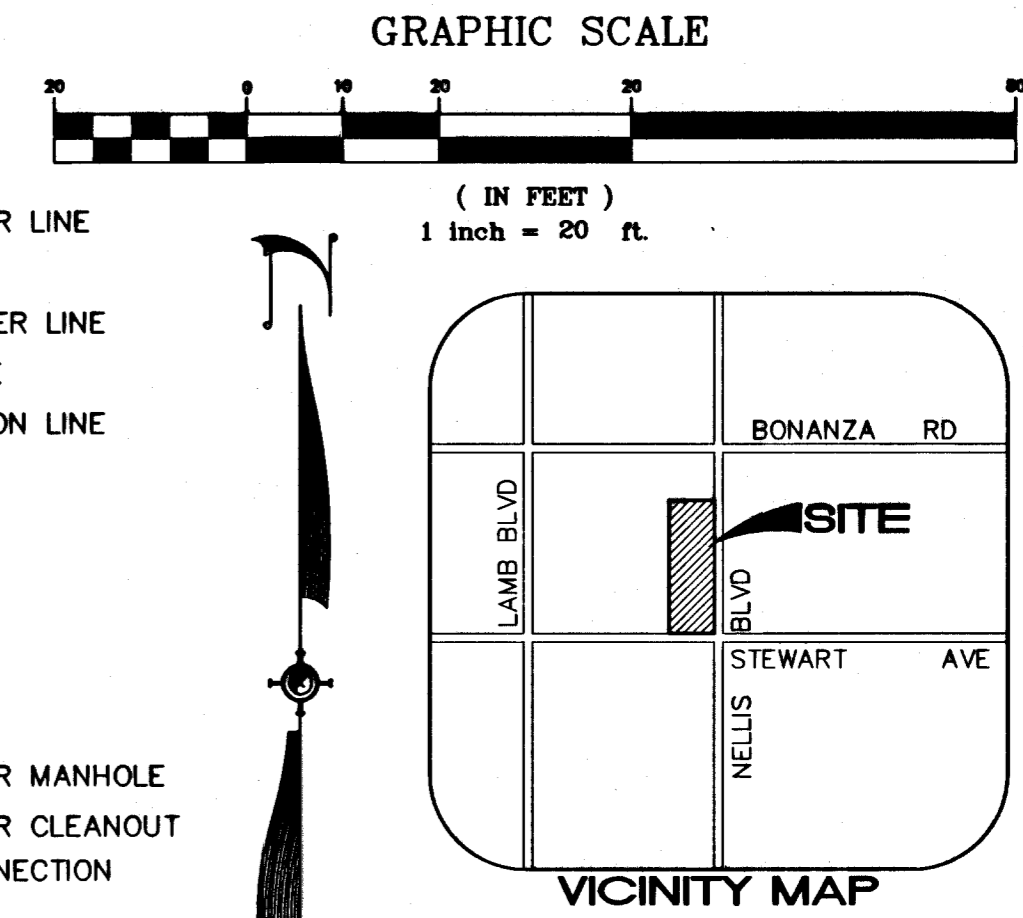


LEGEND

PROPOSED	EXISTING
25 L.F. 8" PVC WAT.	EX. 8" PVC WAT.
25 L.F. 8" PVC SS @ 2.0%	EX. 8" PVC SS @ 2.0%
N/A	EX. 2" GAS
N/A	O.H.P.
N/A	TEL
N/A	CATV
DCDA	DCDA
RPPA	RPPA
FMCT	FMCT

- WATER LINE
- SANITARY SEWER LINE
- GAS LINE
- OVERHEAD POWER LINE
- TELEPHONE LINE
- CABLE TELEVISION LINE
- DCDA
- RPPA
- FMCT
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- FIRE DEPT. CONNECTION (BY OTHERS)



**REDUCED PRESSURE PRINCIPAL ASSEMBLY (1) 2'**

APPROVED REDUCED PRESSURE PRINCIPAL ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPAL ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWMD.

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.

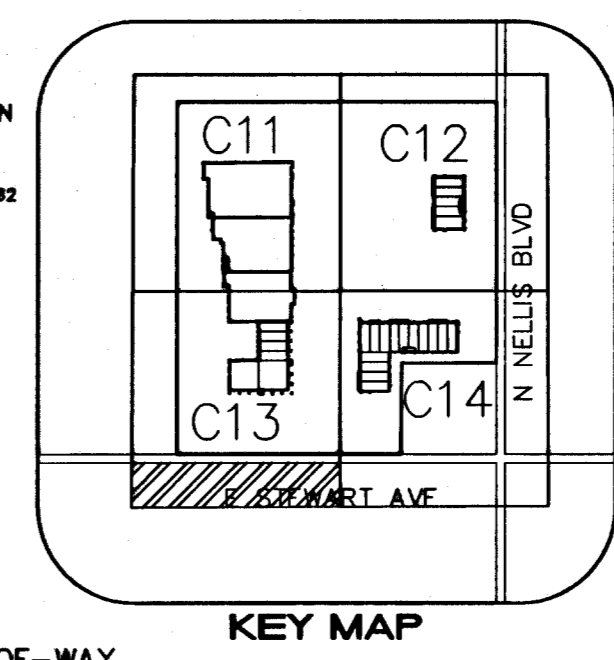
EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION. ESN.026

**DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) (1) 8"**

THE DOUBLE CHECK DETECTOR ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH THE UDACS PLATE NO. 11C.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) SO AS TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO START OF CONSTRUCTION. ESN.006



**NOTE:**  
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACS PLATE NO. 27. ESN.002

**NOTE:**  
ANY WORK IN NDOT RIGHT-OF-WAY REQUIRES A SEPARATE NDOT PERMIT.

**SEWER CONTRIBUTION**

- AVG. DAILY = 0.585 GPM
- PEAK DAILY = 1.93 GPM
- AVG. DAILY = 0.10 GALLONS PER SQ. FT. PER DAY
- AVG. DAILY = 84.239 SQ. FT. (0.10 GAL./SQ.FT./PER DAY)
- PEAK FACTOR = 3.3 (AVG.)
- PEAK DAILY = 3.3 X 0.585 GPM = 1.93 GPM

PROJECT NUMBER: 114361  
APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT DATE

**NOTE:** ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.040

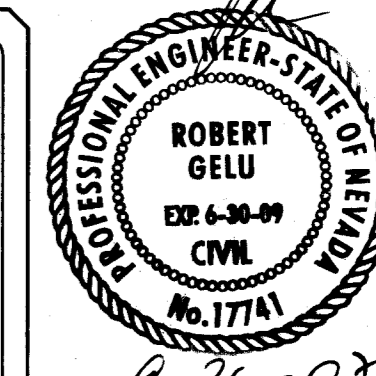
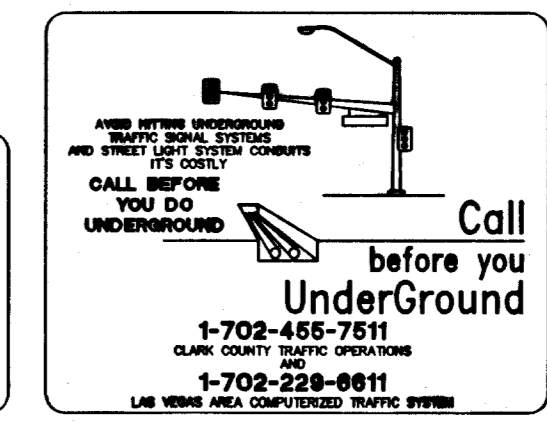
Ha24130

UTILITY 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 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.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

Call before you Dig  
811  
UNDERGROUND SERVICE (USA)



**CONSTRUCTION NOTES - WATER QUANTITY**

ITEM	PUBLIC	PRIVATE
1 INSTALL 2" PVC WATER	N/A	1542 L.F.
2 INSTALL 6" PVC WATER	N/A	2423 L.F.
3 INSTALL 8" PVC WATER	N/A	433 L.F.
4 INSTALL 8" GATE VALVE PER UDACS PLATE #S 3 & 8	N/A	11 EA.
5 INSTALL 8" DCDA PER UDACS PLATE # 11C	1 EA.	N/A
6 INSTALL 2" RPPA PER UDACS PLATE # 11A	1 EA.	N/A
7 INSTALL 2" DOMESTIC METER PER UDACS PLATE # 1D	1 EA.	N/A
8 INSTALL 8" X 90° BEND PER UDACS PLATE # 5	N/A	7 EA.
9 INSTALL 8" X 45° BEND PER UDACS PLATE # 5	N/A	5 EA.
10 INSTALL 8" X 22.5° BEND PER UDACS PLATE # 5	N/A	2 EA.
11 INSTALL 8" X 8" TEE PER UDACS PLATE # 5	N/A	4 EA.
12 INSTALL 8" X 6" TEE PER UDACS PLATE # 5	N/A	11 EA.
13 INSTALL 8" X 90° BEND PER UDACS PLATE # 5	N/A	2 EA.
14 INSTALL 2" X 90° BEND PER UDACS PLATE # 5	N/A	5 EA.
15 NOT USED	N/A	N/A
16 INSTALL 2" X 2" TEE PER UDACS PLATE # 5	N/A	5 EA.
17 INSTALL FIRE HYDRANT PER UDACS PLATE # 7	N/A	11 EA.
18 12.00' X 15.00' LVWMD EASEMENT	150 S.F.	N/A
19 INSTALL 8" X 2" SERVICE SADDLE PER UDACS PLATE # 1D	1 EA.	N/A
20 INSTALL 8" X 6" REDUCER PER UDACS PLATE # 5	1 EA.	N/A
21 5' X 5' CONCRETE PAD	N/A	11 EA.
22 INSTALL VEHICULAR PROTECTION BOLLARD PER UDACS PLATE # 23	N/A	11 EA.
23 INSTALL 8" GATE VALVE PER UDACS PLATE #S 3 & 8	N/A	8 EA.

**CONSTRUCTION NOTES - SANITARY QUANTITY**

ITEM	PUBLIC	PRIVATE
1 INSTALL 8" PVC SAN SEW	537 L.F.	459 L.F.
2 INSTALL 6" PVC SAN SEW	N/A	528 L.F.
3 INSTALL 48" STD. SAN. SEW. MANHOLE	3 EA.	2 EA.
4 INSTALL SAN SEW CLEANOUT SSS DETAIL C16 OF 20	N/A	9 EA.
5 INSTALL 1500 GAL. GREASE INTERCEPTOR JENSEN PRECAST MODEL #JP1500EE-C OR APPROVED EQUAL	N/A	3 EA.
6 SAWCUT, TRENCH AND BACKFILL PER C.C.S.D NO. 504	618 S.Y.	N/A

**SUMMIT ENGINEERING CORPORATION**  
58 PLOT ROAD, SUITE A, LAS VEGAS, NV. 89199  
PHONE (702) 252-3828 FAX (702) 252-3847

DESIGNED BY: ACADRH  
DRAWN BY: ACADRH  
CHECKED BY: ACADRH  
DATE: COPYRIGHT SUMMIT ENG 2007

NEVADA  
CLARK COUNTY  
LAS VEGAS

CIVIL IMPROVEMENT PLANS FOR STEWART AND NELLIS UTILITY PLAN

BY	APP'D	REV.	DATE	DESCRIPTION

SHEET C12 OF 26

SCALE: HORIZ: 1"=20' VERT: N/A  
JOB NO.: J73063  
10/26/2007 8:42 AM \* 28-AUG-2007