

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. No work shall begin until the water plans have been released for construction by the LVVWD. Following water plan approval, 48 hour notice shall be given to the LVVWD Communication Support Center (258-7171) prior to the start of construction. Notice must be given by 2:00 p.m. the business day prior to a LVVWD inspection.

2. All work shall conform to LVVWD Standard Plates, Drawings, and Specifications, and the Uniform Design and Construction Standards for Water Distribution Systems (UDACS), latest edition.

3. All work, except as modified by these plans or by note 2, shall be done in accordance with the most current draft or edition of the Uniform Standard Specifications for the Public Works Construction Office improvement, Clark County Area.

4. A single pipe material shall be used throughout the project unless otherwise approved by the LVVWD.

5. All service laterals two (2) inches in diameter and smaller shall be copper tubing with LVVWD approved service saddles.

6. All meter boxes shall be located outside of driveway areas.

7. All valves shall be located outside of driveways, valley and curb gutters.

8. The following requirements must be met in the event of a water line and sanitary or storm sewer line cross. A minimum eighteen (18) inch vertical separation (outside to outside) must be maintained when the water line is installed over the sanitary or storm sewer line. If the vertical separation cannot be maintained or the water line must be placed under the sanitary or storm sewer line, the sanitary or storm sewer line must be constructed with one of the following or, as shown on these plans:

- Potable water supply material,
- Encasement, with four (4) inch concrete (minimum)
- Sleeving 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 exterior.

9. Warning tape shall be required over all mains, all six (6) inch diameter and larger service laterals, and any service lateral not installed perpendicular to the main in accordance with Standard Plate No. 27.

10. All water facilities shall be filled, disinfected, pressure tested, flushed, filled and an acceptable water sample obtained, prior to connection to the LVVWD's distribution system.

11. The contractor must obtain all meters two (2) inches and smaller from LVVWD Central Stores. Telephone 258-3152 forty-eight (48) hours prior to pickup.

12. Construction may interrupt service, with LVVWD approval and proper notification, between the hours of 10 PM and 6 AM, Sunday through Thursday. Circumstances may require temporary service feeds be installed, without LVVWD reimbursement. Any temporary service feed must have prior LVVWD approval.

13. All water facility construction materials used must be as listed on the LVVWD's Pre-approved Materials and Manufacturers Listing for New Facilities, latest revision, or specifically approved on these plans.

CITY OF LAS VEGAS SEWER CONSTRUCTION GENERAL 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. 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 OTHER CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.

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

4. CHISEL "S" IN CURBS WHERE SEWER LATERALS PASS UNDER THE CURB.

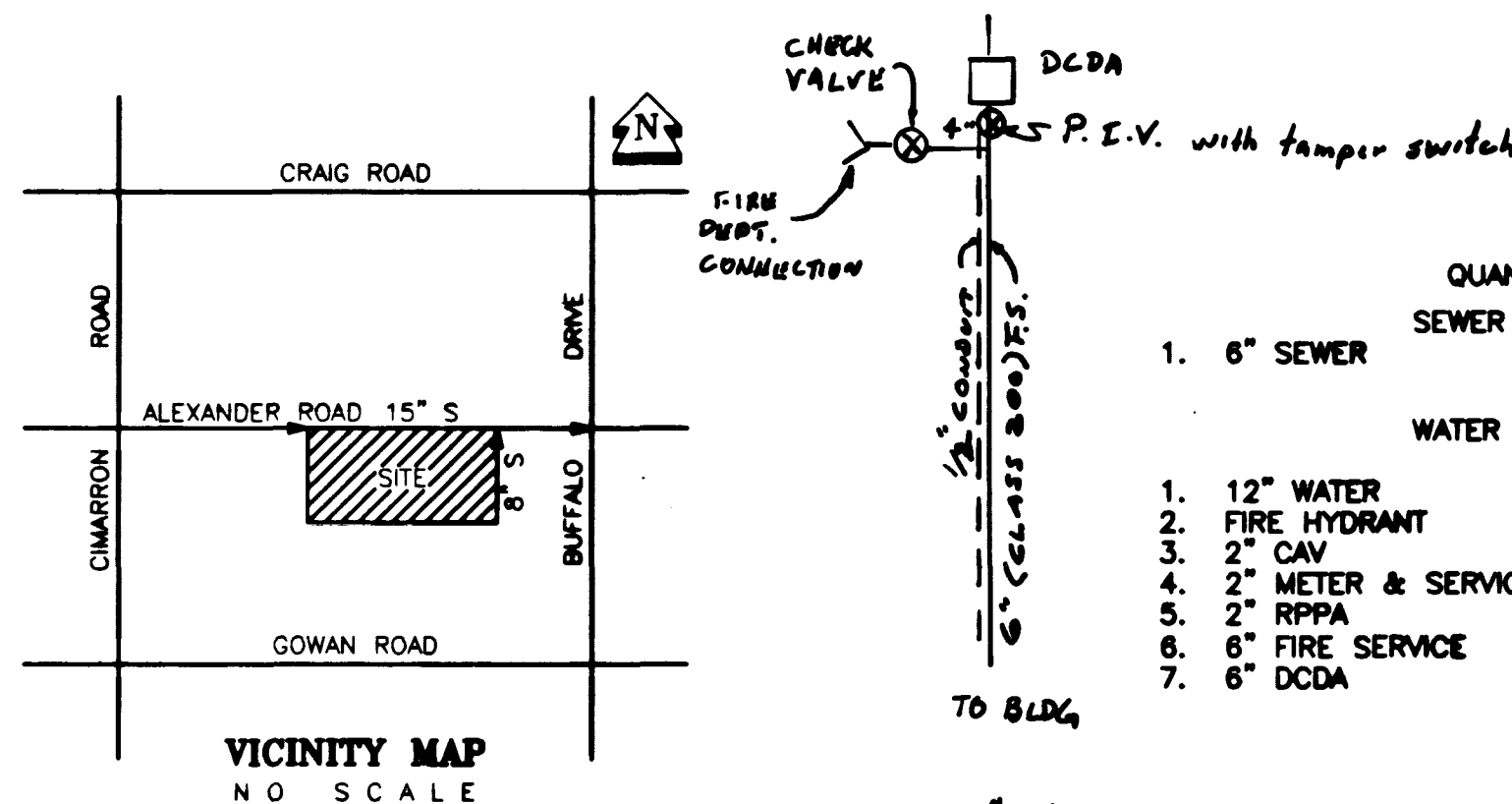
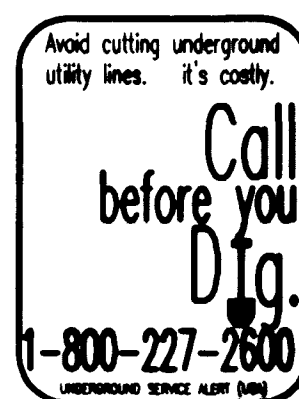
5. POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS.

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

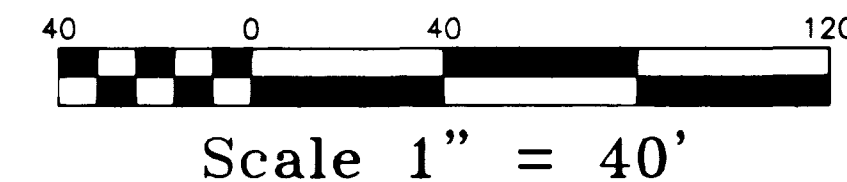
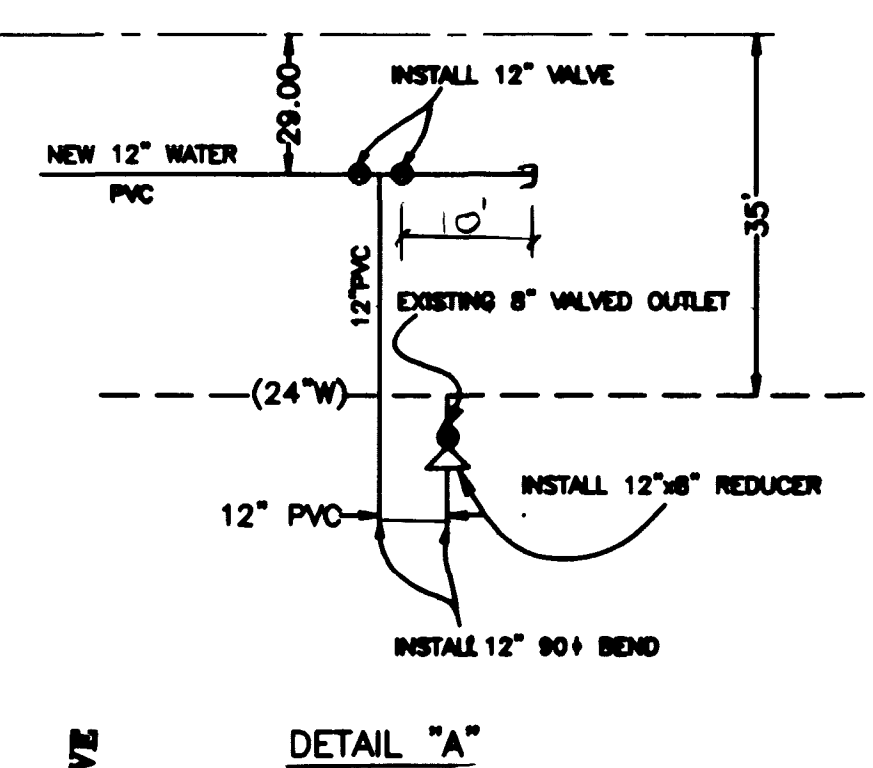
7. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" IN DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.

8. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED PIPE FOR A DISTANCE NOT LESS THAN 10 FEET TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.

9. THE CITY OF LAS VEGAS WILL NOT EXCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.01) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.



- QUANTITIES
- | | |
|-----------------|----------|
| SEWER (PRIVATE) | 20 L.F. |
| WATER (PUBLIC) | 727 L.F. |
- 12" WATER
 - FIRE HYDRANT
 - 2" CAV
 - 2" METER & SERVICE (COPPER)
 - 2" RPPA
 - 6" FIRE SERVICE
 - 6" DCDA
- 3 EACH
2 EACH
1 EACH
1 EACH
160 LF
1 EACH



INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY

THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE 20B.

ANY BLOCK WALL OR OTHER FENCING MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW DIRECT ACCESS TO THE VALVE(S) FROM THE ADJACENT RIGHT OF WAY.

CITY OF LAS VEGAS 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 #3944.

2. Authorized hydrants for this project are:

- Kennedy Guardian
- Meuller A-423 Centurian
- Clow Model 2546 Medallion

3. On any new home or building installation, accessible fire hydrants shall be installed before combustible construction commences and sold fire hydrants shall be in good working order with adequate water supply.

4. Contractor shall place a blue reflective marker at centerline of street adjacent to fire hydrant as required in Ordinance #3944 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 #3944 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. Private fire hydrants shall be painted red.

9. A flow test must be witnessed by the Fire Department prior to occupancy for verification of required on-site water supply.

10. All on-site fire main materials must be U.L. listed and A.W.W.A. approved.

11. Fire hydrant spacing: Residential - 500 feet unsprinklered, 1,000 feet sprinklered.

Commercial, including multi-family - 300 feet unsprinklered, 600 feet sprinklered.

12. Where water mains are extended along streets, where hydrants are not needed for protection of structures, fire hydrants shall be spaced at maximum 1,000 foot spacing to provide for transportation hazards.

13. No fire hydrant shall be located within the required cul-de-sac or within 20 feet of the perimeter of the radius of the cul-de-sac.

14. No fire hydrant shall be located within 8 feet of any curb return, driveway, power pole, street light or any other obstruction.

15. Two sources of supply are required whenever there are 4 or more fire hydrants installed on a single system.

16. Not more than 2 hydrants can be out of service due to a single main break.

17. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet provided no parking is allowed, not less than 28 feet if parallel parking is allowed on both sides. Vertical clearance shall be not less than 13 feet 6 inches.

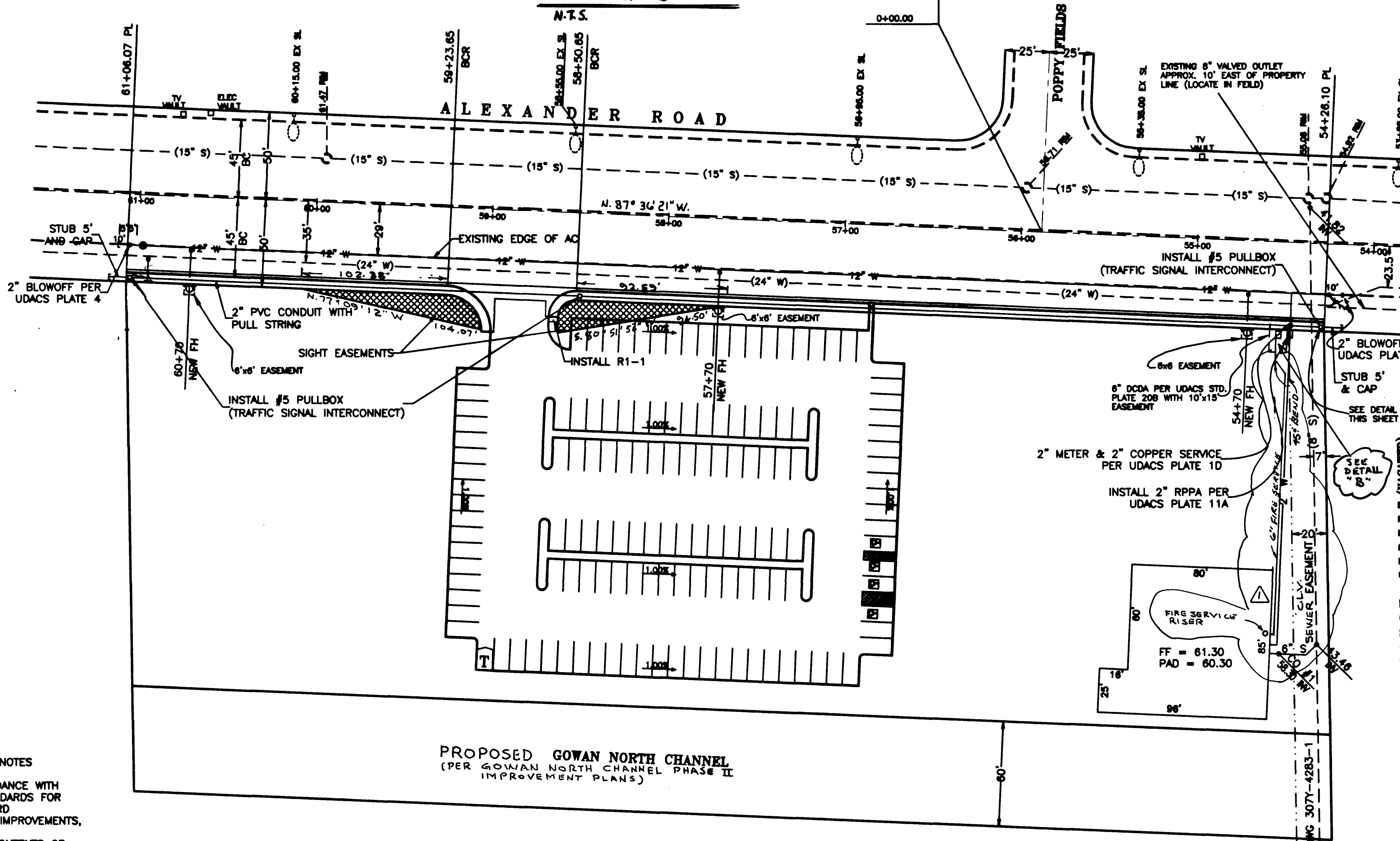
18. The turning radius for any fire apparatus access road and/or fire lane, public or private shall be not less than 45 feet outside radius and 22 feet inside radius.

19. 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 UFC 94, Section 902.2).

20. 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 #3944.

21. Access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and with signs at intervals of 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 present, shall be painted with a red weather resistant paint in addition to the signs.

22. 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 guideline for Automatic Emergency Vehicle Access Gates.



SEWAGE CONTRIBUTION: 7525 G.P.D. AVE.
15,050 G.P.D. PEAK

NOTE: FIRE HYDRANTS SHALL BE INSTALLED PER UDACS STANDARD PLATE 7 - CONDITION C WITH 6" EASEMENT

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT	1500 G.P.M.
SQUARE FOOTAGE	7216 SQ. FT.
NO AREA SEPARATION WALLS	
BUILDING HEIGHT	25 FT.
NUMBER OF STORIES	1
TYPE OF CONSTRUCTION	II - N
OCCUPANCY	B
FULL AUTOMATIC SPRINKLER SYSTEM	YES

REVIEWED BY: *[Signature]*
DATE: 7-17-98

- LEGEND
- PL PROPERTY LINE
 - (15" S) EXISTING SEWER
 - (8" W) EXISTING WATER
 - SEWER MANHOLE
 - CLEANOUT
 - AC ASPHALT CONCRETE
 - 12" W NEW WATER
 - 6" S NEW SEWER
 - FF FINISH FLOOR
 - INV INVERT
 - STREET LIGHT
 - BCR BACK OF CURB RADIUS
 - LF LINEAR FEET
 - NEW FIRE HYDRANT
 - BC BACK OF CURB
 - WATER VALVE

REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A OR 11B. PROJECT NAME: MEADOWS FELLOWSHIP CHURCH

NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACK FLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT ACCESS FROM THE ADJACENT RIGHT OF WAY.

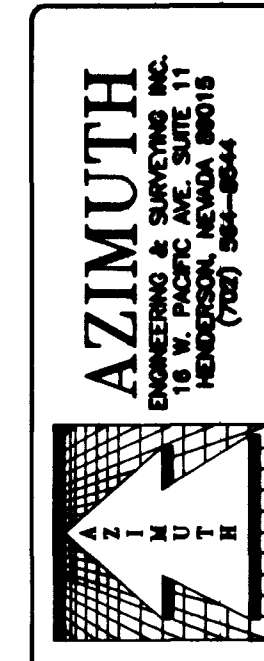
This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is

NOT APPROVED FOR CONSTRUCTION

at this time and this signature does not provide or imply a water commitment.

[Signature] 6-19-98
LVVWD DATE

NO.	DATE	BY	REVISION
1	7/17/98	AKB	REVISED LOCATION OF 6" FIRE SERVICE
2			
3			



MEADOWS FELLOWSHIP CHURCH UTILITY PLAN

JOB NO:	98-005	D.S.B.	
DRAWN:		DATE:	12 JUN 98
CHECKED:		G.H.B.	

3
OF 4 SHEETS

1. The purpose of this plan is to show the location of the proposed utility line and the existing utility lines in the area. The plan is based on the information provided by the utility company and the field survey.

2. The proposed utility line is shown as a solid line, and the existing utility lines are shown as dashed lines. The plan also shows the location of the proposed structure and the existing structures in the area.

3. The plan is drawn to a scale of 1" = 40'. The north arrow is located in the upper right corner of the plan.

4. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

5. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

6. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

7. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

8. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

9. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

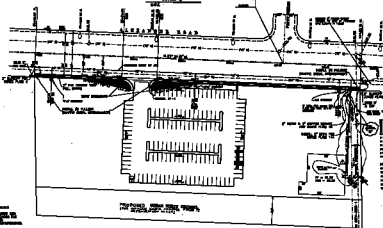
10. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

11. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

12. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).



Scale 1" = 40'



1. The purpose of this plan is to show the location of the proposed utility line and the existing utility lines in the area. The plan is based on the information provided by the utility company and the field survey.

2. The proposed utility line is shown as a solid line, and the existing utility lines are shown as dashed lines. The plan also shows the location of the proposed structure and the existing structures in the area.

3. The plan is drawn to a scale of 1" = 40'. The north arrow is located in the upper right corner of the plan.

4. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

5. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

6. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

7. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

8. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

9. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

10. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

11. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

12. The plan is drawn in accordance with the standards of the American Society of Civil Engineers (ASCE) and the American Institute of Professional Surveyors (AIPs).

PROPOSED UTILITY LINE

EXISTING UTILITY LINES

STRUCTURES

THIS PLAN IS THE PROPERTY OF THE ENGINEER AND IS NOT TO BE REPRODUCED OR COPIED WITHOUT HIS WRITTEN CONSENT.

10/1/1978

DATE	10/1/1978
BY	J. H. HARRIS
CHECKED	J. H. HARRIS
APPROVED	J. H. HARRIS



MEADOWS FELLOWSHIP CHURCH
UTILITY PLAN

DATE	10/1/1978
BY	J. H. HARRIS
CHECKED	J. H. HARRIS
APPROVED	J. H. HARRIS

3