

ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS," "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3944.

2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:

- A. KENNEDY GUARDIAN
- B. MUELLER A-423 CENTURIAN
- C. CLOW MODEL 2546 MEDALLION

3. 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.

4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTER LINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3944 TO IDENTIFY THE FIRE HYDRANT LOCATIONS.

5. 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.

6. 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.

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. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.

9. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.

10. ALL ON-SITE FIRE HYDRANT INFORMATION MUST BE U.L.I.S.TED AND A.W.W.A. APPROVED.

11. FIRE HYDRANT SPACING:

RESIDENTIAL - 500 FEET UNSPRINKLERED, 1,000 FEET SPRINKLERED.
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 600 FEET SPRINKLERED.

12. 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.

13. 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.

14. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.

15. TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE A MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.

16. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.

17. FIRE APPARATUS ACCESS ROADS 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, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.

18. 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.

19. 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 U.F.C. 44, SECTION 902.2.)

20. 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.

21. ACCESS ROADS 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 THE DESIGNATED FIRE LANE. SIGNS TO BE PLACED ON BOTH SIDES 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 SIGNS, WHETHER ON THE PAVING OR ON THE CURB, SHALL BE 18 INCHES SQUARE, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.

22. 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.

1/96

	RADIUS	LENGTH	TANGENT	DELTA
C1	61.00'	73.36'	41.85'	65°54'14"
C2	45.00'	12.17'	6.12'	15°29'26"
C3	10.00'	7.97'	5.33'	56°04'24"
C4	10.00'	9.45'	5.11'	54°07'26"
C5	45.00'	23.56'	12.06'	30°00'00"
C6	15.00'	15.71'	8.66'	60°00'00"

	LENGTH	BEARING
1	108.22'	S 44°49'31" W
2	95.29'	S 44°37'55" W
3	15.70'	S 44°54'03" E
4	16.00'	N 44°26'21" E
5	70.06'	N 00°33'39" W
6	115.74'	N 00°33'39" W

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVMD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE MUST BE GIVEN TO THE LVVMD AND THE LVVMD 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 LVVMD INSPECTION.
2. ALL WORK SHALL CONFORM TO THE LVVMD'S STANDARD PLANS, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION 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 OFFSITE 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 A WATER LINE 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 WATER LINE IS INSTALLED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH A MINIMUM OF FOUR (4) INCH VERTICAL SEPARATION FROM THESE PLANS.
 - A. POTABLE WATER SUPPLY QUALITY MATERIAL.
 - B. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM).
 - C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.
9. 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.
10. WARNING TAPE SHALL BE REQUIRED OVER ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS. IF ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
11. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVMD'S DISTRIBUTION SYSTEM.
12. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVMD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
13. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVMD 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 LVVMD REIMBURSEMENT. AN EMERGENCY SERVICE, FEED MUST HAVE PRIOR LVVMD APPROVAL.
14. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVMD'S PREAPPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION SPECIFICALLY APPROVED ON THESE PLANS.

STD FIRE HYDRANT ASSEMBLIES	3 EA
18" STORM DRAIN	241 LF
8" PVC	1545 LF
8" PVC (PUBLIC)	55 LF
6" PVC	601 LF
6" SEWER	360 LF
4" PVC	877 LF
4" SEWER	50 LF
3" PVC	1146 LF
8" VALVE (TAPPING)	1 EA
8"x 10" TAPPING TEE (MECHANICAL JOINT)	1 EA
8" 6" TEE	5 EA
2" METER	1 EA
1 1/2" METER	4 EA
2" RPPA	1 EA
1 1/2" RPPA	6 EA
8" DOUBLE CHECK DETECTOR ASSEMBLY (PUBLIC)	2 EA
8" x 10" REDUCER	1 EA

NOTE: THESE QUANTITIES ARE ESTIMATES ONLY.
CONTRACTOR SHALL VERIFY.

THE FIRE FLOW REQUIREMENT IS: 3,200 GALLONS PER MINUTE
20 PSI RESIDUAL PRESSURE.

BASED ON:

SQUARE FOOTAGE: 53,163 SQUARE FEET

LARGEST AREA BETWEEN
4-HOUR AREA SEPARATION
WALLS: N/A SQUARE FEET

BUILDING HEIGHT: 25 FEET

NUMBER OF STORIES: 2 FLOORS

TYPE OF CONSTRUCTION: II-NON RATED

OCCUPANCY: OFFICE

FULL AUTOMATIC FIRE
SPRINKLER SYSTEM: YES

REVIEWED BY: AM

DATE: 9.13.16

THE DOUBLE CHECK DETECTOR ASSEMBLIES 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.

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

EASEMENT LINE DATA		
	BEARING	DISTANCE
C1	N 62° - 49' - 13" W	50.0'
C2	S 27° - 10' - 47" W	70.0'
C3	N 62° - 49' - 13" W	35.0'
C4	S 27° - 10' - 47" W	50.0'
C5	N 62° - 49' - 13" W	15.0'

GRAPHIC SCALE

PEAK FLOW = 0.1360 MGD
AVG. FLOW = 0.0450 MGD

[illegible]

1	FIRE HYDRANT ASSY.
2	8" x 6" TEE
3	8" 90° BEND
4	8" 45° BEND
5	8" x 4" TEE
6	10" x 8" TAPPING TEE (MECH. JOINT)
7	8" TAPPING VALVE
8	6" 90° BEND
9	6" 45° BEND
10	4" 90° BEND
11	4" 45° BEND
12	3" 90° BEND
13	3" 45° BEND
14	10" X 8" REDUCER
15	3" TEE
16	1-1/2" REDUCER
17	1-1/2" VALVE

Maryann P. Rodriguez 10/19/96
 LAS VEGAS VALLEY WATER DISTRICT DATE
 Mary M. Miller 9-13-96
 CITY OF LAS VEGAS FIRE DEPARTMENT DATE
 R. P. E. on 9-19-96
 NEVADA POWER COMPANY DATE
 NOTE: THIS APPROVAL IS FOR THE PLACEMENT AND CLEARANCE
 OF STREET LIGHT AND SIGNAL LIGHT INSTALLATION ONLY.

