Map of Survey
Located in T38S R1W, W.M. Sections 1, 2, 3, 4, 9, 10,11,12, 13, 14

Jackson County, Oregon Section 35 Section 36 Section 34 Section 33 540700 S 89'25'56" E 2672.32' 600700 440700 N 89'47'42" E 2631.43' S 89°25'56" E 2672.32' T37S N 89"47"42" E 2631.44" (West 40.00 Chains) (West 40.00 Chains) (West 40.00 Chains) (West 40.00 Chains) T38S Section 2 Section 1 Section 4 Section 3 500640 400640 600640 Section 6 (N 89°49" W 40.055 Chains) (N 89°45" W 40.00 Chains) (\$ 89°59"' W 40.075 Chains) 700600 (N 89°49" W 40.055 Chains) 440600 540600 (N 89°45" W 40.00 Chains) (\$ 89°59" W 40.075 Chains) 640600 N 89'41'31" W 2659.38 N 89'41'31" W 2659.38 N 89'25'35" W 2639.22' S 89'58'10" E 2644.11 N 89'25'35" W 2639.22' S 89'58'10" E 2644.11 Section 7 Section 12 Section 11 Section 10 Section 9 600540 **LEGEND RECEIVED** Date 23-07 By Found Corner As Described (See Narrative) This survey consists of: Set Corner As Described (See Narrative) NAVD 88 NAD 83 (1991) \_\_/\_\_sheet(s) Map REGISTERED 400600 BLM GCDB Identifier **PROFESSIONAL** ELEVATION NORTHING EASTING POINT g page(s) Narrative (GLO RECORD) 1854 Contract 39, Ives and Hyde LAND SURVEYOR 4294552,625 1600.000 400600 234897.034 4294635.783 1561,920 400640 237540,604 JACKSON COUNTY 1523.845 4294718.835 400700 240180.864 SURVEYOR OREGON
JULY 16, 1987
KERRY K. BRADSHAW 4297210.382 1641.000 234809.360 440600 4297349.337 1605,330 440700 240117.659 4299868.147 1682.311 500600 234721.998 Expires 12/31/2009 4299942.841 1734.640 500640 237374.362 600500 1686,819 240054.759 4299979.836 500700 Jackson County Surveyor 1894,380 234623,387 4302505.325 Section 13 540600 Section 14 1924,910 4302650.093 540700 239955.178 Medford, OR 97501 (541) 774-6191 Kerry Bradshaw 229212.745 4305016.517 1796,650 600500 1950,000 4305079.513 CS Job File: T38S R1W S2-S3 2009 600540 231868.918 Field work was performed Basis of Bearing: Geodetic North per NAD 83 (1991) 2106,450 4305142.511 234525.083 600600 between: 3/14/07 and 4/10/09 Elevations are orthometric heights based on NAVD 88 and Geoid 03 237180.542 4305231.091 2134.730 600640 Bearings shown are mean geodetic bearing per line Reviewed By: SMB 4/14/09 2163.009 4305320.331 500700 239855,912 Distances shown at mean ground elevation per line KKB 4/16/09 Scale: 1"=1000' Field Crew: SDF, SMB 2445,530 4307785.332 234451.945 640600 All distances and elevations are International Feet Approved: KKB 5/05/09 381W 2\_3.dwg T38S R1W Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14 2782.613 Drawn By: SDF 4/13/09 234379.116 4310428.161 **-** 700600

REGISTERED

**PROFESSIONAL** LAND SURVEYOR

Kerry K. Bradd OREGON JULY 16, 1987 KERRY K. BRADSHAW 2271

Expires 12/31/2009

RECEIVED Date 6-23-09 By

This survey consists of:

\_\_\_\_\_sheet(s) Map

8 page(s) Narrative

JACKSON COUNTY SURVEYOR

6000600 A thorough search was made for any original corner evidence, none was found. A survey by A.T. Brown dated 9/15/1913 of Campbell Road (also known as Campbell-Graffis Road), per the Jackson County Surveyor's records field book 61, pages 60, 61, 64,65, 66 was thoroughly analyzed. Brown's 1913 survey located Campbell Road by stationing with reference to DLC 84 SW and DLC 84 SE, T38S R1W; quarter corner common to sections 2 and 3 (500640), T38S R1W; section corner common to sections 1.2.11.12 (600600), T38S R1W. At station 125+75.2 a pipe was set per page 65 of book 61, this pipe was thoroughly searched for and not found. The notes also called for a two course direction and distance from station 145+75 to 600600 on page 65 of book 61. Discrepancies between the stationing and traverse information on Brown's survey resulted in two positions for the pipe and thus two positions for the section corner. All positions were searched for in the field and yielded no evidence. No monumentation was tied after the aforementioned pipe and no public land corners were located beyond this lost section corner which results in an indeterminable location of where Brown's survey ended. A valiant effort was made to locate any evidence of Campbell road beyond its modern day location. Historic aerial photos were reviewed and a substantial amount of time was spent trying to locate evidence in the field. No definitive locus could be determined using Brown's 1913 survey. The original GLO notes of Ives and Hyde 1854 survey make a topographic call of .75 chains south of 600600 to a spring branch 2 lks. wide, course SW. This topographic call was analyzed, however not utilized due to a significant change to the spring branch east of the section corner position as a result of orchard construction. The final determination for this section corner was that it was lost, and therefore double proportioned between 600700 and 600500 (north-south) and 700600 and 500600 (east-west) relative to the 1854 Ives and Hyde GLO Survey. At this position set a 2 inch diameter flanged GIP with a 3 inch diameter brass cap. MKD:

JACKSON COUNTY SURVEYOR

T38S R1W

2|1

11|12

2009

UNLAWFUL TO DISTURB

**640600** A thorough search was made for any original evidence of the corner or supplemental information, and none was found, therefore corner was determined to be lost and was set at a single proportion position relative to lives and Hyde 1854 GLO survey, between 600600 and 700600. Set a 2 1/2 inch diameter brass cap cemented in a sandstone outcrop. MKD:

JACKSON COUNTY SURVEYOR

T38S R1W

4 S 1

12

2009

UNLAWFUL TO DISTURB

**540700** Found 3 inch diameter brash cap, flush with surface, per the Jackson County Surveyor's first re-establishment. MKD:

JACKSON COUNTY SURVEYOR

T37S R1W

14 S

35

2

T38S

2008

**UNLAWFUL TO DISTURB** 

**600700** Found 1 ½ inch diameter aluminum cap on a 5/8 inch diameter rebar, per the Jackson County Surveyor's office per fourth reestablishment, mkd: Jackson County Surveyor. Also associated witness monument, a 3 inch diameter brass cap. MKD:

JACKSON COUNTY SURVEYOR

T37S R1W

S35|S36

S2 S1

WIT. T38S MON.

2003

#### **Corners Set This Survey**

**600540** A thorough search was made for any original evidence of the corner or supplemental information, and none was found, therefore corner was determined to be lost and was set at a single proportion position relative to the lves and Hyde 1854 GLO survey, between 600500 and 600600. Set a 2 inch diameter flanged GIP with a 3 inch diameter brass cap, 9 inches below the surface. MKD:

JACKSON COUNTY SURVEYOR

T38S R1W

14 S

11 12

2009

#### **UNLAWFUL TO DISTURB**

**600640** A thorough search was made for any original evidence of the corner or supplemental information, and none was found, therefore corner was determined to be lost and was set at a single proportion position relative to lves and Hyde 1854 GLO survey, between 600600 and 600700. Set a 2 inch diameter flanged GIP with a 3 inch diameter brass cap. MKD:

JACKSON COUNTY SURVEYOR

T38S R1W

1/4 S

2 1

2009

**UNLAWFUL TO DISTURB** 

400600 Found 3 inch diameter brass cap on a 2 inch diameter GIP, 3 inches below the surface per the Jackson County Surveyor's first re-establishment. MKD:

# JACKSON COUNTY SURVEYOR

T38S R1W

2009

#### **UNLAWFUL TO DISTURB**

500640 Found 2 ½ inch diameter brass cap on a 1 inch diameter GIP, exposed 4 inches above the surface per the Jackson County Surveyor's re-establishment. MKD:

T38S R1W

1/4 3 2 COR. C.S.

1971

400700 Found 2 ½ inch diameter brass cap, 2 inches below the surface, per the Jackson County Surveyor's first re-establishment. MKD:

T37S R1W

43

CS

1993

440700 Found 3 inch diameter brass cap, flush with surface, per the Jackson County Surveyor's first re-establishment. MKD:

# JACKSON COUNTY SURVEYOR

T37S R1W

14 S 34

3

T38S

2008

## **UNLAWFUL TO DISTURB**

500700 Found 2 ½ inch diameter brass cap, flush with surface, per the Jackson County Surveyor's first re-establishment MKD:

JACKSON COUNTY

T37S R1W

34|35 1981 3 2

T38S

### **Corners Found This Survey**

**600500** Found 2 ½ inch diameter brass cap on a 1 inch diameter GIP, 6 inches below the surface per the Jackson County Surveyor's first re-establishment. MKD:

Jackson County Surveyor

T38S R1W

11 12 14 13

2008

**700600** Found 2 ½ inch diameter brass cap on a 1 inch diameter GIP, flush with surface, per the Jackson County Surveyor's first re-establishment. MKD:

T38S R1W R1E 16 12 7 CS 1969

**500600** Found 2 ½ inch diameter brass cap, 2 inches below the surface per the Jackson County Surveyor's first re-establishment. MKD:

T38S R1W

3|2
10|11

CS
1994

This corner was originally set by L.E. Ager PLS No. 21 during the course of survey No. 3660 on file in the Jackson County Surveyor's office. Ager's survey reports finding a stone with "x" on top, and claims said stone monument related well to deed record and property line fences indicating it had been used for corner control on prior surveys. To preserve this position the Jackson County Surveyor's office recovered the stone monument in 1994 and perpetuated the position as described in the first re-establishment. Extensive survey analysis was performed to determine the validity of Ager's section corner. Its relationship to found original corners and restored corners east-west and north-south was found to be within the limits of acceptability of the 1854 Ives and Hyde GLO survey. In addition Ager's position for the section corner has not be refuted since 1968 and has been utilized by residents in the area. For these reasons the position determined by Ager during the course of survey No. 3660 and subsequently perpetuated by the Jackson County Surveyor was accepted during the course of this survey and used as a controlling corner.

Redundant observations were made and vector data was collected with quality control information to verify positional accuracy requirements.

4. Terrestrial observations were made utilizing a Trimble 5600 robotic total station. These observations were made in areas where the use of GPS was limited due to overhead canopy. In these instances GPS control was established in the locale and closed traverse was performed with redundant observations. The integrity of the terrestrial measurements was verified for positional accuracy requirements via a minimally constrained least squares adjustment in Liscad SEE.

## Horizontal control stations utilized during the course of this survey:

#### NGS:

Ash, Hyatt Dam, Agate Dam RP 1-1

## **Jackson County Surveyor:**

157, Talent, Pumice

Established for this survey: Baldy, Center

#### **CORS:**

Justice 2 (Jackson County Surveyor)

Ashland, Central Point (ODOT)

Vertical control stations utilized during the course of this survey:

#### NGS:

NZ0183A, V548, A760

#### **Survey Control Requirements**

Horizontal accuracy requirements for all locations within this survey met or exceeded NGS Class B standards for GPS positioning and Second Order Class II standards for terrestrial measurements.

## **Corner Reestablishment**

Latitude calculations were performed on the arc of the true meridian. Departure calculations were performed on the arc of the true parallel. Calculations for lost corners were geodetically reduced using Cadastral Measurement Management (CMM) V7.148 and verified via hand calculation. Note that a single combined scale factor was not utilized for this project; a mean was utilized per each line. Bearings shown on the plat are the mean geodetic and distances shown are mean elevation per line. For specific monumentation details and associated accessories please refer to the Jackson County Surveyor's public land corner reestablishment records as noted. All corners found and set are filed in the Jackson County Surveyor's corner reestablishment records.

# <u>Survey Narrative</u> <u>To comply with Oregon Revised Statues Paragraph 209.250</u>

Survey By: Jackson County Surveyor 10 S. Oakdale, RM 318A Medford, OR 97501

Date of Survey: 3/14/07 to 4/10/09

Location: T38S R1W, W.M. Sections 1,2,3,4,9,10,11,12,13,14

<u>Purpose</u>: To restore lost public land corners in accordance with Oregon Revised Statues and BLM Manual of Survey Instructions 1973 edition. To determine geodetic positions of public land corners and State Plane coordinates per the North American Datum of 1983 (1991 Adjustment).

<u>Procedure:</u> The following equipment was utilized; Trimble 5800 GPS receiver, Trimble 5700 GPS Receiver, Trimble R6 GPS Receiver, Trimble TSC2 Data Collector with survey controller software. Positions were determined using the following methods:

- Static observations utilizing Trimble 5700 GPS as a base station located in the field at a geodetic
  control station per the NGS and Jackson County Surveyor's control network. The Jackson County
  Surveyor's CORS station. Oregon Department of Transportation CORS stations Ashland and
  Central point with NAD 83 (1991) positions as determined by the Jackson County Surveyor's
  Office. All static observations were redundant utilizing a minimum of two base stations and a
  rover. Data was post processed in Trimble Geomatics Office and verified for positional accuracy
  requirements with a minimally constrained least squares adjustment.
- 2. Real Time Kinematic observations utilizing a Trimble 5700 GPS with a Trimark 3 Radio as a base station located at a NGS or Jackson County Surveyor's geodetic control station in the field. The Jackson County Surveyor's CORS station correction broadcast was transmitted via a cellular phone modem. All observations were redundantly made utilizing a minimum of two control stations. Quality control data was collected with each RTK vector and the converging vectors were post processed in Trimble Geomatics Office. Data was verified for positional accuracy requirements with a minimally constrained least squares adjustment.
- 3. Wide Area RTK / VRS RTK via Oregon Department of Transportation's "Oregon Real Time GPS Network" (ORGN), Southern Oregon Network. The correction broadcast was received through a cellular phone modem. A seven parameter coordinate transformation surrounding the project area was performed in order to operate on the NAD 83 (1991) projection as the ORGN broadcasts a corrector per NAD 83 (CORS 1996)(Epoch 2002). Control utilized was provided by the NGS and Jackson Country Surveyor's Office. The coordinate transformation was performed in Trimble Geomatics Office and verified for accuracy.