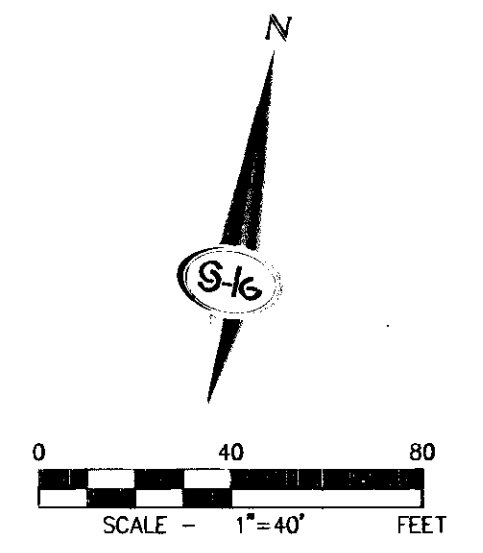
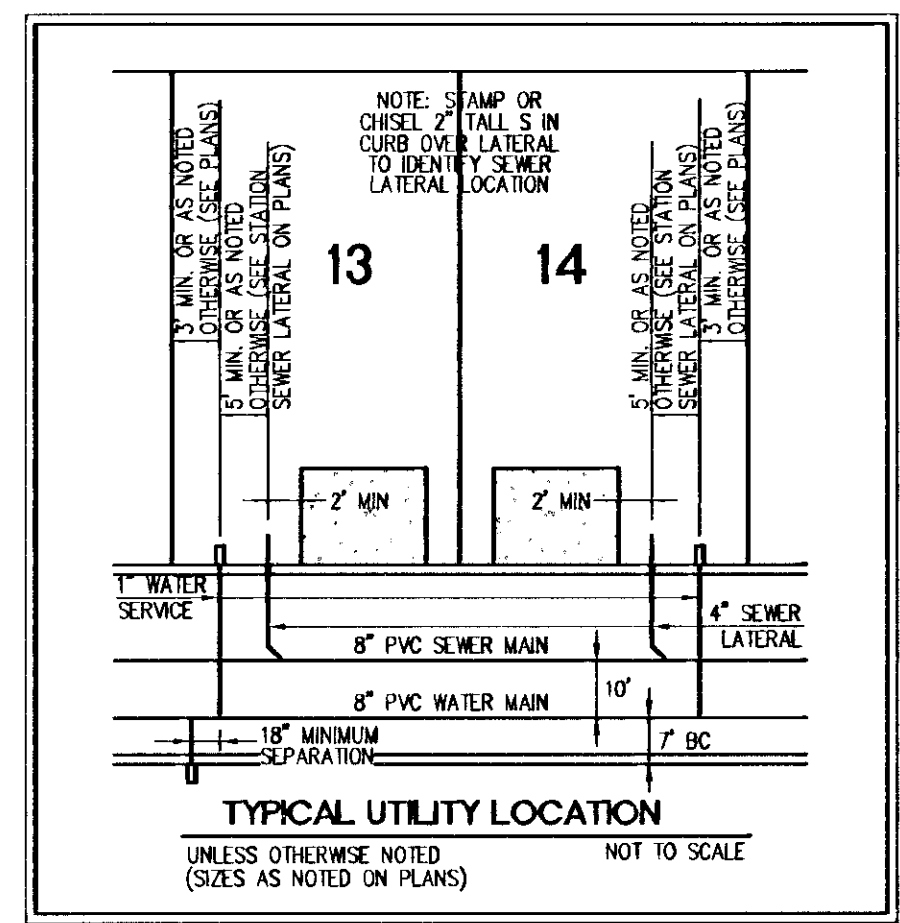
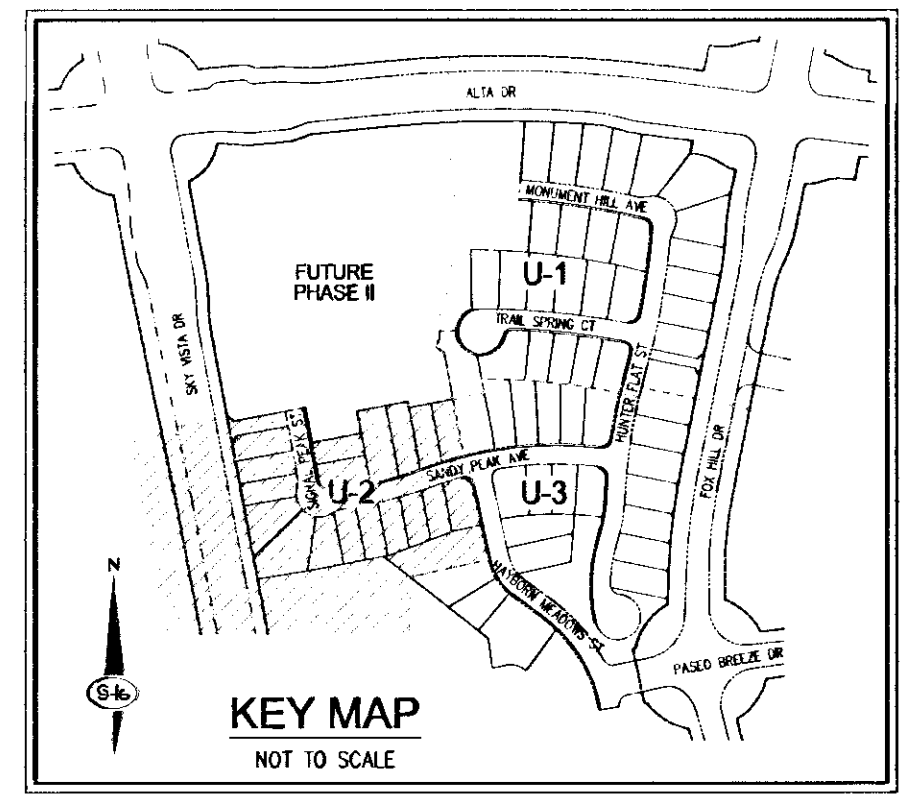


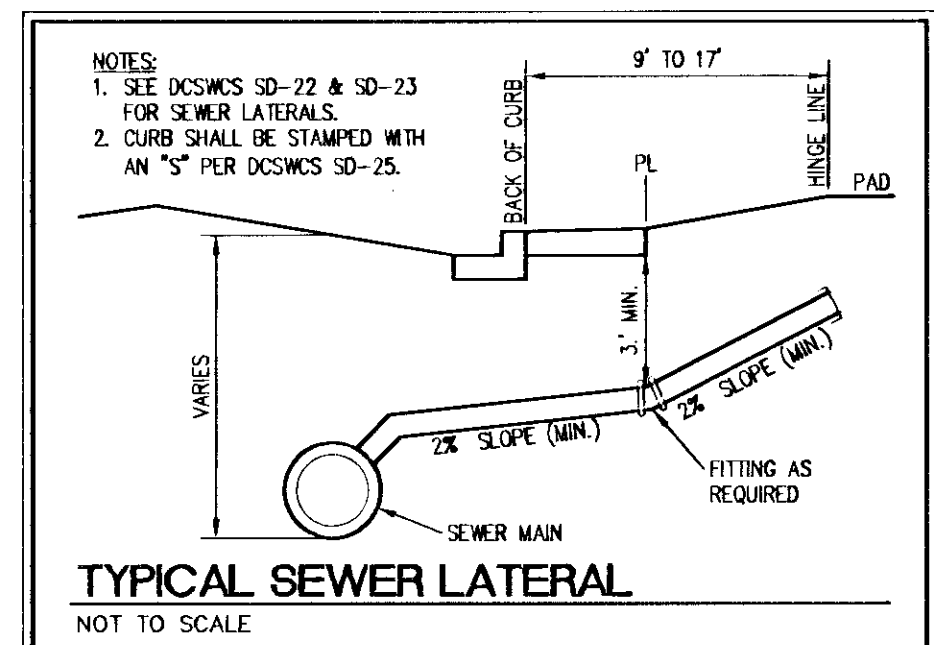
EXISTING SERVICES
 IF ANY OF THE EXISTING SERVICES ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON, THE DEVELOPER SHALL ABANDON THE LATERALS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH THE UDAC'S STANDARDS, AND AT THE DEVELOPER'S EXPENSE.



- WATER NOTES**
- 1" 8" PVC WATER PIPE (2745 WP2)
 - 2" 8" PVC WATER PIPE (2745 WP2)
 - 3" 8" DIP WATER PIPE (CLASS 53)
 - 4" 8" x 8" TEE PER UDAC'S PLATE NO. 31
 - 5" 8" x 8" TEE PER UDAC'S PLATE NO. 31
 - 6" 8" x 8" REDUCER PER UDAC'S PLATE NO. 31
 - 7 5 DEGREE BEND WITH RESTRAINED JOINTS
 - 8 11.25 DEGREE BEND PER UDAC'S PLATE NO. 31
 - 9 22.5 DEGREE BEND PER UDAC'S PLATE NO. 31
 - 10 45 DEGREE BEND PER UDAC'S PLATE NO. 31 (SEE PROFILE FOR STATION OF VERTICAL BENDS)
 - 11 90 DEGREE BEND PER UDAC'S PLATE NO. 31
 - 12 8" GATE VALVE WITH VALVE BOX PER UDAC'S PLATE NO. 30 & 39
 - 13 CAP AND 2" BLOW-OFF VALVE PER UDAC'S PLATE NO. 36
 - 14 FIRE HYDRANT ASSEMBLY W/ 6" GATE VALVE PER UDAC'S PLATE NO. 40
 - 15 INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS
 - 16 1" COPPER SERVICE W/ 3/4" METER PER UDAC'S PLATE NO. 30 & 39
 - 17 1" COPPER SERVICE W/ 1" IRRIGATION METER AND 1" RPPA PER UDAC'S PLATE NO. 4 & 8 (BRASS BETWEEN METER AND RPPA)
 - 18 1" COPPER SERVICE W/ 1" METER PER UDAC'S PLATE NO. 4
 - 19 FIELD VERIFY LOCATION, CUT, AND CONNECT TO EXISTING WATER
 - 20 1 DEGREE MAXIMUM JOINT DEFLECTION PER UDAC'S SECTION 2.07.01
 - 21 POINT OF CURVATURE OF WATER MAIN USING 1" JOINT DEFLECTIONS PER UDAC'S SECTION 2.07.01
 - 22 INSTALL 2 - 4" DIP COUPLER
 - 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 HANDBOIL WITH PRECAST BASE PER UDAC'S SD-1A
 - 4 4" SANITARY SEWER CAP (SEE DETAIL 19 SHEET D-2 FOR THRUST BLOCK DETAIL)
 - 5 FIELD VERIFY AND CONNECT TO EX STUB
 - 6 INSTALL 4" SANITARY SEWER LATERAL, PLUG AND 4"x4" POST PER UDAC'S SD-22
 - 7 INSTALL 4" SANITARY SEWER LATERAL, PLUG AND 4"x4" POST PER UDAC'S SD-22 AND SD-25
 - 8 PUBLIC DRAINAGE EASEMENT TO BE PRIVATELY MAINTAINED
- 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.



REDUCED PRESSURE PRINCIPLE ASSEMBLY
 APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDAC'S PLATE NO. 8. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWMD. 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 THE ADJACENT RIGHT-OF-WAY. EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

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 UDAC'S 2.07.01 AND 2.07.02.

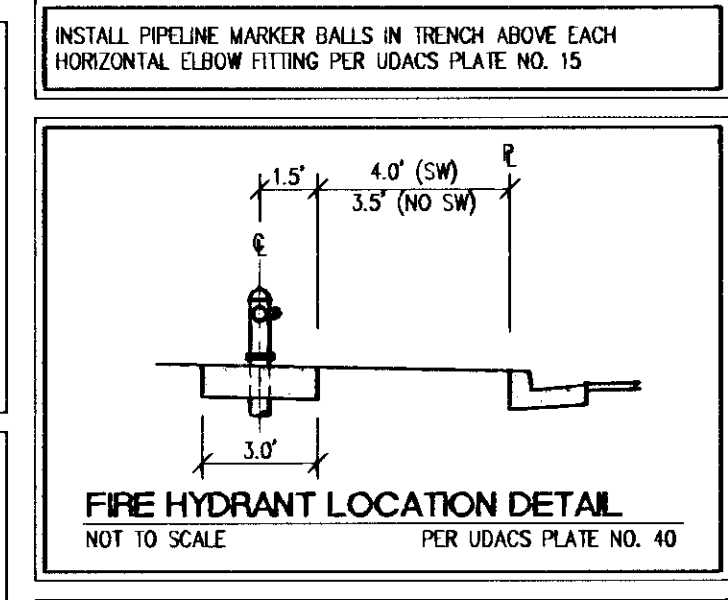
GENERAL NOTES

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 MSA LEVEL II ELECTRICAL CONTRACTOR TO MAKE REPAIRS PER UNIFORM SPECIFICATION NO. 623.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, GUTTERS OR SIDEWALK.

Call before you Dig
 Call 811
 1-800-227-2600
 CLARK COUNTY TRAPEZOIDAL OPERATIONS
 1-702-455-6000

Call before you do UnderGround
 1-702-455-6000
 CLARK COUNTY TRAPEZOIDAL OPERATIONS
 1-702-432-5300
 FREEWAY AND AIRTEL SYSTEM OF TRANSPORTATION

CALL BEFORE YOU DO OVERHEAD
 1-702-227-2929



BENCHMARK
 RIVET & PLATE IN TOP OF CURB IN THE SOUTHEAST CORNER OF DESERT MOON ROAD & DESERT SUNRISE ROAD, 7100345496A
 NAVD 88 ELEV = 1006.289 METERS = 3301.47 FEET

BASIS OF BEARING
 NORTH 02°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.

FIRE FLOW CALCULATIONS
 FIRE FLOW REQUIREMENT IS 1,750 GALLONS PER MINUTE AT 20 P.S.I. RESIDUAL PRESSURE.

| | |
|-----------------------------------|---------------|
| USE/OCCUPANCY | SINGLE FAMILY |
| TYPE OF CONSTRUCTION (IBC) | TYP. V |
| AUTOMATIC FIRE SPRINKLERS | NO |
| SQUARE FOOTAGE | <4800 |
| LARGEST AREA BETWEEN 4 HOUR WALLS | N/A |
| BUILDING HEIGHT | <55 |
| NO. OF STORES INCLUDING BASEMENT | 2 |
| HIGH PILED COMBUSTIBLE STORAGE | NO |
| NO. OF HYDRANTS INSTALLED | 3 |

ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS

68 UNITS X 250 GPD/UNIT = 16,500 GPD
 TOTAL AVERAGE CONTRIBUTION = 16,500 GPD = 0.0165 MGD
 TOTAL PEAK FLOW = 0.0165 MGD X 3.5 (PEAK FACTOR) = 0.05775 MGD

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS
 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
 PHONE (702) 284-5500
 FAX (702) 284-5399

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

Woodside Homes
 BETTER BY DESIGN
ANDORRA & CASTILLE - PHASE 1
21 - UTILITY PLAN II

APPROVED FOR CONSTRUCTION

Corey A. Eber
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE 10/31/12 PROJECT NO. 117428
 LVWMD APPROVED FIRE FLOW 1,750 GPM AT 20 PSI RESIDUAL

APPROVED FOR CONSTRUCTION

Corey A. Eber
 CIVIL ENGINEER
 No. 15875
 Exp. 12/31/2015

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

U-2
 SHEET 21 OF 25

20130686