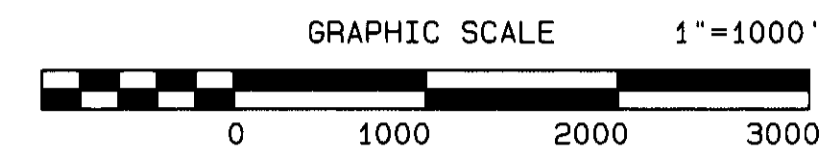
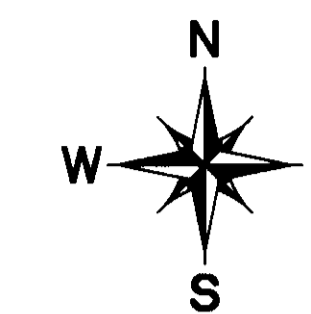
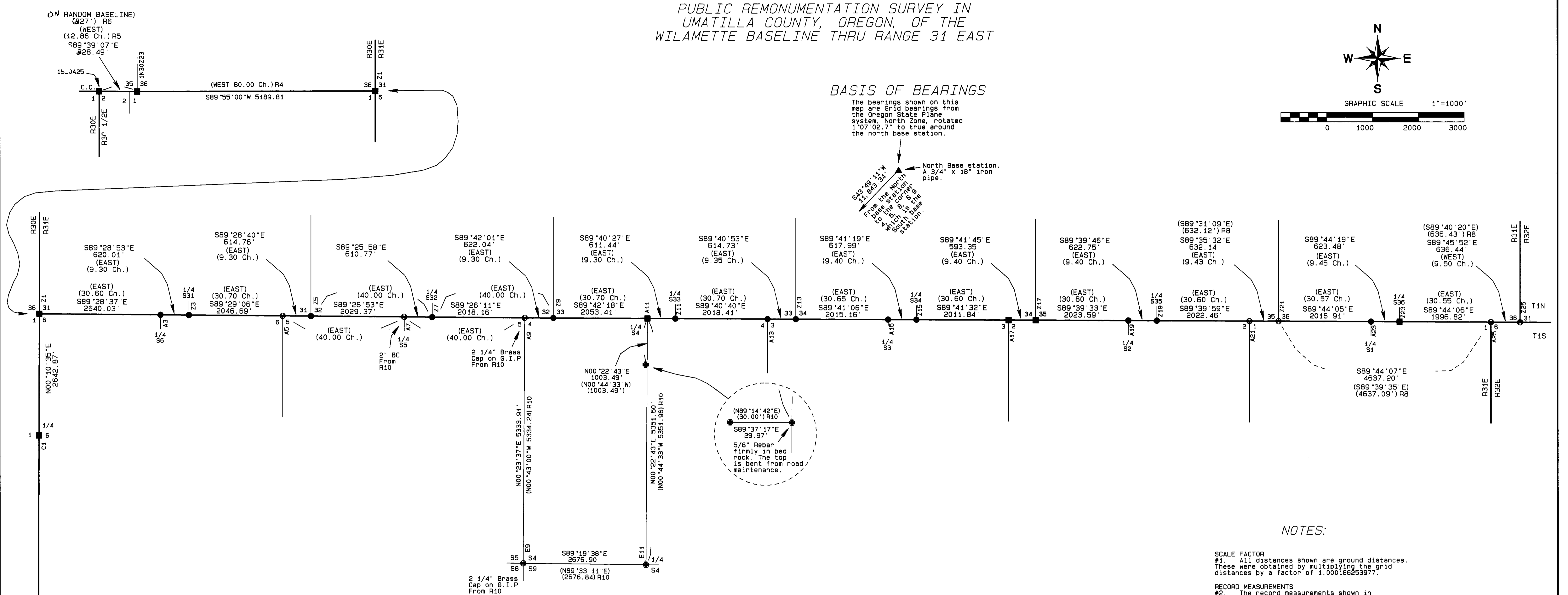
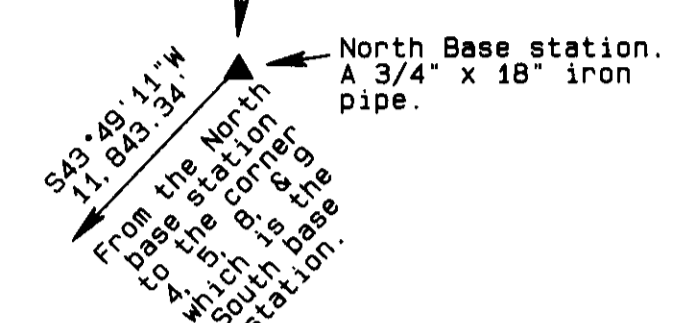


PUBLIC REMONUMENTATION SURVEY IN
UMATILLA COUNTY, OREGON, OF THE
WILAMETTE BASELINE THRU RANGE 31 EAST



BASIS OF BEARINGS

The bearings shown on this map are Grid bearings from the Oregon State Plane system, North Zone, rotated 1°07'02.7" to true around the north base station.



NARRATIVE OF SURVEY

This survey was performed at the request of the Umatilla County Surveyor, Mr. David Krumbein. The purpose of the survey was to remonument the existing corners, re-establish lost corners, and provide State Plane coordinates in NAD 83-91 for all corners tied in the survey.

The Wilamette Baseline was originally established through Ranges 30 and 31 East by David P. Thompson in 1858. The Township corners were held but all other corners were superseded by William B. Campbell (Range 30 East) and Josiah Burnett (Range 31 East) in 1860. The closing corners for Township 1 South, Range 31 East, were established by David P. Thompson in 1864 in the following manner: The west, south, and east Township exteriors were run by beginning at the corner to Township 1 North, Ranges 30 and 31 East, thus making it common to 4 Townships, and running cardinal south, east and north. The northeast corner of Township 1 South was established as a closing corner by intersecting the Baseline coming from the south. The closing corners along the Baseline were then established by retracing the Baseline to determine the length and then setting the corners at their proper distance along the line.

The original monumentation along this portion of the Baseline has suffered extensive loss as the monuments were, for the most part, posts in earth mounds. The area has been farmed for most of the length of the township. The County Surveyor, Aubrey Perry, in 1919 indicated that some of the original monuments had been replaced with stones but he often did not call their size or markings nor did he state who set them. No acceptable evidence of the corners for Township 1 North was found between the southwest corner of Section 35 and the southwest corner of Section 31. I therefore held the junior corners to the south as being the best available evidence of the line which is the same thing that Aubrey Perry did in 1919.

Control for this survey was established by static GPS observations from two base stations to NGS Tri Stations Alkali, Birch, and Pendleton. The network was adjusted using a least squares adjustment routine to obtain final values for the base stations. Static GPS observations were then made to all existing corners from each base station and the network was again adjusted using Least Squares. Lost corner positions were then computed along a straight latitudinal line by single proportion using the geodetic coordinates of the existing corners. A difference was found in the northing coordinates for the corners 1N31Z25 and 1S31A25 of approximately 0.5 foot between the values produced in this survey and those of the 1997 Baseline survey. This is believed to have been caused by using Tri Station Pendleton in this survey instead of Tri Station Sparks used in the 97 survey.

The corners 1S31A25 & A21 and 1N31Z25 and Z21 were remonumented as described in the filed certificates from the 1997 survey 97-140-C. All other existing corners were remonumented from the evidence as described in the corner certificates filed with this survey.

Control and existing corners were located and proportioned corner monuments set using a LIECA System 300 RTK GPS in a combination of static and real time observations.

LEGEND

- SET 2 1/4" BRASS CAP ON A 1 1/8" x 30" GALVANIZED IRON PIPE FROM ORIGINAL EVIDENCE SEE CORNER CERTIFICATE
- SET 2 1/4" BRASS CAP ON A 1 1/8" x 30" GALVANIZED IRON PIPE AT PROPORTIONED POINT SEE CORNER CERTIFICATE
- ✱ FOUND 1/2" IRON PIN FROM SURVEY H-7-B
- ⊕ FOUND 2 1/4" BRASS CAP FROM RECORD SURVEY 97-140-C EXCEPT AS NOTED.
- × COMPUTED POINT
- R1 GLO CONTRACT #106 DATED AUGUST 16, 1864 BY DAVID P. THOMPSON
- R2 GLO CONTRACT #92 DATED SEPTEMBER 12, 1860 BY JOSIAH A. BURNETT
- R3 GLO CONTRACT #79 DATED JULY 26, 1858 BY DAVID P. THOMPSON
- R4 GLO CONTRACT #95 DATED SEPTEMBER 19, 1860 BY WILLIAM B. CAMPBELL
- R5 GLO CONTRACT #154 DATED JUNE 15, 1871 BY GEORGE PERSHIN AND GEORGE WILLIAMS
- R6 RECORD OF PRIVATE SURVEYS BOOK 1, PAGE 271, JOHN ARNOLD
- R7 RECORD OF PRIVATE SURVEYS BOOK 2, PAGE 301, AUBREY PERRY
- R8 COUNTY SURVEY 97-140-C
- R9 PARTITION PLAT BY TOM FROST FOR J.L. BLANCHET, JUNE 2000
- R10 COUNTY SURVEY H-7-B
- R11 ROAD NOTES FOR COUNTY ROAD 632 STOCK DRIVE ROAD

OREGON STATE PLANE COORDINATES

UMATILLA COUNTY PROJECT 2001 BASELINE
T1N, R31E, W.M.

The following are the 1983-91, Oregon State Plane coordinates North Zone, for the corners listed. Corner 1S30A25 is the closing corner monument only. The true corner was not located in this survey.

Northing	Easting	Corner
677654.59	8581201.20	1S30A25
677655.72	8582029.46	1N30Z21
675132.43	8581250.56	1S31C1
672550.29	8597861.78	1S31E9
672571.07	8600538.10	1S31E11
664564.95	8587434.15	1S31L1
677774.45	8587217.16	1N31Z1
677801.83	8589856.56	1S31A3
677808.31	8590476.41	1N31Z3
677829.83	8592522.61	1S31A5
677836.21	8593137.22	1N31Z5
677857.42	8595166.11	1S31A7
677863.28	8595776.73	1N31Z7
677882.79	8597794.42	1S31A9
677891.66	8598416.29	1N31Z9
677921.13	8600469.10	1S31A11
677929.58	8601090.37	1N31Z11
677957.58	8603098.22	1S31A13
677966.15	8603712.77	1N31Z13
677994.37	8605727.35	1S31A15
678003.05	8606345.17	1N31Z15
678031.49	8608356.44	1S31A17
678039.91	8608949.62	1N31Z17
678067.33	8610972.64	1S31A19
678075.81	8611595.22	1N31Z19
678103.46	8613617.11	1S31A21
678111.31	8614249.09	1N31Z21
678141.30	8616265.40	1S31A23
678150.61	8616888.69	1N31Z23
678180.31	8618884.91	1S31A25

NOTES:

SCALE FACTOR
#1. All distances shown are ground distances. These were obtained by multiplying the grid distances by a factor of 1.000186253977.

RECORD MEASUREMENTS
#2. The record measurements shown in the parenthesis (xxx) are from record survey R1 unless otherwise stated.

REGISTERED PROFESSIONAL LAND SURVEYOR

David L. Haddock

OREGON JULY 12, 1968 DAVID L. HADDOCK

RENEWS 6-30-03

12-01
KE
01-206-C

PROJECT No. 01-03
SURVEY FOR
UMATILLA COUNTY SURVEYOR
3920 WESTGATE
PENDLETON, OR. 97801

MONUMENTS SET: 8 - 29 THRU 10 - 5, 2001

David L. Haddock, Surveyor and Engineer
P.O. Box 1574
Pendleton, Oregon 97801
(541) 276-2174

HADDOCK SURVEYING
GPS AND TOTAL STATION