

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

PRESSURE REDUCING VALVE
 (PRV) ALL LOTS WITH THIS SYMBOL REQUIRE A PRESSURE REDUCING VALVE

SEWER CONSTRUCTION NOTES
 21 INSTALL 48" STANDARD MANHOLE (PER DCSWCS STD. No. SD-1A, SD-4, SD-5 & SD-8)
 22 INSTALL 4" SEWER LATERAL (PER DCSWCS STD. No. SD-17, SD-22 & SD-25) AND 1 CU-PT THRUST BLOCK @ CAP
 23 TYPICAL LOCATION FOR SEWER LATERAL AT WATER MAIN CROSSING. ALL SEWER LATERALS MUST MAINTAIN 18" VERTICAL CLEARANCE BELOW WATER MAIN AT CROSSINGS.

WATER CONSTRUCTION NOTES
 1 INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE No. 40 (INCLUDES 6" GATE VALVE)
 2 INSTALL 8" GATE VALVE PER UDACS PLATE No. 30 & No. 39
 3 INSTALL 8" X 6" TEE PER UDACS PLATE No. 31
 4 INSTALL 8" X 8" TEE PER UDACS PLATE No. 31
 5 INSTALL 8" X 6" REDUCER PER UDACS PLATE No. 30
 6 INSTALL 10" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 36
 7 INSTALL 6" CAP WITH 2" BLOW OFF ASSEMBLY PER UDACS PLATE No. 36
 8 REMOVE CAP AND BLOW OFF PER UDACS PLATE No. 36
 9 INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" METER PER UDACS PLATE No. 4
 10 INSTALL 1" COPPER SERVICE LATERAL WITH 3/4" WATER METER (FOR IRRIGATION) WITH 1" WPPA PER UDACS PLATE No. 4 & B (1" BRASS WATERLINE BETWEEN METER AND RPPA)
 11 INSTALL (2) 4" SCHEDULE 40 PVC IRRIGATION SLEEVES
 12 INSTALL 10" GATE VALVE PER UDACS PLATE No. 30 & No. 39
 13 INSTALL 10" 45° BEND PER UDACS PLATE No. 31
 14 INSTALL 10" X 8" TEE PER UDACS PLATE No. 31
 15 INSTALL 8" 90° BEND PER UDACS PLATE No. 31
 16 ADJUST WATER VALVE BOX TO FINISH GRADE PER UDACS PLATE No. 39
 17 INSTALL 8" 45° BEND PER UDACS PLATE No. 31
 18 INSTALL 1" COPPER SERVICE LATERAL WITH 1" METER PER UDACS PLATE No. 4
 19 INSTALL 8" 45° WITH A 37° CLOCKWISE ROTATION PER UDACS PLATE No. 31
 20 INSTALL 8" 11.25° BEND PER UDACS PLATE No. 31

BENCHMARK
 CITY OF LAS VEGAS BENCHMARK NO. 6LY90 1854
 A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHEAST CORNER OF GRAND CANYON AND ELKHORN
 ELEVATION=840.308 METERS (NAVD'88)
 ELEVATION=2756.91 US SURVEY FEET (NAVD'88)

BASIS OF BEARINGS
 N 00°00'21" W, BEING THE EAST LINE OF THE SOUTHWEST QUARTER (SE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 16, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN THAT CERTAIN MAP IN FILE 82, PAGE 20, OF PARCEL MAPS ON FILE IN THE COUNTY RECORDERS OFFICE, CLARK COUNTY, NEVADA.

WATER NOTE FOR ALL LOTS
 1. THIS PROJECT RESIDES WITHIN THE 2975 WATER ZONE. THEREFORE ANY LOT WITH A FINISH FLOOR ELEVATION LESS THAN 2790.40 WILL HAVE A STATIC PRESSURE THAT EXCEEDS 80 PSI AND WILL REQUIRE AN INDIVIDUAL ON SITE (PRIVATE) PRESSURE REDUCING VALVE.
 2. THIS PROPERTY HAS STATIC WATER PRESSURES IN EXCESS OF 80 PSI, AND THEREFORE PRV'S ARE REQUIRED FOR THIS PROJECT.

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

EXISTING UTILITY NOTE:
 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.

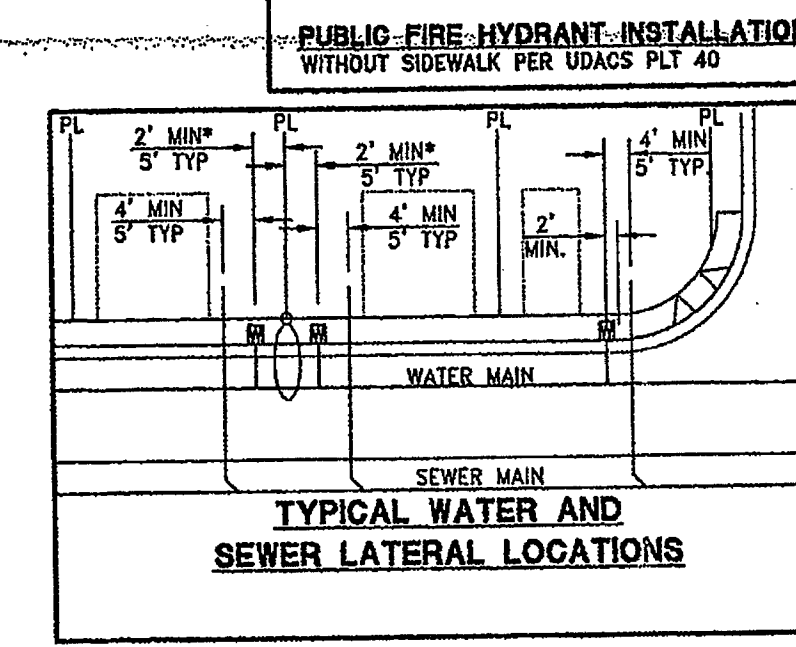
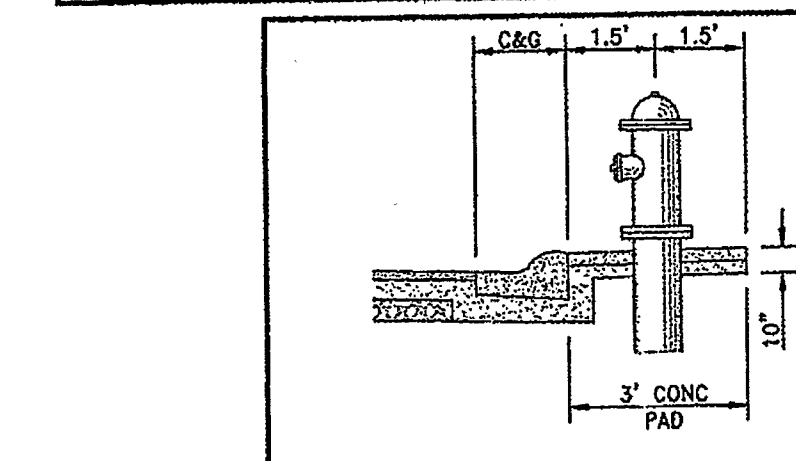
REDUCED PRESSURE PRINCIPLE ASSEMBLY (2) 1"
 APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLIES SHALL BE INSTALLED PER THE UDACS PLATE No. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD. ANY "BLOCK 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.

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 DIMENSIONS PRIOR TO CONSTRUCTION.

BUILDING INFORMATION
 TYPE OF CONSTRUCTION: V-B
 TOTAL LIVING AREA: < 5,000 S.F.
 TOTAL SF UNDER ROOF: < 6,400 S.F.
 NUMBER OF STORIES: 2
 BUILDING USE: SINGLE FAMILY RESIDENTIAL
 SPRINKLERED: NO
 NUMBER OF FIRE HYDRANTS: 6
 FIRE FLOW: 2,250 GPM AT 20 PSI RESIDUAL

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 2,250 GPM AT 20 PSI RESIDUAL

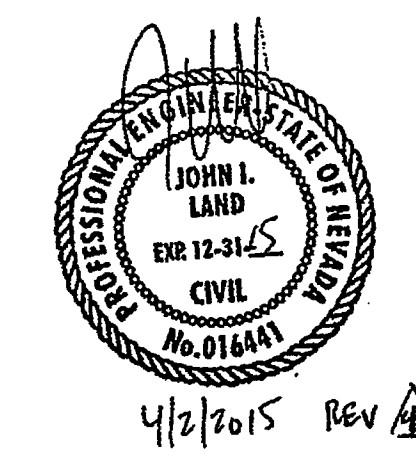
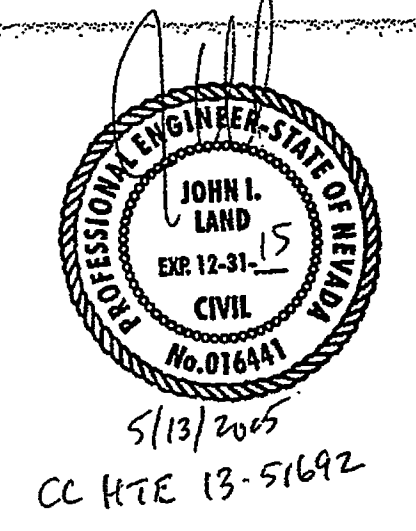
APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE: 9/16/14 PROJECT: 121614
 LVWD APPROVED FIRE FLOW 2,250 GPM AT 20 PSI RESIDUAL



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

WASTEWATER FLOW CALCULATION
 CALCULATIONS:
 UNIT 3 = 24 ERU (24 LOTS) = 250 GPD = 0.008 MGD
 = 0.008 x 3.5 = 0.021 MGD PEAK

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.
 Avoid overhead power line contact. It's costly.
 Call before you Dig
 Call before you Overhead
 1-702-227-2928
 Nevada Power
 Environment and Safety Services Department
 1-800-277-2800
 CLARK COUNTY TRAFFIC OPERATIONS
 1-702-455-7544



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RCI Engineering
 4825 Dorem Martha Drive Suite 300 Las Vegas, Nevada 89103
 PHONE: 702-455-0800 FAX: 702-455-0801

SAVONA UNIT 3
 A SINGLE FAMILY RESIDENTIAL SUBDIVISION
 UTILITY PLAN (SHEET 1 OF 3)

JOHN I. LAND
 CIVIL ENGINEER
 No. 16441
 9/10/2014

U-1
 SHEET 12 OF 35
 DWG NO. 10715003
 CLY PROJECT # 052925

Sewer As Built