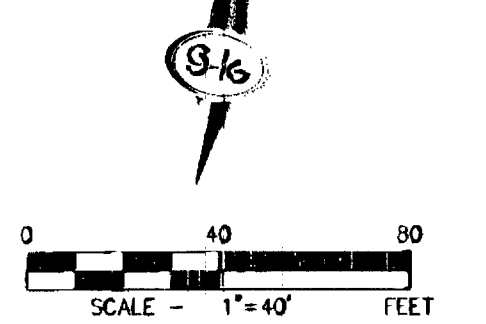
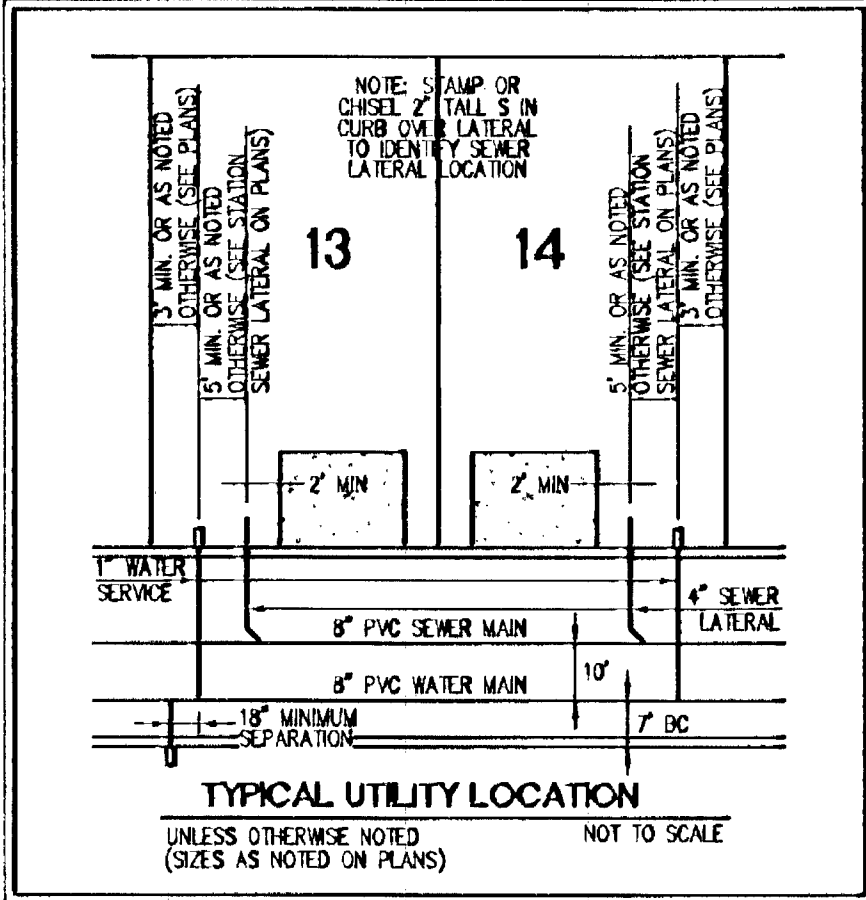
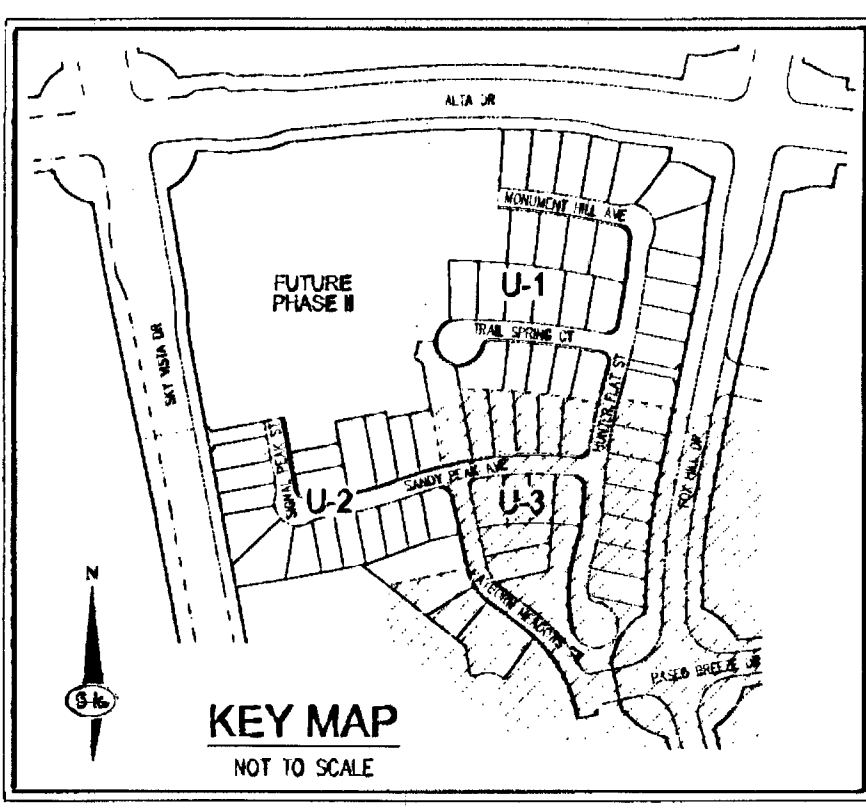


EXISTING SERVICES
 IF ANY OF THE EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE LOCAL STANDARDS AND AS PER DEVELOPER'S LICENSE.

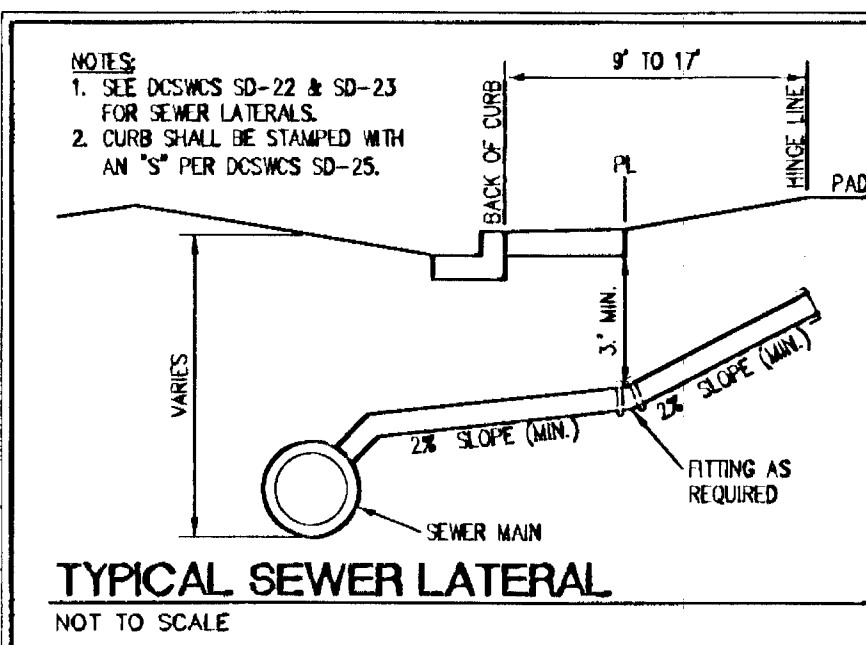


- WATER NOTES**
- 1" 8" PVC WATER PIPE (2745 WP2)
 - 2" 8" PVC WATER PIPE (2745 WP2)
 - 3" 8" DIP WATER PIPE (CLASS S3)
 - 4" 8" X 8" TEE PER UDACS PLATE NO. 31
 - 5" 8" X 8" TEE PER UDACS PLATE NO. 31
 - 6" 8" X 8" REDUCER PER UDACS PLATE NO. 31
 - 7) 5 DEGREE BEND WITH RESTRAINED JOINTS
 - 8) 11.25 DEGREE BEND PER UDACS PLATE NO. 31
 - 9) 22.5 DEGREE BEND PER UDACS PLATE NO. 31
 - 10) 45 DEGREE BEND PER UDACS PLATE NO. 31 (SEE PROFILE FOR STATION OF VERTICAL BENDS)
 - 11) 90 DEGREE BEND PER UDACS PLATE NO. 31
 - 12) 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 38
 - 13) 8" AND 2" 8" ELBOW VALVE PER UDACS PLATE NO. 38
 - 14) FIRE HYDRANT ASSEMBLY W/8" GATE VALVE PER UDACS PLATE NO. 40
 - 15) INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS
 - 16) 1" COPPER SERVICE W/ 3/4" METER PER UDACS PLATE NO. 2
 - 17) 1" COPPER SERVICE W/ 3/4" SPRINKLER METER AND 1" REPAIR PER UDACS PLATE NO. 4 & 9
 - 18) COPPER SERVICE W/ 1" METER PER UDACS PLATE NO. 4
 - 19) FIELD VERIFY LOCATION, CUT, AND CONNECT TO EXISTING WATER
 - 20) 1 DEGREE MAXIMUM JOINT DEFLECTION PER UDACS SECTION 2.07
 - 21) POINT OF CURVATURE OF WATER MAIN USING 1" JOINT DEFLECTIONS PER UDACS SECTION 2.07.01
 - 22) INSTALL 2 - 4" IRRIGATION SLEEVES
 - 23) INSTALL PVC TO DIP COUPLER



- SEWER NOTES**
- 1" 8" PVC SANITARY SEWER PIPE
 - 2" 8" C-900 WATER QUALITY SANITARY SEWER PIPE
 - 3" 48" DIAMETER SANITARY SEWER MANHOLE WITH PRECAST BASE PER UDACS SD-1A
 - 4" 8" SANITARY SEWER CAP (SEE DETAIL 19 SHEET FOR TRUSS BLOCK DETAIL)
 - 5" FIELD VERIFY AND CONNECT TO EX STUB
 - 6" INSTALL 4" SANITARY SEWER LATERAL, PLUG AND 4"x4" POST PER UDACS SD-22
 - 7" INSTALL 4" SANITARY SEWER LATERAL, PLUG AND 4"x4" POST PER UDACS SD-22 AND SD-25
 - 8" VERIFY DEWATER EASEMENT TO BE PRIVATELY MAINTAINED
 - 9" SEE SHEET C-2 FOR LEGEND, ABBREVIATIONS AND QUANTITIES

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.



MH# TABLE

16	C-8 ⁵⁰ TO RIM
6	C-8 ⁴⁵ TO RIM
1	C-12 ⁴⁵ TO RIM
2	C-7 ¹⁰ TO RIM
3	C-7 ³⁰ TO RIM
4	C-8 ³⁰ TO RIM
15	C-7 ³⁵ TO RIM

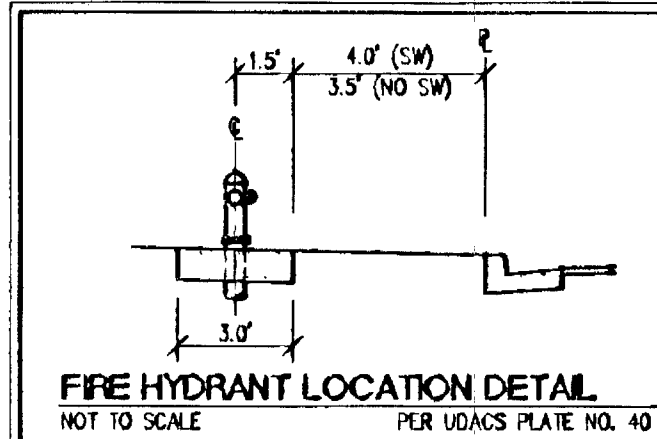
* UNSTRICT SANITARY SEWER LATERAL WITH 0.90 PVC

Call before you Dig
 Avoid hitting underground utility lines.
Call 811
 1-800-227-2600
 CLARK COUNTY TRAFFIC OPERATIONS
 1-702-455-6000

Call before you do UnderGround
 Avoid hitting underground traffic signal systems and street light system conduits. IT'S COSLY.
Call before you do UnderGround
 1-702-455-6000
 CLARK COUNTY TRAFFIC OPERATIONS
 1-702-432-5300
 TRAFFIC AND SIGNAL SYSTEMS OF TRANSPORTATION

AVOID HITTING OVERHEAD POWER LINES. IT'S COSLY.
CALL BEFORE YOU DO OVERHEAD
 1-702-227-2929

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



BENCHMARK
 BENCHMARK PLATE IN TOP OF CURB IN THE SOUTHWEST CORNER OF DESERT MOON ROAD & DESERT SUNRISE ROAD, ALVAD4545454
 NAVD 88 ELEV = 1008.289 METERS = 3301.47 FEET

BASS OF BEARING
 NORTH 05°50'55" WEST, BEING THE BEARING OF THE WEST LINE OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 59 EAST, W.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.

FIRE FLOW CALCULATIONS
 FIRE FLOW REQUIREMENT IS 1,250 GALLONS PER MINUTE AT 2.0 P.S.I. RESIDUAL PRESSURE.

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (IBC)	TYPE Y
AUTOMATIC FIRE SPRINKLERS	NO
SQUARE FOOTAGE	<5000
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	2
NO OF STORIES INCLUDING BASEMENT	2
HIGH PILED COMBUSTIBLE STORAGE	NO
NO OF HYDRANTS INSTALLED	3

- GENERAL NOTES**
1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS) UNDER CLARK COUNTY'S JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR WORKED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL 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 ISA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 823.G.01.02
 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, OUTLETS OR SIDEWALK.

APPROVAL

 LAS VEGAS FIRE AND RESCUE
 DATE: 10/18/12

APPROVED FOR CONSTRUCTION

 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE: 10/31/12 PROJECT NO. 117428
 LVWD APPROVED FLOW: 1,250 GPM AT 2.0 PSI RESIDUAL
 SUMMERLIN

USE/OCCUPANCY: SINGLE FAMILY
 TYPE OF CONSTRUCTION (IBC): TYPE Y
 AUTOMATIC FIRE SPRINKLERS: NO
 SQUARE FOOTAGE: <5000
 LARGEST AREA BETWEEN 4 HOUR WALLS: N/A
 BUILDING HEIGHT: 2
 NO OF STORIES INCLUDING BASEMENT: 2
 HIGH PILED COMBUSTIBLE STORAGE: NO
 NO OF HYDRANTS INSTALLED: 3

WATER MAIN LINE TABLE

LINE	SIZE & MATERIAL	LENGTH	BEARING
W1	8" DIP WATER PIPE (2745 WP2)	5.87	N77°47'00"E
W2	8" DIP WATER PIPE (2745 WP2)	35.02	N77°47'00"E
W3	8" DIP WATER PIPE (2745 WP2)	48.80	N121°30'00"W
W4	8" DIP WATER PIPE (2745 WP2)	2.48	N121°30'00"W
W5	8" DIP WATER PIPE (2745 WP2)	24.00	N121°30'00"W
W6	8" DIP WATER PIPE (2745 WP2)	7.00	N121°30'00"W
W7	8" DIP WATER PIPE (2745 WP2)	6.53	N77°47'00"E
W8	8" DIP WATER PIPE (2745 WP2)	28.25	N77°47'00"E
W9	8" DIP WATER PIPE (2745 WP2)	7.17	N77°47'00"E
W10	8" DIP WATER PIPE (2745 WP2)	48.00	N77°47'00"E
W11	8" DIP WATER PIPE (2745 WP2)	43.84	N77°47'00"E
W12	8" DIP WATER PIPE (2745 WP2)	28.60	N121°10'00"W
W13	8" DIP WATER PIPE (2745 WP2)	2.30	N121°10'00"W
W14	8" DIP WATER PIPE (2745 WP2)	24.19	N121°10'00"W
W15	8" DIP WATER PIPE (2745 WP2)	2.20	N121°10'00"W
W16	8" DIP WATER PIPE (2745 WP2)	5.70	N121°10'00"W
W17	8" DIP WATER PIPE (2745 WP2)	15.88	N121°10'00"W
W18	8" DIP WATER PIPE (2745 WP2)	13.98	N33°15'42"W

* LENGTHS SHOW THE LINEAR LENGTHS. SEE PROFILES FOR ACTUAL PIPE SEGMENT LENGTHS IN LOWERED SECTIONS

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

Woodside Homes
 BETTER BY DESIGN
 ANDORRA & CASTILLE - PHASE 1
 22 - UTILITY PLAN III

DATE: 10/17/12
 DRAFTER: DSP
 DESIGNER: DSP
 CHECKED: CAL
 PROJECT NO. WSH1105-001

 COREY A. MEBER
 CIVIL ENGINEER
 10/17/12
 U-3
 SHEET 22 OF 25
 107V49882-1