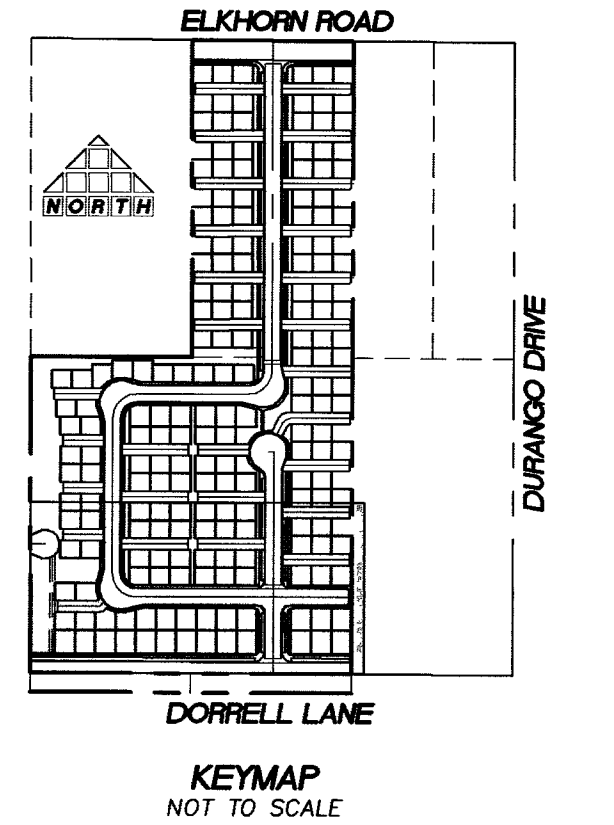
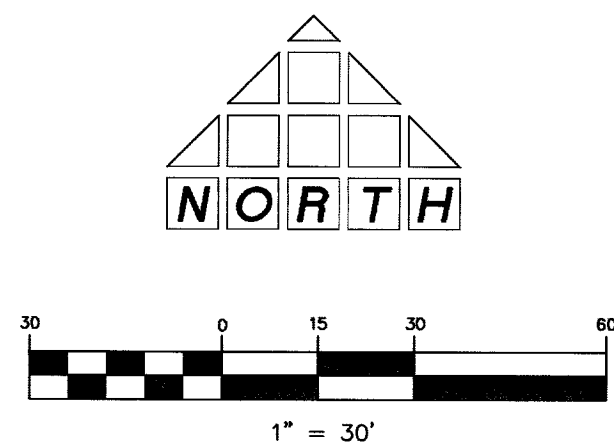
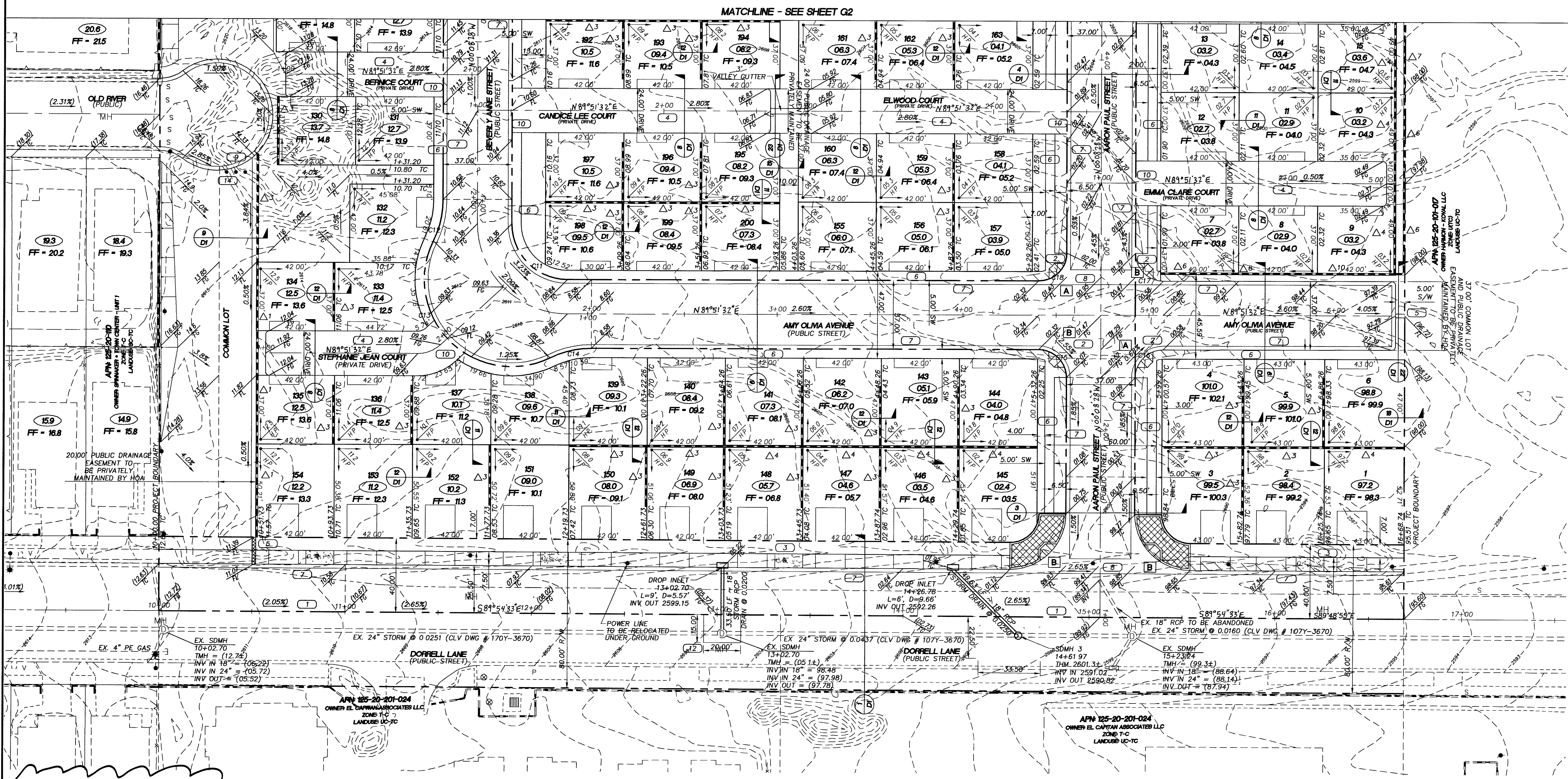




BENCHMARK
CITY OF LAS VEGAS VERTICAL CONTROL POINT "BLV90 18SES", BEING A RIVET PLATE IN A CONCRETE CYLINDER, NORTHWEST CORNER OF ELKHORN AND FORT APACHE.
ELEVATION: 2675.26 (FEET)
815.4214 (METERS)
CITY OF LAS VEGAS VERTICAL CONTROL BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

BASIS OF BEARING
NORTH 89°54'17" EAST, BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 20, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN IN FILE 118 OF SURVEYS AT PAGE 89, OFFICIAL RECORDS, COUNTY OF CLARK, STATE OF NEVADA.

CURVE TABLE				
CURVE	LENGTH	RADIUS	TANGENT	DELTA
C1	48.02	30.00	30.91	91°42'50"
C2	48.23	30.00	29.12	88°17'10"
C3	47.12	30.00	30.00	90°00'00"
C4	22.90	50.00	11.66	26°14'44"
C5	116.89	47.00	138.42	142°29'28"
C6	22.90	50.00	11.66	26°14'44"
C7	47.12	30.00	30.00	90°00'00"
C8	22.90	50.00	11.66	26°14'44"
C9	116.89	47.00	138.42	142°29'28"
C10	22.90	50.00	11.66	26°14'44"
C11	46.98	30.00	29.85	89°43'18"
C12	22.90	50.00	11.66	26°14'44"
C13	116.89	47.00	138.42	142°29'28"
C14	22.90	50.00	11.66	26°14'44"
C15	23.56	15.00	15.00	90°00'00"
C16	23.56	15.00	15.00	90°00'00"
C17	23.56	15.00	15.00	90°00'00"
C18	23.56	15.00	15.00	90°00'00"
C19	22.43	19.50	12.64	65°53'59"
C20	195.64	40.50	35.98	276°46'11"
C21	10.51	19.50	5.38	30°52'12"
C22	47.07	29.84	30.04	90°23'16"
C23	47.25	30.00	30.12	90°13'55"

SIDEWALK RAMP DATA			
PER STD. DWG. 235			
	A	B	TYPE
A	8'	8'	I
B	4.5	21.5'	I

RETAINING WALL HEIGHT			
	PAD DIFFERENCE	RET. WALL HEIGHT (# COURSES)	
Δ1	-4.7	8" (1 CRS)	
Δ2	71--83	1'4" (2 CRS)	
Δ3	84--1.5	2' (3 CRS)	
Δ4	1.51--2.17	2'8" (4 CRS)	
Δ5	2.18--2.83	3'4" (5 CRS)	
Δ6	2.84--3.5	4' (6 CRS)	
Δ7	3.51--4.17	4'8" (7 CRS)	
Δ8	4.18--4.83	5'4" (8 CRS)	
Δ9	4.84--5.5	6" (9 CRS)	
Δ10	5.51--6.17	6'8" (10 CRS)	
Δ11	6.18--6.83	7'4" (11 CRS)	

NOTE:
ADD 2600 TO ALL ELEVATIONS
ALL COMMON LOTS AND LANDSCAPED AREAS TO BE PRIVATELY MAINTAINED

- CONSTRUCTION NOTES**
- SAWCUT AND MATCH EXISTING
 - CONSTRUCT CASE 1 SIDEWALK RAMP PER CCASD 235 SEE TABLE FOR LENGTHS AND DETAIL SHEET D2
 - CONSTRUCT 7" SIDEWALK PER CCASD 234
 - CONSTRUCT 24" CONCRETE ALLEY PER MODIFIED CCASD 215
 - CONSTRUCT SIDEWALK UNDERDRAIN PER CCASD 236
 - CONSTRUCT 5" SIDEWALK PER CCASD 234
 - CONSTRUCT "L" TYPE CURB AND GUTTER PER CCASD 216
 - CONSTRUCT CROSS GUTTER PER CCASD 228
 - CONSTRUCT DEPRESSED CURB PER CCASD 227
 - CONSTRUCT DEPRESSED ALLEY ENTRANCE PER CCASD 227
 - CONSTRUCT A CURB MEDIAN ISLAND PER CCASD 218 AND 219
 - SAWCUT EXISTING PAVING AND REPLACE AGGREGATE BASE AND PAVING
 - CONSTRUCT 8" CMU BLOCK SOLID GROUTED FLOOD WALL MIN. 3 COURSES ABOVE BLOCK OF SIDEWALK
 - CONSTRUCT REMOVABLE BOLLARD PER DETAIL SHEET D3
 - CONSTRUCT WROUGHT IRON FENCE PER CLV SD 421B AND DETAIL SHEET D3
 - CONSTRUCT 5'X24'X 6" DEEP RIPRAP PAD, D50=3" W/ 6" TYPE II BASE & GEOTEXTILE FILTER FABRIC.

- LEGEND**
- PROPERTY LINE / RIGHT-OF-WAY
 - "L" TYPE CURB AND GUTTER
 - "A" TYPE CURB
 - EXISTING CURB AND GUTTER
 - PROPOSED WATER LINE (SIZE AS SHOWN)
 - PROPOSED SEWER LINE (SIZE AS SHOWN)
 - EXISTING UTILITY (AS SHOWN)
 - CROSS GUTTER
 - WHEELCHAIR RAMP
 - CUT OR FILL SLOPE
 - PROPOSED PAVEMENT AREA
 - PROPOSED ELEVATION (DESCRIPTION AS SHOWN)
 - EXISTING ELEVATION (DESCRIPTION AS SHOWN)
 - FUTURE DESIGN ELEVATION (DESCRIPTION AS SHOWN)
 - LOT NUMBER
 - PAD ELEVATION
 - FINISHED FLOOR ELEVATION
 - EXISTING PAVEMENT TO BE REMOVED AND REPLACED

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

CERTIFICATION
I HEREBY CERTIFY THAT THE GRADING PLAN IS IN COMPLIANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH THE CITY OF LAS VEGAS PUBLIC WORKS FOR THIS PROJECT. - DS3605

JOSEPH D. THOMASON, P.E. #11097

DATE 2-10-05

Avoid cutting underground utility lines. It's costly.
Call before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

Avoid overhead power line contact.
Call before you Overhead
1-702-593-6111
NEVADA POWER OVERHEAD SAFETY SERVICE (NEPOSS)

Call before you Undercut
1-702-593-6111
UNDERCUT SERVICE (USA)

BENCHMARK
CITY OF LAS VEGAS BENCHMARK - 2090-20M
REBAR ±124 FT. NORTHEAST OF DEER SPRINGS AND FORT APACHE
ELEVATION = 806.867 METERS (NAVD88)
ELEVATION = 2647.20 FEET (NAVD88)

BASIS OF BEARING
SOUTH 0°15'40" EAST BEING THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 20, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN IN FILE 118, PAGE 44 OF PARCEL MAPS IN THE CLARK COUNTY RECORDERS' OFFICE, CLARK COUNTY, NEVADA.

THOMASON
CONSULTING
ENGINEERS

3161 E. WARM SPRINGS ROAD, SUITE 200
LAS VEGAS, NEVADA 89120
702-932-6125

RICHMOND AMERICAN HOMES
WHITNEY HEIGHTS

GRADING PLAN

PROJECT NO. 00104005
SHEET 7 OF 33
DRAWING NO. 10714858

DATE 2-10-05

REVISION
1. 3-15-05 Dwg. Rev. Benchmark Basis of Bearing & Elevation
2. 4-10-05 Dwg. Rev. Benchmark Basis of Bearing & Elevation
3. 4-10-05 Dwg. Rev. Benchmark Basis of Bearing & Elevation

DESIGNED BY
CHECKED BY
SCALE 1" = 30'

00104005

00104005-GRADING-30 Dwg. 2/9/2005 5:47 09 PM PST