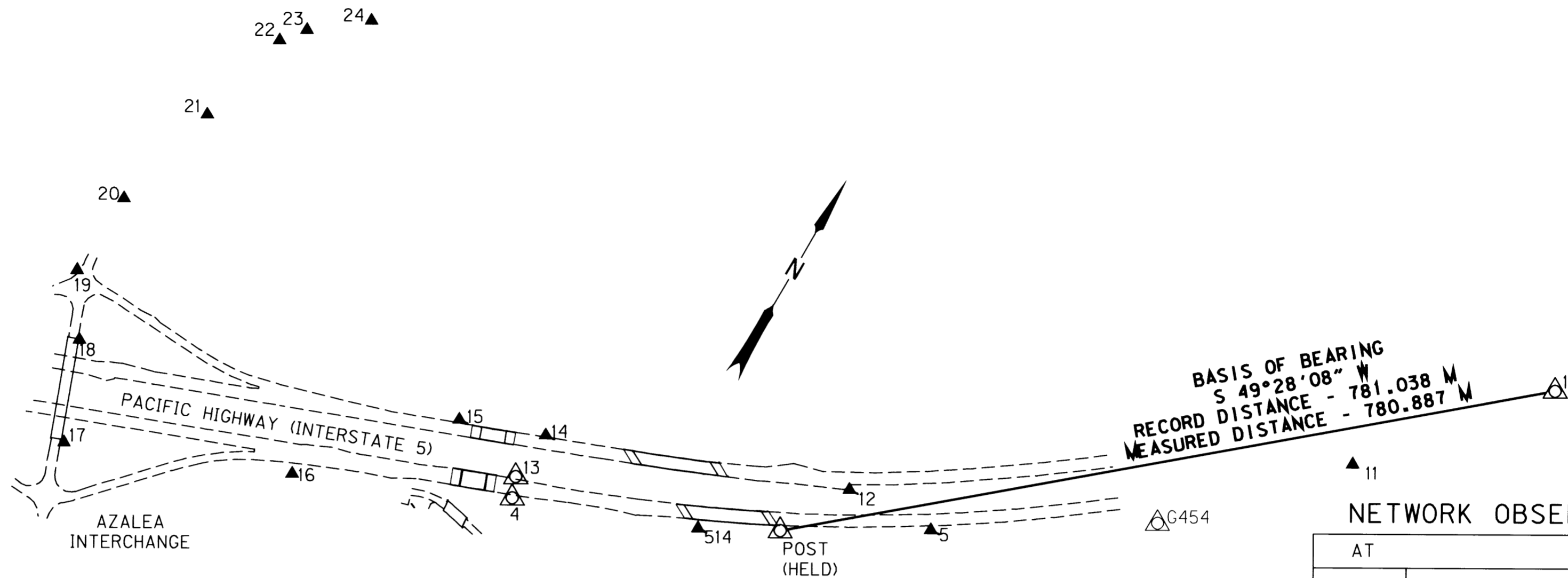


SECTIONS 14, 15, 22 & 23, T32S, R5W, W.M.

FILED
 Date: 12/3/2001 By: JP
 This survey consists of: 5 SHEETS
 Map: ST HWY 15-011A
 Narrative:
 Corner Rpt:

DOUGLAS COUNTY
 SURVEYOR



BASIS OF BEARING AND
 CONTROL NETWORK SCHEMATIC
 NOT TO SCALE

LEGEND	
▲	NETWORK POINT
△	FOUND MONUMENT USED AS NETWORK PT.
---	EDGE OF PAVEMENT

NETWORK OBSERVATIONS

AT	TO
4	5,13,18,514,POST
5	4,10,11,12,17,514,POST,G454
10	5,11,12,45,POST,G454
11	5,10,12,45,514,POST,G454
12	5,10,11,14,15,514,POST,G454
13	4,16,17,514,POST
14	12,15,17
15	12,14,16,17,18
16	13,15,17,18,19
17	5,13,14,15,18,20
18	4,15,16,17,19,20
19	16,18,20,21,22
20	17,18,19,21,22,23
21	19,20,22,23
22	19,20,21,23,24
23	20,21,22,24
24	22,23
45	10,11
514	4,5,10,11,12,13,POST
G454	5,10,11,12,POST
POST	4,5,10,11,12,13,514,G454

SURVEY NETWORK NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH HORIZONTAL CONTROL AND TO RECOVER MONUMENTS FOR AN OREGON DEPARTMENT OF TRANSPORTATION PROJECT CALLED "COW CREEK AND QUINES CREEK BRIDGE REPLACEMENTS" LOCATED ALONG INTERSTATE 5 NEAR AZALEA. THE SURVEY WAS PERFORMED BETWEEN SEPTEMBER 20, 2001 AND SEPTEMBER 24, 2001 BY AN ODOT SURVEY CREW FROM ROSEBURG. THE ORIGINAL FIELD NOTES ARE ARCHIVED IN SALEM AS BOOK #3785.

A LEICA TCA 1800 TOTAL STATION (SERIAL # 418939) WAS USED TO MAKE THE NETWORK OBSERVATIONS AND TIE THE FOUND MONUMENTS. THIS INSTRUMENT HAS THE FOLLOWING PRECISION: STANDARD ANGULAR ERROR OF +/- 1 SECOND, AND STANDARD DISTANCE ERROR OF +/- 2 mm, +/- 2 PPM.

THE LEAST SQUARES ADJUSTMENT PROGRAM WAS USED TO CALCULATE THE COORDINATES. THIS ADJUSTMENT PRODUCED ANGULAR RESIDUALS (THE AMOUNT THE FIELD OBSERVED ANGLES WERE CHANGED DUE TO THE ADJUSTMENT) OF WHICH 86% WERE WITHIN 3 SECONDS AND 99% WERE WITHIN 9 SECONDS. IT ALSO PRODUCED DISTANCE RESIDUALS (THE AMOUNT THE FIELD OBSERVED DISTANCES WERE CHANGED DUE TO THE ADJUSTMENT) OF WHICH 100% WERE WITHIN 4 mm. THERE IS A 95% PROBABILITY THAT THE FINAL POSITIONS OF THESE POINTS ARE WITHIN THE ERROR ELLIPSES AS SHOWN ON THE "CONFIDENCE LEVEL LIMITS" TABLE SHOWN ON SHEET 2 OF 5.

THE BASIS OF BEARING FOR THE NETWORK WAS CALCULATED USING TWO FOUND MONUMENTS REFERENCED ON ODOT DRG. NO. 8B-30-20, NAMELY POINTS "POST" (ENGLISH STATION 146+04.16 P.O.S.T.) AND "10" (ENGLISH STATION 120+41.50 P.O.S.T.). USING THE REFERENCED MAP THE BEARING WAS CALCULATED TO BE S 49°28'08" W. SEE NETWORK SCHEMATIC THIS SHEET FOR MORE DETAIL. POINT "POST" WAS HELD FOR COORDINATES. THIS SURVEY USED LOCAL DATUM PLANE COORDINATES AS SHOWN ON ODOT DRG. NO. 8B-30-20, WHICH ARE DERIVED FROM 1927 DATUM. TO CONVERT METRIC COORDINATES TO ENGLISH DIVIDE BY 0.30480061.



REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

Christine V. Blevins

OREGON
 JULY 19, 1994
 CHRISTINE V. BLEVINS
 02669LS

EXPIRES 12/31/01

OREGON DEPARTMENT OF TRANSPORTATION
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP
 COW CREEK & QUINES CREEK BRIDGES
 PACIFIC HIGHWAY (INTERSTATE 5)
 DOUGLAS COUNTY
 NOVEMBER 27, 2001 FOR ODOT REGION 3
 3500 NW STEWART PKWY., ROSEBURG, OR 97470
 SHEET 1 OF 5