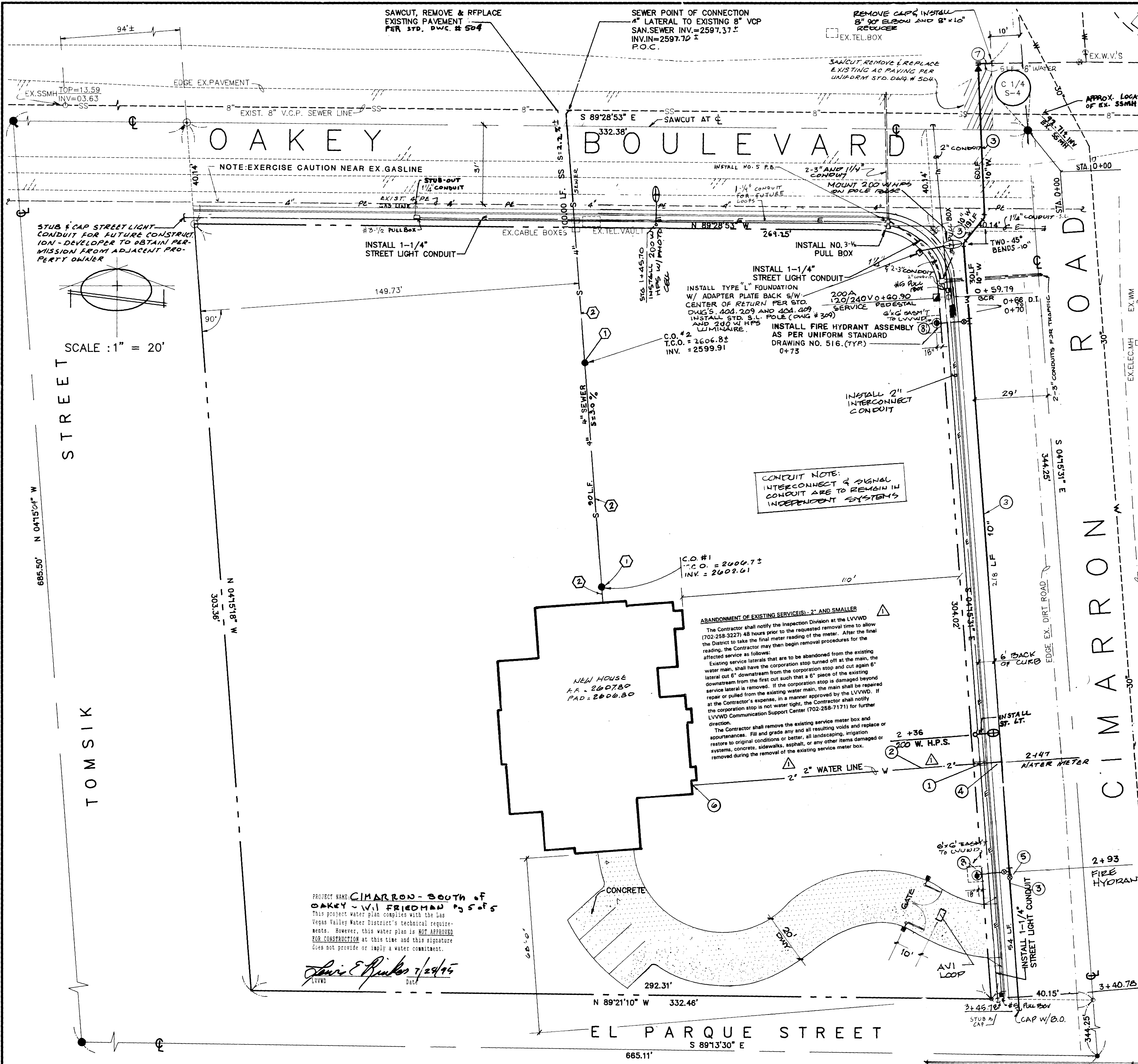




WATER LINE NOTES:

- LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES**
- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN REVIEWED FOR CONSTRUCTION BY THE LVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOURS NOTICE SHALL BE GIVEN TO THE LVWD CUSTOMER SERVICE DEPARTMENT (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE START OF CONSTRUCTION.
 - ALL WORK SHALL CONFORM TO LVWD STANDARD PLATES, DRAWINGS, SPECIFICATIONS, LATEST EDITION.
 - ALL WORK, EXCEPT AS NOTED BY THESE PLANS OR BY NOTE NO. 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE LVWD STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
 - A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD.
 - ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVWD APPROVED SERVICE SADDLES.
 - ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
 - ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAY, VALLEY AND CURB OUTLINES.
 - THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
 - A MINIMUM BENTONITE (15) INCH VERTICAL SEPARATION (CURB TO CURB) MUST BE MAINTAINED WHEN WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED, THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE. THE SEPARATION OF THE WATER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:
 - POTABLE WATER SUPPLY QUALITY MATERIAL.
 - ENCASUREMENT WITH FOUR (4) INCH CONCRETE (MINIMUM).
 - BLEEDING WITH POTABLE WATER SUPPLY QUALITY PIPE.
 - 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 EXTENSION.
 - WARNING: PIPE SHALL BE REINFORCED OVER ALL MAINS. ALL 24" (10) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
 - ALL WATER FACILITIES SHALL BE FILLED, DISCONNECTED, PRESSURE TESTED, FLANGED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO CONNECTION TO THE LVWD'S DISTRIBUTION SYSTEM.
 - THE CONTRACTOR MUST OBTAIN ALL METERS 2" AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 258-7182. FORTY-FOUR (48) HOURS PRIOR TO WORK.
 - CONSTRUCTION MAY INTERRUPT SERVICE WITH LVWD APPROVAL AND PROPER NOTIFICATION. BETWEEN THE HOURS OF 10 P.M. AND 8 A.M. SUNDAY THROUGH THURSDAY. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
 - ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVWD'S APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIALLY APPROVED OF THESE PLANS.

FIRE DEPT. NOTES:

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", HYDRANT INSTALLATION SPECIFICATIONS AND ORDINANCE #3677. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - A. KENNEDY GUARDIAN
 - B. MILLER 4000 CENTURIAN
 - C. CLOW MODEL 2546 MEDALLION
- 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.
- CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE #3677 TO IDENTIFY FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS BUILDING DEPARTMENT AT 229-2070 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 PER ORDINANCE #3677 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 INSTALLATIONS. THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE ANY WORK BEGINS.
- 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 P.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 WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCEPTIONS IN ULC-9A, SECTION 10.20).
- ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LANE PUBLIC OR PRIVATE IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. (SEE ORDINANCE #3677).
- 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.

NOTES:

- ALL LOOP PER CITY OF LAS VEGAS FIRE DEPT. STANDARDS. RECEIVERS MUST BE COMPATIBLE WITH CITY OF LAS VEGAS FIRE DEPARTMENT TRANSMITTERS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET SHALL BE MAINTAINED FOR THE FIRE APPARATUS ACCESS ROADS.

NOTE: COORDINATE ALL WORK WITH THE VALLEY WIES (12-26-96) X1 (PHASE 6 & 7) PROJECT

ESTIMATED QUANTITIES:

WATER	
2" WATER METER ASSEMBLY (FROM LVWD)	1 EA
2" COPPER SERVICE LINE	115 LF
10" WATER LINE	378 LF
2" SERVICE CONNECTION	1 EA
10" GATE VALVE	1 EA
CONNECT TO BLDG. (SEE MECHANICAL PLANS)	1 EA
8" WATER	5 LF
SEWER	
FIRE HYDRANT ASSEMBLY INCLUDING TEE, VALVE, LATERAL, RISER, THRUST BLOCK, AND ALL ASSOCIATED FITTINGS	2 EA
SEWER CLEANOUTS	2 EA
4" PVC SEWER LATERALS	15 LF

LAS VEGAS FIRE DEPT.

OCCUPANCY	SINGLE FAMILY
SQ. FOOTAGE	4893 (LVWD)
HEIGHT	28'-8"
CONSTRUCTION MATERIALS	TYPE V-A
SPRINKLERS	NONE
ESTIMATED FIRE FLOW	2000 GPM @ 20 PSI MIN

PROJECTED SEWER FLOWS

0.0009 MGD

APPROVALS

12/26/96 5/31/96
LAS VEGAS VALLEY WATER DIST. DATE

5-1-98
CITY OF LAS VEGAS FIRE DEPT. DATE

12/29/94
NEVADA POWER CO. DATE

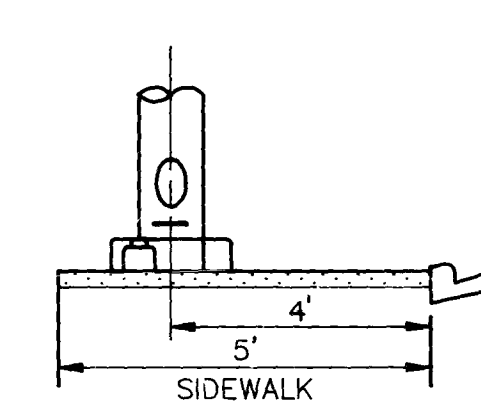
FOR THE PLACEMENT & CLEARANCE OF STREETLIGHT & SIGNAL LIGHT INSTALLATION.

LEGEND:

- SEWER CLEANOUT
- PROPERTY LINE
- STREET CENTERLINE
- EXIST. SANITARY SEWER
- EXIST. WATER LINE

STREET LIGHT NOTES

- ALL STREET LIGHT INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE LVWD STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTED.
- ALL HAND HOLE COVERS MUST BE INSTALLED. POLE CAPS POURED AND PULL BOX BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE TWIN INSULATION.



STREET LIGHT LOCATION

(N.T.S.)

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

UTILITY NOTE:
THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE 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 COMPANY PRIOR TO COMMENCING ANY EXCAVATION.

BASIS OF BEARINGS:
NORTH 89°28'53" WEST - THE NORTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 4, TOWNSHIP 21 SOUTH, RANGE 60 EAST M.D.B. & M. AS SHOWN ON PARCEL MAP FILE 63, PAGE 18, CLARK COUNTY RECORDS.

BENCH MARK:
CITY OF LAS VEGAS BENCH MARK NO. ILV10-4SSW6 RIVET IN PLATE IN TOP OF CURB AT 8260 W. SAHARA AVENUE. ELEVATION 2610.93 FEET, NAVD 1988 DATUM.

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

F.B. 178 PG'S 2, 1, 2, 3

APPROVED: 12/26/96
REVISIONS: 1/2/97
DATE: 12/26/96
PREPARED FOR: C. FRIEDMAN
C. FRIEDMAN
WIL FRIEDMAN
JULY 1994
E.R. RIK
DRAWN: CHECK: SCALE: 1"=20'
BAUGHMAN & TURNER, INC.
LAND PLANNERS
LAND SURVEYORS
CIVIL ENGINEERS
1210 HINSON STREET
LAS VEGAS, NEVADA 89102
702-870-8771
UTILITY PLAN
PORTION OF THE NE 1/4 OF THE SW 1/4 OF SECTION 4, TOWNSHIP 21 SOUTH, RANGE 60 EAST, M.D.B. & M. CITY OF LAS VEGAS
SHEET 5 OF 5
PROJ. NO. FRIEDMAN

