

SURVEY NARRATIVE TO COMPLY WITH PARAGRAPH 209.250
OREGON REVISED STATUTES

NARRATIVE OF SURVEY FOR SECTIONS 10 AND 11

LOCATION: Section 10 and 11, Township 33 South, Range 2 East of the Willamette Meridian in Jackson County, Oregon

PURPOSE: To monument the boundary corners and post line markers along the northerly boundary of Tract 402 in Section 10 and Tract 403 in Section 11, as shown on Segment 4 of the Lost Creek Lake Real Estate drawings. Tract 402 is shown as Tax Lot 3401 on the Jackson County Assessor's Map, and Tract 403 is shown as Tax Lot 3100.

PROCEDURE: Establishing Lambert State Plane Coordinate control traverse:

The areas to be surveyed under this contract were concentrated in Sections 10, 11, 20 and 21, T 33 S, R 2 E. An initial control traverse was run from the vicinity of the northeast corner of Section 20 northeasterly through Sections 10 and 11. This traverse ran from station POST 11-A and closed on the line between stations "GUARDRAIL" and "SHOLDER", all of USCE second-order control. This yielded an unadjusted closure of 0.95 feet and 00°00'38" in bearing, with a precision of 1:26100. After angular adjustment, the distance closure increased to 2.01 feet and precision dropped to 1:12400. Although this met contract requirements of NOAA 3rd Order Class 1, it indicated that there may be an error in the traverse. Also, adjusting out 2.01 feet would cause problems in getting any additional surveying from this control traverse to fit. Therefore, the traverse was run back to close on itself. This yielded an unadjusted closure of 0.54 feet and 00°00'07" angular closure. After angular adjustment, the distance closure dropped to 0.15 feet and the ratio of precision was 1:311,000. This was now an acceptable traverse closure, but raised questions concerning the accuracy of the established USCE Second Order coordinates. The control traverse was adjusted by the Crandall method of least squares. The computed coordinates of "GUARDRAIL" and "SHOLDER" now differ from the record coordinates by 0.83 feet and 0.97 feet.

As a check, two more Second Order control stations, "TURNOUT" and "DUNG", both in Section 10, were tied to by closed traverse. The computed coordinates differed by 0.29 feet and 0.33 feet from the record coordinates. It was then decided that, since these latter stations were located in the immediate vicinity of the boundary to be monumented, the record coordinates at "TURNOUT" would be held and the control traverse rotated to match these coordinates and the bearing between "TURNOUT" and "DUNG".

The measured distance between "TURNOUT" and "DUNG" differed from that determined by the record coordinates by 0.21 feet. Since both were to be used for establishing and checking the accuracy of the boundary, the computed coordinates for "DUNG" were used rather than the USCE record coordinates. This would minimize problems in establishing a boundary point from one station and attempting to verify its accuracy by traverse from the other station.

Survey of Section 10:

The east 1/4 corner of Section 10 was included in the initial control traverse. Additional traversing was run to tie to the northwest, southwest, and southeast corners and north, west, and south 1/4 corners. A description of the monuments and accessories found are listed at the end of this narrative.

A review of prior surveys indicated some changes in the accepted position of the southwest and south 1/4 corners of Section 10. The earliest private survey of record, Survey #1098, dated January 1957, reports finding no original evidence of these two corners, and establishing the southwest corner by double proportionate measurement and the south 1/4 corner by single proportionate measurement. Survey #4721, dated December 1971, reports finding the original notched stone marking the southwest corner. This corner position was perpetuated by the BLM in 1974. At this same time, the BLM established a position of the south 1/4 corner by single proportionate measurement. The BLM monuments found at these two corners were used for this survey.

Survey #1098 also reported finding no definite original evidence of the west 1/4 corner of Section 10, but did establish a corner position based on a possible original southeast bearing tree and affidavits from two local residents. This corner position has been perpetuated by subsequent surveys, and lies north 39 feet and east 45 feet from a single proportionate position. Due to the terrain and the type of vegetation reported as being encountered in the original survey, I felt that the true corner position should not vary nearly as much from the proportionate position. Therefore, there was some doubt as to the accuracy of this 1/4 corner position. An attempt was made to locate and review the affidavits, but no record of their existence could be found, nor could the identity of the two local residents be determined. Because of its proximity to State Highway 62, the Oregon State Department of Transportation was contacted in hopes of researching highway maps and survey field notes for any clues to the true 1/4 corner position. Research at the Medford ODOT office lead to contacting the Roseburg ODOT office by phone. They in turn contacted their Archives office in Salem. This all proved fruitless, and no evidence could be found to more accurately determine the true 1/4 corner position. Therefore, the corner position as established by Survey #1098 was accepted as being the best available evidence.

The east 1/4 of Section 10 was evidently monumented at single proportionate distance during Survey #1098. This position falls in the westbound lane of Mill Creek Drive.

Using the foregoing information, the center 1/4 corner of Section 10 was then determined by straightline intersection, and the southeast quadrant subdivided and monumented as shown on sheet 2. The intermediate monuments shown were placed so that they are intervisible.

Monument no. 10-05-R, at the extreme west end of the monumented boundary, was intended to be placed on the southerly right of way boundary of Mill Creek Drive, formerly State Highway No. 62, (Crater Lake Highway). However, deed research revealed an uncertainty over the true right of way width. Two county centerline surveys prior to 1960 indicated a 60 foot right of way width, but neither survey corresponded to the present road location. Many deeds, from 1916 on, referred to a 60 foot right of way. Still other deeds referred to an 80 foot wide right of way. An Oregon State Highway Department map, Drawing No. 2B22-9, "McLeod to Prospect, Crater Lake Highway", dated Nov. 1930, shows an 80 foot wide strip, but calls it a "constructed line" rather than a right of way. Due to this uncertainty, the monument was placed at 40 feet from the centerline to allow for possible encroachment into the right of way.

In Survey #3318, dated 1966, Surveyor Ed McGinty showed a found centerline PI monument, and referred to a 1932 Highway map. This map could not be located in the ODOT records. I therefore contacted Mr. McGinty, and he was able to provide me with a copy of a portion of field notes from a parcel survey by the State Highway Department, which showed a PI monument as being set at that time. This monument and several of those set by Mr. McGinty along the "40 feet from centerline" boundary were recovered and used to determine the location to place monument #10-05-R.

Survey in Section 11:

The southwest quarter of Section 11 was subdivided and monumented by the BLM in 1974. For the purpose of this survey, the east-west centerline needed verification prior to setting monuments. The east 1/4 corner of Section 11 had not been established in the original government survey. The BLM in 1974 had used the witness 1/4 corner, from the original government survey, and the northeast corner of Section 11 to establish the east 1/4 corner location. These three monuments were included in a closed traverse, and the location of the east 1/4 corner monument was accepted for this survey.

The monument marking the west 1/16 corner on the section centerline was also included in the closed traverse and checked for accuracy in east-west alignment only. It was found to be within acceptable limits and used to control the direction of the north boundary of the northwest 1/4 of the southwest 1/4 of the section.

Since Mill Creek Drive enters and exits Tract 403, the points of intersection of the 80 foot wide "constructed line" boundary with the east-west section centerline were monumented. The as-constructed centerline of the roadway was compared to the record location as shown on Oregon State Highway Department Drawing No. 2B22-9, and the record curve information fit the existing conditions quite well. The monuments were then placed accordingly.

NARRATIVE OF SURVEY IN SECTIONS 20 AND 21

LOCATION: Northeast quarter of Section 20 and northwest quarter of Section 21, Township 33 South, Range 2 East of the Willamette Meridian in Jackson County, Oregon.

PURPOSE: To monument that part of the Project Boundary in Section 20 from existing monument RW 20-01L, along the line described in Disclaimer Deed recorded as Instrument No. 85-07974 of the Official Records of Jackson County, to the southerly right of way boundary of Peyton Frontage Road, then along the southerly right of way boundary to the existing Project Boundary Monument 21-02 in Section 21, as shown on Segment 3 of the Lost Creek Lake Real Estate drawings.

PROCEDURE: A closed traverse was run along the length of Peyton Frontage Road, tying in the existing monuments along the line being surveyed. USCE monument POST 11-A was used as control for Lambert Coordinates, with the line from POST 11-A to POST 10-B used as a basis of grid bearing.

Monument 20-1A was placed at the intersection of the existing monumented line with the west boundary of the east 1/2 of the northeast 1/4 of Section 20. This section division line was not verified on this survey, since its location was already known from previous work done by this office during Survey #9667 in 1983. Monuments 21-1A and 21-1B were located in relation to the existing Peyton Frontage Road centerline and right of way monumentation.

Monument 21-1, having been originally set by the Corps in 1970, was missing and believed to have been destroyed during clearing for right of way fence construction by the Highway Department. The method of bearing-bearing intersection from adjacent monuments 20-21 and 21-2 was used to locate the missing monument. This yielded coordinates which are much closer to the original Corps coordinates for this point than those computed by the method of distance-distance intersection.

SECTION CONTROL - FOUND OR SET (Bearings oriented to true north)

North 1/4 corner of Section 10: Found, at a fence corner from which fences run east-west and south, the 1963 County Surveyor brass cap monument and the following bearing trees.
18" dia. ponderosa pine bears N 27° W 9.2 ft.
14" dia. black oak bears S 33°30' W 31.7 ft.
12" dia. black oak bears S 63°20' E 31.2 ft.

Northwest corner of section 10: Found, the 1971 County Surveyor brass cap monument marking the corner common to sections 3, 4, 9, and 10, and the following bearing trees.
8" dia. cedar bears N 55°39' W 39.4 ft.
14" dia. black oak bears N 74°19' W 13.6 ft.
12" dia. black oak bears N 83° 20' E 57.8 ft.
9" dia. black oak bears S 73°24' E 33.1 ft.
24" dia. cedar bears S 9°50' W 30.1 ft.

West 1/4 corner of Section 10: Found, on the east shoulder of a one lane gravel access road, a 5/8" dia. iron pin with yellow plastic cap, set on Survey #8061 in 1979, and the following bearing trees.
9" dia. white oak bears S 64° E 5.28 ft.
19" dia. ponderosa pine bears S 10° W 114.8 ft.
13" dia. ponderosa pine, now dead, bears S 80° East 38.8 ft.

Southwest corner of Section 10: Found, the brass cap monument set on Survey #4721 in 1971, alongside the original marked stone, and the following bearing trees.
15" dia. fir bears S 11°25' E 23.2 ft.
8" dia. fir bears N 53°40' W 19.8 ft.
24" dia. by 6' tall fir stump bears N 7°16' E 53.1 ft.
17" dia. by 6' tall fir stump bears S 43° E 46.9 ft.
The following trees were marked at this time:
8" dia. fir, marked "T33S R2E S10 BT", bears N 39°43' E 17.5 ft.
7" dia. fir, marked "T33S R2E S16 BT", bears S 36°33' W 32.8 ft.
Survey #4721 shows the 2" pipe set for double proportion section corner in Survey #1098 as bearing N 11°11'30" W 66.41 ft. The pipe was not located at this time.

South 1/4 corner of Section 10: Found, a 1973 USCE 3.5" brass disc monument, exposed 1.4 ft., and the following references.
8" dia. white oak bears N 5° W 24.1 ft.
7" dia. white oak bears S 65°20' E 26.3 ft.
1 1/2" dia. iron pipe, exposed 8", bears N 13°14' W 34.3 ft.

Southeast corner of Section 10: Found, the 1" dia. iron pipe and brass cap set on Survey #4721 in 1971, and the following references.
19" dia. fir bears N 58° E 39.5 ft.
26" dia. fir bears S 66° E 21.6 ft.
22" dia. fir bears S 14° W 31.2 ft.
17" dia. fir bears N 42° W 31.6 ft.

East 1/4 corner of Section 10: Found, flush with the surface of Mill Creek Drive, the 1 1/4" dia. iron pin set at proportionate measurement on Survey #1098 in 1957, and the following bearing trees.
15" dia. fir bears N 26°34' W 53.0 ft.
12" dia. fir bears S 57°26' E 66.5 ft.

Center 1/4 corner of Section 10: Set a 30" long Berntsen aluminum monument flush with the surface, with the aluminum cap stamped as shown here, and marked the following bearing trees.
8" dia. white oak bears N 11° W 11.1 ft. T33S R2E
6" dia. madrone bears N 11° E 15.6 ft. C1/4 S10
Both trees are marked "C1/4 S10 BT". 1986
Found the iron bolt set for the C1/4 on LS 1656
Survey #1098, bears S 89°32'20" W 2.64 ft.

Center east 1/16 corner of Section 10: Set a 30" long Berntsen aluminum monument, exposed 4", in a mound of stone, with the aluminum cap stamped as shown here, and marked the following bearing trees.
6" dia. white oak bears S 75° E 11.0 ft. E 1/16
8" dia. madrone bears S 12° E 11.6 ft. S 10
Both trees are marked "CE 1/16 S10 BT". C+-C
1986
LS 1656

Northeast corner of Section 11: Found, 3" deep in gravel driveway, the 1974 BLM brass cap monument marking the corner common to sections 1, 2, 11, and 12, and the following references.
12" dia. dead cedar bears N 27°46' W 30.7 ft.
5/8" dia. iron pin with County Surveyor plastic cap bears N 41°32' W 29.57 ft.
5/8" dia. iron pin with County Surveyor plastic cap bears S 41°30' E 26.29 ft.

Witness to east 1/4 Section 11: Found, the 1" pipe with 1 1/2" expander, bearing the date of 1954, and the following bearing trees.
8" dia. fir bears N 64°28' E 24.8 ft.
34" dia. fir bears N 54°26' W 4.7 ft.
44" dia. fir stump bears S 82°30' E 25.1 ft.

East 1/4 corner of Section 11: Found, the 1974 BLM brass cap monument and the following bearing trees.
14" dia. fir bears S 80° W 19.4 ft.
8" dia. fir bears S 68° E 12.3 ft.

Center-west 1/16 corner of Section 11: Found, the 1971 BLM brass cap monument and the following bearing trees.
10" dia. fir bears S 4° W 52.7 ft.
20" dia. fir bears N 40°40' E 41.5 ft.

Northeast corner of Section 20: Found, at the top of and overhanging the high bank of the river canyon, the 1973 BLM brass cap monument marking the corner common to sections 16, 17, 20, and 21, and the following bearing trees.
42" dia. fir bears N 72°40' E 53.9 ft.
26" dia. fir bears S 4° E 5.7 ft.
18" dia. fir bears S 70° W 25.3 ft.
8" dia. fir bears N 27°30' W 16.5 ft.

North 1/16 corner between Sections 20 and 21: Found the 1" dia. iron pipe with brass disc, set on Survey #9667 in 1983, from which a USCE brass disc monument set in concrete in 1970, and stamped "20-21", bears N 61°55'35" W 22.71 ft. A County road centerline monument, being a brass disc set in concrete, bears N 28°41'20" W 93.62 ft.

Center-east 1/16 corner of Section 20: Found the 1" dia. iron pipe with brass disc, set on Survey #9667 in 1983, from which a USCE brass disc monument set in concrete in 1970, bears N 57°13'13" W 28.69 ft.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Roger P. Roberts

OREGON
JULY 14, 1979
ROGER P. ROBERTS
1656

LOST CREEK LAKE
U.S. ARMY CORPS OF ENGINEERS

SURVEY NARRATIVE

FOR SURVEY OF
NORTH BOUNDARY, TRACTS 402 AND 403
IN SECTIONS 10 & 11, T.33S, R.2E., W.M.
AND SOUTHEAST BOUNDARY OF TRACTS 313 & 314
IN SECTIONS 20 & 21, T.33S., R.2E., W.M.
JACKSON COUNTY, OREGON

HOFFBUHR and ASSOCIATES, INC.
219 N. OAKDALE
MEDFORD, OREGON

AUGUST 10, 1986

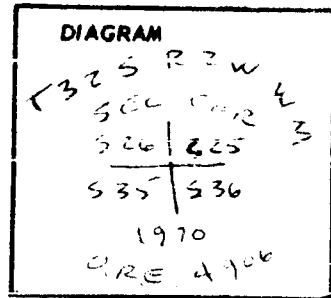
NPPEN-SY 85-86

CERTIFIED RECORD OF LAND CORNER MONUMENTATION

10728

History of original corner establishment:

THIS CORNER WAS SET IN 1970 BY
O.R.E. #4906.



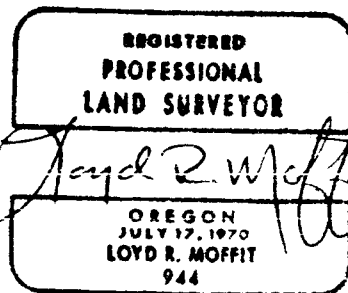
Description of corner evidence found:

FOUND A BRASS CAP ON A 2" IRON PIPE IN A ROCK MOUND.

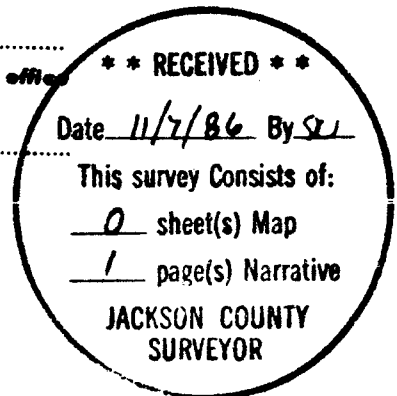
Description of monument and accessories I established to perpetuate the original location of this corner

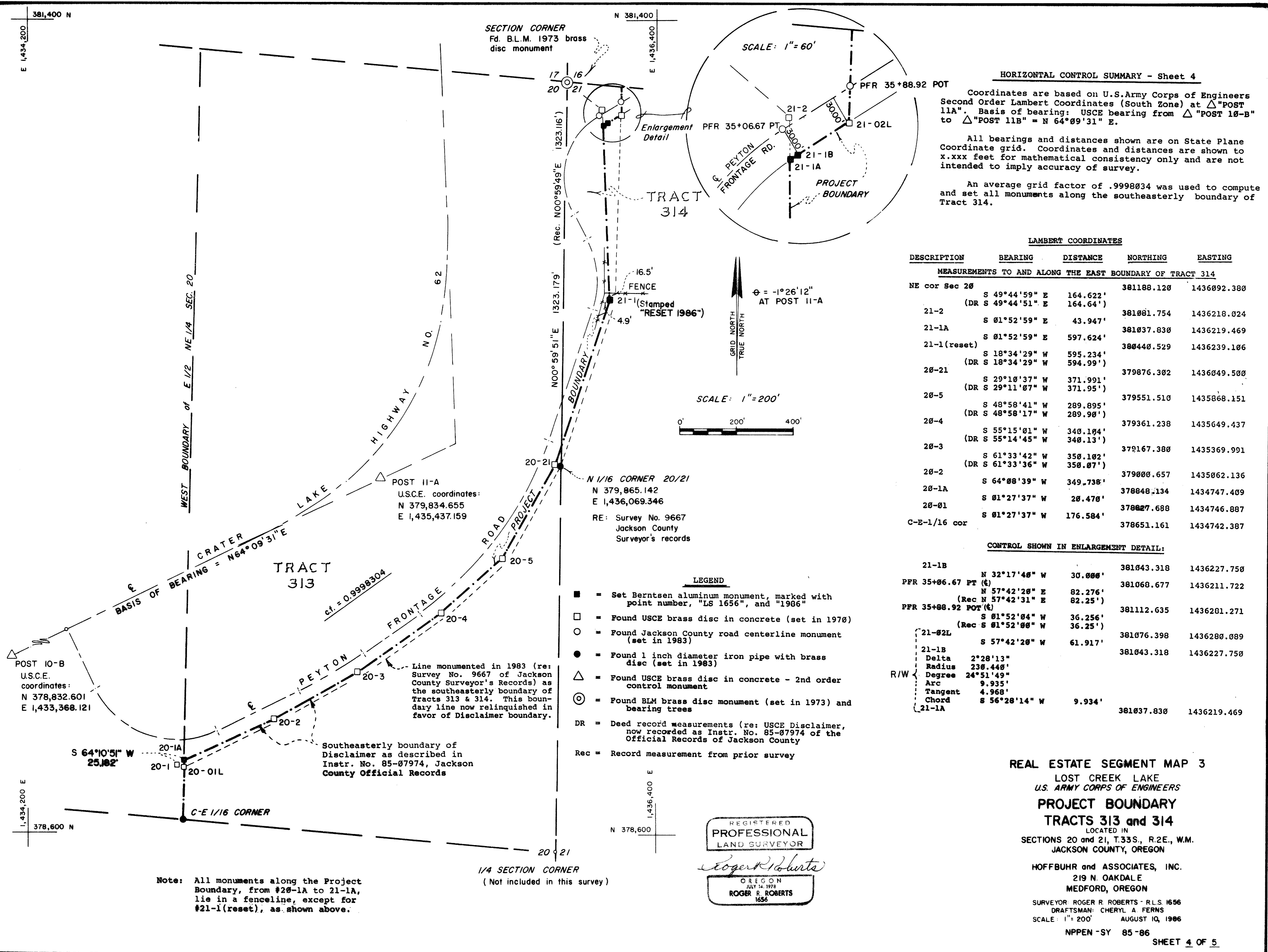
FOUND A 26" FIR WHICH BEARS N10°E 37.0', SCAR VISIBLE.
 FOUND A 6" FIR WHICH BEARS S55°E 43.0', SCRIBE VISIBLE.
 FOUND A 36" FIR STUMP WHICH BEARS S11°E 9.7', SCRIBE VISIBLE.
 FOUND A 24" FIR SNAG WHICH BEARS S49°W 15.3', SCRIBE VISIBLE.
 FOUND A 13" FIR WHICH BEARS S71°W 31.8', SCRIBE VISIBLE. (DEAD)
 FOUND A 24" FIR WHICH BEARS N28½°W 48.5', SCAR VISIBLE.
 I SCRIBED A 8" FIR WHICH BEARS S57½°W 22.1', MARKED T32S
 R2W S35 BT, NAILED LS WASHER NO.944 TO BT SCRIBE.

DATE: OCT., 1986



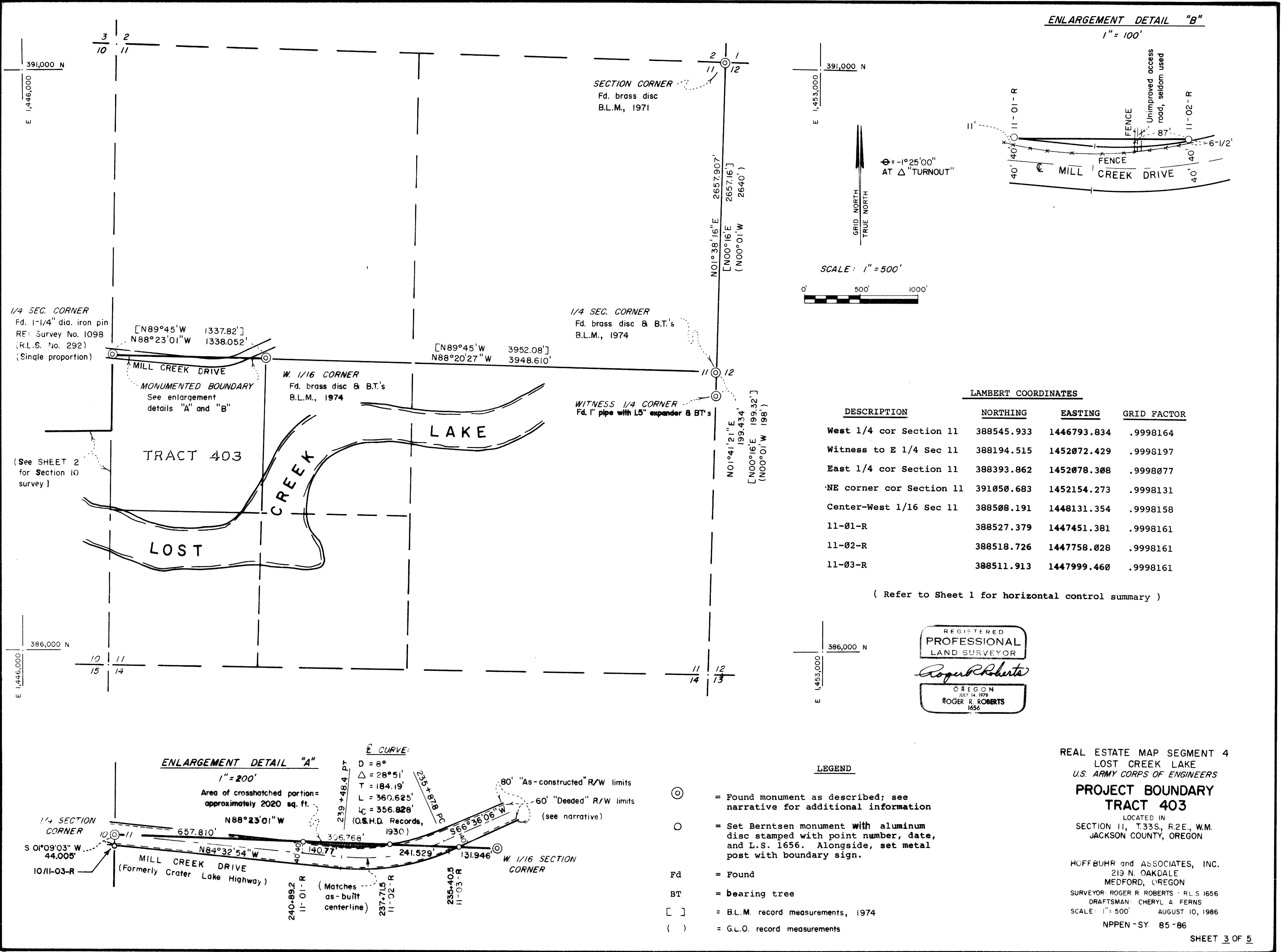
Office of Surveyor County of Jackson
 State of Oregon, I hereby certify that the within instrument was filed in this office
 for record on the 1th day of November 1986.
Edward H. McQuitty by _____
 (COUNTY OFFICIAL) (DEPUTY)

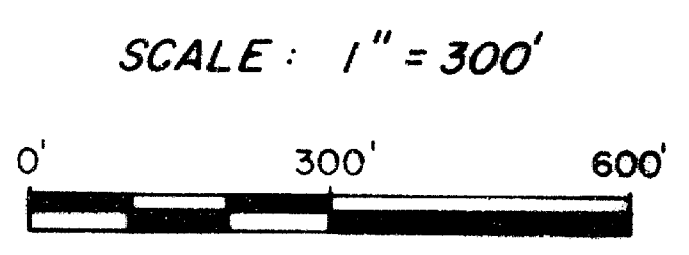
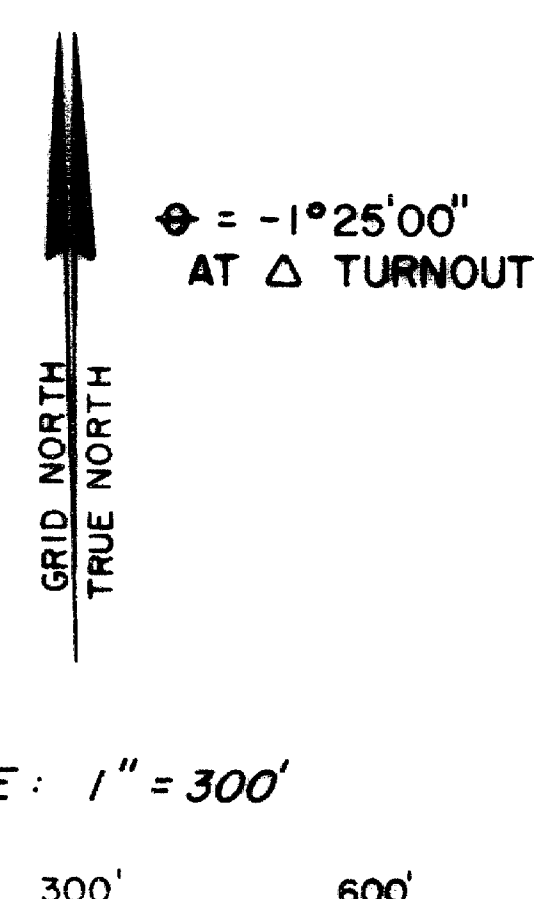
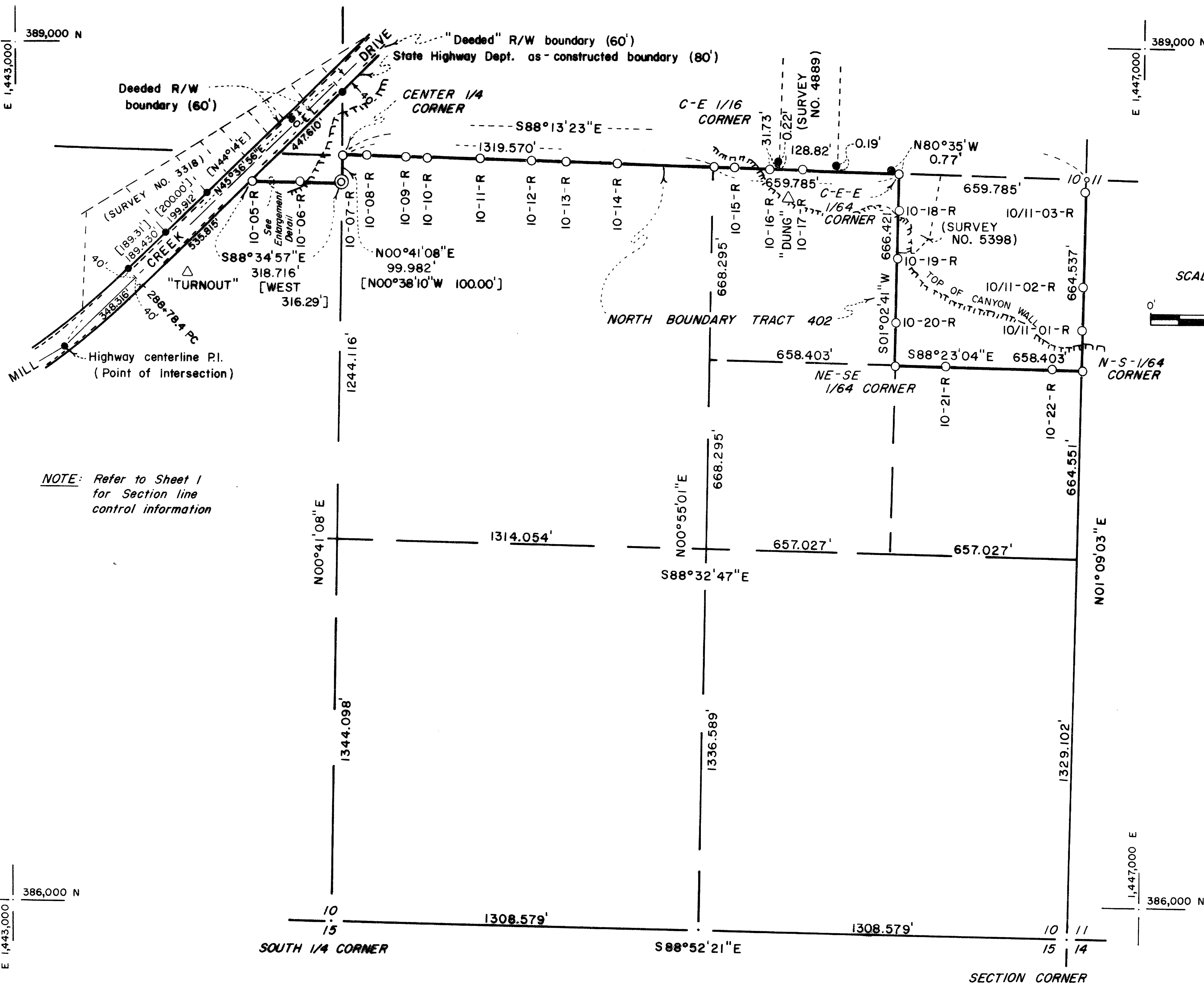




Note: All monuments along the Project Boundary, from #20-1A to 21-1A, lie in a fenceline, except for #21-1(reset), as shown above.

REGISTERED
PROFESSIONAL
LAND SURVEYOR
Roger R. Roberts
OREGON
JULY 14, 1978
ROGER R. ROBERTS
1656

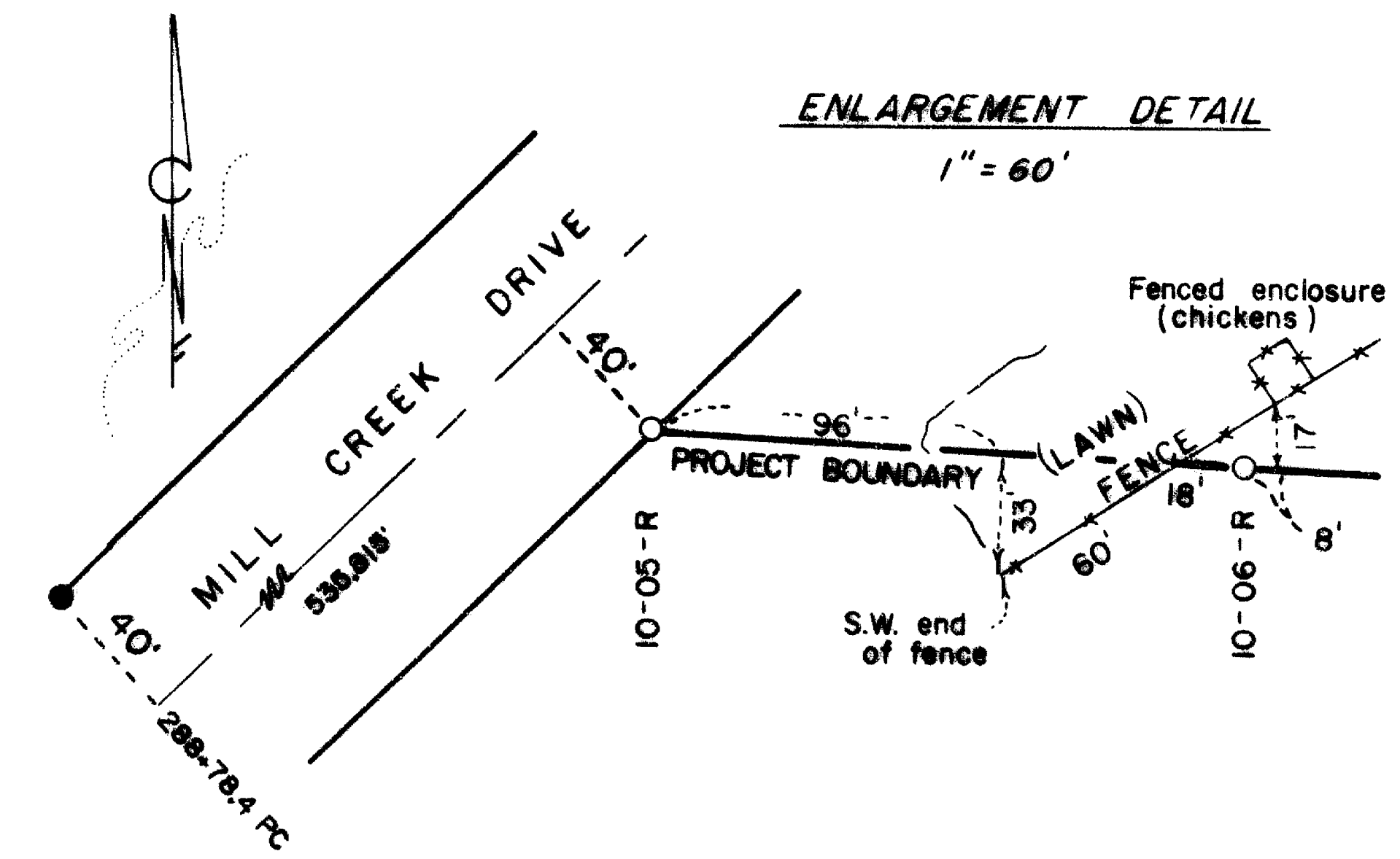




NOTE: Refer to Sheet 1 for horizontal control summary

NOTE: Refer to Sheet 1 for Section line control information

LAMBERT COORDINATES				
DESCRIPTION	BEARING	DISTANCE	NORTHING	EASTING
10-05-R			388535.682	1443836.147
10-06-R	S 88°34'57" E	164.427'	388531.614	1444000.524
10-07-R	S 88°34'57" E	154.289'	388527.797	1444154.766
C 1/4 cor	N 00°41'08" E	99.982'	388627.772	1444155.962
10-08-R	S 88°13'23" E	87.368'	388625.063	1444243.288
10-09-R	S 88°13'23" E	140.601'	388620.703	1444383.821
10-10-R	S 88°13'23" E	78.659'	388618.264	1444462.442
10-11-R	S 88°13'23" E	188.647'	388612.414	1444650.999
10-12-R	S 88°13'23" E	179.979'	388606.833	1444830.891
10-13-R	S 88°13'23" E	125.935'	388602.927	1444956.766
10-14-R	S 88°13'23" E	179.468'	388597.362	1445136.148
C-E-1/16	S 88°13'23" E	338.913'	388586.853	1445474.898
10-15-R	S 88°13'23" E	75.827'	388584.501	1445550.689
10-16-R	S 88°13'23" E	124.147'	388580.652	1445674.776
10-17-R	S 88°13'23" E	114.577'	388577.099	1445789.298
C-E-E 1/64	S 88°13'23" E	345.234'	388566.393	1446134.366
10-18-R	S 01°02'01" W	129.125'	388437.289	1446132.036
10-19-R	S 01°02'01" W	166.232'	388271.084	1446129.038
10-20-R	S 01°02'01" W	225.393'	388045.728	1446124.972
NE-SE 1/64	S 01°02'01" W	145.671'	387900.080	1446122.345
10-21-R	S 88°23'04" E	179.333'	387895.024	1446301.606
10-22-R	S 88°23'04" E	372.275'	387884.527	1446673.733
N-S 1/64	S 88°23'04" E	106.795'	387881.516	1446780.486
10/11-01-R	N 01°09'03" E	138.444'	388019.932	1446783.267
10/11-02-R	N 01°09'03" E	145.285'	388165.188	1446786.185
10/11-03-R	N 01°09'03" E	336.817'	388501.937	1446792.950
E 1/4 COR	N 01°09'03" E	44.005'	388545.933	1446793.834



- LEGEND
- △ = Found USCE brass disc, second order control monument
 - = Found 5/8" diameter iron pin
 - = Set Berntsen monument with aluminum disc stamped with point number, date, and L.S. 1656. Alongside, set metal post with boundary sign
 - ⊙ = Set 3.5" diameter brass disc drilled and cemented onto top of small rock outcrop, with stamping & signpost as described above
 - [] = Record measurements from Filed Survey #3318 (Not reduced to grid)
 - ~~~~~ = Approximate top of canyon wall

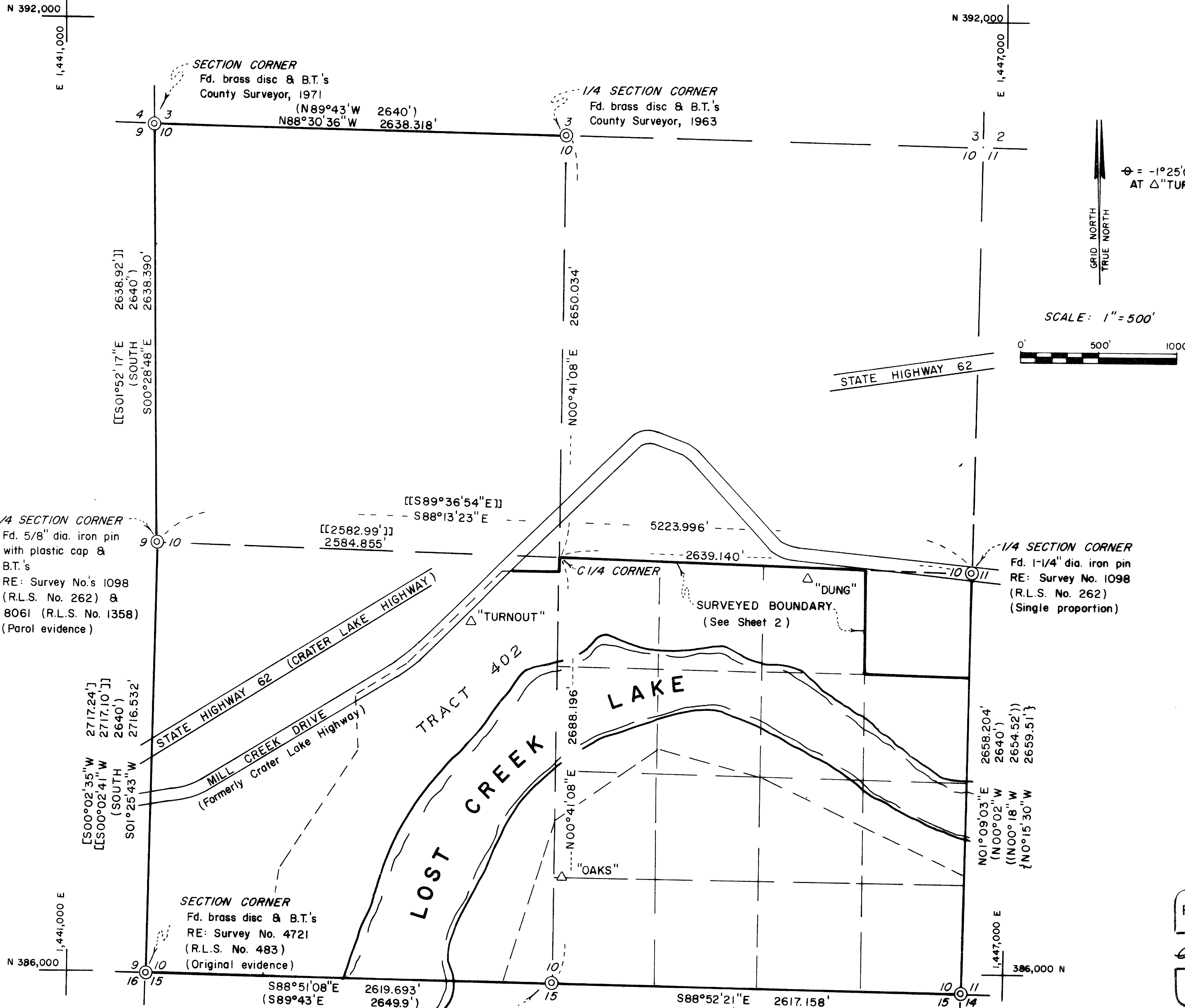
REGISTERED
PROFESSIONAL
LAND SURVEYOR

Roger R. Roberts

OREGON
JULY 14, 1972
ROGER R. ROBERTS
1656

REAL ESTATE MAP SEGMENT 4
LOST CREEK LAKE
U.S. ARMY CORPS OF ENGINEERS
PROJECT BOUNDARY TRACT 402
LOCATED IN
SECTION 10, T.33S., R.2E., W.M.
JACKSON COUNTY, OREGON

HOFFBUHR and ASSOCIATES, INC.
219 N. OAKDALE
MEDFORD, OREGON
SURVEYOR: ROGER R. ROBERTS - R.L.S. 1656
DRAFTSMAN: CHERYL A. FERNS
SCALE: 1" = 300' AUGUST 10, 1986
NPPEN-SY 85-06



DESCRIPTION	LAMBERT COORDINATES		GRID FACTOR
	NORTHING	EASTING	
"TURNOUT" (USCE record)	388217.030	1443592.980	.9998179
"DUNG" (computed)	388502.625	1445743.765	.9998169
(record)	388502.65	1445743.97	
SE corner Section 10	385888.265	1446740.444	.9998077
SW corner Section 10	385992.241	1441504.625	.9998192
NW corner Section 10	391346.225	1441550.248	.9997899
North 1/4 corner	391277.617	1444187.675	.9998090
West 1/4 corner	388707.928	1441572.350	.9998145
South 1/4 corner	385939.769	1444123.793	.9998148
East 1/4 corner	388545.933	1446793.834	.9998164

HORIZONTAL CONTROL SUMMARY - Sheets 1 thru 3

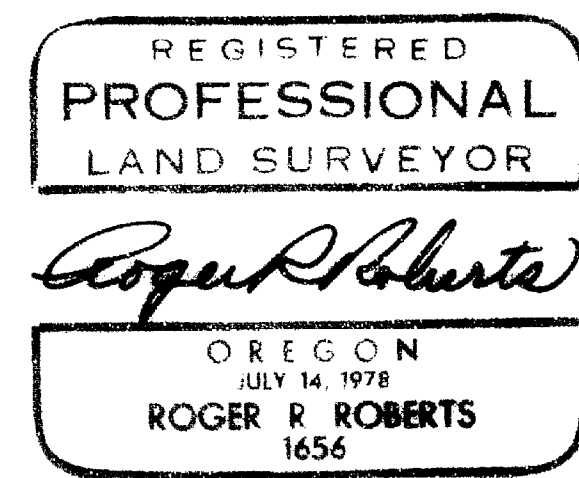
Coordinates for sheets 1 through 3 are based on U.S. Army Corps of Engineers 1968 Second Order Lambert Coordinates (South Zone) at Δ "TURNOUT". Basis of bearing: 1968 USCE bearing from Δ "TURNOUT" to Δ "DUNG" = N 82°26'10.1" E.

All bearings and distances shown are on State Plane Coordinate grid except those shown in parentheses or brackets. Coordinates and distances are shown to .xxx feet for mathematical consistency only and are not intended to imply accuracy of survey.

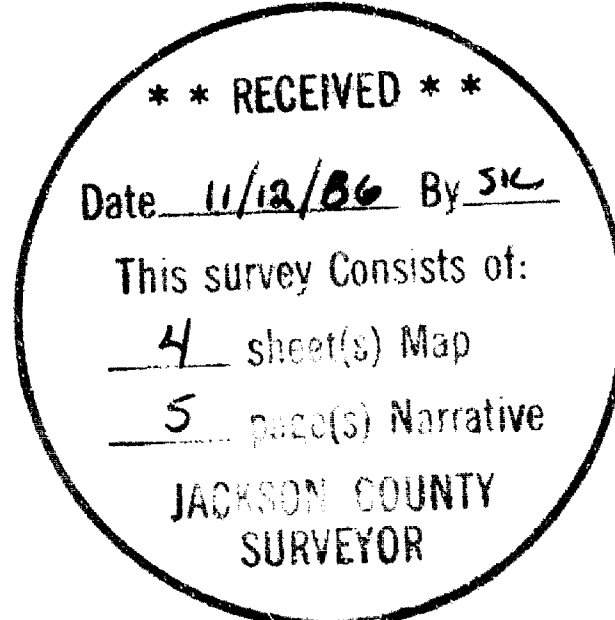
Sheet 1: The elevation and scale factors at each control point were used to determine the grid factor at that point.
 Sheets 2 and 3: An average grid factor of .9998166 was used to set all monuments along the North boundary of Tracts 402 and 403.

I, Roger R. Roberts, registered land surveyor in the State of Oregon, hereby certify that this plat and the notes hereon, or attached, are a correct representation of a survey I performed during May through August, 1986, at the request of the U.S. Army Corps of Engineers, in accordance with the survey recording act of the State of Oregon, and articles of the Department of the Army, Portland District, Corps of Engineers, Contract No. DACW57-86-C-0067.

Roger R. Roberts
 Roger R. Roberts



REAL ESTATE MAP SEGMENT 4
 LOST CREEK LAKE
 U.S. ARMY CORPS OF ENGINEERS
PROJECT BOUNDARY
TRACT 402
 LOCATED IN
 SECTION 10, T.33S., R.2E., W.M.
 JACKSON COUNTY, OREGON



HOFFBUHR and ASSOCIATES, INC.
 219 N. OAKDALE
 MEDFORD, OREGON
 SURVEYOR: ROGER R. ROBERTS - R.L.S. 1656
 DRAFTSMAN: CHERYL A. FERNS
 SCALE: 1" = 500' AUGUST 10, 1986
 NPPEN-SY 85-86

- LEGEND**
- △ = Found USCE brass disc, second order control monument
 - ⊙ = Found monument as described; see narrative for additional information
 - () = General Land Office record measurement
 - (()) = Bureau of Land Management record measurement
 - { } = Filed Survey No. 1098 record measurements
 - [] = Filed Survey No. 4721 record measurements
 - [[]] = Filed Survey No. 8061 record measurements
 - B.T. = Bearing tree
 - Fd. = Found