

FLOOD CONTROL IMPROVEMENTS:

PRIVATE FLOOD CONTROL IMPROVEMENT	QUANTITY
20' DRAINAGE EASEMENT	3,883 S.F.
4" RIP RAP $D_{50}=2"$	9606 S.F.

NOTE: ALL OF THE RETAINING WALL HEIGHTS ARE DETERMINED WITH THE TOP OF THE FOOTING BEING APPROXIMATELY 4" BELOW EXISTING GRADE. WITH THE EXCEPTION OF RETAINING WALLS WHICH ARE NEXT TO A SIDEWALK, ALL OF THESE ARE FIGURED TO HAVE THE TOP OF FOOTING BEING 8" BELOW THE TOP OF THE SIDEWALK.

TOP OF RETAINING WALL TO BE AT OR ABOVE UPPER PAD ELEVATION.

RETAINING WALL CONVERSION TABLE

	STANDARD	RETAINER NEXT TO SIDEWALK
1	0.4-0.7'	N/A
2	0.71-0.83'	N/A
3	0.84-1.5'	0.7-1.17'
4	1.51-2.17'	1.18-1.83'
5	2.18-2.83'	1.84-2.5'
6	2.84-3.5'	2.51-3.17'
7	3.51-4.17'	3.18-3.83'
8	4.18-4.83'	3.84-4.5'
9	4.84-5.5'	4.51-5.17'
10	5.51-6.17'	5.18-5.83'
11	6.18-6.83'	5.84-6.5'
12	6.84-7.5'	6.51-7.17'

ALL PRIVATE STREETS ARE PUBLIC UTILITY EASEMENTS, PUBLIC DRAINAGE EASEMENTS AND CLV SEWER EASEMENT TO BE PRIVATELY MAINTAINED

Avoid cutting underground utility lines. It's costly.

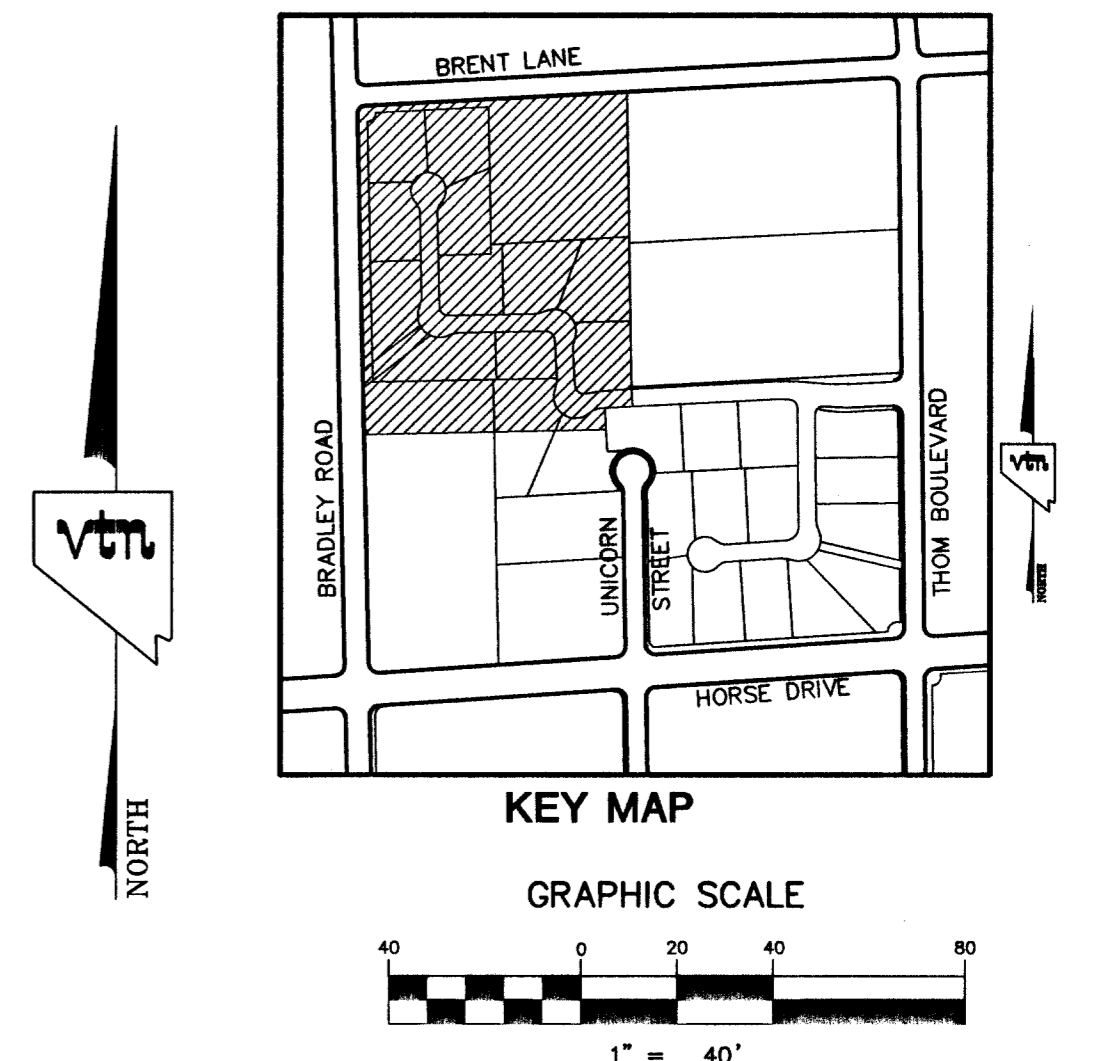
Call before you Dig
1-800-227-2600

Avoid overhead power line contact. It's costly.

Call before you Overhead
1-702-593-6111

PROJECT BENCHMARK
PROJECT DATUM: NAVD88
(OLD) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES NAVD88 ELEVATION: 710.9608 METERS (2332.54 FEET)
PROJECT DESIGNED USING OLD BENCHMARK
(NEW) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES NAVD88 ELEVATION: 710.9181 METERS (2332.40 FEET)
BRASS CAP IN CONCRETE AT S.W. CORNER OF DECADATOR AND GRAND TETON
ONLY BM 413148, NAVD 88 ELEV=710.953 METERS (2332.52 FEET) 1" DIAMETER CONCRETE MONUMENT 77 FEET SOUTH & 54 FEET WEST N.E. CORNER SEC. 13T19R06E 10' EAST OF LARGE POWER POLE (-0.14 FEET) TO GET NEW PUBLISHED DATUM

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NCS83), EAST ZONE, (2701), DETERMINED BY CLARK COUNTY GIS CONTROL POINTS 802, 803, 804, AND 805, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE, IN BOOK 88 OF SURVEYS, AT PAGE 53.



- LEGEND**
- FG FINISH GRADE
 - FL FLOW LINE
 - TC TOP OF CURB
 - TRC TOP OF ROLL CURB
 - EAC EDGE OF ASPHALT PAVEMENT
 - FUT. FUTURE
 - EXIST. EXISTING (EX)
 - VO VALLEY CUTTER
 - NG NATURAL GROUND
 - H.P. HIGH POINT
 - L.P. LOW POINT
 - C/L CENTER LINE
 - O/C OFFSET CROWN
 - BC BACK OF CURB
 - BCR BEGIN CURB RETURN
 - TF TOP OF FOOTING
 - GB GRADE BREAK
 - PC POINT OF CURVATURE
 - PT POINT OF TANGENCY
 - PRC POINT OF REVERSE CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - BVC BEGIN VERTICAL CURVE
 - MVC MID-POINT OF VERTICAL CURVE
 - EVC END VERTICAL CURVE
 - PRVC POINT OF REVERSE VERTICAL CURVE
 - INT. INTERSECTION
 - D.G. DESIGN GRADE
 - TSW TOP OF SIDEWALK
 - FF= FINISH FLOOR
 - GFT= GARAGE FINISH FLOOR
 - BFE= BASE FLOOD ELEVATION
 - R/W RIGHT-OF-WAY
 - S/W SIDEWALK
 - EX. CONTOUR(5' INTERVAL)
 - EX. CONTOUR(1' INTERVAL)
 - PROPOSED CONTOUR
 - PROPOSED PAD GRADE
 - FUT./EXIST. PAD GRADE
 - SLOPE AND FLOW DIRECTION
 - EDGE OF EXIST. A.C.
 - SAW CUT & MATCH A.C.
 - SIDEWALK RAMP
 - PAD SWALE SLOPES
 - SCARP AREA
 - LOT NUMBER
 - BLOCK LETTER
 - RETAINING HEIGHT (FEET)
 - SIGHT VISIBILITY ZONES
 - PROJECT BOUNDARY LINE
 - R/W OR P/L
 - EXIST. IMPROVEMENTS
 - FUTURE IMPROVEMENTS
 - CENTER LINE
 - RETAINING WALL
 - CONC. BLOCK WALL
 - EXIST. CONC. BLOCK WALL
 - EXIST. DIRT ROAD
 - EXIST. AC

- CITY OF LAS VEGAS GRADING NOTES**
- IN THE EVENT THAT ANY UNFORSEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
 - CONTRACTOR SHALL TAKE RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
 - THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
 - THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED.
 - CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:
- HORIZONTAL VERTICAL COMPACTION**
A. PAVEMENT AREA SUBGRADE 0.1+ 0.01 to 0.1
B. ENGINEERING FILL 0.5+ 0.11 to 0.1
C. SEE SOils REPORT FOR COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
 - THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
 - THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM ALL THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
 - IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

"I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT"

Ken Nicholson
KEN NICHOLSON PE# 10539
DATE 7.3.04

CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148
PH: (702) 673-7550 FAX: (702) 367-2597
www.nvada.gov

KB HOME
50 WEST ROAD, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 814-2500

GRADING PLAN 2
IRON MOUNTAIN RANCH VILLAGE 12A

DESIGNED BY: MARCH '03
CHECKED BY: MARCH '03
PROJECT NO: 1010539
SCALE: 40 HORIZ. 40 VERT.

EXPIRES 12-31-05

PROFESSIONAL ENGINEER STATE OF NEVADA
KENNETH NICHOLSON
CIVIL
No. 10539
7.3.04

SHEET
8 of 33 SHEETS
DRAWING NO.
1010539-12A