

**Decision and Rationale
for the Environmental Assessment for the
Poor Angora's Folly Timber Sale**

Grave Creek West EA #OR110-99-09

Decision

The Poor Angora's Folly timber sale was proposed, and the environmental effects of the proposal and the No Action alternative were analyzed in an Environmental Assessment (EA) for the Grave Creek West Project Area, dated March 29, 1999.

The EA analyzed the effects of potentially harvesting timber in more than one timber sale. This decision only applies to the units to be included in the Poor Angora's Folly timber sale. All units are located in the Rogue River basin. Additional units, which are located in the Umpqua River basin, were analyzed in the EA, but no decision has been made concerning those units. Any decision to go forward with the units in the Umpqua basin will be addressed in a separate decision document.

Since the EA was released for public review and comment, some changes were made in the way the Bureau manages Survey and Manage species as a result of Judge Dwyer's decision in Oregon Natural Resources Council Action, et. al. v United States Forest Service and Bureau of Land Management. Additional surveys were conducted for red tree voles and non-vascular plants. Based on the results of those surveys, the timber sale proposals were modified. In most cases, protective buffers have been placed around plant populations or red tree vole nests. In a few cases, entire units have been deferred from the timber sale. Additional changes were also made for other reasons. I have carefully reviewed the results of the surveys and the modifications and do not feel an amendment to the EA is necessary. The changes all result in less environmental disturbance than was envisioned in the EA, so the environmental consequences are less than those analyzed in the EA.

Several comments were received from the public, including four extensive, substantial comments on this proposal and the environmental effects. These letters were well thought out and presented viable concerns. I reviewed the comments in detail with my staff specialists and considered them carefully. Those deliberations were incorporated into this decision.

My decision is to implement the Poor Angora's Folly timber sale, modified from Alternative 5 in the environmental assessment (EA #OR110-99-09). The modifications are presented below. The project design features in the EA will be implemented unless they are changed by this decision. This timber sale will consist of 25 units, covering 311 acres and produce approximately 3.5 million board feet of timber. The harvest units and treatments are summarized in Table DR-1 and in the attached maps. More detailed information on the harvest and subsequent treatments can be found in Table DR-3 and in the silvicultural prescription in the Medford District files.

The proposed action is located in:

T 33S, R 7W, sec. 9, 10, 11, 13, 14, 17, 21, 25, 26, 27, 33, 34, 35, and
T 34S, R 7W, sec. 1, 3, 4, 7, 17.

Due to the changes in harvest units, some of the road work proposed in the EA will also be modified. The most substantial change is that the new permanent road construction near units 21 and 23 will not be done, since those units were deferred from the sale. A summary of the road work to be done under this sale is presented in Table DR-1. The acres and volumes reflect the most recent and accurate figures; previous documents relied on estimates which vary slightly from these numbers.

Table DR-1. Summary of decision for the Poor Angora’s Folly Timber Sale, compared with the Preferred Alternative from the EA.

	<u>Decision</u>	<u>Alternative 5</u> Preferred Alternative from the EA
Number of units	25	36 timber harvest 2 Riparian Reserves
Acres of regeneration and overstory removal harvest	136	342
Acres of commercial thinning	139	258
Acres of select cut and shelterwood harvest	37	56
Total acres of timber harvest	312	656
Timber Volume (MBF)	3,485	5,887
Temporary Road Construction (miles)	0.37	0.5
Permanent Road Construction (miles)	0	0.4
Road Decommissioning (miles)	1.2	2.4
Drainage Improvement (miles)	20.5	18.4

Specific Decision Points and Rationale

Active red tree vole nests will be protected with a 10-acre no-cut buffer. This change from the EA had a large impact on the sale; many units were reduced in size to provide for the protective buffer and units 15 and 47 were deferred. While the current management recommendations do not call for protecting each nest with 10 acres, I feel this is a prudent management direction for this species at this time.

The non-vascular Survey and Manage plant sites will be protected by retaining vegetation in no-cut buffers around populations. Buffers will be at least 100 feet wide, but would vary depending on the harvest treatment, species, slope, aspect and other conditions with the objective of maintaining adequate micro-climatic conditions to allow the plant populations to persist.

In addition, one of the comments from the public questioned the adequacy of the size of protective buffers for plants and molluscs in the harvest units. The size of these buffers was recommended by the botanists and biologists on my staff. I understand these are based on professional opinion and there is no firm scientific literature to support these exact buffer widths. But the comment from the public also does not provide any evidence to support the need for larger buffers. Therefore, my decision is to proceed with the recommended buffers in the EA, along with a commitment to monitor the effectiveness of these buffers on sensitive plants and molluscs following harvest. The results of the monitoring will be used in future timber sale planning. This “adaptive management” approach is supported by the Northwest Forest Plan in cases where this type of uncertainty exists.

Another comment mentioned that candystick (*Allotropa virgata*) should be protected. I reviewed this situation because of that comment. The management recommendations for this species do not require protecting all sites in this sale area. The species is relatively abundant and widespread in this sale area and will be protected in many cases by other reserves. The Resource Area botanist does not believe this timber sale will have a major impact on this species, although individual sites could be extirpated. I concur with this assessment and believe that the timber sale meets the Survey and Manage requirements for this species.

Occupied Del Norte salamander habitat will be protected by retaining at least 60-80 percent canopy closure over the talus area, rather than the 40 percent proposed in the EA. More recent literature and draft management recommendations have indicated that 60-80 percent canopy closure may be optimum for maintaining suitable habitat conditions. While the management recommendations have not been finalized, I feel this is a prudent course of action to maintain habitat conditions for this species.

Two comments dealt with mollusc surveys. No surveys for aquatic molluscs were conducted because the survey protocol only require surveys to be conducted when there are known sites within the same fifth-field watershed. There is none in the Grave Creek watershed. The mollusc survey techniques were criticized because they are a sample, not a complete survey. It is not clear what was meant by this statement, but the surveys done for this timber sale covered all the proposed harvest units and met the requirements in the survey protocol. I don't consider this to be a sample survey and I feel we have met the requirements of the Northwest Forest Plan in completing the surveys.

One comment recommended protecting known goshawk nest sites. I agree that active goshawk nest sites should be protected and I have taken appropriate action. An active goshawk nest was located within one of the proposed timber harvest units. However, goshawk nests are a very sensitive issue and disclosing the exact location of any nest would jeopardize the birds, making them more vulnerable to poaching and disturbance. I have chosen to defer this unit, which will retain more than 40 acres of undisturbed habitat around the nest site. In addition, the area within 1/4 mile of the nest tree will be afforded a seasonal restriction to protect nesting birds and fledglings from Feb. 1 to July 15, from disturbance from felling, yarding, road work and hauling. This restriction may affect units 29, 31A, 31B, 31C, 33, 34A, 34B and 34E.

Timber harvest in unit 45 will be deferred since the canopy closure in this unit is already close to the target needed for protection of Survey and Manage molluscs.

One comment suggested that the level of "Take" of spotted owls under the Endangered Species Act is too high. BLM consulted with the United States Fish and Wildlife Service (USFWS) on this sale. As a result of that consultation, USFWS deemed the level of take to be acceptable and incidental to the proposed action, and an incidental take statement was provided as part of the Biological Opinion on the Poor Angora's Folly timber sale. Since many units changed as the result of new Survey and Manage protection measures, we re-examined the level of harvest and it is less than that analyzed in the EA. Since the impacts are well within those considered by the USFWS no reinitiation of consultation is necessary.

Most of unit 34C will be deferred from harvest to maintain wildlife habitat conditions.

An old mining ditch was located in unit 42A. Special care will be taken in designing logging systems and in contract administration to avoid damaging this ditch during the logging.

In addition to the gates and barricades listed in the EA, a gate will be installed on the Archer Mine Road, (road number 34-7-3.2), beyond the residence, to prevent sedimentation from this natural surface road, prevent damage to the road, and reduce the illegal garbage dumping.

The restriction on tractor size (EA p.21) will be increased to no more than nine feet, rather than eight feet to allow for using the same size tractor to yard, rip and do other work. This slight increase will not cause additional compaction or other adverse impacts.

Units 2, 3, 7, 13, 14, 15 are located within a “connectivity band” identified in the Grave Creek watershed analysis. Units 14 and 15 have been deferred for other reasons. Units 3, 7 will be commercially thinned and will be consistent with the management recommendation in the watershed analysis. Units 2 and 13 were proposed to be harvested using a Commercial Thin/Overstory Removal. This unit will result in some small openings in the canopy, but will not present large barriers to movement of species associated with late-successional habitat. The interdisciplinary team believes that these two harvest units will not substantially reduce the value of this area for connectivity for late-successional species, since the unit is small, compared with the size of the connectivity band. I concur with this analysis and feel that the decision to proceed with this type of harvest is consistent with the recommendation in the watershed analysis.

Unit 39 was also identified in the EA as important for connectivity and it is located within a connectivity/diversity block. Two options were examined in the EA: either do a lighter touch thinning in a larger unit, or do a more intensive regeneration harvest in a smaller unit. After protection measures were instituted for Survey and Manage species in this unit, it appears that substantial part of this unit will either be within no-cut buffers, or will be retaining at least 40 percent canopy closure to manage mollusc habitat. With this in mind, it is my decision to implement an overstory removal harvest, with additional canopy retained, over approximately 2/3 of the original unit. The higher degree of canopy retention, along with the no-cut buffers, will provide a high degree of habitat connectivity in this area, similar to the levels described in the EA alternatives.

Because the new permanent road construction was dropped, the number and sizes of units have been reduced, and many regeneration harvest units now have a higher level of canopy retention, I now believe this sale should be considered as a Not Likely to Adversely Affect (NLAA) action for Northern California/Southern Oregon coho salmon or its habitat, as defined by the Endangered Species Act. This species has been listed as a federally listed Threatened species. The EA originally described the entire Grave Creek West project (including the Umpqua basin units) as Likely to Adversely Affect (LAA). But the impacts on aquatic systems and fish habitat of the revised timber sale are substantially less than those described in the EA. The BLM has discussed this revised determination in detail with the National Marine Fisheries Service (NMFS). Following these discussions, the proposed sale was submitted to NMFS for informal consultation. No letter of concurrence has been received from NMFS as of the date of this Decision Record and Finding of No Significant Impact (FONSI). Based on the discussions with NMFS, I expect to receive a letter of concurrence shortly; the sale will not be awarded until it is received.

The EA also discussed adverse affects on several other fish species (EA p. 35), including the Klamath Province steelhead, which is considered a candidate species. Since the EA was published, the federal Threatened and Endangered status of these species have changed, so they are no longer subject to formal consultation under the Endangered Species Act. The Northern California/Southern Oregon coho salmon is the only fish species for which consultation is required. However, I feel confident that impacts on other aquatic species have also been reduced substantially by the revisions of the original proposal.

There are other specific measures which deserve mention in light of the discussions with NMFS:

- there will be no timber hauling during the wet, winter season,
- for any culvert work in stream channels, any running water will be diverted (the channel will be “dewatered”) during the work period to reduce sedimentation downstream.
- in addition, Oregon Department of Fish and Wildlife requirements will be followed for all instream work.

These are measures which we normally do implement as standard operating procedures, but the EA did not specifically mention them.

In summary, I have evaluated the project described in the EA and have carefully reviewed the comments and suggestions received from the public. I have determined that a Supplement to the Environmental Assessment (EA) is necessary for these reasons:

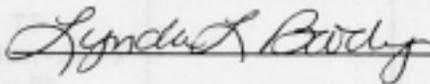
1. The existing EA for the Poor Angora’s Folly Timber Sale fully covers the project as modified by the proposed mitigation and adjustments required by the surveys conducted for Survey and Manage species. There will be no substantial changes to the action as originally proposed in the EA. The action, as amended, is within the scope of the alternatives identified in the original EA, and the environmental impacts are within those described in the original EA and are less than or the same as those anticipated for the preferred alternative in that assessment.

2. There are no significant new circumstances or facts relevant to environmental concerns and bearing on the modification to the proposed action or its impacts which were not addressed in the EA. The EA anticipated protecting Survey and Manage species in accordance with the Record of Decision for the NFP and the Medford District RMP. The surveys conducted for this sale complete the survey requirements for this sale as amended by the *Plan Maintenance Documentation: Decision to Delay the Effective Date for Surveying 7 “Survey and Manage” and Protection Buffer Species*, which was approved March 13, 2000, and fulfills the Survey and Manage S&G commitment identified in the EA.

Consultation under section 7(a)(4) of the Endangered Species Act has not been completed with the National Marine Fisheries Service (NMFS) on the Northern California/Southern Oregon coho salmon. The sale contract will not be awarded until a final biological opinion or letter of concurrence, which includes a non-jeopardy determination, has been received. The sale was designed to follow the guidance of the Medford District Resource Management Plan and the Northwest Forest Plan, and to incorporate mitigations identified in the consultations on similar projects. Therefore, it is my expectation that NMFS will concur that this project should be considered as a "Not Likely to Adversely Affect" and will not make a jeopardy determination nor prescribe any reasonable and prudent measures or terms and conditions that are not already part of the sale design and mitigation. Because the United States retains the right to reject any and all bids for any reason, the mere offering of the sale does not make any irreversible or irretrievable commitment of resources which have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures. If additional reasonable and prudent alternative measures or terms and conditions are prescribed which would require alteration in the terms of the sale contract, the agency retains the discretion (prior to award) to adjust the sale design accordingly and readvertise the sale if necessary.

I find that the action will be consistent with the Medford District Resource Management Plan and the Northwest Forest Plan, including the Aquatic Conservation Strategy. This project is also consistent with the Endangered Species Act, the Native American Religious Freedom Act and cultural resource management laws and regulations.

In accordance with the BLM Forest Management Regulations (43 CFR 5003.2(1)), the decision for this timber sale will not become effective, or be open to formal protest, until the first Notice of Sale appears in a newspaper of general circulation in the area where the lands affected by the decision are located.

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Lynda L. Boody
Field Manager, Glendale Resource Area,
Medford District, Bureau of Land Management

_____ 9/7/00 _____

Date

Table DR- 3. Summary of decision for the Poor Angora’s Folly Timber Sale, compared with the Preferred Alternative from the EA.

Unit Number	Decision				Alternative 5 Preferred Alternative from the EA
	Treatment	Acres	Species affecting the unit	Comments	
2	CT/OR Hel P 224 MBF	18	BIT PAP Non-vac. D.S.	Retain 60-80% canopy over talus	CT/OR Hel 19 ac. 190 MBF
3	CT Cable P 53 MBF	9	BIT Non-vac.		CT Cable 6 51 MBF
3B	Defer				Part of Unit 3
4	Defer - Umpqua Drainage				Regan (40% can) Cable 6 ac. 96 MBF
5A	Defer - Umpqua Drainage				CT Cable 17 ac. 85 MBF
5B	Defer - Umpqua Drainage				Regan Cable 6 ac 210 MBF
7	CT Hel P 132 MBF	10	BIT PTD RTV Non-vac.		CT Cable - multispan 40 ac 190 MBF
8	Defer - Umpqua Drainage				CT/OR Cable 5 ac. 25 MBF
9					Defer Red Tree Voles
10					Defer Red Tree Voles

Unit Number	Decision				<u>Alternative 5 Preferred Alternative from the EA</u>
	Treatment	Acres	Species affecting the unit	Comments	
12	Defer				Defer Red Tree Voles, Molluscs, Uneconomical
13	CT/OR Cable/Hel P 309 MBF	30	BIT PTD		CT/OR Cable (S) /Hel (N) 75 ac 600 MBF
14	Defer - Del Norte salamanders				Regan (40% can) Hel 16 ac 320 MBF
15	Defer - Red Tree Voles, Plants				OR (40% can) Cable 24 ac 180 MBF
16	Defer -				OR (40% can) Hel 15 ac 180 MBF
17	Defer -				Defer Red Tree Voles
18	CT/OR Hel P 107 MBF	8	BIT RTV		CT/OR (40% can) Hel 7 ac 56 MBF
19	CT Cable P 175 MBF	14	BIT Non-vac. RTV		CT Cable 10 ac. 70 MBF
20	Select Cable P 77 MBF	13	BIT PTD D.S.		Select Cable 16 ac 160 MBF
21	Defer -				Retain 40% canopy Cable 10 ac 150 MBF
RR-21	Defer - unit 21 was deferred; this riparian treatment would be impractical alone.				Rehab 2 ac.

Unit Number	Decision				Alternative 5 Preferred Alternative from the EA
	Treatment	Acres	Species affecting the unit	Comments	
22	Defer -				Defer Molluscs, Uneconomical, Future planning
23A	Defer -				Regan (40 % can) Hel 28 ac 196 MBF
23B					Part of unit 23
RR-23					Defer Occupied Talus
24					Defer - RTVs
RR-24					Defer Uneconomical
25	Select Cable P 138 MBF	13	BIT Non-vac.		Select Cable 29 ac 435 MBF
28	Regan Hel BB 402 MBF	33	BIT D.S. RTV	Exclude talus at top of unit Retain 40 % canopy for molluscs on talus Retain smaller stems	Regan 6-8 tpa 40 % can around talus Hel 30 ac 360 MBF
RR-28					Defer - Del Norte
29	Shelterwood - 40% canopy Cable P 116 MBF	11	BIT RTV	Exclude mollusc at north end of unit Buffer other mollusc Retain 40% canopy	Shelterwood Cable 11 ac 165 MBF
31A	Regan Cable BB 103 MBF	6	BIT PTD RTV		Regan 6-8 tpa Cable 14 ac 252 MBF
31B	Regan Cable BB 20 MBF	2	BIT RTV Non-vac.		Regan 6-8 tpa Cable 5 ac 75 MBF

Unit Number	Decision				Alternative 5 Preferred Alternative from the EA
	Treatment	Acres	Species affecting the unit	Comments	
31C	Regan Cable BB 17 MBF	1			Part of unit 31A
32					
33	CT Cable - multispans P 109 MBF	16	BIT Non-vac.		CT Cable-multispans 18 ac 75 MBF
34A	CT Cable-downhill P 36 MBF	6	Non-vac.		CT 40-50% can Cable - downhill 6 ac 12 MBF
34B	CT Cable-downhill P 37 MBF	6	BIT		CT 40-50% can Cable - downhill 10 ac 90 MBF
34C	Defer unit - Wildlife Concerns				CT 40-50% can Cable 30 ac 150 MBF
34D					Defer - DM
34E	CT Cable P 48 MBF	8	BIT Non-vac.		Part of 34A
38					Drop Owl Core Area
39	OR - 12-18 tpa Cable BB 342 MBF	23	BIT PTD RTV Non-vac.	Retain 12-18 tpa Retain 40% canopy around molluscs	Regan Cable 18 tpa N half 12-18 tpa S half 52 ac 432 MBF
40A					
40B					
41A					Defer- Red Tree Voies

Unit Number	Decision				<u>Alternative 5 Preferred Alternative from the EA</u>
	Treatment	Acres	Species affecting the unit	Comments	
41B					Defer - Red Tree Voles
42A	OR/Regan Cable P/BB 408 MBF	26	BIT PTD RTV Non-vac. D.S.	Defer talus portion of unit	OR/Regan 6-8 tpa Cable/Hel 44 ac 264 MBF
42B	Regan Cable BB 31 MBF	7	PTD D.S. RTV Non-vac.	Buffer mollusc	Regan 40% can Cable 10 ac 110 MBF
43A	OR Cable P 80 MBF	5	N/A		OR Cable 5 ac 30 MBF
43B	CT Cable/Tractor P 123 MBF	14	BIT PTD Non-vac.	Tractor below plant buffer	CT Cable 15 ac 45 MBF
44A	OR Cable P 49 MBF	6	BIT PTD		OR - 40% can Cable 7 ac 42 MBF
44B					Defer - DM
45	Defer - Not enough trees per acre for economical harvest				Regan - 40% can Cable 22 ac 110 MBF
RR 45					Defer - occupied talus
46	Regan Hel BB 244 MBF	20	BIT RTV Non-vac.		Regan - 40% can Hel 22 ac 220 MBF
47	Defer - Red Tree Voles				Regan 6-8 tpa Cable 7 ac 119 MBF

Unit Number	Decision				<u>Alternative 5 Preferred Alternative from the EA</u>
	Treatment	Acres	Species affecting the unit	Comments	
48					OR/Regan 6-8 tpa Hel 12 ac 72 MBF
52					Defer Molluscs
54					Drop -Owl Core Area
55					Defer - RTVs
58					Defer - No Volume Blue-gray Tail- droppers
RR-58					Defer Uneconomical
59	OR Tractor P 82 MBF	7	BIT RTV	Buffer BIT	OR Tractor 7 ac 70 MBF
62					Defer - DM

Legend for Table DR-3

PTD = Papillose tail dropper
BIT = Blue-grey tail dropper
RTV = Red Tree Vole

DM = Density Management
can = Canopy Closure
MBF = Thousand Board Feet
tpa = trees per acre

Harvest/Treatment Systems:

Regeneration Harvest

Regan = Regeneration Harvest
OR = Overstory removal
Select Cut = Selection Harvest

Yarding Systems:

Cable = Partial suspension

D.S. = Del Norte salamander
Non Vac. = Non-vascular plants

P = Hand pile and burn

Other Cuts

CT = Commercial thinning
DM = Density Management (non-harvest)
RR = Riparian Reserve Treatment

TR = Tractor

Hel = Helicopter

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for the
Poor Angora's Folly Timber Sale
OR-110-99-09

The proposed action for the Poor Angora's Folly timber sale is described in the environmental assessment (EA) and it can be obtained at the Medford District Office.

The proposed action is located in:

T 33S, R 7W, sec. 9, 10, 11, 13, 14, 17, 21, 25, 26, 27, 33, 34, 35, and
T 34S, R 7W, sec. 1, 3, 4, 7, 17.

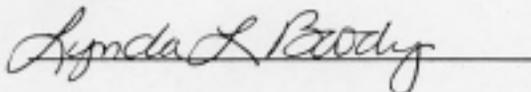
The public notice of availability of this FONSI is provided through the Medford District BLM central registration recording system and newspapers in the area of the proposed action.

There are no wetlands, wild and scenic rivers, known hazardous waste areas, areas of religious concern, prime nor unique farmlands within the project area. The project area does not qualify for wilderness designation. No significant adverse impact is anticipated to fisheries, lands and minerals. No cultural sites are in the project area. The effects on Threatened and Endangered Species and special status species are described in the EA. Formal consultation requirements will be met as called for under the Endangered Species Act.

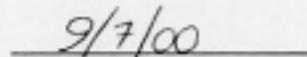
The estimation of impacts was based on research, professional judgment and experience of the interdisciplinary team. This method of estimating effects to the environment reduces the uncertainties to a level which does not involve highly unknown or unique risks.

FONSI DETERMINATION

I have reviewed the environmental assessment including the explanation and resolution of any potentially significant environmental impacts not previously identified. And I have reviewed the comments received from the public concerning this proposal. I have determined the action described above will not have any significant impacts on the human environment beyond those already fully described in the Final Medford District Proposed Resource Management Plan and Environmental Impact Statement and that a supplemental EIS is not required.

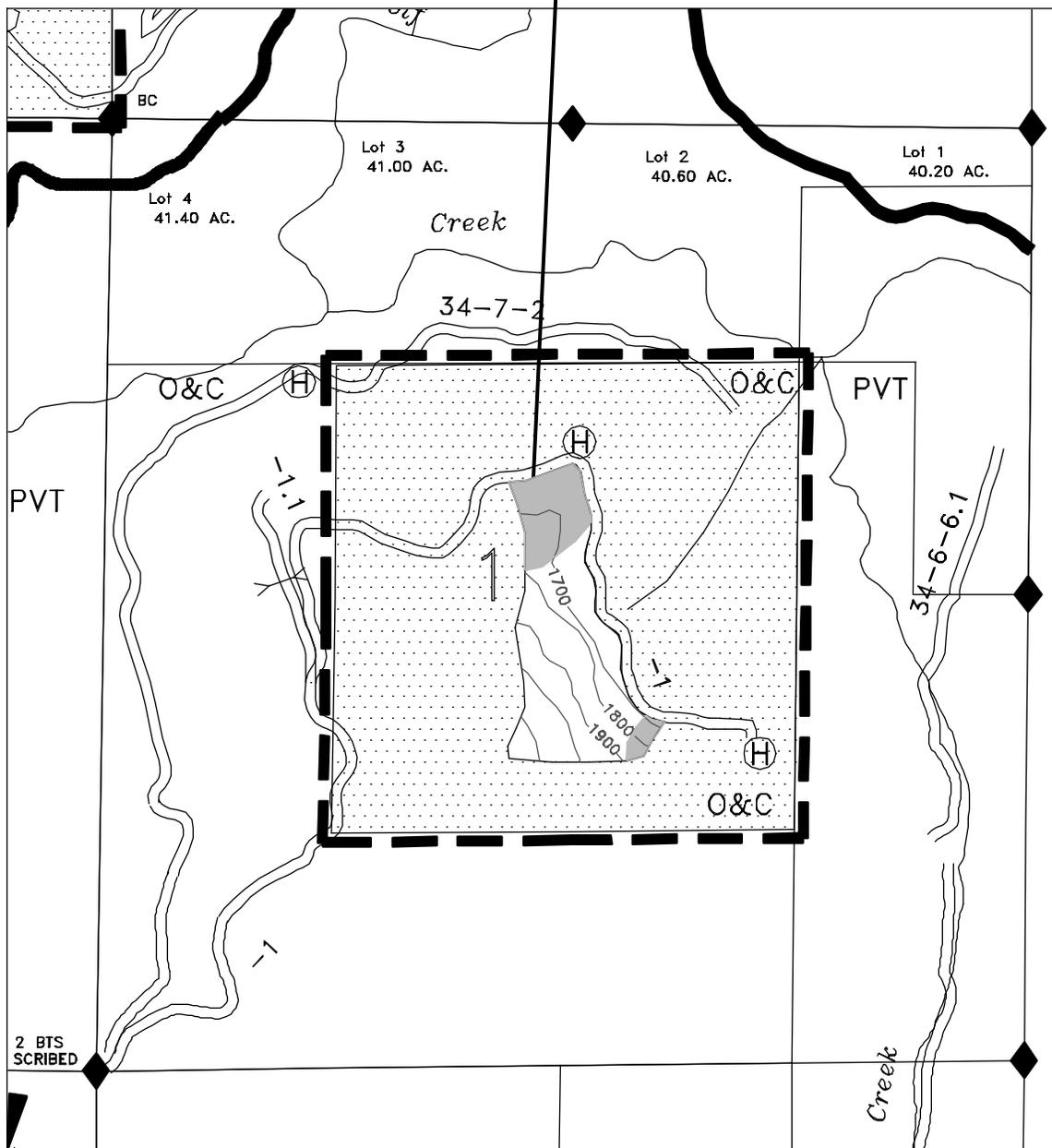


Lynda L. Boody
Glendale Resource Area Manager
Medford District, BLM

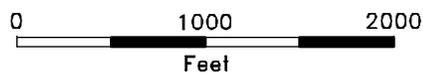


Date

UNIT 46
REGEN-H
20 ACRES



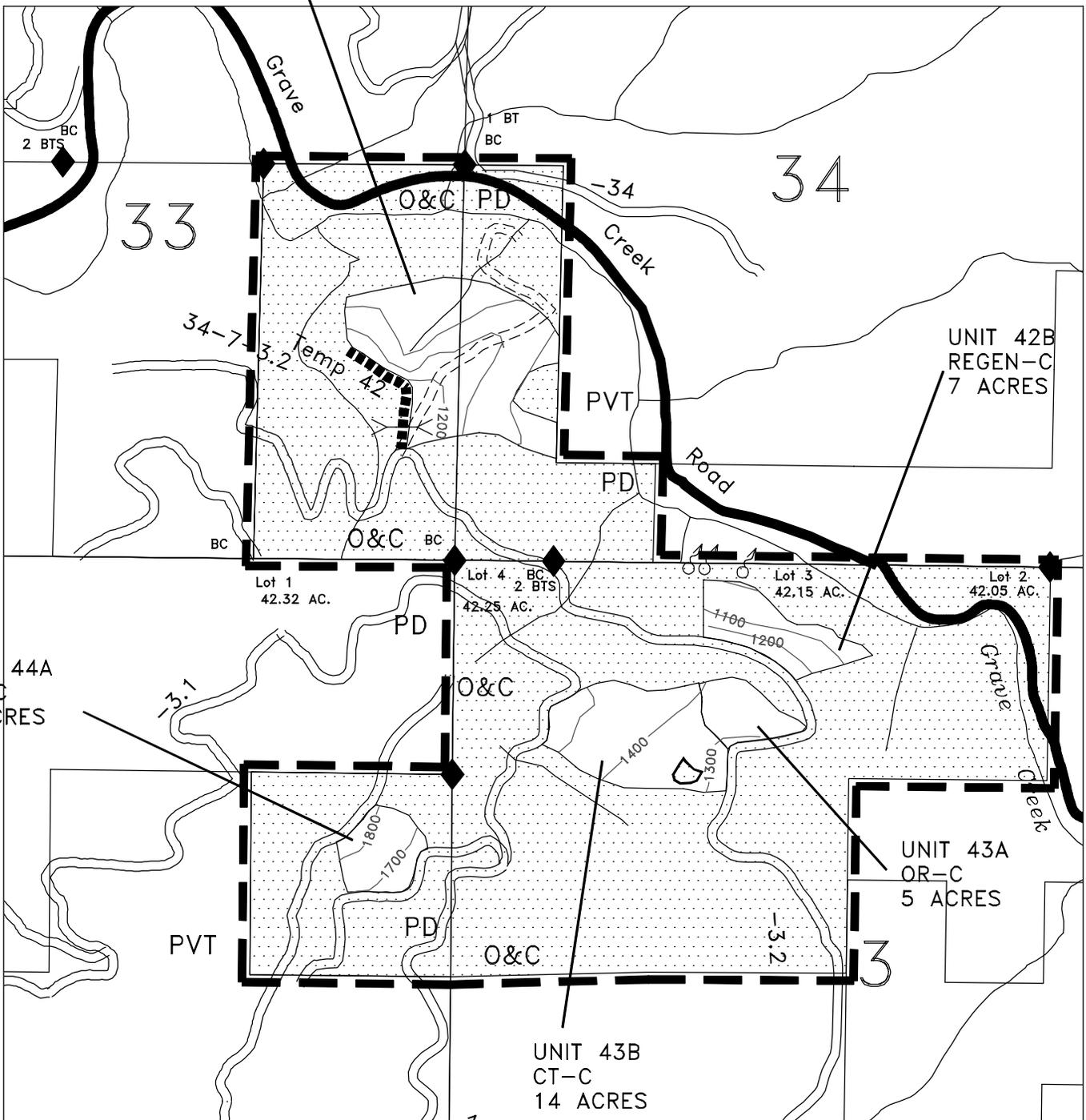
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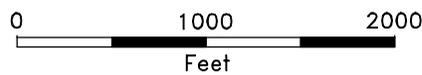
U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 00-04
T.33S., R.7W., SEC. 33 & 34, WILL. MER.
T.34S., R.7W., SEC. 3 & 4, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
DOUGLAS COUNTY

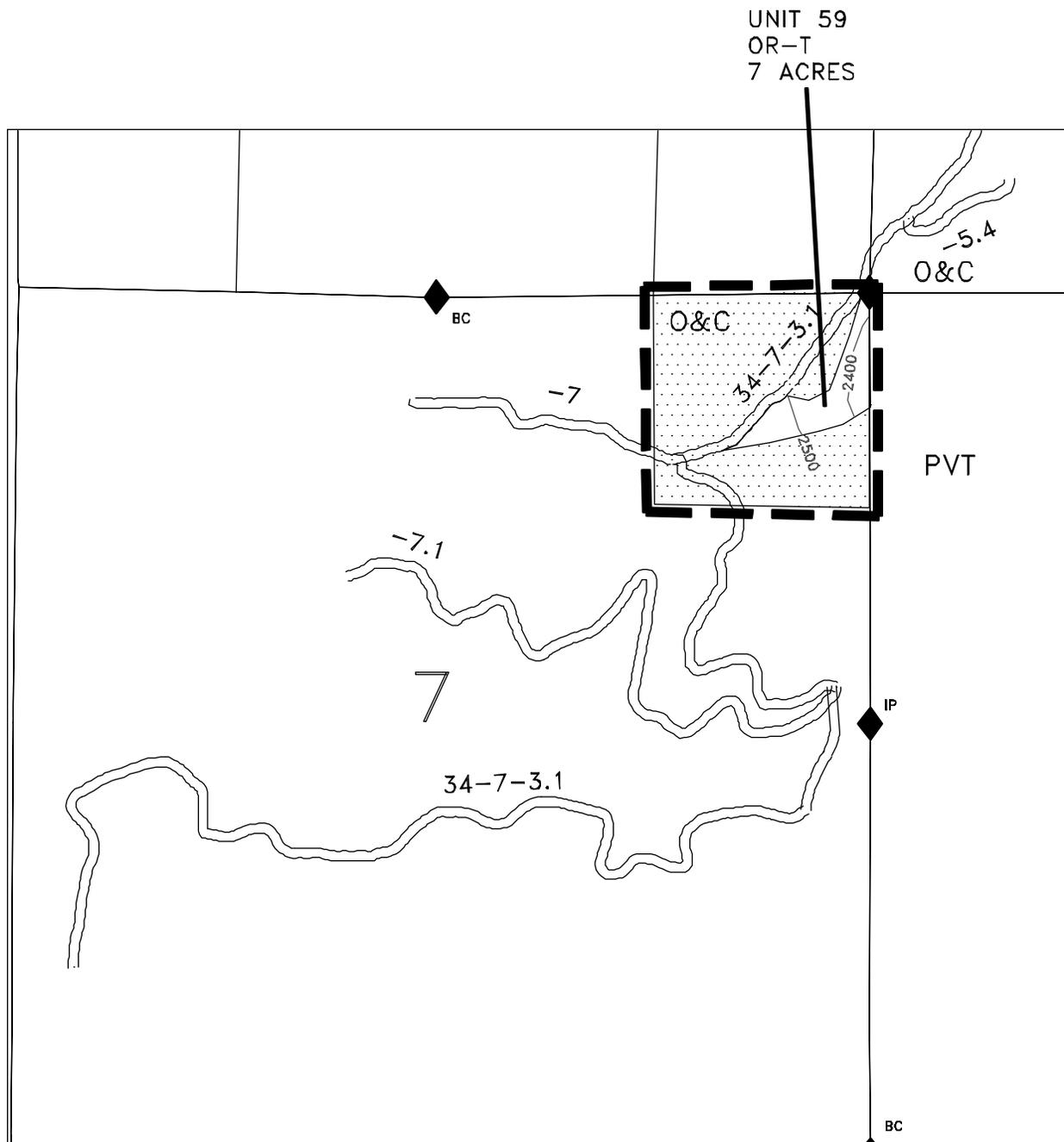
TIMBER SALE CONTRACT MAP
CONTRACT NO. 00-04
EXHIBIT A
PAGE 2 OF 14

UNIT 42A
OR/REGEN-C
26 ACRES

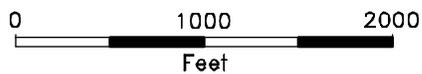


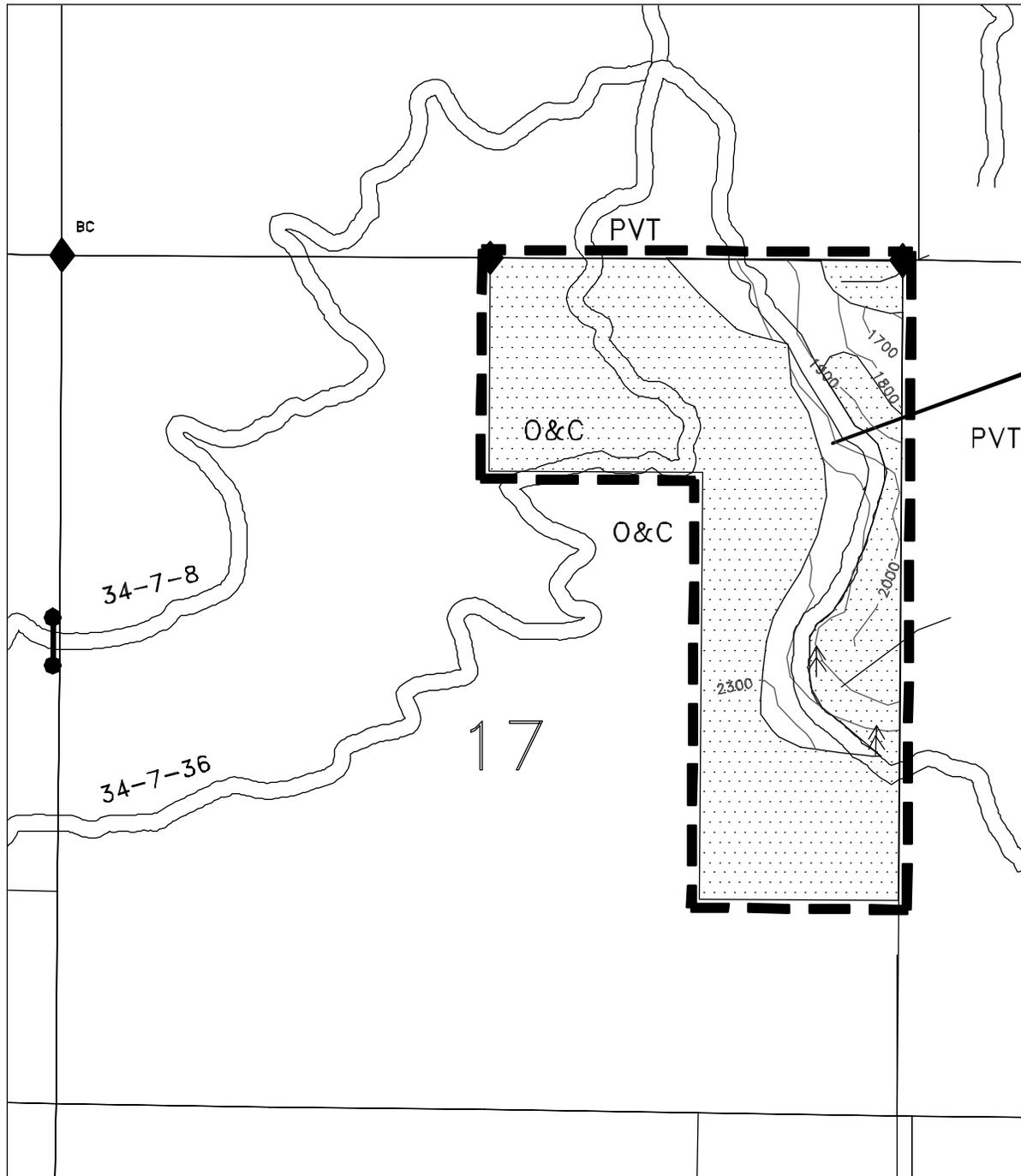
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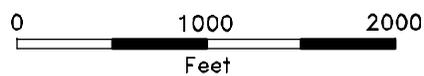


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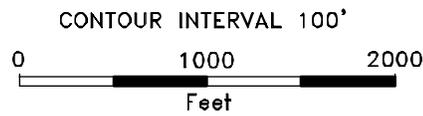
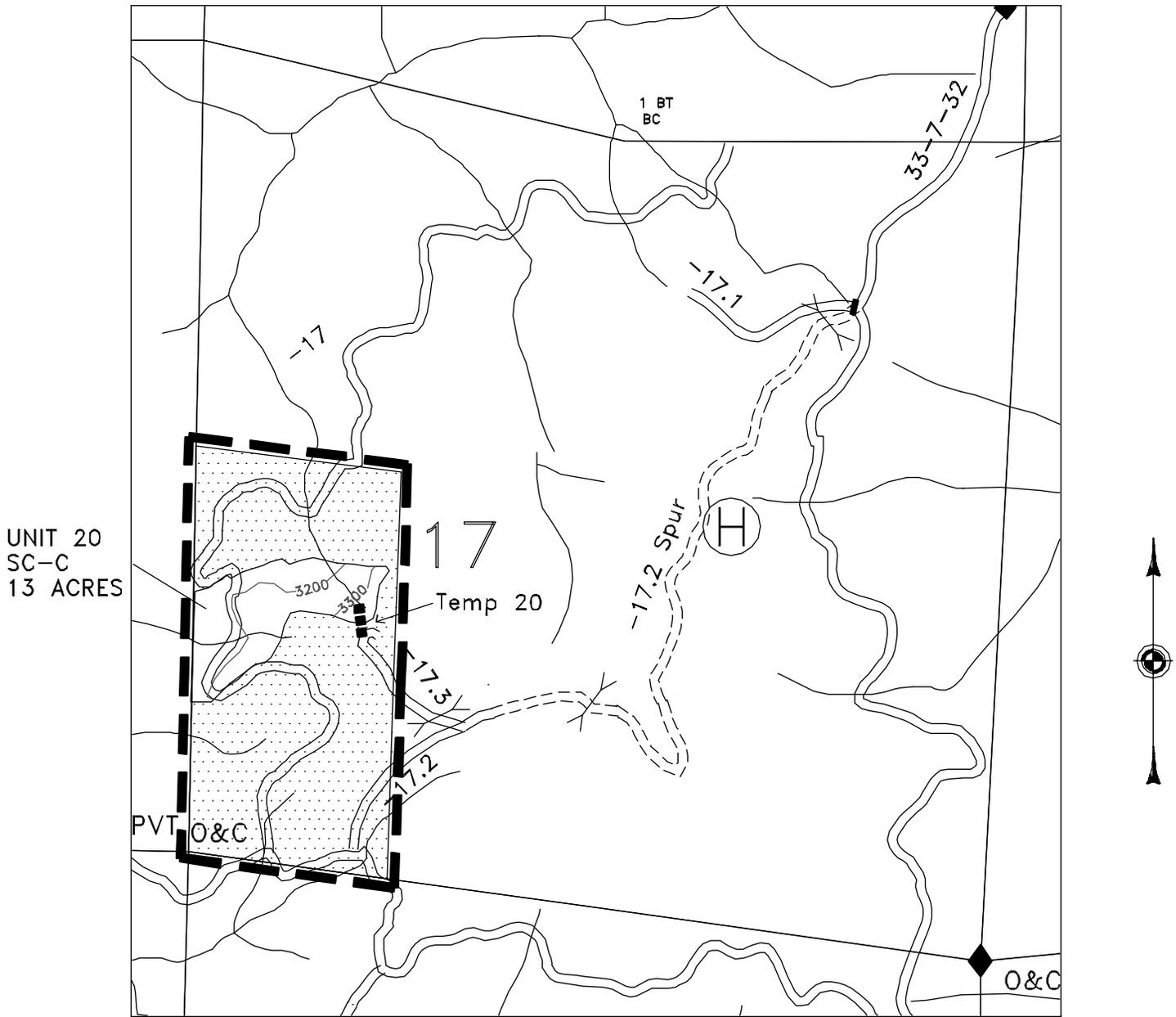


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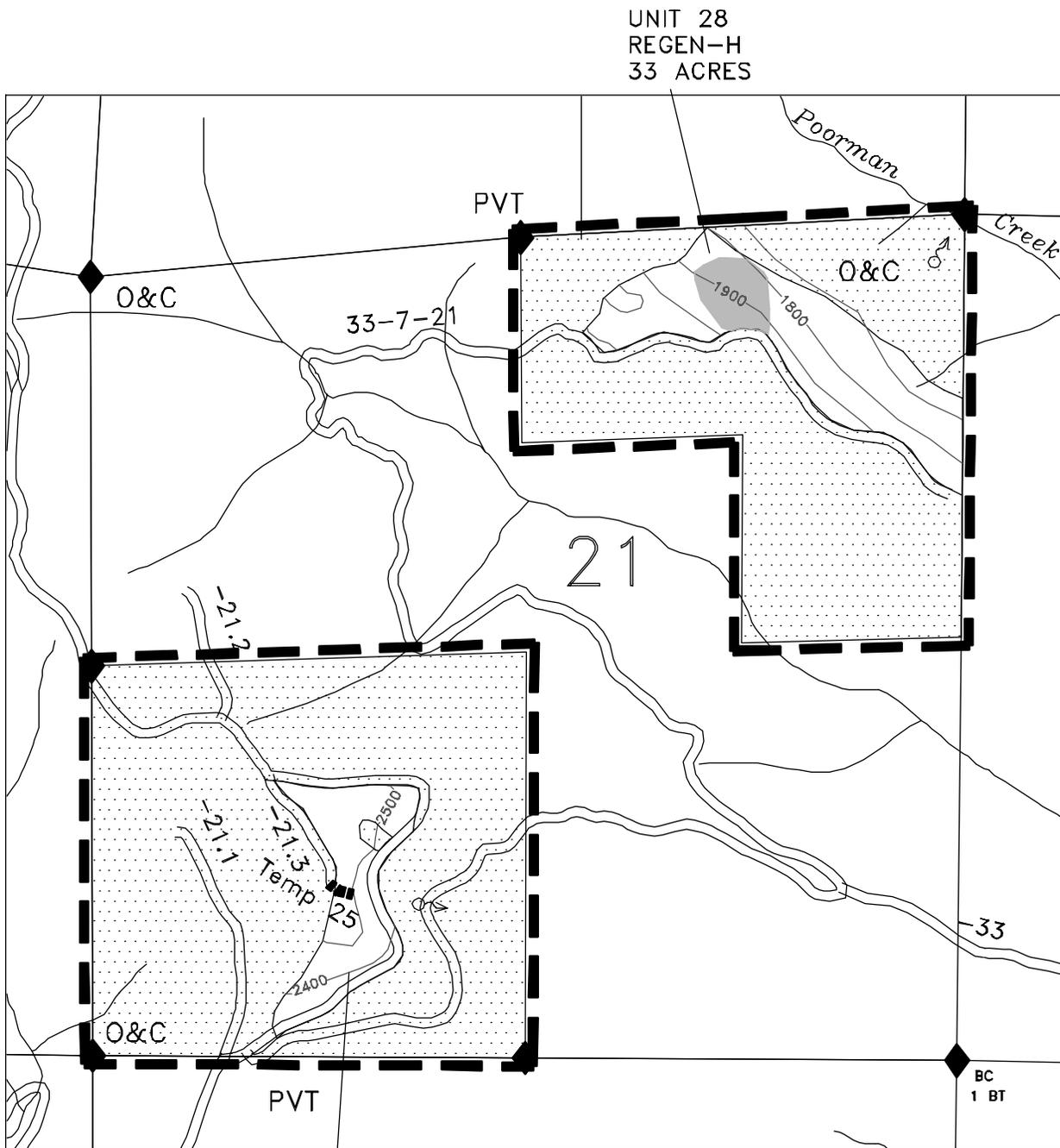
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T.33S., R.7W., SEC. 17, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
CONTRACT NO. 00-04
EXHIBIT A
PAGE 5 OF 14

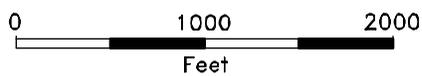


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T.33S., R.7W., SEC. 21, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
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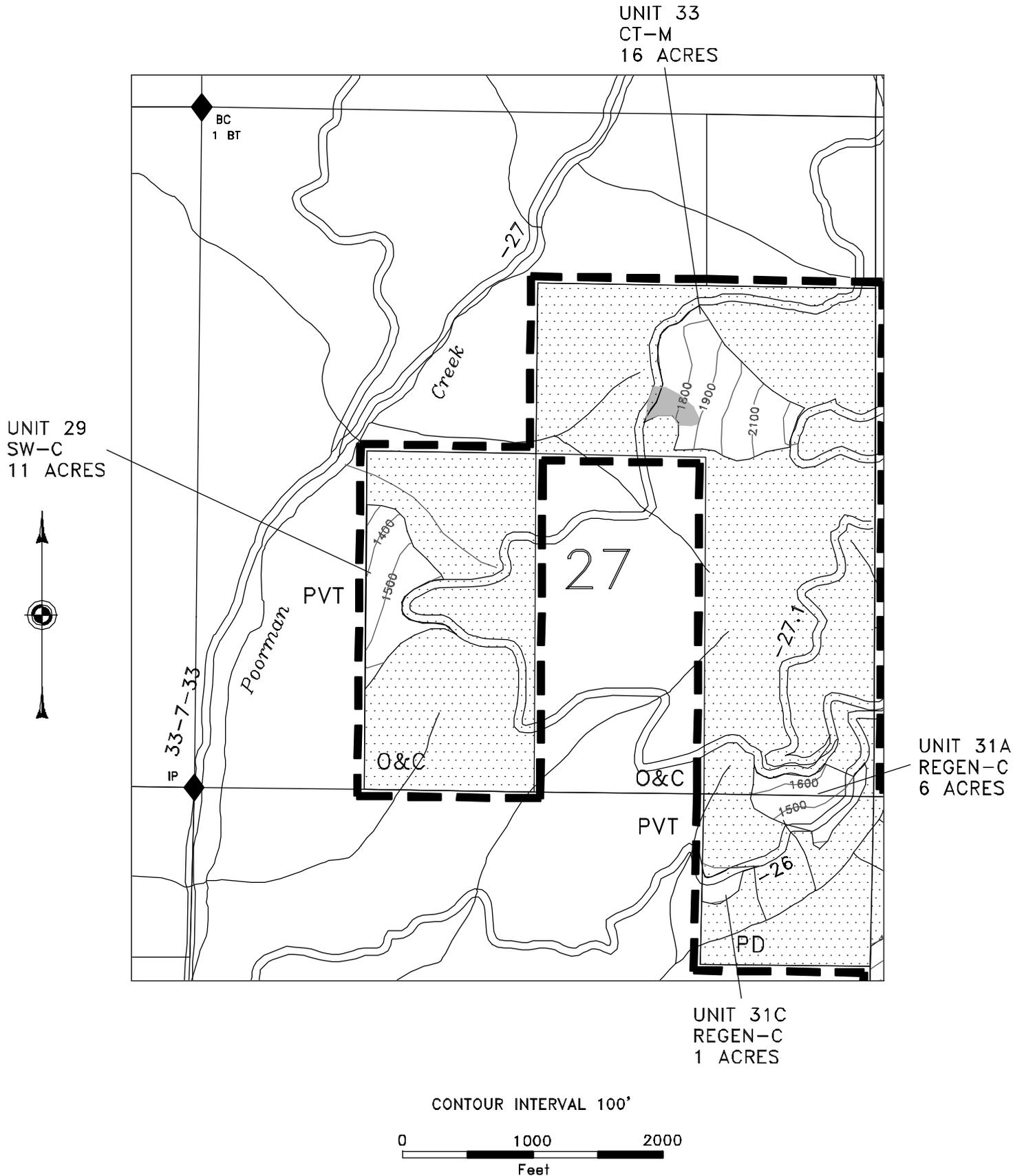


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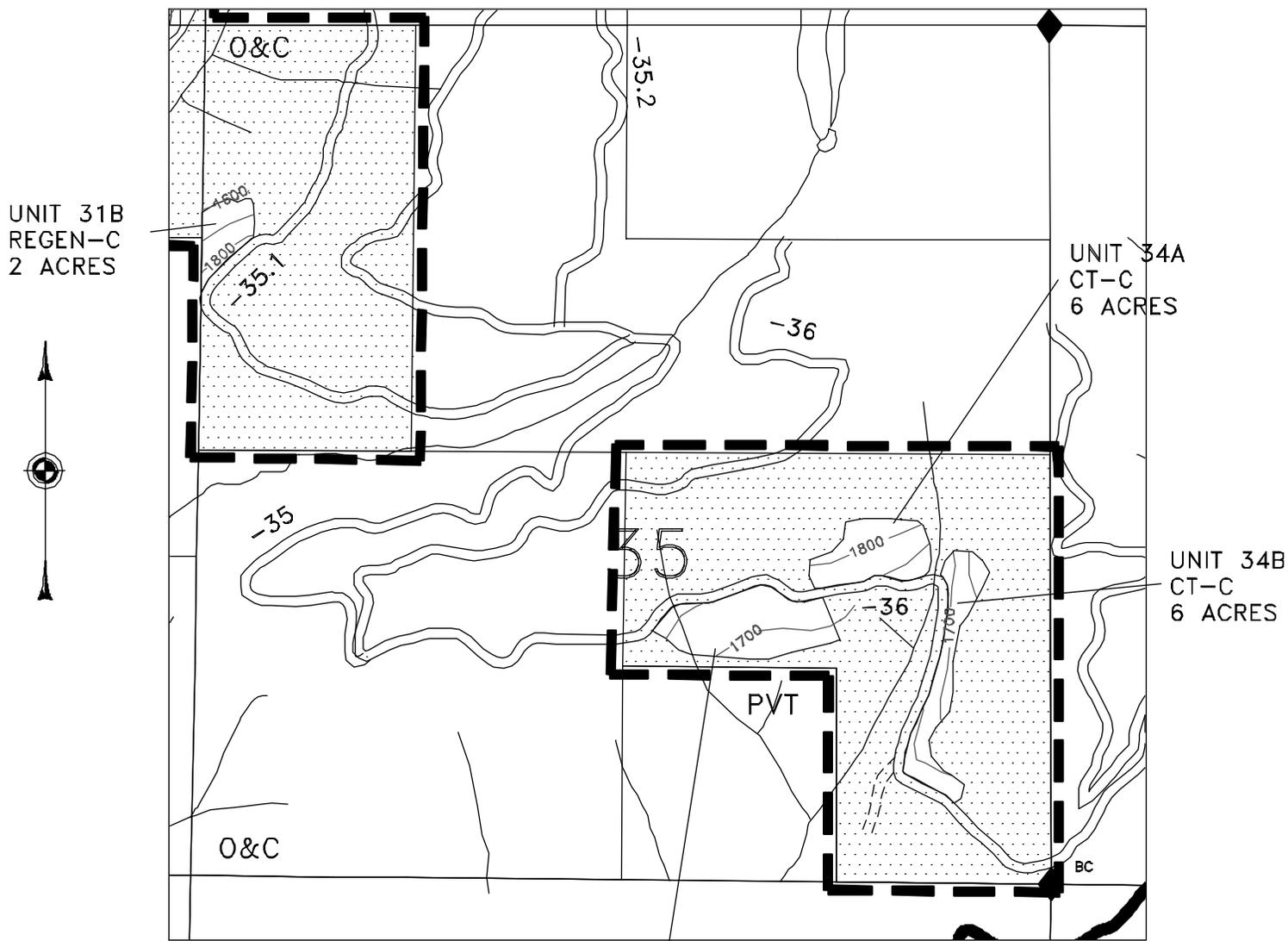
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T.33S., R.7W., SEC. 27 & 34, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
CONTRACT NO. 00-04
EXHIBIT A
PAGE 7 OF 14



U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 00-04
T.33S., R7W., SEC. 35, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
CONTRACT NO. 00-04
EXHIBIT A
PAGE 8 OF 14



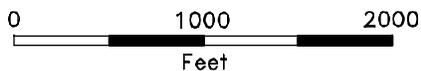
UNIT 31B
REGEN-C
2 ACRES

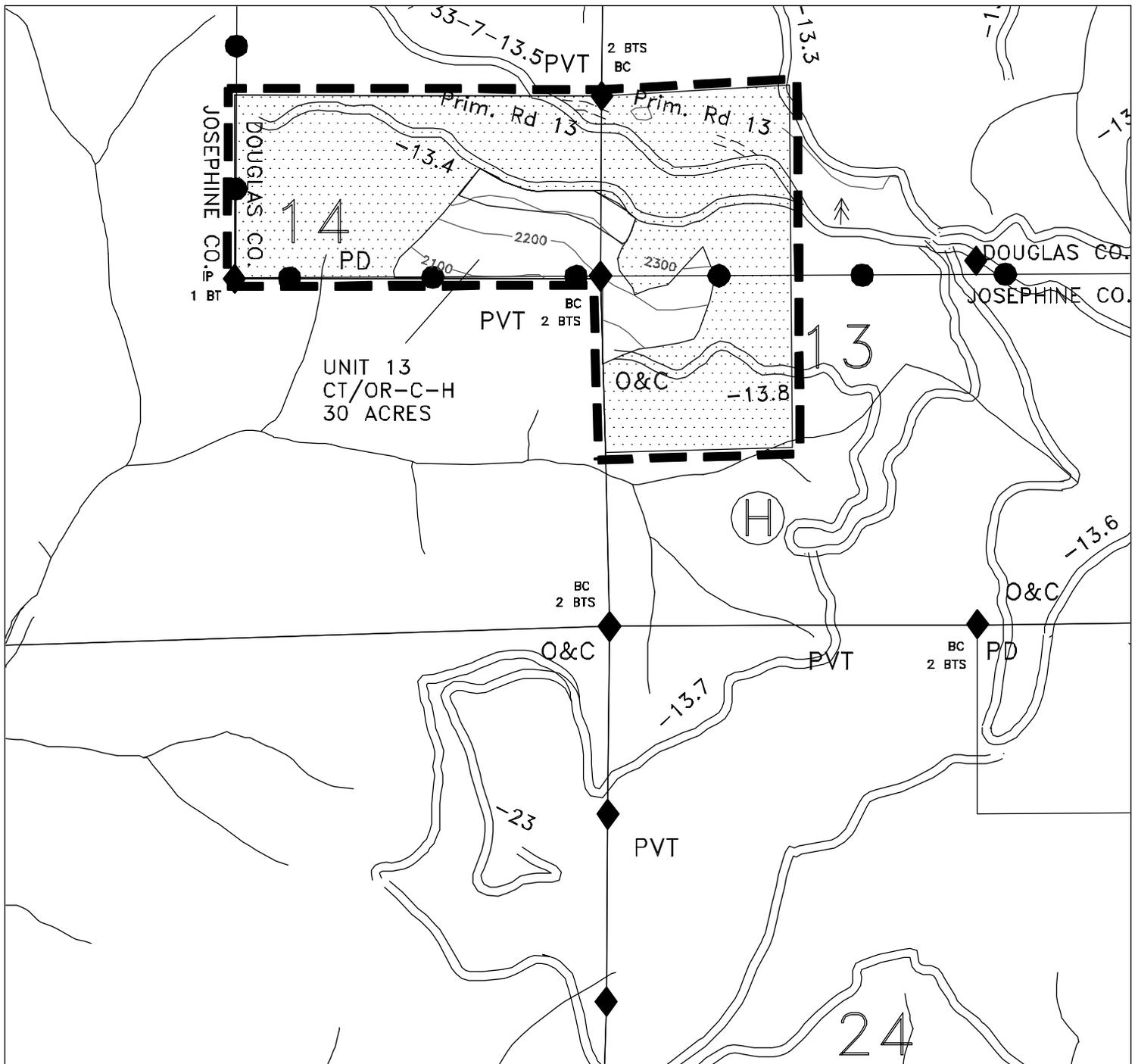
UNIT 34A
CT-C
6 ACRES

UNIT 34B
CT-C
6 ACRES

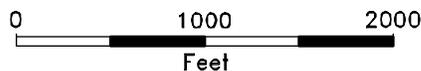
UNIT 34E
CT-C
8 ACRES

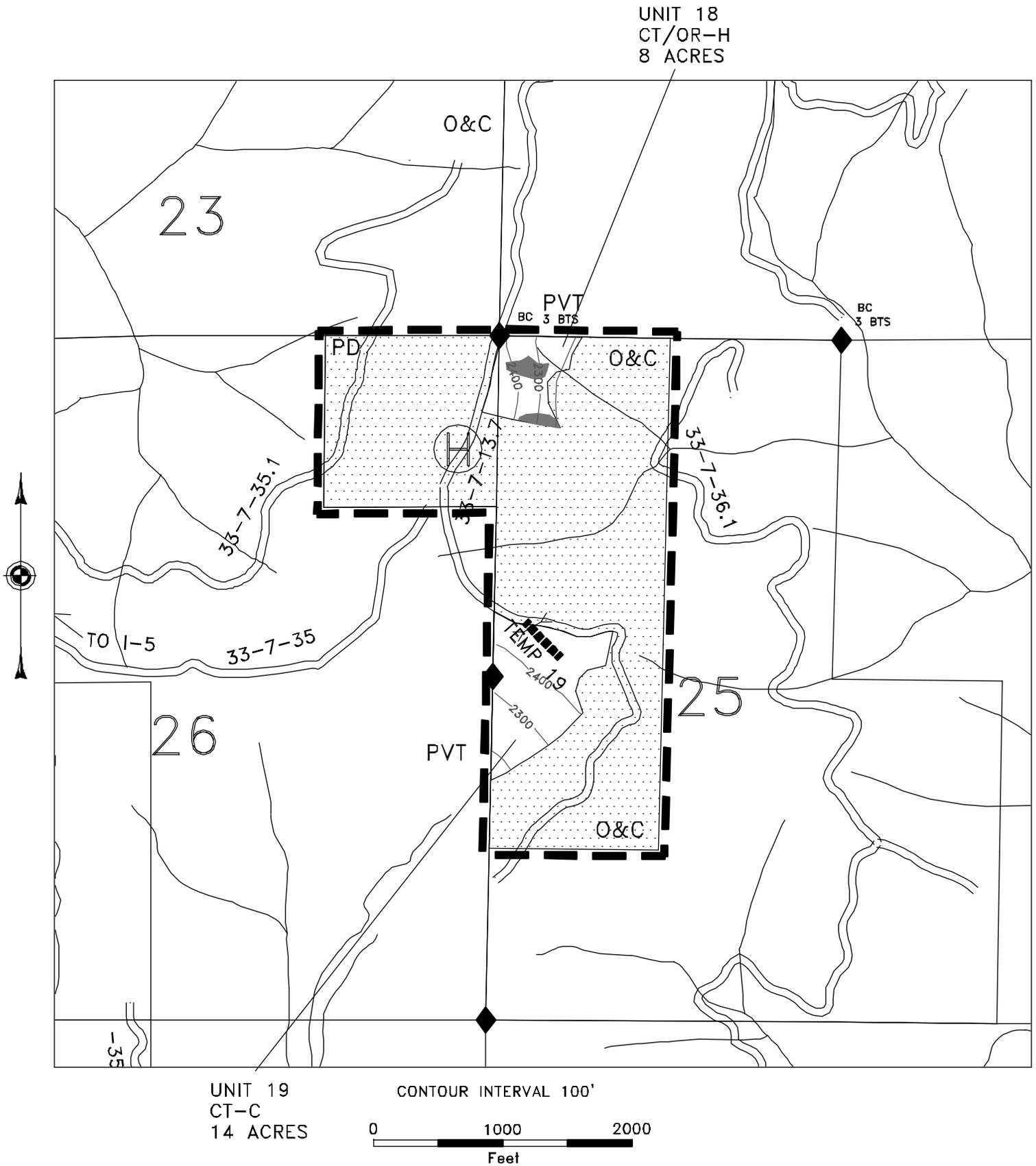
CONTOUR INTERVAL 100'





CONTOUR INTERVAL 100'

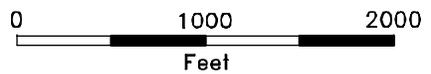


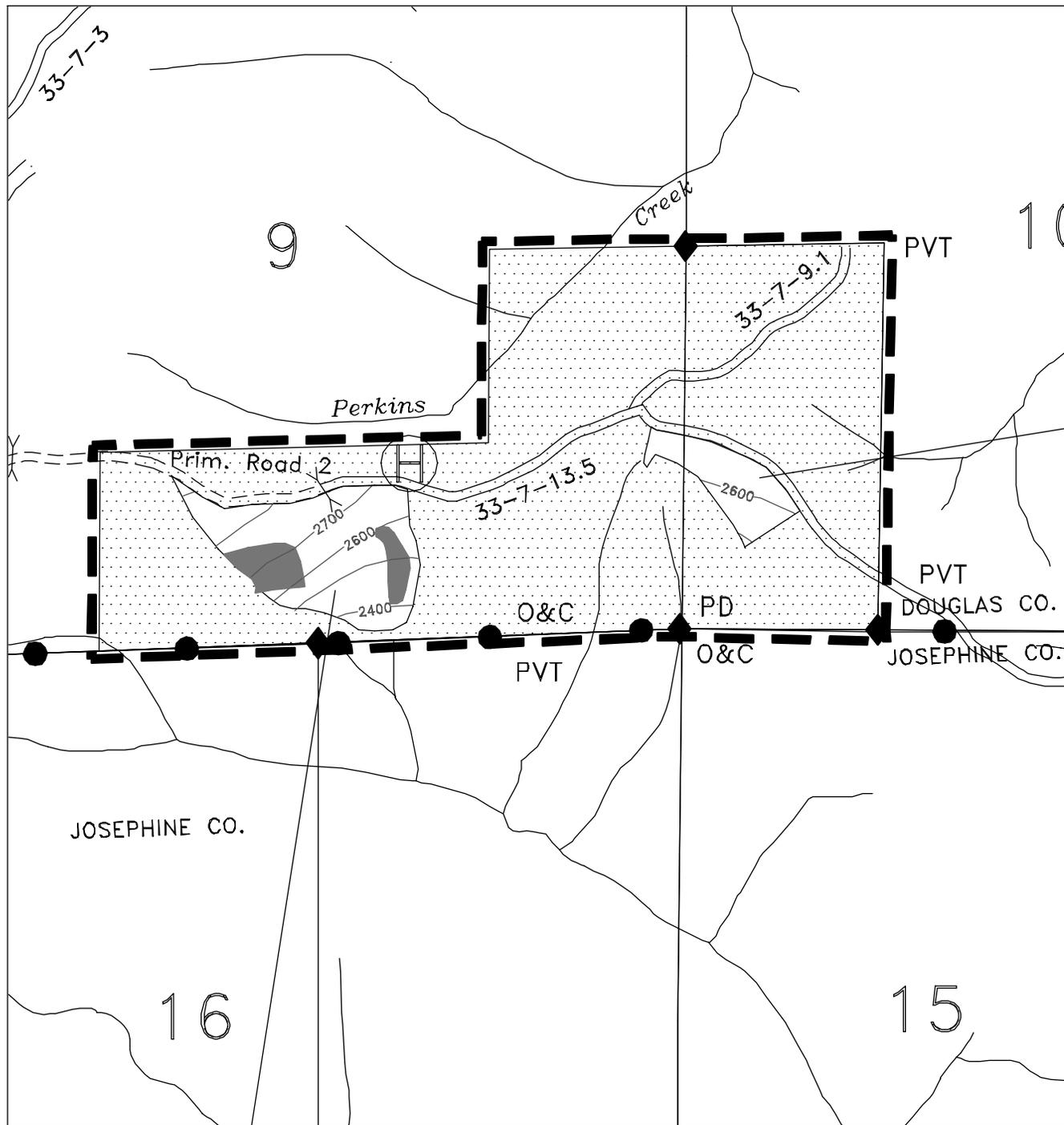


UNIT 18
CT/OR-H
8 ACRES

UNIT 19
CT-C
14 ACRES

CONTOUR INTERVAL 100'



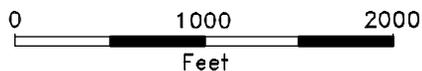


UNIT 3
CT-C
9 ACRES



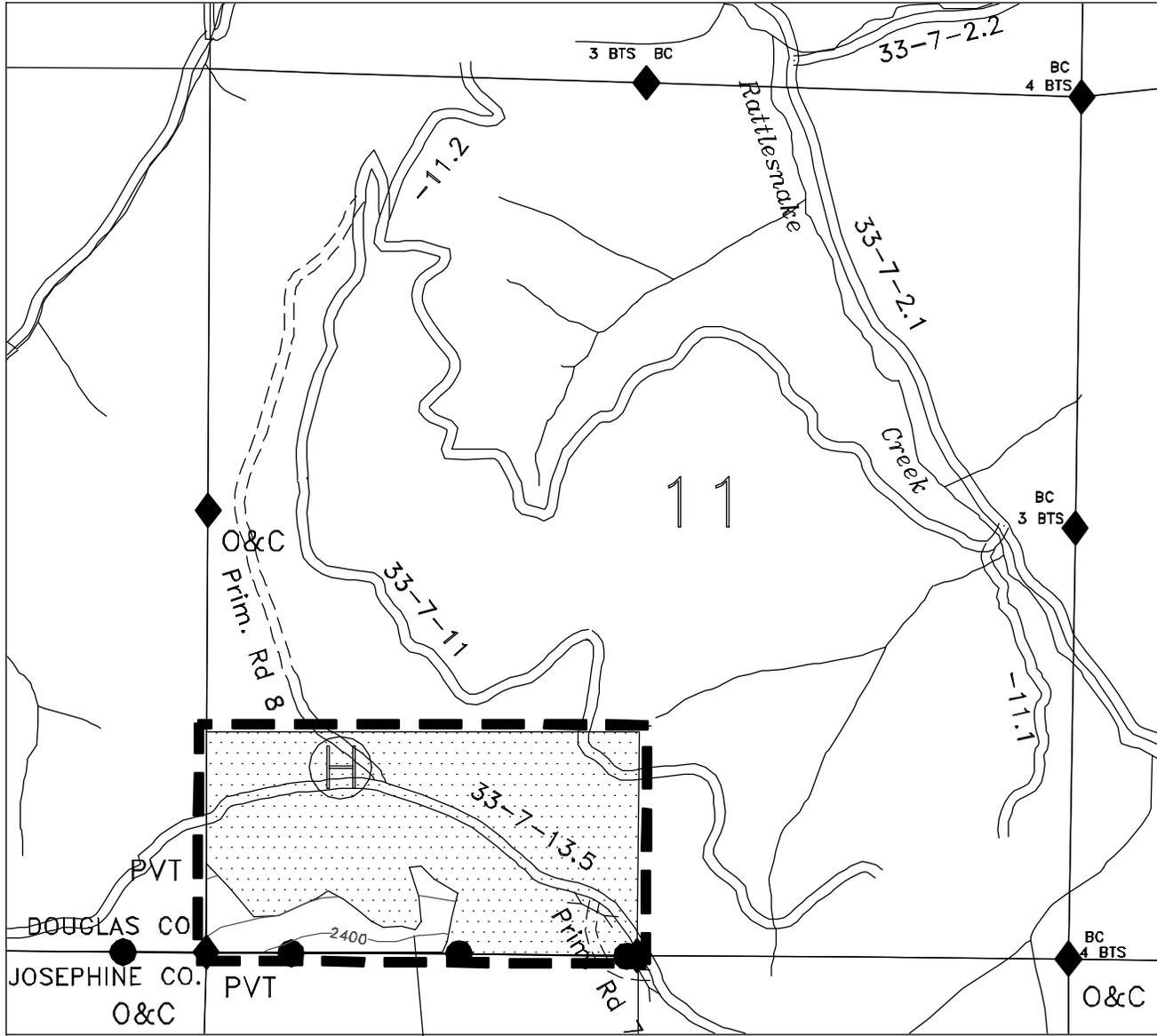
UNIT 2
CT/OR-H
18 ACRES

CT/OR-H
CONTOUR INTERVAL 100'



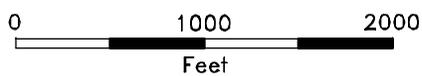
U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 00-04
T.33S., R.7W., SEC. 11, WILL. MER.
POOR ANGORA'S FOLLY TIMBER SALE
DOUGLAS COUNTY

TIMBER SALE CONTRACT MAP
CONTRACT NO. 00-04
EXHIBIT A
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UNIT 7
CT-H
10 ACRES

CONTOUR INTERVAL 100'

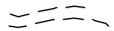


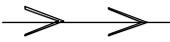
LEGEND

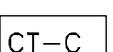
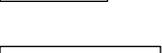
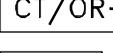
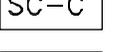
UNIT #	UNIT ACRES
2	18
3	9
7	10
13	30
18	8
19	14
20	13
25	13
28	33
29	11
31A	6
31B	2
31C	1
33	16
34A	5
34B	6
34E	8
39	23
42A	26
42B	7
43A	5
43B	14
44A	6
46	20
59	7
RW	1
TOTALS	312

ALL ACRES COMPUTED
BY GPS TRAVERSE

LEGEND

	BOUNDARY OF CONTRACT AREA
	BOUNDARY OF CUTTING AREA
	EXISTING ROAD
	PRIMITIVE ROAD
	COUNTY LINE
	NEW CONSTRUCTION
	CONTOUR LINES
	LOG BARRICADE TO BE CONSTRUCTED
	SPRING

	TALUS AREA
	HELICOPTER LANDING SITE
	SEED TREE LOCATION
BT	BEARING TREE
BC	BRASS CAP
IP	IRON PIPE
	FOUND CORNER
	STREAM
O&C	BLM LAND
PVT	PRIVATE LAND
PD	PUBLIC DOMAIN

	OVERSTORY REMOVAL - CABLE YARD UNITS 43A,44A	11.00 ACRES
	OVERSTORY REMOVAL - TRACTOR YARD UNIT 59	7.00 ACRES
	REGENERATION HARVEST - HELICOPTER YARD UNITS 28,46	53.00 ACRES
	REGENERATION HARVEST - CABLE YARD UNITS 31A,31B,31C,39,42B	38.00 ACRES
	COMMERCIAL THIN - CABLE YARD UNITS 3,19,34A,34B,34E,43B	56.00 ACRES
	COMMERCIAL THIN - MULTISPAN CABLE YARD UNIT 33	16.00 ACRES
	COMMERCIAL THIN - HELICOPTER YARD UNITS 7,13	18.00 ACRES
	COMMERCIAL THIN/OVERSTORY REMOVAL - CABLE YARD UNIT 13	22.00 ACRES
	COMMERCIAL THIN/OVERSTORY REMOVAL - HELICOPTER YARD UNITS 2,18	26.00 ACRES
	SELECTION HARVEST - CABLE YARD UNITS 20,25	26.00 ACRES
	SHELTERWOOD HARVEST - CABLE YARD UNIT 29	11.00 ACRES
	OVERSTORY REMOVAL/REGENERATION HARVEST - CABLE YARD UNIT 42A	26.00 ACRES
	RIGHT OF WAY	1.00 ACRE
	RESERVE AREA	1905.45 ACRES
TOTAL CONTRACT AREA		2216.45 ACRES

NOTE: BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED ORANGE