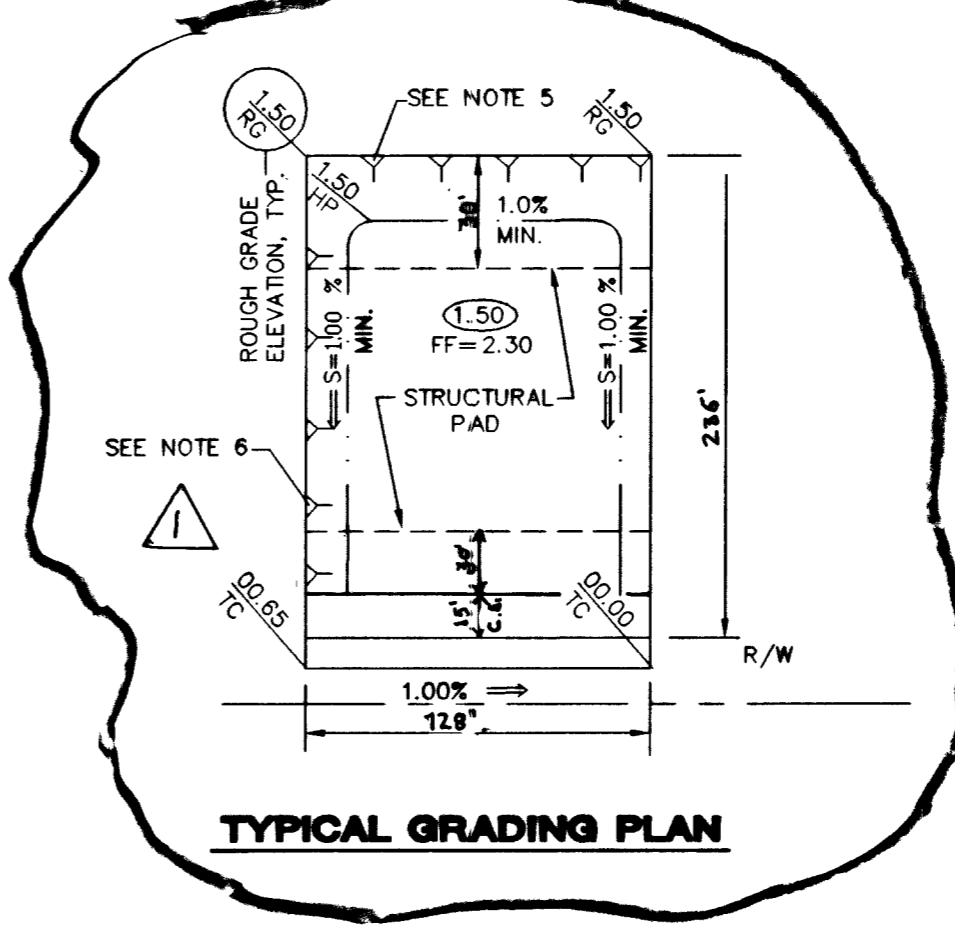


- NOTES:**
- STRUCTURAL PAD SHALL BE 5' BEYOND BLDG. SETBACK SEE TYPICAL GRADING SECTION.
  - REFER TO GENERAL NOTE 1.
  - REAR LOT CORNER GRADES ARE EQUAL TO ADJACENT LOTS UNLESS SHOWN OTHERWISE.
  - MINIMUM SIDEYARD X-SLOPE SHALL BE 2%.
  - MAXIMUM REAR YARD SLOPE IS 2:1 AS SHOWN, EXCEPT THAT WITHIN 15' OF THE HOUSE, THE MAXIMUM SLOPE IS 12:1.
  - MAXIMUM SIDEYARD SLOPE IS 5:1 AS SHOWN, EXCEPT THAT WITHIN 5' OF THE HOUSE, THE MAXIMUM SLOPE IS 12:1. MINIMUM 1% DRAINAGE AWAY FROM BUILDING PAD.



**NOTE:**  
ALL PRIVATE STREETS ARE P.U.E., PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY HOA.

**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.

**ENGINEERS ESTIMATE OF PRIVATE FLOOD CONTROL REQUIRED QUANTITIES**

QUANTITY	DESCRIPTION
1418-LF	1 COURSE SOLID GROUDED PERIMETER FLOODWALL
1190-LF	3 COURSES SOLID GROUDED STEMWALL (BOND REQUIRED)

**RETAINING WALL CONVERSION TABLE**

	STANDARD RETAINER	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'

**SIDEWALK RAMPS TABLE**  
PER STD. DWG 235 CASE I

NO.	DIM "A"	DIM "B"	CASE
1	8.0'	8.0'	I

**LEGEND**

FG	FINISH GRADE	EX. CONTOUR(5' INTERVAL)
FL	FLOW LINE	EX. CONTOUR(1' INTERVAL)
TC	TOP OF CURB	PROPOSED CONTOUR
TRC	TOP OF ROLL CURB	FUT. EXIST. PAD GRADE
EAC	EDGE OF ASPHALT PAVEMENT	(42.1)
FUT	FUTURE	(42.1)
EXIST	EXISTING (EX.)	FUT. EXIST. PAD GRADE
VG	VALLEY GUTTER	SLOPE AND FLOW DIRECTION
NG	NATURAL GROUND	H.P.
H.P.	HIGH POINT	L.P.
L.P.	LOW POINT	C/L
C/L	CENTER LINE	O/C
O/C	OFFSET CROWN	BC
BC	BACK OF CURB	BCR
BCR	BEGIN CURB RETURN	TP
TP	TOP OF FOOTING	GB
GB	GRADE BREAK	PC
PC	POINT OF CURVATURE	PT
PT	POINT OF TANGENCY	PRC
PRC	POINT OF REVERSE CURVATURE	PVC
PVC	POINT OF COMPOUND CURVATURE	PCC
PCC	BEGIN VERTICAL CURVE	BVC
BVC	MID-POINT OF VERTICAL CURVE	MVC
MVC	END VERTICAL CURVE	ENC
ENC	POINT OF REVERSE VERTICAL CURVE	PRVC
PRVC	VERTICAL POINT OF INTERSECTION	VPI
VPI	TOP OF PLANTER WALL	TPW
TPW	TOP OF RETAINING WALL	TRW
TRW	TOP OF CHANNEL/SCARP	TOE
TOE	TOE OF CHANNEL/SCARP	TOB
TOB	TOP OF BOX	PP
PP	POWER POLE	TRANS.
TRANS.	TRANSITION	RET.
RET.	RETAINMENT	INT.
INT.	INTERSECTION	D.G.
D.G.	DESIGN GRADE	TSW
TSW	TOP OF SIDEWALK	FF
FF	FINISH FLOOR	GFF
GFF	GARAGE FINISH FLOOR	BFE
BFE	BASE FLOOR ELEVATION	R/W
R/W	RIGHT-OF-WAY	S/W
S/W	SIDEWALK	SNWA
SNWA	SOUTHERN NEVADA WATER AUTHORITY	

- 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+ to 0.1- | See Soils Report |
| B. ENGINEERING FILL       | 0.5+ to 0.1- | See Soils Report |
- 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.

**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))  
(-0.14 FEET) TO GET NEW PUBLISHED DATUM  
ONLY BM 413148 NAVD 88 ELEV=710.953 METERS (2332.52 FEET) 77 FEET SOUTH & 54 FEET WEST OF N.E. CORNER SEC. 13T19R60E 10' EAST OF LARGE POWER POLE.

**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 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 55.

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 PE#10539  
DATE 7-30-03

Call before you Overhead 1-702-593-6111  
Call before you Dig 1-800-227-2600

**CITY OF LAS VEGAS**  
2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148  
PH. (702) 873-1550 FAX (702) 382-2597  
novada CONSULTING ENGINEERS & LAND SURVEYORS

**KB HOME**  
750 PILOT ROAD, SUITE F LAS VEGAS, NV 89119 (702) 614-2500

**IRON MOUNTAIN RANCH VILLAGE 3**

**GRADING PLAN**

DRAWN BY: RCP  
DESIGNED BY: BF  
CHECKED BY: KFN  
PROJECT NO: 8005-1

JAN '03  
JAN '03  
JAN '03

SCALE: 1"=40' VERT. NA

**PROFESSIONAL ENGINEER STATE OF NEVADA**  
KEN NICHOLSON  
NO. 10539  
EXPIRES 12-31-03

SHEET 11 OF 34 SHEETS  
DRAWING NO. 1074604-3