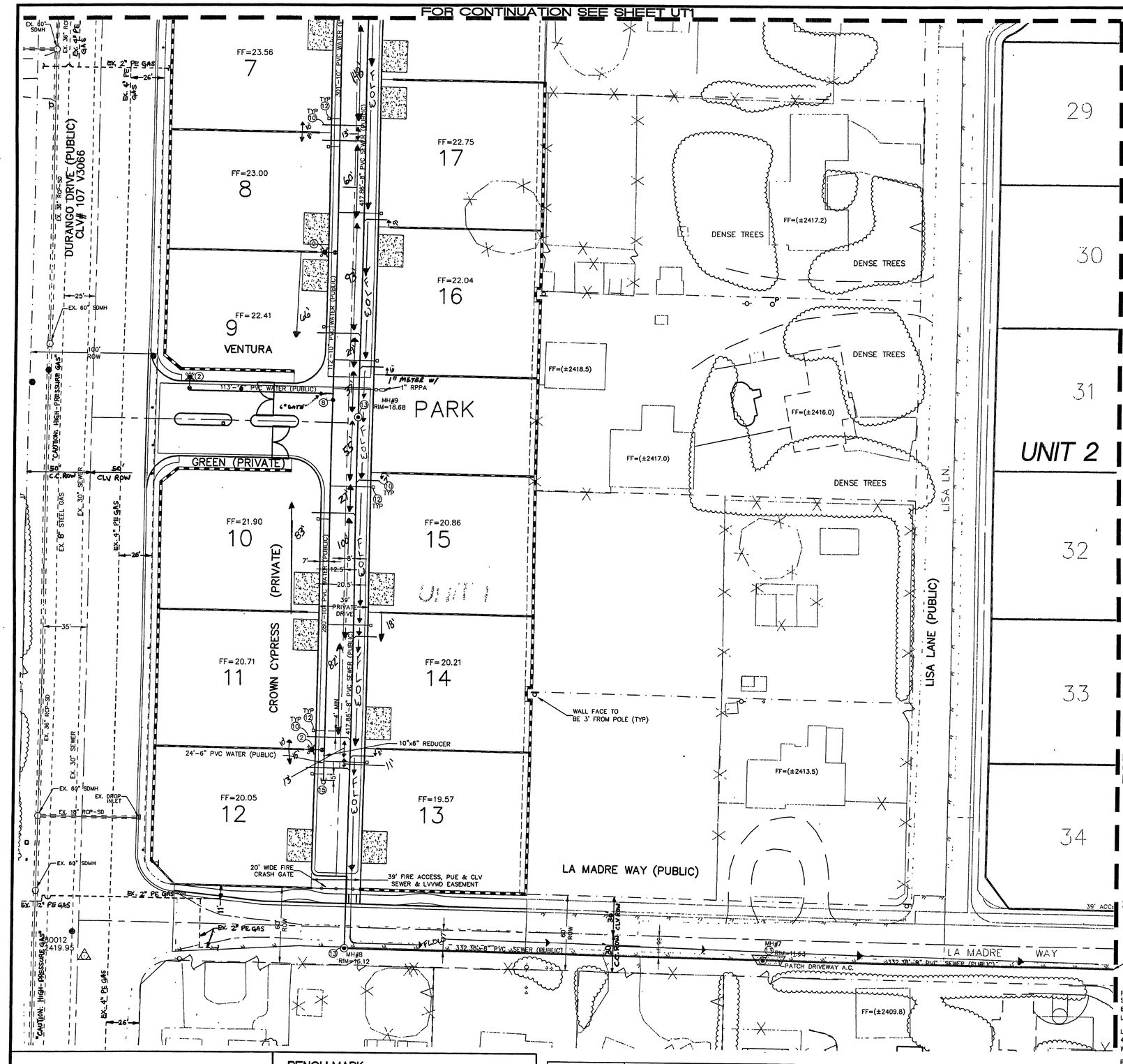

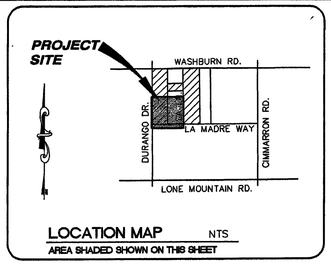

LOCATION MAP NTS
AREA SHADED SHOWN ON THIS SHEET

MANHOLE INFO

SSMH #1 (60" TYPE I) STA 9+83.95 18.00' LT RIM = 2367.54 INV IN = 2371.30 PIPE	SSMH #7 (48" TYPE I) STA 34+60.23 17.00' LT RIM = 2417.03 INV IN = 2404.40 PIPE INV OUT = 2404.20 PIPE
SSMH#2 (48" TYPE I) STA 14+33.46 18.00' LT RIM = 2381.13 INV IN = 2383.62 PIPE INV OUT = 2383.42 PIPE	SSMH #8 (48" TYPE I) STA 35+34.70 17.00' LT RIM = 2416.15 INV IN = 2407.03 PIPE INV OUT = 2406.83 PIPE
SSMH #3 (48" TYPE I) STA 16+81.46 18.00' LT RIM = 2393.62 INV IN = 2390.65 PIPE INV OUT = 2390.45 PIPE	SSMH #9 (48" TYPE I) STA 36+81.62 6.00' RT RIM = 2418.68 INV IN = 2408.31 PIPE INV OUT = 2408.12 PIPE
SSMH #4 (48" TYPE I) STA 2+30.26 18.00' LT RIM = 2387.09 INV IN = 2389.40 PIPE INV OUT = 2389.2 PIPE	SSMH #10 (48" TYPE I) STA 17+79.86 6.00' RT RIM = 2421.18 INV IN = 2411.81 PIPE INV IN = 2411.81 PIPE INV OUT = 2411.41 PIPE
SSMH #5 (48" TYPE I) STA 3+40.40 17.00' LT RIM = 2400.40 INV IN = 2394.22 PIPE INV OUT = 2394.02 PIPE	SSMH #11 (48" TYPE I) STA 34+86.16 6.00' RT RIM = 2419.12 INV OUT = 2418.75 PIPE
SSMH #6 (48" TYPE I) STA 16+60.34 17.00' LT RIM = 2398.58 INV IN = 2395.78 PIPE INV IN = 2395.78 PIPE INV OUT = 2395.58 PIPE	SSMH #12 (48" TYPE I) STA 1+34.23 1.00' RT RIM = 2417.06 INV OUT = 2413.38 PIPE

ASBuilts

ASBuilts

LEGEND

- EXISTING STREET LIGHTS
- NEW STREET LIGHT (UNLESS NOTED AS EXISTING)
- PHOTO EYE
- ELECTRICAL PEDISTAL
- PULL BOX AS SHOWN
- GATE VALVE
- EX GATE VALVE
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT (UNLESS NOTED AS EXISTING)
- BW BACKWATER VALVE
- SEWER MANHOLE
- EXISTING SEWER MANHOLE
- STORM DRAIN MANHOLE
- SEWER AND WATER SERVICE WITH PRESSURE REDUCING VALVE
- STREET NAME SIGN
- STREET SIGN (SPEED LIMIT 25) (R2-1)
- STOP SIGN (R1-1)
- FUTURE IMPROVEMENTS
- EX. IMPROVEMENTS
- STREET LIGHT CONDUIT
- UNIT LINE

UTILITY CONSTRUCTION NOTES UNIT 1

1. INSTALL 10" PVC (PUBLIC) WATERLINE ..... 1,675 LF
2. INSTALL FIRE HYDRANT ASSEMBLY PER UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDS) PLATE No. 7, AND THE LOCATION SHALL BE DETERMINED BY USD 516 ..... 4 EA
3. INSTALL 10" TEE ..... 1 EA
4. INSTALL 10" – 45° BEND ..... 2 EA
5. INSTALL 10" – "SPECIFIED FITTINGS" 5° BEND W/ RESTRAINED JOINTS ..... 2 EA
6. INSTALL 10" – 11.25° BEND ..... 1 EA
7. INSTALL 10" CAP & 2" BLOWOFF ASSEMBLY PER UDACS PLATE No. 4 A.... 1 EA
8. INSTALL 10" GATE VALVE. VALVES SHALL NOT BE LOCATED IN STREET VALLEY GUTTERS ..... 7 EA
9. 8" PVC SANITARY SEWER LINE ..... 1713 LF
10. 4" PVC SANITARY SEWER LATERAL ..... 687 LF
11. CONNECT TO EXISTING W/ 12"X10" MJ TAPPING TEE W/10 TAPPING VALVE .. 1 EA
12. INSTALL 1" METER W/ 1" COPPER SERVICE CONNECTION ..... 25 EA PER UDACS PLATE No.1D
13. INSTALL 48" DIAMETER MANHOLE ..... 12 EA (SEE PLAN & PROFILE FOR VERTICAL INFO.)
14. USE AWWA C900 PVC WATER QUALITY PIPE FOR SEWER LATERAL.
15. INSTALL 6" CAP & 2" BLOWOFF ASSEMBLY PER UDACS PLATE No. 4 A.... 1 EA

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

APPROVED FOR CONSTRUCTION

CITY OF LV MARSHAL — DATE 11/24/03

LAS VEGAS VALLEY WATER DISTRICT — DATE 12/11/03

SEWER FLOW CONTRIBUTIONS

AVERAGE DAILY FLOW = 250 GPD x 23 = 5,750 GPD
PEAK DAILY FLOW = 3.1 (250 GPD) x 23 = 17,825 GPD

FOR CONTINUATION OF OFFSITE SEWER SEE LA MADRE AND JANELL PROFILES, SHEET PP7, PP8, AND PP9

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 POUNDS SQUARE INCH RESIDUAL PRESSURE.

BASED ON:

LARGEST SQUARE FOOTAGE:	3600– SQ.FT.
LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS:	3600– SQ.FT.
BUILDING HEIGHT:	35 FEET
NUMBER OF STORIES:	2 FLOORS
TYPE OF CONSTRUCTION:	(VN)
OCCUPANCY:	SINGLE FAMILY
FULL AUTOMATIC FIRE SPRINKLER SYSTEM:	NO

REVIEWED BY: [signature]
DATE: 11-25-03

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1"

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 PRESSURE PRINCIPLE ASSEMBLY 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 ADJACENT RIGHT-OF-WAY.

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

BASIS OF BEARING

NORTH 88°58'14" WEST BEING THE EAST-WEST LINE CENTER OF SECTION LINE BETWEEN THE WEST QUARTER (1/4) CORNER AND THE WEST SIXTEENTH (1/16) CORNER OF SECTION 33, TOWNSHIP 19 SOUTH, RANGE 60 EAST M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA. AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 82 OF PARCEL MAPS PAGE 75.

61836 94705

BENCH MARK

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB, NE RETURN OF DURANGO DRIVE & WASHBURN RD.
STATION 1LV90
33W4
ELEVATION = 740.8191 METERS 2430.50 FEET (NAVD88) OLD
740.7932 METERS 2430.42 FEET NEW
OLD – 0.0[illegible] = NEW

AVOID OVERHEAD POWER LINE CONTACT
CALL BEFORE YOU OVERHEAD
1-702-593-6111
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

NOTICE!
EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR SHOWN INCORRECTLY.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.
Call BEFORE YOU Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

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

REV	DATE	BY	REVISION	APPROVED	DATE

TOLL BROTHERS
1635 VILLAGE CENTER CIRCLE, SUITE 100
LAS VEGAS, NV. 89134
(702) 243-9800 FAX (702) 243-9610

ALPHA & ENGINEERING COMPANY
50 So. Jones #202, Las Vegas, NV. 89107
Telephone: (702) 877-1300

SHEET WASHBURN & DURANGO UNIT 1 (AKA - NORTH CANYON ESTATES)

TITLE UTILITY PLAN 2 OF 2

DRAWN BY: RCV 05/13/03
DESIGNED BY: RCV 05/13/03
CHECKED BY: GWS 05/13/03
SCALE: 1"=40'
PROJECT NO: 316710

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA GEORGE W. SPENCER JR. CIVIL No. 7848 DATE 11/24/03

SHEET UT2
7 OF 17 SHEETS
DRAWING NO. 10744789

HTE# 04-18736

-SEWER ASBUILT-