IMPROVEMENT NOTES

WORK AT (760) 752-7550.

- THE STRUCTURAL SECTIONS SHOWN ON THESE PLANS ARE BASED ON R-VALUE TESTS OR MINIMUM STRUCTURAL STANDARDS REQUIRED BY THE CITY, WHICHEVER IS GREATER. ACTUAL STRUCTURAL SECTIONS WILL BE DETERMINED AFTER THE "R" VALUE TEST HAS BEEN CONDUCTED BY A QUALIFIED GEOTECHNICAL ENGINEER ON THE PREPARED SUB-BASE MATERIAL. THE "R" VALUE TEST AND RECOMMENDED ENGINEERED STRUCTURAL SECTION MUST BE APPROVED BY THE PUBLIC WORKS DIRECTOR PRIOR TO THE INSTALLATION OF BASE AND PAVING MATERIALS. STRUCTURAL SECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH CHAPTER 600 OF THE CALTRANS HIGHWAY DESIGN MANUAL. STRUCTURAL SECTIONS SHALL BE NOTED ON THE "AS-BUILT" DRAWINGS.
- THIS NOTE WILL NOT APPLY TO THOSE AREAS WHERE GRADING IS MINIMAL AND "R" VALUES CAN BE OBTAINED PRIOR TO PLAN APPROVAL. ALL EXISTING STREETS SHALL BE CORE TESTED TO DETERMINE THE EXISTING STRUCTURAL SECTION AND TO DETERMINE THE EXTENT OF OVERLAY OR RECONSTRUCTION NECESSARY TO ACHIEVE THE REQUIRED "R" VALUES, TESTS SHALL BE PERFORMED AT LOCATIONS APPROVED BY THE PUBLIC WORKS DIRECTOR.
- ALL ELECTRICAL, TELEPHONE AND CABLE TELEVISION UTILITIES SHALL BE CONSTRUCTED/CONVERTED TO UNDERGROUND. THE RELOCATION AND/OR UNDERGROUNDING OF EXISTING AND NEW UTILITIES SHALL BE DONE BY THE DEVELOPER OF THE PROPERTY AT NO COST TO THE
- ALL UNDERGROUND UTILITIES AND LATERALS SHALL BE INSTALLED BEFORE CONSTRUCTION OF THE CURB AND GUTTER OR SURFACING OF STREETS.
- A PERMIT SHALL BE OBTAINED FROM THE CITY OF SAN MARCOS FOR ANY EXCAVATION AND/OR CONSTRUCTION WITHIN THE PROPOSED PROJECT AND PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL NOTIFY THE CITY'S PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO THE BEGINNING OF ANY GRADING/CONSTRUCTION
- PRECISE LOCATIONS/ELEVATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE NOT KNOWN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAKING SUFFICIENT EXPLORATIONS TO LOCATE ALL UTILITIES AND SUBSTRUCTURES WHETHER SHOWN ON THE PLANS OR NOT AND TO PROTECT THEM FROM ANY POSSIBLE DAMAGE PRIOR TO AND DURING CONSTRUCTION. THE EXPENSE OF REPAIR OR REPLACEMENT OF SAID UTILITIES AND SUBSTRUCTURES SHALL BE BORNE BY THE CONTRACTOR. CONTRACTOR SHALL NOTIFY THE ENGINEER-OF-WORK OF ANY POTENTIAL CONFLICTS SUFFICIENTLY IN TIME FOR CONSTRUCTION CHANGES TO BE MADE AND APPROVED.
- THE CONTRACTOR SHALL CONTACT THE UNDERGROUND SERVICE ALERT AT 1-800-422-4133 AT LEAST 48 HOURS PRIOR TO EXCAVATING TO VERIFY THE LOCATIONS OF UNDERGROUND FACILITIES OF THE FOLLOWING UTILITIES:
 - COX COMMUNICATIONS OR TIME WARNER COMMUNICATIONS

PACIFIC BELL/SBC

SAN DIEGO GAS & ELECTRIC/SEMPRA VALLECITOS WATER DISTRICT

- A DIG ALERT IDENTIFICATION NUMBER MUST BE ISSUED BEFORE A "PERMIT TO EXCAVATE" IS VALID PER GOVERNMENT CODE SECTION 4216/4217.
- 8. AN AS-BUILT DRAWING SHALL BE SUBMITTED FOR ALL PUBLIC IMPROVEMENTS PRIOR TO ACCEPTANCE OF SAID IMPROVEMENTS.

9. THE ENGINEER-OF-WORK SHALL BE NOTIFIED WHEN CONSTRUCTION COMMENCES.

- 10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION/GRADING OF SLOPES, PADS, STREET GRADES AND INFRASTRUCTURE IMPROVEMENTS ACCORDING TO THESE PLANS. THE ENGINEER-OF-WORK SHALL BE CONTACTED WHEN CHANGES OR ADDITIONS MADE DURING THE PROGRESS OF CONSTRUCTION OR IF THERE IS A MISUNDERSTANDING OF THESE PLANS OR FIELD STAKES AND AN INTERPRETATION IS NEEDED. CERTIFICATION FROM THE REGISTERED CIVIL ENGINEER STATING THAT THE GRADING HAS BEEN COMPLETED PER THE APPROVED PLAN, AND THE COMPACTION REPORT FROM THE GEOTECHNICAL ENGINEER ON ANY REQUIRED FILL AREAS SHALL BE PROVIDED PRIOR TO BUILDING PERMITS BEING ISSUED.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY MONUMENTATION AND/OR BENCHMARKS. ANY MONUMENTATION AND/OR BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT.
- 12. ALL EXISTING FEATURES AND STRUCTURES IN CONFLICT WITH THESE PLANS SHALL BE RELOCATED OR REMOVED AT THE DEVELOPER'S
- 13. MINIMUM 90% COMPACTION IS REQUIRED IN ALL ON-SITE FILL AREAS WITH A MINIMUM OF 95% COMPACTION SIX INCHES (6") BELOW FINISHED SUBGRADE IN A PUBLIC STREET.
- 14. ALL PUBLIC IMPROVEMENTS SHOWN ON THESE IMPROVEMENT PLANS SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR PRIOR TO OCCUPANCY OF ANY BUILDING.
- 15. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF ANY EQUIPMENT SHALL BE LIMITED TO THE HOURS OF 7:00 A.M. TO 4:30 P.M., MONDAY THROUGH FRIDAY. NO WORK SHALL BE PERFORMED ON THE PREMISES ON SATURDAY, SUNDAY OR HOLIDAYS.
- 16. NO PRIVATE IRRIGATION MAINS OR CONTROL VALVES SHALL BE PLACED WITHIN THE PUBLIC RIGHT—OF—WAY.
- CURB RAMPS SHALL BE INSTALLED AT ALL CURB RETURNS PER TITLE 24, PART 2, STATE CHAPTER 71, SITE DEVELOPMENT REQUIREMENTS FOR HANDICAPPED ACCESSIBILITY, SECTION 7103, CURB RAMPS, OF THE CALIFORNIA BUILDING CODE.
- 18. ALL TRENCH EXCAVATION AND BACKFILL IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE CITY'S EXCAVATION ORDINANCE.
- 19. THESE PLANS HAVE BEEN EXAMINED BY THE CITY'S ENGINEERING DIVISION TO INSURE COMPLIANCE WITH GENERAL ENGINEERING STANDARDS AND THE CITY'S DESIGN STANDARDS AND SPECIFICATIONS.
- 20. THE ENGINEER-OF-WORK SHALL BEAR THE SOLE RESPONSIBILITY OF THE MATHEMATICAL DATA AND ACCURACY OF DESIGN SHOWN
- 21. IF THE IMPROVEMENTS SHOWN ON THIS PLAN HAVE NOT BEEN CONSTRUCTED AND ACCEPTED BY THE CITY WITHIN TWO (2) YEARS OF THE DATE OF PLAN APPROVAL BY THE CITY ENGINEER, THESE PLANS WILL BE SUBJECT TO REVIEW BY THE CITY'S ENGINEERING DIVISION FOR CONFORMANCE WITH CURRENT CITY STANDARDS, POLICIES AND/OR ADDITIONAL REQUIREMENTS.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, RELOCATION OR REPLACEMENT OF ALL STRIPING, SIGNING OR TRAFFIC DETECTOR LOOPS AS REQUIRED BY THE PUBLIC WORKS DIRECTOR.
- 23. STREET SIGNING AND STRIPING ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE SUBJECT TO CITY OF SAN MARCOS PUBLIC WORKS DEPARTMENT APPROVAL.
- 24. DUST CONTROL MEASURES, SUCH AS THE PERIODIC WETTING DOWN OF THE BARE AND EXPOSED AREAS, SHALL BE USED AT ALL TIMES
- DURING CONSTRUCTION TO THE SATISFACTION OF THE PUBLIC WORKS AND/OR BUILDING INSPECTORS. 25. THE CONTRACTOR IS ADVISED THAT HE IS RESPONSIBLE FOR MAINTAINING THE ADJOINING PUBLIC STREETS AND RIGHT-OF-WAYS IN A CLEAN AND DUST FREE CONDITION WITHIN THE LIMITATION OF THE CITY MUNICIPAL CODE SECTION 14.15.030 "ILLICIT DISCHARGES
- PROHIBITED." THIS SECTION OF THE CODE PROHIBITS THE "WASHING DOWN" OF A STREET INTO A PUBLIC STORM DRAIN. THE CONTINUOUS USE OF STREET SWEEPING MACHINES MAY BE ADVISABLE
- 26. THE ENGINEER-OF-WORK IS NOT RESPONSIBLE FOR GRADING OPERATIONS OR GRADING DONE. THE CONTRACTOR IS SOLELY RESPONSIBLE
- 27. A PERMIT MUST BE OBTAINED FROM THE SAN MARCOS FIRE DEPARTMENT PRIOR TO ANY BLASTING. CITY PERMITS ARE REQUIRED PRIOR TO ANY CONSTRUCTION, EXCAVATION, STORAGE OF MATERIALS OR ANY OTHER ENCROACHMENTS.
- 28. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY D. HESPELER, G.E., PROJECT NUMBER 546-6 & 05-29, DATED MARCH 12, 1999 CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, AND UPDATE LETTER DATED APRIL 22, 2008. THE ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, ENGINEER OR CITY.
- 29. EROSION CONTROL, INCLUDING RIP-RAP, INTERIM SLOPE PROTECTION, SANDBAGS OR OTHER EROSION CONTROL MEASURES SHALL BE PROVIDED AS NECESSARY TO CONTROL SEDIMENT AND SILT FROM THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL FACILITIES THROUGHOUT THE DEVELOPMENT OF THE PROJECT.
- 30. A TRAFFIC CONTROL PLAN, INCLUDING THE LAYOUT OF CONSTRUCTION WARNING AND DETOUR SIGNS, SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. TRAFFIC CONTROL SHALL BE IMPLEMENTED BEFORE ANY WORK IS STARTED.

ENGINEER OF WORK

Name: Richard G. Lang, P.E.

R.C.E.: 39016 exp: 03/31/09

- 31. FIRE SPRINKLERS ARE REQUIRED ON ALL HOMES ON LOTS ______ THROUGH ______.
- 32. ALL LOTS REQUIRING FIRE SPRINKLERS MUST HAVE A MINIMUM ______ WATER METER.
- 33. IN NO CASE SHALL THE CITY BE RESPONSIBLE FOR CONSTRUCTION COSTS FOR THESE IMPROVEMENTS, INCLUDING THE UNDERGROUNDING OF EXISTING AND NEW DRY UTILITIES, OR ANY NECESSARY REPAIRS.
- 34. FIRE HYDRANTS SHALL BE AS FOLLOWS:

SAN MARCOS FIRE DEPARTMENT

Fire Marshal

RESIDENTIAL "SINGLE FAMILY DETACHED DWELLINGS" JONES 3700 OR CLOW 2050, ONE-4" AND ONE-2%" OUTLETS MULTI-FAMILY, COMMERICAL OR INDUSTRIAL, JONES 3775 OR CLOW 2065, TWO-4" AND ONE-2兆" OUTLETS.

VALLECITOS WATER DISTRICT

CARMEL STREET WATERLINE IMPROVEMENT PLANS

VALLECITOS WATER DISTRICT GENERAL NOTES

- 1. ALL WATER AND SEWER LINES SHALL BE INSTALLED ACCORDING TO THE CURRENT STANDARD SPECIFICATIONS, DRAWINGS AND APPROVED MATERAIL LIST OF THE VALLECITOS WATER DISTRICT FOR THE CONSTRUCTION OF WATER AND SEWER FACILITIES.
- 2. WATER LINES SHALL HAVE A MINIMUM COVER OF 36 INCHES. SEWER LINES SHALL HAVE A MINIMUM COVER OF 5 FEET.
- VALLECITOS WATER DISTRICT 1-760-744-0460 COX COMMUNICATION 1-800-227-2600 PACIFIC BELL 1-800-227-2600 SAN DIEGO GAS & ELECTRIC 1-800-227-2600 UNDERGROUND SERVICE ALERT 1-800-227-2600

3. CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES 48 HOURS PRIOR TO CONSTRUCTION. A VALID UNDERGROUND SERVICE ALERT TICKET SHALL BE ON FILE.

- 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL SUBSTRUCTURES, WHETHER SHOWN ON THE PLANS OR NOT, AND PROTECT THEM FROM DAMAGE. THE ACTUAL LOCATION AND DEPTH OF ALL EXISTING WATER AND SEWER LINES IS TO BE VERIFIED BY THE CONTRACTOR AND ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF WORK FOR CORRECTION AND THEN SUBMITTED TO THE DISTRICT FOR APPROVAL
- 5. NEITHER THE ENGINEER, OWNER NOR THE VALLECITOS WATER DISTRICT SHALL BE RESPONSIBLE FOR THE ENFORCEMENT OF SAFETY STANDARDS.
- 6. A PRECONSTRUCTION CONFERENCE MEETING WITH VALLECITOS WATER DISTRICT PERSONNEL SHALL BE HELD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION.
- 7. A SIGNED SET OF IMPROVEMENT PLANS DOES NOT IMPLY THAT CONSTRUCTION MAY BEGIN. THE CONTRACTOR MUST CONTACT THE VALLECITOS WATER DISTRICT ENGINEERING DEPARTMENT.
- 8. ANY PROPOSED CHANGES IN THE APPROVED IMPROVEMENT PLANS MUST BE REVIEWED AND APPROVED BY THE DISTRICT PRIOR TO THE INSTALLATION OF SUCH CHANGES AND THE CHANGES SHALL BE SHOWN ON THE IMPROVEMENT PLANS.
- 9. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MAINTAIN AT ALL TIMES ON THE JOB SITE, AN "AS-BUILT" RECORD OF ALL WATER AND SEWER MAINS AND APPURTENANCES INSTALLED UNDER HIS CONTRACT AND PROVIDE SAID RECORD TO THE ENGINEER AT THE COMPLETION OF THE CONTRACT. THE ENGINEER SHALL PROVIDE TWO (2) BLUELINE SETS OF "AS-BUILTS" TO THE DISTRICT PRIOR TO THE WATER AND SEWER SYSTEM BEING PLACED INTO SERVICE, AND A FINAL "AS-BUILT" MYLAR AS A CONDITION OF ACCEPTANCE OF THE WATER AND SEWER SYSTEM.
- 10. ALL CONTRACTORS WORKING IN THE PUBLIC RIGHTS-OF-WAY SHALL OBTAIN A SEPARATE ENCROACHMENT PERMIT OR EXCAVATION PERMIT FROM THE APPROPRIATE AGENCY. INSPECTION OF ALL WORK IS REQUIRED. FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED FOR INSPECTION. NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT-OF-WAY ON SATURDAYS, SUNDAYS OR LEGAL HOÙIDÂYS WITHOUT THE EXPRESS PERMISSION OF THE DISTRICT ENGINEER.
- 11. CONTRACTOR SHALL POTHOLE (EXCAVATE AND EXPOSE) ALL UTILTIES ALONG CONSTRUCTION EXCAVATION CORRIDOR AS SHOWN ON THE PLANS OR IDENTIFIED BY USA MARK-OUT. THE POTHOLE INFORMATION (UTILITY SIZE, TYPE, LOCATION, ELEVATION, GRADE AND ALIGNMENT) SHALL BE SUBMITTED TO VALLECITOS WATER DISTRICT PRIOR TO CONSTRUCTION. IN ADDITION, POTENTIAL CONFLICTS WITH EXISTING UTILTIIES, AS IDENTIFIED BY THE CONTRACTOR, SHALL BE SUBMITTED PRIOR TO CONSTRUCTION. CONSEQUENCES OFCONTRACTOR'S FAILURE TO POTHOLE AND PROVIDE INFORMATION TO DISTRICT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY AND LIABILITY.
- 12. A BLASTING PLAN SHALL BE SUBMITTED FOR DISTRICT APPROVAL PRIOR TO THE USE OF EXPLOSIVES NEAR DISTRICT FACILITIES.
- 13. NEW STREETS SHALL BE CONSTRUCTED TO SUB GRADE PRIOR TO INSTALLATION OF THE PUBLIC WATER OR SEWER SYSTEM.
- 14. ALL WATER LINES SHALL BE DUCTILE IRON PIPE, CLASS 350, OR AS NOTED. ALL FITTINGS ARE TO BE PUSH ON, UNLESS OTHERWISE SHOWN AND APPROVED BY THE DISTRICT ENGINEER. MAXIMUM ALLOWABLE DEFLECTION FOR DIP SHALL BE 3 DEGREES. ALL SEWER LINES SHALL BE BELL AND SPIGOT SDR35 PVC PIPE, OR AS NOTED. LATERALS MAY BE WHITE OR GREEN.
- 15. THE CONTRACTOR SHALL TEST HIS LINES AGAINST HIS OWN BLOCKING AND NOT AGAINST DISTRICT VALVES.
- 16. UPON CONNECTION OF THE NEW WATER SYSTEM TO THE EXISTING SYSTEM, ALL VALVES ON THE EXISTING AND NEW SYSTEM SHALL BE OPERATED ONLY BY DISTRICT PERSONNEL. THE DEVELOPER OR CONTRACTOR SHALL NOTIFY DISTRICT INSPECTOR IN WRITING A MINIMUM OF 6 WORKING DAYS PRIOR TO A PLANNED SHUTDOWN. ALL SHUTDOWNS REQUIRE A STATE CERTIFIED BACTERIA TEST.
- 17. UNLESS OTHERWISE SHOWN, SEWER LATERALS AND WATER SERVICES SHALL BE RUN PERPENDICULAR TO THE MAIN.
- 18. THE MINIMUM SIZE FOR WATER SERVICES SHALL BE ONE—INCH (1"), ALL WATER SERVICES SHALL BE MARKED WITH A "W" ON THE CURB AND SHALL BE SHOWN ON THE "AS-BUILT" DRAWINGS.
- 19. PRESSURE REGULATING VALVES SHALL BE INSTALLED BEFORE THE WATER METER FOR ALL INSTALLATIONS WITH GREATER THAN 150 PSI. 1" HIGH PRESSURE WATER SERVICES WILL REQUIRE A #6B METER BOX.
- 20. ALL MATERIALS SHALL UTILIZED ONLY WITHIN THE PRESSURE RATING OF THE DEVICE.
- 21. ALL SEWER LATERALS SHALL BE CONSTRUCTED TO A MINIMUM FIVE—FOOT (5') DEPTH (TO TOP OF PIPE) AT PROPERTY LINE AND SHALL BE CLEAR OF DRIVEWAYS. ALL LATERALS SHALL BE CLEARLY MARKED WITH AN "S" ON THE CURB AND SHALL BE SHOWN ON THE "AS-BUILT" DRAWINGS.
- 22. ALL ABANDONED SEWER LATERALS SHALL BE CAPPED AT THE MAIN. ALL ABANDONED WATER SERVICES SHALL BE PLUGGED OFF AT THE MAIN. AND THE CONNECTION SEVERED. BAILS AND SERVICE SADDLES OTHER THAN BRASS SHALL BE REPLACED PRIOR TO ABANDONMENT, RELOCATE EXISTING SERVICES AS DIRECTED BY THE DISTRICT ENGINEER. WATER MAIN STUBS WHICH ARE NOT USED SHALL BE ABANDONED AT THE MAIN BY REMOVING VALVE AND INSTALLING BLIND FLANGE AT TEE. SHUTDOWN OF WATER MAINS MAY BE REQUIRED DURING ABANDONMENT. ABANDONING EXISTING WATER OR SEWER MAINS SHALL CONSIST OF REMOVAL OR SLURRY FILL AS APPROVED BY THE DISTRICT.
- 23. DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ACP PIPE WHICH SHALL BE PERFORMED BY A CONTRACTOR REGISTERED BY CAL/OSHA AND CERTIFIED BY THE STATE CONTRACTORS LICENSING BOARD FOR ASBESTOS REMOVAL.
- 24. WATER SERVICES WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN FULL WITH A COPPER SERVICE PER DISTRICT SPECIFICATIONS AS DIRECTED BY THE DISTRICT. SEWER LATERALS OR WYES DAMAGED OR MODIFIED DURING CONSTRUCTION SHALL BE REPLACED IN FULL, AS DIRECTED BY THE DISTRICT.
- 25. RELOCATION OR EXTENSION OF AN EXISTING WATER METER SHALL MEAN INSTALLATION OF THE METER AT A LOCATION IN CONFORMANCE WITH DISTRICT SPECIFICATIONS AS DIRECTED BY THE DISTRICT AND PERPENDICULAR TO THE MAINLINE CONNECTION, UNLESS OTHERWISE NOTED. SERVICE LATERALS OTHER THAN COPPER SHALL BE REPLACED TO THE MAIN. BAILS AND SERVICE SADDLES OTHER THAN BRASS SHALL ALSO BE REPLACED. SHUTDOWN OF MAIN MAY BE REQUIRED.
- 26. PRIOR TO ACCEPTANCE OF ANY SEWER LINE BY THE DISTRICT, ALL MAINS SHALL BE AIR TESTED, FLUSHED CLEAN USING THE "WAYNE" BALL METHOD OR VACTOR TRUCK, AND SHALL PASS A 5% MANDREL THROUGH THE PIPE. ALL TEST WATER SHALL BE PUMPED. A VIDEO CAMERA INSPECTION OF THE SEWER MAIN SHALL BE CONDUCTED BY PRIVATE CONTRACTOR OR DISTRICT.
- 27. THE DISTRICT WILL NOT SUPPLY WATER SERVICE, EXCEPT FOR FIRE PROTECTION, TO ANY PROJECT UNTIL ALL PROVISIONS OF THE DISTRICT STANDARDS AND IMPROVEMENT PLANS HAVE BEEN MET, AND FINAL ACCEPTANCE OF THE PROJECT HAS BEEN GRANTED BY THE DISTRICT BOARD OF DIRECTORS.

GEOTECHNICAL ENGINEER'S DECLARATION:

THESE PLANS HAVE BEEN REVIEWED BY THE UNDERSIGNED RELATIVE TO GEOTECHNICAL ASPECTS OF THE PLANS AND HAVE BEEN FOUND TO BE IN CONFORMANCE WITH INTENTIONS OF THE FINDINGS AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT BY ROBERT PRATER ASSOCIATES, WM.



Date: ___

WM. DAVID HESPELER, G.E., REG. 396 REGISTRATION EXPIRES, MARCH 31, 2010

CITY APPROVED CHANGES

<u>No. | Description</u>

PERMITTEE: SITE ADDRESS: CARMEL, LLC c/o ELKINS-ZIRPOLO, INC

<u>App'd By Date</u>

CARMEL STREET RIGHT-OF-WAY BETWEEN INDUSTRIAL AVENUE & VENTURE STREET Attn: ALEXANDER ZIRPOLO CITY OF SAN MARCOS, CA 2150 FIRST AVENUE SAN DIEGO, CA 92101 (619)239 - 3434

RECOMMENDED FOR APPROVAL

_ exp.: _ 03/31/2010

Sassan Haghgoo, Deputy City Engineer

I HEREBY CERTIFY THAT A REGISTERED SOILS ENGINEER OR GEOLOGIST HAS BEEN OR WILL BE RETAINED TO SUPERVISE OVER ALL GRADING ACTIVITY AND ADVISE ON THE COMPACTION AND STABILITY OF THE SITE. ALEXANDER ZIRPOLO, MANAGING MEMBER DATE

R.C.E.: 42201

Date: _

Public Works Inspector APPROVED FOR CONSTRUCTION BENCH MARK Description: Caltrans Monument "78—12.9 1988 CDH", 2 brass disc (PT #1130 on Record of Survey 1392 Michael D. Edwards, City Engineer Location: Brass disc in sidewalk at a point 66.7' south of the $- \exp : -06/30/2010$ <u>southwest corner of the Twin Oaks Valley Road bridge over Highway 78</u> R.C.E.: 32977 Record From; Record of Survey 13928

581.91

Record of Survey 13928

Datum: Ms

SOURCE OF TOPOGRAPHIC MAPPING

LAND SURVEYING, JULY 2008.

BASIS OF BEARINGS

SYSTEM.

VWD AS-BUILT

THE PLANIMETRIC AND TOPOGRAPHIC FEATURES SHOWN HEREON WERE

12, 1998, JOB #982345, AND GROUND FIELD SURVEYS PERFORMED BY

MAPPING PREPARED BY PHOTO GEODETIC CORPORATION DATED FEBRUARY

POUNTNEY & ASSOCIATES, INC. DATED FEBRUARY 19 & 23, 1998 AND IN

MARCH OF 2000. ADDITIONAL GROUND SURVEY WAS PERFORMED BY WOODS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE

SYSTEM NAD'83, ZONE 6, AS DETERMINED LOCALLY BY THE LINE BETWEEN

CITY OF SAN MARCOS CONTROL MONUMENT "SMVCO38", (PT.#1038 ON RO

13928) AND CALIFORNIA DEPARTMENT OF TRANSPORTATION MONUMENT

"78-12.9 1988", (PT. #1130 ON ROS 13928), I.E. N87°44'19"W. SAID

BEARING AND THE BEARINGS SHOWN HEREON ARE IN TERMS OF THE

CALIFORNIA COORDINATE SYSTEM NAD'83, ZONE 6. QUOTED BEARINGS

FROM REFERENCE MAPS OR DEEDS MAY OR MAY NOT BE IN TERMS OF SAID

INSPECTED AND RECOMMENDED

FOR ACCEPTANCE

COMPILED FROM A COMBINATION OF THE AERIAL PHOTOGRAMMETRIC

WORK TO BE DONE:

THE GRADING CONSISTS OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING DOCUMENTS:) SAN DIEGO AREA REGIONAL STANDARD DRAWINGS

LEGEND

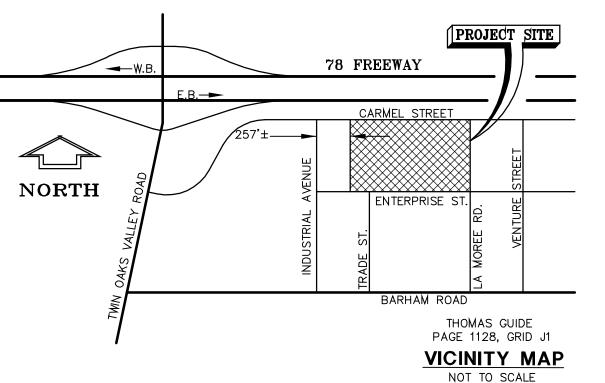
STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREEN BOOK")

) CITY OF SAN MARCOS GRADING AND EXCAVATION ORDINANCE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS) STATE OF CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

SVALLECITOS WATER DISTRICT STANDARD DRAWINGS AND SPECIFICATIONS ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION

DESCRIPTION S	TD.	DWG.	SYMBOL	QUANTITY
RIGHT OF WAY				
EXIST. WATER LINE				
EXIST. FIRE HYDRANT				
EXIST. SEWER LINE			=====S=====	
EXIST. STORM DRAIN			SD	
EXIST. GAS MAIN			— — — GAS— — —	
EXIST, CURB AND GUTTER/EDGE OF PAVEM	ENT_			
WATER LINE, DIP - CL350	_V \ D	W-17		1,441 L.F.~ 8" DIP 74 L.F.~ 6" DIP
8" DETECTOR CHECK ASSEMBLY	_V\D	W-13	DC	2 EACH
6" FIRE HYDRANT ASSEMBLY	_V \ D	W-4, W-5	▶ -⊗	2 EACH
2" WATER SERVICE CONNECTION	_ V \#D	W-7, W-19	WB	1 EACH
2" IRRIGATION SERVICE CONNECTION W/ 1½" METER + TR/PL W/BACKFLOW	_ V \#D	W-7, W-19	WB	1 EACH
CONCRETE THRUST BLOCK	_ V \\D	W-15	-	10 EACH
GATE VALVE ASSEMBLY	_V \ D	W-16	\otimes	5 EACH ~ 6" 4 EACH ~ 8"
END CAP ASSEMBLY	_ V \\D	W-16	⊣	2 EACH ~ 8
2" BLOW-OFF ASSEMBLY	_ V \\D	W-1		1 EACH
1" AUTOMATIC AIR & VACUUM VALVE	_V \ D	W-2		1 EACH
PROTECTION POST, TYPE A	_RSD	WM-4	•	4 EACH
CARMEL/VENTURE STREET TRENCH REPAIR				4,792 S.F.
CONCRETE APRON REPAIR	_RSD	G-12		37 S.F.



IMPORTANT NOTICE Section 4216 of the Government de requires that a Dig Alert Identificati Number be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number Call Underground Service Alert at Two working days before you di

PROJECT AREA:

6.26 ACRES

ASSESSOR'S PARCEL NUMBER:

220-201-01 & 02

SHEET INDEX COVER SHEET

SHEET INDEX PLAN 8" WATERLINE PLAN / PROFILE SHEET 3: 8" WATERLINE PLAN/PROFILE SHEET 4:

VALLECITOS WATER DISCTRICT POTHOLE NOTE:

CONTRACTOR SHALL POTHOLE (EXCAVATE AND EXPOSE) ALL UTILITIES ALONG CONSTRUCTION CORRIDOR AS SHOWN ON THE PLANS OR IDENTIFIED BY USA MARKOUT. THE POTHOLE INFORMATION (UTILITY SIZE, TYPE, LOCATION, ELEVATION, GRADE AND ALIGNMENT) SHALL BE SUBMITTED TO VALLECITOS WATER DISTRICT PRIOR TO CONSTRUCTION. IN ADDITION, POTENTIAL CONFLICTS WITH EXISTING UTILITIES, AS IDENTIFIED BY CONTRACTOR, SHALL BE SUBMITTED PRIOR TO CONSTRUCTION.

FAILURE TO POTHOLE AND SUBMIT REQUIRED UTILITY INFORMATION MAY RESULT IN CONTRACTOR BEING INELIGIBLE FOR PAYMENT OF EXTRA WORK NECESSARY TO REMEDY THE CONFLICT, AT SOLE DISCRETION OF DISTRICT.

CONSEQUENCES OF CONTRACTOR'S FAILURE TO POTHOLE AND PROVIDE INFORMATION TO DISTRICT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY AND LIABILITY,

DECLARATION OF ENGINEER OF WORK (VALLECITOS WATER DISTRICT): I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH

PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE SIGNATURE OF THESE PLANS BY AND THE REVIEW OF THE PLANS BY VALLECITOS WATER DISTRICT, IS A REVIEW OF GENERAL COMPLIANCE WITH DISTRICT STANDARDS. THIS APPROVAL IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OR ACCURACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH APPROVAL DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS.

RICHARD G. LANG, R.C.E. 39016 REGISTRATION EXPIRES, MARCH 31, 2009

DECLARATION OF RESPONSIBLE CHARGE (CITY OF SAN MARCOS):

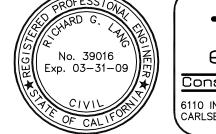
I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN MARCOS IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THIS PROJECT.

ENGINEER OF WORK:

RICHARD G. LANG. R.C.E. 39016 DATE REGISTRATION EXPIRES, MARCH 31, 2009

LANG ENGINEERING COMPANY 6110 INNOVATION WAY CARLSBAD, CA 92009 (760)692 - 1950



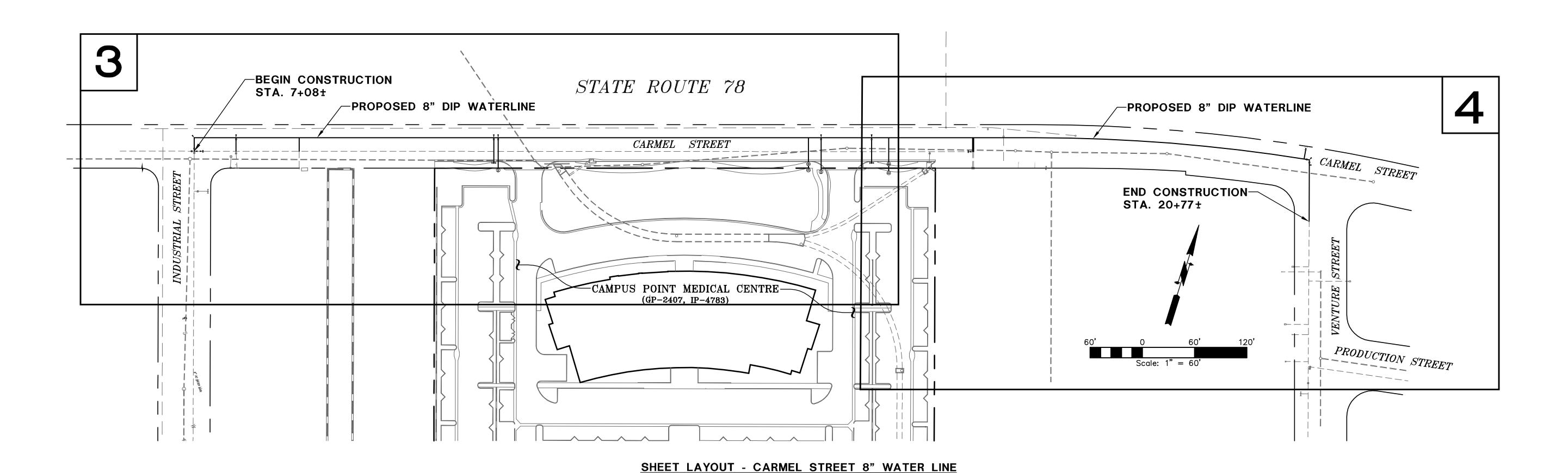
Consulting Engineers Land Planners PH(760)692-1950 10 INNOVATION WAY ARLSBAD, CALIFORNIA 92009 FAX(760)692-195 © 2008 LANG ENGINEERING COMPANY

CITY OF SAN MARCOS ENGINEERING DIVISION IMPROVEMENT PLANS FOR:

CARMEL STREET WATERLINE

Sheet **1** of **4** MAXIMO WO# 101249

City Drawing No



SCALE: 1" = 60'

POLYETHYLENE ENCASEMENT FOR DUCTILE-IRON PIPE SYSTEMS

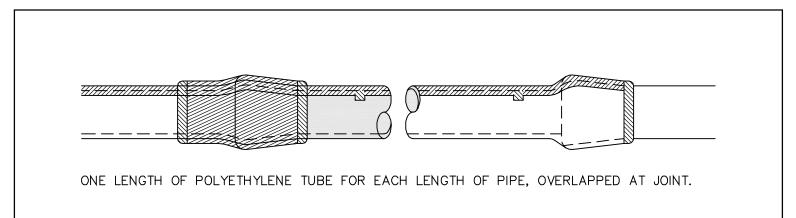


FIGURE 1, INSTALLATION METHOD A

4.3.1 INSTALLATION, GENERAL. BURIED DUCTILE-IRON PIPE, FITTINGS, VALVES, AND OTHER APPURTENANCES SHALL BE INSTALLED WITH POLYETHYLENE ENCASEMENT PER ANSI/AWWA C105/A21.5-93 STANDARD. FOR INSTALLATIONS BELOW THE WATER TABLE, USE TUBE-FORM POLYÉTHYLENE WITH BOTH ENDS SEALED AS TIGHTLY AS POSSIBLE WITH ADHESIVE TAPE OR PLASTIC TIE STRAPS AT THE JOINT OVERLAP. PLACE CIRCUMFERENTIAL WRAPS OF TAPE OR PLASTIC TIE STRAPS AT 2-FOOT INTERVALS ALONG THE BARREL OF THE PIPE TO HELP MINIMIZE THE SPACE BETWEEN THE POLYETHYLENE AND THE PIPE.

4.3.2 PIPE. METHOD OF INSTALLATION OF POLYETHYLENE ENCASEMENT ON DUCTILE-IRON PIPE SHALL BE BY METHOD A.

4.3.2.1 <u>METHOD A.</u> (REFER TO FIGURE 1.) CUT THE POLYETHYLENE TUBE TO A LENGTH APPROXIMATELY 2—FOOT LONGER THAN THE PIPE SECTION. SLIP THE TUBE AROUND THE PIPE, CENTERING IT TO PROVIDE A 1—FOOT OVERLAP ON EACH ADJACENT PIPE SECTION, AND BUNCHING IT ACCORDION-FASHION LENGTHWISE UNTIL IT CLEARS THE PIPE ENDS.

LOWER THE PIPE INTO THE TRENCH AND MAKE UP THE PIPE JOINT WITH THE PRECEDING SECTION OF PIPE. A SHALLOW BELL HOLE IS NECESSARY AND SHALL BE MADE AT JOINTS TO FACILITATE INSTALLATION OF THE

AFTER ASSEMBLING THE PIPE JOINT, MAKE THE OVERLAP OF THE POLYETHYLENE TUBE. PULL THE BUNCHED POLYETHYLENE FROM THE PRECEDING LENGTH OF PIPE, SLIP IT OVER THE END OF THE NEW LENGTH OF PIPE, AND SECURE IT IN PLACE. THE SLIP THE END OF THE POLYETHYLENE FROM THE NEW PIPE SECTION OVER THE END OF THE FIRST, WRAP UNTIL IT OVERLAPS THE JOINT AT THE END OF THE PRECEDING LENGTH OF PIPE. SECURE THE OVERLAP IN PLACE. TAKE UP THE SLACK WIDTH AT THE TOP OF THE PIPE AS SHOWN IN FIGURE 1 TO MAKE A SNUG BUT NOT TIGHT FIT ALONG THE BARREL OF THE PIPE, SECURING THE FOLD AT QUARTER POINTS.

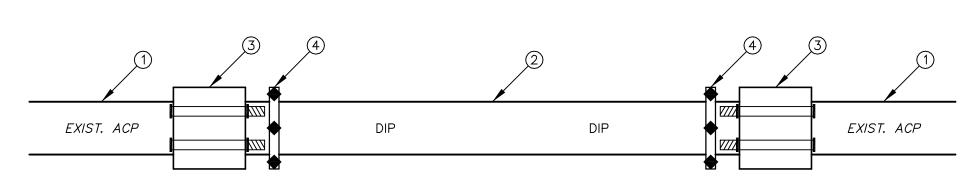
CUTS, TEARS, PUNCTURES OR OTHER DAMAGE TO THE POLYETHYLENE SHALL BE REPAIRED AS DESCRIBED IN SECTION 4.3.5. PROCEED WITH THE INSTALLATION OF THE NEXT SECTION OF PIPE IN THE SAME MANNER.

4.3.5. <u>REPAIRS</u>. REPAIR CUTS, TEARS, PUNCTURES, OR DAMAGE TO POLYETHYLENE WITH ADHESIVE TAPE OR WITH A SHORT LENGTH OF POLYETHYLENE SHEET OR A TUBE CUT OPEN, WRAPPED AROUND THE PIPE TO OVER THE DAMAGED AREA, AND SECURE IN PLACE.

CONNECTION TO ASBESTOS CEMENT PIPE (ACP)

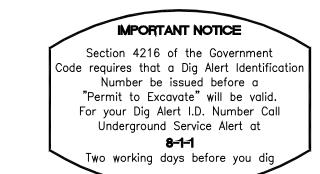
- 1. CONTRACTOR SHALL POTHOLE EXISTING ACP WATER MAIN TO DETERMINE EXACT LOCATION, DIMENSIONS, ELEVATION, AND ORIENTATION OF WATER MAIN INCLUDING LOCATIONS OF EXISTING PIPE JOINTS.
- 2. HOT TAPS OF EXISTING ACP PIPE WILL NOT BE ALLOWED FOR SIZE ON SIZE CONNECTIONS, EXISTING ACP PIPE SHALL BE REMOVED TO NEAREST JOINT. INSTALL NEW TEE, GATE VALVE & THRUST BLOCK.
- 3. TAPPED CONNECTIONS SHALL NOT BE CLOSER THAN 24" (EDGE TO EDGE) TO AN EXISTING PIPE FITTING OR
- 4. HOT TAP CONNECTION TO EXISTING ACP WATER MAIN SHALL BE COORDINATED WITH VALLECITOS WATER DISTRICT. CONTRACTOR SHALL PROVIDE A MINIMUM TWO WEEK NOTICE TO VALLECITOS WATER DISTRICT PRIOR
- 5. VALLECITOS WATER DISTRICT RESERVES THE RIGHT TO SELECT THE HOURS OF THE DAY AND DAY OF THE WEEK DURING WHICH THE CONNECTION WILL BE MADE.
- 6. HOT TAP CONNECTIONS FOR FIRE HYDRANTS AND DETECTOR CHECK ASSEMBLIES SHALL INCLUDE 6" TAPPING GATE VALVE, TEE & THRUST BLOCK PER VWD STANDARD DRAWING W-16.
- 7. REMOVAL OF ACP PIPE SHALL BE PERFORMED BY A CONTRACTOR REGISTERED BY CAL/OSHA AND CERTIFIED BY THE STATE CONTRACTORS LICENSING BOARD FOR ASBESTOS REMOVAL.

STANDARD CLOSURE DETAIL



<u>LEGEND:</u>

- 1. ACP (NOTE: CONNECTION TO BE MADE AT NEAREST MACHINED END)
- 2, DIP
- 3. FLEX COUPLING (PER VWD STANDARDS AND MATERIALS LIST) (NOTE: CONNECTION TO BE MADE AT NEAREST MACHINED END)
- 4. MEGA-LUG/UNI-FLANGE RESTRAINING GLAND







	R.C.E.: exp.: Date:
APPROVAL	APPROVED FOR CONSTRUCTION
	Bv:
ity Engineer 03/31/2010	By:

Date: _

VWD AS-BUILT

__ exp.: __06/30/2010

BENCH MARK Description: Caltrans Monument "78-12.9 1988 CDH", 2 1 Location: Brass disc (PT #1130 on Record of Survey 13928)

Location: Brass disc in sidewalk at a point 66.7' south of the southwest corner of the Twin Oaks Valley Road bridge over Highway 78

Record From: Record of Survey 13928

Elev.: _581.91' Datum: _MSL

CITY OF SAN MARCOS ENGINEERING DIVISION IMPROVEMENT PLANS FOR:

CARMEL STREET WATERLINE

Sheet 2 of 4 MAXIMO WO# 101249

City Drawing No.

SAN MARCOS FIRE DEPARTMENT	VALLECITOS WATER DISTRICT	ENGINEER OF WORK	CITY APPROVED CHANGES	RECOMMENDED FOR APPROVAL
Fire Marshal Pate:	By:	By:Date: Name: <u>Richard G. Lang, P.E.</u> R.C.E.: <u>39016</u> exp: <u>03/31/09</u>	No. Description App'd By Date	By:

