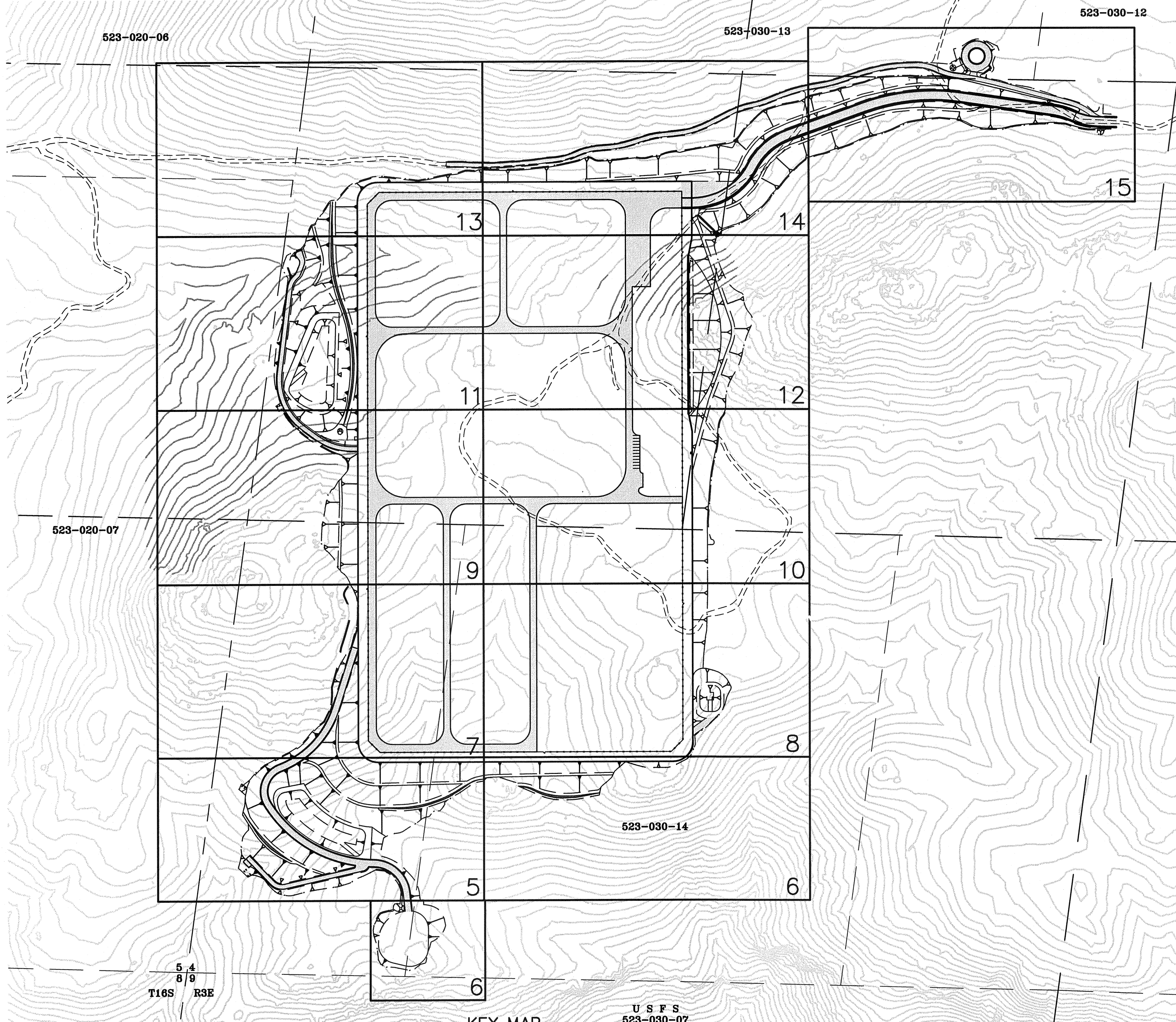
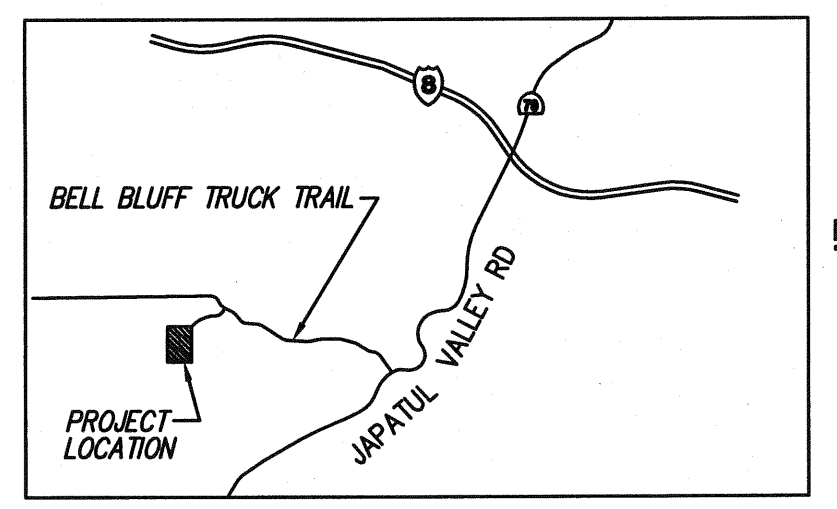


SUNCREST SUBSTATION GRADING PLAN



KEY MAP
SCALE 1"=200'



DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY SAN DIEGO GAS AND ELECTRIC COMPANY IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS DESIGNER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

David B. Evans 3/30/10
R.C.E. NO. 63344 DATE
EXPIRES: 06-30-10

Joseph J. Vetter 3/30/10
No. 2401 DATE
EXPIRES: 9-30-10

LIST OF DRAWINGS

SCR-C-001	KEY MAP, GENERAL NOTES
SCR-C-002	NOTES & TYPICAL ROAD SECTIONS
SCR-C-003	GENERAL SITE PLAN
SCR-C-004	SITE PLAN SECTIONS
SCR-C-004.1	SITE PLAN SECTION
SCR-C-005-SCR-C-015	GRADING PLAN
SCR-C-016	STORM DRAIN PROFILES KEY MAP
SCR-C-017-SCR-C-024	STORM DRAIN PROFILES
SCR-C-025	ACCESS ROAD PROFILE-MAIN
SCR-C-026	ACCESS ROAD PROFILE-"A & B"
SCR-C-027	ACCESS ROAD PROFILE-"C"
SCR-C-028-SCR-C-033	MSE WALL PLAN AND PROFILES
SCR-C-034	SHEET NOT USED
SCR-C-035	MSE WALL DETAILS AND NOTES
SCR-C-036	MSE WALL NOTES
SCR-C-037	MSE WALL SECTIONS AND DESIGN CHARTS
SCR-C-038-SCR-C-039	MSE WALL DETAILS
SCR-C-040-SCR-C-041	GRADING AND DRAINAGE DETAILS
SCR-C-042	FENCE DETAILS
SCR-C-043-SCR-C-046	GRADING AND DRAINAGE DETAILS
SCR-C-047-SCR-C-059	WATER AND WELL SYSTEM DETAILS
SCR-C-060-SCR-C-065	EROSION CONTROL PLANS

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE WORK TO BE DONE ACCORDING TO THESE PLANS, SDG&E SPECIFICATIONS, STANDARD SPECIFICATIONS AND THE SAN DIEGO REGIONAL STANDARD DRAWINGS, STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, AND WATER AGENCY STANDARDS.

- STANDARD DRAWINGS**
- SAN DIEGO REGIONAL STANDARD DRAWINGS, DOCUMENT NO. AEC1231062, FILED DECEMBER 31, 2006.
 - STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, DATED MAY 2008.
 - WATER AGENCY STANDARDS (SDWAS), SEPTEMBER 28, 2009.

- STANDARD SPECIFICATIONS**
- STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2006 EDITION) INCLUDING THE 2006 REGIONAL AND 2006 CITY OF SAN DIEGO SUPPLEMENTAL AMENDMENTS DOC. AEC1231062, FILED DECEMBER 31, 2006.
 - STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, DOCUMENT NO. AEC0925062, FILED SEPTEMBER 25, 2006.
 - WATER AGENCY STANDARD SPECIFICATIONS (SDWAS), SEPTEMBER 28, 2009

CONTRACTOR'S NOTE

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

EARTHWORK QUANTITIES

CUT 1,086,000 CY
FILL 1,229,000 CY

NOTE: QUANTITIES NOT ADJUSTED FOR BULK OR SHRINK. TOTALS DO NOT INCLUDE REMEDIAL EARTHWORK, OVEREXCAVATION OR IMPORT SOILS FROM SUBSTATION ACCESS ROAD. EARTHWORK VOLUMES SHOWN HEREON ARE APPROXIMATE. ACTUAL VOLUMES ARE DEPENDENT UPON ACTUAL PERCENT OF BULK AND SHRINKING, QUANTITY OF REMEDIAL EXCAVATION, QUANTITY OF OVEREXCAVATION AND EXISTING SURFACE TOPOGRAPHY. EARTHWORK SHALL BE QUANTIFIED IN THE FIELD DURING GRADING OPERATIONS.

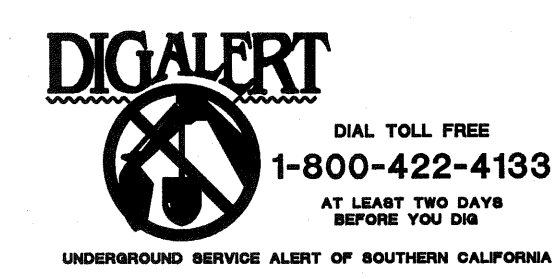
ABBREVIATIONS

APPROX	APPROXIMATE	MSE	MECHANICALLY STABILIZED EARTH
AC	ASPHALT CONCRETE	OC	ON CENTER
BW	BOTTOM OF WALL	OD	OUTSIDE DIAMETER
CB	CATCH BASIN	OH	OVERHEAD
CONC	CONCRETE	POB	POINT OF BEGINNING
CL	CENTER LINE	PVC	POLY-VINYL-CHLORIDE
CP	CENTER POINT	PVT	PRIVATE
DIA	DIAMETER	PCC	PORTLAND CEMENT CONCRETE
D.I.	DUCTILE IRON	R/W	RIGHT-OF-WAY
DG	DECOMPOSED GRANITE	RC	RELATIVE COMPACTION
EP	EDGE OF PAVEMENT	RIM	RIM ELEVATION
EX	EXISTING	RT	RIGHT
FF	FINISH FLOOR	RCP	REINFORCED CONCRETE PIPE
IE	INVERT ELEVATION	RSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
ID	INSIDE DIAMETER	S	SLOPE
FS	FINISH SURFACE	SCH	SCHEDULE
FG	FINISH GRADE	SD	STORM DRAIN
FH	FIRE HYDRANT	SDRS	SAN DIEGO REGIONAL STANDARD DRAWINGS
FL	FLOW LINE	SDWAS	SAN DIEGO WATER AGENCIES STANDARDS
FLG	FLANGED	SF	SQUARE FEET
GB	GRADE BREAK	STA	STATION
HDPE	HIGH DENSITY POLYETHYLENE	TC	TOP OF CURB
HP	HIGH POINT	TF	TOP OF FOOTING
LAT	LATERAL	TG	TOP OF GRATE
LF	LINEAR FEET	TOP	TOP OF PIPE
LOC	LOCATION	TOS	TOP OF SLOPE
LT	LEFT	TW	TOP OF WALL
MAX	MAXIMUM	TYP	TYPICAL
MIN	MINIMUM	W/	WITH
MH	MANHOLE	WAS	WATER AGENCIES STANDARDS
MH	MANHOLE		

- GRADING SPECIFICATIONS**
- ALL GRADING SHALL BE DONE UNDER THE OBSERVATION OF A QUALIFIED GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST AND IN ACCORDANCE WITH THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT ENTITLED "GEOTECHNICAL INVESTIGATION REPORT, SUNCREST SUBSTATION SDG&E 500KV SUNRISE POWERLINK PROJECT". LOCATED IN THE COUNTY OF SAN DIEGO, CALIFORNIA, DATED DECEMBER 21, 2009, PREPARED BY URS CORPORATION (PROJECT # 27669017.00002), AND UPDATE REPORT AND CHANGE OF GEOTECHNICAL ENGINEER OF RECORD, PREPARED BY GECON INC, (PROJECT # G1164.32.01) DATED 1/12/10. ALL FILL MATERIAL SHALL BE ACCORDING TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND SUBMITTED TO THE SDG&E PROJECT ENGINEER PRIOR TO THE ACCEPTANCE OF WORK.
 - AT THE COMPLETION OF THE GRADING OPERATIONS, AN AS-GRADED SOILS AND GEOLOGICAL REPORT SHALL BE PREPARED AND DELIVERED TO THE SDG&E PROJECT ENGINEER.
 - THESE GRADING PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS OUTLINED IN THE REFERENCED GEOTECHNICAL REPORTS PREPARED FOR THIS PROJECT.

David B. Evans 3-30-10
C.E.G. NO. 1860 DATE

Joseph J. Vetter 3/30/10
G.E. NO. 2401 DATE
EXPIRES: 9-30-10



LEGEND

SYMBOL	LEGEND	STD.
	EXISTING CONTOUR	
	FINISH CONTOUR	
	CUT SLOPE	
	FILL SLOPE	(B) 40
	LIMITS OF GRADING	
	CUT/FILL LINE	
	FLOW LINE	
	GRADE BREAK	RSD D75
	PCC DRAINAGE DITCH	TYPE B & TYPE D
	STORM DRAIN	
	CONCRETE BACKFILL	RSD G-33
	WATER MAIN	WAS WF-2
	CUT-OFF WALL	RSD SP-07
	RIP-RAP DISSIPATOR	(H) 46
	STRAIGHT HEADWALL	RSD D-40
	WING HEADWALL	RSD D-30
	CONCRETE ENERGY DISSIPATOR	RSD D-34
	CANYON SUBDRAIN	RSD D-41
	MODIFIED TYPE A CLEAN OUT-TYPE F INLET TOP	(J) 40
	MODIFIED TYPE A CLEAN OUT-TYPE F INLET TOP	(J) 41
	MODIFIED TYPE A CLEAN OUT-GRATE LID	RSD D-9
	TYPE A CLEAN OUT	RSD D-9
	TYPE B-1 CURB INLET	RSD D-2
	TYPE F CATCH BASIN	RSD D-7
	TYPE G CATCH BASIN	RSD D-8
	PAVEMENT SUBDRAIN	(A) 41
	CONTECH CDS 3030 DV PRECAST WATER QUALITY SYSTEM	(A) 44 (D) 44
	CONTECH CDS 2015 DV PRECAST WATER QUALITY SYSTEM	(E) 40
	6" A.C. BERM TYPE A	RSD G-5
	AC PAVING	(D) 40
	MSE WALL/SOIL NAIL WALL	
	CHAIN LINK FENCE	
	SETTLEMENT MONUMENT	(C) 41
	PROFILE STRUCTURE NUMBER A-4 CO STRUCTURE TYPE 345.35 FS	STORM DRAIN CALLOUT
	SPOT ELEVATION	
	DETAIL LETTER	DETAIL CALLOUT
	SHEET NUMBER	
	FIRE HYDRANT W/ PROTECTION POST	WAS WF-1 WAS WF-4
	BLOWOFF ASSEMBLY	WAS WB-1
	AUTOMATIC COMBINATION AIR RELEASE AND AIR/VACUUM VALVE	WAS WA-2 WAS WA-3
	GATE VALVE	WAS WW-1

BENCHMARK/BASIS OF BEARING

THE BASIS OF COORDINATES OF THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 6, NAD 83 (1992). THE COORDINATES ARE DISPLAYED IN U.S. SURVEY FEET, AS DETERMINED LOCALLY BY THE LINE BETWEEN GPS 32 AND CA 1102, I.E. NORTH 41°29'59" WEST AS SHOWN ON SDOO ROS 14310. THE BENCHMARK USED IS SAN DIEGO COUNTY BENCHMARK WHICH IS A 3 INCH BRASS DISK MARKED USGS H133 SET IN A GRANITE ROAD LEDGE NORTHERLY OF BELL BLUFF TRUCK TRAIL, AND WESTERLY OF JAPATUL VALLEY ROAD. THE ELEVATION OF THE BENCHMARK IS 3152.01 FEET (NAVD 88 DATUM).

REVISIONS

NO.	WORK DONE	DATE:	BY:	APP'D:	NO.	WORK DONE	DATE:	BY:	APP'D:	NO.	WORK DONE	DATE:	BY:	APP'D:	NO.	WORK DONE	DATE:	BY:	APP'D:	NO.

SAN DIEGO GAS & ELECTRIC COMPANY
SAN DIEGO, CALIFORNIA

SUNCREST SUBSTATION
TITLE SHEET, KEY MAP, GENERAL NOTES

DRAWN BY: MJ DATE: 3/24/10 SCALE: AS NOTED W.O.: - REV.: 0
CHECKED BY: RWM DATE: -
APPROVED BY: CR DATE: - SHEET 1 OF 68
CAD NO.: GP01 PLOT SCALE: 1=1

SCR-C-001