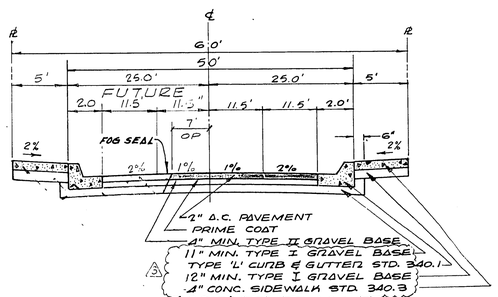
26-4-1

△1 CORRECTIONS 4/30/79 T.L.

△2 CORRECTIONS 5/30/79 TL

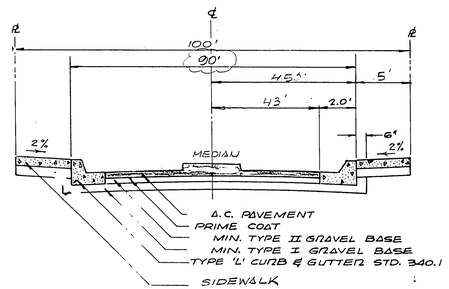
## GENERAL SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS OF THE CLARK COUNTY SANITATION DISTRICT AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA 1978. IN ALL CASES THE DISTRICT'S CRITERIA SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS.
2. CLARK COUNTY SANITATION DISTRICT'S STANDARD DRAWINGS SHALL APPLY TO ALL CONSTRUCTION.
3. SEWER MAINS ONLY TO BE LAID IN SEWER EASEMENTS.
4. ALL 4" HOUSE LATERALS TO BE LAID AT NOT LESS THAN MINIMUM SLOPES AS SHOWN IN THE DISTRICT STANDARDS.
5. SEWER LATERAL LOCATIONS TO BE MARKED IN ACCORDANCE WITH STANDARD DRAWING SD-11 IN THE DISTRICT'S STANDARDS.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST BE MET WITH THE APPROVAL OF THE CLARK COUNTY SANITATION DISTRICT.
7. IF A LATERAL IS UNDER A DRIVEWAY, CONCRETE SLAB, OR A.C. AREA, A CLEANOUT SHALL BE INSTALLED AND RAISED TO GRADE WITH A SLOTTED BRASS CAP OR WITHIN A WATER METER BOX WHICH HAS A METAL COVER MARKED "SEW. C.O.". THIS INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING SD-12.
8. SOIL TESTING SHALL BE IN ACCORDANCE WITH ITEM #21 OF THE CONSTRUCTION STANDARDS OF THE DISTRICT'S DESIGN AND CONSTRUCTION STANDARDS.
9. ALL EXFILTRATION, INFILTRATION AND AIR TESTING OF LINES SHALL BE IN ACCORDANCE WITH THE DISTRICT'S DESIGN AND CONSTRUCTION STANDARDS.
10. CUT SHEETS MUST BE SUBMITTED TO THE DISTRICT BEFORE CONSTRUCTION WILL BE PERMITTED TO START.
11. ALL CONTRACTORS INSTALLING SEWER MAINS WHICH WILL BE UNDER THE JURISDICTION OF THE DISTRICT MUST BE CLASS "A" CONTRACTORS.




### 60' STREET SECTION WITH 50' BACK OF CURB

LILLIAN ST. (HALF ST.)
(LOOKING NORTH)




### 100' STREET SECTION WITH 90' BACK OF CURB

△4 FUTURE

BONANZA RD. (HALF ST.)

NELLIS BLVD. (HALF ST.)

C&G, SW, STREET, MEDIAN STC., WILL BE BUILT BY ASSESSMENT DIST. W/ REG. ST. & HWY. PROJECT.

## QUANTITIES

QUANTITY ESTIMATES
(BONDING PURPOSES ONLY)

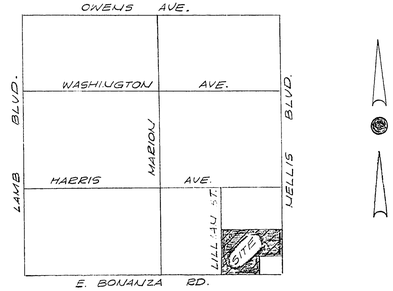
(NOT FOR BIDDING OR CONSTRUCTION USE)

| NO. | DESCRIPTION | QUANTITY | UNIT |
|---|---|---|---|
| 1 | Clearing & Grubbing | 7.9± | Acres |
| 2 | Type "L" Curb & Gutter | 554 | Lin.Ft. |
| 3 | Concrete Sidewalk 4" | 2,768 | Sq. Ft. |
| 4 | Concrete Driveway-Commercial | 280 | Sq. Ft. |
| △3 5 | 3" AC Pavement (Temp.) | 11,095 | Sq. Ft. |
| 6 | 2" AC Pavement | 18,048 | Sq. Ft. |
| 7 | Type I Gravel Base | △2 742 | Cu.Yds. |
| 8 | Type II Gravel Base | 879 | Cu.Yds. |
| 9 | Wheel Chair Ramp | 1 | Each |
| 10 | Concrete Drainage Flume | 2 | Each |
| 11 | Eccentric Concrete Manhole | 1 | Each |
| 12 | 6" VC Pipe-House Laterals | 44 | Lin.Ft. |
| 13 | 8" VC Pipe | 22 | Lin.Ft. |
| 14 | Street Lighting Quantity | (SEE SHEET 4 of 4) | |
| 15 | Water Quantity | (SEE SHEET 2 of 4) | |

## ABBREVIATIONS

AC.....Asphaltic Concrete
ACP.....Asbestos Cement Pipe
ADJ.....Adjust
BC.....Beginning of curve or Back of curb
BCR.....Beginning of curb return or Back of curb radius
BDRY.....Boundary
BEG.....Begin
BM.....Bench Mark
BVC.....Beginning of Vertical Curve
C & G.....Curb & Gutter
CF.....Curb Face
CIP.....Cast Iron Pipe
CL.....Centerline or Chain Link
CMP.....Corrugated Metal Pipe
CONC.....Concrete
CONST.....Construct
D.....Diameter of Pipe
DBL.....Double
DI.....Drop Inlet
DIA.....Diameter
DMH.....Drop Manhole
EC.....End of Curve
ECR.....End of Curb Return
EL.....Elevation
EVC.....End of Vertical Curve
EQ.....Equal
EX.....Existing
FG.....Finish Grade
FH.....Fire Hydrant
FL.....Flow Line
G.....Gas
GB.....Grade Break
H.....High or Height
HOR.....Horizontal
ID.....Inside Diameter
INV.....Invert
IP.....Iron Pipe
L.....Length
LAT.....Lateral
LF.....Lineal Feet
LT.....Left
Max.....Maximum
MH.....Manhole
MIN.....Minimum
NO.....Number
NRCP.....Non-reinforced concrete pipe
OC.....On Center
OD.....Outside diameter
PC.....Point of curvature
PCC.....Point of compound curve or Portland cement concrete
PHP.....Plastic High Pressure
PI.....Point of Intersection
PL.....Property Line
PP.....Power Pole
PRC.....Point of Reverse Curve
PROP.....Proposed
PT.....Point of Tangent
PVC.....Poly vinyl chloride pipe
PVI.....Point of Vertical Intersection
PVMT.....Pavement
Q.....Rate of Flow
R.....Radius
RC.....Reinforced Concrete
RCP.....Reinforced Concrete Pipe
RT.....Right
R/W.....Right of Way
SD.....Storm Drain
SHP.....Steel High Pressure
SHT.....Sheet
SP MH.....Special Manhole
SS.....Sanitary Sewer
STA.....Station
STD.....Standard
STL.....Steel
SW.....Sidewalk
T.....Tangent Distance
TC.....Top of Curb
TMH.....Top of Manhole
TRANS.....Transition
TSC.....Traffic Signal Conduit
VC.....Vertical Curve
VCP.....Vitrified Clay Pipe
VERT.....Vertical
VG.....Valley Gutter
W.....Water

## VICINITY MAP




## BENCHMARK

C.C.E.D. BRASS NAIL & TAG T.C.
SE CORNER NELLIS BLVD. & BONANZA ROAD.
ELEV. 1759.51

## GENERAL NOTES

1. All construction and materials shall be in accordance with the "Uniform Standard Specifications for Public Works Construction Off-site Improvements, Clark County Area Nevada", issued 1978 ; the "Uniform Standard Drawings for Public Works Construction, Clark County Area"; any other applicable approved standards issued by the controlling agency; the Uniform Building Code; and all Local City Codes and Ordinances Applicable.
2. The existence and location of any underground utility pipes or structures shown on these plans are obtained by a search of the available records. To the best of our knowledge there are no existing utilities except as shown on these drawings. The contractor is required to take precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these drawings.
3. All grades are referenced to the top of the construction grade stakes or nails and this rule shall be observed: Three consecutive construction grade stakes or nails corresponding to three consecutive points shown on the approved plans as a straight grade shall be used in common and any variation shall be reported in writing to Alca before work proceeds. Contractors doing otherwise shall proceed at their total risk and responsibility.
4. The quantity estimates shown hereon are approximate and no one is to rely upon them for pay quantities. Each and every contractor shall have a set of approved plans and specifications on the job site at all times and shall rely upon them to a higher degree than the construction stakes in prosecuting the work.
5. All Construction shall be as shown on these plans, any alterations shall have the prior approval of the City Engineer.
6. Contractor shall provide all necessary Horizontal and Vertical Transitions for proper drainage, extent of transitions shall be as shown or as determined by City Engineer or Inspector.
7. If any curb grades are shown on plan @ less than 0.40%, it is required by this office, that the forms be checked by a survey crew prior to concrete placement. A 48 hour notification of work is required, and if this office is not notified, it will assume no responsibility for finished product.

△4 8. Concrete mix design per Section 701 revised specs.

9. Expansion joints are required at 300' maximum intervals in extruded type curb.
10. AC pavement to be 1/2" above lip of all gutters & valley gutters after compaction.
11. The manholes shall have concrete collars at surface of paved areas.
12. Chisel S or G wherever sewer or gas lines pass under the curb.

5-21-79

## INDEX OF SHEETS



## APPROVALS

C.P. BRACKLOW — 4-30-79
REGIONAL ST. & HWY. COMM. — DATE

LAS VEGAS VALLEY WATER DISTRICT sht. No. — Date Signed

LAS VEGAS CITY ENGINEER — 5/24/79 DATE

N/A
LAS VEGAS FIELD OPERATIONS ENGINEER — DATE

SEE SHEET No. 4
LAS VEGAS CITY ELECTRICIAN — DATE

LAS VEGAS ELECTRICAL COORDINATOR — 5/1/79 DATE

LAS VEGAS SANITATION SUPT. — DATE

Stephen Hampton
LAS VEGAS FIRE DEPARTMENT — 3-21-79 DATE

QUALITY CONTROL ENGINEER — 5-11-79 DATE

LAS VEGAS TRAFFIC ENGINEER — 3-21-79 DATE

NEVADA POWER COMPANY — DATE

## DEVELOPER

W.R. GRACE DEVELOPMENT CORP.
P.O. BOX 2430
NEWPORT BEACH, CALIFORNIA
92663

| REVISION NO. | DESCRIPTION | BY | DATE | APPROVAL |
|---|---|---|---|---|
| | | | | |

REVISIONS

W.R. GRACE DEVELOPMENT CORP.
NELLIS & BONANZA SHOPPING CTR.
# LAS VEGAS, NEVADA
ABBREVIATIONS, APPROVALS, BENCHMARK, INDEX OF SHEETS, NOTES, QUANTITIES, SECTIONS & DETAILS, STANDARDS & VICINITY MAP


ALCA ENGINEERING INC.
CIVIL ENGINEERING - SURVEYING
2765 SOUTH HIGHLAND DRIVE SUITE 103
LAS VEGAS, NEVADA 89109 PH. 732-2105


| SCALE (H) 1 | SCALE (V) | DATE | JOB NO. |
|---|---|---|---|
| | | | 7806-3-C |
| DES. | | | |
| DR. | | | SHEET 1 OF 4 |

SD-7

107-V 1147