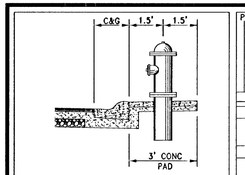
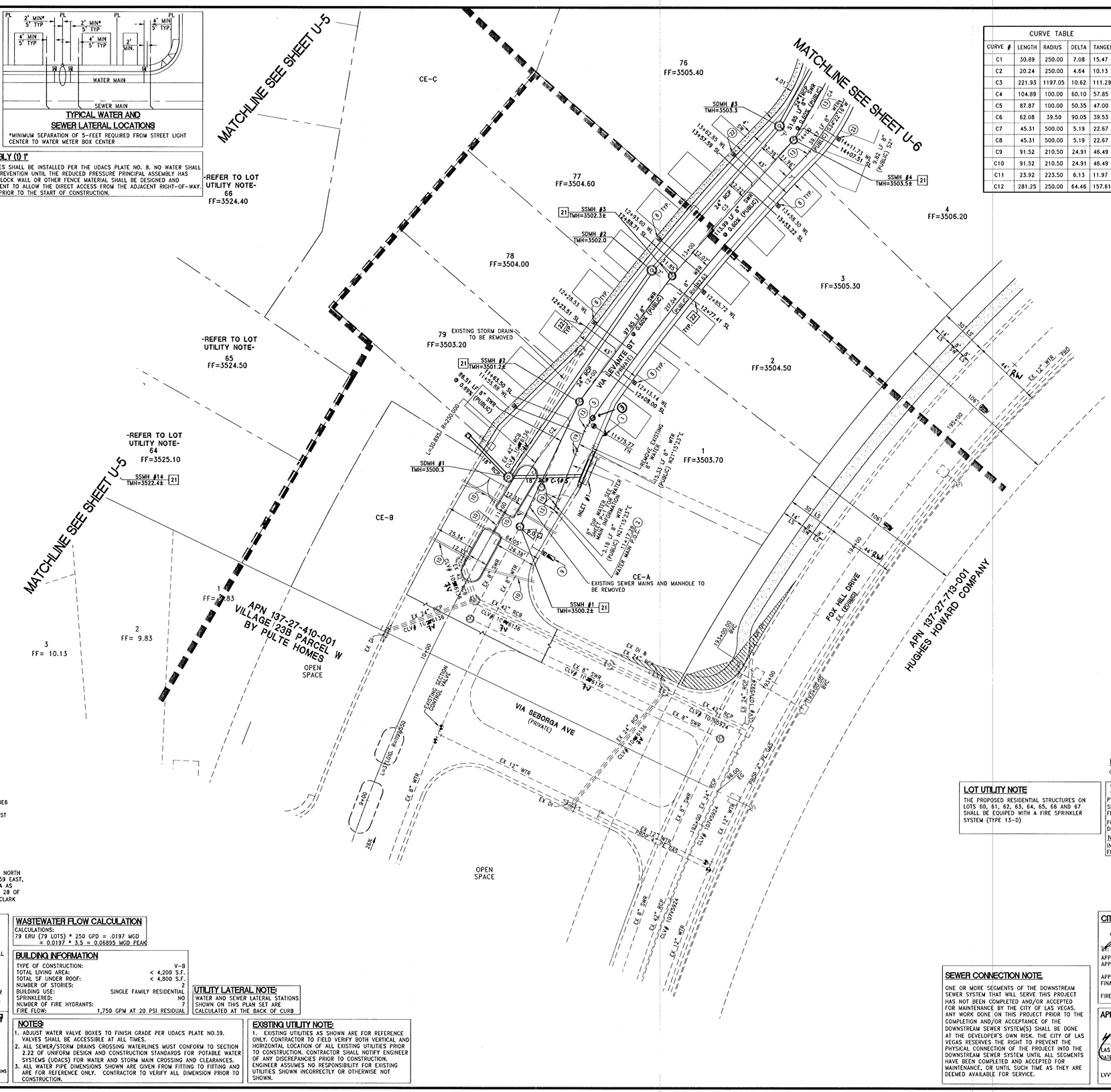


PUBLIC FIRE HYDRANT INSTALLATION
WITHOUT SIDEWALK PER UDACS PLT 40

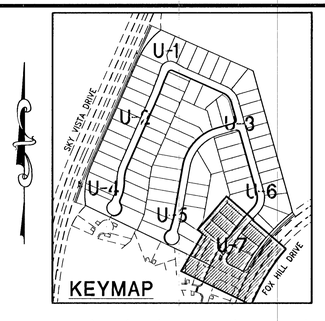
TYPICAL WATER AND SEWER LATERAL LOCATIONS
*MINIMUM SEPARATION OF 5-FEET REQUIRED FROM STREET LIGHT CENTER TO WATER METER BOX CENTER

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"

APPROVED REDUCED PRESSURE PRINCIPAL ASSEMBLIES SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPAL 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 TO ALLOW THE DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENT SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.



CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C1	30.89	250.00	7.08	15.47
C2	20.24	250.00	4.64	10.13
C3	221.93	1197.05	10.62	111.29
C4	104.89	100.00	60.10	57.85
C5	87.87	100.00	50.35	47.00
C6	62.08	39.50	90.05	39.53
C7	45.31	500.00	5.19	22.67
C8	45.31	500.00	5.19	22.67
C9	91.52	210.50	24.91	46.49
C10	91.52	210.50	24.91	46.49
C11	23.92	223.50	6.13	11.97
C12	281.25	250.00	64.46	157.61



30' 15' 0' 30' 60'
SCALE: 1" = 30'

WATER CONSTRUCTION NOTES

1. INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE No. 40 (INCLUDES 6" GATE VALVE)
2. CONNECT TO EXISTING 8" WATER MAIN
3. INSTALL 8" GATE VALVE PER UDACS PLATE No. 30 & No. 39
4. INSTALL 8" X 8" TEE PER UDACS PLATE No. 31
5. INSTALL 8" X 6" TEE PER UDACS PLATE No. 31
6. INSTALL 12" X 8" REDUCER PER UDACS PLATE No. 30
7. INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 38
8. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 2
9. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No.'s 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
10. INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
11. INSTALL 8" 45° BEND PER UDACS PLATE No. 31
12. INSTALL 8" 5° BEND PER UDACS PLATE No. 31 WITH RESTRAINTS
13. INSTALL 8" 11.25° BEND PER UDACS PLATE No. 31
14. COMMON ELEMENT/EASEMENT REQUIREMENTS PER NOTES AND TEST STATION DETAIL ON SHEET MU-1
15. INSTALL 8" 22.5° BEND PER UDACS PLATE No. 31
16. INSTALL 12" 90° BEND PER UDACS PLATE No. 31
17. INSTALL 8" X 6" REDUCER PER UDACS PLATE No. 30
18. INSTALL 6" 5° BEND PER UDACS PLATE No. 31 WITH RESTRAINTS
19. INSTALL 8" VERTICAL 45° BEND PER UDACS PLATE No. 31
20. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 2 (INSTALL 13-D FIRE SPRINKLER SYSTEM) CUT CAP AND ABANDON 12" WTR LINE AT THIS POINT SEE (CUT AND CAP) NOTE
21. INSTALL 1" SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 4
22. INSTALL 6" 45° BEND PER UDACS PLATE No. 31

SEWER CONSTRUCTION NOTES

21. INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. No. SD-1A, SD-4, SD-5 & SD-6)
22. INSTALL 4" SEWER LATERAL (PER DCSWCS STD No. SD-17, SD-22 & SD-25) AND 1 CU-FT THRUST BLOCK @ CAP
23. TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 24" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.

BACKWATER VALVE
(BW) ALL LOTS WITH THIS SYMBOL REQUIRE A BACKWATER VALVE

LOT UTILITY NOTE
THE PROPOSED RESIDENTIAL STRUCTURES ON LOTS 60, 61, 62, 63, 64, 65, 66 AND 67 SHALL BE EQUIPED WITH A FIRE SPRINKLER SYSTEM (TYPE 13-D)

WATER MAIN JOINT DEFLECTION (PVC 4"-24")
PVC PIPE SHALL BE DEFLECTED AT THE JOINT ONLY. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE ONE (1) DEGREE PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.
NOTE:
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

BENCHMARK
CITY OF LAS VEGAS BENCHMARK STATION 5LV09 34NE6

RIVET AND PLATE IN TOP OF CURB AT THE NORTHEAST CORNER OF DESERT FOOTHILLS AND ALTA DRIVE.

ELEVATION = 1007.197 METERS (NAVD'88)
ELEVATION = 3304.45 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS
NORTH 89°48'49" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN FILE 91, PAGE 28 OF PARCEL MAPS IN THE COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

DISCLAIMER NOTE:
UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. CONTRACTOR TO NOTIFY ENGINEER OF ANY CHANGES OR DISCREPANCIES.

Avoid overhead power line contact. It's costly.
Call before you Overhead
1-702-227-2929
Nevada Power Environment and Safety Services Department

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-227-2600 OR
CLARK COUNTY TRAFFIC OPERATIONS
1-702-455-7544

WASTEWATER FLOW CALCULATION
CALCULATIONS:
79 ERU (79 LOTS) * 250 GPD = .0197 MGD
= 0.0197 * 3.5 = 0.06895 MGD PEAK

BUILDING INFORMATION

TYPE OF CONSTRUCTION:	V-B
TOTAL LIVING AREA:	< 4,200 S.F.
TOTAL SF UNDER ROOF:	< 4,800 S.F.
NUMBER OF STORIES:	2
BUILDING USE:	SINGLE FAMILY RESIDENTIAL
SPRINKLERED:	NO
NUMBER OF FIRE HYDRANTS:	7
FIRE FLOW:	1,750 GPM AT 20 PSI RESIDUAL

UTILITY LATERAL NOTE:
WATER AND SEWER LATERAL STATIONS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

NOTES:
1. ADJUST WATER VALVE BOXES TO FINISH GRADE PER UDACS PLATE NO.39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.
2. ALL SEWER/STORM DRAINS CROSSING WATERLINES MUST CONFORM TO SECTION 2.22 OF UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSING AND CLEARANCES.
3. ALL WATER PIPE DIMENSIONS SHOWN ARE GIVEN FROM FITTING TO FITTING AND ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY ALL DIMENSION PRIOR TO CONSTRUCTION.

EXISTING UTILITY NOTE:
1. EXISTING UTILITIES AS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY BOTH VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ENGINEER ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITIES SHOWN INCORRECTLY OR OTHERWISE NOT SHOWN.

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 THE 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.

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL
BY: _____ 5/13/14 DATE
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR ANY APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.
APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LVVWD.
FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 5/22/14 PROJECT # 122465
LVVWD APPROVED FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL

REV	DESCRIPTION	BY	APPD	DATE

DATE: May 13, 2014
HORIZ. SCALE: 1"=30'
VERT. SCALE: N/A
DRAWN BY: CR
DESIGNED BY: AW
CHECKED BY: JIL
APPROVED BY: JIL
PROJECT # 3110.0017

TOLL SOUTH LV, LLC
1140 TOWN CENTER DRIVE SUITE 250
LAS VEGAS, NV 89144
PHONE: 702-243-9800 FAX: 702-243-9610

RCI Engineering
4325 Dean Martin Drive Suite 300, Las Vegas, NV 89103
PH#702.453.0800 FAX#702.453.0801

MONTECITO AT SUMMERLIN VILLAGE 23B PARCEL X
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
UTILITY PLAN (SHEET 7 OF 7)

CITY OF LAS VEGAS NEVADA

JOHN I. LAND Exp. 12/31/2015 CIVIL No. 16441 STATE OF NEVADA PROFESSIONAL ENGINEER
5/13/2014

DRAWING U-7
SHT 20 OF 39
CLV DRAWING NUMBER 4455318 10TY4997
CLV PROJECT #

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