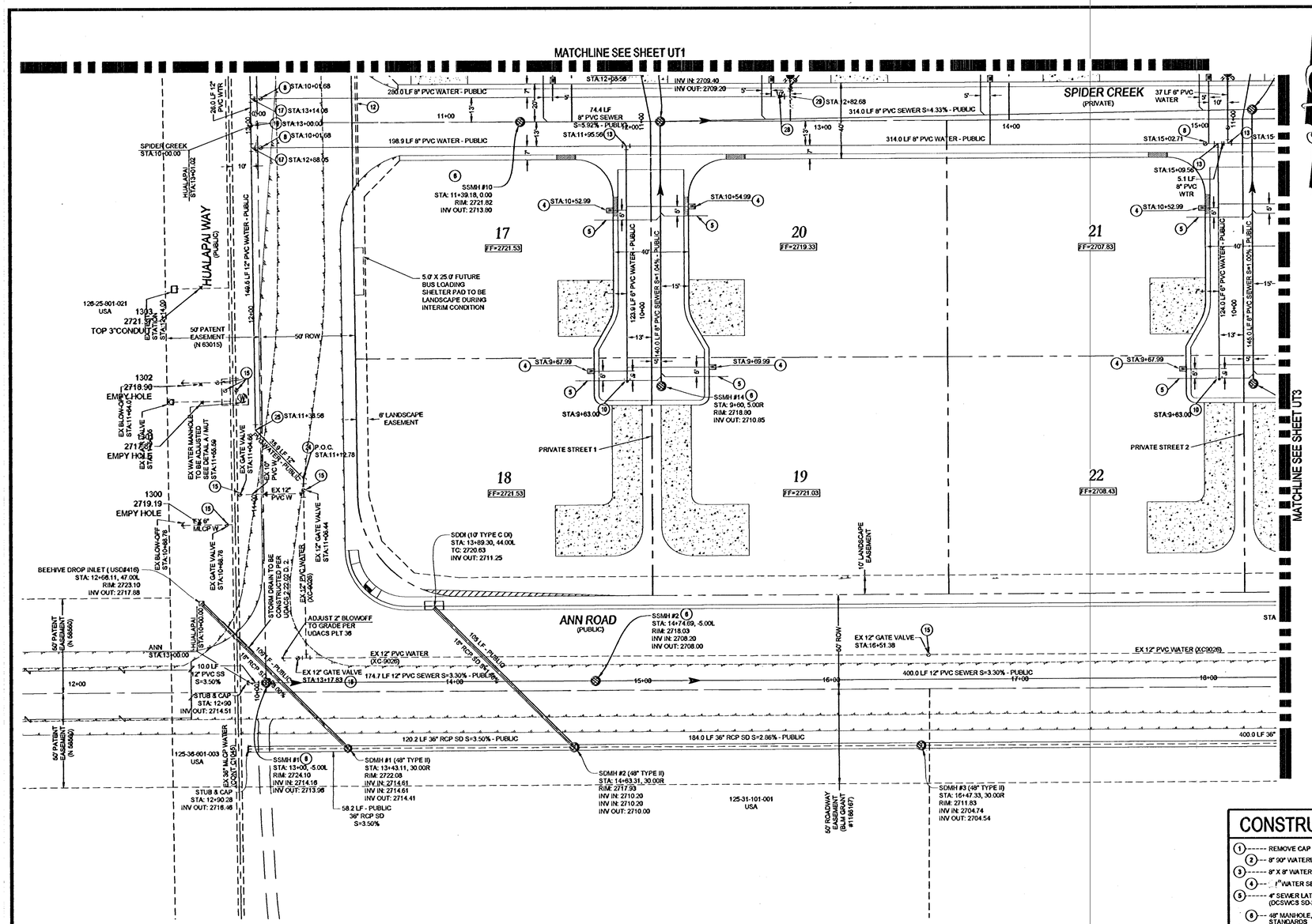
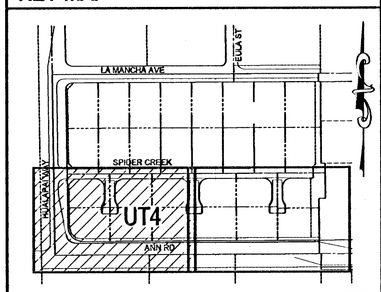
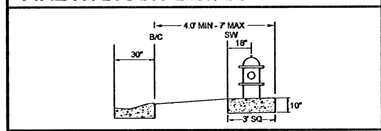


KEY MAP



FIRE HYDRANT DETAIL



WATER MAIN JOINT DEFELCTION

(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 2,000 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL
BASED ON:
SQUARE FOOTAGE: 5,100 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: 2 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

SCALE

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

LEGAL DESCRIPTION

PARCEL 7:
A PORTION OF LOT 4 A SHOWN AT PAGE 52 IN FILE 22 OF PARCEL MAPS ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE AND A SHOWN ON THAT RECORD OF SURVEY FOR BOUNDARY LINE ADJUSTMENT AT PAGE 25 IN FILE 161 OF SURVEYS, ON FILE IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE. LYING WITHIN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER (SW ¼) OF THE SOUTHWEST QUARTER (SW ¼) OF SECTION 30, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA

BASIS OF BEARINGS

NORTH 89°48'21" EAST

BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 30, T. 19 S., R. 60 E., M.D.M., CLARK COUNTY, NEVADA, ALSO BEING CENTERLINE OF ANN ROAD AS SHOWN UPON PARCEL MAP FILE 97, PAGE 85, CLARK COUNTY, NEVADA OFFICIAL RECORDS.

BENCHMARK

CITY OF LAS VEGAS BM NO. 8LV30 30SSW8 - CITY OF LAS VEGAS PIN AND ROUND PLATE IN CONCRETE PAD, NORTHWEST CORNER OF ANN RD AND CONQUISTADOR ST., +/-30' WEST OF CONQUISTADOR ST.

817.475 METERS (NAVD 88) 2681.99 FEET

APPROVAL BLOCK

05/09/13
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER — DATE
(PROJ # 117546) LVVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

H #47818

24Apr13
CLARK COUNTY FIRE DEPARTMENT — 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 = 2,000 G.P.M. AT 20 PSI RESIDUAL.
13-16905 5 hydrants

WASTEWATER CALCULATIONS

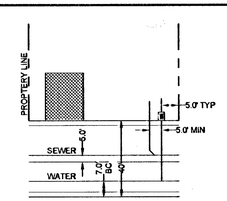
FACILITY TYPE: SINGLE FAMILY RESIDENTIAL
TOTAL UNITS AT BUILD OUT: 28 HOUSES

AVERAGE FLOW (MGD) = 0.0069
PEAK FLOW (MGD) = 0.024

CALCULATIONS:
AVG FLOW = 28 X 90.000 / 365 X 1 / 1,000,000 = 0.0069 MGD

PEAK FLOW = 0.0069 X 3.5 = 0.024 MGD

TYPICAL LATERAL LAYOUT



BACKWATER VALVE (BWV)

LOTS: 2, 3, 4, 6, 7, 8, 11, 13 & 14
THESE LOTS HAVE DRAINAGE PIPING FEATURES THAT LOWER THAN THE NEXT UPSTREAM SEWER MANHOLE COVER AND SHALL HAVE BACKWATER VALVES INSTALLED PER DCSWCS SD-29.

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.

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

CONSTRUCTION NOTES

1. REMOVE CAP AND BLOW OFF & CONNECT TO EXISTING MAIN (UDACS PLT. 36)
2. 8" 90° WATERLINE BEND (UDACS PLT. 31)
3. 8" X 8" WATERLINE TEE (UDACS PLT. 31)
4. 1" WATER SERVICE W/ 3/4" METER (UDACS PLT. 4)
5. 4" SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWCS SD-22)
6. 48" MANHOLE, BASE PRECAST, GRADE RING COLLAR & LID PER DCSWCS STANDARDS
7. FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE (UDACS PLT. 40) - PUBLIC
8. 8" GATE VALVE (UDACS PLT. 30 & 39)
9. 8" 45° WATERLINE BEND (UDACS PLT. 31)
10. INSTALL 2" BLOW-OFF ASSEMBLY (UDACS PLT. 36)
11. 1" IRRIGATION METER W/ 1" RPPA (UDACS PLT. 4 & 8)
12. (4) 4" PVC CONDUITS
13. 8" X 8" WATERLINE TEE (UDACS PLT. 31)
14. INSTALL 12" X 8" TAPPING SLEEVE W/ 8" TAPPING VALVE (UDACS SECTION 2.24.01 (B), & PLT 34 & 39)
15. EXISTING WATER VALVES TO BE ADJUSTED TO GRADE (UDACS PLT 39)
16. 12" GATE VALVE (UDACS PLT. 30 & 39)
17. 12" X 8" WATERLINE TEE (UDACS PLT. 31)
18. 12" X 8" WATERLINE REDUCER (UDACS PLT. 30)
19. INSTALL 8" X 8" TAPPING SLEEVE W/ 8" TAPPING VALVE (UDACS SECTION 2.24.01(A)) & PLATES 34 & 39)
20. 12" X 12" WATERLINE TEE (UDACS PLT. 31)
21. CONTRACTOR TO REMOVE 90° BEND AND CONNECT NEW 8" WL TO NEW 45° BEND
22. REMOVE EXISTING GATE VALVE AND INSTALL 8" BLIND FLANGE
23. SAWCUT & MATCH EXISTING AC PAVEMENT PER CCAUSD #500.3, 500.5 & 503
24. REMOVE EXISTING BLOW OFF VALVE AND INSTALL 12" 45° BEND (UDACS PLT. 31)
25. INSTALL 12" 45° WATERLINE BEND (UDACS PLT. 31)
26. CUT AND CAP LATERAL AND ABANDON VALVE PER NOTES ON THIS SHEET
27. INSTALL 4" C-900 WATER QUALITY SEWER LATERAL WITH MARKER BALL & CURB MARKING (DCSWCS SD-22)
28. INSTALL 8" X 8" REDUCER PER UDACS PLT. 30
29. 6" 90° WATERLINE BEND (UDACS PLT. 31)

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

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

NO.	DESCRIPTION	SHTS.	APPR.	DATE
	REVISIONS			

D.R. HORTON
520 CAROUSEL PKWY
HENDERSON, NV 89014
(702) 635-5500 FAX: (800) 906-4601

TANEY ENGINEERING
6030 S. JONES BLVD STE# 100
LAS VEGAS, NV 89118
(702) 362-8844 FAX: (702) 362-4253

ANN & HUALAPAI
A RESIDENTIAL SUBDIVISION

UTILITY PLAN - SOUTHWEST

ROBERT D. CUNNINGHAM, Exp. 12-31-14, CIVIL, No. 15728, STATE OF NEVADA, REGISTERED PROFESSIONAL ENGINEER
4/22/13
ENGINEER'S SEAL

DATE:	4/22/2013
SCALE:	1"=30'
JOB NO:	DRH-12-030
DESIGNED BY:	SF
CHECKED BY:	RDC
SHEET NAME:	UT4
SHEET:	27 OF 31

307V10104
HTE#12-48968
CC (CLV SEWER)

FILE NAME: 19 UT1.DWG