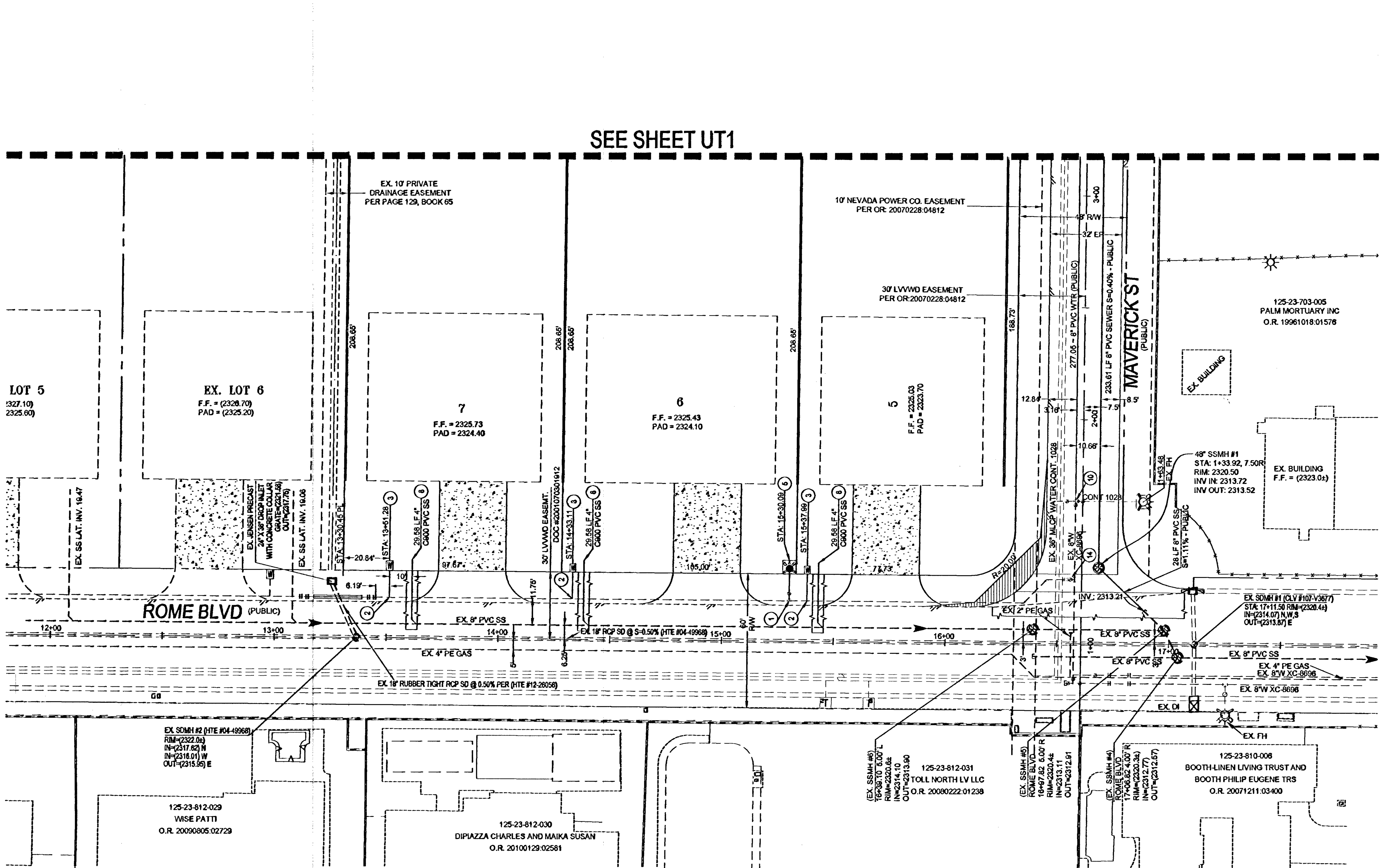
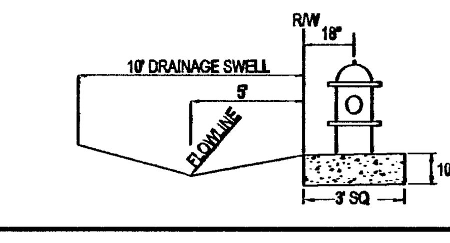
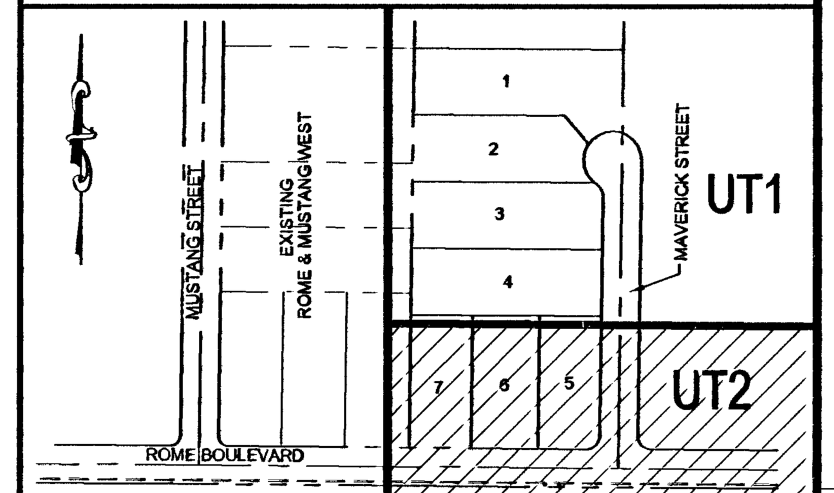


FIRE HYDRANT DETAIL



KEY MAP



CONSTRUCTION NOTE

1. INSTALL 8"X6" TAPPING SLEEVE & 6" TAPPING VALVE PER UDACS 2.24.01 (B) PLATE 34 & 39
2. INSTALL 1" SERVICE SADDLE AND CORPORATION STOP (UDACS PLATE NO. 4)
3. INSTALL 1" METER (UDACS PLATE NO. 4)
4. INSTALL 8"X6" TEE (UDACS PLATE NO. 31)
5. INSTALL FIRE HYDRANT ASSEMBLY WITH 6" WATER LINE AND 6" GATE VALV (UDACS PLATE NO. 40).
6. INSTALL 6" CAP WITH 2" BLOW OFF (UDACS PLATE NO. 36)
7. INSTALL 8" GATE VALVE (UDACS PLATE NO. 30 AND 39)
8. INSTAL 4" C900 PVC WATER QUALITY SANITARY SEWER LATERAL. (UDACS 2.2203 B)
9. INSTALL 8" 90° ELBOW PER UDACS PLATE No. 31
10. REMOVE EXISTING TEE AND INSTALL 8" CROSS PER UDACS PLATE #31
11. INSTALL 6" GV PER PLT 39 AND 30 WITH 10' STUB TO END CAP
12. INSTALL WATER LATER PER UDACS PLT 15 AND SECTION 2.17.01.B W/24' MIN DIAMETER SWEEP
13. EXISTING WATER DISTRICT ACCESS MANHOLE ASSEMBLY
14. EXISTING GATE VALVE ADJUST TO GRADE. MUST BE ACCESSIBLE AT ALL TIMES

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 PLIUMBING CODE)

4. 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.

5. 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.

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

7. INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING. (UDACS PLT 15.)

8. SEWER TRENCH BACKFILL SHALL BE PER USDCCA DWG. NO. 503.

NOTES

1 PRIOR TO COMMENCING SEWER INSTALLATION, THE CONTRACTOR IS REQUIRED TO PULL PERMITS FROM LAND DEVELOPMENT SERVICES, CITY OF LAS VEGAS AT 333 NORTH RANCHO.

2 SERVICE LATERALS FOR LOTS 5, 6, 7 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVVWD.

LEGAL DESCRIPTION

THE EAST HALF (E ½) OF THE SOUTHEAST QUARTER (SE ¼) OF THE NORTHWEST QUARTER (NW ¼) OF THE SOUTHEAST QUARTER (SE ¼) OF SECTION 23, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.B. & M.

EXCEPTING THEREFROM THE NORTH 30 (30) FEET, THE EAST THIRTY (30) FEET, AND THE SOUTH THIRTY (30) FEET, AS CONVEYED FOR ROADS AND INCIDENTAL PURPOSES IN THOSE DEEDS RECORDED FEBRUARY 7, 1973 AS DOCUMENT NO. 259243, IN BOOK 300, AND RECORDED FEBRUARY 23, 2007 AS DOCUMENT 04746, IN BOOK 20070223, OFFICIAL RECORDS, CLARK COUNTY NEVADA.

TOGETHER WITH THOSE PORTIONS OF SAID LAND VACATED BY THOSE CERTAIN ORDERS OF VACATION RECORDED NOVEMBER 07, 1991 IN BOOK 911107 AS DOCUMENT NO. 00662, AND RECORDED FEBRUARY 28, 2007 IN BOOK 20070228 AS DOCUMENT NO. 04812, OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

BENCHMARK

CLARK COUNTY STATION OLV90 2356
ELEVATION 708.755 METERS 2,325.31 FEET

CITY OF LAS VEGAS RIVET AND ROUND PLATE IN CONCRETE CYLINDER, TORREY PINES DR. AND ROME BLVD.

WASTEWATER CALCULATIONS

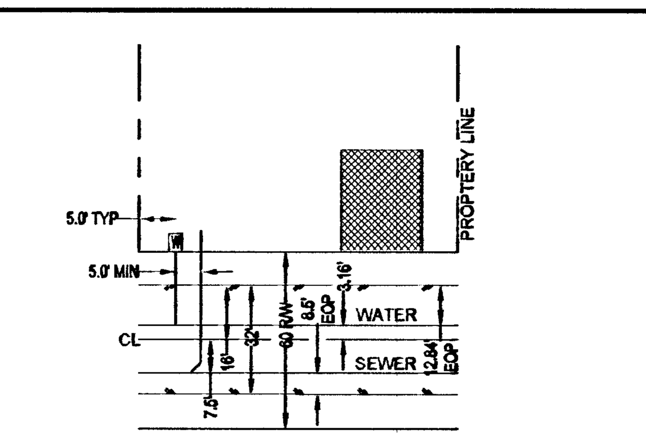
FACILITY TYPE: SINGLE FAMILY RESIDENTIAL
TOTAL UNITS AT BUILD OUT: 5 HOUSES

AVERAGE FLOW (MGD) = 0.0017
PEAK FLOW (MGD) = 0.0060

CALCULATIONS:
AVG FLOW = $7 \times 90{,}000 \times \frac{1}{365} \times \frac{1}{1{,}000{,}000} = 0.0017$ MGD

PEAK FLOW = $0.0017 \times 3.5 = 0.0060$ MGD

TYPICAL LATERAL LAYOUT



ALL LOTS

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.

WATER CROSSING

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

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY
CALL BEFORE YOU DO OVERHEAD
1-702-227-2929

AVOID HITTING UNDERGROUND TRAFFIC SIGNAL SYSTEMS AND STREET LIGHT SYSTEM CONDUITS. IT'S COSTLY.
Call UnderGround before you
1-702-455-7511
CLARK COUNTY TRAFFIC OPERATIONS
1-702-229-6611
LAS VEGAS AREA COMPUTERIZED TRAFFIC SYSTEM

Call Before You Dig
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
CALL 811
OR
1-800-227-2600
AND
CLARK COUNTY TRAFFIC OPERATIONS
1-800-455-7544

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 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 1,750 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL.
BASED ON:
SQUARE FOOTAGE: 4,000 SQ FT
LARGEST AREA BETWEEN SEPARATE WALLS: N/A
HEIGHT: 35-FT
SPRINKLER SYSTEM: NO
ROOF CONSTRUCTION: TILE
HIGH PILED COMBUSTIBLE STORAGE: NO
TYPE OF CONSTRUCTION: V-B
OCCUPANCY: R-1
STORIES: 1-STORIES
ESFR SYSTEM: NO

UTILITY DISCLAIMER NOTE

EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS 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

CLV SEWER NOTE

SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE CITY OF LAS VEGAS OFFSITE INSPECTION AND TESTING SECTION PRIOR TO PROJECT ACCEPTANCE. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO A DROP INLET, CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE SEWER SERVICE LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATION SHALL BE DESCRIBED BY STATE PLANE COORDINATES WHICH SHALL BE BASED ON THE "NEVADA COORDINATE SYSTEM OF 1983, EAST ZONE" AS DEFINED BY THE NEVADA REVISED STATUTES CHAPTER 327, AND TIED TO THE CITY OF LAS VEGAS VERTICAL CONTROL BENCHMARK NETWORK. COORDINATES MUST BE CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTAINTIES OF +/- 0.1 METER (+/- 0.3 FEET). A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).

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 MINIMUM RADIUS OF CURVATURE OF 1,150 FEET, PER UDACS 2.07.01 AND 2.07.02. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTING SHALL BE USED.

SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

BASIS OF BEARINGS

SOUTH 00 39'27" WEST BEING THE WEST LINE OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION OF SECTION 23, M.D.M., CLARK COUNTY, NEVADA, PER THE FINAL MAP OF MUSTANG AND ROME BLVD., RECORDED IN BOOK 129, PAGE 65 OF PLANTS, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA.

APPROVAL BLOCK

Dea Meade 9/12/13
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER DATE
(PROJECT # 121434) LVVWD APPROVED FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL

Steven W White 4SEP2013
CLARK COUNTY FIRE DEPARTMENT 135886 + 2 FH 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 = 1,750 G.P.M. AT 20 PSI RESIDUAL.

NO.	DESCRIPTION	SHTS.	APPR.	DATE

REVISIONS

D R HORTON
330 CAROUSEL PKWY
HENDERSON, NV 89014
(702) 635-3600 FAX: (800) 909-4601

TANEY ENGINEERING
6030 S. JONES BLVD STE# 100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-5233

ROME AND MAVERICK
A RESIDENTIAL SUBDIVISION

UTILITY PLAN II

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA
ROBERT D. CUNNINGHAM
Exp. 12-31-14
CIVIL
No. 15726
9/4/13
ENGINEER'S SEAL

DATE: 8/30/2013
SCALE: 1"=30'
JOB NO: DRH-12-037
DESIGNED BY: CH
CHECKED BY: RC
SHEET NAME: UT2
SHEET: 12 OF 12
H#47824
307V1071
CC HTE # 12-49141

FILE NAME: UT.DWG