GENERAL CONSTRUCTION NOTES

1. BEFORE STARTING ANY WORK ON THIS PROJECT, THE CONTRACTOR SHALL:

   A) HAVE SUBMITTED, IN SEXTUPLET, A WRITTEN LISTING OF ALL MATERIAL ITEMS TO BE FURNISHED TO AND/OR INSTALLED ON THE PROJECT, TO THE ENGINEER AND POSSESS A RETURNED COPY OF SUCH MARKED "APPROVED" FOR THIS PROJECT BY THE ENGINEER.

   B) HAVE SUBMITTED TO THE ENGINEER PROOF THAT THE AGENCY IS NAMED INSURED BY THE CONTRACTOR'S INSURERS IN ACCORDANCE WITH THE GENERAL PROVISIONS OF THE SPECIFICATIONS.

   C) HAVE GIVEN THE ENGINEER THE TELEPHONE NUMBER, BUSINESS OR HOME ADDRESS AND MAILING ADDRESS AND NAMES OF THE PERSONS WHO CAN BE CONTACTED IN THE EVENT OF AN EMERGENCY OCCURRENCE ON THE PROJECT DURING THE TIME THE WORK IS IN PROGRESS, 24 HOURS PER DAY, 7 DAYS PER WEEK.

   D) HAVE GIVEN THE ENGINEER 2 DAYS IN ADVANCE OF START OF WORK, NOTICE, IN WRITING, OF THE TIME OF START OF WORK.

2. IT IS RECOMMENDED THAT THE DEVELOPER CHECK THIS PLAN WITH HIS PLANS BEFORE COMMENCING CONSTRUCTION OF THE WATER SYSTEM. THE WATER DISTRIBUTION SYSTEM PLAN FOR THIS PROJECT WAS PREPARED BY THE DEVELOPER'S ENGINEER. THE ACCURACY OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT SHOWN ON THESE PLANS DOES NOT CONSTITUTE A GUARANTEE AS TO THEIR LOCATION BY THE AGENCY. NEW PAVING, CURBS, AND SIDEWALKS INDICATED ON THESE DRAWINGS ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR FOR THE WATER SYSTEM SHOULD VERIFY THE LOCATION AND THE PROPOSED SCHEDULING OF THE NEW PAVING, WORK BEFORE HE PROCEEDS.

3. ALL WATER SYSTEM MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE REQUIREMENTS OF THE DISTRICT THESE PLANS AND THIS LIST OF MATERIALS HAVE BEEN DETAILED FOR USE OF DUCTILE IRON, CEMENT MORTAR LINED FITTINGS AND APPURTENANCES OR STEEL CEMENT MORTAR LINED AND COATED APPURTENANCES AS SHOWN. THE CONTRACTOR'S MATERIAL LISTING APPROVED BY THE ENGINEER SHALL BE IN THE CONTRACTORS POSSESSION PRIOR TO HIS PURCHASE OR FABRICATION OF SUCH MATERIALS. DUCTILE IRON FITTINGS SHALL BE MINIMUM PRESSURE RATED 350 P.S.I., STEEL FITTINGS SHALL BE MINIMUM SCHEDULE 40. ALL VALVES SHALL BE DESIGNED FOR A MINIMUM WORKING PRESSURE OF 200 P.S.I. CONTRACTOR SHALL APPLY TWO COATS OF HEAVY DUTY RED PRIMER AND TWO FINISH COATS OF PAINT TO FIRE HYDRANTS AND FLUSHOUTS, AS SPECIFIED IN THE APPLICABLE STANDARD DRAWINGS.

4. ALL WORK IS SUBJECT TO THE REQUIREMENTS OF THE PERMIT(S) OF THE CITY OF PALMDALE REGARDING BARRICADES, TRAFFIC CONTROL, BACKFILL COMPACTION, PAVEMENT REPAIRS, ETC.

5. ALL SURVEYING SERVICES ARE TO BE FURNISHED BY THE DEVELOPERS ENGINEER.

6. ALL 4" AND 6" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 36"; 8" AND 10" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 42"; 12" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 48"; AND ALL SERVICE CONNECTIONS SHALL HAVE A MINIMUM COVER OF 24" MEASURED VERTICALLY FROM TOP OF SERVICE CONNECTION TO APPROVED GUTTER SURFACE FLOW LINE CROSSED BY THE SERVICE CONNECTION. WHERE CONSTRUCTION OF PERMANENT GUTTER SURFACES IS NOT COMPLETE OR ESTABLISHED ADJACENT TO THE WATER MAIN WORK, WATER MAINS SHALL BE CONSTRUCTED WITH THE MINIMUM REQUIRED COVER MEASURED FROM THE PROPOSED ADJACENT FLOW LINES.

7. EARTH COVER OVER TOP OF THE PIPE AT FITTING IS CONTROLLED BY LARGEST PIPE OUTLET.

8. ALL SERVICE CONNECTIONS SHALL BE INSTALLED FROM THE MAIN IN THE STREET FROM WHICH THE HOUSE IS NUMBERED AND INSTALLED AT RIGHT ANGLES TO THE WATER MAIN AND AS CLOSE AS POSSIBLE TO THE CENTER OF THE LOT, BUT NO CLOSER THAN 10' TO ANY DRIVEWAY, WALKWAY, CURB RETURN, OR OTHER UTILITY UNLESS NOTED OTHERWISE ON THE PLANS. WATER METER BOXES AND SERVICE CONNECTIONS SHALL BE INSTALLED BETWEEN THE BACK OF CURB AND PROPERTY LINE PER STANDARD W-5 OR W-7, AS APPLICABLE. METERS SHALL BE INSTALLED BY THE CONTRACTOR AFTER:

   A) AN APPLICATION FOR EACH METER HAS BEEN SUBMITTED TO THE AGENCY.

   B) ALL APPLICABLE CHARGES HAVE BEEN PAID.

   C) THE CONTRACTOR HAS BROUGHT THE WATER METER BOXES AND SERVICE CONNECTIONS TO FINISHED CURB AND SIDEWALK GRADE.

9. IT SHALL BE THE DEVELOPERS DUTY TO CAUSE THE SEWER OR LATERALS TO MEET THE REQUIREMENTS OF STANDARD 2100-0 OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS AND WATERWORKS DISTRICT STANDARD W-50.

10. PROPOSED UTILITY INFORMATION, AND LOCATIONS SHOWN ON THIS PLAN ARE SUBJECT TO CONTRACTUAL ARRANGEMENTS WITH THE DEVELOPER. CONTRACTOR SHALL CHECK THIS INFORMATION WITH THE APPROPRIATE UTILITY COMPANY.

11. FIRE HYDRANT RISERS SHALL BE INSTALLED AS SHOWN IN THE APPLICABLE DISTRICT STANDARD DRAWINGS. ANY NECESSARY ADJUSTMENT OF FIRE HYDRANT FLANGE ELEVATION SHALL BE PERFORMED AT DEVELOPERS EXPENSE AT TIME FINAL FINISH GRADE IS DEVELOPED.

12. ALL NEW WORK SHALL BE TESTED VALVE TO VALVE AT 200 P.S.I. FOR FOUR HOURS, UNLESS OTHERWISE SPECIFIED. PRESSURE TESTING SHALL NOT BE CONDUCTED AGAINST ANY NEW OR EXISTING VALVE THAT IS CONNECTED TO THE DISTRICT'S EXISTING DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL DESIGN, FURNISH AND INSTALL ANY NECESSARY THRUST BLOCKS IN ACCORDANCE WITH STANDARD W-21, OR AS SHOWN ON THESE PLANS.

13. DISINFECTION: CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO ASSURE SANITARY INSTALLATION. HE SHALL ENDEAVOR TO KEEP ALL DIRT, RODENTS, INSECTS, ETC. AWAY FROM WATERWAY SURFACES. ISOLATION VALVES SHALL BE KEPT CLOSED (EXCEPT DURING FILLING AND FLUSHING, WHEN VALVES SHALL BE OPERATED SO AS TO ASSURE FLOW TOWARD NEW DISCHARGE) AND LEFT CLOSED AT ALL OTHER TIMES UNTIL AFTER PRESSURE TEST, DISINFECTION, FLUSHING AND BACTERIAL TEST HAS BEEN PASSED. CONTRACTOR SHALL NOTIFY AGENCY AT LEAST 24 HOURS IN ADVANCE OF ANY OPERATION OF ISOLATION VALVES WHICH SHALL BE OPERATED ONLY BY AGENCY PERSONNEL. AGENCY WILL ARRANGE FOR BACTERIOLOGICAL TEST SAMPLING OF WATER MAINS UPON NOTIFICATION BY CONTRACTOR. AGENCY WILL ALSO ARRANGE FOR CONCURRENT BACTERIOLOGICAL TEST SAMPLING OF SUPPLY.

14. IF THE DEVELOPER DESIRES TEMPORARY WATER SERVICE FOR CONSTRUCTION AND TO OPERATE HOUSE PLUMBING PRIOR TO INSTALLATION OF PERMANENT WATER METER BY CONTRACTOR, THE DEVELOPER SHALL APPLY FOR INSTALLATION, BY THE DISTRICT, OF TEMPORARY CONSTRUCTION METERS(S) OFF FIRE HYDRANTS OR FLUSHOUTS. THE ISSUANCE OF TEMPORARY CONSTRUCTION METER(S) DURING THE SUMMER MONTHS MAY BE RESTRICTED BASED ON AVAILABLE WATER SUPPLY.

15. INTERCONNECTIONS: CONTRACTOR SHALL NOTIFY THE AGENCY, IN WRITING, TWO WORKING DAYS IN ADVANCE THAT HE IS PREPARED WITH ALL LABOR, MATERIAL, EQUIPMENT, AND NECESSARY PRELIMINARY WORK TO MAKE THE CONNECTION. THE AGENCY WILL MARK ON THE SURFACE THE DISTRICTS EXISTING FACILITIES, AND WILL PROVIDE SUPERVISION ONLY FOR CONTRACTOR TO MAKE INSTALLATION. THE CONTRACTOR SHALL EXCAVATE, INSTALL CONNECTIONS, BACKFILL AND REPAIR ANY DAMAGES AT HIS EXPENSE.

16. ANY MATERIAL SALVAGED FROM THE EXISTING WATER SYSTEM BY THE CONTRACTOR SHALL BE RETURNED BY THE CONTRACTOR TO THE AGENCY (260 EAST AVENUE K-8, LANCASTER), UNLESS SUCH MATERIAL IS DETERMINED BY THE ENGINEER TO BE EQUIVALENT TO NEW MATERIAL REQUIRED FOR THIS WORK, IN WHICH CASE THE CONTRACTOR WILL BE ALLOWED TO USE SUCH EQUIVALENT SALVAGED MATERIAL IN PLACE OF NEW MATERIAL. CONTRACTOR SHALL RECOAT, REPAINT, REWORK, CLEAN AND TEST SUCH MATERIAL TO THE SATISFACTION OF THE ENGINEER BEFORE INSTALLING CONTRACTOR SHALL RECOAT, REPAINT, REWORK, CLEAN AND TEST SUCH MATERIAL TO THE SATISFACTION OF THE ENGINEER BEFORE INSTALLING SAME.

17. PIPE LENGTHS IN ENGINEER'S "ESTIMATED" QUANTITIES WERE CALCULATED ON A HORIZONTAL OFFSET. PIPE LENGTHS ADJUSTMENT FOR JOGS, SLOPES, VALVES, AND FITTINGS HAS NOT BEEN MADE.

18. CONTRACTOR SHALL MAKE ARRANGEMENTS TO ADJUST VALVE BOXES, FIRE HYDRANT FLANGES, METER BOXES, VAULTS, ETC. TO SUBDIVISION FINISH GRADE AT TIMES WHEN FINISH GRADES ARE ESTABLISHED BY OTHERS AT NO COST TO AGENCY.

19. CONTRACTOR SHALL NOT UNREASONABLY RESTRICT THE USE OF PUBLIC RIGHT-OF-WAY OR ACCESS TO ADJACENT PREMISES.

20. IN ADDITION TO ITEMS IN LIST OF MATERIALS, CONTRACTOR SHALL FURNISH ALL NECESSARY ADAPTORS, COUPLINGS, BOLTS, GASKETS, CAULKING MATERIALS, AND REPAVING MATERIALS AS REQUIRED TO COMPLETE THE WORK.

21. BEFORE BACKFILLING TRENCH, ALL EXPOSED UNDERGROUND METAL SURFACES, UNLESS NOTED OTHERWISE OR SPECIFIED ELSEWHERE IN THE PLANS AND SPECIFICATIONS. SHALL BE COATED WITH A 2-INCH MINIMUM THICKNESS OF 1,000 LB. CEMENT MORTAR. [THREE (3) PARTS SAND TO ONE (1) PART PORTLAND CEMENT TO ONE (1) PART LIME.]

22. CLEARANCE: (EXCEPT SEWERS, SEE NOTE 9)
    UNLESS NOTED OTHERWISE IN THE PLANS AND SPECIFICATIONS, IT SHALL BE THE DEVELOPERS DUTY TO ARRANGE ALL OTHER EXISTING OR PROPOSED PROJECT IMPROVEMENTS INCLUDING ALL UNDERGROUND STRUCTURES AND UTILITY LINES TO PROPERLY CLEAR WATER PIPE AS SPECIFIED BELOW

    (A) HORIZONTAL : 48 - INCHES OUTSIDE - TO - OUTSIDE FROM STORM DRAINS; 24 - INCHES OUTSIDE - TO - OUTSIDE FROM ALL OTHER;

    (B) VERTICAL : 12 - INCHES OUTSIDE - TO OUTSIDE

23. THE CONTRACTOR IS TO NOTIFY THE AGENCY, TELEPHONE (661-940-9270, LANCASTER), AT LEAST THREE (3) WORKING DAYS BEFORE STARTING ANY WORK ON THIS PROJECT.

24. THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, CLASS, PROTECTIVE LINING AND COATING, AND DEPTH OF THE EXISTING WATER MAIN AND SHALL BE RESPONSIBLE FOR MAKING THE PROPER CONNECTIONS.

GENERAL CONSTRUCTION NOTES (CONT.)

25. THE DEVELOPER MUST PROCEED WITH, AND COMPLETE, THE REQUIRED WATER SYSTEM IMPROVEMENTS WITHIN ONE YEAR OF THE DATE OF THE DISTRICT APPROVAL OF THE PLANS. AFTER THE 12 - MONTH PERIOD, THE DISTRICT REQUIREMENTS ARE SUBJECT TO CHANGE. IF NO IMPROVEMENTS HAVE COMMENCED WITHIN A 24-MONTH PERIOD FROM APPROVAL DATE, THE PLANS MUST BE RE-ISSUED BY THE DISTRICT.

26. METERED WATER SERVICE CONNECTIONS MAY ONLY BE INSTALLED AFTER RECEIPT AND PROCESSING OF WATER SERVICE APPLICATION BY THE AGENCY AND PAYMENT OF APPLICABLE CHARGES. IF SERVICES ARE NOT TO BE INSTALLED PER THIS PLAN, SEPARATE SPECIFICATIONS WILL THEN BE ISSUED BY THE AGENCY THEREFOR.

27. WHERE PUBLIC FIRE HYDRANTS ARE INSTALLED OR UPGRADED, THE CONTRACTOR SHALL INSTALL A TWO-WAY BLUE REFLECTIVE RAISED PAVEMENT MARKER, ALSO COMMONLY CALLED "BLUE DOTS". REFLECTORS SHALL COMPLY AND BE INSTALLED PER SECTION 214- "PAVEMENT MARKERS" OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. ONE MARKER SHALL BE INSTALLED PERPENDICULARLY OPPOSITE EACH HYDRANT, APPROXIMATELY 6 INCHES OFFSET FROM THE CENTERLINE OF THE STREET ON THE HYDRANT SIDE OF THE STREET. (TWO MARKERS SHALL BE REQUIRED IN THE CITY OF LANCASTER).

28. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, PIPES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL ASCERTAIN THE TRUE LOCATION OF ANY UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES, SHOWN OR NOT SHOWN HEREON. IT IS ALSO SUGGESTED THAT THE CONTRACTOR POTHOLE THE AREA PRIOR TO INSTALLATION TO MAKE SURE CONNECTIONS AND CROSSINGS CAN BE MADE ACCORDING TO PLAN. ANY CHANGES TO THE PLANS MUST BE APPROVED BY THE ENGINEER.

29. ASBESTOS CEMENT PIPE SHALL BE CUT IN ACCORDANCE WITH CAL-OSHA STANDARDS AND THE LAWS OF THE STATE OF CALIFORNIA, ABRASIVE SAWS FOR CUTTING THIS PIPE SHALL NOT BE USED. ALL ASBESTOS RESIDUE SHALL BE REMOVED FROM THE JOB SITE AND DISPOSED IN ACCORDANCE TO STATE LAW. THE CONTRACTOR WORKING WITH ASBESTOS MATERIALS MUST HAVE REGISTRATION FOR THIS WORK FROM CAL-OSHA.

30. CONTRACTOR SHALL POSSESS A VALID "A", "C-34", OR "SC-34" CONTRACTORS LICENSE.

31. A DISTRICT APPROVED BACKFLOW PREVENTION ASSEMBLY, OF THE TYPE SPECIFIED, IS REQUIRED WHEN POTENTIAL BACKFLOW HAZARDS TO THE DISTRICT'S WATER SUPPLY EXIST. THE APPROVED ASSEMBLY SHALL BE INSTALLED ABOVE GROUND DIRECTLY AFTER THE METER. NO CONNECTIONS ARE ALLOWED BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. WATER SERVICE SHALL BE CONTINGENT UPON TESTING AND CERTIFICATION OF THE ASSEMBLY BY A LOS ANGELES COUNTY CERTIFIED BACKFLOW TESTER. SUBSEQUENT TO THE INITIAL CERTIFICATION, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR SUBMITTING AN ANNUAL TEST CERTIFICATION TO THE DISTRICT. ALL TESTING PROCEDURES AND CERTIFICATIONS SHALL BE CONDUCTED AT OWNER'S EXPENSE.

32. ALL BURIED PIPING, INCLUDING MAINS, HYDRANT LATERALS, FLUSHOUT LATERALS, AIR RELEASE VALVE LATERALS, AND OTHER APPURTENANCES SHALL BE INSTALLED WITH FACILITY IDENTIFICATION WARNING TAPE (SEE SPECIFICATIONS).

STATISTICS

NUMBER OF LOTS	1
NUMBER OF ACRES	0.86
LANDSCAPE / IRRIGATION AREA SQ. FT / ACRES	N/A
FEET OF WATERMAIN	645±
PUBLIC FIRE FLOW, G.P.M. @ 20 PSI RESIDUAL *	2625
DURATION OF PUBLIC FIRE FLOW, HOURS *	2
ON-SITE FIRE FLOW, G.P.M. *	N/A
FIRE SPRINKLER DEMAND, G.P.M. *	650

* SUBJECT TO FIRE DEPARTMENT APPROVAL

HWL OF PRESSURE ZONE	2555
DISTRIBUTION SHEET	I-05W

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND ANY DISCREPANCY BETWEEN THE PLANS SHALL BY BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER 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 OR THE ENGINEER.

BARRY S. MUNZ R.C.E

UNDERGROUND SERVICE ALERT

811 Know what's **below.** **Call** before you dig.

TWO (2) WORKING DAYS BEFORE YOU DIG

ARTICLE 2, SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER CALL UNDERGROUND SERVICE ALERT AT THE NUMBER ABOVE.

LIST OF MATERIALS

ITEM NO.	DESCRIPTION	ENGINEER'S "ESTIMATED" QUANTITIES								
		SHEET NUMBER							TOTAL	UNIT
		W2	W3							
1	12" I.D. DI WATERMAIN, CL-50 (0.31") CML & POLY WRAPPED	600±	–	–	–	–	–	–	600±	L.F.
2	10" I.D. DI SPOOL, CL-50 (0.29") CML & POLY WRAPPED (LENGTH AS REQUIRED)	2	–	–	–	–	–	–	2	EA.
3	6" I.D. DI SPOOL, CL-50 (0.25") CML & POLY WRAPPED (LENGTH AS REQUIRED)	1	–	–	–	–	–	–	1	EA.
4	TEE, 12"x 6", DI, PR 350, FLG'D. (CL-125) CML & POLY WRAPPED	4	–	–	–	–	–	–	4	EA.
5	TEE, 10", DI, PR 350, FLG'D. (CL-125) CML & POLY WRAPPED	1	–	–	–	–	–	–	1	EA.
6	ELBOW, 6", 90°, DI, PR 350, FLG'D. (CL-125) CML & POLY WRAPPED	1	–	–	–	–	–	–	1	EA.
7	REDUCER, 12" x 10", DI, PR 350, FLG'D. (CL-125) CML & POLY WRAPPED	1	–	–	–	–	–	–	1	EA.
8	REDUCER, 12" x 6", DI, PR 350, FLG'D. (CL-125) CML & POLY WRAPPED	1	–	–	–	–	–	–	1	EA.
9	VALVE, 10" GATE, 200 PSI WWP, NRS FLANGED ENDS (CL-125) W/ ADJUSTABLE VALVE BOX (PER STD. PLAN W-15)	1	–	–	–	–	–	–	1	EA.
10	VALVE, 6" GATE, 200 PSI WWP, NRS FLANGED ENDS (CL-125) W/ ADJUSTABLE VALVE BOX (PER STD. PLAN W-15)	4	–	–	–	–	–	–	4	EA.
11	COUPLING ADAPTER, 10", A.C. TO DI, EPOXY LINED AND POLY WRAPPED	2	–	–	–	–	–	–	2	EA.
12	COUPLING ADAPTER, 6", A.C. TO DI, EPOXY LINED AND POLY WRAPPED	1	–	–	–	–	–	–	1	EA.
13	6"x 4"x 2 1/2" FIRE HYDRANT COMPLETE PER LACWD STD. PLAN W-8	2	–	–	–	–	–	–	2	EA.
14	6" REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY (W/ 2" BYPASS METER & BALL VALVES) COMPLETE PER LACWD STD. PLAN W-8. (NOTE: ALL ABOVE GROUND PIPING/PARTS TO BE INSULATED.)	2	–	–	–	–	–	–	2	EA.
15	2" WATER SERVICE CONNECTION & 1 1/2" METER W/AMR/AMI COMPATIBLE & RP BACKFLOW DEVICE PER LACWD STD. PLAN W-5. (SEE GENERAL NOTES 8, 26 & 31).	2	–	–	–	–	–	–	2	EA.
16	P.C.C. THRUST BLOCK PER LACWD STD. PLAN W-21, AS REQUIRED EVEN IF NOT SHOWN	AS REQUIRED (EVEN IF NOT SHOWN)								
17	TEMPORARY 6" BLIND FLANGE, DI PR 350, CL-125, EPOXY COATED	–	1	–	–	–	–	–	1	EA.
18	6 5/8" O.D. STL. SPOOL, 10 GA. MIN., CML & POLY WRAPPED (LENGTH AS REQUIRED)	–	16	–	–	–	–	–	1	EA.
19	ELBOW, 6", 90°, STEEL, SCH. 40, FLG'D. (CL-125) CML & POLY WRAPPED	–	4	–	–	–	–	–	1	EA.
20	ELBOW, 6", 45°, STEEL, SCH. 40, FLG'D. (CL-125) CML & POLY WRAPPED	–	8	–	–	–	–	–	1	EA.
21	ELBOW, 6", 45°, STEEL, SCH. 40, WELD END, CML & POLY WRAPPED	–	8	–	–	–	–	–	1	EA.
22	SLIP-ON WELD FLANGE, 6", CL-125	–	16	–	–	–	–	–	1	EA.

CONDUCT OF CONSTRUCTION

THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED WORK AND ENGINEER'S RIGHT TO INSPECT OR SUSPEND THE WORK IS LIMITED THERETO. THE ENGINEER WILL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE ENGINEER WILL NOT BE RESPONSIBLE FOR OR HAVE CONTROL OR CHARGE OVER THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OF THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.

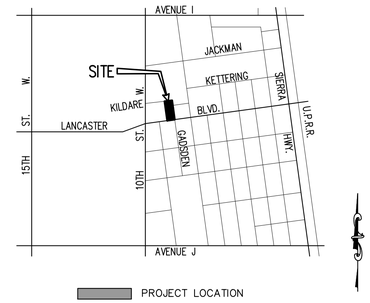
LEGEND

WATER IMPROVEMENTS

- WATER MAIN
- RECYCLED WATER (RW)
- GATE VALVE
- BUTTERFLY VALVE
- REDUCER
- TEE
- ELBOW
- FLUSH OUT: 4"x2~8" COMPLETE
- AIR & VACUUM RELEASE VALVE COMPLETE
- PUMP WELL
- FIRE HYDRANT
- COUPLING ADAPTER

EXISTING UTILITIES AND STREET IMPROVEMENTS

- SEWER AND MANHOLE (S)
- STORM DRAIN (SD)
- GAS LINE (G)
- TELEPHONE (T)
- STREET CENTER LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- A.C. PAVEMENT
- CURB, GUTTER, & SIDEWALK
- STREET LIGHT
- POWER POLE
- EXISTING RECYCLED WATER MAIN (RW)
- EXISTING DOMESTIC WATER MAIN (W)
- EXISTING VALVE
- EXISTING SERVICE AND METER
- EXISTING FLUSH OUT
- EXISTING AIR & VACUUM RELEASE VALVE
- EXISTING FIRE HYDRANT



PROJECT LOCATION

VICINITY MAP

N.T.S.
T.G. PAGE 4105/J2
A.P.N. 3126-031-037

BENCH MARK: L 5749
ELEV. 2329.743

L&T N DPW TAG IN N CB 6.6 FT E/O BCR @ NE COR AVE I & 10TH ST W 85.3 FT E/O AND 57.7 FT N/O C/L INT

LANCASTER QUAD (2012 ADJUSTMENT)
NAVD 88 DATUM

NO.	DATE	REVISION	SUBMT BY	APPV'D BY

REGISTERED PROFESSIONAL ENGINEER — BARRY S. MUNZ — C44094 EXP. 6-30-19 — CIVIL — STATE OF CALIFORNIA

PLANS PREPARED BY: AVE J.N. 17149
ANTELOPE VALLEY ENGINEERING INC.
129 W. PONDERA ST.
LANCASTER, CA 93534
(661) 948-0805

PRELIMINARY-FOR REVIEW PURPOSES ONLY

BARRY S. MUNZ R.C.E. 44094
EXPIRATION DATE: 6/30/2019

DWG NAME: 17149_W1 *PLOT: 2/13/18*

REVIEWED FOR COMPLIANCE WITH DISTRICT REQUIREMENTS

LACWD — LOS ANGELES COUNTY WATERWORKS DISTRICTS
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

FOR DISTRICT USE ONLY	PLAN CHECKED	T.V.	UNIT HD. APPR.

APPROVED BY:

ASSISTANT DEPUTY DIRECTOR DATE

LOS ANGELES COUNTY
WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY
SPEC. NO. WWD 4-____(PC)

DEVELOPER: BLVD RENUAL, LP
6265 VARIEL AVENUE
WOODLAND HILLS, CA 91367

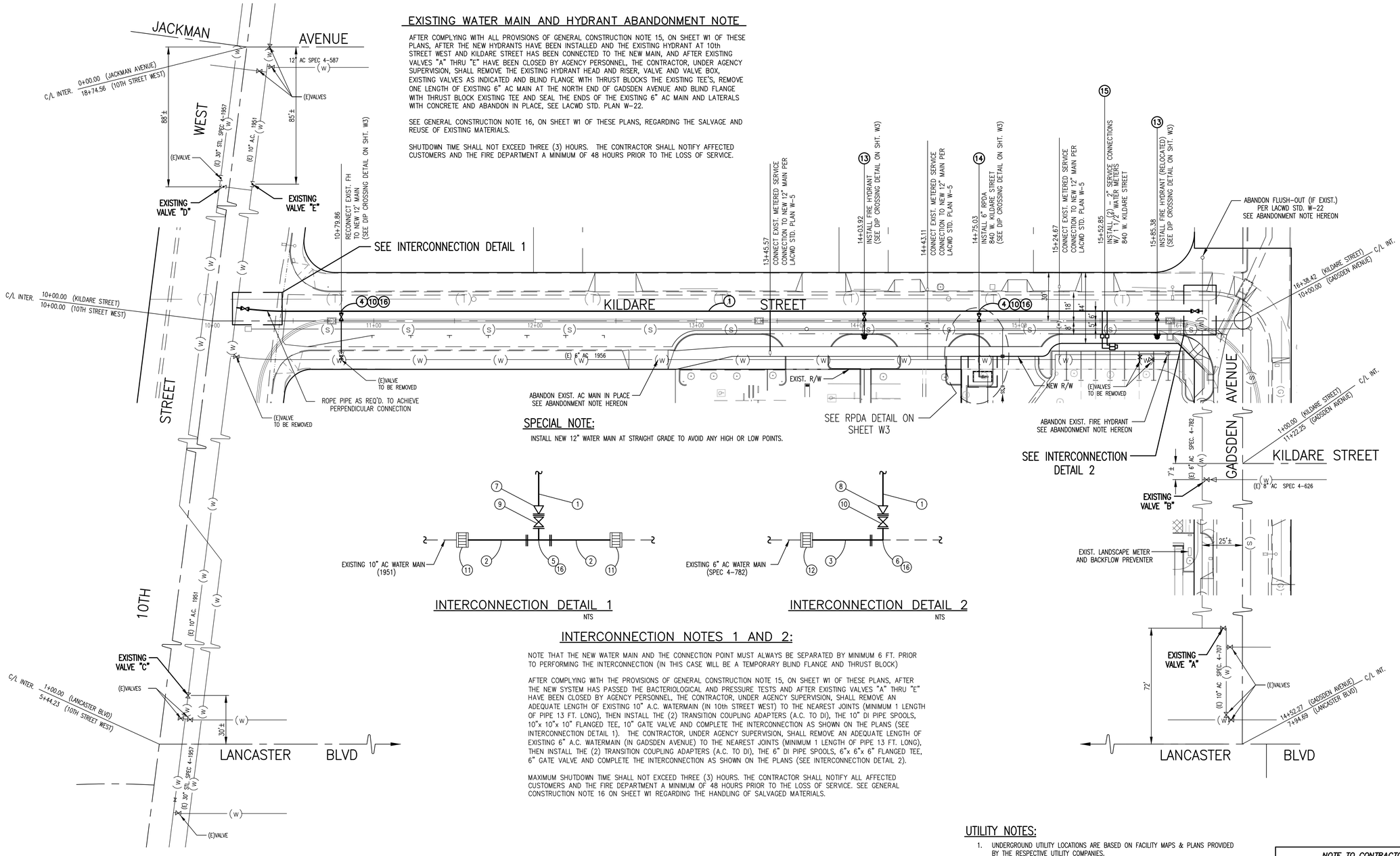
IMPROVEMENTS: WATERMAIN, HYDRANT AND 6" RPDA IMPROVEMENTS

LOCATION: 840 W. KILDARE STREET
LANCASTER, CA 93534

JOB NO. Y
INQUIRY NO. I-____-__
DWG. NO. 4-____.PC-2

SHEET W1 OF 3 SHEETS

Kneiford F:\PROJECTS\17149\DWG\17149 Off-Site Water.dwg Mon, Apr 16 2018 03:42:35 pm



EXISTING WATER MAIN AND HYDRANT ABANDONMENT NOTE

AFTER COMPLYING WITH ALL PROVISIONS OF GENERAL CONSTRUCTION NOTE 15, ON SHEET W1 OF THESE PLANS, AFTER THE NEW HYDRANTS HAVE BEEN INSTALLED AND THE EXISTING HYDRANT AT 10th STREET WEST AND KILDARE STREET HAS BEEN CONNECTED TO THE NEW MAIN, AND AFTER EXISTING VALVES "A" THRU "E" HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY SUPERVISION, SHALL REMOVE THE EXISTING HYDRANT HEAD AND RISER, VALVE AND VALVE BOX, EXISTING VALVES AS INDICATED AND BLIND FLANGE WITH THRUST BLOCKS THE EXISTING TEE'S, REMOVE ONE LENGTH OF EXISTING 6" AC MAIN AT THE NORTH END OF GADSDEN AVENUE AND BLIND FLANGE WITH THRUST BLOCK EXISTING TEE AND SEAL THE ENDS OF THE EXISTING 6" AC MAIN AND LATERALS WITH CONCRETE AND ABANDON IN PLACE, SEE LACWD STD. PLAN W-22.

SEE GENERAL CONSTRUCTION NOTE 16, ON SHEET W1 OF THESE PLANS, REGARDING THE SALVAGE AND REUSE OF EXISTING MATERIALS.

SHUTDOWN TIME SHALL NOT EXCEED THREE (3) HOURS. THE CONTRACTOR SHALL NOTIFY AFFECTED CUSTOMERS AND THE FIRE DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE LOSS OF SERVICE.

SPECIAL NOTE:

INSTALL NEW 12" WATER MAIN AT STRAIGHT GRADE TO AVOID ANY HIGH OR LOW POINTS.

INTERCONNECTION DETAIL 1
NTS

INTERCONNECTION DETAIL 2
NTS

INTERCONNECTION NOTES 1 AND 2:

NOTE THAT THE NEW WATER MAIN AND THE CONNECTION POINT MUST ALWAYS BE SEPARATED BY MINIMUM 6 FT. PRIOR TO PERFORMING THE INTERCONNECTION (IN THIS CASE WILL BE A TEMPORARY BLIND FLANGE AND THRUST BLOCK)

AFTER COMPLYING WITH THE PROVISIONS OF GENERAL CONSTRUCTION NOTE 15, ON SHEET W1 OF THESE PLANS, AFTER THE NEW SYSTEM HAS PASSED THE BACTERIOLOGICAL AND PRESSURE TESTS AND AFTER EXISTING VALVES "A" THRU "E" HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY SUPERVISION, SHALL REMOVE AN ADEQUATE LENGTH OF EXISTING 10" A.C. WATERMAIN (IN 10th STREET WEST) TO THE NEAREST JOINTS (MINIMUM 1 LENGTH OF PIPE 13 FT. LONG), THEN INSTALL THE (2) TRANSITION COUPLING ADAPTERS (A.C. TO DI), THE 10" DI PIPE SPOOLS, 10"x 10"x 10" FLANGED TEE, 10" GATE VALVE AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS (SEE INTERCONNECTION DETAIL 1). THE CONTRACTOR, UNDER AGENCY SUPERVISION, SHALL REMOVE AN ADEQUATE LENGTH OF EXISTING 6" A.C. WATERMAIN (IN GADSDEN AVENUE) TO THE NEAREST JOINTS (MINIMUM 1 LENGTH OF PIPE 13 FT. LONG), THEN INSTALL THE (2) TRANSITION COUPLING ADAPTERS (A.C. TO DI), THE 6" DI PIPE SPOOLS, 6"x 6"x 6" FLANGED TEE, 6" GATE VALVE AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS (SEE INTERCONNECTION DETAIL 2).

MAXIMUM SHUTDOWN TIME SHALL NOT EXCEED THREE (3) HOURS. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CUSTOMERS AND THE FIRE DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE LOSS OF SERVICE. SEE GENERAL CONSTRUCTION NOTE 16 ON SHEET W1 REGARDING THE HANDLING OF SALVAGED MATERIALS.

GRAPHIC SCALE

30 0 15 30

(IN FEET)

1 inch = 30 ft.

UTILITY NOTES:

1. UNDERGROUND UTILITY LOCATIONS ARE BASED ON FACILITY MAPS & PLANS PROVIDED BY THE RESPECTIVE UTILITY COMPANIES.
2. ABOVE GROUND UTILITY LOCATIONS ARE BASED ON FIELD SURVEY.
3. OVERHEAD SCE, TELEPHONE, AND CATV FACILITIES MAY NOT BE SHOWN. APPROXIMATE LOCATION OF UNDERGROUND FACILITIES ARE SHOWN HEREON.

NOTE TO CONTRACTOR

VERIFY LOCATIONS AND DEPTHS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.

REFER TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS

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Underground Service Alert
Call: TOLL FREE
811
TWO WORKING DAYS BEFORE YOU DIG

NO.	DATE	REVISION	SUBMT BY	APPV'D BY

REGISTERED PROFESSIONAL ENGINEER
BARRY S. MUNZ
C44094
EXP. 6-30-18
STATE OF CALIFORNIA
CIVIL

PLANS PREPARED BY: AVE J.N. 17149
ANTELOPE VALLEY ENGINEERING INC.
129 W. PONDERA ST.
LANCASTER, CA 93534
(661) 948-0805

PRELIMINARY-FOR REVIEW PURPOSES ONLY

BARRY S. MUNZ R.C.E. 44094
EXPIRATION DATE: 6/30/2018

DWG NAME: 17064_W2 *PLOT: 1/17/2018*

LACWD
LOS ANGELES COUNTY WATERWORKS DISTRICTS
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

FOR DISTRICT USE ONLY	PLAN CHECKER	T.V.	UNIT HD. APPR.

APPROVED BY:

ASSISTANT DEPUTY DIRECTOR DATE

LOS ANGELES COUNTY
WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY
SPEC. NO. WWD 4- (PC)

DEVELOPER: BLVD RENUAL, LP
6265 VARIEL AVENUE
WOODLAND HILLS, CA 91367
TEL. (818) 788-1122

IMPROVEMENTS: 6" R.P.D.A. AND HYDRANT, ABANDON EXISTING HYDRANT

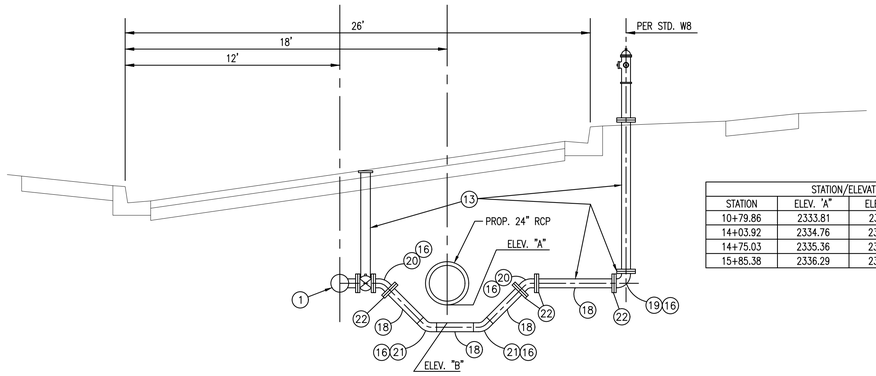
LOCATION: 840 W. KILDARE STREET LANCASTER, CA. 93534

APN: 3133-003-009

JOB NO. Y
INQUIRY NO. I
DWG. NO. 4. .PC-2

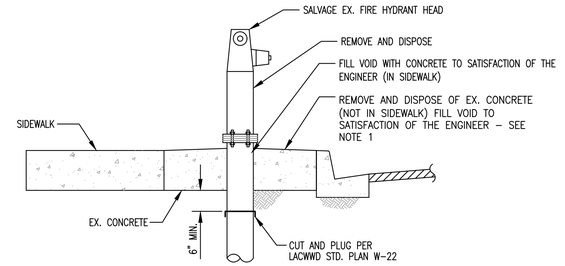
SHEET W2 OF 3 SHEETS

Krelford F:\PROJECTS\17149\DWG\17149 Off-Site Water.dwg Mon, Apr 16 2018 03:43:02 pm



STATION/ELEVATION TABLE			
STATION	ELEV. "A"	ELEV. "B"	DESCRIPTION
10+79.86	2333.81	2332.81	FH CROSSING
14+03.92	2334.76	2333.76	FH CROSSING
14+75.03	2335.36	2334.36	RPDA CROSSING
15+85.38	2336.29	2335.29	FH CROSSING

DIP CROSSING DETAIL
NTS



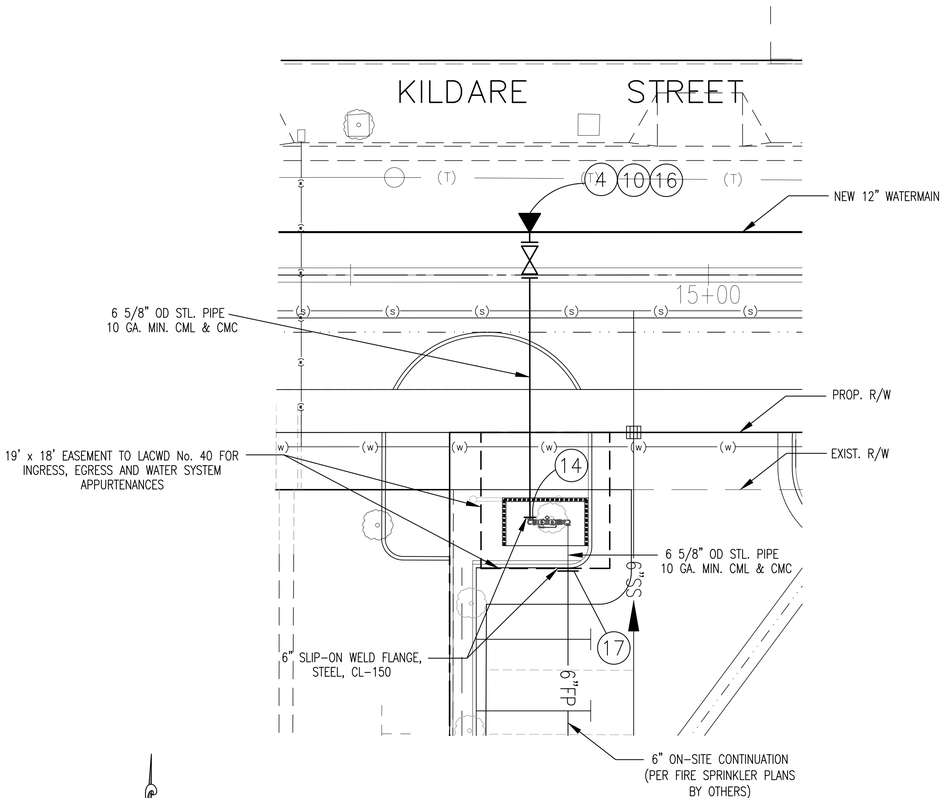
FIRE HYDRANT REMOVAL DETAIL
NTS

EXISTING WATER MAIN AND HYDRANT ABANDONMENT NOTE

AFTER COMPLYING WITH ALL PROVISIONS OF GENERAL CONSTRUCTION NOTE 15, ON SHEET W1 OF THESE PLANS, AFTER THE NEW HYDRANTS HAVE BEEN INSTALLED AND THE EXISTING HYDRANT AT 10th STREET WEST AND KILDARE STREET HAS BEEN CONNECTED TO THE NEW MAIN, AND AFTER EXISTING VALVES "A" THRU "E" HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY SUPERVISION, SHALL REMOVE THE EXISTING HYDRANT HEAD AND RISER, VALVE AND VALVE BOX, EXISTING VALVES AS INDICATED AND BLIND FLANGE WITH THRUST BLOCKS THE EXISTING TEE'S, REMOVE ONE LENGTH OF EXISTING 6" AC MAIN AT THE NORTH END OF GADSDEN AVENUE AND BLIND FLANGE WITH THRUST BLOCK EXISTING TEE AND SEAL THE ENDS OF THE EXISTING 6" AC MAIN AND LATERALS WITH CONCRETE AND ABANDON IN PLACE, SEE LACWD STD. PLAN W-22.

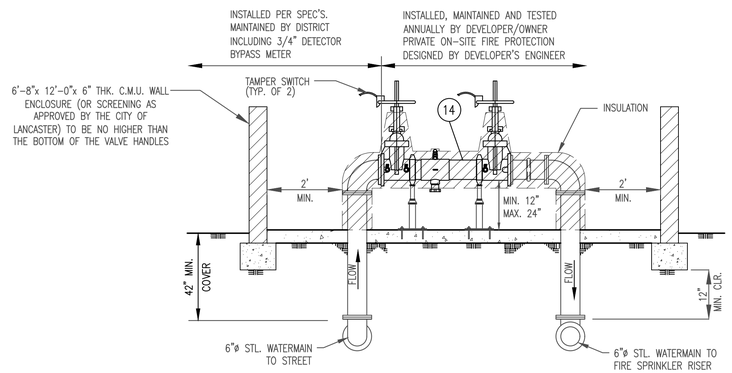
SEE GENERAL CONSTRUCTION NOTE 16, ON SHEET W1 OF THESE PLANS, REGARDING THE SALVAGE AND REUSE OF EXISTING MATERIALS.

SHUTDOWN TIME SHALL NOT EXCEED THREE (3) HOURS. THE CONTRACTOR SHALL NOTIFY AFFECTED CUSTOMERS AND THE FIRE DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE LOSS OF SERVICE.



GRAPHIC SCALE
10 0 5 10
(IN FEET)
1 inch = 10 ft.

RPDA DETAIL
1" = 10'
(SEE SECTION HEREON)



SECTION
NTS

SEE STANDARD W-6 FOR COMPLETE DETAILS

NOTE TO CONTRACTOR
VERIFY LOCATIONS AND DEPTHS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION.

REFER TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS

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PLANS PREPARED BY: AVE J.N. 17149
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129 W. PONDERA ST.
LANCASTER, CA 93534
(661) 948-0805

PRELIMINARY-FOR REVIEW PURPOSES ONLY
BARRY S. MUNZ R.C.E. 44094
EXPIRATION DATE: 6/30/2019

DWG NAME: 17149_W3 *PLOT: 2/13/18*

REVIEWED FOR COMPLIANCE WITH DISTRICT REQUIREMENTS

LACWD
LOS ANGELES COUNTY WATERWORKS DISTRICTS
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

FOR DISTRICT USE ONLY	PLAN CHECKER	T.V.	UNIT HD. APPR.

APPROVED BY:

ASSISTANT DEPUTY DIRECTOR DATE

LOS ANGELES COUNTY
WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY
SPEC. NO. WWD 4-____(PC)

DEVELOPER: BLVD RENUAL, LP.
6265 VARIEL AVENUE
WOODLAND HILLS, CA 91367

IMPROVEMENTS: WATERMAIN, HYDRANT AND 6" RPDA IMPROVEMENTS

LOCATION: 840 W. KILDARE STREET
LANCASTER, CA 93534

JOB NO. Y
INQUIRY NO. I-____-__
DWG. NO. 4.____.PC-2

SHEET W3 OF 3 SHEETS

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