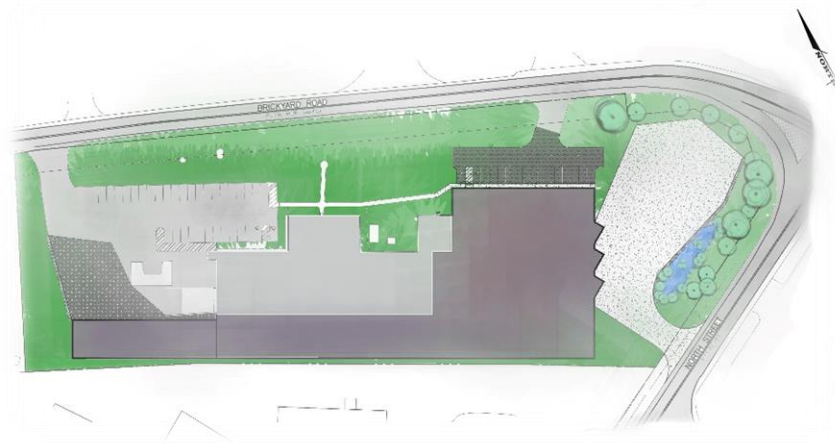


PRELIMINARY ENGINEERS REPORT  
FOR  
ARTISAN MEATS BUILDING  
EXPANSION



2540 Brickyard Road  
Town of Canandaigua  
Ontario County, State of New York  
November 11, 2022

Prepared By:

Prepared For:



Artisan Meats  
2640 Brickyard Road  
Canandaigua NY 14424



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## **1.0 Introduction**

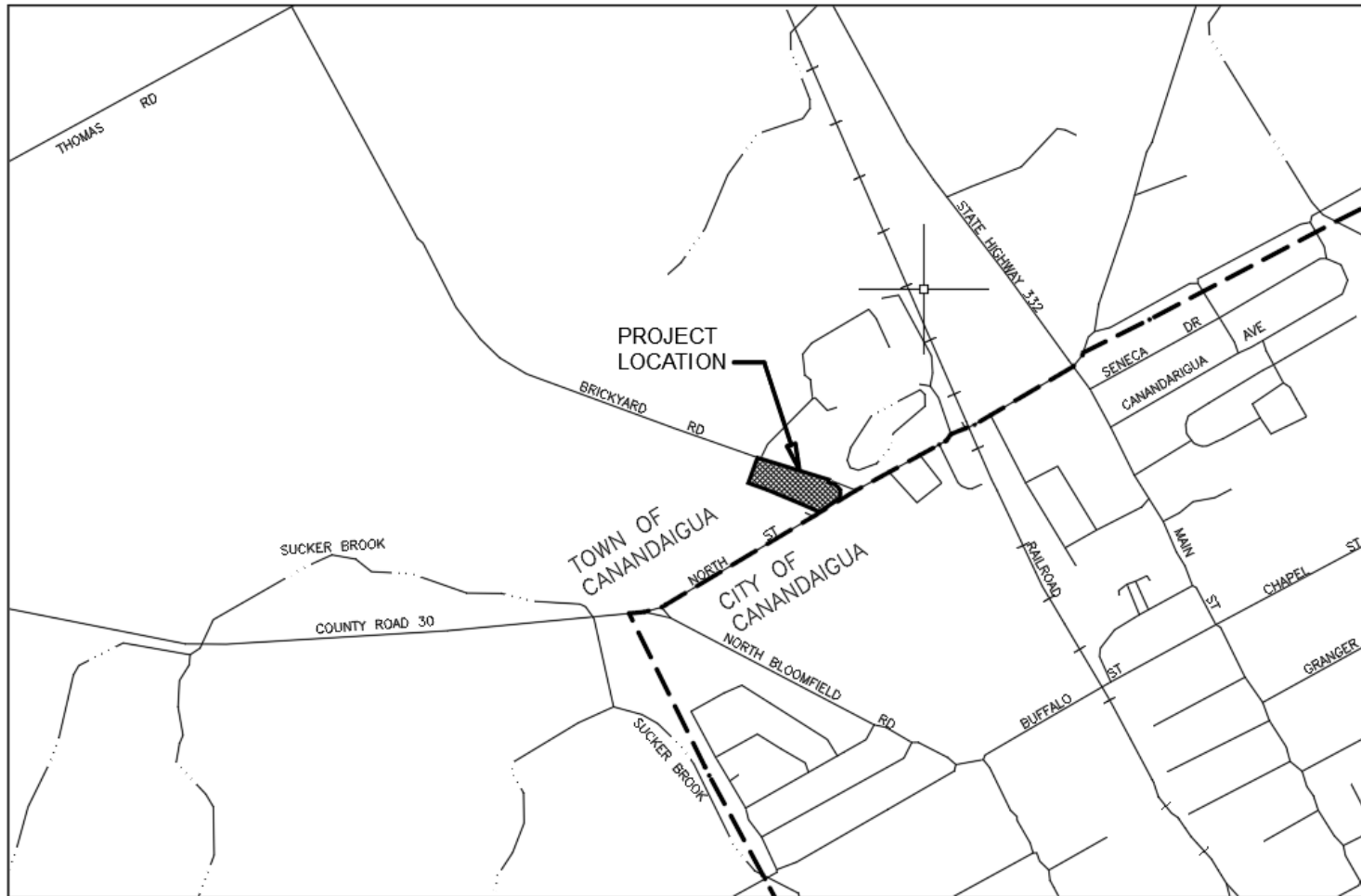
Artisan Meats is proposing to expand their operation at 2640 Brickyard Road to accommodate their growing business. A 4,675 ± sf, 2-story addition to the east and south of the existing building is proposed, as well as a 6,950 ± sf, 1-story addition at the southwest corner of the 2-story addition. 16 additional parking spaces will be constructed on the front (north) side of the addition and a truck access point from North Street will be added. This project will not only provide additional production area, but also additional loading docks and improved vehicular circulation.

In addition, there will be improvements to the sanitary and storm system on site. A bioretention area will be added.

The site is located on the northwest corner of Brickyard Road (a Town Road) and North Street (a City Street) and is zoned I – Industrial. Two area variances were identified and approved by the Zoning Board of Appeals on July 19<sup>th</sup>, 2022, to allow a 52-foot setback from the side property line and to allow a 5-foot setback from the rear property line.



November 11, 2022



**FIGURE 1:** Location Map

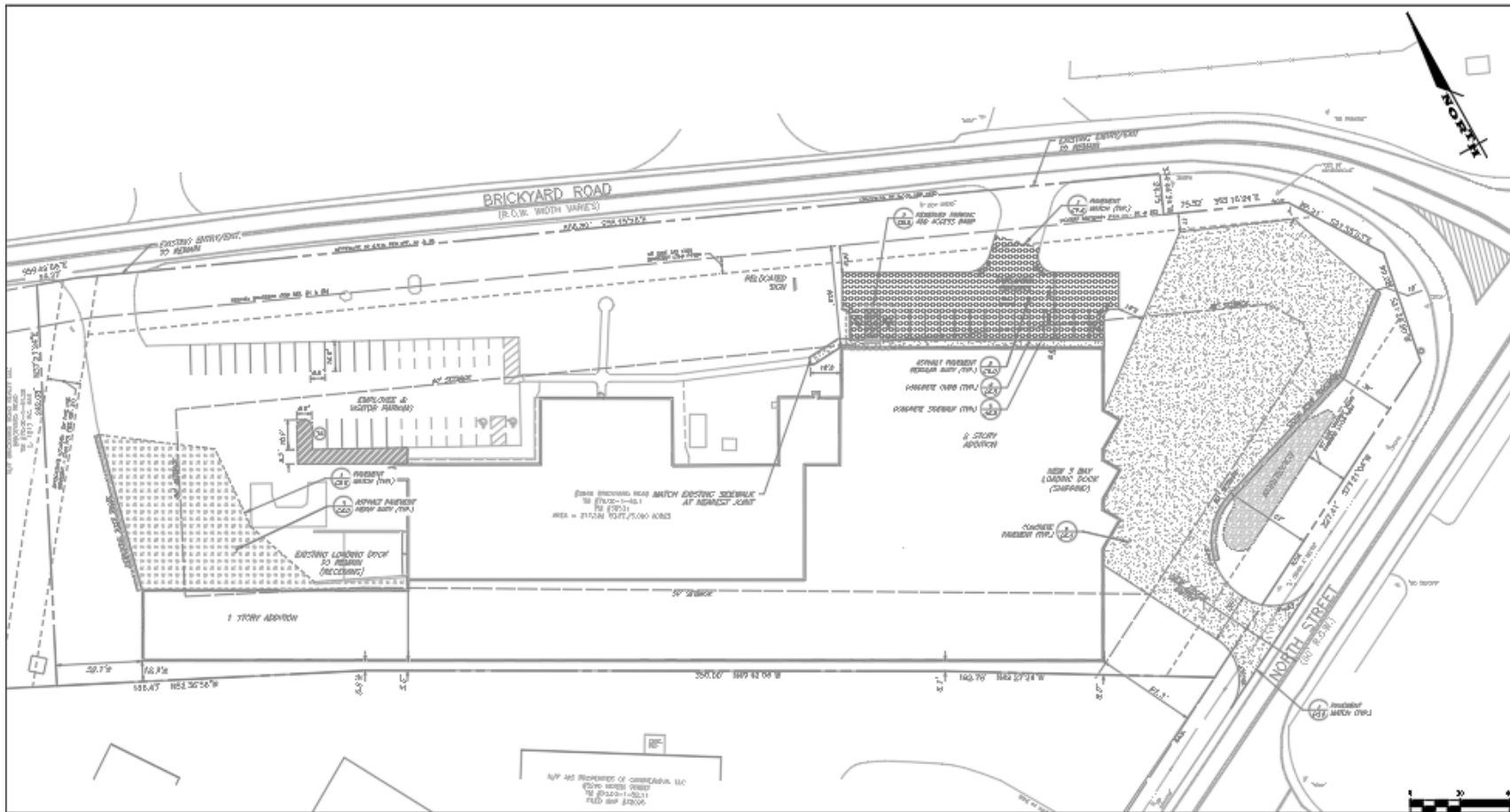


FIGURE 2: Overall Plan (Reduced scale)



## **2.0 Sanitary Sewer System**

The project is located within the Canandaigua Lake Consolidated Sewer District. The existing building is serviced by an existing (private) sanitary sewer manhole and lateral that services the manufacturing portion of the existing building. A pump station and 2-inch forcemain service the office portion of the existing building. Both services connect to the existing 12-inch sanitary sewer main along North Street maintained by the Ontario County Department of Public Works (OCDPW).

The existing private sanitary sewer manhole will be removed and a portion of the existing forcemain will be replaced to accommodate the new building addition. A new sanitary manhole will be installed along the existing lateral, and a new 6" PVC lateral will service the manufacturing portion of the building. The relocated 2-inch forcemain will connect to the existing 2-inch forcemain and utilize the existing pump.

## **3.0 Storm Sewer System**

The existing project site slopes from the northeast to the southwest. The site is developed land that consisted mainly of building and pavement /stone parking areas and qualifies as redevelopment activity classified under chapter 9 of the New York State Stormwater Management Design Manual.

The project will replace 1.90 acres of existing impervious with 2.09 acres of impervious improvements, increasing to 0.19 acres of new impervious.

A Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the entire project and a Notice of Intent (NOI) will be filed with NYSDEC to obtain coverage under the State Pollutant Discharge Elimination System (SPDES) Permit Program. Each section will continue coverage under this permit.

During construction, disturbed areas will be protected by erosion control fencing, check dams, et al in conformance with the Best Management Practices as outlined in the SWPPP. Further discussion, related documents, and calculations for the SWMF and drainage of the site can be found in the Stormwater Pollution Prevention Plan.



## **4.0 Water System**

The existing building is serviced by a 12" water main located on the north side of Brickyard Road. Existing services will be maintained, and no improvements to the water services are proposed.

## **5.0 Lighting**

The existing site is lighted by pole-mounted cobra head area lights. All existing light poles will remain except for one pole that will be replaced with building-mounted lights. Building-mounted lights will be provided at all ingress/egress points to meet code and for egress purposes. All new fixtures will meet the Town's dark sky compliance requirements.



# APPENDIX 1

## STORM PIPE/CULVERT SIZING CALCULATIONS



# MARATHON ENGINEERING

39 Cascade Drive  
Rochester NY 14614  
Tel: 585-458-7770 Fax: 585-458-7776  
www.marathoneng.com

JOB 1374 - Artisan Meats  
SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
CALCULATED BY COLP DATE 11/08/00  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SCALE \_\_\_\_\_

## Storm Pipe Calcs (Rational Method - Conservative)

### Check ST-6-0

$$A = \text{Drainage Area} = 0.4 \text{ ac}$$

$$i = \text{intensity} = 4.91 \text{ in/hr @ 5 min tc (min.) [10 yr]}$$

$$C = \text{runoff coefficient} = \text{Industrial, D soil, 0-2\%} = 0.69$$

$$Q = CIA$$
$$= 0.69 (4.91 \text{ in/hr}) (0.4 \text{ ac})$$
$$Q = 1.35 \text{ cfs @ ST-6-0}$$

check pipe size via Manning EQ

$$12" \text{ pipe @ } 0.5\% = 2.5 \text{ cfs} \quad \checkmark \checkmark$$

### Check ST-5-0

$$A = 0.7 \text{ ac}$$

$$i = 4.91 \text{ in/hr}$$

$$C = 0.69$$

$$Q = CIA = 0.69 (4.91 \text{ in/hr}) (0.7 \text{ ac})$$
$$Q = 2.37 \text{ cfs}$$

check pipe size

$$15" \text{ pipe @ } 0.5\% = 4.6 \text{ cfs} \quad \checkmark \checkmark$$



the USGS regression equations discussed in Section 7.3.3. However, these equations are not widely used because they do not include variables that typically are used to reflect changes in watershed conditions. Thus, methods that provide peak-discharge estimates using readily available input data, such as watershed and design-storm rainfall characteristics, are needed in design. The remainder of this chapter introduces a few of these methods.

**TABLE 7.9** Runoff Coefficients for the Rational Formula versus Hydrologic Soil Group (A, B, C, D) and Slope Range

Land Use	A			B			C			D		
	0-2%	2-6%	6% <sup>+</sup>	0-2%	2-6%	6% <sup>+</sup>	0-2%	2-6%	6% <sup>+</sup>	0-2%	2-6%	6% <sup>+</sup>
Cultivated land	0.08 <sup>a</sup>	0.13	0.16	0.11	0.15	0.21	0.14	0.19	0.26	0.18	0.23	0.31
	0.14 <sup>b</sup>	0.18	0.22	0.16	0.21	0.28	0.20	0.25	0.34	0.24	0.29	0.41
Pasture	0.12	0.20	0.30	0.18	0.28	0.37	0.24	0.34	0.44	0.30	0.40	0.50
	0.15	0.25	0.37	0.23	0.34	0.45	0.30	0.42	0.52	0.37	0.50	0.62
Meadow	0.10	0.16	0.25	0.14	0.22	0.30	0.20	0.28	0.36	0.24	0.30	0.40
	0.14	0.22	0.30	0.20	0.28	0.37	0.26	0.35	0.44	0.30	0.40	0.50
Forest	0.05	0.08	0.11	0.08	0.11	0.14	0.10	0.13	0.16	0.12	0.16	0.20
	0.08	0.11	0.14	0.10	0.14	0.18	0.12	0.16	0.20	0.15	0.20	0.25
Residential lot	0.25	0.28	0.31	0.27	0.30	0.35	0.30	0.33	0.38	0.33	0.36	0.42
size 1/8 acre	0.33	0.37	0.40	0.35	0.39	0.44	0.38	0.42	0.49	0.41	0.45	0.54
Residential lot	0.22	0.26	0.29	0.24	0.29	0.33	0.27	0.31	0.36	0.30	0.34	0.40
size 1/4 acre	0.30	0.34	0.37	0.33	0.37	0.42	0.36	0.40	0.47	0.38	0.42	0.52
Residential lot	0.19	0.23	0.26	0.22	0.26	0.30	0.25	0.29	0.34	0.28	0.32	0.39
size 1/3 acre	0.28	0.32	0.35	0.30	0.35	0.39	0.33	0.38	0.45	0.36	0.40	0.50
Residential lot	0.16	0.20	0.24	0.19	0.23	0.28	0.22	0.27	0.32	0.26	0.30	0.37
size 1/2 acre	0.25	0.29	0.32	0.28	0.32	0.36	0.31	0.35	0.42	0.34	0.38	0.48
Residential lot	0.14	0.19	0.22	0.17	0.21	0.26	0.20	0.25	0.31	0.24	0.29	0.35
size 1 acre	0.22	0.26	0.29	0.24	0.28	0.34	0.28	0.32	0.40	0.31	0.35	0.46
Industrial	0.67	0.68	0.68	0.68	0.68	0.69	0.68	0.69	0.69	0.69	0.69	0.70
	0.85	0.85	0.86	0.85	0.86	0.86	0.86	0.86	0.87	0.86	0.86	0.88
Commercial	0.71	0.71	0.72	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
	0.88	0.88	0.89	0.89	0.89	0.89	0.89	0.89	0.90	0.89	0.89	0.90
Streets	0.70	0.71	0.72	0.71	0.72	0.74	0.72	0.73	0.76	0.73	0.75	0.78
	0.76	0.77	0.79	0.80	0.82	0.84	0.84	0.85	0.89	0.89	0.91	0.95
Open space	0.05	0.10	0.14	0.08	0.13	0.19	0.12	0.17	0.24	0.16	0.21	0.28
	0.11	0.16	0.20	0.14	0.19	0.26	0.18	0.23	0.32	0.22	0.27	0.39
Parking	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87	0.85	0.86	0.87
	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97	0.95	0.96	0.97

<sup>a</sup> Runoff coefficients for storm-recurrence intervals less than 25 years.

<sup>b</sup> Runoff coefficients for storm-recurrence intervals of 25 years or longer.

### 7.6.1 Procedure

The rainfall intensity-duration-frequency (IDF) curve for the return period of the runoff coefficient is determined from the watershed slope and the runoff coefficient. The runoff coefficient is determined from the categories for the watershed slope and the runoff coefficient. The runoff coefficient can lead to multiple values for the same watershed slope. The runoff coefficient would lead to multiple values for the same watershed slope. The runoff coefficient is to plot the watershed slope and the runoff coefficient. The runoff coefficient is then take the watershed slope and the runoff coefficient. The runoff coefficient is drawn with the watershed slope and the runoff coefficient.

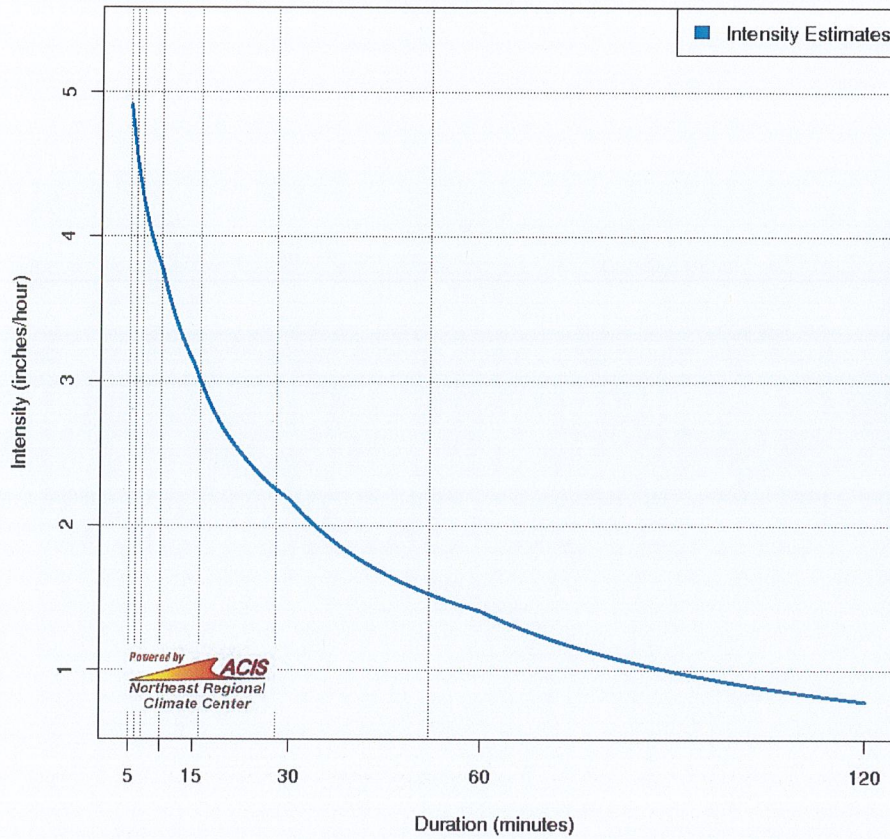
Table 7.9 shows runoff coefficients for various land uses, such as Table 7.9. The runoff coefficient can lead to multiple values for the same watershed slope. The runoff coefficient would lead to multiple values for the same watershed slope. The runoff coefficient is to plot the watershed slope and the runoff coefficient. The runoff coefficient is then take the watershed slope and the runoff coefficient. The runoff coefficient is drawn with the watershed slope and the runoff coefficient.

### Example 7.9

Consider a watershed with an inlet for a slope of 8.6 in./h. The runoff coefficient is 0.69.



Intensity Frequency Duration – 10yr  
(42.902N, -77.303W)



Time (mins)	Intensity (in/hr)
=====	
5	4.91
6*	4.53
7*	4.26
8*	4.06
9*	3.90
10	3.77
11*	3.60
12*	3.45
13*	3.32
14*	3.21
15	3.12
16*	3.00
17*	2.90
18*	2.81
19*	2.72
20*	2.65
21*	2.58
22*	2.52
23*	2.46
24*	2.41
25*	2.37
26*	2.32
27*	2.28
28*	2.25
29*	2.21
30	2.18
31*	2.13
32*	2.08
33*	2.04
34*	2.00
35*	1.96
36*	1.92
37*	1.89
38*	1.85
39*	1.82
40*	1.79
41*	1.76