

INSTALLATION OF METER AND VAULT

THE METER(S) AND VAULT(S) WITH NON-TRAFFIC BEARING COVER(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 18A AND WITH STANDARD VAULT DRAWING C-475, LATEST REVISION.

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

(1) 1-1/2"
(4) 2"

REDUCED PRESSURE PRINCIPLE ASSEMBLY

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A OR 11B. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW 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 DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.
ESN 026

CONSTRUCTION NOTES

1. ALL BARRICADING AND TEMPORARY TRAFFIC CONTROL DEVICES OR METHODS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "NEVADA TRAFFIC CONTROL MANUAL," MOST RECENT EDITION, PUBLISHED BY THE STATE OF NEVADA, DEPARTMENT OF HIGHWAYS, EXCEPT AS OTHERWISE PROVIDED IN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE ENGINEER.
2. AT THE TIME OF PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL FURNISH, FOR APPROVAL, A TRAFFIC BARRICADING PLAN AND METHOD OF MAINTAINING PUBLIC CONVEYANCE AND SAFETY THROUGHOUT THE CONSTRUCTION AREA. TRAFFIC BARRICADING PLANS SHALL COMPLY WITH APPLICABLE PORTIONS OF SECTIONS 624 AND 625 OF THE STANDARD SPECIFICATIONS, THE TRAFFIC CONTROL MANUAL AND APPLICABLE CITY ORDINANCES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERTICAL ADJUSTMENT OF EXISTING SANITARY, WATER AND STORM SEWER MANHOLES TO THE FINAL FINISH GRADES AS NOTED ON THE CONTRACT DRAWINGS, AND IN ACCORDANCE WITH SECTION 609 OF THE "STANDARD SPECIFICATIONS," AND ANY VERTICAL ADJUSTMENTS OF WATER VALVE BOXES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONTRACT DRAWINGS.
4. NOTICE: GRADING AUTHORIZED ONLY AFTER PERMITTEE'S FULL COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT.
5. THE DESIGN GRADE (DG) INDICATED ON THESE PLANS IS FOR VERTICAL ELEVATION DESIGN CALCULATION PURPOSES AND DOES NOT NECESSARILY REPRESENT THE FINISH IMPROVEMENT GRADES @ CENTERLINE. (I.E. THRU MEDIAN AREAS). SEE STANDARD STREET SECTIONS ON SHEET 12.

NOTE: APPROVAL OF THESE PLANS FOR THE WATER STUBOUT INSTALLATION WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE TO THIS PROJECT.

1-1/2" REDUCED PRESSURE PRINCIPLE ASSEMBLY
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW 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 DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

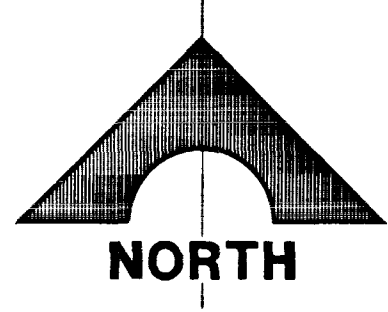
WATER NOTES

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 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 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 PUBLIC WORKS CONSTRUCTION OFFSITE 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 WATER 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 A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
 - a. 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:
 - a. POTABLE WATER SUPPLY QUALITY MATERIAL.
 - b. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM)
 - c. SLEEVE WITH POTABLE WATER SUPPLY QUALITY PIPE.
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 P.M. AND 6 A.M., 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 PREAPPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

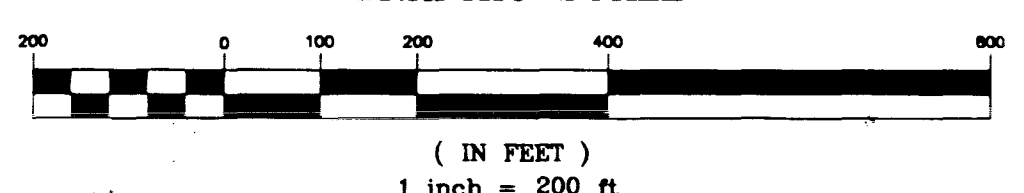
NOTE: THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE), PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRVS ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

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:
 - A - KENNEDY GUARDIAN
 - B - MUELLER A-423 CENTURIAN
 - C - 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 CENTER-LINE 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, 1000 FEET SPRINKLERED
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNSPRINKLERED, 600 FEET SPRINKLERED.
12. WHERE NEW 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 HYDRANTS 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.
14. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 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 ONE SIDE, AND NOT LESS THAN 36 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 DESIGNATION 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 OF 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 GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.



1" = 200'
GRAPHIC SCALE



RECORD DRAWINGS	
THESE PLANS SHOW RECORD INFORMATION FROM:	
CONTRACTOR: WELLS CARGO, INC. (UNDERGROUND UTILITIES)	DATE: 04/16/98
CONTRACTOR: SOUTHERN NEVADA PAVING (ROADWAY IMPROVEMENTS)	DATE: 04/07/98
CONTRACTOR:	DATE:
CONTRACTOR:	DATE:

ORIGINALLY SIGNED 9/15/96
Stephen A. Robinson 11/26/96
L.V.V.W.D. DATE

FINAL SUBMITTAL
 RECORD DRAWING INFORMATION
 8-22-98
 8-1-97 CHANGE 2-3' METERS TO 4-2' METERS 9-14-97 6/87
 8-18-97 ADDED 2-3' BR. METERS W/MPRA #12468 7/19/97 6/87
 8-25-97 DELETED MTR # 1502175 7/19/97 6/87
 11/07/98 REVISE UTILITIES PER PASO 7/19/97 6/87
 10/18/98 GRADING PLANS, C&G DRIVE AND WATER STUDIES TO PARCELS C, AND X 7/19/97 6/87
 RECOMMENDED BY: CHRISTOPHER W. ANDERSON
 DATE: 9/07
 R.P.E. NO.: 5071
 DESCRIPTION: WATER STUDIES TO PARCELS C, AND X
 STATE OF NEVADA
 PROFESSIONAL ENGINEER
 CIVIL
 G.C. WALLACE, INC.
 Engineering/Architecture
 1535 SOUTH RAINBOW BLVD., LAS VEGAS, NEVADA 89102
 SUMMERLIN
 THE ARBORS AT SUMMERLIN
 VILLAGE 11/12 UNIT 2B IMPROVEMENTS
 WATER MASTER PLAN
 SHEET
5
 SHT 5 OF 46
 ISSUE TO CONSTRUCT 10/07/96

November 19, 1996 3:41:15 p.m.
 Drawing: C:\DWG\11-12\2B\IMPROV\12B-WATER.DWG
 Xrefs: MASTUTL.DWG
 JOB NO. 82011.213

