

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

- NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION. THE FOLLOWING APPROVAL OF THE PLANS, NOTICE SHALL BE GIVEN TO THE LVWD CUSTOMER SERVICE DEPARTMENT (870-1194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION, AND 24 HOURS PRIOR TO AN INSPECTION.
- CALL BEFORE YOU DIG 1-800-227-2600.
- ALL WORK SHALL CONFORM TO LVWD LATEST STANDARD PLANS, DRAWINGS, AND SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OR UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
- DISTRICT APPROVED SERVICE SADDLES OR TAPPED COLLARS SHALL BE REQUIRED ON ALL 3/4" AND 1" SERVICE LATERALS. SERVICE SADDLES ONLY SHALL BE PERMITTED ON 1-1/2" AND 2" SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
- COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLANS.
- THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR ACP AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZE	ACP	SLIP JOINT	MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	1.5 DEGREES	2.5 DEGREES
14-16 INCH	2.0 DEGREES	1.5 DEGREES	1.5 DEGREES
18-24 INCH	N/A	1.5 DEGREES	1.5 DEGREES

- IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURERS RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY OUTLETS.
- DETECTOR TAPE SHALL BE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. WHERE INDICATED, AND AS FOLLOWS:
 - OVER ALL WAYS NOT INSTALLED 6 FEET FROM BACK OF CURB.
 - OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.
- ALL WATER MAINS SHALL BE PRESSURE TESTED AT 200 PS FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.
- ALL WATER MAINS SHALL BE DISINFECTED, FLUSHED, AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED PRIOR TO THE CONNECTION OF THE WATER MAINS AND/OR LATERALS TO THE DISTRICT'S SYSTEM.
- CONTRACTOR TO OBTAIN ALL METERS 2' AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 268-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

CITY OF LAS VEGAS SEWER NOTES

- 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 CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, AS AMENDED. IN ALL CASES, THESE 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.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHISEL "S" OR "O" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- THE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" 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 FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
- ALL ON-SITE SEWERS TO BE PRIVATELY OWNED AND MAINTAINED.

FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", HYDRANT INSTALLATION SPECIFICATIONS AND ORDINANCE #3877.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - KENNEDY GUARDIAN
 - MUELLER #43 CENTURIAN
 - CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING INSTALLATION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMPLETION OF CONSTRUCTION AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3877 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS BUILDING DEPARTMENT AT 233-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE, ORDINANCE #3877, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- 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.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.
- FIRE HYDRANT SPACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED COMMERCIAL INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.
- 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.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- 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.
- 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 UFG 8A, SECTION 10.207).
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LINES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA. SEE ORDINANCE #3877.

NOTE:

CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK.

CHISELED + IN TOP OF CURB, AT END OF CURB ON THE WEST SIDE OF DURANGO, APPROX. 250' SOUTH OF WESTCLIFF.
ELEVATION = 2610.16'

NOTE: * FIRE STAND PIPE SYSTEM TO PARALLEL 6" WATER SERVICE MAIN IN THE SAME TRENCH.

NO FIRE HYDRANTS ARE TO BE CONNECTED TO THE FIRE STAND PIPE SYSTEM LINE.

THRUST BLOCKS ARE TO BE INSTALLED ON BOTH WATER LINES AS REQUIRED.

LEGEND:

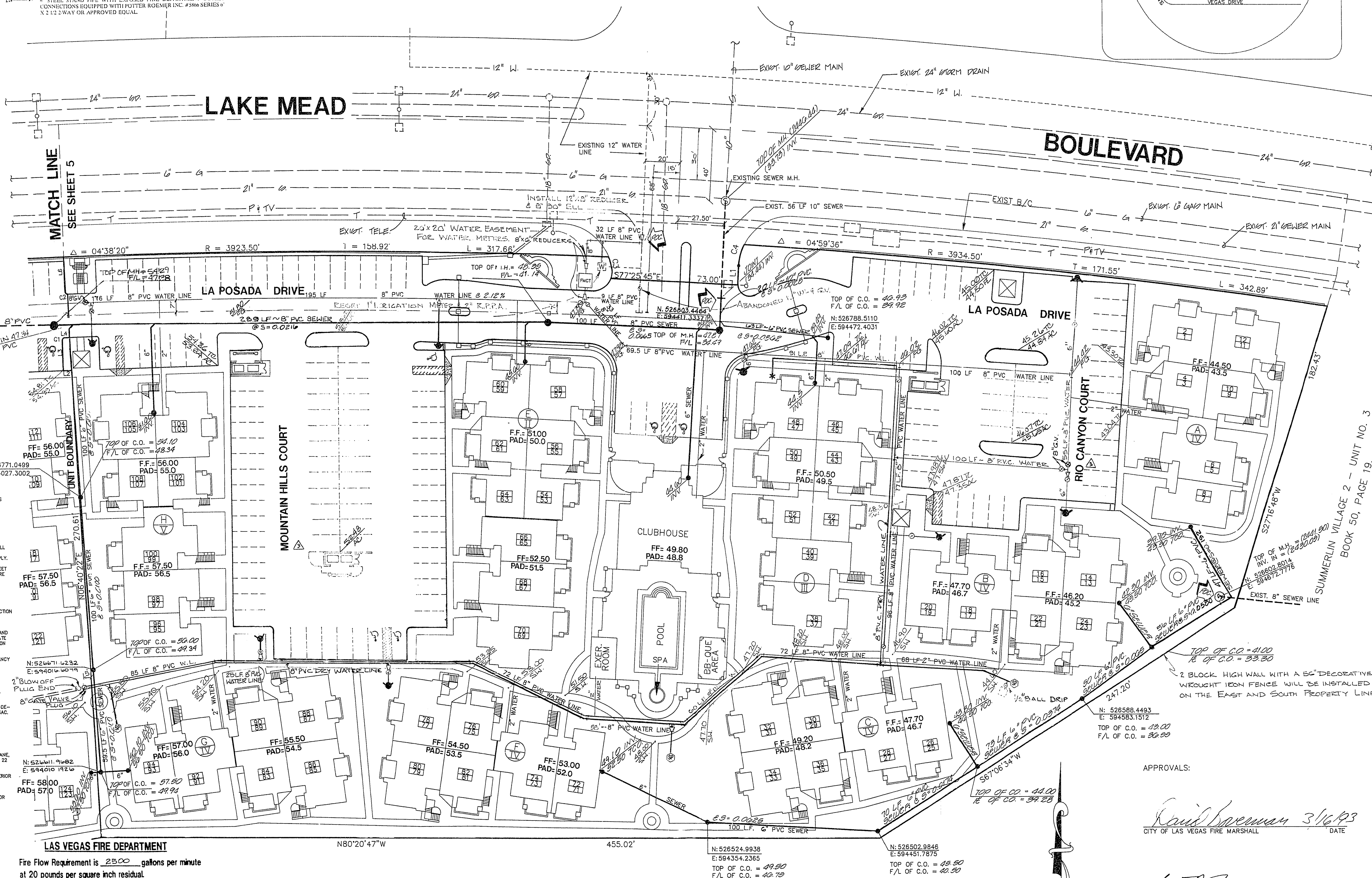
- STANDARD FIRE HYDRANT ASSEMBLY WITH A 4" X 6" REDUCER.
- STEEL STAND PIPE WITH EXPOSED FIRE DEPARTMENT INLET CONNECTION, EQUIPPED WITH 6" X 1/2" X 1/2" X 1/2" INLET CONNECTION POTTER - KOEMER INC. #3675 SERIES OR APPROVED EQUAL.
- STEEL STAND PIPE WITH EXPOSED FIRE DEPARTMENT OUTLET CONNECTIONS EQUIPPED WITH POTTER KOEMER INC. #3666 SERIES 6" X 1/2" X 1/2" X 1/2" OR APPROVED EQUAL.

Call before you Dig.

1-800-227-2600

NOTE:

FOR EXISTING UTILITIES AND PROPOSED TRAFFIC LOOPS IN MARINER DRIVE - LAKE MEAD BOULEVARD INTERSECTION SEE SHEET NO. 5 & 6



LAS VEGAS FIRE DEPARTMENT

Fire Flow Requirement is 2500 gallons per minute at 20 pounds per square inch residual.

Based on:

Square footage 20,000 S.F.

Largest area between area separation walls 10'

Height 2 STORY - 32'

Type of Construction V - 1 HR.

Exposures NONE

Sprinkler System NO

Occupancy CONDOMINIUM

Roof Construction CERAMIC TILE

Reviewed By: VEN NICHOLSON

Date: 3-16-93

LINE	DIRECTION	DISTANCE
L1	S12°34'15"W	11.00'
L2	S82°37'41"E	4.92'
L3	S07°22'19"W	17.50'
L4	N82°37'41"W	2.98'
L5	S07°22'19"W	25.00'
L6	N07°21'35"E	20.11'

PROVIDE FIRE LANE IDENTIFICATION PER CITY ORD. 3677

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	1.50'	2.36'	1.50'	90°00'00"
C2	1.50'	2.36'	1.50'	89°59'16"
C3	30.00'	12.75'	6.47'	24°21'04"
C4	30.00'	12.75'	6.47'	24°21'19"

NEAREST 12" SEWER MAIN TO THIS PROJECT IS A 21" SEWER MAIN AT LAKE MEAD BOULEVARD AND BUFFALO.

SEWAGE CONTRIBUTED = 0.0432

NOTE: TRENCHING FOR SEWER LINE INSTALLATION IS NOT TO DISTURB THE NATURAL GROUND IN PUEBLO PARK.

ACCESS TO PUEBLO PARK OR DISTURBING PARK NATURAL GROUND DURING CONSTRUCTION WILL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

NOTE:

ALL ON-SITE SEWERS ARE PRIVATELY OWNED AND MAINTAINED. PERMITS MUST BE OBTAINED FROM THE DEPARTMENT OF BUILDING AND SAFETY.

FIRE HYDRANTS AND LINES REQUIRE PERMIT FROM THE DEPARTMENT OF BUILDING AND SAFETY.

APPROVALS:

Ronit Breman 3/16/93
CITY OF LAS VEGAS FIRE MARSHAL DATE

James B. ... 3/18/93
LAS VEGAS VALLEY WATER DISTRICT DATE

... 2/22/93
NEVADA POWER COMPANY DATE

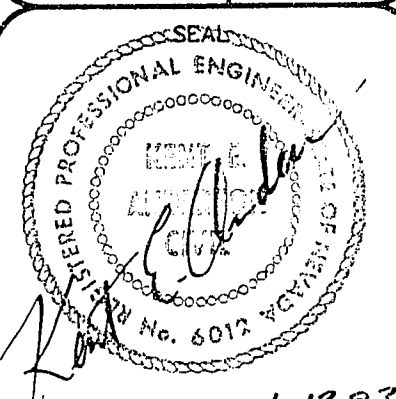
NEVADA POWER COMPANY APPROVAL IS ONLY FOR THE PLACEMENT AND CLEARANCE OF STREET LIGHT AND SIGNAL LIGHT INSTALLATION.

PLASTER DEVELOPMENT
CITY OF LAS VEGAS

MASTER UTILITY PLAN
SEWER AND WATER

LA POSADA AT SUMMERLIN

UNIT 1



WO NO. 4349-1
BY: EEB/KFN
DATE: NOV., '92
SCALE: 1" = 30'
SHEET: 4 OF 6 SHEETS

307Y-4251-1