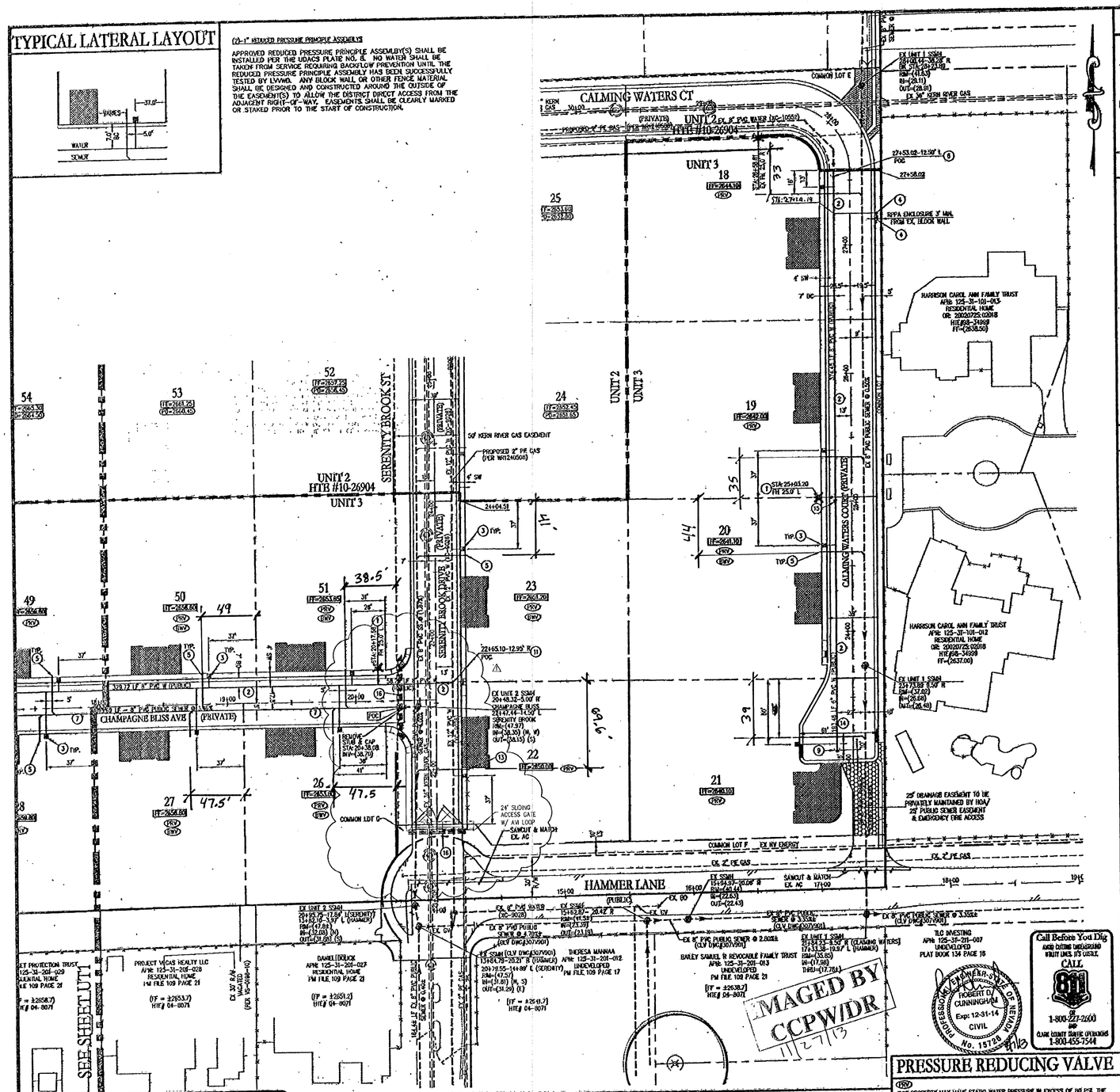
TYPICAL LATERAL LAYOUT

(2)-1" REDUCED PRESSURE PRINCIPLE ASSEMBLYS

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 6. NO WATER SHALL BE TAKEN FROM SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY 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. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.



LVVWD NOTE

SERVICE LATERALS FOR LOTS 22 AND 23 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVVWD.

LVVWD NOTE

AT THE DIRECTION OF THE DEVELOPER, 3/4" WATER METERS ARE SHOWN TO BE INSTALLED ON THIS PROJECT. METER SIZE HAS BEEN DETERMINED BY FIXTURE UNIT CALCULATIONS BY THE PROJECT ENGINEER PER CHAPTER 6 OF THE UNIFORM PLUMBING CODE.

ANY OPTIONAL FEATURE ADDED TO THE STRUCTURES TO BE BUILT ON THESE LOTS, OR ANY CHANGE IN THE STANDARD FEATURES OF THE STRUCTURES TO BE BUILT ON THESE LOTS WHICH ADDS TO THE TOTAL FIXTURE UNIT COUNT FOR THAT STRUCTURE MAY RESULT IN NON-COMPLIANCE WITH THE UNIFORM PLUMBING CODE.

BACKWATER VALVE

(PRV)

THE FOLLOWING LOTS HAVE DRAINAGE PIPING FEATURES THAT ARE LOWER THAN THE NEXT UPSTREAM SEWER MANHOLE COVER AND SHALL HAVE BACKWATER VALVES INSTALLED PER UCSWCS SD-22:

20, 23, 26, 27, 29, 30, 32, 41, 47, 48, 50, AND 51

TOTAL LOTS REQUIRING BACKWATER VALVES = 12

PRESSURE REDUCING VALVE

(PRV)

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. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES.

LOTS WITHIN THE 2060 PRESSURE ZONE WITH A FINISH FLOOR ELEVATION LESS THAN 2575.4 WILL REQUIRE A PRV.

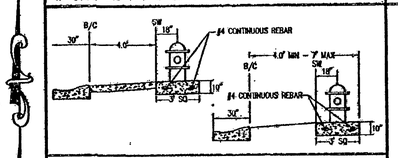
THE FOLLOWING LOTS REQUIRE A PRV:

ALL LOTS REQUIRE PRV'S

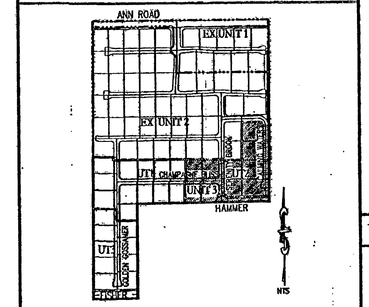
TOTAL LOTS REQUIRING PRV'S = 31 LOTS

(2) IRRIGATION METERS REQUIRE PRV'S

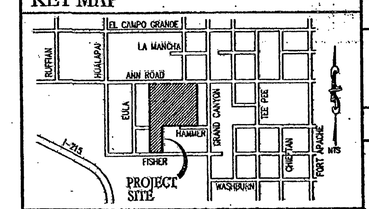
FIRE HYDRANT DETAIL



SITE MAP



KEY MAP



UTILITY NOTES

1. ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS), LATEST EDITION.

2. FIRE, WATER, AND SEWER SERVICES, AS APPROVED ON THIS PLAN, ARE INTENDED SPECIFICALLY FOR THE LOT AND USE SHOWN, AND ARE NOT INTENDED TO SERVICE ADDITIONAL PARCELS OR STRUCTURES WHICH MAY BE CREATED IN THE FUTURE. IN THE EVENT THAT THE PARCELS AND/OR LOTS SHOWN ON THIS PLAN ARE FURTHER DIVIDED TO CREATE ADDITIONAL PARCELS OR LOTS, THE OWNER IS REQUIRED TO PROVIDE SEPARATE FIRE, WATER, & SEWER SERVICES TO EACH.

3. WATER AND SEWER LATERALS SHALL BE INSTALLED A MINIMUM OF 48" APART IN SEPARATE TRENCHES. WATER LATERALS SHALL BE A MINIMUM OF 12" ABOVE THE SEWER LATERAL. (REF. UNIFORM PLUMBING CODE)

4. LOCATOR RIBBON SHALL BE USED FOR ALL SERVICE LATERALS NOT PERPENDICULAR TO THE MAIN. (TYPICAL)

5. ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS" (UDACS) FOR WATER AND STORM DRAIN CROSSINGS AND CLEARANCES.

6. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENTS HAVE BEEN OBTAINED FROM THE OFFSITE OWNER AND GIVEN TO CLARK COUNTY.

7. ALL ONSITE STREETS AND DRAINAGE EASEMENTS ARE TO BE PRIVATELY OWNED AND MAINTAINED.

CONSTRUCTION NOTES

1. FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE (UDACS PLATE No. 40) – PUBLIC (SEE FIRE HYDRANT DETAIL THIS SHEET)
2. 8" PVC WATERLINE – PUBLIC
3. 1" COPPER WATER SERVICE W/ 3/4" METER (UDACS PLATE No. 4)
4. 3/4" IRRIGATION METER W/ 1" RPPA (UDACS PLATE No. 4 & No. 8)
5. 4" SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWCS SD-22) – PRIVATE
6. REMOVE CAP AND BLOW OFF PER UDACS PLATE No. 36 & CONNECT TO EX. STUB
7. 8" PVC SEWER – PUBLIC
8. 48" SEWER MANHOLE (DCSWCS SD-1A) – PUBLIC
9. CAP & 2" BLOW OFF VALVE (UDACS PLATE No. 36) – PUBLIC
10. 8" TEE (UDACS PLATE No. 31) – PUBLIC
11. 8" x 8" TAPPING SLEEVE W/ 8" TAPPING VALVE – PUBLIC (UDACS 2.24.01 B AND UDACS PLATE No. 34 & No. 39)
12. 8" GATE VALVE (UDACS PLATE No. 30 & No. 39) – PUBLIC
13. 4" C900 SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWCS SD-22) – PRIVATE
14. 8" PVC WATERLINE – PUBLIC
15. 8"X6" REDUCER (UDACS PLATE No. 30)
16. (4) 6" IRRIGATION CONDUITS – PRIVATE
17. 4" C900 SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWCS SD-22) – MINIMUM 18" VERTICAL SEPARATION FROM WATER
18. 8" CLASS 53 DIP WATERLINE – PUBLIC

APPROVAL SIGNATURES

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER	06/18/13 DATE
PROJECT #121540	
CLARK COUNTY FIRE DEPARTMENT 13-19303 PC 914	9 May 2013 DATE

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.
FIRE FLOW = 2,000 G.P.M. AT 20 PSI RESIDUAL.

LEGEND

	EXISTING	PROPOSED
CENTERLINE		
RIGHT-OF-WAY		
CUT LINE-ASPHALT		
CURB AND GUTTER		
FENCE		
POWER POLE		
SIDEWALK RAMP		
CURB DROP INLET		
STORM DRAIN W/MANHOLE		
SIDEWALK		
PROPERTY LINE		
EDGE OF PAVEMENT		
CAP & 2" BLOW OFF VALVE		
WATERLINE FITTINGS		
GATE VALVE		
FIRE HYDRANT		
SEWER LINE W/MANHOLE		
SEWER LATERAL		
WATER LINE		
WATER LATERAL W/METER		
PRESSURE REDUCING VALVE		(PRV)
BACKWATER VALVE		(BWV)

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 MAXIMUM RADIUS OF CURVATURE OF 1,100 FEET, PER UDACS 2.07.01 AND 2.07.02.

FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 2,000 GPM AT 20 POUNDS PER SQUARE INCH RESIDUAL.
HYDRANTS TO BE INSTALLED: 6
BASED ON:
SQUARE FOOTAGE: 6,200 SQ.FT. — LARGEST AREA BETWEEN SEPARATE WALLS: N/A
HEIGHT: 35-FT — TYPE OF CONSTRUCTION: V-B
SPRINKLER SYSTEM: NO — OCCUPANCY: R-3
ROOF CONSTRUCTION: TILE — STORIES: 1-STORY
HIGH PILED COMBUSTIBLE STORAGE: NO — ESFR SYSTEM: NO

UTILITY DISCLAIMER NOTE

EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND 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 LOCATIONS.
CALL BEFORE YOU DIG: 1-800-227-2600
CALL BEFORE YOU OVERHEAD: 1-702-227-2929.

SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

LEGAL DESCRIPTION

BEING A PORTION OF THE NORTHWEST QUARTER (¼) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.B. & M., CLARK COUNTY, NEVADA

BASIS OF BEARINGS

S 89°14'18" E, BEING THE NORTH LINE OF THE SE ¼ AND NW ¼, SECTION 31, T19S, R60E, M.D.M. AS SHOWN ON FILE 97, PAGE 85 OF PARCEL MAPS, CLARK COUNTY, NEVADA OFFICIAL RECORDS.

BENCHMARK

B.M. #BV96-3104 CLV RIVET & ROUND PLATE IN CONC PAD WEST SIDE OF GRAND CANYON DR., 109 FEET SOUTH OF WASHBURN ROAD.

ELEVATION = 795.573 M (2610.14 FEET) NAVD 88

NOTE

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 15

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	OC	ON CENTER
BC	BACK OF CURB	PB	PULL BOX
BCR	BACK OF CURB RADIUS	PC	POINT OF CURVE
BM	BENCHMARK	PCC	POINT OF COMPOUND CURVE
BVC	BEGIN VERTICAL CURVE	PI	POINT OF INTERSECTION
CATV	CABLE TELEVISION	PL	PROPERTY LINE
CC	CLARK COUNTY	PLT	PLANTER
CL	CENTERLINE	POC	POINT OF CONNECTION
COLV	CITY OF LAS VEGAS	PP	POWER POLE
CNLV	CITY OF NORTH LAS VEGAS	PRC	POINT OF REVERSE CURVE
CO	CLEAN OUT, SEWER	PT	POINT OF TANGENCY
COH	CITY OF HENDERSON	PVC	POLYVINYL CHLORIDE
CY	CURBS YARD	R	RADIUS
DCSWCS	DESIGN AND CONSTRUCTION STANDARDS OF WASTE WATER COLLECTION SYSTEMS	RCB	REINFORCED CONCRETE BOX
DG	DESIGN GRADE	RCP	REINFORCED CONCRETE PIPE
DI	DROP INLET	R/W	RIGHT-OF-WAY
DIP	DUCTILE IRON PIPE	RT	RIGHT
EC	END OF CURVE	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	STLT	STREETLIGHT
EVC	END VERTICAL CURVE	SNWA	SOUTHERN NEVADA WATER AUTHORITY
EX	EXISTING	SS	SANITARY SEWER
FF	FINISH FLOOR ELEVATION	STA	STATION
FG	FINISH GRADE	STD	STANDARD
FH	FIRE HYDRANT	SVZ	SIGHT VISIBILITY ZONE
FL	FLOW LINE	SW	SIDEWALK
FT	FEET	TC	TOP OF CURB
GB	GRADE BREAK	TF	TOP OF FOOTING
GFF	GARAGE FINISH FLOOR	TR	TOP OF RETAINING
HP	HIGH POINT	TW	TOP OF WALL
INV	INVERT	TYP	TYPICAL
LF	LINEAR FEET	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
LT	LEFT	USD	UNIFORM STANDARD DRAWING
LVVWD	LAS VEGAS VALLEY WATER DISTRICT	VC	VERTICAL CURVE
MAX	MAXIMUM	VCP	VITRIFIED CLAY PIPE
MH	MANHOLE	VG	VALLEY GUTTER
MIN	MINIMUM	W	WATER
NTS	NOT TO SCALE	ZC	ZERO LIP CURB

NO.	DESCRIPTION	BY	DATE	APPR.
A	REVISED DATE AND SIDEWALK LOCATION	MAN/CLV	03/10/03	

REVISIONS

WILLIAM LYON HOMES
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LAS VEGAS, NV 89119
(702) 255-5200 FAX: (702) 255-5220

TANEY ENGINEERING
6030 S. JONES BLVD STE#100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-8233

ANN AND GRAND CANYON - UNIT 3
(SERENITY RIDGE)
A RESIDENTIAL SUBDIVISION

UTILITY PLAN - EAST

ROBERT D. CUNNINGHAM Exp. 12-31-14 CIVIL No. 15726 — ENGINEER'S SEAL

DATE:	5/8/13
SCALE:	1"=40'
JOB NO:	WLL-10-068
DESIGNED BY:	MC
CHECKED BY:	RDC
SHEET NAME:	UT2
SHEET:	9 OF 17
HTE#	13-6603

FILE NAME: WLL10068UT2.DWG