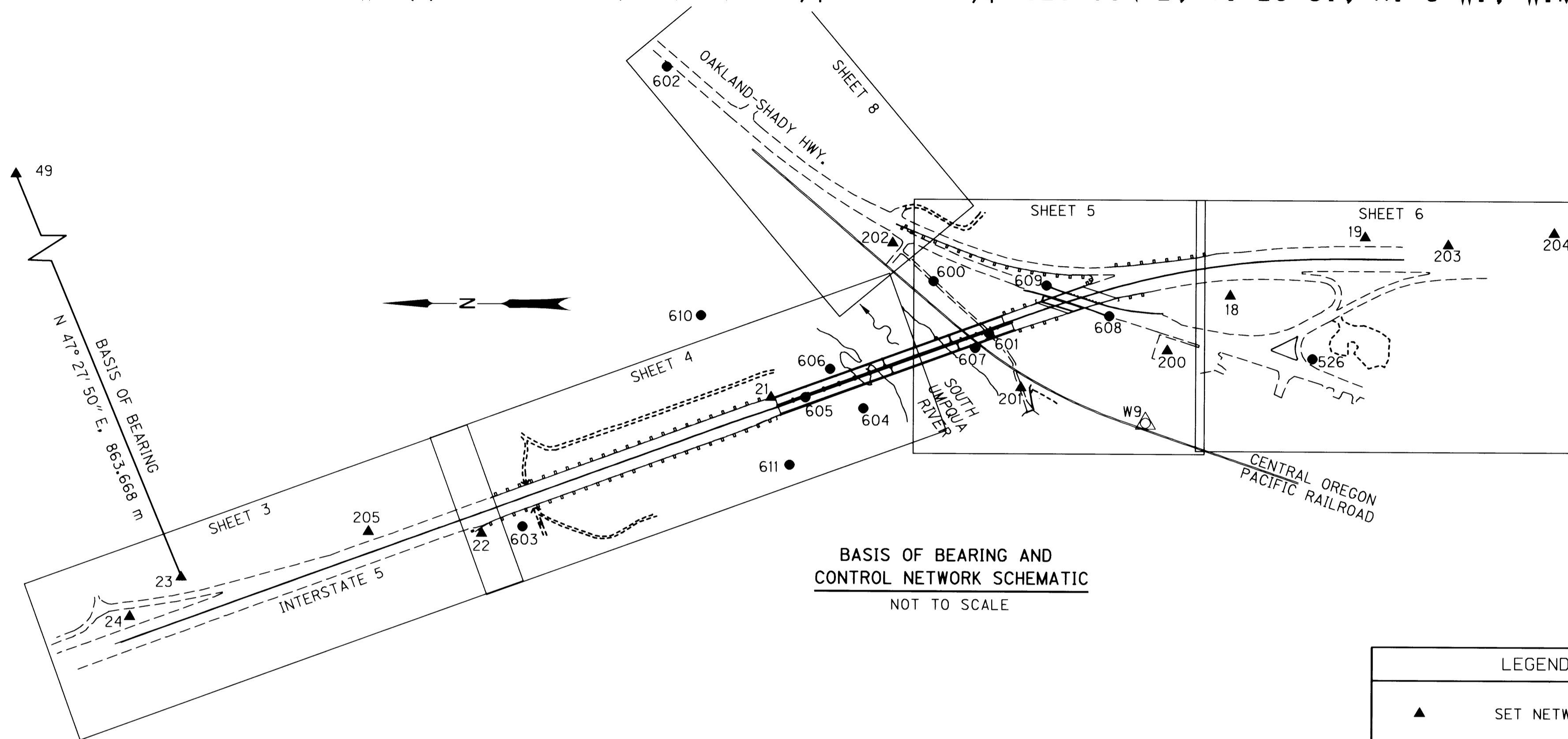


S.E. 1/4 SECTION 35 AND S.W. 1/4 SECTION 36, T. 27 S., R. 6 W., W.M.  
 N.W. 1/4 SECTION 1, AND N.E. 1/4 & S.E. 1/4 SECTION 2, T. 28 S., R. 6 W., W.M.

FILED  
 Date: 4-24-2002 By: JC  
 This survey consists of:  
 Map: ST HWY 15 - 014A-H  
 Narrative:  
 Corner Rpt:

DOUGLAS COUNTY  
 SURVEYOR



BASIS OF BEARING AND  
 CONTROL NETWORK SCHEMATIC  
 NOT TO SCALE

### SURVEY NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH CONTROL FOR THE OREGON DEPARTMENT OF TRANSPORTATION PROJECT CALLED "SHADY BRIDGE" LOCATED ON INTERSTATE 5, APPROXIMATELY MILE POINT 120.6. THE NETWORK WAS CONDUCTED BY AN ODOT SURVEY CREW FROM ROSEBURG BETWEEN FEBRUARY 5TH AND 12TH, 2002. THE ORIGINAL FIELD NOTES ARE ARCHIVED IN SALEM AS BOOK # 3813.

THE BASIS OF BEARING BETWEEN POINTS 49 AND 23 IS N 47°27'50" E TAKEN FROM SURVEY \*ST. HWY. 15-006, A-L, DOUGLAS COUNTY SURVEYORS OFFICE. COORDINATES ARE ALSO TAKEN FROM SURVEY \*ST. HWY. 15-006, A-L, BASED ON THE OREGON COORDINATE SYSTEM OF 1927, SOUTH ZONE, THEN CONVERTED TO LOCAL DATUM PLANE COORDINATES USING A FACTOR OF 0.9998693. FOR METRIC CONVERSION PURPOSES ONE METER = 3937 FEET / 1200.

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

THE NETWORK WAS ADJUSTED USING A LEAST SQUARES ROUTINE. THIS ADJUSTMENT PRODUCED ANGULAR AND DISTANCE RESIDUALS (THE AMOUNT THE FIELD OBSERVED MEASUREMENTS WERE CHANGED DUE TO THE ADJUSTMENT).

ALL ANGULAR RESIDUALS WERE WITHIN 3 SECONDS EXCEPT ONE RESIDUAL OF 4 SECONDS. ALL DISTANCE RESIDUALS WERE WITHIN 5 mm EXCEPT ONE RESIDUAL OF 6 mm. THESE ARE WELL WITHIN ODOT'S ACCEPTABLE TOLERANCES. THERE IS A 95% PROBABILITY THAT THE FINAL POSITIONS OF THE NETWORK POINTS ARE WITHIN THE ERROR ELLIPSES AS SHOWN ON THE "CONFIDENCE LEVEL LIMITS TABLE" ON SHEET 2.

### RETRACEMENT NARRATIVE

**INTERSTATE 5**  
 ON SURVEY \*ST. HWY. 15-006, A-L, THE BASIS OF BEARING WAS BETWEEN POINTS 'U596' AND '2770'; THIS IS WHAT I HELD FOR THE SOUTHERLY TANGENT OF THE ALIGNMENT. FOR THE NORTHERLY TANGENT I HELD POINTS 2000 AND 2015 WHICH PROVIDED THE BEST FIT OF MONUMENTS NEAREST TO THE BRIDGE. THE RECORD RADIUS AND SPIRAL LENGTHS WERE HELD. FOR STATIONING I CONVERTED THE ENGLISH STATION AT 2744+32.00 P.S. TO METRIC 83+647.041 P.S. I REFERRED TO ODOT R/W DRG. NO. 8B-23-19 FOR RECORD INFORMATION.

**OAKLAND-SHADY HIGHWAY**  
 I DID A BEST OF FOUND MONUMENTS TO DETERMINE THE LOCATION OF THE TANGENTS. FOR THE NORTHERLY TANGENT I HELD POINTS 2043 AND 2045, AND FOR THE SOUTHERLY TANGENT I HELD POINTS 2025 AND 2032. THE RECORD RADIUS AND SPIRAL LENGTHS WERE HELD ALSO. FOR STATIONING I CONVERTED ENGLISH STATION 1394+24.8 P.S. TO METRIC 42+496.764 P.S. I REFERRED TO ODOT R/W DRG. NO. 7B-23-1 FOR RECORD INFORMATION.

LEGEND	
▲	SET NETWORK POINT
●	SET STRATEGIC POINT
△	FOUND MONUMENT USED AS NETWORK POINT

REGISTERED  
 PROFESSIONAL  
 LAND SURVEYOR  
*Christine V. Blevins*  
 OREGON  
 JULY 19, 1994  
 CHRISTINE V. BLEVINS  
 2669  
 EXPIRES 12/31/03



TO CONVERT METERS TO FEET DIVIDE BY 0.30480061

OREGON DEPARTMENT OF TRANSPORTATION  
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP  
 SHADY BRIDGE  
 PACIFIC HWY. (INTERSTATE 5)  
 DOUGLAS COUNTY  
 APRIL 15, 2002 FOR ODOT REGION 3  
 3500 NW STEWART PARKWAY, ROSEBURG, OR 97470  
 SHEET 1 OF 8