

THE REDUCED PRESSURE DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 59. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE 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) SO AS TO ALLOW LVVWD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

THE REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY LVVMD. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW LVVMD DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

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

ALL NON-POTABLE FIRE WATER LINES CROSSING POTABLE DOMESTIC WATER LINES ARE TO BE INSTALLED WITH A "VERTICAL SEPARATION OF NO LESS THAN SIX INCHES..." AND IN ACCORDANCE WITH THE UDACS 2.23.01, 2.04.03, 2.22.02.B1, AND 2.22.02.B2.

A. SUBMIT ANY PROVISIONS TO PERIODICALLY CIRCULATE AND/OR FLUSH POTABLE WATER THROUGH THE FIRE PROTECTION WATER LINES OR ELSE:
B. THE FIRE PROTECTION WATER IS CONSIDERED NON-POTABLE AND THEREFORE:

- i. THE FIRE PROTECTION WATER LINES WILL ADHERE TO THE UDACS SEPARATION REQUIREMENTS OF SUBSECTIONS 2.23.01, 2.22, AND 2.04 AS NON-POTABLE WATER LINES (I.E. 6' MINIMUM HORIZONTAL SEPARATION AND 6' MINIMUM VERTICAL SEPARATION FROM POTABLE WATER LINES).
- ii. SEPARATION OF THE FIRE WATER LINES FROM THE STORM AND SANITARY SEWER LINES (I.E. 5'-6' MINIMUM HORIZONTAL SEPARATION) SHOULD BE MAINTAINED IN ORDER TO PROTECT THE OFFSITE POTABLE WATER AFTER THE BACKFLOW PREVENTION DEVICE.

ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.040.

TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLIES, AND PIPING FROM THE ADJACENT RIGHT-OF-WAY.

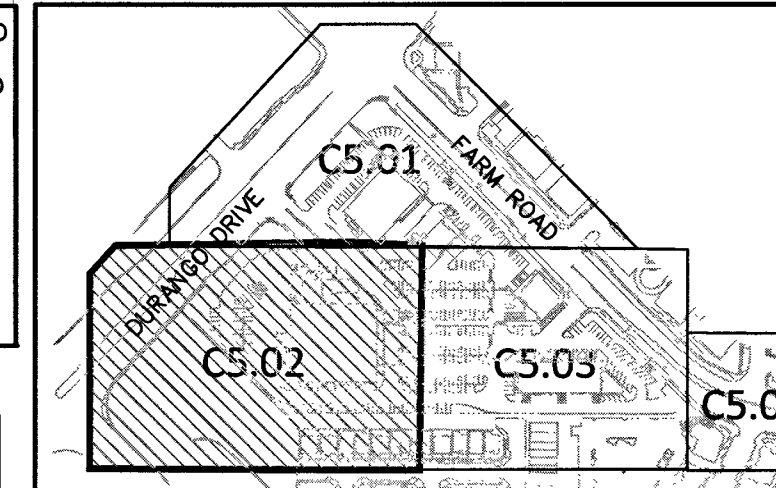
WARNING FIRE LANE (NON-POTABLE WATER)
ALL EXISTING, RELOCATED OR PROPOSED DCDA/RPDA
INSTALLATIONS

"TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, THE FIRE LINE OR ANY OF ITS COMPONENTS, SHALL NOT BE USED FOR POTABLE DRINKING WATER AT ANY TIME"

PROTECT IN PLACE AND ADJUST LVVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

INSTALL WATERLINE IN STEEL CASING PER UDACS PLATES NO.21 AND 23. MINIMUM CLEARANCE IS REQUIRED ABOVE THE TOP OF THE CASING. FROM THE UPPER BENDS THROUGHOUT THE LOWERED SECTION OF THE PIPE. DUCTILE IRON PIPE WITH RESTRAINED JOINTS IS REQUIRED. IN ADDITION, THRUST BLOCKS ARE TO BE INSTALLED AT THE UPPER BENDS.

ALL SEWER/STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.



KEY MAIN
NT

30 0 15 30

SCALE: 1"=30'

SOUTH 00°0657 WEST, BEING THE WEST LINE OF THE GOVERNMENT LOT 11,
LYING WITHIN THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 17,
TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN IN BOOK 140,
PAGE 12 OF PLATS IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE.

CITY OF LAS VEGAS BENCHMARK # 5LV90 17S6

A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF
OSO BLANCA ROAD AND DURANGO DRIVE.

NAVD 88 ELEVATION = 798.4331 METERS / 2619.53 FEET
NORTH AMERICAN DATUM OF 1988

NO.	ITEM	UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS
①	INSTALL PVC WATER LINE (C-900) (SIZE PER PLAN) PER UDACS PLATE NO. 17.	
②	INSTALL 45° BEND (SAME SIZE AS LINE) PER UDACS PLATE NO. 31.	
③	INSTALL 90° BEND (SAME SIZE AS LINE) PER UDACS PLATE NO. 31.	
④	INSTALL TEE (SIZE PER PLAN) PER UDACS PLATE NO. 31.	
⑤	INSTALL FIRE HYDRANT ASSEMBLY PER UDACS PLATE NO. 40.	
⑥	INSTALL GATE VALVE (SAME SIZE AS LINE) PER UDACS PLATE NO. 30 & 39.	
⑦	INSTALL 12"x8" TAPPING SLEEVE W/8" TAPPING VALVE PER UDACS PLATE NO. 34 & SEC 2.24.01.	
⑧	INSTALL 8" RPDA PER UDACS PLATE NO. 59.	
⑨	POINT OF CONNECTION. SEE PLUMBING PLANS FOR CONTINUATION.	
⑩	INSTALL COPPER TYPE "K" WATER LINE (SIZE PER PLAN) PER UDACS PLATE NO. 4.	
⑪	INSTALL PVC WATER LINE (SIZE PER PLAN) PER UDACS PLATE NO. 17.	
⑫	INSTALL 12"x 2" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑬	INSTALL 12"x 1 1/2" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑭	INSTALL 12"x 1" SERVICE SADDLE PER UDACS PLATE NO. 4.	
⑮	INSTALL 2" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 2" RPPA PER UDACS PLATE NO. 8.	
⑯	INSTALL 1 1/2" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 1 1/2" RPPA PER UDACS PLATE NO. 8.	
⑰	INSTALL 1" DOMESTIC METER PER UDACS PLATE NO. 4 WITH 1" RPPA PER UDACS PLATE NO. 8.	
⑱	POINT OF CONNECTION. SEE LANDSCAPING PLANS FOR CONTINUATION.	
⑲	RELOCATE EXISTING FIRE HYDRANT IN ACCORDANCE WITH UDACS PLATE NO. 40.	
⑳	INSTALL POST INDICATOR VALVE W/ ADJUSTABLE TYPE INDICATOR POST (MUELLER PART # A-20806) OR SUPERVISORY CONTROL VALVE SWITCH (POTTER PART# 1010107) OR APPROVED EQUIVALENT.	
㉑	INSTALL VEHICULAR PROTECTION BOLLARD PER UDACS PLATE NO. 75.	
㉒	INSTALL REDUCER (SIZE PER PLAN)	

NO.	ITEM
	*SS STD PER DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
1	INSTALL PWD SEWER LINE (SDP-35) PER DCSWS, DWG. NO. SD-15, DWG. NO. SD-17, (PAVED AREA)
2	INSTALL WYE PER DCSWS DWG. NO. SD-22 AND DETAIL "U" SHEET C8.01.
3	REMOVE EXISTING CAP AND CONNECT TO EXISTING SEWER MAIN.
4	INSTALL 48" SSMH PER DCSWS DWG. NO. SD-1A, SD-1B AND SD-4.
5	POINT OF CONNECTION. SEE PLUMBING PLANS FOR CONTINUATION AND USE.
6	INSTALL 60" SSMH PER DCSWS DWG. NO. SD-1A, SD-1B AND SD-4.
7	INSTALL 6" CLEAN-OUT PER DCSWS DWG. # SD-26 WITH TRAFFIC RATED LID.
8	STORM DRAIN/EXIST. WATER LINE CROSSING. PER UDACS PLATE NO. 23 SEE SHEET C5.05.
9	INSTALL SEWER BACK WATER VALVE SAME SIZE AS LINE SHOWN.

FIRE FLOW INFORMATION BLOCK

USE/OCCUPANCY _____ M _____

TYPE OF CONSTRUCTION _____ III B _____

FIRE FLOW 1875 GPM @ 20 PSI

AUTOMATIC FIRE SPRINKLERS X YES/NO _____

NFPA 13 X 13R _____ 13D _____

ESFR _____ YES/NO _____

SQUARE FOOTAGE _____ 30,000 _____

LARGEST AREA BETWEEN 4 HOUR WALLS NO

BUILDING HEIGHT _____ 25' 9" _____

OF STORIES INCLUDING BASEMENT _____ 1 _____

HIGH PILED COMBUSTIBLE STORAGE _____ YES/NO X _____

OF HYDRANTS INSTALLED _____ 3 _____

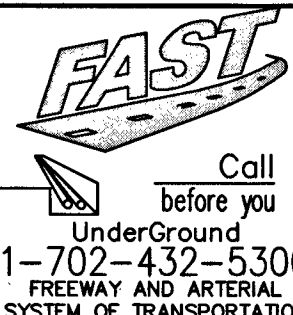
NDOT PERMIT REQUIRED. CONTRACTOR TO OBTAIN NDOT OCCUPANCY PERMIT PRIOR TO CONSTRUCTION IN NDOT RIGHT OF WAY

LAS VEGAS FIRE & RESCUE
 1st Submittal 10/24/16 APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE: 5/13/17 PROJECT NO: 124683
 SPECIFICATIONS APPROVED FIRE FLOW: 1275 GPM AT 20 PSI RESIDUAL
 SIZES: C1.01, C1.02, C4.05, C4.06, C4.07, C4.09, C4.10, C4.11, C4.12, C4.13,
 C5.01, C5.02, C5.03, C5.04, (C5.11, C5.12 NDOT).
 UDACS NOTE
 ALL WATER FACILITIES CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE
 "UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER
 DISTRIBUTION SYSTEMS" UDACS, LATEST EDITION.

107V6734

CALL BEFORE YOU DIG
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY

Call
811
or
1-800-227-2600

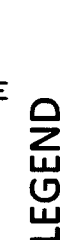


AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.

CALL BEFORE
YOU DO
OVERHEAD
WORK

1-702-227-2929

COLLINS ENGINEERS ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY.



EXISTING	PROPOSED	
(0.00) XXX	0.00 XXX	ELEVATION TAG
		DRAIN INLET
		RETAINING WALL
		SCREEN WALL
		UTILITY POLE
		STREET LIGHT

EXIST

PROPOSED

—E—	POWER LINE/POLE
—T—	TELEPHONE LINE
—W—	WATER LINE
—SS—	SANITARY SEWER LINE
—D—	STORM SEWER LINE
—G—	GAS LINE
Ⓢ	STORM MANHOLE

EXISTING	PROPOSED

HYDRANT
DEPARTMENT
SECTION
R VALVE
CER
R MANHOLE
NOUT
VALVE

EXISTING	PROPOSED	
		PL-RIGHT-OF-WAY
		PL-ADJACENT CENTERLINE
		EASEMENT LINE
		FLOW LINE
		SIGN W/POLE
		SAWCUT LINE
		AREA LIGHT
		WATER METER

EXISTING	PROPOSED	
		AC PAVEMENT 6" TYPE "A" CURB
		24" TYPE "L" CURB & GUTTER 30" ROLL CURB
		BACK WATER VALVE