

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO RESOLVE THE FIELD LOCATION OF THE EXISTING RIGHTS-OF-WAY FOR "GV" GARDEN VALLEY ROAD NUMBER 6 AND 31A BETWEEN A POINT 600 FT. SOUTH OF QUAIL LANE TO THE INTERSECTION OF CHEROKEE ROAD AND A PORTION OF OLD GARDEN VALLEY ROAD NUMBER 6 AS SHOWN HEREON BEING LOCATED IN DOUGLAS COUNTY, OREGON. THIS SURVEY WAS ALSO PERFORMED TO PERPETUATE THE POSITIONS OF ANY EXISTING SURVEY MONUMENTS THAT LIE NEAR THE PROJECT AREA BY TYING THE MONUMENTS TO THE PROJECT CONTROL NETWORK. THIS SURVEY WAS MADE AT THE REQUEST OF THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT) AND DOUGLAS COUNTY FOR AN UPCOMING PROJECT IN THE PREVIOUSLY DESCRIBED VICINITY. THIS SURVEY MEETS THE REQUIREMENTS FOR A RECOVERY SURVEY AS OUTLINED IN THE OREGON REVISED STATUTES, CHAPTER 209.155.

THIS SURVEY WAS PERFORMED IN INTERNATIONAL FEET UNITS (HORIZONTALLY) AND US SURVEY FEET (VERTICALLY).

CONTROL POINTS FOR THIS SURVEY WERE NOT SET ON AND DO NOT REPRESENT PROPERTY LINES OR RIGHT-OF-WAY LINES AND ARE INTENDED FOR USE SOLELY BY ODOT, DOUGLAS COUNTY, AND OBEC CONSULTING ENGINEERS IN SUPPORT OF FUTURE PROJECTS. IT IS NOT THE INTENT OF ODOT, DOUGLAS COUNTY, OR OBEC CONSULTING ENGINEERS TO PERPETUATE THESE CONTROL POINTS AS MONUMENTS.

THIS SURVEY WAS PERFORMED IN JANUARY OF 2008. THE SURVEY EQUIPMENT USED FOR THIS PROJECT CONSISTED OF FOUR TRIMBLE R8 GPS RECEIVERS, ONE TRIMBLE 5700 GPS RECEIVER, ONE TRIMBLE S6 ROBOTIC TOTAL STATION, FOUR TRIMBLE TSC2 DATA COLLECTORS, AND TWO SOKKIA SDL30 DIGITAL LEVELS.

GARDEN VALLEY ROAD ("GV" & "M99" LINES)

THE RESOLUTION OF THE RIGHT-OF-WAY OF GARDEN VALLEY ROAD NUMBER 6 AND 31A WAS COMPUTED BY UTILIZING FOUND MONUMENTS, RECORD DEEDS, AND THE CORRESPONDING 1965 AND 1987 DOUGLAS COUNTY ROAD MAPS.

THE TANGENT GOING NORTH FROM PT STATION "GV" 260+78.99 BK = 261+51.55 AH WAS COMPUTED BY HOLDING THE RECORD OFFSET OF 50.00 FEET LEFT FROM POINT NUMBER 1026, WHICH WAS ALSO HELD FOR RECORD STATION "GV" 274+00.00, AND POINT NUMBER 1037, THEN PROJECTING THIS BEARING SOUTHERLY AT THE RECORD DISTANCE BETWEEN STATIONS "GV" 274+00.00 AND THE PI AT STATION "GV" 256+66.568. WITH THIS TANGENT BEARING NOW ESTABLISHED, THE BEARING FOR THE TANGENT HEADING SOUTH FROM PC STATION "GV" 235+24.78 WAS ESTABLISHED BY HOLDING THE ANGULAR DIFFERENCE BETWEEN THESE TWO TANGENTS PER THE 1965 DOUGLAS COUNTY ROAD MAP, AND PLACING THE COMPUTED TANGENT ALONG A LINE OF BEST FIT BETWEEN FOUND MONUMENT POINT NUMBERS 1010 AND 1012 PER THE 1965 DOUGLAS COUNTY ROAD MAP, WITH 1010 BEING HELD FOR "GV" STATION 235+24.78 PC.

TO COMPUTE THE ALIGNMENT BETWEEN "GV" STATIONS 235+24.78 PC AND 260+78.99 PT BK = 261+51.55 PT AH, THE RECORD PI-TO-PI DISTANCE PER THE 1965 DOUGLAS COUNTY ROAD MAP WAS HELD FROM PI STATION "GV" 256+66.568, AND WAS INTERSECTED WITH THE TANGENT EXTENDED NORTHERLY FROM STATION "GV" 235+24.78 PC TO ESTABLISH PI STATION "GV" 243+30.523. THE CURVES WERE THEN COMPUTED BY HOLDING THE TANGENT LENGTHS AND DELTAS ESTABLISHED BY THIS METHOD. THIS CREATED A SMALL DEFICIENCY BETWEEN THE RECORD CURVE LENGTHS AND THE COMPUTED CURVE LENGTHS. THE STATION DIFFERENCE WAS RECTIFIED BY HOLDING THE RECORD AHEAD STATIONING AT THE STATION EQUATIONS AS SHOWN HEREON IN ORDER TO BEST PRESERVE THE STATIONING OF THE ALIGNMENT, SINCE ALL DEED REFERENCES WERE BASED ON STATION AND OFFSET CALLS TO THE RECORD CENTERLINE.

THE "M99" GARDEN VALLEY ROAD NUMBER 31A ALIGNMENT WAS COMPUTED USING THE RECORD CENTERLINE DESCRIBED IN BK 1710 PG 308 AND WAS CONVERTED FROM METERS TO FEET USING A CONVERSION FACTOR OF 3.28083990. THE ALIGNMENT WAS NEEDED TO ESTABLISH THE CENTERLINE OF GARDEN VALLEY ROAD NUMBER 31A FROM THE END OF THE "GV" ALIGNMENT TO THE END OF PROJECT AT STATION "M99" 14+90.94 BEING THE RECORD PC STATION IN THE "M99" ALIGNMENT OF [10+454.437 M] CONVERTED TO FEET. PAROL EVIDENCE FROM COMMON CORNER TIES WITH THE DOUGLAS COUNTY ENGINEERING DEPARTMENT WAS USED TO DETERMINE THAT THE "M99" AND THE "GV" ALIGNMENTS WERE ON A COINCIDENT TANGENT. THE DOUGLAS COUNTY ENGINEERING DEPARTMENT IS CURRENTLY IN THE PROCESS OF CREATING A ROAD MAP FOR THIS ALIGNMENT AND THEY WERE ABLE TO PROVIDE STATION AND OFFSETS TO COMMONLY TIED MONUMENTS AIDING IN THE PLACEMENT OF THE ALIGNMENT. POINT NUMBERS 1015 AND 1033 SET DURING THE 1965 DOUGLAS COUNTY ROAD PROJECT WERE LOCATED BY THE COUNTY ENGINEERING DEPARTMENT AND HELD THE RECORD (60.00 FEET RIGHT) FOR THE "M99" ALIGNMENT. THIS WOULD INDICATE THAT THE INTENT OF THE "M99" ALIGNMENT WAS TO BE COINCIDENT WITH THE TANGENT OF THE "GV" 1965 ALIGNMENT AND WAS COMPUTED AS SUCH DURING THIS SURVEY. IN ORDER TO OBTAIN THE CORRECT STATIONING THE COUNTY INFORMED THIS OFFICE THAT THE MONUMENT LOCATED AT "GV" STATION 275+00.00 WAS BEING HELD AT "M99" STATION [10+200.620 M] BEING "M99" [16+58.20] CONVERTED TO FEET. THIS ALIGNMENT WAS PLACED BASED ON THIS PAROL EVIDENCE AND STATIONS AND OFFSET IN RIGHT OF-WAY DEEDS WERE CONVERTED TO FEET AND HELD PER THE CALCULATED "M99" ALIGNMENT. THE BEGINNING OF "M99" STATION 0+00.00 WAS COMPUTED AND A TIE WAS MADE TO THE SOUTHEAST CORNER OF SECTION 28, TOWNSHIP 26 SOUTH, RANGE 6 WEST OF THE WILLAMETTE MERIDIAN, DOUGLAS COUNTY, OREGON, AS SHOWN HEREON. THIS TIE DOES NOT MATCH THE ORIGINAL DEED TIE IN BK 1710 PG 308. HOWEVER, THE EVIDENCE PROVIDED BY THE DOUGLAS COUNTY ENGINEERING DEPARTMENT AS TO THE LOCATION OF THIS "M99" ALIGNMENT UTILIZING FOUND MONUMENTS WAS STRONGER AND MORE CONSISTENT WITH THE HISTORIC LOCATION FOR THE CENTERLINE OF GARDEN VALLEY ROAD NUMBER 31A.

CHEROKEE AVENUE ("CH" LINE)

THE RESOLUTION OF THE RIGHT-OF-WAY OF CHEROKEE AVENUE WAS COMPUTED UTILIZING MONUMENTS FOUND PER RIVER CLUB ESTATES AND DEL VIEW SUBDIVISION. THE CENTERLINE INTERSECTION OF GARDEN VALLEY ROAD NUMBER 31A AND CHEROKEE AVENUE WAS LOCATED BY HOLDING FOUND MONUMENTS FROM RIVER CLUB ESTATES AND THE RECORD GEOMETRY OF THE PLAT, THEN HOLDING THE RECORD OFFSET DISTANCE OF 30.00' TO CALCULATE THE CENTERLINE. THIS CENTERLINE WAS THEN EXTENDED TO INTERSECTION THE "M99" ALIGNMENT OF GARDEN VALLEY ROAD NUMBER 31A AS COMPUTED FROM PAROL EVIDENCE OF DOUGLAS COUNTY AND DEED REFERENCE BK 1710 PG 308. THE RECORD 60.00 FOOT RIGHT-OF-WAY WIDTH WAS HELD FOR THE RIGHT-OF-WAY LOCATION.

SW 1/4 SEC 34 T26S R6W WM
NW 1/4 SEC 34 T26S R6W WM
NE 1/4 SEC 33 T26S R6W WM
SE 1/4 SEC 28 T26S R6W WM

FILED
Date: 3-12-2008 By: JC
This survey consists of:
Map: Co. Rd 6 & 31A
Narrative:
Corner Rpt: 10 Pgs
DOUGLAS COUNTY
SURVEYOR

OLD GARDEN VALLEY ROAD ("OGV" LINE)

THE RESOLUTION OF THE RIGHT-OF-WAY OF OLD GARDEN VALLEY ROAD NUMBER 6 "OGV" WAS COMPUTED UTILIZING RECORD INFORMATION PER THE GARDEN VALLEY ROAD NUMBER 6 & 31A 1987 DOUGLAS COUNTY ROAD MAP, THE OLD GARDEN VALLEY ROAD NUMBER 6 1996 DOUGLAS COUNTY ROAD MAP AND THE GARDEN VALLEY ROAD NUMBER 6 1965 DOUGLAS COUNTY ROAD MAP AND FOUND MONUMENTS PER THESE MAPS BEING POINT NUMBERS 1026 (1965) AND 1023 ((1996)). POINT NUMBER 1023 WAS HELD FOR STATION AND OFFSET AT "OGV" 16+50.00 AND 35.00 FEET LEFT. AT THE INTERSECTION OF GARDEN VALLEY ROAD "GV" AND OLD GARDEN VALLEY ROAD THERE WAS SOME DIFFERENCES STATIONING BETWEEN THE CALCULATED AND RECORD CENTERLINES OF "OGV". IN ORDER TO DETERMINE THE INTERSECTION A LINE WAS CALCULATED FROM SAID POINT NUMBER 1023 AND THE RECORD "GV" STATION 274+80.00 AT 120.00 FEET LEFT PER THE 1987 ROAD MAP HOLDING POINT NUMBER 1026 FOR THE RECORD "GV" STATION 274+00.00 AT 50.00 FEET LEFT. THIS LINE WAS THEN OFFSET THE RECORD 35.00 FEET PER THE "OGV" 1996 ROAD MAP AND EXTENDED TO INTERSECT THE COMPUTED "GV" AND "M99" ALIGNMENTS SHOWN HEREON. STATIONING WAS HELD AT POINT NUMBER 1023 FOR THE "OGV" ALIGNMENT AND BACKED INTO THE INTERSECTION STATION SHOWN HEREON AS "OGV" 9+83.69 WITH THE RECORD STATIONING BEING 9+83.98.

RIGHT-OF-WAY ENCROACHMENTS

THE PLATS OF RIVER CLUB ESTATES, THE MEADOWS AT GARDEN VALLEY AND THE MEADOWS AT GARDEN VALLEY PHASE 5 HAVE AREAS OF ENCROACHMENT INTO THE DEEDED RIGHT-OF-WAY. IN THESE CASES THE DEEDED RIGHT-OF-WAY LINES BY STATION AND OFFSET WERE HELD BASED ON THE RETRACED ALIGNMENTS AS SHOWN HEREON AND THE ABUTTING LOT LINES WERE TRIMMED BACK TO THE RESOLVED DEEDED RIGHT-OF-WAY LINES.

WATER BOUNDARIES

DURING THE COURSE OF THIS SURVEY, INCONSISTENCIES RELATING TO THE OWNERSHIP OF THE RIVER BED WERE DISCOVERED IN THE EXISTING RECORDS OF THE PROPERTIES ADJACENT TO THE RIVER. AN EXTENSIVE AMOUNT OF RESEARCH REGARDING WATER BOUNDARIES WAS DONE TO DETERMINE THAT THE RIVER HAS BEEN DEEMED NON-NAVIGABLE BY THE DIVISION OF STATE LANDS (DSL).

THE 1973 BUREAU OF LAND MANAGEMENT (BLM) MANUAL ADDRESSES THE ISSUE OF OWNERSHIP OF A NON-NAVIGABLE STREAM BED IN CHAPTER 7-51, ENTITLED "NON-NAVIGABLE STREAMS AND LAKES". THE MANUAL STATES "NON-NAVIGABLE STREAMS AND LAKES ARE MEANDERED UNDER CERTAIN CONDITIONS WHICH WERE DESCRIBED IN CHAPTER III. TITLE TO THE BEDS REMAINS IN THE UNITED STATES UNTIL THE SHORE LANDS HAVE PASSED INTO PRIVATE OWNERSHIP." THE MANUAL ALSO CITES COURT CASE "UNITED STATES V. OREGON, 295 U.S. 1 (1935)", STATING "THE GOVERNMENT'S CONVEYANCE OF TITLE TO A FRACTIONAL SUBDIVISION FRONTING UPON A NON-NAVIGABLE BODY OF WATER, UNLESS SPECIFIC RESERVATIONS ARE INDICATED IN THE PATENT, CARRIES OWNERSHIP TO THE MIDDLE OF THE BED IN FRONT OF THE BASIC HOLDING."

ALL OF THE ABUTTING PROPERTIES IN THIS SECTION OF THE RIVER ARE CURRENTLY UNDER PRIVATE OWNERSHIP AT THIS TIME. THIS WOULD SUGGEST THAT THE BASIC HOLDING ALONG THE FRONTAGE OF THE RIVER, WHERE THE BANK WAS CALLED IN THE DEED, ASSUMES OWNERSHIP TO THE MIDDLE OF THE BED, WHICH IS CONSISTENT WITH THE STATED POSITIONS OF THE DSL AND THE BLM.

COMMON PRACTICES IN THE STATE OF OREGON DEFINE THE MIDDLE OF THE BED AS THE CENTER OF THE CHANNEL BETWEEN THE ORDINARY HIGH WATER LINES. THIS LINE WAS COMPUTED USING THE METHOD OF PLACING LINES PERPENDICULAR TO THE CALCULATED CENTER OF THE CHANNEL AS SHOWN HEREON, AND THE FRONTING PROPERTIES WERE EXTENDED TO THE COMPUTED CENTER OF THE RIVER BED.

FILE NAME: 15467RET.dgn

OBEC CONSULTING ENGINEERS
Corporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090
2235 MISSION STREET SE, SUITE 100 SALEM, OREGON 97302-1295, 503-589-4100
1335 POPLAR DRIVE MEDFORD, OREGON 97504-5207, 541-774-5590
5005 SW MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103
www.obec.com



REGISTERED PROFESSIONAL LAND SURVEYOR

LOGAN MILES
65452

RENEWAL DATE: DEC. 31, 2008

OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
NORTH UMPQUA RIVER BROWNS BRIDGE
GARDEN VALLEY RD.
DOUGLAS COUNTY

ODOT REGION 3 JANUARY, 2008
3500 NW STEWART PARKWAY NO SCALE
ROSEBURG, OR. 97470 KEY # 15467 SHEET 2 OF 10

DESIGNED: LOGAN MILES PROJ. NO. 0019-0084.18

DRAWN: DAVID JOHN CHK'D: ANDY AUSLAND

Co. Rd. #6 & #31A MP 4.35 - 5.41 & 0.65 - 0.50

CO RD 6 & 31A

06RDCV2