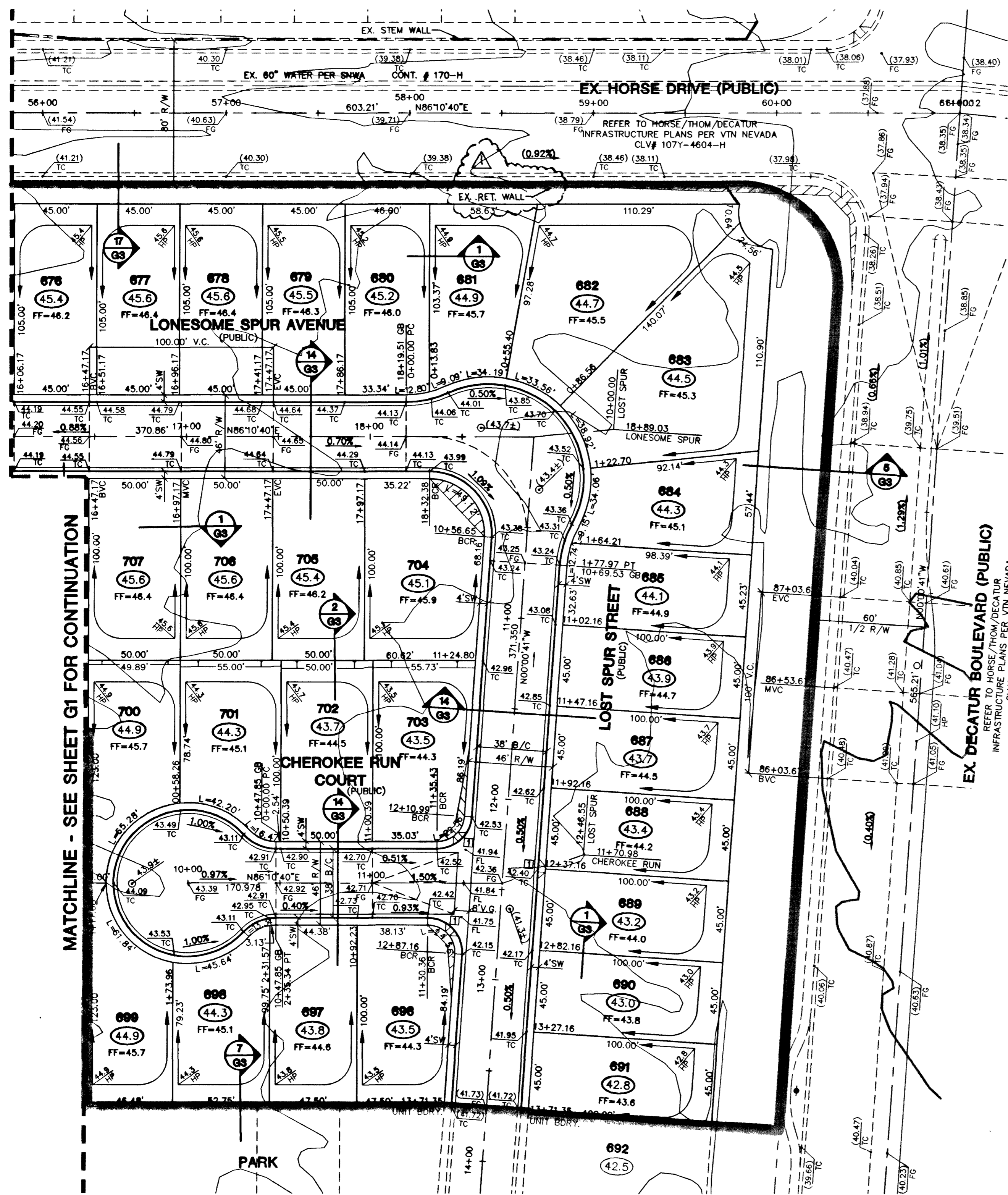


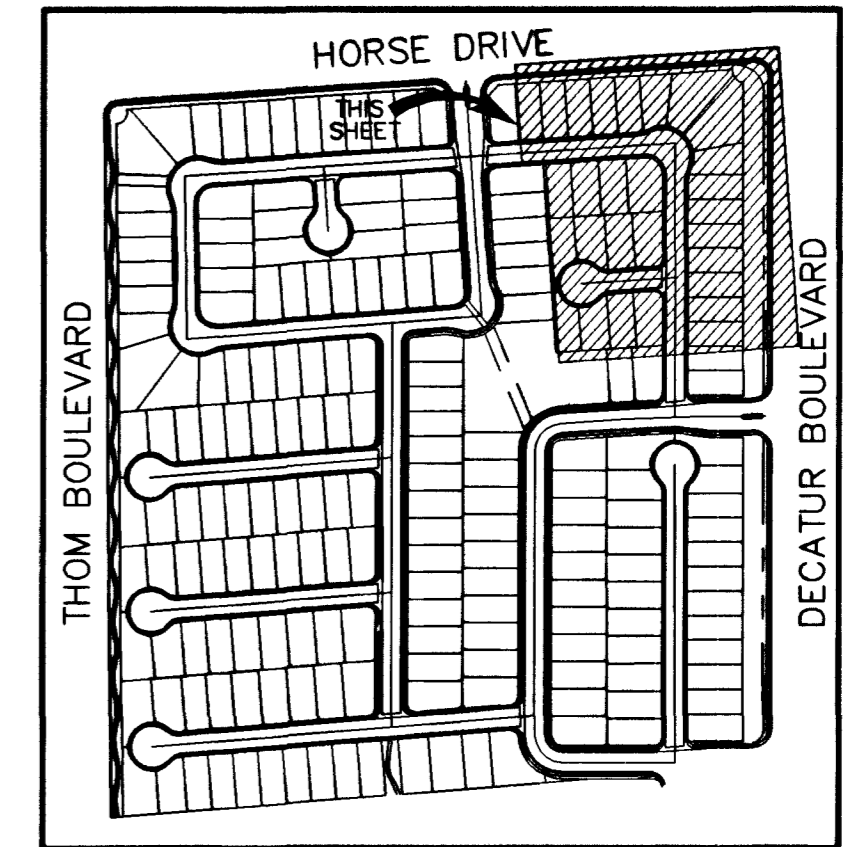
**EXISTING IRON MOUNTAIN RANCH
VILLAGE 7 UNIT 3**
REFER TO IMPROVEMENTS PLANS PER VTN NEVADA
CL# 1071-4604-7-3



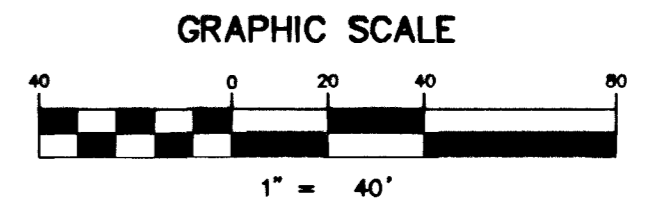
**EXISTING IRON MOUNTAIN RANCH
VILLAGE 5 - UNIT 2**
REFER TO IMPROVEMENTS PLANS PER VTN NEVADA
CL# 1071-4604-5-2



SNWA CONSTRUCTION NOTES:
CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING, BUT NOT LIMITED TO AV/AR, ACCESS MAINWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CATHODIC PROTECTION TEST STATIONS, RECTIFIERS, AND AV/AR'S MUST BE RELOCATED TO THE SIDEWALK PER SNWA STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO NOTIFY SOUTHERN NEVADA WATER AUTHORITY, DEVELOPMENT PLAN REVIEW, AT (702) 862-3444 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.



VILLAGE 5 - KEY MAP
NOT TO SCALE



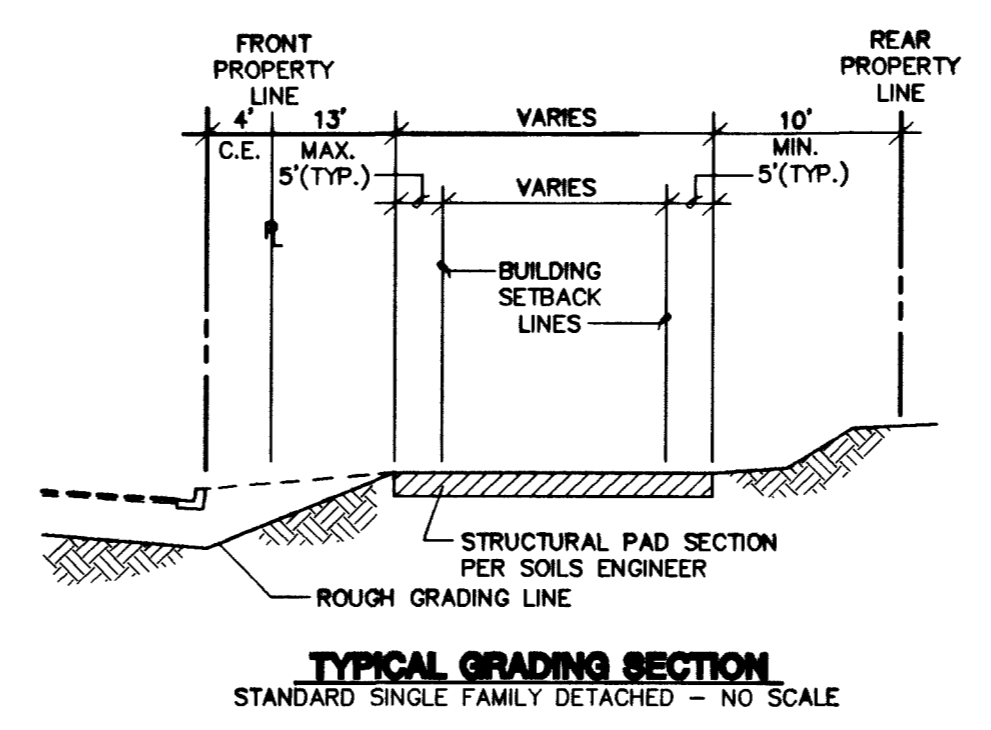
Ken Nicholson 12/20/02
SOUTHERN NEVADA WATER AUTHORITY DATE

SNWA APPROVAL IS VALID FOR ONE YEAR FROM THE SIGNATURE DATE. IF CONSTRUCTION WITHIN THE BASINMENT OF RESTRICTED PIPE SAFETY ZONE IS NOT COMPLETE, PLANS MUST BE RESUBMITTED TO SNWA FOR APPROVAL.

SIDEWALK RAMPS TABLE
PER STD. DWG 235 CASE I

NO.	DIM "A"	DIM "B"	CASE
1	8.0'	8.0'	1
2	9.5'	4.5'	1

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 0" BELOW THE TOP OF THE SIDEWALK.
TOP OF RETAINING WALL TO BE AT OR ABOVE UPPER PAD ELEVATION.



TYPICAL GRADING SECTION
STANDARD SINGLE FAMILY DETACHED - NO SCALE

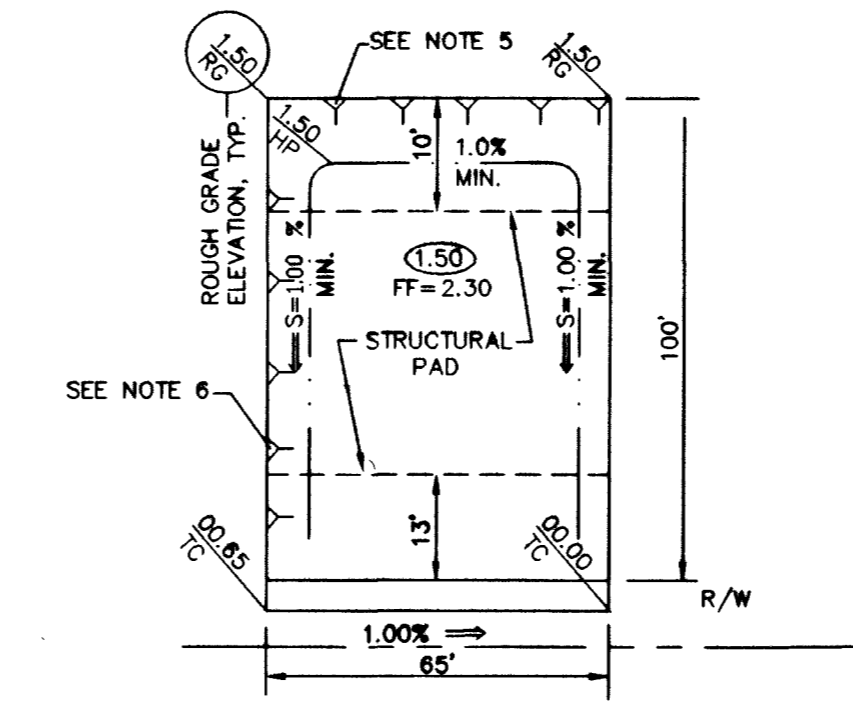
- NOTES:**
- STRUCTURAL PAD SHALL BE 5' BEYOND BLDG. SETBACK SEE TYPICAL GRADING SECTION.
 - REFER TO GENERAL NOTE 1.
 - REAR LOT CORNER GRADES ARE EQUAL TO ADJACENT LOTS UNLESS SHOWN OTHERWISE.
 - MINIMUM SIDEYARD X-SLOPE SHALL BE 2%.
 - MAXIMUM REAR YARD SLOPE IS 2:1 AS SHOWN EXCEPT THAT WITHIN 15'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

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'

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) 1" DIAMETER CONCRETE MONUMENT 77 FEET SOUTH & 54 FEET WEST OF N.E. CORNER SEC. 13119R60E 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'S CONTROL POINTS 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.



TYPICAL GRADING PLAN

Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111

- CITY OF LAS VEGAS GRADING NOTES**
- IN THE EVENT THAT ANY UNFORSEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING CONSTRUCTION, 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"	+0.0' to -0.1'	See Soils Report
B. ENGINEERING FILL	0.5"	+0.1' to -0.1'	See Soils Report
 - 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 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.

LEGEND

8	LOT NUMBER	VG	VALLEY GUTTER
B	BLOCK NUMBER	FG	FINISH GRADE
EX. CONTOUR (5' INTERVAL)	FL	FL	FLOW LINE
EX. CONTOUR (1' INTERVAL)	TC	TC	TOP OF CURB
PROPOSED CONTOUR	TRC	TRC	TOP OF ROLL CURB
CONCRETE BLOCK WALL	BC	BC	BACK OF CURB
RETAINING WALL	BOR	BOR	BEGIN CURB RETURN
EXISTING WALL	EX	EX	EXISTING
PROPOSED PAD GRADE	GR	GR	GRADE BREAK
EX./FUTURE PAD GRADE	PC	PC	POINT OF CURVATURE
SCARP AREA	PRC	PRC	POINT OF REVERSE CURVATURE
SIDEWALK RAMP	PCC	PCC	POINT OF COMPOUND CURVATURE
PAD SLOPES	BVC	BVC	BEGIN VERTICAL CURVE
0.8%	MVC	MVC	MID-POINT OF VERTICAL CURVE
	EVC	EVC	END VERTICAL CURVE
	PRVC	PRVC	POINT OF REVERSE VERTICAL CURVE
	PT	PT	POINT OF TANGENCY
	NG	NG	NATURAL GROUND
	TF	TF	TOP OF FOOTING

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 12.9.02
KEN NICHOLSON PE#10539 DATE

7	12/16/03	ADD. EXISTING RET. WALL	REVISION
6			
5			
4			
3			
2			
1	12/16/03	ADD. EXISTING RET. WALL	REVISION

CITY OF LAS VEGAS
2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148
PH: (702) 873-7550 FAX (702) 362-2597

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

GRADING PLAN
IRON MOUNTAIN RANCH
VILLAGE 5
UNIT 3

DRAWN BY: RNS
DESIGNED BY: RNS
CHECKED BY: KEN
PROJECT NO: 5218-3
SCALE: 1"=40' HORIZ. VERT. N/A

DESIGNER'S SEAL: KEN NICHOLSON, CIVIL ENGINEER, No. 10539, VTN NEVADA, 12.9.02

EXPIRES 12-31-03
SHEET 8 OF 14 SHEETS
DRAWING NO. 1674-4604-5-3