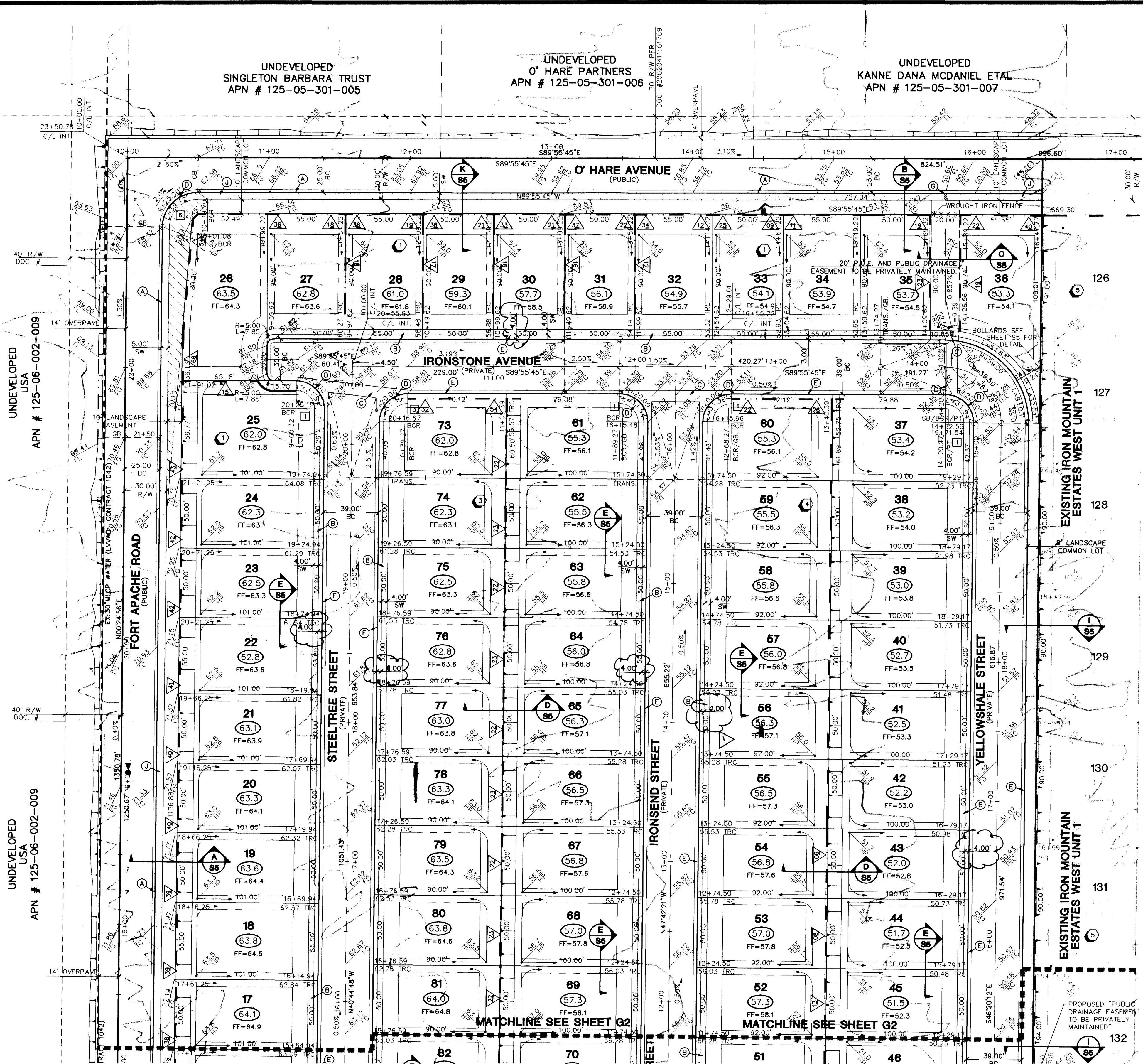


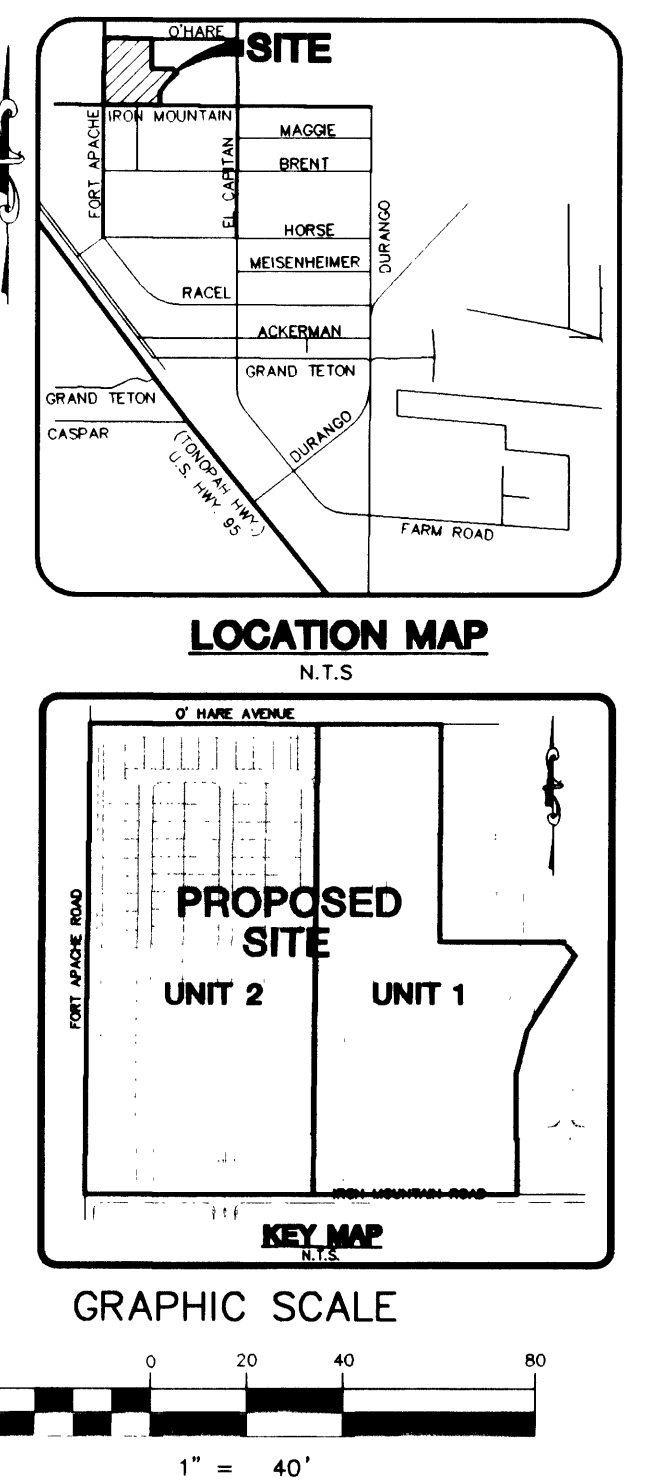


SPECIAL NOTE:
ADJUST ALL EXISTING SANITARY SEWER AND STORM DRAIN MANHOLE ELEVATIONS TO STREET FINISH GRADE AS NECESSARY.

PRIVATE STREET NOTE:
PRIVATE STREETS ARE P.U.E.s. CLV PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENT ARE TO BE PRIVATELY MAINTAINED.

HC RAMP DATA

NO.	"A"	"B"	CASE
1	8'	8'	1
2	4.5'	15.0'	1
3	4.5'	12.0'	1
4	12.0'	4.5'	1
5	21.5'	4.5'	1
6	4.5'	21.5'	1



BASIS OF BEARING
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, & 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.

BENCHMARK
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
CLARK COUNTY BENCHMARK USCGS V-169
NAVD88 ELEVATION: 791.316 METERS (2596.17 FEET)
USCGS BRASS CAP 400 FT. SOUTH OF LOG CABIN WAY AND 100 FT. EAST OF EL CAPITAN WAY JUST EAST OF OF A BARBED WIRE FENCE.

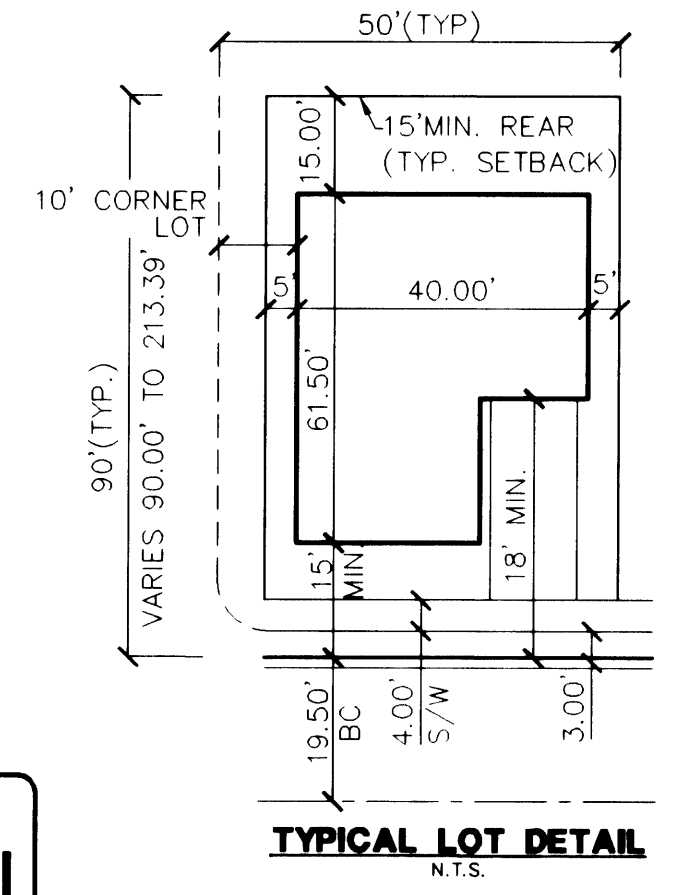
FOR ALL GRADING & STREET SECTIONS SEE SHEET S5

CONTRACTOR NOTE
CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

- CONSTRUCTION NOTES:**
- (A) CONSTRUCT "L" CURB & GUTTER PER STD. # 216
 - (B) CONSTRUCT 4" SIDEWALK PER STD. # 234
 - (C) CONSTRUCT 8" CROSS GUTTER PER STD. # 228
 - (D) CONSTRUCT SIDEWALK RAMP PER STD. # 235 CASE 1
 - (E) CONSTRUCT "ROLL" CURB & GUTTER PER STD. # 217A
 - (F) CONSTRUCT DEPRESSED CURB PER DETAIL SHEET D1
 - (G) CONSTRUCT SIDEWALK UNDERDRAIN PER STD. # 236
 - (H) CONSTRUCT "A" TYPE CURB PER STD. # 219
 - (I) CONSTRUCT 10' CURB TRANSITION "ROLL" TO "L"
 - (J) CONSTRUCT 5' SIDEWALK PER STD. # 234

GRADING TO BE IN COMPLIANCE WITH CITY OF LAS VEGAS REVISED UNIFORM BUILDING CODE, LATEST EDITION.

CUT = 95,140 C.Y.
FILL = 47,904 C.Y.



CITY OF LAS VEGAS GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN 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 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.

- HORIZONTAL VERTICAL COMPACTION**
- A. PAVEMENT AREA SUBGRADE 0.1+ to 0.1+ to 0.1+ See Soils Report B. ENGINEERED FILL 0.5+ to 0.1+ to 0.1+ See Soils Report
- 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 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 CONTRACTOR SHALL 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

- FG FINISH GRADE
FL FLOW LINE
TC TOP OF CURB
TRC TOP OF ROLL CURB
EAC EDGE OF ASPHALT PAVEMENT
FUT FUTURE EXISTING (EX)
VG VALLEY GUTTER
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
D.G. DESIGN GRADE
PRC POINT OF REVERSE CURVATURE
PCC POINT OF COMPOUND CURVATURE

- BVC BEGIN VERTICAL CURVE
MVC MID-POINT OF VERTICAL CURVE
EVC END VERTICAL CURVE
PVI POINT OF VERTICAL CURVE
TOP OF PLANTER WALL
TOP OF RETAINMENT WALL
TOP OF CHANNEL/SCARP
TOE TOP OF BOX
TOB TOP OF BOX
TRANS. TRANSITION
RET. RETAINMENT
INT. INTERSECTION
D.G. DESIGN GRADE
TSW TOP OF SIDEWALK
FF FINISH FLOOR
GARAGE FINISH FLOOR
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 NUMBER
RETAINING HEIGHT (FEET)

- SIGHT VISIBILITY ZONES
PROJECT BOUNDARY LINE
SETBACK 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
CONSTRUCTION PHASE LINE
OR UNIT BOUNDARY LINE
MATCHLINE

Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT CITY OF LAS VEGAS, NEVADA FOR THIS PROJECT.
CHRISTOPHER R. GRUBBS NO. 13956 DATE 7/11/02

ASTORIA HOMES
9555 DEL WEBB BLVD., LAS VEGAS, NEVADA, 89134
(702) 257-1188

GRADING PLAN

IRON MOUNTAIN ESTATES WEST UNIT 2

DRAWN BY: MJD 12/04/01
DESIGNED BY: 12/04/01
CHECKED BY: CCG/DP 12/04/01
PROJECT NO: 5463-1
SCALE: 1" = 40' HORZ.
VERT. N/A

PROFESSIONAL ENGINEER-SEAL
No. 13956
7/11/02

SHEET **G1** OF 23 SHEETS
DRAWING NO. 1074-1691-2

CITY OF LAS VEGAS, NEVADA
REVISION
DATE
BY
REV