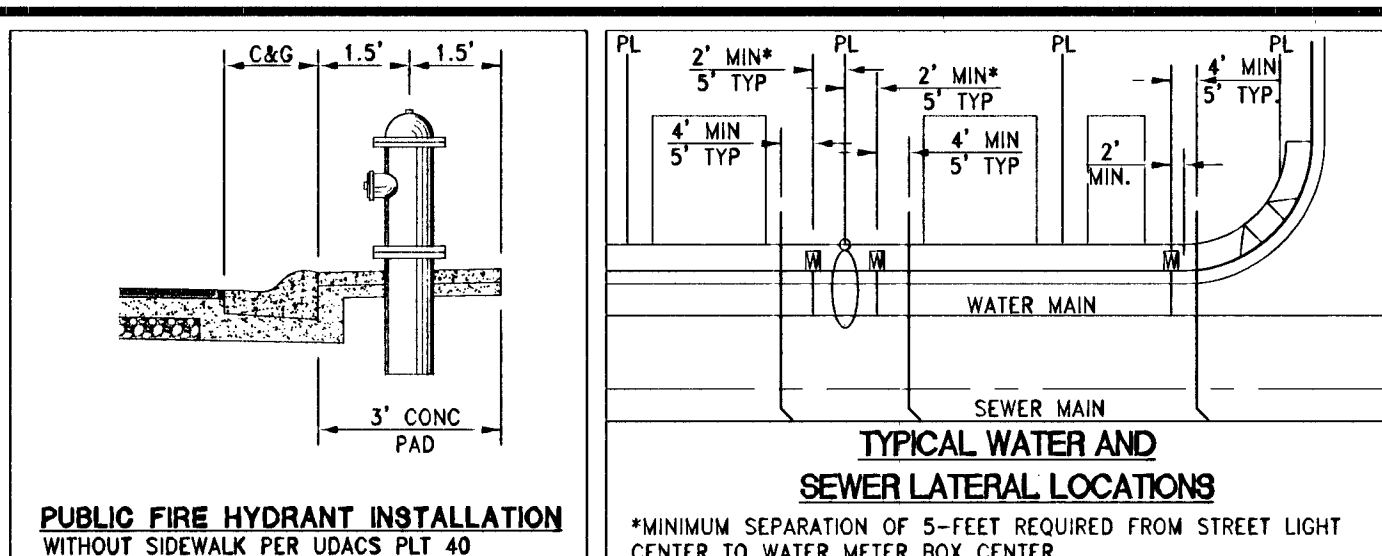




PUBLIC FIRE HYDRANT INSTALLATION
WITHOUT SIDEWALK PER UDACS PLT 40

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

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY SHALL BE INSTALLED PER THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD. 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.

CUT AND CAP
THE LATERAL MUST BE CUT WITHIN ONE (1) FOOT OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE CONTRACTOR SHALL CUT THE EXISTING PIPE WHERE SHOWN ON THE DRAWING AND INSTALL A CAP COMPLETE WITH THRUST BLOCK, WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CAP OR PLUG LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF UDACS PLATE 31.

LVWD EASEMENT NOTE
IF FUSIBLE PVC IS TO BE USED, SHOP DRAWINGS MUST BE SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION OF THAT OPTION.

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 CONTRACTOR'S 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.

WASTEWATER FLOW CALCULATION
CALCULATIONS:
78 ERU (78 LOTS) • 250 GPD = .0195 MGD
= 0.0195 • 3.5 = 0.06825 MGD PEAK

BUILDING INFORMATION
TYPE OF CONSTRUCTION: V-9
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

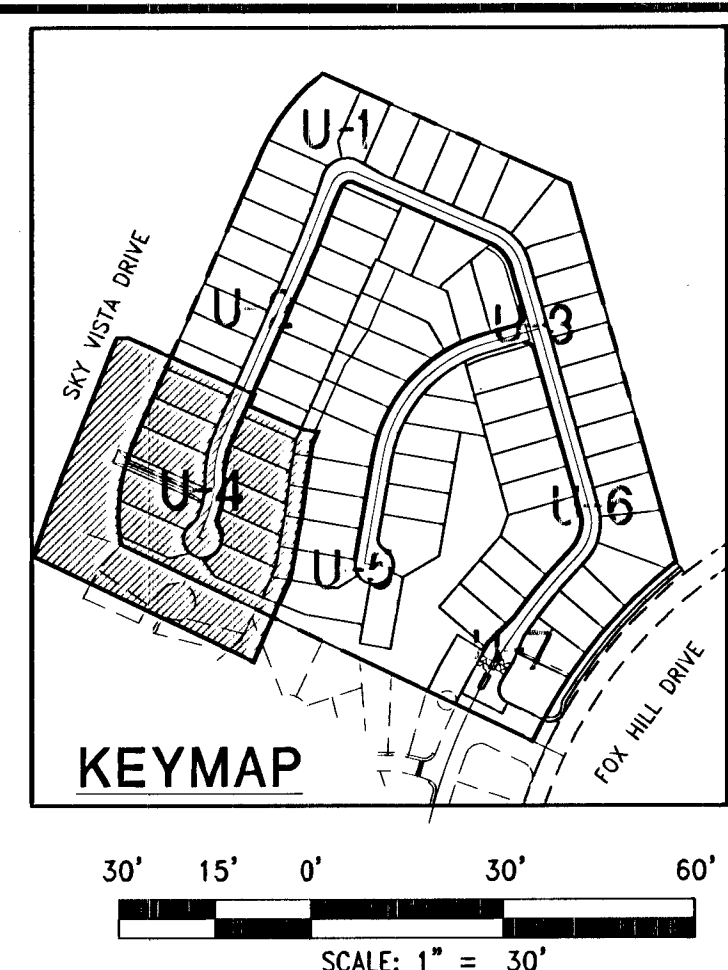
UTILITY LATERAL NOTE:
WATER AND SEWER LATERAL SYSTEMS SHOWN ON THIS PLAN SET ARE CALCULATED AT THE BACK OF CURB

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.

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.

Call before you Dig
Call before you Dig
1-702-227-2929
1-800-227-2600
Clark County Public Operations
1-702-455-7544

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	337.49	300.00	64.46	189.13



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 12" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 36
 8. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No. 4 & 8 (1" BRASS WATERLINE BETWEEN METER AND RPPA)
 9. INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" RPPA PER UDACS PLATE No. 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)
 21. CUT CAP AND ABANDON 12" WTR LINE AT THIS POINT
 22. SEE (CUT AND CAP) NOTE
 23. INSTALL 1" SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 4
 24. INSTALL 6" 45° BEND PER UDACS PLATE No. 31
 25. INSTALL 6" 22.5° BEND PER UDACS PLATE No. 31
- SEWER CONSTRUCTION NOTES**
1. INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. No. 21) SD-1A, SD-4, SD-5 & SD-6
 2. INSTALL 4" SEWER LATERAL (PER DCSWCS STD No. SD-17, SD-22 & SD-25) AND 1 CU-FT THRUST BLOCK @ CAP
 3. TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 24" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.
- LOT UTILITY NOTE**
THE PROPOSED RESIDENTIAL STRUCTURES ON LOTS 61A, 62A, 63A, 64A, AND 65A SHALL BE EQUIPPED 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

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL
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 LVWD.
FIRE FLOW 1,250 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION 1ST APPROVED ON 05/22/14
1. DISHARFER, JON
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 9/14/14 PROJECT: 122465
LVWD APPROVED FIRE FLOW 1,250 GPM AT 20 PSI RESIDUAL

TOLL SOUTH LV, LLC
1140 TOWN CENTER DRIVE SUITE 250
LAS VEGAS, NV 89144
PHONE: 702-242-9800 FAX: 702-242-9810

RCI Engineering
4325 Dean Martin Drive Suite 300, Las Vegas, NV 89103
PH: 702.453.0600 FAX: 702.453.0801

**MONTECITO AT SUMMERLIN VILLAGE 23B PARCEL X
A SINGLE FAMILY RESIDENTIAL SUBDIVISION
UTILITY PLAN (SHEET 4 OF 7)**

NEVADA
CITY OF LAS VEGAS
03/31/10, TOL 007, Y23A, Parcel_X, CIVIL, LVPS, REVISED 006-101-07.dwg gilaera 8/30/14 1:07pm