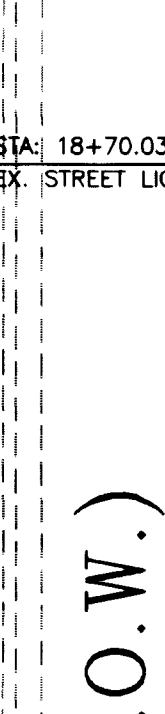


1. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE, BACK OF CURB, PROPERTY LINE, CENTERLINE, & BUILDING LINE, UNLESS NOTED OTHERWISE.
2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. ALL SEWER AND WATER LATERALS ARE TO BE INSTALLED PER UPL STANDARDS FROM MAIN TO 5' FROM BUILDING.
4. ALL EXISTING UTILITY STRUCTURES WITH CONNECTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (IE. NW BOX, TEL. TEL. BOX, ETC.).
5. FOR EXACT BUILDING LATERAL CONNECTION POINTS, SEE PLUMBING PLANS.



1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY LVVMD FOLLOWING WATER PLAN APPROVAL. NOTICE SHALL BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO AN LVVMD INSPECTION.
2. ALL WORK SHALL CONFORM TO LVVMD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN (UDACS), LATEST EDITION, STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
3. 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 OFF-SITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVMD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.

7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT OF A WATERLINE AND SANITARY OR STORM SEWER LINE CROSS:
 - A. 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.
9. WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.

10. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVYMD'S DISTRIBUTION SYSTEM.
11. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM THE LVYMD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVYMD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 P.M. AND 6 A.M., SUNDAY THROUGH THURSDAY. THE CONTRACTOR MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVYMD REIMBURSEMENT, ANY TEMPORARY SERVICE FEED MAY HAVE PRIOR LVYMD APPROVAL.
13. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVYMD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR CONSTRUCTION MATERIALS, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

- ① MAKE CONNECTION TO EX. 6" SEWER STUB (PRIVATE) WITH CLEANOUT.
- ② STUB SEWER WITH CLEANOUT
- ③ INSTALL 8" TAPPING SLEEVE & 8" TAPPING VALVE
- ④ 8" x 90° ELBOW
- ⑤ INSTALL 6" FIRE HYDRANT ASSEMBLY PER U.D.S. PLATE NO. 7
- ⑥ 6" x 45° BEND
- ⑦ 8" GATE VALVE
- ⑧ 8" x 45° BEND
- ⑨ 8" x 8" x 6" TEE
- ⑩ 8" TEE
- ⑪ 6" x 90° ELBOW
- ⑫ INSTALL 4" DIA. SMH PER CCSD STD DWG NO. SD-1
- ⑬ SEWER CLEANOUT PER UNIFORM PLUMBING CODE, LATEST EDITION
- ⑭ 6" GATE VALVE

- 15 6"x6"x3" TEE
- 16 INSTALL 4" PVC SEWER LATERAL CONNECTION PER CCSD STD. DWG. NO. SD-17, LAY PIPE AT 2.0% SLOPE
- 17 REMOVE 8" SEWER PLUG, MAKE CONNECTION TO EXIST. SEWER
- 18 REMOVE 8" WATER CAP & PLUG, MAKE CONNECTION TO EXIST. WATER
- 19 INSTALL 6" PVC SEWER LATERAL CONNECTION PER CCSD STD. DWG. NO. SD-17
- 20 CONCRETE ENCASE BOTH SEWER AND WATER LINES TO 1' BEYONDCROSSING POINT W/300 PSI CONCRETE SLURRY
- 21 INSTALL 250W STREET LIGHT
- 22 INSTALL 2" STREET LIGHT CONDUIT
- 23 MAKE CONNECTION TO EXISTING 8" WATER LATERAL W/8"x90" ELBOW
- 24 INSTALL 8"x2" FSM, SEE DETAIL, THIS SHEET
- 25 INSTALL 8" RPPA PER UDACS PLATE NO. 11B



(IN FEET)
1 inch = 30 ft.

[Signature] 10.27.98
CITY FIRE MARSHALL DATE

LAS VEGAS VALLEY WATER DISTRICT DATE

AVERAGE FLOW = 17,840 GAL/DAY (178,400 SF @ 0.10 GAL/DAY/S.F.)
PEAK FLOW = 58,872 GAL/DAY (3.3 PEAK FACTOR)

FIRE FLOW IS: 3,125 GPM AT 20 PSI RESIDUAL PRESSURE

BASED ON: LARGEST BLDG.
SQUARE FOOTAGE: 51,970 SQ. FT.

AREA BETWEEN 4-HR AREA
SEPARATION WALLS: N/E
N/E

BUILDING HEIGHT: 35'

NUMBER OF STORIES: 1

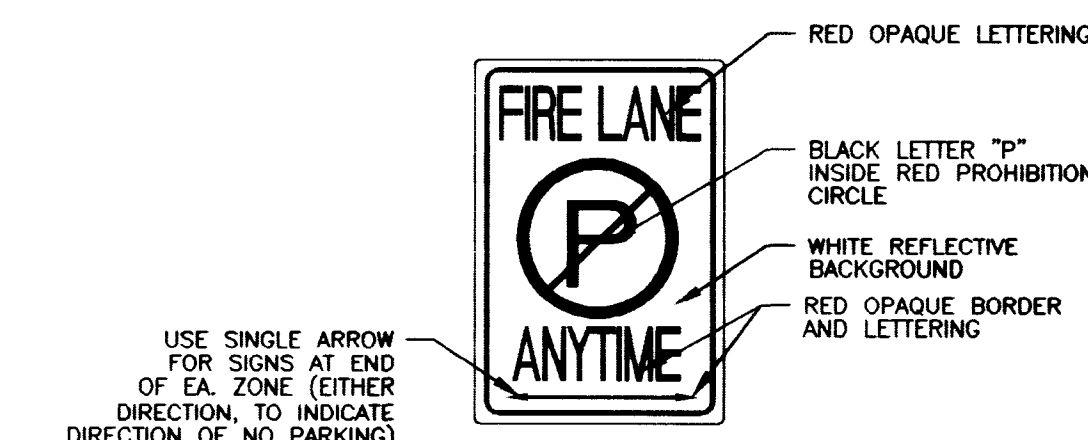
OCCUPANCY: V-M

FULL AUTOMATIC FIRE SYSTEM: YES

NOTE:

ALL ON-SITE SEWERS ARE PRIVATELY OWNED AND MAINTAINED.

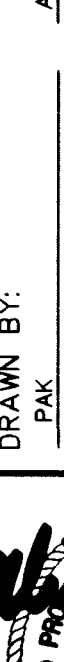
CURB PAINTED RED
4" HIGH, WHITE PAINTED BLOCK LETTERS
"NO PARKING FIRE LANE" ON CURB FACE
OR BLOCK WALL & "FIRE LANE" NO PARKING
SIGN (SEE DETAIL BELOW) @ 50' O.C. MAX



The diagram illustrates the placement of a street light pole relative to the road center line and sidewalk. Key dimensions include the Right of Way (R/W), a 5-foot distance from the sidewalk (SW), the Center Line (C/L), and a 4-foot offset from the center line to the pole.

Diagram illustrating the Fire Hydrant Installation. The hydrant is shown with a 3" BC (MIN. PRIVATE) and 6.5" (PUBLIC) connection. The hydrant is mounted on a base with a 36" diameter. The hydrant has a 5' S.W. (Side Water) connection. The hydrant is shown with a 10" height. The hydrant is shown with a 10" height. The hydrant is shown with a 10" height.



 C3	DRAWN BY: _____ DATE: AUG'98	UTILITY PLAN	NORTHWEST PROPERTIES, L.L.C. 6900 WESTCLIFF DRIVE, #505 LAS VEGAS, NEVADA 89128 (702)256-3781	 AGRA Infrastructure, Inc. ENGINEERING GLOBAL SOLUTIONS 3016 W. CHARLESTON BOULEVARD, SUITE 180 LAS VEGAS, NEVADA 89102 PHONE: (702) 878-3817 FAX: (702) 878-3716	REV	DATE	BY	REVISION
	DESIGNED BY: _____ DATE: MC/06/MS/PNK				CHECKED BY: _____ DATE: _____	PROJECT NO: _____ DATE: 02-1998-087	SCALE: _____ 1" = 30'	

