

Call Before You Dig  
AVOID HITTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

**811**

1-800-227-2600  
CLARK COUNTY TRAFFIC OPERATIONS  
1-800-455-7544

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHTING SYSTEMS. IT'S COSTLY.

Call  
**UnderGround**  
1-702-455-7511  
CLARK COUNTY TRAFFIC OPERATIONS  
1-702-432-5300  
FIREWAY & METEORAL SYSTEMS OF TRANSPORTATION (F.A.S.T.)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929

### 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 1,150 FEET, PER UDACMS 2.06.01 AND 2.06.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

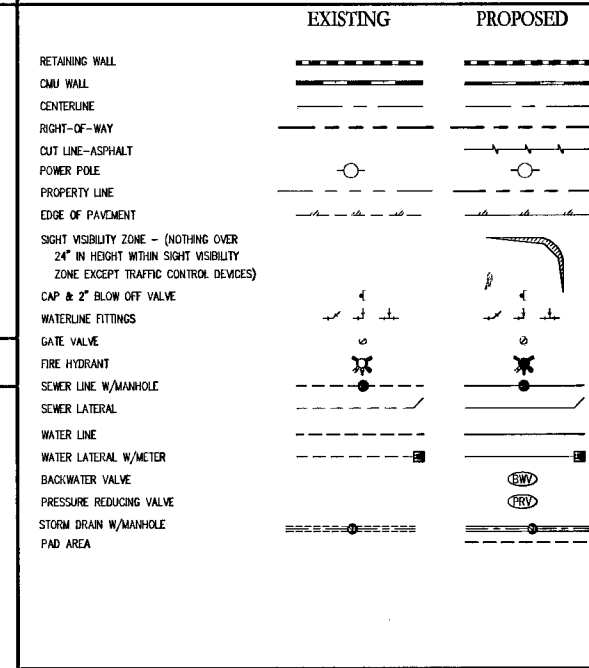
### FIRE FLOW CALCULATIONS

FIRE FLOW REQUIREMENT IS 2,000 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.  
BASED ON:  
SQUARE FOOTAGE: 6,200 MAX  
LARGEST AREA BETWEEN SEPARATE WALLS: N/A  
HEIGHT: 2-STORIES UP TO 35 FEET  
TYPE OF CONSTRUCTION: TYPE IBC-V-E  
R/SPRINKLER SYSTEM: NO  
OCCUPANCY: RESIDENTIAL  
ROOF CONSTRUCTION: TILE

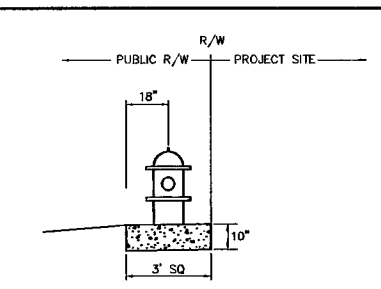
### UTILITY NOTES

1. FIRE HYDRANT ASSEMBLY W/6" GATE VALVE (UDACS PLT. 7 - CONDITION F)
2. 8" PVC WATER LINE - PUBLIC
3. 10" PVC WATER LINE - PUBLIC
4. 1" TYPE K COPPER WATER SERVICE W/ 1" METER (UDACS PLT. 10)
5. 4" SEWER LATERAL - PRIVATE
6. 10"x10" WATER CROSS (UDACS PLT. 5)
7. 8" GATE VALVE (UDACS PLT. 3)
8. 10" GATE VALVE (UDACS PLT. 3)
9. 10"x8" WATER LINE REDUCER (UDACS PLT. 3)
10. EXISTING SSJM TO BE ADJUSTED TO NEW ROAD GRADE AND COLLAR TO BE INSTALLED
11. 10" CAP AND 2" BLOW OFF VALVE (UDACS PLT. 4A)
12. 8" CAP AND 2" BLOW OFF VALVE (UDACS PLT. 4A)
13. TRENCH AND BACKFILL (USD #501 AND 503AB WITH SPECIFICATION 208)
14. 4" SEWER CLEAN OUT-18" DIA
15. SEWER LATERAL CONNECTION (DCSWCS SD-17)

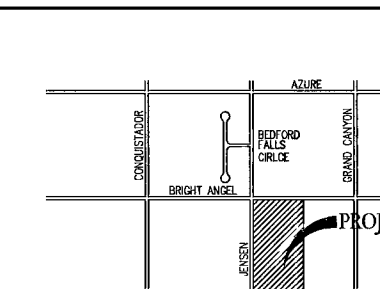
### LEGEND



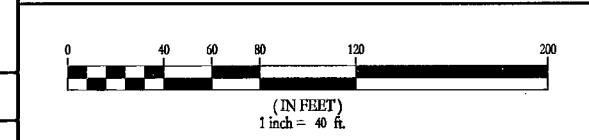
### FIRE HYDRANT DETAIL



### VICINITY MAP



### SCALE



### NOTE

INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACMS PLATE NO. 27

### SEWER NOTE

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.19 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR PORTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

### 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

### 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 SERVE 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 2.19 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.

### LEGAL DESCRIPTION

A PORTION OF THE WEST HALF OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA.

### BASIS OF BEARINGS

NORTH 89°49'37" EAST, BEING THE BEARING OF THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON THAT CERTAIN MAP IN BOOK 124, PAGE 61 OF PLATS IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER.

### BENCHMARK

BENCHMARK # 8015030106-CITY OF LAS VEGAS PIN AND ROUND PLATE IN CONCRETE PAD NE CORNER OF TROPICAL AND CONQUISTADOR.  
ELEVATION 821.9895±@696.81 FT (NAVD 88 DATUM)

### ABBREVIATIONS

AC	ASPHALTIC CONCRETE	MIN	MINIMUM
BC	BACK OF CURB	NTS	NOT TO SCALE
BOR	BACK OF ROAD RADIUS	OC	ON CENTER
BM	BENCHMARK	PB	PULL BOX
BVC	BEGIN VERTICAL CURVE	PC	POINT OF CURVE
BM	BOTTOM OF EXISTING WALL	POC	POINT OF COMPOUND CURVE
CATV	CABLE TELEVISION	PE	POLYETHYLENE
CC	CLARK COUNTY	PI	POINT OF INTERSECTION
CL	CENTRLINE	PL	PROPERTY LINE
CLV	CITY OF LAS VEGAS	POC	POINT OF CONNECTION
CMP	CORRUGATED METAL PIPE	PP	POWER POLE
CO	CITY OF HENDERSON	PRC	POINT OF REVERSE CURVE
CO	CITY OF LAS VEGAS	PT	POINT OF TANGENCY
COH	CITY OF HENDERSON	PVC	POLYVINYL CHLORIDE
CT	CUBIC YARD	R	RADIUS
DG	DESIGN GRADE	R/CB	REINFORCED CONCRETE BOX
DI	DROP INLET	RC	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON PIPE	RT	RIGHT-OF-WAY
EC	END OF CURVE	SD	STORM DRAIN
EF	EDGE OF PAVEMENT	SE	STREETLIGHT
EVC	END VERTICAL CURVE	SS	SANITARY SEWER
EX	EXISTING	STA	STATION
FG	FINISH FLOOR ELEVATION	STW	STANDARD
FI	FIRE HYDRANT	SVZ	SIGHT VISIBILITY ZONE
FL	FLOW LINE	SW	SIDEWALK
FL	FEET	TC	TOP OF CURB
GB	GRADE BREAK	TF	TOP OF FOOTING
GET	GARAGE FINISH FLOOR	TR	TOP OF RETAINING
HP	HIGH POINT	TW	TOP OF WALL
HP	HIGH POINT	TP	TYPICAL
IF	INVERT	USD	UNIFORM STANDARD DRAWING (CC AREA)
LF	LINEAR FEET	VC	VERTICAL CURVE
LP	LOW POINT	VCP	VITRIFIED CLAY PIPE
LI	LEFT	VG	VALLEY GUTTER
LWVD	LAS VEGAS VALLEY WATER DISTRICT	W	WATER
MAX	MAXIMUM	WH	WATER MAINHOLE
MH	MANHOLE		

### APPROVAL SIGNATURES

*Steven W. White*  
CLARK COUNTY FIRE DEPARTMENT - C-11255-2-2008  
DATE: 2/23/09  
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.

*Tom Hoban*  
LAS VEGAS VALLEY WATER DISTRICT (PROJ 113174)  
DATE: 1-28-09

NO.	DESCRIPTION	BY	DATE	APPR.

**CHARLES & BEVERLY PHILLIPS**  
9660 W. TROPICAL & JENSEN  
LAS VEGAS, NV 89149  
702.562.8444

**TANEY ENGINEERING**  
6805 JONES BOULEVARD, SUITE 100  
LAS VEGAS, NV 89118  
702.562.8444 FAX: 702.562.9333

MSM-08-17  
TROPICAL & JENSEN  
N/E FOR PHILLIPS

UTILITY PLAN

DATE: 11.04.08

SCALE: 1"=40'

JOB NO: PLP-07-001

DESIGNED BY: FR/BSP

CHECKED BY: EL

SHEET NAME: UT1

SHEET: 8 OF 10

H/E: 08-28-07

CLV: 307V1035

**JURISDICTION**  
CLARK COUNTY (LV SEWER)