

**NARRATIVE**

THE PURPOSE OF THIS SURVEY IS TO LOCATE AND MONUMENT THE BOUNDARY OF QUARRY LEASE PERMITS OBTAINED BY THE OREGON DEPARTMENT OF TRANSPORTATION FROM THE BUREAU OF LAND MANAGEMENT (BLM) FOR A MATERIAL SOURCE KNOWN AS UNITY RESERVOIR QUARRY. THE BLM LEASE PERMITS DESCRIBE THE LOCATION OF THE MATERIAL SOURCE AS, THE NW1/4 NE1/4 OF SECTION 28, T12S, R37E, WM (BLM DECISION 0017209), AND THE S1/2 NE1/4 NE1/4 AND THE N1/2 SE1/4 NE1/4 OF SECTION 28, T12S, R37E, WM (BLM DECISION 032363).

TO ESTABLISH THE BOUNDARIES OF SAID QUARRY LEASE PERMITS REQUIRED A BREAKDOWN OF SECTION 28, T12S, R37E. A DILIGENT SEARCH FOR ALL SECTION AND QUARTER SECTION CORNERS WAS MADE FOR SECTION 28 AND THE ONLY CORNER LOCATED WAS A MARKED STONE AT THE EAST QUARTER CORNER. THE NEAREST SECTION OR QUARTER SECTION CORNERS ALONG THE SECTION LINES EXTENDING IN ALL DIRECTIONS FROM SECTION 28 WERE RECOVERED AND TIED IN ORDER TO PROPORTION THE LOST CORNERS. THE POSITIONS FOR THE CORNERS PREVIOUSLY FOUND BY THE OREGON DEPARTMENT OF TRANSPORTATION SHOWN ON SURVEY NO. 12-37-0086 WERE HELD.

DURING THE COURSE OF THIS SURVEY IT WAS DISCOVERED THAT TWO ERRORS WERE MADE ON BOUNDARY SURVEY NO 12-37-0086. THE NORTHWEST CORNER OF SECTION 32 FALLS ON ROUSE LANE, WHICH APPEARS TO HAVE BEEN ESTABLISHED ON THE NORTH LINE OF SECTION 32, HOWEVER, NO DOCUMENTATION WAS EVER FOUND THAT CREATED ROUSE LANE. UNDER THE ADVISEMENT OF TOM HANLEY, THE BAKER COUNTY SURVEYOR, ODOT WAS ADVISED TO USE THE CENTER LINE OF EXISTING ROUSE LANE AS AN ACCESSORY IN THE NORTH-SOUTH DIRECTION IN ORDER TO REPLACE THE NORTHWEST CORNER OF SECTION 32. THE EXISTING EDGE OF GRAVEL AND EXISTING FENCE LINES ALONG ROUSE LANE WERE TIED AND USED TO ESTABLISH THE CENTER LINE FOR ROUSE LANE. THE OTHER ERROR MADE ON SURVEY NO. 12-37-0086 WAS THAT AN ESTABLISHED FENCE CORNER WAS LOCATED AT THE SOUTHEAST CORNER OF SECTION 31 THAT WAS NOT PREVIOUSLY HELD. A CORRECTED SURVEY WAS FILED CONCURRENTLY WITH THIS SURVEY TO CORRECT THOSE ERRORS AND NEW CORNER REMONUMENTATION RECORDS FILED.

THE NORTH QUARTER CORNER OF SECTION 32 WAS ESTABLISHED AT THE INTERSECTION OF THE CENTER LINE OF ROUSE LANE WITH A NORTH-SOUTH FENCE LINE FOLLOWING THE QUARTER SECTION LINE EXTENDED NORTHERLY.

**DOOLEY MOUNTAIN HIGHWAY (OR245)**

NO RIGHT OF WAY MONUMENTATION WAS FOUND IN THE VICINITY OF THIS PROJECT ON DOOLEY MOUNTAIN HIGHWAY, THEREFORE, THE EXISTING EDGE OF PAVEMENT WAS MAPPED AND USED TO RESOLVE THE LOCATION OF THE HIGHWAY CENTER LINE TANGENTS. ONCE THE POSITION OF THE TANGENTS WAS ESTABLISHED, THE RECORD DEGREE OF CURVE SHOWN ON ODOT DRAWING 5B-9-25 WAS HELD TO ESTABLISH THE LOCATION OF THE CURVES. STATIONING WAS HELD AS SHOWN ON ODOT DRAWING 5B-9-25 AND PER A CURRENTLY UNRECORDED SURVEY BY ODOT FOR THE STOCK PILE SITE ALONG DOOLEY MOUNTAIN HIGHWAY APPROXIMATELY ONE MILE NORTHERLY FROM THE JUNCTION OF SAID HIGHWAY WITH JOHN DAY HIGHWAY (HWY 26).

**RECOVERED MONUMENT LIST**

PT ID	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION & REFERENCE DOCUMENTS
1000	307829.91	8795721.76	04/23/2013	FD 2-1/2" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 1.0 FEET, SURVEY NO. 12-36-30
1001	302560.84	8795839.90	10/01/2014	FD 3/4" INSIDE DIAMETER IRON PIPE WITH 2-1/2" BRASS CAP MARKED AS SHOWN ON SHEET 2, SURVEY NO. 12-37-86
1002	307898.72	8798124.51	10/01/2014	FD 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM DISK MARKED AS SHOWN ON SHEET 2, UP 0.5', SURVEY NO. 12-37-86
1003	313174.44	8800639.79	10/01/2014	FD 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, FLUSH, SURVEY NO. 12-37-86
1004	308313.02	8816572.98	03/25/2014	FD FENCE CORNER, HELD FOR NORTHEAST CORNER OF SECTION 34, T12S, R37E, WM, SURVEY NO. 12-37-86
1005	302985.40	8814096.88	06/30/2014	FD FENCE CORNER, HELD FOR THE SOUTH QUARTER CORNER OF SECTION 34, T12S, R37E, WM
1006	305195.38	8795780.83	09/30/2014	FD 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM DISK MARKED AS SHOWN ON SHEET 2, SURVEY NO. 12-37-86
1007	302691.33	8800925.89	10/18/2016	FD FENCE CORNER, HELD FOR SOUTHEAST CORNER OF SECTION 31, T12S, R37E, WM
2001	323828.70	8805601.23	08/17/2016	FD. 2-1/2" ALUMINUM CAP ON 2-1/2" DIA. IRON PIPE MARKED AS SHOWN ON SHEET 2, UP 0.5', SURVEY NO. 12-37-63
2002	313578.28	8816429.93	09/18/2016	FD. 2-1/2" BRASS CAP ON 1-1/2" IRON PIPE MARKED AS SHOWN ON SHEET 2, UP 1.3'
2003	310814.62	8811252.22	08/17/2016	FOUND 15"x11"x7" STONE MARKED "1/4" WITH MOUND OF STONE 1 FOOT WESTERLY, REPLACED WITH 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP
2004	323989.28	8810888.75	09/18/2016	FOUND FENCE CORNER, SET 5/8" IRON ROD WITH 3-1/4" ALUM. CAP AT BEST FIT OF FENCE INTERSECTION
L385	304053.32	8805236.72	02/19/2014	FD 3" BRASS CAP SET IN CONCRETE, DESIGNATION L385, PID 0C0087, NGS DATASHEET

FD=FOUND  
GLO=GENERAL LAND OFFICE  
ODOT=OREGON DEPARTMENT OF TRANSPORTATION  
NGS=NATIONAL GEODETIC SURVEY

**SET/CALCULATED MONUMENT LIST**

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
5020	313418.96	8809852.61	4/03/2017	SET 5/8"x30" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.25'
5021	313449.55	8811168.71	4/03/2017	SET 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.35'
5022	312102.66	8809892.23	3/28/2017	SET 5/8"x30" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.15'
5023	312132.08	8811210.47	3/29/2017	SET 5/8"x30" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.40'
5024	311444.51	8809912.04	3/28/2017	SET 5/8"x30" IRON ROD WITH 1-1/2" ALUM. NUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.25'
5025	310786.36	8809931.86	3/28/2017	SET 5/8"x30" IRON ROD WITH 1-1/2" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, FLUSH
5026	307963.21	8800770.03	3/27/2017	SET 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, DOWN 0.25'
5027	308015.08	8803418.83	3/27/2017	SET 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, DOWN 0.5'
5028	308076.45	8806060.86	3/27/2017	SET 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, DOWN 0.35'
5029	308185.27	8811311.94	3/29/2017	SET 5/8"x30" IRON ROD WITH 3-1/4" ALUMINUM CAP MARKED AS SHOWN ON SHEET 2, UP 0.5'
7020	302808.96	8806194.28	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7021	302926.59	8811462.68	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7022	310701.23	8805982.57	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7023	313327.20	8805904.29	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7024	313388.38	8808536.50	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7025	312073.24	8808574.00	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7026	312760.81	8809872.42	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7027	312790.82	8811189.59	N/A	CALCULATED POINT - NOTHING FOUND OR SET
7028	311473.35	8811231.34	N/A	CALCULATED POINT - NOTHING FOUND OR SET

SECTION 27 T12S R37E WM  
SECTION 28 T12S R37E WM  
SECTION 29 T12S R37E WM  
SECTION 31 T12S R37E WM  
SECTION 32 T12S R37E WM  
SECTION 33 T12S R37E WM  
SECTION 34 T12S R37E WM

**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 L385. A SUBSEQUENT RTK GPS SURVEY WAS PERFORMED USING L385 AS A BASE POINT TO ESTABLISH POSITIONS ON ALL OF THE FOUND MONUMENTS SHOWN ON THIS SURVEY. THE BEARINGS SHOWN ON THIS SURVEY 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 0.99977943.

**REFERENCE LIST**

1. ORIGINAL GLO SURVEY NOTES FOR T12S, R37E BY E.P. McCORNACK, CONTRACT NO. 398
2. ORIGINAL GLO SURVEY NOTES FOR T12S, R37E BY W.R. GRADON, CONTRACT NO. 409
3. OREGON DEPARTMENT OF TRANSPORTATION DRG. NO. 1B-27-5, UNITY JUNCTION TO MILL GULCH, CONSTRUCTED LINE, DATED DEC. 1927
4. OREGON DEPARTMENT OF TRANSPORTATION DRG. NO. 1R-1-605, QUARRY SITE, DATED APRIL 1928
5. OREGON DEPARTMENT OF TRANSPORTATION DRG. NO. 5B-9-25, HEREFORD-UNITY JUNCTION SECTION, DATED MAY 22, 1936
6. OREGON DEPARTMENT OF TRANSPORTATION DRG. NO. 1R-2-1706, QUARRY AND HAUL ROAD, DATED FEB. 7, 1947
7. OREGON DEPARTMENT OF TRANSPORTATION DRG. NO. 1R-2-1707, QUARRY SITE, DATED FEB 1947
8. PARTITION PLAT 2007-013 (SURVEY NO. 12-37-0077) BY MICHAEL C. SPRINGER, FILED SEPT. 24, 2007
9. SURVEY NO. 12-37-0086 BY BRET N. ELITHORP, FILED DEC. 19, 2014


REGISTERED PROFESSIONAL LAND SURVEYOR

*BDC*  
OREGON  
JANUARY 14, 2003  
BRET N. ELITHORP  
63148

EXPIRES: DEC. 31, 2017

OREGON DEPARTMENT OF TRANSPORTATION

BOUNDARY SURVEY  
UNITY RESERVOIR QUARRY  
DOOLEY MOUNTAIN HIGHWAY  
BAKER COUNTY



ODOT REGION 5  
3012 ISLAND AVENUE  
LA GRANDE, OR 97850

FILED *May 17, 2017*  
BAKER COUNTY SURVEYOR  
SURVEY NO. *12-36-70*  
*12-37-98*

APRIL 11, 2017  
NO SCALE  
SHEET 1 OF 3