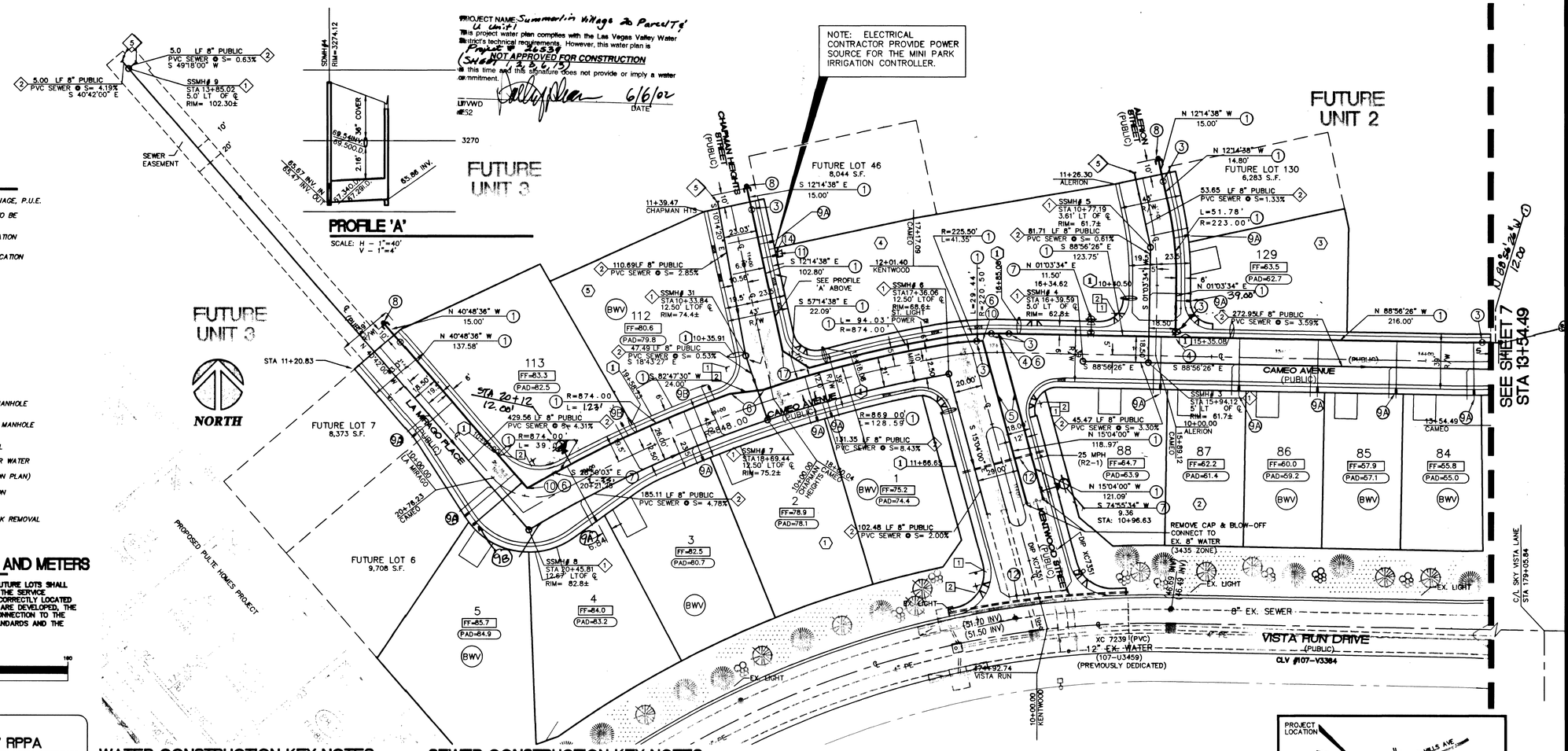
Avoid cutting underground utility lines. It's costly.

Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111

PROJECT NAME: Summerlin Village 20 Parcel T & U
This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is
Page # 2639
(Sheet 2 of 6 13)
NOT APPROVED FOR CONSTRUCTION
at this time and this signature does not provide or imply a water commitment.
LVVWD #52 — DATE 6/6/02

NOTE: ELECTRICAL CONTRACTOR PROVIDE POWER SOURCE FOR THE MINI PARK IRRIGATION CONTROLLER.



LEGEND

- PRIVATE DRIVE, PUBLIC DRAINAGE, P.U.E. AND CITY OF LAS VEGAS SEWER EASEMENT, TYPICAL TO BE PRIVATELY MAINTAINED.
- EXISTING FIRE HYDRANT LOCATION
- PROPOSED FIRE HYDRANT LOCATION
- PROPERTY LINE
- STREET CENTERLINE
- RIGHT OF WAY LINE
- EXISTING TRAFFIC SIGN
- PROPOSED TRAFFIC SIGN
- EXISTING UTILITY VALVE
- PROPOSED UTILITY VALVE
- EXISTING SEWER MAIN WITH MANHOLE
- PROPOSED SEWER MAIN WITH MANHOLE
- PROPOSED 4" SEWER LATERAL
- PROPOSED 1" TYPE K COPPER WATER LATERAL W/ 3/4" METER (UNLESS NOTED OTHERWISE ON PLAN)
- PROPOSED DRIVEWAY LOCATION
- AREA OF EX. AC OR SIDEWALK REMOVAL
- BLOCK NUMBER

FUTURE SERVICE LATEREALS AND METERS

INSTALLATION OF SERVICE LATERALS (1" TO 2") FOR FUTURE LOTS SHALL BE INSTALLED PER THE UDACS PLATE 1B. IF ANY OF THE SERVICE LATERALS TO BE INSTALLED FOR FUTURE LOTS ARE INCORRECTLY LOCATED OR ARE NOT USED FOR ANY REASON WHEN THE LOTS ARE DEVELOPED, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARDS AND THE DEVELOPER'S EXPENSE.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1" RPPA

APPROVED REDUCED PRESSURE PRINCIPLE 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 PRESSUREASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD. 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.

GENERAL NOTES

1. CVL CONSULTANTS, INC. SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
2. ALL UTILITY INSTALLATION SHALL CONFORM TO THE CITY OF LAS VEGAS STANDARDS, LAS VEGAS VALLEY WATER DISTRICT STANDARDS AND THE UNIFORM PLUMBING CODE.
3. ALL WORK TO BE PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENT HAVE BEEN OBTAINED FROM THE OFFSITE OWNER
4. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND OUTSIDE THE PROJECT BOUNDARY SHALL BE PERFORMED UNDER A SEPARATE ENCROACHMENT PERMIT ISSUED BY THE CONTROLLING AUTHORITY.
5. ALL HYDRANTS SHALL BE PLACED A MIN. OF 18" BACK OF SIDEWALK.
6. WATER AND SEWER LINES SHALL BE INSTALLED IN SEPARATE TRENCHES WITH AT LEAST TEN (10) FEET OF SEPARATION MEASURED HORIZONTALLY FROM THE EXTERIOR PIPE WALLS.
7. ADD 3200' TO ALL ELEVATIONS SHOWN.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND VERIFY SIZE, MATERIAL, DEPTH, CONDITION, PRESSURE AND LOCATION OF ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA.
9. PLANS MAY NOT INDICATE ALL EXISTING UTILITY LINES. CONTRACTOR IS TO EXERCISE EXTREME CAUTION DURING EXCAVATION IN ORDER TO AVOID DAMAGING ANY EXISTING UTILITY LINES. IF THE UTILITY LINES ARE DAMAGED BY THE CONTRACTOR, SUCH DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
10. CONTRACTOR IS TO SAWCUT AND REMOVE EXISTING ASPHALT AND CONCRETE AS NECESSARY FOR UTILITY TRENCHES. BACKFILL AND PATCH ALL TRENCHES ACCORDING TO SUMMERLIN STANDARDS.
11. FIRE HYDRANT STATIONING REFERENCES TEE LOCATION.
12. IN THE EVENT SEWER LATERAL LOCATIONS ARE PLACED ABOVE WATER LATERALS, OR REQUIRED CLEARANCES ARE NOT MAINTAINED, WATER QUALITY PIPE SHALL BE USED FOR SEWER INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INCLUDING ANY ADDITIONAL COSTS IN THEIR BIDDING.
13. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.
14. ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.e. WV, BOX, WMH, ANNODE BOX, FH, TEL. BOX, ETC.)
15. THIS SITE IS LOCATED WITHIN THE LAS VEGAS VALLEY WATER DISTRICT (LVVWD) 3205 WATER PRESSURE ZONE.

41520

019056

PROFILE 'A'

SCALE: H - 1"=40' V - 1"=4'

WATER CONSTRUCTION KEY NOTES AND QUANTITIES

1	INSTALL 8" PVC WATER LINE	1487	LF
2	INSTALL 6" PVC WATER LINE	55	LF
3	INSTALL 8" GATE VALVE. VALVES SHALL NOT BE LOCATED IN STREET VALLEY GUTTERS OR WITHIN THE PROPOSED CURB AND GUTTER LOCATIONS.	8	EA
4	INSTALL 8" TEE	2	EA
5	INSTALL 8" 22.5° BEND	0	EA
6	INSTALL 8" 11.25° BEND	5	EA
7	INSTALL FIRE HYDRANT ASSEMBLY PER UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDS) PLATE No. 7, INCLUDES TEE, 6" PIPE, GATE VALVE AND RISER AND THE LOCATION SHALL BE DETERMINED BY CLARK COUNTY AREA STD. DWG. 516 VALVES SHALL NOT BE LOCATED IN STREET VALLEY GUTTERS OR WITHIN PROPOSED CURB AND GUTTER LOCATIONS.	3	EA
8	8" CAP W/ 2" BLOW OFF ASSEMBLY (PER UDACS PLATE No. 4)	4	EA
9A	INSTALL 3/4" WATER METER AND 1" COPPER SERVICE LATERAL (PER UDACS PLATE No.1B)	14 ~~12~~	EA
9B	INSTALL 3/4" WATER METER AND 1" COPPER SERVICE LATERAL (PER UDACS PLATE No 1D)	3 ~~0~~	EA
10	INSTALL 8" 90° BEND	2	EA
11	INSTALL 1" RPPA (PER UDACS PLATE No.11A)	1	EA
12	INSTALL IRRIGATION SLEEVES TO 18" BEYOND EDGE OF PAVEMENT (2-4" & 1-6" SCH. 40 PVC CONDUITS) PER SUMMERLIN STD. DWG. No. U-18	2	EA
13	4" SCH.40 PVC IRRIGATION SLEEVES	1	EA
14	INSTALL 1" WATER METER AND 1" COPPER SERVICE LATERAL (PER UDACS PLATE No.1D)	1	EA
15	2" SCH.40 PVC ELECTRICAL CONDUIT	1	EA
16	8" DUCTILE IRON PIPE	0	LF
17	INSTALL 45 BEND	2	EA
18	REMOVE CAP AND EXTEND WATER LINE	2	EA

STREET LIGHT NOTES

1. ALL STREET LIGHTS, POLES, LUMINARIES, FOUNDATIONS AND APPURTENANCES WILL CONFORM WITH THE MINIMUM REQUIREMENTS OF SUMMERLIN'S IMPROVEMENT STANDARDS. SEE SUMMERLIN STANDARD DRAWING # E-27 FOR LIGHT POLE FOUNDATION LOCATION.

SEWER CONSTRUCTION KEY NOTES

1. INSTALL 48" SANITARY SEWER MANHOLE PER SOUTHERN NEVADA DESIGN & CONSTRUCTION STANDARDS FOR WASTE WATER COLLECTION SYSTEMS, 1997. SD-1, SD-7.
2. INSTALL 8" SEWER MAIN
3. TRENCH BACKFILL UNPAVED AREA PER SUMMERLIN STD. DWG NO. U-19
4. TRENCH BACKFILL PAVED AREA PER SUMMERLIN STD. DWG. NO. U-20
5. INSTALL 8" CAP
6. TRENCH BACKFILL PAVED AREA PER SUMMERLIN STD. DWG. NO. U-21 (PRIOR TO FINAL LIFT)
7. REMOVE PLUG AND EXTEND SEWER LINE

BWV BACK WATER VALVE (FOR DETAIL SEE SHEET C2)

SIGNAGE KEY NOTES

1. INSTALL 30"x30" R1-1 (STOP SIGN) UNLESS NOTED OTHERWISE
2. INSTALL STREET NAME SIGN PER CLARK COUNTY AREA DWG. NO. 250.

SEWER CONTRIBUTIONS

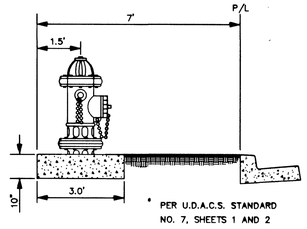
AVERAGE FLOW:.....0.0015 MGD
PEAK FLOW:.....0.0051 MGD

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW IS 1500 GPM AT 20 PSI RESIDUAL PRESSURE.

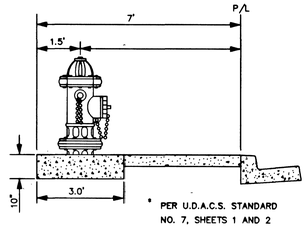
BASED ON:
SQUARE FOOTAGE:.....2,358 S.F.
BUILDING HEIGHT:.....19'
NUMBER OF STORIES:.....1
OCCUPANCY:.....SINGLE FAMILY
FULL AUTOMATIC FIRE SPRINKLERS:...NO

REVIEWED BY: — DATE 6/6/02



FIRE HYDRANT DETAIL

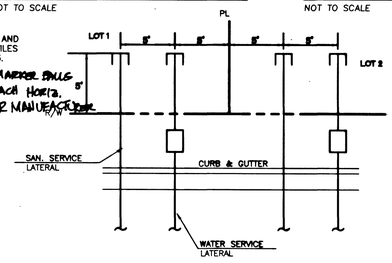
NOT TO SCALE



FIRE HYDRANT DETAIL

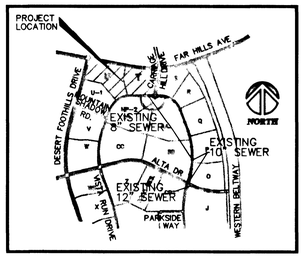
NOT TO SCALE

NOTE:
1) FOR STORMDRAIN DESIGN AND CONSTRUCTION, SEE PROFILES ON SHEETS ST1, ST2, ST3.
2) INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZ. ELBOW FITTING PER MANUFACTURER RESTRICTIONS



TYPICAL UTILITY SERVICE LAYOUT

NOT TO SCALE



SEWER DISCHARGE MAP

NTS

APPROVED FOR CONSTRUCTION	ESN.018
LAS VEGAS VALLEY WATER DISTRICT	DATE

BENCHMARK

Elevation = 3209.10 FEET (NAVD 88 DATUM)

CITY OF LAS VEGAS BENCHMARK No. 9LV19 2NWS

NDOT DISC SET IN CONCRETE, 50 FEET SOUTH OF THE CENTERLINE OF CHARLESTON BLVD. AT P.T. COMING OUT OF RED ROCK, STAMPED STA. 787+19.42 PT ± MP 14.7

NAVD 88 ELEVATION = 978.1356 METERS

BASIS OF BEARINGS

NORTH 89°46'49" EAST, BEING THE BEARING OF THE NORTH LINE OF SECTION 27, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN IN FILE 92 OF SURVEYS, PAGE 42, OFFICIAL RECORDS OF CLARK COUNTY, NEVADA.

NO.	REVISION	BY	DATE	APP.	DATE
6					
5					
4					
3					
2					
1					

DESIGNED BY:
DRAWN BY:
CHECKED BY:
PROJECT DATE:

CITY OF LAS VEGAS — NEVADA

SUMMERLIN, VILLAGE 20
PARCEL U (ENCANTO) & PARCEL T (SANTALINA) UNIT 1 UTILITY PLAN 1

DEVELOPER: William Lyon Homes, Inc.

SEAL: ENGINEER - STATE OF NEVADA — DARREN M. BENO — No. 14671 — PROFESSIONAL

CVL CONSULTANTS, INC.
ENGINEERING · PLANNING · LAND SURVEYING
6280 S. Valley View Blvd
Suite 200
Las Vegas, NV 89118
Tel: (702) 368-3008
Fax: (702) 368-0047

SHEET C4 6 OF 16

AGENCY DWG. NO. 307Y-4705

CVL Proj. No. 019056