



City of Las Vegas

CENTRAL NEIGHBORHOOD FLOOD CONTROL MASTER PLAN

LEGEND

- Sub-basin Boundary
- LV12 Basin ID
- (10yr./100yr.) Contributing flow from the basin (cfs)
- Flow Arrow
- 250 10-Year Street Flow
500 100-Year Street Flow
(300) 10-Year Facility Flow
(800) 100-Year Facility Flow
(Flows in CFS)
- Study Area Limit

PHOTO DATE: SPRING 2004

FIGURE E-16



EXISTING DRAINAGE CONDITIONS

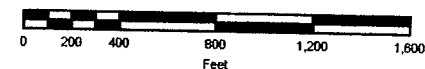
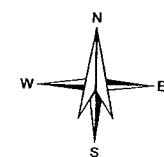


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	Durango	Rainbow	Decatur	Tonopah	5th	Pecos	Nellis
Lake Mead				1	2		
Washington				3	4	5	6
Charleston				7	8	9	10
Sahara				11	12	13	14
Desert Inn				15	16	17	18

NOTE:
Existing conditions are based on future
Curve Number values with only existing local and
CCRFC facilities in place.

100-Year flows at locations where a 100-Year
subbasin concentration point does not exist in the
hydrology model were based on an area-weighted
ratio of the 100-Year flows from concentration points
upstream and downstream of the location. See
Volume I for a more detailed explanation.



SCALE: 1 inch = 800 feet

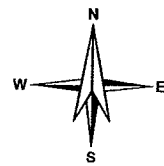
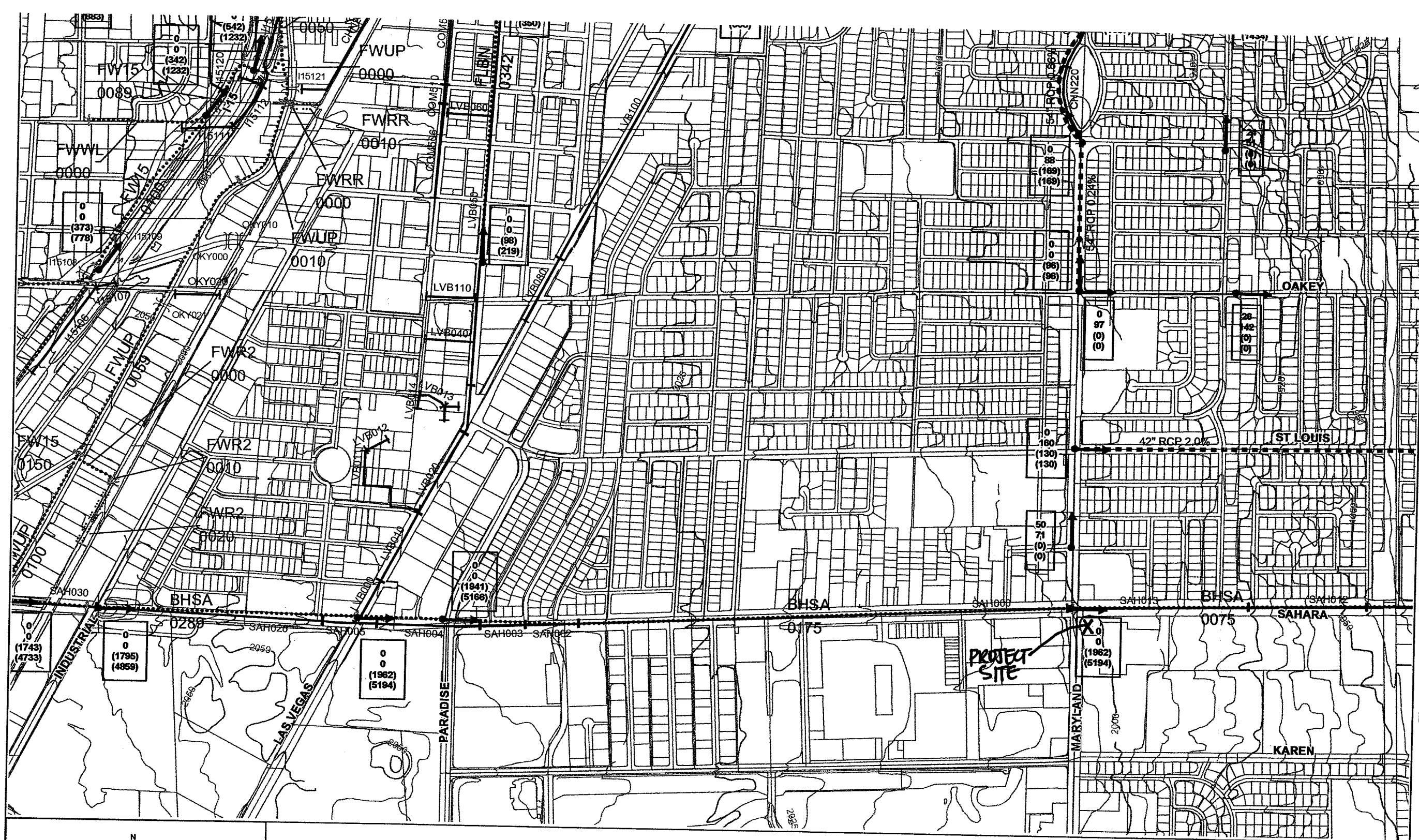


City of Las Vegas
**CENTRAL
NEIGHBORHOOD
FLOOD CONTROL
MASTER PLAN**

LEGEND

- Existing Regional Facility
- Category A Proposed Regional Facility (2002 MPU)
- Category B Proposed Regional Facility (2002 MPU)
- Category A Proposed Regional Facility (2004 CNFCMP)
- Existing Local Facility
- Proposed Local Facility
- Regional Culvert
- Regional Bridge
- Regional Pipeline
- Regional Channel
- Regional Levee
- Regional Detention Basin
- Local Storm Drain
- Local Culvert
- Proposed Local Storm Drain
- Regional ID-Mile Separator
- Local Facility Separator

FIGURE F-16



SCALE: 1 inch = 800 feet

Flow Arrow

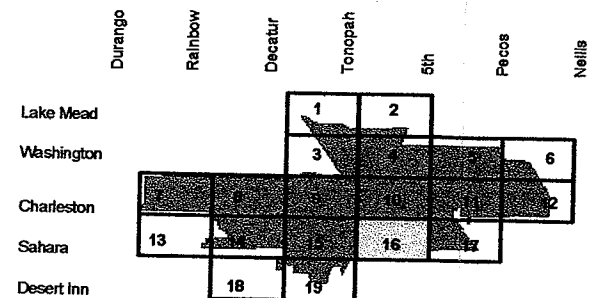
250 10-Year Street Flow
500 100-Year Street Flow
(300) 10-Year Facility Flow
(800) 100-Year Facility Flow

(Flows in CFS)

NOTE:

Ultimate drainage conditions are based on future Curve Number values with all flood control facilities in place.

100-Year flows at locations where a 100-Year subbasin concentration point does not exist in the hydrology model were based on an area-weighted ratio of the 100-Year flows from concentration points upstream and downstream of the location. See Volume I for a more detailed explanation.



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City of Las Vegas

2004 CITY OF LAS VEGAS
CENTRAL NEIGHBORHOOD
FLOOD CONTROL MASTER PLAN

LEGEND

REGIONAL STREAM NAME DESIGNATOR	AABB
REGIONAL MILE	0000
LOCAL STREAM NAME DESIGNATOR	AAB
LOCAL ID NUMBER	000
EXISTING FACILITY	E
PROPOSED OR MODIFIED FACILITY	P
CONTINGENCY LEVEL: CATEGORY B	P0
MASTER PLAN	P1
PRELIMINARY DESIGN	P2
DESIGN	P3
BOTTOM WIDTH	W
DEPTH	D
SIDE SLOPE, H:V	SS
LEFT SIDE SLOPE H:V	LSS
RIGHT SIDE SLOPE H:V	RSS
CORRUGATED METAL ARCH PIPE CULVERT	CMAP
CORRUGATED METAL PIPE CULVERT	CMP
DUCTILE IRON PIPE	DIP
HIGH DENSITY POLYETHYLENE PIPE	HDPE
HELICAL ELLIPTICAL REINFORCED	HERCP
CONCRETE PIPE	PDE
PUBLIC DRAINAGE EASEMENT	PDE
POLYVINYL CHLORIDE PIPE	PVC
REINFORCED CONCRETE BOX	RCB
REINFORCED CONCRETE BOX CULVERT	RCBC
REINFORCED CONCRETE ELLIPTICAL PIPE	RCEP
REINFORCED CONCRETE PIPE	RCP
REINFORCED CONCRETE PIPE ARCH	RCPA
REINFORCED CONCRETE PIPE CULVERT	RCPC
STORM SEWER PIPE	SSP
VITRIFIED CLAY PIPE	VCP

NOTES:
FLOW = 100 YEAR HEC-1 FLOW (REGIONAL)
FLOW = FACILITY CAPACITY (LOCAL FACILITIES)

FLOOD CONTROL FACILITIES INVENTORY

SHEET I - 11



ID	MILE	Status	Plan No.	Facility Description	Facility Length L (ft)	Channel Slope S (%)	Flow (cfs)
F-16 REGIONAL FACILITIES							
BOULDER HIGHWAY, SAHARA AVENUE							
BHSA	0075	P1	2004 CNFCMP	2: 12' X 8' RCB			
BHSA	0175	P1	2004 CNFCMP	3: 11' X 10' RCB	5280	2.11	5194
BHSA	0289	P1	2004 CNFCMP	2: 12' X 11' RCB	6000	0.67	5194
BHSA	0331	P1	2004 CNFCMP	2: 12' X 10' RCB	2300	0.87	5194
FLAMINGO - BOULDER HIGHWAY NORTH							
FLBN	0342	P1		10' X 6' RCB	2000	1.00	4859
FREEWAY CHANNEL FROM DESERT INN TO EXPRESSWAY							
FW15	0050	E	327-V254	3: 12' X 10' RCB	812	0.17	2192
FW15	0089	E	327-V254	3: 12' X 10' RCB	922	0.17	805
FW15	0100	E	327-V254	3: 12' X 9' RCB	1669	0.17	805
FW15	0125	E	327-V254	2: 10' X 8' RCB	1379	0.80	805
OAKLEY DRAIN							
FWOK	0000	E	327-V254	10' X 8' RCB	1300	0.62	805
FREEWAY CHANNEL - RAILROAD CHANNEL 2							
FWR2	0000	E	327-V254	5' X 5' RCBC	310	1.60	
FWR2	0010	E	327-V254	Conc Chnl 8'W 4'D 2:1 SS	50	0.95	
FWR2	0020	E	327-V254	Earth Chnl 8'W 4'D 2:1 SS	600	0.95	
FREEWAY CHANNEL BYPASS FACILITY RR BRANCH							
FWRR	0000	E	327-V254	48" RCP	35	1.22	
FWRR	0010	E	327-V254	Conc Chnl 5'W 5'D	215	1.22	
FREEWAY CHANNEL BYPASS FACILITY							
FWUP	0000	E	327-V254	12' X 9' RCB	426	0.37	221
FWUP	0010	E	327-V254	10' X 8' RCB	804	0.37	221
FWUP	0059	E	327-V254	6' X 5' RCB	2680	0.56	221
FWUP	0100	E	327-V254	6' X 5' RCB	1400	0.56	221
FREEWAY CHANNEL - WALDMAN AVENUE							
FWWL	0000	E	327-V254	6' X 6' RCB	1110	0.20	497
LOCAL FACILITIES							
CHN	210	E	107V-829C	18" RCP	713		11
CHN	220	E	107V-731	18" RCP	606		10
CHN	241	E	327V-120	Conc Chnl 9'W 3'D 1.5:1 SS	1275		
COM	506	E	107V-2008	12" RCP	860	0.25	2
COM	510	E	107V-2008	12" RCP	88	0.25	2
COM	516	E	107V-2008	18" RCP	883	0.25	5
I15	106	E	HWY BK I-12	Riprap/Conc Chnl 10'W 6'D 2:1 SS	1197	0.10	484
I15	107	E	HWY BK I-3	45" X 29" Oval RCP	316	0.60	48
I15	108	E	HWY BK I-3	18" RCP	280	0.50	6
I15	109	E	HWY BK I-3	18" RCP	96	0.50	6
I15	111	E	HWY BK I-3	8' X 3' RCBC	360	0.25	170
I15	112	E	HWY BK I-3	Conc Chnl 6'W 2:1 SS	550	0.12	
I15	113	E	HWY BK I-3	24" RCP	236	0.40	12
I15	120	E	107V-800	15" RCP	351		6
I15	121	E	107-V793	9' x 3' RCB	80		189
I15	130	E	327-119	38" X 60" RCP	1435		56
I15	140	E	115-337	15" RCP	650	0.40	3
LVB	000	E	HWY BK # 12-A	15" RCP	413		6
LVB	010	E	107-V1942	18" RCP	713		11
LVB	011	E	107V-2358	18" RCP	1069	0.30	5
LVB	012	E	107V-2358	8" DIP	250	0.80	1
LVB	013	E	107V-2358	24" RCP	599	0.19	9
LVB	013	E	107V-2358	24" RCP	599	0.19	9
LVB	013	E	107V-2358	24" RCP	599	0.19	9
LVB	014	E	107V-2358	12" RCP	61	0.19	1
LVB	020	E	HWY BK # 12-A	24" RCP	1243		23
LVB	040	E	HWY BK # S-3	12" ACP	371		17
LVB	050	E	HWY BK # M-2	24" CMP	3675		23
LVB	060	E	327-7	15" RCP	379		4
LVB	080	E	HWY BK # L-3, L-5	10" VCP	600		2
LVB	100	E	NSHD # 11/Hwy Bk # L-5	24" RCP	2750		23
LVB	110	E	107-V1942	18" RCP	713		11
OKY	000	E	107V-957	31" X 50" RCP	120		60
OKY	010	E	107V-957	31" X 50" RCP	120		80
OKY	020	E	327-V120	Unlined Chnl 3'D 9'W	375		389
OKY	021	E	327-V120	2: 12" x 24" CMP	70		32
SAH	000	E	HWY BK # S-1	60" RCP	3910		221
SAH	002	E	HWY BK # S-1	66" RCP	695		336
SAH	003	E	HWY BK # S-1	83" X 53" RCP	295		336

ID	MILE	Status	Plan No.	Facility Description	Facility Length L (ft)	Channel Slope S (%)	Flow (cfs)
F-16 LOCAL FACILITIES (continued)							
SAH	004	E	HWY BK # S-1	51" RCP	885		174
SAH	005	E	HWY BK # S-1	68" x 43" RCP	275		187
SAH	011	E	HWY BK # S-1	48" RCP	692		296
SAH	012	E	HWY BK # S-1	54" RCP	853		224
SAH	013	E	HWY BK # 67	24" RCP	1050		23
SAH	020	E	HWY BK # S-2	42" RCP	2506		75
SAH	030	E	HWY BK # S-2	36" RCP	812		67
F-17 REGIONAL FACILITIES							
BOULDER HIGHWAY - EASTERN DRAIN							
BHEA	0000	P1	2003 CNFCMP	10' X 8' RCB	1320	0.20	563
BOULDER HIGHWAY - SAHARA							
BHSA	0000	E	HWY BK # S-1	72" RCP	768	0.79	5194
BHSA	0000	P1	2004 CNFCMP	2: 12' X 12' RCB	1350	0.79	5194
BHSA	0026	P1	2004 CNFCMP	2: 12' X 10' RCB	4000	1.30	5194
BHSA	0075	P1	2004 CNFCMP	2: 12' X 8' RCB	5280	2.11	5194
FLAMINGO - BOULDER HIGHWAY NORTH							
FLBN	0000	E	2002 Master Plan Update	Conc Chnl 5'W 6'D 2:1 SS	2200	0.70	5455
FLBN	0000	P1	2004 CNFCMP	3: 11' X 10' RCB	2200	0.70	5455
FLBN	0038	E	2002 Master Plan Update	Channel - Unknown Characteristics	6600	0.59	2284
FLBN	0038	P1	2004 CNFCMP	3: 9' X 7' RCB	6600	0.59	2284
FLAMINGO - BOULDER HIGHWAY SOUTH							
FLBS	0167	E	2002 Master Plan Update	Unlined Median Chnl 0'W 3.5'D 9:1 SS	8850	0.90	959
FLAMINGO WASH							
FLWA	0175	E	2002 Master Plan Update	Earth Chnl 50'W 12'D 1:1 SS	2400	0.70	10082
FLWA	0175	P1	2002 Master Plan Update	Conc Chnl 50'W 9'D 1:1 SS	2400	0.70	10082
FLWA	0226	E	2002 Master Plan Update	Free Span Bridge 100'W 10.0'D @ I-515	170	0.80	10082
FLWA	0228	E	2002 Master Plan Update	Earth Chnl 50'W 12'D 1:1 SS	1500	0.80	10082
FLWA	0228	P1	2002 Master Plan Update	Conc Chnl 50'W 9'D 1:1 SS	1500	0.80	10082
FLWA	0255	E	2002 Master Plan Update	2 Span Bridge 150'W 9'D @ Boulder Hwy	65	1.00	7469
FLWA	0256	E	2002 Master Plan Update	Conc Chnl 60'W 7.5'D 0:1 SS	40	1.00	7469
FLWA	0257	E	2002 Master Plan Update	2 Span Bridge 150'W 9'D @ Boulder Hwy	60	1.00	7469
FLWA	0258	E	2002 Master Plan Update	Conc Chnl 60'W 7.5'D 0:1 SS	750	0.44	7469
FLWA	0273	E	2002 Master Plan Update	Free Span Bridge 60'W 9.0'D @ Trailer Park	10	0.40	7469
FLWA	0274	E	2002 Master Plan Update	Conc Chnl 60'W 8.1'D 0:1 SS	1370	1.00	7469
COLORADO AVENUE SYSTEM							
LVCO	0109	E	2002 Master Plan Update	10' X 5' RCB	2500	0.25	394
LOCAL FACILITIES							
BHY	000	E	HWY BK #B-2	24" RCP	150		30
BHY	010	E	HWY BK #B-2	24" RCP	150		30
BHY	020	E	HWY BK #B-2	24" RCP	150		30
BHY	030	E	HWY BK #B-2	24" RCP	150		30
BHY	040	E	HWY BK #B-2	24" RCP	150		30
BHY	050	E	107-V594	66" RCP	500		237
BHY	060	E	HWY BK #B-2	24" RCP	120		30
BHY	070	E	327-86	66" RCP	520		260
BHY	080	E	100-51-D1	30" RCP	155		29
BHY	090	E	100-51-D5	24" RCP	600		16
BHY	100	E	100-51-D5	18" RCP	300		7
BHY	110	E	327-86	66" RCP	700		237
CHN	070	E	107-V1632	12" PVC	678		2
ETN	000	E	327-V67	48" RCP	600		542
ETN	010	E	327-V67	42" RCP	748		450
ETN	020	E	327-V67	30" RCP	60		225
ETN	030	E	107-V835A	18" RCP	1529		6
ETN	040	E	327-73	12" VCP	555		3
ETN	050	E	327-73	15" RCP	293		7
ETN	060	E	327-73	18" RCP	518		11
ETN	090	E	107-V835A	24" RCP	628		16
SAH	007	E	HWY BK # S-1	66" RCP	3262		425
SAH	008	E	HWY BK # S-1	60" RCP	1888		300
SAH	009	E	HWY BK # S-1	51" RCP	1447		250
SAH	010	E	HWY BK # S-1	48" RCP	696		265
SAH	011	E	HWY BK # S-1	48" RCP	692		296
SAH	012	E	HWY BK # S-1	54" RCP	853		224

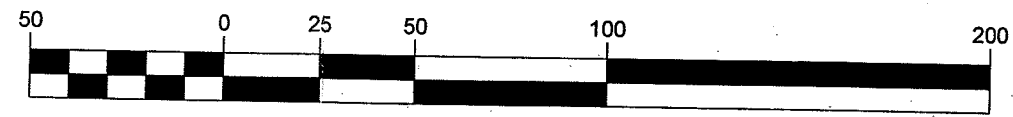
MARYLAND PKWY.

(**365/701)

**CP1

SAHARA AVE.

GRAPHIC SCALE



(IN FEET)
1 inch = 50 feet

(*S-2)

(*K-1)

LEGEND

- EXISTING BASIN DELINEATIONS FROM "SAHARA TOWNE SQUARE" TDS
- PROPOSED DELINEATION CHANGE WITH NEW BANK BUILDING
- EXISTING IMPROVEMENTS
- PROPOSED NEW BANK IMPROVEMENTS

*EXISTING BASIN DELINEATION REFERENCED FROM SAHARA TOWNE SQUARE DRAINAGE STUDY BY BAUGHMAN & TURNER, INC. JULY 13, 1987

**FLOWS AT CP1 (365/701) REFERENCED FROM CITY OF LAS VEGAS CENTRAL NEIGHBORHOOD FLOOD CONTROL MASTER PLAN.

FLOW COMBINATION POINTS ●		
CONC. POINT	Q10 (CFS)	Q100 (CFS)
**CP1	365	701

HYDRAULIC CROSS-SECTIONS

CROSS-SECTION NAME	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)	D ₁₀ (FT)	D ₁₀₀ (FT)	V ₁₀ (FT/S)	V ₁₀₀ (FT/S)	(DxV) ₁₀	(DxV) ₁₀₀	10-YR DRY LANE
SECTION 1	365	701	1.23	1.51	6.41	7.75	7.88	11.70	NO
SECTION 2	365	701	1.48	1.80	4.62	5.61	6.84	10.10	NO



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meeting your land development needs

CHASE @ MARYLAND & SAHARA
EXISTING/PROPOSED BASIN MAP