Bridgefield Addition

By BLG Date 3-19-97 Page 1 of 11 BAUGHMAN COMPANY, P.A.

Inflow from off-site 36" RCP assume HW control w/ depth = 4.5'

$$Q = CA\sqrt{2gH}$$

$$Q = (.5)\left[\frac{(3)^2\pi}{4}\right]\sqrt{2g(4.5-1.5)}$$

$$Q = 50 \text{ cfs}$$

Sum of Flow from SWS Systems

SYSTEM #	Q_p
1	4.3
2	20.5
3	36.8
4	14.0
	75 cfs

SHEET FLOW From Basin #8
Q = 33

Total on-site Flow = 108

Total D.A. Flow = 158 cfs

CHANNEL SECTION # 1 Top width = 47.6'

CHANNEL SECTION # 2 Top width = 43.6'

CHANNEL SECTION # 3 Top width = 46'

System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P1-1	I1-1	0.80	0.72	0.58	Outlet	18 inch	0.021260	127.00	53.70	51.00	4.28
	N/A	N/A	N/A	0.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Project Title: Bridgefield Addition
f:\hydro\projects\bridge\system1.stm
03/01/97 02:11:58 PM © Haestad Methods, Inc. Baughman Company, P.A. 37 Brookside Road Waterbury, CT 06708 USA (203) 755-1666
Project Engineer: Baughman Company, P.A.
StormCAD v1.0
Page 1 of 1

System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P2-1	I2-1	1.10	0.72	0.79	I2-2	18 inch	0.009804	51.00	51.00	50.50	5.88
P2-2	I2-2	1.90	0.72	2.16	I2-3	18 inch	0.005338	281.00	50.00	48.50	15.94
P2-3	I2-3	0.90	0.72	2.81	Outlet	24 inch	0.019802	202.00	48.00	44.00	20.45
	N/A	N/A	N/A	2.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Project Title: Bridgefield Addition
f:\hydro\projects\bridge\system2.stm
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StormCAD v1.0
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System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P3-1	I3-1	0.70	0.00	0.00	I3-2	18 inch	0.011429	36.00	50.90	50.50	2.00
P3-2	I3-2	5.10	0.00	0.00	I3-3	18 inch	0.001553	322.00	50.00	49.50	5.00
P3-3	I3-3	2.20	0.72	1.58	I3-4	24 inch	0.014286	35.00	49.00	48.50	32.70
P3-4	I3-4	1.20	0.72	2.45	Outlet	24 inch	0.030864	162.00	48.00	43.00	36.79
	N/A	N/A	N/A	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Project Title: Bridgefield Addition
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Page 1 of 1

System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P4-6	I4-5	0.90	0.72	0.65	I4-6	18 inch	0.005556	36.00	43.00	42.80	2.50
P4-7	I4-6	0.50	0.72	1.01	I4-4	18 inch	0.003106	161.00	42.60	42.10	3.84
P4-1	I4-1	1.30	0.72	0.94	I4-2	18 inch	0.002976	168.00	43.40	42.90	3.61
P4-2	I4-2	1.20	0.72	1.80	I4-3	18 inch	0.002778	36.00	42.70	42.60	6.68
P4-3	I4-3	0.60	0.72	2.23	I4-4	24 inch	0.001987	151.00	42.40	42.10	8.24
P4-4	I4-4	1.00	0.72	3.96	J4-1	24 inch	0.001863	161.00	41.90	41.60	14.22
P4-5	J4-1	N/A	N/A	3.96	Outlet	24 inch	0.002083	192.00	41.40	41.00	13.98
	N/A	N/A	N/A	3.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Project Title: Bridgefield Addition
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CURRENT DATE: 03-19-1997
CURRENT TIME: 14:35:18

FILE DATE: 03-19-1997
FILE NAME: BRIDGE

FHWA CULVERT ANALYSIS
HY-8, VERSION 4.1

CULV	SITE DATA: INLET ELEV. (FT)	OUTLET ELEV. (FT)	CULVERT LENGTH (FT)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (FT)	RISE (FT)	MANNING n	INLET TYPE
1	39.94	38.06	97.01	3 RCP	3.00	3.00	.012	CONVENTIONAL
2								
3								
4								
5								
6								

SUMMARY OF CULVERT FLOWS (CFS) FILE: BRIDGE DATE: 03-19-1997

ELEV (FT)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
41.00	0	0	0	0	0	0	0	0	1
41.25	20	20	0	0	0	0	0	0	1
41.55	40	40	0	0	0	0	0	0	1
42.02	60	60	0	0	0	0	0	0	1
42.42	80	80	0	0	0	0	0	0	1
42.81	100	100	0	0	0	0	0	0	1
43.22	120	120	0	0	0	0	0	0	1
43.67	140	140	0	0	0	0	0	0	1
44.18	160	160	0	0	0	0	0	5	9
44.57	180	173	0	0	0	0	0	22	4
44.68	200	177	0	0	0	0	0	0	OVERTOPPING
44.50	171	171	0	0	0	0			

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: BRIDGE DATE: 03-19-1997

HEAD ELEV(FT)	HEAD ERROR(FT)	TOTAL FLOW(CFS)	FLOW ERROR(CFS)	% FLOW ERROR
41.00	0.00	0	0	0.00
41.25	0.00	20	0	0.00
41.55	0.00	40	0	0.00
42.02	0.00	60	0	0.00
42.42	0.00	80	0	0.00
42.81	0.00	100	0	0.00
43.22	0.00	120	0	0.00
43.67	0.00	140	0	0.00
44.18	0.00	160	0	0.00
44.57	-0.01	180	1	0.78
44.68	-0.00	200	1	0.74

<1> TOLERANCE (FT) = 0.010 <2> TOLERANCE (%) = 1.000

2

CURRENT DATE: 03-19-1997
CURRENT TIME: 14:35:18

FILE DATE: 03-19-1997
FILE NAME: BRIDGE

PERFORMANCE CURVE FOR CULVERT # 1 - 3 (3 BY 3) RCP

[redacted]

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRITICAL DEPTH (ft)	OUTLET VEL. (fps)	OUTLET DEPTH (ft)	TAILWATER VEL. (fps)	TAILWATER DEPTH (ft)
0	41.00	0.00	1.06	0-NF	0.00	0.00	0.00	0.00	0.00	2.94
20	41.25	1.02	1.31	3-M1t	0.50	0.80	0.95	2.94	0.00	2.94
40	41.55	1.61	1.61	1-S2n	0.72	1.16	10.05	0.72	0.00	2.94
60	42.02	2.07	2.07	1-S2n	0.91	1.43	10.52	0.95	0.00	2.94
80	42.42	2.48	2.48	1-S2n	1.05	1.66	11.24	1.11	0.00	2.94
100	42.81	2.87	2.87	1-S2n	1.19	1.87	11.84	1.26	0.00	2.94
120	43.22	3.27	3.27	5-S2n	1.31	2.06	12.29	1.41	0.00	2.94
140	43.67	3.72	3.72	5-S2n	1.43	2.22	12.72	1.55	0.00	2.94
160	44.18	4.24	4.24	5-S2n	1.55	2.37	13.10	1.68	0.00	2.94
173	44.56	4.62	4.62	5-S2n	1.63	2.45	13.35	1.77	0.00	2.94
177	44.67	4.73	4.73	5-S2n	1.65	2.47	13.43	1.79	0.00	2.94

El. inlet face invert 39.94 ft El. outlet invert 38.06 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** EMBANKMENT TOE ***************

UPSTREAM STATION (FT)	0.00
UPSTREAM ELEVATION (FT)	40.00
UPSTREAM EMBANKMENT SLOPE (X:1)	1.00
DOWMSTREAM STATION (FT)	103.00
DOWNSTREAM ELEVATION (FT)	38.00
DOWNSTREAM EMBANKMENT SLOPE (X:1)	1.00

***** CULVERT DATA SUMMARY ************************

BARREL SHAPE	CIRCULAR
BARREL DIAMETER	3.00 FT
BARREL MATERIAL	CONCRETE
BARREL MANNING'S N	0.012
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE WITH HEADWALL
INLET DEPRESSION	NONE

3

CURRENT DATE: 03-19-1997
CURRENT TIME: 14:35:18

FILE DATE: 03-19-1997
FILE NAME: BRIDGE

TAILWATER

CONSTANT WATER SURFACE ELEVATION
41.00

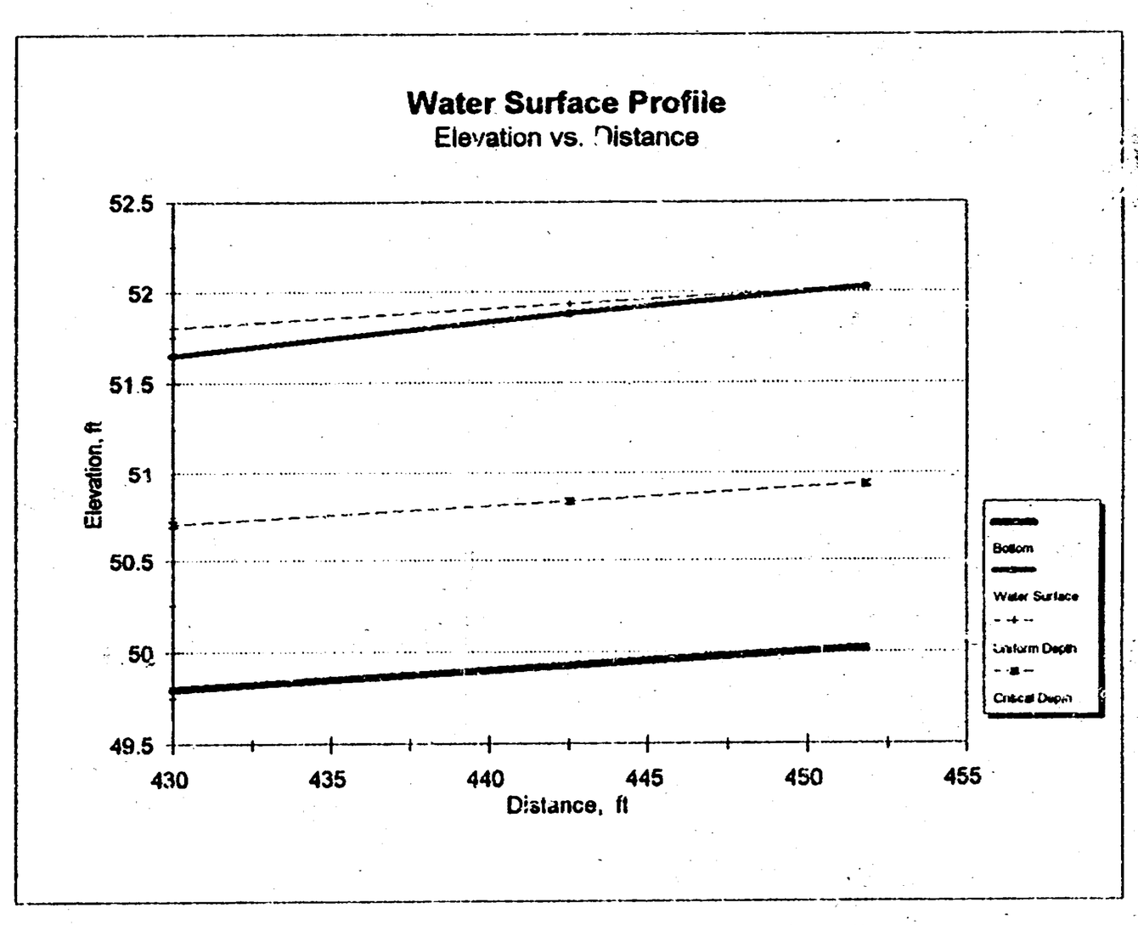
ROADWAY OVERTOPPING DATA

WEIR COEFFICIENT	2.86
EMBANKMENT TOP WIDTH (FT)	46.00
CREST LENGTH (FT)	100.00
OVERTOPPING CREST ELEVATION (FT)	44.50

Channel Properties								Classifications	
Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Channel	Profile
30	0.0103	4	4	0.1	160	0.91	2.00	mild	M2

Staring Point				
Station ft	Bottom Elevation ft	Flow Depth ft	Depth Step ft	Directional Depth Ste ft
430	49.8	1.85	0.1	0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave. Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
1.85	62.90	2.54	1.95	45.26	1.390	----------	----------	430.00	49.80	51.[illegible]
1.95	66.30	2.41	2.04	46.08	1.439	0.0175	12.55	442.55	49.93	5[illegible]
2.00	68.12	2.35	2.09	46.52	1.464	0.0155	9.32	451.86	50.03	52.[illegible]
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03
2.00	68.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.86	50.03	52.03



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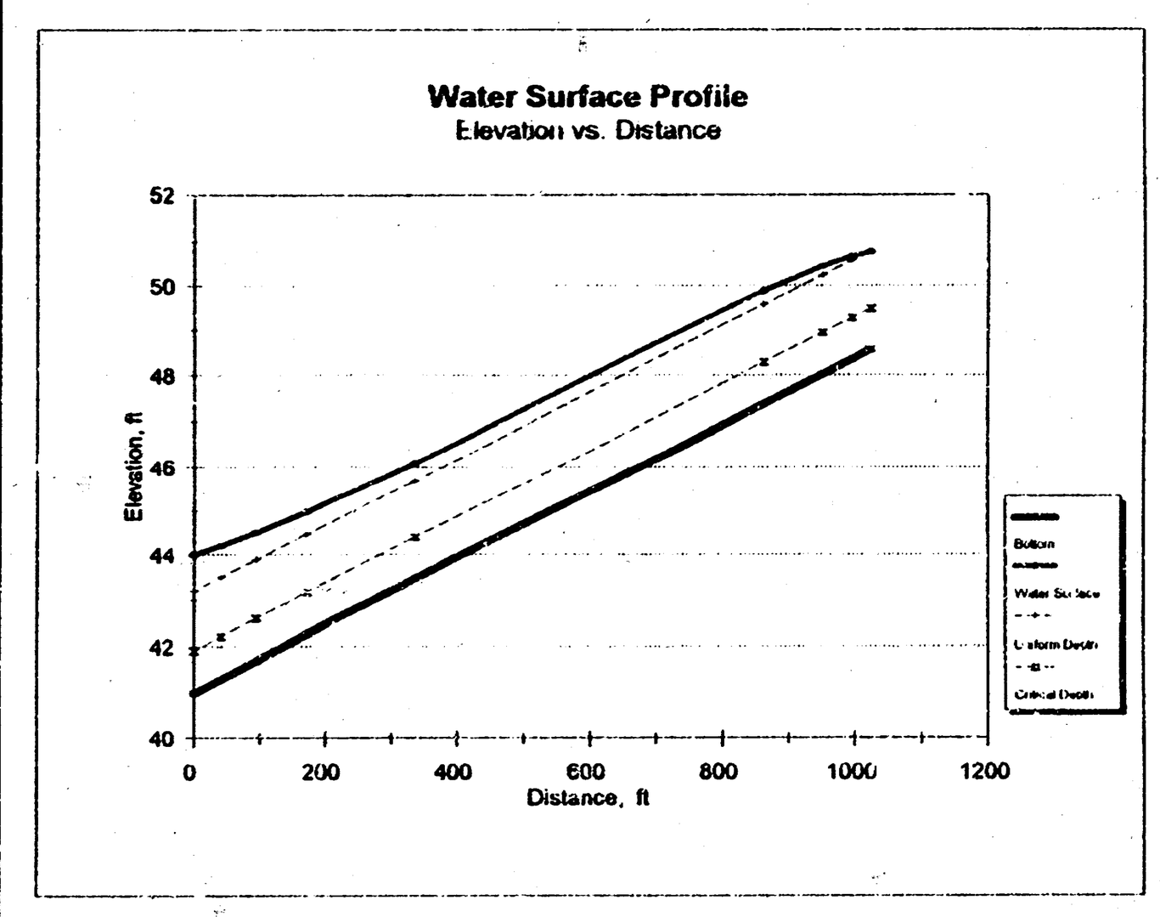
Channel Properties								Classifications	
Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Channel	Profile
30	0.0074	4	4	0.1	160	0.91	2.20	mild	M1

Staring Point				
Station ft	Bottom Elevation ft	Flow Depth ft	Depth Step ft	Directional Depth Ste ft
0	41	3	0.1	-0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave. Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
3.00	102.00	1.57	3.04	54.74	1.863	----------	----------	0.00	41.00	44.00
2.90	98.60	1.62	2.94	53.91	1.829	0.0051	41.74	41.74	41.31	44.21
2.80	95.20	1.68	2.84	53.09	1.793	0.0056	53.07	94.81	41.70	44.50
2.70	91.80	1.74	2.75	52.26	1.756	0.0061	77.25	172.06	42.27	44.97
2.60	88.40	1.81	2.65	51.44	1.719	0.0068	163.93	335.99	43.49	46.09
2.50	85.00	1.88	2.56	50.62	1.679	0.0076	526.51	862.51	47.38	49.88
2.40	81.60	1.96	2.46	49.79	1.639	0.0085	88.33	950.84	48.04	50.44
2.30	78.20	2.05	2.37	48.97	1.597	0.0095	44.42	995.26	48.36	50.66
2.20	74.80	2.14	2.27	48.14	1.554	0.0108	27.82	1023.09	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.49	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.58	48.57	50.77



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Channel Properties								Classifications	
Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Channel	Profile
30	0.0187	4	4	0.1	160	0.91	1.69	mild	M1

Staring Point				
Station ft	Bottom Elevation ft	Flow Depth ft	Depth Step ft	Directional Depth Ste ft
200	45.5	2.7	0.1	-0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave. Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
2.70	91.80	1.74	2.75	52.26	1.756	----------	----------	200.00	45.50	48.20
2.60	88.40	1.81	2.65	51.44	1.719	0.0038	8.10	208.10	45.65	48.25
2.50	85.00	1.88	2.56	50.62	1.679	0.0076	8.62	216.72	45.81	48.31
2.40	81.60	1.96	2.46	49.70	1.639	0.0085	9.33	226.05	45.99	48.39
2.30	78.20	2.05	2.37	48.97	1.597	0.0095	10.33	236.38	46.18	48.48
2.20	74.80	2.14	2.27	48.14	1.554	0.0108	11.86	248.24	46.40	48.60
2.10	71.40	2.24	2.18	47.32	1.509	0.0123	14.45	262.69	46.67	48.77
2.00	68.00	2.35	2.09	46.49	1.463	0.0140	19.76	282.45	47.04	49.04
1.90	64.60	2.48	2.00	45.67	1.415	0.0162	36.44	318.69	47.72	49.62
1.80	61.20	2.61	1.91	44.84	1.365	0.0189	527.14	846.03	57.58	59.38
1.70	57.80	2.77	1.82	44.02	1.313	0.0222	25.11	871.14	58.05	59.75
1.69	57.57	2.78	1.81	43.96	1.310	0.0241	1.07	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
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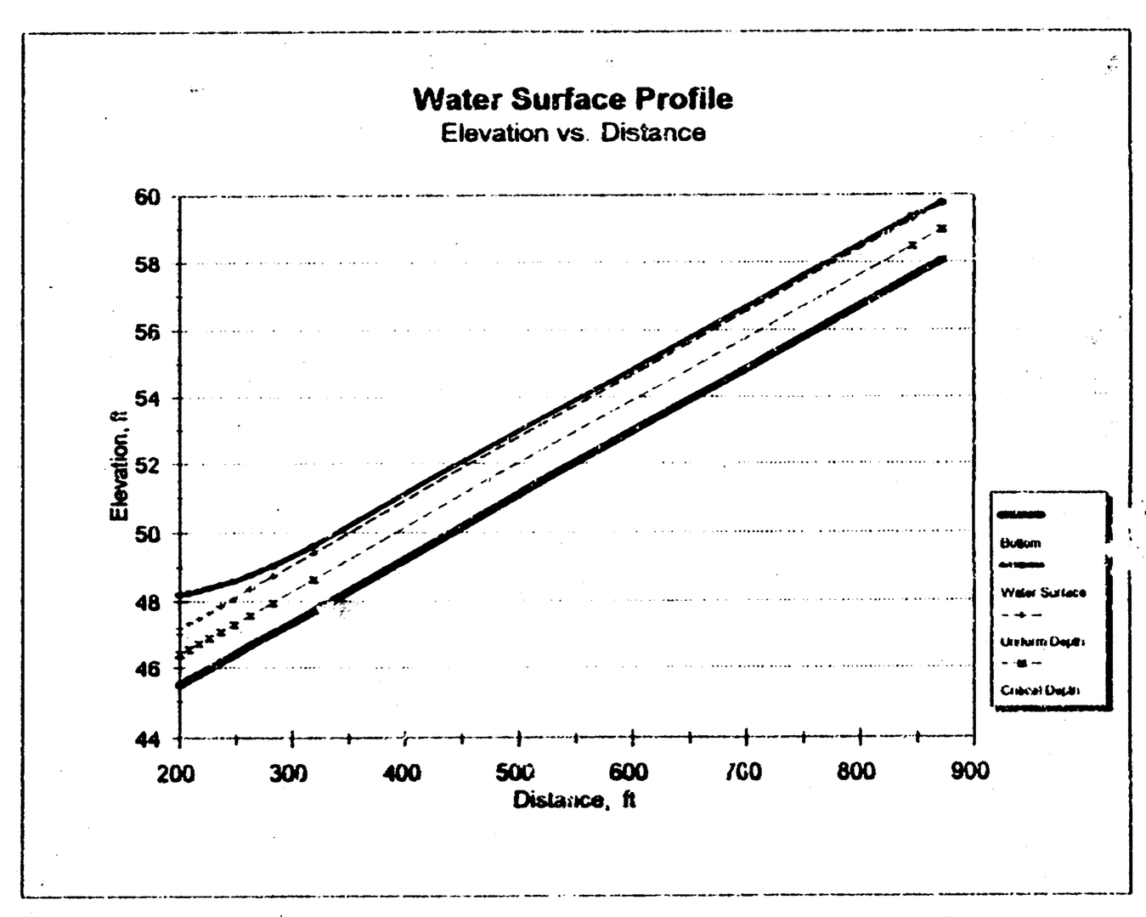
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76



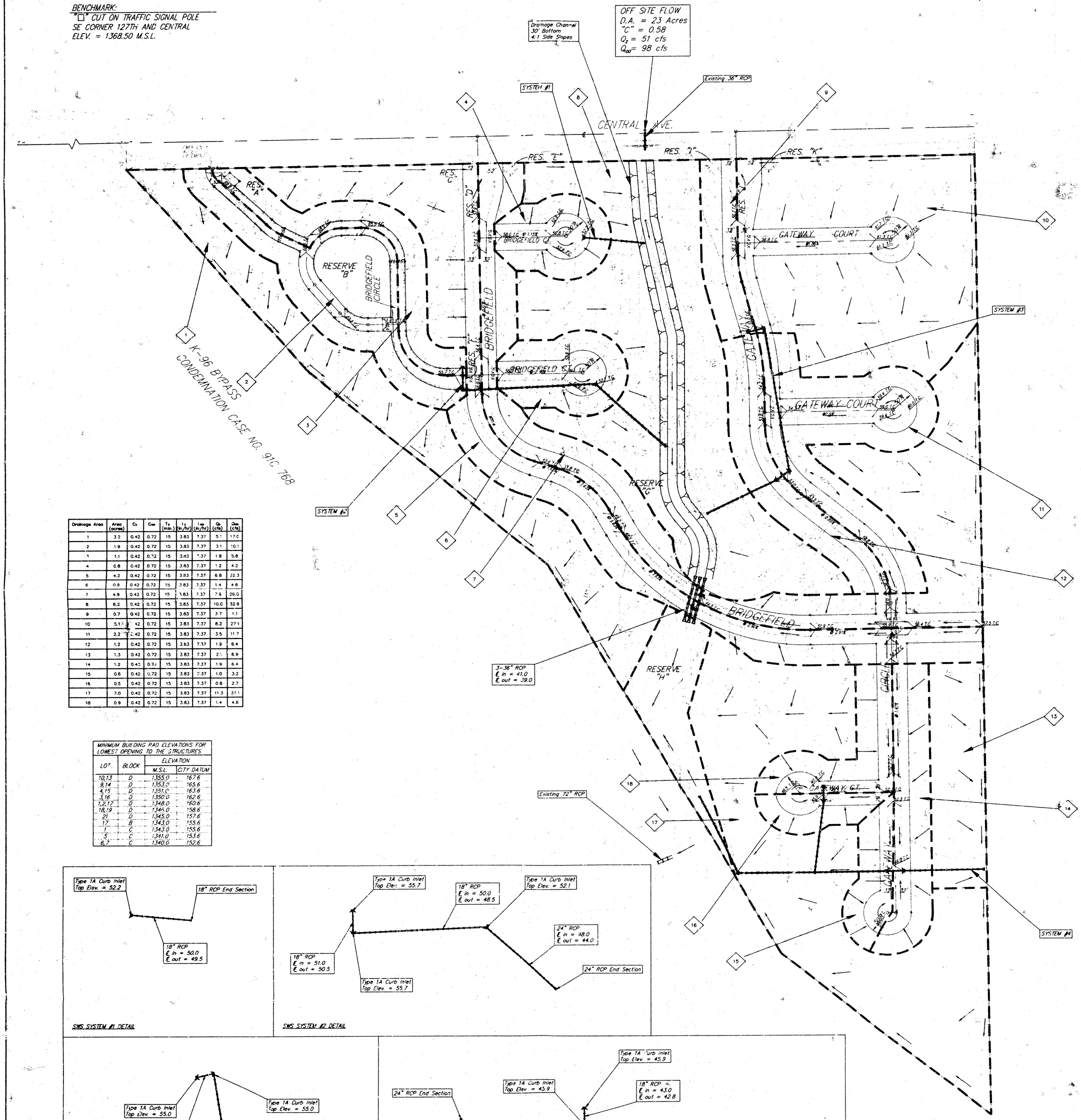
10

DRAINAGE PLAN
BRIDGEFIELD ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

OWNER:
SCOTT DEVELOPERS, LLC
ATTN: DON & PAT SCOTT
21 SCOTTSDALE
WICHITA, KS 67230

BENCHMARK:
"□" CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127Th AND CENTRAL
ELEV. = 1368.50 M.S.L.

0 100 200



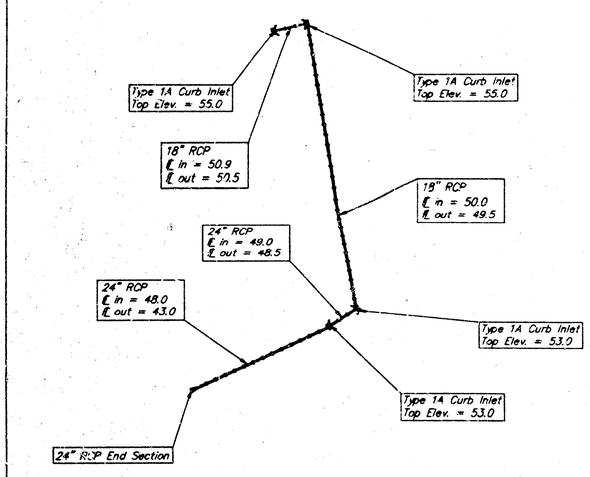
Drainage Area	Area (acres)	Cs	Cm	Tc (min.)	I2 (in/hr)	I100 (in/hr)	Q2 (cfs)	Q100 (cfs)
1	3.2	0.42	0.72	15	3.83	7.37	5.1	17.0
2	1.9	0.42	0.72	15	3.83	7.37	3.1	10.1
3	1.1	0.42	0.72	15	3.83	7.37	1.8	5.8
4	0.8	0.42	0.72	15	3.83	7.37	1.2	4.2
5	4.2	0.42	0.72	15	3.83	7.37	6.8	22.3
6	0.9	0.42	0.72	15	3.83	7.37	1.4	4.8
7	4.9	0.42	0.72	15	3.83	7.37	7.9	26.0
8	6.2	0.42	0.72	15	3.83	7.37	10.0	32.9
9	0.7	0.42	0.72	15	3.83	7.37	1.7	1.1
10	5.1	0.42	0.72	15	3.83	7.37	8.2	27.1
11	2.2	0.42	0.72	15	3.83	7.37	3.5	11.7
12	1.2	0.42	0.72	15	3.83	7.37	1.9	6.4
13	1.3	0.42	0.72	15	3.83	7.37	2.1	6.9
14	1.2	0.42	0.72	15	3.83	7.37	1.9	6.4
15	0.6	0.42	0.72	15	3.83	7.37	1.0	3.2
16	0.5	0.42	0.72	15	3.83	7.37	0.8	2.7
17	7.0	0.42	0.72	15	3.83	7.37	11.3	37.1
18	0.9	0.42	0.72	15	3.83	7.37	1.4	4.8

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES

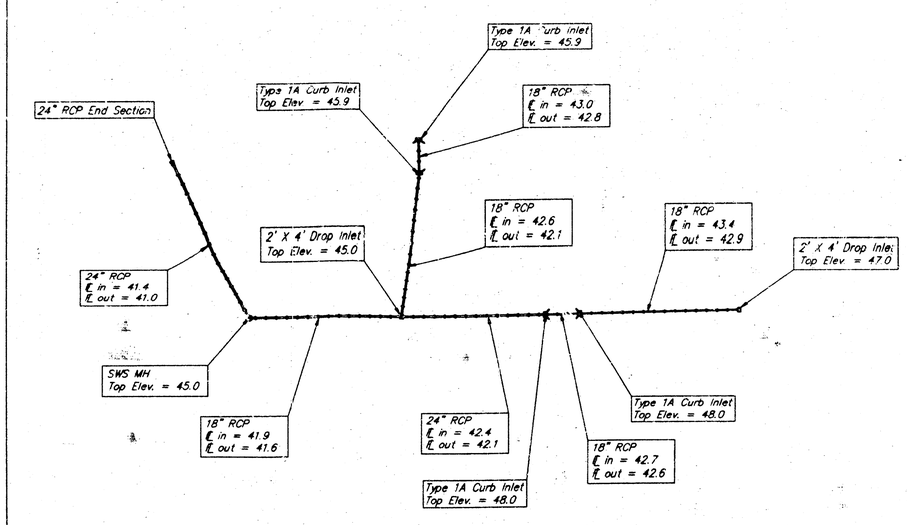
LOT	BLOCK	ELEVATION	
		M.S.L.	CITY DATUM
10,13	D	1355.0	167.6
9,14	D	1353.0	165.6
4,15	D	1351.0	163.6
3,16	D	1350.0	162.6
1,2,17	D	1348.0	160.6
18,19	D	1346.0	158.6
21	D	1345.0	157.6
1,7	B	1343.0	155.6
1	C	1343.0	155.6
5	C	1341.0	153.6
6,7	C	1340.0	152.6

SWS SYSTEM #1 DETAIL

SWS SYSTEM #2 DETAIL



SWS SYSTEM #3 DETAIL

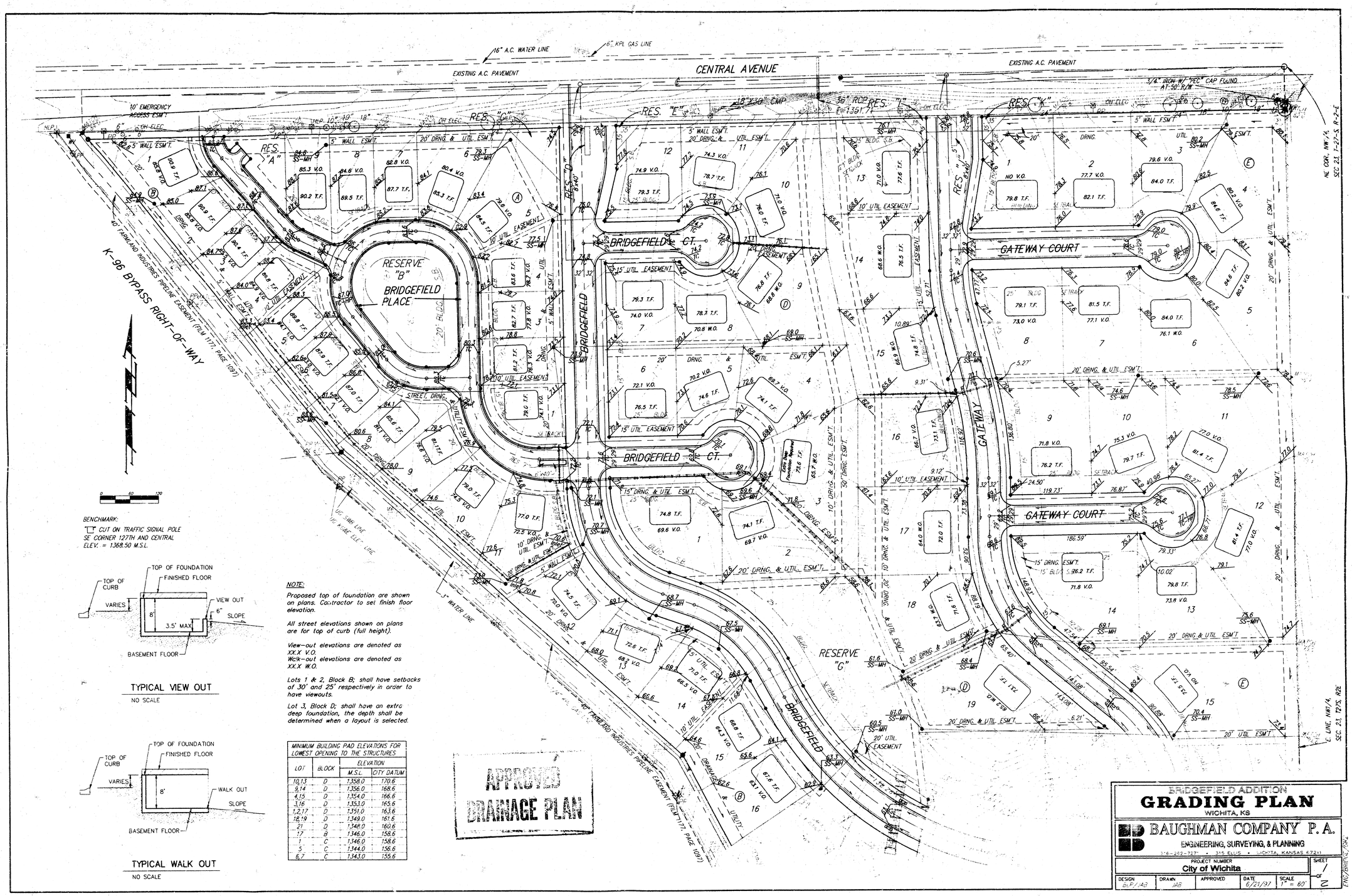


SWS SYSTEM #4 DETAIL

Note: Elevations shown on this Drainage Plan are in Mean Sea Level. To Convert MSL to City Datum subtract 1187.4' from MSL.

The "Drainage Plan" being submitted herein is intended to serve as a guide for the design of streets and storm water sewer improvements. Modifications to structures, pipes, etc. may be necessary during the final design in order to obtain the most economical design and construction possible.

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316-262-2691 • 315 ELLIS • WICHITA, KANSAS 67211



BENCHMARK:
CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.

TYPICAL VIEW OUT
NO SCALE

TYPICAL WALK OUT
NO SCALE

NOTE:

Proposed top of foundation are shown on plans. Contractor to set finish floor elevation.

All street elevations shown on plans are for top of curb (full height).

View-out elevations are denoted as XX.X V.O.
Walk-out elevations are denoted as XX.X W.O.

Lots 1 & 2, Block B; shall have setbacks of 30' and 25' respectively in order to have viewouts.

Lot 3, Block D; shall have an extra deep foundation, the depth shall be determined when a layout is selected.

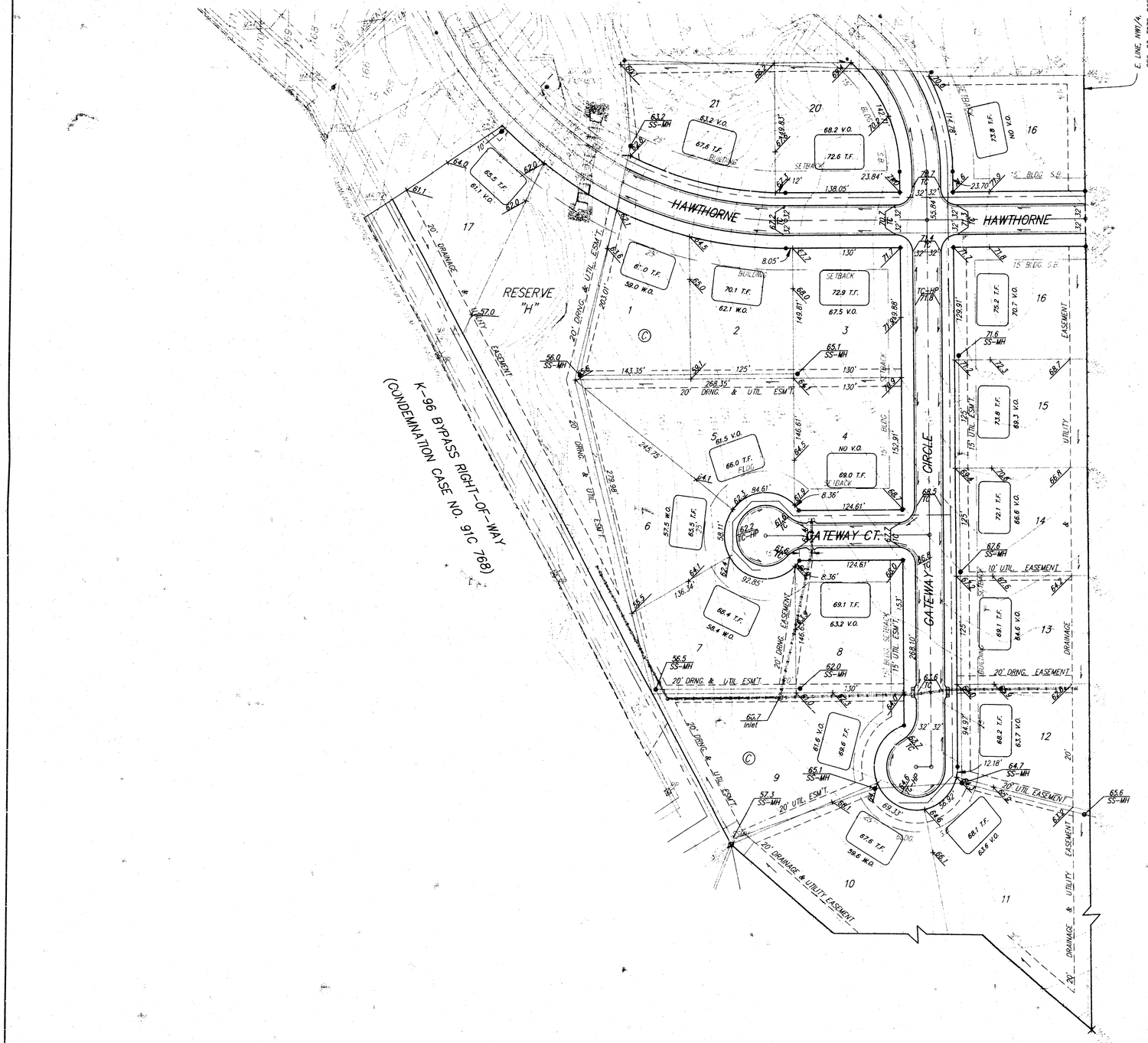
MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES			
LOT	BLOCK	ELEVATION	
		M.S.L.	CITY DATUM
10,13	D	1358.0	170.6
9,14	D	1356.0	168.6
4,15	D	1354.0	166.6
3,16	D	1353.0	165.6
1,2,17	D	1351.0	163.6
18,19	D	1349.0	161.6
21	D	1348.0	160.6
17	B	1346.0	158.6
1	C	1346.0	158.6
5	C	1344.0	156.6
6,7	C	1343.0	155.6

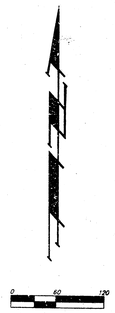
BRIDGEFIELD ADDITION
GRADING PLAN
WICHITA, KS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

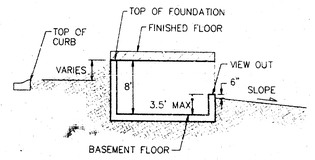
PROJECT NUMBER				SHEET
City of Wichita				1 OF 2
DESIGN	DRAWN	APPROVED	DATE	SCALE
GLP/JAB	JAB		6/21/97	1" = 60'

ENG/BAUGHMAN.DWG

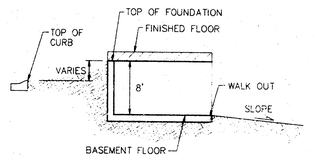




BENCHMARK:
"L" CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.



TYPICAL VIEW OUT
NO SCALE



TYPICAL WALK OUT
NO SCALE

NOTE:
Proposed top of foundation are shown on plans. Contractor to set finish floor elevation.

All street elevations shown on plans are for top of curb (full height).

View-out elevations are denoted as XX.X V.O.
Walk-out elevations are denoted as XX.X W.O.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES			
LOT	BLOCK	ELEVATION M.S.L.	ELEVATION CITY DATUM
10,13	D	1358.0	170.6
9,14	D	1356.0	168.6
4,15	D	1354.0	166.6
3,16	D	1353.0	165.6
1,2,17	D	1351.0	163.6
18,19	D	1349.0	161.6
21	D	1348.0	160.6
17	B	1346.0	158.6
1	C	1346.0	156.6
5	C	1344.0	156.6
6,7	C	1343.0	155.6

BRIDGEFIELD
GRADING PLAN
WICHITA, KS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER				SHEET
				2 OF 2
DESIGN: SLP/JAB	DRAWN: JAB	APPROVED	DATE: 5/29/97	SCALE: 1" = 60'

ENG/BRIDGE/GR3