

# THE CITY OF NAPOLEON

BUILDING & ZONING DEPARTMENT

255 W. RIVERVIEW

(419)592-4010

Zoning Permit

Permit Number: ZP2009-13

Page 1 of 1

Printed: 5/20/2009

ADDRESS:

**1600 Glenwood**

**Applicant**

Name: Steve Kauffman  
Address: 116 Phesant Ln.

Approval Date: 5/20/2009  
419-445-1769

**Owners**

Name: Steve Kauffman  
Address: 116 Phesant Ln.  
Archbold, OH 43502

Phone: 419-445-1769

**Contractors**

**Fees and Receipts:**

Number	Description	Amount
FEE2009-221	Zoning	\$50.00
<b>Total Fees:</b>		<b>\$50.00</b>
RCPT2009-191		\$50.00
<b>Total Receipts:</b>		<b>\$50.00</b>

APPLICANTS SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

REMINDER: YOU MUST CALL (419)592-4010 FOR AN INSPECTION

**SCANNED**

12-23-09



**CITY OF NAPOLEON, OHIO  
STORMWATER ABATEMENT CREDIT APPLICATION**

SERVICE ADDRESS: <u>600</u>	STREET NAME <u>Menwood Ave</u>	ACCOUNT NUMBER: <u>35.11970.1</u>
STREET NUMBER		
SERVICE CLASS: <input type="checkbox"/> RESIDENTIAL <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL		DATE <u>05.30.09</u>

ARE YOU THE OWNER:  YES  NO IF NO, COMPLETE PROPERTY OWNER & TENANT INFORMATION BELOW  
IF YES, COMPLETE PROPERTY OWNER INFORMATION BELOW

Tenant	Property Owner
NAME: (LAST, FIRST, MIDDLE INITIAL)	NAME: (LAST, FIRST, MIDDLE INITIAL) <u>LAST</u> <u>Steven H Kauffman</u>
ADDRESS: (IF DIFFERENT FROM SERVICE ADDRESS)	ADDRESS: <u>116 Pheasant Ln</u>
	<u>Archbold OH 43502</u>
CITY, STATE, ZIP:	CITY, STATE, ZIP:
HOME PHONE:	HOME PHONE: <u>419 445 1769</u>
WORK PHONE:	WORK PHONE: <u>Same</u>

<p>ARE YOU APPLYING FOR A COMMERCIAL/ INDUSTRIAL CREDIT (RETENTION &amp; DETENTION) OR ARE YOU CHALLENGING THE E.R.U. CALCULATION FOR THIS ACCOUNT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (IF YES, PLEASE COMPLETE THIS BLOCK)</p> <p>Total Area of Property/Lot: <u>127,300</u> s.f. <u>25,460</u></p> <p>Impervious Area: <u>117,920</u> s.f. <u>23,584</u></p> <p>(ATTACH DRAINAGE &amp; DETENTION CALCULATIONS)</p>	<p>ARE YOU APPLYING FOR RESIDENTIAL MULTIPLE LEVEL UNIT CREDIT? <input type="checkbox"/> YES <input type="checkbox"/> NO (IF YES, PLEASE COMPLETE THIS BLOCK)</p> <p>MULTI-LEVEL BUILDING* <input type="checkbox"/> YES <input type="checkbox"/> NO BUILDING USE: <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL</p> <p>* Multi-level residential units where there are separate residents on multiple levels are eligible for up to 50% credit. * Multi-level single family residents are <b>NOT</b> eligible.</p>
---	---

If applying for a multiple electric meter credit, please provide details in the "Additional Information" section below.

Additional Information: \_\_\_\_\_

Signature  APPLICANT Date 5/29/09

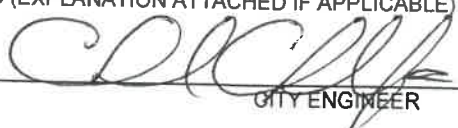
**FOR CITY USE ONLY**

E.R.U. ~~39.2~~ 7.8  
 Credit\* 80 % 6.2  
 E.R.U. Credit: ~~31.4~~ (If zero, see explanation below.)  
 Net Billable E.R.U. ~~7.8~~ 1.6

REVISED 06.05.09  
 ONLY CONSTRUCTING  
 1/5 BUILDINGS AT  
 THIS TIME  
 C.E.L.

APPROVED  
 DENIED (EXPLANATION ATTACHED IF APPLICABLE)

EFFECTIVE DATE: 06/01/2009

 CITY ENGINEER Date 06/01/09

\*\*RETURN COMPLETED APPLICATION TO ENGINEERING DEPARTMENT\*\*



CITY OF NAPOLEON, OHIO  
STORMWATER ABATEMENT CREDIT APPLICATION

SERVICE ADDRESS: 600 Menwood Ave ACCOUNT NUMBER: 35.11970.1  
 STREET NUMBER STREET NAME  
 SERVICE CLASS:  RESIDENTIAL  COMMERCIAL  INDUSTRIAL DATE 05/30/09

ARE YOU THE OWNER:  YES  NO IF NO, COMPLETE PROPERTY OWNER & TENANT INFORMATION BELOW  
 IF YES, COMPLETE PROPERTY OWNER INFORMATION BELOW

Tenant		Property Owner	
NAME: (LAST, FIRST, MIDDLE INITIAL)		NAME: (LAST, FIRST, MIDDLE INITIAL) LAST	<u>Steven H. Kauffman</u>
ADDRESS: (IF DIFFERENT FROM SERVICE ADDRESS)		ADDRESS:	<u>116 Pheasant Ln</u>
CITY, STATE, ZIP:		CITY, STATE, ZIP:	<u>Archbold OH 43502</u>
HOME PHONE:	WORK PHONE:	HOME PHONE:	WORK PHONE:
		<u>419 445 1769</u>	<u>Same</u>

ARE YOU APPLYING FOR A COMMERCIAL/ INDUSTRIAL CREDIT (RETENTION & DETENTION) OR ARE YOU CHALLENGING THE E.R.U. CALCULATION FOR THIS ACCOUNT?  YES  NO (IF YES, PLEASE COMPLETE THIS BLOCK)

Total Area of Property/Lot: 127,300 s.f.  
 Impervious Area: 117,920 s.f.  
 (ATTACH DRAINAGE & DETENTION CALCULATIONS)

ARE YOU APPLYING FOR RESIDENTIAL MULTIPLE LEVEL UNIT CREDIT?  YES  NO (IF YES, PLEASE COMPLETE THIS BLOCK)

MULTI-LEVEL BUILDING\*  YES  NO  
 BUILDING USE:  RESIDENTIAL  COMMERCIAL

\* Multi-level residential units where there are separate residents on multiple levels are eligible for up to 50% credit.  
 \* Multi-level single family residents are NOT eligible.

If applying for a multiple electric meter credit, please provide details in the "Additional Information" section below

Additional Information: \_\_\_\_\_

Signature [Signature] APPLICANT

Date 5/29/09

FOR CITY USE ONLY

E.R.U. 39.2  
 Credit\* 80 %  
 E.R.U. Credit: 31.4 (If zero, see explanation below.)  
 Net Billable E.R.U. 7.8

APPROVED  
 DENIED (EXPLANATION ATTACHED IF APPLICABLE)

EFFECTIVE DATE: 06/01/2009

[Signature]  
 CITY ENGINEER

Date 06/01/09

\*\*RETURN COMPLETED APPLICATION TO ENGINEERING DEPARTMENT\*\*



①

U-LOCK STORAGE, INC.

4/15/19

O.K.

CAL 04.15.19

PROPOSED DETENTION AREA

GROSS AREA -  $380' \times 335' = 127,300 \text{ SF} = 2.92 \text{ A.}$

BUILDING AREA -  $30' \times 300' \times 5 \text{ UNITS} = 45,000 \text{ SF} = 1.03 \text{ A}$

DRIVEWAY AREA -  $(360' \times 327') + (20' \times 10') - 45,000 \text{ SF}$   
 $= 72,920 \text{ SF} = 1.67 \text{ A.}$

GRASS AREA -  $2.92 \text{ A.} - 1.03 \text{ A.} - 1.67 \text{ A.} = .22 \text{ A.}$

DESIGN FOR 2 YEAR STORM (24 HR. STORM)

$i = 2.60 \text{ in/hr. (20 MIN.) TABLE OH-1, TR-55 OHIO}$

$C_{\text{ROOF}} = .90$   $C_{\text{GRASS}} = .20$   $C_{\text{GRAVEL}} = .50$

$C_{\text{AVG.}} = \frac{\text{Building } (1.03 \text{ A.} \times .90) + \text{Driveway } (1.67 \text{ A.} \times .50) + (.22 \text{ A.} \times .20)}{2.92}$

$C_{\text{AVG.}} = .62$

PRE-DEVELOPMENT "C" = .20

POST-DEVELOPMENT "C" = .62

$Q_{2A} = .20 \times 2.60 \text{ in/hr.} \times 2.92 \text{ A.} = 1.52 \text{ C.F.S.}$

$Q_{2B} = .62 \times 2.60 \text{ in/hr.} \times 2.92 \text{ A.} = 4.71 \text{ C.F.S.}$

$\frac{(Q_{2B} - Q_{2A})}{Q_{2A}} = \frac{4.71 - 1.52}{1.52} = 2.10 = 210\%$





(2)

CRITICAL STORM (FROM TABLE PAGE 19 OF NAPOLE  
ENGINEERING DEPT. RULES & REGULATIONS)  
USE 25 YEAR STORM FREQUENCY (24 HR. STORM)

$$\text{ALLOWABLE RUNOFF} = CIA = .20 \times 2.60 \text{ in/hr.} \times 2.92 \\ = 1.52 \text{ C.F.S.}$$

$$\text{FOR 25 YEAR STORM } i = 4.5 \text{ in/hr. (20 MIN.)}$$

THE GRADE WILL BE SLOPED WHERE 2.38 A.  
OF PROPERTY WILL GO INTO THE EXISTING POND  
AT REAR & .54 A. WILL GO INTO DITCH AT  
FRONT OF PROPERTY. THE ONLY OUTLET FROM  
THE POND THAT THE OWNER COULD FIND WAS  
AN EMERGENCY SPILLWAY AT THE NORTHEAST  
CORNER. THE EXISTING POND (6.2 A.) WOULD ONLY  
RAISE 1 INCH IF ALL THE WATER WAS DIRECTED  
TOWARD IT DURING A 25 YEAR STORM. IT  
APPEARS THAT THE ONLY OTHER GROUND THAT MAY  
DRAIN TOWARD THE POND IS THE JEFFERY MILLER  
PROPERTY TO THE SOUTH (5.0 A.).

0.0895'  
≈ 1"



**Determination of Design Detention Volume**

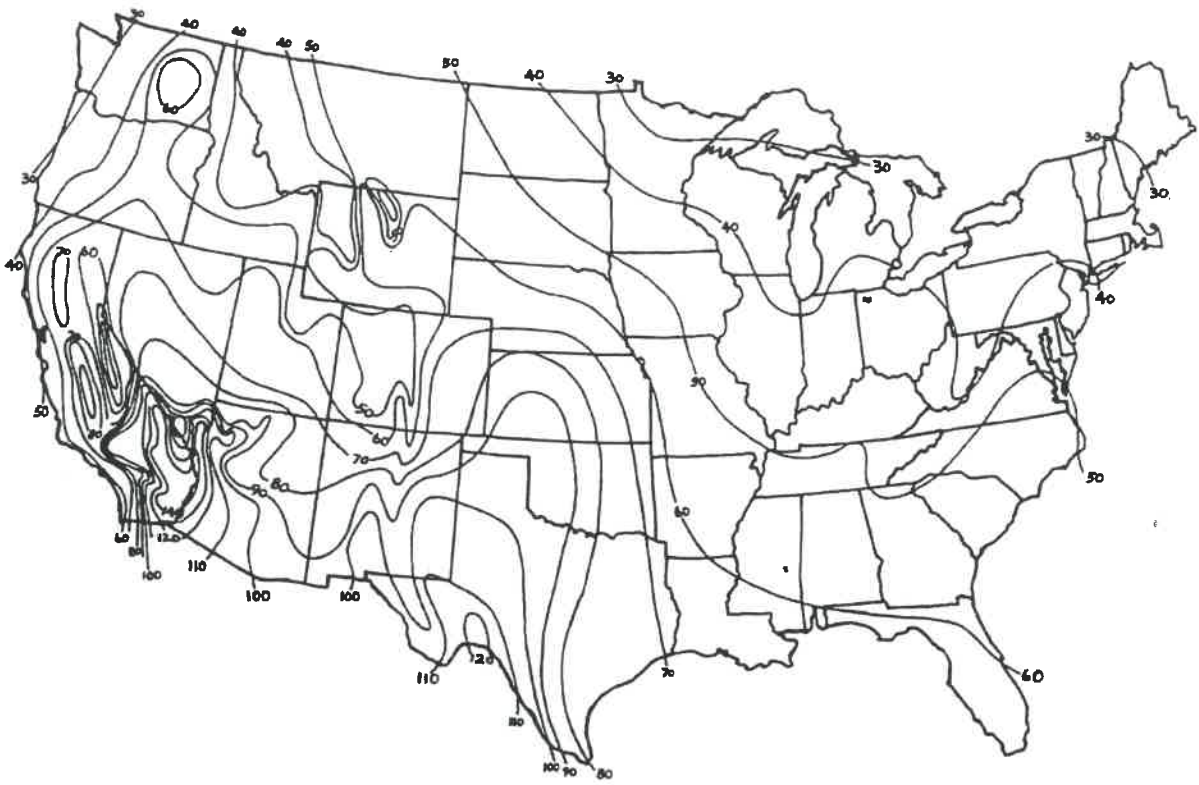
Data:

- 1. Gross Area (Sq. Ft.) 127300 sq. ft.
- 2. Pavement Area (Sq. Ft.) 0 sq. ft.
- 3. Building Area (Sq. Ft.) 0 sq. ft.
- 4. Other Impervious Areas (Sq. Ft.) 0 sq. ft.
- 5. Total Impervious Area (Sq. Ft.) 0 sq. ft. (Runoff Co.) 0.9 0 sq. ft.
- 6. Total Other Impervious Area (Sq. Ft.) 0 sq. ft. (Runoff Co.) 0.75 0 sq. ft.
- 7. Net Pervious Area (Sq. Ft.) 127300 sq. ft. (Runoff Co.) 0.62 78926 sq. ft.
- 8. Weighted Runoff coefficient 0.62
- 9. Weighted Runoff coefficient x Area 1.81
- 10. Quantity of Runoff (Qallow.) 1.52 c.f.s.
- 11. Maximum Flow (Qmax.) 0 c.f.s.  
(Determined by Assumed Max. Head)

Time of Concentration (tc)	Rainfall Intensity (in/hr.)	Weighted Runoff coefficient per Acre	Runoff Quantity (Qin)	Runoff Quantity (Qout)	Qin - Qout	(Qin-Qout) x tc x 60 (cu. ft.)
20.0	4.50	1.81	8.15	0.00	8.15	9784
30.0	3.60	1.81	6.52	0.00	6.52	11741
40.0	3.00	1.81	5.44	0.00	5.44	13046
50.0	2.60	1.81	4.71	0.00	4.71	14133
60.0	2.30	1.81	4.17	0.00	4.17	15002
70.0	2.10	1.81	3.80	0.00	3.80	15981
80.0	1.90	1.81	3.44	0.00	3.44	16524
90.0	1.70	1.81	3.08	0.00	3.08	16633
100.0	1.60	1.81	2.90	0.00	2.90	17394
110.0	1.50	1.81	2.72	0.00	2.72	17938
120.0	1.40	1.81	2.54	0.00	2.54	18264
130.0	1.30	1.81	2.36	0.00	2.36	18373

DESIGN  
DETENTION  
VOLUME





ANNUAL EVAPORATION (INCHES)

≈ 42" / YEAR (NORTHWEST OHIO)

