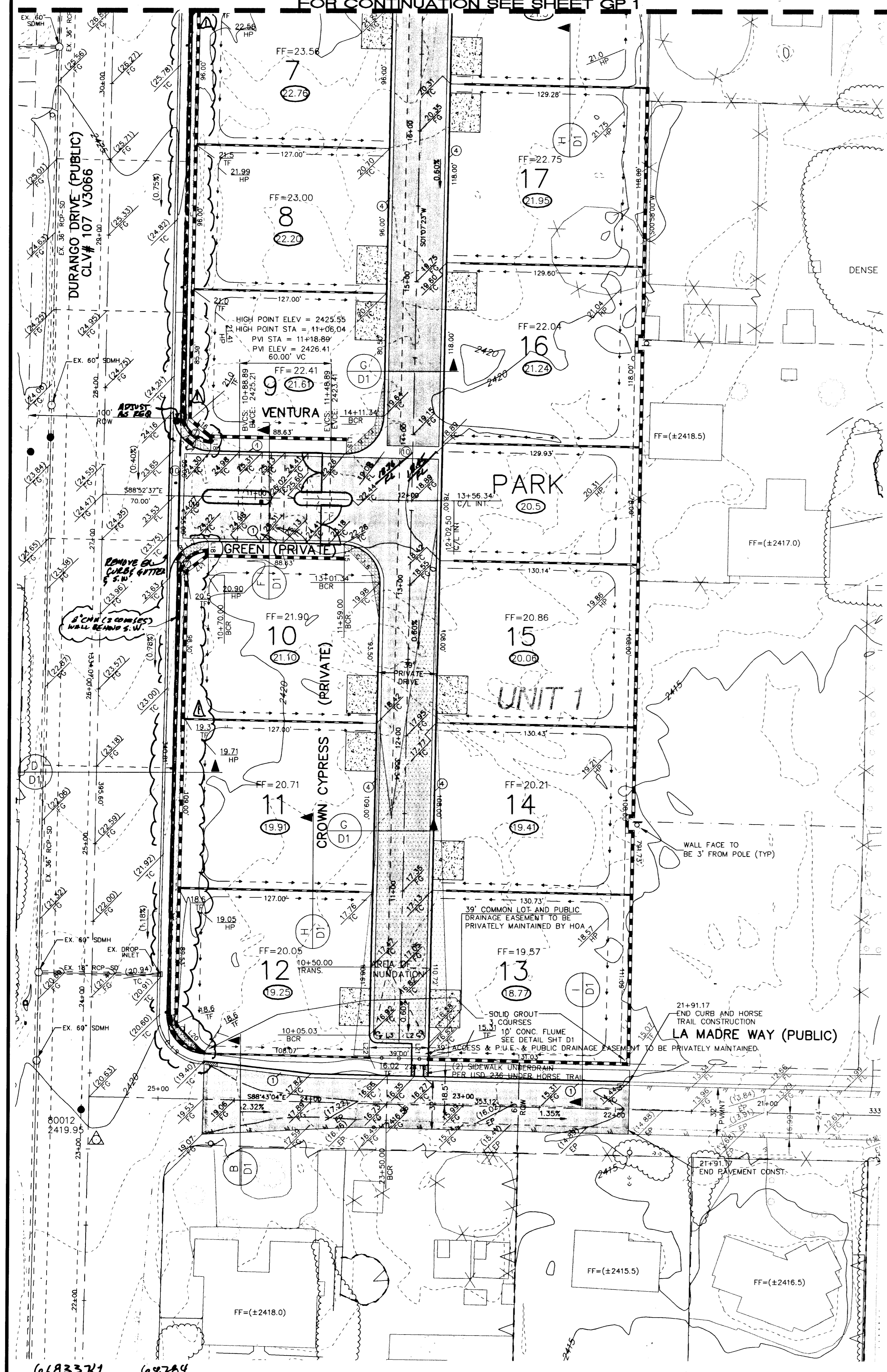
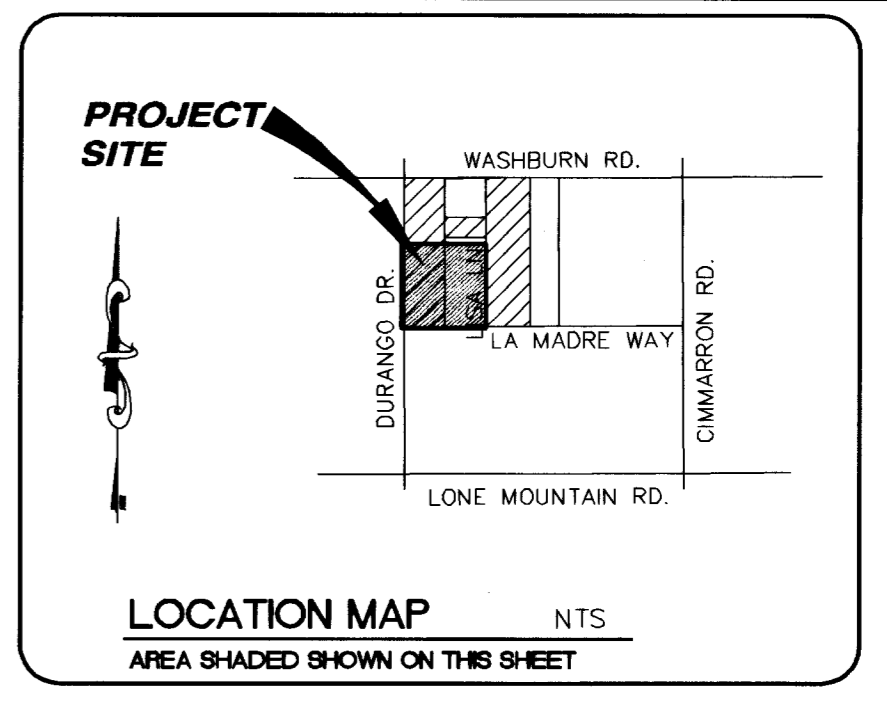


FOR CONTINUATION SEE SHEET GP 1



LEGEND

- EX IMPROVEMENTS
- RETAINING BLOCK WALL
- BLOCK WALL
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- TW TOP OF RETAINING WALL
- FF FINISH FLOOR
- BW BOTTOM WALL
- FG FINISH GRADE
- FL FLOW LINE
- TC TOP OF CURB
- HP HIGH POINT
- AC ASPHALT CONCRETE
- WSE WATER SURFACE ELEVATION
- 99.9 PAD GRADE
- SIGHT VISIBILITY ZONE
- SCARP 2:1 MAX
- UNIT BOUNDARY



BENCH MARK
CITY OF LAS VEGAS VERTICAL CONTROL
RIVET AND PLATE IN TOP OF CURB, NE
RETURN OF DURANGO DRIVE & WASHBURN RD.
STATION 11.92
ELEVATION = 740.8191 METERS 2430.50 FEET (NAVD88) OLD
740.7932 METERS 2430.42 FEET NEW
OLD - 0.08' = NEW

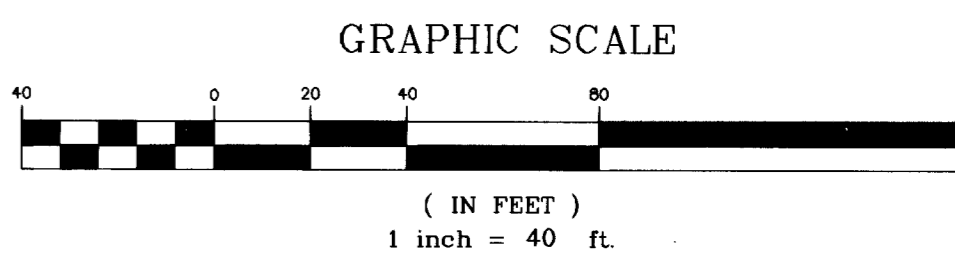
BASIS OF BEARING
NORTH 88°58'14" WEST BEING THE EAST-WEST LINE CENTER
OF SECTION LINE BETWEEN THE WEST QUARTER (1/4)
CORNER AND THE WEST SIXTEENTH (1/16) CORNER OF
SECTION 33, TOWNSHIP 19 SOUTH, RANGE 60 EAST M.D.M.,
CITY OF LAS VEGAS, CLARK COUNTY, NEVADA, AS SHOWN
BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA
RECORDER IN FILE 82 OF PARCEL MAPS PAGE 75.

GRADING NOTES

- FINAL GRADES ADJACENT TO STRUCTURE AFTER LANDSCAPING SHALL BE 0.5 FEET BELOW FINISH FLOOR (MIN).
- THE QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.
- THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE BEGINNING WORK.
- FINISH FLOOR ELEVATION IS TO BE 0.8 FOOT ABOVE PAD GRADE.
- ALL IMPROVEMENTS TO BE PROTECTED FROM EROSION.
- MAXIMUM SLOPES AND MINIMUM STREET SECTIONS NOT TO EXCEED THAT SHOWN ON GEOTECH REPORT
- SEE FINAL MAP FOR EXACT BEARINGS AND DISTANCES.
- SEE DETAIL SHEETS FOR STREET SECTIONS AND DETAILS.
- 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 OUTSIDE OF THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL BE PERFORMED UNDER A SEPARATE ENCROACHMENT PERMIT ISSUED BY THE CONTROLLING AUTHORITY.
- FINISH GRADE CONTOURS ARE INDICATED WITH TEXT INTERIOR TO BROKEN LINE.

CONSTRUCTION NOTES

- CONSTRUCT "L" CURB AND GUTTER PER USD#216
- CONSTRUCT "A" TYPE ISLAND CURB PER USD#219
- NOT USED
- CONSTRUCT 30 IN. "ROLL" TYPE CURB & GUTTER PER USD#217A
- NOT USED
- NOT USED
- CONSTRUCT SIDEWALK PER USD#234
- CONSTRUCT HC RAMP PER USD#235 USE CASE I A=B=8' UNLESS OTHERWISE SHOWN ON PLAN
- NOT USED
- CONSTRUCT 8' VG PER USD#228
- NOT USED
- LANDSCAPE PER OWNER
- 2" ASPHALT CEMENT & 4" TYPE II BASE (SEE ASPHALT CONCRETE PAVEMENT ON SECTION 1.1, PER SOIL'S FILE # 20001099E1) PREPARED BY GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.
- CONSTRUCT (2) 24" SIDEWALK UNDER DRAIN PER CLARK COUNTY AREA STANDARD DWG. NO. 236.
- NOT USED
- NOT USED
- NOT USED



DRAINAGE CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS.

George Spencer, P.E. 12/12/03
GEORGE SPENCER, P.E. #7848 DATE

CALL BEFORE YOU OVERHEAD
1-702-593-6111

NOTICE!
EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE ENGINEER BEARS NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR SHOWN INCORRECTLY.

Call BEFORE YOU Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

LINE DATA TABLES

NO.	BEARING	DISTANCE
1.1	S00°48'26"W	19.54
1.2	S88°43'46"E	14.05
1.3	S88°43'46"E	14.51
1.4	S00°48'26"W	3.20
1.5	N00°00'00"E	42.28
1.6	N89°14'47"W	0.40
1.7	N00°00'00"E	5.88
1.8	N45°57'49"E	26.79
1.9	S00°50'00"W	30.00
1.10	S89°11'21"E	14.47
1.11	S89°11'21"E	14.51
1.12	S00°00'00"E	29.00
1.13	N00°00'00"E	8.03
1.14	N00°00'00"E	8.07
1.15	N00°00'00"E	8.50
1.16	N50°15'00"W	77.13
1.17	N52°27'48"E	77.13
1.18	N00°00'00"E	5.00
1.19	S88°52'17"E	20.00
1.20	N44°02'55"W	26.67
1.21	S07°23'21"W	14.82
1.22	S07°23'21"W	14.81

CURVE DATA TABLES

NO.	CHORD	DELTA	LENGTH	TANGENT
C1	774.97	03°04'56"	47.43	23.72
C2	444.50	12°57'45"	32.44	16.79
C3	3.00	89°09'51"	7.87	3.07
C4	3.00	89°13'09"	7.84	2.99
C5	205.47	03°50'57"	47.39	23.77
C6	744.47	03°07'17"	47.47	23.74
C7	125.00	12°57'45"	26.56	14.09
C8	84.00	12°57'45"	36.80	18.49
C9	15.00	18°54'44"	4.40	2.24
C10	15.00	58°27'22"	15.70	8.65
C11	15.00	85°58'08"	28.14	11.62
C12	15.00	103°03'24"	28.38	18.86
C13	25.00	89°40'59"	39.13	24.86
C14	5.00	90°15'15"	7.88	5.03
C15	5.00	89°40'44"	7.83	4.97
C16	25.00	90°00'00"	36.27	23.00
C17	20.00	90°00'00"	31.47	20.00
C18	20.00	90°00'00"	31.42	20.00
C19	25.00	89°50'27"	38.20	24.83

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

TOLL BROTHERS
1635 VILLAGE CENTER CIRCLE, SUITE 100
(702) 243-9600 FAX (702) 243-9610

ENGINEERING COMPANY
50 So. Jones #202, Las Vegas, NV, 89107
Telephone: (702) 977-1300

ALPHA

WASHBURN & DURANGO UNIT 1 (AKA - NORTH CANYON ESTATES)

GRADING PLAN 2 OF 2

SHEET: 05/13/03
DRAWN BY: RCV
DESIGNED BY: RCV
CHECKED BY: GMS
PROJECT NO: 316710
SCALE: 1"=40'

DATE: 05/13/03

DATE: 05/13/03

DATE: 11/20/03

PROFESSIONAL ENGINEER
GEORGE SPENCER, P.E.
No. 7848

GP2
4 OF 17 SHEETS
DRAWING NO. 10744789