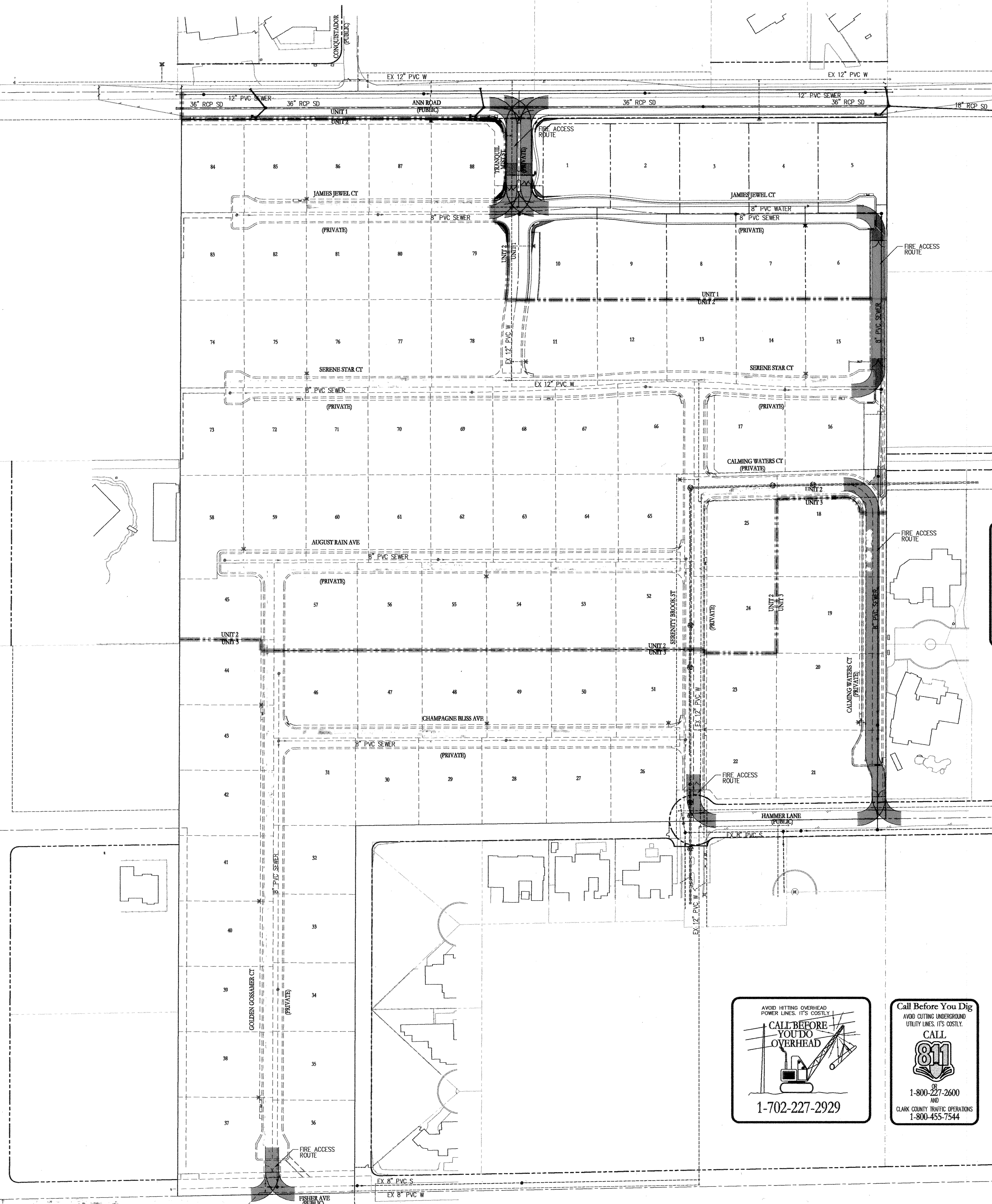


FILE NAME: WLL05BMP.DWG

SEE ABOVE

125840

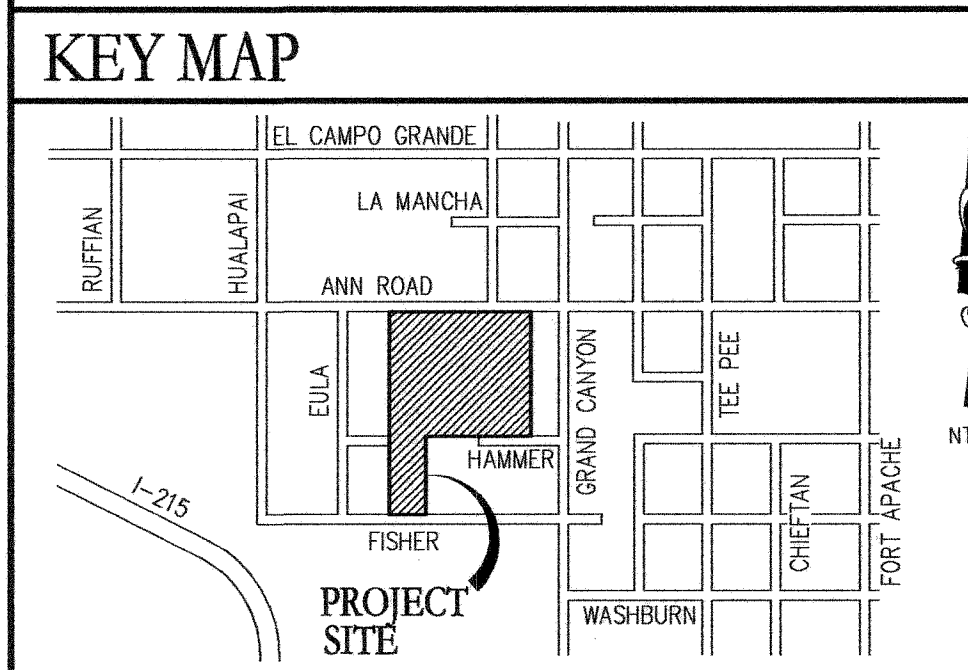


UnderGround
1-702-455-7511
1-702-229-6611
CLARK COUNTY TRAFFIC OPERATIONS
LAS VEGAS AREA COMPUTERIZED TRAFFIC SIGNALS

FIRE TURNING RADIUS

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 WIRE 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 MAIN 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.



APPROVAL SIGNATURES

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
(PROJ# 115616)

CLARK COUNTY FIRE DEPARTMENT
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.

12/22/10
3DEC2010
307V1051-1

LEGEND

	EXISTING	PROPOSED
CENTERLINE	---	---
RIGHT-OF-WAY	---	---
CUT LINE-ASPHALT	---	---
CURB AND GUTTER	---	---
FENCE	X X	X X
POWER POLE	○	○
SEWAGE RAMP	---	---
CURB DROP INLET	---	---
STORM DRAIN W/MANHOLE	---	---
SEWAGE	---	---
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	---	---

FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 2,000 GPM AT 20 POUNDS PER SQUARE INCH RESIDUAL. HYDRANTS TO BE INSTALLED: 1
BASED ON:
SQUARE FOOTAGE: UP TO 6,200 SQ FT
HEIGHT: 35-FT
SPRINKLER SYSTEM: NO
ROOF CONSTRUCTION: TILE
HIGH PILED COMBUSTIBLE STORAGE: NO

LARGEST AREA BETWEEN SEPARATE WALLS: N/A
TYPE OF CONSTRUCTION: V-B
OCCUPANCY: R-3
STORIES: 1-STORY
ESFR SYSTEM: NO

WASTEWATER CALCULATIONS

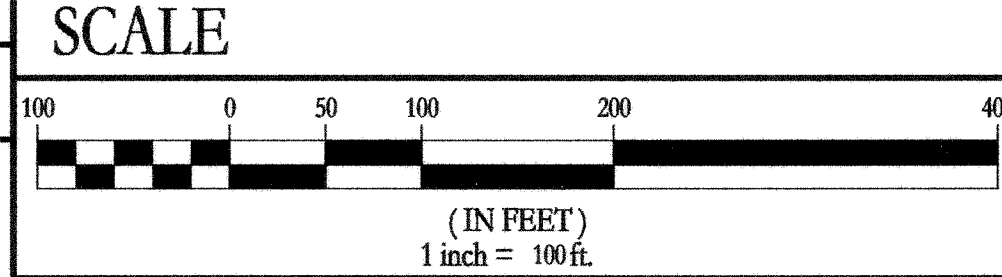
FACILITY TYPE: SINGLE FAMILY RESIDENTIAL
TOTAL UNITS AT BUILD OUT: 10 HOUSES

AVERAGE FLOW (MGD) = 0.0025
PEAK FLOW (MGD) = 0.00875

CALCULATIONS:
AVG FLOW = $10 \times 90,000 \times \frac{1}{365} = 0.0025$ MGD
PEAK FLOW = $0.0025 \times 3.5 = 0.00875$ MGD

UTILITY DISCLAIMER NOTE

EXISTING UTILITY LOCATIONS SHOWN HEREIN 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



LEGAL DESCRIPTION

BEING A PORTION OF THE NORTHWEST QUARTER (1/4) OF SECTION 31, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.B.D. & M. CLARK COUNTY, NEVADA

BASIS OF BEARINGS

S 89°14'18" E, BEING THE NORTH LINE OF THE SE 1/4, NW 1/4, 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. #BLV90-31C4 CLV RIVET & ROUND PLATE IN CONC PAD WEST SIDE OF GRAND CANYON DR., 120 FEET SOUTH OF WASHBURN ROAD.
ELEVATION = 795.579 M (2010.16 FEET) NAVD 88

ABBREVIATIONS

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

REVISIONS

N.O.	DESCRIPTION	BY	DATE	APPR.

WILLIAM LYON HOMES
900 PILOT ROAD STE# G
LAS VEGAS, NV 89119
(702) 263-8200 FAX: (702) 263-8220

TANEY ENGINEERING
6080 S. JONES BLVD STE# 100
LAS VEGAS, NV 89118
(702) 562-8844 FAX: (702) 562-2233

ANN AND GRAND CANYON - UNIT 1 (SERENITY RIDGE) A RESIDENTIAL SUBDIVISION

MASTER UTILITY PLAN

ROBERT D. CUNNINGHAM
Exp. 12-31-12
CIVIL
No. 15726
12.11.10
ENGINEER'S SEAL

DATE: 12/1/10
SCALE: 1"=100'
JOB NO: WLL-10-068
DESIGNED BY: MC
CHECKED BY: RDC
SHEET NAME: MUT
SHEET: 5 OF 16
10-26897