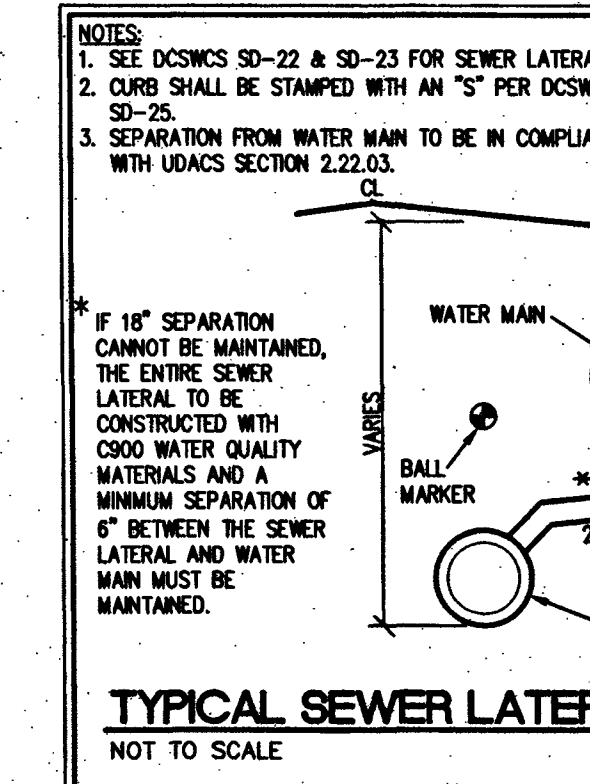


- ### GENERAL NOTES
1. REPLACE ALL TRAFFIC CONTROL DEVICES (SIGNS AND/OR PAVEMENT MARKINGS) UNDER CLARK COUNTY'S JURISDICTION THAT ARE DISTURBED, DESTROYED, MOVED OR MODIFIED BY TRENCHING ACTIVITIES TO CLARK COUNTY'S SATISFACTION. ALL MATERIAL USED SHALL MEET CLARK COUNTY'S SPECIFICATIONS OR WILL BE AN APPROVED EQUIVALENT.
 2. IN THE EVENT THAT THE TRAFFIC SIGNAL CONDUITS, LOOP DETECTORS OR ASSOCIATED EQUIPMENT ARE DAMAGED BY CONTRACTOR, THE CONTRACTOR SHALL 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 2.2.2 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.

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

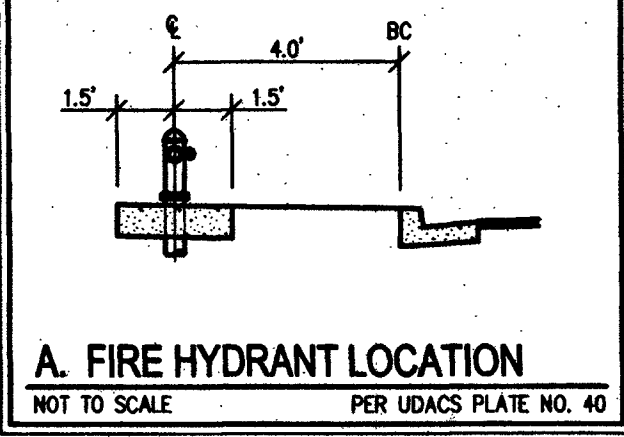
ESTIMATED AVERAGE DAILY SEWER CONTRIBUTIONS

8 UNITS X 250 GPD/UNIT = 2,000 GPD = 0.0020 MGD
 TOTAL PEAK FLOW = 0.0020 X 3.62 (PEAK FACTOR) = 0.00724 MGD

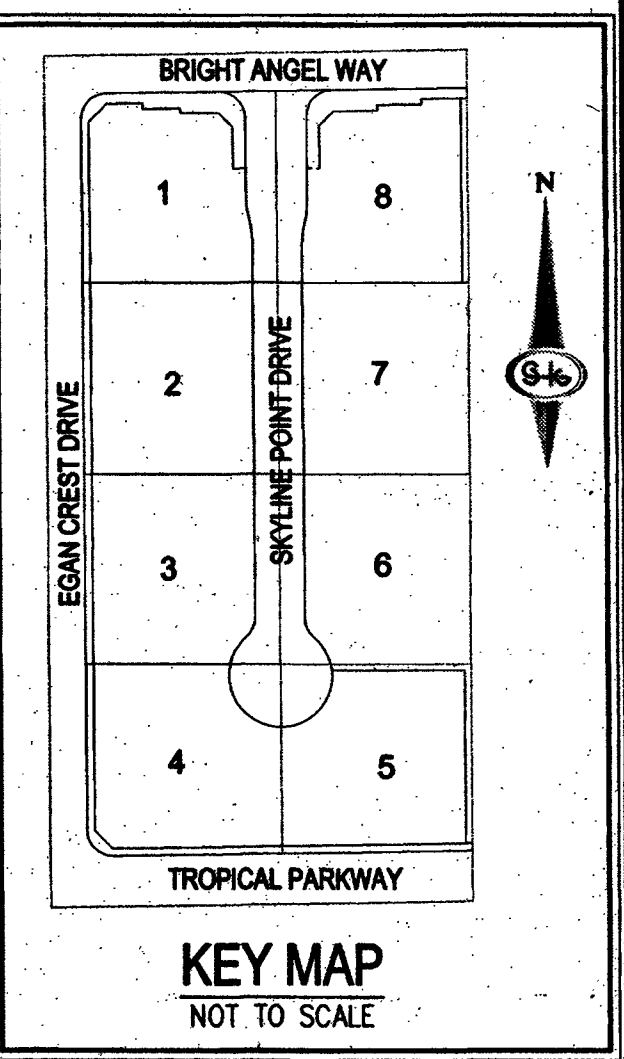


NOT TO SCALE

- ### LEGEND
- ROADWAY CENTERLINE
 - RIGHT-OF-WAY
 - LOT LINE
 - CURB AND GUTTER
 - EASEMENT LINE
 - WATER PIPE FITTING
 - WATER GATE VALVE
 - FIRE HYDRANT
 - REFLECTIVE RAISED PAVEMENT MARKERS
 - SANITARY SEWER MANHOLE
 - SANITARY SEWER FLOW DIRECTION
 - POINT OF CONNECTION
 - STREETLIGHT



- ### SEWER NOTES
- 1. INSTALL 48" DIAMETER SANITARY SEWER MANHOLE WITH PRECAST BASE PER DCSWCS SD-1A, SD-1B AND SD-1.
 - 2. INSTALL 60" DIAMETER SANITARY SEWER MANHOLE WITH PRECAST BASE PER DCSWCS SD-1A, SD-1B AND SD-1 AND CORROSION PROTECTION PER DCSWCS 3.16.8.
 - 3. INSTALL 6" PVC SANITARY SEWER PIPE PER DCSWCS SD-22.
 - 4. FIELD VERIFY AND CONNECT TO EXISTING SEWER.
 - 5. INSTALL 4" PVC SANITARY SEWER PIPE PER DCSWCS SD-22.
 - 6. INSTALL 4" CPVC SANITARY SEWER PIPE PER DCSWCS SD-22.
 - 7. INSTALL CONCRETE ENCASUREMENT PER DCSWCS SD-22.



- ### WATER NOTES
1. INSTALL 8" PVC WATER PIPE PER UDACS PLATE NO. 17 (2975 WF2)
 2. INSTALL 6" WATER JOINT PER UDACS PLATE NO. 17 (2975 WF2)
 3. INSTALL 1" MAXIMUM JOINT DEFLECTION PER UDACS SECTION 2.07
 4. INSTALL 8" X 4" REDUCER PER UDACS PLATE NO. 30
 5. INSTALL CAP AND 2" BLOW-OFF VALVE PER UDACS PLATE NO. 30
 6. INSTALL FIRE HYDRANT ASSEMBLY W/ 3/4" GATE VALVE PER UDACS PLATE NO. 40 (SEE DETAIL A SHEET 14-1)
 7. INSTALL 1" COPPER SERVICE LATERAL W/ 3/4" METER PER UDACS PLATE NO. 2
 8. INSTALL 1" COPPER SERVICE LATERAL W/ 3/4" BRIGATION METER AND 1" RPPA PER UDACS PLATE NO. 4 & 8 (BRASS BETWEEN METER & RPPA)
 9. INSTALL BLUE REFLECTIVE RAISED PAVEMENT MARKERS PER 2009 IFC APPENDIX C, SECT C107.1
 10. REMOVE EXISTING CAP AND BLOW-OFF PER UDACS PLATE 30 AND CONNECT TO EXISTING WATER MAIN
 11. FIELD VERIFY LOCATION AND CONNECT TO EXISTING WATER
 12. INSTALL 8" TEE PER UDACS PLATE NO. 31
 13. INSTALL 8" GATE VALVE WITH VALVE BOX PER UDACS PLATE NO. 30 & 39
 14. INSTALL 10" X 8" REDUCER PER UDACS PLATE NO. 30

FIRE FLOW CALCULATIONS

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

USE/OCCUPANCY	SINGLE FAMILY
TYPE OF CONSTRUCTION (BC)	TYPE V-B
SQUARE FOOTAGE	67,700
LARGEST AREA BETWEEN 4 HOUR WALLS	N/A
BUILDING HEIGHT	2.5
NO OF STORIES INCLUDING BASEMENT	2
FIRE SPRINKLER (NFPA 13D)	YES (LOTS 1-8)
NO OF HYDRANTS INSTALLED	0

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 MUST BE USED.

REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1" APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS 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 LVWD. 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.

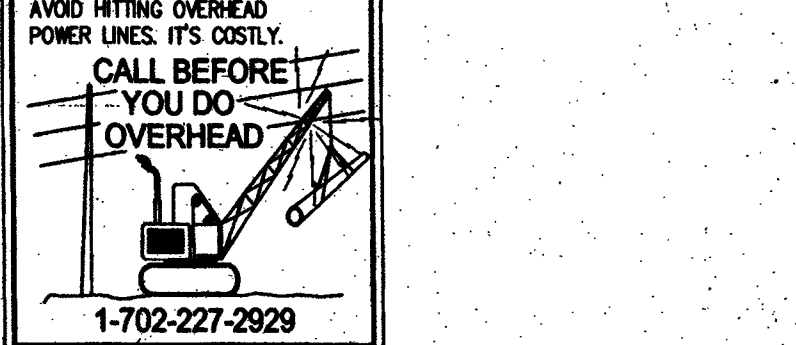
BASIS OF BEARING

SOUTH 85°32'27" WEST, BEING THE BEARING OF THE NORTH LINE OF THE SOUTHWEST QUARTER (SE1/4) OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 25, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY NEVADA, AS SHOWN BY MAP THEREOF ON FILE 180, PAGE 62 OF SURVEYS IN THE CLARK COUNTY RECORDER'S OFFICE, NEVADA.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK NUMBER: 6199 2968
 BENCH AND PLATE IN A CONCRETE TELEPHONE VAULT IN THE NORTHWEST CORNER OF EGAN CREST WAY AND TROPICAL PARKWAY, 52' NORTHWEST OF P.C. POINT
 ELEVATION: 2,774.5 SURVEY FEET (NAD83)
 849.400 METERS

APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE: 04/30/2015
 PROJECT NO. 12345



SLATER HANIFAN GROUP
 CONSULTING ENGINEERS & PLANNERS
 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
 PHONE (702) 284-5300 FAX (702) 284-5398

CLARK COUNTY, NEVADA

PINNACLE HOMES
 SKYLINE POINT (AKA EGAN CREST/TROPICAL)
 UTILITY PLAN

DATE: 3/5/15
 DRAFTER: CZ
 DESIGNER: CZ
 CHECKED: TJS
 PROJECT NO. PIN1409

U-1
 SHEET 11 OF 12