GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE UNIFORM-STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION, OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA 1986.

2. 48 HOURS PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT

LAS VEGAS VALLEY WATER DISTRICT	PHONE	870-2011
NEVADA POWER COMPANY	PHONE	1-800-227-2600
CENTRAL TELEPHONE COMPANY	PHONE	1-800-227-2600
SOUTHWEST GAS CORPORATION	PHONE	365-2296

3. LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM INFORMATION RECEIVED FROM THE APPLICABLE UTILITY CO'S. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR EXISTING UTILITIES OR STRUCTURES NOT SHOWN, OR NOT IN THE LOCATIONS SHOWN ON THE DRAWINGS. CONTRACTOR TO VERIFY THE EXACT LOCATION OF UTILITIES PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR'S RESPONSIBILITY REGARDING UTILITIES SHALL BE AS REQUIRED UNDER SECTION 107.17 OF THE UNIFORM STANDARD SPECIFICATIONS FOR CLARK COUNTY AREA, NEVADA AND AS PROVIDED IN THE SPECIFICATIONS. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING OVER OR NEAR THE EXISTING GAS MAINS.

4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

5. THE CONTRACTOR SHALL NOT REMOVE TREES, SHRUBS, LAWNS, WALLS, FENCES, SIGNS, STRUCTURES, LIGHTS, OR ANY EXISTING IMPROVEMENTS OUTSIDE OF STREET RIGHT-OF-WAY, EXCEPT WHERE REQUIRED TO DO SO BY THE CONTRACT DRAWINGS OR BY THE ENGINEER.

6. TREES, SHRUBS, LAWNS, WALLS, FENCES, SIGNS, STRUCTURES, LIGHTS AND OTHER EXISTING IMPROVEMENTS WITHIN STREET RIGHTS-OF-WAY SHALL BE REMOVED WHERE SHOWN ON THE CONTRACT DRAWINGS, AND AS REQUIRED BY THE ENGINEER.

7. REPLACEMENT, RELOCATION OR RECONSTRUCTION OF ALL EXISTING IMPROVEMENTS INCLUDING SPRINKLER SYSTEMS, LAWNS, FENCES, WALLS, SIGNS, STEPS, SIDEWALKS, DRIVEWAYS,LAWN LIGHTS, AND ALL OTHER ITEMS APPLICABLE TO THIS CONTRACT SHALL BE AS REQUIRED BY THE ENGINEER.

8. THE CONTRACTOR SHALL BACKFILL AND FINE GRADE ALL CUT OR FILL SLOPES TO MATCH EXISTING CONDITIONS TO THE SATISFACTION OF THE ENGINEER, WHERE EXISTING LAWNS ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL RE-SEED AND/OR SOD THE AFFECTED AREA TO A CONDITION EQUAL TO, OR BETTER THAN EXISTED PRIOR TO CONSTRUCTION.

9. ALL BARRICADING AND TEMPORARY TRAFFIC CONTROL DEVICES OR METHODS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "NEVADA TRAFFIC CONTROL MANUAL", 1985, PUBLISHED BY THE STATE OF NEVADA, DEPARTMENT OF HIGHWAYS, EXCEPT AS OTHERWISE PROVIDED IN THE CONTRACT SPECIFICATIONS OR AS REQUIRED BY THE ENGINEER.

10. AT THE TIME OF PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL FURNISH, FOR APPROVAL, A TRAFFIC BARRICADING PLAN AND THE METHOD OF MAINTAINING PUBLIC CONVEYANCE AND SAFETY THROUGHOUT THE CONSTRUCTION AREA. TRAFFIC BARRICADING PLANS SHALL COMPLY WITH APPLICABLE PORTIONS OF SECTIONS 624 AND 625 OF THE STANDARD SPECIFICATIONS, THE TRAFFIC CONTROL MANUAL AND APPLICABLE CITY ORDINANCES.

11. REMOVAL OR RELOCATION OF POWER POLES, TELEPHONE POLES, JOINTLY-OWNED POLES, AND APPURTENANCES WHICH INTERFERE WITH IMPROVEMENTS REQUIRED TO BE CONSTRUCTED UNDER THIS CONTRACT, SHALL BE THE RESPONSIBILITY OF THE RESPECTIVE UTILITY COMPANY.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERTICAL ADJUSTMENT OF ALL EXISTING SANITARY, WATER AND STORM SEWER MANHOLES TO THE FINAL FINISH GRADES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONTRACT DRAWINGS, AND IN ACCORDANCE WITH SECTION 609 OF THE "STANDARD SPECIFICATIONS", AND THE VERTICAL ADJUSTMENTS OF ALL WATER VALVE BOXES SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE CONTRACT DRAWINGS.

LEGEND

- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF EXISTING SLOPE
- TOE OF EXISTING SLOPE
- 6'-0" HIGH CHAIN LINK FENCE
- EDGE OF A.C. PAVEMENT
- 2475 — EXISTING CONTOURS (CONTOUR INTERVAL 1')
- DIRECTION OF FLOW
- FUTURE CONSTRUCTION
- 100.00 TOP (1) — POTHOLE EXCAVATION
- 85.40 D.G. — DESIGN GRADE
- 55.9 F.G. — FINISHED GRADE
- 64.90 F.L — FLOW LINE ELEVATION
- 72.4 T.B. — TOP OF BERM ELEVATION
- IRRIGATION SLEEVE
- —W— PROPOSED WATER LINE
- —S— PROPOSED SEWER LINE
- —G— EXISTING GAS LINE
- BENCHMARK
- RIGHT-OF-WAY (R/W)
- (5) CURVE NUMBER
- 15 16 / 21 22 — SECTION CORNER

ABBREVATIONS

A.C.	ASPHALTIC CONCRETE	N.D.O.T.	NEVADA DEPT. OF TRANSPORTATION
B.C.	BACK OF CURB	N.P.C.	NEVADA POWER COMPANY
B.C.R.	BACK OF CURB RADIUS	N.	NORTH
BLVD.	BOULEVARD	N.I.C.	NOT IN CONTRACT
BVC	BEGIN VERTICAL CURVE	N.T.S.	NOT TO SCALE
C.B.	CATCH BASIN	NO. #	NUMBER
CTR.	CENTER	O.A.	OVERALL
℄	CENTERLINE	O.C.	ON CENTER
C.L.V.	CITY OF LAS VEGAS	OPN'G.	OPENING
CLR.	CLEAR	PKWAY.	PARKWAY
CONC.	CONCRETE	P T.	POINT, POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	P.C.C.	POINT OF COMPOUND CURVE
CULV.	CULVERT	P.C.	POINT OF CURVATURE
C. & G.	CURB & GUTTER	P.I.	POINT OF INTERSECTION
Δ	DELTA	P.R.C.	POINT OF REVERSE CURVE
D.G.	DESIGN GRADE		PROPERTY LINE
DET.	DETAIL	Q	RATE OF FLOW
DIA.	DIAMETER	QTY.	QUANTITY
DWG.	DRAWING	R	RADIUS
D.I.	DROP INLET	REF.	REFFRENCE
E.W.	EACH WAY	RT.	RIGHT
EA.	EACH	R/W	RIGHT OF WAY
E.	EAST	REINF.	REINFORCING
ELEV.	ELEVATION	RCB	REINFORCED CONC. BOX
EVC	END VERTICAL CURVE	RCP	REINFORCED CONCRETE PIPE
E.P.	EDGE PAVEMENT	REQ'D	REQUIRED
EXIST.	EXISTING	SECT.	SECTION
EXP.	EXPANSION	SHT.	SHEET
F.G.	FINISHED GRADE	SHLDR.	SHOULDER
F.H.	FIRE HYDRANT	SIM.	SIMILAR
F.L.	FLOW LINE	S.	SOUTH
FT.	FOOT	S.W.G.	SOUTHWEST GAS CORP.
GALV.	GALVANIZED	SPECS.	SPECIFICATIONS
G	GAS	STD.	STANDARD
G.B.	GRADE BREAK	STA.	STATION
HP.	HIGH POINT	S.D.	STORM DRAIN
HORZ.	HORIZONTAL	STRUCT.	STRUCTURAL
∞	INFINITY	S.F.	SQUARE FEET
I.D.	INSIDE DIAMETER	S.Y.	SQUARE YARD
INV.	INVERT ELEVATION	SYMM.	SYMMETRICAL
JT.	JOINT	T.	TANGENT
LAT.	LATERAL	THRU	THROUGH
LT.	LEFT	T.C.	TOP OF CURB
L.	LENGTH OF ARC:	T.M.H.	TOP OF MANHOLE
LF.	LINEAR FEET	TY.	TYPE
LG.	LONG	TYP.	TYPICAL
LOC	LENGTH OF CURVE	UTL.	UTILITY
LP	LOW POINT	V.G.	VALLEY GUTTER
M.H.	MANHOLE	VERT.	VERTICAL
MAX.	MAXIMUM	V.C.	VERTICAL CURVE
MISC.	MISCELLANEOUS	V.G.	VERTICAL GUTTER
MIN.	MINIMUM	W.	WEST
MVC	MIDDLE VERTICAL CURVE	W.P.	WORKING POINT
		R.G.	ROUGH GRADE

ENGINEER'S EVALUATION OF GRADING QUANTITIES

USING A SHRINKAGE FACTOR OF 10% AND A SUBSIDENCE OF 0.10; AN ESTIMATE FOR THE GRADING IS SHOWN BELOW. PLEASE NOTE THAT THESE QUANTITIES ARE ONLY AN ESTIMATE. THE ACTUAL QUANTITIES MAY DIFFER FROM THE ESTIMATE DUE TO SOIL VARIATIONS IN THE FIELD. QUANTITIES FOR ADDITIONAL DITCHES OR BERMS THAT MAY BE REQUIRED BY THE ENGINEER ARE NOT INCLUDED.

	CUT	FILL
COMPUTED VOL.	204,700 CY	158,900 CY
SUBSIDENCE (0.10)	-8,300 CY	+6,700 CY
SUBTOTAL	196,400 CY	165,600 CY
SHRINKAGE (10%)	-19,600 CY	
TOTAL	176,800 CY	165,600 CY
EXCESS MATERIAL	11,200 CY	

* ESTIMATE OF QUANTITIES

ITEM	QUANTITIES	UNITS
ROADWAY EXCAVATION	204,700	CY
ROADWAY & CONTROLLED FILL	158,900	CY
SCARIFY & RECOMPACT	252,000	SY
BLASTING	204,200	CY

* NOTE TO CONTRACTOR

QUANTITIES SHOWN ARE ESTIMATES ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED. ESTIMATE OF QUANTITIES DOES NOT INCLUDE SHRINAGE OR SUBSIDENCE.

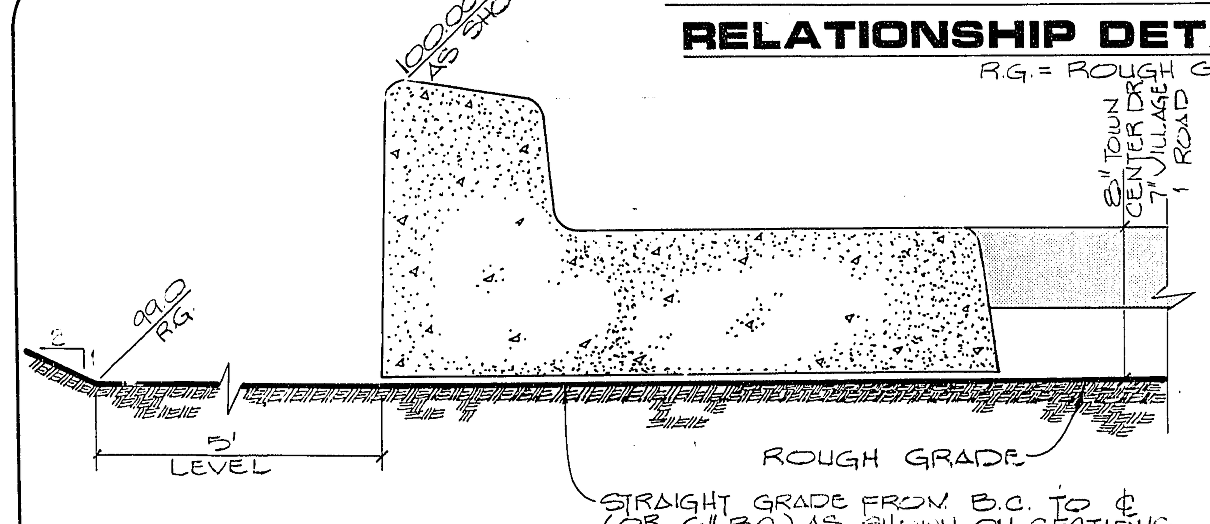
BASIS OF BEARING

N. 01 12'43" E. IS BASED ON THE NEVADA STATE GRID SYSTEM (EAST ZONE) AS DETERMINED FROM THE TRIANGULATION POINTS "RED ROCK" TO "LONE MOUNTAIN".

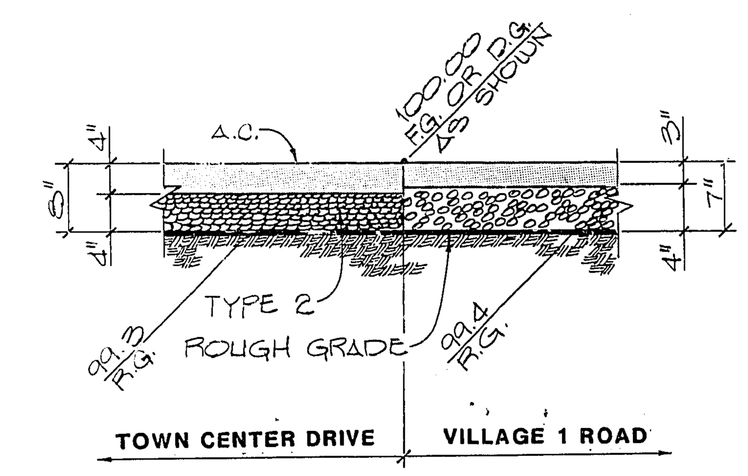
TYPICAL ROUGH GRADING RELATIONSHIP DETAILS

R.G.= ROUGH GRADE

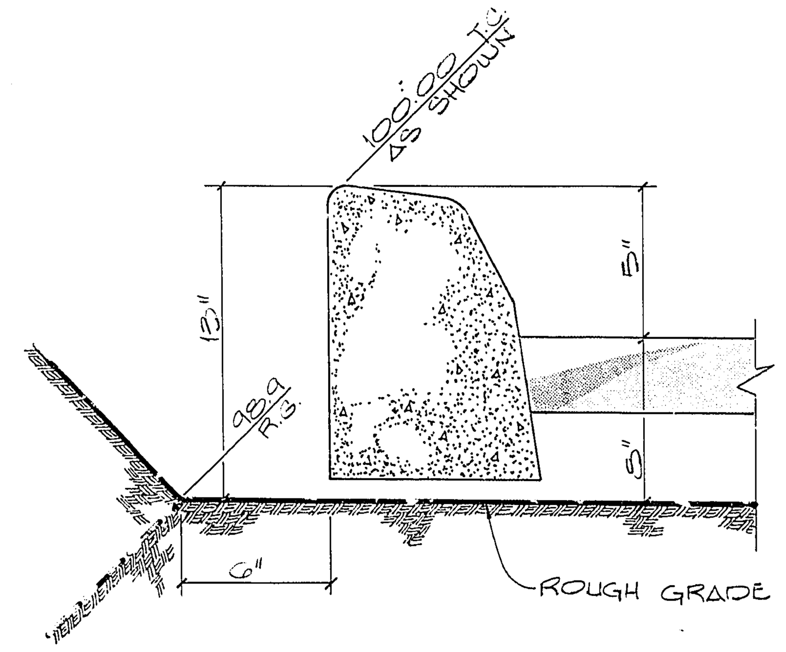
NOTE: THESE DETAILS ARE TO BE USED IN DETERMINING ROUGH GRADE ELEVATIONS RELATIVE TO FINISHED GRADE ELEVATION (F.C., D.C., T.C., F.L., ETC.) AS SHOWN ON THE DESIGN PLANS CONTAINED IN THIS PACKAGE.



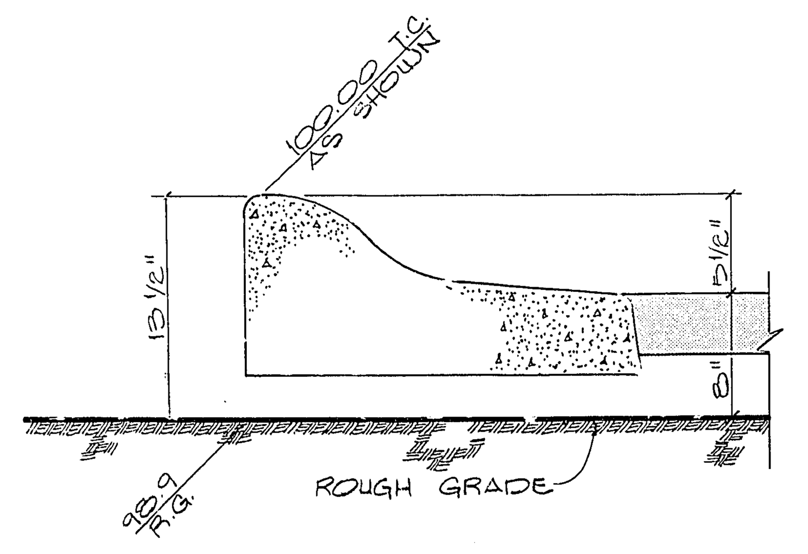
"L" TYPE CURB AND GUTTER



A.C. PAVEMENT SECTION



"A" TYPE ISLAND CURB



ROLL TYPE CURB AND GUTTER

BENCHMARK

CHISELED + IN TOP OF CURB AT END OF CURB ON WEST SIDE OF DURANGO, 250' SOUTH OF WESTCLIFF.

ELEV. PER CITY OF LAS VEGAS DATUM = 2610.16

Avoid cutting underground utility lines. It's costly

Call before you Dig.

1-800-227-2600

UNDERGROUND SERVICE (USA)

APPROVALS

CITY OF LAS VEGAS

CITY ENGINEER — 11-16-88 DATE

NOTE: THESE PLANS ARE FOR THE PURPOSES OF ROUGH GRADING ONLY. ALL IMPROVEMENTS OR UTILITIES (PAVEMENT, CURB AND GUTTER, STORM DRAIN, WATER, SEWER, ETC.), WHETHER EXISTING, FUTURE OR PROPOSED, ARE SHOWN FOR REFERENCE ONLY AND ARE NOT A PART OF THIS CONTRACT.

REV	DATE	DESCRIPTION
1	11-28-88	ISSUED FOR BID
2	12-23-88	ISSUED FOR CONSTRUCTION

RECOMMENDED — CRAIG A. PRIMAS — 6638 R.P.E. NO. — 11/22/88 DATE

G.C. WALLACE, INC.
Engineering/Architecture
1555 SOUTH RAINBOW BLVD./LAS VEGAS, NEVADA 89102

HILLS CENTER DRIVE, VILLAGE CENTER CIRCLE & TOWN CENTER DRIVE

HOWARD HUGHES PROPERTIES

ROUGH GRADING

GENERAL NOTES, ABBREVATIONS & LEGEND

SHEET 2 OF 15 SHEETS

10/31/88

JOB NO. 620.282

8/84 DIETERICH-POST 65328

9-2.50 107-V2094