Thomas Graham Associates, Inc.
Engineers • Surveyors

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July 27, 2015

? please provide a copy of the ODOT hydrology approval

STORM WATER DETENTION BASIN CALCULATIONS
Liberty Kroger
North Basin

The basin is designed as a Storm Water & Water Quality Basin

The drainage area for this basin includes the area East of Kyles Station that currently drains North to State Route 4 = 34.4 Ac (see attached Pages 1 & 2).

28.3 Ac	New Kroger & Retail	(Detained)
4.5 Ac	Midwest Switch Gear	(Detained) (Page 16)
1.6 Ac	Residential	(Pass Thru) (Page 17)
Total 34.4 Ac		

Kyles Pre CN Calculations: (Page 18)

21.7 Ac	Crops Good	78	1692.6
3.6 Ac	Open Fair	69	248.4
3.0 Ac	Brush Fair	56	168.0
28.3 Ac			2112/28.3 = 74.63
			Use 75

The Proposed development:
New Kroger, Retail, and Midwest Switch Gear (32.8 Ac)
4.8 Ac open space = CN = 75
28 Ac @ 85% development
CN = .85 (98) + .15 (75) = 95
CN total = 95 (28 Ac) + 75 (4.8 Ac) = 92
32.8 Ac

? 28 ac = Kroger Development
15% = 4.2 acres
32.8 - 28 = 4.8 → however Midwest Gear is not open space
- should us 95 for post... (?? much different)

Q1pre = 2.0 Ac/Ft (Page 3)
Q1post = 4.98 Ac/Ft (Page 5)

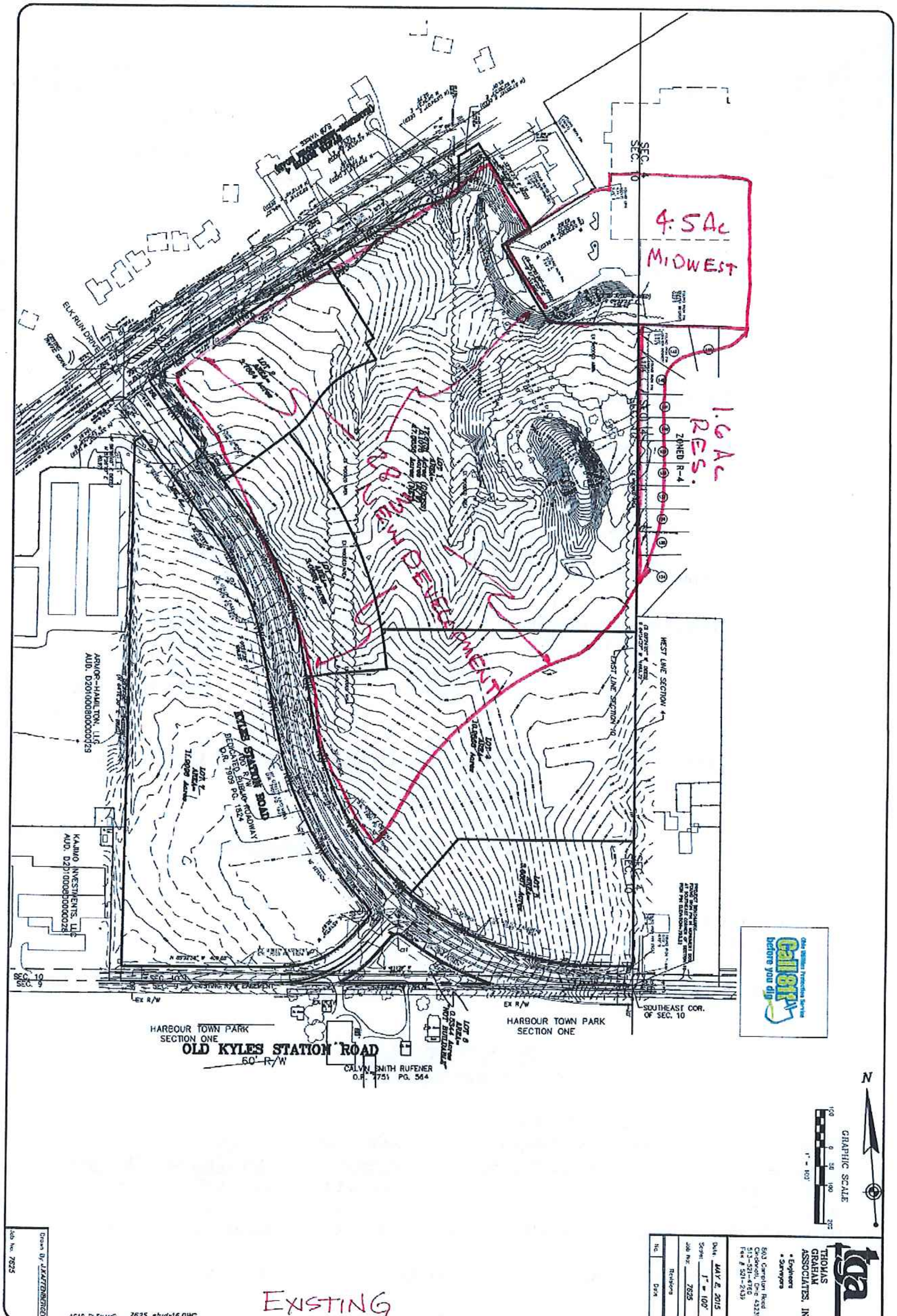
4.98 – 2.0 = 149% use 25 yr @ CYS
2.0

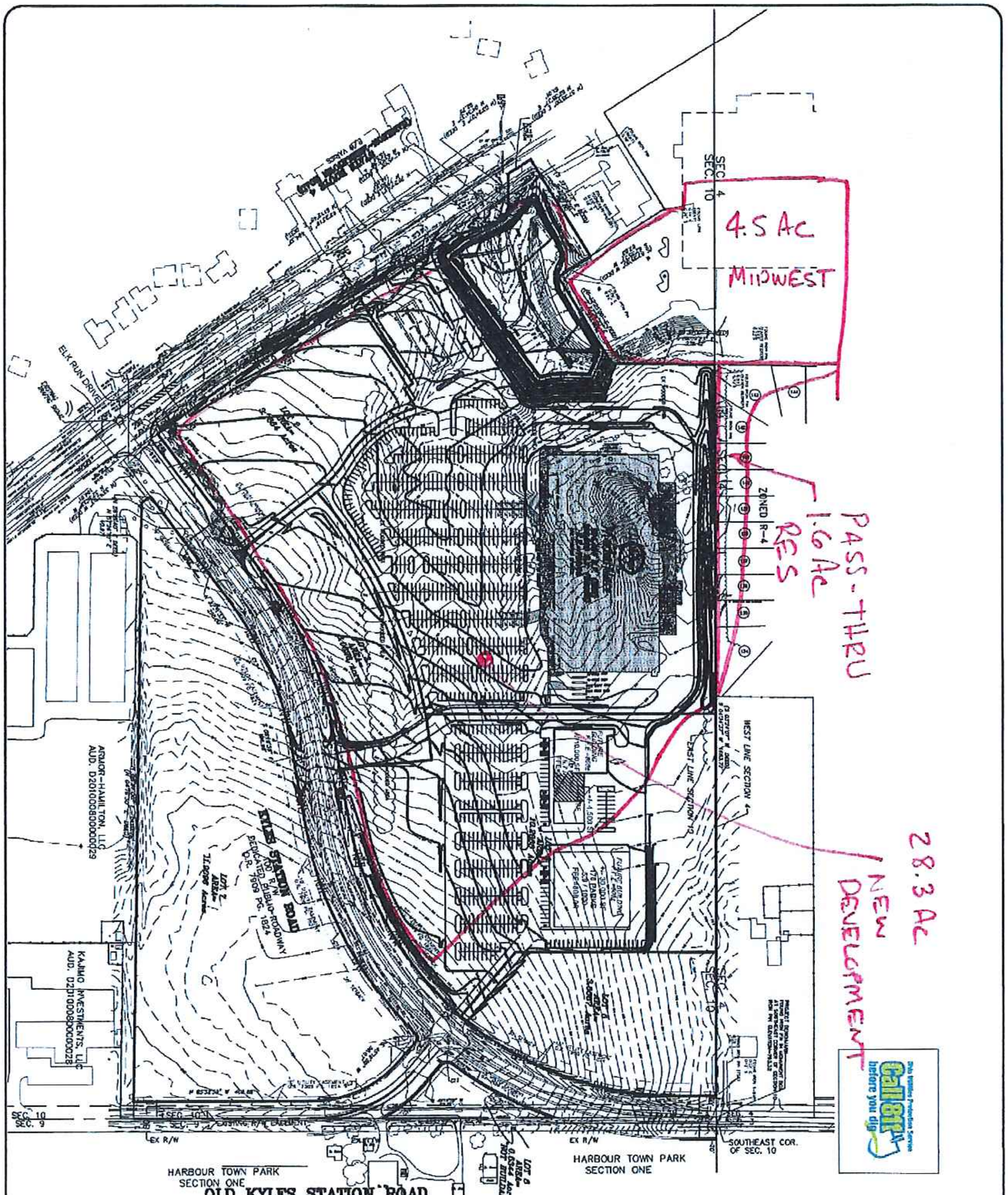
PEAK FLOW TABLE
Predevelopment

Residential Pass Thru (Page 7)	Pre-Development Kroger & Midwest Detained (Page 6)	Allowable Release	(Page 9) Out of Basin	Elevation
25 yr 5.48 CFS	1 yr 25.66 CFS	31.14 CFS	30.39 CFS	773.3
50 yr 6.34 CFS	25 yr 86.39 CFS	92.73 CFS	41.86 CFS	773.6
100 yr 7.20 CFS	50 yr 101.41 CFS	108.61 CFS	60.30 CFS	773.9

WQV = .75 in. (.8) 31 Ac/12 in/ft x 43560 Ft^2/Ac = 67,500 CF WQV

? appears to be double counted w/ detention volume


4.5Ac
MIDWEST
1.6Ac
RES.
ZONED R-4
28 NEW DEVELOPMENT
ELK RUN DRIVE
KYLES STATION ROAD
WEST LINE SECTION 4
EAST LINE SECTION 10
ARWOO-HAMILTON, LLC
AUD. D2010080000029
KAIMO INVESTMENTS, LLC
AUD. D2010080000028
SEC. 10
SEC. 9
SEC. 4
EX R/W
HARBOUR TOWN PARK
SECTION ONE
OLD KYLES STATION ROAD
60' R/W
CALVIN SMITH RUFENER
O.R. 7751 PG. 564
SOUTHEAST COR. OF SEC. 10
Call 811 before you dig
N
GRAPHIC SCALE
1" = 100'
THOMAS GRAHAM ASSOCIATES, INC.
• Engineers
• Surveyors
Date: MAY 8, 2015
Scale: 1" = 100'
Job No.: 7625
Revisions
Drawn By: J.KATENBERGER
Job No. 7625
ACAD FILENAME: 7625_study16.DWG
EXISTING



ELK RUN DRIVE
ARMOR-HAMILTON, LLC
AUD. D201000800000229
KYLES STATION ROAD
KAJIMO INVESTMENTS, LLC
AUD. D20100080000228
SEC. 10
SEC. 9
EX R/W
HARBOUR TOWN PARK
SECTION ONE
OLD KYLES STATION ROAD
60' R/W
CALVIN SMITH RUFENER
O.R. 7751 PG. 564
SOUTHEAST COR. OF SEC. 10
WEST LINE SECTION 4
EAST LINE SECTION 10
ZONED R-4
SEC. 4
SEC. 10
4.5 Ac
MIDWEST
PASS-THRU
1.6 Ac
RES
28.3 Ac
NEW DEVELOPMENT
Call 811 before you dig
GRAPHIC SCALE
1" = 100'
N
THOMAS GRAHAM ASSOCIATES, INC.
• Engineers
• Surveyors
Date: MAY 8, 2015
Scale: 1" = 100'
Job No.: 7625
Drawn By: J.KAFFENBERGER
Job No. 7625
ACAD FILENAME: 7625_study16.DWG
PROPOSED

New Kroger & Retail
Ex Midwest Switch Gear

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.6400 in
Rain Dir = C:\Haestad\PROJECTS\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = C:\Haestad\PROJECTS\
HYG File - ID = - SUBAREA 10 Pre 1
Tc = .2768 hrs
Drainage Area = 32.800 acres Runoff CN= 75

==========
Computational Time Increment = .03691 hrs
Computed Peak Time = 12.0687 hrs
Computed Peak Flow = 26.13 cfs

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 12.1000 hrs
Peak Flow, Interpolated Output = 25.66 cfs
WARNING: The difference between calculated peak flow
and interpolated peak flow is greater than 1.50%
==========

DRAINAGE AREA

ID:SUBAREA 10
CN = 75
Area = 32.800 acres
S = 3.3333 in
0.2S = .6667 in

Cumulative Runoff

.7338 in
2.006 ac-ft

HYG Volume... 2.006 ac-ft (area under HYG curve)

***** SCS UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc = .27680 hrs (ID: SUBAREA 10)
Computational Incr, Tm = .03691 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 134.26 cfs
Unit peak time Tp = .18454 hrs
Unit receding limb, Tr = .73814 hrs
Total unit time, Tb = .92268 hrs

Residential
Pass thru

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.6400 in
Rain Dir = C:\Haestad\PROJECTS\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = C:\Haestad\PROJECTS\
HYG File - ID = - SUBAREA 20 Pre 1
Tc = .2000 hrs
Drainage Area = 1.600 acres Runoff CN= 79

==========
Computational Time Increment = .02667 hrs
Computed Peak Time = 12.0267 hrs
Computed Peak Flow = 1.92 cfs

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 12.0500 hrs
Peak Flow, Interpolated Output = 1.89 cfs
WARNING: The difference between calculated peak flow
and interpolated peak flow is greater than 1.50%
==========

DRAINAGE AREA

ID:SUBAREA 20
CN = 79
Area = 1.600 acres
S = 2.6582 in
0.2S = .5316 in

Cumulative Runoff

.9326 in
.124 ac-ft

HYG Volume... .124 ac-ft (area under HYG curve)

***** SCS UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc = .20000 hrs (ID: SUBAREA 20)
Computational Incr, Tm = .02667 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 9.06 cfs
Unit peak time Tp = .13333 hrs
Unit receding limb, Tr = .53333 hrs
Total unit time, Tb = .66667 hrs

New Kroger & Retail
Ex Midwest Switch Gear

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 1 year storm
Duration = 24.0000 hrs Rain Depth = 2.6400 in
Rain Dir = C:\Haestad\PROJECTS\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = C:\Haestad\PROJECTS\
HYG File - ID = - SUBAREA 10 Dev 1
Tc = .1500 hrs
Drainage Area = 32.800 acres Runoff CN= 92

==========
Computational Time Increment = .02000 hrs
Computed Peak Time = 11.9600 hrs
Computed Peak Flow = 82.37 cfs

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 11.9500 hrs
Peak Flow, Interpolated Output = 81.37 cfs
==========

DRAINAGE AREA

ID:SUBAREA 10
CN = 92
Area = 32.800 acres
S = .8696 in
0.2S = .1739 in

Cumulative Runoff

1.8232 in
217078 cu.ft

HYG Volume... 217076 cu.ft (area under HYG curve) 4.98 AcFt

***** SCS UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc = .15000 hrs (ID: SUBAREA 10)
Computational Incr, Tm = .02000 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 247.76 cfs
Unit peak time Tp = .10000 hrs
Unit receding limb, Tr = .40000 hrs
Total unit time, Tb = .50000 hrs

MASTER DESIGN STORM SUMMARY

Network Storm Collection: oxford

Return Event	Total Depth in	Rainfall Type	RNF ID
Pre 1	2.6400	Synthetic Curve	TypeII 24hr
Pre 2	2.8800	Synthetic Curve	TypeII 24hr
Pre 5	3.6000	Synthetic Curve	TypeII 24hr
Pre 10	4.0800	Synthetic Curve	TypeII 24hr
Pre 25	4.8000	Synthetic Curve	TypeII 24hr
Pre 50	5.2800	Synthetic Curve	TypeII 24hr
Pre100	5.7600	Synthetic Curve	TypeII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
*OUT 10	JCT	1	2.130		12.1000	27.24		
*OUT 10	JCT	2	2.561		12.0500	33.55		
*OUT 10	JCT	5	3.972		12.0500	54.05		
*OUT 10	JCT	10	4.990		12.0500	68.71		
*OUT 10	JCT	25	6.605		12.0500	91.70		
*OUT 10	JCT	50	7.726		12.0500	107.53		
*OUT 10	JCT	100	8.876		12.0500	123.64		
SUBAREA 10	AREA	1	2.006		12.1000	25.66		
SUBAREA 10	AREA	2	2.414		12.1000	31.39		
SUBAREA 10	AREA	5	3.753		12.0500	50.70		
SUBAREA 10	AREA	10	4.720		12.0500	64.58		
SUBAREA 10	AREA	25	6.254		12.0500	86.39		
SUBAREA 10	AREA	50	7.320		12.0500	101.41		
SUBAREA 10	AREA	100	8.414		12.0500	116.72		

Total Incl Residential

Kroger + Midwest

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
SUBAREA 20	AREA	1	.124		12.0500	1.89		
SUBAREA 20	AREA	2	.147		12.0000	2.24		
SUBAREA 20	AREA	5	.219		12.0000	3.41		
SUBAREA 20	AREA	10	.271		12.0000	4.22		
SUBAREA 20	AREA	25	.351		12.0000	5.48		
SUBAREA 20	AREA	50	.406		12.0000	6.34		
SUBAREA 20	AREA	100	.462		12.0000	7.20		

Residential

MASTER DESIGN STORM SUMMARY

Network Storm Collection: oxford

Return Event	Total Depth in	Rainfall Type	RNF ID
Dev 1	2.6400	Synthetic Curve	TypeII 24hr
Dev 2	2.8800	Synthetic Curve	TypeII 24hr
Dev 5	3.6000	Synthetic Curve	TypeII 24hr
Dev 10	4.0800	Synthetic Curve	TypeII 24hr
Dev 25	4.8000	Synthetic Curve	TypeII 24hr
Dev 50	5.2800	Synthetic Curve	TypeII 24hr
Dev100	5.7600	Synthetic Curve	TypeII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID		Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
*OUT 10		JCT	1	222493		12.9000	5.70		
*OUT 10		JCT	2	250238		12.6500	7.75		
*OUT 10		JCT	5	334896		12.4000	15.50		
*OUT 10		JCT	10	392175		12.3500	21.51		
*OUT 10		JCT	25	478928		12.3000	30.41		
*OUT 10		JCT	50	537167		12.2500	41.86		
*OUT 10		JCT	100	595649		12.2000	60.30		
POND 10	IN	POND	1	222495		11.9500	82.96		
POND 10	IN	POND	2	250240		11.9500	92.98		
POND 10	IN	POND	5	334899		11.9500	123.09		
POND 10	IN	POND	10	392177		11.9500	143.13		
POND 10	IN	POND	25	478930		11.9500	173.10		
POND 10	IN	POND	50	537169		11.9500	193.02		
POND 10	IN	POND	100	595651		11.9500	212.88		

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol cu.ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage cu.ft
POND 10	OUT POND	1	222493		12.9000	5.70	771.53	130272
POND 10	OUT POND	2	250238		12.6500	7.75	771.72	143689
POND 10	OUT POND	5	334896		12.4000	15.50	772.32	185828
POND 10	OUT POND	10	392175		12.3500	21.51	772.72	214539
POND 10	OUT POND	25	478928		12.3000	30.41	773.30	257950
POND 10	OUT POND	50	537167		12.2500	41.86	773.64	284902
POND 10	OUT POND	100	595649		12.2000	60.30	773.92	307227
SUBAREA 10	AREA	1	217076		11.9500	81.37		
SUBAREA 10	AREA	2	243840		11.9500	91.06		
SUBAREA 10	AREA	5	325345		11.9500	120.11		
SUBAREA 10	AREA	10	380390		11.9500	139.40		
SUBAREA 10	AREA	25	463646		11.9500	168.21		
SUBAREA 10	AREA	50	519481		11.9500	187.33		
SUBAREA 10	AREA	100	575510		11.9500	206.39		
SUBAREA 20	AREA	1	5419		12.0500	1.89		
SUBAREA 20	AREA	2	6401		12.0000	2.24		
SUBAREA 20	AREA	5	9553		12.0000	3.41		
SUBAREA 20	AREA	10	11788		12.0000	4.22		
SUBAREA 20	AREA	25	15284		12.0000	5.48		
SUBAREA 20	AREA	50	17689		12.0000	6.34		
SUBAREA 20	AREA	100	20140		12.0000	7.20		

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 4.8000 in
Rain Dir = C:\Haestad\PROJECTS\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = C:\Haestad\PROJECTS\
HYG File - ID = - SUBAREA 10 Dev 25
Tc = .1500 hrs
Drainage Area = 32.800 acres Runoff CN= 92

Kroger + Midwest

==========
Computational Time Increment = .02000 hrs
Computed Peak Time = 11.9600 hrs
Computed Peak Flow = 169.73 cfs

Time Increment for HYG File = .0500 hrs
Peak Time, Interpolated Output = 11.9500 hrs
Peak Flow, Interpolated Output = 168.21 cfs
==========

DRAINAGE AREA

ID:SUBAREA 10
CN = 92
Area = 32.800 acres
S = .8696 in
0.2S = .1739 in

Cumulative Runoff

3.8941 in
463648 cu.ft

HYG Volume... 463646 cu.ft (area under HYG curve)

***** SCS UNIT HYDROGRAPH PARAMETERS *****

Time Concentration, Tc = .15000 hrs (ID: SUBAREA 10)
Computational Incr, Tm = .02000 hrs = 0.20000 Tp

Unit Hyd. Shape Factor = 483.432 (37.46% under rising limb)
K = 483.43/645.333, K = .7491 (also, K = 2/(1+(Tr/Tp))
Receding/Rising, Tr/Tp = 1.6698 (solved from K = .7491)

Unit peak, qp = 247.76 cfs
Unit peak time Tp = .10000 hrs
Unit receding limb, Tr = .40000 hrs
Total unit time, Tb = .50000 hrs

File.... C:\Haestad\PROJECTS\7625_POST_CYS.PPW

Basin Control

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 768.00 ft
Increment = .20 ft
Max. Elev.= 774.00 ft

****
OUTLET CONNECTIVITY
****

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Orifice-Circular	O0	--->	TW	770.500	774.000
Inlet Box	R0	--->	TW	773.300	774.000
Orifice-Circular	O1	--->	TW	768.000	774.000
Weir-Rectangular	W0	--->	TW	773.500	774.000

TW SETUP, DS Channel

File.... C:\Haestad\PROJECTS\7625_POST_CYS.PPW

OUTLET STRUCTURE INPUT DATA

Structure ID = O0
Structure Type = Orifice-Circular

# of Openings = 1
Invert Elev. = 770.50 ft
Diameter = 2.5000 ft - drawings say 2.1 ft
Orifice Coeff. = .610

Structure ID = R0
Structure Type = Inlet Box

# of Openings = 1
Invert Elev. = 773.30 ft windows (4) @ 773.4
Orifice Area = 3.5000 sq.ft
Orifice Coeff. = .600
Weir Length = 8.00 ft - ? per dwg
Weir Coeff. = 3.500
K, Reverse = 1.000
Mannings n = .0000
Kev,Charged Riser = .000
Weir Submergence = No
Orifice H to crest= Yes

Structure ID = O1
Structure Type = Orifice-Circular

# of Openings = 1
Invert Elev. = 768.00 ft ✓
Diameter = .2500 ft ✓
Orifice Coeff. = .610

File.... C:\Haestad\PROJECTS\7625_POST_CYS.PPW

OUTLET STRUCTURE INPUT DATA

Structure ID = W0
Structure Type = Weir-Rectangular

# of Openings = 1
Crest Elev. = 773.50 ft
Weir Length = 12.00 ft
Weir Coeff. = 3.500000

Weir TW effects (Use adjustment equation)

? sidewalk elev (wider than 12')

Structure ID = TW
Structure Type = TW SETUP, DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations= 40
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .00 cfs
Max. Q tolerance = .00 cfs

Name.... POND 10
File.... C:\Haestad\PROJECTS\7625_POST_CYS.PPW

LEVEL POOL ROUTING DATA

HYG Dir = C:\Haestad\PROJECTS\
Inflow HYG file = NONE STORED - POND 10 IN Dev 1
Outflow HYG file = NONE STORED - POND 10 OUT Dev 1

Pond Node Data = POND 10
Pond Volume Data = POND 10
Pond Outlet Data = Outlet 1

Basin Volt Outflow

No Infiltration

INITIAL CONDITIONS

Starting WS Elev = 768.00 ft
Starting Volume = 0 cu.ft
Starting Outflow = .00 cfs
Starting Infiltr. = .00 cfs
Starting Total Qout= .00 cfs
Time Increment = .0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area acres	Infilt. cfs	Q Total cfs	2S/t + O cfs
768.00	.00	0	.0000	.00	.00	.00
768.20	.06	44	.0147	.00	.06	.55
768.40	.13	335	.0565	.00	.13	3.84
768.60	.17	1107	.1253	.00	.17	12.46
768.80	.20	2597	.2213	.00	.20	29.05
769.00	.22	5041	.3444	.00	.22	56.24
769.20	.25	8588	.4734	.00	.25	95.68
769.40	.27	13349	.6228	.00	.27	148.59
769.60	.29	19499	.7928	.00	.29	216.95
769.80	.31	27221	.9832	.00	.31	302.76
770.00	.33	36691	1.1941	.00	.33	408.00
770.20	.35	47348	1.2525	.00	.35	526.44
770.40	.36	58522	1.3125	.00	.36	650.61
770.50	.37	64304	1.3430	.00	.37	714.86
770.60	.43	70220	1.3738	.00	.43	780.65
770.80	.87	82461	1.4365	.00	.87	917.11
771.00	1.72	95255	1.5006	.00	1.72	1060.11
771.20	2.94	108419	1.5213	.00	2.94	1207.60
771.40	4.50	121765	1.5422	.00	4.50	1357.44
771.60	6.40	135288	1.5632	.00	6.40	1509.60

WQV

LEVEL POOL ROUTING DATA

HYG Dir = C:\Haestad\PROJECTS\
Inflow HYG file = NONE STORED - POND 10 IN Dev 1
Outflow HYG file = NONE STORED - POND 10 OUT Dev 1

Pond Node Data = POND 10
Pond Volume Data = POND 10
Pond Outlet Data = Outlet 1

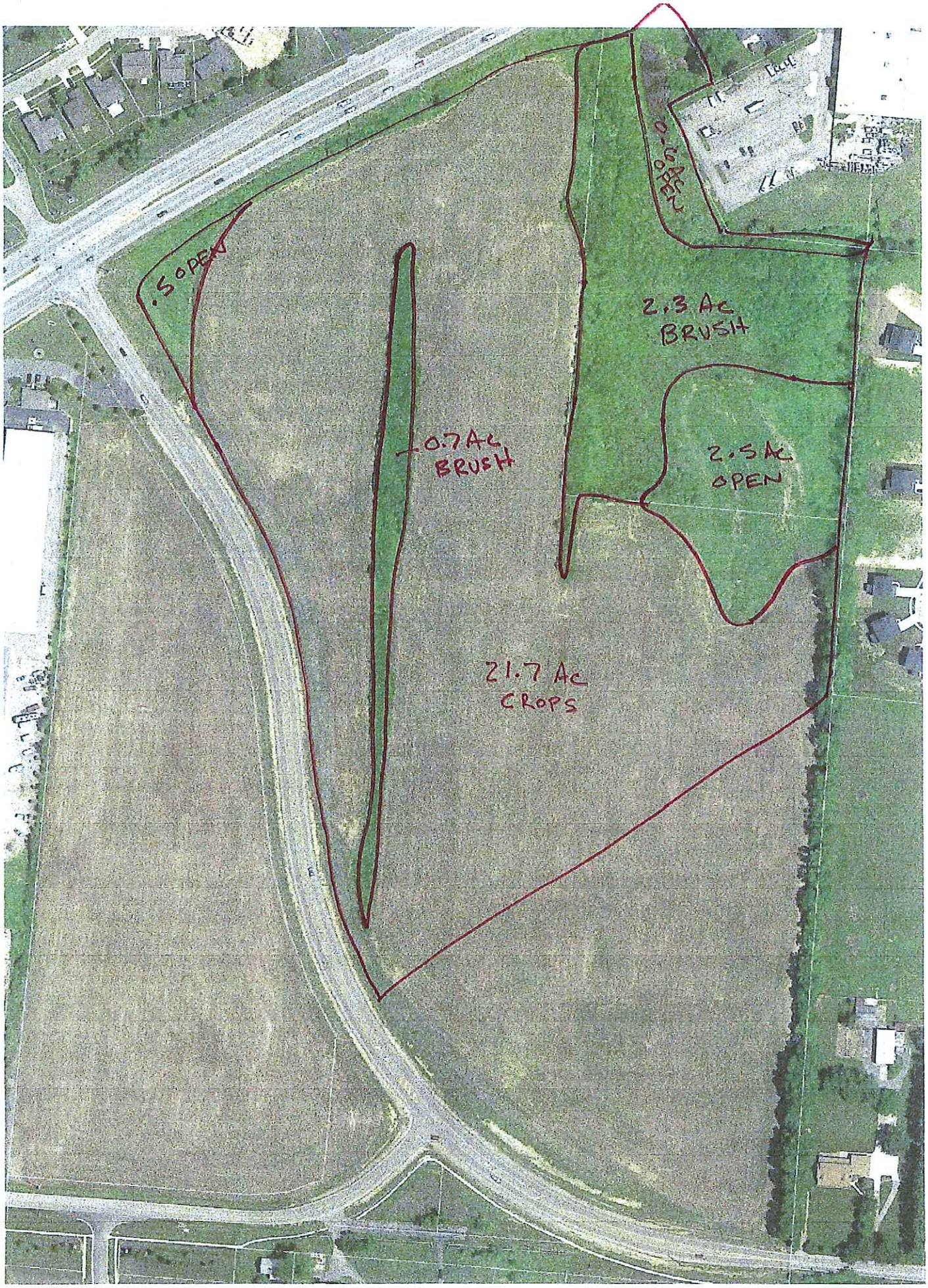
No Infiltration

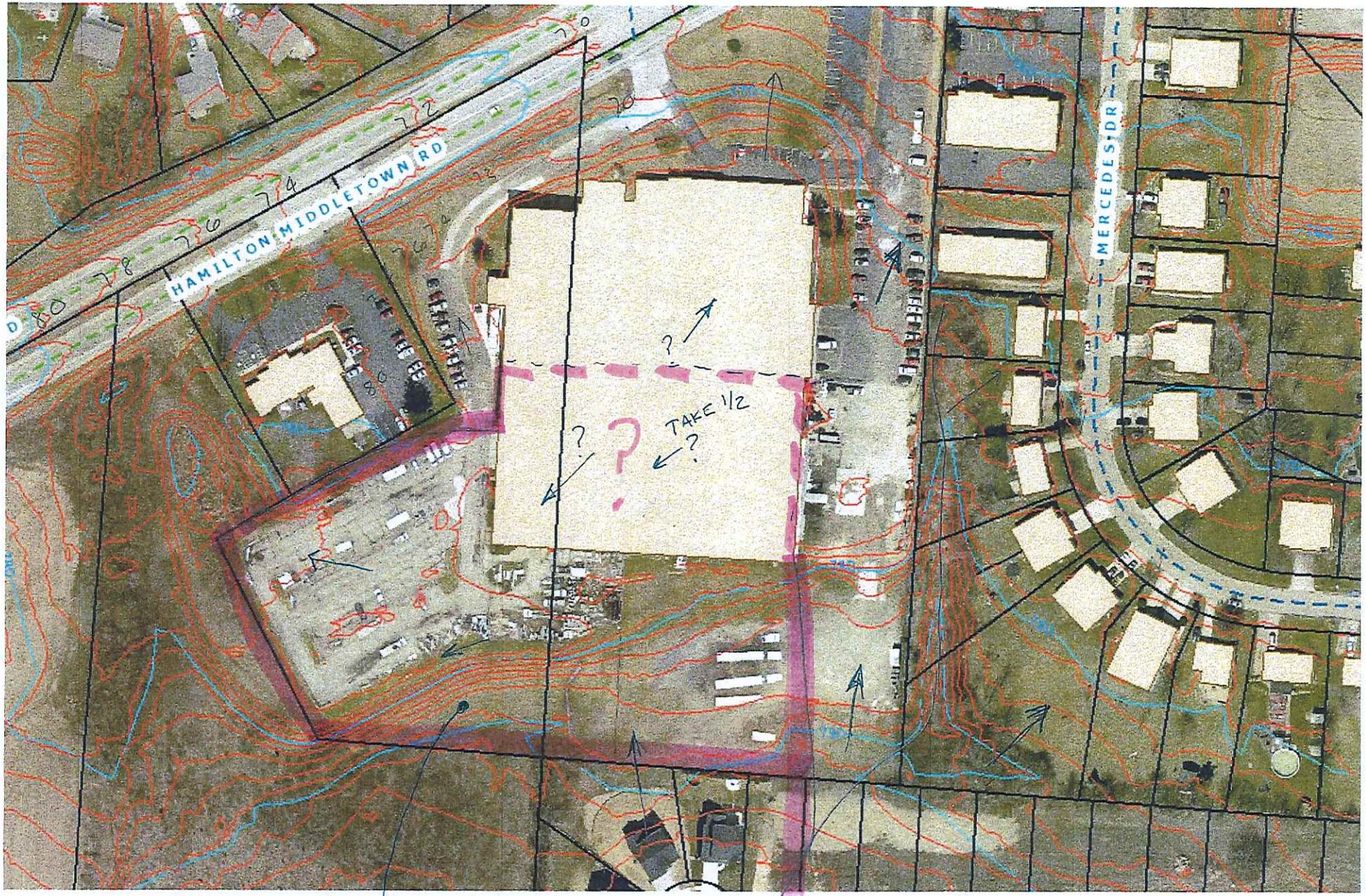
INITIAL CONDITIONS

Starting WS Elev	=	768.00 ft
Starting Volume	=	0 cu.ft
Starting Outflow	=	.00 cfs
Starting Infiltr.	=	.00 cfs
Starting Total Qout	=	.00 cfs
Time Increment	=	.0500 hrs

Elevation ft	Outflow cfs	Storage cu.ft	Area acres	Infilt. cfs	Q Total cfs	2S/t + O cfs
771.80	8.59	149000	1.5844	.00	8.59	1664.14
772.00	11.04	162896	1.6057	.00	11.04	1821.00
772.20	13.70	176989	1.6294	.00	13.70	1980.25
772.40	16.60	191290	1.6534	.00	16.60	2142.05
772.60	19.63	205796	1.6775	.00	19.63	2306.25
772.80	22.78	220517	1.7018	.00	22.78	2472.97
773.00	27.39	235451	1.7263	.00	27.39	2643.50
773.20	29.46	250598	1.7509	.00	29.46	2813.89
773.30	30.45	258250	1.7633	.00	30.45	2899.90
773.40	32.29	265961	1.7758	.00	32.29	2987.42
773.50	34.84	273722	1.7882	.00	34.84	3076.19
773.60	39.16	281536	1.8007	.00	39.16	3167.34
773.80	51.76	297335	1.8259	.00	51.76	3355.49
774.00	65.56	313354	1.8513	.00	65.56	3547.26

7 elevation ob sidewalk


.5 OPEN
0.5 OPEN
2.3 Ac
BRUSH
2.5 Ac
OPEN
±0.7 Ac
BRUSH
21.7 Ac
CROPS



6

w/ 1/2 Building = 195,500SF / = 4.5 Ac

A

68,030 SF 1.6 Ac

B