

PROJECT BOUNDARY			
N-S 1/256 Sec 18/17		383356.284	1399075.712
18/17-01-R	N 00 58 59.4 E	143.393	383499.655
51/16 Sec 18/17	N 06 58 59.4 E	188.744	383688.372
		383688.372	1399081.411

S-N 1/64th Sec 18/17		385680.747	1399115.606
17-01-R	S 62 54 13.2 E	248.139	385567.723
17-02-R	S 62 54 13.2 E	164.730	385492.690
17-03-R	S 62 54 13.2 E	258.256	385375.057
17-04-R	S 62 54 13.2 E	208.721	385279.987
17-05-R	S 62 54 13.2 E	167.981	385203.474
17-06-R	S 62 54 13.2 E	196.902	385113.788
17-07-R	S 62 54 13.2 E	189.549	385027.450
CW 1/16 Sec 17	N 89 31 22.6 E	151.972	385028.716
17-08-R	N 89 31 22.6 E	138.994	385029.873
17-09-R	N 89 31 22.6 E	127.378	385030.934
17-10-R	N 89 31 22.6 E	214.949	385032.723
17-11-R	N 89 31 22.6 E	284.487	385035.092
	Delta: 28 32 44.3	Radius: 772.958	
	Arc: 385.100	Tangent: 196.634	
	Long Chord: N 45 45 37.9 E	381.129	
17-12-R	N 60 02 00.0 E	311.160	385300.990
17-13-R	N 60 02 00.0 E	311.160	385456.413
	Delta: 49 16 00.0	Radius: 118.310	
	Arc: 101.731	Tangent: 54.250	
	Long Chord: N 35 24 00.0 E	98.626	
17-14-R	N 10 46 00.0 E	155.335	385536.806
17-15-R	N 10 46 00.0 E	293.636	385689.406
17-16-R	N 10 46 00.0 E	293.636	385977.873
17-17-R	N 10 46 00.0 E	194.849	386169.292
	Delta: 30 02 13.0	Radius: 372.958	
	Arc: 195.521	Tangent: 100.063	
	Long Chord: N 4 15 06.5 W	193.290	
17-18-R	N 70 43 47.0 E	372.958	386362.049
CN 1/16 Sec 17	S 89 39 22.7 W	303.600	386360.228
17-19-R	N 1 22 07.5 E	150.347	386510.532
17-20-R	N 1 22 07.5 E	207.700	386718.173
17-21-R	N 1 22 07.5 E	113.892	386832.033
17-22-R	N 29 28 48.0 W	112.751	386930.185
	Delta: 7 47 15.2	Radius: 772.958	
	Arc: 105.059	Tangent: 52.611	
	Long Chord: N 25 35 07.9 W	104.978	
17-23-R	N 18 54 40.5 W	74.925	387024.870
	Delta: 5 33 39.6	Radius: 772.958	
	Arc: 75.022	Tangent: 37.540	
	Long Chord: N 18 54 40.5 W	74.925	
17-24-R	N 3 14 54.9 W	344.657	387095.814
	Delta: 25 45 51.6	Radius: 772.958	
	Arc: 347.578	Tangent: 176.778	
	Long Chord: N 3 14 54.9 W	344.657	
17-25-R	N 3 14 54.9 W	344.657	387439.917
	Delta: 5 34 02.8	Radius: 772.958	
	Arc: 75.105	Tangent: 37.584	
	Long Chord: N 12 25 02.3 E	75.075	
17-26-R	N 21 45 01.8 E	176.776	387513.240
	Delta: 13 07 56.4	Radius: 772.958	
	Arc: 177.164	Tangent: 88.972	
	Long Chord: N 21 45 01.8 E	176.776	
17-27-R	N 28 20 00.0 E	5.195	387677.411
8/17-01-R	N 28 20 00.0 E	5.195	387681.984

**** RECEIVED ****
 Date: 8/26/88 By: [Signature]
 This survey consists of:
 - 3 sheets (1) Map
 - 0 pages (1) Narrative
 JACSON COUNTY SURVEYOR

REGISTERED
**PROFESSIONAL
 LAND SURVEYOR**
 Roger R. Roberts
 OREGON
 JULY 14, 1978
 ROGER R. ROBERTS
 1988

U.S. ARMY ENGINEER DISTRICT, PORTLAND

**ROGUE RIVER BASIN
 ELK CREEK LAKE
 PROJECT BOUNDARY MONUMENTATION**

SECTION 17, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M.
 JACKSON COUNTY, OREGON

SUPERVISED: [Signature]	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2
DATE: JULY, 1988	SHEET: 1 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON

- LEGEND**
- △ - Found USCE brass disc, second order control monument
 - ⊙ - Found bronze cap set by Bureau of Land Management
 - ⊙ - Found brass disc set by US Corps of Engineers
 - ⊙ - No monument set. See sheet 3 for additional information
 - ⊙ - Set Benneken aluminum monument stamped with monument number, date, and "L.S. 1858". Alongside, set metal post with boundary sign.
 - () - General Land Office record measurements *
 - () - Bureau of Land Management record measurements *
 - POB - Point of beginning of legal description
- * not reduced to grid

I, Roger R. Roberts, registered land surveyor in the State of Oregon, hereby certify that this plat and notes hereon, or attached, are a correct representation of a survey I performed during July, 1987, through April, 1988 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. DACW57-87-C-0054.

[Signature]
 Roger R. Roberts

SURVEY NARRATIVE TO COMPLY WITH PARAGRAPH 209.250
OREGON REVISED STATUTES

LOCATION: Section 17, Township 33 South, Range 1 East of the Willamette Meridian, Jackson County, Oregon.

PURPOSE: To monument the boundary corners and post line markers along that portion of the Elk Creek Project Boundary being in Section 17, as shown on Segment 2 of the Corps of Engineers Elk Creek Lake Real Estate drawings. The survey was performed during July 1987 through April 1988.

PROCEDURE: Establishing Lambert State Plane Coordinate control:

Second order control monument Station EC-30, established by the Corps of Engineers in 1964, was used as a basis of Lambert State Plane Coordinates (South Zone). The 1974 adjusted coordinates were used. The line from Station EC-30 to Station EC-31, also established in 1964, was used as a basis of bearing. The USCE record bearing from EC-30 to EC-31 = South 30°28'28.5" East.

All bearings and distances shown are on State Plane Coordinate grid. Coordinates and distances are shown to .xxx feet and bearings to .x seconds for mathematical consistency only and are not intended to imply accuracy of survey.

An average latitude and elevation were used to compute a single grid factor for each individual survey traverse. The grid factor at the Station EC-30 is:

- Scales factor (latitude N 42°42'02") = 0.9999277
- Elevation factor (1600') = 0.9999235
- Combined (grid) factor = 0.9998512

All horizontal control established by this survey meets requirements of 3rd Order, Class 1, National Oceanic and Atmospheric Administration specifications for geodetic control.

Establishing section subdivision control:

The project boundary within Section 17 is dependent upon both the subdivisional lines of the section and metes and bounds descriptions. A series of traverses were run, using an electronic "total station" 1 second theodolite and distance meter, to locate the controlling section monuments and establish coordinates.

Only the southeast corner of Section 17 has been perpetuated from original evidence.

The northwest corner of Section 17 was monumented at a double proportionate position by the BLM in 1965, using the northeast and southwest corners of the section, the section corner to the west common to Sections 7 and 18 only, and the quarter-section corner to the north common to Sections 7 and 8. The northeast corner of Section 17 was monumented by the BLM in 1965, using a 3-way fence intersection, 50 year old unrecorded bearing trees, and the fact that the location had been used for many years as the corner.

The southwest corner of the Section 17, which had been perpetuated by the BLM from original evidence, falls in an area which has been cleared for quarry operations in conjunction with the dam construction. No evidence of the monument or corner accessories remains. The coordinate location was determined by references taken by Hoffbuhr & Associates, Inc., shortly before the corner was obliterated.

The north, west, and east quarter-section corners of Section 17 were monumented by the BLM at single proportionate position. The monument at the west quarter-section corner was evidently replaced by the US Corps of Engineers in 1973. The south quarter-section corner was monumented by the BLM in 1966 from parcel evidence.

The positions of these monuments in relation to the controlling corners used for the proportioning were checked for accuracy. Also, a ground search was made for evidence of the original survey. No additional evidence was found.

As shown on the map on sheet 1, the monuments found at the north, east and center quarter-section corners, the sixteenth-section corners on the east and west boundaries of the section, and the center-west and center-north sixteenth-section corners were not used for this survey. They were considered to be outside of the allowable "limits of closure" as outlined in the 1947 and 1973 editions of the Manual of Surveying Instructions, using a ratio of 1/1280 for latitude and departure independently. No monuments were set at the computed positions except for the center-north and center-west quarter-section corners, since they are both angle points on the project boundary.

The westerly boundaries of Tracts 205/2 and 205/3 were both determined by metes and bounds as described in Instrument No. 74-08008 of the Official Records of Jackson County, with each boundary being 200 feet westerly of and parallel with a described line.

Using the section control determined as described above, Section 17 was subdivided and monumented as shown on the plat on sheet 1. The intermediate project boundary monuments were positioned for intervisibility.

SECTION CONTROL - (Bearings oriented to true north)

FOUND:

Northeast corner of Section 17: Found, the BLM brass cap set in 1965, on a 2" diameter pipe exposed 12", and the following bearing trees:
15" black oak, blazed in 1965, bears N 73°11' E 76.1 ft.
16" fir with lower healed blazes of unknown origin, bears S 51°36' E 111.6 ft.

Northwest corner of Section 17: Found, the BLM brass cap set in 1965, on a 2" diameter pipe exposed 13", with the following bearing trees:
10" fir snag with healed blazes bears N 10° E 23.7 ft.
8" fir, dead and down, scribing visible, bears S 52° E 27.2 ft. to the stump hole.
13" fir snag, with healed blazes, bears S 64° W 4.9 ft.
8" pine with healed blazes bears N 75° W 45.4 ft.

Southeast corner of Section 17: Found, the 1966 BLM brass cap on a 2" diameter pipe, exposed 12" above a mound of stone, from which stands the following original bearing tree:
18" oak with healed blazes bears N 64°33' E 12.0 ft.
Trees marked by the BLM in 1966 were found as follows:
16" pine with healed blazes bears N 43°17' E 52.9 ft.
6" oak with healed blazes bears S 70°46' E 52.1 ft.
13" fir with healed blazes bears S 69°54' W 47.9 ft.
9" oak with healed blazes bears N 58°06' W 42.2 ft.

Northwest corner of Section 18: Found, the BLM brass cap set in 1956, on a 2" diameter pipe exposed 14", with notched stone alongside, and the following bearing trees:
15" fir with healed blazes bears N 63°03' E 41.7 ft.
10" fir with healed blazes bears S 19°03' E 19.0 ft.
57" fir with ax marks, no scribing visible, bears S 28°34' E 39.6 ft.
The slab remains of a fir, with scribing visible, bears S 8°42' E 31.8 ft.

Quarter-section corner common to Sections 7 and 8: Found, the BLM brass cap set in 1965, on a 1" pipe, exposed 16", and the following bearing trees:
14" fir with healed blazes bears S 21°44' E 66.5 ft.
9" fir with healed blazes bears N 67°57' E 18.9 ft.

Quarter-section corner common to Sections 17 and 16: No monument found or set at the computed single proportionate position. The 1965 BLM brass cap monument intended to be set at the proportionate position bears N 59°21' E 3.13 ft., from which bear the following bearing trees:
15" fir with healed blazes bears S 66°04' E 42.8 ft.
19" pine with healed blazes bears N 47°50' W 22.3 ft.

Quarter-section corner common to Sections 17 and 18: Found, a 4" diameter brass disc set in concrete, marked "...Corps of Engineers...1973...", and the following bearing tree:
19" diameter fir with healed blaze, marked by the BLM in 1965, bears N 81°33' W 32.3 ft.

Quarter-section corner common to Sections 17 and 20: Found, the 1966 brass cap on a 1" diameter pipe, exposed 6", from which bear the following trees marked by the BLM in 1974:
12" fir snag with scribing visible bears S 12° E 26.5 ft.
15" fir stump with scribing visible bears N 34° W 17.5 ft.

Center quarter-section corner: No monument found or set at the computed corner position. The 1965 BLM brass cap monument intended to be set at the corner position bears N 27°38' W 5.68 ft., from which bear the following found bearing trees:
32" pine with healed blazes bears S 48°52' E 39.19 ft.
28" pine with healed blazes bears S 36° W 36.84 ft.

North sixteenth-section corner between Sections 17 and 18: No monument found or set at the computed position. The 1965 BLM brass cap monument intended to be set at the corner position bears N 57°22' E 1.87 ft., from which bear the following found bearing trees:
7" white oak with healed blaze bears S 86°40' E 14.2 ft.
12" fir with healed blazes bears N 85°28' W 20.8 ft.

North sixteenth-section corner between Sections 17 and 16: No monument found or set at the computed position. The 1965 BLM brass cap monument intended to be set at the corner position bears S 60°06' E 4.36 ft., from which bear the following bearing trees:
12" fir with healed blazes bears N 38° E 43.4 ft.
20" pine with healed blazes bears S 71°35' W 43.4 ft.

South sixteenth-section corner between Sections 17 and 16: No monument found or set at the computed position. The 1965 BLM brass cap monument intended to be set at the corner position bears S 32°45' E 1.62 ft., from which bear the following bearing trees:
9" fir with healed blazes bears S 87°43' E 30.8 ft.
16" fir with healed blazes bears N 69°33' W 26.7 ft.

SET:

Quarter-section corner common to Sections 8 and 17: Set a 30" long Berntsen aluminum monument with the aluminum cap stamped as shown here. The 1965 BLM brass cap monument intended to be set at the corner position bears S 52°17' E 8.14 ft., from which bears the following bearing tree:
10" fir with healed blazes bears S 85°30' W 40.8 ft.

It should be noted here that there is evidence that the found monument may be in a location different from where it was placed in 1965. From the new monument the tree bears S 76°34' W 35.2 ft.

South sixteenth-section corner between Sections 17 and 18: Set a 30" Berntsen aluminum monument, flush with the aluminum cap stamped as shown here, from which bear the following:
The 1965 BLM brass cap monument intended to be set at the proportionate position bears N 40°30' E 2.97 ft. From the found monument were found the following bearing trees:
16" madrone with healed blaze bears S 74° E 55.0 ft.
14" fir snag with scribing visible bears S 28° E 8.9 ft.

Center-west sixteenth-section corner: Set a 30" Berntsen aluminum monument, exposed 3", with the aluminum cap stamped as shown here, from which bear the following:
The 1965 BLM brass cap monument intended to be set at the corner position bears N 1°31' E 7.07 ft. From the found monument were found the following bearing trees:
11" fir with healed blazes bears N 59°07' E 7.7 ft.
12" fir with healed blazes bears S 26°07' W 20.8 ft.

Center-north sixteenth-section corner: Set a 30" Berntsen aluminum monument, exposed 2", with the aluminum cap stamped as shown here, from which bear the following:
The BLM brass cap monument intended to be set at the corner position bears N 57°49' E 1.88 ft. From the found monument were found the following bearing trees:
16" fir with healed blazes bears S 9°24' E 21.6 ft.
16" fir with healed blazes bears N 23°10' W 68.1 ft.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

Roger R. Roberts

OREGON
JULY 14, 1978
ROGER R. ROBERTS
1955

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROGUE RIVER BASIN

ELK CREEK LAKE

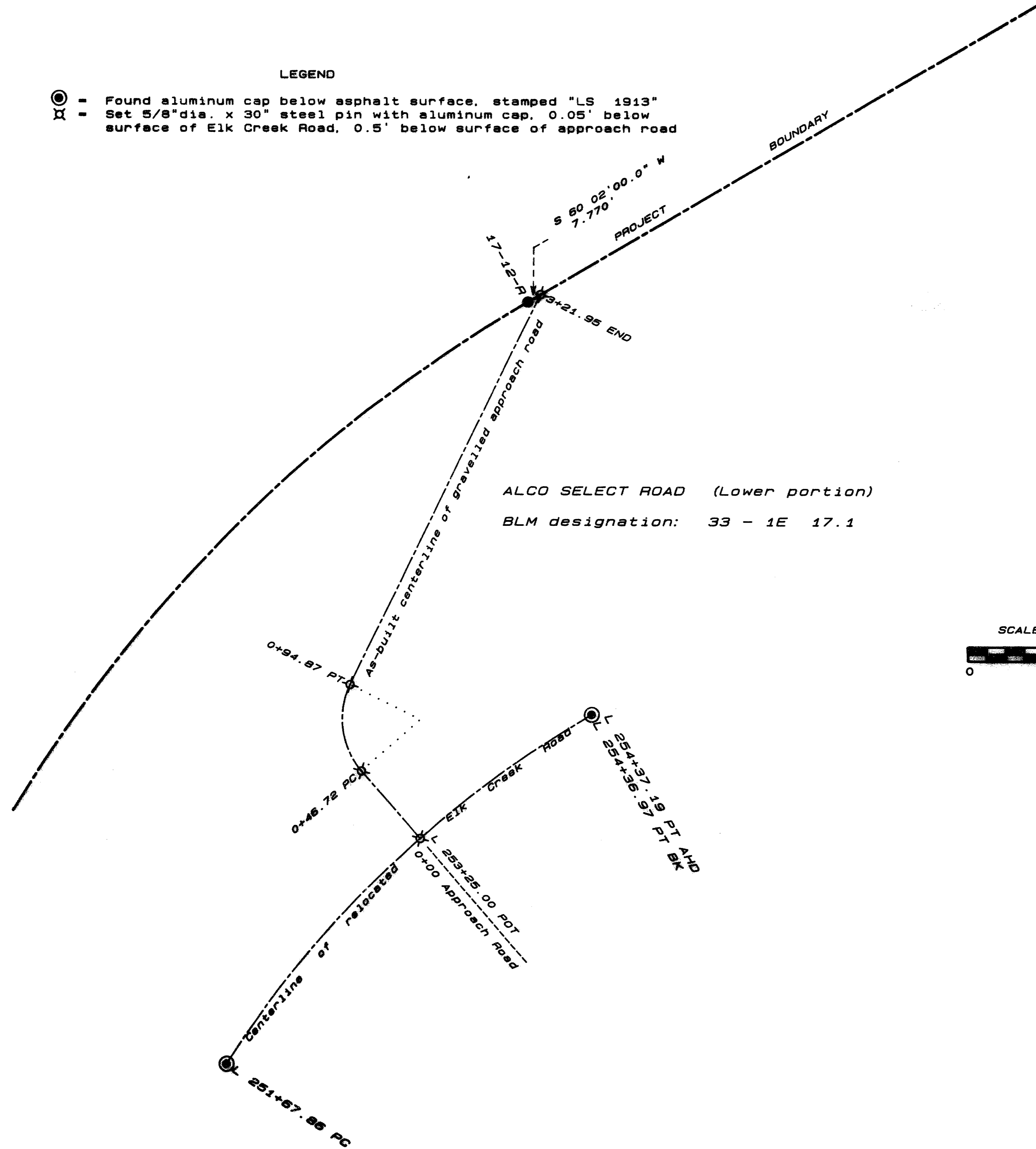
PROJECT BOUNDARY MONUMENTATION

SECTION 17, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M.

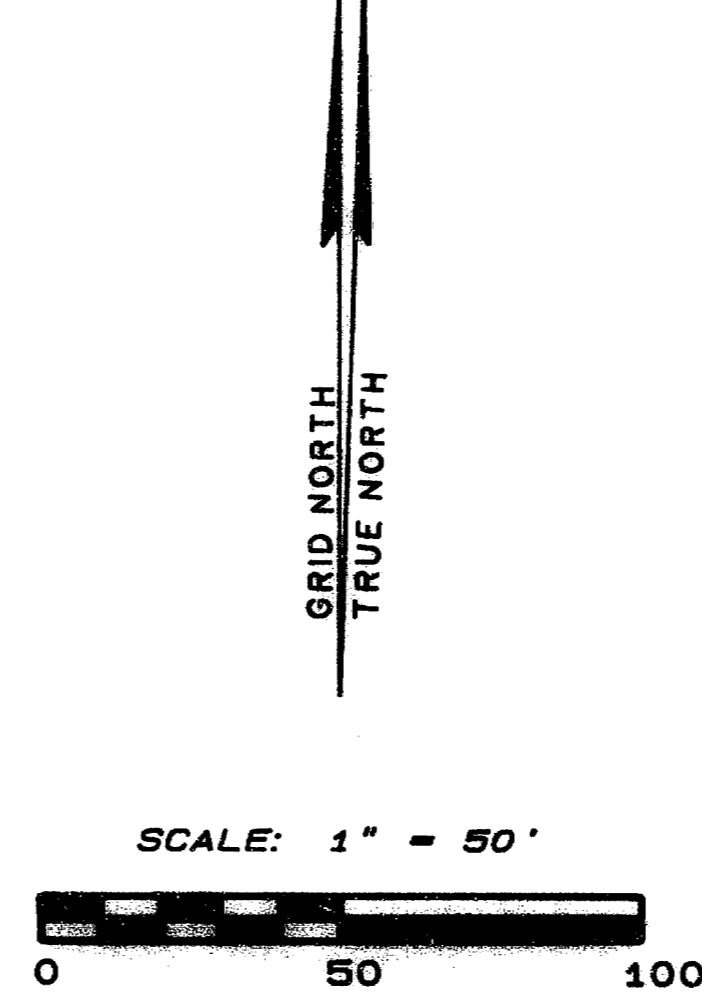
JACKSON COUNTY, OREGON

SUPERVISED: <i>RRR</i>	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2 NPPEN-SY-85-50
DATE: July, 1988	SHEET: 3 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON

- LEGEND**
- ⊙ - Found aluminum cap below asphalt surface, stamped "LS 1913"
 - ⊠ - Set 5/8" dia. x 30" steel pin with aluminum cap, 0.05' below surface of Elk Creek Road, 0.5' below surface of approach road



ALCO SELECT ROAD (Lower portion)
BLM designation: 33 - 1E 17.1



ENLARGEMENT DETAIL 'A'

LAMBERT COORDINATES

DESCRIPTION	NORTH	EAST
Control Station EC-30	384905.910	1402927.480
Control Station EC-31	384192.440	1402507.640
Control Station WEC-3	383128.660	1400826.970
Control Station WEC-4	384537.470	1399714.930
Sec cor 7, 8, 17, 18	387672.796	1399149.804
Sec cor 8, 9, 16, 17	387691.763	1404337.979
Sec cor 15, 17, 20, 21	382428.077	1404246.026
Sec cor 17, 18, 19, 20	382360.020	1399058.615
Sec cor 7/18 only	387302.154	1393898.959
1/4 cor Sec 16/17	385016.724	1399104.207
1/4 cor Sec 17/20	382235.095	1401613.739
1/4 cor Sec 17/16	385059.920	1404292.003
1/4 cor Sec 8/17	387682.279	1401743.892
C 1/4 Sec cor	385038.177	1401680.715
1/4 cor Sec 7/8	390320.765	1399516.949
N 1/16 Sec 18/17	386344.770	1399127.005
S 1/16 Sec 18/17	383698.372	1399081.411
S 1/16 Sec 17/16	383743.998	1404269.014
N 1/16 Sec 17/16	386375.841	1404314.981
CN 1/16 Sec 17	386360.228	1401712.303
CW 1/16 Sec 17	385027.450	1400392.461
S-N 1/64 Sec 18/17	385680.747	1399115.606
N-S-S 1/256 Sec 18/17	383356.284	1399075.712
POB of Tract 205-3 description	384895.483	1401460.900
POB of Tract 205-2 description	387946.560	1402032.961

- See sheet 3 for horizontal control details -

ROAD CENTERLINES

Description	NORTH	EAST
Centerline of Elk Creek Road:		
L 251+67.86 PC	384902.648	1401423.459
Delta: 15 42 50.2	Radius: 572.958	
Arc: 157.140	Tangent: 79.066	
Long Chord: N 40 59 42.4 E	156.648	
L253+25.00 POT	385020.880	1401526.219
Delta: 11 11 29.4	Radius: 572.958	
Arc: 111.915	Tangent: 56.136	
Long Chord: N 54 26 52.2 E	111.737	
L 254+37.19 PT AHD	385085.849	1401617.127
L 254+36.97 PT BK		
Centerline of Alco Select Road:		
0+00	385020.880	1401526.219
N 41 03 47.0 W	46.720	
0+46.72 PC	385056.106	1401495.529
Delta: 67 17 00.0	Radius: 41.000	
Arc: 48.147	Tangent: 27.283	
Long Chord: N 7 25 17.0 W	45.428	
0+94.87 PT	385101.153	1401489.661
N 26 13 13.2 E	227.084	
3+21.95 END	385304.871	1401589.992

U.S. ARMY ENGINEER DISTRICT, PORTLAND

ROGUE RIVER BASIN
ELK CREEK LAKE
APPROACH ROAD MONUMENTATION
SECTION 17, TOWNSHIP 33 SOUTH, RANGE 1 EAST, W.M.
JACKSON COUNTY, OREGON

REGISTERED
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Roger R. Roberts
OREGON
JULY 14, 1978
ROGER R. ROBERTS
1885

SUPERVISED: <i>RJR</i>	DRAWN: H-P CAM	Ref: Real Estate Segment Map 2 NPPEN-SY-86-50
DATE: JULY, 1988	SHEET: 2 of 3	PREPARED BY: HOFFBUHR & ASSOCIATES, INC. MEDFORD, OREGON