Bridgefield Addition
BLG 3-19-97 1 11 BAUGHMAN COMPANY, P.A.

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

$Q = CA\sqrt{2gH}$

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

$Q = 50$ cfs

Sum of Flows from SWS Systems

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

SHEET FLOW from Basin #8
Q = 21

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
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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)
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	0.005336	281.00	50.00	48.50	15.94
P2-3	I2-3	0.95	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
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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
f:\hydro\projects\bridge\system3.stm
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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)
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	0.001967	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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                                                                    1
CURRENT DATE: 03-19-1997                                  FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18                                    FILE NAME: BRIDGE
-------------------------------------------------------------------------------
                         FHWA CULVERT ANALYSIS
                         HY-8, VERSION 4.1
-------------------------------------------------------------------------------
 C |          SITE DATA          |          CULVERT SHAPE, MATERIAL, INLET
 U |                             |
 L |  INLET   OUTLET  CULVERT    | BARRELS
 V |  ELEV.   ELEV.   LENGTH     | SHAPE        SPAN  RISE  MANNING   INLET
 0 |  (FT)    (FT)    (FT)       | MATERIAL     (FT)  (FT)  n         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 OVERTOPPING
   44.50    171  171    0    0    0    0    0
-------------------------------------------------------------------------------
SUMMARY OF ITERATIVE SOLUTION ERRORS    FILE: BRIDGE          DATE: 03-19-1997

     HEAD      HEAD      TOTAL      FLOW      % FLOW
   ELEV(FT)  ERROR(FT)  FLOW(CFS)  ERROR(CFS)  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
```

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Page 1 of 1
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                                                                    2
CURRENT DATE: 03-19-1997                                  FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18                                    FILE NAME: BRIDGE
-------------------------------------------------------------------------------
          PERFORMANCE CURVE FOR CULVERT # 1 - 3 ( 3 BY 3 ) RCP
-------------------------------------------------------------------------------
DIS-  HEAD-  INLET   OUTLET                 NORMAL  CRITICAL   OUTLET   TAILWATER
CHARGE WATER CONTROL CONTROL FLOW
FLOW  ELEV.  DEPTH   DEPTH   TYPE  DEPTH  DEPTH   VEL. DEPTH  VEL. DEPTH
(cfs)  (ft)  (ft)    (ft)   <4>   (ft)   (ft)   (fps)  (ft)  (fps)  (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  5-Mt   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
        DOWNSTREAM 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
```

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                                                                    3
CURRENT DATE: 03-19-1997                                  FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18                                    FILE NAME: BRIDGE
-------------------------------------------------------------------------------
                              TAILWATER
-------------------------------------------------------------------------------

          CONSTANT WATER SURFACE ELEVATION
                  41.00
-------------------------------------------------------------------------------
                       ROADWAY OVERTOPPING DATA
-------------------------------------------------------------------------------

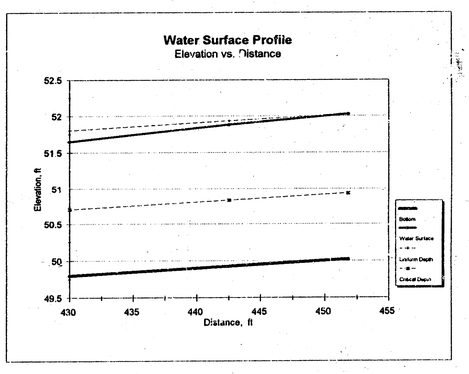
        WEIR COEFFICIENT                          2.86
        EMBANKMENT TOP WIDTH (FT)                46.00
        CREST LENGTH (FT)                       100.00
        OVERTOPPING CREST ELEVATION (FT)         44.50
-------------------------------------------------------------------------------
```

8

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	Directiona 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	51.72
1.85	66.30	2.41	2.04	46.08	1.439	0.0175	12.55	442.55	49.93	51.78
2.00	68.12	2.35	2.09	46.52	1.464	0.0155	9.32	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

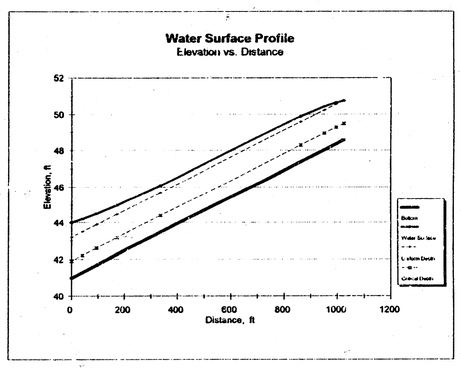


Wednesday, March 19, 1997

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	Directiona 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	1.828	0.0051	41.74	41.74	41.31	44.21
2.80	95.20	1.68	2.84	53.08	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	77.29	172.08	42.27	44.97
2.60	88.40	1.81	2.65	51.44	1.719	0.0068	163.91	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	1023.08	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

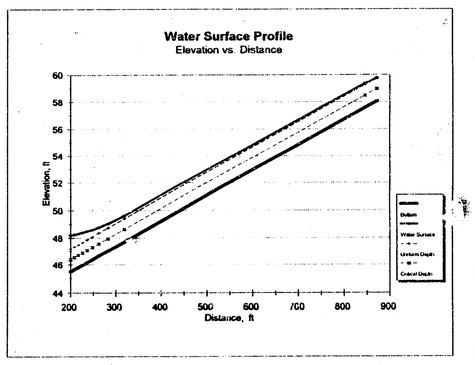


Wednesday, March 19, 1997

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	Directiona 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	0.0078	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	11.88	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	2.08	46.49	1.463	0.0140	19.78	282.45	47.04	49.04
1.90	64.60	2.48	2.00	45.67	1.415	0.0162	36.44	318.89	47.72	49.92
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	0.0224	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
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

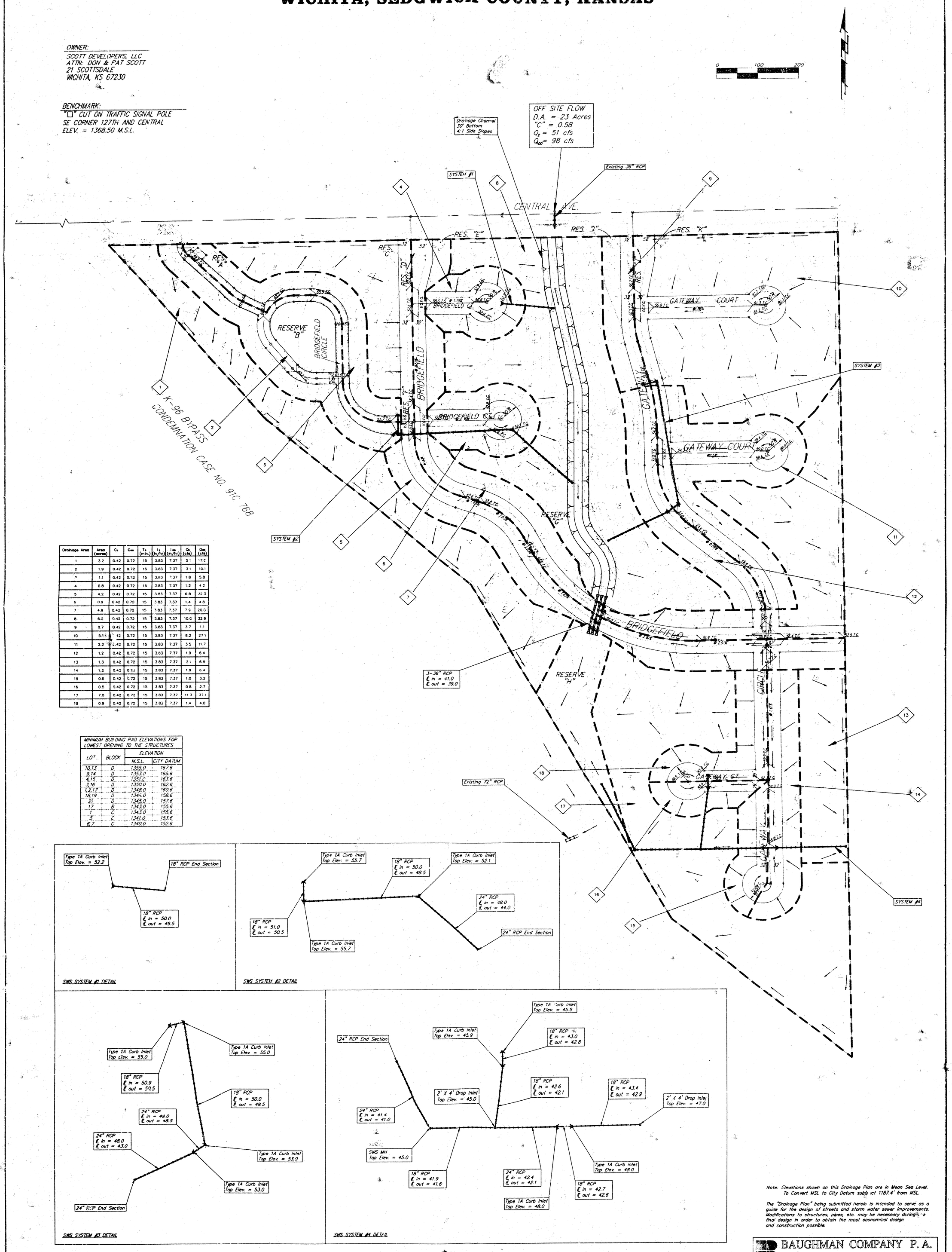


Wednesday, March 19, 1997

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.



Drainage Area	Area (acres)	C_5	C_{100}	T_c (min.)	I_5 (in/hr)	I_{100} (in/hr)	Q_5 (cfs)	Q_{100} (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	0.7	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
17	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

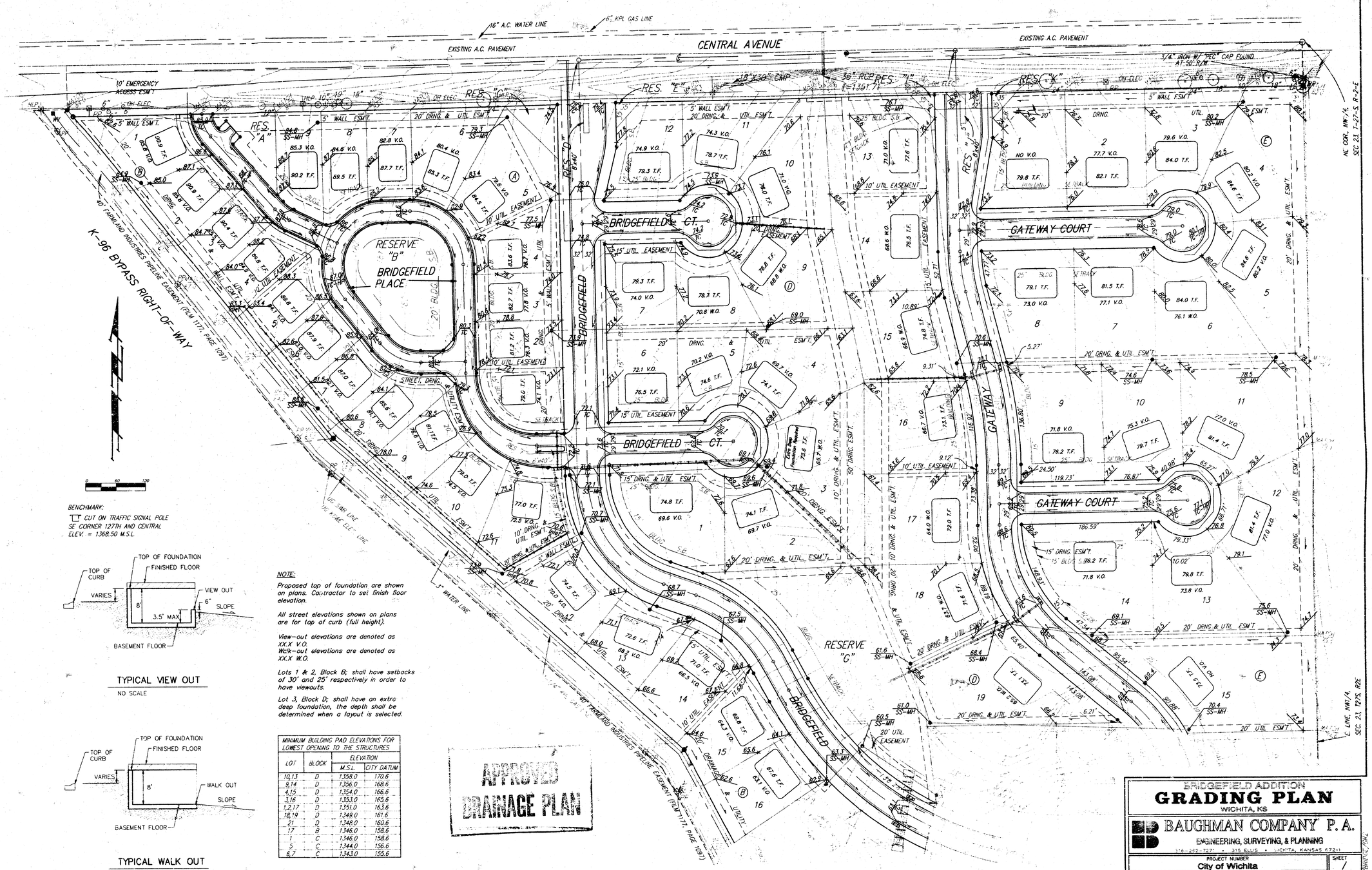
SWS SYSTEM #3 DETAIL

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
316-262-7271 • 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

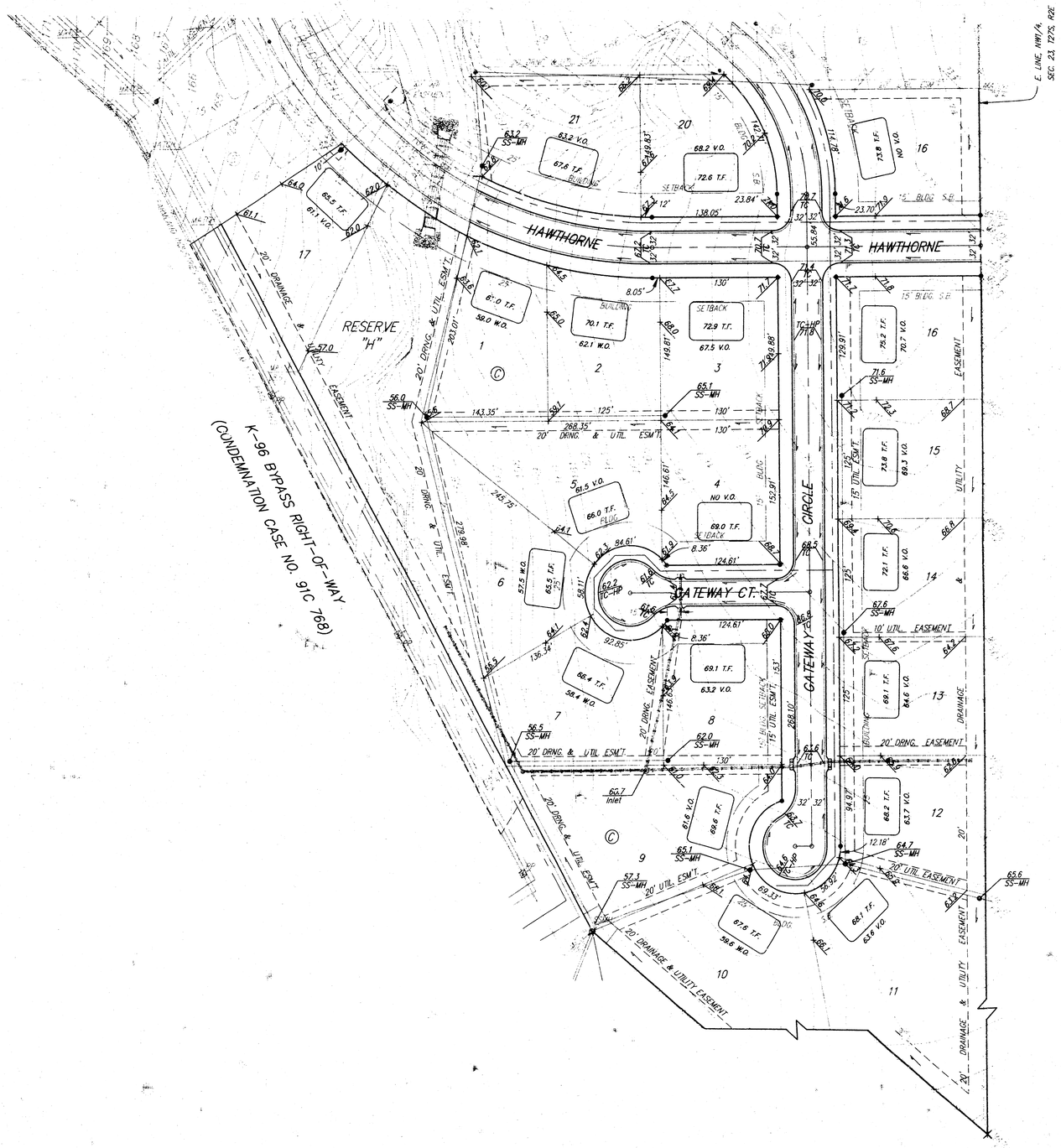
BAUGHMAN COMPANY P. A.

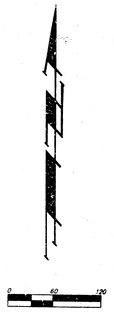
ENGINEERING, SURVEYING, & PLANNING

316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

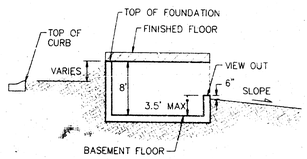
PROJECT NUMBER					SHEET
City of Wichita					1 OF 2
DESIGN	DRAWN	APPROVED	DATE	SCALE	
BLP/JAB	JAB		6/21/97	1" = 60'	

ENG/BAUTHCO, CORP.



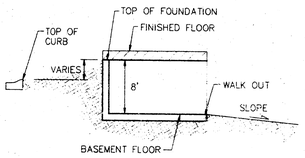


BENCHMARK:
"L" CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.



TYPICAL VIEW OUT

NO SCALE



TYPICAL WALK OUT

NO SCALE

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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

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	DRAWN	APPROVED	DATE	SCALE	
SLP/JAB	JAB		5/29/97	1" = 60'	

ENG/BRIDGE/GR3