

GENERAL NOTES

- CONSTRUCTION OF THE SEWER SHALL BE IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS, 1991.
- ALL OTHER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS," CLARK COUNTY AREA, NEVADA, 1988, AS REVISED AND "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," CLARK COUNTY, NEVADA, UNLESS OTHERWISE SPECIFIED, SHOWN ON THE DRAWINGS OR PROVIDED IN THE D & C STANDARDS AS REFERENCED IN NOTE 1.
- ALL UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION, IN ADDITION TO NOTIFYING "CALL BEFORE YOU DIG", 1-800-227-2600.
- UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON PLANS ARE FOR THE CONTRACTOR'S CONVENIENCE. CITY OF LAS VEGAS ASSUMES NO RESPONSIBILITY FOR UTILITIES OR STRUCTURES NOT IN THE LOCATION OF RECORD PROVIDED BY THE UTILITY COMPANY. THE CONTRACTOR'S LIABILITY REGARDING ANY DAMAGE TO UTILITIES IS SET FORTH IN SECTION 105 OF THE "STANDARD SPECIFICATIONS" AND IN THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING PRIVATE IMPROVEMENTS, TREES, SHRUBS, WALLS, FENCES, SIGNS, STRUCTURES, LIGHT POLES, ETC., UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL BARRICADING AND TRAFFIC CONTROL DEVICES OR METHODS TO BE USED DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF NEVADA "TRAFFIC CONTROL MANUAL," LATEST EDITION, AND WITH THE "U. S. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," LATEST EDITION, 1988.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DIVISION, TEL. 229-6905, FOR THE LOCATION OF ALL TRAFFIC CONDUIT AND RELATED APPURTENANCES THAT MAY INTERFERE WITH REQUIRED IMPROVEMENTS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERTICAL ADJUSTMENT OF MANHOLES, VALVE BOXES, ETC., TO THE FINISH GRADE OF THE PAVEMENT IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS," AND DETAIL DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE CITY OF LAS VEGAS ELECTRICAL DIVISION AND/OR NEVADA POWER COMPANY FOR THE LOCATION OF ALL ELECTRICAL CONDUIT AND RELATED APPURTENANCES THAT MAY INTERFERE WITH REQUIRED IMPROVEMENTS PRIOR TO CONSTRUCTION.
- THE STATIONING ON THE DRAWINGS IS BASED UPON THE CENTERLINE OF PIPE AS SHOWN. THE SURVEY LINE IS NOT VERIFIED TO BE THE STREET CENTERLINE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO RECORD ANY WORK WHICH IS INSTALLED OTHER THAN AS SHOWN ON THE DRAWINGS. AND REPORT S.D.M.E. TO THE ENGINEER.
- UTILITY LATERALS ARE NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR IS TO ASSUME THERE IS A LATERAL OF EACH TYPE OF UTILITY TO EACH BUILDING.
- THE CONTRACTOR SHALL LOCATE ALL OVERHEAD FACILITIES THAT MAY AFFECT THE CONSTRUCTION AND SHALL TAKE PRECAUTIONS TO AVOID INTERFERENCE WITH SAME.
- ALL EXISTING SURVEY MONUMENTS SHALL BE LOCATED BY THE CONTRACTOR'S SURVEYOR AND PROPER MONUMENTS SHALL BE REINSTALLED AS APPROVED BY THE CITY SURVEYOR.

APPROXIMATE QUANTITIES

SEWER	TOTAL
8" SEWER PIPE	4,845 LF
STANDARD MANHOLE (48" DIA.)	17 MH

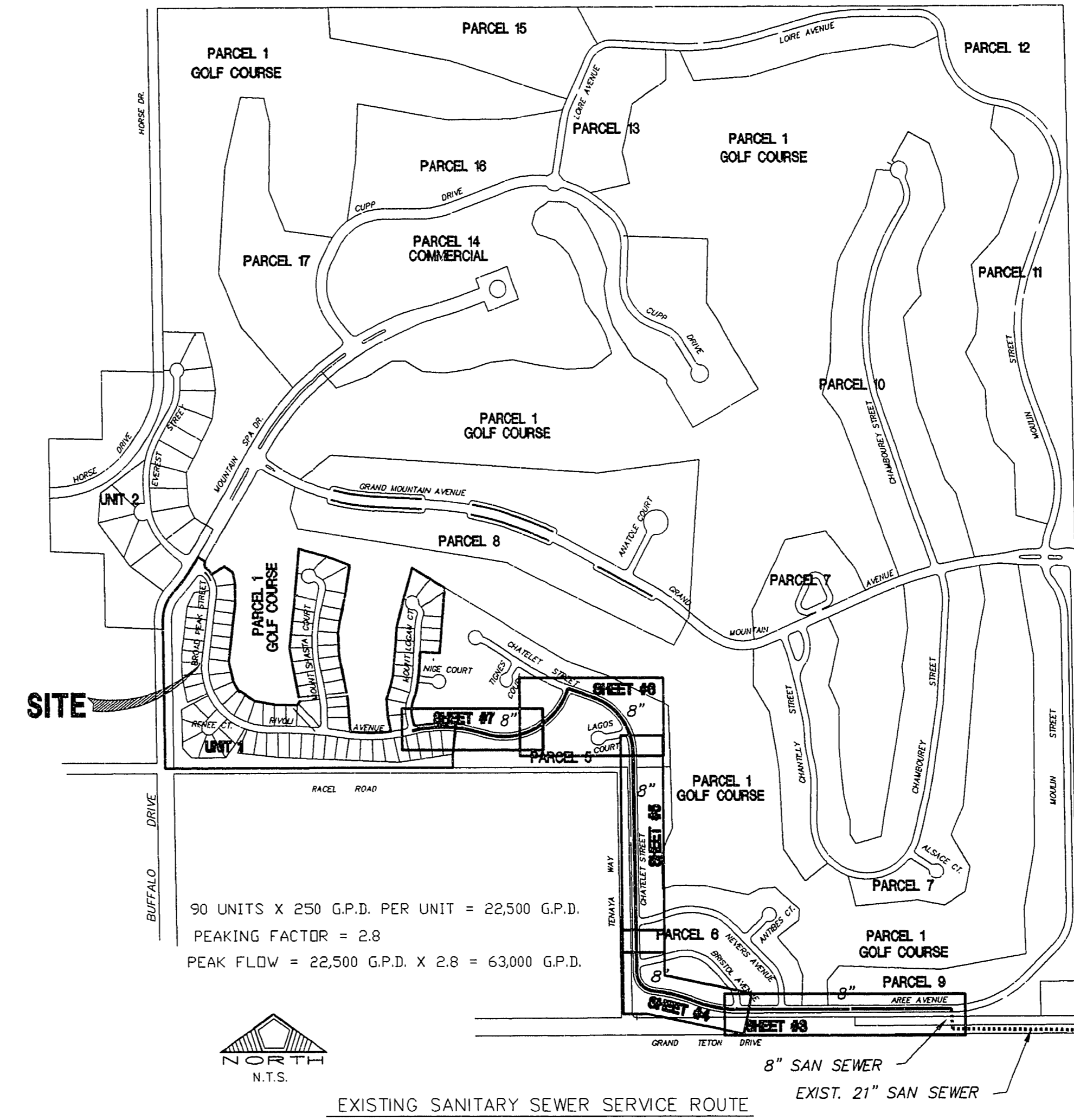
NOTE TO CONTRACTOR:
 1. QUANTITIES SHOWN ARE APPROXIMATIONS ONLY AND ARE INTENDED TO ILLUSTRATE SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT QUANTITIES INVOLVED.

DEVIATIONS FROM STANDARDS

- DEVIATION FROM MANHOLE SPACING OF 450 LF. TO 465.20 LF. BETWEEN MH# 2 AND MH# 3. (SEE SHEETS 3 AND 4)

LEGEND

CONSTRUCTION ITEMS	
① SEWER MAIN	—————
② MANHOLE	—●—
SYMBOLS OF EXISTING TOPOGRAPHY	
CURB & GUTTER	=====
RIGHT-OF-WAY	-----RW-----
SURVEY LINE	-----
EDGE OF PAVEMENT	-----
STREET LIGHT	☼
LIGHT POST	☼
PULL BOX, METER BOX	□
POI E	○P
FENCE	—x—x—
TEST BORING	⊕
UNDERGROUND UTILITY (SS, STD, G, T, W, C)	-----
SIGN	⊙
MISCELLANEOUS UTILITY BOX	○

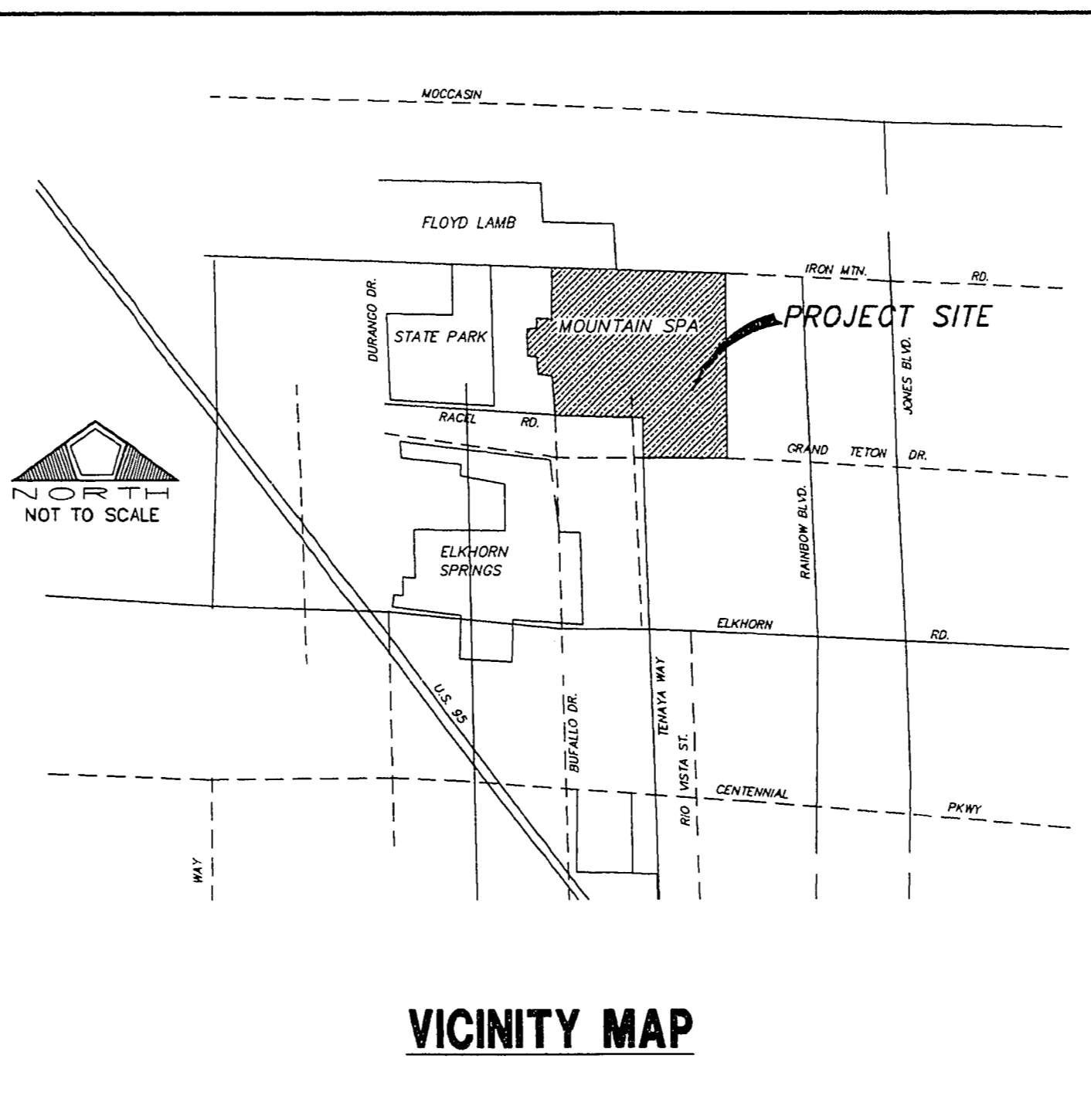


CITY OF LAS VEGAS - SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATION, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.10) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.

ABBREVIATIONS

AGG	AGGREGATE	MH	MANHOLE
ACP	ASBESTOS CEMENT PIPE	MAX	MAXIMUM
AC	ASPHALTIC CONCRETE	MIN	MINIMUM
AVE	AVENUE	NTS	NOT TO SCALE
BC	BACK OF CURB	OC	ON CENTER
BCR	BACK OF CURB RADIUS	OHP	OVERHEAD POWER
BM	BENCH MARK	PVMT	PAVEMENT
CATV	CABLE TELEVISION	PI	POINT OF INTERSECTION
C-C	CENTER TO CENTER	PRC	POINT OF REVERSE CURVE
CL	CENTERLINE	PC	POINT OF CURVE
CLV	CITY OF LAS VEGAS	PT	POINT OF TANGENCY
CC	CLARK COUNTY	PP	POWER POLE
CONC	CONCRETE	P	POWER
CONST	CONSTRUCTION OR CONSTRUCT	PL	PROPERTY LINE
C&G	CURB & GUTTER	PB	PULL BOX
CIP	CAST IRON PIPE	R	RADIUS
CU YD.	CUBIC YARD	RCP	REINFORCED CONCRETE PIPE
CY		R/W	RIGHT-OF-WAY
CU FT.		RT	RIGHT
CF		SS	SANITARY SEWER
DIA	DIAMETER	SHT	SHEET
DWY	DRIVEWAY	SQ FT.	SQUARE FOOT
DI	DROP INLET	SF	STATION
ESMT	EASEMENT	STA	STORM DRAIN
EP	EDGE OF PAVEMENT	SD	STANDARD
ELEC	ELECTRIC	SL	STREETLIGHT
EL	ELEVATION	TEL.	TELEPHONE
EC	END OF CURVE	T	TEMPORARY
EXIST	EXISTING	TEMP	TEMPORARY
FT	FEET OR FOOT	TC	TOP OF CURB
FG	FINISH GRADE	TS	TRAFFIC SIGNAL
FH	FIRE HYDRANT	TSI	TRAFFIC SIGNAL INTERCONNECT
FL	FLOW LINE	TRANS	TRANSITION
GM	GAS METER	TYP	TYPICAL
GPR	GAS PRESSURE REGULATOR	UG	UNDERGROUND
GB	GRADE BREAK	UON	UNLESS OTHERWISE NOTED
IN	INCH	VERT	VERTICAL
INT	INTERSECTION	VC	VALLEY GUTTER
INV	INVERT	W	WATER
JB	JUNCTION BOX	WCR	WHEEL CHAIR RAMP
LT	LEFT	WM	WATER METER
LF	LINEAR FEET	WV	WATER VALVE
LVVWD	LAS VEGAS VALLEY WATER DISTRICT		



BENCHMARK

BLM BRASS CAP #41, RAINBOW BLVD. & HORSE DRIVE.
 STA. 1LV90/11W4, ELEV. = 2396.994' (NGVD29)
 NAVD88 = NGVD 29 + 2.408'

NOTE:
 ALL UTILITIES SHOWN ARE BELIEVED TO BE ACCURATELY LOCATED, BUT THE ACCURACY AND COMPLETENESS OF UTILITY INFORMATION IS NOT GUARANTEED. FOR EXACT LOCATION OF ANY UTILITY, SEE THE APPROPRIATE UTILITY OR GOVERNMENTAL AGENCY.

Avoid cutting underground utility lines. It's costly.

Call before you Dig.

1-800-227-2600

UNDERGROUND SERVICE ALERT (USA)

INDEX OF DRAWINGS

- COVER SHEET
- GENERAL NOTES, INDEX OF DRAWINGS, LEGEND, VICINITY MAP
- OFFSITE SEWER STA: 1+00.00 TO STA: 11+04.09
- OFFSITE SEWER STA: 11+04.09 TO STA: 20+97.26
- OFFSITE SEWER STA: 20+97.26 TO STA: 33+05.21
- OFFSITE SEWER STA: 33+05.21 TO STA: 41+61.76
- OFFSITE SEWER STA: 41+61.76 TO STA: 49+04.61

BASIS OF BEARING

SOUTH 00°37'59" EAST, BEING THE BEARING OF THE EAST LINE OF THE NORTHEAST (N1/4) OF SECTION 10, TOWNSHIP 19 SOUTH, RANGE 60 EAST, M.D.M., AS SHOWN BY A MAP ON FILE IN CLARK COUNTY, NEVADA RECORDER'S OFFICE AS PAGE OF RECORD OF SURVEY BOOK

NO.	DESCRIPTION	DATE	APP'D

RECOMMENDED:
 8/22/95
 LENNARD GREGORSKY
 R. E. # 8200

DATE: 8/22/95
 DRAWN BY: MRA
 DESIGNED BY: MRA/JDL
 CHECKED BY:
 JOB NO.: 158.0000
 SCALE: NONE

PENTACORE
 Engineering, Inc.
 (702) 258-0115
 6763 West Charleston Boulevard
 Las Vegas, Nevada 89102

MOUNTAIN SPA DEVELOPMENT, INC.
 MOUNTAIN SPA DEVELOPMENT
 GENERAL NOTES, INDEX OF DRAWINGS,
 LEGEND, VICINITY MAP & ABBREVIATIONS