

GNSS PROJECT CONTROL MONUMENTS - NAD83(1998) EPOCH 2004.69															
POINT		NAD83(2011) GEODETIC COORDINATES			NETWORK ACCURACY (2 σ)		CCS83, ZONE 1 EPOCH 2010.00		ORTHO HEIGHT						
	PID	LATITUDE	LONGITUDE	ELLIP. HT.	CIRCULAR ERROR	HEIGHT	NORTHING	EASTING	ELEVATION	DESCRIPTION			CGF	MAP ANGLE	MONUMENTATION TYPE
89 PLU 16.65	DH6398	N40°06'31.21034"	W120°54'27.16524"	3460.49	FIXED	FIXED	1924777.36	6867230.43	3537.88	FOUND CSRC SURVEY DISC ON ALUMINUM ALLOY ROD STAMPED "89 PLU 16.65 2004"	0.999809295	0d42'52"	PRIMARY		
HPGN D CA 02 ES	DF4390	N40°10'42.49926"	W121°05'35.40074"	4428.93	FIXED	FIXED	1949611.55	6815050.40	4506.46	FOUND CADT ALLUMINUM SURVEY DISC IN CONCRETE STRUCTURE STAMPED "CA-HPGN-DENSIFICATION STA. 02-ES 1998"	0.999748531	0d35'35"	PRIMARY		
HPGN D CA 02 FS	AE8716	N40°18'12.10931"	W121°02'28.94626"	5010.29	FIXED	FIXED	1995258.73	6829023.88	5086.61	FOUND CADT SURVEY DISC EPOXIED IN ROCK STAMPED "CA-HPGN-DENSIFICATION STA. 02-FS 1995"	0.999698392	0d37'37"	PRIMARY		
9-89-19.41		N40°08'09.59421"	W120°55'52.47219"	3485.66	0.02	0.02	1934650.33	6860481.37	3562.93	SET NO. 6 REBAR WITH CADT ALUMINUM CAP STAMPED "GPS 9-89-19.41"	0.999802217	0d41'56"	SUPPLEMENTAL		
9-89-19.62		N40°08'13.50880"	W120°56'05.54162"	3496.43	0.02	0.02	1935034.06	6859461.58	3573.71	SET NO. 6 REBAR WITH CADT ALUMINUM CAP STAMPED "GPS 9-89-19.62"	0.999801473	0d41'47"	SUPPLEMENTAL		
9-89-21.18		N40°08'50.00137"	W120°57'31.78559"	3528.14	0.21	0.02	1938645.97	6852720.07	3605.36	SET NO. 6 REBAR WITH CADT ALUMINUM CAP STAMPED "GPS 9-89-21.18"	0.999797841	0d40'51"	SUPPLEMENTAL		
MEADOW		N40°08'56.90487"	W120°56'13.61784"	3514.36	0.16	0.02	1939417.35	6858781.12	3591.52	SET NO. 6 REBAR WITH CADT ALUMINUM CAP STAMPED "GPS MEADOW"	0.999798101	0d41'42"	SUPPLEMENTAL		

SURVEY NOTES:

1. CADT IS AN ACRONYM FOR THE CALIFORNIA DEPARTMENT OF TRANSPORTATION A.K.A CALTRANS.
2. ALL COORDINATES AND DISTANCES SHOWN ARE IN TERMS OF THE U.S. SURVEY FOOT UNLESS NOTED OTHERWISE.
3. ORTHOMETRIC HEIGHTS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 DERIVED USING GEOID MODEL GEOID09.
4. COORDINATE ERRORS ARE CALCULATED PER THE STANDARDS SET BY THE FEDERAL GEOGRAPHIC DATA COMMITTEE'S GEOSPATIAL POSITIONING ACCURACY STANDARDS, SPECIFICALLY FGDC-STD-007.3-1998 (PART 3 NATIONAL STANDARD FOR SPATIAL DATA ACCURACY).
5. ALL PRIMARY AND PROJECT CONTROL MONUMENTS ESTABLISHED OR REFERENCED BY THIS SURVEY MEET OR EXCEED THE FEDERAL GEOGRAPHIC DATA COMMITTEE GEOSPATIAL POSITIONING ACCURACY STANDARD OF 2CM HORIZONTAL NETWORK ACCURACY UNLESS NOTED OTHERWISE.
6. NO ORDER OF VERTICAL ACCURACY IS CLAIMED FOR MONUMENTS ESTABLISHED PER THIS SURVEY.
7. MONUMENTATION TYPES ARE FURTHER DEFINED IN SECTION 5.8, CHAPTER 5 OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION SURVEYS MANUAL (2015).
8. METHODOLOGY: THIS SURVEY WAS CONDUCTED UTILIZING STATIC GPS SURVEY METHODS IN ACCORDANCE WITH CHAPTER 6 OF THE CALTRANS SURVEYS MANUAL (2012 CALIFORNIA DEPARTMENT OF TRANSPORTATION) WITH THE FOLLOWING MODIFICATION: AZIMUTH PAIRS ESTABLISHED BY THIS SURVEY ARE SHORTER THAN SUGGESTED BY THE MANUAL DUE TO INCOMPATIBLE SITE CONDITIONS. TO MITIGATE THIS MODIFICATION, ADDITIONAL REDUNDANT BASELINES WERE COLLECTED TO PROVIDE STATISTICALLY INDEPENDENT OBSERVATIONS FOR ACCURACY VERIFICATION.

FIELD MEASUREMENTS WERE COLLECTED USING TRIMBLE R8 AND R10 GNSS ANTENNAS. THE GNSS DATA WAS PROCESSED AND THE SURVEY NETWORK WAS ADJUSTED (USING A LEAST SQUARES ADJUSTMENT) IN TRIMBLE BUSINESS CENTER VERSION 3.90 SOFTWARE.

9. COMBINED GRID FACTORS SHOWN FOR NGS MONUMENTS DIFFER FROM VALUES LISTED ON NGS DATA SHEETS. THE VALUES SHOWN HEREON ARE DERIVED FROM TRIMBLE BUSINESS CENTER. THE DIFFERENCE IN VALUES IS DUE TO UTILIZATION OF DIFFERENT METHODS TO COMPUTE ELEVATION FACTORS BY TRIMBLE BUSINESS CENTER AND NGS.

STATE OF CALIFORNIA
CALIFORNIA STATE TRANSPORTATION AGENCY
DEPARTMENT OF TRANSPORTATION, DISTRICT 2

**RECORD OF SURVEY
FOR GNSS PROJECT CONTROL
ON NAD83(1998), EPOCH 2004.69**

IN THE UNINCORPORATED TERRITORY OF THE COUNTY OF PLUMAS, STATE OF CALIFORNIA, ALONG STATE ROUTE 89, FROM POSTMILE 16.6 TO 21.2 SITUATED IN SECTIONS 2&3, T26N R9E; & SECTION 35, T27N R9E OF THE MOUNT DIABLO BASE AND MERIDIAN

EA:	0E240	EFIS:	02000000023
CO.	RTE.	P.M.	SHEET NO.
PLU	89	16.6 TO 21.2	2 OF 2