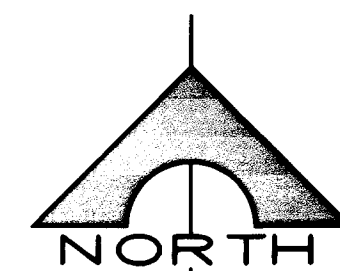


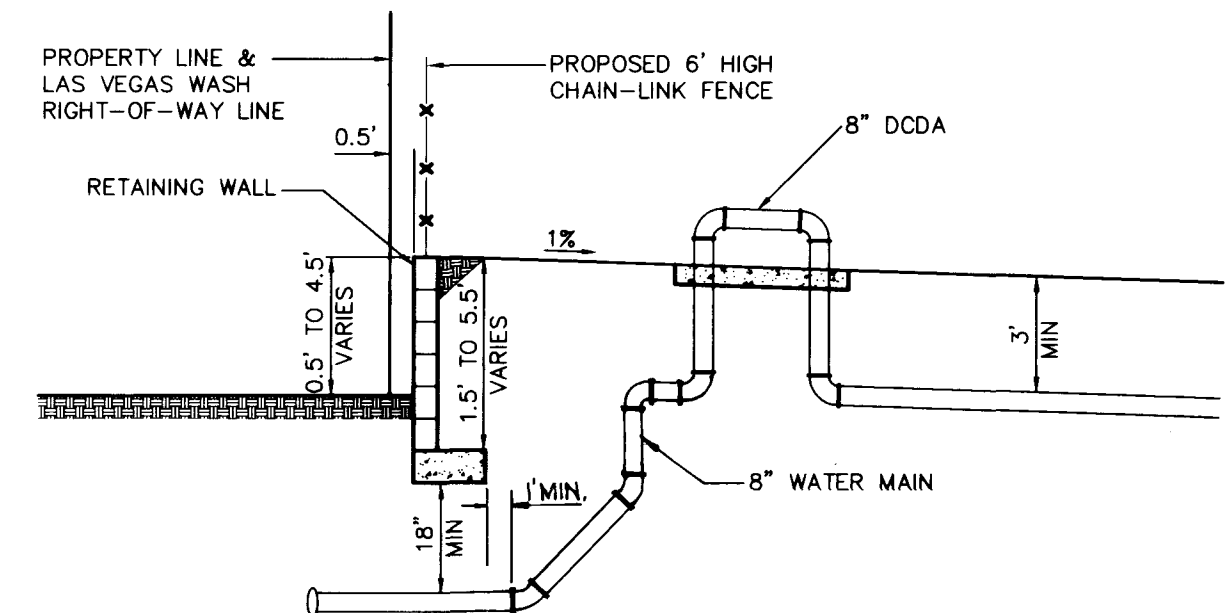
PROJECT NAME: SEAGULL PARK DOMANDA EAST PLAZA (SHEETS 1, 2, 3, 4)

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.

James S. Rankin 5-19-99
LWWD DATE

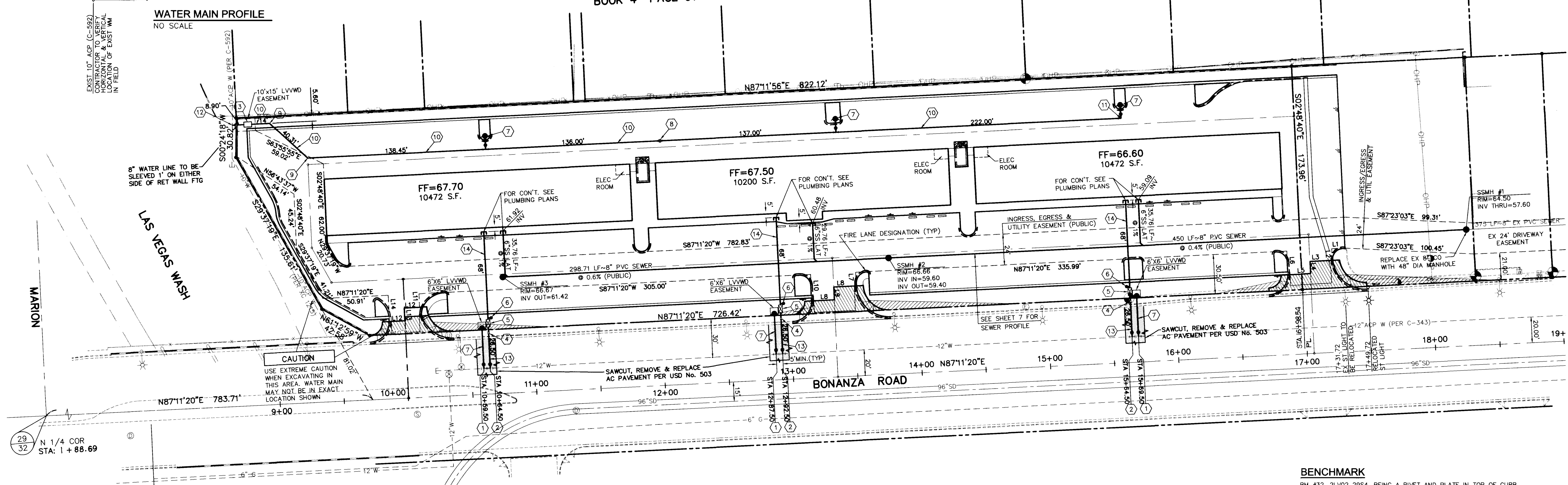


SCALE: 1"=40'
40 0 40 80
SCALE FEET

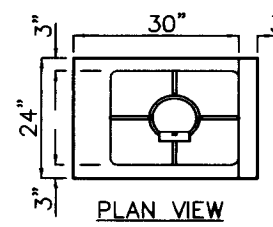


WATER MAIN PROFILE
NO SCALE

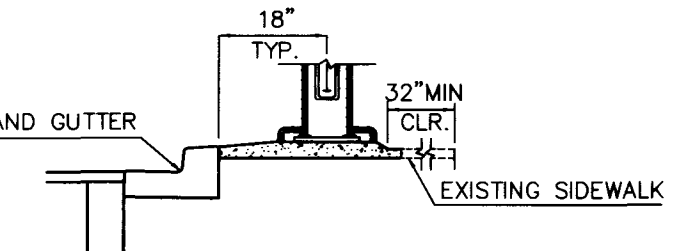
SUNLAND VILLAGE
BOOK 4 PAGE 91



CAUTION
USE EXTREME CAUTION WHEN EXCAVATING IN THIS AREA. WATER MAIN MAY NOT BE IN EXACT LOCATION SHOWN.



**MODIFIED STREET LIGHT
CRASH CAP CROSS SECTION**



**MODIFIED STREET LIGHT
CRASH CAP CROSS SECTION**

No.	Bearing	Distance
L1	N87°11'20"E	10.48
L2	N02°48'40"W	9.08
L3	N87°17'58"E	17.56
L4	N02°48'40"W	9.48
L5	N87°11'20"E	17.51
L6	N02°48'40"W	18.50
L7	N02°48'40"W	10.54
L8	N87°11'20"E	17.50
L9	N02°48'40"W	9.39
L10	N02°48'40"W	20.53
L11	N02°48'40"W	10.50
L12	N87°11'20"E	12.00
L13	N02°48'40"W	9.88
L14	N02°48'40"W	20.39

LEGEND

- 12" W— EXISTING WATER LINE
- 8" S— EXISTING SEWER LINE
- C— EXISTING GAS LINE
- 12" SD— EXISTING STORM DRAIN
- OH— EXISTING OVERHEAD POWER
- ⊙ EXISTING FIRE HYDRANT
- ⊙ EXISTING WATER VALVE
- ⊙ EXISTING MANHOLE
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED MANHOLE
- PROPOSED CLEANOUT
- FIRE LANE - PAINT CURBS RED

CONSTRUCTION NOTES AND ESTIMATE OF QUANTITIES

- WATER**
- 1) INSTALL 12"x6" TAPPING SLEEVE AND 6" TAPPING VALVE 3 EA
 - 2) INSTALL 12"x 1-1/2" SERVICE SADDLE WITH CORP. STOP PER UDACS PLATE 1-D 3 EA
 - 3) INSTALL 8" DCDA (FEBCO "N" PATTERN, MODEL NO. 876) PER UDACS PLATE NO. 20B 1 EA
 - 4) INSTALL 1-1/2" WATER METER PER UDACS PLATE NO 1-D 3 EA
 - 5) INSTALL 1-1/2" RPPA PER UDACS PLATE NO 11-A 3 EA
 - 6) INSTALL IRRIGATION AUTO SUPPORT VALVE 3 EA
 - 7) INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO 7 6 EA
 - 8) INSTALL 8" GATE VALVE 1 EA
 - 9) INSTALL 8" 45° BEND 2 EA
 - 10) INSTALL 8" WATER MAIN (FIRE) 688 LF
 - 11) INSTALL 8" 90° BEND 3 EA
 - 12) INSTALL 10"x8" MECH. JT. TAPPING SLEEVE & 8" TAPPING VALVE 1 EA
 - 13) INSTALL 1-1/2" WATER LINE 80 LF
 - 14) INSTALL 2" WATER LINE 204 LF
 - 15) INSTALL 2"x1-1/2" REDUCER 3 EA
- SEWER**
- 48" STANDARD MANHOLE (PUBLIC) 3 EA
 - 8" PVC SEWER (PUBLIC) 749 LF
 - 6" PVC SEWER 101 LF

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY (1) - 8"

THE DOUBLE CHECK DETECTOR ASSEMBLY 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.

REDUCED PRESSURE PRINCIPLE ASSEMBLY - (3) (1-1/2")

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

SEWER CONTRIBUTION

AVERAGE FLOW = 0.0112 MGD
PEAK FLOW = 0.0390 MGD

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

BENCHMARK

BM #32, 2LV02 2954, BEING A RIVET AND PLATE IN TOP OF CURB, NE RETURN MARION DRIVE AND BONANZA ROAD. ELEV: 1766.98' NAVD88

BASIS OF BEARINGS

N 87°11'20" E BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 29, TOWNSHIP 20 SOUTH, RANGE 62 EAST, M.D.M., CITY OF LAS VEGAS, NEVADA. AS PER PARCEL MAP 48, PAGE 97 OF CLARK COUNTY OFFICIAL RECORDS. SAID LINE ALSO BEING THE CENTERLINE OF BONANZA ROAD.

LAS VEGAS FIRE DEPARTMENT

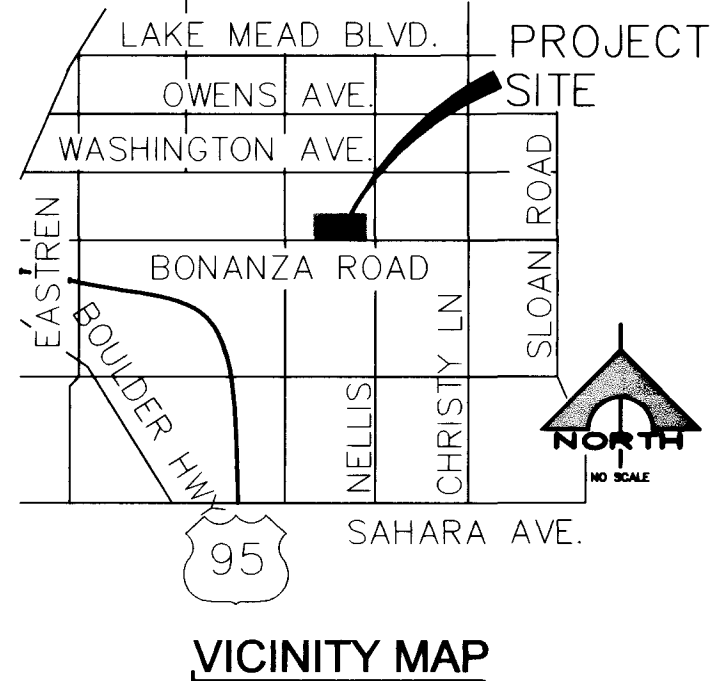
FIRE FLOW IS 1750 GPM AT 20PSI RESIDUAL PRESSURE
BASED ON: 9840 S.F.
NUMBER OF STORIES: 1
OCCUPANCY: B&M
FULL AUTOMATIC FIRE SYSTEM: NO
TYPE CONSTRUCTION: V-1HR

[Signature] 5/19/99
CITY FIRE MARSHAL DATE

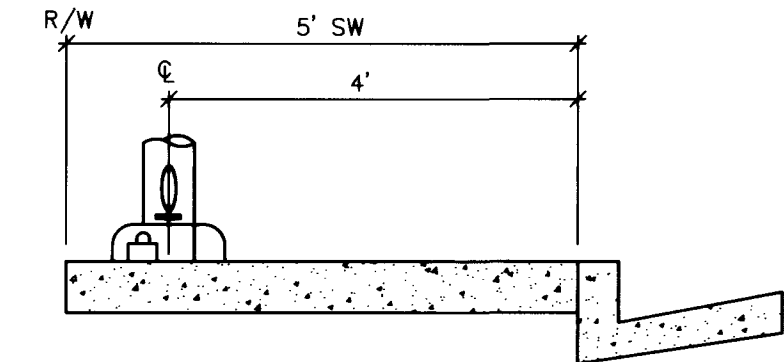
APPROVAL
APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT DATE

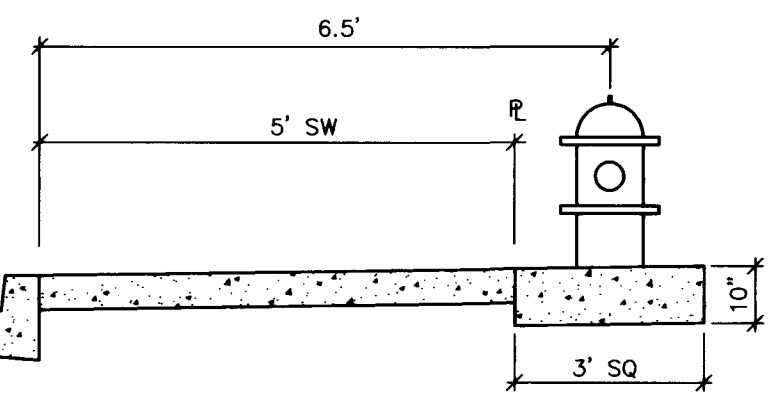
8" SEWER IN LILLIAN RUNS SOUTH AND DISCHARGES INTO A 10" IN BONANZA ROAD. THIS 10" RUNS EAST AND DISCHARGES INTO A 10" IN NELLIS BLVD WHICH RUNS SOUTH AND DISCHARGES INTO A 15" APPROX 700' NORTH OF STEWART AVE.



VICINITY MAP



**STREET LIGHT DETAIL
TYPICAL**

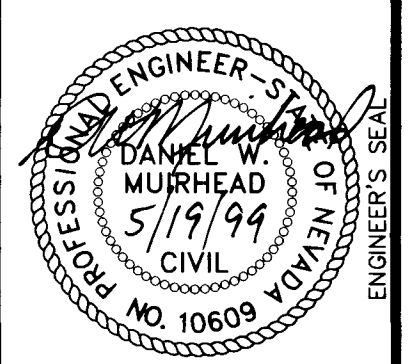


**FIRE HYDRANT DETAIL
TYPICAL**

TETRA
Southwest
3081 South Valley View • Las Vegas, Nevada 89012
Phone: (702) 869-6010 • Fax: (702) 869-6020

SCALE (H)	SCALE (V)	DESIGN BY	DRAWN BY	REV. #	DATE	DESCRIPTION	APPROVAL
1"=40'	NONE	PK	FA				

**SEAGULL PARK
BONANZA EAST PLAZA
UTILITY PLAN**



**SHEET
C4**
4 OF 7 SHEETS
JOB# 99007
107-V3097



G:\99007\dwg\lumprow\007-c4.dwg Wed May 19 08:36:38 1999 UDSE

