

CITY OF LAS VEGAS GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST EDITION, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CITY OF LAS VEGAS, ANY OTHER APPLICABLE STANDARDS ISSUED BY THE CONTROLLING AGENCY, THE UNIFORM BUILDING CODE, AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED SATISFACTORY TO THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY ALTERATIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE DESIGNED FOR A 5.5 SACK MIX WITH A MAXIMUM WATER/CEMENT RATIO 0.45 (OR AS DESIGNED BY THE SOILS ENGINEER). MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE CITY ENGINEER OR PER THE PLANS.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER OR PER THE PLANS.
- EXACT LOCATION OF ALL SAWCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS INSPECTOR IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.

BENCH MARK:
B.M. NO. 06120C1 - BOLT & PLATE AT THE NORTHEAST CORNER OF TONOPAH HIGHWAY AND VEGAS DRIVE.
ELEV. = 2116.33 CITY OF LAS VEGAS DATUM

BASIS OF BEARINGS:

N 89° 55'00" W - THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 20, TOWNSHIP 20 SOUTH, RANGE 31 EAST, NAD 83, AS SHOWN ON PLAT MAP BOOK 2, PAGE 28, CLARK COUNTY RECORDS, NEVADA.

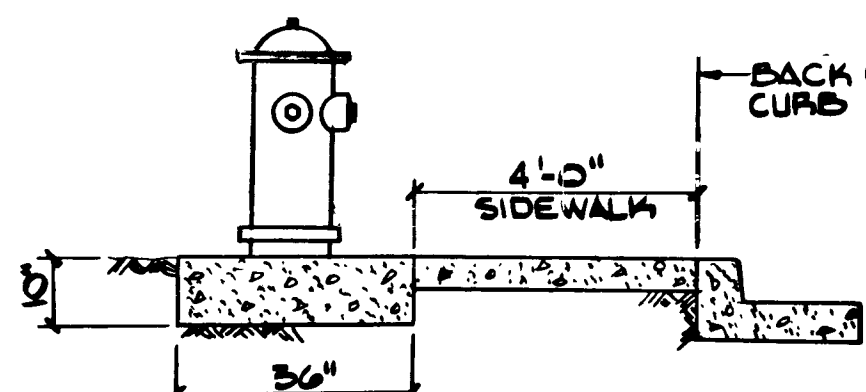
APPROVED BY

[Signature] 4/18/89
* NEVADA POWER COMPANY DATE
LAS VEGAS VALLEY WATER DISTRICT DATE
CLV FIRE MARSHALL DATE

* THIS IS FOR APPROVAL ON STREETS LIGHTS CLEARANCES ONLY.

SEWER LINE NOTES:

- ALL SANITARY SEWER 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.
- CHISEL "S" OR "H" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING BACKFILL OR TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS 80" R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 18" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED PIPE FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL ON-SITE SEWERS ARE PRIVATELY OWNED AND MAINTAINED.



- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT, OR ANY OTHER OBSTRUCTION.
- FIRE HYDRANTS IN OPERATION PRIOR TO CONSTRUCTION PER CITY OF LAS VEGAS FIRE DEPARTMENT.

STANDARD FIRE HYDRANT DETAIL



THE KEITH COMPANIES
NEVADA

PLANNING
DESIGN
CONSTRUCTION
LANDSCAPE ARCHITECTURE
ENGINEERING

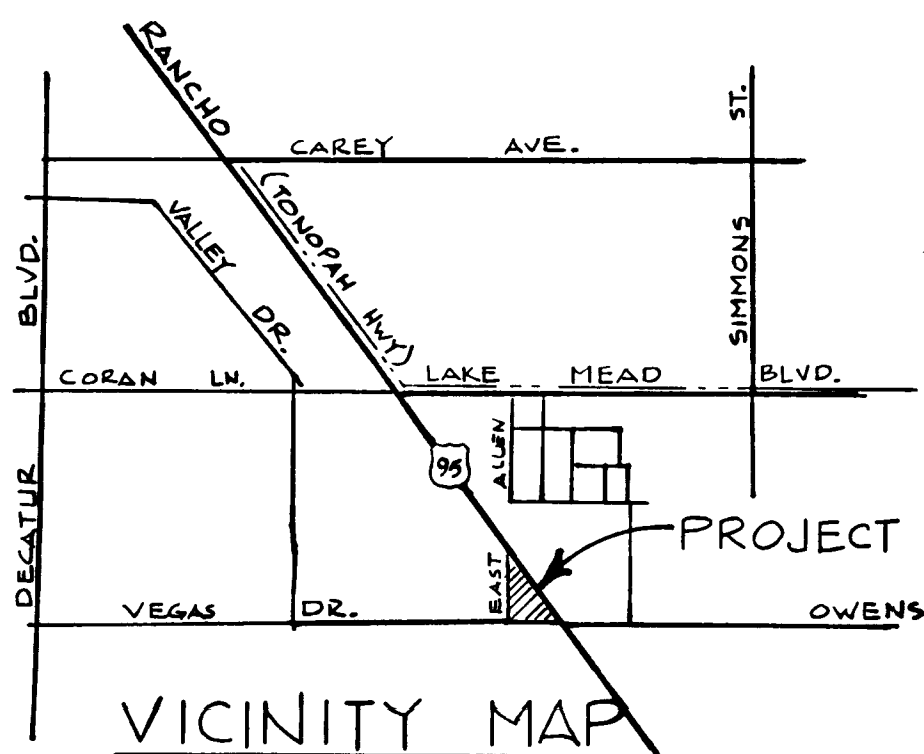
2000 E. SUMMIT, 30 A-B, Las Vegas, NV 89103 (702) 798-3988

QUANTITY ESTIMATES

WATER - OFFSITE		
1	WET TAP	1 EA.
2	8" TAPPING VALVE (MECH. JOINT)	1 EA.
3	3/4" WATER SERVICE CONNECTION	3 EA.
4	3/4" WATER METER (BY L.V.W.D.)	3 EA.
5	3/4" WATER SERVICE (BY CONTRACTOR)	113 L.F.
6	2" WATER MAIN	10 L.F.
7	3/4" R.P.D. (BY CONTRACTOR)	1 EA.
WATER - ONSITE		
8	6" DETECTOR CHECK (BY CONTRACTOR)	1 EA.
9	FIRE HYDRANT ASS'Y, INCLUDING GATE VALVE, TEE, RISER, LATERAL, TURBID METER, & ALL ASSOCIATED HARDWARE	1 EA.
10	8" x 4" x 8" TEE	1 EA.
11	8" WATER MAIN	230 L.F.
12	4" WATER MAIN	20 L.F.
13	8" x 4" REDUCER	1 EA.
14	3/4" WATER SERVICE	123 L.F.
SEWER - OFFSITE		
15	6" PVC SEWER LATERAL	20 L.F.
SEWER - ONSITE		
16	6" PVC SEWER LATERAL	157 L.F.

STREET LIGHT QUANTITIES ESTIMATE

250 W H.P.S.	5 EA.
100 W H.P.S.	3 EA.
1 1/4" STREET LIGHT CONDUIT	703 L.F.
POINT OF CONNECTION	
FIRE FLOW ESTIMATE	
TYPE OF CONSTRUCTION	SM
AREA	6200 S.F.
NUMBER OF STORIES	1 SINGLE
OCCUPANCY	VETERINARY HOSPITAL
AUTO SPRINKLERS	YES
EXPOSURES	
FRONT	0'
LEFT	0'
REAR	0'
RIGHT	35'
TOTAL	1467 GPM
FIRE FLOW REQUIRED	1500 GPM



Minimum Specifications of "No Parking Fire Lane Signs"
Size: 1' wide x 1 1/2' long or 2' wide x 2 1/2' long as required
Color: Red and black on white luminous background (see above example)
Verbiage: Fire Lane, Section 10.207 - Las Vegas Fire Code
Symbol: International No Parking Symbol
Height: To be installed not less than seven feet (7') nor more than ten feet (10') from ground level

CITY OF LAS VEGAS FIRE DEPT. NOTES

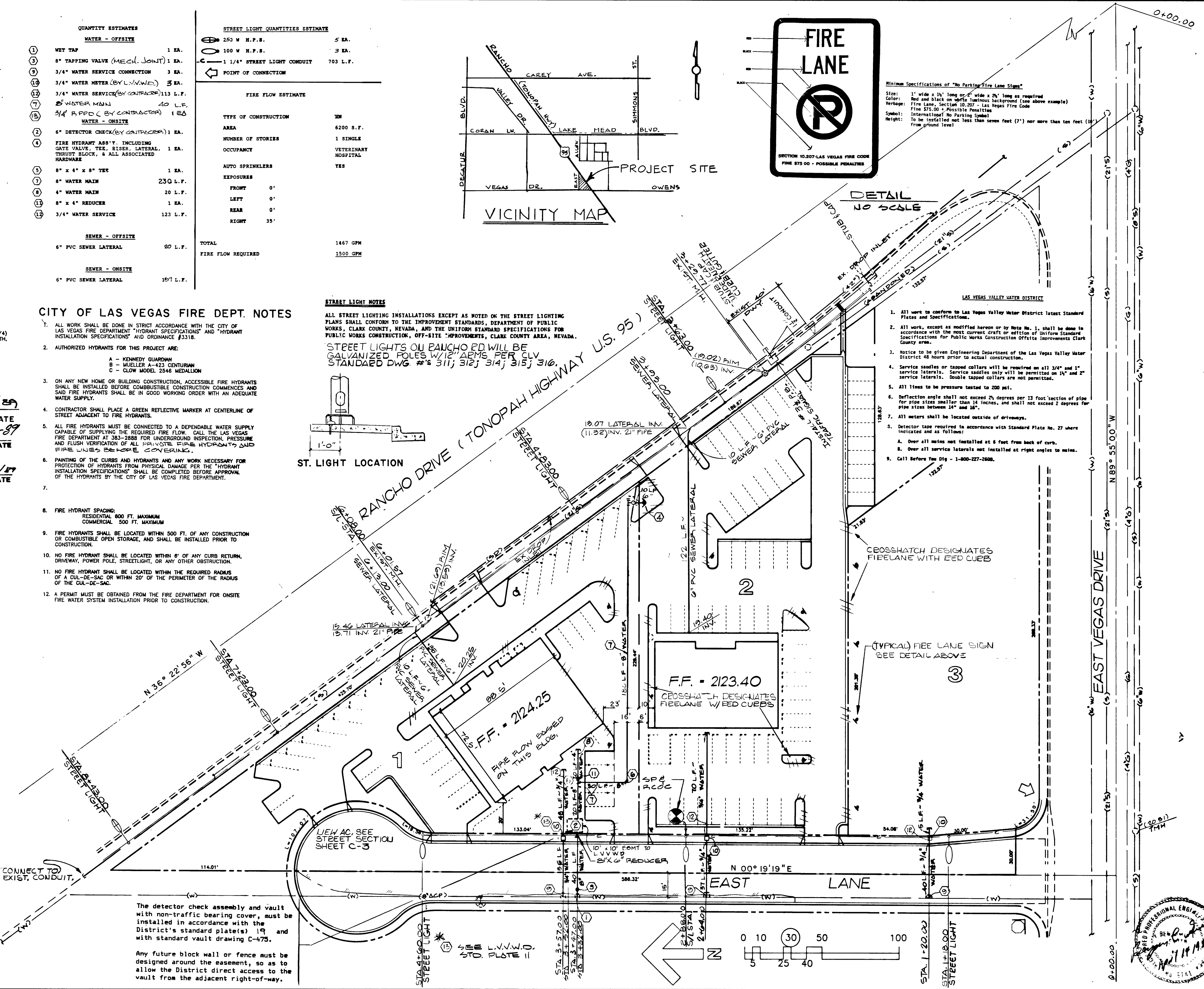
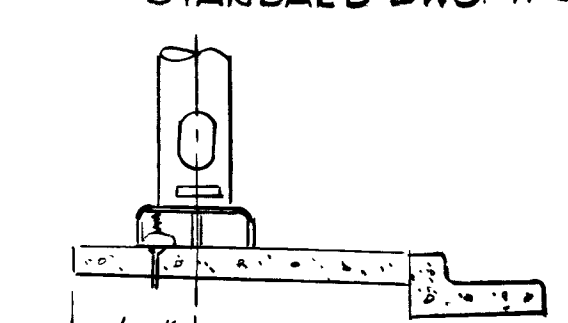
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS" AND "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE #3318.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A - KENNEDY GUARDIAN
B - MUELLER A-423 CENTURION
C - CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING CONSTRUCTION, 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.
- CONTRACTOR SHALL PLACE A GREEN REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANTS.
- ALL FIRE HYDRANTS MUST BE CONNECTED TO A DEPENDABLE WATER SUPPLY CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW. CALL THE LAS VEGAS FIRE DEPARTMENT AT 383-2888 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL PRIVATE FIRE HYDRANTS AND FIRE ALARMS, SMOKE HOLES, CONVEYERS, ETC.
- PAINTING OF THE CURBS AND HYDRANTS AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER THE "HYDRANT INSTALLATION SPECIFICATIONS" SHALL BE COMPLETED BEFORE APPROVAL OF THE HYDRANTS BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- FIRE HYDRANT SPACING:
RESIDENTIAL 800 FT. MAXIMUM
COMMERCIAL 500 FT. MAXIMUM
- FIRE HYDRANTS SHALL BE LOCATED WITHIN 500 FT. OF ANY CONSTRUCTION OR COMBUSTIBLE OPEN STORAGE, AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20' OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- A PERMIT MUST BE OBTAINED FROM THE FIRE DEPARTMENT FOR ONSITE FIRE WATER SYSTEM INSTALLATION PRIOR TO CONSTRUCTION.

STREET LIGHT NOTES

ALL STREET LIGHTING INSTALLATIONS EXCEPT AS NOTED ON THE STREET LIGHTING PLANS SHALL CONFORM TO THE IMPROVEMENT STANDARDS, DEPARTMENT OF PUBLIC WORKS, CLARK COUNTY, NEVADA, AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA.

STREET LIGHTS ON RANCHO RD WILL BE GALVANIZED POLES W/12 ARMS PER LV STANDARD DWG #S 311; 312; 314; 315; 316.

ST. LIGHT LOCATION



ARCHITECT
ETHAN JENNINGS, JR., AIA, CSI

PROJECT NAME
NORTH RANCHO CENTER

OWNER
SARATOGA LAND AND DEVELOPMENT CO.

SHEET TITLE
MASTER UTILITY PLAN

SHEET NO.
C-5

JOB NO.
E604002

DRWN BY
ASM

CHKD BY
DATE 30 JAN 89

OF 6 SHEETS

107-1/666

13-3-89

