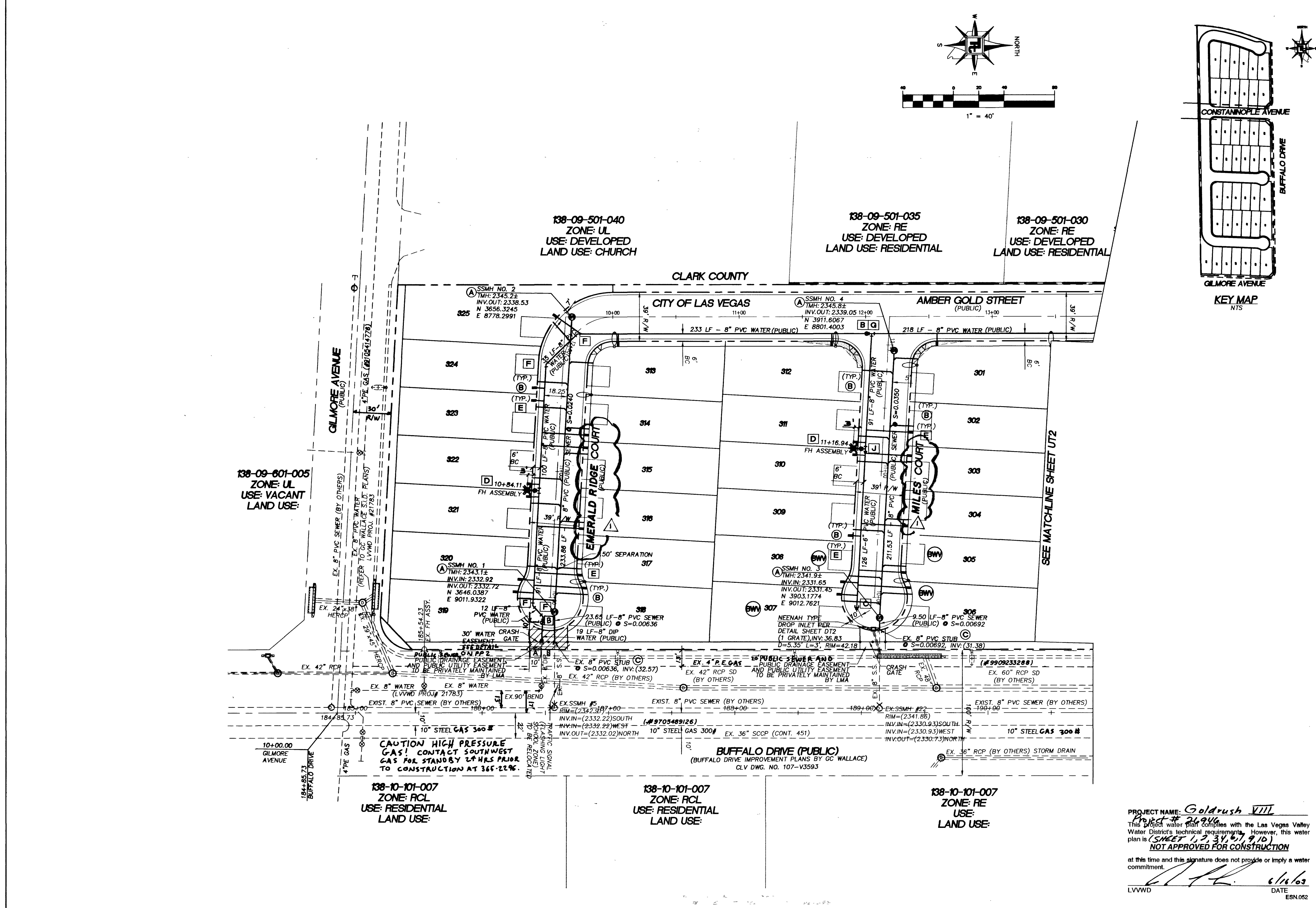




LWWD NOTE:
PROVIDE CROSS SECTION OF 30' EASEMENT SHOWING LOCATION OF UNDERGROUND UTILITIES SHOW CURB, BLOCK WALL OR FENCE MATERIAL AT EDGE OF EASEMENT DIRECT ACCESS FROM ADJACENT RIGHT-OF-WAY IS REQUIRED. D.I.P. WITH VALVE AT EACH END IS REQUIRED.

BASIS OF BEARING:
SOUTH 87°29'02" EAST BEING THE NORTH LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 9, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN COPPERHEAD UNIT-7 ON FILE IN BOOK 72, PAGE 33 OF PLATS IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

Call before you Dig
1-800-227-2600
UNIVERSITY SERVICE (USA)

Call before you Overhead
1-702-593-6111
NEVADA POWER TRANSMISSION SAFETY SERVICE (NPTSS)

BENCHMARK:
CITY OF LAS VEGAS BENCHMARK - NO.18 11V00-45ES
RIVET AND SQUARE ALUMINUM PLATE IN TOP OF CURB
NORTHWEST RETURN OF ALEXANDER ROAD AND BUFFALO

ELEVATION = 713.8077 METERS (NAVOD88)
ELEVATION = 2341.88 FEET (NAVOD88)

LWWD NOTE:
INSTALL PIPELINE MARKER BALLS IN TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER MANUFACTURER INSTRUCTIONS.

ALL LOTS:
THIS PROPERTY MAY HAVE STATIC WATER 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 LWWD FACILITIES.

SEWER CONTRIBUTION
43 UNITS @ 1 ERU PER UNIT (90,000 GPY/ERU) = 3,870,000 GPY
365 DAYS PER YEAR
AVERAGE DAILY FLOW = 10,603 GPD
PEAK FACTOR = 3.3
APPROXIMATE PEAK FLOW = 34,989 GPD

SEWER CONNECTION NOTE:
A SEGMENT OF THE DOWNSIDE SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE C.L.V. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSIDE 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 DOWNSIDE SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY HAVE BEEN DEEMED AVAILABLE FOR SERVICE.

- UTILITY NOTE**
1. NOTIFY TETRA TECH, INC. IMMEDIATELY OF ANY DISCREPANCIES IN THE PLANS OR CONDITIONS IN THE FIELD.
 2. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL LOCATE AND VERIFY SIZE, MATERIAL DEPTH, CONDITION, PRESSURE AND LOCATION OF ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. TETRA TECH, INC. SHALL BE CONTACTED ONCE THE UTILITY IS LOCATED.
 3. PLANS MAY NOT INDICATE ALL EXISTING UTILITY LINES. CONTRACTOR IS TO EXERCISE EXTREME CAUTION DURING EXCAVATION IN ORDER TO AVOID DAMAGING ANY EXISTING UTILITY LINES. IF THE UTILITY LINES ARE DAMAGED BY THE CONTRACTOR, SUCH DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
 4. CONTRACTOR TO SAWCUT AND REMOVE EXISTING ASPHALT AND CONCRETE AS NECESSARY FOR UTILITY TRENCHES. BACKFILL AND PATCH ALL TRENCHES ACCORDING TO CITY OF LAS VEGAS STANDARDS.
 5. ALL WATER SERVICE LINES AND METERS SHALL BE INSTALLED PER LAS VEGAS VALLEY WATER DISTRICT STANDARDS AND SPECIFICATIONS.
 6. CONTRACTOR TO FIELD VERIFY LOCATION AND INVERT OF MANHOLE PRIOR TO CONSTRUCTION. TETRA TECH, INC. SHALL BE CONTACTED ONCE THIS INFORMATION HAS BEEN OBTAINED.

WATER QUANTITIES AND KEY NOTES

A	REMOVE CAP & BLOWOFF ASSEMBLY AND CONNECT TO EXISTING PVC WATERLINE	2 EA
B	8" GATE VALVE PER UDACS STD. PLATE NO. 8	4 EA
C	8" CAP AND BLOWOFF ASSEMBLY PER UDACS STD. PLATE NO. 4	2 EA
D	INSTALL FIRE HYDRANT ASSEMBLY PER UDACS STD. PLATE NO. 7	5 EA
E	5/8" METER AND 1" TYPE K COPPER LATERAL PER UDACS STD. PLATE NO. 1B	43 EA
F	8" 45° BEND	6 EA
G	8" TEE	2 EA
H	8" 22 1/2° BEND	1 EA
I	1" IRRIGATION METER PER UDACS PLATE #1D 1" RPPA PER UDACS PLATE #11A	1 EA
J	8" X 6" REDUCER	2 EA
	8" PVC WATERLINE	1,443 LF
	6" PVC WATERLINE	246 LF

SEWER QUANTITIES AND KEY NOTES

A	CONSTRUCT STANDARD ECCENTRIC MANHOLE PER DCSWCS PLATE SD-1	7 EA
B	INSTALL SEWER LATERAL PER DCSWCS PLATE SD-17	1,677 LF
C	REMOVE CAP AND CONNECT TO EXISTING PVC SEWERLINE	4 EA
	8" PVC SEWERLINE	962 LF

FIRE FLOW CALCULATIONS
FIRE FLOW REQUIREMENT IS: 1500 GALLONS PER MINUTE AT 20 PSI RESIDUAL PRESSURE.

BASED ON:
SQUARE FOOTAGE: 2312 SQUARE FEET
LARGEST AREA BETWEEN 4-HOUR: N/A
AREA SEPARATION WALLS: N/A SQUARE FEET
BUILDING HEIGHT: 25' FEET
NUMBER OF STORIES: 2 FLOORS
TYPE OF CONSTRUCTION: M-V
OCCUPANCY: N-V
FULL AUTOMATIC FIRE SPRINKLER SYSTEM: N
REVIEWED BY: [Signature]
DATE: 6/20/03

LEGEND:

	PROPOSED PVC SEWER MAIN WITH 4' MANHOLE (SIZE AS SHOWN)
	PROPOSED PVC WATER MAIN AND GATE VALVE (SIZE AS SHOWN)
	PROPOSED FIRE HYDRANT ASSEMBLY
	EXISTING PVC SEWER MAIN WITH EXISTING MANHOLE
	EXISTING STORM DRAIN MAIN WITH EXISTING MANHOLE
	EXISTING PVC WATER MAIN AND GATE VALVE
	PROPOSED 4' SEWER LATERAL AND CLEANOUT
	PROPOSED 1" WATER SERVICE LATERAL WITH 5/8" METER
	EXISTING FIRE HYDRANT ASSEMBLY
	20' SEWER EASEMENT

DISCLAIMER NOTE:
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD 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 OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS.
NOTIFY ENGINEER IMMEDIATELY IF DISCREPANCIES ARE ENCOUNTERED.

APPROVALS
LAS VEGAS VALLEY WATER DISTRICT
[Signature] 6/20/03
LAS VEGAS FIRE DEPARTMENT
[Signature] 6/20/03

KB HOME NEVADA, INC.
750 PILOT ROAD
LAS VEGAS, NEVADA
(702) 614-2500

UTILITY PLAN

GOLDRUSH VIII
CITY OF LAS VEGAS

TETRA TECH, INC.
INFRASTRUCTURE SOUTHWEST GROUP
401 N. Buffalo Dr. Suite 100, Las Vegas, Nevada 89145 (702) 248-4200

PROJECT NO. P08042-0057

UT1
6 OF 13
DRAWING NO. 16744648-8

REVISION
1 7-18-03 AM REVISED ST NAME
REV. DATE BY