

CITY OF ENCINITAS
SURVEY CONTROL

PROCEDURE OF SURVEY:

THE PURPOSE OF THIS SURVEY IS TO ESTABLISH A NETWORK OF HORIZONTAL AND VERTICAL GEODETIC CONTROL STATIONS THROUGHOUT THE CITY OF ENCINITAS TO UTILIZE FOR GIS PURPOSES AND SUBSEQUENT MAPPING SURVEYS IN THE CITY.

TO ACCOMPLISH THIS TASK A GPS SURVEY WAS CONDUCTED USING FOUR LEICA SYSTEM 500 SYSTEMS COMPRISED OF AT502 L1,L2 MICROSTRIP ANTENNAS, AND SR 530 DUAL FREQUENCY RECEIVERS UTILIZING "FAST AMBIGUITY RESOLUTION" TECHNIQUES. ALL OCCUPATIONS UTILIZED FIXED HEIGHT ANTENNA TRIPODS. MONUMENTS USED FOR THE SURVEY WERE SELECTED IN UNOBSTRUCTED LOCATIONS FOR FUTURE USE, AT ONE MILE GRIDS AND SPACED NO GREATER THAN 1 MILE UNLESS DIRECTED BY THE CITY ENGINEER. LEVELING WITH A WILD NA-2002 BAR CODE LEVEL WAS PERFORMED INLAND TO TWENTY THREE MONUMENTS FROM THE EXISTING FIRST ORDER LEVEL LINE LYING ALONG THE COASTAL RAILROAD LINE.

AN ADDITIONAL MONUMENT WAS SET AND OBSERVATIONS MADE IN JULY OF 2004 AT WHICH TIME POINT 1049 WAS ADDED TO THE OVERALL NETWORK.

THE NETWORK SURVEY WAS CONDUCTED IN TWO DISTINCT PHASES, A CONTROL THE NETWORK AND AN OVERALL NETWORK. BOTH NETWORKS WERE PERFORMED IN COMPLIANCE WITH ACCURACY STANDARDS PER THE CALIFORNIA GEODETIC CONTROL COMMITTEE (C.G.C.C.) DOCUMENT "SPECIFICATIONS FOR GEODETIC CONTROL NETWORKS USING HIGH-PRODUCTION GPS SURVEYING TECHNIQUES" VERSION 2.0, JULY 1996 FOR BAND V (1cm), GROUP C 1ST ORDER EQUIVALENT AS DEFINED IN THE CALIFORNIA PUBLIC RESOURCES CODE SECTION 8801(c)(10).

THE NETWORK CONTROL TIES CONSISTS OF 2 MONUMENTS ONE ON THE NORTH END AND ONE ON THE SOUTH END OF THE PROJECT AREA AND 2 "B" ORDER MONUMENTS OUTSIDE THE PROJECT AREA. ADDITIONALLY THIS NETWORK WAS TIED TO THREE CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) OUTSIDE THE PROJECT AREA. THE 2 LOCAL MONUMENTS ARE HIGH STABILITY MARKS SET AS 2.5" DISKS IN MAJOR CONCRETE STRUCTURES. THE NETWORK CONTROL TIES WERE SURVEYED ON APRIL 16, 2004 CONCURRENTLY WITH THE OVERALL NETWORK. STATION DATA LOGGING OCCUPATION TIMES TO THE EXISTING B ORDER MONUMENTS RANGED FROM 60 TO 90 MINUTES.

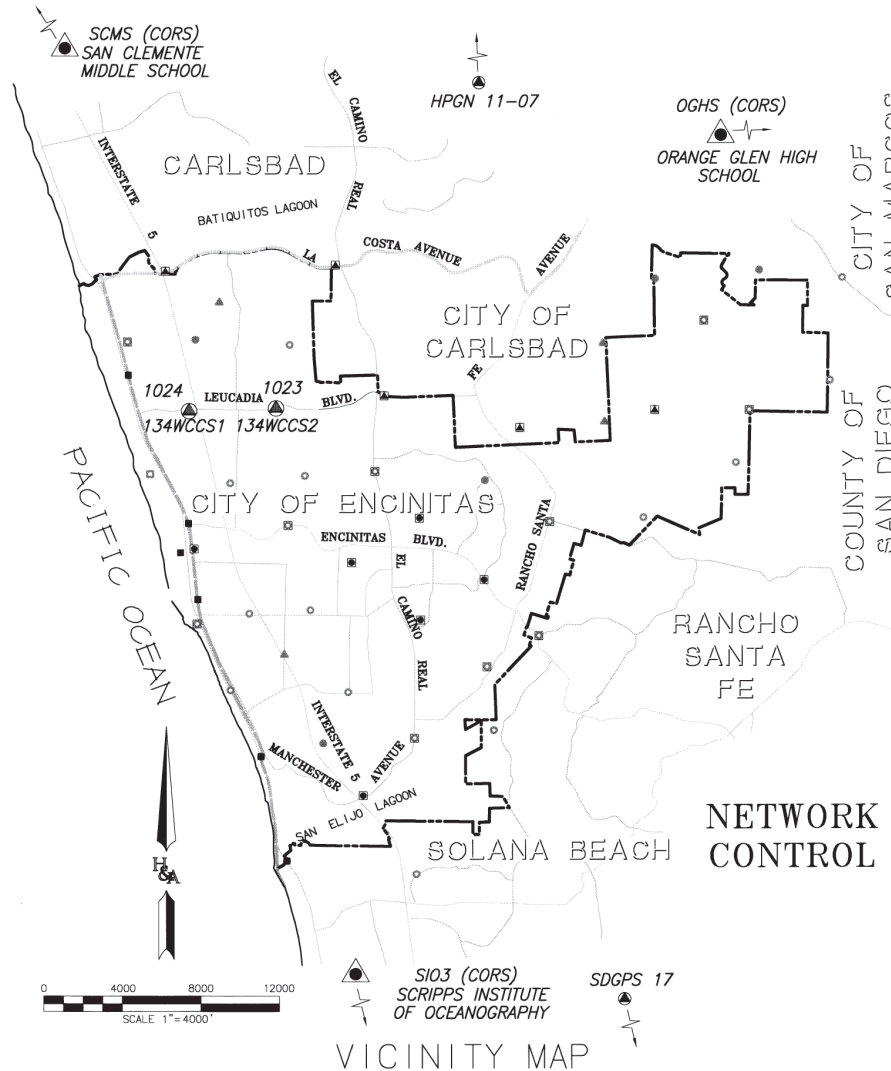
THE OVERALL NETWORK INCLUDES THE REMAINING FORTY FIVE STATIONS (52 STATIONS IN TOTAL ADJUSTMENT) AND WAS SURVEYED FROM APRIL 13, TO APRIL 16, 2004. STATION DATA LOGGING OCCUPATION TIMES RANGED FROM 30 TO 50 MINUTES.

THE OVERALL NETWORK WAS CONSTRAINED IN TWO ADJUSTMENTS ON TWO SEPARATE DATUMS. THE CCSB3 ZONE 6, 1991.35 EPOCH HORIZONTAL DATUM WITH THE NAVD 29 VERTICAL DATUM TO CORRESPOND WITH EXISTING HIGH ORDER CONTROL SURVEYS, AND ALSO CONSTRAINED TO THE CCSB3 ZONE 6, 2004.0 EPOCH HORIZONTAL DATUM WITH THE NAVD88 VERTICAL DATUM PER CORS STATIONS NGS DATASHEETS AS THE MOST CURRENT HIGH PRECISION GEODETIC NETWORK (HPGN) SURVEY.

THE CCSB3 ZONE 6, 1991.35 EPOCH HORIZONTAL DATUM WITH THE NAVD 29 VERTICAL DATUM NETWORK ADJUSTMENT INCLUDED 3 CORS STATIONS, 1 "B" ORDER MONUMENT AND TWO FIRST ORDER MONUMENTS USED AS THE BASIS OF COORDINATES. 10 FIRST ORDER BENCHMARKS AND TWENTY ONE MONUMENTS WERE USED AS THE BASIS OF ELEVATION. THE NETWORK STATION POSITION DATA IS THE RESULT OF A CONSTRAINED BASELINE ADJUSTMENT USING "MOVE 3 VERSION 3.2.2" LEAST SQUARES ADJUSTMENT SUBROUTINE IMBEDDED IN "LEICA SKI PRO VERSION 3.0" GPS SOFTWARE. THE ADJUSTMENT WAS CONSTRAINED TO THE HORIZONTAL AND VERTICAL MONUMENTS LISTED UNDER "BASIS OF COORDINATES" AND "BASIS OF ELEVATIONS" AS NOTED AND ARE THE BASIS FOR THE CCSB3 (1991.35 EPOCH), NAVD29 COORDINATES FOR THIS SURVEY.

THE CCSB3 ZONE 6, 2004.0 EPOCH HORIZONTAL DATUM WITH THE NAVD 88 VERTICAL DATUM PRIMARY NETWORK ADJUSTMENT INCLUDED THREE CORS STATIONS USED AS THE BASIS OF COORDINATES. 11 FIRST ORDER BENCHMARKS WITH 21 MONUMENTS WERE USED AS THE BASIS OF ELEVATION. THE NETWORK STATION POSITION DATA IS THE RESULT OF A CONSTRAINED BASELINE ADJUSTMENT USING "MOVE 3 VERSION 3.0.2" LEAST SQUARES ADJUSTMENT SUBROUTINE IMBEDDED IN "LEICA SKI PRO VERSION 2.0" GPS SOFTWARE. THE ADJUSTMENT WAS CONSTRAINED TO THE HORIZONTAL AND VERTICAL MONUMENTS LISTED UNDER "BASIS OF COORDINATES" AND "BASIS OF ELEVATIONS" AS NOTED. THE NETWORK CONTROL TIES FOR THIS ADJUSTMENT WAS USED TO VERIFY THE VALIDITY OF THE CONSTRAINTS AND COMBINED WITH THE OVERALL NETWORK.

COMPUTATIONS PERFORMED WITH THE "LEICA " LEAST SQUARES ADJUSTMENT WERE SPECIFIED TO 2-SIGMA (95%) CONFIDENCE REGIONS. GEOD 2003 PUBLISHED BY THE NATIONAL GEODETIC SURVEY (NGS) WAS THE GEOD MODEL UTILIZED TO COMPUTE GEOD SEPARATIONS FOR THE ADJUSTMENTS. THE RESULTS OF THE NETWORK ADJUSTMENT ACCURACIES CONFORM TO FIRST ORDER AS DEFINED BY THE FEDERAL GEODETIC CONTROL COMMITTEE (F.G.C.C.) BY DOCUMENT ENTITLED "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SEPARATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES", VERSION 5.0, REPRINTED WITH CORRECTIONS AUGUST 1, 1989.



RECORD OF SURVEY

OF A GEODETIC CONTROL NETWORK OF THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

SURVEYORS STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT AT THE REQUEST OF THE CITY OF ENCINITAS IN APRIL, 2004.



David W. Ambler 8-31-2004
DAVID W. AMBLER L.S. 7322
EXP. 12-31-05

LEGEND

- ▲ INDICATES CONTINUOUSLY OPERATING REFERENCE STATION (CORS)
- INDICATES EXISTING FIRST OR "B" ORDER CONTROL MONUMENT HELD IN ADJUSTMENT (SEE BASIS OF COORDINATES)
- INDICATES EXISTING FIRST ORDER BENCHMARK UNLESS OTHERWISE NOTED (SEE BASIS OF ELEVATION)
- INDICATES MONUMENT INCLUDED IN LEVELING AS A PART OF THIS SURVEY (SEE BASIS OF ELEVATION)
- ▲ INDICATES EXISTING 1ST ORDER MONUMENT PER CITY OF CARLSBAD CONTROL NETWORK (SEE R.O.S. 17271), UNLESS NOTED OTHERWISE.
- INDICATES A MONUMENT ESTABLISHED (SET) AS A PART OF THIS SURVEY.
- INDICATES MONUMENT USED (EXISTING) AS A PART OF THIS SURVEY

STATION NAME DESCRIPTIONS:

(MONUMENTS WITH STATION NAMES WHICH HAVE THE FOLLOWING DESIGNATION)

(CORS) - INDICATES AN EXISTING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) MONUMENT IN SAN DIEGO COUNTY FROM THE SOUTHERN CALIFORNIA INTEGRATED GPS NETWORK.

HPGN - INDICATES AN EXISTING CALIFORNIA HIGH PRECISION GEODETIC NETWORK MONUMENT PER R.O.S. 14310.

CLSB - INDICATES AN EXISTING CARLSBAD NETWORK MONUMENT PER R.O.S. 17271.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE LAND SURVEYORS ACT THIS 30th DAY OF August, 2004.



Philip J. Giurbino
PHILIP J. GIURBINO
L.S. 4424, COUNTY SURVEYOR

RECORDER'S STATEMENT

FILE NO. 2004-043375
FILED THIS 30th DAY OF SEPTEMBER, 2004, AT 10:31 O'CLOCK, A.M. IN BOOK OF RECORD OF SURVEY MAPS AT PAGE NA AT THE REQUEST OF DAVID W. AMBLER.

GREGORY J. SMITH
COUNTY RECORDER
BY: *M. HERANA*

FEE \$18.00

CITY OF ENCINITAS SURVEY CONTROL

ADJUSTMENT NO. 1

BASIS OF COORDINATES:
CCS83, ZONE 6, 1991.35 EPOCH PER R.O.S. 14310

THE HEREIN LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ALL PER EPOCH 1991.35 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR THREE CONTROL MONUMENTS OF B-ORDER ACCURACY OR BETTER.

NO	NAME	NORTHING	EASTING	ELLIPSOID HEIGHT	SOURCE	FGCC ORDER
OGHS	ORANGE GLEN HS	1992065 599	6319282 782	608.6	NGS DATA*	(CORS)
SIO3	SCRIPPS	1995870 270	6254483 553	115.2	NGS DATA*	(CORS)
SMCS	SAN CLEMENTE	2108031 366	8139329 933	77.1	NGS DATA*	(CORS)
1107	HPGN 11-07	1992291 232	6247272 613	196.75	R.O.S. 19810	B
1024	134WCCS1	1968854 814	6242001 192	62.73	R.O.S. 19810	FIRST
1023	134WCCS2	1968948 942	6245412 993	204.89	R.O.S. 19810	FIRST

* COMPUTED TO 1991.35 EPOCH USING HTDP

NGVD29 ELEVATIONS PER NGS 1ST ORDER BENCHMARKS:

THE HEREIN LISTED NATIONAL GEODETIC DATUM OF 1929 (NGVD29) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR SEVEN BENCHMARKS OF FIRST ORDER ACCURACY AND 3 OF SECOND ORDER.

NO	NAME	ORTHOMETRIC HEIGHT	SOURCE	FGCC ORDER
1001	CLSB-021	44.95	R.O.S. 17271	2 ND
1003	CLSB-017	19.58	R.O.S. 17271	2 ND
1042	OC-136	14.79	NGS DATA	FIRST
1107	HPGN 11-07	309.19	CALTRANS DATA	FIRST
*	CLSB-027	520.64	R.O.S. 17271	2 ND
*	OC-140	77.49	NGS DATA	FIRST
*	U1307	56.01	NGS DATA	FIRST
*	N 131	77.43	NGS DATA	FIRST
*	OC-139	76.51	NGS DATA	FIRST
*	T 131	71.38	NGS DATA	FIRST

THE NGS GEOID 99, GEOID MODEL AND AN ADDITIONAL TWENTY ONE STATIONS WERE LEVELED TO AND HELD IN THE VERTICAL COMPONENT OF THE ADJUSTMENT WERE USED TO DERIVE NGVD29 ORTHOMETRIC HEIGHTS USING GPS MEASUREMENTS.

ADJUSTMENT NO. 2

BASIS OF COORDINATES:
CCS83, ZONE 6, 2004.0 EPOCH PER NGS DATASHEETS

THE HEREIN LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ALL PER EPOCH 2004.0 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR FOUR CONTROL MONUMENTS OF B-ORDER ACCURACY OR BETTER AND TWO FIRST ORDER MONUMENTS.

* COMPUTED TO 2004.0 EPOCH USING HTDP

NO	NAME	NORTHING	EASTING	ELLIPSOID HEIGHT	SOURCE	FGCC ORDER
OGHS	ORANGE GLEN HS	1992066 979	6319281 696	610.3	NGS DATA*	(CORS)
SIO3	SCRIPPS	1995871 559	6254482 497	116.8	NGS DATA*	(CORS)
SMCS	SAN CLEMENTE	2108032 748	8139328 570	193.1	NGS DATA*	(CORS)

BASIS OF ELEVATION:
NAVD88 ELEVATIONS PER NGS 1ST ORDER BENCHMARKS:

THE HEREIN LISTED NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR EIGHT BENCHMARKS OF FIRST ORDER ACCURACY AND 3 OF SECOND ORDER ACCURACY PER CITY OF CARLSBAD CONTROL NETWORK.

NO	NAME	ORTHOMETRIC HEIGHT	SOURCE	FGCC ORDER
1001	CLSB-021	47.114	R.O.S. 17271	2 ND
1003	CLSB-017	21.739	R.O.S. 17271	2 ND
1042	OC-136	16.938	NGS DATA	FIRST
1043	J1415	34.665	NGS DATA	FIRST
1107	HPGN 11-07	311.358	CALTRANS DATA	FIRST
*	CLSB-027	522.803	R.O.S. 17271	2 ND
*	OC-140	79.636	NGS DATA	FIRST
*	U1307	57.185	NGS DATA	FIRST
*	N 131	79.580	NGS DATA	FIRST
*	OC-139	78.668	NGS DATA	FIRST
*	T 131	73.546	NGS DATA	FIRST

* USED FOR LEVEL TIES ONLY, NOT PART OF THIS SURVEY.

THE NGS GEOID 2003, GEOID MODEL AND AN ADDITIONAL TWENTY THREE STATIONS WERE LEVELED TO AND HELD IN THE VERTICAL COMPONENT OF THE ADJUSTMENT TO DERIVE NAVD88 ORTHOMETRIC HEIGHTS USING GPS MEASUREMENTS.

EXISTING CONTROL CHECK

PL No	RECORD No	Northing	Easting	NAVD88 Elev	Description	Dy	Dx	Dz	Notes
1	1975959.65	6240754.97	44.95	1	1001 1975959.65 6240754.91 44.85 CLSB-021 R.O.S. 17271	-0.085	-0.056	-0.101	Hold GPS
2	1974349.91	6243508.88	311.52	1002	1974349.10 6243509.83 WHITE NGS Data sheet (Conventional)	0.188	-0.053		Pre HPGN
3	1976246.32	6249451.81	19.58	1003	1976246.26 6249451.81 19.58 CLSB-017 R.O.S. 17271	-0.055	0.003	0.000	Hold Levels
7	1969591.76	6251923.84	82.53	1007	1969591.69 6251923.82 82.44 CLSB-004 R.O.S. 17271	-0.063	-0.020	-0.086	GPS HGT
8	1967966.13	6258842.70	218.28	1008	1967966.09 6258842.68 218.20 CLSB-006 R.O.S. 17271	-0.040	-0.017	-0.076	GPS HGT
9	1968260.91	6263147.03	297.08	1009	1968260.83 6263147.02 297.02 CLSB-007 R.O.S. 17271	-0.086	-0.008	-0.064	GPS HGT
10	1968880.96	6265716.17	201.00	1010	1968880.89 6265716.19 200.98 CLSB-012 R.O.S. 17271	-0.067	0.016	-0.024	GPS HGT
23	1968949.02	6246413.01	318.26	1023	1968949.99 6246412.94 318.16 134WCCS2 - ROS16810&ROS17271	-0.029	-0.055	-0.107	GPS HGT
24	1968854.66	6242001.19	176.39	1024	1968854.61 6242001.19 176.27 134WCCS1 - ROS16810&ROS17271	-0.041	0.002	-0.118	GPS HGT
42	1951126.36	6245651.73	14.79	1042	14.79 BM OC-136 NGS Data sheet			0.000	Hold Levels
43	1945758.04	6246975.45	32.51	1043	32.51 BM J 1415 NGS Data sheet			0.000	Hold GPS
47	1956519.83	6246846.56	229.54	1047	1956319.83 6246846.56 HPGN-D 11-DC R.O.S. 19607	-0.001	0.000		

Not used to compute Std. Dev.
Std Dev Dy 0.025
Std Dev Dx 0.027
Std Dev Dz 0.047

LEVELING RESULTS

ENC DESIGNATION	MONUMENT NAME	NAVD 88 ELEVATION	NGVD 29 ELEVATION	** HELD FOR LEVELING MAIN CIRCUITS
1003	CLSB-017**	21.739	19.58	** HELD FOR LEVELING MINOR LOOPS
1042	OC-136**	16.938	14.79	PER R.O.S. 17271 LEVELING
	CLSB-027**	522.803	520.64	JUNE 1991 LEVELING PER NGS DATA SHEET
	OC-140*	79.636	77.49	PER R.O.S. 17271 LEVELING
	U 1307*	57.185	56.01	JUNE 1991 LEVELING PER NGS DATA SHEET
	N 131*	79.580	77.43	JUNE 1991 LEVELING PER NGS DATA SHEET
	OC-139*	78.668	78.51	JUNE 1991 LEVELING PER NGS DATA SHEET
	T 131*	73.546	71.38	JUNE 1991 LEVELING PER NGS DATA SHEET
1004	ENC-04	67.839	65.48	
1007	CLSB-004	84.683	82.53	84.607 & 82.444 PER R.O.S. 17271 (GPS DERIVED, NOT HELD)
1008	CLSB-006	220.432	218.28	220.388 & 218.204 PER R.O.S. 17271 (GPS DERIVED, NOT HELD)
1010	CLSB-012	203.160	201.00	203.140 & 200.976 PER R.O.S. 17271 (GPS DERIVED, NOT HELD)
1013	ENC-13	454.416	452.25	
1017	ENC-17	427.877	425.72	
1020	ENC-20	120.965	118.41	
1022	ENC-22	142.124	139.97	
1028	ENC-28	250.481	248.33	
1029	ENC-29	218.104	215.95	
1030	ENC-30	388.480	386.33	
1031	ENC-31	182.965	180.85	
1032	ENC-32	92.004	89.86	
1033	ENC-33	82.081	79.93	
1035	ENC-35	243.238	241.09	
1036	ENC-36	37.309	35.16	
1037	ENC-37	55.969	53.42	
1038	ENC-38	37.522	35.37	
1041	ENC-41	74.279	72.12	
1044	ENC-44	18.961	16.41	

Not Held, NAVD 88 Elevations, GPS ties from adjacent benchmarks shows a difference of 0.33'

1001	CLSB-021	47.114	44.95	EXISTING BM (NOT INCLUDED IN LEVELING) PER R.O.S. 17271 LEVELING
1043	J 1415	34.665	-----	EXISTING BM (NOT INCLUDED IN LEVELING) JUNE 1991 PER NGS DATA SHEET
1107	HPGN-11-07	311.358	309.19	EXISTING BM (NOT INCLUDED IN LEVELING) JUNE 1991 PER NGS DATA SHEET

MAP SHEET INDEX:

- SHEET 1 - NETWORK DIAGRAM, PROCEDURE & CERTIFICATE SHEET.
- SHEET 2 - BASIS OF COORDINATES AND ELEVATIONS, SURVEYORS NOTES.
- SHEETS 3 - DETAILED NETWORK DIAGRAM SHEETS.
- SHEETS 4 - FINAL COORDINATE VALUE LISTINGS.
- SHEETS 5-6 - MONUMENT DESCRIPTIONS.

SURVEYORS NOTE: CORS

THE CORS STATION COORDINATES HAVE BEEN UPDATED TO THE SPECIFIED HORIZONTAL DATUM EPOCH UTILIZING THE HORIZONTAL TIME DEPENDENT POSITIONING PROGRAM (HTDP) VERSION 2.5 PUBLISHED BY THE NGS.

THE 2004.0 COORDINATES UPDATED OVER TWO MONTHS COMPARED TO THE MINIMALLY CONSTRAINED ADJUSTMENT VALUES WAS AT MOST 0.05' NORTH, AND 0.03' EAST WHICH IS WITHIN THE ACCURACY OF THE GPS OBSERVATIONS AND WERE USED AS THE BASIS OF COORDINATES.

THE 1991.35 COORDINATE UPDATED OVER TWELVE YEARS COMPARED TO THE MINIMALLY CONSTRAINED ADJUSTMENT VALUES WAS 0.08' NORTH, AND 0.05' EAST WHICH IS WITHIN THE ACCURACY OF THE GPS OBSERVATIONS AND WAS USED AS THE BASIS OF COORDINATES.

SURVEYORS NOTE: ELEVATIONS

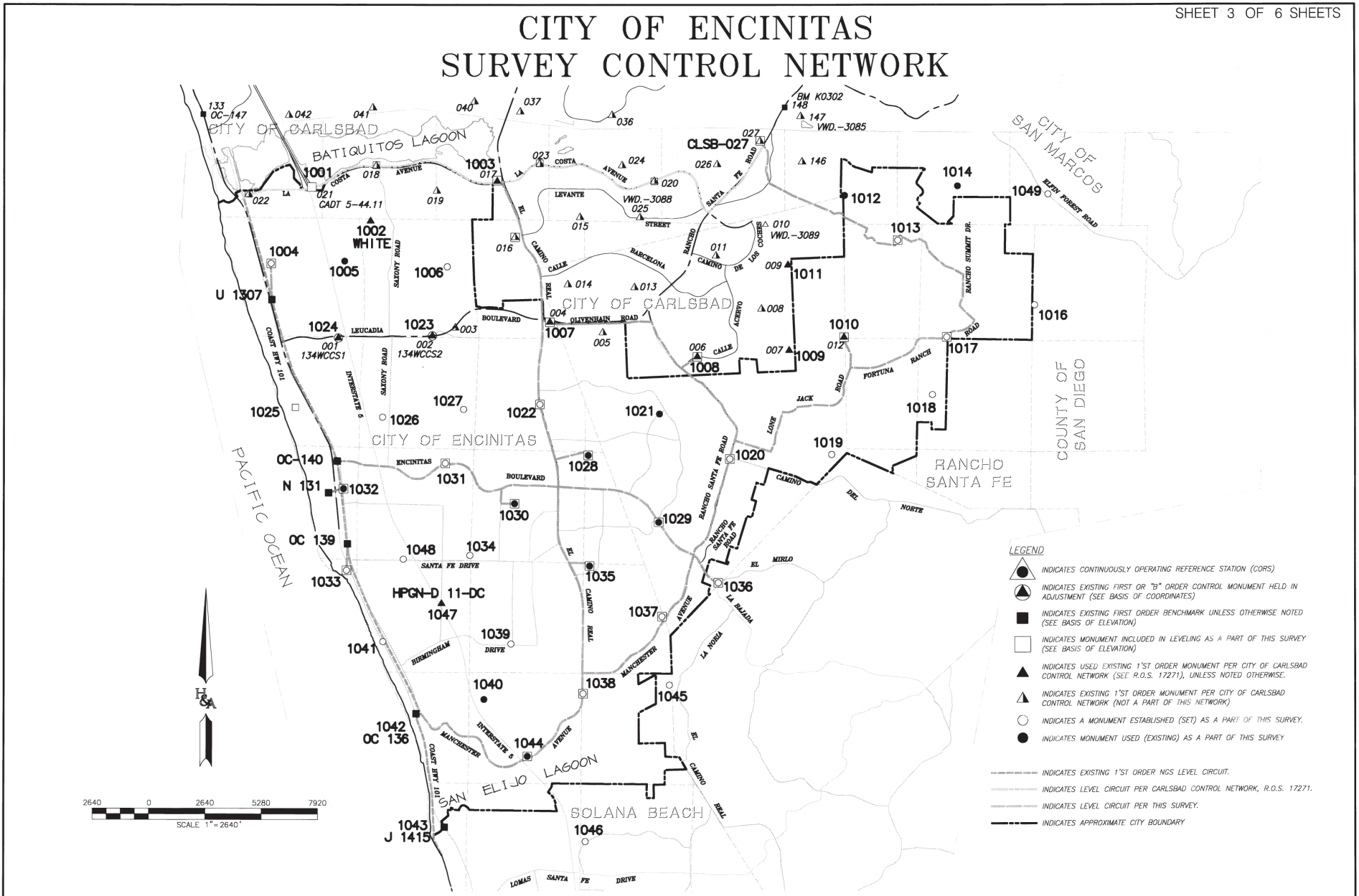
THE LEVELING FOR THIS SURVEY WAS PERFORMED TO ESTABLISH 3RD ORDER BENCH MARKS INLAND TO ADD AS VERTICAL CONSTRAINTS FOR THE GPS ADJUSTMENTS. THE LEVELING PROCEDURES USED DO NOT SUPPORT A HIGH ORDER OF ACCURACY ON THESE MONUMENTS EVEN THOUGH THE CLOSURES INDICATE OTHERWISE.

NAVD88 CLOSURE = 0.2208" IN 22.3 MILES. ERROR RATIO = 1:5,32,849
NGVD29 CLOSURE = 0.2196" IN 22.3 MILES. ERROR RATIO = 1:5,35,760

THE GPS DERIVED ELEVATIONS ON THE REMAINDER OF THE STATIONS IN THE NETWORK RESOLVED TO +/- 0.05 FEET BUT ARE STILL SUBJECT TO ERRORS IN CONTROL (3RD ORDER CONSTRAINTS), THE VERTICAL COMPONENT OF THE GPS ADJUSTMENT AND THE USE OF THE GEOID 2003 GEOID MODEL. THEREFORE NO SPECIFIC ORDER OF ACCURACY IS CLAIMED FOR THIS SURVEY'S ELEVATIONS DUE TO THE INABILITY TO DEFINE THE ABSOLUTE RELATIONSHIP TO THE DATUM.

HOWEVER, THE NETWORK IS TIED TO FIRST ORDER BENCHMARKS AND THE LEVELING CLOSURES AND GPS ADJUSTMENTS SHOW THE RELATIVE VERTICAL ACCURACY TO BE SUFFICIENT FOR MOST ENGINEERING AND GEOGRAPHIC INFORMATION SYSTEM (GIS) APPLICATIONS.

CITY OF ENCINITAS SURVEY CONTROL NETWORK



- LEGEND**
- INDICATES CONTINUOUSLY OPERATING REFERENCE STATION (CORS)
 - INDICATES EXISTING FIRST OR "B" ORDER CONTROL MONUMENT HELD IN ADJUSTMENT (SEE BASIS OF COORDINATES)
 - INDICATES EXISTING FIRST ORDER BENCHMARK UNLESS OTHERWISE NOTED (SEE BASIS OF ELEVATION)
 - INDICATES MONUMENT INCLUDED IN LEVELING AS A PART OF THIS SURVEY (SEE BASIS OF ELEVATION)
 - INDICATES USED EXISTING 1ST ORDER MONUMENT PER CITY OF CARLSBAD CONTROL NETWORK (SEE R.O.S. 17271), UNLESS NOTED OTHERWISE.
 - INDICATES EXISTING 1ST ORDER MONUMENT PER CITY OF CARLSBAD CONTROL NETWORK (NOT A PART OF THIS NETWORK)
 - INDICATES A MONUMENT ESTABLISHED (SET) AS A PART OF THIS SURVEY.
 - INDICATES MONUMENT USED (EXISTING) AS A PART OF THIS SURVEY
- INDICATES EXISTING 1ST ORDER NOS LEVEL CIRCUIT.
- INDICATES LEVEL CIRCUIT PER CARLSBAD CONTROL NETWORK, R.O.S. 17271.
- INDICATES LEVEL CIRCUIT PER THIS SURVEY.
- INDICATES APPROXIMATE CITY BOUNDARY

RECORD OF SURVEY NO. 18416

SHEET 4 OF 6 SHEETS

Pt. No.	Name	Latitude	Longitude	Ellipsoid Height	CCS 83 2004.0		NAVD88	CCS83 1991.35		NGVD29	Convergence	Combined SF	Pt. No.
					Northing	Easting	Elevation	Northing	Easting	Elevation			
1001	CLSB-021	33°5'3.96659"N	117°17'51.79963"W	-66.857	1975960.979	6240753.851	47.114	1975959.601	6240754.950	44.950	- 0 34 32.663	0.99996685	1001
1002	WHITE	33°4'48.31301"N	117°17'19.24557"W	199.831	1974351.244	6243507.768	313.681	1974349.862	6243508.871	311.526	- 0 34 14.774	0.99995442	1002
1003	CLSB-017	33°5'7.655752"N	117°16'9.622199"W	-91.668	1976247.649	6249450.690	21.739	1976246.274	6249451.783	19.580	- 0 33 36.515	0.99996796	1003
1004	ENC-04	33°4'27.96099"N	117°18'13.83224"W	-46.586	1972340.984	6238842.552	67.639	1972339.607	6238843.657	65.480	- 0 34 44.770	0.99996655	1004
1005	ENC-05	33°4'29.37186"N	117°17'33.36999"W	60.399	1972448.960	6242286.869	174.391	1972447.581	6242287.976	172.235	- 0 34 22.536	0.99996150	1005
1006	ENC-06	33°4'27.26036"N	117°16'36.71041"W	207.012	1972187.715	6247105.857	320.695	1972186.325	6247106.957	318.541	- 0 33 51.400	0.99995453	1006
1007	CLSB-004	33°4'2.055622"N	117°15'39.81068"W	-28.778	1969593.087	6251922.721	84.683	1969591.693	6251923.819	82.530	- 0 33 20.133	0.99996637	1007
1008	CLSB-006	33°3'46.62845"N	117°14'18.33077"W	107.355	1967967.457	6258841.581	220.432	1967966.069	6258842.679	218.280	- 0 32 35.358	0.99996021	1008
1009	CLSB-007	33°3'49.94583"N	117°13'27.78832"W	186.499	1968262.241	6263145.909	299.239	1968260.857	6263147.007	297.082	- 0 32 07.584	0.99995635	1009
1010	CLSB-012	33°3'56.31692"N	117°12'57.66865"W	90.629	1968882.286	6265715.053	203.160	1968880.903	6265716.150	201.000	- 0 31 51.033	0.99996079	1010
1011	CLSB-009	33°4'29.58801"N	117°13'28.97375"W	256.970	1972269.626	6263082.484	369.543	1972268.243	6263083.581	367.380	- 0 32 08.236	0.99995209	1011
1012	ENC-12	33°5'2.576987"N	117°12'58.10122"W	581.048	1975579.215	6265740.295	693.314	1975577.832	6265741.392	691.149	- 0 31 51.271	0.99993588	1012
1013	ENC-13	33°4'41.64944"N	117°12'28.564"W	342.241	1973440.977	6268233.900	454.416	1973439.595	6268234.997	452.250	- 0 31 35.039	0.99994775	1013
1014	ENC-14	33°5'7.426898"N	117°11'55.85189"W	726.578	1976020.716	6271040.951	838.481	1976019.333	6271042.049	836.316	- 0 31 17.063	0.99992882	1014
1015	Intentionally Deleted												1015
1016	ENC-16	33°4'11.81826"N	117°11'12.74445"W	437.433	1970367.455	6274657.997	549.325	1970366.072	6274659.095	547.165	- 0 30 53.375	0.99994385	1016
1017	ENC-17	33°3'56.74896"N	117°12'1.037054"W	315.676	1968881.661	6270534.698	427.877	1968880.278	6270535.796	425.720	- 0 31 19.913	0.99995001	1017
1018	ENC-18	33°3'29.86907"N	117°12'8.630961"W	197.564	1966170.936	6269863.655	309.922	1966169.552	6269864.753	307.765	- 0 31 24.086	0.99995628	1018
1019	ENC-19	33°3'1.554508"N	117°13'3.831248"W	-4.952	1963352.581	6265139.257	107.826	1963351.198	6265140.355	105.670	- 0 31 54.419	0.99996663	1019
1020	ENC-20	33°2'59.05586"N	117°13'59.91094"W	7.487	1963144.715	6260363.776	120.564	1963143.331	6260364.873	118.410	- 0 32 25.236	0.99996610	1020
1021	ENC-21	33°3'19.7696"N	117°14'38.92075"W	151.063	1965269.631	6257063.479	264.323	1965268.244	6257064.577	262.170	- 0 32 46.673	0.99995874	1021
1022	ENC-22	33°3'23.73644"N	117°15'44.84127"W	28.525	1965724.525	6251457.028	142.124	1965723.139	6251458.126	139.970	- 0 33 22.897	0.99995511	1022
1023	134WCCS2	33°3'55.16318"N	117°16'44.48988"W	206.590	1968950.353	6246411.892	320.417	1968948.942	6246412.993	318.266	- 0 33 55.675	0.99995526	1023
1024	134WCCS1	33°3'53.79573"N	117°17'36.31764"W	64.424	1968855.987	6242000.075	178.543	1968854.614	6242001.192	176.391	- 0 34 24.155	0.99996210	1024
1025	ENC-25	33°3'21.10154"N	117°17'59.57943"W	-53.753	1965571.643	6239987.266	60.601	1965570.266	6239988.375	58.449	- 0 34 36.938	0.99996850	1025
1026	ENC-26	33°3'16.96275"N	117°17'11.5028"W	61.096	1965112.418	6244074.767	175.189	1965111.036	6244075.873	173.040	- 0 34 10.519	0.99996311	1026
1027	ENC-27	33°3'21.04116"N	117°16'26.85728"W	198.734	1965487.052	6247878.517	312.567	1965485.663	6247879.619	310.417	- 0 33 45.986	0.99995642	1027
1028	ENC-28	33°3'0.093278"N	117°15'17.8912"W	136.955	1963312.846	6253727.625	250.480	1963311.462	6253728.722	248.330	- 0 33 08.088	0.99995988	1028
1029	ENC-29	33°2'29.2827"N	117°14'38.75615"W	104.698	1960167.051	6257028.838	218.103	1960165.668	6257029.935	215.950	- 0 32 46.582	0.99996177	1029
1030	ENC-30	33°2'37.32793"N	117°15'58.26832"W	274.724	1961045.386	6250268.586	388.479	1961044.005	6250269.682	386.330	- 0 33 30.276	0.99995384	1030
1031	ENC-31	33°2'55.73258"N	117°16'36.60969"W	69.048	1962937.417	6247023.326	182.995	1962936.036	6247024.425	180.850	- 0 33 51.345	0.99996323	1031
1032	ENC-32	33°2'43.38641"N	117°17'32.6524"W	-22.320	1961736.994	6242240.837	92.004	1961735.615	6242241.939	89.860	- 0 34 22.141	0.99996790	1032
1033	ENC-33	33°2'5.34315"N	117°17'30.47467"W	-32.322	1957890.328	6242387.781	82.081	1957888.951	6242388.878	79.930	- 0 34 20.945	0.99996932	1033
1034	ENC-34	33°2'12.92925"N	117°16'22.60259"W	168.735	1958599.802	6248173.084	282.723	1958598.426	6248174.178	280.574	- 0 33 43.648	0.99995951	1034
1035	ENC-35	33°2'8.55423"N	117°15'16.54178"W	129.551	1958103.085	6253792.292	243.238	1958101.705	6253793.387	241.090	- 0 33 07.346	0.99996149	1035
1036	ENC-36	33°2'1.246752"N	117°14'5.620281"W	-76.034	1957306.836	6259822.644	37.309	1957305.454	6259823.741	35.160	- 0 32 28.373	0.99997151	1036
1037	ENC-37	33°1'45.24134"N	117°14'36.52001"W	-57.971	1955714.211	6251776.769	55.569	1955712.830	6251777.865	53.420	- 0 32 45.353	0.99997106	1037
1038	ENC-38	33°1'8.905583"N	117°15'19.54898"W	-76.340	1952077.071	6253478.164	37.521	1952075.692	6253479.259	35.370	- 0 33 08.999	0.99997288	1038
1039	ENC-39	33°1'31.75092"N	117°15'59.52732"W	209.973	1954418.927	6250096.804	323.983	1954417.550	6250097.897	321.833	- 0 33 30.967	0.99995858	1039
1040	ENC-40	33°1'5.776596"N	117°16'14.1695"W	108.074	1951806.027	6248824.522	222.245	1951804.650	6248825.615	220.097	- 0 33 39.014	0.99996414	1040
1041	ENC-41	33°1'32.17311"N	117°17'10.0452"W	-40.780	1954520.693	6244093.576	73.612	1954519.319	6244094.667	71.463	- 0 34 09.718	0.99997057	1041
1042	ENC-42	33°0'58.75634"N	117°16'51.36416"W	-97.449	1951127.688	6245650.619	16.938	1951126.311	6245651.712	14.793	- 0 33 59.453	0.99997416	1042
1043	ENC-43	33°0'5.772762"N	117°16'35.19847"W	-79.827	1945759.365	6248974.337	34.664	1945757.987	6248975.431	32.509	- 0 33 50.569	0.99997476	1043
1044	ENC-44	33°0'39.41167"N	117°15'49.95019"W	-95.577	1949121.354	6250860.731	18.560	1949119.976	6250861.825	16.410	- 0 33 25.705	0.99997459	1044
1045	ENC-45	33°1'13.27032"N	117°14'32.09101"W	-88.778	1952479.481	6257523.075	24.841	1952478.100	6257524.170	22.691	- 0 32 42.920	0.99997336	1045
1046	ENC-46	32°59'59.73542"N	117°15'17.64972"W	56.220	1945084.872	6253572.495	170.313	1945083.493	6253573.589	168.162	- 0 33 07.955	0.99996842	1046
1047	CADT 11-DC	33°1'50.25583"N	117°16'37.93358"W	117.523	1956321.159	6246845.450	231.691	1956319.791	6246846.538	229.539	- 0 33 52.072	0.99996253	1047
1048	ENC-48	33°2'10.81824"N	117°16'59.21386"W	59.165	1958417.185	6245054.418	173.376	1958415.809	6245055.513	171.227	- 0 34 03.766	0.99996480	1048
1049	ENC-49	33°5'3.95231"N	117°11'5.94947"W	477.343	1975631.219	6275283.460	588.991	1975629.836	6275284.558	586.829	- 0 30 49.641	0.99994082	1049

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SHEET 5 OF 6 SHEETS

PT. NO. 1001 NAME CLSB-021
STAMPING 5-44.11 1997
MONUMENT DESCRIPTION:
 FD. 2.5" CADT DISK IN WEST END OF DRAINAGE BOX INLET IN THE NORTH-EAST QUADRANT OF THE INTERSECTION OF LA COSTA AVENUE AND INTERSTATE HIGHWAY 5. IN THE NORTHWEST CORNER OF NORTHBOUND ON RAMP AND 47 FT. EAST OF BRIDGE
TO REACH DESCRIPTION:
 MONUMENT IS IN THE NORTHEAST QUADRANT OF THE INTERSECTION OF LA COSTA AVENUE AND INTERSTATE HIGHWAY 5. AT THE NORTHWEST CORNER OF LA COSTA AVE. AND THE NORTHBOUND ON RAMP TO I-5. 47 FT. EASTERLY OF THE EAST END OF LA COSTA AVE. BRIDGE OVER I-5. 9 FT. WESTERLY OF TRAFFIC LIGHT AND 3.5 FT. FROM CURB.

PT. NO. 1002 NAME WHITE
STAMPING WHITE
MONUMENT DESCRIPTION:
 FD. 3" USC&GS DISC IN 8"x8" CONCRETE MONUMENT 6" ABOVE GROUND STAMPED "WHITE 1938"
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF GLOSSONY ROAD AND AMALFI DRIVE GO SOUTH ON GLASSONY ROAD 0.25 MI. TO THE MONUMENT ON THE RIGHT. THE MONUMENT IS LOCATED ON THE WEST SIDE OF THE ROAD 12.5 FEET WEST OF AC BERM AND 43 FEET WEST OF POWER POLE #P120181.

PT. NO. 1003 NAME CLSB-017
STAMPING CLSB-017 L.S. 6215
MONUMENT DESCRIPTION:
 FD. 2.5" DISK IN NORTHEAST CORNER OF LA COSTA AVENUE BRIDGE OVER ENCINITAS CREEK. 185' WEST OF EL CAMINO REAL.
TO REACH DESCRIPTION:
 MONUMENT IS IN THE NORTHEAST CORNER OF LA COSTA AVENUE BRIDGE OVER ENCINITAS CREEK. 185' WEST OF EL CAMINO REAL ON NORTH SIDEWALK OF BRIDGE. 6 FT. NORTH OF CURB AND 2.5 FT. WEST OF THE EAST END OF BRIDGE WALL.

PT. NO. 1004 NAME ENC-04
STAMPING ENC-04. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN DRAINAGE BOX INLET AT THE NORTHEAST CORNER OF THE CITY OF ENCINITAS LEUCADIA OAKS PARK ON THE WEST SIDE OF RAINTREE DRIVE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED 4.5 FEET WEST OF CURB ON THE WEST SIDE OF RAINTREE DRIVE IN CURVE. KNUCKLE. 250 FEET NORTHERLY FROM THE INTERSECTION OF RAINTREE DRIVE AND SANFORD DRIVE.

PT. NO. 1005 NAME ENC-05
STAMPING RCE 29577
MONUMENT DESCRIPTION:
 FD. 2" IRON PIPE WITH TAG STAMPED "RCE 29577" AT A 20 FOOT OFFSET TO THE CENTER OF CUL-DE-SAC AT THE NORTHEAST END OF ARBOR COURT.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF OLYMPUS STREET AND ARBOR COURT. GO NORTHEASTERLY 0.1 MI. TO A BULB CUL-DE-SAC. THE MONUMENT IS LOCATED 20 FEET NORTHWESTERLY OF A 2" IRON PIPE AT THE CENTER OF CUL-DE-SAC. 27' SOUTHERLY OF A STREET LIGHT AND 19 FEET SOUTHEASTERLY OF A SEWER MANHOLE SET FLUSH IN ASPHALT.

PT. NO. 1006 NAME ENC-06
STAMPING ENC-06. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN THE SOUTHWEST CORNER OF CONCRETE PEDESTAL FOR UTILITY BOXES. WEST SIDE OF CITY TRAIL ENTRANCE AT THE SOUTH END OF RAINEY COURT.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED 190 FEET SOUTHERLY OF THE INTERSECTION OF RANCH ROAD AND RAINEY COURT IN THE SOUTHWEST CORNER OF A CONCRETE PEDESTAL. 15 FEET SOUTHERLY OF ROLLED CURB AND 31 FEET WESTERLY OF A STREET LIGHT.

PT. NO. 1007 NAME CLSB-004
STAMPING CLSB-004 L.S. 6215
MONUMENT DESCRIPTION:
 FD. 2.5" DISK IN THE NORTH-EAST CORNER OF A 3'X3' DRAINAGE BOX IN THE SOUTHEAST QUADRANT OF EL CAMINO REAL AND OLIVENHAIN RD. 33 FT. OFF CURB AND 310 FT. EAST OF INTERSECTION.
TO REACH DESCRIPTION:
 MONUMENT IS IN THE NORTHEAST CORNER OF A 3'X3' DRAINAGE BOX IN THE SOUTHEAST QUADRANT OF EL CAMINO REAL AND OLIVENHAIN RD. 33 FT. SOUTH OF THE SOUTHERLY CURB OF OLIVENHAIN RD. AND 310 FT. EAST OF EL CAMINO REAL.

PT. NO. 1008 NAME CLSB-006
STAMPING CLSB-006 L.S. 6215
MONUMENT DESCRIPTION:
 FD. 2.5" DISK IN SOUTH CURB OF CALLE ACERVO AT THE WEST END OF THE WEST CURB RETURN OF THE EAST DRIVEWAY OF ELEMENTARY SCHOOL. 0.1 MI. NORTHEAST OF RANCHO SANTA FE RD.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF RANCHO SANTA FE RD. AND CALLE ACERVO GO NORTHEASTERLY ON CALLE ACERVO 0.1 MI. TO THE MONUMENT ON THE RIGHT. THE MONUMENT IS IN THE SOUTHERLY CURB OF CALLE ACERVO AT THE WEST END OF THE WEST CURB RETURN OF THE EASTERLY DRIVEWAY OF AN ELEMENTARY SCHOOL. 84 FT. WESTERLY OF A STREET LIGHT.

PT. NO. 1009 NAME CLSB-007
STAMPING CLSB-007 L.S. 6215
MONUMENT DESCRIPTION:
 FD. ROD DRIVEN TO REFUSAL WITH CAP ON WEST SIDE OF PASEO ESMERADO AT ACCESS DRIVEWAY TO PROTECTED HABITAT AREA. 50' FROM CURB AND 20' FROM FENCE ON ANYON RIM.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF AVENIDA PANTERA AND PASEO ESMERADO GO SOUTH ON PASEO ESMERADO 0.3 MI. TO THE POINT ON THE NORTH SIDE AND ACROSS FROM 7880 PASEO ESMERADO 54 FT. FROM CURB AND 21 FT. FROM HABITAT AREA FENCE AND 13 FT. EAST OF A "NO TRESPASSING" SIGN.

PT. NO. 1010 NAME CLSB-012
STAMPING CLSB-012 L.S. 6215
MONUMENT DESCRIPTION:
 FD. 2.5" DISK IN THE NORTHEAST CORNER OF VAULT IN THE SOUTHWEST QUADRANT OF LONE JACK RD. AND DOUBLE LL RANCH RD. IN SAN MARCOS.
TO REACH DESCRIPTION:
 MONUMENT IS IN THE SOUTHWEST QUADRANT OF LONE JACK RD. AND DOUBLE LL RANCH RD. IN THE NORTHEAST CORNER OF VAULT. 44FT. SOUTH OF SOUTHERLY CURB OF DOUBLE LL RANCH RD. 3 FT. WEST OF WESTERLY CURB OF LONE JACK RD. AND 36 FT. WESTERLY OF POWER POLE NO. 518620.

PT. NO. 1011 NAME CLSB-009
STAMPING RCE 23956
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT IN THE CENTER OF THE SOUTHEAST END OF BULB CUL-DE-SAC OF SITIO BORDE.
TO REACH DESCRIPTION:
 MONUMENT IS IN CENTER OF THE SOUTHEAST END OF BULB CUL-DE-SAC. 0.1 MI. SOUTHEASTERLY OF AVENIDA DISTRHO AND 47.5 FT. NORTHWESTERLY OF A STREET LIGHT.

PT. NO. 1012 NAME ENC-12
STAMPING (NONE)
MONUMENT DESCRIPTION:
 FD. 4" DIAMETER CONCRETE CYLINDER UP 1 FOOT WITH 3/8" PIN UP 1 INCH IN MOUND OF ROCKS.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF RANCHO SANTA FE ROAD AND CAMINO JUNIPERO GO 0.3 MILES EASTERLY ON CAMINO JUNIPERO TO A SDG&T TRANSMISSION LINE. TURN LEFT ONTO DIRT ACCESS ROAD UNDER TRANSMISSION LINE GO SOUTHEAST ALONG DIRT ROAD 0.2 MILES TO 2ND TRANSMISSION TOWER AND A DIRT ROAD TO THE LEFT. TURN LEFT GO NORTH UPHILL 0.1 MILES TO END OF DRIVABLE ROAD. CONTINUE ON FOOT UP TRAIL. 500 FEET TO THE MONUMENT. THE MONUMENT IS LOCATED 10 FEET NORTHERLY OF THE TRAIL.

PT. NO. 1013 NAME ENC-13
STAMPING ENC-13. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2" IRON PIPE WITH 2.5" BRASS DISC WITH 8" CONCRETE COLLAR UP 6". 0.6 MILES WEST OF TWIN WATER TANKS AT NORTH END OF FORTUNA SUMMIT DRIVE ALONG DIRT ROAD THAT CROSSES CANYON. 21 FEET EAST OF THE WESTERLY FORK OF DIRT ROAD AND 3 FEET WEST OF TBAR POST.

TO REACH DESCRIPTION:
 FROM LONE JACK RD AND FORTUNA RANCH RD GO EAST ON FORTUNA RANCH RD 1 MI TO THE END OF PAVEMENT. CONTINUE EAST ALONG DIRT RD 700 FT. TO A FORK AT CANYON DE ORO RD. TAKE LEFT FORK GO NELY ALONG CANYON DE ORO RD 500 FT TO THE INTERSECTION WITH RANCHO SUMMIT DR. TURN LEFT GO NORTH 0.4 MI ON RANCHO SUMMIT DR TO A LOCKED GATE AT THE SECOND RESIDENCE ALONG ROAD. CONTINUE NORTH THROUGH GATE 0.5 MILES UP HILL TO THE FENCED WATER TANKS. TURN LEFT GO WEST 0.1 MI ALONG FENCE TO CORNER. TURN RIGHT GO NW ALONG FENCE 200 FT TO SECOND DIRT RD. TURN LEFT GO WEST DOWNHILL ON DIRT RD 0.4 MILES TO A LOCKED GATE. CONTINUE ALONG DIRT ROAD 0.2 MI TO A SPLIT IN THE ROAD. TAKE LEFT FORK GO SOUTH 200 FEET TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED 150 FT NORTH OF DUAL POWER POLES ADJACENT TO AN SDG&E TRANSMISSION LINE.

PT. NO. 1014 NAME ENC-14
STAMPING SM LF 40. 9-19-92
MONUMENT DESCRIPTION:
 FD. 2" IRON PIPE WITH 1 1/2" ALUMINUM COUNTY OF SAN DIEGO DISC STAMPED HORIZ. CONTROL SURVEY MONUMENT AT THE TOP OF SLOPE BETWEEN 2 DIRT ROADS HEADING NORTH INTO AN ABANDONED DUMP SITE NORTH OF THE NORTH END OF RANCHO SUMMIT DRIVE.

TO REACH DESCRIPTION:
 FROM CANYON DE ORO RD AND RANCHO SUMMIT DR. GO NORTH 0.4 MI ON RANCHO SUMMIT DRIVE TO A LOCKED GATE AT THE SECOND RESIDENCE. CONTINUE NORTH 0.5 MI UP HILL TO THE FENCED WATER TANKS. TURN LEFT GO WEST 0.1 MI ALONG FENCE TO COR. TURN RIGHT GO NW. NORTH AND NE 0.2 MI ALONG FENCE. AROUND TANK TO THE NORTH SIDE OF THE SOUTH TANK AND A GRAVEL ROAD TO THE LEFT. TURN LEFT GO NORTH ALONG GRAVEL RD 0.3 MI TO A LOCKED GATE TO CLOSED COUNTY DUMP SITE. GO PAST GATE 200 FT TO THE MONUMENT IN THE SPLIT OF THE DIRT ROAD. THE MONUMENT IS LOCATED AT THE TOP OF SLOPE FOR THE LOWER ROAD. 5 FEET WEST OF THE EDGE OF UPPER GRAVEL ROAD. 3 FEET EAST OF THE TOP OF SLOPE. 13 FEET NORTH OF 18"X18" CONC. PEDESTAL FOR ELECTRIC BOX AND 1 FOOT EAST OF TBAR POST.

PT. NO. 1015 NAME
STAMPING INTENTIONALLY DELETED
MONUMENT DESCRIPTION:
TO REACH DESCRIPTION:

PT. NO. 1016 NAME ENC-16
STAMPING ENC-16. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2" IRON PIPE WITH 2.5" CITY OF ENCINITAS BRASS DISC ON THE WEST SIDE OF CANYON DE ORO. 150 FEET NORTH OF PAINT MOUNTAIN ROAD AND 150 FEET SOUTH OF POWER LINES.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED 150 FEET NORTHERLY ALONG CANYON DE ORO FROM THE INTERSECTION WITH PAINT MOUNTAIN ROAD AND 16FEET WESTERLY OF THE WESTERLY EDGE OF PAVEMENT.

PT. NO. 1017 NAME ENC-17
STAMPING ENC-17. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN DROP INLET ON THE NORTH SIDE OF FORTUNA RANCH ROAD AND 50 FEET SOUTH OF ADAMS RUN.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE NORTHWESTERLY CORNER OF A DRAINAGE BOX INLET 80 FEET SOUTHWESTERLY ALONG FORTUNA RANCH ROAD FROM THE CENTERLINE INTERSECTION WITH ADAMS RUN. 16 FEET NORTHWESTERLY OF THE CENTER OF FORTUNA RANCH ROAD AND 4.5 FEET NORTHWESTERLY OF CURB.

PT. NO. 1018 NAME ENC-19
STAMPING ENC-18. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN CONCRETE SLAB FOR FIRE HYDRANT. 800 FEET NORTH OF THE END OF BUMANN ROAD.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF BUMANN ROAD AND ROCKING HORSE CIRCLE. GO EASTERLY 300 FEET TO AN INTERSECTION TURN RIGHT GO SOUTH ONTO A DIRT ROAD 0.2 MILES TO THE BEGINNING OF AC PAVEMENT. A DIRT DRIVEWAY TO THE LEFT AND THE MONUMENT ON THE RIGHT. THE MONUMENT IS LOCATED ON THE NORTHWESTERLY CORNER OF A CONCRETE PEDESTAL FOR A FIRE HYDRANT. 8 FEET WEST OF AC BERM. 12 FEET SOUTHERLY OF THE BEGINNING OF PAVEMENT AND 65 FEET SOUTHWESTERLY OF ADDRESS SIGN ON FENCE "3465 BUMANN ROAD".

PT. NO. 1019 NAME ENC-19
STAMPING ENC-19. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN THE EAST END OF A 1'X7' HEADWALL ON THE SOUTH SIDE OF CIRCA DE TIERRA. 210 FEET WEST OF THE CUL-DE-SAC AT THE SOUTH END OF ROAD AND 9.5 FEET OFF CURB.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF VAL SERENO DRIVE AND CIRCA DE TIERRA. GO NORTHEASTERLY ON CIRCA DE TIERRA 0.4 MILES TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE EAST END OF A 1 FOOT WIDE BY 7 FEET LONG HEADWALL. 210 FEET WESTERLY OF THE CENTER OF A CUL-DE-SAC. AND 9.5 FEET SOUTH OF THE SOUTHERLY CURB.

PT. NO. 1020 NAME ENC-20
STAMPING ENC-20. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN THE SOUTHWEST CORNER OF CONCRETE PEDESTAL FOR FIRE HYDRANT ON THE EAST SIDE OF RANCHO SANTA FE ROAD AND 100 FEET SOUTH OF EL CAMINO DEL NORTE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE SOUTHWEST CORNER OF A CONCRETE PEDESTAL FOR A FIRE HYDRANT ON THE EAST SIDE OF RANCHO SANTA FE ROAD. 100 FEET SOUTHERLY OF THE MIDDLE OF EL CAMINO DEL NORTE. 2.5 FEET EASTERLY OF AN AC. BERM AND 63 FEET WEST OF POWER POLE NO. P164067.

PT. NO. 1021 NAME ENC-21
STAMPING R.C.E. 9416
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT WITH A 2.5" BRASS DISC STAMPED RCE9416 ON CENTERLINE OF VILLAGE PARK WAY AT A BEGINNING OF CURVE 340 FEET SOUTHWEST OF WILLOW SPRINGS DRIVE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE MIDDLE OF VILLAGE PARK WAY. 340 FEET SOUTHERLY OF THE INTERSECTION WITH WILLOW SPRINGS DRIVE. 61 FEET SOUTHWESTERLY OF A STREET LIGHT AND 53 FEET NORTHWESTERLY OF A FIRE HYDRANT.

PT. NO. 1022 NAME ENC-22
STAMPING ENC-22. L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5" CITY OF ENCINITAS BRASS DISC IN TOP OF CURB NOSE IN THE MIDDLE OF EL CAMINO REAL IN THE EAST SIDE OF APPROXIMATELY 700 FEET SOUTH OF GARDEN VIEW ROAD.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE WESTERLY CURB OF THE 3RD MEDIAN ISLAND BEING 700 FEET SOUTHERLY FROM THE MIDDLE OF GARDEN VIEW ROAD AND 10 FEET SOUTHERLY OF CURB NOSE.

PT. NO. 1023 NAME 134WCCS2
STAMPING 134WCCS2
MONUMENT DESCRIPTION:
 FD. 2" DISK IN MEDIAN ISLAND OF LEUCADIA BLVD. 141 FT. -- WESTERLY OF LEFT TURN ISLAND GORE NOSE AT QUAIL GARDENS DRIVE
TO REACH DESCRIPTION:
 MONUMENT IS 141 FT. WESTERLY OF LEFT TURN ISLAND GORE NOSE OF LEUCADIA BLVD. AT QUAIL GARDENS DRIVE. 38 FT. SOUTHERLY OF A STREET LIGHT.

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SHEET 6 OF 6 SHEETS

PT. NO. 1024 NAME ENC-31
STAMPING 134WCCS1
MONUMENT DESCRIPTION:
 FD 2.5' DISK IN SIDEWALK IN THE SOUTHEAST QUADRANT LEUCADIA BLVD. AND ORPHEUS AVENUE, 37' EASTERLY OF TRAFFIC SIGNAL.
TO REACH DESCRIPTION:
 MONUMENT IS IN ENCINITAS AT THE SOUTHEAST QUADRANT OF THE INTERSECTION OF LEUCADIA BLVD. AND ORPHEUS ST. IN THE SOUTHERLY SIDEWALK OF LEUCADIA BLVD. 3 FT. FROM FACE OF CURB AND 37 FT. EASTERLY OF TRAFFIC SIGNAL ON THE CORNER.

PT. NO. 1025 NAME ENC-25
STAMPING ENC-25, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN WELL MONUMENT IN THE MIDDLE OF THE INTERSECTION OF SOUTH EL PORTAL STREET AND LA MESA AVENUE, 100 FEET NORTH ALONG THE SOUTHEASTERLY CURB LINE OF SOUTH EL PORTAL STREET.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE MIDDLE OF THE INTERSECTION OF SOUTH EL PORTAL STREET AND LA MESA AVENUE.

PT. NO. 1026 NAME ENC-26
STAMPING ENC-26, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN THE SOUTHWEST CORNER OF A DRAINAGE INLET BOX AT THE WEST SIDE OF PARKING LOT FOR OFFICE BUILDINGS ON THE SOUTH SIDE OF SAXONY PLACE, 200 FEET WEST OF SAXONY ROAD.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF SAXONY ROAD AND SAXONY PLACE, GO WEST ON SAXONY PLACE 265 FEET TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE SOUTHWEST CORNER OF A DRAINAGE BOX INLET AT THE WEST END OF THE FIRST PARKING LOT, 2 FEET WEST OF CURB AND 33 FEET SOUTH OF THE NORTHWEST CORNER OF THE PARKING LOT.

PT. NO. 1027 NAME ENC-27
STAMPING ENC-27, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN TOP OF CURB AT THE NORTH END OF HANDICAP RAMP ON THE NORTH SIDE OF CYPRESS HILLS DRIVE AT PASEO DE LAS VERDES.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE TOP OF THE EASTERLY CURB AT THE INTERSECTION OF PASEO DE LAS VERDES AND CYPRESS HILLS DRIVE AT THE NORTH END OF A HANDICAP RAMP AND 24' NORTHERLY OF A STREET LIGHT.

PT. NO. 1028 NAME ENC-28
STAMPING L.S. 5663
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT AT CENTERLINE INTERSECTION OF TURNER AVENUE AND SHIELDS AVENUE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE CENTERLINE INTERSECTION OF TURNER AVENUE AND SHIELDS AVENUE, 5 FEET SOUTH OF A SEWER MANHOLE AND 12 FEET NORTHWESTERLY OF A WATER GATE VALVE.

PT. NO. 1029 NAME ENC-29
STAMPING (BLANK WITH PUNCH)
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT IN AC. ON CENTERLINE OF ENCINITAS BOULEVARD, 300' EAST OF INTERSECTION WITH WILLOW SPRINGS AT BEGINNING OF LEFT TURN POCKET.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE SOUTHEAST END OF THE LEFT TURN POCKET FROM NORTHBOUND ENCINITAS BOULEVARD TO WILLOW SPRINGS DRIVE WESTBOUND.

PT. NO. 1030 NAME ENC-30
STAMPING L.S. 3997
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT AT CENTER OF CUL-DE-SAC, NORTH END OF OAK CREST PARK DRIVE AT ENTRANCE TO OAK CREST MIDDLE SCHOOL.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE CENTER OF A 50 FOOT CURB RADIUS AT THE ENTRANCE TO THE OAK CREST MIDDLE SCHOOL.

PT. NO. 1031 NAME ENC-31
STAMPING ENC-31, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN THE NORTHWEST CORNER OF DRAINAGE BOX ON NORTH SIDE OF ENCINITAS BOULEVARD AND 700 FEET EAST OF WESTLAKE STREET.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF ENCINITAS BOULEVARD AND WESTLAKE STREET GO EAST 700 FEET ALONG ENCINITAS BOULEVARD TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE NORTHWEST CORNER OF A DRAINAGE BOX CURB INLET ON THE NORTH SIDE OF ENCINITAS BOULEVARD 4.5 FEET NORTH OF CURB AND 57 FEET WEST OF DRIVEWAY INTO THE SAN DIEGO UNION HIGH SCHOOL DISTRICT OFFICES.

PT. NO. 1032 NAME ENC-32
STAMPING HORIZ. CTRL. ENC-32
MONUMENT DESCRIPTION:
 FD. 2' SD. CO. ENG. DEPT. BRASS DISC SET IN TOP OF CURB EAST SIDE OF VULCAN AVENUE, 200 FEET NORTH OF E STREET.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE TOP OF EAST CURB OF VULCAN AVENUE 200 FEET NORTH OF E STREET AND 2.5 FEET NORTH OF THE DRIVEWAY INTO THE ENCINITAS CITY ADMINISTRATION OFFICES.

PT. NO. 1033 NAME ENC-33
STAMPING ENC-33, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN CURB ON THE SOUTH SIDE OF THE PARKING LOT FOR THE CITY OF ENCINITAS SWAMIS PARK IN RED CURB NORTH OF RESTROOMS.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF CHESTERFIELD DRIVE AND HIGHWAY 101 GO NORTH 0.2 MILES TO THE ENTRANCE TO SWAMIS CITY PARK. TURN LEFT INTO PARKING LOT AND THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE TOP OF CURB ON THE SOUTH SIDE OF THE PARKING LOT ADJACENT TO THE RESTROOMS, 65 FEET NORTH OF RESTROOMS AND 7 FEET WEST OF PARKING BAY.

PT. NO. 1034 NAME ENC-34
STAMPING ENC-34
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN THE WEST END OF A 1X5' HEADWALL ON THE NORTH END OF PIPE UNDER DRIVEWAY ON THE WEST SIDE OF BONITA DRIVE, 225 FEET NORTH OF SANTA FE DRIVE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED IN THE WEST END OF THE NORTHERLY HEADWALL FOR A PIPE UNDER DRIVEWAY ON THE WEST SIDE OF BONITA DRIVE 225 FEET NORTH OF THE MIDDLE OF SANTA FE ROAD.

PT. NO. 1035 NAME ENC-35
STAMPING R.C.E. 13817
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT AT CENTER OF CUL-DE-SAC, EAST END OF ORANGE VIEW DRIVE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE CENTER OF THE CUL-DE-SAC AT THE EAST END OF ORANGE VIEW DRIVE, 12 FEET WEST OF A SEWER MANHOLE AND 10 FEET NORTH OF A WATER GATE VALVE.

PT. NO. 1036 NAME ENC-36
STAMPING ENC-36, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN THE NORTHEAST CORNER OF DRAINAGE INLET ON THE NORTH SIDE OF RANCHO SANTA FE ROAD, 200' WEST OF THE INTERSECTION WITH LA BAJADA AND EL MIRLO.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE NORTHSIDE OF RANCHO SANTA FE ROAD, 200 FEET WEST OF THE INTERSECTION WITH LA BAJADA AND EL MIRLO, 200 FEET EASTERLY OF THE EAST END OF THE RANCHO SANTA FE ROAD BRIDGE OVER ESCONDIDO CREEK AND 4.5 FEET NORTH OF CURB.

PT. NO. 1037 NAME ENC-37
STAMPING ENC-37, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2' IRON PIPE WITH CONCRETE COLLAR AND 2.5' CITY OF ENCINITAS BRASS DISC 220 FEET NORTH OF MANCHESTER AVENUE AND 85 FEET WEST OF TRABERT RANCH ROAD.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED 220 FEET NORTH OF MANCHESTER AVENUE, 85 FEET WEST OF TRABERT RANCH ROAD, 20 FEET EAST OF A CITY MAINTAINED TRAIL AND 81 FEET WEST OF THE SOUTHERLY END OF A WOOD SPLIT RAIL FENCE.

PT. NO. 1038 NAME ENC-38
STAMPING ENC-38, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN NE CORNER OF DRAINAGE CURB ON THE EAST SIDE OF MANCHESTER AVENUE 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF EL CAMINO REAL AND MANCHESTER AVENUE GO SOUTH ON MANCHESTER AVENUE 0.1 MILES TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE NORTHEAST CORNER OF A DRAINAGE CURB INLET, 4.5 FEET FROM CURB AND 68 FEET SOUTH OF AN ANCHOR POLE.

PT. NO. 1039 NAME ENC-39
STAMPING ENC-39, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN THE TOP OF CURB, NORTHWEST QUADRANT OF BIRMINGHAM DRIVE AND LAKE DRIVE IN THE MIDDLE OF RETURN.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE NORTHWEST QUADRANT OF BIRMINGHAM DRIVE AND LAKE DRIVE, 35 FEET NORTH OF THE CENTER OF BIRMINGHAM DRIVE AND 15 FEET WEST OF THE CENTER OF LAKE DRIVE.

PT. NO. 1040 NAME ENC-40
STAMPING ENC-40, L.S. 7322
MONUMENT DESCRIPTION:
 FD. WELL MONUMENT AT THE CENTER OF CUL-DE-SAC, SOUTH END OF BURLUSH LANE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED AT THE CENTER OF A 38 FOOT CURB RADIUS CUL-DE-SAC AT THE SOUTH END OF BURLUSH LANE.

PT. NO. 1041 NAME ENC-41
STAMPING ENC-41, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2' IRON PIPE IN AC. WITH 2.5' CITY OF ENCINITAS BRASS DISC IN A TURNOUT ON THE EAST SIDE OF NORTHBOUND HIGHWAY 101, 0.5 MILES NORTH OF CHESTERFIELD AND 10 FEET WEST OF THE NORTH END OF GUARD RAIL.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF HIGHWAY 101 AND CHESTERFIELD DRIVE GO NORTH ON HIGHWAY 101 0.5 MILES TO A TURNOUT AND THE MONUMENT ON THE RIGHT. THE MONUMENT IS LOCATED 10 FEET WESTERLY AND OPPOSITE THE NORTH END OF A GUARD RAIL IN THE AC. PAVEMENT.

PT. NO. 1042 NAME ENC-42
STAMPING OC 136, 1968
MONUMENT DESCRIPTION:
 FD 2.5' SD. CO. ENGINEERS DISC STAMPED "OC 136, 1968" IN EAST WING WALL OF THE NORTH END OF THE NORTHBOUND HIGHWAY 101 BRIDGE OVER SAN ELIJO LAGOON.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF CHESTERFIELD DRIVE AND HIGHWAY 101, GO SOUTH ON HIGHWAY 101 0.2 MILES TO THE BRIDGE OVER THE SAN ELIJO LAGOON AND THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE EAST WING WALL OF THE NORTH END OF BRIDGE, 9 FEET EAST OF EAST CURB AND 3.8 FEET SOUTH OF NORTH CURB.

PT. NO. 1043 NAME ENC-43
STAMPING J 1415, 1987
MONUMENT DESCRIPTION:
 FD. 3.5" NATIONAL GEODETIC SURVEY DISC IN HEADWALL, 0.2 MILES NORTH OF SOLANA VISTA DRIVE ON THE EAST SIDE OF NORTHBOUND HIGHWAY 101, 3 FEET OFF SHOULDER AND 6 FEET WEST OF CARDIFF BY THE SEA SIGN.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF SOLANA VISTA DRIVE AND HIGHWAY 101, GO NORTH ON HIGHWAY 101 0.25 MILES TO THE MONUMENT ON THE RIGHT. THE MONUMENT IS LOCATED ON THE EAST SIDE OF HIGHWAY 101, THE TOP OF THE HILL, BEFORE THE BEGINNING OF A LONG CURVE TO THE RIGHT, ON THE NORTHWEST END OF A DRAINAGE PIPE HEADWALL, 3 FEET EAST OF AC. BERM AND 6 FEET WEST OF "CARDIFF BY THE SEA" SIGN.

PT. NO. 1044 NAME ENC-44
STAMPING SEV 104, 1974
MONUMENT DESCRIPTION:
 FD. 3.5" DIAMETER CORPS OF ENGINEERS-US ARMY BRASS DISC STAMPED "SEV 104, 1974" SET IN CONCRETE STRUCTURE OF THE OLIVENHAIN PUMP STATION IN THE NORTHWEST QUADRANT OF MANCHESTER AVENUE AND THE NORTHBOUND INTERSTATE 5 OFF RAMP TO MANCHESTER AVENUE.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE NORTH SIDE OF MANCHESTER AVENUE, 65 FEET WESTERLY OF THE CENTER OF THE NORTHBOUND INTERSTATE HIGHWAY 5 FREEWAY OFF RAMP. IN THE MIDDLE OF THE SOUTHERLY EDGE OF A CONCRETE SLAB FOR AN OLIVENHAIN MUNICIPAL WATER DISTRICT PUMP STATION.

PT. NO. 1045 NAME ENC-45
STAMPING ENC-45, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN WESTERLY CORNER OF CONCRETE DROP INLET, EAST SIDE OF STONEBRIDGE LANE AND 450 FEET WEST OF EL CAMINO REAL.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF STONEBRIDGE LANE AND EL CAMINO REAL, GO SOUTHWESTERLY ON STONEBRIDGE LANE 450 FEET TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED IN THE SOUTHWEST CORNER OF A DRAINAGE BOX INLET ON THE SOUTH SIDE OF STONEBRIDGE LANE, 0.5 FEET FROM CURB.

PT. NO. 1046 NAME ENC-46
STAMPING ENC-46, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN NORTHWEST CORNER OF CONCRETE DROP INLET IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF SANTA HELENA AND SANTA ROSITA STREETS.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED 60 FEET NORTH OF THE CENTER OF SANTA HELENA AND 20 FEET WEST OF THE CENTER OF SANTA ROSITA, 2 FEET WEST OF CURB.

PT. NO. 1047 NAME CADT 11-DC
STAMPING STA. 11-DC, 1993
MONUMENT DESCRIPTION:
 FD. 3.5" CALIFORNIA DEPARTMENT OF TRANSPORTATION ALUMINUM DISC IN THE SIDEWALK OVER THE SOUTHEAST END OF THE NORTHEAST ABUTMENT OF THE MACKINNON AVENUE BRIDGE OVER INTERSTATE HIGHWAY 5.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE SOUTH EAST SIDE OF MACKINNON AVENUE OVER THE NORTHEAST ABUTMENT FOR THE BRIDGE OVER INTERSTATE HIGHWAY 5, IN THE CENTER OF SIDEWALK.

PT. NO. 1048 NAME ENC-48
STAMPING ENC-48, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2.5' CITY OF ENCINITAS BRASS DISC IN NORTHWEST CORNER OF CONCRETE DROP INLET ON NORTH SIDE OF SANTA FE DRIVE WEST OF INTERSTATE HIGHWAY 5 AT THE NORTHEAST RETURN INTO SCRIPPS MEMORIAL HOSPITAL, ENCINITAS.
TO REACH DESCRIPTION:
 THE MONUMENT IS LOCATED ON THE NORTH SIDE OF SANTA FE DRIVE, 175 FEET WEST OF THE INTERSTATE HIGHWAY 5 SOUTHBOUND OFF RAMP TO SANTA FE DRIVE IN THE NORTHWEST CORNER OF A DRAINAGE CURB INLET, 4 FEET NORTH OF CURB.

PT. NO. 1049 NAME ENC-49
STAMPING ENC-49, L.S. 7322
MONUMENT DESCRIPTION:
 SET 2' IRON PIPE WITH CONCRETE COLLAR AND 2.5' CITY OF ENCINITAS BRASS DISC IN NORTHERLY RIGHT OF WAY OF ELFIN FOREST ROAD 0.1 MILES EASTERLY OF FORTUNA DEL NORTE, 29 FEET NORTH OF PAVEMENT.
TO REACH DESCRIPTION:
 FROM THE INTERSECTION OF ELFIN FOREST ROAD WITH FORTUNA DEL NORTE AND FORTUNA DEL SUR, GO EASTERLY ON ELFIN FOREST ROAD 0.1 MILES TO THE MONUMENT ON THE LEFT. THE MONUMENT IS LOCATED 29 FEET NORTHERLY OF THE EDGE OF PAVEMENT, 7 FEET SOUTHERLY OF THE CENTER OF A "SDCWA COMBLE" VAULT NO. FB26, AND 55 FEET EASTERLY OF POWER POLE NO. 712397.

PROCEDURE OF SURVEY:

THE PURPOSE OF THIS SURVEY IS TO REPLACE A HORIZONTAL GEODETIC CONTROL STATION IN THE CITY OF ENCINITAS TO BE UTILIZED FOR GIS PURPOSES AND SUBSEQUENT MAPPING SURVEYS IN THE CITY.

TO ACCOMPLISH THIS TASK A GPS SURVEY WAS CONDUCTED USING FOUR LEICA SYSTEM 500 SYSTEMS COMPRISED OF AT502 L1,L2 MICROSTRIP ANTENNAS, AND SR 530 DUAL FREQUENCY RECEIVERS UTILIZING "FAST AMBIGUITY RESOLUTION" TECHNIQUES. ALL OCCUPATIONS UTILIZED EITHER FIXED HEIGHT POLES OR ANTENNA TRIPODS. THE MONUMENT USED FOR THIS SURVEY WAS SELECTED IN AN UNOBSTRUCTED LOCATION ALONG EL CAMINO REAL FOR FUTURE USE.

THE NETWORK SURVEY WAS CONDUCTED IN COMPLIANCE WITH ACCURACY STANDARDS PER THE CALIFORNIA GEODETIC CONTROL COMMITTEE (C.G.C.C.) DOCUMENT "SPECIFICATIONS FOR GEODETIC CONTROL NETWORKS USING HIGH-PRODUCTION GPS SURVEYING TECHNIQUES" VERSION 2.0, JULY 1996 FOR BAND V (1cm), 1ST ORDER EQUIVALENT AS DEFINED IN THE CALIFORNIA PUBLIC RESOURCES CODE SECTION 8801-8819.

THE NETWORK CONTROL TIES CONSISTS OF FOUR CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) STATIONS 2 OF WHICH ARE SANCTIONED BY THE NGS FOR 2004.0 EPOCH COORDINATE VALUES. ADDITIONALLY THIS NETWORK TIED TO 3 ADJACENT EXISTING FIRST ORDER MONUMENTS IN THE CITY OF ENCINITAS CONTROL NETWORK PER R.O.S. 18416. THE NETWORK CONTROL TIES WERE SURVEYED ON NOVEMBER 28, 2005 CONCURRENTLY WITH THE OVERALL NETWORK. STATION DATA LOGGING OCCUPATION TIMES TO THE EXISTING CORS STATIONS RANGED FROM 60 TO 120 MINUTES.

THE OVERALL NETWORK INCLUDED ONE STATION ESTABLISHED ON THIS SURVEY (7 STATIONS IN TOTAL ADJUSTMENT). STATION DATA LOGGING OCCUPATION TIMES TO THE EXISTING FIRST ORDER STATIONS RANGED FROM 60 TO 80 MINUTES.

THE OVERALL NETWORK WAS CONSTRAINED IN TWO ADJUSTMENTS ON TWO SEPARATE DATUMS. THE CCSB3 ZONE 6, 1991.35 EPOCH HORIZONTAL DATUM WITH THE NAVD 29 VERTICAL DATUM TO CORRESPOND WITH THE EXISTING HIGH ORDER CITY OF ENCINITAS CONTROL SURVEY PER R.O.S. 18416, AND ALSO CONSTRAINED TO THE CCSB3 ZONE 6, 2004.0 EPOCH HORIZONTAL DATUM WITH THE NAVD88 VERTICAL DATUM PER CORS STATIONS AND NGS DATASHEETS AS THE MOST CURRENT HIGH PRECISION GEODETIC NETWORK (HPGN) SURVEY ADJUSTMENT.

THE NETWORK STATION POSITION DATA IS THE RESULT OF CONSTRAINED BASELINE ADJUSTMENTS USING "MOVE 3 VERSION 3.2.2" LEAST SQUARES ADJUSTMENT SUBROUTINE IMBEDDED IN "LEICA SKI PRO VERSION 3.0" GPS SOFTWARE. THE ADJUSTMENT WAS CONSTRAINED TO THE HORIZONTAL AND VERTICAL MONUMENTS LISTED UNDER "BASIS OF COORDINATES" AND "BASIS OF ELEVATIONS" AS NOTED.

COMPUTATIONS PERFORMED WITH THE "LEICA" LEAST SQUARES ADJUSTMENT WERE SPECIFIED TO 2-SIGMA (95%) CONFIDENCE REGIONS. GEOID 2003 PUBLISHED BY THE NATIONAL GEODETIC SURVEY (NGS) WAS THE GEOID MODEL UTILIZED TO COMPUTE GEOID SEPARATIONS FOR THE ADJUSTMENTS. THE RESULTS OF THE NETWORK ADJUSTMENT ACCURACY CONFORMS TO FIRST ORDER AS DEFINED BY THE FEDERAL GEODETIC CONTROL COMMITTEE (F.G.C.C.) BY DOCUMENT ENTITLED "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES", VERSION 5.0, REPRINTED WITH CORRECTIONS AUGUST 1, 1989 AND CONFORMS TO THE 1 CENTIMETER HORIZONTAL LOCAL ACCURACY CLASSIFICATION AS DEFINED BY THE FEDERAL GEODETIC CONTROL SUBCOMMITTEE (F.G.C.S.) BY DOCUMENT ENTITLED "GEOSPATIAL POSITIONING ACCURACY STANDARDS PART 2: STANDARDS FOR GEODETIC NETWORKS" (FGCC-ST0-007.2-1998).

BASIS OF COORDINATES: CCSB3, ZONE 6, 2004.0 EPOCH PER NGS DATASHEETS:

THE HEREIN-LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN-LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCSB3) ZONE 6 PLANE COORDINATES ALL PER EPOCH 2004.0 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR TWO CONTROL MONUMENTS OF 8-ORDER ACCURACY OR BETTER.

NO.	NAME	NORTHING	EASTING	ELL. HGT	SOURCE	ORDER
OGHS	ORANGE GLEN HS	1992066.979	6319281.696	610.3	NGS DATASHEET	(CORS)
SI03	SCRIPPS NO. 3	1895871.559	6254482.497	116.8	NGS DATASHEET	(CORS)

NAVD88 ELEVATIONS PER CORS STATION GPS BENCHMARKS:

THE HEREIN LISTED NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR ONE GPS STATION AND NGS GEOID 2003 GEOID MODEL.

NO.	NAME	ORTHO HGT	SOURCE	ORDER
1007	CLSB-004	84.68	R.O.S. 18416	3RD LEVELS R.O.S. 18416

BASIS OF COORDINATES: CCSB3, ZONE 6, 1991.35 EPOCH PER R.O.S. 18416.

THE HEREIN-LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN-LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCSB3) ZONE 6 PLANE COORDINATES ALL PER EPOCH 1991.35 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR THREE CONTROL MONUMENTS OF FIRST ORDER ACCURACY.

NO.	NAME	NORTHING	EASTING	SOURCE	ORDER
1007	CLSB-004	1969591.693	6251923.819	R.O.S. 18416	FIRST
1021	ENC-21	1965268.244	6257064.577	R.O.S. 18416	FIRST
1023	134WCSS2	1968948.942	6246412.993	R.O.S. 18416	FIRST

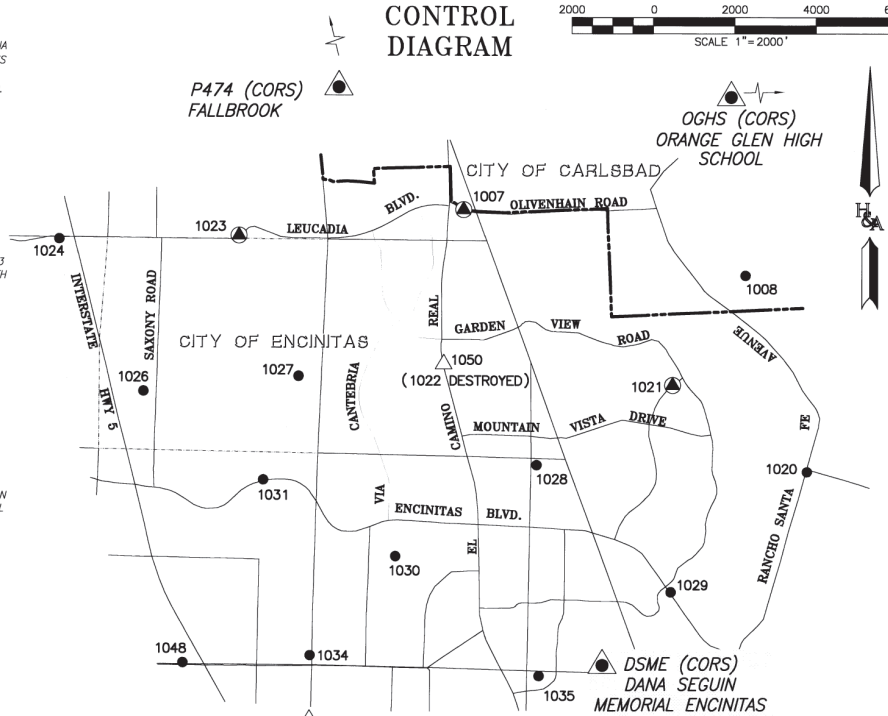
NGVD29 ELEVATIONS PER R.O.S 18416 GPS BENCHMARKS:

THE HEREIN LISTED NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR THREE GPS STATIONS AND NGS GEOID 2003 GEOID MODEL.

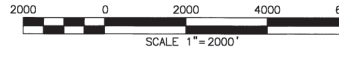
NO.	NAME	ORTHO HGT	SOURCE	ORDER
1007	CLSB-004	82.53	R.O.S. 18416	3RD
1021	ENC-21	262.17	R.O.S. 18416	3RD
1023	134WCSS2	318.266	R.O.S. 18416	3RD

CONTROL SURVEY
CITY OF ENCINITAS

CONTROL
DIAGRAM



VICINITY MAP



RECORD OF SURVEY

A GEODETIC CONTROL SURVEY TO REPLACE FIRST ORDER CONTROL STATION, NO. 1022 WHICH WAS DESTROYED BY CONSTRUCTION IN THE CITY OF ENCINITAS SURVEY CONTROL NETWORK, IN THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

SURVEYORS STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT AT THE REQUEST OF THE CITY OF ENCINITAS IN DECEMBER, 2005.



David W. Ambler
L.S. 7322
Exp. 12-31-07

LEGEND

- INDICATES CONTINUOUSLY OPERATING REFERENCE STATION (CORS)
- INDICATES EXISTING FIRST OR "B" ORDER CONTROL MONUMENT HELD IN ADJUSTMENT (SEE BASIS OF COORDINATES)
- INDICATES EXISTING GROUP C 1ST ORDER MONUMENT IN CITY OF ENCINITAS CONTROL NETWORK (SEE R.O.S. 18416).
- INDICATES A MONUMENT ESTABLISHED (SET) AS A PART OF THIS SURVEY.

STATION NAME DESCRIPTIONS:

(MONUMENTS WITH STATION NAMES WHICH HAVE THE FOLLOWING DESIGNATION)

(CORS) - INDICATES AN EXISTING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) MONUMENT IN SAN DIEGO COUNTY FROM THE SOUTHERN CALIFORNIA INTEGRATED GPS NETWORK.

SURVEYORS NOTE

DESCRIPTIONS FOR THE EXISTING CONTROL IS ON FILE WITH THE CITY OF ENCINITAS ENGINEERING DEPARTMENT, R.O.S. 18416 OR AVAILABLE IN THE NGS DATABASE.

POINT 1050

2 1/2" BRASS DISK STAMPED "ENC-50, LS 7322, 2005" SET IN CONCRETE MEDIAN CURB NEAR CENTERLINE OF EL CAMINO REAL IN THE NORTH END OF THIRD MEDIAN ISLAND SOUTHERLY OF GARDEN VIEW ROAD. 700 FEET SOUTHERLY OF INTERSECTION AND 15 FEET SOUTHERLY OF CURB NOSE.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE LAND SURVEYORS ACT THIS 18th DAY OF JULY, 2006.



Philip J. Giurbinio
L.S. 4424, COUNTY SURVEYOR

RECORDER'S STATEMENT

FILE NO. 2006-0514654

FILED THIS 21st DAY OF July, 2006, AT 9:51 O'CLOCK, A.M. IN BOOK OF RECORD OF SURVEY MAPS AT PAGE 149, 377, 1021 AT THE REQUEST OF DAVID W. AMBLER.

GREGORY J. SMITH
COUNTY RECORDER

BY: [Signature] DEPUTY

FEE \$8.00

HUNSAKER & ASSOCIATES SAN DIEGO, INC.

PLANNING - ENGINEERING - SURVEYING
10179 HUENKENS STREET - SAN DIEGO, CA 92121
R. N0460 Map/RS Encr n1 tas 1022 Replacemnt 01 awg| 18913Jul-11-2006 10:39 W.D. 2531-1
(858) 558-4500 - FAX (858) 558-1414

PROCEDURE OF SURVEY

THE PURPOSE OF THIS SURVEY IS TO REPLACE A HORIZONTAL GEODETIC CONTROL STATION IN THE CITY OF ENCINITAS TO BE UTILIZED FOR GIS PURPOSES AND SUBSEQUENT MAPPING SURVEYS IN THE CITY.

TO ACCOMPLISH THIS TASK A GPS SURVEY WAS CONDUCTED USING FOUR LEICA SYSTEM 500 SYSTEMS COMPRISED OF AT1502 L1,L2 MICROSTRIP ANTENNAS, AND SR 530 DUAL FREQUENCY RECEIVERS UTILIZING FAST AMBIGUITY RESOLUTION TECHNIQUES. ALL OCCUPATIONS UTILIZED EITHER FIXED HEIGHT POLES OR ANTENNA TRIPODS. THE MONUMENT USED FOR THIS SURVEY WAS SELECTED IN AN UNOBSTRUCTED LOCATION ALONG BONITA DRIVE FOR FUTURE USE.

THE NETWORK SURVEY WAS CONDUCTED IN COMPLIANCE WITH ACCURACY STANDARDS PER THE CALIFORNIA GEODETIC CONTROL COMMITTEE (C.G.C.C.) DOCUMENT "SPECIFICATIONS FOR GEODETIC CONTROL NETWORKS USING HIGH-PRODUCTION GPS SURVEYING TECHNIQUES" VERSION 2.0, JULY 1996 FOR BAND Y (1cm), 1ST ORDER EQUIVALENT AS DEFINED IN THE CALIFORNIA PUBLIC RESOURCES CODE SECTION 8801-8819, AND MEET THE NETWORK REQUIREMENTS FOR 2cm STANDARDS PER FEDERAL GEOGRAPHIC DATA COMMITTEE FGDC-STD-007.2-1998.

THE NETWORK CONTROL TIES CONSISTS OF FOUR CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) STATIONS 2 OF WHICH ARE SANCTIONED BY THE NGS FOR 2007.0 EPOCH COORDINATE VALUES. ADDITIONALLY THIS NETWORK TIED TO 4 ADJACENT EXISTING FIRST ORDER MONUMENTS IN THE CITY OF ENCINITAS CONTROL NETWORK PER R.O.S. 18416. THE NETWORK CONTROL TIES WERE SURVEYED ON JANUARY 16, 2008 CONCURRENTLY WITH THE OVERALL NETWORK. STATION DATA LOGGING OCCUPATION TIMES TO THE EXISTING CORS STATIONS RANGED FROM 60 TO 120 MINUTES.

THE OVERALL NETWORK INCLUDED ONE STATION ESTABLISHED ON THIS SURVEY (8 STATIONS IN TOTAL ADJUSTMENT), STATION DATA LOGGING OCCUPATION TIMES TO THE EXISTING FIRST ORDER STATIONS RANGED FROM 40 TO 90 MINUTES.

THE OVERALL NETWORK WAS CONSTRAINED IN TWO ADJUSTMENTS ON TWO SEPARATE DATUMS. THE CCS83 ZONE 6, 1991.35 EPOCH HORIZONTAL DATUM WITH THE NGVD 29 VERTICAL DATUM TO CORRESPOND WITH THE EXISTING HIGH ORDER CITY OF ENCINITAS CONTROL SURVEY PER R.O.S. 18416, AND ALSO CONSTRAINED TO THE CCS83 ZONE 6, 2007.0 EPOCH HORIZONTAL DATUM WITH THE NAVD88 VERTICAL DATUM PER CORS STATIONS AND NGS DATASHEETS AS THE MOST CURRENT HIGH PRECISION GEODETIC NETWORK (HFGN) SURVEY ADJUSTMENT.

THE NETWORK STATION POSITION DATA IS THE RESULT OF CONSTRAINED BASELINE ADJUSTMENTS USING "MOVE 3 VERSION 3.3" LEAST SQUARES ADJUSTMENT SUBROUTINE EMBEDDED IN "LEICA GEO OFFICE VERSION 4.0" GPS SOFTWARE. THIS ADJUSTMENT WAS CONSTRAINED TO THE HORIZONTAL AND VERTICAL MONUMENTS LISTED UNDER "BASIS OF COORDINATES" AND "BASIS OF ELEVATIONS" AS NOTED.

COMPUTATIONS PERFORMED WITH THE "LEICA" LEAST SQUARES ADJUSTMENT WERE SPECIFIED TO 2-SIGMA (95%) CONFIDENCE REGIONS. GEOID 2003 PUBLISHED BY THE NATIONAL GEODETIC SURVEY (NGS) WAS THE GEOID MODEL UTILIZED TO COMPUTE GEOD SEPARATIONS FOR THE ADJUSTMENTS. THE RESULTS OF THE NETWORK ADJUSTMENT ACCURACY CONFORMS TO FIRST ORDER AS DEFINED BY THE FEDERAL GEODETIC CONTROL COMMITTEE (F.G.C.C.) BY DOCUMENT ENTITLED "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" VERSION 5.0, REPRINTED WITH CORRECTIONS AUGUST 1, 1989 AND CONFORMS TO THE 1 CENTIMETER HORIZONTAL LOCAL ACCURACY CLASSIFICATION AS DEFINED BY THE FEDERAL GEODETIC CONTROL SUBCOMMITTEE (F.G.C.S.) BY DOCUMENT ENTITLED "GEOSPATIAL POSITIONING ACCURACY STANDARDS PART 2: STANDARDS FOR GEODETIC NETWORKS" (FGDC-STD-007.2-1998).

BASIS OF COORDINATES: CCS83, ZONE 6, 2007.0 EPOCH PER NGS DATASHEETS.

THE HEREIN-LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN-LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ALL PER EPOCH 2007.0 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR TWO CONTROL MONUMENTS OF B-ORDER ACCURACY OR BETTER.

NO.	NAME	NORTHING	EASTING	ELL. HGT	SOURCE	ORDER
OGHS	ORANGE GLEN HS	1992067.316	61319281.451	610.2	NGS DATASHEET (CORS)	
S103	SCRIPPS NO. 3	1895871.895	6254482.247	116.9	NGS DATASHEET (CORS)	

NAVD88 ELEVATIONS PER CORS STATION GPS BENCH-MARKS:

THE HEREIN LISTED NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR ONE GPS STATION AND NGS GEOID 2003 GEOID MODEL.

NO.	NAME	ORTHO HGT	SOURCE	ORDER
1030	ENC-30	388.479	R.O.S. 18416	3RD LEVELS R.O.S. 18416
1047	ENC-47	1956319.791	R.O.S. 18416	FIRST

BASIS OF COORDINATES: CCS83, ZONE 6, 1991.35 EPOCH PER R.O.S. 18416.

THE HEREIN-LISTED NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND, THE HEREIN-LISTED CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ALL PER EPOCH 1991.35 ARE BASED IN THE HORIZONTAL COMPONENT UPON THE FOLLOWING VALUES FOR FOUR CONTROL MONUMENTS OF FIRST ORDER ACCURACY.

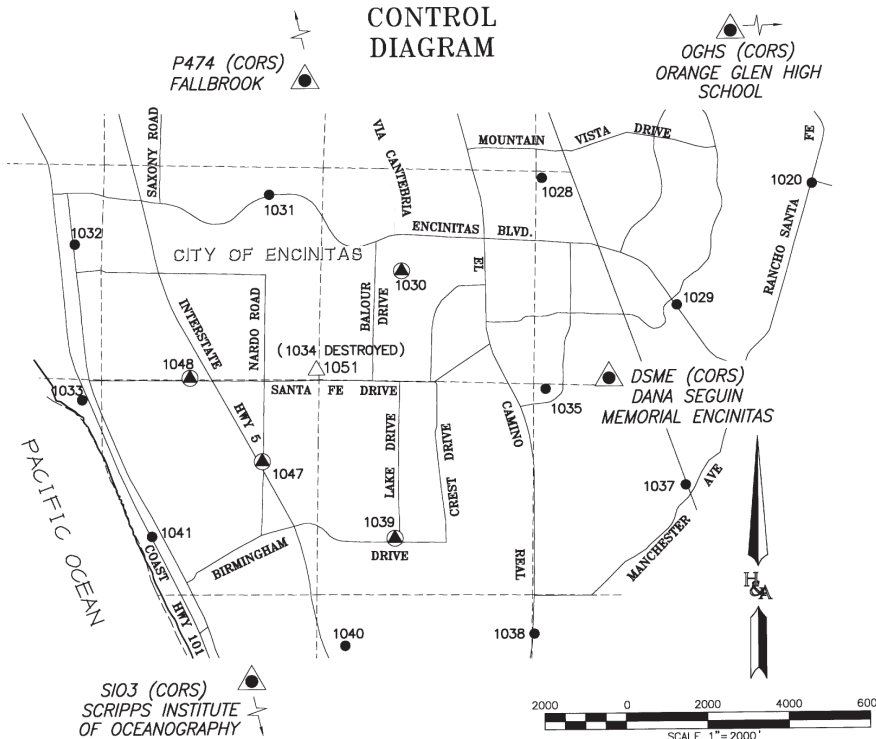
NO.	NAME	NORTHING	EASTING	SOURCE	ORDER
1030	ENC-30	1961044.005	6250269.682	R.O.S. 18416	FIRST
1039	ENC-39	1954417.550	6250097.897	R.O.S. 18416	FIRST
1047	ENC-47	1956319.791	6246846.538	R.O.S. 18416	FIRST
1048	ENC-48	1958415.809	6245055.513	R.O.S. 18416	FIRST

NGVD29 ELEVATIONS PER R.O.S. 18416 GPS BENCH-MARKS:

THE HEREIN LISTED NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) ORTHOMETRIC HEIGHTS ARE BASED IN THE VERTICAL COMPONENT UPON THE FOLLOWING VALUES FOR ONE GPS STATION AND NGS GEOID 2003 GEOID MODEL.

NO.	NAME	ORTHO HGT	SOURCE	ORDER
1030	ENC-30	386.330	R.O.S. 18416	3RD

CONTROL SURVEY CITY OF ENCINITAS



CONTROL DIAGRAM

P474 (CORS)
FALLBROOK

OGHS (CORS)
ORANGE GLEN HIGH SCHOOL

S103 (CORS)
SCRIPPS INSTITUTE OF OCEANOGRAPHY

VICINITY MAP

Point	Northing	Easting	Orth. Hgt	Geoid-Sep	Convergence	C.G.F.	Latitude	Longitude	Ell. Hgt Point
1030	1961045.749	6250268.325	388.479	-113.370	-0° 33' 30.284"	0.99995373	33° 2' 37.331493"N	117° 15' 58.271426"W	275.109 1030
1039	1954419.276	6250096.521	323.963	-113.580	-0° 33' 30.976"	0.99995848	33° 1' 31.754353"N	117° 15' 59.530683"W	210.383 1039
1047	1956321.512	6246845.205	231.672	-113.729	-0° 33' 52.081"	0.99996243	33° 1' 50.259297"N	117° 16' 37.936488"W	117.943 1047
1048	1958417.542	6245054.162	173.343	-113.781	-0° 34' 03.775"	0.99996470	33° 2' 10.821758"N	117° 16' 59.216899"W	59.562 1048
1051	1958784.555	6248184.825	292.088	-113.570	-0° 33' 43.591"	0.99995891	33° 2' 14.758279"N	117° 16' 22.485968"W	178.516 1051
DSME	1958365.928	6255349.824	300.380	-113.139	-0° 32' 57.316"	0.99995858	33° 2' 11.304028"N	117° 14' 58.276459"W	187.241 DSME
OGHS	1992067.316	61319281.451	718.826	-108.352	-0° 26' 06.299"	0.99993119	33° 7' 50.172580"N	117° 2' 30.316180"W	610.474 OGHS
P474	2074322.333	6256719.146	712.171	-109.400	-0° 32' 55.647"	0.99992537	33° 21' 18.678545"N	117° 14' 55.238732"W	602.771 P474
S103	1895871.895	6254482.247	231.783	-114.715	-0° 32' 59.046"	0.99998186	32° 51' 52.918570"N	117° 15' 1.423830"W	117.068 S103

Point	Northing	Easting	Orth. Hgt	Geoid-Sep	Convergence	C.G.F.	Latitude	Longitude	Ell. Hgt Point
1030	1961044.005	6250269.682	386.330	-113.370	-0° 33' 30.276"	0.99995384	33° 2' 37.314368"N	117° 15' 58.255282"W	272.960 1030
1039	1954417.550	6250097.897	321.833	-113.580	-0° 33' 30.967"	0.99995858	33° 1' 31.737405"N	117° 15' 59.514325"W	208.253 1039
1047	1956319.791	6246846.538	229.539	-113.729	-0° 33' 52.072"	0.99996253	33° 1' 50.242397"N	117° 16' 37.920638"W	115.810 1047
1048	1958415.809	6245055.513	171.227	-113.781	-0° 34' 03.766"	0.99996480	33° 2' 10.804740"N	117° 16' 59.200831"W	57.446 1048
1051	1958782.825	6248186.179	289.958	-113.570	-0° 33' 43.582"	0.99995901	33° 2' 14.741297"N	117° 16' 22.469862"W	176.388 1051
DSME	1958364.198	6255351.179	298.249	-113.139	-0° 32' 57.307"	0.99995868	33° 2' 11.287039"N	117° 14' 58.260353"W	185.110 DSME
OGHS	1992065.583	61319282.816	716.697	-108.352	-0° 26' 06.290"	0.99993130	33° 7' 50.155538"N	117° 2' 30.299979"W	608.344 OGHS
P474	2074322.615	6256720.501	710.029	-109.400	-0° 32' 55.638"	0.99992547	33° 21' 18.661682"N	117° 14' 55.222564"W	600.629 P474
S103	1895870.166	6254483.598	229.653	-114.715	-0° 32' 59.037"	0.99998196	32° 51' 52.901589"N	117° 15' 1.407795"W	114.939 S103

RECORD OF SURVEY

A GEODETIC CONTROL SURVEY TO REPLACE FIRST ORDER CONTROL STATION, NO. 1034 WHICH WAS DESTROYED BY CONSTRUCTION IN THE CITY OF ENCINITAS SURVEY CONTROL NETWORK, IN THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT AT THE REQUEST OF THE CITY OF ENCINITAS IN JANUARY 2008.



David W. Ambler 5/08/2008
DAVID W. AMBLER, L.S. 7322 DATE
EXP. 12-31-09

LEGEND

- ▲ INDICATES CONTINUOUSLY OPERATING REFERENCE STATION (CORS)
- INDICATES EXISTING FIRST OR "B" ORDER CONTROL MONUMENT HELD IN ADJUSTMENT (SEE BASIS OF COORDINATES)
- INDICATES EXISTING GROUP C 1ST ORDER MONUMENT IN CITY OF ENCINITAS CONTROL NETWORK (SEE R.O.S. 18416).
- △ INDICATES A MONUMENT ESTABLISHED (SET) AS A PART OF THIS SURVEY.

STATION NAME DESCRIPTIONS:

(MONUMENTS WITH STATION NAMES WHICH HAVE THE FOLLOWING DESIGNATION)

(CORS) - INDICATES AN EXISTING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) MONUMENT IN SAN DIEGO COUNTY FROM THE SOUTHERN CALIFORNIA INTEGRATED GPS NETWORK.

SURVEYORS NOTE

DESCRIPTIONS FOR THE EXISTING CONTROL IS ON FILE WITH THE CITY OF ENCINITAS ENGINEERING DEPARTMENT, R.O.S. 18416 OR AVAILABLE IN THE NGS DATABASE.

POINT 1051

2 1/2" BRASS DISK STAMPED "ENC-51, LS 7322, 2008" SET IN CONCRETE ON THE TOP OF A CATCH BASIN ON THE WEST SIDE OF BONITA DRIVE, 16.5 FEET NORTHERLY OF THE NORTHERLY CORNER OF THE DRIVEWAY ENTRANCE OF THE SAN DIEGO UNION HIGH SCHOOL DISTRICT TRANSPORTATION DEPARTMENT, 400 FEET NORTHERLY OF SANTA FE DRIVE.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYOR'S ACT THIS 15th DAY OF MAY, 2008.



Terrence J. Conmors
TERRENCE J. CONMORS
L.S. 5099, COUNTY SURVEYOR

RECORDER'S STATEMENT

FILE NO. 2008-0246054

FILED THIS 16th DAY OF May, 2008, AT 3:44 O'CLOCK, P.M. IN BOOK OF RECORD OF SURVEY MAPS AT PAGE _____ AT THE REQUEST OF DAVID W. AMBLER.

GREGORY J. SMITH
COUNTY RECORDER
Gregory J. Smith
DEPUTY

FEES \$10.00

PROCEDURE OF SURVEY

THE PURPOSE OF THIS SURVEY IS TO DENSIFY AND ESTABLISH HORIZONTAL GEODETIC CONTROL STATION 1052 TO REPLACE OLD STATION 1048 WHICH WAS DESTROYED DURING CONSTRUCTION IN THE CITY OF ENCINITAS.

TO ACCOMPLISH THIS TASK A GPS SURVEY WAS CONDUCTED USING 5 TRIMBLE R10 RECEIVERS. ALL RECEIVERS BEING DUAL FREQUENCY GPS AND GNSS MODELS. ALL OCCUPATIONS UTILIZED ANTENNA TRIPODS. THE MONUMENTS SELECTED FOR USE IN THIS SURVEY WERE IN UNOBSTRUCTED LOCATIONS WITHIN THE CITY OF ENCINITAS AS COORDINATED WITH THE CITY OF ENCINITAS LAND SURVEYOR.

THE NETWORK SURVEY WAS CONDUCTED IN COMPLIANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819, 8870-8880, AND 8890-8902 AND IN COMPLIANCE WITH ACCURACY STANDARDS PER THE JOINT TASK FORCE OF CALIFORNIA LAND SURVEYORS ASSOCIATION CALIFORNIA SPATIAL REFERENCE CENTER DOCUMENT "GNSS SURVEYING STANDARDS AND SPECIFICATIONS" VERSION 1.1, DECEMBER 10, 2014, WHICH ACCEPTS THE NETWORK REQUIREMENTS FOR 2cm STANDARDS PER FEDERAL GEOGRAPHIC DATA COMMITTEE GDC-STD-007.2-1998.

THE NETWORK CONTROL TIES CONSIST OF FOUR CONTINUOUSLY OPERATING REFERENCE STATIONS (CORS) AND FOUR NEARBY EXISTING FIRST ORDER MONUMENTS IN THE CITY OF ENCINITAS CONTROL NETWORK PER R.O.S. 18416. THE NETWORK CONTROL TIES WERE SURVEYED ON JUNE 23, 2020 AND AGAIN ON JUNE 24, 2020. STATION DATA LOGGING OCCUPATION TIMES AVERAGED 45 MINUTES PER SESSION WITH A MINIMUM OF TWO OBSERVATIONS PER STATION. INDEPENDENT OBSERVATIONS OF INDIVIDUAL STATIONS WERE SEPARATED BY AT LEAST 15 HOURS. THE OVERALL NETWORK INCLUDES THE ESTABLISHMENT OF 1 STATION.

THE OVERALL NETWORK WAS CONSTRAINED IN TWO ADJUSTMENTS ON TWO SEPARATE DATUMS:

- 1) THE CCS83 ZONE 6, NAD83 1991.35 EPOCH HORIZONTAL DATUM WITH NAVD 88 VERTICAL DATUM TO CORRESPOND WITH THE EXISTING HIGH ORDER CITY OF ENCINITAS CONTROL SURVEY PER R.O.S. 18416; AND
- 2) THE CCS83 ZONE 6, 2017.5 EPOCH HORIZONTAL DATUM PER CORS STATIONS AS PUBLISHED AS THE MOST CURRENT CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) SURVEY ADJUSTMENT WITH THE NAVD88 VERTICAL DATUM PER CITY OF ENCINITAS BENCHMARKS AND LEVELING THROUGH THE NEW STATION WITH THE TRIMBLE Dini 0.3 DIGITAL LEVEL.

THE NETWORK STATION POSITION DATA IS THE RESULT OF POST-PROCESSED CONSTRAINED BASELINE ADJUSTMENTS USING TRIMBLE BUSINESS CENTER SOFTWARE VERSION 5.00. THE ADJUSTMENT WAS CONSTRAINED TO THE HORIZONTAL AND VERTICAL MONUMENTS LISTED UNDER "BASIS OF COORDINATES" AND "BASIS OF ELEVATIONS" AS NOTED.

COMPUTATIONS WERE PERFORMED USING TRIMBLE BUSINESS CENTER LEAST SQUARES NETWORK ADJUSTMENT TO 95% CONFIDENCE UTILIZING THE GEOD MODEL 12A TO COMPUTE GEOD SEPARATIONS FOR THE ADJUSTMENTS. THE ACCURACY OF THE NETWORK ADJUSTMENT CONFORMS TO THE FIRST ORDER CLASS (C) AS DEFINED BY THE FEDERAL GEODETIC CONTROL COMMITTEE BY DOCUMENT ENTITLED "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" VERSION 5.0, REPRINTED WITH CORRECTIONS AUGUST 1, 1989.

ALL VALUES EXPRESSED HEREIN ARE IN TERMS OF THE U.S. SURVEY FOOT (1 METER=39.37/12 FEET).

BASIS OF COORDINATES: CCS83, ZONE 6, NAD 83 2017.5 EPOCH PER SOPAC CSRC:

THE NORTH AMERICAN DATUM OF 1983 (NAD83) LATITUDES, LONGITUDES AND ELLIPSOID HEIGHTS, AND THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ARE BASED ON THE HORIZONTAL VALUES OF THE FOLLOWING FOUR CONTROL STATIONS.

NO.	NAME	LATITUDE	LONGITUDE	ELL. HGT	SOURCE	ORDER
DSME	DANA SEGUIN MEMO	N33°02'11.31350"	W117°14'58.28754"	186.552	SOPAC CSRC	(CORS)
OCSD	OCEANSIDE_CA2012	N33°14'26.39388"	W117°20'48.20029"	143.146	SOPAC CSRC	(CORS)
SI05	SCRIPPS 5-MT	N32°50'26.63977"	W117°14'58.84204"	611.093	SOPAC CSRC	(CORS)
VTOR	VISTA_TWINCA2012	N33°13'30.04659"	W117°11'35.42462"	1248.860	SOPAC CSRC	(CORS)

BASIS OF COORDINATES: CCS83, ZONE 6, 1991.35 EPOCH PER R.O.S. 18416

THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND, THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 PLANE COORDINATES ARE BASED ON THE HORIZONTAL VALUES OF THE FOLLOWING FOUR FIRST ORDER CONTROL MONUMENTS.

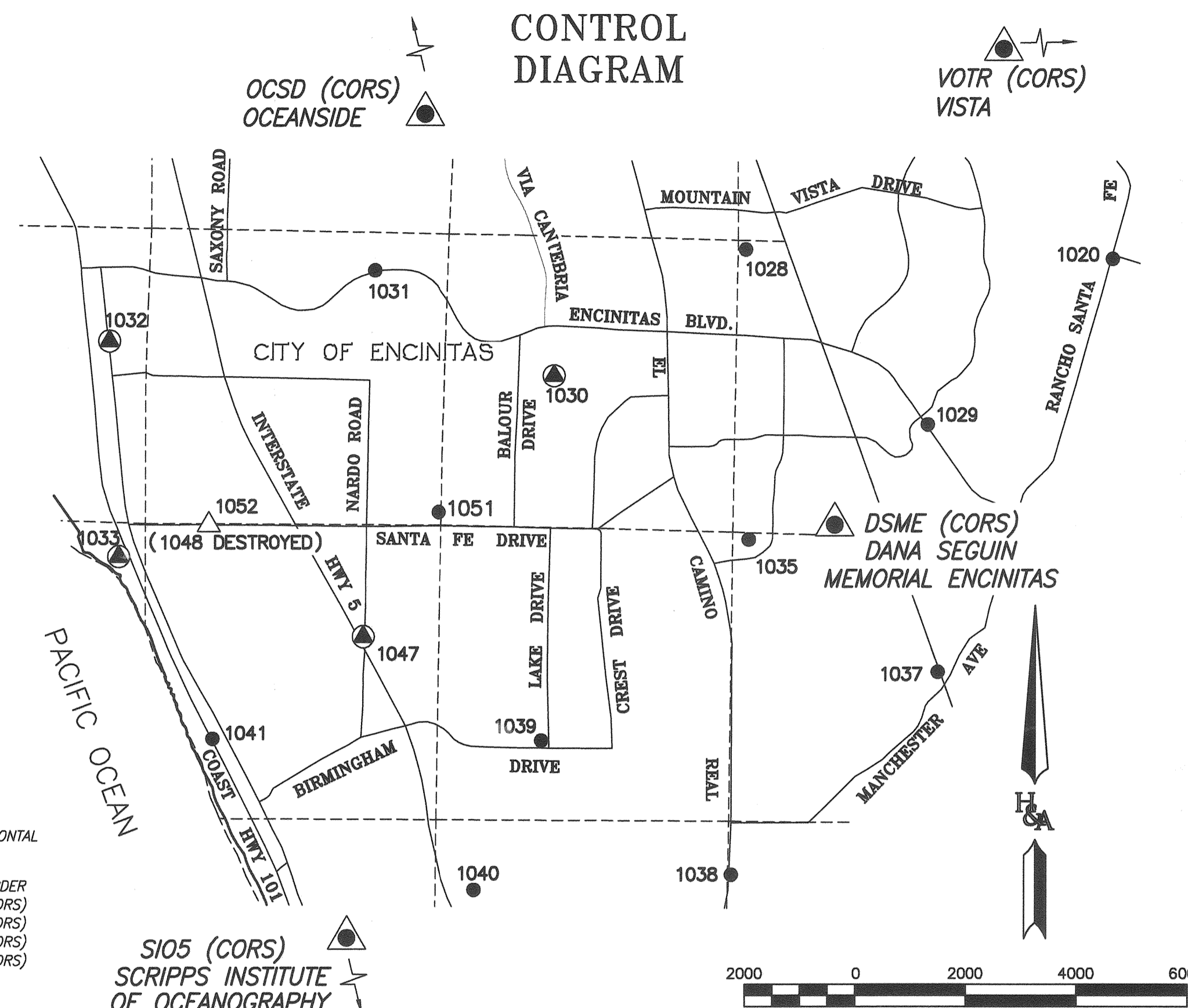
NO.	NAME	NORTHING	EASTING	SOURCE	ORDER	DESCRIPTION
1030	ENC-30	1961044.005	6250269.682	R.O.S. 18416	FIRST	FD WELL MON. STAMPED "L.S. 3997"
1032	ENC-32	1961735.615	6242241.939	R.O.S. 18416	FIRST	FD 2" SD. CO. ENG. DEPT. BRASS DISC STAMPED "HORIZ. CTRL, ENC TC 2"
**1033	ENC-33	1957888.951	6242388.878	R.O.S. 18416	FIRST	FD 2.5" CITY OF ENCINITAS BRASS DISC STAMPED "ENC-33, L.S. 7322"
1047	CADT 11-DC	1956319.791	6246846.538	R.O.S. 18416	FIRST	FD 3.5" CALTRANS ALUMINUM DISC STAMPED "STA. 11-DC, 1993"

BASIS OF NAVD88 ELEVATIONS PER CITY OF ENCINITAS BENCHMARKS:

THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88) ORTHOMETRIC HEIGHTS LISTED ARE BASED ON FIRST ORDER LEVELING FROM THE FOLLOWING CITY BENCHMARKS. THE PUBLISHED ELEVATION FOR OC-139 WAS HELD. THE PUBLISHED ELEVATION FOR ENC-33 IS SHOWN IN ().

NAME	ORTHO HGT	SOURCE	ORDER	DESCRIPTION	NAD 83 2017.5 Epoch		NAVD88		NAD 83 2017.5 Epoch		NAVD88		1991.35 Epoch		Point
					Station	Northing	Easting	Orth. Hgt.	Convergence	Comb. S.F.	Latitude	Longitude	Ell. Hgt	Northing	
OC-139	78.658'	CITY BM BOOK	FIRST	STANDARD DISK STAMPED "OC 139 1968"	1030	1961046.724	6250267.408	388.388	-0°33'30"	0.999953747	N33°02'37.34105"	W117°15'58.28231"	274.779	1961044.005	1030
					1032	1961738.292	6242239.594	92.025	-0°34'22"	0.999967809	N33°02'43.39912"	W117°17'32.66715"	-22.153	1961735.615	1032
					1033	1957891.852	6242386.621	82.035	-0°34'21"	0.999969232	N33°02'05.35811"	W117°17'30.48847"	-32.266	1957890.803	1033
					1047	1956322.484	6246844.273	231.636	-0°33'52"	0.999962442	N33°01'50.26881"	W117°16'37.94755"	117.618	1956319.791	1047
					1052	1958381.345	6244267.108	**176.164	-0°34'09"	0.999964596	N33°02'10.38637"	W117°17'08.45751"	61.976	1958378.672	1052

CONTROL SURVEY CITY OF ENCINITAS



VICINITY MAP

** INDICATES POINT WAS FOUND TO HAVE SIGNIFICANT VELOCITY AND WAS NOT USED IN THE ADJUSTMENT. NEWLY OBSERVED VALUES SHOWN HEREON.

*** INDICATES NORTH AMERICAN VERTICAL DATUM 88 ELEVATIONS ESTABLISHED FROM DIGITAL LEVEL RUN DESCRIBED UNDER "BASIS OF NAVD 88 ELEVATIONS PER CITY OF ENCINITAS BENCHMARKS."

ALL OTHER ELEVATIONS SHOWN HEREON WERE DERIVED BY GPS METHODS AND NO DEGREE OF ACCURACY IS CLAIMED.

RECORD OF SURVEY

A GEODETIC CONTROL SURVEY TO REPLACE FIRST ORDER CONTROL STATION, NO. 1048 "ENC-48" PER RECORD OF SURVEY NO. 18416 WHICH WAS DESTROYED BY CONSTRUCTION IN THE CITY OF ENCINITAS SURVEY CONTROL NETWORK, IN THE CITY OF ENCINITAS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYOR'S ACT AT THE REQUEST OF THE CITY OF ENCINITAS IN JUNE 2020.

D. B. Stroup
DOUGLAS B. STROUP, L.S. 8553
EXP. 12-31-20
DATE: 8/28/2020



LEGEND

- ▲ INDICATES CONTINUOUSLY OPERATING REFERENCE STATION (CORS)
- INDICATES EXISTING FIRST OR "B" ORDER CONTROL MONUMENT HELD IN ADJUSTMENT (SEE BASIS OF COORDINATES)
- INDICATES EXISTING GROUP C 1ST ORDER MONUMENT IN CITY OF ENCINITAS CONTROL NETWORK (SEE R.O.S. 18416).
- △ INDICATES A MONUMENT ESTABLISHED (SET) AS A PART OF THIS SURVEY.

STATION NAME DESCRIPTIONS:

(MONUMENTS WITH STATION NAMES WHICH HAVE THE FOLLOWING DESIGNATION)

(CORS) - INDICATES AN EXISTING CONTINUOUSLY OPERATING REFERENCE STATION (CORS) MONUMENT IN SAN DIEGO COUNTY FROM THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) INTEGRATED GPS NETWORK.

SURVEYORS NOTE

DESCRIPTIONS FOR THE EXISTING CONTROL IS ON FILE WITH THE CITY OF ENCINITAS ENGINEERING DEPARTMENT, R.O.S. 18416 OR AVAILABLE IN THE NGS DATABASE.

POINT 1052
2 1/2" BRASS DISK STAMPED "ENC-52, LS 8553, 2020" SET IN CONCRETE ON THE TOP OF MEDIAN ON THE CENTERLINE OF SANTE FE DRIVE, 70 FEET EASTERLY FROM THE INTERSECTION OF SANTE FE DR AND DEVONSHIRE DR, AND 750 FEET EASTERLY FROM ARDEN DR.

COUNTY SURVEYOR'S STATEMENT

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766 OF THE PROFESSIONAL LAND SURVEYOR'S ACT THIS 23rd DAY OF SEPTEMBER, 2020.



RAYMOND L. MATHE, P.L.S. 6185
COUNTY SURVEYOR

RECORDER'S STATEMENT

FILE NO. 2020-7000329

FILED THIS 24th DAY OF SEPTEMBER, 2020, AT 3:55 O'CLOCK, P.M. IN BOOK OF RECORD OF SURVEY MAPS AT PAGE _____ AT THE REQUEST OF DOUGLAS B. STROUP

ERNEST J. BRONBURG, JR.
COUNTY RECORDER

BY: *[Signature]*
DEPUTY COUNTY RECORDER

FEES \$43.00