

COUNTY SURVEYORS FILE DATA  
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# HORIZONTAL CONTROL AND RECOVERY MAP FOR THE OREGON DEPARTMENT OF TRANSPORTATION LOCATED IN THE SE 1/4 OF SECTION 30, THE NE 1/4 OF SECTION 31, AND THE NW 1/4 OF SECTION 32, T. 21 S., R. 4 W., W.M. DOUGLAS COUNTY

FILED  
Date: 6-8-1999 By: JP  
This survey consists of: 5 Plans  
Map: M129-47A  
Narrative: \_\_\_\_\_  
Corner Rpt: \_\_\_\_\_  
DOUGLAS COUNTY, OREGON  
SURVEYOR

## SURVEY NARRATIVE

THE PURPOSE OF THIS METRIC SURVEY WAS TO ESTABLISH HORIZONTAL CONTROL FOR AN OREGON DEPARTMENT OF TRANSPORTATION PROJECT CALLED "ANLAUF INTERCHANGE - ELKHEAD INTERCHANGE" ALONG INTERSTATE 5. THE SURVEY WAS CONDUCTED BETWEEN NOVEMBER 9, 1995 AND FEBRUARY 13, 1996. THE ORIGINAL FIELD NOTES ARE CONTAINED IN BOOK #3623, ARCHIVED IN THE ROADWAY ENGINEERING SECTION OF ODOT IN SALEM, OREGON.

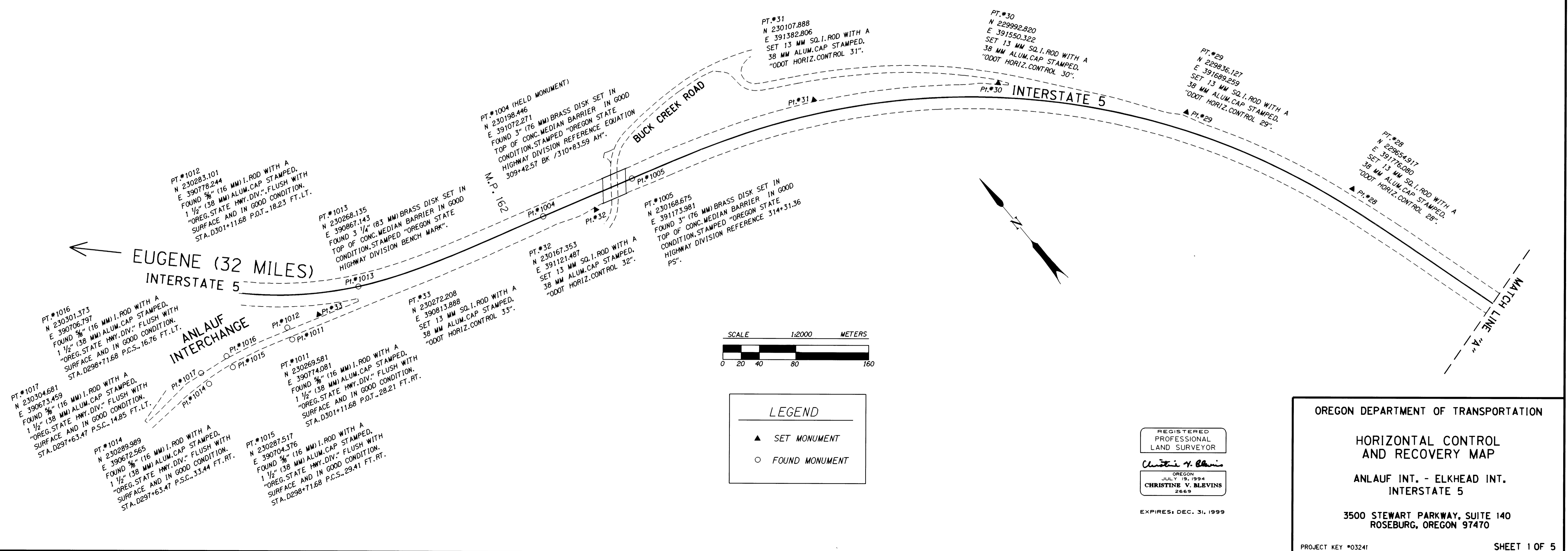
THE CONTROL NETWORK POINTS CONSISTS OF BOTH FOUND AND SET MONUMENTS (SEE DESCRIPTIONS AT EACH POINT LOCATION). AN ORANGE CARSONITE WITNESS POST WAS SET AT EACH NETWORK POINT. THE BASIS OF BEARING IS THE RECORD COURSE FROM CENTERLINE POINTS AT ENGLISH CONSTRUCTION STATION 309+42.57 BK.+310+83.59 AH. (POINT 1004, HELD) AND THE RIGHT OF WAY STATION 610+09.33 P.S. (POINT 1029) TAKEN FROM ODOT RIGHT OF WAY DRAWING NOS. 7B-13-5 AND 7B-13-6, AND THE AS-CONSTRUCTED PLANS #12V-72. COORDINATES ARE ASSUMED AND ARE ON A LOCAL DATUM PLANE WHERE MEASUREMENTS REPRESENT TRUE GROUND DISTANCES. TO CONVERT METRIC COORDINATES TO ENGLISH DIVIDE BY 0.3048.

THE NETWORK WAS ADJUSTED USING LEAST SQUARES. THIS ADJUSTMENT PRODUCED ANGULAR RESIDUALS (THE AMOUNT THE FIELD OBSERVED ANGLES WERE CHANGED DUE TO THE ADJUSTMENT) OF NO GREATER THAN 3 SECONDS; AND, DISTANCE RESIDUALS (THE AMOUNT THE FIELD OBSERVED DISTANCES WERE CHANGED DUE TO ADJUSTMENTS) OF NO GREATER THAN 3 MM, EXCEPT FOR ONE RESIDUAL OF 8 MM. THERE IS A 95% PROBABILITY THAT THE FINAL POSITIONS OF THE CONTROL POINTS ARE WITHIN THE ERROR ELLIPSES AS SHOWN ON THE ERROR ANALYSIS TABLE (SHOWN ON THIS SHEET).

## ERROR ANALYSIS

POINT	STANDARD DEVIATIONS		STANDARD ERROR ELLIPSE		
	NORTH	EAST	SEMI MAJOR	SEMI MINOR	ORIENTATION
34	0.002	0.006	0.006	0.001	S 71°06'29"E
3	0.001	0.002	0.002	0.001	S 71°11'40"E
4	0.001	0.001	0.001	0.001	S 63°14'47"E
5	0.001	0.003	0.003	0.001	S 65°46'23"E
6	0.004	0.006	0.007	0.001	S 61°09'58"E
7	0.005	0.010	0.011	0.001	S 61°12'27"E
8	0.007	0.013	0.015	0.001	S 62°10'17"E
9	0.008	0.016	0.018	0.001	S 62°25'30"E
10	0.009	0.019	0.020	0.001	S 64°38'14"E
11	0.009	0.023	0.024	0.002	S 69°38'53"E
12	0.008	0.029	0.030	0.004	S 75°07'41"E
13	0.011	0.036	0.038	0.003	S 74°06'50"E
14	0.015	0.046	0.049	0.003	S 72°42'08"E
15	0.018	0.057	0.060	0.003	S 72°46'17"E
16	0.020	0.063	0.066	0.003	S 72°22'18"E
17	0.019	0.068	0.070	0.004	S 74°40'28"E
18	0.016	0.074	0.075	0.007	S 79°05'54"E
19	0.015	0.078	0.079	0.008	S 80°38'09"E
20	0.015	0.086	0.087	0.008	S 81°12'43"E
21	0.017	0.092	0.093	0.007	S 80°33'47"E
22	0.017	0.099	0.100	0.008	S 80°59'41"E

POINT	STANDARD DEVIATIONS		STANDARD ERROR ELLIPSE		
	NORTH	EAST	SEMI MAJOR	SEMI MINOR	ORIENTATION
23	0.017	0.102	0.103	0.008	S 81°39'32"E
24	0.015	0.110	0.110	0.010	S 84°22'28"E
25	0.015	0.117	0.117	0.011	S 85°09'55"E
26	0.014	0.124	0.124	0.013	S 87°01'05"E
27	0.015	0.137	0.137	0.015	S 89°10'41"E
28	0.015	0.145	0.145	0.015	S 89°46'26"E
29	0.017	0.152	0.152	0.017	N 88°45'12"E
30	0.021	0.159	0.159	0.019	N 86°35'16"E
31	0.028	0.163	0.164	0.022	N 84°04'57"E
32	0.040	0.166	0.168	0.028	N 80°10'57"E
33	0.055	0.170	0.176	0.035	N 75°41'19"E
35	0.005	0.011	0.012	0.001	S 68°06'38"E
36	0.006	0.014	0.015	0.001	S 68°15'27"E
37	0.006	0.019	0.020	0.002	S 72°05'22"E
38	0.006	0.022	0.023	0.002	S 76°46'27"E
39	0.005	0.026	0.026	0.003	S 81°29'30"E
40	0.005	0.032	0.032	0.005	S 89°53'45"E
41	0.006	0.037	0.037	0.005	N 86°41'15"E
42	0.007	0.044	0.044	0.006	N 84°35'22"E
43	0.007	0.049	0.049	0.005	N 85°43'15"E
44	0.005	0.058	0.058	0.005	S 89°53'05"E



REGISTERED PROFESSIONAL LAND SURVEYOR  
*Christine V. Blevins*  
OREGON JULY 19, 1994  
CHRISTINE V. BLEVINS 2669  
EXPIRES: DEC. 31, 1999

OREGON DEPARTMENT OF TRANSPORTATION  
**HORIZONTAL CONTROL AND RECOVERY MAP**  
ANLAUF INT. - ELKHEAD INT. INTERSTATE 5  
3500 STEWART PARKWAY, SUITE 140  
ROSEBURG, OREGON 97470  
PROJECT KEY #03241 SHEET 1 OF 5