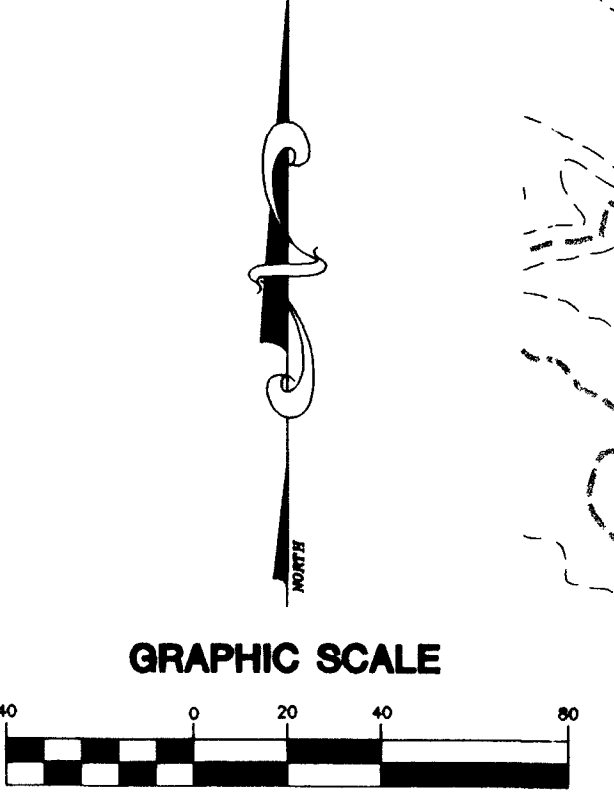
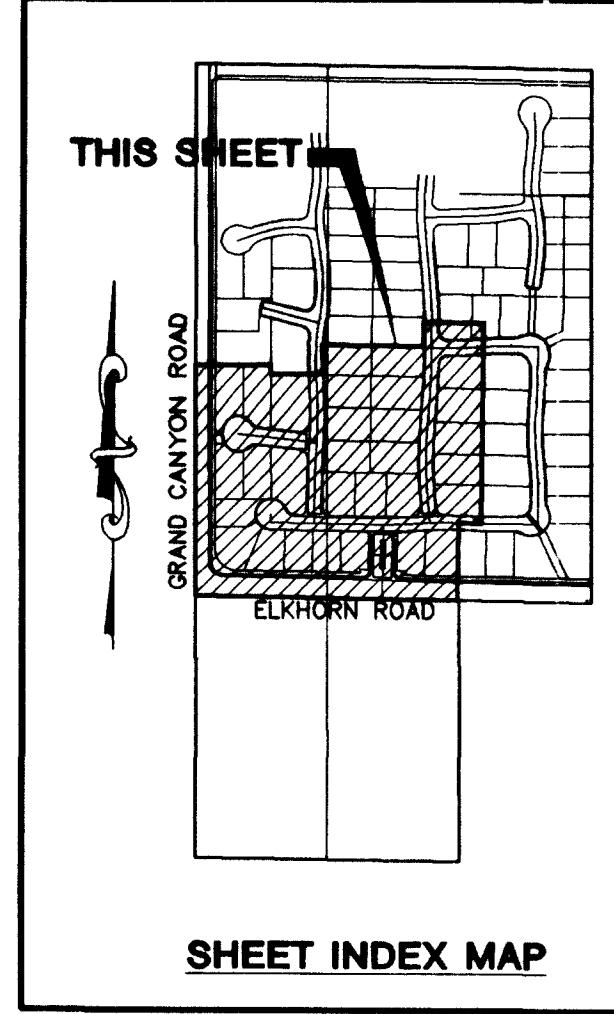
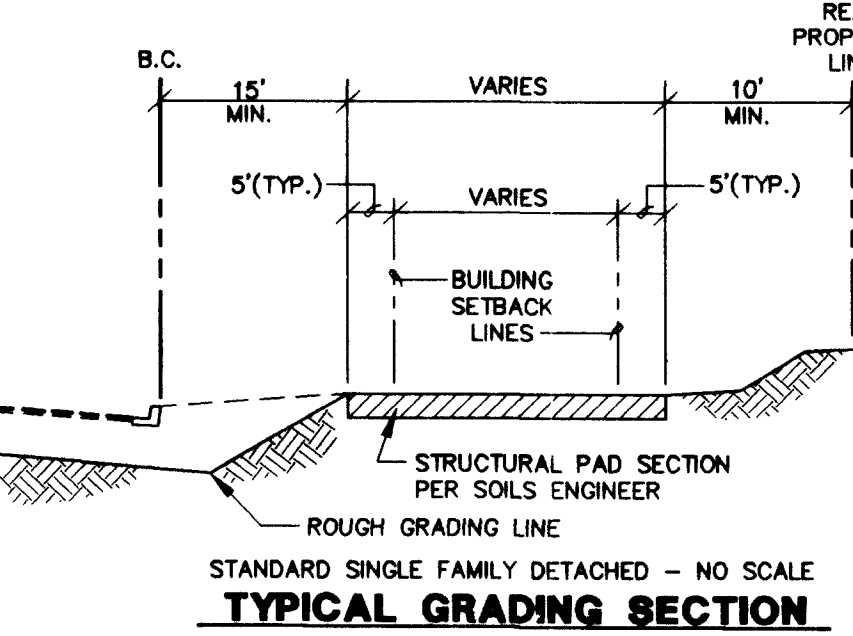




PRIVATE FLOOD CONTROL IMPROVEMENTS	QUANTITY
BERM	360 LF
BLOCK WALL WITH 3 COURSES SOLID GROUT	1,517 L.F.
2 COURSES STEM WALL	1,389 L.F.



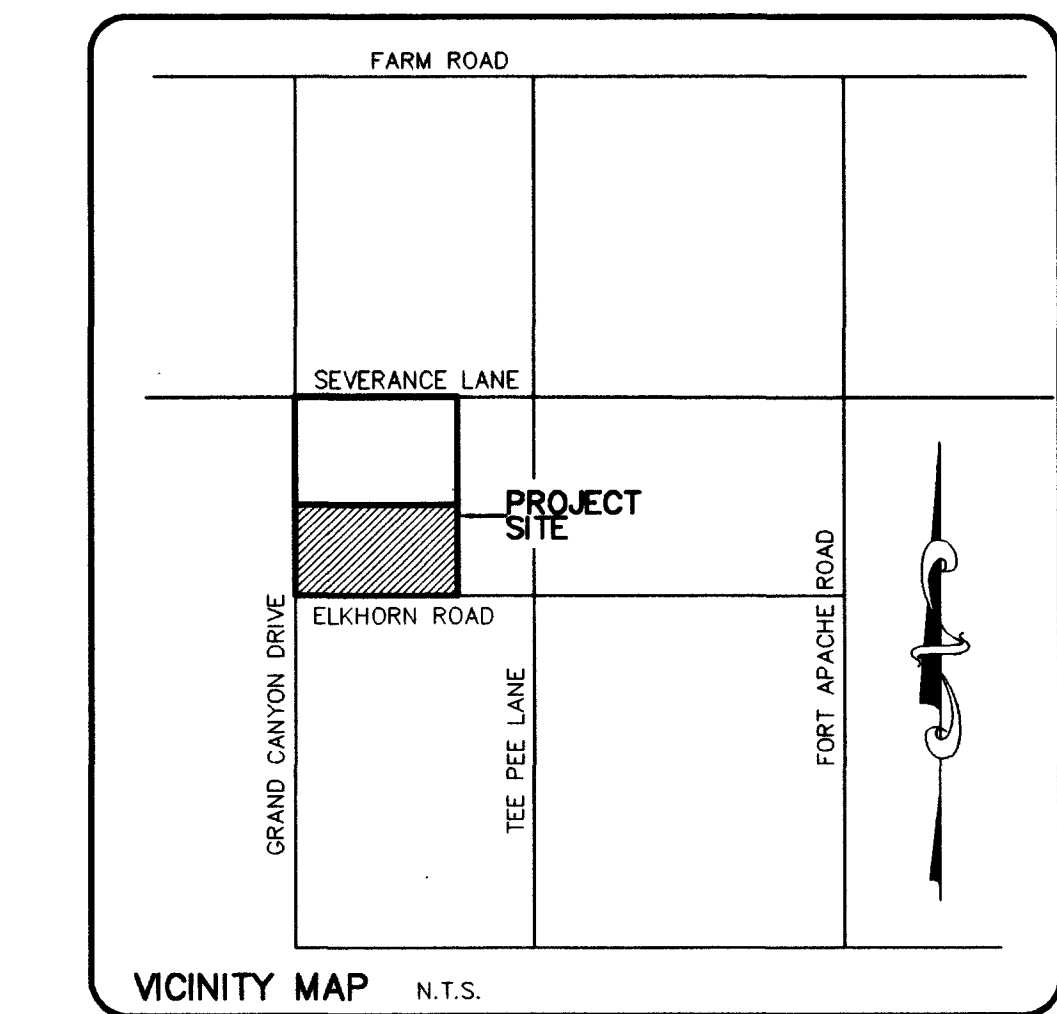
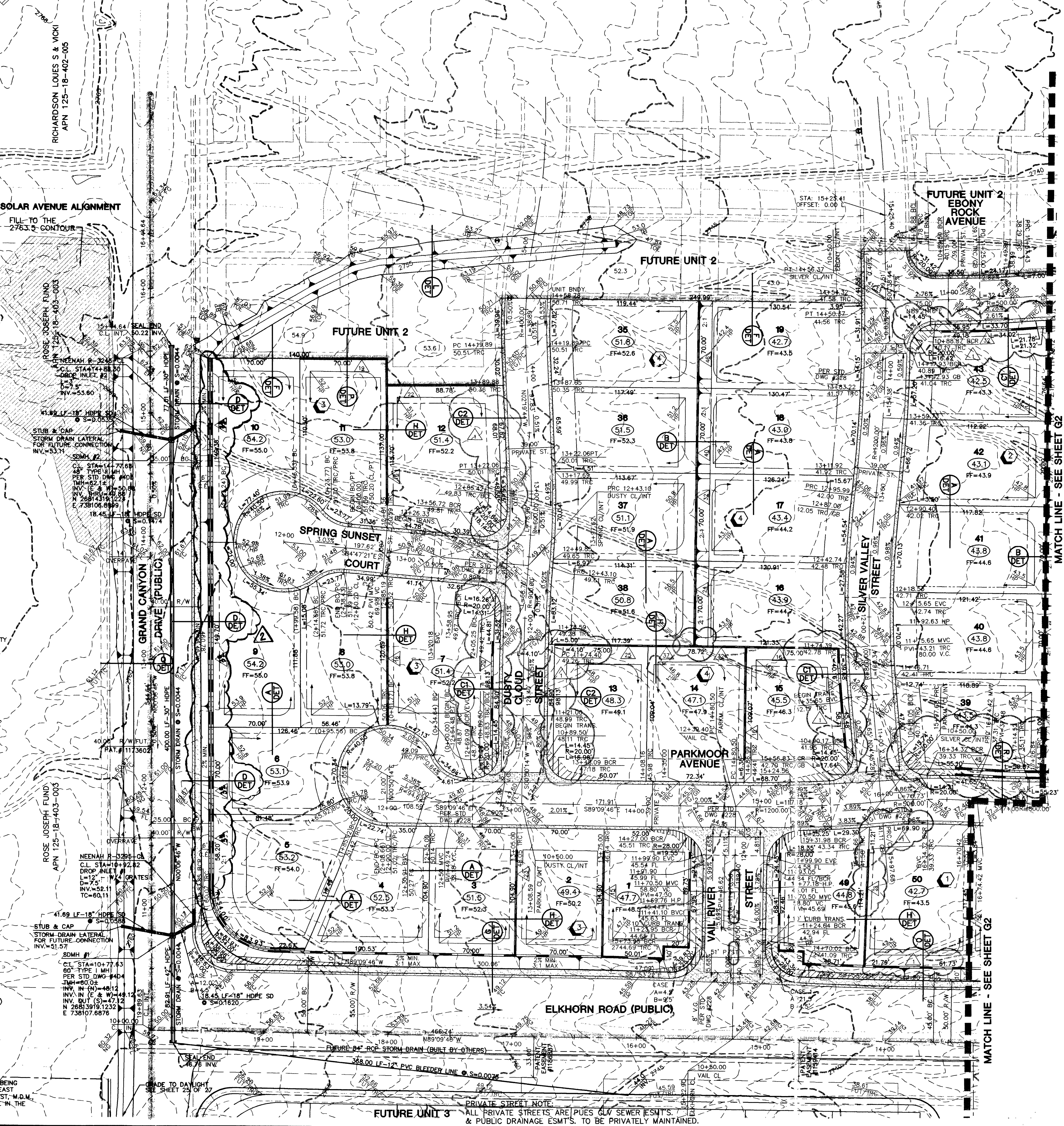
HDPE CONSTRUCTION NOTE:
CONTRACTOR SHALL PROVIDE 30" MINIMUM COVER OVER PIPE PRIOR TO VEHICLE LOADING DURING CONSTRUCTION. TRENCH WIDTH MUST BE WIDE ENOUGH TO ACCOMMODATE COMPACTION EQUIPMENT. SEE MANUFACTURER'S GUIDELINES (PRODUCT NOTE 3.115) AND ASTM D2321. CONTRACTOR SHALL NOT USE HYDRO-HAMMER TYPE COMPACTORS OVER PIPE TRENCH AREA.

Call before you Dig
1-800-227-2800

Call before you Overhead
1-702-593-6111

BENCHMARK
PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
PROJECT BENCHMARK: CLARK COUNTY BENCHMARK 1C90304
NAVD88 ELEVATION: 819.508 METERS (2688.67 FEET)
RIVET AND SQUARE ALUMINUM PLATE IN THE SOUTHEAST CORNER OF A ELECTRICAL CABINET BASE (#00720), 200 FT. SOUTH AND 40 FT. WEST CENTENNIAL PKWY. AND GRAND CANYON DR.

BASIS OF BEARING
THE BASIS OF BEARINGS FOR THIS PROJECT IS NORTH 00°06'46" WEST BEING THE WEST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 18, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE, IN FILE 114 AT PAGE 57.



- 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)
 - VG VALLEY GUTTER
 - NO 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
 - PRC POINT OF REVERSE CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - BVC BEGIN VERTICAL CURVE
 - EVC END VERTICAL CURVE
 - PRVC POINT OF REVERSE CURVE
 - VP VALLEY POINT
 - TPW TOP OF PLANTER WALL
 - TRW TOP OF RETAINMENT WALL
 - TOP TOP OF CHANNEL/SCARP
 - TOE TOP OF CHANNEL/SCARP
 - TOB TOP OF BOX
 - PP POWER POLE
 - TRANS. TRANSITION
 - RET. RETAINMENT
 - INT. INTERSECTION
 - D.G. DESIGN GRADE
 - TSW TOP OF SIDEWALK
 - OFF. OFF-FLOOR
 - BFE BASE FLOOD ELEVATION
 - RCP REINFORCED CONCRETE PIPE
 - SD STORM DRAIN
 - DI DROP INLET
 - R/W RIGHT-OF-WAY
 - S/W SIDEWALK
 - BCL BACK OF CURB LENGTH
 - 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 VERTICAL ZONES
 - PROJECT BOUNDARY LINE
 - SETBACK LINE
 - R/W OR P/L
 - CENTER LINE
 - BACK OF CURB
 - LIP OF GUTTER
 - EXIST. IMPROVEMENTS
 - FUTURE IMPROVEMENTS
 - RETAINING WALL
 - CONC. BLOCK WALL
 - EXIST. CONC. BLOCK WALL
 - EXIST. DIRT ROAD
 - EXIST. AC
 - CONSTRUCTION PHASE LINE OR UNIT BOUNDARY LINE
 - MATCHLINE

- GENERAL GRADING NOTES**
- ALL ELEVATIONS SHOWN HEREON WITHIN LANDSCAPED AREAS ARE FINAL FINISH GRADES. ROUGH GRADES SHALL BE 0.30' BELOW FINISH GRADES INDICATED ON PLAN.
 - ALL LOTS ARE TO BE F.H.A. TYPE "A" DRAINAGE UNLESS OTHERWISE NOTED.
 - SEE IMPROVEMENT PLANS FOR STREET SECTIONS AND DETAILS. SEE FINAL MAP FOR EXACT BEARINGS AND DISTANCES.
 - CONTRACTORS SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
 - ALL GRADING AND SITE PREPARATION SHALL CONFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION PREPARED BY: GEOTEK, INC. # W.O. NO. 3272-LV8 DATED APRIL 5, 2001.
 - ALL WORK PERFORMED OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENT HAVE BEEN OBTAINED FROM THE OFFSITE OWNER.
 - ALL WORK PERFORMED WITHIN PUBLIC RIGHT-OF-WAY AND OUTSIDE OF THE PROJECT BOUNDARY THAT IS NOT SHOWN ON THESE PLANS SHALL BE PERFORMED UNDER A SEPARATE ENFORCEMENT PERMIT ISSUED BY THE CONTROLLING AUTHORITY.
 - FINISH FLOOR ELEVATION = PAD ELEVATION +0.80'
 - ALL STATIONING ON GRADING PLAN IS CENTERLINE STATIONING UNLESS OTHERWISE NOTED.
 - THESE PLANS AND THE DESIGN CRITERIA CONTAINED WITHIN THESE PLANS ARE BASED UPON THE INFORMATION PRESENTLY KNOWN BY ENGINEER AND INTENDED SOLELY AS A GENERAL GUIDELINE FOR CONSTRUCTION. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES, LAWS, CODES, REGULATIONS AND ORDINANCES, INCLUDING BUT NOT LIMITED TO THE FEDERAL FAIR HOUSING AMENDMENTS ACT, AMERICANS WITH DISABILITIES ACT, THE ARCHITECTURAL BARRIERS ACT, AND ANY APPLICABLE UNIFORM STANDARDS, SPECIFICATIONS OR DRAWINGS. THE PERSON OR ENTITY PERFORMING THE CONSTRUCTION SHALL BE SOLELY RESPONSIBLE TO MAKE SURE CONSTRUCTION IS IN CONFORMANCE WITH ALL LOCAL, STATE AND FEDERAL STATUTES, LAWS, CODES, REGULATIONS, STANDARDS, GUIDELINES AND ORDINANCES AND FURTHER, IS IN CONFORMANCE WITH ANY APPLICABLE DESIGN CRITERIA, INCLUDING BUT NOT LIMITED TO SOILS REPORTS, ARCHITECTURAL PLANS AND SPECIFICATIONS, DRAINAGE PLANS OR STUDIES AND ANY OTHER CRITERIA, STANDARDS OR REQUIREMENTS LISTED IN THE PLANS OR THE GENERAL NOTES RELATED TO THESE PLANS OR PROVIDED BY ANYONE IN REFERENCE TO THIS PROJECT.

FOR ALL GRADING & STREET SECTIONS SEE DETAIL SHEET DET 1 & DET 2

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

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.

DANIEL A. HOOD P.E. NO.12811 DATE 1.8.03

PERMA-BILT HOMES LAS VEGAS, NEVADA 89119 (702) 888-9100	GRADING PLAN	DRAWN BY: W.P.	01/29/02
		DESIGNED BY: A.Y. / M.P.	01/22/02
		CHECKED BY: A.Y.	02/05/02
		PROJECT NO: 5897	SCALE: 1"=40' HORIZ. VERT. NONE
ELKHORN / GRAND CANYON		SHEET 7 OF 27 SHEETS DRAWING NO. 1674-4736-1	

