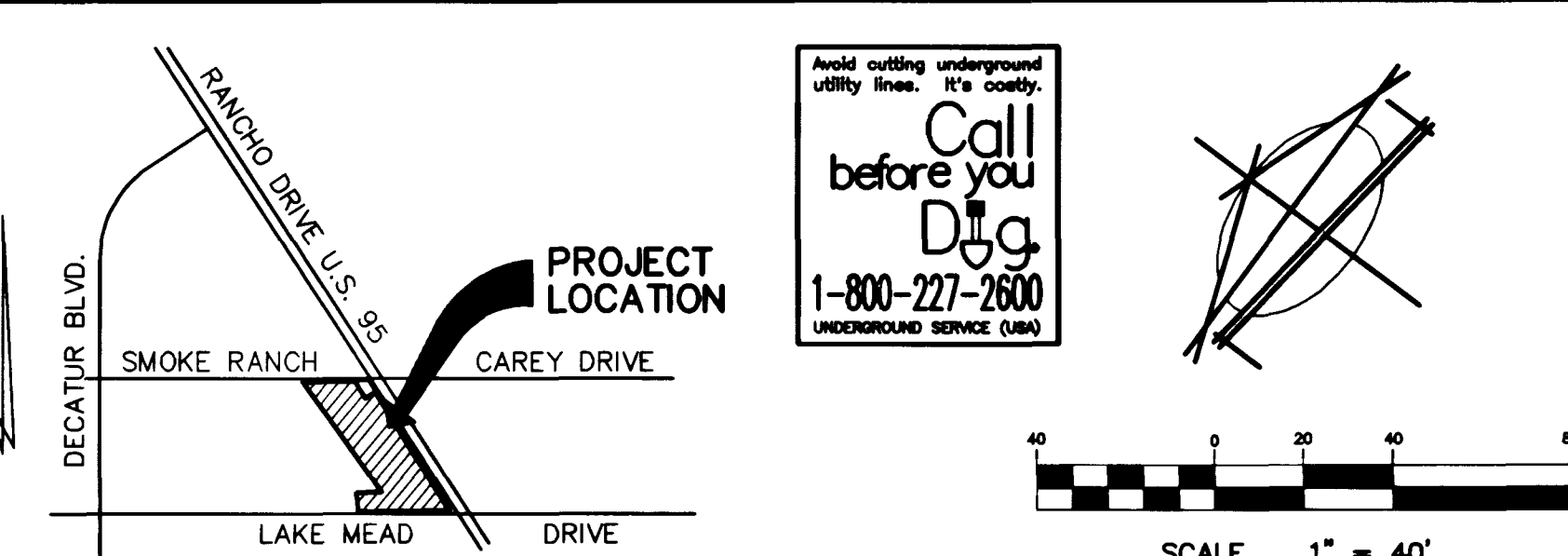


1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3944.
2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - A. KENNEDY GUARDIAN
 - B. MUELLER A-423 CENTURIAN
 - C. CLOW MODEL 2546 MEDAGON
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 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 #3944 TO IDENTIFY FIRE HYDRANT LOCATION.
5. CALL THE LAS VEGAS BUILDING 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 OF THE CITY OF LAS VEGAS FIRE DEPARTMENT.
7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT INSTALLATIONS. THE PERMIT AND CONTRACTORS 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 FLUSH TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
10. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.
11. FIRE HYDRANT SPACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLERED; 1,000 FEET SPRINKLERED
 - COMMERCIAL, INCL. 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 A 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 SOCES OR EQUIVALENT ARE REQUIRED WHENEVER THERE ARE 4 OR 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 FOADS 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 ON ONE SIDE, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES OF THE 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 CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
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 UFC 94, 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 ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF THE 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 CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH 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 GATES.

INSTALL 4 BOLLARDS (4" DIA. 8' LONG
STEEL PIPE FILLED W/CONC. SET 4' IN
GROUND W/8" DIAFTG) AT EACH FIRE
HYDRANT IN PARKING AREA AS SHOWN.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTANCE OR FROM INFORMATION OBTAINED FROM THE UTILITY COMPANIES. THE ENGINEER ACCEPTS NO LIABILITY FOR THE EXISTENCE OR NON-EXISTENCE OF UTILITY LINES. CONTRACTORS AND OTHERS USING THIS MAP MUST CONFIRM THE LOCATION OF UNDERGROUND LINES OR STRUCTURES WITH THE UTILITY COMPANIES PRIOR TO COMMENCING ANY EXCAVATION.



NO SCALE

1. ALL WORK SHALL CONFORM TO THE CITY OF NORTH LAS VEGAS STANDARDS AND THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA. IN ALL CASES THE CITY OF NORTH LAS VEGAS STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
2. NOTICE SHALL BE GIVEN TO THE CITY OF NORTH LAS VEGAS PUBLIC WORKS DEPARTMENT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
3. NO MAIN MAY BE SHUT DOWN TO MAKE CONNECTIONS WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT OF UTILITIES. WHEN A SHUT DOWN WILL LAST LONGER THAN 4 HOURS, WRITTEN APPROVAL MUST BE OBTAINED.
4. WATER SERVICE CONNECTIONS WILL BE MADE WITH TAPPED COLLARS OR APPROVED SERVICE CLAMPS. DOUBLE TAP COLLARS SHALL NOT BE PERMITTED.
5. ALL VALVE BOXES SHALL HAVE AN 8 INCH THICK CONCRETE COLLAR AS SHOWN ON CLARK COUNTY UNIFORM STANDARD DRAWING NO. 517 OR MAY BE RAISED AFTER PAVING WITH A NEAT CUT ON A 12 INCH RADIUS FROM THE CENTER OF THE VALVE BOX AND CONCRETE POURED FLUSH WITH THE FINISH PAVING GRADE.
6. ALL WATER VALVES 12 INCHES AND LARGER SHALL BE BUTTERFLY VALVES AND SHALL CONFORM TO THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS, SUBSECTION 629.02.23B.
7. ALL LINES SHALL BE PRESSURE TESTED TO 200 P.S.I..
8. ALL NON-METALLIC WATER MAINS AND SERVICES OVER 2 INCHES IN DIAMETER SHALL BE INSTALLED WITH A LOCATOR RIBBON IN ACCORDANCE WITH NORTH LAS VEGAS STANDARD DRAWINGS.
9. ALL SERVICE LINES, 2 INCHES IN DIAMETER AND SMALLER, SHALL BE COPPER.
10. THE INSTALLATION OF WATER METERS SHALL BE REQUIRED ON ALL WATER SERVICES.
11. ALL WATER METER BOXES SHALL BE EQUIPPED WITH A CAST IRON TRAFFIC COVER.
12. METER BOXES SHALL BE PLACED TRUE TO GRADE ON PLAN. WHERE NO CURB EXISTS, PROPOSED ELEVATION SHALL BE OBTAINED FROM THE CITY ENGINEER.
13. CORPORATION STOP, ANGLE METER STOP AND SERVICE LATERAL SHALL BE THE SAME SIZE.
14. METER ASSEMBLY, CONSISTING OF ANGLE METER STOP, ANGLE TAIL PIECE AND IDLER SHALL BE CENTERED IN METER BOX.
15. THE TOP OF ALL ANGLE METER STOPS SHALL BE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 8 INCHES BELOW METER BOX COVER.
16. ALL NEW FIRE HYDRANTS TO BE INSTALLED SHALL CONFORM TO THE MOST CURRENT EDITION OF THE UNIFORM STANDARD SPECIFICATIONS, SUBSECTION 629.03.14 EXCEPT THAT A 5-1/4 INCH VALVE OPENING SHALL BE REQUIRED.
17. PRIOR TO FINAL ACCEPTANCE, ALL BACKFLOW PREVENTION ASSEMBLIES MUST BE TESTED AND CERTIFIED BY A PROPERLY LICENSED AND CERTIFIED TESTER APPROVED BY THE CITY OF NORTH LAS VEGAS.
18. AS-BUILT DRAWINGS, PER CITY OF NORTH LAS VEGAS STANDARDS, MUST BE SUBMITTED TO THE UTILITIES DIVISION PRIOR TO FINAL ACCEPTANCE.

FIRE FLOW REQUIREMENT IS:
1875 GPM AT 20 P.S.I. RESIDUAL.

BASED ON:	
SQUARE FOOTAGE:	20,520 SF
LARGEST AREA BETWEEN 4-HR. AREA SEPERATION WALLS:	20,520 SF
BUILDING HEIGHT:	30 FT.
NUMBER OF STORIES:	3 FLOORS
TYPE OF CONSTRUCTION	TYPE V - N
OCCUPANCY	MOTEL/HOTEL
FULL AUTOMATIC FIRE SPRINKLER SYSTEM, PER NFPA No. 13 <i>(All Buildings)</i>	YES

REVIEWED BY: Gray Muthal
DATE: 5-29-96

WATER PLAN
SECTION 19, TOWNSHIP 20 SOUTH, RANGE 61 E
CITY OF LAS VEGAS
SUN HARBOR – RANCHO/SMO

SHEET
3
OF
11
PROJ. NO.
W1

