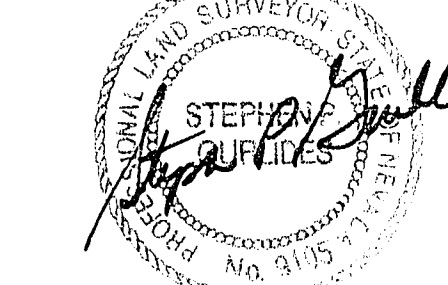


SEWER LATERAL "AS-BUILT"
CERTIFICATION

STEPHEN P. GURLIDES, P.E.
NEVADA CERT. NO.: 9105

LAS VEGAS FIRE DEPARTMENT

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

Based on:

Square footage 1913 SF

Largest area between
area separation walls 10'

Height 2 STORY - 24'

Type of Construction I

Exposures NONE

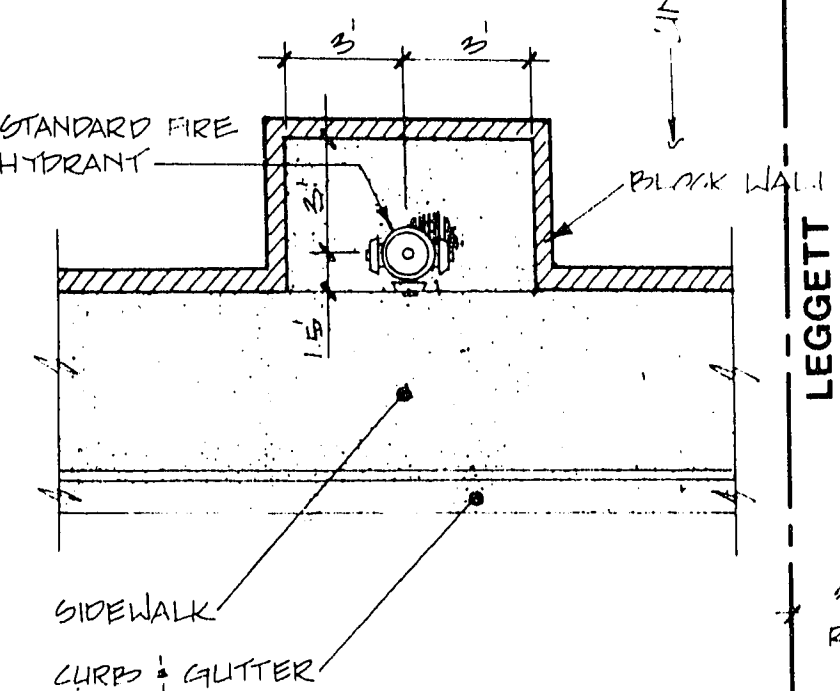
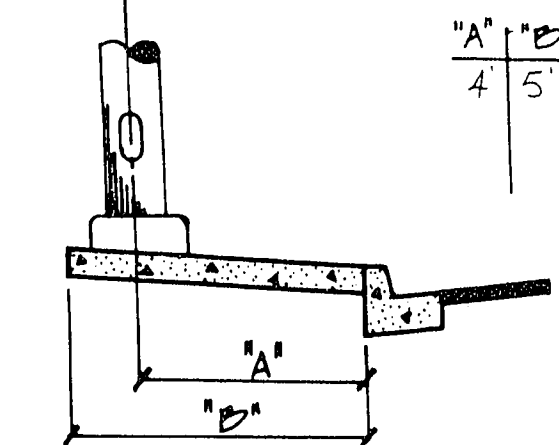
Sprinkler System NO

Occupancy SINGLE FAMILY

Roof Construction CERAMIC TILE

Reviewed By: Richard Q. Brown

Date: 11-21-91

TYPICAL FIRE HYDRANT
WALL CLEARANCE DETAIL

STREETLIGHT DETAIL

CITY OF LAS VEGAS NOTES
1. All construction and materials shall be in accordance with the latest editions of the Uniform Building Code, the International Fire Code, the International Plumbing Code, and the International Electrical Code, as well as the Nevada State Building Code, the Nevada State Fire Code, the Nevada State Plumbing Code, and the Nevada State Electrical Code.
2. It shall be the Contractor's responsibility to perform construction as per these notes. Any additions, deletions, or changes shall first meet with the approval of the controlling agency.
3. Detail "A" or "B" in cases where sewer or gas laterals pass under the curb.
4. Potentially (PVC) sewer pipe shall meet ASTM D-3034, SDR 35 specifications. Installed with same bedding and backfill of Type II gravel.
5. All manholes to paved streets 80" R/W and larger, shall have concrete collars.
6. The manhole 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.
7. 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.
8. All Contractors installing sewer mains that will be under the jurisdiction of the controlling agency must be Class "A" Contractors.

PROJECT NAME: DESERT CREEK

Phase II Unit 1

This project will comply with the Las Vegas Valley Water District's technical requirements; however, this water plan is NOT APPROVED FOR CONSTRUCTION at this time.

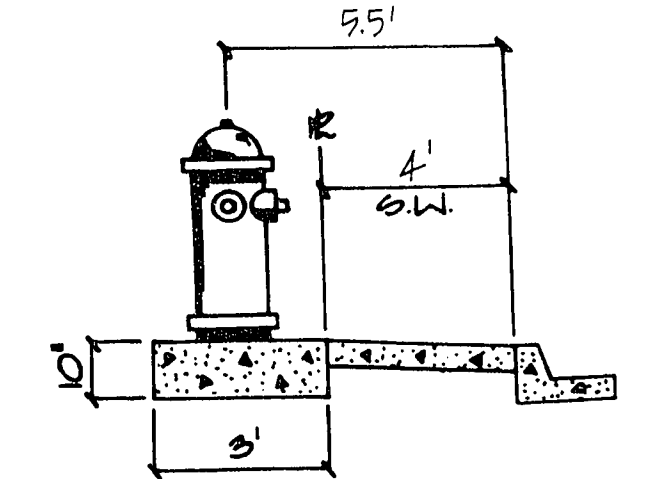
11-21-91
11-21-91
11-21-91

BENCHMARK

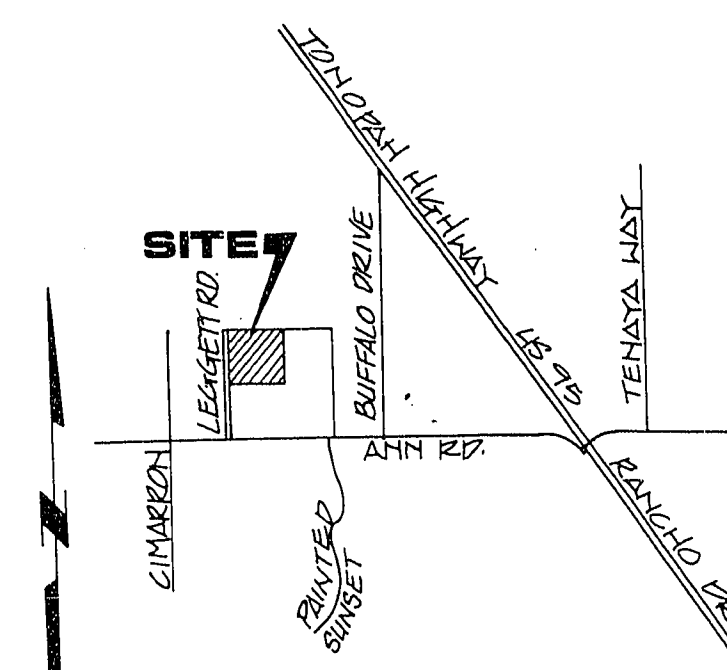
BM = U.S.G.S. Brass Cap
and Conc. stamped 8169 Reset 1963
Elev. = 2357.04
Approx. 400' No. Ann Road & 4.0' East of
the East E.P. NB Lane of Oran Gragson Expressway

STREET LIGHT NOTE

1. All street light installations 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 noted. ALL HANG HOLE COVERS MUST BE INSTALLED, BLUE CAPS, RUBBER AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THIN INSULATION. ALL BALLAST MUST BE MAG. RES.



FIRE HYDRANT DETAIL



VICINITY MAP

LEGEND & QUANTITY
ESTIMATE

WATER

- | | |
|--|-----------|
| ① FIRE HYDRANT ASSY (TO INCLUDE PIPE, TEE, VALVE, RISER) | 7 EA. |
| ② 8" GATE VALVE | 11 EA. |
| ③ 8" TEE | 8 EA. |
| ④ 8" 90° BEND | 1 EA. |
| ⑤ 8" 45° BEND | 7 EA. |
| ⑥ 8" 22 1/2° BEND | 3 EA. |
| ⑦ 8" CROSS | 1 EA. |
| ⑧ 8" 1/2" TEE | 1 EA. |
| ⑨ 1/2" GATE VALVE | 1 EA. |
| ⑩ 2" BLOW OFF ASSY | 2 EA. |
| 3/4" SERVICE | 105 EA. |
| 5/8" METER BY LVVWD | 105 EA. |
| 8" WATER MAIN | 3,212 LF. |
| 1 1/2" WATER MAIN | 267 LF. |
| ⑪ 8" 8" M.J. TAPPING TEE & VALVE | 1 EA. |
| ⑫ 8" 1 1/2" BEND | 2 EA. |
| ⑬ 1" IRRIGATION SERVICE | 1 EA. |

SEWER

- | | |
|--------------------|-----------|
| ① STANDARD MANHOLE | 14 EA. |
| ② SEWER MAIN | 4,431 LF. |
| ③ SEWER LATERALS | 2,210 LF. |
| NYES 8" SEWER MAIN | 109 EA. |
| 110 LF. | |

OFFSITE STREETLIGHT

- | | |
|--------------------------|-----------|
| ① 250 WATT LUMIN. | 4 EA. |
| ② 100 WATT LUMIN. | 4 EA. |
| ③ 1 1/2" CONDUIT | 1,337 LF. |
| ④ SERVICE POINT & R.O.C. | 1 EA. |
| ⑤ STREET SIGNS | 9 EA. |

STREETLIGHT:

- | | |
|-------------------|-----------|
| ① 100 WATT LUMIN. | 20 EA. |
| ② 1 1/2" CONDUIT | 9,900 LF. |
| ③ 3/4" PULL BOX | 5 EA. |

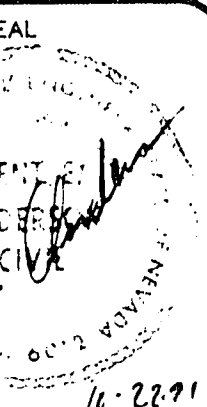
CITY OF LAS VEGAS
FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3545.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY GUARDIAN
B. MUELLER A-423 CENTURIAN
C. CLON MODEL 2546 MEDALLION
3. ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMPLETION OF CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3545 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. 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.
6. 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.
7. 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.
8. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.
10. FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED
11. 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 A CUL-DE-SAC.
12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
13. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
14. 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.
15. 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 88, SECTION 10.207).
16. 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 TURN AROUND AREA. SEE ORDINANCE #3545.

DESERT CREEK ASSOCIATES
LAS VEGAS, NEVADA

SEWER AS-BUILT

DESERT CREEK
PHASE II UNIT 1



NO. NO. 4008-1
BY: RQBN, WLR
DATE: AUG. 1991
SCALE: 1"=40'
SHEET: 6 OF 14 SHEETS

As Built 3074-4674-II-1