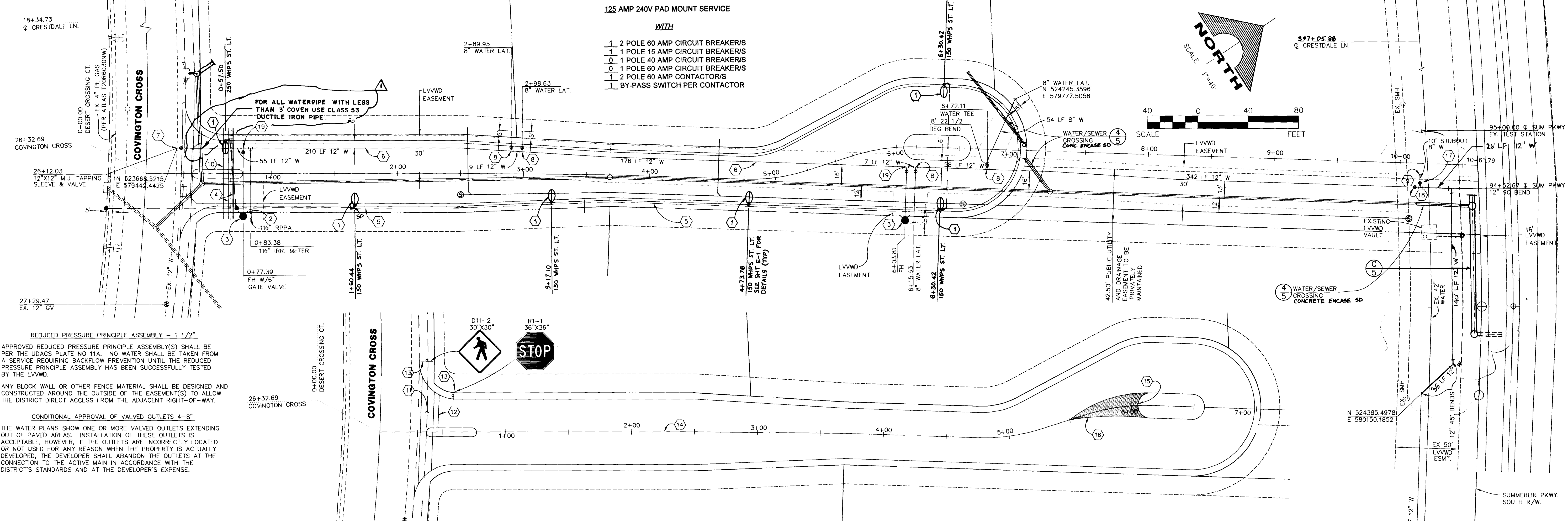




REDUCED PRESSURE PRINCIPLE ASSEMBLY - 1 1/2"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE PER THE UDACS 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) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

CONDITIONAL APPROVAL OF VALVED OUTLETS 4-8"

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND AT THE DEVELOPER'S EXPENSE.

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:
A. KENNEDY GUARDIAN
B. MUELLER A-423 CENTURIAN
C. 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 CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3944 TO IDENTIFY THE FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 229-2071 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 ONSITE 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 ONSITE WATER SUPPLY.
- ALL ONSITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
- FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED; 1,000 FEET SPRINKLERED.
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED; 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 6 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 ROAD 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 THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.
- 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 UFG 94, SECTION 902.2).
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3944.
- ACCESS ROAD 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 LANES. SIGNS TO BE PLACED ON BOTH SIDE 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 CURB IS 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.

APPROVED:
[Signature]
FIRE MARSHAL, CITY OF LAS VEGAS

2-28-97
DATE

SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORK'S CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS, 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTION TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN, MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN. SEE WATER-SEWER/STORM DRAIN CROSSING NOTE THIS SHEET.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1') OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.

UTILITY SIGNAGE AND STRIPING NOTES

- INSTALL STREET LIGHT PER SUMMERLIN STANDARD DRAWING E-1 TYPE 2B
 - INSTALL 1 1/2" IRRIGATION METER PER UDACS PLATE 10
 - INSTALL FIRE HYDRANT 6" LINE AND VALVE BOX PER UDACS PLATE 7
 - INSTALL (2) 3" DIA. AND (1) 1" DIA. PVC SLEEVE FOR FUTURE IRRIGATION
 - INSTALL 1 1/4" PVC STREET LIGHT CONDUIT
 - CONSTRUCT 12" DIA. PVC WATER LINE (DR-19) PER LVVWD STANDARDS.
 - 12" WET TAP PER UDACS PLATE 22
 - 12"x12"x8" TEE W/ 8" GATE VALVE.
 - INSTALL 2" B.O. ASSEMBLY PER UDACS STD. PLATE.
 - INSTALL 4" PVC CONDUIT FOR LIGHTED SIGNS.
 - INSTALL CROSSWALK PER SUMMERLIN IMPROVEMENT STD. DWG. NO. S-78
 - INSTALL 24" SOLID WHITE LINE - STOP BAR (COLD POLYMER FILM)
 - INSTALL SINGLE POST SIGN PER NOOT STD. DWG. NO. T-311.7 WITH SIGN INDICATED.
 - INSTALL TYPE III CENTERLINE - (U.S.D. 244)
 - INSTALL MEDIAN NOSE MARKINGS - (U.S.D. NO. 248)
 - INSTALL LANE DELINEATION - WITH SOLID YELLOW FILL PATTERN (COLD POLYMER FILM) (U.S.D. 245)
 - 12"x12"x12" TEE W/ 12" GATE VALVE.
 - INSTALL 12" GATE VALVE
 - 12"x12"x8" TEE
- GENERAL NOTE: ALL UTILITY LINES SHALL BE BACKFILLED AND COMPACTED PER SUMMERLIN STANDARD DRAWING U-20.

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 COMMUNICATION SUPPORT CENTER (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 THE LVVWD'S STANDARD PLATES, DRAWINGS AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
 - ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 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 DRIVEWAY, VALLEY AND CURB GUTTERS.
 - 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 THE 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:

A. POTABLE WATER SUPPLY QUALITY MATERIAL.
B. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM).
C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.

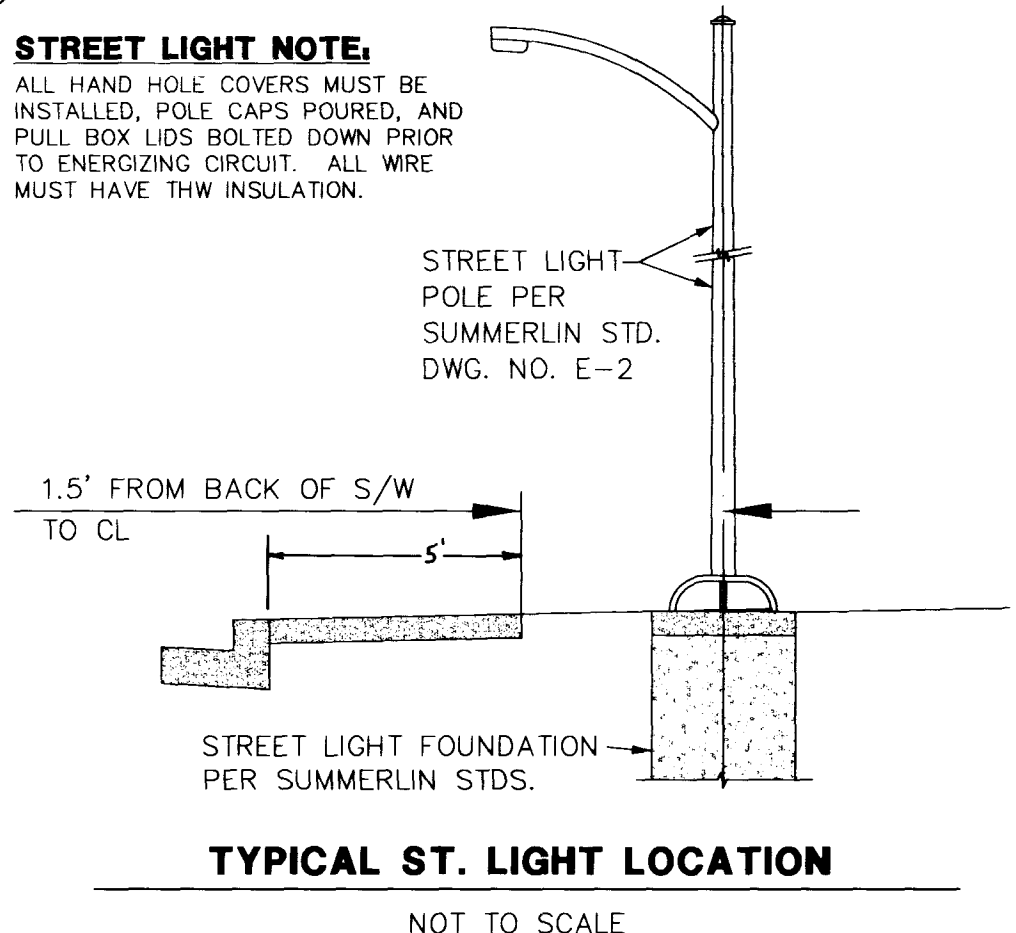
EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
 - WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED 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 AND 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 FEES BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEE 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.
- APPROVED FOR CONSTRUCTION
[Signature]
LAS VEGAS VALLEY WATER DISTRICT

SOUTHWEST GAS CORPORATION NOTES

- ATLAS SHEETS T20R5925NE, T20R6030NW.
- CALL BEFORE YOU DIG (1-800-227-2600).

STREET LIGHT NOTE:

ALL HAND HOLE COVERS MUST BE INSTALLED, POLE CAPS POURED, AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THW INSULATION.



ESTIMATE OF QUANTITIES

8" WATER LINE	130 LF.
12" WATER LINE	1290 LF.
12" WET TAP 12"x12" MJ TAPPING SLEEVE & VALVE	1 EA.
FIRE HYDRANT ASSY. (INCL. 6" GV & 6" LAT.)	2 EA.
12"x12" TEE	1 EA.
8" GATE VALVE	4 EA.
12" GATE VALVE	3 EA.
1 1/2" IRR. METER AND LATERAL	1 EA.
2" BLOW OFF	2 EA.
12" 90° ELBOW	2 EA.
12" 45° BEND	4 EA.
12"x8" TEE	2 EA.

WATER NOTE

THE CONTRACTOR SHALL NOT BACKFILL ANY TRENCHES UNTIL THE WATERLINES HAVE BEEN INSPECTED BY THE LAS VEGAS VALLEY WATER DISTRICT. THE WATER DISTRICT SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF CONSTRUCTION IN THE VICINITY OF WATER LINES.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

Call before you Dig.

1-800-227-2600

UNDERGROUND SERVICE ALERT (USA)

REVISIONS

REV.	DATE	DESCRIPTION
1	11/27/97	RELEASE FOR BIDDING
2	11/27/97	ADD NOTE ON CUL. DE SAC

APPROVED FOR CONSTRUCTION
[Signature]
GREGORY J. WALLACE, INC.

RECEIVED
[Signature]
GREGORY J. WALLACE, INC.

1555 SOUTH RANCHO BLVD./LAS VEGAS, NEVADA 89102
(702) 363-1200

