

V.C.M.W.D. GENERAL NOTES

UNLESS OTHERWISE INDICATED HEREIN, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE BELOW; PRECEDENCE SHALL FOLLOW ORDER LISTED:

- A. THESE PROJECT PLANS AND SPECIFICATION
- B. VCMWD STANDARD WATER AND SEWER DRAWINGS, LATEST APPROVED EDITION
- C. VCMWD SEWER FACILITY DESIGN MANUAL, FEBRUARY 2000 AND STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF PIPELINES AND APPURTENANCES, LATEST EDITION.
- D. STANDARD SPECIFICATION FOR PUBLIC WORKS, "GREENBOOK" LATEST EDITION

- 1. A PRE-JOB CONFERENCE SHALL BE HELD BEFORE THE START OF CONSTRUCTION. CONTRACTOR ATTENDANCE IS MANDATORY.
- 2. CONTRACTOR SHALL NOTIFY THE VCMWD ENGINEERING DEPARTMENT IN WRITING ONE WEEK PRIOR TO THE START OF CONSTRUCTION AND VERBALLY 24 HOURS IN ADVANCE OF BEGINNING WORK TO ARRANGE FOR INSPECTION OF THE PROJECT.
- 3. CONTRACTOR MUST CALL "DIG ALERT" OF SOUTHERN CALIFORNIA TO HAVE UNDERGROUND SERVICE UTILITIES LOCATED PRIOR TO CONSTRUCTION
- 4. WORK DONE WITHOUT DISTRICT INSPECTION SHALL BE SUBJECT TO REMOVAL.
- 5. THE TELEPHONE NUMBER OF THE VALLEY CENTER MUNICIPAL WATER DISTRICT IS (760) 735-4500.
- 6. APPROVAL OF PLANS BY THE VALLEY CENTER MUNICIPAL WATER DISTRICT DOES NOT CONSTITUTE RESPONSIBILITY FOR ACCURACY OF INFORMATION NOR LOCATIONS OF OTHER EXISTING UTILITIES.
- 7. CONTRACTOR IS REQUIRED TO SUBMIT ALL MATERIALS FOR APPROVAL PRIOR TO INSTALLATION, ANY MATERIALS INSTALLED WITHOUT APPROVAL SHALL BE SUBJECT TO REMOVE.
- 8. CONTRACTOR IS REQUIRED TO EMPLOY CERTIFIED THIRD PARTY TESTING FOR COMPACTION AND PROVIDE REPORTS ON A TIMELY BASIS.
- 9. CONTRACTOR SHALL POTHOLE ALL FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT TO VERIFY DEPTHS, GRADES, SIZES, LOCATIONS, ETC., MINIMUM 10 DAYS PRIOR TO THE START OF TRENCHING OPERATIONS. ANY DISCREPANCIES FOUND IN THE FIELD WITH THE INFORMATION PROVIDED ON THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE DISTRICT ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 10. ANY CHANGES TO THE DESIGN OR THESE DRAWINGS SHALL BE APPROVED BY THE DISTRICT ENGINEER, IN WRITING, PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 11. ALL MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION, UNLESS DIRECTED OTHERWISE
- 12. ANY "BREAK-INS" OR MODIFICATIONS TO EXISTING INSTALLATIONS SHALL BE MADE IN THE PRESENCE OF THE DISTRICT ENGINEER OR HIS REPRESENTATIVE..
- 13. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING VCMWD ABOVE AND BELOW GROUND FACILITIES AFFECTED BY CONSTRUCTION OF THIS PROJECT.
- 14. CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR CONSTRUCTION OF THE WORK, INCLUDING A PERMIT FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY EXCAVATION WITHIN EXISTING COUNTY RIGHTS-OF-WAY.
- 15. CONTRACTOR IS TO OBSERVE ALL SAFETY AND TRAFFIC CONTROL REGULATIONS AS REQUIRED BY CAL/OSHA, COUNTY OF SAN DIEGO AND THE AMERICAN PUBLIC WORKS ASSOCIATION.
- 16. PRIOR TO INSTALLING ANY DISTRICT PIPELINE IN A FILL AREA, A SOILS REPORT SHALL BE SUBMITTED TO THE DISTRICT ENGINEER CERTIFYING THAT ALL EARTH FILLS WERE COMPACTED TO A MINIMUM 90% RELATIVE DENSITY TOP TO BOTTOM.
- 17. THE FINAL LOCATION AND ELEVATION OF SEWER AND WATER LATERALS SHALL BE SHOWN ON ORIGINAL PLANS PRIOR TO ACCEPTANCE OF WORK.
- 18. CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILTS ONSITE.
- 19. CONTRACTOR SHALL POSSESS CURRENT HARD COPIES OF PROJECT PLANS AND ALL REFERENCED SPECIFICATIONS ONSITE.
- 20. THE CONTRACTOR SHALL FOLLOW INSURANCE, BONDING, AND WARRANTY REQUIREMENTS AS SPECIFIED IN THE DISTRICT FACILITIES AGREEMENT.

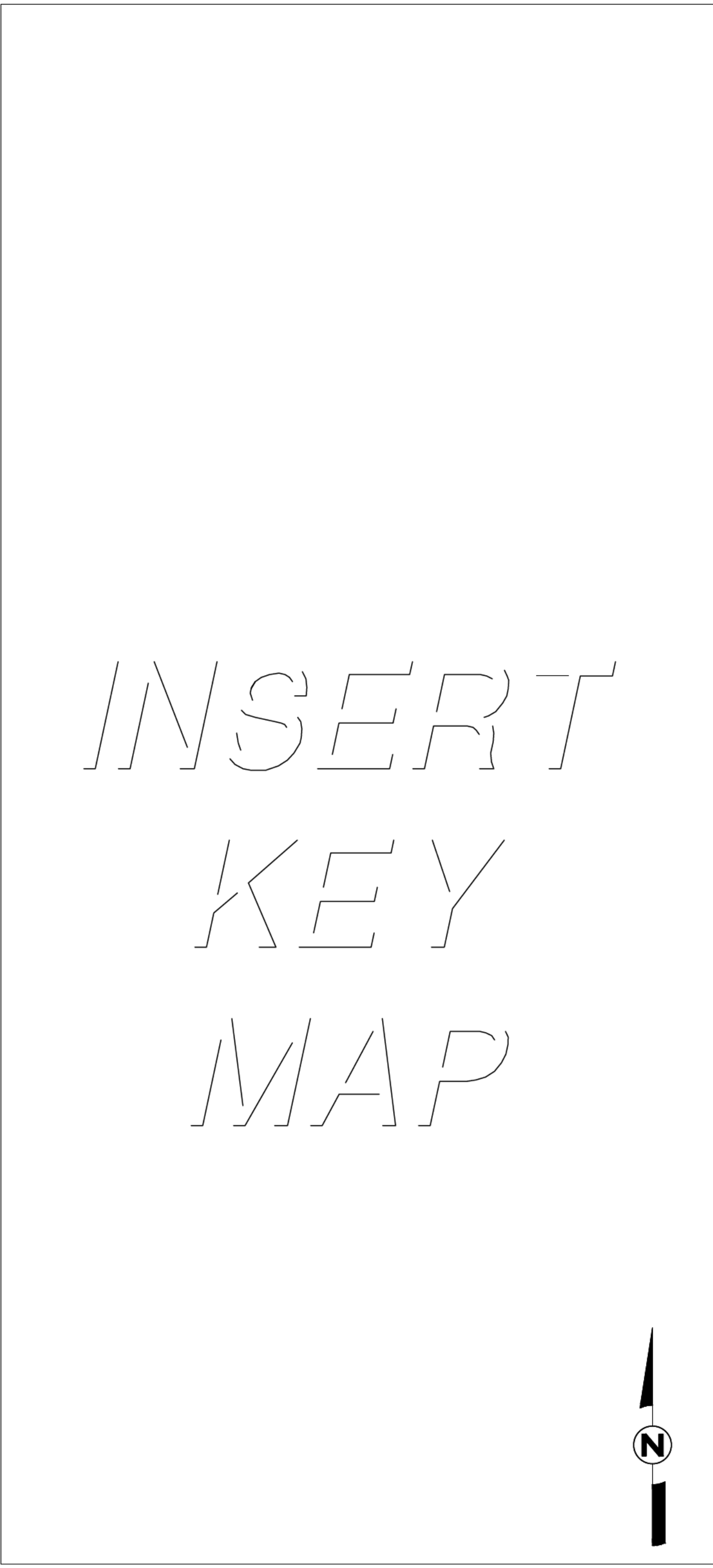
WATER NOTES

- 1. CONNECTIONS TO EXISTING DISTRICT FACILITIES WILL BE MADE IN ACCORDANCE WITH VCMWD'S STANDARD SPECIFICATIONS, SECTION 1-34 SHUTDOWN PERIODS, AND SECTION 3-16 CONNECTIONS TO EXISTING WATER LINES, WHICH DETAIL THE NOTICE PERIODS, REQUIRED CONDITIONS, AND RESPONSIBILITIES OF THE CONTRACTOR.
- 2. UNLESS SHOWN DEEPER, ALL PIPELINES 14" AND SMALLER SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" FOR PAVED ROADWAYS OR 42" FOR UNPAVED ROADWAYS AND EASEMENTS. PIPELINES 16" AND LARGER SHALL BE INSTALLED WITH A MINIMUM COVER OF 48" FOR PAVED ROADWAYS OR 54" FOR UNPAVED ROADWAYS AND EASEMENTS.
- 3. ALL MAINLINE AND HYDRANT VALVES SHALL BE FLANGED.
- 4. CONTRACTOR MAY BE REQUIRED TO INSTALL 2" SERVICE SADDLE WITH 2" CORPORATION STOP TO TOP OF 8" WATER MAIN TO SERVE AS MANUAL AIR RELEASE DURING PIPELINE TESTING. UPON COMPLETION OF ALL PIPELINE TESTING, CONTRACTOR WILL REMOVE 2" CORP. STOP AND INSTALL 2" THREADED BRASS PLUG INTO SERVICE SADDLE.
- 5. WATER SERVICE LATERALS SHALL NOT BE INSTALLED WITHIN DRIVEWAY OR SIDEWALK AREAS.
- 6. CONTRACTOR SHALL, AT NO COST TO THE DISTRICT, EXTEND OR RELOCATE EXISTING WATER MAIN APPURTENANCES, RELOCATE EXISTING WATER SERVICE LATERALS AND METERS; RECONNECT, EXTEND/SHORTEN ALL CUSTOMER'S PRIVATE LINES AFFECTED BY THE ROAD IMPROVEMENTS INCLUDED IN THESE PLANS, WHEN NECESSARY, AT DEVELOPER'S COST. THE DEVELOPER WILL BE RESPONSIBLE FOR THE COST TO UPGRADE ALL RELOCATED WATER METERS TO CURRENT BACKFLOW STANDARDS.
- 7. PRESSURE TESTING SHALL BE COMPLETED PER SECTION 3-20 OF THE STANDARD SPECIFICATIONS, WITH EXCEPTION TO THE LEAKAGE AMOUNT, NO MEASURABLE LEAKAGE ALLOWED, THAT IS NOT DUE TO GAUGE TOLERANCE AND AMBIENT TEMPERATURE CHANGES DURING TESTING.
- 8. ALL NEW WATERLINES SHALL BE DISINFECTED PER AWWA C651-14. BACTERIA SAMPLING SHALL BE DONE USING METHOD A PROCEDURE.
- 9. DISINFECTION AND PRESSURE TESTING OF NEW WATERLINES SHALL BE COMPLETED AND ACCEPTED BY DISTRICT PRIOR TO MAKING CONNECTION TO EXISTING SYSTEMS. AN AIR GAP OR TEST PLATE SHALL BE USED, PRESSURIZING/DISINFECTING AGAINST A CLOSED VALVE IS NOT ALLOWED.
- 10. PIPE DEFLECTION SHALL NOT EXCEED 80% OF MANUFACTURER ALLOWABLE TOLERANCE. ADDITIONAL DEFLECTION SHALL BE ACCOMPLISHED WITH APPROPRIATE FITTINGS, SUBMITTED AND APPROVED BY DISTRICT PRIOR.
- 11. ALL ABOVE GROUND APPURTENANCES (FH, AV, BO, ETC.) AND PRV VALVES AND FITTINGS, WHICH ARE BEING ABANDONED AS A PART OF THIS PROJECT, SHALL BE REMOVED TO MINIMUM 12" BELOW GRADE AND DELIVERED TO THE VCMWD YARD OR AS DIRECTED BY INSPECTOR.
- 12. MATERIALS SHALL BE ADEQUATELY RATED FOR SPECIFIED TEST PRESSURE AT 135% OF DESIGN PRESSURE.

SEWER NOTES

- 1. TRENCH WIDTH SHALL BE PER VCMWD S-8, FOR PIPE UP TO 15 INCHES, UNLESS OTHERWISE NOTED. FOR PIPE 15 INCHES AND OVER, TRENCH WIDTH SHALL BE PER GREENBOOK SPECIFICATIONS, 306-8.1. WHENEVER THE EXCAVATED MATERIAL IS NOT SUITABLE FOR BACKFILL, THE CONTRACTOR SHALL REMOVE THIS MATERIAL AND ARRANGE FOR AND FURNISH SUITABLE IMPORTED BACKFILL MATERIAL WHICH IS CAPABLE OF MAINTAINING THE REQUIRED STABILITY. LATERALS, IMPROVED BACKFILL MATERIAL, OR OTHER BACKFILL MATERIAL SHALL BE APPROVED BY THE ENGINEER, AND PER SECTION 306-1.3.5 OF THE "GREENBOOK" STANDARD SPECIFICATIONS.
- 2. CONTRACTOR SHALL INSTALL TRAPS AND PLUGS IN UPSTREAM MANHOLES TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING AS DIRECTED BY DISTRICT INSPECTOR.
- 3. AFTER COMPLETION OF PIPE LAYING, ALL MAIN LINE SEWERS, SERVICE LATERALS AND STRUCTURES SHALL BE AIR AND MANDREL TESTED PER SSPWC SECTION 306-7.8 IN THE PRESENCE OF THE INSPECTOR.
- 4. FINAL ACCEPTANCE OF SEWER LINES WILL BE SUBJECT TO INTERNAL CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION. CCTV SHALL HAVE BEEN DONE NO MORE THAN 6 MONTHS PRIOR TO ACCEPTANCE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PAY FOR THE COST OF THIS WORK AND ANY ADDITIONAL CCTV THAT IS REQUIRED TO VERIFY RE-WORK OR CORRECTIONS.
- 4.1. VIDEO INSPECTION SHALL SHOW WITH HIGH RESOLUTION OPERATIONAL AND STRUCTURAL DEFECTS E.G., INFLOWS, SAGS, OFFSET JOINTS, CRACKS, ROUGHNESS, RINS OR FOLDS IN THE PIPELINES, COMPLETE WITH AUDIO COMMENTARY AND INSPECTION LOG.
- 4.2. THE DISTRICT INSPECTOR SHALL BE NOTIFIED A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF VIDEO INSPECTING.
- 4.3. VIDEO INSPECTION SHALL BE PERFORMED ONE PIPE REACH (E.G., MANHOLE TO MANHOLE) AT A TIME.
- 4.4. THE CONTRACTOR SHALL VIDEO INSPECT THE PIPELINE WITH MAXIMUM FLOW INVERTED (IF REQUIRED) FROM THE PIPE REACH BEING INSPECTED. SHALL BE ISOLATED FROM THE REMAINDER OF THE PIPELINES WITH THE UPSTREAM SEWAGE FLOW BYPASSED (IF REQUIRED). IN THE EVENT THAT THE EXISTING FLOW IS INTERFERING WITH THE VIDEO OPERATION, A BYPASS SHALL BE PERFORMED BY THE CONTRACTOR TO LOWER THE FLOW VOLUME SUFFICIENTLY TO ALLOW FOR A CLEAR VIDEO PICTURE. SUFFICIENT WATER SHALL BE SUPPLIED TO THE ISOLATED SECTION TO CAUSE DRAINAGE REACHING THE DOWNSTREAM MANHOLE PRIOR TO VIDEO INSPECTING. IF EXISTING FLOWS ARE HIGH, PRE-CONSTRUCTION VIDEO INSPECTION CAN BE DONE WITH PARTIAL FLOW. DEPTH OF THE FLOW SHALL NOT EXCEED:
4.5. PIPES 6" - 10" - 20% OF THE PIPE DIAMETER.
4.6. PIPES 12" - 24" - 25% OF THE PIPE DIAMETER.
4.7. PIPES 27" AND UP - 30% OF THE PIPE DIAMETER.
- 4.8. THE CAMERA SHALL BE MOVED THROUGH THE PIPELINE IN A DOWNSTREAM DIRECTION AT A UNIFORM RATE BY MEANS OF POWER CABLE WINCHES OR SELF-PROPELLED TRACTORS AT EACH MANHOLE, STOPPING AND ROTATING THE CAMERA HEAD AT EACH LOCATION, EITHER OR BOTH TO ALLOW FOR ADEQUATE EVALUATION. THE CONTRACTOR SHALL STOP WHEN NECESSARY TO ENSURE PROPER DOCUMENTATION OF THE PIPE CONDITION, BUT IN NO CASE SHALL THE CAMERA BE PULLED AT A RATE GREATER THAN 30" PER MINUTE. A CLEAR PICTURE SHALL BE PROVIDED LOOKING INTO EACH SERVICE CONNECTION. BOTH PRE AND POST VIDEO INSPECTIONS SHALL BE SUBMITTED TO THE ENGINEER.
- 4.9. MEASUREMENT FOR LOCATION OF DEFECTS SHALL BE ABOVE GROUND BY MEANS OF A MEASURING DEVICE. FOOTAGES SHOWN IN THE DIGITAL FILES SHALL COINCIDE WITH HORIZONTAL LENGTHS FROM STATIONING AS SHOWN ON THE PLANS. FOOTAGE MEASUREMENTS SHALL BEGIN AT THE CENTERLINE OF THE UPSTREAM MANHOLE OR STORM DRAIN ACCESS POINT, UNLESS PERMISSION IS GIVEN BY THE ENGINEER TO DO OTHERWISE.
- 4.10. THE CONTRACTOR SHALL CLEAN THE SEWER MAINS PRIOR TO VIDEO INSPECTING AS NECESSARY TO ADEQUATELY PERFORM THE VIDEO RECORDING OPERATIONS. IF THE CAMERA WILL NOT PASS THROUGH THE ENTIRE PIPELINE SECTION, THE CONTRACTOR SHALL RESET THE CAMERA TO THE DOWNSTREAM MANHOLE AND ATTEMPT TO INSPECT THE SECTION OF PIPE FROM THE OPPOSITE DIRECTION. IF THE CAMERA FAILS TO PASS THROUGH THE ENTIRE SECTION, IT SHALL BE ASSUMED THAT AN OBSTRUCTION EXISTS. BEFORE TO VIDEO RECORD THAT SECTION OF PIPE, SHALL BE TEMPORARILY SUSPENDED AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER. UPON REMOVAL OF THE OBSTRUCTION, THE CONTRACTOR SHALL COMPLETE THE INSPECTION.
- 4.11. IF AN OBSTRUCTION IS ENCOUNTERED DURING THE POST-CONSTRUCTION VIDEO INSPECTION, THE CONTRACTOR SHALL REMOVE THE OBSTRUCTION BY EXCAVATION, REPAIR, OR OTHER MEANS APPROVED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE, IN ORDER THAT VIDEO INSPECTION MAY CONTINUE.
- 4.12. THE SYSTEM USED TO MOVE THE CAMERA THROUGH THE PIPE SHALL NOT OBSTRUCT THE CAMERA'S VIEW. THE CONTRACTOR SHALL CALIBRATE THE MEASURING DEVICE EACH DAY WITH A KNOWN DISTANCE TO THE SATISFACTION OF THE ENGINEER PRIOR TO STARTING THE INSPECTION AND VIDEO RECORDING PROCESS.
- 4.13. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL FOR ANY ADDITIONAL POINT REPAIRS.
- 5. TOLERANCES ENCOUNTERED FOLLOWING INSPECTION SHALL BE ADDRESSED AS FOLLOWS:
5.A. FOR NEW UNDERGROUND SEWER INSTALLATIONS, THE MAXIMUM OPERATIONAL TOLERANCE FOR SAG SHALL BE 1/12" WHEN VIDEO RECORDED. INSPECTION IS USED TO CHECK FOR SAG. A CALIBRATED 14" DIAMETER STEEL BAR/SAG GAGE OR APPROVED EQUAL DEVICE, MOUNTED IN FRONT OF THE CAMERA, SHALL BE USED TO MEASURE THE DEPTH OF SAG.
5.B. IF THE ENGINEER DETERMINES THAT THE DEFICIENCIES OR SAGS ARE NON-REPAIRABLE IN PLACE, THE AFFECTED PORTION(S) SHALL BE RECONSTRUCTED.
- 6. THE CONSTRUCTION OF PCC SEWER MANHOLE PER VCMWD S-4 OR VCMWD S-5 POURED IN PLACE MANHOLE BASES SHALL BE A MONOLITHIC POUR FINISHED COMPLETE AT TIME OF POUR. EACH NEW MANHOLE SHALL BE VACUUM TESTED PRIOR TO BACK FILLING. THE TEST SHALL BE CONDUCTED IMMEDIATELY AFTER PLACEMENT OF PRE-CAST UNITS WITH POLYMER MORTAR/BUTYL SEALANT. ALL PIPES IN THE MANHOLE SHALL BE SECURELY PLUGGED. THE TEST HEAD SHALL BE PLACED AT THE INSIDE OF THE TOP PRE-CAST UNIT PRIOR TO THE INSTALLATION OF THE GRADE RING, AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6.1. A VACUUM OF 10 PSI SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVE CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 PSI. THE MANHOLE SHALL PASS IF THE TIME IS GREATER THAN 75 SECONDS. IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE WITH NO SHRINK GROUT WHILE VACUUM IS STILL BEING DRAWN. RETESTING SHALL PROCEED UNTIL A SATISFACTORY TEST IS OBTAINED.
- 6.2. POLYMER MORTAR SHALL BE USED TO JOIN PRE-CAST COMPONENTS ON ALL MANHOLES TO CREATE WATERIGHT JOINTS TO RESIST INFILTRATION. THE MORTAR SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, AND SHALL NOT EXCEED TO ONE PART POLYMER. ACCEPTABLE JOINT SEALANT PRODUCTS SHALL BE SKIDDER 31 AND 32 HI-MOD GEL MANUFACTURED BY Sika CORPORATION, 490 EPOXY PUTTY AND 498 UNDERWATER EPOXY PUTTY MANUFACTURED BY HENKELS, AND CS-102 BUTYL GASKETS (ROPE FORM) MANUFACTURED BY CONCRETE SEALANTS OR APPROVED EQUAL.
- 6.3. THE CONCRETE OR OTHER SURFACES THAT ARE TO ADHERE TO POLYMER MORTAR SHALL BE FREE FROM DUST, LOOSE AGGREGATES, OIL, GREASE OR OTHER CONTAMINANTS.
- 6.4. ON ALL MANHOLES, CONTRACTOR SHALL APPLY WATERPROOFING AGENT CONSISTING OF A ONE PART POLYMER AND TWO PARTS OF EMULSION. THE EMULSION SHALL BE TNE MEC 46-465, OR APPROVED EQUAL. THE EMULSION SHALL BE APPLIED IN NO LESS THAN TWO COATS TO ACHIEVE A TOTAL DRY THICKNESS OF 25 MILS. MINIMUM. THE EXTERIOR EMULSION COATINGS SHALL BE APPLIED PRIOR TO DELIVERY TO THE JOBSITE. IN ADDITION, A BITUMASTIC BAND 6 INCHES WIDE SHALL BE APPLIED AT ALL JOINTS ON EXTERIOR OF SUCH MANHOLES THAT SHALL BE WATERPROOFED.
- 6.5. WHEN COMPLETED, ALL MANHOLES SHALL BE WATERIGHT WITH ZERO INFILTRATION OF GROUNDWATER.

UTILITY PLANS FOR
PROJECT NAME
COUNTY OF SAN DIEGO TRACT NO. XXXX



KEY MAP LEGEND:

- 3 UTILITY SHEETS
- SUBDIVISION BOUNDARY
- TRACT BOUNDARY

SHEET INDEX

- SHEET XX VCMWD UTILITY TITLE SHEET
- SHEET XX VCMWD STREET SECTIONS
- SHEET XX VCMWD DETAILS & LATERAL TABLES
- SHEET XX THRU XX VCMWD UTILITY PLAN & PROFILE

DIGALERT

CALL BEFORE YOU DIG
1-800-227-2600
2 WORKING DAY
NOTICE REQUIRED

WORK TO BE DONE

IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CURRENT SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARD SPECIFICATIONS AND STANDARD REFERENCE DRAWINGS. THE WATER FACILITIES WORK SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS AND DRAWINGS OF VALLEY CENTER MUNICIPAL WATER DISTRICT.

LEGEND:

	EXISTING	PROPOSED
RIGHT OF WAY.....	---	---
PROPERTY LINE.....	---	---
CENTERLINE.....	---	---
EASEMENT.....	---	---
CONTOUR.....	1300	1300
EDGE OF PAVEMENT.....	///	///
CABLE LINE.....	C	C
ELECTRICAL (OVERHEAD).....	OH-E	OH-E
ELECTRICAL (UNDERGROUND).....	E	E
GAS MAIN.....	G	G
TELEPHONE LINE.....	T	T
IRRIGATION LINE.....	IRR	IRR
RECYCLED WATER MAIN.....VCMWDSD W-17.....	RW	RW
RECYCLED WATER SERVICE.....VCMWDSD W-2, W-4, W-5.....	RW	RW
SEWER MAIN.....VCMWDSD S-4,S-8.....	S	S
SEWER MANHOLE.....VCMWDSD S-4, S-5, S-6, S-7 (SELECT AS APPLICABLE).....	○	○
SEWER LATERAL.....VCMWDSD S-11, S-12 (SELECT AS APPLICABLE).....	○ S	○ S
FORCE MAIN.....VCMWDSD S-4, S-8.....	FM	FM
WATER SERVICE.....VCMWDSD W-2, W-3, W-3A, W-4, W-5 (SELECT AS APPLICABLE)	W	W
FIRE SERVICE.....VCMWDSD W-7, W-8.....	CSRF	CSRF
BLOW OFF ASSEMBLY.....VCMWDSD W-2, W-9, W-11 (SELECT AS APPLICABLE).....	●	●
AIR VACUUM & BLOW OFF COMB. VCMWDSD W-2, W-10, W-16.....	⊗	⊗
FIRE HYDRANT ASSEMBLY.....VCMWDSD W-2, W-12.....	⊗	⊗
AIR & VACUUM RELEASE ASSEMBLY.VCMWDSD W-2, W-13, W-14, W-16 (SELECT AS APPLICABLE).....	■	■
WATER MAIN.....VCMWDSD W-17.....	W	W
CONCRETE THRUST BLOCK.....VCMWDSD W-20.....	◄	◄
GATE VALVE.....VCMWD SPEC. 4.01.....	⊗	⊗
WATER QUALITY SAMPLING STATION..VCMWDSD W-35.....	⊗	⊗
STORM DRAIN.....	SD	SD

TOPOGRAPHY SOURCE

ASSESSOR'S PARCEL NO.

BASIS OF BEARING

LEGAL DESCRIPTION

BENCHMARK

SITE ADDRESS

OWNER/APPLICANT

ENGINEER OF WORK

NAME
ADDRESS
CITY, STATE, ZIP CODE
PHONE

NAME
ADDRESS
CITY, STATE, ZIP CODE
PHONE

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 PROFESSION CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO, OR ITS AGENTS IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

ENGINEER NAME, R.C.E. XXXXX DATE

OWNER'S CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS.

IT IS FURTHER AGREED THAT THE DEVELOPER SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES, ALTERATIONS, OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. PROVIDED, HOWEVER, SUCH CHANGE, ALTERATIONS OR ADDITIONS SHALL NOT EXCEED 10% OF THE ORIGINAL ESTIMATED COST OF THE IMPROVEMENTS WITHOUT THE WRITTEN CONSENT OF THE SURVEY COMPANY.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN 60 DAYS AFTER ISSUANCE OF CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT UNDER MY CONTROL.

OWNER DATE

VCMWD APPROVED CHANGES

BENCH MARK

NO.	DESCRIPTION:	APPROVED BY:	DATE:	DESCRIPTION:
				LOCATION: _____
				RECORD FROM: _____
				ELEVATION: _____ DATUM: _____

COUNTY NOTE

THESE PLANS ARE REVIEWED BY THE COUNTY OF SAN DIEGO FOR BONDING PURPOSES ONLY.

COUNTY NOTE REVIEWED FOR BONDING PURPOSES ONLY		
PRIVATE CONTRACT		
SHEET XX	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	XX SHEETS
UTILITY PLAN FOR:		
PROJECT NAME		
COUNTY OF SAN DIEGO TM XXXX CALIFORNIA COORDINATE INDEX <u>XXX-XXXX</u>		
APPROVED FOR WILLIAM P. MORGAN COUNTY ENGINEER	DATE: R.C.E. XXXXX	ENGINEER OF WORK NAME R.C.E. XXXXX
BY:	DATE:	IMPROVEMENT PLAN NO. PDSXXXX-XXXXXX-XXXXX

ENGINEER OF WORK
COMPANY LOGO

DESIGN GUIDE EXHIBIT 'D-1'

VALLEY CENTER MUNICIPAL WATER DISTRICT

VALID FOR ONE YEAR FROM DATE OF SIGNATURE

STANDARD TITLE SHEET
(PART OF COUNTY OF SD
IMPROVEMENT PLAN SET)

GENERAL MANAGER DATE

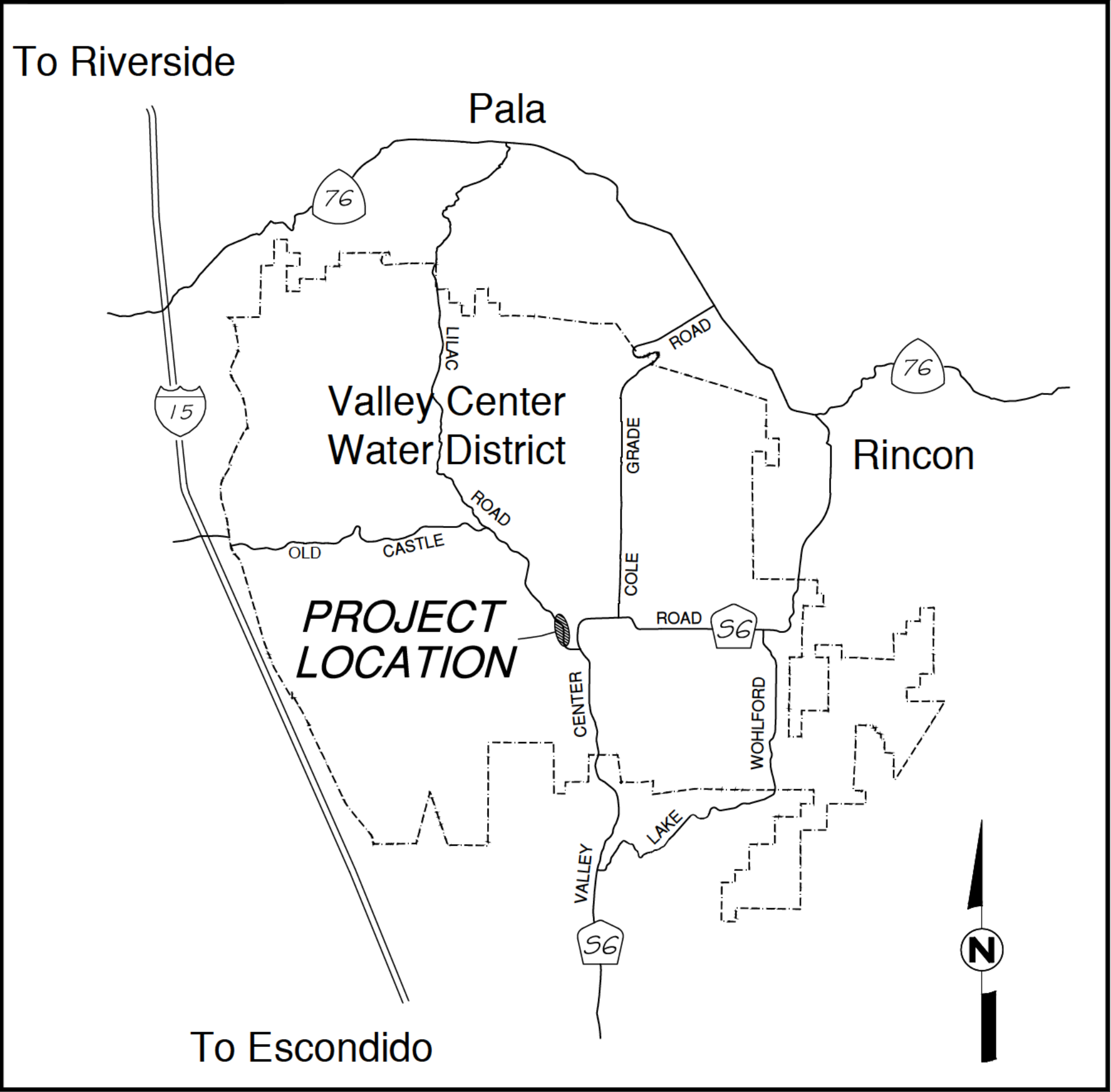
DISTRICT ENGINEER DATE

DIRECTOR OF OPERATIONS/FACILITIES DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT

PROJECT TITLE
(PROJECT NO. 01-06-78-XXXXX)

ONLY FOR VCMWD
CIP PROJECTS



VICINITY MAP
NOT TO SCALE

ONLY FOR
DEVELOPER
PROJECTS

SHEET INDEX
SHEET X TITLE SHEET
SHEET X NOTES & DETAILS
SHEETS X THRU X..... UTILITY PLAN & PROFILE

OWNER/APPLICANT

NAME
ADDRESS
CITY, STATE, ZIP CODE
PHONE

ENGINEER OF WORK

NAME
ADDRESS
CITY, STATE, ZIP CODE
PHONE

BOARD OF DIRECTORS

ROBERT A. POLITO	PRESIDENT
RANDY D. HASKELL	VICE PRESIDENT
ENRICO P. FERRO	DIRECTOR
DANIEL E. HOLTZ	DIRECTOR
OLIVER J. SMITH	DIRECTOR

STAFF

GARY T. ARANT	GENERAL MANAGER
WALLY T. GRABBE	DISTRICT ENGINEER/DEPUTY G.M.
JAMES V. PUGH	DIRECTOR OF FINANCE
A. GREG HOYLE	DIRECTOR OF OPERATIONS
ANDO PILVE	DIRECTOR OF INFORMATION TECHNOLOGY

TOPOGRAPHY SOURCE

BASIS OF BEARING

BENCHMARK

ASSESSOR'S PARCEL NO.

LEGAL DESCRIPTION

SITE ADDRESS

ABBREVIATIONS			
AB	AGGREGATE BASE	MIN	MINIMUM
AC	ASPHALTIC CONCRETE	MOD	MODIFIED
ACP	ASBESTOS CEMENT PIPE	NO	NUMBER
AV	AIR VACUUM VALVE	OD	OUTSIDE DIAMETER
BC	BEGIN CURVE	OHE	OVERHEAD ELECTRICAL
BFP	BACKFLOW PREVENTER	PCC	PORTLAND CEMENT CONCRETE/
BO	BLOW OFF		POINT COMPOUND CURVATURE
BP	BOTTOM OF PIPE	PIP	PROTECTED IN PACE
BVC	BEGIN VERTICAL CURVE	PI	POINT OF INTERSECTION
CATV	CABLE TELEVISION	PIV	POST INDICATOR VALVE
CB	CATCH BASIN	PL	PROPERTY LINE
CI	CURB INLET	PP	POWER POLE
CIP	CAST IRON PIPE	PRS	PRESSURE REDUCING STATION
CLR	CLEAR	PSI	POUNDS PER SQUARE INCH
CML&C	CEMENT MORTAR LINED & COATED	PVCC	POINT OF COMPOUND VERTICAL CURVE
CO	CLEANOUT	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	PVT	PRIVATE
CTS	CATHODIC TESTING STATION	RCP	REINFORCED CONCRETE PIPE
DIM	DIMENSION	RSKV	RESILIENT SEAT GATE VALVE
DIP	DUCTILE IRON PIPE	RW	RECYCLED WATER
DWG	DRAWING	S	SEWER
EA	END CURVE	SPEC	SPECIFICATIONS
EC	ELECTRIC	SCP	STEEL CYLINDER PIPE
ELEC	ELEVATION	SD	STORM DRAIN
ELEV	EXISTING	SDCDS	SAN DIEGO COUNTY DESIGN STANDARDS
EVC	END VERTICAL CURVE	SDG&E	SAN DIEGO GAS & ELECTRIC
EXIST	EXISTING	SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
FDC	FIRE DEPARTMENT CONNECTION	SF	SQUARE FEET
FG	FINISHED GRADE	SHT	SHEET
FH	FIRE HYDRANT	SS	STAINLESS STEEL
FL	FLOW LINE	STA	STATION
FLG	FLANGE	STD	STANDARD
FM	FORCE MAIN	STL	STEEL
FS	FINISH SURFACE, FIRE SERVICE	TB	THRUST BLOCK TOP OF BERM
GB	GRADE BREAK	TC	TOP OF CURB
GV	GATE VALVE	TCO	TOP OF CLEANOUT
HDPE	HIGH DENSITY POLYETHYLENE	TEL	TELEPHONE
HP	HIGH POINT	TG	TOP OF GRATE
HW	HEADWALL	TP	TOP OF PIPE
ID	INSIDE DIAMETER	TPP	TYPICAL
IE	INVERT ELEVATION	VC	VERTICAL CURVE
IRR	IRRIGATION	VCMWD	VALLEY CENTER MUNICIPAL WATER DISTRICT
LF	LINEAR FOOT	W	WATER
LP	LOW POINT	WM	WATER METER
M	METER	X-ING	CROSSING (UTILITY)
MH	MANHOLE		

INSERT
KEY
MAP

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 PROFESSION CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY VALLEY CENTER MUNICIPAL WATER DISTRICT IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

NAME OF ENGINEER R.C.E. XXXXX DATE

ENGINEER OF WORK
COMPANY LOGO



THOMAS BROS. MAP GUIDE
PG XXXX
KEY MAP LEGEND:

3
IMPROVEMENT SHEETS
SUBDIVISION BOUNDARY

KEY MAP
SCALE: 1"=200'



REFERENCE DRAWINGS	NO.	APPROVED CHANGES	APPROVED BY	DATE	VALLEY CENTER MUNICIPAL WATER DISTRICT VALID FOR ONE YEAR FROM DATE OF SIGNATURE
					GENERAL MANAGER DATE
					DISTRICT ENGINEER DATE
					DIRECTOR OF OPERATIONS/FACILITIES DATE

VALLEY CENTER MUNICIPAL WATER DISTRICT
29300 VALLEY CENTER ROAD P. O. BOX 67
VALLEY CENTER, CALIFORNIA 92082
(760) 735-4500



VCMWD JOB #
DATE:
DRAWN BY:
CHECKED BY:

DESIGN GUIDE EXHIBIT 'D-2'
STANDARD TITLE SHEET
(VCMWD PROCESSING ONLY)

X
X of X

XX% DESIGN