

A SURVEY OF THE NE 1/4 OF TOWNSHIP 5 NORTH, RANGE 36 EAST
WILLAMETTE MERIDIAN, UMATILLA COUNTY, OREGON

NARRATIVE OF SURVEY

This survey was performed at the request of the Umatilla County Surveyor, Mr. David Krumbain. The purpose of the survey was to re-establish and remonument the original GLO corner positions and provide NAD 83-1991 Oregon State Plane Coordinates on those positions. GPS observations to Tri Stations "Big Hill Reset" and "Pendleton" were adjusted by least squares to obtain the control for this survey.

The GLO record shows that this township was surveyed by William Lewis. The monumentation set by Mr. Lewis was entirely post and pits. Several of the early surveys in the area indicate that the posts were cottonwood which had decayed fairly rapidly. Those same surveys also reveal significant errors in both the chaining and alignment of the original survey. The survey from 1876 by Peter Zahner shows a difference of 6" variation in the magnetic needle between the east and west lines of Section 4. This circumstance could be the source of much of the error if Mr. Lewis was stubbing, which it appears he was.

I performed a survey for Blue Mountain Credit Union (11-127-C) in sections 14 and 23 in November of 2011. That survey should be consulted for much of the corner history along the south line of this project. In that survey I had held a position for the west 1/4 corner of section 14 that was on a straight line between the section corners to the north and south. After further review of the agreement of Kimbrell's record with the actual evidence on the ground, I have calculated a position for the west 1/4 by projecting the line from the C1/4 through the C1/4/16th as shown hereon.

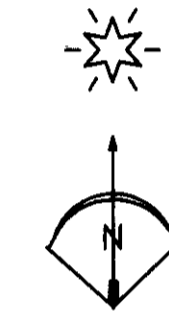
In survey 00-226-C a position was calculated for the south 1/4 corner of Section 15 at the intersection of the section line with a fence approximately 1/4 mile south of the corner. This was done without knowledge of the survey by John Arnold (Book 1, Page 170) or taking into consideration the existing fence at the actual corner point. For this survey I held the fence at the actual corner point because of its agreement with the Arnold survey.

For additional information concerning evidence found and accepted and information concerning corners that were proportioned, please see the corner certificates filed with this survey. This survey was performed with a Trimble R7/R8 GPS system with a combination of RTK and Static survey procedures.



LINE TABLE
NOTE: Record dimensions in the table below are from survey H-113-Ax.

LINE No.	BEARING	DISTANCE
L1	S14°22'57"E	680.88'
(L1)	S14°30'10"W	681.11'
L2	S55°44'53"W	745.80'
(L2)	S55°43'30"W	745.87'
L3	S07°57'43"W	740.07'
(L3)	N07°56'20"E	740.07'
L4	S75°21'33"W	3012.25'
(L4)	N75°20'10"E	3011.94'



NAD 83-1991
COORDINATE LISTING
IN INTERNATIONAL FEET

Corner	Northing	Easting
A13	839156.39	8759346.16
A15	839298.46	8762019.21
A17	839440.90	8764692.27
A19	839481.98	8767341.45
A21	839523.47	8769990.63
A23	839565.28	8772636.93
A25	839676.48	8775267.42
C13	836438.97	8759241.61
C17	836464.64	8764679.27
C21	836913.14	8769980.14
C25	837053.70	8775225.59
E13	833787.87	8759139.66
E15	833815.97	8761909.33
E17	833844.08	8764679.00
E19	833895.08	8767336.50
E21	834275.49	8769989.55
E23	834363.16	8772597.78
E25	834449.87	8775226.01
G13	831085.87	8759264.87
G17	831324.88	8764647.61
G21	831839.46	8769948.08
G25	831846.04	8775226.43
J13	828383.88	8759390.09
J15	828591.78	8762003.16
J17	828799.69	8764616.23
J19	828885.99	8767256.44
J21	829002.48	8769926.61
J23	829102.48	8772603.92
J25	829202.49	8775281.23
L13	825721.88	8759514.45
L17	826131.97	8764681.39
L21	826401.48	8770013.32
L25	826559.17	8775336.02
N13	823053.50	8759621.86
N15	823256.58	8762220.17
N17	823462.28	8764852.17
N19	823618.96	8767495.58
N21	823788.69	8770100.42
N23	823847.00	8772751.10
N25	823915.85	8775390.81

LEGEND

- SET 2 3/8" BRASS CAP ON A 1 1/8" x 30" GALVANIZED IRON PIPE - SEE FILED CORNER CERTIFICATE
- SET A 1" x 24" IRON REBAR WITH A 2" ALUMINUM CAP. SEE FILED CORNER CERTIFICATE.
- ★ FOUND BRASS CAP PER SURVEY 09-10-C
- FOUND ALUMINUM OR PLASTIC CAP ON A 5/8" IRON REBAR FROM SURVEY AS NOTED.
- ☑ FOUND 5/8" IRON REBAR FROM SURVEY H-113-Ax
- ⊗ FOUND EVIDENCE FROM SURVEY R4
- COMPUTED POINT
- R1 GLO CONTRACT #110 DATED FEBRUARY 7, 1865 BY WILLIAM ODELL AND WILLIAM LEWIS.
- R2 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 68 (No. 2)
- R3 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 170 (No. 28)
- R4 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 374 (No. 99)
- R5 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 393 (No. 100)
- R6 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 397 (Zahner)
- R7 COUNTY SURVEY H-113-AX
- R8 COUNTY SURVEY 05-51-C
- R9 COUNTY SURVEY 09-10-C
- R10 COUNTY SURVEY 09-44-B
- R11 COUNTY SURVEY 00-226-C
- R12 COUNTY SURVEY 11-33-B
- R13 COUNTY SURVEY 11-127-C
- R14 COUNTY SURVEY 11-154-B

BASIS OF BEARINGS

Bearings are based on GPS ties to Tri Stations "Big Hill Reset" and "Pendleton". Grid bearings were rotated 1°34'13" clockwise to obtain the true bearings shown on this map and a combined scale factor of 0.99989859 was applied to obtain the ground level distances shown on this map.

REGISTERED PROFESSIONAL LAND SURVEYOR
Stephen K. Haddock
OREGON
JULY 5, 2001
STEPHEN K. HADDOCK
56299LS
RENEWS 5-30-13

RECEIVED BY
Umatilla County Surveyor
Date: 6/5/2012
Rec'd by: S. Lea
No.: 12-088-C

SURVEY FOR
UMATILLA COUNTY SURVEYOR
MR. DAVID H. KRUMBEIN
3920 WESTGATE
PENDLETON, OR 97801
LOCATION: NE1/4, T5N, R36E, W.M.
UMATILLA COUNTY, OREGON

PROJECT DATE: 03-11 THROUGH 05-12
Project No. 11-22 SCALE: 1" = 1000'
WITNESS TREE SURVEYING
Stephen K. Haddock, PLS, CFedS
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