LAS VEGAS VALLEY WATER DIST. 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 THE LVVWD'S 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. 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 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. 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 WATER 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 PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THE PLANS.

REVISED: April 25, 1995

ABANDONED VALVE CUT AND CAP

ALL VALVES TO BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 12 INCHES OF THE VALVE BOX AND THEN FILLING THE REMAINING PORTION OF THE VALVE BOX WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST 2,000 PSI.

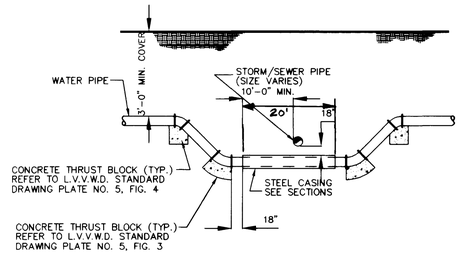
THE CONTRACTOR SHALL CUT THE EXISTING PIPE 3' + BEYOND THE ABANDONED VALVE AND INSTALL A CAP. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATION, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. THE CONTRACTOR SHALL INSTALL A CONCRETE THRUST BLOCK IN ACCORDANCE WITH THE PROVISIONS OF THE UDACS PLATE NO. 5 AT ALL CAP OR PLUG LOCATIONS.
ESN: 033

C.L.V. FIRE FLOW DATA

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

LARGEST SQUARE FOOTAGE:	2400 ± SQ.FT.
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:	2400 ± SQ.FT.
TYPE OF CONSTRUCTION:	(VN)
OCCUPANCY:	SINGLE FAMILY
FULL AUTOMATIC FIRE SPRINKLER SYSTEM:	NO

REVIEWED BY: [illegible]
DATE: 7-13-98



WHERE THE WATER LINE IS LESS THAN 18 INCHES OVER THE SEWER LINE, WHERE THE WATER LINE IS UNDER THE SEWER LINE, AND WHERE THE HORIZONTAL SEPARATION, AS REQUIRED BY THE WATER SUPPLY REGULATIONS, CANNOT BE MAINTAINED BECAUSE OF PHYSICAL OBSTRUCTIONS, THE WATER LINE SHALL BE PROTECTED BY CONSTRUCTION OF THE STORM/SEWER LINE AS FOLLOWS:

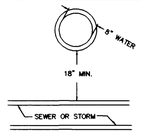
1. EXTRA HEAVY CAST IRON PIPE
2. WATER SUPPLY QUALITY MATERIALS; OR
3. ENCASEMENT WITH FOUR INCHES, MINIMUM, OF CONCRETE OR SLEEVING WITH WATER SUPPLY QUALITY PIPE.

EACH OF THESE PROVISIONS SHALL ALSO BE EXTENDED FOR OTHER THAN 90 DEGREE CROSSINGS TO THE POINT AT WHICH THE TEN FOOT SEPARATION BETWEEN THE WATER AND SEWER LINES IS ACHIEVED (10/SINE OF CROSSING ANGLE).

A – STORM/SEWER WATER CROSSING DETAIL

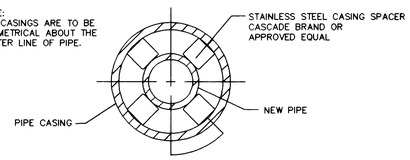
NTS

UTILITY CROSSING TYPICAL DETAIL



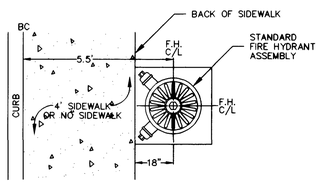
TYPICAL CASING DETAIL

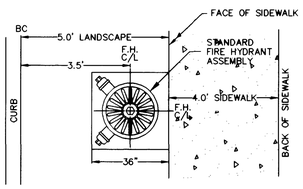
NOTE:
ALL CASINGS ARE TO BE SYMMETRICAL ABOUT THE CENTER LINE OF PIPE.



PIPE 4" THRU 12"

1. STEEL PIPE CASING SHALL BE FABRICATED FROM A MINIMUM OF 1/4" THICK STEEL PLATES, CONFORMING TO THE REQUIREMENTS OF ASTM A283, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED. INTERIOR JOINTS SHALL BE GROUNDED TO A SMOOTH FINISH. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C201, "AWWA STANDARD FOR FABRICATED ELECTRICALLY WELDED STEEL WATER PIPE." COATINGS FOR STEEL CASING ARE NOT REQUIRED.
2. PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADED WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.
3. THE PIPE SHALL BE SUPPORTED AT EACH END OF EACH JOINT WITH SPACERS. AFTER INSTALLATION OF THE PIPE, THE CASING SHALL BE SEALED AT BOTH ENDS WITH CASING END SEALS.





FIRE HYDRANT LOCATION

PER SUMMERLIN STD. DWG. NO. U-13

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

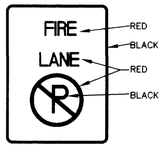
UNIT 3 PROJECT SEWER FLOW CONTRIBUTIONS

AVERAGE DAILY FLOW	=	250 GPD x 72 = 18,000 GPD
PEAK DAILY FLOW	=	3.4 (250 GPD) x 72 = 61,200 GPD

SEWER NOTE:

ALL SEWER MAINS SHOWN ARE PUBLIC AND WILL BE MAINTAINED BY THE CITY OF LAS VEGAS.

FIRE LANE SIGN



MINIMUM SPECIFICATIONS OF "NO PARKING FIRE LANE SIGNS"

SIZE: 1' WIDE X 1 1/2' LONG OR 2' WIDE X 2 1/2' LONG AS REQUIRED
COLOR: RED AND BLACK ON WHITE LUMINOUS BACKGROUND (SEE EXAMPLE ❶ LEFT)
SYMBOL: INTERNATIONAL NO PARKING SYMBOL
HEIGHT: TO BE INSTALLED NOT LESS THAN SEVEN (7) FEET NOR MORE THAN TEN (10) FEET FROM GROUND LEVEL.

REDUCED PRESSURE PRINCIPLE ASSEMBLY

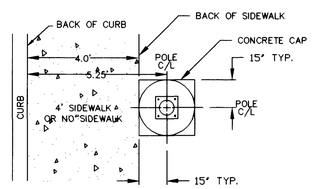
(3 – 3/4")

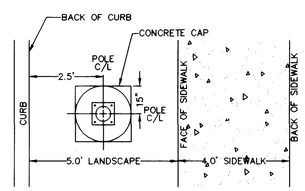
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

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. (ESN. 026)

STREET LIGHT NOTES

ALL STREET LIGHT INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE SUMMERLIN IMPROVEMENT STANDARDS.





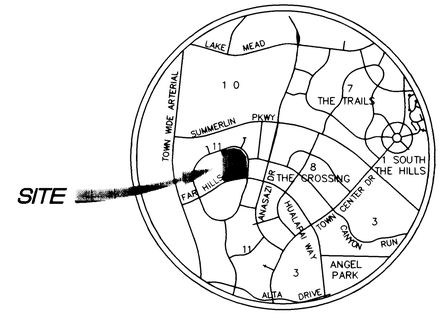
STREET LIGHT LOCATION

PER SUMMERLIN STD. DWG. NO. E-16

NOTICE!

EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR SHOWN INCORRECTLY.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.
Call BEFORE YOU Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)



LOCATION MAP

QUANTITIES:

PUBLIC WATER QUANTITIES

8" WATER	1500 LF
8" x 12" REDUCER	–
12"x8"x12" MECHANICAL TAPPING TEE	–
8" TEE	–
8" 45°	2 EA
8" 22.5°	–
1" LATERAL WITH 3/4" METER	53 EA
1" LATERAL WITH 1" METER	19 EA
1" LATERAL WITH 5/8" METER (IRRIG.)	3 EA
1" LATERAL WITH 1" METER (IRRIG.)	1 EA
PRESSURE REDUCING VALVE	7 EA
8" GATE VALVE	–
STD. F.H. ASSY. W/ 8x6x8 TEE, 6" GV AND LATERAL	5 EA
2" BLOWOFF VALVE	–
3/4" RPPA	3 EA
1" RPPA	1 EA

PUBLIC SEWER QUANTITIES

8" SEWER	1440 LF
48" MANHOLE	6 EA
4" LATERAL (PRIVATE)	900 LF
BACK WATER VALVE (PRIVATE)	17 EA

PRIVATE STREET LIGHT QUANTITIES

100 W H.P.S.	22 EA
150 W H.P.S.	–
#3-1/2 PULLBOX	3 EA
1-1/4" CONDUIT	3650 LF
DOUBLE METER PADMOUNT & PHOTO EYE	

PRIVATE BACK WATER VALVE SCHEDULE

LOTS – 63,64,65,91,92,94,100,101,115,117,119,120,122,123,125,126 AND 127

SERVICE LATERALS FOR LOTS:
64-65 BLOCK D, 91-94 BLOCK C,
101-103 BLOCK B, AND 115-126 BLOCK A
WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF LAS VEGAS VALLEY WATER DISTRICT.

NOTE: CONTRACTOR TO VERIFY DEPTH OF EXISTING SEWER STUB BEFORE COMMENCING CONSTRUCTION. ANY DISCREPANCY IN PLAN AND ACTUAL ELEVATION IS TO BE BROUGHT TO THE ENGINEERS ATTENTION IN WRITING IMMEDIATELY!

APPROVALS:

LAS VEGAS VALLEY WATER DISTRICT — DATE 3/03/99

REV	DATE	BY	REVISION
1	4/8/99	MW	Revised Street Names

ALPHA & ENGINEERING COMPANY
50 So. Jones #202, Las Vegas, NV. 89107
Telephone: (702) 877-1300

CHRISTOPHER HOMES
9500 HILLWOOD DRIVE
LAS VEGAS, NEVADA 89134
(702) 360-3200

SHEET: UTILITY NOTES AND DETAILS

TITLE: VINEYARDS UNIT 3 THE ARBORS @ SUMMERLIN

DRAWN BY: ET / HL 7.7.98
DESIGNED BY: ET / HL 7.7.98
CHECKED BY: HL 7.7.98
PROJECT NO: 714905
SCALE: NONE

REGISTERED PROFESSIONAL ENGINEER — EDWARD F. TANEY — CIVIL — NO. 9903 — NEVADA

SHEET U6
13 OF 15 SHEETS
DRAWING NO. 3071-4546-3

VIEW NAME: 3U6
FILE NAME: DET-NOTE.DWG

11358 14038

LAS VEGAS VALLEY WATER DIST. NOTES

ABANDONED VALVE CUT AND CAP

C.L.V. FIRE FLOW DATA

FIRE HYDRANT LOCATION

STORM/SEWER WATER CROSSING DETAIL

UTILITY CROSSING TYPICAL DETAIL

TYPICAL CASING DETAIL

SEWER CONNECTION NOTE

UNIT 3
PROJECT SEWER FLOW CONTRIBUTIONS

SEWER NOTE

FIRE LINE SIGN

REDUCED PRESSURE PRINCIPLE ASSEMBLY

STREET LIGHT NOTES

STREET LIGHT LOCATION

LOCATION MAP

QUANTITIES:

PUBLIC WATER QUANTITIES

8" WATER	[illegible] LF
6" x 12" REDUCER	—
12"x8"x12" MECHANICAL COUPLING TEE	—
8" TEE	—
8" CAP	2 EA
8" ELL	—
1" LATERAL WITH 3/4" METER	53 EA
1" LATERAL WITH 1" METER	16 EA
1" LATERAL WITH 5/8" METER (SMALL)	3 EA
1" LATERAL WITH 1" METER (SMALL)	1 EA
PRESSURE REDUCING VALVE	2 EA
8" GATE VALVE	—
BTA TYP. WITH 16" BARREL TEE, 8" WV AND LATERAL	8 EA
2" BLOWOFF VALVE	—
3/4" HYDRANT	3 EA
1" HYDRANT	1 EA

PUBLIC SEWER QUANTITIES

8" SEWER	[illegible] LF
48" MANHOLE	8 EA
4" LATERAL (PRIVATE)	[illegible] LF
SEWER WATER VALVE (PRIVATE)	12 EA

PRIVATE STREET LIGHT QUANTITIES

150 W H.P.S.	33 EA
150 W H.P.S.	—
25-1/2' FIBERGLASS	3 EA
1-1/2" CONDUIT	[illegible] LF

PRIVATE SEWER WATER VALVE SCHEDULE

APPROVALS

3/13/07

ALPHA Ω

CHRISTOPHER HOMES

UTILITY NOTES AND DETAILS

VINEYARDS UNIT 3
THE ARBORS @ SUNRISE