

FILED
 Date: 6/16/2004 By: JP
 This survey consists of: 4 pages
 Map: ~~ST. HWY. 42-010A~~
 Narrative: ST. HWY. 42-010A
 Corner Rpt: _____
 DOUGLAS COUNTY
 SURVEYOR

SURVEY NARRATIVE

THE PURPOSE OF THIS METRIC SURVEY WAS TO MONUMENT THE RIGHT OF WAY AND ACCESS CONTROL LINES USING RIGHT OF WAY MAP 10B-17-17 AT CARNES ROAD AND ROBERTS CREEK ROAD. THE RIGHT OF WAY AND ACCESS CONTROL LINES WERE ACQUIRED FOR THE CONSTRUCTION OF AN OREGON DEPARTMENT OF TRANSPORTATION (ODOT) PROJECT ON THE COOS BAY - ROSEBURG HIGHWAY (42) CALLED "OR42: WINSTON - INTERSTATE 5 SEC." CONSTRUCTION BEGAN IN MAY OF 2003.

THIS SURVEY UTILIZES A LOCAL DATUM PLANE (LDP) REPRESENTING TRUE GROUND DISTANCES. THE LDP WAS DERIVED FROM THE OREGON STATE PLANE COORDINATE SYSTEM OF 1927, SOUTH ZONE. TO CONVERT METRIC COORDINATES AND DISTANCES TO ENGLISH, DIVIDE BY 0.30480061 (OR, 1 METER = 3937 US SURVEY FEET / 1200).

THE BASIS OF BEARING, COORDINATES, ORIGINAL CONTROL NETWORK ACCURACIES, AND RESOLVED ALIGNMENTS FOR THIS SURVEY ARE TAKEN FROM FILED SURVEY ST. HWY. 42-007, (A-H) AND ST. HWY. 42-008, (A-B). THE EXISTING CONTROL NETWORK AND MONUMENT TIE SURVEY, ST. HWY. 42-007, (A-H), WAS FILED AT THE COUNTY SURVEYOR'S OFFICE APRIL 29, 2002. SURVEY ST. HWY. 42-008, (A-B), AN AMENDMENT TO SURVEY ST. HWY. 42-007, WAS FILED WITH THE COUNTY SURVEYOR'S OFFICE JUNE 9, 2003. THE ORIGINAL FIELD NOTES FOR BOTH SURVEYS ARE ARCHIVED IN SALEM AS BOOK#3750.

THE ORIGINAL CONTROL NETWORK CONDUCTED BY AN ODOT SURVEY CREW FROM ROSEBURG BETWEEN DECEMBER 11, 2000 TO DECEMBER 18, 2000 WAS NOT DENSIFIED TO REPLACE NETWORK CONTROL POINTS DESTROYED DURING CONSTRUCTION. SUFFICIENT NETWORK CONTROL WAS FOUND TO PERPETUATE THE NEW RIGHT-OF-WAY AND ACCESS CONTROL IN ACCORDANCE WITH OREGON REVISED STATUTE (ORS) CHAPTER 209, SECTION 155, SUBSECTION 2 (b).

A LEICA "TCA 1800" TOTAL STATION (SERIAL #418939) WAS USED TO RUN THE ORIGINAL CONTROL NETWORK AND TIE EXISTING MONUMENTS. THE LEICA TCA 1800 HAS THE FOLLOWING ACCURACY: STANDARD ANGULAR ERROR OF +/- 1 SECOND, AND A STANDARD DISTANCE ERROR OF +/- 2 MM, +/- 2 PPM.

THE ORIGINAL CONTROL NETWORK WAS ADJUSTED USING A LEAST SQUARES ROUTINE WITH LISCAD SOFTWARE. THIS ADJUSTMENT PRODUCED ANGULAR AND DISTANCE RESIDUALS (THE AMOUNT THE FIELD OBSERVED MEASUREMENTS WERE CHANGED DUE TO THE ADJUSTMENT): ANGULAR RESIDUALS: 94% WERE WITHIN 3 SECONDS, AND 100% WERE WITHIN 9 SECONDS. DISTANCE RESIDUALS: 100% WERE WITHIN 4 MM. 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.

CONFIDENCE LEVEL LIMITS

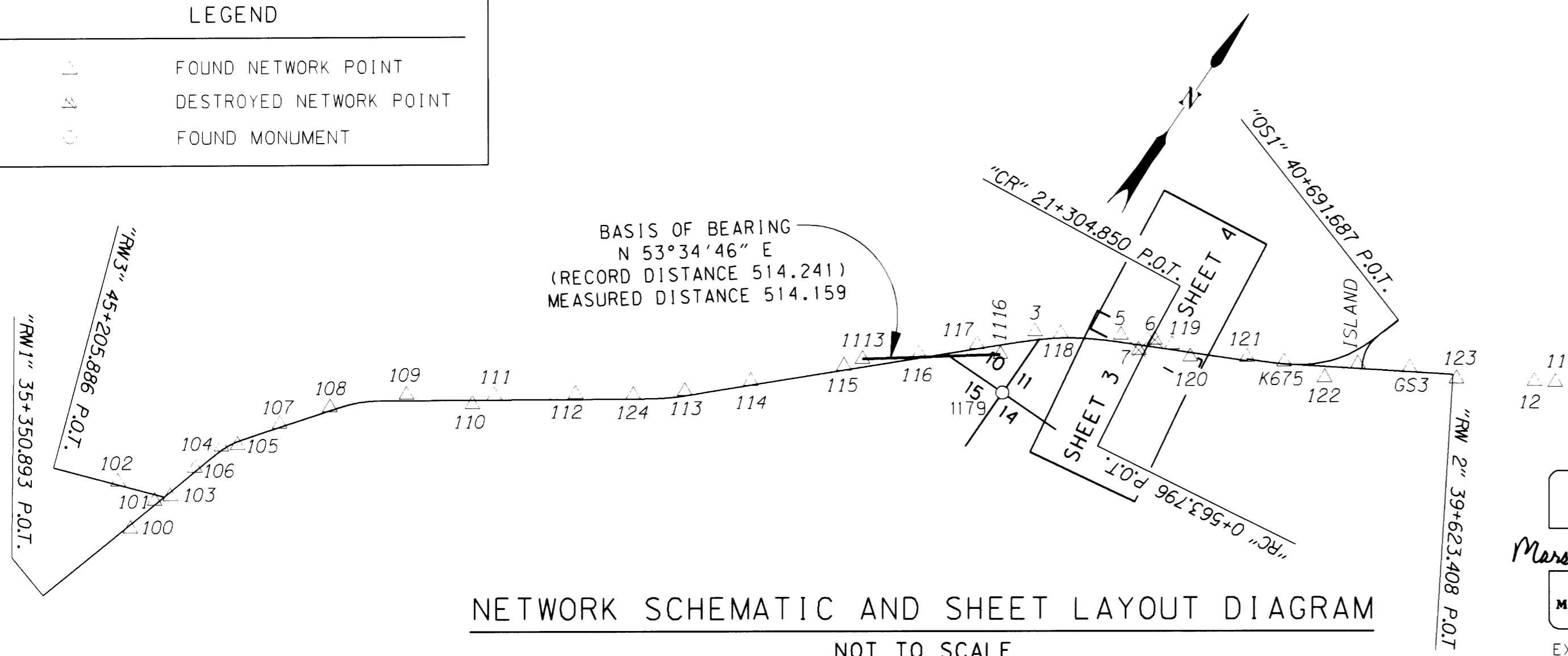
POINT	SEMI MAJOR	SEMI MINOR	ORIENTATION
117	0.001 m	0.001 m	S 42°27'02" E
116	0.002 m	0.001 m	S 39°55'57" E
115	0.002 m	0.001 m	S 41°07'33" E
114	0.007 m	0.001 m	S 44°25'45" E
113	0.010 m	0.001 m	S 44°00'03" E
3	0.002 m	0.001 m	S 50°16'10" E
124	0.014 m	0.002 m	S 42°27'37" E
112	0.019 m	0.002 m	S 40°01'02" E
111	0.026 m	0.002 m	S 38°30'55" E
110	0.028 m	0.002 m	S 39°48'39" E
108	0.043 m	0.002 m	S 38°18'02" E
109	0.035 m	0.002 m	S 37°08'54" E
107	0.048 m	0.003 m	S 40°02'01" E
106	0.053 m	0.003 m	S 42°09'41" E
105	0.055 m	0.003 m	S 42°06'42" E
104	0.059 m	0.004 m	S 44°19'50" E
103	0.063 m	0.006 m	S 47°20'11" E
101	0.065 m	0.006 m	S 47°33'59" E
100	0.069 m	0.008 m	S 60°19'58" E
102	0.069 m	0.005 m	S 44°34'45" E
118	0.003 m	0.001 m	S 43°05'02" E
5	0.006 m	0.001 m	S 37°14'57" E
7	0.007 m	0.001 m	S 30°25'17" E
119	0.008 m	0.001 m	S 32°57'23" E
121	0.013 m	0.001 m	S 30°00'00" E
K675	0.015 m	0.002 m	S 29°29'20" E
122	0.017 m	0.002 m	S 27°04'02" E
120	0.009 m	0.002 m	S 29°02'38" E
6	0.008 m	0.001 m	S 34°39'14" E
ISLAND	0.019 m	0.002 m	S 30°24'31" E
GS3	0.023 m	0.002 m	S 30°36'05" E
123	0.026 m	0.002 m	S 29°23'06" E
12	0.033 m	0.002 m	S 30°04'59" E
11	0.035 m	0.002 m	S 30°10'25" E

NETWORK OBSERVATIONS

AT	TO
1113	1116, 117, 116, 115, 114, 113
115	1116, 3, 117, 116, 114, 113, 1113
114	3, 116, 1113, 115, 113, 124
113	1113, 115, 114, 124, 112, 111
124	114, 113, 112, 111, 110, 108
112	113, 124, 111, 110, 109, 108
111	113, 124, 112, 110, 109, 108
110	124, 112, 111, 109, 108
109	112, 111, 110, 108, 107
108	124, 112, 111, 110, 109, 107, 106
107	109, 108, 106, 105
106	108, 107, 105, 104
105	107, 106, 104, 103, 101, 100
104	106, 105, 103, 101, 100
103	105, 104, 102, 101, 100
101	105, 104, 103, 102, 100
100	105, 104, 103, 101
102	101, 103
116	1113, 115, 1116, 117, 3, 118
117	1113, 115, 116, 1116, 3, 118
1116	1113, 115, 116, 117, 3
3	115, 114, 116, 117, 1116, 118, 5, 7, 119, 115, 121, K675, 122
118	116, 117, 3, 5, 7, 119, 121, K675, 122, 116, 120
5	3, 118, 6, 7, 120, 121, 122
6	5, 7, 119, 120, 121, 122
7	3, 118, 5, 6, 119, 120
119	3, 118, 6, 7, 120, 121, 122, 3, 5
120	118, 5, 6, 119, 121, 122
121	3, 118, 5, 6, 119, 120, 122, K675
K675	3, 118, 121, 122, ISLAND, GS3, 123
ISLAND	K675, 122, 123
GS3	122, 123, 12, K675
123	K675, 122, ISLAND, GS3, 12, 11
12	122, GS3, 123, 11
11	123, 12
122	3, K675, ISLAND, GS3, 123, 12, 3, 118, 5, 6, 119, 120, 121

LEGEND

△	FOUND NETWORK POINT
□	DESTROYED NETWORK POINT
○	FOUND MONUMENT



NETWORK SCHEMATIC AND SHEET LAYOUT DIAGRAM
 NOT TO SCALE



1 METER = 3937 U.S. FEET / 1200
 TO CONVERT A METRIC DISTANCE DIVIDE BY 0.30480061

REGISTERED PROFESSIONAL LAND SURVEYOR
 Marshall R. Wagstapp
 OREGON
 JANUARY 9, 2001
 MARSHALL R. WAGSTAPP
 49476LS
 EXPIRES: JUNE 30, 2004

OREGON DEPARTMENT OF TRANSPORTATION
 RIGHT-OF-WAY NETWORK MONUMENTATION MAP
 WINSTON - INTERSTATE 5
 COOS BAY - ROSEBURG HWY. (42)
 DOUGLAS COUNTY
 ODOT, REGION 3
 3500 STEWART PARKWAY, SUITE 140
 ROSEBURG, OREGON 97470
 JUNE 4, 2004
 CONTRACT No. C12867
 SHEET 1 OF 4