

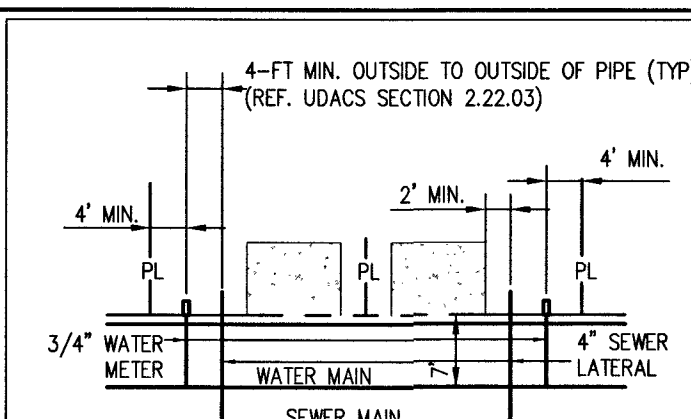
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GENERAL NOTES

- 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.
- IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR WILL HIRE AN INCA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.6.01.02.
- 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.
- WATER LINES TO BE CONSTRUCTED WITH MINIMUM DEPTH OF COVER AS LISTED IN UDACS SECTION 2.08 AND UDACS PLATES NO. 16 & 17, UNLESS AS SHOWN OTHERWISE ON THE PROFILE.
- 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.
- FITTINGS SHALL NOT FALL UNDER CURBS, GUTTERS OR SIDEWALK.

SEWER CONNECTION NOTE

ONE OR MORE OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.



TYPICAL UTILITY LOCATION
(UNLESS OTHERWISE NOTED
(SIZES AS NOTED ON PLANS)

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

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.

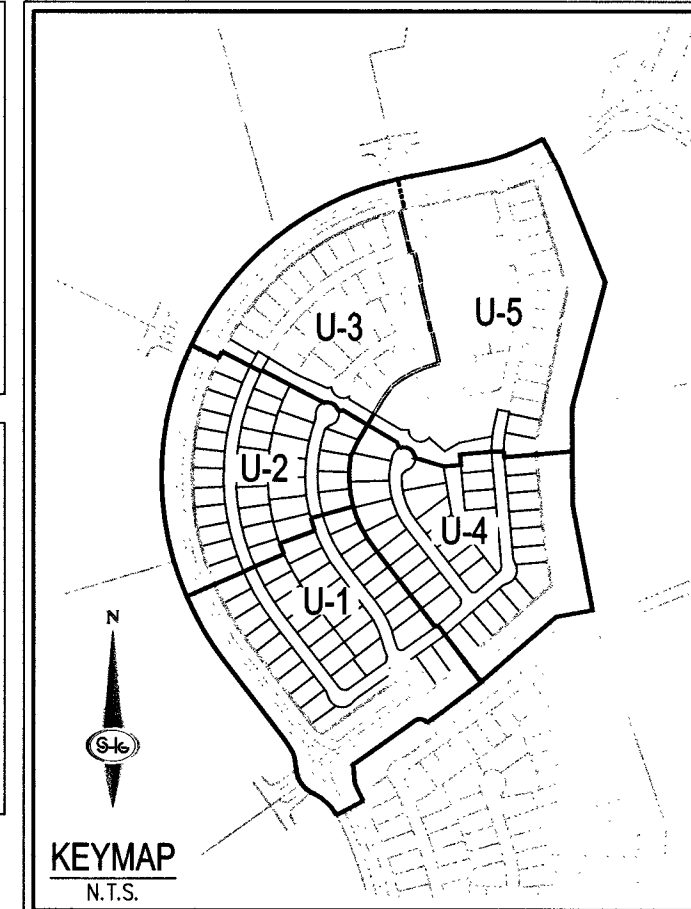
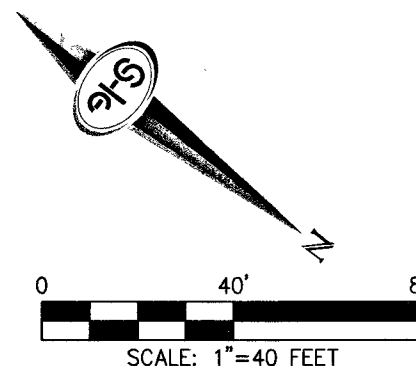
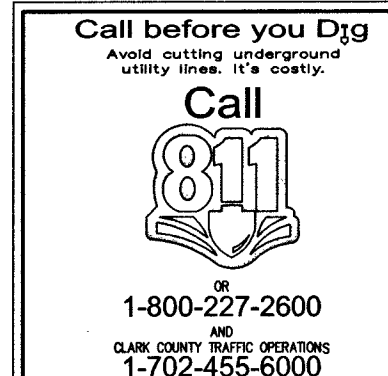
FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

FIRE FLOW CALCULATIONS

FIRE FLOW 2000 GPM AT 20 P.S.I. RESIDUAL

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE V-B
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	<4,000
LARGEST AREA BETWEEN 4-HR WALLS	N/A
BUILDING HEIGHT	<35
NO. OF STORIES INCLUDING BASEMENT	2
UNFILLED COMBUSTIBLE STORAGE	NO
NO. OF HYDRANTS INSTALLED	11

LOTS: 1-19, 52-81, 116-137, 153-169, 173-175
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. PRV'S ARE THE DEVELOPER'S RESPONSIBILITY, AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVWD FACILITIES.



ADDITIONAL SEWER NOTE

ABANDON EXISTING 4" SEWER LATERAL. REMOVE WYE, REPLACE MAIN WITH 8" PVC SEWER AND CONSTRUCT 4" SEWER LATERAL AT NEW LOCATION DOWNS 3.17.1

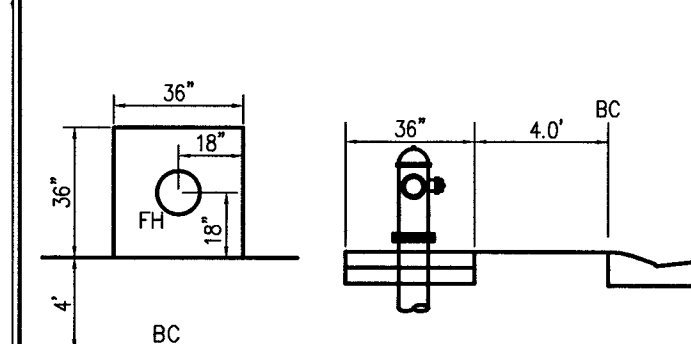
WATER NOTES

- REMOVE EX. CAP AND BLOW-OFF ASSEMBLY AND CONNECT TO EX. 8" DIP WATER PIPE (BY OTHERS)
- INSTALL 8" PVC (CLASS 150) WATER PIPE
- INSTALL 3/4" WATER METER PER UDACS PLATE # 2 (TYP)
- INSTALL 8" x 8" CROSS WITH THRUST BLOCKS PER UDACS PLATE # 31
- INSTALL 8" x 8" TEE WITH THRUST BLOCKS PER UDACS PLATE # 31
- INSTALL 8" x 8" TEE PER UDACS PLATE # 31 AND FIRE HYDRANT ASSEMBLY WITH 6" GATE VALVE PER UDACS PLATE # 40
- INSTALL CAP AND 2" BLOWOFF VALVE PER UDACS PLATE # 38
- INSTALL 5' HORIZONTAL BEND (RESTRAIN BOTH ENDS)
- INSTALL 45' BEND PER UDACS PLATE #31
- INSTALL 22.5' BEND PER UDACS PLATE #31
- INSTALL 90' HORIZONTAL BEND PER UDACS PLATE #31
- 1" MAX. DEFLECTION (VERTICAL)
- INSTALL 1" IRRIGATION METER PER UDACS PLATE NO. 4 WITH BACKFLOW PREVENTION ASSEMBLY PER UDACS PLATE NO. 8 W/ 8" x 4" WYE (TYPICAL)
- SLEEVES
- INSTALL 6" PVC (CLASS 150) WATER PIPE
- INSTALL 8"x6" REDUCER
- INSTALL 1" WATER METER PER UDACS PLATE NO. 4
- REMOVE CAP AND BLOW OFF PER UDACS PLATE NO. 36 AND CONNECT TO EXISTING MAIN
- INSTALL 11.25' HORIZONTAL BEND PER UDACS PLATE #31
- INSTALL 45' VERTICAL BEND PER UDACS PLATE #31
- REMOVE CAP AND BLOWOFF PER UDACS PLATE NO. 36 AND CONNECT TO EXISTING MAIN
- INSTALL 8" x 6" TEE PER UDACS PLATE # 31 WITH 6" GATE VALVE
- INSTALL 8" DIP (CLASS 50) WATER PIPE
- 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39

SEWER NOTES

- INSTALL 8" PVC SANITARY SEWER PIPE
- INSTALL 48" DIAMETER SANITARY SEWER MANHOLE PER UDACS SD-1A & SD-1B
- INSTALL 4" SEWER LATERAL PER SD-22, SD-23, & SD-25 W/ 8" x 4" WYE (TYPICAL)
- STUB AND CAP 8" SS (WITH THRUST BLOCK PER DETAIL ON SHEET U-1)
- CONNECT TO SANITARY SEWER MANHOLE (BY OTHERS)
- DROP INLET NOTE: CAST-IN-PLACE MONOLITHIC POUR WITH WATER STOP BETWEEN SLOPE AND WALLS. BASE OF SLOPE AND TOP TO BE CONSTRUCTED WITH WATER STOPS, CENTER BUILD, OR PLAT STOPS (VINYLEX, GREENBREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

SEE SHEET C-2 FOR QUANTITIES AND ABBREVIATIONS



TYPICAL FIRE HYDRANT LOCATION DETAIL

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 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 IN THEIR PROPER LOCATION.

INTERSECTION DATA

ELDER MEW ST STA 10+00.00=
ARTWOOD AVE STA 10+00.00
ARTWOOD AVE STA 124+27.74=
CALGROVE ST STA 13+01.34
ARTWOOD AVE STA 15+60.53=
OAKRUN CT STA 10+00.00
ARTWOOD AVE STA 17+25.27=
HIGHSRING ST STA 10+00.00

APPROVAL
[Signature]
LAS VEGAS FIRE AND RESCUE

DATE
3/24/14

APPROVED FOR CONSTRUCTION

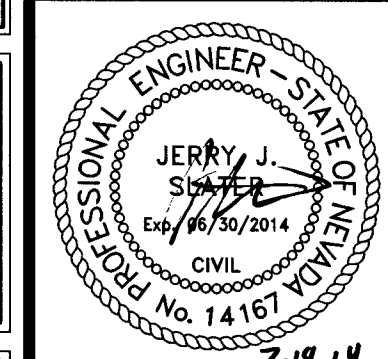
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LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE
PROJECT NO. 122268
LVWD APPROVED FIRE FLOW 2,000 GPM AT 20 PSI RESIDUAL

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5389

NO.	DATE	BY	APPROVED	DESCRIPTION
1	REVISION	LOT 52 ONLY		RELOCATE SWR LAL
2	REVISION	STREET NAME		

LENNAR
CITY OF LAS VEGAS
DELANO - PHASE 1
UTILITY PLAN V

DATE: 03/18/14
DRAFTER: BCC
DESIGNER: BCC
CHECKED: STS
PROJECT NO.
LEN1303.000



U-5
SHEET 24 OF 25