

ENGINEER'S GENERAL NOTE: 1. All work shall be constructed in full compliance with the standard drawings and specifications of the governing authorities having jurisdiction. The Engineer shall be notified in advance to permit relocation of disturbed monuments and to permit the setting of any monuments called for on the plans. The Engineer shall be notified and, after the Engineer has marked the location, the Contractor shall set the monuments as specified by the governing authority which shall be marked and referenced by the Engineer.

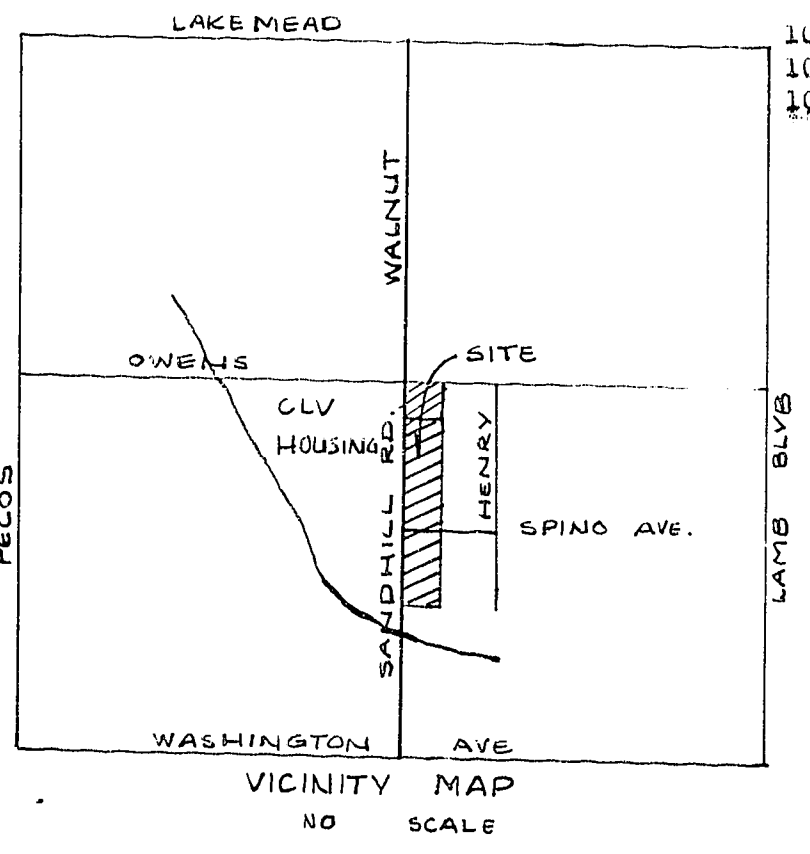
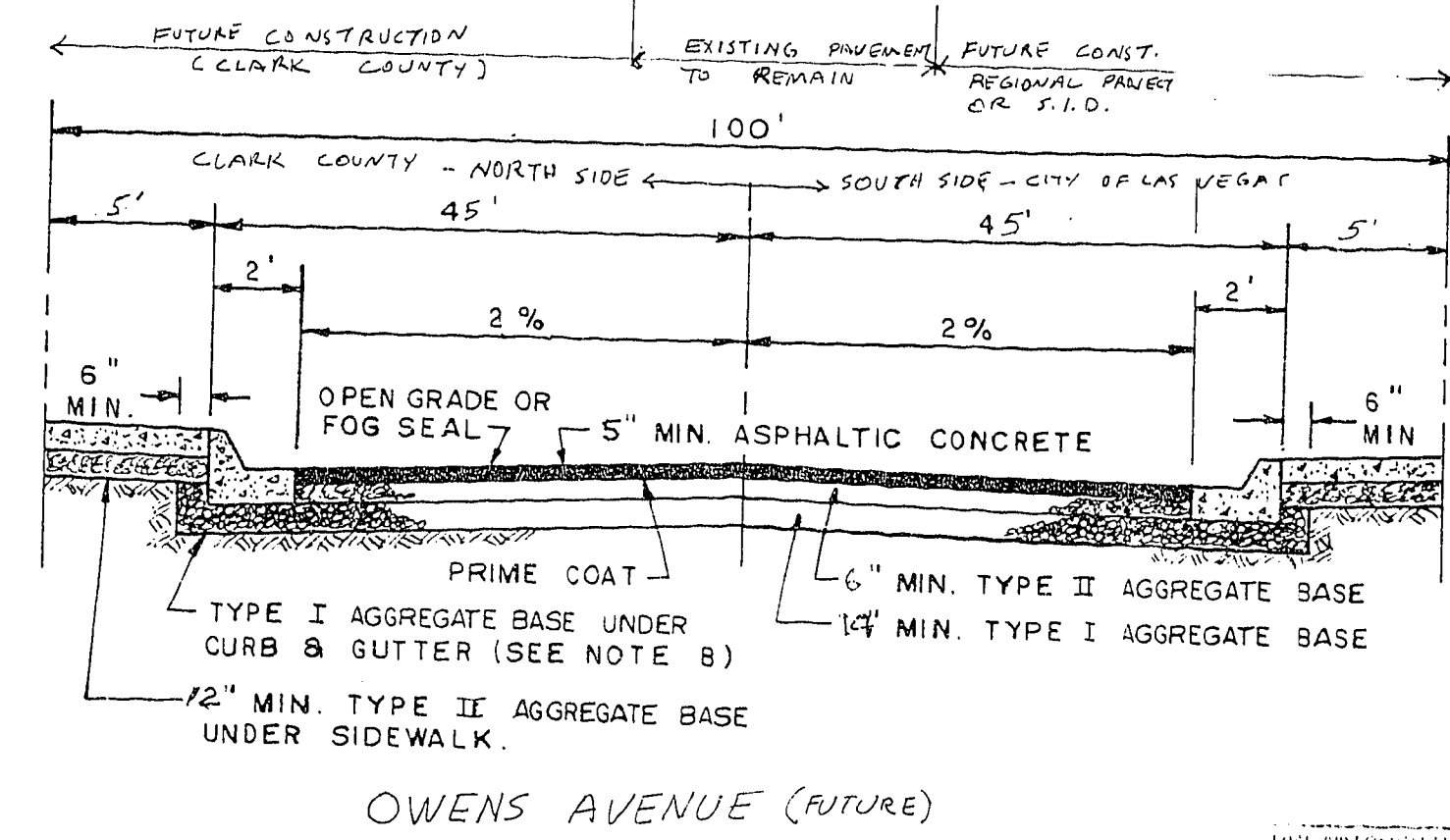
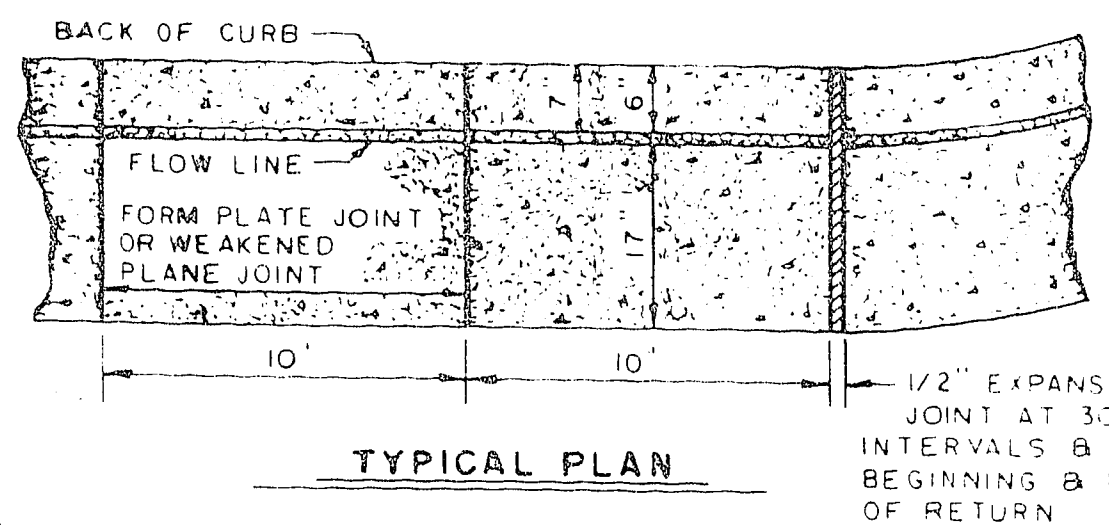
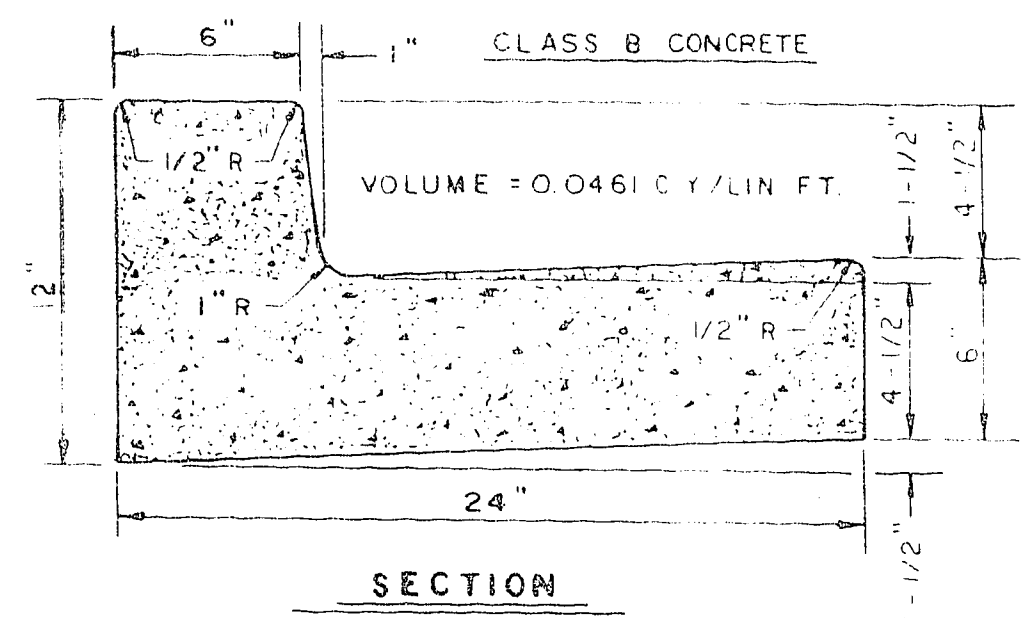
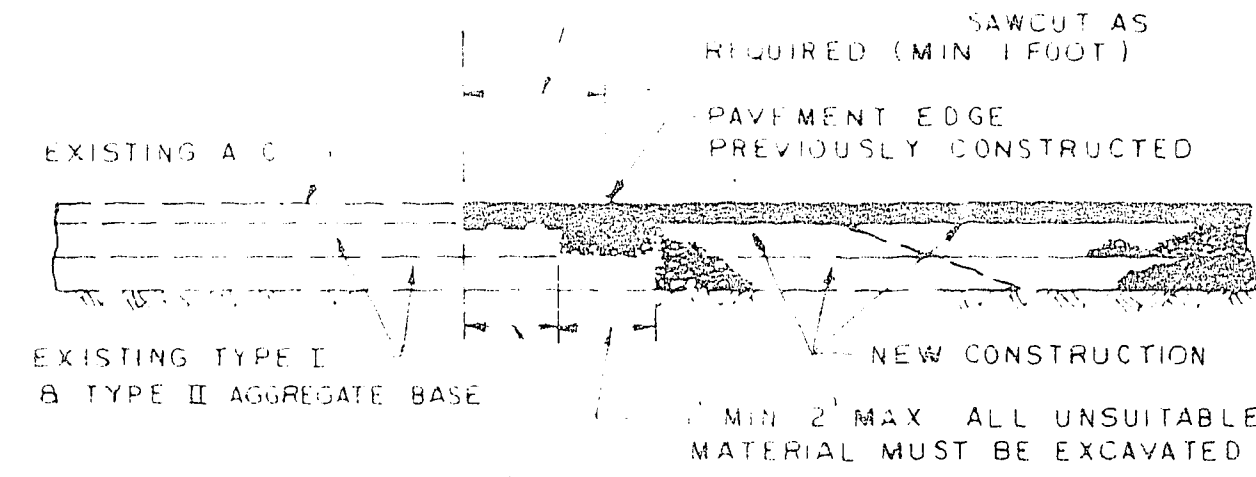
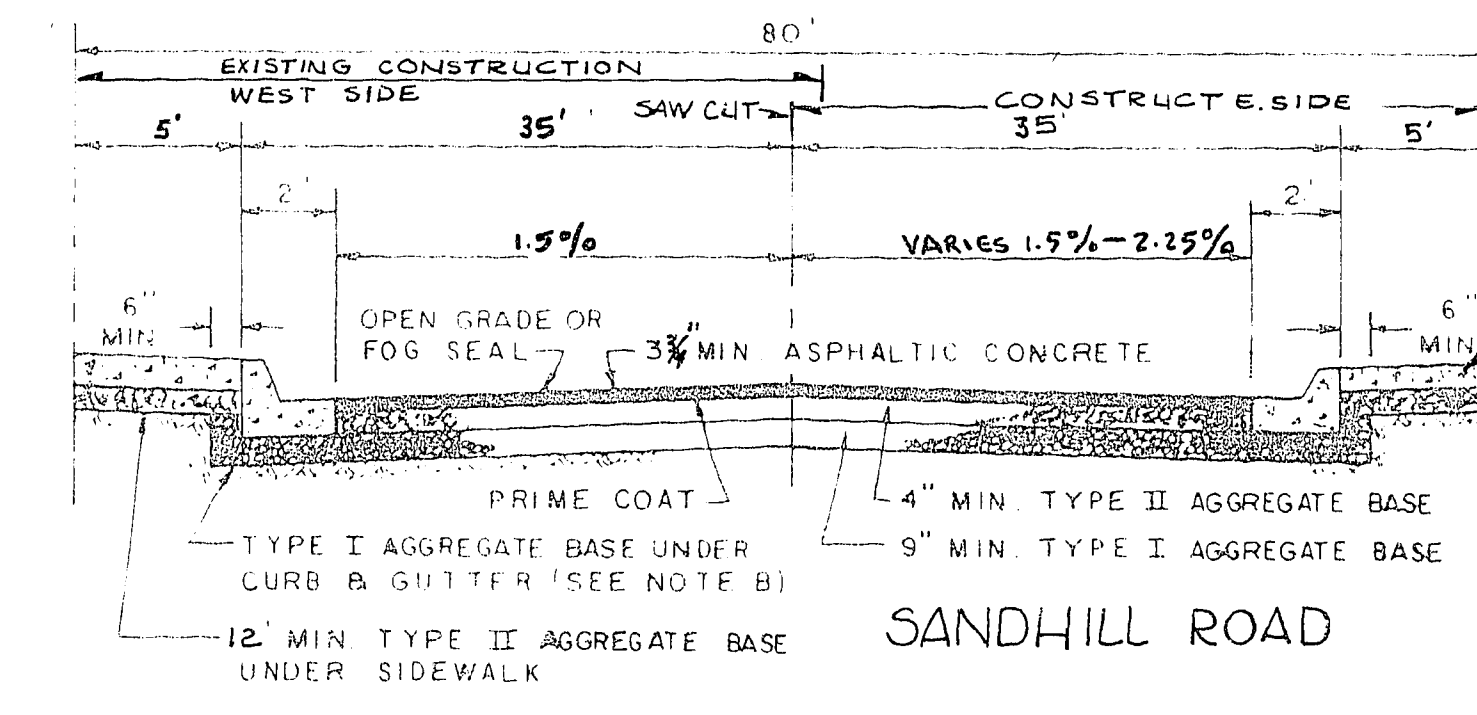
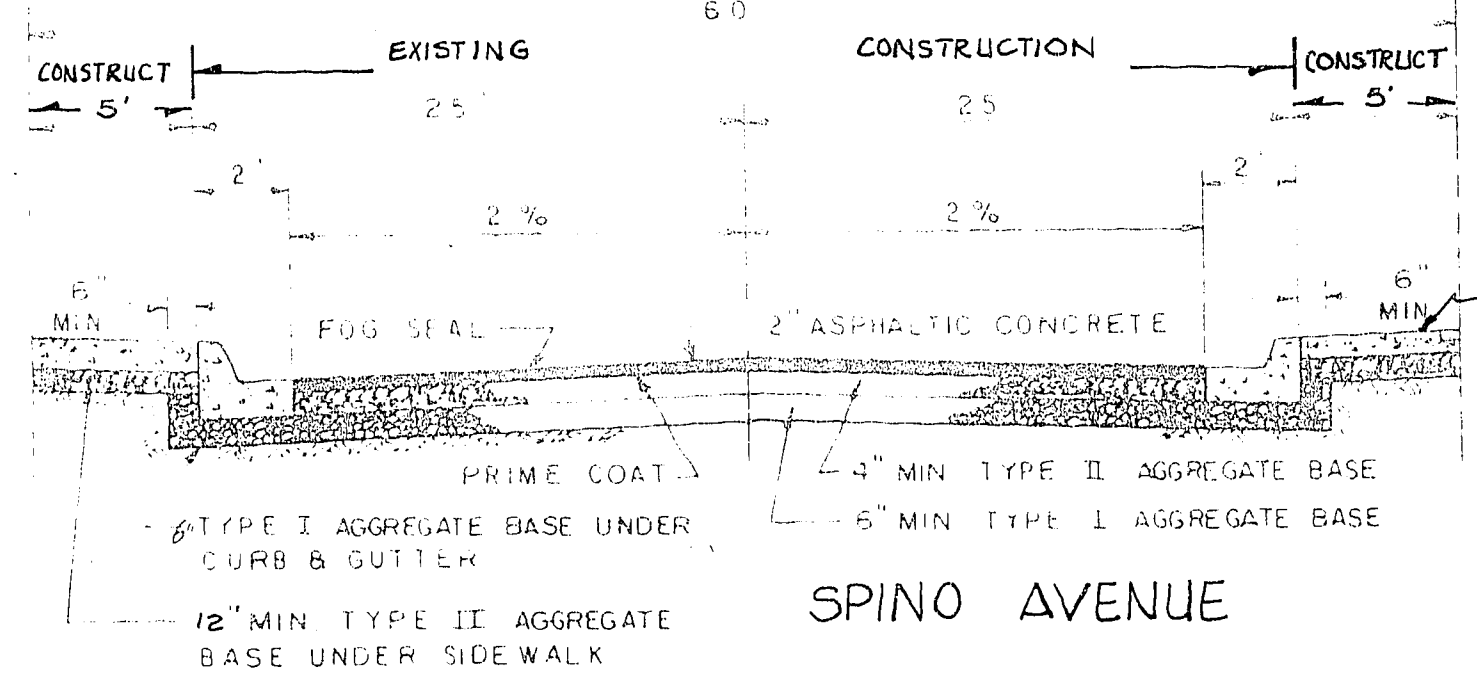
All field stake grades are referenced to the top of the construction grade stakes or nails and this rule shall be observed: Three consecutive construction grade stakes or nails corresponding to three consecutive points shown on the approved plans as a straight grade shall be used in common and any variation shall be reported in writing to the Engineer before work proceeds. Contractors doing otherwise shall proceed at their total risk and responsibility. 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. Any plans issued before having noted thereon the final approvals of all approving governmental agencies are preliminary and shall not be relied upon for any purpose. Contractor shall provide all necessary horizontal and vertical transitions for proper drainage, and the extent of the transitions shall be as shown or as determined by the Engineer or Inspector of the Governing Agency.

If any curb or other drainage grades are shown on the plans at less than 0.40, it is required by the Engineer that the Engineer check by our survey crew prior to concrete placement. A 48 hour notification of work is required, and if the Engineer is not notified or provided adequate time for checking, and does not issue a written approval of the grades, he will assume no responsibility for the finished product. PRIVATE ENGINEER'S NOTICE TO CONTRACTOR: 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 THIS MAP. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN AND ANY OTHER LINES OF RECORD OR NOT SHOWN ON THIS DRAWING.

CITY OF LAS VEGAS GENERAL NOTE: All construction to conform to Uniform Standard Drawings for Public Works Construction, Clark County Area, 1978 Edition. All street lighting installations shall conform to the latest issue of the Standard Details and Specifications of the City of Las Vegas, as well, unless otherwise noted. 2. All work shall be done in strict accordance with the City of Las Vegas Fire Department "Hydrant Specifications". 3. On any new home or building construction, accessible fire hydrants shall be installed before actual construction commences and said fire hydrants shall be in good working order with an adequate water supply. 4. Painting of the curbs and/or striping of asphalt protection of hydrants from physical injury per City Fire Department "Hydrant Installation Specifications" shall be completed before approval of the hydrants by the City of Las Vegas Fire Department can be obtained. 5. Construct wheelchair ramps as specified on plans per City of Las Vegas Standard drawings. 6. APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS AND ADJUSTMENTS HAVE BEEN MADE.

CITY OF NORTH LAS VEGAS, DEPARTMENT OF PUBLIC WORKS, GENERAL WATER LINE CONSTRUCTION: 1. All work shall conform to City of North Las Vegas Standards and the most current edition of the Uniform Standard Specifications for Public Works Construction, Off-Site Improvements, Clark County Area, Nevada. 2. Notice shall be given to the City of North Las Vegas Public Works Department 48 hours prior to actual construction. 3. Water service connections shall be made with tinned collars or service clamps with double flat silicon bronze strans and bronze nuts. Double tan collars shall not be permitted. 4. All valve boxes shall have an 8" thick concrete collar poured 2" below finish grade. 5. All lines shall be pressure tested to 200 p.s.i. 6. All water mains and non-metallic services shall be installed with a locator ribbon in accordance with North Las Vegas Standard Drawings. 7. The installation of water meters shall be required on all water services. 8. All water meter boxes shall be equipped with a cast iron traffic cover. 9. Corporation stop, angle meter stop and service line shall be the same size. 10. Flared type couplings shall be used at all connections. 11. Meter boxes shall be placed true to grade on plan. Where no curb exists, proposed elevation shall be obtained from the City Engineer. 12. Top of angle meter stop shall be a minimum of 6" and a maximum of 8" below meter box cover. 13. Meter assembly, consisting of angle stop, meter couplings and idler shall be centered in meter box. 14. All new fire hydrants to be installed shall conform to the most current edition of the Uniform Standard Specifications, Subsection 629.03.14 except that a 5 1/4" valve opening shall be required. 15. All water valves 12" and larger shall be butterfly valves and shall conform to the most current edition of the Uniform Standard Specifications, Subsection 629.02.23 b.

CURVE DATA:	Lot Line A Centerline			Back of Curb				
	No.	Central Angle	Radius	Length	Tangent	Radius	Length	Tangent
1	89° 43' 06"	20.00'	31.32'	19.99'	39.15'	25.00'	39.39'	24.88'
2	90° 16' 54"	20.00'	31.51'	20.10'	39.39'	25.00'	39.39'	25.12'
3	87° 54' 41"	25.00'	38.36'	24.10'	30.00'	46.03'	28.93'	28.93'
4	111° 24' 26"	38.00'	78.89'	55.71'				
5	111° 24' 26"	30.00'	58.33'	43.98'	30.00'	58.33'	43.98'	
6	111° 24' 26"	46.00'	89.44'	67.44'				
8	89° 51' 32"	10.00'	15.68'	9.98'	10.00'	15.68'	9.98'	9.98'
9	90° 09' 28"	10.00'	15.73'	10.00'	15.73'	10.00'	15.73'	10.02'
12	75° 48' 32"	10.00'	12.88'	7.79'	10.00'	12.88'	7.79'	
13	14° 03' 00"	10.00'	2.80'	1.41'	10.00'	2.80'	1.41'	
14	77° 46' 32"	10.00'	13.57'	8.07'	10.00'	13.57'	8.07'	
15	12° 21' 56"	10.00'	2.16'	1.08'	10.00'	2.16'	1.08'	
16	42° 29' 56"	30.00'	22.25'	11.67'	30.00'	22.25'	11.67'	
17	68° 54' 30"	30.00'	36.08'	20.58'	30.00'	36.08'	20.58'	
18	87° 54' 41"	20.00'	30.69'	19.28'				
25	22° 54' 58"	38.00'	15.20'	7.70'	44.00'	18.40'	9.32'	
26	22° 54' 58"	46.00'	18.40'	9.32'	30.00'	12.00'	6.08'	
27	22° 54' 58"	30.00'	12.00'	6.08'	30.00'	12.00'	6.08'	



Item	Unit	ESTIMATE OF QUANTITIES						
		Total	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
3 3/4" AC Pav & base	SqYd	4144	704	626	673	749	709	703
Curb & Rutter	LnFt	1200	209	183	197	197	166	197
Sidewalk	SqFt	7523	1224	1961	1891	1236	1235	1186
Light Standards	Each	9	1	1	3	1	1	2
Ston Signs	Each	1						1
Street Signs	Each	1						1
Sewer, 4" lat.	LnFt	1051	158	165	192	168	168	200
Sewer, 8" PVC	LnFt	431	203	228				
Sewer, 6" PVC	LnFt	878			218	206	206	178
Manholes, Sewer	Each	2	1	1				
Service to lots	Each	88	14	14	16	14	14	16
Survey Monuments	Each	5	1	1	1	1	1	2
Water Service Meters Only	Each	2						

BENCH MARK  
 CLV BM NO. 06230135 SE COR OWENS & VIRGIL  
 ELEV 1806.292, (NOTE ELEVATIONS ON THESE PLANS  
 READING "80" OR "90" ETC, ADD 1700 FOR FULL DATUM;  
 ELEVATIONS READING "0" ETC, ADD 1800 FOR FULL DATUM.)

DIMENSIONS AND BEARINGS ON THE FINAL MAP CONTROL, AND DIMENSIONS ON THE DRAWINGS ARE SECONDARY TO THOSE SHOWN ON THE FINAL MAP. NOTIFY ENGINEER IN WRITING OF ANY DIFFERENCE DISCOVERED AT ANY TIME.

Height of Way	Side Walk	Pavement	RELATIONSHIP OF STREET CONSTRUCTION TO CENTERLINE	
			Elevation above or below centerline	Flow
28' PVT	0'	24'	+0.24'	+0.09'
30' PVT	0'	26'	+0.26'	+0.07'
40' PVT	0'	36'	+0.36'	+0.03'
51' NLV	5'	37'	+0.37'	+0.04'
51' NLV	5'	37'	+0.37'	+0.04'
60' NLV	5'	46'	+0.46'	+0.13'
60' NLV	5'	46'	+0.46'	+0.13'
80' NLV	5'	60'	+0.60'	+0.33'
80' NLV	5'	60'	+0.60'	+0.33'
100' NLV	5'	84'	+0.84'	+0.51'
100' NLV	5'	84'	+0.84'	+0.51'

SHEET	DESCRIPTION
1	NOTES, DETAILS, ESTIMATES, APPROVALS
2-3	PLAT & GRADING, GENERAL UTILITY PLAN
4-6	RECONSTRUCTION, STREETS, DRIVE & UTILITY
7-8	FINAL MAP UNIT 1
9-10	FINAL MAP UNIT 2
11-12	FINAL MAP UNIT 3
13-14	FINAL MAP UNIT 4
15-16	FINAL MAP UNIT 5
17-18	FINAL MAP UNIT 6
19-20	CALCULATIONS & COORDINATES

APPROVALS:

*James B. ...* 10/10/83  
 CHIEF LAND DEVELOPMENT & FOOD CONTROL DATE

*Yematis ...* 10-14-83  
 ELECTRICAL SUPERVISOR DATE

*...* 11-3-83  
 DATE

*...* 10-28-83  
 DATE

*...* 10-18-83  
 DATE

*...* 11/14/83  
 DATE

*...* 10-4-83  
 DATE

*Paul H. Mitchell* 5-5-82  
 NORTH LAS VEGAS UTILITIES DATE

Avoid cutting underground utility lines. It's costly.

**Call before you Dig.**

1-800-227-2600

REVISIONS

DATE	BY	REVISIONS
11/18/83	JPH	CHANGED NAME TO SANDHILL VILLAS - COMMERCIAL
9/21/83	JPH	CHANGED BASE
7/29/83	JPH	REVISED TYPE AC & 48" CURVE CONST.
10/21/83	JPH	FINAL CLV
10/21/83	LP	FINAL REVISIONS

IMPROVEMENT PLANS OF SANDHILL VILLAS SANDHILL ROAD & OWENS AVE.

NOTES, DETAILS, APPROVALS AND ESTIMATES

SECTION 30  
 IN W 1/2 NW 4 NE 4  
 TOWNSHIP 20 SOUTH RANGE 62 EAST MOUNT DIABLO MERIDIAN  
 CITY OF LAS VEGAS CLARK COUNTY, NEVADA

FOR PORTER CONSTRUCTION CO.  
 1214 SOUTH 3rd ST LAS VEGAS, NEVADA 89101  
 PHONE NO. 852-0559  
 SCALE NONE DRAWN BY W.J.L.

CAUSEY ENGINEERING SERVICE  
 ENGINEERS, PLANNERS, SURVEYORS  
 LAS VEGAS, NEVADA 89148  
 P.O. BOX 14848

DATE: 9/1/82

DAVID CAUSEY PE, LS  
 REGISTERED PROFESSIONAL ENGINEER  
 LICENSE NO. 10000

JOB NO. 7893-1

SHEET 1 OF 6

14-A-6 1078-2670-1,2,3,4