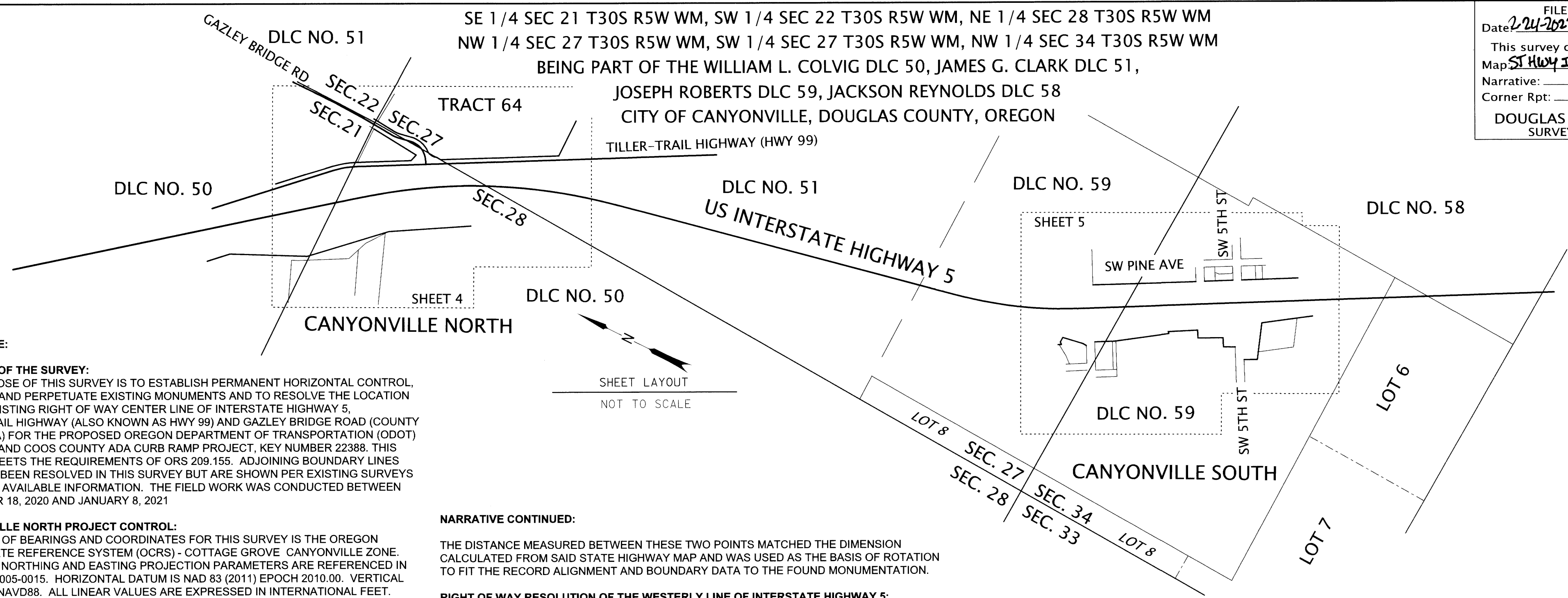


FILED  
 Date: 2/24/2022 By: [Signature]  
 This survey consists of:  
 Map: ST HWY 15-035 A-F  
 Narrative:  
 Corner Rpt:  
 DOUGLAS COUNTY SURVEYOR



**NARRATIVE:**  
**PURPOSE OF THE SURVEY:**  
 THE PURPOSE OF THIS SURVEY IS TO ESTABLISH PERMANENT HORIZONTAL CONTROL, RECOVER AND PERPETUATE EXISTING MONUMENTS AND TO RESOLVE THE LOCATION OF THE EXISTING RIGHT OF WAY CENTER LINE OF INTERSTATE HIGHWAY 5, TILLER-TRAIL HIGHWAY (ALSO KNOWN AS HWY 99) AND GAZLEY BRIDGE ROAD (COUNTY ROAD #35A) FOR THE PROPOSED OREGON DEPARTMENT OF TRANSPORTATION (ODOT) DOUGLAS AND COOS COUNTY ADA CURB RAMP PROJECT, KEY NUMBER 22388. THIS SURVEY MEETS THE REQUIREMENTS OF ORS 209.155. ADJOINING BOUNDARY LINES HAVE NOT BEEN RESOLVED IN THIS SURVEY BUT ARE SHOWN PER EXISTING SURVEYS OR OTHER AVAILABLE INFORMATION. THE FIELD WORK WAS CONDUCTED BETWEEN DECEMBER 18, 2020 AND JANUARY 8, 2021

**CANYONVILLE NORTH PROJECT CONTROL:**  
 THE BASIS OF BEARINGS AND COORDINATES FOR THIS SURVEY IS THE OREGON COORDINATE REFERENCE SYSTEM (OCRS) - COTTAGE GROVE CANYONVILLE ZONE. THE OCRS NORTHING AND EASTING PROJECTION PARAMETERS ARE REFERENCED IN O.A.R. 734-005-0015. HORIZONTAL DATUM IS NAD 83 (2011) EPOCH 2010.00. VERTICAL DATUM IS NAVD88. ALL LINEAR VALUES ARE EXPRESSED IN INTERNATIONAL FEET.

PRIMARY CONTROL CONSISTS OF TWO PRIMARY PROJECT CONTROL STATIONS AND THREE SECONDARY CONTROL STATIONS. TWO-HOUR STATIC SESSIONS WERE OBSERVED AT PROJECT CONTROL STATIONS 50 AND 51. ALL PROJECT CONTROL STATION POSITIONS WERE ESTABLISHED USING A COMBINATION OF GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) OBSERVATIONS, TERRESTRIAL TOTAL STATION MEASUREMENTS, AND DIGITAL LEVEL OBSERVATIONS.

GNSS BASELINE VECTORS, TOGETHER WITH TERRESTRIAL OBSERVATIONS, WERE ADJUSTED USING LEAST SQUARES ANALYSIS (STARNET V9.0). THE NETWORK WAS CONSTRAINED BY HOLDING THE PUBLISHED OREGON REAL-TIME GNSS NETWORK (ORGN) LATITUDE AND LONGITUDE OF THREE CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS): RDL2, RSBG, AND PSPT. THE RESULTING ERROR SEMI-MAJOR AXIS LENGTHS, AT THE 95% CONFIDENCE LEVEL FOR PRIMARY AND SECONDARY CONTROL POINTS, WERE UNDER 0.03 FEET IN ABSOLUTE ACCURACY. FINAL PROJECT COORDINATES WERE ESTABLISHED BY PROJECTING THE ADJUSTED NETWORK POSITIONS TO THE OCRS - COTTAGE GROVE CANYONVILLE ZONE, REPRESENTING APPROXIMATE GROUND DISTANCES. ALL OBSERVATIONS WERE MADE IN DECEMBER 2020, UTILIZING LEICA TS15 TOTAL STATION AND LEICA GS14 GNSS RECEIVERS WITH CS15 DATA COLLECTOR.

NETWORK POINTS SET DURING THIS SURVEY DO NOT REPRESENT PROPERTY LINES OR RIGHT OF WAY LINES. THEY ARE INTENDED TO PERPETUATE THE ALIGNMENTS AND RIGHT OF WAY DEVELOPED FOR THIS PROJECT IN CONFORMANCE WITH ORS CHAPTER 209 SECTION 155.

**MONUMENTS:**  
 HORIZONTAL POSITIONS OF THE FOUND MONUMENTS WERE OBTAINED USING TWO METHODS: REAL-TIME KINEMATIC (RTK) GPS MEASUREMENTS AND TERRESTRIAL OBSERVATIONS FROM HORIZONTAL CONTROL WHERE RTK WAS NOT FEASIBLE. MONUMENTS WERE OBSERVED TWICE, WITH A MINIMUM OF FORTY-FIVE MINUTES BETWEEN RTK OBSERVATIONS, AND THEN MEANING THE VALUES. TERRESTRIAL OBSERVATION METHODS FOLLOWED ODOT PROCEDURES WITH TWO OBSERVATIONS.

**CENTER LINE RESOLUTION OF INTERSTATE HIGHWAY 5, TILLER-TRAIL HIGHWAY (ALSO KNOWN AS HWY 99) AND GAZLEY BRIDGE ROAD (COUNTY ROAD #35A):**  
 A BEST FIT RESOLUTION WAS UTILIZED IN ORDER TO MAINTAIN THE GEOMETRIC RELATIONSHIP AND STATIONING OF THE CENTER LINE ALIGNMENTS AS SHOWN FOR INTERSTATE HIGHWAY 5 ("I-5" LINE), TILLER-TRAIL HIGHWAY ("99" LINE) AND GAZLEY BRIDGE ROAD ("GR" LINE) ACCORDING TO RECORD COORDINATE CONTROL, STATIONING AND CURVE DATA PER STATE HIGHWAY MAP 15-015, "HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP", DATED FEBRUARY 2004.

THE CENTER LINE ALIGNMENTS AND ADJACENT RIGHT OF WAY LINES AS SHOWN ON SAID STATE HIGHWAY MAP WERE CALCULATED AND ROTATED TO MATCH THE BEARING AS ESTABLISHED BETWEEN POINT 2046, A 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "ODOT CONTROL 24", FOUND AT "I-5" STATION 469+80.66, 75.38 FT LT., AND POINT 2057, A 2-1/2" BRASS CAP MARKED "T30S R5W SEC. COR. RESET 1995", BEING THE SECTION CORNER COMMON TO SECTIONS 21, 22, 27 AND 28, FOUND AT "GR" STATION 14+85.51, 22.14 FT RT.

**NARRATIVE CONTINUED:**  
 THE DISTANCE MEASURED BETWEEN THESE TWO POINTS MATCHED THE DIMENSION CALCULATED FROM SAID STATE HIGHWAY MAP AND WAS USED AS THE BASIS OF ROTATION TO FIT THE RECORD ALIGNMENT AND BOUNDARY DATA TO THE FOUND MONUMENTATION.

**RIGHT OF WAY RESOLUTION OF THE WESTERLY LINE OF INTERSTATE HIGHWAY 5:**  
 DETERMINED PER DEED TO THE UMPQUA INDIAN DEVELOPMENT CORPORATION ACCORDING TO INSTRUMENT NO. 2019-017236, AND AS DEPICTED ON SURVEY M171-71. THE BOUNDARY LINES PER SAID DOCUMENTS WERE CALCULATED AND ROTATED TO MATCH THE BEARING AS ESTABLISHED BETWEEN POINT 2100, A 5/8" IRON ROD WITH YELLOW PLASTIC CAP MARKED "WYTCHERLEY LS 2724", FOUND AT "I-5" STATION 452+50.76, 220.74 FT RIGHT, AND POINT 2103, A 5/8" IRON ROD FOUND AT "I-5" STATION 464+78.63, 272.22 FT RIGHT. THESE TWO MONUMENTS FIT THE DATA ACCORDING TO SAID SURVEY M171-71 AND ARE ALSO SHOWN ON STATE HIGHWAY MAP 15-015 AND PARTITION PLAT 1997-0058.

**RIGHT OF WAY RESOLUTION OF THE EASTERLY LINE OF TILLER TRAIL HIGHWAY:**  
 THE RIGHT OF WAY LINE AS SHOWN HEREON IS PER RECORD INFORMATION ACCORDING TO STATE HIGHWAY MAP 15-015. THE RIGHT OF WAY MONUMENTS WE LOCATED ALONG THIS LINE, POINTS 2043, 2044, 2045, 2052 AND 2053, WERE FOUND TO BE WITHIN AN AVERAGE DISTANCE OF 0.05 FT FROM THE ODOT RECORD POSITIONS ACCORDING TO SAID STATE HIGHWAY MAP, AND WERE THEREFORE ACCEPTED. THE POSITION OF THE EASTERLY LINE OF TILLER TRAIL HIGHWAY, RELATIVE TO ITS CENTER LINE ALIGNMENT, IS AS SPECIFIED ON SAID HIGHWAY MAP.

**RIGHT OF WAY RESOLUTION OF THE EASTERLY LINE OF GAZLEY BRIDGE ROAD:**  
 DUE TO CONFLICTING LINE WORK AS SHOWN BETWEEN DOUGLAS COUNTY ROAD MAP #35A, THE BLM SURVEY OF TRACT 64 AND STATE HIGHWAY MAP 15-015, ADDITIONAL RESEARCH WAS REQUIRED IN ORDER TO DETERMINE AND RESOLVE THE CURRENT RIGHT OF WAY LINE. A GRANT OF EASEMENT FOR RIGHT OF WAY ACCORDING TO INSTRUMENT NO. 98-14937 AND A BOARD OF COUNTY COMMISSIONERS VACATION ORDER ACCORDING TO INSTRUMENT NO. 98-15172 WERE REVIEWED AND BOTH WERE FOUND TO BE CONSISTENT WITH THE BLM SURVEY. THE RIGHT OF WAY MONUMENTS WE LOCATED ALONG THIS LINE, POINTS 2045, 2047-2050, 2055, 2059 AND 2060, WERE FOUND TO BE WITHIN AN AVERAGE DISTANCE OF 0.03 FT FROM THE ODOT RECORD POSITIONS ACCORDING TO THE STATE HIGHWAY MAP AND WERE THEREFORE ACCEPTED. THE MONUMENTS WE FOUND ARE THE SAME MONUMENTS THAT WERE EITHER SET OR FOUND IN ALL THREE OF THE PREVIOUSLY MENTIONED SURVEYS. HAVING ACCEPTED THESE RIGHT OF WAY MONUMENT POSITIONS, WE DETERMINED THE RIGHT OF WAY LINE ACCORDING TO THE BOUNDARY DATA AS SHOWN ON SAID BLM SURVEY.

**SHEET INDEX:**  
 SHEET 1: SHEET LAYOUT, NARRATIVE AND REFERENCES (NORTH PROJECT)  
 SHEET 2: SHEET LAYOUT, NARRATIVE AND REFERENCES (SOUTH PROJECT)  
 SHEET 3: GPS NETWORK, CONTROL MONUMENT LIST  
 SHEET 4: PROJECT RECOVERY AND LEGEND (NORTH PROJECT)  
 SHEET 5: PROJECT RECOVERY AND LEGEND (SOUTH PROJECT)  
 SHEET 6: MONUMENT TABLE AND LEGEND (NORTH AND SOUTH PROJECTS)

**NARRATIVE CONTINUED:**  
**RIGHT OF WAY RESOLUTION OF THE WESTERLY LINE OF GAZLEY BRIDGE ROAD:**  
 DETERMINED ACCORDING TO STATE HIGHWAY MAP 15-015, DOUGLAS COUNTY ROAD MAP #35A AND A DEED TO DOUGLAS COUNTY FOR ADDITIONAL RIGHT OF WAY ACCORDING TO INSTRUMENT NO. 95-11103. WE HELD A LINE FROM POINT 2056, SAID LINE BEING PARALLEL WITH AND 60 FT WESTERLY OF THAT PORTION OF THE EASTERLY RIGHT OF WAY LINE OF GAZLEY BRIDGE ROAD SITUATED BETWEEN POINT 2060 AND POINT 2050, PER SAID COUNTY ROAD MAP, TO AN ANGLE POINT IN SAID PARALLEL LINE FROM POINT 2056, BEING A TRANSITION IN THE WESTERLY RIGHT OF WAY LINE OF GAZLEY BRIDGE ROAD PER SAID INSTRUMENT NO. 95-11103, TO THE EASTERLY RIGHT OF WAY LINE OF TILLER-TRAIL HIGHWAY.

**CANYONVILLE NORTH REFERENCES:**  
 ODOT RIGHT OF WAY MAPS  
 3B-11-8  
 6B-34-18  
 8B-16-18  
 9B-4-27  
 10B-20-5  
 DOUGLAS COUNTY STATE HIGHWAY MAPS  
 ST. HWY. 15-015  
 DOUGLAS COUNTY ROAD MAPS  
 CO. RD. #35A

**REFERENCES CONTINUED:**  
 DOUGLAS COUNTY SURVEYS  
 M145-3 (BLM SURVEY OF TRACT 64)  
 M98-36  
 DOUGLAS COUNTY PARTITION PLATS  
 PP 1997-0074  
 DOUGLAS COUNTY DOCUMENTS  
 89-18282 2013-004708  
 95-11103 2016-000096  
 98-14937 2019-017234  
 98-15172 2019-017235  
 2019-017236

FILE NAME: S\_K22388\_CRR\_CANYONVILLE.DGN

**DAVID EVANS AND ASSOCIATES INC.**  
 2100 S River Parkway, Suite 100  
 Portland Oregon 97201  
 Phone: 503.223.6663

REGISTERED PROFESSIONAL LAND SURVEYOR  
 [Signature]  
 OREGON  
 JANUARY 10, 2006  
 ROBERT R. JACKSON  
 47721  
 RENEWS: 6/30/2023

**OREGON DEPARTMENT OF TRANSPORTATION**  
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP  
 REGION 3 DISTRICT 7  
 DOUGLAS COUNTY ADA RAMP  
 MILEPOSTS 98.27 TO 99.80  
 CITY OF CANYONVILLE,  
 DOUGLAS COUNTY, OREGON

ODOT REGION 3 HQ  
 3500 NW STEWART PARKWAY  
 ROSEBURG, OREGON KEY NO. 22388

DECEMBER 15, 2021  
 SCALE: N/A  
 SHEET 1 OF 6

ST. HWY. 15-035 A