

NE 1/4 SECTION 16 T18S R32E WM  
SE 1/4 SECTION 16 T18S R32E WM  
NW 1/4 SECTION 16 T18S R32E WM  
SW 1/4 SECTION 16 T18S R32E WM

SHEET INDEX

- 1. SHEET INDEX, CONTROL NARRATIVE AND BASIS OF BEARING, SURVEY NARRATIVE, MONUMENT TABLES, AND REFERENCES.
- 2. BOUNDARY SURVEY

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO RESOLVE AND MONUMENT THE BOUNDARY OF THAT TRACT OF LAND ACQUIRED BY THE STATE OF OREGON BY BARGAIN AND SALE DEED RECORDED IN VOLUME 47, PAGE 351, DEED RECORDS OF GRANT COUNTY, FOR THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT) REGION 5 GEOLOGY SECTION. THIS SURVEY WAS PERFORMED BETWEEN THE MONTHS OF APRIL AND MAY 2015. THE SURVEY EQUIPMENT CONSISTED OF A LEICA 1200 GPS BASE STATION AND LEICA GS14 ROVERS.

TO RESOLVE THE BOUNDARY OF SAID TRACTS, A BREAKDOWN OF SECTION 16, T.18S., R.32E. W.M. WAS REQUIRED. MONUMENTS FOUND AT THE NORTHEAST CORNER, AND SOUTHEAST CORNER, AS WELL AS FENCE CORNERS AT THE NORTH QUARTER AND NORTHWEST CORNER OF SECTION 16 WERE HELD TO SUBDIVIDE SAID SECTION. THE SOUTHWEST CORNER OF SAID SECTION WAS NOT FOUND AND THE POSITION WAS ESTABLISHED BY DOUBLE PROPORTION BY HOLDING THE POSITION FOR THE SOUTHWEST CORNER OF SECTION 18 AND THE SOUTHWEST CORNER OF SECTION 21, T28S., R.32E., W.M.

SECTION 16 WAS THEN FURTHER SUBDIVIDED TO ESTABLISH THE BOUNDARY OF THE SE1/4 OF THE NW1/4 AND THE SW1/4 OF THE NE1/4 OF SECTION 16, T.18S., R.32E., W.M. AS DESCRIBED IN IN VOLUME 47, PAGE 357. THE ORIGINAL STONE MONUMENT AT THE SOUTHWEST CORNER OF SECTION 21, T.18S., R.32E., WAS REPLACED WITH A 5/8" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2 WITH THE ORIGINAL STONE BURIED ALONG SIDE.

SILVIES-HOPPER RANCH ROAD (COUNTY ROAD NO. 73)

COUNTY ROAD NO 73 WAS RESOLVED BY RECREATING THE RECORD SHAPE OF THE CENTER LINE ALIGNMENT AS SHOWN ON GRANT COUNTY MAP OF SURVEY NO. 1138 AND POSITIONED BY HOLDING RECORD DISTANCE OF 50.00 FEET FROM THE MONUMENT FOUND AT RECORD STATION 97+74.16 (POINT NO. 1016) AND ROTATED TO HOLD RECORD DISTANCE OF 50.00 FEET FROM THE MONUMENT FOUND AT RECORD STATION 86+43.10 (POINT NO. 1009). RIGHT OF WAY WIDTH WAS ESTABLISHED AS SHOWN ON SAID MAP OF SURVEY NO. 1138.

CONTROL NARRATIVE

PRIMARY CONTROL WAS ESTABLISHED ON THIS PROJECT BY USING GPS AND THE ONLINE POSITIONING USER SERVICE (OPUS) TO ESTABLISH A POSITION ON POINT CPI. A SUBSEQUENT REAL TIME KINEMATIC (RTK) GPS SURVEY WAS PERFORMED USING CPI AS A BASE POINT TO ESTABLISH POSITIONS ON ALL OF THE FOUND MONUMENTS SHOWN ON THIS SURVEY.

THE BASIS OF BEARING FOR THIS SURVEY IS BASED UPON GPS OBSERVATIONS. THE BEARINGS SHOWN ARE GRID BEARINGS BASED ON THE OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011) EPOCH 2010.

COORDINATES WERE MOVED TO GROUND BY UTILIZING A LOCAL DATUM PLANE (LDP) COORDINATE SYSTEM. TO CONVERT THE PROJECT LDP COORDINATES TO THE OREGON COORDINATE SYSTEM, NORTH ZONE, NAD83 (2011) EPOCH 2010, MULTIPLY THE VALUES BY A COMBINED FACTOR OF 0.9998657.

REFERENCES

- 1. GLO CONTRACT NO. 489, SURVEYED BY REUBEN R. LEIGH, AUG. 15, 1883
- 2. ODOT DRG. NO. 1R-2-1458 BY THE OREGON STATE HIGHWAY DEPARTMENT, DATED JAN. 1944.
- 3. BARGAIN AND SALE DEED, VOLUME 47, PAGE 357, RECORDED JAN. 31, 1945
- 4. COUNTY SURVEY NO. 1138 BY ROBERT D. BAGETT FILED APR. 27, 1990
- 5. WARRANTY DEED 970154 RECORDED JAN. 29, 1997
- 6. SURVEY NO. 1718 BY THE US DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT, FILED NOV. 24, 2004
- 7. QUITCLAIM DEED 2007-1207 RECORDED APR. 12, 2007
- 8. STATUTORY WARRANTY DEED NO. 2014-1426 RECORDED JULY 15, 2014

RECOVERED MONUMENT LIST

PT ID	LDP NORTHING	LDP EASTING	DATE	STATION	OFFSET	DESCRIPTION & REFERENCE DOCUMENTS
CPI	131240.70	8627294.97	04/27/2015	N/A	N/A	FD 1-1/2" ALUMINUM DISK, MARKED "ODOT CPI 2014", FLUSH, SET BY ODOT IN 2014, NO RECORD EXISTS FOR THIS CONTOL POINT
1000	128336.76	8630134.62	04/27/2015	127+49.94	70.12' RT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 127+50 70FT", UP 7", COUNTY SURVEY NO. 1138
1001	127356.00	8630219.21	04/27/2015	N/A	N/A	FD 3-1/4" BRASS DISK, MARKED AS SHOWN ON SHEET 2, FLUSH IN MOUND OF STONE, COUNTY SURVEY NO. 1718
1002	128380.71	8629938.48	04/27/2015	125+49.94	50.10' RT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 125+50 50FT", FLUSH, COUNTY SURVEY NO. 1138
1004	132319.94	8624736.01	04/28/2015	N/A	N/A	FD 4' DIAMETER, 4' HIGH ROCK JACK AT FENCE CORNER, TIED CENTER OF ROCK JACK, NO SURVEY RECORD FOUND
1005	132633.66	8630078.19	04/28/2015	N/A	N/A	FD 3-1/4" BRASS DISK, MARKED AS SHOWN ON SHEET 2, ON 2-3/4" O.D. IRON PIPE, UP 12", IN MOUND OF STONE, COUNTY SURVEY NO. 1718
1007	129945.48	8623496.41	04/28/2015	56+49.76	49.79' LT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 56+50 50FT", FLUSH, COUNTY SURVEY NO. 1138
1008	129845.52	8623501.32	04/28/2015	56+49.83	50.29' RT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 56+50 50FT", FLUSH, COUNTY SURVEY NO. 1138
1009	130076.19	8626189.49	04/28/2015	83+46.01	50.00' LT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 86+43.10 50FT", UP 1", COUNTY SURVEY NO. 1138
1010	129976.32	8626194.36	04/28/2015	83+46.04	49.99' RT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 86+43.10 50FT", FLUSH, COUNTY SURVEY NO. 1138
1011	129980.88	8626317.53	04/28/2015	84+70.94	50.06' RT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 84+71.10 50FT", UP 1", COUNTY SURVEY NO. 1138
1012	126901.70	8614856.94	04/29/2015	N/A	N/A	FD 3-1/4" BRASS DISK, MARKED AS SHOWN ON SHEET 2, ON 2-3/4" O.D. IRON PIPE, UP 12", IN MOUND OF STONE, COUNTY SURVEY NO. 1718
1014	121931.69	8625029.48	04/29/2015	N/A	N/A	FD 36"X18"X8" STONE WITH 2 NOTCHES ON SOUTH FACE AND 4 NOTCHES ON EAST FACE, MARKED WITH A SCRIBED "JW", BROKEN IN HALF, GLO CONTRACT 489
1015	129661.64	8627558.66	04/29/2015	97+74.15	49.99' LT	FD 5/8" IRON ROD, FLUSH, COUNTY SURVEY NO. 1138
1016	129583.04	8627496.85	04/29/2015	97+74.16	50.00' RT	FD 5/8" IRON ROD, FLUSH, COUNTY SURVEY NO. 1138
1017	129504.65	8627592.08	04/29/2015	98+99.15	50.03' RT	FD 5/8" IRON ROD, UP 3", COUNTY SURVEY NO. 1138
1018	129581.21	8627656.42	04/29/2015	98+99.11	49.98' LT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 98+99.16 50FT", UP 2", COUNTY SURVEY NO. 1138
1019	130080.84	8626316.05	04/30/2015	84+71.03	49.91' LT	FD 5/8" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED "BGA SURVEY MARKER 84+71.10 50FT", DOWN 2", COUNTY SURVEY NO. 1138
1020	132474.84	8627416.35	04/28/2015	N/A	N/A	FD WOOD FENCE POST AT INTERSECTION OF FENCE LINES, NO SURVEY RECORD FOUND

SET/CALCULATED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION & REFERENCE DOCUMENTS
5000	129790.98	8626178.16	6/02/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5001	131094.18	8626127.17	6/02/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5002	131166.96	8627460.54	6/01/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5003	131240.60	8628786.99	6/01/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5004	129926.96	8628826.72	6/01/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5005	129859.09	8627504.73	6/01/2015	SET 5/8"X30" IRON ROD WITH 1-1/2" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5006	129722.87	8624851.60	6/02/2015	SET 5/8"X30" IRON ROD WITH 3-1/4" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5007	129994.83	8630148.70	6/03/2015	SET 5/8"X30" IRON ROD WITH 3-1/4" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5008	127240.91	8627593.20	6/03/2015	SET 5/8"X30" IRON ROD WITH 3-1/4" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5009	127125.81	8624967.18	6/03/2015	SET 5/8"X30" IRON ROD WITH 3-1/4" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2
5010	121931.69	8625029.48	6/02/2015	SET 5/8"X30" IRON ROD WITH 3-1/4" ALUMINUM CAP, MARKED AS SHOWN ON SHEET 2

RECEIVED AND FILED  
GRANT COUNTY SURVEYOR

AUG 3 2015

BY: *[Signature]*

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JANUARY 14, 2003  
BRET N. ELITHORP  
63148

EXPIRES: DEC. 31, 2015

OREGON DEPARTMENT OF TRANSPORTATION

BOUNDARY SURVEY  
SILVIES QUARRY  
SILVIES-HOPPER RANCH ROAD (COUNTY ROAD NO. 73)  
GRANT COUNTY

FOR ODOT REGION 5  
3012 ISLAND AVENUE  
LA GRANDE, OR 97850



JULY 29, 2015  
NO SCALE  
SHEET 1 OF 2