

SEC. 23, 24, & 25, T26S, R6W, W.M.
SEC. 18 & 19, T26S, R5W, W.M.

PURPOSE

THE PURPOSE OF THIS SURVEY WAS TO PROVIDE TOPOGRAPHIC DATA; DIGITAL TERRAIN MODEL; AND A CONTROL, RECOVERY, RETRACEMENT MAP FOR A PROJECT NAMED "15: DEL RIO ROAD / WINCHESTER INTERCHANGE", KEY NUMBER 15186. THIS PROJECT IS AN EXTENSION OF FILED SURVEY ST. HWY. 15-016 FOR PROJECT "1-5: EXIT 129 / N. UMPQUA RIVER (WINCHESTER) BRIDGES", KEY NUMBER 11851. SURVEY FIELD WORK WAS PERFORMED BETWEEN FEBRUARY 2006 AND MAY 2011. THE SURVEY WORK EXTENDED FURTHER WESTERLY ON DEL-RIO ROAD, NORTHERLY ON THE OAKLAND - SHADY HIGHWAY, AND EASTERLY ON UMPQUA COLLEGE ROAD. THE ORIGINAL FIELD NOTES ARE ARCHIVED IN SALEM ADDED TO BOOK NUMBER 4073.

COORDINATES & BASIS OF BEARING

THE BEARINGS ARE BASED ON THE OREGON COORDINATE SYSTEM (OCS) OF 1983 (91 ADJUSTMENT), SOUTH ZONE. THIS SURVEY UTILIZES A LOCAL DATUM PLANE (LDP) WHICH IS RELATIVE TO THE SAID OCS, WITH RESPECT TO THE LOCAL LATITUDE AND GROUND ELEVATION. THE LDP COORDINATES DEFINE TRUE GROUND DISTANCES. TO CONVERT LDP COORDINATES TO THE OCS, MULTIPLY THE COORDINATES BY 0.99987087. THE LDP COORDINATE SYSTEM AND LDP SCALE FACTOR MATCH A PREVIOUS ODOT PROJECT NAMED "1-5: EXIT 129 / N. UMPQUA RIVER (WINCHESTER) BRIDGES". VERTICAL DATUM IS NAVD 1988.

HORIZONTAL CONTROL

"AKIN2" FROM FILED SURVEY ST. HWY. 15-016 WAS USED AS THE PRIMARY CONTROL FOR THE PROJECT. A GPS BASE STATION OCCUPIED THE PRIMARY CONTROL POINT FOR REAL TIME KINEMATIC (RTK) GPS WORK. THIS WORK CONSISTED OF TYING STRATEGIC POINTS AND EXISTING MONUMENTS TWICE WITH A GPS RTK ROVER WITH AT LEAST 30 MINUTES BETWEEN OCCUPATIONS. MONUMENTS WERE TIED WITH A COMBINATION OF THE FOLLOWING METHODS: EITHER TIED BY RTK GPS OR BY TOTAL STATION FROM PREVIOUSLY TIED RTK GPS MONUMENTS OR FROM NETWORK AND STRATEGIC POINTS FROM SURVEY ST. HWY. 15-016.

HORIZONTAL CONTROL EQUIPMENT

A LEICA GX1230 DUAL FREQUENCY GPS RECEIVER WAS USED FOR GPS OBSERVATIONS. IT HAS THE FOLLOWING ACCURACY: PHASED DIFFERENTIAL STATIC METHOD HORIZONTAL ERROR OF 5 MM + 0.5 PPM, AND A VERTICAL ERROR OF 10 MM, + 0.5 PPM; PHASED DIFFERENTIAL RTK METHOD HORIZONTAL ERROR OF 10 MM + 1 PPM, AND A VERTICAL ERROR OF 20 MM, + 1 PPM.

A LEICA TCRP1201 TOTAL STATION WAS USED FOR GATHERING TOPOGRAPHIC DATA AND SOME OF THE MONUMENT TIES. IT HAS THE FOLLOWING ACCURACY: STANDARD ANGULAR ERROR +/- 1 SECOND; STANDARD DISTANCE ERROR OF +/- 2MM, +/- 2 PPM.

VERTICAL CONTROL

BENCH MARKS E749, F749, AA267, AND R554 WERE HELD AS VERTICAL CONTROL FOR THE PROJECT. LEVEL CIRCUITS WERE RUN TO ESTABLISH ELEVATIONS ON CONTROL POINTS USED FOR THE TOPOGRAPHY WORK.

VERTICAL CONTROL EQUIPMENT

A LEICA NA2002 DIGITAL LEVEL AND LEICA GBNL4C FIBERGLASS LEVEL ROD WERE USED TO COMPLETE THE LEVEL CIRCUITS. THIS INSTRUMENT HAS A STANDARD DEVIATION OF 1.5 MM IN A 1 KILOMETER DOUBLE RUN LEVEL CIRCUIT.

OAKLAND - SHADY HIGHWAY RIGHT OF WAY CENTER LINE

THE OAKLAND - SHADY HIGHWAY RIGHT OF WAY CENTER LINE USES "OS" AS A CENTER LINE DESIGNATOR AND WAS RESOLVED USING ODOT RIGHT OF WAY DRAWINGS (DRG) 6B-29-16 AND 7B-7-10. THE FIRST TANGENT HELD THE RECORD DISTANCE FROM POINT 1042 AND 1043. THE NEXT TANGENT HELD THE RECORD TANGENT AND STATIONING FROM SURVEY ST. HWY. 15-016. RECORD DEGREE OF CURVE WAS HELD ON THE CURVE. THE RECORD EQUATION AT STATION "OS" 2238+14.00 P.O.T. BACK EQUALS STATION "OS" 2238+17.30 P.O.T. AHEAD WAS TAKEN FROM DRG 6B-29-16.

DEL-RIO ROAD RIGHT OF WAY CENTER LINE

DEL-RIO ROAD RIGHT OF WAY CENTER LINE USES "DR" AS A CENTER LINE DESIGNATOR AND WAS RESOLVED USING COUNTY ROAD PLANS FOR WINCHESTER DEL-RIO ROAD NUMBER 115. THE FIRST TANGENT HELD THE RECORD TANGENT AND STATIONING FROM SURVEY ST. HWY. 15-016. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM POINT 1203 AND ROTATED TO FIT THE RECORD DISTANCE FROM POINT 1202, A POINT ON CURVE, AND THE NEXT TANGENT. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM POINTS 1205 AND 1207. THE NEXT TANGENT HELD THE RECORD DISTANCE FROM POINTS 1221 AND 1230. THE RECORD DEGREE OF CURVE WAS HELD ON ALL CURVES AND ALL RECORD CURVE DATA WAS HELD ON THE LAST CURVE. RECORD STATIONING WAS HELD ON POINTS 1204, 1205, AND 1225.

UMPQUA COLLEGE ROAD RIGHT OF WAY CENTER LINE

UMPQUA COLLEGE ROAD RIGHT OF WAY CENTER LINE USES "CR" AS A CENTER LINE DESIGNATOR AND WAS RESOLVED USING COUNTY ROAD PLANS FOR UMPQUA COLLEGE ROAD NUMBER 284. THE FIRST TANGENT WAS PROJECTED BACKWARD FROM THE NEXT TANGENT HOLDING THE RECORD CURVE DATA TO ITS INTERSECTION WITH THE "OS" CENTER LINE. THE NEXT TANGENT SPLIT THE DISTANCE BETWEEN POINTS 1035 AND 1036 AND BETWEEN POINTS 1052 AND 1244. THE NEXT TANGENT SPLIT THE DISTANCE BETWEEN POINTS 1246 AND 1251 AND HELD THE RECORD DISTANCE FROM 1252. THE RECORD RADIUS WAS HELD ON THE FIRST CURVE. THE RECORD DEGREE OF CURVE WAS HELD ON THE SECOND CURVE. THE LAST CURVE HELD ALL THE RECORD CURVE DATA. RECORD STATIONING WAS HELD ON THE SPLIT BETWEEN POINTS 1035 AND 1036.


RAILROAD RIGHT OF WAY CENTER LINE

RAILROAD RIGHT OF WAY CENTER LINE USES "RR" AS A CENTER LINE DESIGNATOR AND WAS A BEST FIT OF THE SPLIT BETWEEN THE RAILROAD TRACKS. RECORD STATIONING WAS HELD AT THE INTERSECTION OF THE "RR" AND "CR" CENTER LINES AS SHOWN ON THE COUNTY ROAD PLANS FOR WINCHESTER DEL-RIO ROAD NUMBER 115.

BOUNDARY LINE LEGEND	
EXISTING HIGHWAY RIGHT OF WAY ACCESS CONTROLLED	NOT CONTROLLED
EXISTING STREET RIGHT OF WAY	
EXISTING RAILROAD RIGHT OF WAY	
DONATION LAND CLAIM (THIS SIDE)	
DONATION LAND CLAIM (BOTH SIDES)	
TOWNSHIP	
SECTION	
1/4 SECTION	
1/16 SECTION OR GOVERNMENT LOT	

RECOVERED MONUMENTS NOT SHOWN ON INDIVIDUAL SHEETS

PT. NO.	LDP. NORTHING	LDP. EASTING	DATE	DESCRIPTION	REFERENCE
1012	601418.313	4161308.609	5/13/2003	FD. 2 1/2" BRASS CAP STAMPED "COUNTY SURVEYORS OFFICE T26S R6W W.C. N.W. COR. DLC 53 1954" 0.8 FT. ABOVE SURFACE GOOD CONDITION	M 8-12
1013	598330.864	4161112.352	5/7/2003	FD. 5/8" IRON REBAR 0.3 FT. ABOVE SURFACE. GOOD CONDITION	CS 52/87
1020	608372.495	4163247.287	5/13/2003	FD. 5/8" I. ROD 0.3 FT. ABOVE SURFACE, GOOD CONDITION, PADDLE NEARBY MARKED "SHRW 2231+50 150 RT"	7B-7-10
1021	609193.466	4163358.024	5/13/2003	FD. 5/8" I. ROD 0.2 FT. ABOVE SURFACE, GOOD CONDITION, PADDLE BOARD NEARBY MARKED "SHRW PSC 2223+09.42 200 RT"	7B-7-10
1067	606182.675	4164011.990	5/13/2003	FD. 2 1/2" BRASS CAP STAMPED "COUNTY SURVEYORS OFFICE T26S R6/5W 1/4 S24 S19 1964 0.3 FT. BELOW SURFACE GOOD CONDITION METAL FENCE POST NEARBY	DCSO 1964
1068	601478.642	4159718.974	5/13/2003	FD. 2" INSIDE DIA. IRON PIPE 1.2 FT. BELOW SURFACE. GOOD CONDITION.	CS 67/25-17
1240	605801.237	4160862.015	3/2/2006	FD. 5/8" IRON REBAR 1.5 FT. ABOVE SURFACE BENT BADLY TO SW TIED WHERE ENTERS GROUND	RM 1-71
1241	605762.133	4160986.489	3/13/2006	FD. 1 1/2" I.D. IRON PIPE 1.0 FT. BELOW SURFACE BENT BADLY TO SOUTH POOR CONDITION TIED WHERE ENTERS GROUND	M 16-32
1259	608201.265	4163496.622	3/2/2006	FD. 5/8" IRON REBAR 0.1 FT. BELOW SURFACE GOOD CONDITION	M 63-34
1260	608998.054	4158827.633	3/3/2006	FD. 1 1/4" O.D. IRON PIPE WITH 2 1/2" DIA. BRASS CAP STAMPED "COUNTY SURVEYORS OFFICE T26S R6W S13,S14,S23,S24 1969" 1.2 FT. ABOVE SURFACE GOOD CONDITION	CS 54/95

SI FEET


OREGON DEPARTMENT OF TRANSPORTATION
CONTROL, RECOVERY, AND RETRACEMENT MAP
15: DEL RIO ROAD / WINCHESTER INTERCHANGE
PACIFIC HIGHWAY NO. 1, 1-5, M.P. 128.26 - 130.53
& OAKLAND - SHADY HIGHWAY, OR99
DOUGLAS COUNTY
FILE:15186RW.DGN MODEL: CRR

FOR ODOT REGION 3
3500 NW. STEWART PKWY.
ROSEBURG, OR. 97470

NOV. 15, 2011
SHEET 3 OF 11