

CLV FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT ORDINANCES #5115, "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS".
- AUTHORIZED FIRE HYDRANTS FOR THIS PROJECT ARE:
 - KENNEY--GUARDIAN MODELS KB1A AND KB10
 - MUELLER--SUPER CENTURION 250 A-423
 - CLOW--MEDALLION MODEL F-2546LV
- ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE IN CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW.
- TO IDENTIFY THE FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTERLINE OF STREET ADJACENT TO THE FIRE HYDRANT AS REQUIRED BY ORDINANCE #5115.
- ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CALL CITY OF LAS VEGAS INSPECTION HOT-LINE AT 229-2071 TO REQUEST AN INSPECTION BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- PAINTING OF THE CURBS AND HYDRANT AND ALL OTHER WORK NECESSARY AS REQUIRED BY ORDINANCE #5115, FOR THE PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR THE ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
- PRIOR TO THESE FINAL OCCUPANCY, A FLOW TEST MUST BE WITNESSED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW.
- ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS MUST BE U.L. LISTED, A.W.W.A. APPROVED, AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE.
- FIRE HYDRANT SPACING:
RESIDENTIAL - 500 FEET UNSPRINKLERED, 1000 FEET SPRINKLERED
COMMERCIAL - 300 FEET UNSPRINKLERED, 600 FEET SPRINKLERED.
- WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT MAXIMUM 1,000 FOOT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FEET.
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTOR (FDC) SHALL NOT EXCEED 100 FEET, AS MEASURED BY AN APPROVED ROUTE.
- TWO SOURCES OF WATER SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM.
- SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN.
- ALL FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET TO THE FLOW LINE. PROVIDED NO PARKING IS ALLOWED ON EITHER SIDE, 28 FEET (FLOW LINE TO THE FLOW LINE), IF PARALLEL PARKING IS ALLOWED ON ONE SIDE ONLY, AND 36 FEET (FLOW LINE TO THE FLOW LINE) IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS.
- THE GRADIENT FOR A FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FEET PRIOR TO OR AFTER THE GRADE CHANGE.
- THE TURNING RADIUS OF A FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE TURNING RADIUS.
- ALL FIRE APPARATUS ACCESS ROADS 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 UPC 97, SECTION 902.2).
- 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 TURN AROUND AREA HAVING A MINIMUM DIAMETER OF 81 FEET (BACK OF CURB TO THE BACK OF CURB).
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS 100 FEET ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN 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 PROVIDED SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- 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.

REVISED 1/99

NOTE

EXISTING TRASH ENCLOSURE IS LOCATED ON-SITE ELSEWHERE.

FIRE DEPARTMENT DATA

FIRE REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL

BASED ON:

TOTAL SQUARE FOOTAGE 9275 SQ. FT.
LARGEST AREA BETWEEN 4 HOUR SEPARATION WALLS: 9275 SQ. FT.
BUILDING HEIGHT: 32 FEET
TYPE OF CONSTRUCTION: SN
EXPOSURES:

SPRINKLER SYSTEM: SPRINKLERED

OCCUPANCY: S-1

ROOF CONSTRUCTION: CLASS B

APPROVAL

BY: *[Signature]*
CITY OF LAS VEGAS FIRE DEPT.10/3/01
DATE

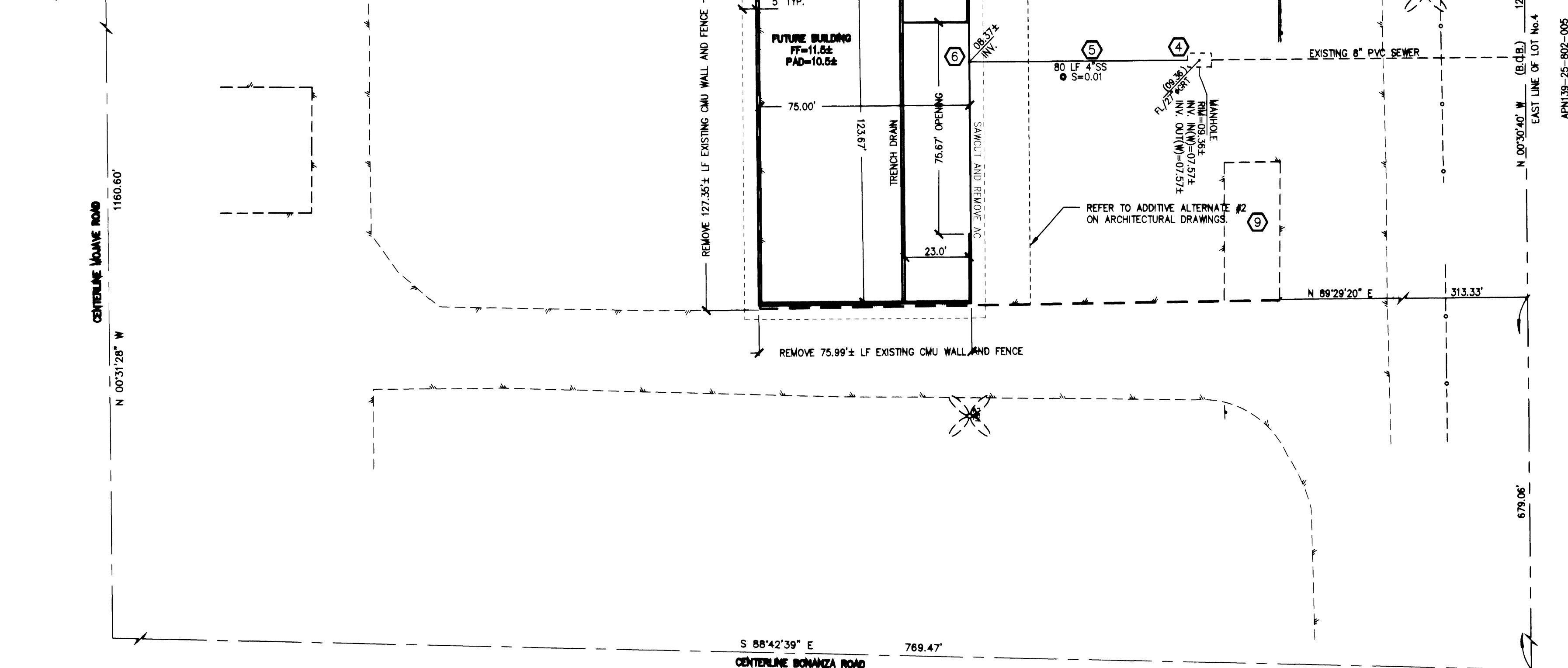
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL.

CLV 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, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
- 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 CITY PLANNING ENGINEER.
- CHISEL "S" OR "G" 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 AGGREGATE BASE.
- ALL MANHOLES IN PAVED STREETS EIGHTY (80') FOOT R/W AND LARGER, SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCHES (18") UNDER A WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY PLANNING ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
- INSTALLATION OF CURVED SEWER REQUIRES SPECIAL CONSTRUCTION PROCEDURES AND INSPECTIONS. CONTACT CITY OF LAS VEGAS CONSTRUCTION SERVICES 24 HOURS PRIOR TO INSTALLATION.

REVISED 11/98



CONSTRUCTION NOTES

- INSTALL 1" WATER SERVICE (w/o METER) PER UDACS STD. PLATE 1D W/ RPPA. CONTRACTOR SHALL LOCATE AND VERIFY EXACT LOCATION OF WATER MAIN PRIOR TO START OF CONSTRUCTION.
- INSTALL 8" 6" TAPPING TEE W/ 6" TAPPING VALVE PER UDACS STD. PLATE 22.
- SAWCUT, REMOVE AND REPLACE EXISTING AC PER UDACS STD. PLATE 6B.
- REMOVE MANHOLE AND INSTALL 750 GALLON SAND/OIL INTERCEPTOR W/ SLOTTED COVER. SEE MECHANICAL PLAN FOR DETAILS.
- INSTALL 6" (SDR-35) PVC SEWER MAIN PER DCSWCS STD. DWG. SD-11.
- STUB AND CAP WATER AND SEWER FOR CONNECTION PER DCSWCS STD. DWG. SD-12 (SEE MECHANICALS FOR CONTINUATION).
- REMOVE EXISTING AREA LIGHT.
- EXISTING CHAINLINK FENCE TO REMAIN.
- EXISTING CONCRETE RAMP TO REMAIN.

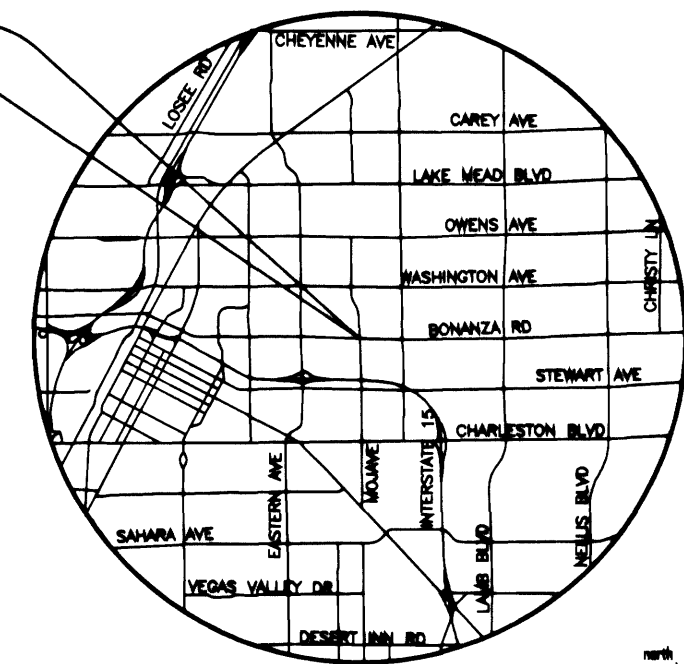
UTILITY NOTES

THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE OR FROM INFORMATION OBTAINED FROM A SITE VISIT. 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.

EAST YARD TRANSFER STATION

A PORTION OF THE SOUTHEAST QUARTER (SE 1/4), SECTION 25,
TOWNSHIP 20 SOUTH, RANGE 61 EAST, M.D.M.
CLARK COUNTY, NEVADA
APN 139-25-802-004

PROJECT LOCATION



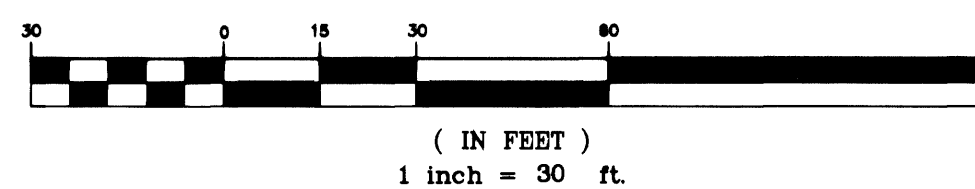
VICINITY MAP:

LEGEND

---	PROPERTY LINE
- - - - -	EXISTING RETAINING OR CMU WALL
- - - - -	EXISTING CHAIN LINK FENCE
- - - - -	EXISTING/PROPOSED SAWCUT LINE
- - - - -	EXISTING 3" VALLEY GUTTER
- - - - -	BUILDING LINE
- - - - -	EXISTING EDGE OF CONCRETE
- - - - -	EXISTING EDGE OF PAVEMENT
- - - - -	EXISTING BUILDING LINE
- - - - -	EXISTING WATER LINE
- - - - -	EXISTING SEWER LINE
- - - - -	EXISTING INTERMEDIATE CONTOUR LINE
- - - - -	PROPOSED FIRE MAIN

●	EXISTING FOUND MONUMENT
○	EXISTING FIRE HYDRANT
○	EXISTING GRADE (ELEVATION)
○	EXISTING RATE OR SLOPE
○	PROPOSED GRADE (ELEVATION)
○	PROPOSED RATE OR SLOPE
○	EXISTING AREA LIGHT
○	ASPHALTIC CONCRETE
○	CLEANOUT
○	EDGE OF CONCRETE
○	EDGE OF PAVEMENT
○	FIRE DEPARTMENT CONNECTION
○	FLOW LINE
○	FINISH SURFACE
○	GRADE BREAK
○	LOW POINT
○	NATURAL GROUND
○	NOT TO SCALE
○	TYPICAL
○	WITHOUT
○	WATER VALVE

GRAPHIC SCALE



BASIS OF BEARING

N 00°30'40"W BEING THE EASTERLY LINE OF LOT 4 OF PARCEL MAP FILE 86, PAGE 48

BENCHMARK

CLV BM STA 2LV012554 (NAVD 88)

RIVET AND PLATE IN TOP OF CURB, NORTHEAST RETURN MOJAVE ROAD AND BONANZA ROAD.

ELEVATION: 552.61 (METERS)
ELEVATION: 1813.01 (FEET)

ESTIMATED QUANTITIES ON-SITE

WATER	
1" WATER SERVICE (w/o METER)	1 EA.
6" PVC FIRE MAIN	51 LF
FIRE DEPT. CONNECTION	1 EA.

SEWER	
6" PVC SEWER MAIN	80 LF
SAND/OIL SEPARATOR W/ CLEANOUTS	1 EA.

Job No.

FTR No.

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APPROVED

REVISIONS

DISCREPANCY

NO.

DATE

NO.

DATE

NO.

DATE

NO.

DATE

NO.

DATE

NO.

DATE

NO.

DATE

NO.

UTILITY AND HORIZONTAL CONTROL PLAN

EAST YARD TRANSFER STATION

BONANZA AND MOJAVE ROAD

LAS VEGAS, NEVADA

APN 139-25-802-006

SECTION 25, TOWNSHIP 20 SOUTH, RANGE 61 EAST, M.D.M.

JOB No.

21034

DATE:

08/13/01

VERT. SCALE:

N/A

HORIZ. SCALE:

1"=30'

DRAWN BY:

MRA

CHECKED BY:

DD

SHEET

2 OF 2

CLV DWG # 107-V3443