

MAP OF SURVEY FOR ODOT RIGHT-OF-WAY LOCATED IN THE NE 1/4 NW 1/4 OF SECTION 34, TOWNSHIP 30 SOUTH, RANGE 5 WEST, W.M. DOUGLAS COUNTY, OREGON

FILED
Date: 4-20-2007 by: JC
This survey consists of:
Map: ST HWY 15-019A-B
Narrative:
Corner Rpt:
DOUGLAS COUNTY
SURVEYOR

REVISIONS	BY

**ANDERSON ENGINEERING
AND SURVEYING, INC.**
P.O. BOX 28
LAKEVIEW, OREGON 97630
(541) 947-4407
FAX 947-2321

PREPARED FOR:
HW LOCHNER, INC.
2001 FRONT STREET NE, #120
SALEM, OREGON 97303
(503) 588-0100

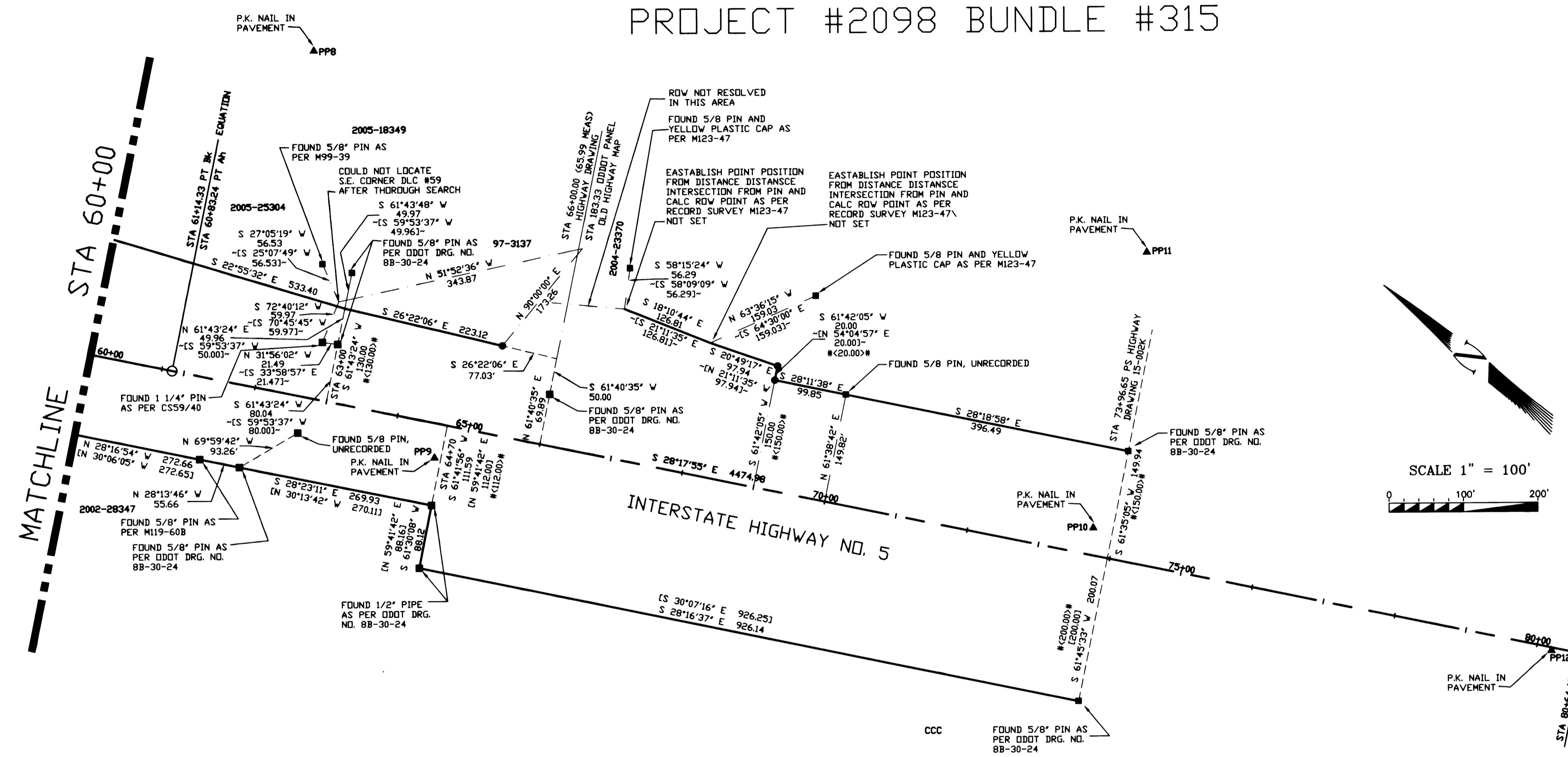
REGISTERED
PROFESSIONAL
LAND SURVEYOR
DOUGLAS COUNTY, OREGON
DATE: 12/31/07
RENEWAL: 12/31/07

**MAP OF SURVEY
CANYONVILLE ROW
OREGON DEPARTMENT OF TRANSPORTATION
DOUGLAS COUNTY, OREGON**

DATE: 12/20/06
SCALE: 1"=100'
DWG. BY: W.M.
FILE: ROW
JOB NO.: 2005-096
SHEET

C-2

PROJECT #2098 BUNDLE #315



- LEGEND**
- ▲ - CONTROL POINT (SEE TABLE)
 - ◆ - FOUND MONUMENT AS NOTED
 - ◊ - EXISTING CORNERS OF BRIDGE
 - - SET 5/8"x30" IRON PIN WITH YELLOW PLASTIC CAP STAMPED "AES, INC."
 - - EXISTING ODOT RIGHT-OF-WAY
 - - EXISTING ROAD CENTERLINE
 - - CALCULATION LINE
 - - EXISTING PROPERTY LINE
 - () - PER MAP FILE NO. M119-56
 - [] - PER MAP FILE NO. M119-60B
 - < > - PER MAP FILE NO. M104-64
 - () - PER C.S. 47/96
 - (()) - PER C.S. 55/24
 - ([])
 - << >> - PER MAP FILE NO. M50-36
 - [] - PER C.S. 55/14-1
 - << >> - PER MAP FILE NO. M85-79
 - ≡ - PER C.S. 55/347-2
 - ≡ - PER MAP FILE NO. M42-78
 - ≡ - PER MAP FILE NO. M132-14
 - ≡ - PER C.S. 58/151-20
 - ≡ - PER PLAT OF GODDELL TRACT
 - ≡ - PER MAP FILE NO. M67-76
 - ≡ - PER ODOT DRG. NO. 88-30-24
 - ≡ - PER MAP FILE NO. M33-26
 - ≡ - PER MAP FILE NO. M98-24
 - ≡ - PER MAP FILE NO. M123-47

CONTROL POINTS TABLE

Point ID	(Y) State Plane Northing (meters)	(X) State Plane Easting (meters)	(S.F.) Mean Scale Factor (8 significant digits)	(E.F.) Mean Elevation Factor (8 significant digits)	(C.F.) Combined Factor (8 significant digits)	(N) Project Datum Northing (meters)	(E) Project Datum Easting (meters)	Project Datum Northing (feet)	Project Datum Easting (feet)
PP1	144061.431	1273086.755	0.99990368	1.00003342	0.99993710	144070.493	1273166.839	472672.222	4177056.558
PP2	143905.916	1272806.662	0.99990368	1.00003342	0.99993710	143914.969	1272886.731	472161.971	4176137.568
PP3	143761.967	1273014.556	0.99990368	1.00003342	0.99993710	143771.011	1273094.638	471689.668	4176819.678
PP4	143513.550	1273041.952	0.99990368	1.00003342	0.99993710	143522.578	1273122.035	470874.600	4176909.565
PP5	143625.678	1273358.131	0.99990368	1.00003342	0.99993710	143634.713	1273438.234	471242.497	4177946.963
PP6	143468.121	1273228.702	0.99990368	1.00003342	0.99993710	143477.146	1273308.797	470725.545	4177522.301
PP7	143303.122	1273248.821	0.99990368	1.00003342	0.99993710	143312.137	1273328.917	470184.176	4177588.312
PP8	143313.887	1273433.045	0.99990368	1.00003342	0.99993710	143322.902	1273513.153	470219.496	4178192.759
PP9	143166.158	1273334.061	0.99990368	1.00003342	0.99993710	143175.164	1273414.163	469734.791	4177867.988
PP10	142934.573	1273487.895	0.99990368	1.00003342	0.99993710	142943.565	1273568.007	468974.950	4178372.725
PP11	142990.812	1273591.127	0.99990368	1.00003342	0.99993710	142999.807	1273671.245	469159.472	4178711.434
PP12	142753.654	1273570.675	0.99990368	1.00003342	0.99993710	142762.634	1273650.792	468381.346	4178644.330
89	143498.048	1273186.304	0.99990368	1.00003342	0.99993710	143507.075	1273266.397	470823.737	4177383.191
86	142510.391	1273879.198	0.99990368	1.00003342	0.99993710	142519.356	1273959.334	467583.189	4179656.608

NARRATIVE

THE BASIS FOR THIS SURVEY WAS A GPS CONTROL NETWORK. THREE TRIMBLE 98 RECEIVERS WERE USED TO COLLECT THE DATA. THE COLLECTION RATE (EPH) WAS SET AT 5 SECONDS AND EACH STATION WAS OCCUPIED FOR A MINIMUM OF 20 MINUTES PER SESSION. ON TWO SEPARATE DAYS, THE DATA WAS DOWNLOADED USING TRIMBLE DATA TRANSFER SOFTWARE AND WAS ADJUSTED USING TRIMBLE GEOMATICS OFFICE (TGO) VERSION 1.61. ODOT CONTROL POINT STATIONS 79 AND 89 FROM OREGON DEPARTMENT OF TRANSPORTATION HORIZONTAL CONTROL RECOVERY AND RETRACEMENT MAP "M129-39" WERE HELD TO ADJUST THE NETWORK HORIZONTALLY. ADJUSTMENT WAS MADE SO THAT A 95% PROBABILITY THAT THE FINAL POSITIONS OF A CONTROL POINT ARE WITHIN A MAXIMUM ERROR ELLIPSE OF 0.052 FEET (NORTHING) AND 0.032 FEET (EASTING). DIFFERENTIAL LEVEL WERE RUN THROUGH PUBLISHED ODOT CONTROL POINTS 89, 90, 91 AND 93 (MAP "M129-39") AND THROUGH PUBLISHED ODOT CONTROL POINT 86 (MAP "M135-71"). THESE MONUMENTS WERE HELD WITH A MAXIMUM ERROR OF .009 FEET.

THE ADJUSTED COORDINATES WERE REPORTED IN THE NAD83/98 OREGON SOUTH ZONE (METERS) WITH THE ELEVATIONS LISTED ON NGVD 29 VERTICAL DATUM.

THE MEAN LATITUDE AND LONGITUDE FOR THE PROJECT WAS USED TO ACQUIRE A PROJECT SCALE FACTOR. THE MEAN GEOD HEIGHT AND ORTHOMETRIC HEIGHT WERE USED TO DERIVE AN ELEVATION FACTOR. NEXT THE MEAN SCALE FACTOR AND THE ELEVATION FACTOR WAS USED TO ESTABLISH A COMBINED SCALE FACTOR FOR THE PROJECT. THE STATE PLANE COORDINATES WERE THEN DIVIDED BY THE COMBINED SCALE FACTOR TO CREATE LOCAL GROUND COORDINATES FOR THE PROJECT. REFER TO THE ATTACHED WORK SHEET FOR FURTHER INFORMATION REGARDING THE AFOREMENTIONED CONVERSION. THE FINAL PROJECT COORDINATES WERE CONVERTED FROM METERS TO INTERNATIONAL FEET.

THIS CONTROL WAS USED FOR ALL TOPOGRAPHIC MAPPING AND RIGHT OF WAY CONTROL.

THE RIGHT OF WAY WAS LOCATED AS SHOWN ON THE RECORD OF SURVEY MAP. CENTERLINE WAS ESTABLISHED USING RECORD SURVEY # M129-39K. EXISTING RIGHT OF WAY MONUMENTS WERE FOUND AS SHOWN. INTERSTATE RIGHT OF WAY WAS REESTABLISHED AS PER HIGHWAY DRAWING 88-30-24. STATIONING USED WAS ALSO AS PER DRAWING 88-30-24.

RIGHT OF WAY WITHIN THE TOWN OF CANYONVILLE WAS LOCATED USING EXISTING MONUMENTS AND SURVEYS AS SHOWN OR BY ESTABLISHING POINTS AS PER THE ORIGINAL CANYONVILLE PLAT. THE SAME PROCEDURE WAS USED FOR AREAS WITHIN THE GODDELL TRACT.

IN ADDITION TO GPS METHODS A NIKON DTM 530 TOTAL STATION WAS USED TO MEASURE MONUMENTS IN AREAS NOT SUITABLE TO GPS. TRAVERSING WAS BASED ON THE ESTABLISHED CONTROL AND CHECKS WERE MADE TO PRE-ESTABLISHED CONTROL POINTS.

RIGHT OF WAY MONUMENTS WERE SET AS SHOWN.