

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD CUSTOMER SERVICE DEPARTMENT (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN & CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE NO. 2 SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
 - A MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
 - POTABLE WATER SUPPLY QUALITY MATERIAL.
 - ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM).
 - SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL, NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVVWD REQUIREMENT, ANY TEMPORARY SERVICE FEED MUST HAVE PRIOR LVVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS," "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3944.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - KENNEDY GUARDIAN
 - MUELLER 4-23 CENTURIAN
 - CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTER LINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3944 TO IDENTIFY THE FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 228-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- PAINTING OF THE CURBS AND HYDRANTS AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3944 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- FIRE HYDRANT SPACING:
 - RESIDENTIAL - 600 FEET UNSPRINKLERED; 1,000 FEET SPRINKLERED.
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 600 FEET UNSPRINKLERED; MULTI-FAMILY - 600 FEET SPRINKLERED.
- WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1,000 FOOT SPACING TO PROVIDE FOR TRANSPORTATION HAZARDS.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 8 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET PROVIDED NO PARKING IS ALLOWED, NOT LESS THAN 28 FEET IF PARALLEL PARKING IS ALLOWED ON ONE SIDE, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
- THE TURNING RADIUS FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN UFC #4, SECTION 902.2)
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LINES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. (SEE ORDINANCE #3944)
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FEET ALONG ALL DESIGNATED FIRE LINES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURBS NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

(2") REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE DISTRICT'S STANDARD PLATE NO. 11A NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), SO AS TO ALLOW THE DISTRICT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY

THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 20B. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), SO AS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

ESTIMATED QUANTITIES

WATER		
①	10"x10"x6" TEE	1 EA
②	10"x6" REDUCER	1 EA
③	6" PVC WATERLINE	160 LF
④	6" GATE VALVE	1 EA
⑤	FIRE HYDRANT ASSEMBLY (INCLUDES TEE, LATERAL, RISER THRUST BLOCK AND ALL ASSOC. FITTINGS)	2 EA
⑥	6"x 2" SERVICE SADDLE, SEE UDACS PLATE # 1-D	1 EA
⑦	2" COPPER WATER SERVICE LATERAL	5 LF
⑧	2" WATER METER & BOX	1 EA
⑨	2" PVC WATERLINE	270 LF
⑩	2" REDUCED PRESSURE PRINCIPLE ASSEMBLY	1 EA
⑪	3/4" PVC IRRIGATION STUB	7 LF
⑫	2"x2"x2" TEE	1 EA
⑬	2"x1" REDUCER	1 EA
⑭	1" PVC WATERLINE	20 LF
⑮	6" - 45" BEND	2 EA
⑯	6" DOUBLE CHECK DETECTOR ASSEMBLY	1 EA

SEWER		
①	6" SEWER C.O.	5 EA
②	6" PVC SEWER	307 LF
③	6"x6"x6" WYE	1 EA

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②	6" PVC SEWER	307 LF
③	6"x6"x6" WYE	1 EA

PROJECTED SEWAGE FLOWS

0.002 MGD PEAK
0.001 MGD-AVERAGE

NOTE

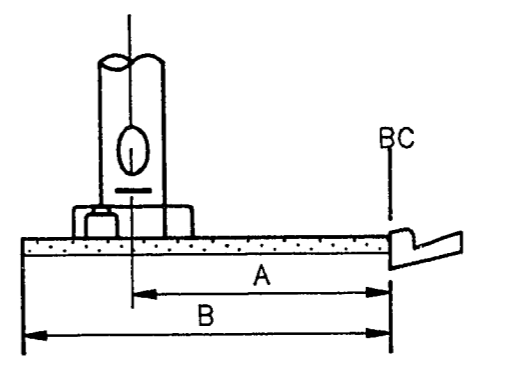
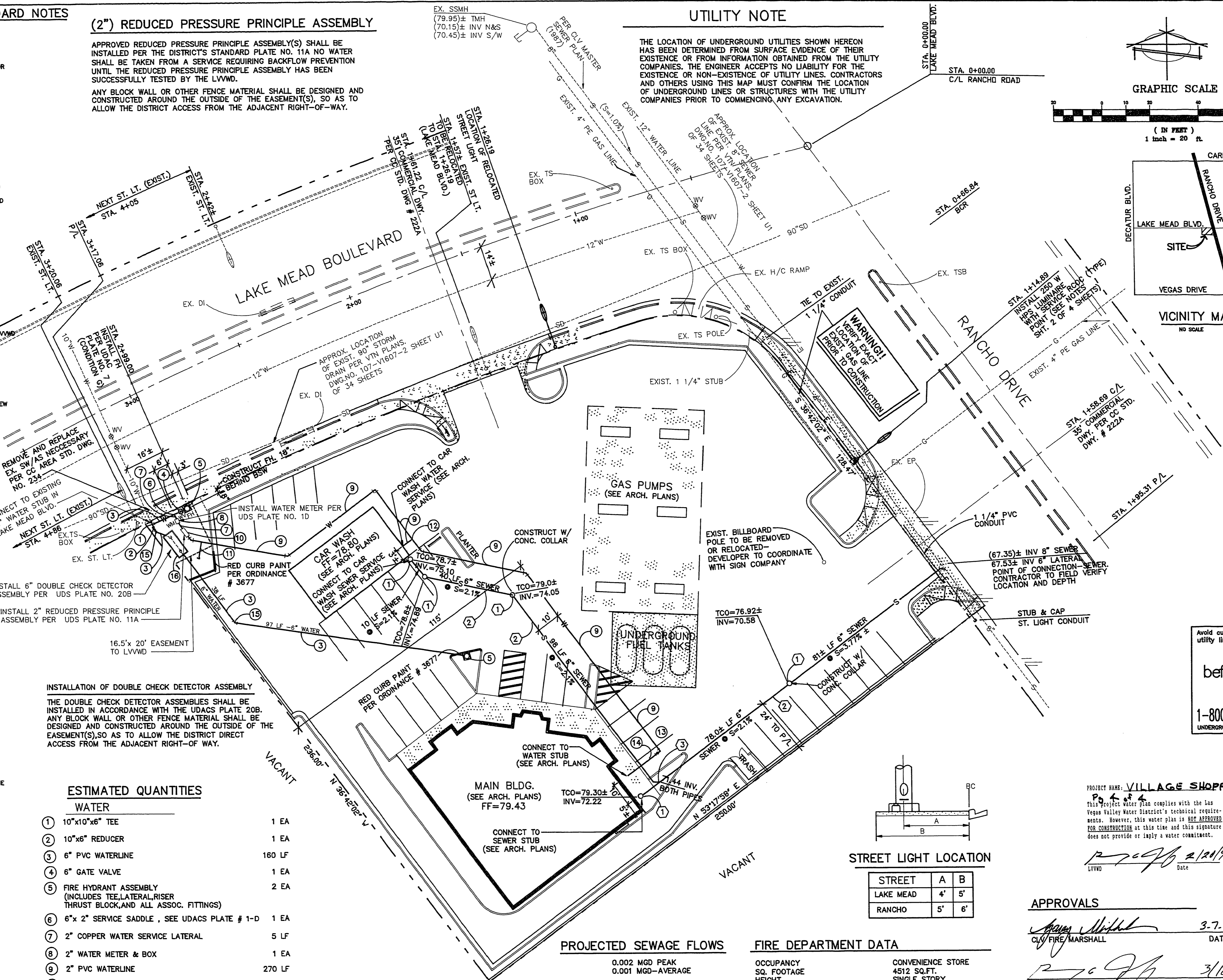
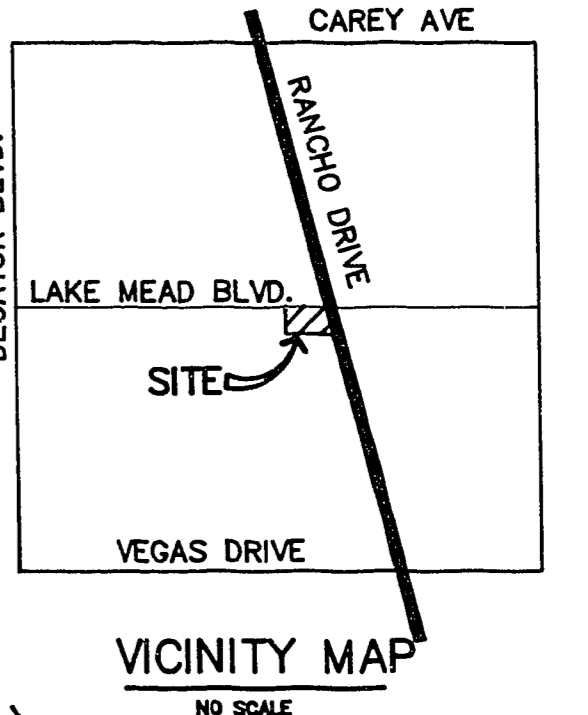
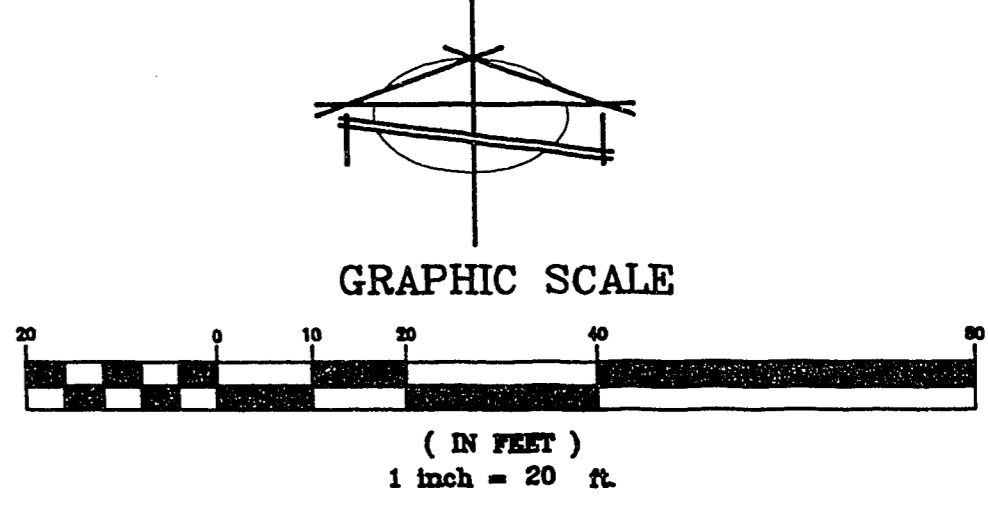
ALL ON-SITE SEWERS ARE PRIVATELY OWNED AND MAINTAINED

NOTE TO CONTRACTOR

QUANTITIES SHOWN ARE APPROXIMATE ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT QUANTITIES INVOLVED.

UTILITY NOTE

THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE OR FROM INFORMATION OBTAINED FROM THE UTILITY COMPANIES. THE ENGINEER ACCEPTS NO LIABILITY FOR THE EXISTENCE OR NON-EXISTENCE OF UTILITY LINES. CONTRACTORS AND OTHERS USING THIS MAP MUST CONFIRM THE LOCATION OF UNDERGROUND LINES OR STRUCTURES WITH THE UTILITY COMPANIES PRIOR TO COMMENCING ANY EXCAVATION.



STREET	A	B
LAKE MEAD	4'	5'
RANCHO	5'	6'

APPROVALS

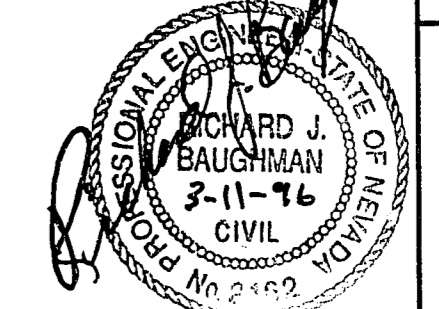
[Signature] 3-7-96
CIVIL ENGINEER
DATE

[Signature] 3/18/96
LAS VEGAS VALLEY WATER DISTRICT
DATE

Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

PROJECT NAME: VILLAGE SHOPPES

This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is NOT APPROVED FOR CONSTRUCTION at this time and this signature does not provide or imply a water commitment.



APPROVED FOR: **VILLAGE SHOPPES**

DATE: OCTOBER, 1995

DESIGN: EMR

DRAWN: JHB

CHECK: JHB

SCALE: 1" = 20'

PREPARED FOR: **BAUGHMAN & TURNER, INC.**

CIVIL ENGINEERS

LAND PLANNERS

LAND SURVEYORS

LAS VEGAS, NEVADA 89102

1210 HINSON STREET

CLARK COUNTY, NEVADA (702) 870-8771

PROJECT NAME: **VILLAGE SHOPPES**

A PORTION OF THE NORTH HALF (N 1/2) OF SECTION 19, TOWNSHIP 20 SOUTH, RANGE 61 EAST, M.D.B. & M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA

SHEET **4** OF **4**

PROJ. NO. VSH-UTL