

Asbury Pointe Subdivision

General Location and Description of Existing Land and Soils

The 23.5 acre site is located on the west side of Green River Road approximately 300 feet north of the intersection of S.R. 57 and Green River Road in Scott Township, Vanderburgh County. The property has previously been used for agricultural purposes. Agricultural ground lies to the west, north, and south, and residential lots border to the east. Existing soils consist mostly of eroded silt loams; precaution should be taken to assure that adequate erosion control methods are employed during construction.

Existing Storm Water Runoff

The site consists of flat to rolling ground that has been previously cultivated. The entire site drains to the southeast corner to an existing unnamed tributary of Schlensker Ditch.

Flood Plain

As shown on the enclosed FIRM Panel Map 180256 0015 C, dated August 5, 1991, no portion of the property lies within the 100 year Flood Zone "A". According to the proposed new maps, which have not been published to date, the subject property will lie within the boundaries of the 100 year flood zone "AE" (see attached map). The minimum finished floor proposed to the Vanderburgh County Building Commissioner is 396.6.

Also attached is a copy of the Flood Insurance Study for Schlensker Ditch. As shown on the proposed floodplain map, X-section "E" goes directly through the site. The corresponding base flood elevation (BFE) as shown on the Floodway Data Table is 394.6. Also for your use is a HEC-RAS model run of Schlensker Ditch for the 25 year storm event. The corresponding elevation for X-section "E" was 393.6, which was used in our design of the retention basin for our site.

Proposed Development

The proposed development will consist of typical residential construction as employed in previous subdivisions developed by Jagoe Land Corporation. A basin will be constructed at the southeast corner of the site to provide storm water retention. Storm water runoff will be conveyed to the basin via storm sewers, swales, and overland flow. Due to the topography, storm runoff from part of the site will be allowed to exit the property undetained. Four undeveloped sub-basins were determined for this site and an allowable discharge was calculated for each using a peak runoff rate for the 10-year storm under undeveloped conditions for a total of 28.15 cfs.

When taking into account the undetained runoff leaving the site, and off-site runoff that is being routed through the retention basin, the allowable discharge rate for a 25 year storm for developed conditions is 24.5 cfs. The required storm water retention volume from the Form 800, using a discharge rate of 24.5 cfs, has been calculated to be 30,671 cubic feet for the 25-year storm. The storage volume available within the retention basin has been calculated to be 128,783 cubic feet.

Due to the excess storage volume in the retention basin, the discharge rate has been reduced to 6 cfs with a required retention volume from the Form 800 of 70,555 cubic feet. Therefore, the flow rate has been reduced by 4 times the allowable and the retention volume required has been nearly doubled. The outlet structure utilizes a 24-inch diameter concrete pipe with a concrete headwall with flapgate as the primary spillway.

Due to the large off-site watershed, OS-1 with approx. 78 acres, FES 505 through FES 511 were sized for the 100 year storm event.

The Erosion/Sediment Control Plan and narrative report for Asbury Pointe Subdivision will be transmitted to the Soil Conservation Service, and the Vanderburgh County Engineers Office.

TABLE 803
UNDEVELOPED RUNOFF COEFFICIENTS (C_u)

SURFACE TYPE:

WOODLAND, TURFED MEADOWS
ROUGH PASTURE, FALLOW BRUSH:

SLOPE:

Less than 2%	C =	0.12
2% to 5%	C =	0.24
5+% to 10%	C =	0.36
Over 10%	C =	0.48

CULTIVATED FIELDS:

Less than 2%	C =	0.20
2% to 5%	C =	0.35
5+% to 10%	C =	0.50
Over 10%	C =	0.65

TABLE 804
DEVELOPED RUNOFF COEFFICIENTS (C_d)

SURFACE TYPE:

PAVEMENT, ROOFTOP
OTHER IMPERVIOUS SURFACES:

Less than 2%	C =	0.92
2% to 5%	C =	0.94
5+% to 10%	C =	0.96
Over 10%	C =	0.98

LAWNS WITH TURF:

Less than 2%	C =	0.15
2% to 5%	C =	0.25
5+% to 10%	C =	0.40
Over 10%	C =	0.55

ALL WATER SURFACES
BASINS, PONDS & LAKES:

C = 1.00

Table 3.2.4 (cont'd)

Kerby (1959)

$$t_c = K (L N S^{-0.5})^{0.467}$$

where K is equal to 0.83 (US Customary units) or 1.44 (Metric units), L is the length of flow in ft (m), s is the average slope of overland flow, ft/ft (m/m), and N is the retardance roughness coefficient given in Table 3.2.5.

The length used in the equation is the straight-line distance from the most distant point of the watershed to the outlet, measured parallel to the slope of the land until a well-defined channel is reached. Watersheds of less than 10 acres were used to calibrate the model; slopes were less than 1%; N values were 0.8 and less and surface flow dominated (McCuen, 1989).

Izzard (1946)

$$t_c = \frac{K(Bi + c') L^{\frac{1}{3}}}{s^{\frac{1}{3}} i^{\frac{2}{3}}}$$

where K is equal to 41.025 for U.S. customary units (113.391 for metric), B is equal to 0.0007 for U.S customary units (0.00027 for metric), c' is the retardance coefficient given in Table 3.2.7, i is the rainfall intensity, in/hr (cm/hr), L is the length of flow path in ft (m), and s is the slope of overland flow path, ft/ft (m/m).

The product of i and L must be less than 500 in-ft/hr (390 cm-m/hr) to consider using this formula. In addition, well defined channels should **not** be present. This method was developed in laboratory experiments for the overland flow on roadway and turf surfaces.

Table 3.2.5

Values of N for Kerby's Formula (Kerby, 1959)

<u>Type of Surface</u>	<u>N</u>
Smooth impervious surface	0.02
Smooth bare packed soil	0.10
Poor grass, cultivated row crops or moderately rough bare surface	0.20
Deciduous timberland	0.60
Pasture or Overage grass	0.40
Conifer timberland, deciduous timberland with deep forest litter or dense grass	0.80

TABLE 807

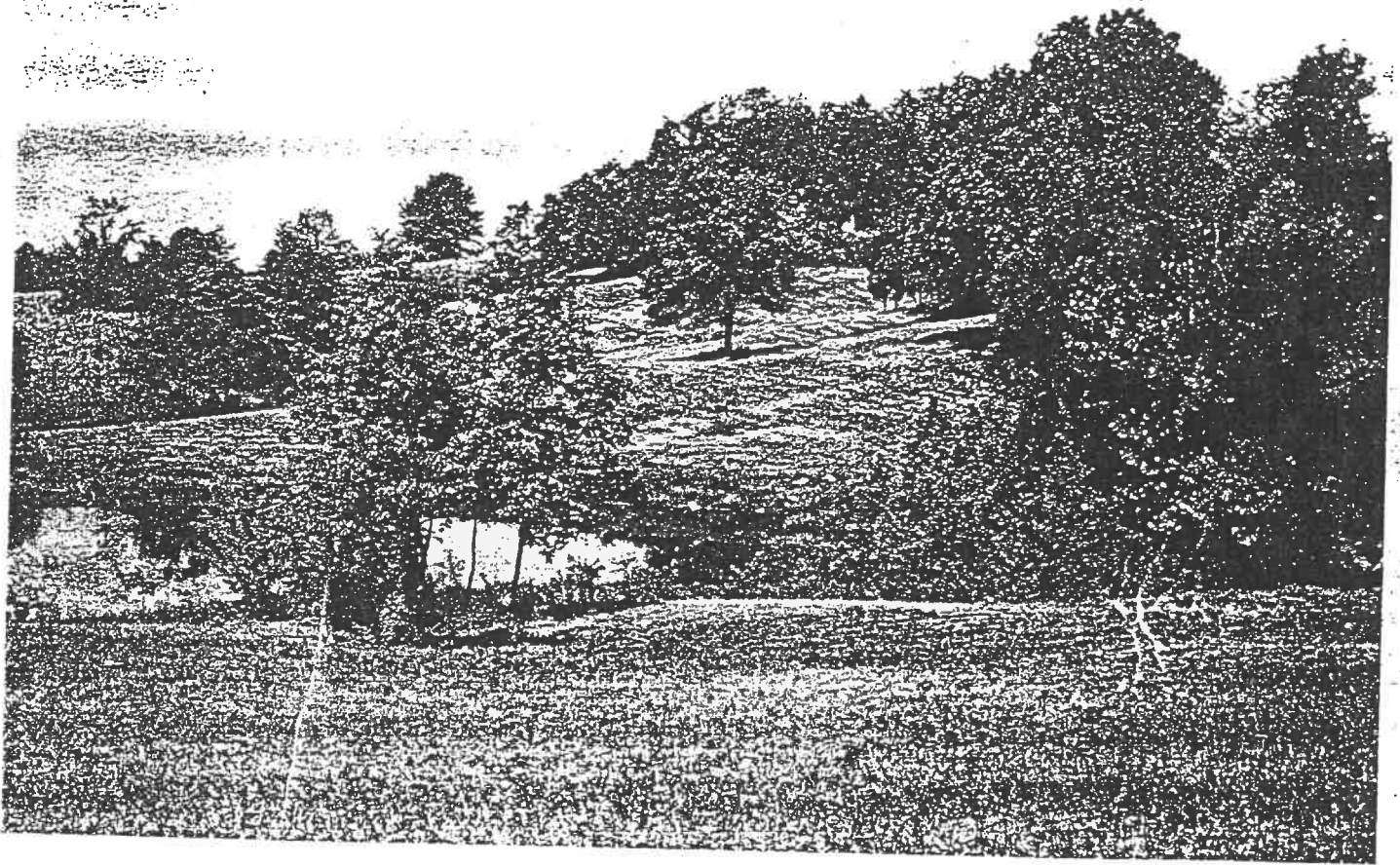
RAINFALL INTENSITY-DURATION-FREQUENCY TABLE FOR EVANSVILLE

INTENSITY IN INCHES PER HOUR

STORM DURATION		STORM RETURN PERIOD IN YEARS				
		5	10	25	50	100
5	MIN	6.063	6.625	7.208	7.936	8.469
10	MIN	4.863	5.380	5.925	6.616	7.126
15	MIN	4.029	4.515	5.033	5.697	6.194
30	MIN	2.837	3.226	3.646	4.194	4.608
60	MIN	1.549	1.819	2.078	2.412	2.663
2.0	HRS	1.053	1.230	1.400	1.620	1.785
3.0	HRS	0.774	0.899	1.019	1.175	1.291
4.0	HRS	0.632	0.736	0.836	0.965	1.062
5.0	HRS	0.524	0.606	0.684	0.785	0.861
6.0	HRS	0.453	0.522	0.589	0.676	0.741
7.0	HRS	0.399	0.459	0.516	0.591	0.647
8.0	HRS	0.358	0.412	0.463	0.530	0.581
9.0	HRS	0.323	0.370	0.415	0.472	0.516
10	HRS	0.297	0.339	0.379	0.431	0.470
11	HRS	0.276	0.314	0.351	0.399	0.435
12	HRS	0.259	0.296	0.331	0.376	0.410
13	HRS	0.245	0.280	0.314	0.357	0.390
14	HRS	0.233	0.267	0.299	0.341	0.372
15	HRS	0.220	0.252	0.281	0.320	0.349
16	HRS	0.209	0.238	0.266	0.302	0.329
17	HRS	0.198	0.225	0.251	0.284	0.310

SOIL SURVEY OF

Vanderburgh County, Indiana



United States Department of Agriculture
Soil Conservation Service

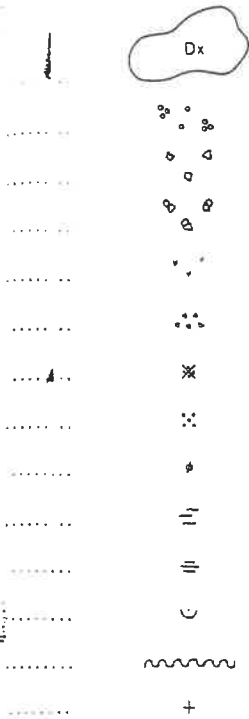
In cooperation with

Purdue University Agricultural
Experiment Station

SURVEY DATA

SOIL LEGEND

The first capital letter is the initial one of the soil name. The lowercase letter that follows separates mapping units having names that begin with the same letter except that it does not separate sloping or eroded phases. The second capital letter indicates the class of slope. Symbols without a slope letter are for soils with a slope range of 0 to 2 percent or they are for land types with a considerable range of slope. A final number, 2 or 3, in the symbol indicates that the soil is eroded or severely eroded.



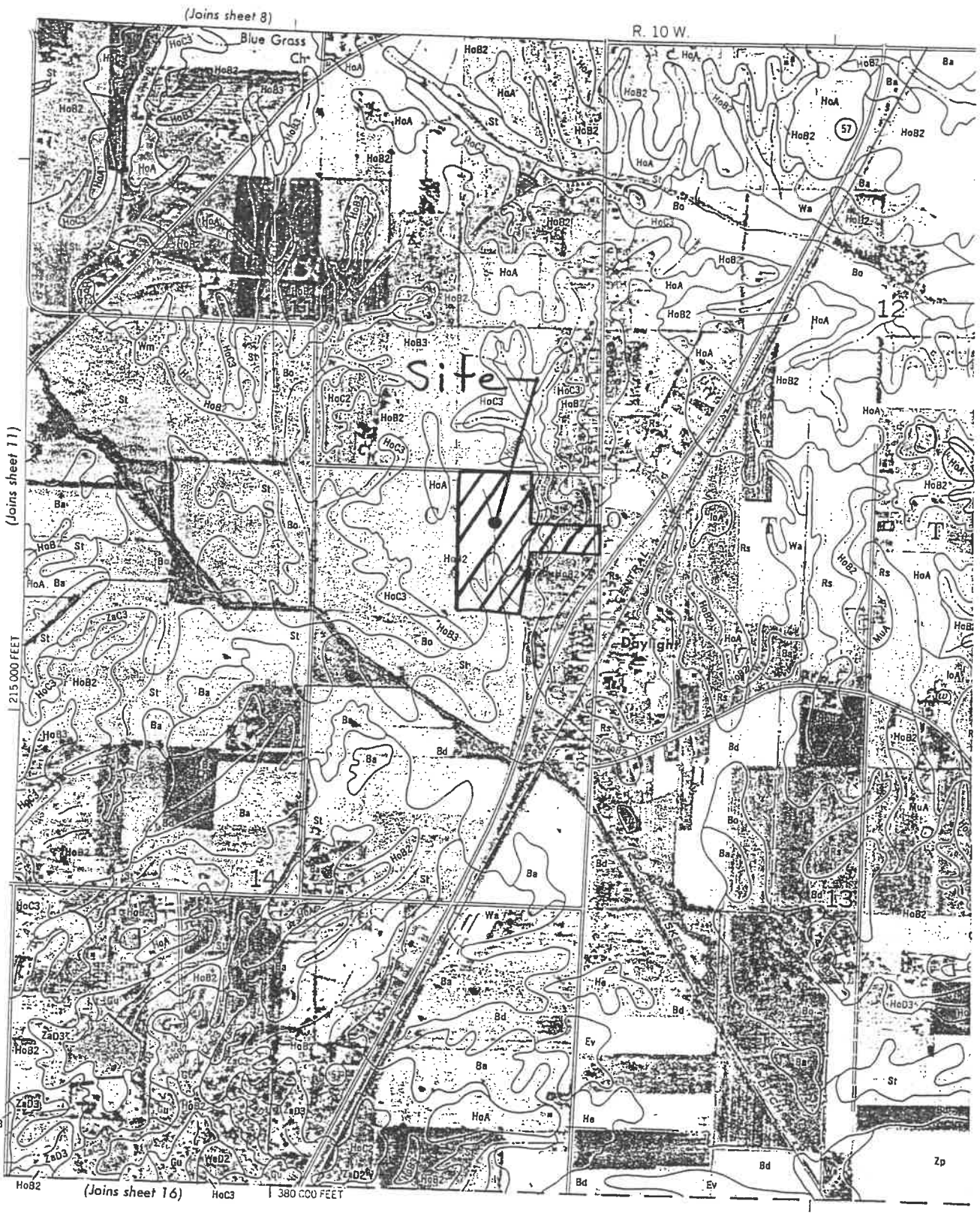
SYMBOL	NAME
AIB2	Alford silt loam, 2 to 6 percent slopes, eroded
AIC2	Alford silt loam, 6 to 12 percent slopes, eroded
AIC3	Alford silt loam, 6 to 12 percent slopes, severely eroded
AID3	Alford silt loam, 12 to 18 percent slopes, severely eroded
Ba	Bartle silt loam
Bd	Birds silt loam
Bo	Bonnie silt loam
Br	Borrow pits
Ev	Evansville silt loam
Gn	Ginat silt loam
Gu	Gullied land
He	Henshaw silt loam
HoA	Hosmer silt loam, 0 to 2 percent slopes
HoB2	Hosmer silt loam, 2 to 6 percent slopes, eroded
HoB3	Hosmer silt loam, 2 to 6 percent slopes, severely eroded
HoC2	Hosmer silt loam, 6 to 12 percent slopes, eroded
HoC3	Hosmer silt loam, 6 to 12 percent slopes, severely eroded
HoD3	Hosmer silt loam, 12 to 18 percent slopes, severely eroded
Ht	Huntington silty clay loam
Hu	Huntington fine sandy loam, sandy variant
IoA	Iona silt loam, 0 to 2 percent slopes
IoB2	Iona silt loam, 2 to 6 percent slopes, eroded
Iv	Iva silt loam
Ln	Lindside silty clay loam
Ma	Made land
MkB2	Markland silt loam, 2 to 6 percent slopes, eroded
MkC2	Markland silt loam, 6 to 18 percent slopes, eroded
MIC3	Markland silty clay loam, 6 to 18 percent slopes, severely eroded
Mr	McGary silt loam
MuA	Muren silt loam, 0 to 2 percent slopes
MuB2	Muren silt loam, 2 to 6 percent slopes, eroded
Nw	Newark silty clay loam
Pa	Patton silty clay loam
PrB	Princeton fine sandy loam, 2 to 6 percent slopes
Ra	Ragsdale silt loam
Rh	Rahm silty clay loam
Rs	Reesville silt loam
ScA	Sciotoville silt loam, 0 to 2 percent slopes
ScB2	Sciotoville silt loam, 2 to 6 percent slopes, eroded
St	Stendal silt loam
UnB2	Uniontown silt loam, 2 to 6 percent slopes, eroded
Wa	Wakeland silt loam
Wb	Weinbach silt loam
WeD2	Wellston silt loam, 12 to 18 percent slopes, eroded
WeD3	Wellston silt loam, 12 to 18 percent slopes, severely eroded
WeE2	Wellston silt loam, 18 to 25 percent slopes, eroded
WeF	Wellston silt loam, 25 to 50 percent slopes
WhA	Wheeling loam, 0 to 2 percent slopes
WhB2	Wheeling loam, 2 to 6 percent slopes, eroded
Wm	Wilbur silt loam
Wo	Woodmere silty clay loam
ZaC2	Zanesville silt loam, 6 to 12 percent slopes, eroded
ZaC3	Zanesville silt loam, 6 to 12 percent slopes, severely eroded
ZaD2	Zanesville silt loam, 12 to 18 percent slopes, eroded
ZaD3	Zanesville silt loam, 12 to 18 percent slopes, severely eroded
Zp	Zipp silty clay



1 Mile
5000 Feet

Land division corners are approximately positioned on this map.

Scale 1:15840
215 000 FEET
0 1000 2000 3000 4000 5000
1/4 1/2 3/4



Undeveloped Conditions

- 10 year peak discharge rate =
- UND-1₍₁₀₎ = 3.85 cfs
 - UND-2₍₁₀₎ = 8.98 cfs
 - UND-3₍₁₀₎ = 13.95 cfs
 - UND-4₍₁₀₎ = 1.37 cfs
- 28.15 cfs

Developed Conditions

- Weighted Runoff Coefficient, $C_d = .477$
- figured from sub-basins routed through proposed retention basin:
2-9, 14-22, AND OS-2, OS-3

Retention Requirements

- Retention basin will receive stormwater runoff from all sub-basins except for the following, which will exit the site undetained:

<u>Sub-basin</u>	<u>Q₍₂₅₎</u>	<u>Sub-basin</u>	<u>Q₍₂₅₎</u>
1	3.00	12A	3.06
10	2.24	13	2.13
11	1.44	23	1.34
11A	0.97	24	2.31
12	1.40		
		Total =	17.89

→ Retention basin will also capture stormwater runoff from off-site sub-basins, which will be detained in our system before leaving the site

<u>Off-Site Sub-basin</u>	<u>Q₍₂₅₎</u>
OS-2	1.69
OS-3	12.55
	<u>14.24 cfs</u>

Allowable Discharge Rate

$$28.15 - 17.89 + 14.24 = 24.50 \text{ cfs}$$

Retention Basin Area / Volume

→ Required storage volume from Form 800
25 yr. = 30,671 c.f.

	<u>Elevation</u>	<u>Surface Area (s.f.)</u>	<u>Storage Capacity Volume (c.f.)</u>
Pool	389.7	26030	—
	390.7	29025	27528
	391.7	32120	58101
	392.7	35316	91819
E.S.	393.7	38612	128783

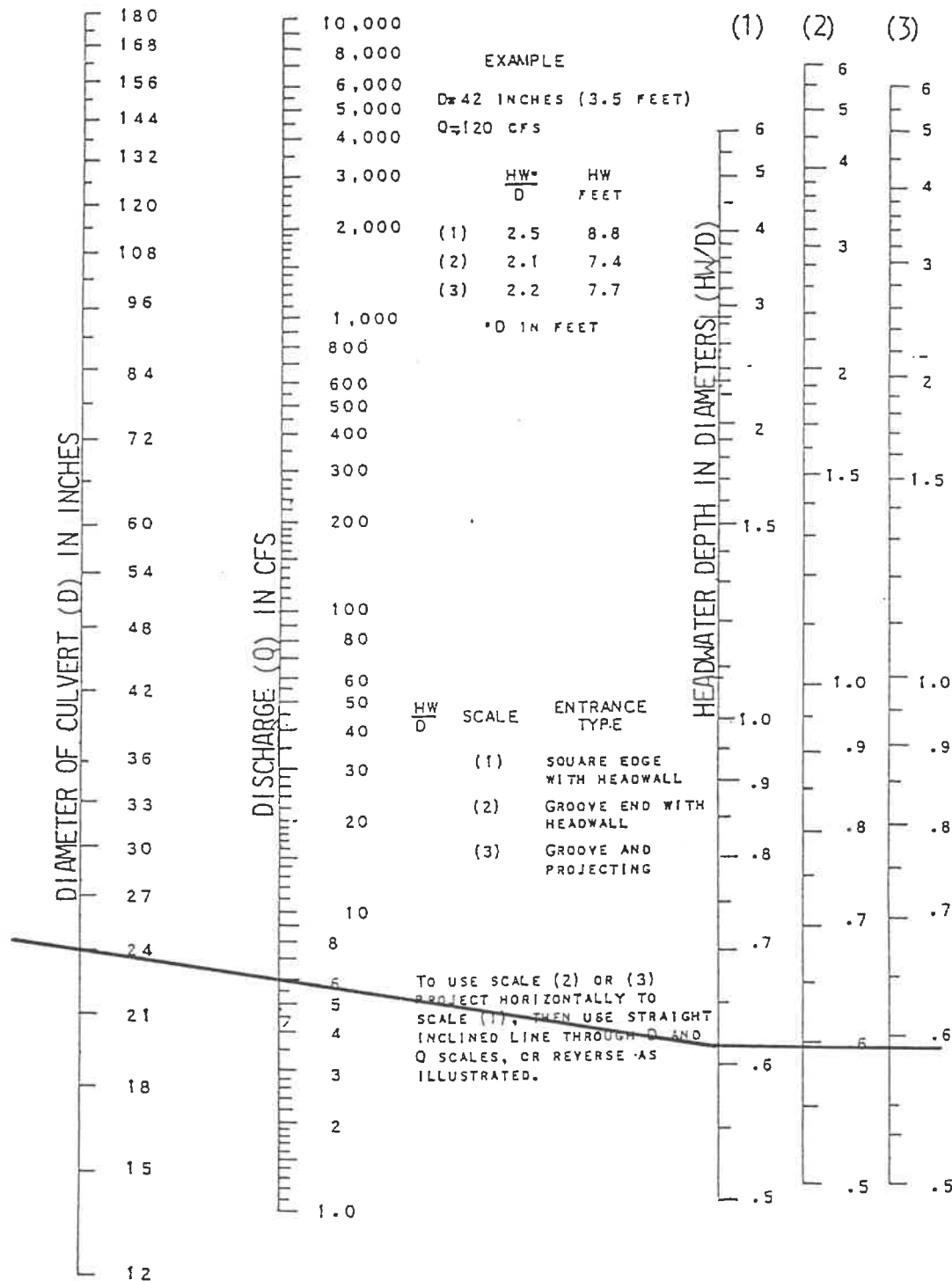
Note: @ 6 cfs the required storage volume per Form 800 = 70,555 c.f.

MORLEY AND ASSOCIATES INC.
STORM DESIGN SHEET - RATIONAL METHOD

PROJECT: Asbury Pointe
OUR PROJECT # 5540-4(B)
MANNINGS n 0.011

DATE 1-28-04
DESIGN PERIOD 25 YEARS

LINE NO.	UPSTREAM MANHOLE	DOWNSTREAM MANHOLE	LENGTH (ft)	Cj	Aj (ac.)	CjAj	SUM CjAj	Tj (min)	Tcum (min)	I (in/hr)	Q (cfs)	PIPE DIA. (in)	PIPE SLOPE (ft/ft)	PIPE CAP. (cfs)	VELOCITY (ft/sec)	TRAVEL TIME (min)
1	501	503	26	0.632	0.97	0.613	0.613	15.17	15.17	5.017	3.08	15	0.0020	3.41	2.78	0.16
2	503	509	131	0.630	0.97	0.611	1.224	15.23	15.33	5.003	6.12	18	0.0030	6.80	3.85	0.57
3	505	507	105	0.342	81.68	27.935	27.935	54.78	54.78	2.353	65.73	36	0.0124	87.75	12.42	0.14
4	507	509	26	0.640	0.43	0.275	28.210	14.01	54.92	2.343	66.10	36	0.0124	87.75	12.42	0.03
4	509	511	105	0.643	0.43	0.276	29.711	14.86	54.96	2.341	69.55	42	0.0063	94.34	9.81	0.18
5	513	515	40	0.618	0.88	0.544	0.544	16.79	16.79	4.868	2.65	12	0.0125	4.71	5.99	0.11
6	515	517	129	0.621	0.59	0.366	0.910	17.08	17.08	4.841	4.41	12	0.0135	4.89	6.23	0.35
7	517	523	180				0.910	17.43	17.43	4.808	4.38	15	0.0086	7.08	5.77	0.52
8	519	521	48	0.655	0.41	0.269	0.269	15.03	15.03	5.030	1.35	12	0.0088	3.95	5.03	0.16
9	521	523	21	0.633	0.52	0.329	0.598	15.21	15.21	5.014	3.00	12	0.0114	4.49	5.72	0.06
10	523	531	104				1.508	17.95	17.95	4.760	7.18	18	0.0041	7.95	4.50	0.39
11	525	527	120	0.360	2.10	0.756	0.756	23.64	23.64	4.234	3.20	12	0.0221	6.26	7.97	0.25
12	527	529	26	0.632	0.81	0.512	1.268	15.85	23.89	4.211	5.34	15	0.0060	5.91	4.82	0.09
13	529	531	140	0.651	0.64	0.417	1.685	14.71	23.98	4.203	7.08	15	0.0107	7.89	6.44	0.36
14	531	533	120	0.410	1.38	0.566	3.758	19.39	24.34	4.169	15.67	18	0.0193	17.24	9.76	0.20
15	533	535	80	0.423	0.58	0.245	4.004	14.78	24.55	4.150	16.62	21	0.0143	22.39	9.31	0.14
16	535	537	26	0.644	0.85	0.547	4.551	14.66	24.69	4.137	18.83	24	0.0062	21.04	6.70	0.06
17	537	545	131	0.664	0.43	0.286	4.837	11.30	24.76	4.130	19.97	24	0.0068	22.04	7.02	0.31
18	539	541	120	0.353	9.05	3.195	3.195	21.74	21.74	4.410	14.09	18	0.0251	19.66	11.13	0.18
19	541	543	26	0.603	1.02	0.615	3.810	16.46	21.92	4.393	16.74	24	0.0048	18.52	5.90	0.07
20	543	545	141	0.645	0.52	0.335	4.145	12.37	21.99	4.387	18.18	24	0.0056	20.00	6.37	0.37
21	545	547	134	0.394	0.44	0.173	9.155	14.80	25.07	4.102	37.55	36	0.0028	41.70	5.90	0.38
22	549	551	120	0.744	1.07	0.796	0.796	15.22	15.22	5.013	3.99	12	0.0118	4.57	5.82	0.34



HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

FIG. 7-430.01 F

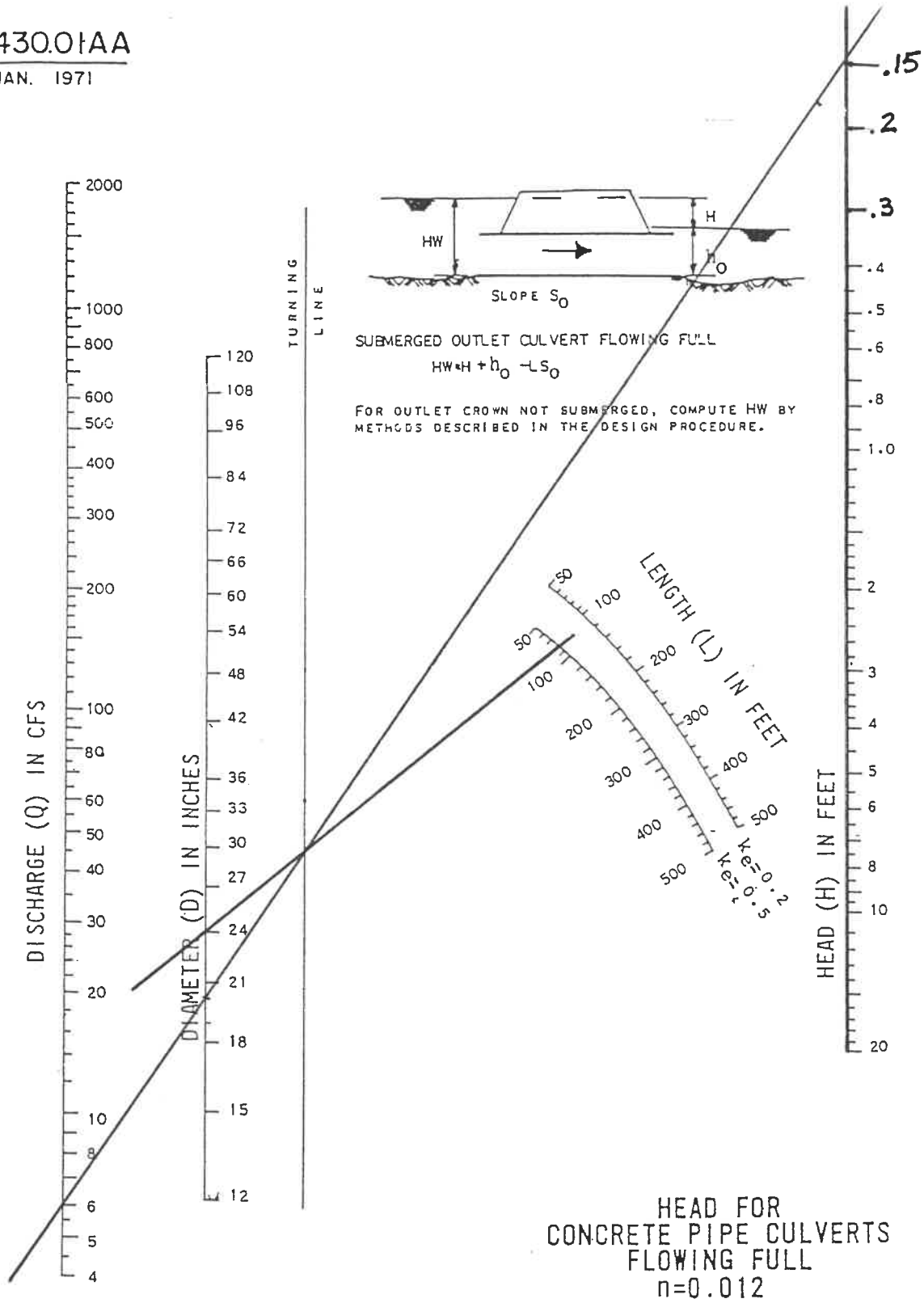
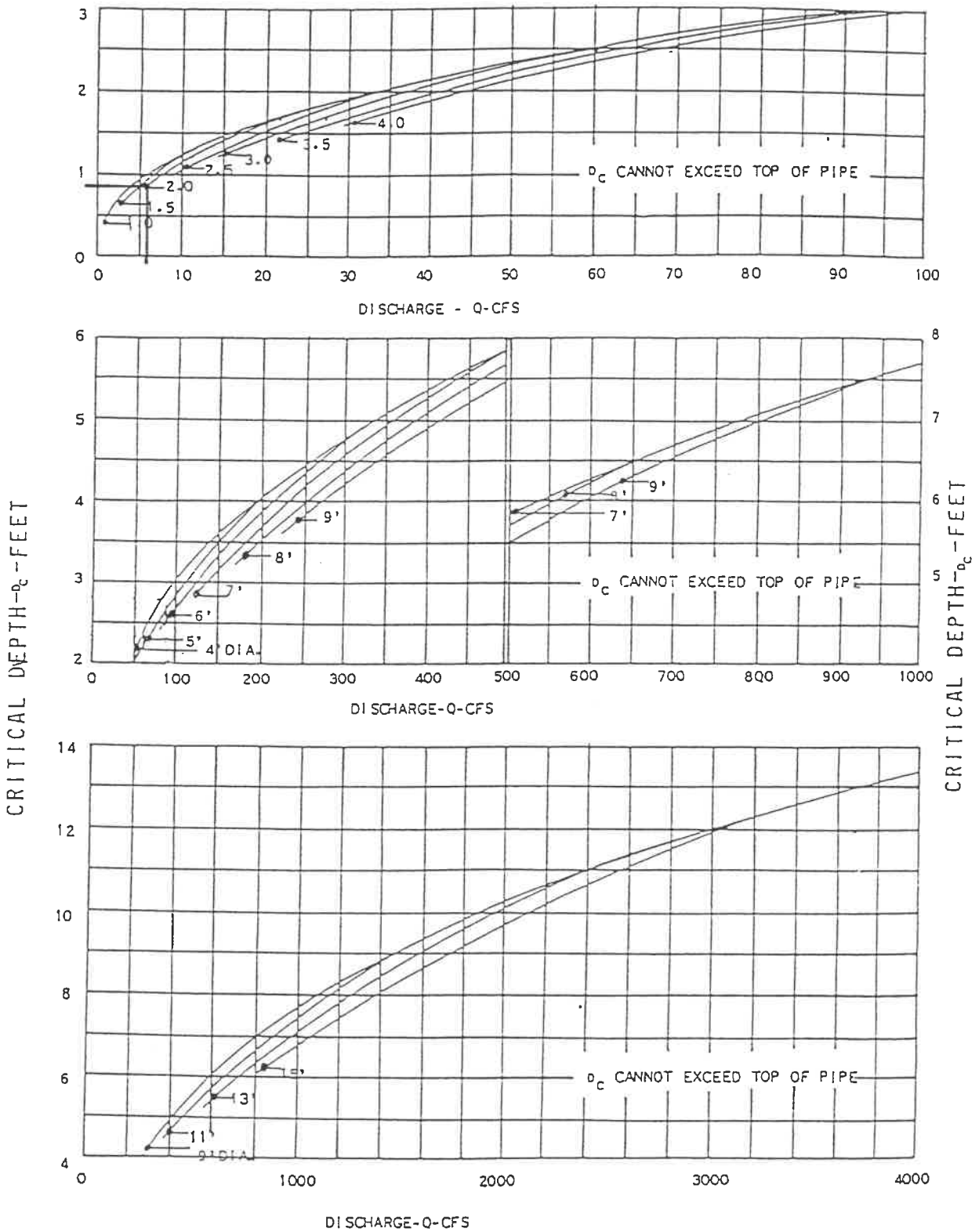


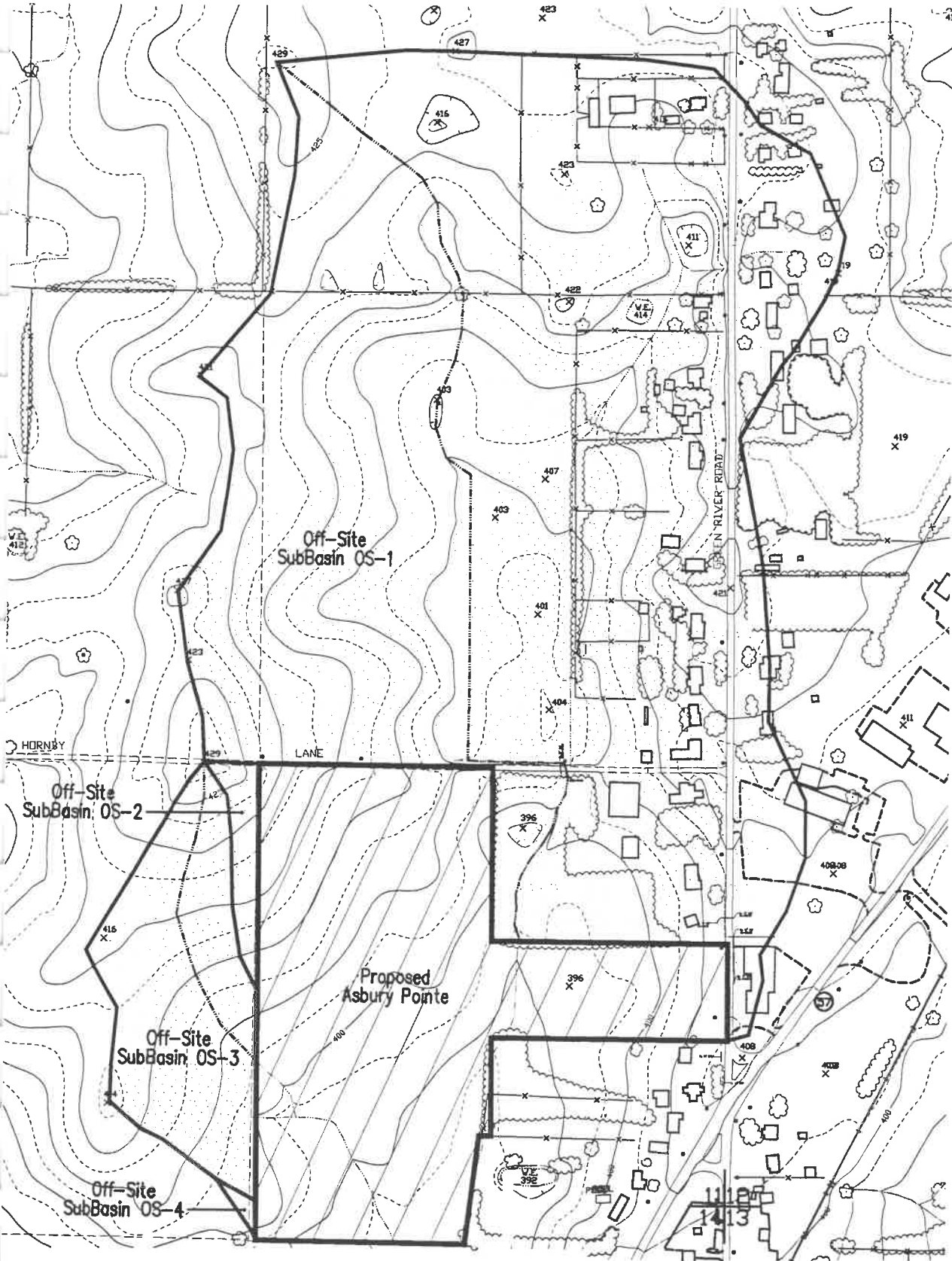
FIG. 7-430.01 W



CRITICAL DEPTH
CIRCULAR PIPE

FIG. 7-430.01 L

Off-Site Drainage Sub-Basins



Off-Site Drainage Sub-Basins																							
Sub-basin No.: OS-1	Total Area = 3,400,125 S.F. = 78.06 Ac.																						
Surface																							
Structures	=	65,000	S.F. =	1.49	Ac.	0.92	0.02																
Gravel Drives	=	53,000	S.F. =	1.22	Ac.	0.70	0.15																
Pavement	=	65,000	S.F. =	1.49	Ac.	0.92	0.02																
Lawn (0-2%)			S.F. =	0.00	Ac.	0.15	0.40																
Lawn (2-5%)	920,000		S.F. =	21.12	Ac.	0.25	0.40																
Lawn (5-10%)			S.F. =	0.00	Ac.	0.40	0.40																
Woodland	314,000		S.F. =	7.21	Ac.	0.24	0.60																
Water	3,800		S.F. =	0.09	Ac.	1.00	0.00																
Cultivated Field (2-5%)	1979325		S.F. =	45.44	Ac.	0.35	0.20																
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Weighted c =</td> <td>0.341</td> </tr> <tr> <td>Weighted N =</td> <td>0.283</td> </tr> <tr> <td>L =</td> <td>3,000 Ft.</td> </tr> <tr> <td>H =</td> <td>35.0 Ft.</td> </tr> <tr> <td>S =</td> <td>0.0117 Ft./Ft.</td> </tr> <tr> <td>tc =</td> <td>54.55 Minutes</td> </tr> <tr> <td>I(25) =</td> <td>2.363 In./Hr.</td> </tr> <tr> <td>Q(25) =</td> <td>62.85 CFS</td> </tr> </tbody> </table>								Weighted c =	0.341	Weighted N =	0.283	L =	3,000 Ft.	H =	35.0 Ft.	S =	0.0117 Ft./Ft.	tc =	54.55 Minutes	I(25) =	2.363 In./Hr.	Q(25) =	62.85 CFS
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Off-Site Drainage Sub-Basins																			
Sub-basin No.: OS-2	Total Area =	43,184 S.F. =	0.99 Ac.																
Surface			C N																
Cultivated Field (2-5%)	43184 S.F. =		0.99 Ac. 0.35 0.20																
<table border="1"> <tr><td>Weighted c =</td><td>0.350</td></tr> <tr><td>Weighted N =</td><td>0.200</td></tr> <tr><td>L =</td><td>600 Ft.</td></tr> <tr><td>H =</td><td>22.0 Ft.</td></tr> <tr><td>S =</td><td>0.0367 Ft./Ft.</td></tr> <tr><td>tc =</td><td>16.74 Minutes</td></tr> <tr><td>I(25) =</td><td>4.872 In./Hr.</td></tr> <tr><td>Q(25) =</td><td>1.69 CFS</td></tr> </table>		Weighted c =	0.350	Weighted N =	0.200	L =	600 Ft.	H =	22.0 Ft.	S =	0.0367 Ft./Ft.	tc =	16.74 Minutes	I(25) =	4.872 In./Hr.	Q(25) =	1.69 CFS	(Min. 5 minutes)	
Weighted c =	0.350																		
Weighted N =	0.200																		
L =	600 Ft.																		
H =	22.0 Ft.																		
S =	0.0367 Ft./Ft.																		
tc =	16.74 Minutes																		
I(25) =	4.872 In./Hr.																		
Q(25) =	1.69 CFS																		

Off-Site Drainage Sub-Basins																			
Sub-basin No.: OS-3	Total Area =	348,954 S.F. =	8.01 Ac.																
Surface			C N																
Cultivated Field (2-5%)	348954 S.F. =		8.01 Ac. 0.35 0.20																
<table border="1"> <tr><td>Weighted c =</td><td>0.350</td></tr> <tr><td>Weighted N =</td><td>0.200</td></tr> <tr><td>L =</td><td>900 Ft.</td></tr> <tr><td>H =</td><td>28.0 Ft.</td></tr> <tr><td>S =</td><td>0.0311 Ft./Ft.</td></tr> <tr><td>tc =</td><td>21.02 Minutes</td></tr> <tr><td>I(25) =</td><td>4.476 In./Hr.</td></tr> <tr><td>Q(25) =</td><td>12.55 CFS</td></tr> </table>		Weighted c =	0.350	Weighted N =	0.200	L =	900 Ft.	H =	28.0 Ft.	S =	0.0311 Ft./Ft.	tc =	21.02 Minutes	I(25) =	4.476 In./Hr.	Q(25) =	12.55 CFS	(Min. 5 minutes)	
Weighted c =	0.350																		
Weighted N =	0.200																		
L =	900 Ft.																		
H =	28.0 Ft.																		
S =	0.0311 Ft./Ft.																		
tc =	21.02 Minutes																		
I(25) =	4.476 In./Hr.																		
Q(25) =	12.55 CFS																		

Off-Site Drainage Sub-Basins																			
Sub-basin No.: OS-4	Total Area =	5,386 S.F. =	0.12 Ac.																
Surface			C N																
Cultivated Field (2-5%)	5386 S.F. =		0.12 Ac. 0.35 0.20																
<table border="1"> <tr><td>Weighted c =</td><td>0.350</td></tr> <tr><td>Weighted N =</td><td>0.200</td></tr> <tr><td>L =</td><td>200 Ft.</td></tr> <tr><td>H =</td><td>5.0 Ft.</td></tr> <tr><td>S =</td><td>0.0250 Ft./Ft.</td></tr> <tr><td>tc =</td><td>10.96 Minutes</td></tr> <tr><td>I(25) =</td><td>5.754 In./Hr.</td></tr> <tr><td>Q(25) =</td><td>0.25 CFS</td></tr> </table>		Weighted c =	0.350	Weighted N =	0.200	L =	200 Ft.	H =	5.0 Ft.	S =	0.0250 Ft./Ft.	tc =	10.96 Minutes	I(25) =	5.754 In./Hr.	Q(25) =	0.25 CFS	(Min. 5 minutes)	
Weighted c =	0.350																		
Weighted N =	0.200																		
L =	200 Ft.																		
H =	5.0 Ft.																		
S =	0.0250 Ft./Ft.																		
tc =	10.96 Minutes																		
I(25) =	5.754 In./Hr.																		
Q(25) =	0.25 CFS																		

On-Site Undeveloped Drainage Sub-Basins																												
Sub-basin No.: UND-1	Total Area =	106,151 S.F. =	2.44 Ac.																									
Surface				C N																								
Gravel Drive	7800 S.F. =		0.18 Ac.	0.70 0.15																								
Cultivated Field (2-5%)	98351 S.F. =		2.26 Ac.	0.35 0.20																								
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.376</td><td></td></tr> <tr><td>Weighted N =</td><td>0.196</td><td></td></tr> <tr><td>L =</td><td>660 Ft.</td><td></td></tr> <tr><td>H =</td><td>18.0 Ft.</td><td></td></tr> <tr><td>S =</td><td>0.0273 Ft./Ft.</td><td></td></tr> <tr><td>tc =</td><td>18.59 Minutes</td><td>(Min. 5 minutes)</td></tr> <tr><td>I(10) =</td><td>4.206 In./Hr.</td><td></td></tr> <tr><td>Q(10) =</td><td>3.85 CFS</td><td></td></tr> </tbody> </table>					Weighted c =	0.376		Weighted N =	0.196		L =	660 Ft.		H =	18.0 Ft.		S =	0.0273 Ft./Ft.		tc =	18.59 Minutes	(Min. 5 minutes)	I(10) =	4.206 In./Hr.		Q(10) =	3.85 CFS	
Weighted c =	0.376																											
Weighted N =	0.196																											
L =	660 Ft.																											
H =	18.0 Ft.																											
S =	0.0273 Ft./Ft.																											
tc =	18.59 Minutes	(Min. 5 minutes)																										
I(10) =	4.206 In./Hr.																											
Q(10) =	3.85 CFS																											

On-Site Undeveloped Drainage Sub-Basins																												
Sub-basin No.: UND-2	Total Area =	351,585 S.F. =	8.07 Ac.																									
Surface				C N																								
Pavement	3240 S.F. =		0.07 Ac.	0.92 0.02																								
Cultivated Field (2-5%)	348345 S.F. =		8.00 Ac.	0.35 0.20																								
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.355</td><td></td></tr> <tr><td>Weighted N =</td><td>0.198</td><td></td></tr> <tr><td>L =</td><td>1,500 Ft.</td><td></td></tr> <tr><td>H =</td><td>21.0 Ft.</td><td></td></tr> <tr><td>S =</td><td>0.0140 Ft./Ft.</td><td></td></tr> <tr><td>tc =</td><td>32.03 Minutes</td><td>(Min. 5 minutes)</td></tr> <tr><td>I(10) =</td><td>3.131 In./Hr.</td><td></td></tr> <tr><td>Q(10) =</td><td>8.98 CFS</td><td></td></tr> </tbody> </table>					Weighted c =	0.355		Weighted N =	0.198		L =	1,500 Ft.		H =	21.0 Ft.		S =	0.0140 Ft./Ft.		tc =	32.03 Minutes	(Min. 5 minutes)	I(10) =	3.131 In./Hr.		Q(10) =	8.98 CFS	
Weighted c =	0.355																											
Weighted N =	0.198																											
L =	1,500 Ft.																											
H =	21.0 Ft.																											
S =	0.0140 Ft./Ft.																											
tc =	32.03 Minutes	(Min. 5 minutes)																										
I(10) =	3.131 In./Hr.																											
Q(10) =	8.98 CFS																											

On-Site Undeveloped Drainage Sub-Basins																												
Sub-basin No.: UND-3	Total Area =	525,998 S.F. =	12.08 Ac.																									
Surface				C N																								
Cultivated Field (2-5%)	525998 S.F. =		12.08 Ac.	0.35 0.20																								
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.350</td><td></td></tr> <tr><td>Weighted N =</td><td>0.200</td><td></td></tr> <tr><td>L =</td><td>1,500 Ft.</td><td></td></tr> <tr><td>H =</td><td>32.0 Ft.</td><td></td></tr> <tr><td>S =</td><td>0.0213 Ft./Ft.</td><td></td></tr> <tr><td>tc =</td><td>29.14 Minutes</td><td>(Min. 5 minutes)</td></tr> <tr><td>I(10) =</td><td>3.300 In./Hr.</td><td></td></tr> <tr><td>Q(10) =</td><td>13.95 CFS</td><td></td></tr> </tbody> </table>					Weighted c =	0.350		Weighted N =	0.200		L =	1,500 Ft.		H =	32.0 Ft.		S =	0.0213 Ft./Ft.		tc =	29.14 Minutes	(Min. 5 minutes)	I(10) =	3.300 In./Hr.		Q(10) =	13.95 CFS	
Weighted c =	0.350																											
Weighted N =	0.200																											
L =	1,500 Ft.																											
H =	32.0 Ft.																											
S =	0.0213 Ft./Ft.																											
tc =	29.14 Minutes	(Min. 5 minutes)																										
I(10) =	3.300 In./Hr.																											
Q(10) =	13.95 CFS																											

On-Site Undeveloped Drainage Sub-Basins																												
Sub-basin No.: UND-4	Total Area =	37,095 S.F. =	0.85 Ac.																									
Surface				C N																								
Cultivated Field (2-5%)	37095 S.F. =		0.85 Ac.	0.35 0.20																								
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.350</td><td></td></tr> <tr><td>Weighted N =</td><td>0.200</td><td></td></tr> <tr><td>L =</td><td>380 Ft.</td><td></td></tr> <tr><td>H =</td><td>12.0 Ft.</td><td></td></tr> <tr><td>S =</td><td>0.0316 Ft./Ft.</td><td></td></tr> <tr><td>tc =</td><td>14.00 Minutes</td><td>(Min. 5 minutes)</td></tr> <tr><td>I(10) =</td><td>4.601 In./Hr.</td><td></td></tr> <tr><td>Q(10) =</td><td>1.37 CFS</td><td></td></tr> </tbody> </table>					Weighted c =	0.350		Weighted N =	0.200		L =	380 Ft.		H =	12.0 Ft.		S =	0.0316 Ft./Ft.		tc =	14.00 Minutes	(Min. 5 minutes)	I(10) =	4.601 In./Hr.		Q(10) =	1.37 CFS	
Weighted c =	0.350																											
Weighted N =	0.200																											
L =	380 Ft.																											
H =	12.0 Ft.																											
S =	0.0316 Ft./Ft.																											
tc =	14.00 Minutes	(Min. 5 minutes)																										
I(10) =	4.601 In./Hr.																											
Q(10) =	1.37 CFS																											

Developed Drainage Sub-Basins																									
Sub-basin No.:		1	Total Area = 107,902 S.F. = 2.48 Ac.																						
Surface																									
Structures	6	Total	1,750	S.F. =	10,500	S.F. =	0.24	Ac.	0.92	0.02															
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02															
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92	0.02															
Patios	12	Total	150	S.F. =	1,800	S.F. =	0.04	Ac.	0.92	0.02															
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92	0.02															
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40															
Lawn (2-5%)			95,602	S.F. =			2.19	Ac.	0.25	0.40															
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40															
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40															
Water				S.F. =			0.00	Ac.	1.00	0.00															
Misc.				S.F. =			0.00	Ac.	0.92	0.02															
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.326</td></tr> <tr><td>Weighted N =</td><td>0.357</td></tr> <tr><td>L =</td><td>730 Ft.</td></tr> <tr><td>H =</td><td>11.5 Ft.</td></tr> <tr><td>S =</td><td>0.0158 Ft./Ft.</td></tr> <tr><td>tc =</td><td>29.28 Minutes</td></tr> <tr><td>I(25) =</td><td>3.713 In./Hr.</td></tr> <tr><td>Q(25) =</td><td>3.00 CFS</td></tr> </tbody> </table>										Weighted c =	0.326	Weighted N =	0.357	L =	730 Ft.	H =	11.5 Ft.	S =	0.0158 Ft./Ft.	tc =	29.28 Minutes	I(25) =	3.713 In./Hr.	Q(25) =	3.00 CFS
Weighted c =	0.326																								
Weighted N =	0.357																								
L =	730 Ft.																								
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tc =	29.28 Minutes																								
I(25) =	3.713 In./Hr.																								
Q(25) =	3.00 CFS																								
(Min. 5 minutes)																									

Developed Drainage Sub-Basins																									
Sub-basin No.:		2	Total Area = 48,435 S.F. = 1.11 Ac.																						
Surface																									
Structures	4	Total	1,750	S.F. =	7,000	S.F. =	0.16	Ac.	0.92	0.02															
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02															
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92	0.02															
Patios	8	Total	150	S.F. =	1,200	S.F. =	0.03	Ac.	0.92	0.02															
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92	0.02															
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40															
Lawn (2-5%)			41,435	S.F. =			0.95	Ac.	0.25	0.40															
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40															
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40															
Water				S.F. =			0.00	Ac.	1.00	0.00															
Misc.				S.F. =			0.00	Ac.	0.92	0.02															
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr><td>Weighted c =</td><td>0.370</td></tr> <tr><td>Weighted N =</td><td>0.346</td></tr> <tr><td>L =</td><td>680 Ft.</td></tr> <tr><td>H =</td><td>14.0 Ft.</td></tr> <tr><td>S =</td><td>0.0206 Ft./Ft.</td></tr> <tr><td>tc =</td><td>26.22 Minutes</td></tr> <tr><td>I(25) =</td><td>3.995 In./Hr.</td></tr> <tr><td>Q(25) =</td><td>1.64 CFS</td></tr> </tbody> </table>										Weighted c =	0.370	Weighted N =	0.346	L =	680 Ft.	H =	14.0 Ft.	S =	0.0206 Ft./Ft.	tc =	26.22 Minutes	I(25) =	3.995 In./Hr.	Q(25) =	1.64 CFS
Weighted c =	0.370																								
Weighted N =	0.346																								
L =	680 Ft.																								
H =	14.0 Ft.																								
S =	0.0206 Ft./Ft.																								
tc =	26.22 Minutes																								
I(25) =	3.995 In./Hr.																								
Q(25) =	1.64 CFS																								
(Min. 5 minutes)																									

Developed Drainage Sub-Basins											
Sub-basin No.:		3		Total Area = 38,334 S.F. = 0.88 Ac.							
Surface											
Structures	4.5	Total	1,750	S.F. =	7,875	S.F. =	0.18	Ac.	C	N	
Drives	9	Total	600	S.F. =	5,400	S.F. =	0.12	Ac.	0.92	0.02	
Pavement	420	L.F.	14.5	Width =	6,090	S.F. =	0.14	Ac.	0.92	0.02	
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02	
Sidewalks	420	L.F.	4	Width =	1,680	S.F. =	0.04	Ac.	0.92	0.02	
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15	0.40	
Lawn (2-5%)			17,289	S.F. =		S.F. =	0.40	Ac.	0.25	0.40	
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40	0.40	
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55	0.40	
Water				S.F. =		S.F. =	0.00	Ac.	1.00	0.00	
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92	0.02	

Weighted c = 0.618
Weighted N = 0.191
L = 500 Ft.
H = 11.5 Ft.
S = 0.0230 Ft./Ft.
tc = 16.79 Minutes
I(25) = 4.868 In./Hr.
Q(25) = 2.65 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins											
Sub-basin No.:		4		Total Area = 25,697 S.F. = 0.59 Ac.							
Surface											
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	C	N	
Drives	4	Total	600	S.F. =	2,400	S.F. =	0.06	Ac.	0.92	0.02	
Pavement	450	L.F.	14.5	Width =	6,525	S.F. =	0.15	Ac.	0.92	0.02	
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02	
Sidewalks	450	L.F.	4	Width =	1,800	S.F. =	0.04	Ac.	0.92	0.02	
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15	0.40	
Lawn (2-5%)			11,472	S.F. =		S.F. =	0.26	Ac.	0.25	0.40	
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40	0.40	
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55	0.40	
Water				S.F. =		S.F. =	0.00	Ac.	1.00	0.00	
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92	0.02	

Weighted c = 0.621
Weighted N = 0.190
L = 500 Ft.
H = 10.5 Ft.
S = 0.0210 Ft./Ft.
tc = 17.08 Minutes
I(25) = 4.841 In./Hr.
Q(25) = 1.77 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins											
Sub-basin No.:		5		Total Area = 35,283 S.F. = 0.81 Ac.							
Surface											
Structures	4	Total	1,750	S.F. =	7,000	S.F. =	0.16	Ac.	0.92	0.02	
Drives	8	Total	600	S.F. =	4,800	S.F. =	0.11	Ac.	0.92	0.02	
Pavement	450	L.F.	14.5	Width =	6,525	S.F. =	0.15	Ac.	0.92	0.02	
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02	
Sidewalks	450	L.F.	4	Width =	1,800	S.F. =	0.04	Ac.	0.92	0.02	
Lawn (0-2%)				S.F. =		0.00	Ac.	0.15	0.40		
Lawn (2-5%)			15,158	S.F. =		0.35	Ac.	0.25	0.40		
Lawn (5-10%)				S.F. =		0.00	Ac.	0.40	0.40		
Lawn (>10%)				S.F. =		0.00	Ac.	0.55	0.40		
Water				S.F. =		0.00	Ac.	1.00	0.00		
Misc.				S.F. =		0.00	Ac.	0.92	0.02		

Weighted c =	0.632	
Weighted N =	0.183	
L =	500	Ft.
H =	13.5	Ft.
S =	0.0270	Ft./Ft.
tc =	15.85	Minutes (Min. 5 minutes)
I(25) =	4.954	In./Hr.
Q(25) =	2.54	CFS

Developed Drainage Sub-Basins											
Sub-basin No.:		6		Total Area = 27,667 S.F. = 0.64 Ac.							
Surface											
Structures	3	Total	1,750	S.F. =	5,250	S.F. =	0.12	Ac.	0.92	0.02	
Drives	5	Total	600	S.F. =	3,000	S.F. =	0.07	Ac.	0.92	0.02	
Pavement	450	L.F.	14.5	Width =	6,525	S.F. =	0.15	Ac.	0.92	0.02	
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02	
Sidewalks	450	L.F.	4	Width =	1,800	S.F. =	0.04	Ac.	0.92	0.02	
Lawn (0-2%)				S.F. =		0.00	Ac.	0.15	0.40		
Lawn (2-5%)			11,092	S.F. =		0.25	Ac.	0.25	0.40		
Lawn (5-10%)				S.F. =		0.00	Ac.	0.40	0.40		
Lawn (>10%)				S.F. =		0.00	Ac.	0.55	0.40		
Water				S.F. =		0.00	Ac.	1.00	0.00		
Misc.				S.F. =		0.00	Ac.	0.92	0.02		

Weighted c =	0.651	
Weighted N =	0.172	
L =	450	Ft.
H =	12.0	Ft.
S =	0.0267	Ft./Ft.
tc =	14.71	Minutes (Min. 5 minutes)
I(25) =	5.085	In./Hr.
Q(25) =	2.10	CFS

Developed Drainage Sub-Basins										
Sub-basin No.:		7	Total Area = 60,278 S.F. = 1.38 Ac.							
Surface										
Structures	7	Total	1,750	S.F. =	12,250	S.F. =	0.28	Ac.	0.92	0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Patios	14	Total	150	S.F. =	2,100	S.F. =	0.05	Ac.	0.92	0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			45,928	S.F. =			1.05	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.410
Weighted N =	0.310
L =	470 Ft.
H =	13.5 Ft.
S =	0.0287 Ft./Ft.
tc =	19.39 Minutes (Min. 5 minutes)
I(25) =	4.627 In./Hr.
Q(25) =	2.62 CFS

Developed Drainage Sub-Basins										
Sub-basin No.:		8	Total Area = 22,612 S.F. = 0.52 Ac.							
Surface										
Structures	2.5	Total	1,750	S.F. =	4,375	S.F. =	0.10	Ac.	0.92	0.02
Drives	5	Total	600	S.F. =	3,000	S.F. =	0.07	Ac.	0.92	0.02
Pavement	300	L.F.	14.5	Width =	4,350	S.F. =	0.10	Ac.	0.92	0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks	300	L.F.	4	Width =	1,200	S.F. =	0.03	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			9,687	S.F. =			0.22	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.633
Weighted N =	0.183
L =	350 Ft.
H =	5.5 Ft.
S =	0.0157 Ft./Ft.
tc =	15.21 Minutes (Min. 5 minutes)
I(25) =	5.014 In./Hr.
Q(25) =	1.65 CFS

Developed Drainage Sub-Basins									
Sub-basin No.:		9		Total Area =		17,928 S.F. =		0.41 Ac.	
Surface									
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	0.92 0.02
Drives	3	Total	600	S.F. =	1,800	S.F. =	0.04	Ac.	0.92 0.02
Pavement	300	L.F.	14.5	Width =	4,350	S.F. =	0.10	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	300	L.F.	4	Width =	1,200	S.F. =	0.03	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15 0.40
Lawn (2-5%)			7,078	S.F. =			0.16	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55 0.40
Water				S.F. =			0.00	Ac.	1.00 0.00
Misc.				S.F. =			0.00	Ac.	0.92 0.02

Weighted c =	0.655
Weighted N =	0.170
L =	350 Ft.
H =	5.0 Ft.
S =	0.0143 Ft./Ft.
tc =	15.03 Minutes
I(25) =	5.030 In./Hr.
Q(25) =	1.36 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		10		Total Area =		50,090 S.F. =		1.15 Ac.	
Surface									
Structures	6.5	Total	1,750	S.F. =	11,375	S.F. =	0.26	Ac.	0.92 0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	120	L.F.	14.5	Width =	1,740	S.F. =	0.04	Ac.	0.92 0.02
Patios	13	Total	150	S.F. =	1,950	S.F. =	0.04	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15 0.40
Lawn (2-5%)			36,975	S.F. =			0.85	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55 0.40
Water				S.F. =			0.00	Ac.	1.00 0.00
Misc.				S.F. =			0.00	Ac.	0.92 0.02

Weighted c =	0.461
Weighted N =	0.301
L =	650 Ft.
H =	14.0 Ft.
S =	0.0215 Ft./Ft.
tc =	23.82 Minutes
I(25) =	4.217 In./Hr.
Q(25) =	2.24 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		11		Total Area =		18,858 S.F. =		0.43 Ac.	
Surface									
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	0.92 0.02
Drives	4	Total	600	S.F. =	2,400	S.F. =	0.06	Ac.	0.92 0.02
Pavement	280	L.F.	14.5	Width =	4,060	S.F. =	0.09	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	257	L.F.	4	Width =	1,028	S.F. =	0.02	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			7,870	S.F. =		S.F. =	0.18	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.640
Weighted N =	0.179
L =	300 Ft.
H =	4.7 Ft.
S =	0.0157 Ft./Ft.
tc =	14.01 Minutes
I(25) =	5.210 In./Hr.
Q(25) =	1.44 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		12		Total Area =		18,772 S.F. =		0.43 Ac.	
Surface									
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	0.92 0.02
Drives	4	Total	600	S.F. =	2,400	S.F. =	0.06	Ac.	0.92 0.02
Pavement	280	L.F.	14.5	Width =	4,060	S.F. =	0.09	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	260	L.F.	4	Width =	1,040	S.F. =	0.02	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			7,772	S.F. =		S.F. =	0.18	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.643
Weighted N =	0.177
L =	300 Ft.
H =	3.6 Ft.
S =	0.0120 Ft./Ft.
tc =	14.86 Minutes
I(25) =	5.058 In./Hr.
Q(25) =	1.40 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.: 11A			Total Area = 42,069 S.F. = 0.97 Ac.							
Surface										
Structures	4.5	Total	1,750	S.F. =	7,875	S.F. =	0.18	Ac.	C 0.92	N 0.02
Drives	9	Total	600	S.F. =	5,400	S.F. =	0.12	Ac.	0.92	0.02
Pavement	580	L.F.	14.5	Width =	8,410	S.F. =	0.19	Ac.	0.92	0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks	573	L.F.	4	Width =	2,292	S.F. =	0.05	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			18,092	S.F. =			0.42	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.632
Weighted N =	0.183
L =	466 Ft.
H =	13.2 Ft.
S =	0.0283 Ft./Ft.
tc =	15.17 Minutes
I(25) =	5.017 In./Hr.
Q(25) =	3.06 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.: 12A			Total Area = 42,254 S.F. = 0.97 Ac.							
Surface										
Structures	4.5	Total	1,750	S.F. =	7,875	S.F. =	0.18	Ac.	C 0.92	N 0.02
Drives	9	Total	600	S.F. =	5,400	S.F. =	0.12	Ac.	0.92	0.02
Pavement	580	L.F.	14.5	Width =	8,410	S.F. =	0.19	Ac.	0.92	0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks	573	L.F.	4	Width =	2,292	S.F. =	0.05	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			18,277	S.F. =			0.42	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.630
Weighted N =	0.184
L =	468 Ft.
H =	13.3 Ft.
S =	0.0284 Ft./Ft.
tc =	15.23 Minutes
I(25) =	5.012 In./Hr.
Q(25) =	3.06 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		13		Total Area =		50,191 S.F. =		1.15 Ac.	
Surface									
Structures	6.5	Total	1,750	S.F. =	11,375	S.F. =	0.26	Ac.	C 0.92 N 0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Patios	13	Total	150	S.F. =	1,950	S.F. =	0.04	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			36,866	S.F. =		S.F. =	0.85	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.428
Weighted N =	0.299
L =	650 Ft.
H =	17.0 Ft.
S =	0.0262 Ft./Ft.
tc =	22.69 Minutes
I(25) =	4.322 In./Hr.
Q(25) =	2.13 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		14		Total Area =		46,544 S.F. =		1.07 Ac.	
Surface									
Structures	10	Total	1,750	S.F. =	17,500	S.F. =	0.40	Ac.	C 0.92 N 0.02
Drives	8	Total	600	S.F. =	4,800	S.F. =	0.11	Ac.	0.92 0.02
Pavement	650	L.F.	14.5	Width =	9,425	S.F. =	0.22	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	650	L.F.	4	Width =	2,600	S.F. =	0.06	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			12,219	S.F. =		S.F. =	0.28	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.744
Weighted N =	0.120
L =	450 Ft.
H =	5.0 Ft.
S =	0.0111 Ft./Ft.
tc =	15.22 Minutes
I(25) =	5.013 In./Hr.
Q(25) =	3.99 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.:		15		Total Area =		37,062 S.F. =		0.85 Ac.		
Surface										
Structures	3	Total	1,750	S.F. =	5,250	S.F. =	0.12	Ac.	C	N
Drives	6	Total	600	S.F. =	3,600	S.F. =	0.08	Ac.	0.92	0.02
Pavement	700	L.F.	14.5	Width =	10,150	S.F. =	0.23	Ac.	0.92	0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks	700	L.F.	4	Width =	2,800	S.F. =	0.06	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15	0.40
Lawn (2-5%)			15,262	S.F. =		S.F. =	0.35	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55	0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00	0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92	0.02

Weighted c =	0.644
Weighted N =	0.176
L =	350 Ft.
H =	6.0 Ft.
S =	0.0171 Ft./Ft.
tc =	14.66 Minutes
I(25) =	5.094 In./Hr.
Q(25) =	2.79 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.:		16		Total Area =		25,152 S.F. =		0.58 Ac.		
Surface										
Structures	3	Total	1,750	S.F. =	5,250	S.F. =	0.12	Ac.	C	N
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Patios	6	Total	150	S.F. =	900	S.F. =	0.02	Ac.	0.92	0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15	0.40
Lawn (2-5%)			19,902	S.F. =		S.F. =	0.46	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55	0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00	0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92	0.02

Weighted c =	0.423
Weighted N =	0.321
L =	250 Ft.
H =	7.0 Ft.
S =	0.0280 Ft./Ft.
tc =	14.78 Minutes
I(25) =	5.072 In./Hr.
Q(25) =	1.24 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.: 17		Total Area = 44,546 S.F. = 1.02 Ac.								
Surface										
Structures	4.5	Total	1,750	S.F. =	7,875	S.F. =	0.18	Ac.	C 0.92	N 0.02
Drives	9	Total	600	S.F. =	5,400	S.F. =	0.12	Ac.	0.92	0.02
Pavement	550	L.F.	14.5	Width =	7,975	S.F. =	0.18	Ac.	0.92	0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks	550	L.F.	4	Width =	2,200	S.F. =	0.05	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			21,096	S.F. =			0.48	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.603
Weighted N =	0.200
L =	400 Ft.
H =	7.0 Ft.
S =	0.0175 Ft./Ft.
tc =	16.46 Minutes
I(25) =	4.898 In./Hr.
Q(25) =	3.02 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins										
Sub-basin No.: 18		Total Area = 45,055 S.F. = 1.03 Ac.								
Surface										
Structures	4	Total	1,750	S.F. =	7,000	S.F. =	0.16	Ac.	C 0.92	N 0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92	0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Patios	8	Total	150	S.F. =	1,200	S.F. =	0.03	Ac.	0.92	0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)				S.F. =			0.00	Ac.	0.15	0.40
Lawn (2-5%)			36,855	S.F. =			0.85	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =			0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =			0.00	Ac.	0.55	0.40
Water				S.F. =			0.00	Ac.	1.00	0.00
Misc.				S.F. =			0.00	Ac.	0.92	0.02

Weighted c =	0.372
Weighted N =	0.331
L =	400 Ft.
H =	7.5 Ft.
S =	0.0188 Ft./Ft.
tc =	20.49 Minutes
I(25) =	4.525 In./Hr.
Q(25) =	1.74 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		19		Total Area =		22,475 S.F. =		0.52 Ac.	
Surface									
Structures	2.5	Total	1,750	S.F. =	4,375	S.F. =	0.10	Ac.	C N
Drives	4	Total	600	S.F. =	2,400	S.F. =	0.06	Ac.	0.92 0.02
Pavement	350	L.F.	14.5	Width =	5,075	S.F. =	0.12	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	350	L.F.	4	Width =	1,400	S.F. =	0.03	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			9,225	S.F. =		S.F. =	0.21	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.645
Weighted N =	0.176
L =	250 Ft.
H =	4.5 Ft.
S =	0.0180 Ft./Ft.
tc =	12.37 Minutes
I(25) =	5.502 In./Hr.
Q(25) =	1.83 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		20		Total Area =		18,540 S.F. =		0.43 Ac.	
Surface									
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	C N
Drives	4	Total	600	S.F. =	2,400	S.F. =	0.06	Ac.	0.92 0.02
Pavement	300	L.F.	14.5	Width =	4,350	S.F. =	0.10	Ac.	0.92 0.02
Patios	0	Total	150	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Sidewalks	300	L.F.	4	Width =	1,200	S.F. =	0.03	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			7,090	S.F. =		S.F. =	0.16	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.664
Weighted N =	0.165
L =	200 Ft.
H =	3.0 Ft.
S =	0.0150 Ft./Ft.
tc =	11.30 Minutes
I(25) =	5.693 In./Hr.
Q(25) =	1.61 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		21		Total Area =		19,125 S.F. =		0.44 Ac.	
Surface									
Structures	2	Total	1,750	S.F. =	3,500	S.F. =	0.08	Ac.	C N
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Patios	4	Total	150	S.F. =	600	S.F. =	0.01	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		0.00	Ac.	0.15	0.40
Lawn (2-5%)			15,025	S.F. =		0.34	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =		0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =		0.00	Ac.	0.55	0.40
Water				S.F. =		0.00	Ac.	1.00	0.00
Misc.				S.F. =		0.00	Ac.	0.92	0.02

Weighted c =	0.394
Weighted N =	0.319
L =	200 Ft.
H =	3.5 Ft.
S =	0.0175 Ft./Ft.
tc =	14.80 Minutes
I(25) =	5.069 In./Hr.
Q(25) =	0.88 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		22		Total Area =		68,395 S.F. =		1.57 Ac.	
Surface									
Structures	3	Total	1,750	S.F. =	5,250	S.F. =	0.12	Ac.	C N
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Patios	6	Total	150	S.F. =	900	S.F. =	0.02	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		0.00	Ac.	0.15	0.40
Lawn (2-5%)			37,145	S.F. =		0.85	Ac.	0.25	0.40
Lawn (5-10%)				S.F. =		0.00	Ac.	0.40	0.40
Lawn (>10%)				S.F. =		0.00	Ac.	0.55	0.40
Water			26,000	S.F. =		0.60	Ac.	1.00	0.00
Misc.				S.F. =		0.00	Ac.	0.92	0.02

Weighted c =	0.599
Weighted N =	0.219
L =	200 Ft.
H =	7.5 Ft.
S =	0.0375 Ft./Ft.
tc =	10.40 Minutes
I(25) =	5.854 In./Hr.
Q(25) =	5.50 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		23		Total Area =		32,328 S.F. =		0.74 Ac.	
Surface									
Structures	1	Total	1,750	S.F. =	1,750	S.F. =	0.04	Ac.	C 0.92 N 0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Patios	2	Total	150	S.F. =	300	S.F. =	0.01	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			30,278	S.F. =		S.F. =	0.70	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.292
Weighted N =	0.376
L =	100 Ft.
H =	5.0 Ft.
S =	0.0500 Ft./Ft.
tc =	9.05 Minutes
I(25) =	6.189 In./Hr.
Q(25) =	1.34 CFS

(Min. 5 minutes)

Developed Drainage Sub-Basins									
Sub-basin No.:		24		Total Area =		55,224 S.F. =		1.27 Ac.	
Surface									
Structures	2.5	Total	1,750	S.F. =	4,375	S.F. =	0.10	Ac.	C 0.92 N 0.02
Drives	0	Total	600	S.F. =	0	S.F. =	0.00	Ac.	0.92 0.02
Pavement	0	L.F.	14.5	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Patios	5	Total	150	S.F. =	750	S.F. =	0.02	Ac.	0.92 0.02
Sidewalks	0	L.F.	4	Width =	0	S.F. =	0.00	Ac.	0.92 0.02
Lawn (0-2%)				S.F. =		S.F. =	0.00	Ac.	0.15 0.40
Lawn (2-5%)			50,849	S.F. =		S.F. =	1.17	Ac.	0.25 0.40
Lawn (5-10%)				S.F. =		S.F. =	0.00	Ac.	0.40 0.40
Lawn (>10%)				S.F. =		S.F. =	0.00	Ac.	0.55 0.40
Water				S.F. =		S.F. =	0.00	Ac.	1.00 0.00
Misc.				S.F. =		S.F. =	0.00	Ac.	0.92 0.02

Weighted c =	0.316
Weighted N =	0.370
L =	150 Ft.
H =	7.5 Ft.
S =	0.0500 Ft./Ft.
tc =	10.86 Minutes
I(25) =	5.772 In./Hr.
Q(25) =	2.31 CFS

(Min. 5 minutes)

Combined Drainage Sub-Basin For FES 505									
Sub-basin No.: OS-1+1+10		Total Area = 3,558,117 S.F. = 81.68 Ac.							
Surface									
C N									
Structures	=	86,875	S.F. =	1.99	Ac.	0.92	0.02		
Gravel Drives	=	54,950	S.F. =	1.26	Ac.	0.70	0.15		
Pavement	=	66,740	S.F. =	1.53	Ac.	0.92	0.02		
Patios	=	3,750	S.F. =	0.09	Ac.	0.92	0.02		
Lawn (0-2%)			S.F. =	0.00	Ac.	0.15	0.40		
Lawn (2-5%)	1,052,577		S.F. =	24.16	Ac.	0.25	0.40		
Lawn (5-10%)			S.F. =	0.00	Ac.	0.40	0.40		
Woodland	314,000		S.F. =	7.21	Ac.	0.24	0.60		
Water	3,800		S.F. =	0.09	Ac.	1.00	0.00		
Cultivated Field (2-5%)	1979325		S.F. =	45.44	Ac.	0.35	0.20		

Weighted c =	0.342
Weighted N =	0.286
L =	3,000 Ft.
H =	35.0 Ft.
S =	0.0117 Ft./Ft.
tc =	54.78 Minutes
I(25) =	2.353 In./Hr.
Q(25) =	65.81 CFS

(Min. 5 minutes)

Combined Drainage Sub-Basin For FES 505									
Sub-basin No.: OS-1+1+10		Total Area = 3,558,117 S.F. = 81.68 Ac.							
Surface									
C N									
Structures	=	86,875	S.F. =	1.99	Ac.	0.92	0.02		
Gravel Drives	=	54,950	S.F. =	1.26	Ac.	0.70	0.15		
Pavement	=	66,740	S.F. =	1.53	Ac.	0.92	0.02		
Patios	=	3,750	S.F. =	0.09	Ac.	0.92	0.02		
Lawn (0-2%)			S.F. =	0.00	Ac.	0.15	0.40		
Lawn (2-5%)	1,052,577		S.F. =	24.16	Ac.	0.25	0.40		
Lawn (5-10%)			S.F. =	0.00	Ac.	0.40	0.40		
Woodland	314,000		S.F. =	7.21	Ac.	0.24	0.60		
Water	3,800		S.F. =	0.09	Ac.	1.00	0.00		
Cultivated Field (2-5%)	1979325		S.F. =	45.44	Ac.	0.35	0.20		

Weighted c =	0.342
Weighted N =	0.286
L =	3,000 Ft.
H =	35.0 Ft.
S =	0.0117 Ft./Ft.
tc =	54.78 Minutes
I(100) =	3.001 In./Hr.
Q(100) =	83.93 CFS

(Min. 5 minutes)

Combined Drainage Sub-Basin For FES 525																						
Sub-basin No.: OS-2+2	Total Area =	91,619	S.F. =	2.10	Ac.																	
Surface					C	N																
Structures	=	7,000	S.F. =	0.16	Ac.	0.92 0.02																
Patios	=	1,200	S.F. =	0.03	Ac.	0.92 0.02																
Lawn (0-2%)	S.F. =			0.00	Ac.	0.15 0.40																
Lawn (2-5%)	41,435 S.F. =			0.95	Ac.	0.25 0.40																
Lawn (5-10%)	S.F. =			0.00	Ac.	0.40 0.40																
Woodland	S.F. =			0.00	Ac.	0.24 0.60																
Water	S.F. =			0.00	Ac.	1.00 0.00																
Cultivated Field (2-5%)	43,184 S.F. =			0.99	Ac.	0.35 0.20																
<table border="1"> <tbody> <tr> <td>Weighted c =</td> <td>0.360</td> </tr> <tr> <td>Weighted N =</td> <td>0.277</td> </tr> <tr> <td>L =</td> <td>680 Ft.</td> </tr> <tr> <td>H =</td> <td>14.0 Ft.</td> </tr> <tr> <td>S =</td> <td>0.0206 Ft./Ft.</td> </tr> <tr> <td>tc =</td> <td>23.64 Minutes (Min. 5 minutes)</td> </tr> <tr> <td>I(25) =</td> <td>4.234 In./Hr.</td> </tr> <tr> <td>Q(25) =</td> <td>3.21 CFS</td> </tr> </tbody> </table>							Weighted c =	0.360	Weighted N =	0.277	L =	680 Ft.	H =	14.0 Ft.	S =	0.0206 Ft./Ft.	tc =	23.64 Minutes (Min. 5 minutes)	I(25) =	4.234 In./Hr.	Q(25) =	3.21 CFS
Weighted c =	0.360																					
Weighted N =	0.277																					
L =	680 Ft.																					
H =	14.0 Ft.																					
S =	0.0206 Ft./Ft.																					
tc =	23.64 Minutes (Min. 5 minutes)																					
I(25) =	4.234 In./Hr.																					
Q(25) =	3.21 CFS																					

Combined Drainage Sub-Basin For FES 539																						
Sub-basin No.: OS-3+18	Total Area =	394,009	S.F. =	9.05	Ac.																	
Surface					C	N																
Structures	=	7,000	S.F. =	0.16	Ac.	0.92 0.02																
Patios	=	1,200	S.F. =	0.03	Ac.	0.92 0.02																
Lawn (0-2%)	S.F. =			0.00	Ac.	0.15 0.40																
Lawn (2-5%)	36,855 S.F. =			0.85	Ac.	0.25 0.40																
Lawn (5-10%)	S.F. =			0.00	Ac.	0.40 0.40																
Woodland	S.F. =			0.00	Ac.	0.24 0.60																
Water	S.F. =			0.00	Ac.	1.00 0.00																
Cultivated Field (2-5%)	348,954 S.F. =			8.01	Ac.	0.35 0.20																
<table border="1"> <tbody> <tr> <td>Weighted c =</td> <td>0.353</td> </tr> <tr> <td>Weighted N =</td> <td>0.215</td> </tr> <tr> <td>L =</td> <td>900 Ft.</td> </tr> <tr> <td>H =</td> <td>28.0 Ft.</td> </tr> <tr> <td>S =</td> <td>0.0311 Ft./Ft.</td> </tr> <tr> <td>tc =</td> <td>21.74 Minutes (Min. 5 minutes)</td> </tr> <tr> <td>I(25) =</td> <td>4.410 In./Hr.</td> </tr> <tr> <td>Q(25) =</td> <td>14.06 CFS</td> </tr> </tbody> </table>							Weighted c =	0.353	Weighted N =	0.215	L =	900 Ft.	H =	28.0 Ft.	S =	0.0311 Ft./Ft.	tc =	21.74 Minutes (Min. 5 minutes)	I(25) =	4.410 In./Hr.	Q(25) =	14.06 CFS
Weighted c =	0.353																					
Weighted N =	0.215																					
L =	900 Ft.																					
H =	28.0 Ft.																					
S =	0.0311 Ft./Ft.																					
tc =	21.74 Minutes (Min. 5 minutes)																					
I(25) =	4.410 In./Hr.																					
Q(25) =	14.06 CFS																					

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

VANDERBURGH
COUNTY,
INDIANA
UNINCORPORATED AREAS

PANEL 15 OF 100

N.W. OF N.E.

COMMUNITY-PANEL NUMBER

180256 0015 C

MAP REVISED:

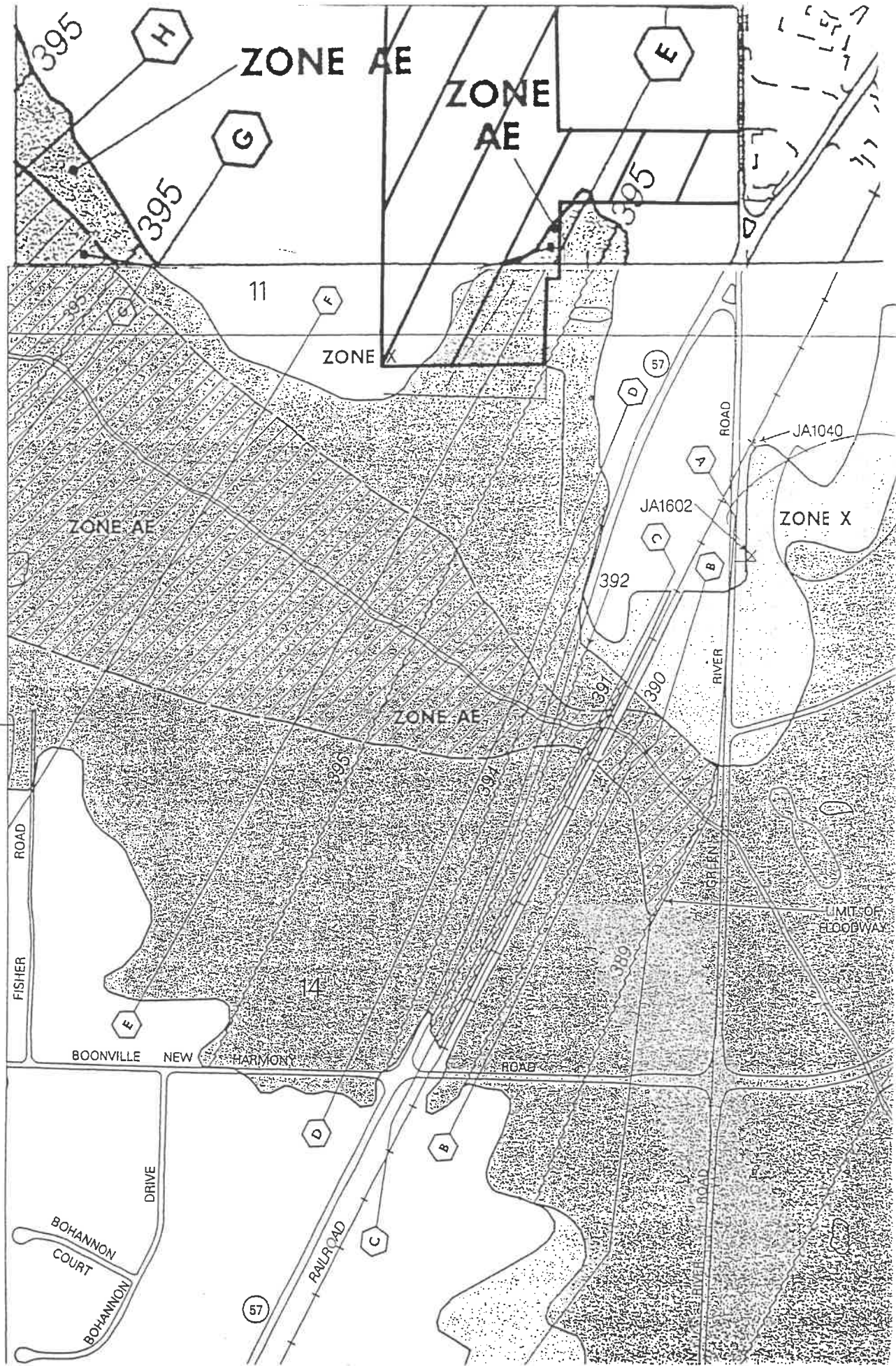
AUGUST 5, 1991



Federal Emergency Management Agency

38 03 31.3

1035000 FT



Proposed FIRM Map

FLOOD INSURANCE STUDY



VANDEBURGH COUNTY, INDIANA AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
EVANSVILLE, CITY OF	180257
VANDEBURGH COUNTY (UNINCORPORATED AREAS)	180256



Vanderburgh County

PRELIMINARY

JUN 28 2002



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
18163CV000A

FLOODING SOURCE		FLOODWAY				BASE FLOOD WATER-SURFACE ELEVATION (FEET NGVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
Schlensker Ditch									
A	7,233	605	1,655	3.4	389.1	389.1	389.2	0.1	
B	7,587	268	1,695	6.4	389.8	389.8	389.9	0.1	
C	7,769	88	1,078	5.2	391.4	391.4	391.5	0.1	
D	8,126	400	4,230	2.2	394.4	394.4	394.4	0.0	
E	8,801	880	4,205	1.3	394.6	394.6	394.6	0.0	
F	9,501	1,120	3,892	1.4	394.7	394.7	394.8	0.0	
G	10,205	1,400	3,380	1.5	394.9	394.9	395.0	0.1	
H	10,909	1,560	1,807	2.7	395.4	395.4	395.5	0.1	
I	14,033	1,110	2,037	2.2	402.2	402.2	402.3	0.1	
J	14,149	989	3,301	1.3	403.5	403.5	403.6	0.1	
K	15,555	1,100	2,164	1.9	404.8	404.8	404.9	0.1	
L	18,985	115	565	3.2	412.6	412.6	412.7	0.1	
M	19,535	61	375	4.8	413.8	413.8	413.8	0.0	
N	20,655	86	351	3.7	417.8	417.8	417.8	0.0	
O	21,215	95	404	3.0	419.1	419.1	419.1	0.0	
P	22,440	37	242	4.0	425.3	425.3	425.3	0.0	
Q	22,915	33	165	5.3	426.7	426.7	426.7	0.0	
R	23,137	35	156	5.6	427.7	427.7	427.7	0.0	
S	23,569	22	102	8.6	431.2	431.2	431.3	0.1	
T	24,213	220	350	2.5	435.4	435.4	435.5	0.1	
U	24,983	140	229	3.8	440.8	440.8	440.9	0.1	

¹Feet above confluence with Bluegrass Creek

TABLE 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

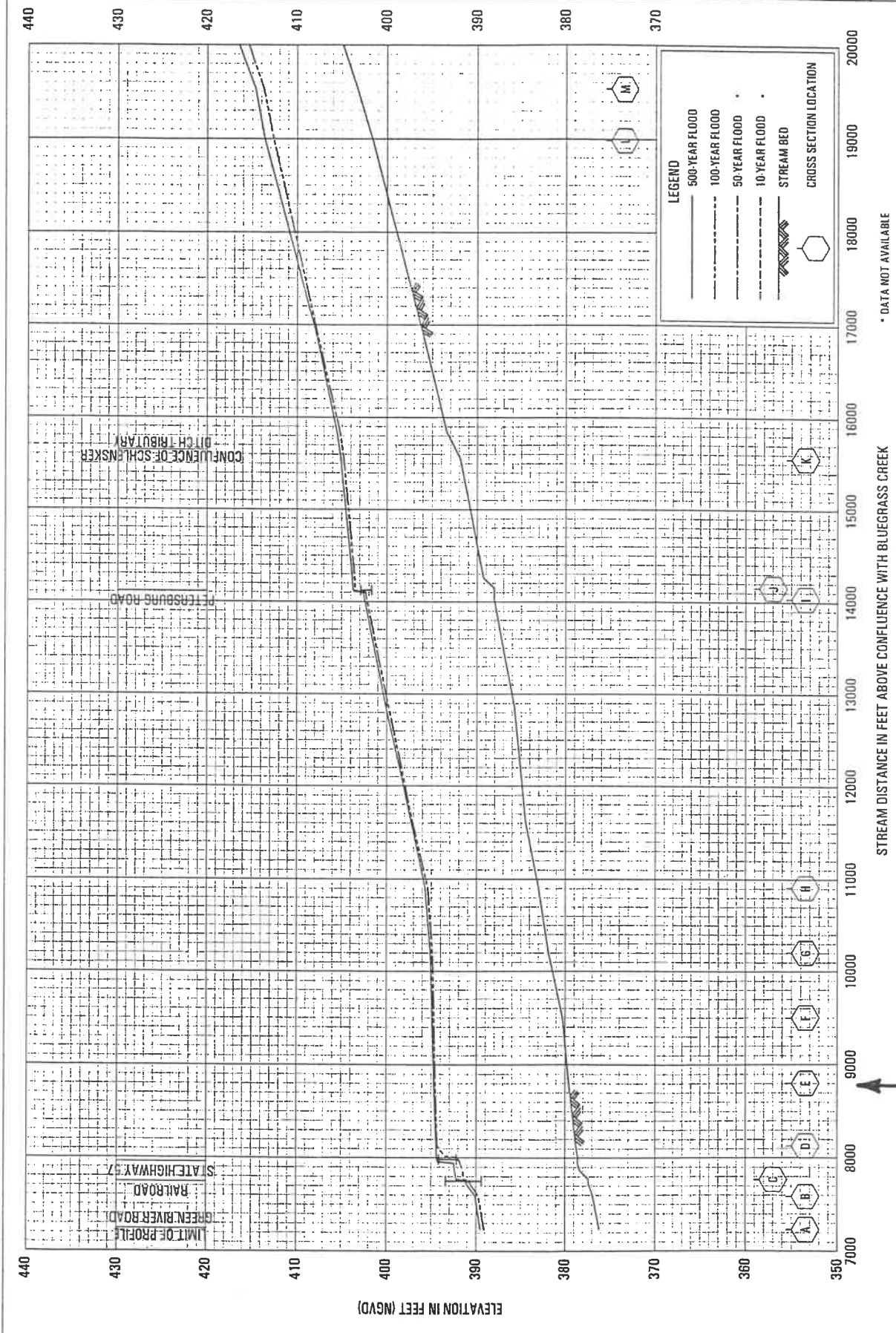
**VANDERBURGH COUNTY, IN
AND INCORPORATED AREAS**

FLOODWAY DATA

SCHLENSKER DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY
VANDERBURGH COUNTY, IN
AND INCORPORATED AREAS

FLOOD PROFILES
SCHLENSKER DITCH



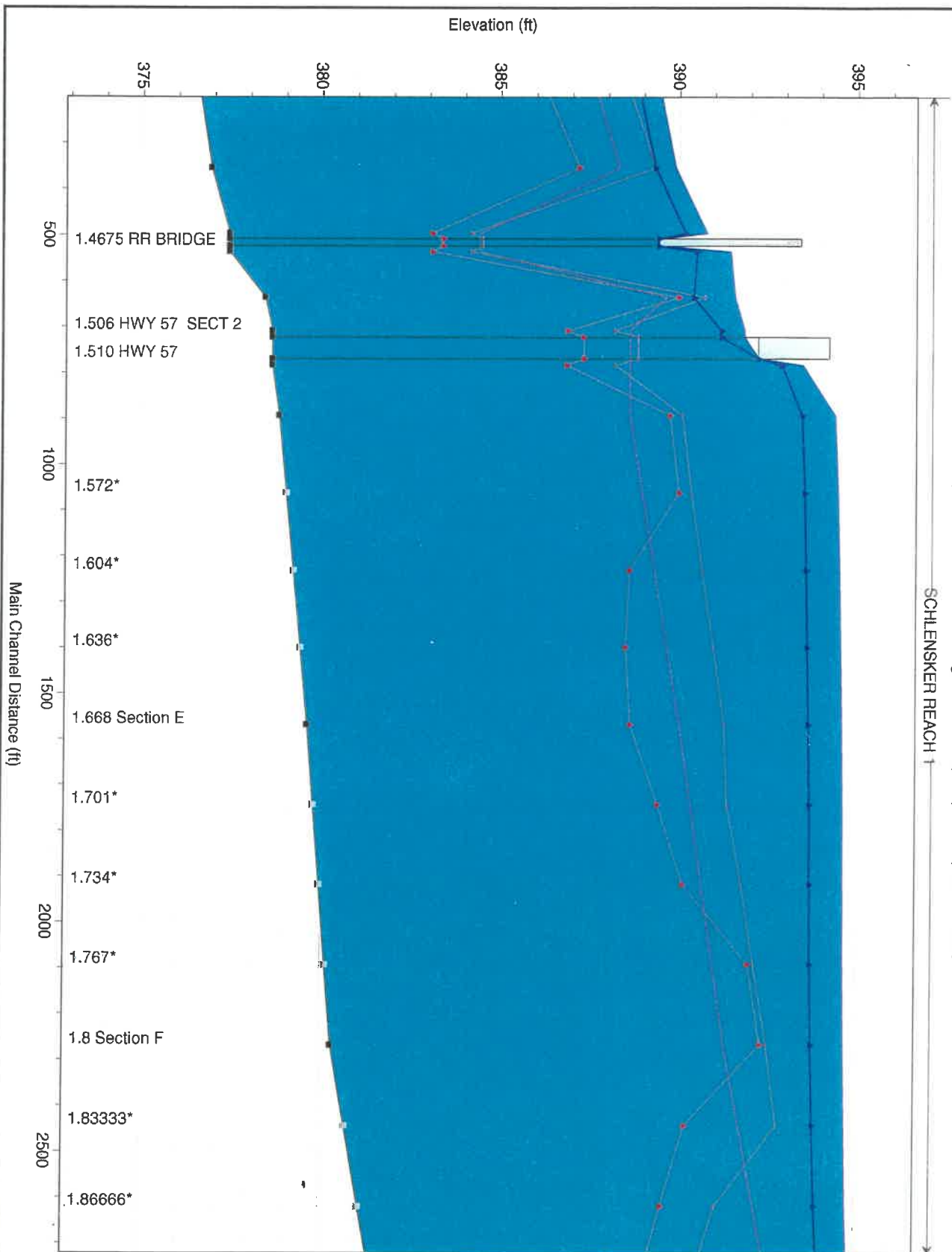
HEC-RAS Plan: 25Year_Rev01 River: SCHLENSKER Reach: REACH 1 (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Wldth (ft)	Froude # Chl
REACH 1	2.202	100-Yr	4925.00	384.50	397.11	396.63	397.22	0.001752	4.08	2520.40	1850.50	0.25
REACH 1	2.202	25-Yr	3650.00	384.50	396.85	395.02	396.95	0.001688	3.92	2030.13	1806.06	0.25
REACH 1	2.066666	100-Yr	4925.00	383.00	395.65	395.35	395.78	0.002291	4.50	2398.04	2038.52	0.29
REACH 1	2.066666	25-Yr	3650.00	383.00	395.38	393.48	395.54	0.002423	4.52	1853.46	2017.55	0.30
REACH 1	1.93333	100-Yr	4925.00	381.90	394.87	389.67	394.91	0.000482	2.50	3691.31	1759.07	0.14
REACH 1	1.93333	25-Yr	3650.00	381.90	394.09	388.37	394.18	0.000826	3.10	2347.48	1700.76	0.18
REACH 1	1.8	100-Yr	5300.00	380.30	394.66	392.49	394.67	0.000233	1.72	5083.92	1764.52	0.09
REACH 1	1.8	25-Yr	3950.00	380.30	393.74	392.31	393.76	0.000362	2.01	3540.56	1593.69	0.12
REACH 1	1.668	100-Yr	5300.00	379.60	394.58	391.27	394.60	0.000174	1.68	4316.90	3115.94	0.09
REACH 1	1.668	25-Yr	3950.00	379.60	393.63	388.63	393.65	0.000196	1.68	3455.97	3060.64	0.09
REACH 1	1.54	100-Yr	5590.00	378.80	394.36	390.07	394.44	0.000407	2.35	2563.23	2336.01	0.13
REACH 1	1.54	25-Yr	4175.00	378.80	393.43	389.72	393.49	0.000381	2.12	2190.50	2311.82	0.13
REACH 1	1.516	100-Yr	5590.00	378.60	393.45	388.18	394.15	0.002942	6.72	831.98	2317.75	0.37
REACH 1	1.516	25-Yr	4175.00	378.60	392.85	386.82	393.29	0.002004	5.33	783.54	2305.26	0.30
REACH 1	1.510		Bridge									
REACH 1	1.506	100-Yr	5590.00	378.60	391.81	388.16	392.80	0.005234	7.99	699.94	2202.97	0.48
REACH 1	1.506	25-Yr	4175.00	378.60	391.16	386.85	391.80	0.003793	6.45	647.09	2142.59	0.40
REACH 1	1.49	100-Yr	5590.00	378.40	391.53	390.70	392.24	0.006590	7.48	892.00	1267.33	0.51
REACH 1	1.49	25-Yr	4175.00	378.40	390.38	389.96	391.30	0.010075	8.17	604.29	1048.80	0.61
REACH 1	1.470	100-Yr	5590.00	377.40	391.42	384.14	391.85	0.001389	5.21	1073.45	250.00	0.26
REACH 1	1.470	25-Yr	4175.00	377.40	390.47	383.06	390.75	0.001014	4.22	990.37	250.00	0.22
REACH 1	1.4675		Bridge									
REACH 1	1.465	100-Yr	5590.00	377.40	390.75	384.14	391.22	0.001385	5.51	1014.86	250.00	0.29
REACH 1	1.465	25-Yr	4175.00	377.40	390.14	383.06	390.43	0.000926	4.34	961.21	250.00	0.23
REACH 1	1.437	100-Yr	5590.00	376.90	389.85	389.31	390.74	0.005781	8.58	878.27	1524.64	0.53

'F'
'E'

Geom: 25yr Event - XS data unchanged Flow: 25, 100, 100FW, 500 Yr Flows

SCHLENSKER REACH



Legend	
WS 100-Yr	— (solid blue line)
WS 25-Yr	- - - (dotted red line)
Crit 100-Yr	▲ (red triangle)
Crit 25-Yr	▲ (red triangle)
Ground	— (solid black line)
LOB	— (dashed black line)
ROB	— (dashed black line)

5540 Schlensker Ditch Vanderburgh County, IN Plan: 25 Year Event Jan 2004. 1/19/2004 1:59:16 PM

Geom: 25yr Event - XS data unchanged Flow: 25, 100, 100FW, 500 Yr Flows
 River = SCHLENSKER Reach = REACH 1 RS = 1.668 Section E

