

ABANDONMENT OF EXISTING SERVICE(S) 2" AND SMALLER

The Contractor shall notify the Inspection Division at the LVVWD (phone 702-258-3227) 48 hours prior to the requested removal time to allow the District to take the final meter reading and remove the meter. The Contractor may then begin removal procedures for the affected service as follows:

Existing service laterals that are to be abandoned from existing water main shall have the corporation stops turned off at the main, the lateral cut 6' downstream from the corporation stop and again cut 6' downstream from the first cut so that a 6' piece of the existing service lateral is removed. If the corporation stop is damaged beyond repair or pulled from the existing water main, the main shall be repaired at the Contractor's expense, in a manner approved by the LVVWD. If the corporation stop is not water tight, the Contractor shall notify LVVWD Customer Service (phone 870-4194) for further direction.

The Contractor shall remove the existing service meter box and appurtenances. Fill and grade any and all resulting voids and replace or restore to original conditions or better, all landscaping, irrigation systems, concrete, concrete sidewalks, asphalt, or any other items damaged or removed during the removal of the existing service meter box.

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

- No work shall begin on the water main until they have been released for construction by the LVVWD. Following approval of the plans, notice shall be given to the LVVWD Customer Service Department (870-4194) 48 hours prior to actual construction, and 24 hours prior to an inspection.
- Call Before You Dig 1-800-237-2600.
- All work shall conform to LVVWD latest standard plans, drawings, and specifications.
- All work, except as modified herein or by Note 3, shall be done in accordance with the most current draft or addition of the Uniform Standard Specifications for Public Works Construction Officially Adopted, Clark County Area.
- District approved service saddles or capped collars shall be removed on all 3/4" and 1" service laterals. Service saddles only shall be permitted on 1 1/2" and 2" service laterals. Double capped collars are not permitted.
- COVER SERVICE LATERALS:** All 3/4" to 2" service laterals shall be of copper tubing in accordance with the District's specifications and standard plates.
- The maximum allowable joint deflection for ACP and Ductile Iron pipe shall be as follows:

Pipe Size	ACP	Ductile Iron	Ductile Iron
		slip joint	monolithic joint
6 inch	2.5 degrees	2.5 degrees	2.5 degrees
8 inch	2.5 degrees	2.5 degrees	2.5 degrees
10 inch	2.5 degrees	2.5 degrees	2.5 degrees
12 inch	2.5 degrees	2.5 degrees	2.5 degrees
14 inch	2.5 degrees	2.5 degrees	2.5 degrees
16 inch	2.5 degrees	2.5 degrees	2.5 degrees
18 inch	2.5 degrees	2.5 degrees	2.5 degrees
20 inch	2.5 degrees	2.5 degrees	2.5 degrees
24 inch	2.5 degrees	2.5 degrees	2.5 degrees

On PVC pipe, the maximum offset for a 20' length of factory belled pipe shall be 1/8" inches for 4" pipe, 1/4" inches for 6" pipe, and 3/8" inches for 10" and 12" pipe.

If these offsets conflict with the pipe manufacturer's recommendation, the more stringent requirement shall apply.

- All water meter boxes shall be located outside of driveway areas.
- All valves shall be located outside of driveways and valley gutters.
- Detector tape shall be provided in accordance with standard Plate No. 27 where indicated, and as follows:
 - over all mains not installed - 1' out from back of curb.
 - over all service laterals not installed at front, unless to a main.
- All water mains shall be pressure tested at 500 psi for a minimum two hour period, in accordance with District standards.
- All water mains shall be constructed, finished, and an acceptable Health Sample obtained, prior to the connection of the water service meter laterals to the district system.
- Contractor to obtain all meters 2" and smaller from LVVWD Central Stores. Telephone 258-3122 party 4441. 1481 meters prior to 3/30/98.

SEWER NOTE

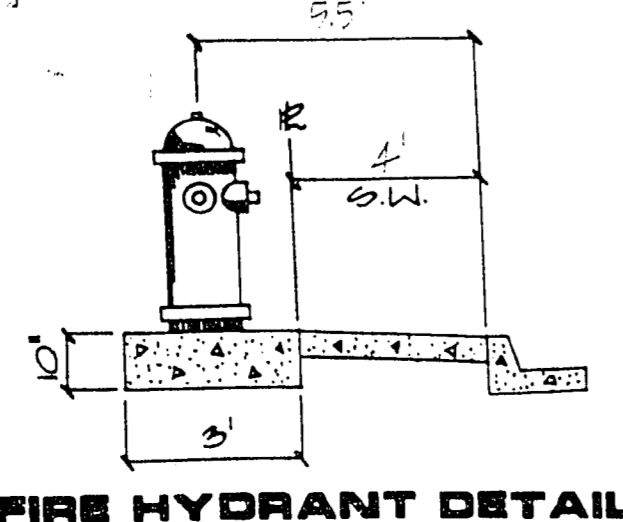
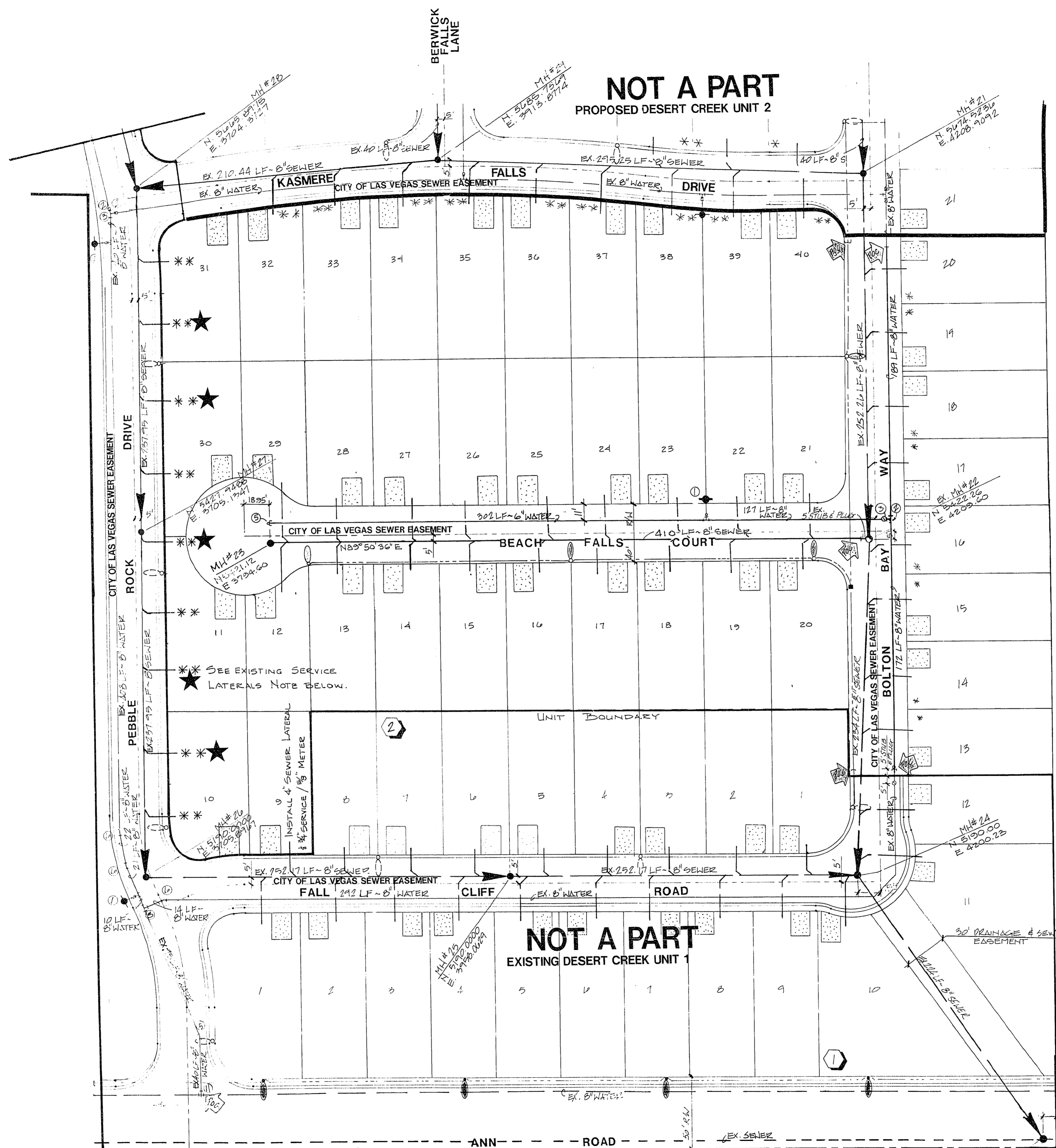
- ALL SANITARY SEWER INSTALLATION SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTE.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB. *REPRODUCIBLE TAG-PLAN SHOWING EXACT LOCATION OF SEWER LATERALS WILL BE REQUIRED PRIOR TO ACCEPTANCE FOR MAINTENANCE. POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING AND BACKFILL OR 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. CONNECTIONS 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 PIPE FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.

CITY OF LAS VEGAS 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 #3545.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - KENNEDY GUARDIAN
 - MUELLER A-423 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 CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #1545 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS BUILDING DEPARTMENT AT 799-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE, PER ORDINANCE #3545, 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.
- 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 F.M. APPROVED.
- FIRE HYDRANT SPACING:

RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CURB-DEAD-EN-D OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CURB-DEAD-EN-D.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- 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 USC OR, SECTION 10, 207).
- 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 TURN AROUND AREA. SEE ORDINANCE #3545.

BENCHMARK
 BM - U.S.G.S. Brass Cap
 and Conc. atop S169 Resat 1963
 Elev. = 2357.04
 Approx. 400' No. Ann Road & 4.0' East of
 the East E.P. NB Lane of Oran Gragon Expressway

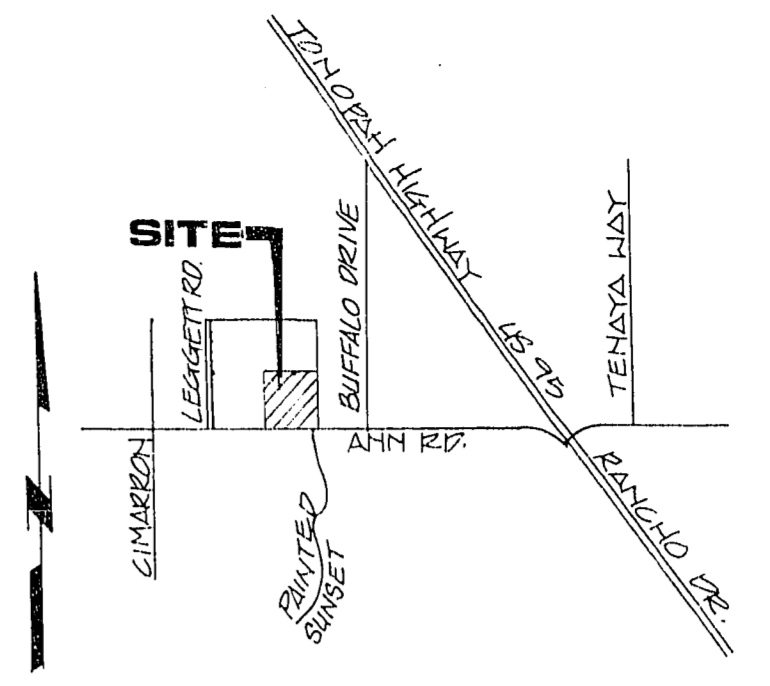


★ SEWER & WATER LATERALS TO BE ABANDONED (SEE ABANDONMENT NOTE)

EXISTING SERVICES LATERALS
 Lot 10, 11, 30 & 31, Block 2
 If any of the existing service laterals are incorrectly located or are not used for any reason, the developer shall abandon the laterals at the connection to the active main in accordance with the District's standards and at the developer's expense.

NOT A PART
 PROPOSED DESERT CREEK UNIT 2

NOT A PART
 EXISTING DESERT CREEK UNIT 1



NOTE: STREETLIGHTING ON "PRIVATE" STREETS REQUIRE PERMITS AND INSPECTIONS BY THE DEPARTMENT OF BUILDING & SAFETY.

LEGEND & QUANTITY ESTIMATE

STREETLIGHT

- 100 WATT LUMINAIRE 4 EA
- 1/4" CONDUIT 750 LF
- 3/8" PULLBOX 1 EA

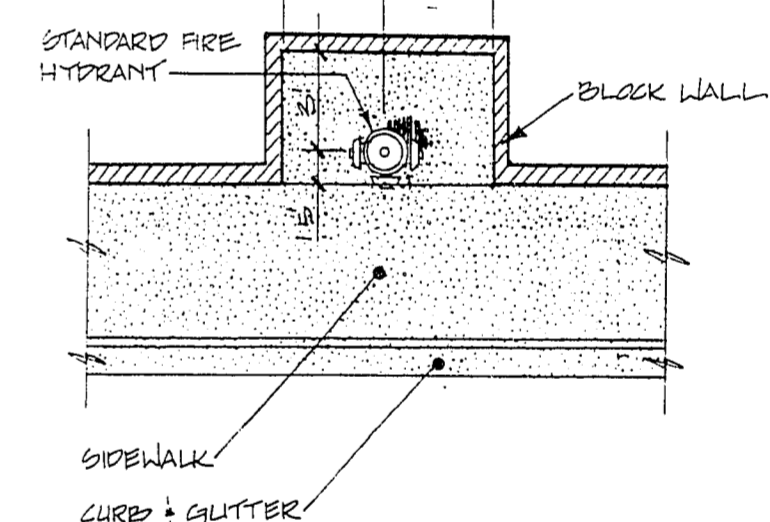
WATER

- FIRE HYDRANT ASS'Y (INCLUDES PIPE, TEE, VALVE, RISER, THROTTLE BLOCK) 1 EA
- 8" TEE 1 EA
- 8" GATE VALVE 1 EA
- 2" BLK-OFF ASS'Y 1 EA
- 3/4" SERVICE 2 EA
- 5/8" METER BY LVVWD 2 EA
- 8" WATER MAIN 488 LF
- 6" WATER MAIN 302 LF

SEWER

- STANDARD MANHOLE 1 EA
- 8" SEWER MAIN 410 LF
- 4" SEWER LATERALS 520 LF
- WYES 19 EA

* SEWER LAT. INSTALLED W/UNIT 2
 ** SEWER LAT. & WATER MET. INSTALLED W/UNIT 1 & 2



TYPICAL FIRE HYDRANT WALL CLEARANCE DETAIL LAS VEGAS FIRE DEPARTMENT

Fire Flow Requirement is 1500 gallons per minute at 20 pounds per square inch residual.

Based on:
 Square footage 1979 S.F.
 Largest area between area separation walls 10'
 Height 2 STORY - 21'
 Type of Construction II
 Exposures NONE
 Sprinkler System NO
 Occupancy SINGLE FAMILY
 Roof Construction CERAMIC TILE
 Reviewed By: David Barrow 1/6/98
 Date: 1/6/98
 PROVIDE FIRE LANE IDENTIFICATION (SEE CITY ORD. 3177)

APPROVALS:
 [Signature] 1-30-92
 CITY LAS VEGAS FIRE MARSHALL DATE
 [Signature] 1-31-92
 LAS VEGAS VALLEY WATER DISTRICT DATE

PROJECT NAME: Desert Creek Phase II Unit 3
 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.
 [Signature] 1/29/92
 Date

DESERT CREEK ASSOCIATES
 LAS VEGAS, NEVADA

CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS
 2727 SOUTH RAINBOW BOULEVARD
 LAS VEGAS, NEVADA 89102-5148 PHONE (702) 873-7550 FAX (702) 362-2597

REVISION
 10-22-98
 11-1-98
 1-1-99

MASTER UTILITY PLAN

DESERT CREEK
 PHASE II UNIT 3

TITLE: MASTER UTILITY PLAN
 PROJECT: DESERT CREEK PHASE II UNIT 3

SCALE: 1"=40'

3 OF 4 SHEETS

1074-4074-JI-3