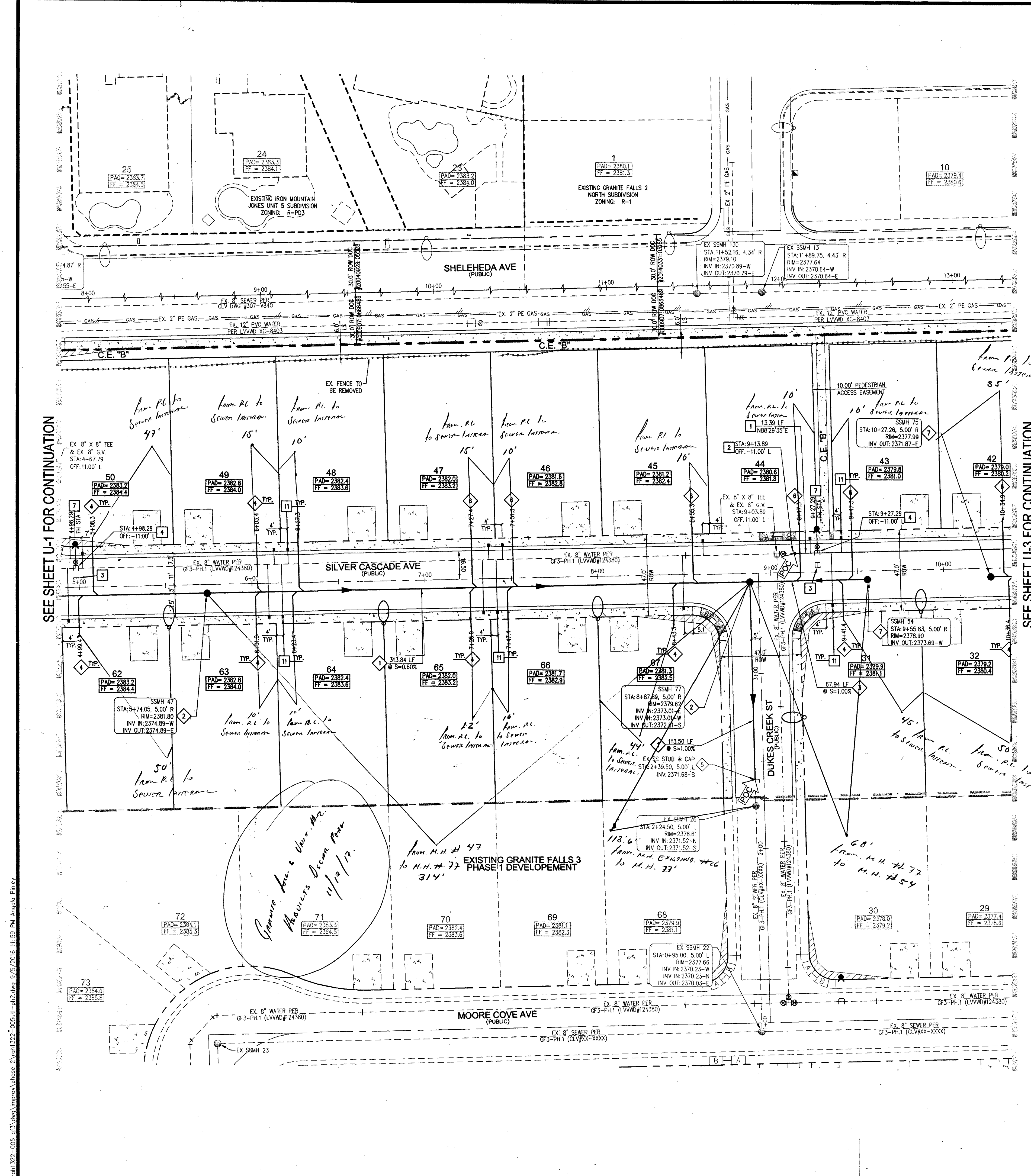




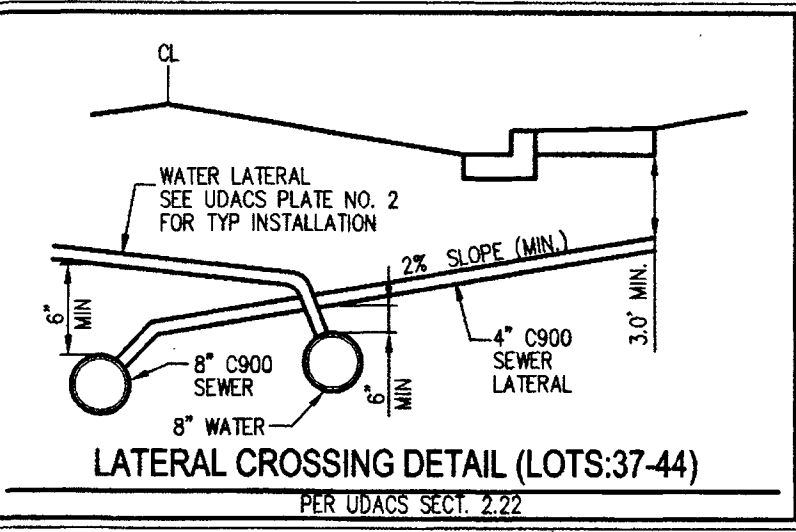
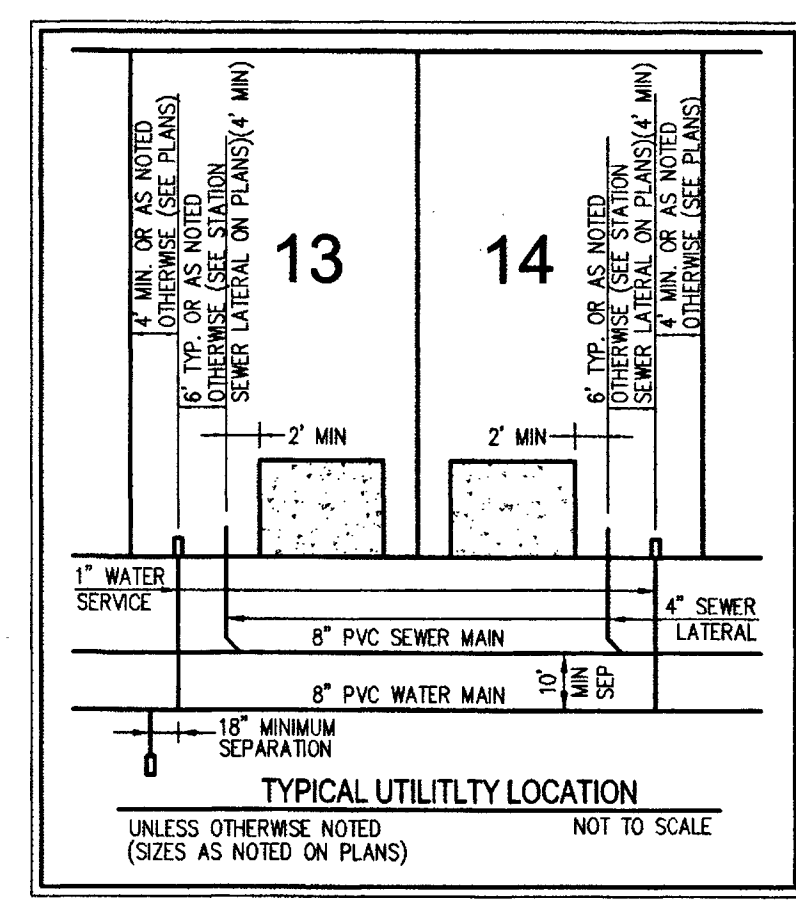
SEE SHEET U-1 FOR CONTINUATION

SEE SHEET U-3 FOR CONTINUATION

- ### SEWER NOTES
1. INSTALL 8" PVC PUBLIC SANITARY SEWER PIPE
 2. INSTALL 48" DIAMETER PUBLIC SANITARY SEWER MANHOLE WITH PRECAST BASE PER DCSWCS SD-1A, SD-1B, SD-4, AND SD-5, WITH SINGLE LD
 3. INSTALL 8" C-900 PUBLIC SANITARY SEWER PIPE
 4. INSTALL 4" PVC SEWER LATERAL
 5. REMOVE PLUG AND CONNECT TO EXISTING 8" SANITARY SEWER PER GRANITE FALLS 3 PH.1
 6. INSTALL 4" C-900 PVC SEWER LATERAL
 7. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE TYPE "A" SHORTY CONE PER DCSWCS SEC. 2.2.11, SD-9 AND SD-13, WITH SINGLE LD
 8. FIELD VERIFY AND CONNECT TO EXISTING 8" SANITARY SEWER
 9. INSTALL 48" DIAMETER PUBLIC SANITARY SEWER MANHOLE WITH CAST-IN-PLACE BASE PER DCSWCS SD-1A, SD-4, SD-7, AND SD-5, WITH SINGLE LD
- SEE SHEET C-2 FOR LEGEND, QUANTITIES & ABBREVIATIONS

CONTINGENCY NOTE

THIS PROJECT PLAN APPROVAL CONTINGENT ON GRANITE FALLS 3 - PHASE 1 (LVWD PROJECT #124380) PLAN APPROVAL



WATER SERVICE LATERALS FOR LOTS 45-50 AND 61-67 WILL BE TAPPED ON EXISTING MAIN BY OWNER'S CONTRACTOR UNDER DIRECTION OF THE LVWD.

SEWER NOTES:

ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
37 UNITS X 250 GPD/UNIT = 9,250 GPD
TOTAL AVERAGE CONTRIBUTION = 9,250 GPD = 0.009 MGD
TOTAL PEAK FLOW = 0.009 MGD X 3.5 (PEAK FACTOR) = 0.032 MGD

NOTE: THE CONTRACTOR IS TO VERIFY THE ACTUAL FIELD CONDITIONS OF ALL LOTS AND INSTALL SEWER CHECK VALVES WHERE REQUIRED PER THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.

NOTE

ALL ABOVE GROUND UTILITY APPEARANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.06 AND 19.08

LAS VEGAS FIRE AND RESCUE
FIRE DEPARTMENT
APPROVED

BY: [Signature]
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 1,500 GPM AT 20 P.S.I. RESIDUAL.

FAST
Call before you dig
Underground utility line
1-702-432-5300
or 1-702-227-2929

CALL BEFORE YOU DIG
Underground utility line
1-702-227-2929

Call before you dig
Underground utility line
1-800-227-2600

WATER NOTES:

FOR ALL DRY AND WET UTILITY CROSSING MAINTAIN MINIMUM 12" VERTICAL SEPARATION AT ALL POINTS OF CROSSING. MAINTAIN A MINIMUM 3" PARALLEL SEPARATION. ANY EXCAVATION AT BACK OF CURB MUST REMAIN OPEN FOR INSPECTION OF COPPER SERVICE LATERALS. ANY COPPER SERVICE LATERAL KINKED, BENT OR OTHERWISE DAMAGED MUST BE REPLACED FROM THE MAIN TO THE ANGLE METER STOP.

NOTE: THE DISTRICT CANNOT GUARANTEE A WATER TIGHT SITUATION WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER THAT MAY IMPAIR CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRAIL SHUTDOWN. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPEARANCES ARE AVAILABLE.

NOTE: INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING PER UDACS PLATE NO. 15

NOTE: ALL SEWER/STORM DRAIN CROSSING WATER LINES MUST CONFORM TO SECTION 2.2.2 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.

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, FITTINGS SHALL BE USED.

EXISTING SERVICES: IF ANY OF THE EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE UDACS STANDARDS, AND AT THE DEVELOPER'S EXPENSE.

NOTE: ADJUST WATER VALVE BOXES TO FINISHED GRADE PER UDACS PLATE NO. 39. VALVES SHALL BE ACCESSIBLE AT ALL TIMES.

- ### WATER NOTES
1. INSTALL 8" PVC WATER PIPE (2538 WP2)
 2. REMOVE EXISTING CAP AND BLOW-OFF ASSEMBLY AND CONNECT TO EXISTING WATER PIPE
 3. INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS PER 2009 IFC APPENDIX C, SECT C10.71
 4. INSTALL 8" X 6" TEE PER UDACS PLATE NO. 31
 5. INSTALL 8" X 6" REDUCER PER UDACS PLATE NO. 30
 6. INSTALL 6" PVC WATER PIPE (2538 WP2)
 7. INSTALL FIRE HYDRANT ASSEMBLY W/6" GATE VALVE PER UDACS PLATE NO. 40
 8. INSTALL CAP AND 2" BLOW-OFF VALVE PER UDACS PLATE NO. 36
 9. INSTALL 45 DEGREE BEND PER UDACS PLATE NO. 31
 10. INSTALL 1 DEGREE MAXIMUM VERTICAL JOINT DEFLECTION PER UDACS SECTION 2.07
 11. INSTALL 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 3
- SEE SHEET C-2 FOR LEGEND, QUANTITIES & ABBREVIATIONS

FIRE FLOW CALCULATIONS

FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL

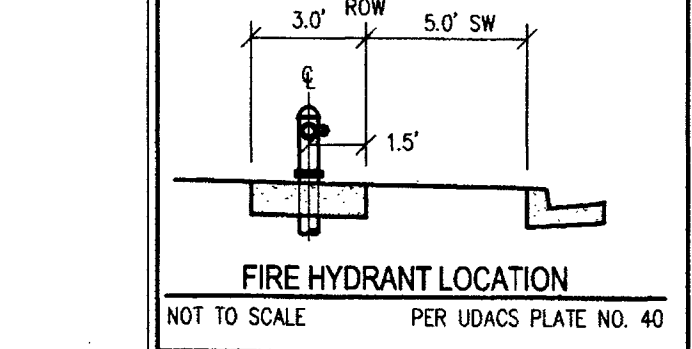
USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V-R
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	2,600
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	1.5
NO OF STORES INCLUDING BASEMENT	2
HIGH PILED COMBUSTIBLE STORAGE	NO
NO OF HYDRANTS INSTALLED	4

BASIS OF BEARING

SOUTH 02°35'41" EAST, BEING THE BEARING OF THE EAST LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 1, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF IN BOOK 148, PAGE 38 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BENCHMARK

BENCHMARK NUMBER 6LV9012N2WMS
RIVET AND PLATE IN TOP OF CURB ON THE SOUTH SIDE OF IRON MOUNTAIN ROAD, 35'± SOUTHEAST OF P.I. OF LEON DRIVE AND IRON MOUNTAIN ROAD.
ELEVATION = 725.053 METERS, 2378.778 US SURVEY FEET
N.A.S.D. 88 DATUM
PER THE CITY OF LAS VEGAS BENCHMARKS, 2008 ADJUSTMENT (UPDATED MAY 24, 2010)



LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
MANAGER
DATE: 9/20/16
PROJECT NO. 124441
LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 P.S.I. RESIDUAL

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5599

CITY OF LAS VEGAS, NEVADA

RICHMOND AMERICAN HOMES

GRANITE FALLS 3-PHASE 2

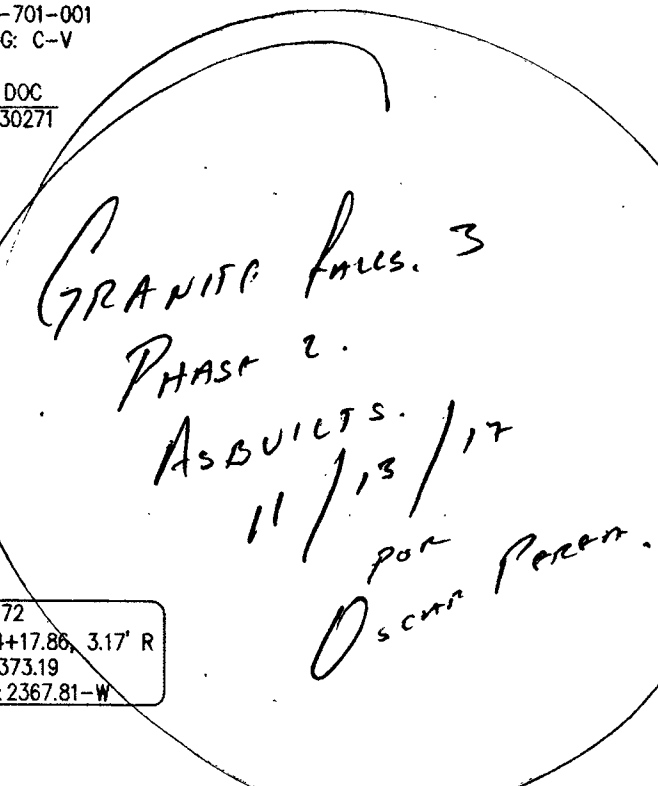
UTILITY PLAN II

DATE: 9/5/16
DRAFTER: JMT
DESIGNER: IG
CHECKED: ARP
PROJECT NO. RAH1322-005

ANGELA R. PINLEY
CIVIL ENGINEER
Exp. 12/31/2017
Professional Seal No. 21375 NV

U-2
SHEET 17 OF 21
10745037-2

\\net1322-005_453\\dwg\\improvements\\phase 2\\net1322-005-ut-ii-ph2.dwg 9/2/2016 11:50 AM Angelle Pinley



PRO.# 724441 AGRE: 153616 OSI:25-01-SW XC 11192
11/10/17 GRANTITE PACS. 3. PHASE 2 ASBUILTS. DEAR PA-