

HUGHES HOWARD COMPANY LLC
APN 137-22-000-015
BK 112 PG 94
DOC#19571260141

PARCEL N
GREYSTONE NEVADA LLC
APN 137-34-313-001
BK 143 PG 47
DOC#2012051100643

HUGHES HOWARD COMPANY LLC
APN 137-34-312-002
BK 121 PG 12
DOC#1991120100141

SLATER
HANFAN
GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216 LAS VEGAS, NV 89118
PHONE (702) 284-5300
FAX (702) 284-5309

LENNAR
ESPERANZA PHASE 2
UTILITY PLAN

DATE: 07/18/2013

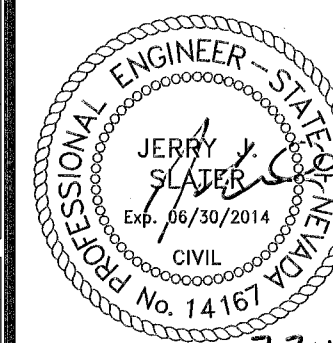
DRAFTER: MH

DESIGNER: BCC

CHECKED: STS

PROJECT NO.

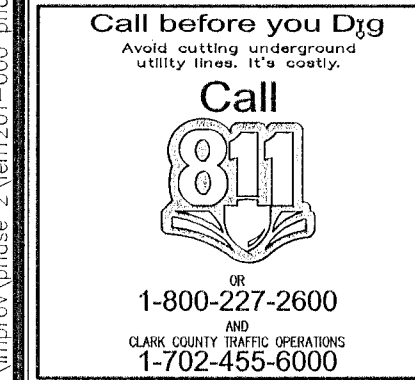
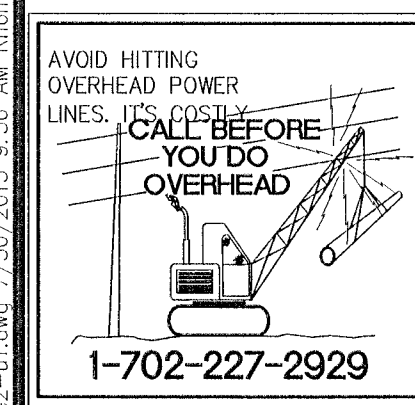
LEN1201.000



U-1
SHEET 7 OF 8

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10715900-2

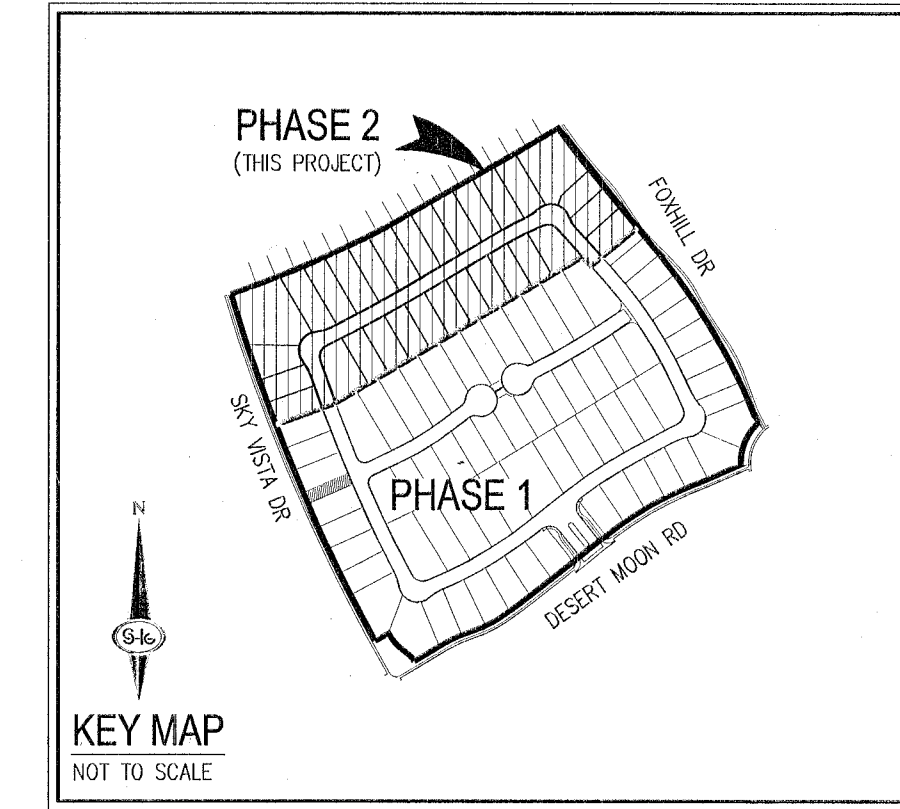
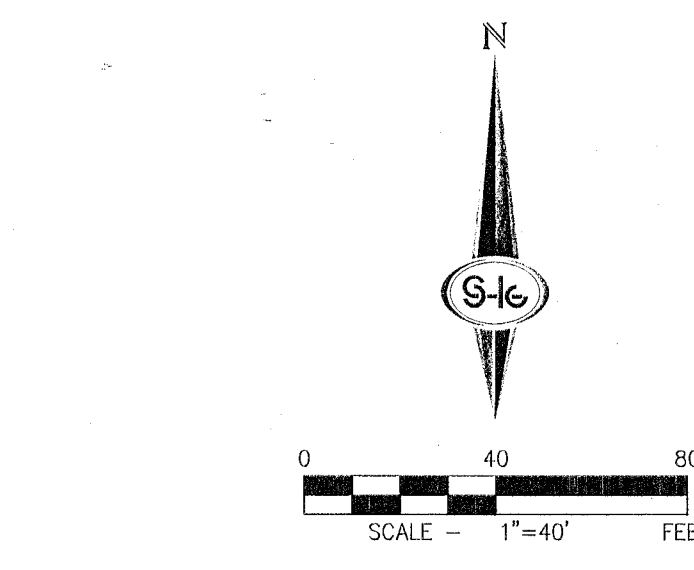
8/1/2013 10:00 am c:\3\project\m\lennar\esperanza\2\len1201-000 phase2-01.dwg 7/20/2013 9:36 AM Ricardo Miller



ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS
(TOTAL FOR PHASES 1 AND 2)
35 UNITS/250 GPD/UNIT=23,750 GPD
TOTAL AVERAGE CONTRIBUTION=0.02375 MGD
TOTAL PEAK FLOW=0.02375 MGD X 3.74 (PEAK FACTOR)
= 0.0889 MGD

FIRE FLOW CALCULATIONS
FIRE FLOW 2,000 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V-B
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	<4,999
LARGEST AREA BETWEEN 4-HR WALLS	N/A
BUILDING HEIGHT	<35
NO. OF STORIES INCLUDING BASEMENT	2
HIGH PILED COMBUSTIBLE STORAGE	NO
NO. OF HYDRANTS INSTALLED	6



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.

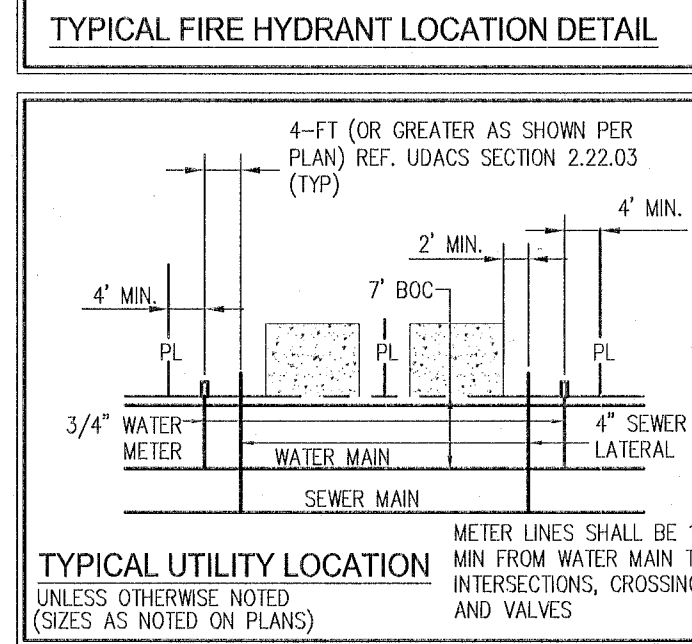
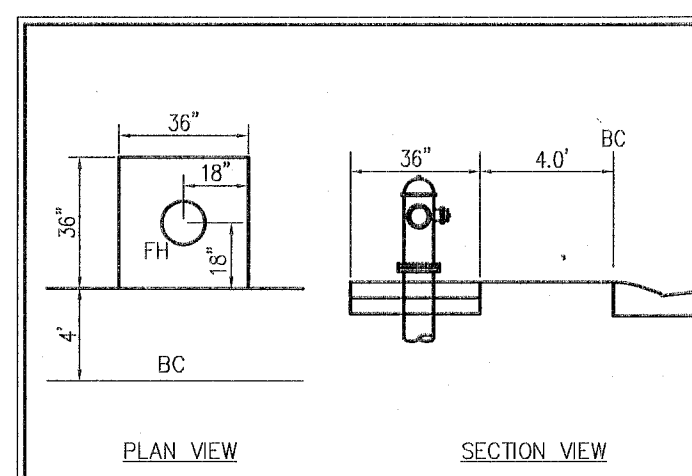
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

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

BENCHMARK
RIVET & PLATE IN TOP OF CURB IN THE SOUTHEAST CORNER OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BASIS OF BEARING
NORTH 05°59'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN BY MAP THEREOF ON FILE IN BOOK 143, PAGE 47 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

ABOVE GROUND UTILITY NOTE
ALL ABOVE GROUND UTILITY SHALL COMPLY WITH TITLE 19.08 UTILITY SCREENING REQUIREMENTS. ALL ABOVE GROUND UTILITIES GREATER THAN 27 CUBIC FEET SHALL BE SETBACK A MINIMUM OF 3 FEET FROM THE BACK OF SIDEWALK AND SHALL INCLUDE VEGETATION THAT UPON MATURITY WILL ADEQUATELY SCREEN SUCH EQUIPMENT FROM PUBLIC VIEWS



ALL ABOVE GROUND UTILITY APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF TITLE 19.12.04

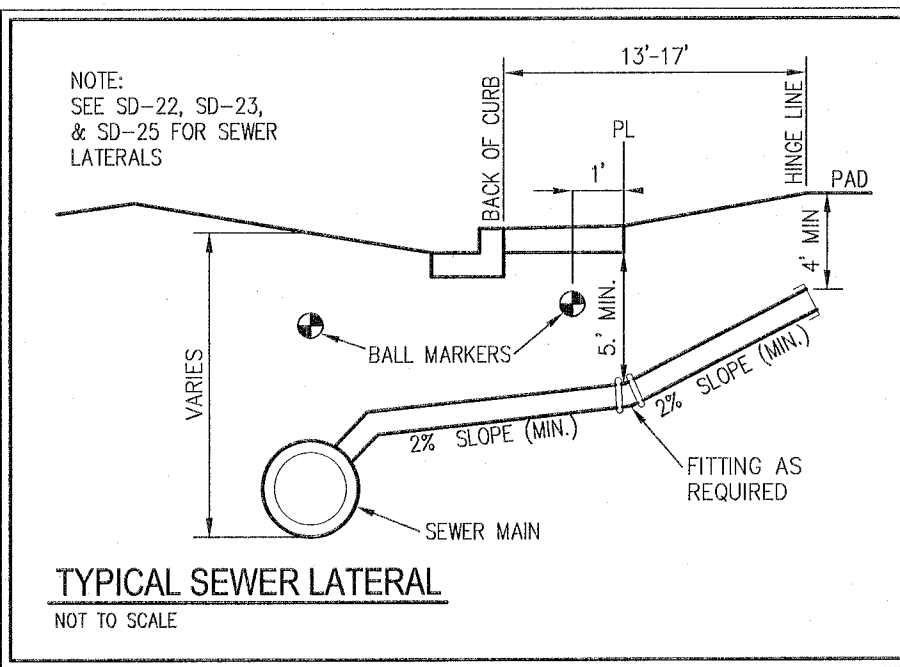
*** SEWER LATERAL CROSSING**
SEWER LATERAL CROSSES WATER MAIN WITH LESS THAN EIGHTEEN (18) INCHES CLEARANCE. (6) INCHES MIN. THE PROVISIONS OF UDACS SECTION 2.22.03.9 SHALL APPLY.

- WATER NOTES**
1. INSTALL 8" PVC (CLASS 150) WATER PIPE
 2. INSTALL 3/4" WATER METER PER UDACS PLATE # 2 (TYP)
 3. REMOVE GAP AND BLOW-OFF PER UDACS PLATE NO. 36, AND CONNECT TO EXISTING MAIN
 4. INSTALL 8" X 6" Tee PER UDACS PLATE # 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE # 40
 5. INSTALL 5' BEND (RESTRAIN BOTH ENDS)
 6. INSTALL 11.25' HORIZONTAL BEND PER UDACS PLATE #31
 7. INSTALL 22.5' HORIZONTAL BEND PER UDACS PLATE #31
 8. INSTALL 45' HORIZONTAL BEND PER UDACS PLATE #31
 9. MAX VERTICAL DEFLECTION PER UDACS SECTION 2.07. SEE SHEETS P-1 AND P-2 FOR PROFILES.

- SEWER NOTES**
- ◇ INSTALL 8" PVC SANITARY SEWER PIPE
 - ◇ INSTALL 48" DIAMETER SANITARY SEWER MAHOLE PER UDACS 30-1A & 30-1B
 - ◇ INSTALL 4" SEWER LATERAL PER SD-22, SD-23, & SD-25
 - ◇ REMOVE EXISTING CAP AND THRUST BLOCK AND CONNECT TO MAHOLE. CONTRACTOR TO VERIFY LOCATION PRIOR TO CONSTRUCTION.
- SEE SHEET C-2 FOR QUANTITIES AND ABBREVIATIONS

DISCLAIMER NOTE
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING 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 IN THEIR PROPER LOCATION.

THIS PROPERTY MAY HAVE STATIC 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. PRVS ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.



- GENERAL NOTES**
1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS), UNDER CLARK COUNTY'S JURISDICTION, THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
 2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN IMA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 622.601.02.
 3. ALL SEWER / STORM DRAINS CROSSING WATER LINES MUST CONFORM TO SECTION 2.22 OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS) FOR WATER AND STORM MAIN CROSSINGS AND CLEARANCES.
 4. 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.
 5. FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

APPROVAL
[Signature]
LAS VEGAS FIRE AND RESCUE
DATE: 7/31/13

APPROVED FOR CONSTRUCTION (1ST APPROVED 12/10/12)
[Signature]
LAS VEGAS-VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. 121983
LVWD APPROVED THE FLOW: 2,000 GPM AT 20 PSI RESIDUAL

SEE COVER
SUMNERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE
DATE: _____

THIS SIGNATURE IS LIMITED TO APPROVAL OF THESE DOCUMENTS FOR CONFORMANCE TO THE DESIGN INTENT OF THE APPLICABLE DESIGN CRITERIA. NEITHER SUMNERLIN NOR THE SUMNERLIN RESIDENTIAL DESIGN REVIEW COMMITTEE ASSUMES RESPONSIBILITY FOR PLAN CONFORMANCE WITH APPLICABLE LAWS, ORDINANCES, AND CODES.