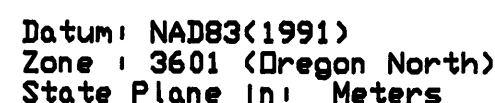
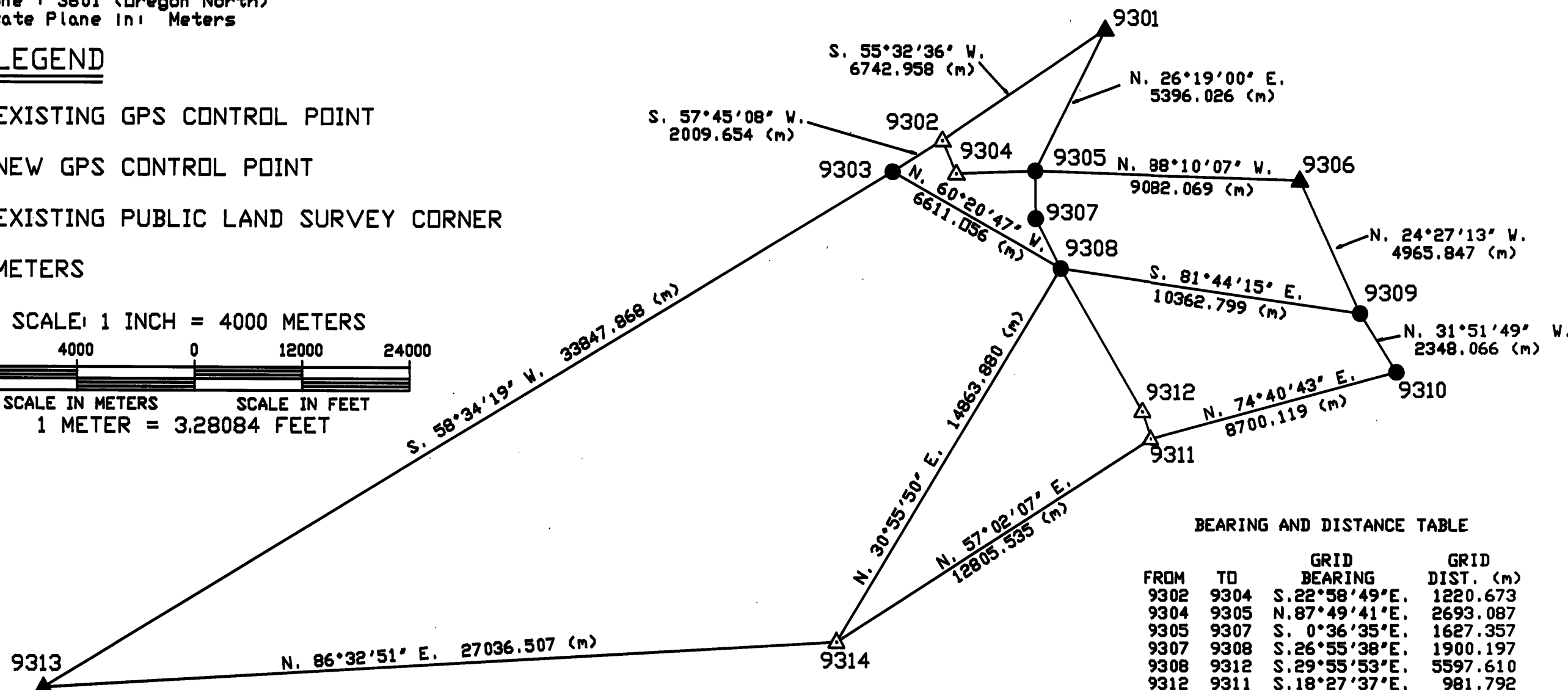


UMATILLA NATIONAL FOREST
LOCATED IN
TOWNSHIP 6 SOUTH, RANGES 34 & 35 EAST,
TOWNSHIP 7 SOUTH, RANGES 34 & 35 EAST,
AND
TOWNSHIP 8 SOUTH, RANGES 31 & 33 EAST,
WILLAMETTE MERIDIAN
GRANT & UMATILLA COUNTIES
OREGON
SEPTEMBER THROUGH OCTOBER 1993



▲ EXISTING GPS CONTROL POINT
△ NEW GPS CONTROL POINT
● EXISTING PUBLIC LAND SURVEY CORNER
(m) METERS



BEARING AND DISTANCE TABLE

FROM	TO	GRID BEARING	GRID DIST. (m)
9302	9304	S.22°58'49"E.	1220.673
9304	9305	N.87°49'41"E.	2693.087
9305	9307	S. 0°36'35"E.	1627.357
9307	9308	S.26°55'38"E.	1900.197
9308	9312	S.29°55'53"E.	5597.610
9312	9311	S.18°27'37"E.	981.792

THE PURPOSE OF THIS SURVEY WAS TO PROVIDE HORIZONTAL CONTROL FOR PORTIONS OF THE NORTH FORK JOHN DAY WILDERNESS AND EXISTING PUBLIC LAND SURVEY CORNERS.

THIS SURVEY WAS CONDUCTED USING FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) ORDER C, SECOND ORDER, CLASS 1 GPS SURVEY SPECIFICATIONS. ALL HORIZONTAL CONTROL MEETS OR EXCEEDS THESE SPECIFICATIONS. ALL COORDINATES PROVIDED ARE NAD83(1991) VALUES BASED ON THE OREGON HIGH PRECISION GPS CONTROL NETWORK.

THE SURVEY WAS CONDUCTED USING TWO TRIMBLE 4000ST AND ONE TRIMBLE 4000SE, SINGLE FREQUENCY, GLOBAL POSITIONING RECEIVERS, NIKON TRIBRACHS AND STANDARD SURVEY TRIPODS. THE ANTENNA HEIGHT MEASUREMENTS WERE MADE USING THE INTERNAL MEASURING TAPES OF THE RECEIVERS AND WERE RECORDED IN METERS.

STATIC SURVEY, CARRIER PHASE MEASUREMENTS AND DATA PROCESSING WAS USED ON ALL BASELINE MEASUREMENTS. ALL BASELINES FOR EACH SESSION WERE PROCESSED, ALTHOUGH ONLY THE INDEPENDENT (N-1) BASELINES WERE USED IN THE NETWORK. BASELINES WERE EVALUATED BY EXAMINATION OF THE STATISTICAL QUALITY INDICATORS AND LOOP CLOSURE ANALYSIS. ALL INDEPENDENT BASELINES WERE THEN ADJUSTED IN A LEAST SQUARES ADJUSTMENT PROGRAM IN TWO PHASES. THE FIRST PHASE WAS A MINIMALLY CONSTRAINED ADJUSTMENT USING THE CENTER OF THE SURVEY AREA. THE SECOND PHASE BEING A CONSTRAINED ADJUSTMENT USING THE THREE EXISTING GPS CONTROL POINTS (9301, 9306 AND 9313) AS FIXED POINTS BOTH HORIZONTALLY (LATITUDE & LONGITUDE) AND VERTICALLY (ELLIPSOID HEIGHT). THE COORDINATES OF THESE POINTS WERE ESTABLISHED BY DAVID EVANS AND ASSOCIATES UNDER CONTRACT TO THE USDA-FOREST SERVICE.

COMPUTER SOFTWARE USED IN THIS SURVEY CONSISTED OF TRIMBLE NAVIGATION'S TRIMVEC (REV. E) PROGRAM WHICH WAS USED FOR DOWNLOAD AND BASELINE PROCESSING, TRIMNET (VERSION 91.060) PROGRAM WHICH WAS USED FOR NETWORK ADJUSTMENTS, THE NATIONAL GEODETIC SURVEY'S GEDID93 PROGRAM WAS USED TO INTERPOLATE THE GEDID SEPARATION FOR EACH STATION IN ORDER TO DETERMINE ORTHOMETRIC HEIGHTS.

MEASUREMENTS SHOWN ON SHEET 2 FROM THE MONUMENTS TO THEIR REFERENCES ARE TRUE GEODETIC BEARINGS (MAGNETIC DECLINATION 20° EAST) AND ACTUAL GROUND DISTANCES IN FEET. ALL MEASUREMENTS SHOWN ON SHEET 1 ARE BASED ON NAD83(1991), OREGON NORTH ZONE STATE PLANE COORDINATES IN METERS.

I, DAVID A. SCHLAICH, A REGISTERED LAND SURVEYOR IN THE STATE OF OREGON
HEREBY CERTIFY THAT THIS PLAT AND THE NOTES HEREON ARE A TRUE AND
CORRECT REPRESENTATION OF A GPS CONTROL SURVEY I CONDUCTED FROM SEPTEMBER
THROUGH OCTOBER OF 1993, AT THE REQUEST OF THE UMATILLA NATIONAL FOREST,
IN ACCORDANCE WITH THE STATUTES OF THE STATE OF OREGON.

DAVID A. SCHLAICH -- RLS 2308
UMATILLA NATIONAL FOREST
2517 S.W. HAILEY AVENUE
PENDLETON, OREGON 97801
PHONE (503) 278-3747

REGISTERED
PROFESSIONAL
LAND SURVEYOR

David A. Schlar

OREGON
JULY 16, 1987
DAVID A. SCHLAICH
2308

EXPIRES 12/31/94

RECEIVED AND
FILED

FEB 2 1994

OFFICE OF COUNTY SURVEYOR
COUNTY OF LOS ANGELES
APPROVED: Jeremy Russell

SHEET 1 OF 2

MAP OF SURVEY NO. 1312