

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. SEE UNIFORM STANDARD DRAWING NO. 319.

THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT OF A WATER-SEWER/STORM CROSSING:

WHEN PROTECTION OF THE WATER LINE IS CONSIDERED, THE MINIMUM VERTICAL DISTANCE OF 18 INCHES MUST BE MAINTAINED WHEN THE WATERLINE IS INSTALLED OVER THE SEWER/STORM LINE. IF THIS DISTANCE CANNOT BE MAINTAINED, THE WATER LINE SHALL BE PROTECTED OR THE WATERLINE MUST BE PLACED UNDER THE SEWER/STORM LINE. THE SEWER/STORM LINE MUST BE CONSTRUCTED WITH ANY ONE OF THE FOLLOWING:

- EXTRA HEAVY CAST IRON OR DUCTILE IRON PIPE;
- WATER SUPPLY QUALITY MATERIAL;
- ENCASEMENT WITH 4 INCHES MINIMUM CONCRETE SLEEVING OR WITH WATER QUALITY PIPE;

EACH OF THESE PROVISIONS MUST BE EXTENDED FOR 10 FEET ON EITHER SIDE OF THE WATERLINE AT 90 DEGREES TO THE CROSSING.

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LATEST EDITIONS OF THE ABOVE SYSTEMS. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORMANCE CONFORMANCE AND ANY PENALTIES, ADDITIONS, DELETIONS OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE ENGINEER.
3. CHASEL 15" OR 18" IN CIRCLES WHERE SEWER OR GAS LATERALS PASS THROUGH THE POLYMER (PVC) SEWER PIPE SHALL MEET ASTM D-3034 BUREAU SPECIFICATIONS, PROTECT WITH SAND RING AND BANGLE OF 12" OR LARGER.
4. ALL MANHOLES IN PAVED STREETS, R/W 8' W/4" AND LARGER, SHALL HAVE CONCRETE COVERS.
5. TEST SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES TO 12" IN SIZE. CONNECTION TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
6. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN SHALL BE REINFORCED WITH 4" STEEL PLATE 1/4" THICK. NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN. SEE WATER-SIDE/STORM DRAIN CROSSING NOTE SHEET.
7. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE LOCAL HEALTH AGENCY SHALL BE REQUIRED TO OBTAIN A PERMIT.

CLV BENCHMARK: 1LV9036NWW6, EL. 2289.592 RIVET & PLATE IN TOP OF CURB, APPROXIMATELY 1/4 MILE NORTH OF WASHBURN ROAD ON JONES BLVD., EAST SIDE.

FIRE HYDRANT	28 EA
12" PVC	2,286 LF
8" PVC	176 LF
6" PVC	11,342 LF
12" x 8" CROSS	1,175 LF
8" x 6" CROSS	2 EA
12" x 10" TEE	2 EA
12" x 8" TEE	4 EA
12" x 6" TEE	3 EA
8" x 6" TEE	5 EA
8" x 6" TEE	27 EA
6" x 6" TEE	2 EA
12" VALVE	6 EA
8" VALVE	30 EA
6" VALVE	30 EA
12" x 8" REDUCER	1 EA
10" x 8" REDUCER	1 EA
8" x 6" REDUCER	1 EA
8" 90° BEND	2 EA
8" 45° BEND	17 EA
8" 22 1/2° BEND	5 EA
8" 11 1/4° BEND	13 EA
6" 22 1/2° BEND	2 EA
12" CAP	3 EA
8" CAP	6 EA
BLOWOFF ASSEMBLY	8 EA
1 1/2" IRRIGATION SERVICE & METER	2 EA
3/4" SERVICE W/METER BOX	230 EA
1/4" METER BY L.V.V.W.D.	230 EA
1" SERVICE W/METER BOX	2 EA
1" METER BY L.V.V.W.D.	5 EA

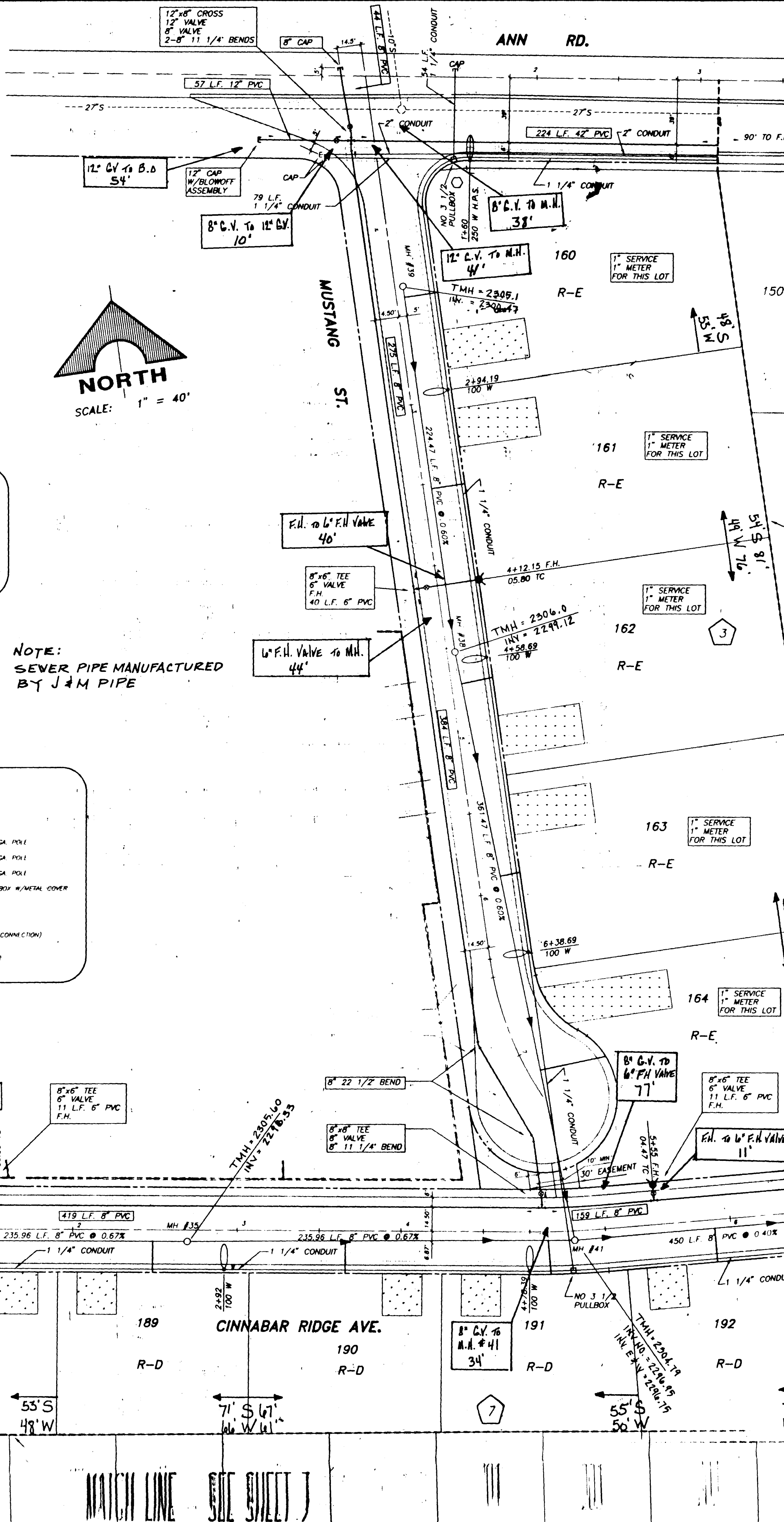
STOP SIGN	6 EA.
STREET SIGN	27 EA.
WT-6 (48"x24")	4 EA.
TYPE 1 CENTERLINE	353 L.F.

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

	RIGHT OF WAY LINE		CONCRETE DRIVE WAY
	EAST-UNIT LINE		
	8" W. EXIST. WATER LINE		
	8" S. EXIST. SEWER LINE		
	FIRE HYDRANT W/LEAD AND G.V.		
	W. WATER LINE		
	S. SEWER LINE WITH MANHOLE		200W HPS LUMINAIRE W/11 GA. POLE
	SEWER LATERAL		100W HPS LUMINAIRE W/11 GA. POLE
	GATE VALVE		NO. 3 1/2\" data-bbox="505 325 580 355"/>
	1\" data-bbox="25 565 185 595"/>		STOP SIGN
	STREET SIGN		S.P.O.C. (SERVICE POINT OF CONNECTION)
	IRRIGATION ELECTRICAL METER		

NOTE:
CONTRACTOR TO VERIFY THE HORIZONTAL
AND VERTICAL LOCATION OF EXISTING
UTILITIES PRIOR TO CONSTRUCTION.
ANY DISCREPANCIES WITH THE PLANS
SHALL BE IMMEDIATELY REPORTED TO
THE ENGINEER.

NOTE:
SEWER PIPE MANUFACTURED
BY J & M PIPE



1. NO WORK SHALL BEGIN ON THE WATER PLATES UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LEVARD (LOCAL) GOVERNMENT APPROVAL OF THE LEVARD WATER SERVICE DEPARTMENT (870-4184) OR 48 HOURS PRIOR TO ACTUAL CONSTRUCTION AND THE LEVARD PRIOR TO ANY MODIFICATIONS.

2. CALL BEFORE YOU DIAL 1-800-237-2900.

3. ALL WORK MUST CONFORM TO LEVARD LATEST STANDARD PLATES, DRAWINGS AND SPECIFICATIONS.

4. ALL WORK, EXCEPT AS MODIFIED HEREIN OR BY NOT 3, SHALL BE DONE IN ACCORDANCE WITH MOST CURRENT DRAINAGE OR ADDITION OF URBAN STANDARD SPECIFICATIONS FOR THE LEVARD WATER SERVICE DEPARTMENT OFFICE HEADQUARTERS, CLARK COUNTY, INDIANA.

5. DISTRICT APPROVED SERVICE SADDLES OR TAPPED COWS SHALL BE REQUIRED FOR ALL 1/4" TO 2" SERVICE LATERALS. SERVICE LATERALS SHALL BE PERMITTED ON 1/2" AND 3" SERVICE LATERALS.

6. ALL TAPPED COWS AND COLLAR TAPPED COWS SHALL BE PERMITTED.

7. COPPER SERVICE LATERALS, ALL 1/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TYPED IN ACCORDANCE WITH THE DISTRICTS' STANDARDS AND SPECIFICATIONS.

8. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	ACP	DUCTILE IRON PIPE JOINT	DUCTILE IRON MECHANICAL JOINT
8" - 12" INCH	2.5 DEGREES	1.5 DEGREES	1.5 DEGREES
14" - 16" INCH	2.5 DEGREES	1.5 DEGREES	1.5 DEGREES
18" - 24" INCH	N/A	1.5 DEGREES	1.5 DEGREES

9. ON PACE PIPE, THE MAXIMUM OFFSET FOR A 30' LENGTH OF FACTORY BELIEVED SHALL BE 12" FOR 12" PIPE, 12" INCHES FOR 14" INCHES FOR 16" PIPE AND 9" FOR 18" PIPE.

10. ALL WATER MAIN BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AND SIDEWALKS.

11. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AND SIDEWALKS.

12. DETECTOR PATE IS REQUIRED IN ACCORDANCE WITH STANDARD SPECIFICATIONS WHEN INDICATED, AND AS FOLLOWS:

	A) DMR ALL MARKS NOT INSTALLED 6 FEET FROM INCH OF PUMP	B) DMR ALL SERVICE LATERALS NOT INSTALLED A 30' DETECTOR PATE
1. ALL WATER MAINS ARE TO BE PRESSURE TESTED AT 75% OF DESIGN PRESSURE AND 100% OF DESIGN PRESSURE.		
2. ALL WATER MAINS AND LATERALS SHALL BE DESIGNED AT 150% OF DESIGN PRESSURE AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO THE TEST.		

13. CONTRACTOR TO OBTAIN ALL METERS 7' AND 1' FROM CENTRAL STORES. TELEPHONE 258-3152 FOR PUMP TO PUMP.

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LOS ANGELES DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE 136777.
2. HYDRANTED HYDRANTS FOR THIS PROJECT ARE:
 - a. - KENNEDY GUARDIAN
 - b. - MULLER A-422
 - c. - CLOW MODEL 2546 METALLON
3. NO NEW HOME OR BUILDING INSTALLATION ACCESSIBLE FIRE HYDRANT SHALL BE INSTALLED BEFORE COMPLETION CONSTRUCTION OF THE HOME AND SAID FIRE HYDRANT SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
4. "HYDRANTER SHALL PLACE A BLUE IDENTIFY MARKER AT CENTER OF HYDRANT, 2 FEET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE 136777 TO IDENTIFY FIRE HYDRANT LOCATIONS.
5. THE LOS LEGAL BOUNDARY BETWEEN AT 279-207 FOR UNDERGROUND PROTECTION PROCEDURE AND FLESH VARIATIONS OF ALL 279-207S AND FIRE LINE LINES BEFORE COVERING.
6. "CITY OF LOS ANGELES AND HYDRANT AND ANY OTHER NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE OR OBSTRUCTION SHALL COMPLY WITH APPROVAL FROM THE CITY OF LOS ANGELES DEPARTMENT.
7. "HYDRANT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER SUPPLY FOR THE HYDRANT. THE HYDRANT SHALL BE INSTALLED AND VERIFIED FOR UNDERGROUND PIPING FORM SHALL BE INSTALLED WITH THE FIRE PROTECTION ENGINEER 2500S.
8. "FIRE TEST MUST BE COMPLETED BY THE FIRE DEPARTMENT SUPPLY 2 HYDRANT FOR VERIFICATION. REQUIRED ON-SITE WATER SUPPLY.
9. "ALL SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND 1" OR A APPROVED.
10. "FIRE HYDRANT SPACING:
 - a. - 100 FEET - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
 - b. - 100 FEET - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
 - c. - 100 FEET - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
11. "FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADII'S OF THE FIRE HYDRANT OR WITHIN 20 FEET OF THE PERIMETER OF THE RADII'S OF THE FIRE HYDRANT.
12. "NO FIRE HYDRANT SHALL BE LOCATED WITHIN 5 FEET OF ANY CURB RETURN DRIVE 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 HYDRANT ACCESS ROAD AND/OR FIRE LINE, PUBLIC OR PRIVATE SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS OF THE TURNING RADIUS. (SEE EXCEPTIONS IN LIFE CODE SECTION 10.07).
15. "ALL DEAD END FIRE HYDRANT ACCESS ROAD AND/OR FIRE LINE PUBLIC OR PRIVATE IN EXCESS OF 100 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNING RADIUS.

Title: 100 Requirements: 1500 gallons per minute at 20
 pounds per square inch, water
 100
 Square Footage: 2500
 Largest area between
 main occupation areas
 Height: 30 FEET
 Type of Construction: FRAME/STUCCO
 Exposure: MA
 Sprinkler System: NONE
 Occupancy: RESIDENTIAL
 Roof Construction: TILE
 Reason By: J. Expando
 Date: 5/5/94

**Call
before you
Dig**
1-800-227-2600
UNDERGROUND SERVICE (USA)

Water & Sewer
ASBUILT
WESTERN STATES CONTRACTING
2810 N. NELLIS BLVD.
LAS VEGAS, NV 89115

APPROVED FOR CONSTRUCTION

J. Lopez 5/5/94

LAS VEGAS FIRE DEPT. DATE

APPROVED FOR CONSTRUCTION

DATE 3/29/94

LAS VEGAS VALLEY WATER DISTRICT

[illegible]

UTILITY PLAN 1

