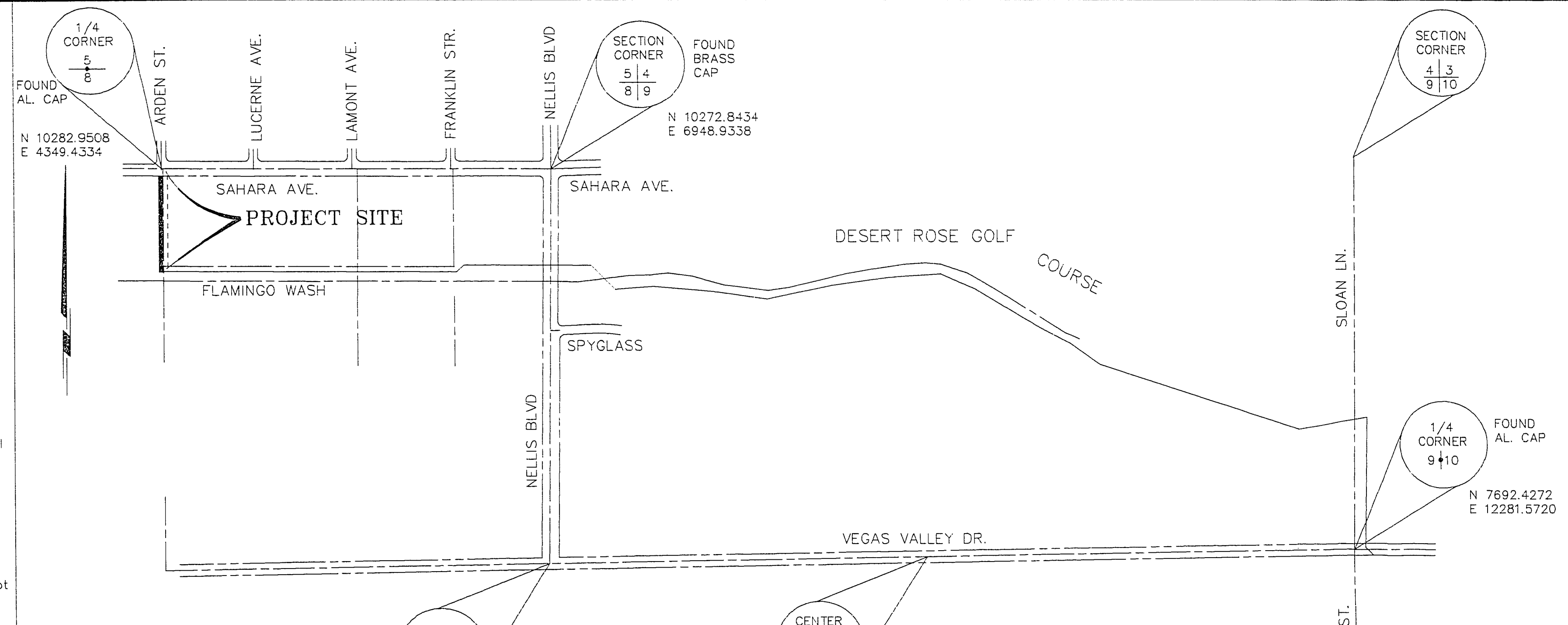


GENERAL NOTES

- The intent of Phase I is to construct three junction boxes, a standard manhole, and a sewer interceptor from the existing stubs located at Arden and Sahara to the first manhole within the Flamingo Wash Right-of-Way.
- All construction shall be in accordance with the "Uniform Standard Drawings for Public Works Construction Off-Site Improvements," Clark County Area, Nevada, 1988, as revised, "Uniform Standard Specifications for Public Works Construction," 1986, Clark County, Nevada and Design and Construction Standards for Wastewater Collection Systems, 1991, unless otherwise specified by note on plans and special provisions or as directed by the Engineer. The Contractor shall maintain a set of these standards at the job site at all times.
- All utility companies shall be notified at least 48 hours prior to beginning construction.
- The existence and location of underground utility pipes or structures are shown on plans for Contractor's convenience and were obtained by a search of available records. City of Las Vegas and Engineer assume no responsibility for utilities or structures not of record, or not at the location of record. The contractor's liability regarding any damaged utility is set forth in Section 105 of the standard specifications and special provisions.
- The contractor is required to take precautionary measures to protect all existing improvements remaining in place. Any improvements or structures damaged by the contractor shall be repaired or reconstructed at the expense of the contractor.
- The contractor shall not remove any existing improvements, trees, shrubs, walls, fences, signs, structures, private light poles, etc., unless otherwise directed by note on the plans or by the engineer.
- All replacement, relocation or reconstruction of existing improvements, fences, sprinkler systems, shrubs, walls, signs, steps, sidewalks, driveways, private light poles and all other objects pertinent to this contract shall be done as directed by the engineer. For those which are not bid items, payment will be included with various items of work and not paid separately.
- All barricading and temporary 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.
- Prior to construction, the contractor shall be responsible to contact the Clark County Public Works Traffic Engineering Division for the location of all traffic control 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 required grade as shown on the plans and in accordance with Section 609.03.02 and applicable portions of Section 609 of the "Standard Specifications."
- The Southwest Gas Corporation shall be responsible for the removal or relocation of all gas lines and related appurtenances that interfere with the required improvements as shown on the plans.
- The contractor shall be responsible to contact the Clark County Public Works Electrical Division, Sprint-Central Telephone Co. and Nevada Power Co. for locations of all electrical conduits and related appurtenances that may interfere with required improvements prior to construction.
- Where a water line is less than 18 inches over the sewer line, where the water line is under the sewer line, and where the horizontal separation, as required by the Water Supply Regulations, cannot be maintained because of physical obstructions (buildings), the water line shall be protected by construction of the sewer line with the following:
 - Extra heavy cast iron pipe;
 - Water supply quality materials; or
 - Encasement with four inches, minimum, of concrete or sleeving with water supply quality pipe.
 Each of these provisions shall also be extended for other than 90 degree crossings to the point at which the ten foot separation between the water and sewer lines is achieved (10/sine of crossing angle).



BASIS OF BEARING
 N00°40'58"E BEING THE CENTERLINE OF NELLIS BLVD. AS SHOWN RECORDED IN BOOK 37 PAGE 4 OF PLATS IN THE CLARK COUNTY NEVADA RECORDERS OFFICE

BENCHMARK
 BM# 6C1245WS
 SET DRIVE RIVET IN A 2"x2" ALUMINUM PLATE, IN DRILLED HOLE WITH EPOXY GLUE, IN TOP CURB, NORTHEAST CORNER OF NELLIS BLVD. AND SAHARA AVE. NEAR THE PC OF NELLIS BLVD.
 ELEV. = 1726.578

KEY MAP
 NOT TO SCALE

ABBREVIATIONS

AC	ACRES	FPS	FEET PER SECOND	QTY	QUANTITY
ACP	ASBESTOS CEMENT PIPE	FT	FEET OR FOOT	R	RADIUS
APPROX	APPROXIMATE	FTG	FOOTING	RC	REINFORCED CONCRETE
AVAR	AIR VACUUM AND AIR RELEASE VALVE	FF	FINISHED FLOOR	RCP	REINFORCED CONCRETE PIPE
		G	GAS	RD	ROAD
BCR	BEGIN CURB RETURN	GALV	GALVANIZED	RWD	REDWOOD
BFP	BACK FLOW PREVENTER	GALP	GALVANIZED IRON PIPE	RED	REDUCER OR REDUCING
BK	BACK	GD	GALLONS PER DAY	REF	REFERENCE OR REFER
BLDG	BUILDING	GPH	GALLONS PER HOUR	REINF	REINFORCE OR REINFORCED
BLD FLG	BLIND FLANGE	GPM	GALLONS PER MINUTE	RREQD	REQUIRED
BM	BENCH MARK	GRD	GRADE OR GROUND	RP	RADIUS POINT
BO	BLOW-OFF ASSEMBLY	GR BRK	GRADE BREAK OR GRADE CHANGE	RPM	REVOLUTIONS PER MINUTE OR REINFORCED PLASTIC MORTAR
BOT	BOTTOM	GV	GAS VALVE	RR	RAILROAD
BRG	BEARING	HDPE	HIGH DENSITY POLYETHYLENE	RT	RIGHT
B & S	BELL AND SPIGOT	HORIZ	HORIZONTAL	ROW	RIGHT OF WAY
BSMT	BASEMENT	HWL	HIGH WATER LEVEL	SCD	SCREWED
BV	BUTTERFLY VALVE	HWP	HORIZONTAL POINT OF INTERSECTION	SCHED	SCHEDULE
BVC	BEGIN VERTICAL CURVE	HGL	HYDRAULIC GRADE LINE	SHT	SHOULDER
		ID	INSIDE DIAMETER	SL	SURVEY LINE
CMU	CONCRETE MASONRY UNIT	IN	INCH	SPD	SPEED
CE	CATCH BASIN	INV	INVERT ELEVATION	SPECS	SPECIFICATIONS
CFH	CUBIC FEET PER HOUR	IRRG	IRRIGATION	SQ	SQUARE
CFM	CUBIC FEET PER MINUTE	L	LENGTH	S	SANITARY SEWER, SLOPE, SOUTH STREET
CFS	CUBIC FEET PER SECOND	LC	LENGTH OF CURVE	STD	STANDARD
CHK V	CHECK VALVE	LP	LIGHT POLE	STL	STEEL
CIP	CAST IRON PIPE	LT	LEFT	STN STL	STAINLESS STEEL
CL	CENTERLINE	LWL	LOW WATER LEVEL	STRUCT	STRUCTURAL OR STRUCTURE
CMP	CORRUGATED METAL PIPE	LF	LINEAR FEET	STD DWG	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS 1991, CLARK COUNTY AREA
CMPA	CORRUGATED METAL PIPE ARCH	MAX	MAXIMUM	T	TELEPHONE
CO	CLEANOUT	ME	MECHANICAL END (COLLARED TYPE)	T&B	TOP AND BOTTOM
COB	CLEANOUT BOX	MH	MANHOLE	T&G	TONGUE & GROOVE
COL	COLUMN	MIN	MINIMUM	TAN	TANGENT
CONC	CONCRETE	MISC	MISCELLANEOUS	TB	TELEPHONE BOX
CTR	CENTER	ML	MONUMENT LINE	TBE	THREAD BOTH ENDS
CY	CUBIC YARDS	MON	MONUMENT	TBC	TOP OF BACK OF CURB
CCFR	CENTRIFUGALLY CAST FIBERGLASS RESIN	MSL	MEAN SEA LEVEL	TBM	TEMPORARY BENCH MARK
		MH	MANHOLE	TM	TELEPHONE MANHOLE
D	STORM DRAIN	N	NORTH	TP	TELEPHONE POLE
DIA	DIAMETER	NTS	NOT TO SCALE	TOP	TOP OF PIPE
DWG	DRAWING	OH	OVER HEAD	TOP	TYPICAL
		OC	ON CENTER	TMH	TOP OF MANHOLE
E	EAST	O.D.	OUTSIDE DIAMETER	UG	UNDERGROUND
ESMT	EASEMENT	ORIG	ORIGINAL	UGC	UNDERGROUND CONDUIT
EOP	EDGE OF PAVEMENT	PC	POINT OF CURVATURE	VC	VERTICAL CURVE
EF	EFFLUENT	PCC	POINT OF COMPOUND CURVATURE	VCP	VITRIFIED CLAY PIPE
ECR	END CURB RETURN	PE	PERMANENT EASEMENT	VERT	VERTICAL
ELEV	ELEVATION	PI	POINT OF INTERSECTION	VOL	VOLUME
EQ	EQUAL OR EQUATION	PL	PROPERTY LINE	VPI	VERTICAL POINT OF INTERSECTION
EVC	END VERTICAL CURVE	POT	POINT ON TANGENT	WM	WATER METER
EXIST	EXISTING	PP	POWER POLE	WS	WATER SURFACE
EXPJT	EXPANSION JOINT	PRES	PRESSURE	W	WEST, WATER
EXT	EXTERIOR	PRC	POINT OF REVERSE CURVE	WT	WEIGHT
ECC	ECCENTRIC	PRV	PRESSURE REGULATING, RELIEF OR REDUCING VALVE	WV	WATER VALVE
EW	EACH WAY	PSI	POUNDS PER SQUARE INCH	YD	YARD
ENCSD	ENCASED	PT	POINT OF TANGENCY		
		PVC	POLYVINYL CHLORIDE		
FIN	FINISH	PVMT	PAVEMENT		
FD	FLOOR DRAIN				
F TO F	FACE TO FACE				
FIN GR	FINISHED GRADE				
FH	FIRE HYDRANT				
FL	FLOWLINE				
FLG	FLANGE				
FLGD	FLANGED				
FLR	FLOOR				
FND	FOUND				
FPM	FEET PER MINUTE				

LEGEND

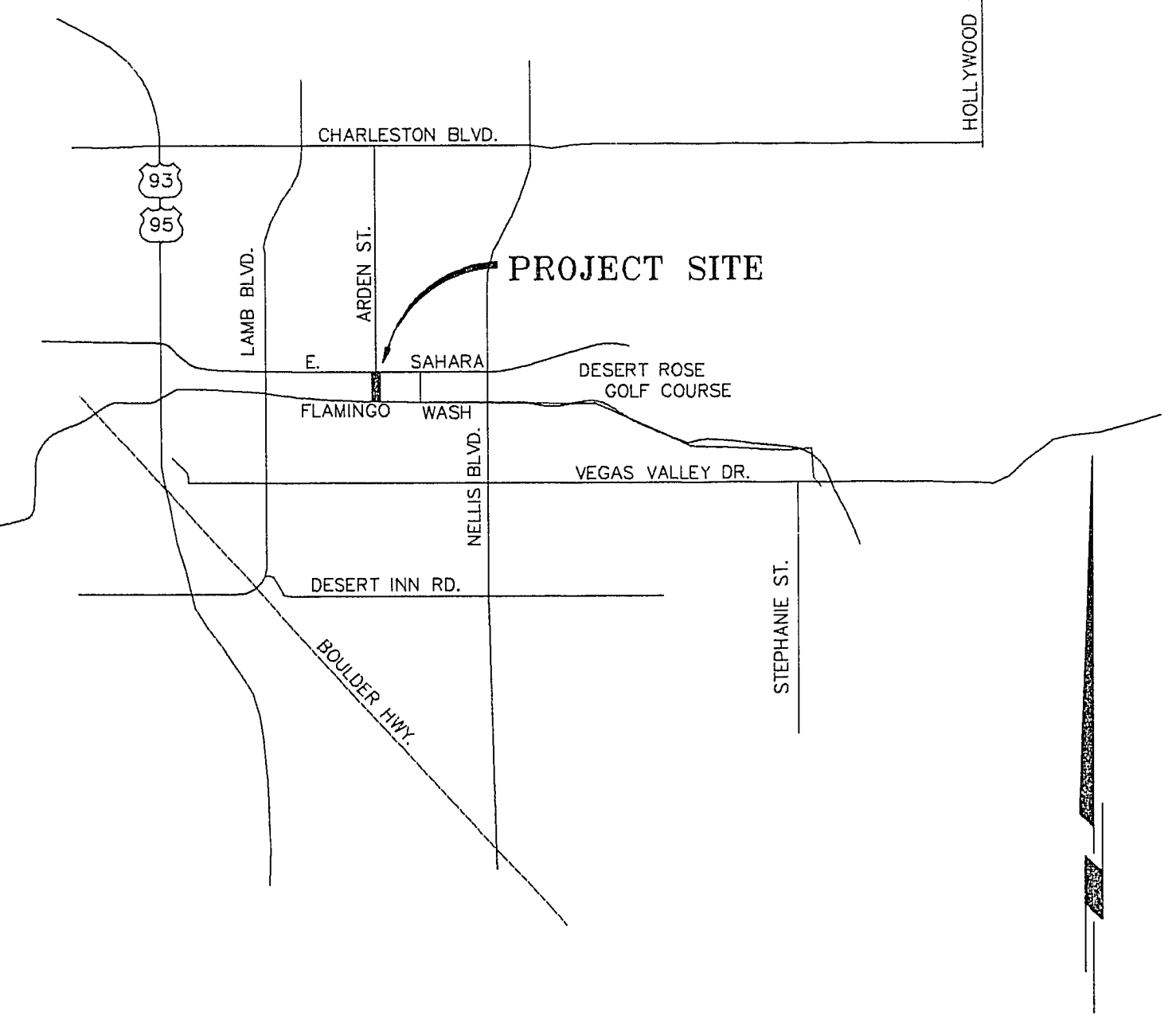
	PROPOSED SEWER & MANHOLE
	CENTERLINE
	RIGHT-OF-WAY
	EXISTING WATERLINE W/VALVE
	EXISTING SEWER W/MANHOLE
	EXISTING GAS LINE W/VALVE
	EXISTING TELEPHONE LINE
	EXISTING POWER LINE
	EXISTING CABLE TV LINE
	EXISTING STORM DRAIN W/MH
	EXISTING POWER POLE
	EXISTING FENCE
	EASEMENT
	EDGE OF EXISTING PAVEMENT
	BOREHOLE LOCATION & NUMBER
	GROUND WATER SURFACE ELEVATION AS OF 2/26/92
	EXISTING ELEVATION (1743.2)

SHEET INDEX

- COVER SHEET
- VICINITY MAP, KEY MAP, SHEET INDEX, ABBREVIATIONS, AND LEGEND
- PLAN, ARDEN ST. AND SAHARA INTERSECTION
- PLAN & PROFILE STA. 0+00 TO 6+75.37
- PROFILE - SECTION A AND CONNECTION DETAILS
- JUNCTION BOX "A" PLAN AND SECTIONS
- JUNCTION BOX "B" PLAN AND SECTIONS
- JUNCTION BOX "C" AND STANDARD MANHOLE DETAIL
- T1. TRAFFIC CONTROL PLAN PHASE I CONSTRUCTION
- T2. TRAFFIC CONTROL PLAN PHASE II CONSTRUCTION

BID QUANTITIES

DESCRIPTION	QUANTITY	UNIT
MOBILIZATION AND DEMOBILIZATION	1	LS
CONSTRUCTION CONFLICTS	1	LS
TRAFFIC MAINTENANCE	1	LS
ADDITIONAL EXCAVATION AND BACKFILL	400	CY
DEWATER EXCAVATION	1	LS
PLANT MIX BITUMINOUS PAVEMENT REMOVAL & REPLACEMENT (APPROXIMATELY 980 SQUARE FEET OF 5 INCH A.C.)	1	LS
CONCRETE JUNCTION BOX A	1	LS
CONCRETE JUNCTION BOX B	1	LS
CONCRETE JUNCTION BOX C AND CONNECTIONS	1	LS
5-FOOT DIAMETER STANDARD TYPE I MANHOLE	1	LS
54" SEWER PIPE	677	LF
MANHOLE/90° BEND/54" SEWER PIPE	1	EA



VICINITY MAP

AS-BUILT
 NOTE: AS-BUILT COMPRISED OF INFORMATION SUPPLIED BY CITY OF LAS VEGAS AND CONTRACTOR.

CALL before you DIG
 1-800-227-2600
 UNDERGROUND SERVICE (USA) AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

W.J.R. / R.D.S.	DESIGNED BY	K.A.E.
D.H.M.	APPROVED BY	
6/22/94	DATE	
AS-BUILTS	REVISION	

2975 SO. RAINBOW BLVD., SUITE G
 LAS VEGAS, NEVADA 89102
 PHONE (702) 364-1066

THE M&K GROUP, INC.
 ENGINEERS & ARCHITECTS

INDEX, ABBREVIATIONS & GENERAL NOTES

SAHARA INTERCEPTOR ARDEN TO W.P.C.F., PHASE I

PROJECT NO.	92-2464.1
DATE	8/05/93
SCALE	HORIZ. NONE
VERT.	NONE
DWG. FILE	R_A_SHT2.DWG

SHEET
2
 OF 10 SHEETS