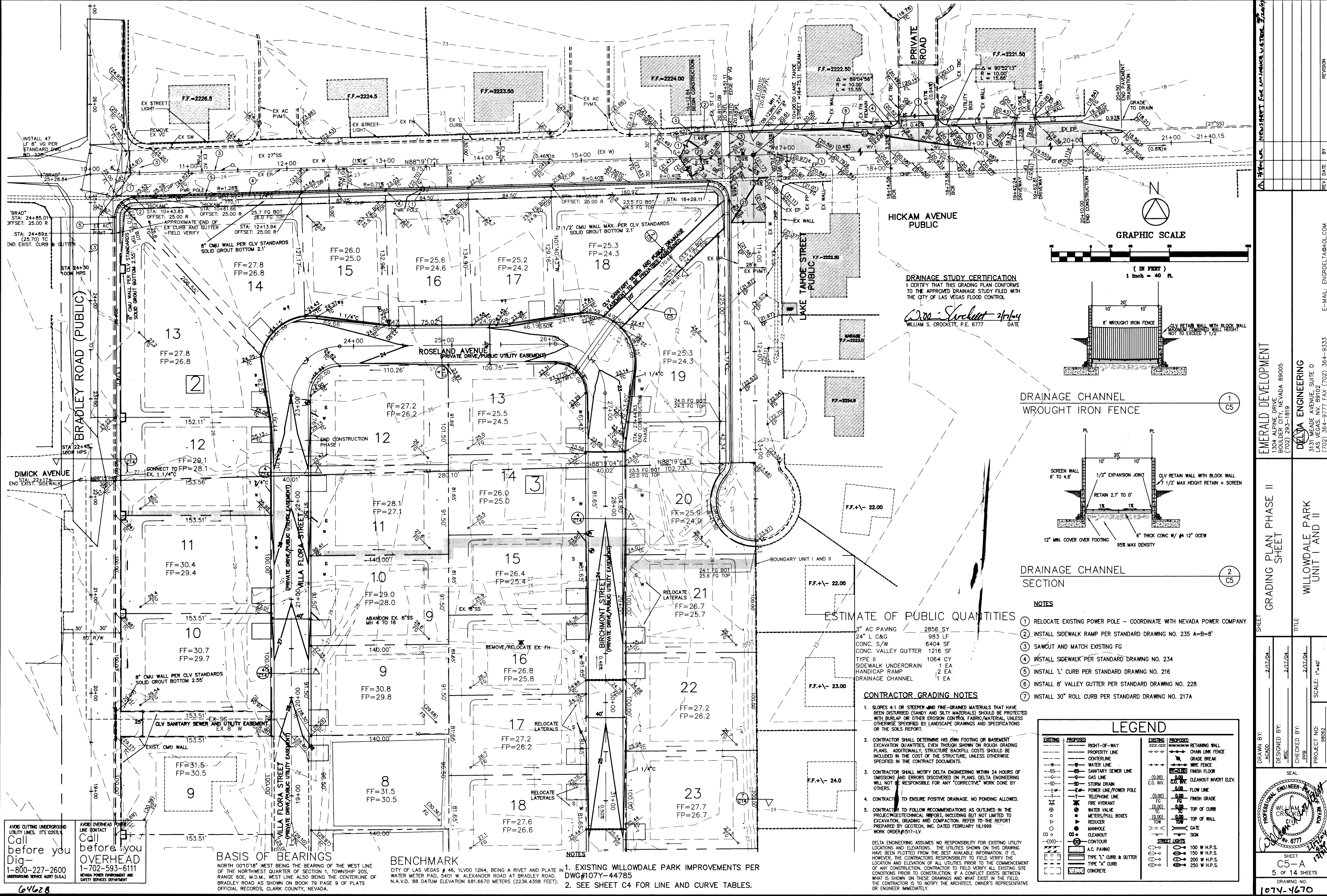




AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY!
Call before you Dig-
1-800-227-2600
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

AVOID OVERHEAD POWER LINES. IT'S COSTLY!
Call before you OVERHEAD
1-702-593-6111
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

BASIS OF BEARINGS
NORTH 00°10'18" WEST BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 20S RANGE 60E, M.D.M., WEST LINE ALSO BEING THE CENTERLINE OF BRADLEY ROAD AS SHOWN ON BOOK 79 PAGE 9 OF PLATS OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

BENCHMARK
CITY OF LAS VEGAS # 46, 1LV00 12N4, BEING A RIVET AND PLATE IN WATER METER PAD, 5401 W. ALEXANDER ROAD AT BRADLEY ROAD. N.A.V.D. 88 DATUM ELEVATION 681.6670 METERS (2236.4358 FEET).

- NOTES**
- EXISTING WILLOWDALE PARK IMPROVEMENTS PER DWG#107Y-44785
 - SEE SHEET C4 FOR LINE AND CURVE TABLES.

ESTIMATE OF PUBLIC QUANTITIES

3" AC PAVING	2856 SY
24" L C&G	983 LF
CONC. S/W	6404 SF
CONC. VALLEY GUTTER	1216 SF
TYPE II SIDEWALK UNDERDRAIN	1064 CY
HANDICAP RAMP	2 EA
DRAINAGE CHANNEL	1 EA

CONTRACTOR GRADING NOTES

- SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
- CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON ROUGH GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY DELTA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. DELTA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED.
- CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT/GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING AND CONSTRUCTION. REFER TO THE REPORT PREPARED BY GEOTECH, INC. DATED FEBRUARY 19, 1999 WORK ORDER#1517-LV

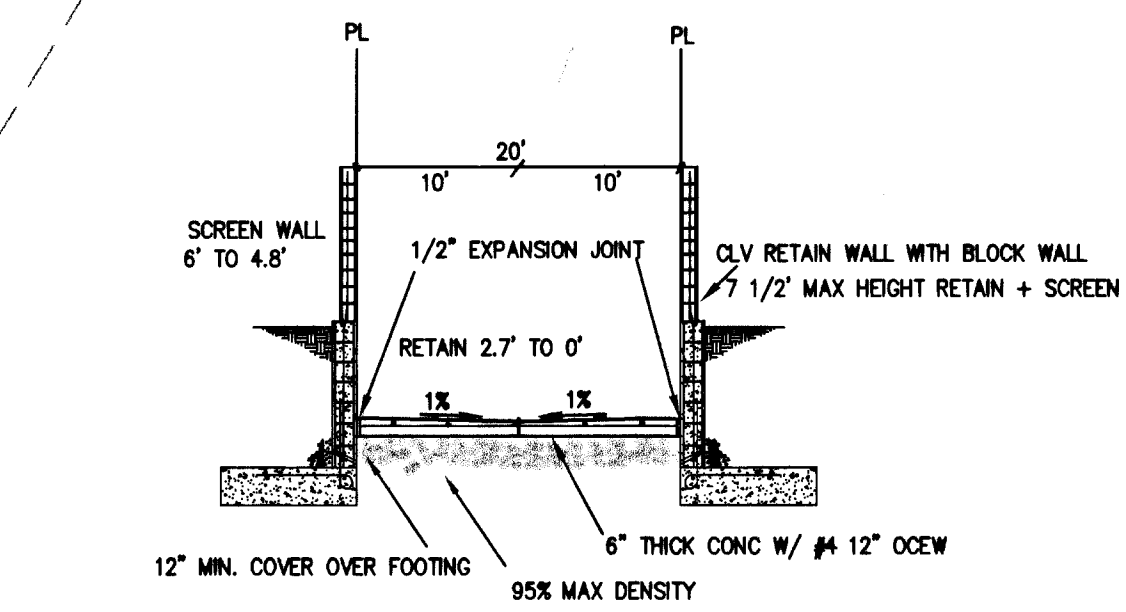
DELTA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT, OWNER'S REPRESENTATIVE OR ENGINEER IMMEDIATELY.

DRAINAGE STUDY CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FILED WITH THE CITY OF LAS VEGAS FLOOD CONTROL.

WILLIAM S. CROCKETT, P.E. 6777
DATE 2/1/04

DRAINAGE CHANNEL WROUGHT IRON FENCE



DRAINAGE CHANNEL SECTION

- NOTES**
- RELOCATE EXISTING POWER POLE - COORDINATE WITH NEVADA POWER COMPANY
 - INSTALL SIDEWALK RAMP PER STANDARD DRAWING NO. 235 A=B=8'
 - SAWOUT AND MATCH EXISTING FG
 - INSTALL SIDEWALK PER STANDARD DRAWING NO. 234
 - INSTALL 'L' CURB PER STANDARD DRAWING NO. 216
 - INSTALL 8' VALLEY GUTTER PER STANDARD DRAWING NO. 228
 - INSTALL 30" ROLL CURB PER STANDARD DRAWING NO. 217A

LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
RIGHT-OF-WAY	PROPERTY LINE	RETAINING WALL	CHAIN LINK FENCE
CENTERLINE	WATER LINE	GRADE BREAK	WIRE FENCE
SANITARY SEWER LINE	GAS LINE	FINISH FLOOR	FINISH GRADE
STORM DRAIN	POWER LINE/POWER POLE	C.O. INV.	FLOW LINE
TELEPHONE LINE	FIRE HYDRANT	FG	TOP OF CURB
WATER VALVE	METERS/PULL BOXES	TOP OF WALL	GATE
REDUCER	MANHOLE	SCM	
CLEANOUT	CONTOUR		
AC PAVING	TYPE 'L' CURB & GUTTER		
TYPE 'A' CURB	CONCRETE		
		100 W.H.P.S.	
		150 W.H.P.S.	
		200 W.H.P.S.	
		250 W.H.P.S.	

EMERALD DEVELOPMENT
1304 ALPINE DRIVE
SULLY CITY, NEVADA 89005
(702) 253-1919

DELTA ENGINEERING
3131 MEADE AVENUE, SUITE D
LAS VEGAS, NV 89102
(702) 364-9777 FAX (702) 364-9333
E-MAIL: ENGRDELTA@AOL.COM

GRADING PLAN PHASE II
SHEET
WILLOWDALE PARK
UNIT I AND II

DRAWN BY: ACAD
DESIGNED BY: MSC
CHECKED BY: EPP
PROJECT NO: 98062
SCALE: 1"=40'

SEAL
WILLIAM S. CROCKETT
P.E. No. 6777
SHEET
C5-A
5 OF 14 SHEETS
DRAWING NO.
107Y-4670