

Call before you Dig
1-800-227-2600

L.V.V.W.D. NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD. FOLLOWING APPROVAL OF THE PLANS, NOTICE SHALL BE GIVEN TO THE LVWD CUSTOMER SERVICE DEPARTMENT (870-4194) 48 HOURS PRIOR TO ACTUAL CONSTRUCTION, AND 24 HOURS PRIOR TO AN INSPECTION.

2. CALL BEFORE YOU DIG : 1-800-227-2600.

3. ALL WORK SHALL CONFORM TO LVWD LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS.

4. ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE 3, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR ADDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA.

5. 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.

6. COPPER SERVICE LATERALS: ALL 3/4" TO 2" SERVICE LATERALS SHALL BE OF COPPER TUBING IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS AND STANDARD PLATES.

7. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR A.C.P. AND DUCTILE IRON PIPE SHALL BE AS FOLLOWS:

PIPE SIZES	A.C.P.	DUCTILE IRON SLIP JOINT	DUCTILE IRON MECHANICAL JOINT
6 INCH	2.5 DEGREES	2.5 DEGREES	3.5 DEGREES
8-12 INCH	2.5 DEGREES	2.5 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

ON P.V.C. PIPE, THE MAXIMUM OFFSET FOR A 20' LENGTH OF FACTORY BELLED PIPE SHALL BE 16 INCHES FOR 6" PIPE, 12 INCHES FOR 8" PIPE, AND 9 INCHES FOR 10" AND 12" PIPE.

IF THESE OFFSETS CONFLICT WITH THE PIPE MANUFACTURER'S RECOMMENDATION, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

8. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.

9. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AND VALLEY GUTTERS.

10. DETECTOR TAPE SHALL BE REQUIRED IN ACCORDANCE WITH STANDARD PLATE No. 27 WHERE INDICATED, AND AS FOLLOWS:

- OVER ALL MAINS NOT INSTALLED 6 FEET FROM BACK OF CURB.
- OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAIN.

11. ALL WATER MAINS SHALL BE PRESSURE TESTED AT 200 P.S.I. FOR A CONTINUOUS TWO HOUR PERIOD, IN ACCORDANCE WITH DISTRICT STANDARDS.

12. ALL WATER MAINS SHALL BE DISINFECTED, FLUSHED, AND AN ACCEPTABLE HEALTH SAMPLE OBTAINED, PRIOR TO THE CONNECTION OF THE WATER MAIN(S) AND/OR LATERAL(S) TO THE DISTRICT'S SYSTEM.

13. CONTRACTOR TO OBTAIN ALL METERS 2" AND SMALLER FROM L.V.V.W.D. CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.

C.L.V. FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS", AND ORDINANCE No. 3677.

2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE

- KENNEDY GUARDIAN
- MUELLER A-423 CENTURION
- CLOW MODEL 2546 MEDALLION

3. 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 ORDER WITH AN ADEQUATE WATER SUPPLY.

4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE No. 3677 TO IDENTIFY FIRE HYDRANT LOCATIONS.

5. CALL THE LAS VEGAS BUILDING DEPARTMENT AT 229-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.

6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE No. 3677 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.

7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.

8. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.

9. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A.W.W.A. APPROVED.

10. FIRE HYDRANT SPACING:

RESIDENTIAL - 500 FEET UNSPRINKLERED, 600 FEET SPRINKLERED
COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 400 FEET SPRINKLERED.

11. 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.

12. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.

13. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.

14. THE TURNING RADIUS OF 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.

15. 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 U.F.C. 88, SECTION 10.207).

16. 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 TURNAROUND AREA. SEE ORDINANCE No. 3677.

REVISED 2/93

FIRE FLOW DATA

BUILDING DATA -- CITY OF LAS VEGAS FIRE DEPARTMENT

TYPE OF CONSTRUCTION -- II-N MAX. SQ. FT. -- 21,000

NUMBER OF FLOORS -- 1

OCCUPANCY -- B-2

FIRE RESISTIVE RATING --

OF SEPARATION WALLS --

AUTOMATIC FIRE SPRINKLER SYSTEM -- YES

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

RESIDUAL

C.L.V. FIRE DEPT. 11-16-93 DATE

C.L.V. SEWER NOTES

1. 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. 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.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.

3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.

4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.

5. ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.

6. TEE 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.

7. 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.

8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.

REVISED 10/91

LINE TABLE

No.	BEARING	DISTANCE	No.	BEARING	DISTANCE
L1	S87°18'22"W	0.51'	L9	S87°18'22"W	14.50'
L2	S87°18'22"W	4.04'	L10	N02°41'38"E	20.00'
L3	N87°18'22"E	17.50'	L11	N87°18'22"E	14.50'
L4	S02°41'38"E	18.00'	L12	S02°41'38"E	3.31'
L5	S02°41'38"E	18.00'	L13	S02°41'38"E	1.31'
L6	N87°18'22"E	17.98'	L14	N02°41'38"W	0.50'
L7	N87°18'22"E	14.04'	L15	S02°41'38"E	19.09'
L8	S02°41'38"E	9.78'	L16	N87°18'22"E	2.00'

CURVE TABLE

No.	RADIUS	DELTA	LENGTH	TANGENT
C1	25.00'	73°17'30"	31.98'	18.60'
C2	15.00'	73°17'30"	19.19'	11.16'
C3	15.00'	90°00'00"	23.56'	15.00'
C4	1.50'	90°00'00"	2.36'	1.50'
C5	30.00'	89°56'19"	47.09'	29.97'
C6	25.00'	90°03'41"	39.30'	25.03'
C7	1.00'	92°34'54"	1.62'	1.05'
C8	1.00'	88°58'03"	1.55'	0.98'
C9	19.50'	88°27'02"	30.10'	18.98'
C10	1.00'	90°00'00"	1.57'	1.00'
C11	4.50'	90°00'00"	7.07'	4.50'

BENCHMARK

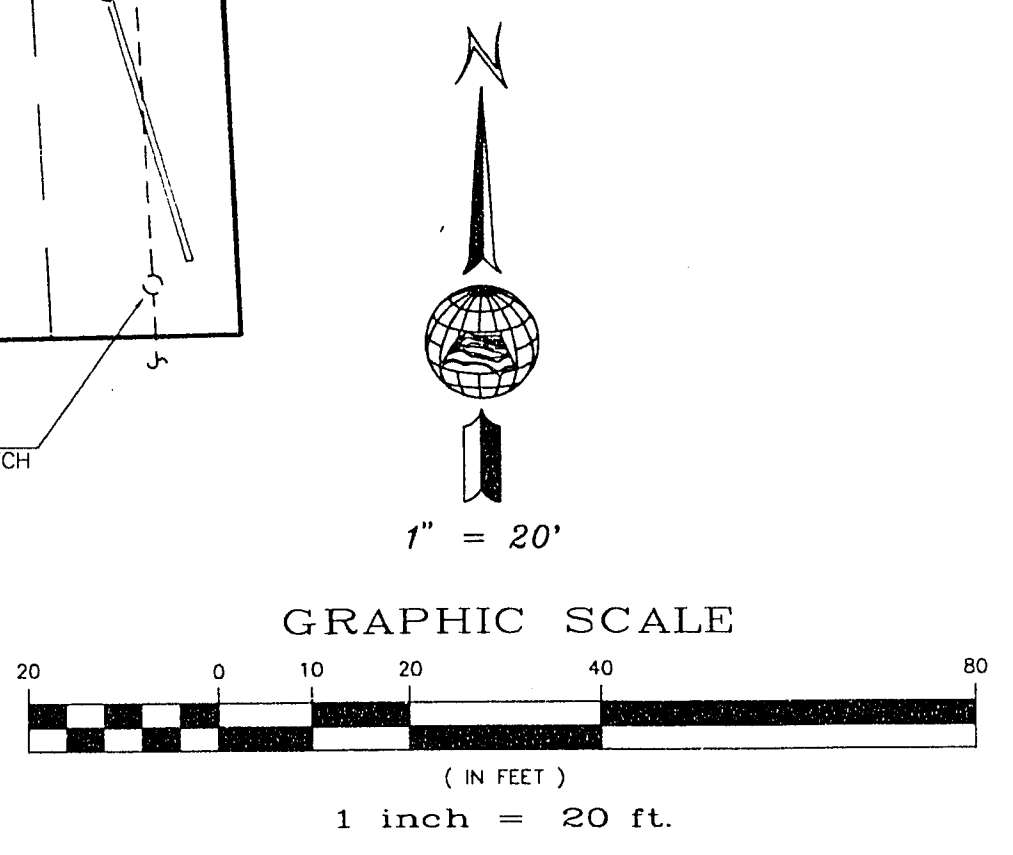
CITY OF LAS VEGAS BENCHMARK No. 7C10 2NWW6
RIVET AND PLATE IN TOP OF CURB, NE RETURN
OF RAINBOW BLVD. AND OAKLEY BLVD.
ELEVATION: 2400.285

BASIS OF BEARING

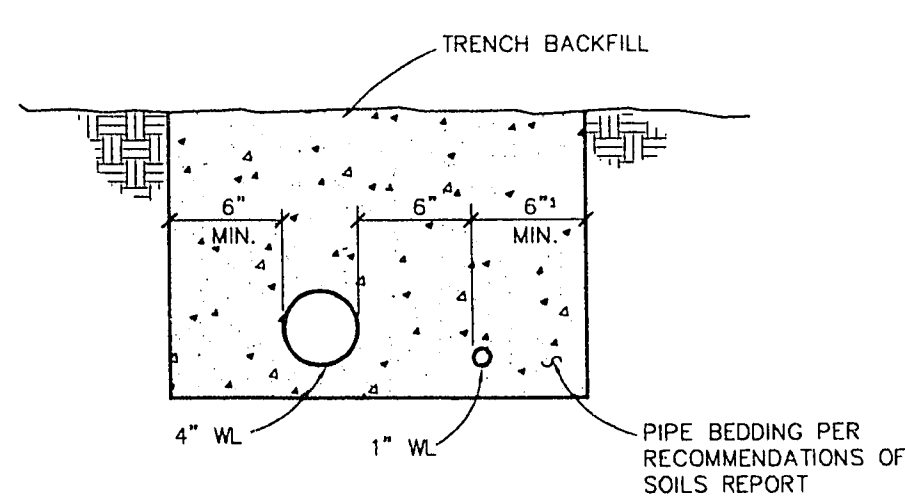
NORTH 02°37'57" WEST, BEING THE WESTERLY LINE OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 2, TOWNSHIP 21 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY MAP IN FILE 73 OF PARCEL MAPS, PAGE 75, OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

NOTE:
NO OBSTRUCTION IS ALLOWED
BETWEEN FIRE HYDRANT AND
PARKING LOT.

NOTE:
ALL ON-SITE SEWER ARE
PRIVATELY OWNED AND
MAINTAINED.



NOTE: ALL CURB DIMENSIONS SHOWN
ARE MEASURED TO BACK OF CURB.



WATERLINE TRENCH DETAIL

C.L.V. STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL CONFORM TO THE LATEST ISSUE OF 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, 1986 UNLESS OTHERWISE NOTED.

2. SEE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION CITY OF LAS VEGAS, DRAWING NOS. 311, 312, 314, 315, AND 316. STREETLIGHTS SHALL BE 30' GALVANIZED POLES WITH 12' ARMS.

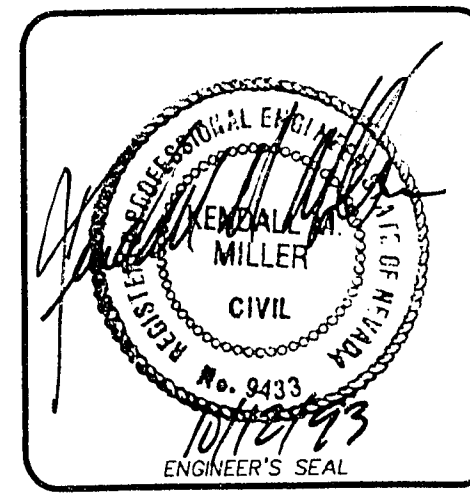
3. ALL HAND HOLE COVERS MUST BE INSTALLED, POLE CAPS POURED, AND PULL BOX LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THW INSULATION.

4. CITY OF LAS VEGAS PERMIT REQUIRED FOR STREETLIGHT INSTALLATION.

PROJECT NAME: **ETHAN ALLEN**

This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is **NOT APPROVED FOR CONSTRUCTION** at this time and this signature does not provide or imply a water commitment.

12/10/93
LVWD
11-16-93
DATE



APPROVED FOR CONSTRUCTION

12/10/93
LVWD
11/16/94
DATE

Church Engineering
A Division of
POST, BOCKLEY, BRIDGEMAN
ENGINEERING • PLANNING • SURVEYING • CONSTRUCTION SERVICES

ETHAN ALLEN

DIMENSION PLAN/UTILITY PLAN

Scale
1" = 20'

File No.
550MP

Drawn by
RMW/CS/MS

Checked by
OR

Job Number
7224560

Sheet Number
2 OF 3

Date
AUG. 11, 1993
PLOT DATE: 10/17/93
DRAWING: 580-02

107-V2169