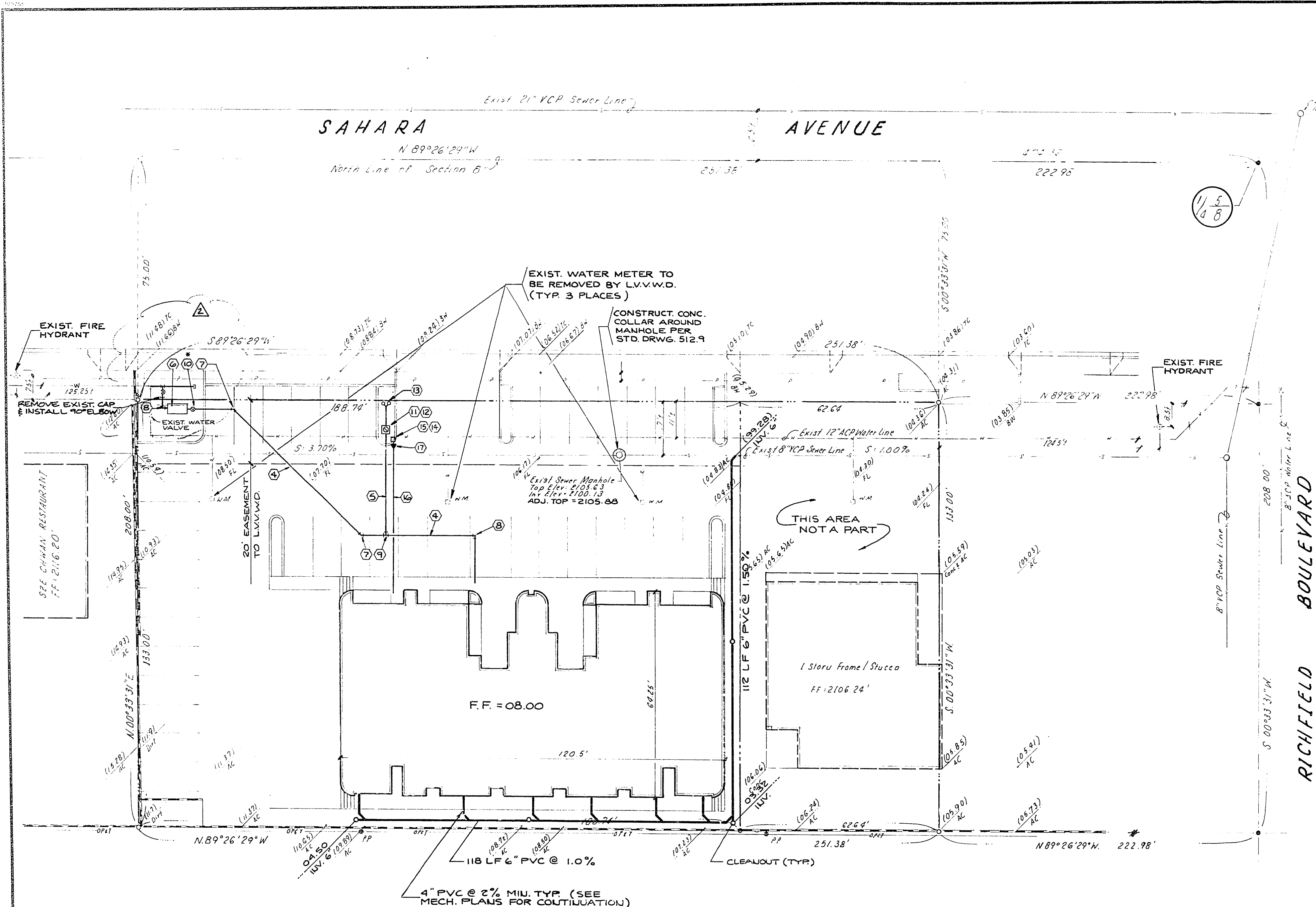




BENCH MARK

B.M. No. 1618A3 - Bolt and plate at the Southeast corner of Sahara Avenue and Richfield Boulevard.
Elevation = 2101.38 CLV Datum

UTILITY NOTE

The location of underground utilities shown hereon has been determined from surface evidence of their existence 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.

LEGEND

- POINT FOUND AS NOTED
- POINT SET AS NOTED
- PROPERTY LINE
- STREET CENTERLINE
- BUILDING LINE
- EXISTING WATER LINE
- EXISTING SEWER LINE

ESTIMATED SEWER QUANTITIES

6" PVC Sewer Line	230 L.F.
4" PVC Sewer Line	48 L.F.
Cleanout	4 EA.

ESTIMATED WATER QUANTITIES

1	6" PVC Water Line	115 L.F.
2	4" PVC Water Line	30 L.F.
3	6" Detector Check & Vault by L.V.V.W.D.	1 EA.
4	6" 46° Elbow	2 EA.
5	6" 90° Elbow	2 EA.
6	6"x4" Tee	1 EA.
7	6" NRS Gate Valve, Indicator Post Type, Mueller No. A-2072-6, w/Indicator Post No. A-20800 or approved equal.	1 EA.
8	4" Check Valve, Mueller No. A-2122-6 or approved equal.	1 EA.
9	Brooks 2"x3' Utility Box No. W-100, Top No. 100 PS, Cover No. 100-17.	1 EA.
10	Fire Dept. Connection per N.F.P.A. No. 13.	1 EA.
11	2" Service Connection & Lateral by L.V.V.W.D.	1 EA.
12	2" Water Meter by L.V.V.W.D.	1 EA.
13	2" P.E. Water Line	50 L.F.
14	*Provide electrical supervision per N.F.P.A. No. 13, 5-6.1.6	
15	17 PRESSURE REDUCING VALVE (REDUCE TO 75 PSI MAX)	1 EA.

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".
- Authorized hydrants for this project are:
A - Kennedy Guardian
B - Mueller A-423 Centurian
- On any new home or building construction, accessible fire hydrants shall be installed before combustible constructions commence 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 hydrant.
- Call the Las Vegas Fire Department at 383-2888 for underground inspection, pressure and flush verification of all fire hydrants and fire lines before covering.
- Painting of the curb and hydrant and any work necessary for protection of hydrant from physical damage per the "Hydrant Installation Specifications" shall be completed before approval by the City of Las Vegas Fire Department.
- Las Vegas Valley Water District shall determine that hydrants are connected to a water supply capable of supplying the required fire flow.
- A permit is required from the Fire Department for water line installation on the private side of the meter.
- A flow test must be witnessed by the Fire Department for verification of on-site water supply.
- All on-site fire water materials must be U.L. listed and F.H. approved.

FIRE DEPARTMENT DATA

- Blgd. Height **2 STORY**
- Type Construction **WOOD FRAME**
- Ground Floor Area **7300 SQ. FT.**
- Sprinkler System **YES**
- Distance to Nearest Existing Building
North **13'**
South **31'** East **13'** West **80'**
- CALC FIRE FLOW = 3000 GPM

SEWER LINE NOTES

- All construction and materials shall be in accordance with Design and Construction Standards of the City of Las Vegas and the Uniform Standard Specifications for Public Works Construction Off-Site Improvements, Clark County Area, Nevada 1978. In all cases, the City's Criteria shall supersede the Uniform Standard Specifications.
- City of Las Vegas drawings shall apply to all construction.
- Sewer mains only to be laid in sewer trenches.
- All 4" house laterals to be laid at not less than minimum slopes.
- Sewer laterals locations to be marked in accordance with Standard Drawing SD-11 in the District Standards. (Clark County Sanitation District).
- 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 of Las Vegas.
- If a lateral is under a driveway, concrete slab, or A.C. area, a cleanout shall be installed and raised to grade with a slotted brass cap or within a water meter box which has a metal cover marked "Sew. C.O.".
- Cut sheets must be submitted to the City before construction will be permitted to start.
- All contractors installing sewer mains which will be under jurisdiction of the City of Las Vegas must be Class "A" Contractors.
- Construction Concrete Collars per Standard Drawing No. 512.9.

WATER LINE NOTES

- All work to conform to Las Vegas Valley Water District latest Standard Plates and Specifications.
- All work, except as modified hereon or by Note No. 1, shall be done in accordance with the most current draft or edition of Uniform Standard Specifications for Public Works Construction Offsite Improvements Clark County Area.
- Notice to be given Engineering Department of the Las Vegas Valley Water District 48 hours prior to actual construction.
- Service saddles or tapped collars will be required on all 3/4" and 1" service laterals. Service saddles only will be permitted on 1 1/2" and 2" service laterals. Double tapped collars are not permitted.
- All lines to be pressure tested to 200 psi.
- Deflection angle shall not exceed 2 1/2 degrees per 13 foot section of pipe for pipe sizes smaller than 14 inches, and shall not exceed 2 degrees for pipe sizes between 14" and 16".
- All meters shall be located outside of driveways.
- Detector tape required in accordance with Standard Plate No. 27 where indicated and as follows:
A. Over all mains not installed at 6 feet from back of curb.
B. Over all service laterals not installed at right angles to mains.
- Call Before You Dig - 1-800-227-2600.

FIRE PROTECTION SYSTEM NOTE

Fire sprinkler engineer or contractor shall verify that the water supply system shown is adequate to supply design demand.

APPROVALS

N/A (PRIVATE SEWER LINE)
C.L.V. SANITATION ENGINEER DATE
C.L.V. QUALITY CONTROL ENGINEER DATE
N/A
C.L.V. FIELD OPERATIONS ENGINEER DATE
LAS VEGAS VALLEY WATER DISTRICT
* David Borenman 4/8/88
C.L.V. FIRE CHIEF DATE

*Both hydrants to be public and w/in 500 ft. of new bldg. DB 4/8/88

REVISIONS
DATE NO. REVISIONS
1 4 8
PREPARED FOR: S & W OFFICE BLDG.
DATE: OCT. 1987
DESIGN: JWL
DRAWN: R.A.J.
CHECK: J.W.L.
SCALE: 1"=20'
BAUGHMAN & TURNER
CIVIL ENGINEERS
MINING ENGINEERS
LAND SURVEYORS
2332 WEST CHARLTON BOULEVARD
LAS VEGAS, NEVADA 89102
WATER & SEWER PLAN
SECTION 8, TOWNSHIP 21 SOUTH, RANGE 61 EAST, M.D.B.M.
CLARK COUNTY NEVADA
SHEET 3 OF 4
PROJ. NO. 107-V1548