

COMPREHENSIVE STORMWATER MANAGEMENT PLAN

FOR THE
VILLAGE OF
TRUMANSBURG

Hon. Rordan Hart, Mayor

Village of Trumansburg
56 E Main Street
Trumansburg, New York 14886

October 2025
(rev1 October 2026)
MRB Project No. 2040.23004



The History Center in Tompkins Co. – Dated Circa 1935, Rt 96 & Union St.

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I. EXECUTIVE SUMMARY

The Village of Trumansburg is located between two HUC 12 watersheds west of Cayuga Lake. Boardman Creek-Cayuga Lake, HUC ID 041402011106, and Bolter Creek-Taughannock Creek, HUC ID 041402011105, split the Village drainage from north to south, respectively. The Boardman Creek-Cayuga Lake watershed covers most of the Village. These drainage areas flow from west to east as stormwater flows towards Cayuga Lake.

The Village of Trumansburg has experienced localized flooding in various locations throughout the Village. The localized flooding occurs due to several factors, including areas of undersized stormwater systems, a lack of roadside swales, and some overgrowth at critical culverts that reduces their ability to move runoff throughout the Village to natural drainage pathways. Trumansburg Creek, which is a Class C stream (PWL ID 0705-0071), and Taughannock Creek, which is a Class C (T) stream (PWL ID 0705-0013), are the main natural drainage pathways. Those creeks and existing infrastructure at road crossings (bridges or large box culverts) generally can handle flow throughout the Village and don't experience flooding like the internal storm system of the Village does. These large crossings of Trumansburg and Taughannock Creek were not evaluated as part of this study.

Legislative Policies were also included in this project. The legislative policies are a draft stormwater management ordinance, shown in Appendix A, that will be presented to the Village Board for approval and adapted into the Zoning Ordinance. The new stormwater management ordinance will provide a framework for coordinating maintenance between the Village and privately-owned stormwater infrastructure. In addition to the stormwater management ordinance, this project also includes design criteria for stormwater to establish minimum construction and design standards for new development within the

Village, which can be found in Appendix B – *Trumansburg Development Details and Specifications*.

There are nine areas identified throughout the Village that have a range of improvements depending on available space, existing storm infrastructure, and runoff rates received, along with historical flooding and input from residents. Areas are listed below with priority, proposed improvements, water quality, overall flows, and improvements to the system. While this report is intended to be a Comprehensive Stormwater Plan for the Village, additional areas throughout the village may require evaluation that were not specifically outlined.

Table I.1: Project Areas, Improvements & BMP Practices with Flows

Project/Location	Improvements & BMP Practices	Ex. Flow (cfs)	Pr. Flow (cfs)
East Seneca Road	Stream Daylighting, Increase existing pipe sizes	20.5	94.32
Tamarac Lane	Stream Daylighting, Increase existing pipe sizes	15.98	47.16
Camp Street	Extended Detention Wetland. Alternate Option - Increase existing pipe sizes	3.40	12.86
Pennsylvania St.	Increase existing pipe sizes	0.27	12.99
Propsect St. to E. Seneca Rd.	New Storm Line, Increase existing pipe sizes	2.77	10.2
Washington St to Strowbridge St.	Increase existing pipe sizes	5.96	22.62
Larchmont Drive	Increase existing pipe sizes, New Storm Line	5.09	18.24
Seneca St to Congress St.	New Storm Line, Increase existing pipe sizes	24.81	66.69
Salo Drive	Increase existing driveway culvert size, New Storm Line	1.83	15.99

Note:

- 1) Ex Flow is defined as the limiting hydraulic feature along the drainage route as shown in Appendix C – *Village Overall Drainage Map*.

2) Pr. Flow is defined as proposed improvements to existing features as shown in Appendix C.

To assist the Village with a means to evaluate the project, a Priority Ranking System was evaluated based on Flood Severity, Property Impact, Green Infrastructure and Stormwater Infrastructure. The Village decide to further assess the projects based on Capital Cost or ability to offset any costs with Grant Funding. Table I.2: Summary Table for Project Priority and Estimated Cost is ordered based on the ranking system.

Table I.2: Summary Table for Project Priority & Estimated Cost

Priority	Project/Location	Flood Severity	Property Impact	Green Impact	Stormwater Infrastructure	Total	Estimated Project Cost
1	East Seneca Road	25	20	20	25	90	\$289,000
2	Camp Street	15	20	25	15	75	\$1,179,000
3	Tamarac Lane	20	20	10	20	70	\$296,000
4	Pennsylvania St.	15	20	20	15	70	\$188,000
5	Larchmont Drive	15	20	10	20	65	\$529,000
6	Washington St to Strowbridge St.	20	15	0	15	50	\$385,000
7	Seneca St to Congress St.	15	10	0	20	45	\$223,000
8	Prospect St. to E. Seneca Rd.	10	15	0	15	40	\$461,000
9	Salo Drive	10	10	10	5	35	\$90,000
* Each category is out of 25 points						Total =	\$3,640,000

The points based project priority ranking is based on calculated flows, discussion with Village staff regarding historical storm events, and input received from residents.

- The Flood Severity category is based on the calculated peak flows to a given project area and the inflow to the associated project area. This gives project areas like East Seneca Road the highest point total, with the amount of total flow that makes its way to the southern ROW swale from the subdrainage areas to the south.
- The Property Impact category was awarded points based on the number of properties affected. The Salo Drive Project greatly affects the property at 4 Salo Drive; however, the flooding is just limited to that property, unlike the Tamarac Lane project which impacts multiple properties along the street.

- Green Infrastructure was utilized in the evaluation for construction of vegetation swales, promotion of infiltration, additional storage and reduction in stormwater flows. Points in the Environmental/Green Infrastructure category focused on the projects potential to provide environmental benefits such as an increase in stormwater storage or reduction in discharges. The project's ability to obtain grant funding through current programs such as the Green Infrastructure Grant Program (GIGP) or Non-Point Source Program through the Water Quality Improvement Program were considered.
- Points in the Stormwater Infrastructure category are based on two main factors. First is if the stormwater infrastructure is damaged, blocked with vegetation, aging or undersized. This factor takes into account how damage and vegetation overgrowth in existing stormwater structures can lead to a reduction in capacity. The second factor considered in this category is the location's impact on other surrounding stormwater infrastructure. For example, the Seneca Street to Congress Street stormwater system connects into Strowbridge Street, so improvements to Seneca Street and Congress Street would help alleviate flooding on a wider scale. On the other hand, the Pennsylvania Street project is isolated to just that street, so it received fewer points in this category.

II. PROJECT OBJECTIVES

In 2017 and 2018, the Village completed a Preliminary Drainage Evaluation, which determined that a more detailed evaluation and site review were necessary to identify areas in the Village requiring improvements. The objective of this report is to systematically evaluate and identify solutions to these ongoing drainage issues throughout the Village. A drainage evaluation will identify the major and minor drainage basins and pinpoint opportunities to correct specific drainage issues. This report will provide conceptual design improvements aimed at both increasing the capacity for the existing

stormwater system and adding stormwater infrastructure within the Right-of-Way (ROW) to convey runoff. Increasing capacity within the ROW will allow private properties to convey stormwater runoff to infrastructure within the ROW. While these improvements might not fully alleviate localized flooding experienced on private property (i.e. backyard flooding or ponding), they are intended to provide a cost-effective means to alleviate issues at the 25-year flood event. Additionally, this report seeks to provide the Village with a framework of proposed stormwater policies to address future issues and include current NYS DEC stormwater guidelines. This report will also provide design criteria to identify stormwater management guidelines for construction.

The Village of Trumansburg has experienced numerous flooding events with varying severity and have been identified as being throughout the Village. These flooding events have had impacts on residential properties and have been documented in many locations. Previously, MRB Group conducted a preliminary field investigation walking the village documenting existing stormwater related infrastructure within the highway right-of-way and in some situations, expanded field investigations beyond the highway right-of-way for areas such as Larchmont Drive. These preliminary investigations were performed to document conditions and understand the topography resulting in the flooding events. In follow up to the Preliminary investigation, MRB Group located existing stormwater infrastructure with Global Positioning System (GPS) equipment to locate latitude/longitude as well as elevation.

1. Technical Approach

The stormwater calculations used in this report are the Soil Conservation Services (SCS), Technical Release 55 (TR-55) Manual and the Manning's Equation. The SCS method is used for the peak flows calculated for each of the subdrainage areas. The time of concentration (T_c) calculations methods follow the TR-55 manual with updates via the NYSDEC Stormwater Management Design Manual. Existing and proposed stormwater infrastructure capacity was calculated using Manning's Equation for pipe flow. The roughness coefficient "n" used for Corrugated Metal Pipes, (cmp) is 0.024 and for

proposed Smooth Interior Corrugated Plastic Pipe, (SICPP) used 0.013 in calculations. The pipe 'roughness' coefficients were uniformly used for the evaluations and were not tailored based on documented conditions of the existing infrastructure.

2. Existing Data

Extreme Precipitations Tables were used for rainfall data in this report. Those are provided by the Northeast Regional Climate Center (www.nrcc.cornell.edu). For soils data, the Web Soil Survey developed by the USDA is used. Topography used for drainage areas is from USGS 2-foot contours dated 2022 from both Seneca County and Tompkins County. MRB Group Surveying conducted limited survey for GIS uses for storm infrastructure throughout the village. That data (latitude, longitude and elevation) is shown on the figures in this report and was used to assist with hydraulic evaluations.

FEMA floodplains are included on the overall drainage map along Trumansburg Creek and Taughannock Creek within the village limits.

3. Calculations and Analysis

Programs used in calculations and analysis are Hydraflow Hydrographs Extension. The Hydrographs Extension is used for developing peak flows and stormwater volume required to analyze the effects on the existing stormwater infrastructure and identify proposed improvements. This Extension program is a part of the Autodesk software.

III. EXISTING CONDITIONS

The Boardman Creek-Cayuga Lake watershed covers most of the Village. Boardman Creek merges with Trumansburg Creek at the Seneca Road Bridge at the Seneca and Tompkins County boundary line east of the intersection with Curry Road. The watershed boundary line between these two HUC 12s within the Village starts near the intersection with Hector Street & Halsey Road on the west side of the Village. Moving east, the

boundary line heads south, crossing Pennsylvania Avenue and South Street, and then continuing through the Trumansburg Fairground. A New York State HUC 12 map is located under Appendix D.

Between the two HUC 12 watersheds, there are three main subdrainage basins. These subdrainage basins are mapped in Appendix C.

- The Boardman Creek-Cayuga Lake HUC 12 within the Village of Trumansburg has two main flow directions, south into Trumansburg Creek and north across East Seneca Road. The subdrainage areas that flow north within the Boardman Creek-Cayuga Lake HUC 12 will have an “A” notation, and the subdrainage areas that flow south into Trumansburg Creek will use a “B” notation.
- The Bolter Creek-Taughannock Creek HUC 12 is located along the southern edge of the Village. Subdrainage areas within this HUC 12 flow south or southeast. These subdrainage areas will be labeled with a “C” notation.

A. SUBDRAINAGE AREA A

Subdrainage area A is located within the Boardman Creek-Cayuga Lake HUC 12 and consists of 13 individual subsections, all of which discharge towards the north along East Seneca Road. The majority of the developed land in these subdrainage areas is residential, with farmland to the east of the Village. The 13 subdrainage areas within Area A make up approximately 234.5 acres of land.

- The general area of Subdrainage Area ‘A’ encompasses:
 - o Bradley Street to McLallen Street to Cayuga Street, east passed King Street, then north across properties to East Seneca Road.
 - o Existing stormwater infrastructure in these areas consists of driveway culverts and roadside swales with minimal closed system stormwater infrastructure system (i.e. pipe network).

- The main outlets for this overall drainage area are located along East Seneca Road. There are a few locations where culverts on the south side of East Seneca Road convey runoff towards the north.
- Washington Street, Congress Street & Prospect Street convey runoff along the ROW swale north towards East Seneca Road.

The tables below are the calculated curve numbers, total area, and time of concentration (Tc) used for the Soil Conservation Service (SCS) method calculations to develop peak flows for each of the stormwater rain events.

Table III.1 Subdrainage Area A's Curve Numbers, Total Areas & Tcs

Subdrainage Area A's			
Subdrainage Area	Curve Number	Area (AC)	Tc (Min)
A1	67	34.1	22.7
A2	55	21.9	18.3
A3	77	16.6	19.9
A4	75	61.7	42.1
A5	66	16.8	25.0
A6	56	22.2	30.0
A7	75	6.6	19.4
A8	71	8.4	30.8
A9	72	14.2	25.5
A10	67	15.0	18.6
A11	58	4.6	28.9
A12	59	8.6	18.4
A13	71	3.8	23.9

Table III.2 Subdrainage Area Peak Flows - 'A'

Subdrainage Area Peak Flows - 'A'						
Subdrainage Area	1 Yr Storm (cfs)	5 Yr Storm (cfs)	10 Yr Storm (cfs)	25 Yr Storm (cfs)	50 Yr Storm (cfs)	100 Yr Storm (cfs)
A1	2.31	14.15	23.87	41.88	59.88	82.70
A2	0.04	0.90	3.27	10.11	18.52	30.40
A3	7.00	17.87	24.81	36.91	48.38	62.37
A4	11.75	34.42	49.67	76.22	101.70	133.04
A5	0.80	5.61	9.71	17.54	25.42	35.46
A6	0.05	1.08	3.16	8.74	15.47	25.11
A7	2.18	6.21	8.41	13.43	17.87	23.32
A8	1.06	4.07	6.27	10.21	14.07	18.89
A9	2.47	8.76	13.15	20.91	28.45	37.94
A10	1.12	6.92	11.59	20.16	28.70	39.53
A11	0.02	0.37	0.93	2.27	3.82	5.95
A12	0.04	1.10	2.69	6.25	10.21	15.43
A13	0.56	2.15	3.39	5.32	7.30	9.79

1. East Seneca Road

East Seneca Road is located along the northern boundary of the Village. There are a few culverts conveying stormwater south to north that discharge runoff to East Seneca Road.

- Approximately 300' west of the Prospect Street intersection, there is a 36" cmp cross culvert which outlets runoff from all the drainage areas from A5 to A13.
- There is another 12" Smooth Interior Corrugated Plastic Pipe (SICPP) culvert in front of 64 East Seneca Road that takes part of the runoff from the southern ROW swale north; acting as an overflow within the drainage swale. The southern side swale continues to travel east along East Seneca Road, past King Street, until reaching a low point outside the village limits prior to the intersection with Frontenac Road.

This area has experienced flooding along the southern swale. Portions of the ROW swale have been replaced with stormwater piping that extends across multiple properties. Those sections cause choke points along the drainage pathways. Some existing piping along

East Seneca Road has a number of driveway culverts that are choke points in the road drainage system. These culverts range in size from 15" to 24" with the smaller culverts acting as either a restriction or as a point where stormwater overtops each driveway or surcharges upstream areas.

2. Washington Street to Strowbridge Street

This area conveys runoff from A10 and A7 to East Seneca Road. The streets in this area convey runoff for the residential properties and lack roadside swales. There is an existing stormwater system in place along these streets. Washington Street has a few catch basins with a 4" pvc pipe connecting into an 18" concrete pipe at the intersection, which then uses only a 6" pvc pipe to connect into the Strowbridge Street storm piping.

This is causing a major choke point in the stormwater system. Residents have reported flooding at the catch basins along Washington Street and stormwater surcharging at the catch basin along the south side of Strowbridge Street. This condition of a larger diameter conveying stormwater into a smaller downstream culvert is systematic and results in choke points which is leading to the surcharge issues visible at the intersection with Washington Street.

3. Seneca Street to Congress Street

This area is another residential area that the Village staff has identified in the past as having issues with flooding. While Congress Street improvements were constructed, Seneca Street still has not been constructed. The intent of this project was to add stormwater along Seneca Street and Congress Street to alleviate the flooding on Seneca Street due to the limited stormwater infrastructure within the ROW on Seneca Street. The village should continue to plan to construct the improvements along Seneca Street. As noted earlier, the infrastructure in the ROW on Seneca Street will allow residents to connect onsite private stormwater. However, the topography is relatively flat on Seneca Street near Congress Street and private property improvements may require drainage improvements to convey stormwater to the ROW.

As noted above, Seneca Street has limited stormwater infrastructure within the ROW. The section of stormwater constructed along Congress Street discharges at the northern end of the property at 33 Congress Street into a ditch that collects the rest of the runoff from subdrainage area A8. A 32" by 24" arch pipe then carries flow to the east side of Congress Street, where the ROW swale begins. Runoff then continues north, connecting with the drainage areas surrounding Washington Street and Strowbridge Street before ultimately reaching East Seneca Road.

4. Prospect Street to East Seneca Road

Prospect Street is a residential street, with large, wooded areas just west of the homes. Runoff travels from these wooded areas and enters the existing storm system along the west side of the street. The existing stormwater system located along the west side of Prospect Street handles flow from subdrainage area A6, which has an estimated peak 25-year flow of 8.74 cfs. The system starts at 17 Prospect Street with an end section collecting runoff and conveying flow north. Runoff sheet flows to the ROW swale and is picked up either by end sections or catch basins. The location of this existing system appears to be within the residential properties. On the east side of the street are open swales and driveway culverts, however, this portion of the road doesn't have as large of a drainage area feeding the system as the western side of the road. Several of the houses on the west side of Prospect Street lack roadside swales.

The stormwater system also has varying pipe sizes causing ineffective flow. Undersized section of piping can contribute to surcharge and ineffective flow, causing flooding. Culverts near the northern end of Prospect Street are 24" in size. At the intersection of Prospect Street and East Seneca Road, there is an 8" pipe to convey runoff from the west side into the southern ROW swale. However, a few of the culvert sections along East Seneca Road east of the intersection with Prospect Street are only 15" in size, thus reducing the ability to convey runoff.

B. SUBDRAINAGE AREA B

Subdrainage Area B is also a part of the Boardman Creek-Cayuga Lake HUC 12. Within Area B, there are 19 individual subdrainage areas that all flow towards Trumansburg Creek and its tributaries. These 19 subdrainage areas total 679.1 acres of land.

The general area of Subdrainage Area 'B' encompasses:

- Meadowview Apartments and Compass Mobile Home Park along the northwest side of the village.
- NYS Route 96 Main Street corridor from Town of Covert to Town of Ulysses (west to east).
- On the south side of Trumansburg Creek, the residential areas surrounding Pease Street and Halsey Road along with the Trumansburg Central School District complex on the east side of the Village.
- There are more closed storm sewer systems in this area when compared to Subdrainage Area A. All runoff within this region discharges directly to Trumansburg Creek primarily through storm piping.

The tables below are the calculated curve numbers, total area and time of concentration (T_c) used for the SCS method calculations to develop peak flows for each of the stormwater rain events.

Table III.3 Subdrainage Area B's Curve Numbers, Total Areas & Tcs

Subdrainage Area B's			
Subdrainage Area	Curve Number	Area (AC)	Tc (Min)
B1	44	5.1	14.0
B2	59	15.6	14.1
B3	64	170.4	34.4
B4	66	81.5	56.6
B5	70	24.7	33.4
B6	63	14.2	29.5
B7	50	4.1	51.5
B8	48	19.9	51.0
B9	58	7.0	44.1
B10	67	102.9	40.9
B11	82	75.5	35.3
B12	74	17.8	94.3
B13	67	29.2	37.4
B14	37	6.9	57.0
B15	73	47.7	47.6
B16	55	8.0	79.2
B17	64	35.7	77.1
B18	92	2.1	32.4
B19	76	10.8	28.9

Table III.4 Subdrainage Area Peak Flows - 'B'

Subdrainage Area Peak Flows - 'B'						
Subdrainage Area	1 Yr Storm (cfs)	5 Yr Storm (cfs)	10 Yr Storm (cfs)	25 Yr Storm (cfs)	50 Yr Storm (cfs)	100 Yr Storm (cfs)
B1	0.00	0.01	0.03	0.20	0.98	2.79
B2	0.07	2.25	5.49	12.72	20.54	30.80
B3	4.04	34.98	64.41	123.58	185.70	265.82
B4	2.72	15.84	27.24	49.55	72.62	102.22
B5	2.60	10.87	17.14	28.43	39.55	53.50
B6	0.26	2.91	5.58	11.04	16.81	24.29
B7	0.00	0.03	0.11	0.45	0.98	1.83
B8	0.00	0.08	0.32	1.51	3.57	7.14
B9	0.03	0.47	1.10	2.65	4.45	6.96
B10	4.96	27.37	46.04	81.86	118.18	164.41
B11	34.51	74.14	98.45	139.31	177.28	222.83
B12	1.70	5.14	7.56	11.84	16.00	21.15
B13	1.46	8.22	13.83	24.58	35.44	49.25
B14	0.00	0.00	0.00	0.03	0.09	0.32
B15	6.20	20.39	30.41	48.14	65.34	86.69
B16	0.01	0.21	0.54	1.40	2.48	4.06
B17	0.66	4.38	7.85	14.95	22.54	32.45
B18	2.15	3.58	4.39	5.69	6.84	8.21
B19	3.04	8.39	11.88	17.90	23.66	30.76

1. Salo Drive

This area is located along the north side of Trumansburg Creek near the Village Department of Public Works (DPW) facility and the Trumansburg Farmers Market. The houses along Salo Drive are situated at the bottom of a hill. Stormwater runoff near the Village DPW facility is collected along roadside drainage swales and driveway culverts are used to convey runoff easterly towards Trumansburg Creek.

- Properties at 4 Salo Drive and 2 Salo Drive are located at the bottom of the street. Upstream, a 12" corrugated plastic pipe at 1.8% slope discharges towards the 12"

corrugated metal pipe at a minimal slope of 0.9% slope. This culvert falls in subdrainage area B10.

- The garage located at 4 Salo Drive is at a lower elevation than the ROW swale and culvert, which leads to flooding during significant storm events. The existing driveway culvert capacity is only 1.83 cfs, while the upstream driveway culvert at 6 Salo Drive has a capacity of 4.78 cfs with a 12" cpp at a 1.8% slope.
- Portions of B10 contribute to those driveway culverts along the north side of Salo Drive.

2. Pennsylvania Ave

Pennsylvania Avenue is located on the southwest side of the Village and is generally east of the Trumansburg Golf Course. The street is split between two of the major drainage areas for Trumansburg, area B and area C.

- The portion of Pennsylvania Ave within Subdrainage Area B include homes along the west side of the street from 224 Pennsylvania Ave to the northern intersection with Pease Street.
- Stormwater runoff sheet flows (runoff overland) across backyards from the west to those properties along Pennsylvania Avenue. Runoff is collected and conveyed northerly in the ROW swale towards the intersection with Pease Street.
- The area along Pennsylvania Avenue and Pease Street is relatively flat, which prohibits the construction of a pipe network or roadside drainage swales.
- Driveway culverts along Pennsylvania Avenue (south of Halsey Street) consist mostly of 12" cmp and cpp pipes, with some of the driveway culverts extending across multiple properties with the ROW swales filled in.
- The subdrainage area B12 contributes stormwater to the ROW swale along Pennsylvania Ave. The subdrainage area B12 has a peak flow for the 25-year event of 11.84 cfs.

3. Camp Street

The Camp Street drainage area is located north of the Crescent Way development and west of the Russell I. Doug Middle School. This location appears to be an existing wetland, as identified on the NYSDEC Environmental Resource Mapper. This location is where both subdrainage areas B8 and B9 merge with a 12" cmp outlet which has a capacity of only 3.40 cfs. South Street Extension has an existing 18" cpp that discharges in the wetland area from the south. The existing 12" cmp inlet at the intersection is heavily covered in vegetation reducing its capacity.

A 12" cmp pipe is the outlet for this wetland area that runs north towards the closed stormwater system located on Whig Street, which then travels east to connect with East Main Street. Subdrainage Areas B9 and B8 contribute to the wetland area at the intersection. Area B7 is captured in the outlet pipe and stormwater system that connects to Whig Street.

A high intensity, short duration storm in May 2025 resulted in significant volume of surface runoff that overwhelmed the existing pipe network causing significant backyard flooding to the areas northeast of Camp Street.

C. SUBDRAINAGE AREA C

The majority of drainage basin C within the Village is a part of the Bolter Creek-Taughannock Creek HUC 12, which is in the southern limits of the Village where Pennsylvania and South Street (generally) plateau and water flows southerly (towards Taughannock Creek) rather than northly to Trumansburg Creek. Within drainage basin C, there are 15 subdrainage areas identified, totaling 198.9 acres.

The general area of Subdrainage Area 'C' encompasses:

- Trumansburg Golf Course, Crescent Way Development and the remaining residential properties south of that development within the Village including Tamarac Lane and Larchmont Drive.
- Runoff in this drainage basin, aside from the golf course, is conveyed through stormwater systems and ROW swales. Pennsylvania Avenue has stormwater piping that collects stormwater and conveys the flows towards Tamarac Lane and Larchmont Drive. There is also a closed stormwater system along the South Street Extension that conveys runoff from the Crescent Way development (south) towards Tamarac Lane Intersection. The residential areas of Tamarac Lane and Larchmont Drive utilize ROW swales and driveway culverts.

The tables below are the calculated curve numbers, total area and time of concentration (Tc) used for the SCS method calculations to develop peak flows for each of the stormwater rain events.

Table III.5 Subdrainage Area C's Curve Numbers, Total Areas & Tcs

Subdrainage Area C's			
Subdrainage Area	Curve Number	Area (AC)	Tc (Min)
C1	80	3.7	27.4
C2	69	4.9	49.8
C3	59	4.8	18.1
C4	66	0.8	24.5
C5	60	1.5	38.4
C6	62	23.1	34.2
C7	60	7.0	8.7
C8	66	8.0	26.8
C9	61	1.8	13.4
C10	60	2.9	14.4
C11	67	17.2	26.2
C12	64	75.7	95.7
C13	75	8.0	17.5
C14	71	13.8	44.8
C15	81	25.7	53.6

Table III.6 Subdrainage Area Peak Flows - 'C'

Subdrainage Area Peak Flows - 'C'						
Subdrainage Area	1 Yr Storm (cfs)	5 Yr Storm (cfs)	10 Yr Storm (cfs)	25 Yr Storm (cfs)	50 Yr Storm (cfs)	100 Yr Storm (cfs)
C1	1.62	3.72	5.03	7.25	9.34	11.86
C2	0.33	1.45	2.33	3.97	5.60	7.66
C3	0.02	0.60	1.47	3.41	5.58	8.43
C4	0.04	0.27	0.46	0.84	1.21	1.69
C5	0.01	0.15	0.33	0.73	1.18	1.79
C6	0.29	3.52	6.99	14.27	22.22	32.60
C7	0.04	1.79	3.95	8.41	13.01	19.00
C8	0.38	2.67	4.62	8.35	12.10	16.89
C9	0.02	0.40	0.83	1.75	2.71	3.95
C10	0.02	0.53	1.18	2.59	4.09	6.05
C11	1.97	19.50	35.84	68.77	102.57	146.07
C12	1.28	7.96	14.05	26.54	39.97	57.64
C13	2.65	7.53	10.72	16.28	21.66	28.26
C14	1.37	5.21	8.04	13.16	18.17	24.45
C15	8.17	18.37	24.7	35.35	45.28	57.24

1. Tamarac Lane

Tamarac Lane runs east-west in the southern portion of the Village. Tamarac Lane collects runoff from subdrainage area C6 to the north. Drainage runs primarily behind these homes with sideyard drainage swales or storm piping. . The area is relatively flat, with some of the properties having storm drains to help convey runoff from the backyards south towards the ROW swale. Runoff travels east along the north side swale to the intersection with South Street Extension, where runoff then enters the stormwater system south along South Street Extension.

Subdrainage area C6 has a peak flow of 7.86 cfs; however, existing driveway culverts along the road are restricted to only 5.78 cfs. Driveway culverts along Tamarac Lane vary in size, from a 12" pipe to a 24" pipe at the far east end of the road. Driveway culverts

along the road also either don't maintain similar sizes or increase in size downstream as additional runoff is collected. At the intersection with South Street Extension, the Tamarac Lane storm system merges with a 24" cmp that only has a capacity of 15.98 cfs but experiences a combined flow of 22.05 cfs for a 25-year event, with subdrainage area C14 further surcharging and limiting the capacity of upstream systems (Tamarac and South Street).

The South Street Extension stormwater system also collects runoff from subdrainage area C14. Drainage from Tamarac Lane connects to the South Street Extension stormwater system at the intersection of Tamarac Lane and South Street Extension. The South Street Extension stormwater system ultimately discharges runoff into a swale south of the intersection, crosses South Street Extension via a road culvert, and continues to travel east to Rabbit Run Road prior to entering Taughannock Creek.

2. Larchmont Drive

Larchmont Drive is a residential area located along the southern border of the Village. Larchmont Drive runs east to west and collects runoff from the north. The subdrainage areas that converge along Larchmont Drive are C10, C9, C7, and C5. A few of these subdrainage areas converge at a low point in the middle of the street. From this point, runoff then crosses south via a road culvert to discharge between the homes at 112 Larchmont Drive and 110 Larchmont Drive. The runoff then travels south between those homes to private ponds south of the street and ultimately east towards South Street Extension to Taughannock Creek. This area has been studied several times by MRB Group and the Village over the years with multiple alternatives considered.

Larchmont Drive's drainage issues result in stormwater ponding in the front and rear yards of properties along the street. These drainage issues were studied as part of a report completed in 2023. During this study, it was noted that there are multiple drainage pipes connected to a 4" pipe to discharge stormwater. This 4" pipe was significantly restricting the amount of water that could be discharged and contributing to surcharge upstream.

Within this report, three options were investigated in order to resolve the drainage issues.

The options evaluated included:

- Storm pipe installation along the rear of lots at Larchmont Drive
- Storm pipe installation along Larchmont Drive within the ROW and aligning beyond the village limits on private property.
- Expansion of existing ponds (beyond village limits)

After evaluating each option, it was determined that the Village should pursue a combination of options 1 and 2, which would include the installation of storm piping along Larchmont Drive plus the installation of some storm piping running along the back property lines between 112 and 118 Larchmont Drive. While this option appears feasible from a means to convey stormwater, it would require intermunicipal working agreements, private easements and potential environmental permitting.

IV. PROPOSED IMPROVEMENTS

The proposed projects identified in this Comprehensive Stormwater Management Plan have been developed to reduce flooding and impacts on property throughout the village. The improvements listed have been identified during the initial preliminary drainage evaluation, then expanded upon based on input from the Village (including community members and village staff) and data from the updated drainage mapping. The projects included in this plan identify improvements shown on the concept plans which are designed to pass 25-year storm events (at a minimum) through new or improved storm sewer systems where issues of flooding have been previously noted. Designing a higher intensity storm event (i.e. 50-year, 100-year or 500-year intensity storm) may require additional improvements (beyond the highway ROW) and can be cost prohibitive. Additional investigation for sizing projects beyond the 25-year event can be pursued during design of individual projects but are likely to increase capital costs. Additionally, other areas throughout the Village may require additional investigation beyond the areas evaluated as part of this report.

Calculations for peak stormwater flows for the subdrainage area use Hydraflow Hydrographs Extension program have been provided under Appendix E. The overall drainage map is included in Appendix C. The conceptual designs and cost estimate worksheets for each project are included in Appendices F through N.

A. EAST SENECA ROAD

The project improvements shown are aimed at removing inadequate pipe sizes, clearing and maintenance along existing roadside swales, and increasing driveway culverts to better convey the runoff received during larger storm events. The conceptual design for the East Seneca Road project is shown in Appendix F.

The first portion of the improvements, shown on page 1 of Appendix F, involves the removal of the existing 12" cmp pipe west of the intersection with Congress Street. This 12" cmp pipe will be replaced with a standard roadside swale. This improvement incorporates "Stream Daylighting" as described in the NYSDEC Stormwater Management Design Manual. Stream Daylighting is when previously culverted/pipe streams are removed, and the area is restored to a more natural habitat to better convey runoff and promote infiltration to reduce pollutant loads. Although this location isn't a natural stream, the benefits of Stream Daylighting can still be achieved by replacing the existing 12" pipe with a roadside swale. This location is in Hydrologic Soil Group (HSG) B, which is suitable for infiltration. Open swales also reduce the flow rate, which can lower peak flows at critical points where multiple subdrainage areas converge. The existing flow through the 12" pipe is 4.18 cfs, while subdrainage area A7 has a 25-year peak flow rate of 13.43 cfs.

The next phase of this project involves the removal of undersized culverts east of the intersection of East Seneca Road and Congress Street and adding ROW swales. In areas to the east of Congress Street, there are undersized culverts that contribute to a pinch point of the drainage system along East Seneca Road. The total contributing flows are

approximately 75.50 cfs and with the proposed improvements including 36" SICPP at an approximate slope of 2.0% which have an estimated capacity of 94.32 cfs.

See tables below and concept plan sheet in Appendix F. The total estimated project cost for the East Seneca Road improvements is \$289,000.

While this option appears to provide water quality benefits and replaces undersized connected networks, watermain is located on the south side of East Seneca Road and will need to be further considered beyond the conceptual design proposed.

B. TAMARAC LANE

The Tamarac Lane project is aimed at reducing flooding along the northern roadside swale and addressing the varying sizes of driveway culverts that are causing pinch points in the system. Flooding in the area impacts properties on the northern side of the street, as runoff cannot effectively enter the village stormwater system due to limited capacity.

The conceptual design for the Tamarac Lane project is shown in Appendix G. The proposed plan is to increase the driveway culverts along Tamarac Lane to 18" and then 24" SICPP from west to east along the road. It is also proposed to add ROW swales between each property to help promote infiltration with the surrounding HSG A soils. At the intersection of Tamarac Lane and South Street, the 24" pipe should be replaced with a larger 36" SICPP to increase the capacity to 47.16 cfs.

Additionally, vegetation downstream of the new pipes' discharge location should be removed to allow better flow of runoff in the existing swale along South Street Extension. The total estimated project cost for the Tamarac Lane improvements is \$296,000. A detailed cost estimate is included in Appendix G. As the project ultimately outlets beyond

the limits of the Village boundaries, coordination with the Town of Ulysses will be important to see this project through.

C. WASHINGTON STREET TO STROWBRIDGE STREET

The Washington Street to Strowbridge Street project involves replacing existing stormwater piping and catch basin(s) with larger-sized pipes to carry the runoff effectively to the open swale at the intersection with Strowbridge Street and Congress Street. The conceptual design for the Washington Street to Strowbridge Street project is shown in Appendix H. There are several sections of 4" and 6" stormwater piping that are severely undersized for the A10 subdrainage area, which has a peak flow of 16.69 cfs for the 25-year storm event. The Strowbridge Street section is to be replaced with a 24" SICPP, thus increasing its capacity to 22.62 cfs to convey the 25-year peak flow within the closed stormwater system. The total estimated project cost for this project is \$385,000.

D. CAMP STREET

Two potential projects were identified for Camp Street. Which project the Village moves forward with will depend on whether or not the Village is granted an easement by the property owner at the southwest corner of Camp Street and South Street Extension, T.A. 6-6-2.2. If the Village can obtain an easement or ability to purchase the land, it appears that this location of the Village has the potential to construct green infrastructure practices that can help reduce the volume of flow discharged. If the Village is unable to gain access to the property for stormwater control, upsizing existing infrastructure would be prudent to alleviate the undercapacity system which resulted in a significant wash out of the roadway during a May 2025 storm event.

Truman Street Improvements are proposed under both potential projects to disconnect a small catch basin located on the south end of the street that has an 8" pipe. The 8" pipe runs east through various private properties towards East Main Street. The improvements

call for two new catch basin and a 15" SICPP to convoy runoff to the Whig Street existing stormwater line located within the right of way.

If the Village is unable to gain access to the property for stormwater control through an easement, the primary objective of the Camp Street project would involve converting the existing lowlands at the intersection of Camp Street and South Street Extension into an improved Extended Detention Shallow Wetland. The conceptual design for this project is shown on page 1 of Appendix I. Forebays will be constructed at the inflow locations of the new wetland stormwater facility to treat pollutants from the roadway and surface runoff from the upstream land. The existing wet areas will have small berms surrounding them, with minimum clearing, to create additional storage for the forebays to discharge into. Additionally, a micropool located along the South Street Extension with an outlet control structure will be constructed to discharge back into the existing ROW swale. The additional volume created and flow paths through the new wetland stormwater facility will reduce peak flow runoff sufficiently to maintain the existing storm system north along South Street Extension that connects into Whig Street. The total project cost for the Camp Street project is \$1,179,000. The conceptual design and cost estimate for the Camp Street project is shown on page 1 of Appendix I.

If the Village is granted the necessary easement, they could pursue the Camp Street Alternate Improvements project. The conceptual design for the Camp Street Alternate Improvements project is shown on page 2 of Appendix I. The Camp Street Alternate Improvements project involves increasing the existing stormwater system between Camp Street and the connection with the Whig Street system and implementing green infrastructure practices. The existing 12" cmp pipe is to be replaced with an 18" SICPP with additional catch basins along South Street Extension at a low point along the road. This will increase the capacity to 12.86 cfs. The cost for the Camp Street Alternative Improvement project is \$442,000.

E. LARCHMONT DRIVE

The Larchmont Drive area suffers from similar issues as Tamarac Lane, including improperly sized driveway culverts and flooding that is causing property damage. Downstream driveway culverts in the area tend to be smaller, 12" in size, then increasing to 15" or 18" upstream. Runoff also exits the roadway between homes on the south side of Larchmont Drive, which can lead to increased property damage with inadequate pipe sizes to handle the 25-year peak flows.

The 2023 report, along with the further drainage evaluation in this report, has identified potential solutions to the flooding and drainage issues. The Larchmont Drive Improvement project will increase the size of driveway culverts and add ROW swales along the north side of the street to reduce sheet flow across the roadway. The project will also add stormwater manholes to either side of 110 Larchmont Drive. These manholes will reroute flow east, then south to discharge at the rear yard of 4074 South St. Extension. As identified in the 2023 study of Larchmont Drive, the improvements will also include the installation of storm piping along Larchmont Drive and along the back-property lines from 112 to 118 Larchmont. This stormwater piping will help drain the stormwater that pools in these properties and reduce upstream surcharging issues. The total estimated project cost for the Larchmont Drive improvements project is \$529,000. The conceptual design and cost estimates for these improvements are shown in Appendix J.

F. PENNSYLVANIA AVENUE

The Pennsylvania Avenue project involves increasing the size of driveway culverts along the western side of the street and expanding existing ROW swales. The conceptual design for this project is shown in Appendix K. As mentioned in the existing conditions section, several driveway culverts are undersized and lacking proper slope. Replacing the 12" cmp and cpp with 18" SICPP and installing a 24" SICPP at the last driveway before the intersection with Pease Street will increase the capacity from 0.27 cfs at the 214

Pennsylvania Ave driveway culvert to 7.43 cfs, and ultimately 12.99 cfs with the new culvert sizes. Increasing existing ROW swales will allow for more storage within the ROW to reduce ponding and flooding along the properties on the west side of the street. The total estimated project cost for the Pennsylvania Avenue improvements is \$529,000.

G. SENECA STREET TO CONGRESS STREET

The Seneca Street to Congress Street project involves adding a new stormwater section along Seneca Street to reduce surface sheet flow along the roadways and provide residents the ability to convey water from private parcels to the ROW infrastructure. The conceptual design for this project is shown in Appendix L. Seneca Street is the upstream section for this project. Subdrainage area A11, which is on the south side of Seneca Street, sheet flows across the residential properties to the ROW, then east towards Congress Street. Proposed catch basins and 18" SICPP storm mains along Seneca Street will capture runoff and connect into the Congress Street stormwater section. While the Congress Street Section was constructed first, the Seneca Street section was intended to collect stormwater and an inundated area and move it north along the Congress Street section.

The downstream sections at Sunrise Terrace and north towards East Seneca Road are also proposed to be improved as part of this project. The existing road culvert under Sunrise Terrace is a 30" cmp that is proposed to be increased to a 32" SICPP. The reduction in material roughness, proper slope, and increase in culvert size will raise the capacity to 34.45 cfs. The driveway at 44 Congress Street is downstream from the Sunset Terrace Road culvert and also needs to convey flows from Washington Street to Strowbridge Street, which also discharges into this ROW swale. This driveway culvert receives runoff from all three subdrainage areas, A8, A10, and A11. The existing 24" cmp driveway culvert is proposed to be replaced with a 36" SICPP. The total estimated project cost for the Seneca Street to Congress Street improvements is \$223,000.

H. PROSPECT STREET TO EAST SENECA ROAD

The conceptual design for the Prospect Street and East Seneca Road improvements are shown in Appendix M. The Prospect Street project involves installing a new stormwater manhole with a high flow splitter into the street's existing stormwater system. The high flow splitter will allow smaller storm events to travel along the existing system, while high-intensity storm events can overflow into the new system. The new system will consist of an 18" SICPP that will travel parallel with the existing system and discharge north of the driveway culvert at 28 Prospect Street. This system will travel along the east side of Prospect Street, which receives less runoff than the west side. These two pipe systems will have a total capacity of at least 10.2 cfs using the 10" concrete pipe as the controlling flow for the existing system. A 3-foot square catch basin is also included in the proposed system between houses at 21 and 23 Prospect Street. This location has a pump station and several transformers that have recently been affected by flooding. The catch basin's top-of-grate elevation will be set lower than the utilities to protect them from surface flooding.

In order to ensure driveway culverts along Prospect and East Seneca Street can handle the additional flow from these improvements, this project will also increase pipe sizes of driveway culverts in the area. The existing 15" driveway culvert between 68 and 64 East Seneca Road will be replaced with a 24" SICPP section that will lead into the recently-replaced driveway culvert east of 64 East Seneca Road, which is now a 30" SICPP. The total project cost for this project is \$461,000.

I. SALO DRIVE

The Salo Drive improvements include increasing the undersized driveway culvert at 4 and 2 Salo Drive, improving the downstream ROW swale, and providing a road culvert to discharge runoff from Salo Drive into Trumansburg Creek. The Salo Drive project conceptual design is shown in Appendix N. As part of this project, the undersized driveway

culvert at 4 and 2 Salo Drive, currently a 12" cmp, will be replaced with a 24" SICPP, which will increase the capacity to 15.99 cfs. This will reduce the risk of flooding for the garage located at 4 Salo Drive, which is currently at a lower elevation than the ROW swale and the culvert. The new road culvert to discharge the runoff into Trumansburg Creek will be located near the Trumansburg DPW site and will have a capacity of 22.62 cfs. The total estimated cost for the Salo Drive improvements is \$90,000.

V. CONCLUSION AND FURTHER PROJECT DESIGN CONSIDERATIONS

Through a comprehensive evaluation of the Village's existing stormwater systems, this report has identified nine proposed projects across the Village that will help reduce flooding and improve drainage issues identified by Village staff and residents. This report also updated the Village's drainage mapping and identified the three major drainage basins and corresponding subdrainage areas within the Village.

Some of the proposed projects, once completed, may require further downstream improvements, such as the Pennsylvania Avenue and Camp Street Alternate Improvement Project. While these projects increase capacity in their designated subdrainage areas, they also connect into existing stormwater systems that don't have discharge points nearby. While these projects will improve the stormwater systems in their immediate areas, some future considerations may be required to account for potential downstream effects.

Grant funding exists for stormwater projects such as those identified in this plan. The Water Quality Improvement Project (WQIP) program, funded through the NYS Department of Environmental Conservation, offers funding through their Non-Agricultural Nonpoint Source Abatement and Control category for stormwater retrofit and green infrastructure projects. The Camp Street project, which proposes implementing constructed wetlands,

and the East Seneca Road project, which proposes incorporating stream daylighting techniques, may be eligible project candidates for funding under this green infrastructure category. Projects that incorporate the removal and replacement of undersized stormwater pipe sections may be eligible for funding through the Stormwater Retrofit category, which aims to reduce localized flooding but has been more recently tailored to culverts (road or stream crossings).

APPENDIX A

A Stormwater Ordinance

VILLAGE OF

TRUMANSBURG

STORMWATER MANAGEMENT CODE

LOCAL LAW ____-2026

As adopted by the Village Board on _____, 2026

Prepared by



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Village of Trumansburg

Stormwater Management Local Law X-2026

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STORMWATER MANAGEMENT LOCAL LAW

VILLAGE OF TRUMANSBURG, TOMPKINS COUNTY, NEW YORK

ARTICLE 1 – Purpose and Findings

Section 101 The purpose of this local law is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within the Village, and to address the findings in Section 102 of this local law. This law seeks to meet those purposes by achieving the following objectives:

1. Meet the requirements of minimum measures 4 and 5 of the SPDES general permit for stormwater discharges from municipal separate stormwater sewer systems (MS4s), Permit GP-0-24-001, as amended or revised;
2. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) general permit for construction activities GP-0-25-001, as amended or revised;
3. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
4. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
5. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
6. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

Section 102 It is hereby determined that:

1. Land development activities and associated increases in site impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;
2. This stormwater runoff contributes to increased quantities of waterborne pollutants, including siltation of aquatic habitat for fish and other desirable species;

3. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;
4. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation;
5. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow;
6. Substantial economic losses can result from these adverse impacts on the waters of the Village;
7. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;
8. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety; and
9. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

ARTICLE 2 – Applicability

Section 201 This local law shall be applicable to all land development activities as defined in Section 10 of this law.

ARTICLE 3 – Responsibility for Administration

Section 301 The Stormwater Management Program (SWMP) Coordinator shall review all stormwater pollution prevention plans (SWPPP). The Coordinator may:

1. Personally review plans; or
2. Engage the services of a licensed/certified professional to review and make recommendations as to approval of plans, specifications and related documents; or
3. Accept the certification of a licensed/certified professional that the plans conform to the requirements of this local law and make recommendations as

to the approval of plans, specifications and related documents to the Village Board for their final approval.

Section 303 When the SWMP Coordinator engages the services of a licensed professional engineer as authorized by Section 301.2 above, the applicant shall be responsible for the payment of any administrative fees, as determined by the Village. Application forms promulgated by the Village shall include an acknowledgment that the applicant shall be jointly and severally liable to the Village of Trumansburg for all administrative fees, as determined by the Village, and the application form shall also include a statement that a copy of the current fee schedule may be obtained from the Village Clerk's office.

Section 303 The SWMP Coordinator shall be the local stormwater public contact as defined in SPDES general permit GP-0-24-001. They shall be responsible for public concerns regarding stormwater management and compliance with the SPDES general permit.

Section 304 The Stormwater Management Officer (SMO) shall administer, implement, and enforce the provisions of this local law. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the SMO as may be authorized by the Village Board.

ARTICLE 4 – Exemptions

Section 401 The following activities are exempt from review under this local law.

1. Agricultural activity as defined in this local law;
2. Silvicultural activity, except that landing areas and log haul roads are subject to this law;
3. Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
4. Repairs to any stormwater management practice or facility deemed necessary by the SMO;
5. Any part of a subdivision if a plat for the subdivision has been approved by the Village on or before the effective date of this law;
6. Land development activities for which a building permit has been approved on or before the effective date of this law;
7. Cemetery graves;
8. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles;

9. Emergency activity immediately necessary to protect life, property or natural resources;
10. Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family; and
11. Landscaping and horticultural activities in connection with an existing structure.

ARTICLE 5 – Stormwater Pollution Prevention Plans

Section 501 No application for final approval of a land development activity shall be approved until the appropriate board or Village official has received a SWPPP prepared in accordance with the specifications in this local law and approved by the SMO.

Section 502 All SWPPPs shall provide the following background information and erosion and sediment controls:

1. Information as to the scope of the project, including location, type and size of project.
2. Site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; location(s) of any stormwater hotspots; and location(s) of the stormwater discharge(s);
3. Description of the soil(s) present at the site;
4. Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five acres shall be disturbed at any one time unless pursuant to an approved SWPPP;
5. Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
6. Description of construction and waste materials expected to be stored on site with updates as appropriate, and a description of controls to reduce pollutants

from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;

7. Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project, from initial land clearing and grubbing to project closeout;
8. A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;
9. Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;
10. Temporary practices that will be converted to permanent control measures;
11. Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
12. Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
13. Name(s) of the receiving water(s);
14. Delineation of SWPPP implementation responsibilities for each part of the site;
15. Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
16. Any existing data that describes the stormwater runoff at the site.

Section 503 Land development activities meeting 1, 2, or 3 below shall also include water quantity and water quality controls (postconstruction stormwater runoff controls) as set forth in Section 504 below, as applicable:

1. Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the New York State Section 303(d) List of Impaired Waters Requiring a Total Maximum Daily Load (TMDL) or a TMDL designated watershed for which pollutants in stormwater have been identified as a source of the impairment.
2. Stormwater runoff from land development activities disturbing five or more acres.

3. Stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities on agricultural properties.

Section 504 SWPPP requirements for the above conditions under Section 503:

1. All information required in Section 502 of this local law;
2. Description of each post-construction stormwater management practice;
3. Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
4. Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms;
5. Comparison of post-development stormwater runoff conditions with predevelopment conditions;
6. Dimensions, material specifications and installation details for each post-construction stormwater management practice;
7. Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater management practice;
8. Maintenance and inspection easement agreement binding on all subsequent landowners served by the on-site stormwater management measures, in accordance with Article 7 of this local law; and
9. For Section 503.1, the SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meets the requirements in this law.

Section 505 The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to the approval of the final stormwater design plan.

Section 506 Contractor Certification

1. Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity. "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the stormwater pollution prevention plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."

2. The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
3. The certification statement(s) shall become part of the SWPPP for the land development activity.

Section 507 A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

ARTICLE 6 – Performance and Design Criteria

Section 601 All land development activities shall be subject to the following performance and design criteria:

4. Technical standards. For the purpose of this local law, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this local law:
 - a. The NYS Stormwater Management Design Manual; and
 - b. The NYS Standards and Specifications for Erosion and Sediment Control.
5. Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in Section 601.1 of this local law and the SWPPP shall be prepared by a licensed professional.
6. Water quality standards. Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the State of New York.
7. All stormwater conveyance systems shall be first approved by the Village Public Works Department before installation can occur.
8. All stormwater shall be discharged utilizing methods which do not adversely impact any neighboring properties.
9. If required, all driveway culverts located within the Village right-of-way are to be approved and installed by the Village Public Works Department at the expense of the home owner and/or applicant.

10. The property owner with a private stormwater conveyance system shall be required to be maintained at their own expense. All stormwater conveyance systems and appurtenances within a Village easement or right-of-way shall be the responsibility of the Village.

ARTICLE 7 – Maintenance, Inspection and Repair

Section 701 Maintenance and Inspection During Construction

1. The applicant or developer of the land development activity or their representative shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by 50%.
2. For land development activities meeting Section 503.1, 503.2, or 503.3 in Article 5 of this local law, the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every seven days and within 24 hours of any storm event producing 0.5 inches of precipitation or more. Inspection reports shall be maintained in a site logbook.

Section 702 Maintenance After Construction. The owner or operator of permanent stormwater management practices installed in accordance with this local law shall ensure they are operated and maintained to achieve the goals of this law. Proper operation and maintenance also includes, as a minimum, the following:

1. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this local law;
2. Written procedures for operation and maintenance and training new maintenance personnel; and
3. Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations, in accordance with the provisions of Article 6 of this local law.

Section 703 Maintenance and inspection easement and agreement. Prior to the issuance of final approval of a land development activity that has a stormwater management facility that will remain in private ownership as one of the requirements, the record owner of the stormwater management facility shall execute a maintenance and inspection easement and agreement running to the benefit of the Village. The

maintenance and inspection easement and agreement shall provide for maintenance of the facility, by the owner, in accordance with the requirements of this local law together with access to the facility at reasonable times for periodic inspection by the Village to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The maintenance and inspection easement and agreement shall be recorded in the office of the County Clerk after approval by the Village attorney.

Section 704 Dedication permitted. The Village, at its sole discretion, may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

ARTICLE 8 – Inspections by SMO

Section 801 Erosion and Sediment Control Inspection.

1. The SMO may require such inspections as necessary to determine compliance with this local law and may either approve that portion or the work completed or notify the applicant how the work fails to comply with the requirements of this local law and the SWPPP as approved. To obtain inspections, the applicant shall notify the SMO at least 48 hours before any of the following as required by the SMO:
 - a. Start of construction;
 - b. Installation of sediment and erosion control measures;
 - c. Completion of site clearing;
 - d. Completion of rough grading;
 - e. Completion of final grading;
 - f. Close of the construction season;
 - g. Completion of final landscaping; and
 - h. Successful establishment of landscaping in public areas.
2. If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the SMO.

Section 802 Stormwater management practice inspections. The SMO is authorized to conduct inspections of stormwater management practices (SMPs). All applicants are required to submit as-built plans for any stormwater management practices located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

Section 803 Inspection of stormwater facilities after project completion.

1. Inspection programs may be established by the SMO on any reasonable basis, including but not limited to the following: routine inspections, random inspections, inspections based on complaints or other notice of possible violations, inspection of drainage basins or areas identified as higher-than-typical sources of sediment or other contaminants or pollutants, inspections of businesses or industries of a type associated with higher-than-usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit, and joint inspections with other agencies inspecting under environmental or safety laws.
2. Inspections may include, but are not limited to: reviewing maintenance and repair records, sampling discharges, surface water, groundwater, and material or water in drainage control facilities, and evaluating the condition of drainage control facilities and other stormwater management practices.

Section 804 Submission of reports. The SMO may require monitoring and reporting from entities subject to this local law as are necessary to determine compliance with this local law.

Section 805 Right of entry for inspection. When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public stormwater system, the landowner shall grant to the Village the right to enter the property at reasonable times, and in a reasonable manner for the purpose of inspection as required or allowed by this local law. This right to enter may be granted by the maintenance and inspection easement and agreement provided in accordance with Section 703 of this local law.

Section 806 Performance guarantee.

1. Construction completion guarantee. In order to ensure the full and faithful compliance with an approved SWPPP, the SMO may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names

the Village as the beneficiary. The security shall be in an amount to be determined by the SMO based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the Village, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved SWPPP, and that a one-year inspection has been conducted and the facilities have been found to be acceptable to the SMO.

2. Maintenance guarantee. Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the Village with an irrevocable letter of credit from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the Village may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

Section 807 Recordkeeping. The SMO may require entities subject to this local law to maintain records demonstrating compliance with this local law.

ARTICLE 9 – Enforcement, Penalties and Fees

Section 901 Notice of violation.

1. When the SMO determines that a land development activity is not being carried out in accordance with the requirements of this local law, the SMO may issue a written notice of violation to the landowner, applicant and/or developer. The notice of violation shall contain:
 - a. The name and address of the landowner, developer and/or applicant;
 - b. The address, when available, or a description of the building, structure or land upon which the violation is occurring;
 - c. A statement specifying the nature of the violation;
 - d. A description of the remedial measures necessary to bring the land development activity into compliance with this local law and a time schedule for the completion of such remedial action; and

- e. A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed.

- Section 902 Stop-work orders. The SMO may issue a stop-work order for violations of this local law. Persons receiving a stop-work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the SMO confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop-work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this local law.
- Section 903 Violations. Any land development activity that is commenced or is conducted contrary to this local law may be restrained by injunction or otherwise abated in a manner provided by law in an action authorized by the Village Board. Further, the SMO may issue appearance tickets for violations of this local law.
- Section 904 Penalties. In addition to or as an alternative to any penalty provided in this local law, any person who violates the provisions of this local law shall be guilty of a violation:
1. Punishable by a fine not to exceed \$250 or imprisonment of not more than 15 days, or both, for conviction of a first offense;
 2. Second and subsequent offenses shall be guilty of a violation and shall be subject to a fine not to exceed \$500 or imprisonment of not more than 15 days, or both.
- Section 905 Withholding of certificate of occupancy. If a land development activity is conducted in violation of this local law, the SMO may prevent the occupancy of said building or land, and the Building Inspector or Code Enforcement Officer may refuse to issue or may condition a certificate of occupancy or certificate of compliance pursuant to Section 802 of the Village of Trumansburg Zoning Ordinance.
- Section 906 Restoration of lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Village may take necessary corrective action, the cost of which shall become a lien upon the property until paid.
- Section 907 Fees for services. The Village may require any person undertaking land development activities regulated by this local law to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the Village or performed by a third party for the Village.

Section 908 All culverts required by this ordinance are to be installed at the expense of the property owner and to the satisfaction of the Village's Code Enforcement Officer and Department of Public Works Superintendent.

ARTICLE 10 – Definitions

AGRICULTURAL ACTIVITY

The activity of an active farm, including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

APPLICANT

A landowner or agent of a landowner who has filed an application for a land development activity.

CHANNEL

A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

CLEARING

Any activity that removes the vegetative surface cover.

CONSTRUCTION ACTIVITY

Any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

CONSTRUCTION PERMIT

The SPDES general permit for construction activities GP-0-25-001, or latest revision.

DEC

The New York State Department of Environmental Conservation.

DESIGN MANUAL

The New York State Stormwater Management Design Manual, most recent version, including applicable updates, that serves as the official guide for stormwater management principles, methods and practices.

DEVELOPER

A person who undertakes land development activities.

EROSION CONTROL MANUAL

The most recent version of the “New York Standards and Specifications for Erosion and Sediment Control” manual, commonly known as the “Blue Book.”

FACILITY OWNER

The person, persons or legal entity which owns or leases the property on which a stormwater management facility is located, and/or an entity that has legal responsibility for the long-term operation and maintenance of a stormwater management facility.

GRADING

Excavation or fill of material, including the resulting conditions thereof.

IMPERVIOUS COVER

Those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snowmelt and water (e.g. building rooftops, pavement, sidewalks, driveways, etc.).

INDUSTRIAL STORMWATER PERMIT

A State Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

INFILTRATION

The process of percolating stormwater into the subsoil.

LAND DEVELOPMENT ACTIVITY

Construction activity, including clearing, grading, excavating, soil disturbance or placement of fill, that results in land disturbance of equal to or greater than one acre, or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules, including the construction of agricultural structures.

LANDOWNER

The legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

LICENSED/CERTIFIED PROFESSIONAL

A person currently licensed to practice engineering in New York State, a registered landscape architect or a certified professional in erosion and sediment control (CPESC).

NONPOINT SOURCE POLLUTION

Pollution from any source other than from any discernible, confined, and discrete conveyances and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

PERSON

Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

PHASING

Clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

POLLUTANT OF CONCERN

Sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant (such as phosphorus) that has been identified as a potential cause of impairment of any water body that will receive a discharge from the land development activity.

PROJECT

Land development activity.

RECHARGE

The replenishment of underground water reserves.

SEDIMENT CONTROL

Measures that prevent eroded sediment from leaving the site.

SENSITIVE AREAS

Cold-water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES GP-0-25-001

A permit under the New York State Pollutant Discharge Elimination System (SPDES) issues to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORMWATER SEWER SYSTEMS GP-0-24-001

A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA-established water quality standards and/or to specify stormwater control standards.

STABILIZATION

The use of practices that prevent exposed soil from eroding.

STORMWATER

Rainwater, surface runoff, snowmelt and drainage.

STORMWATER HOTSPOT

A land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

STORMWATER MANAGEMENT

The use of structural or nonstructural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

STORMWATER MANAGEMENT FACILITY

One or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

STORMWATER MANAGEMENT OFFICER (SMO)

Any Code Enforcement Officer or other official designated by, and serving at the pleasure of, the Village Board to enforce this local law.

STORMWATER MANAGEMENT PRACTICES (SMPS)

Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

STORMWATER MANAGEMENT PROGRAM (SWMP) COORDINATOR

An employee designated by, and serving at the pleasure of, the Village Board to implement, manage and supervise the Village's MS4 program. The SWMP Coordinator shall be a health and safety officer, superintendent, or other individual having responsibility for environmental, health or safety matters for the Village.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

SURFACE WATERS OF THE STATE OF NEW YORK

Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial seas of the State of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to man-made bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

VILLAGE

The Village of Trumansburg.

WATERCOURSE

A permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

WATERWAY

A channel that directs surface runoff to a watercourse or to the public storm drain.

WETLAND

An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as "hydrophytic vegetation," including areas regulated as wetlands under federal or state law.

APPENDIX B***B Trumansburg Development Details and Specifications***

LIST OF APPENDICES

STORM SEWER DETAILS

ST – 1.0	SWPPP Stormwater Permit Process
ST – 2.0	Stormwater Pollution Prevention Plan – Notes
ST – 2.1	Stormwater Pollution Prevention Plan – Notes (Continued)
ST – 2.2	Small Site Erosion Control Sequence
ST – 3.0	Stormwater Inspection Note Block
ST – 4.0	Stormwater Maintenance Agreement (Page 1 of 4)
ST – 4.1	Stormwater Maintenance Agreement (Page 2 of 4)
ST – 4.2	Stormwater Maintenance Agreement (Page 3 of 4)
ST – 4.3	Stormwater Maintenance Agreement (Page 4 of 4)
ST – 5.0	Stormwater Site Observation Report
ST – 6.0	Catch Basin Detail
ST – 7.0	Storm Sewer and Catch Basin Manhole
ST – 8.0	Gutter and Catch Basin Apron Detail
ST – 8.1	Special Gutter and Catch Basin Apron Detail
ST – 9.0	Driveway Culvert Detail
ST – 9.1	Driveway Culvert Detail (Continued)
ST – 10.0	Typical Outlet Control Structure Detail
ST – 11.0	Storm Lateral Detail
ST – 12.0	Pipe Bedding Details
ST – 12.1	Pipe Bedding Details
ST – 12.2	Pipe Bedding Details

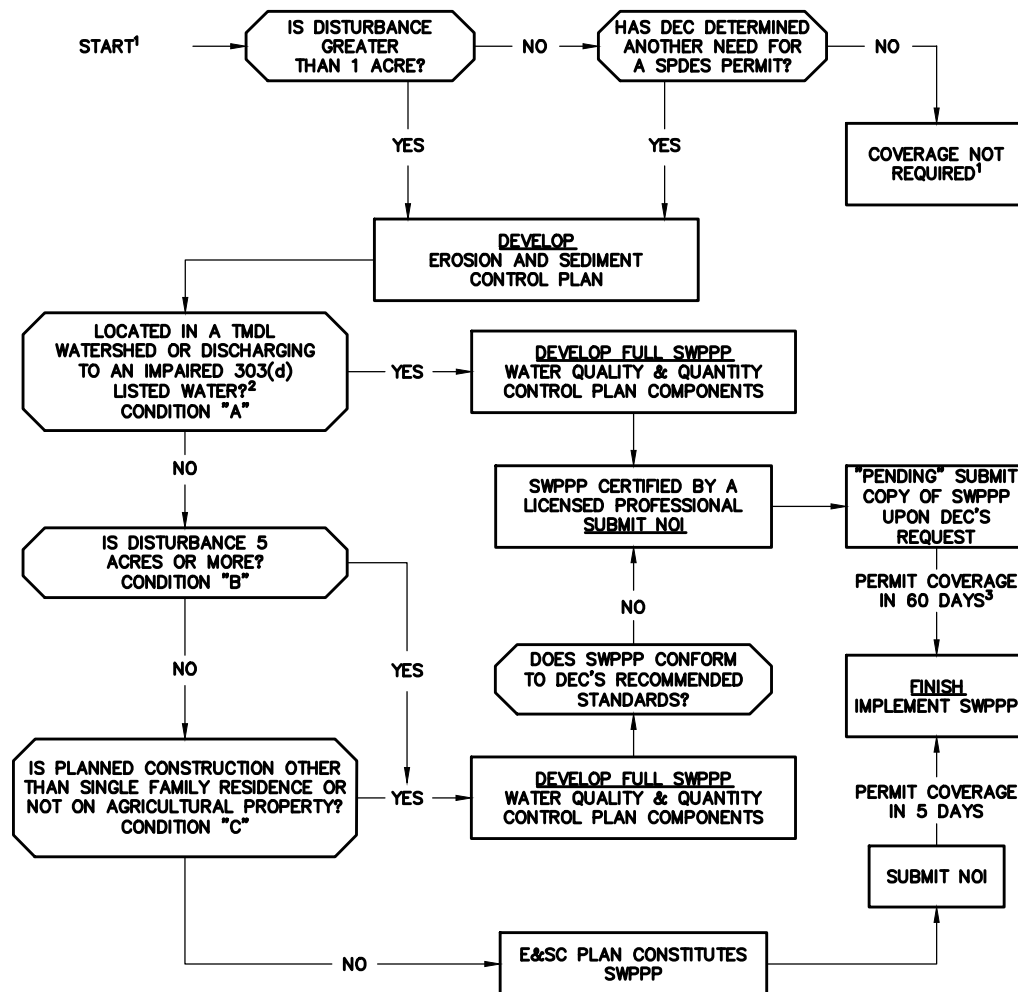
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 1.0**

DATE: 2025

SCALE: N.T.S.



NOTES:

1. UNDER ANY OF THE ABOVE CONDITIONS OTHER ENVIRONMENTAL PERMITS MAY BE REQUIRED. DEC MAY REQUIRE PERMIT FOR CONSTRUCTION DISTURBANCE < 1 ACRES ON A CASE BY CASE BASIS.
2. AND THE FOLLOWING EXISTS: CONSTRUCTION AND/OR STORMWATER DISCHARGES FROM THE CONSTRUCTION OR POST-CONSTRUCTION SITE CONTAIN THE POLLUTANT OF CONCERN IDENTIFIED IN THE TMDL OR 303(d) LISTING.
3. AFTER RECIEPT BY DEC OF COMPLETED APPLICATION.

SWPPP STORMWATER PERMIT PROCESS

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 2.0**

DATE: 2025

SCALE: N.T.S.



The Village of Trumansburg requires the following notes to be added to the Plans:

1. All improvements shall be in accordance with the most recent standards and specifications of the Village of Trumansburg requirements and the appropriate water/sewer agencies, unless otherwise noted.
2. A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for this site to conform with New York State Department of Environmental Conservation (NYSDEC) General Permit GP-0-25-001 or latest version thereof and to the requirements of local authorities regarding the maintenance and control of stormwater quality and quantity. The Stormwater Pollution Prevention Plan will consist of the project plans, the Stormwater Management Plan, soil erosion and sedimentation control specification regarding stormwater control.
3. The owner will be responsible for implementing the required SWPPP, including the filing of a "Notice of Intent", receiving an Acknowledgement Letter, and if necessary a 5-acre waiver from NYSDEC prior to construction starting. The owner, his contractor, sub-contractors and all others associated with the implementation of this plan shall be familiar with and certify the plan and the conditions of the NYSDEC General Permit GP-0-25-001 or latest version thereof for the stormwater discharges from construction activities.
4. Any modifications or deviations from the SWPPP, including implementation of erosion control measures and stormwater management areas, shall be documented by the owner with the engineer and the Village of Trumansburg.
5. The owner shall be responsible for providing on-site inspections by a licensed professional of construction erosion control during construction. If the site is over 5 acres of disturbance, inspections are to be conducted twice per week (separated by a minimum of two days). If the site is under 5 acres of disturbance, inspections are to be conducted once per week. An inspection report log is to be kept on-site by the owner with the approved SWPPP. SWPPP inspection reports are to be forwarded to the Village CEO, Construction inspector and Village's engineering firm, MRB Group, D.P.C.
6. Maps should include re-seeding instructions including materials and a timetable for various seeding:
 - Where soil disturbance activities have temporarily or permanently ceased, apply stabilization measures by the end of the next business day and complete stabilization within:
 - 14 days if 5-acres or less, open disturbed area
 - 7 days if greater than 5-acres of open, disturbed area
 - 3 days if between November 15th and April 1st
 - TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE PROVIDED AS FOLLOWS:
The surface two inches of soil should be loosened by disking, raking, or back-blading with a bulldozer. Immediately fertilize with 300 pounds per acre (or 7 pounds per 1,000 square feet) of 10-10-10 fertilizer. Immediately seed with the following mix:

	<u>PERCENTAGE%</u>	*AT A RATE OF 5LBS PER 1,000 SQ FT
Annual Ryegrass	50%	
Perennial Ryegrass	50%	
Oats	10% (If available)	

Seed should have a germination rate of at least 85 percent and minimal inert material.

- R.O.W. AREAS SHALL BE TOPSOILED AND STABILIZED USING PERMANENT SEEDING MIX SHOWN BELOW UPON COMPLETION OF UTILITIES, SIDEWALKS, AND FINE GRADING:

	<u>LBS/Acre</u>	<u>% BY PURITY</u>	<u>% GERM</u>
'Pennfine' Perennial Rye Grass	35	85	85
'Pennlawn' Red Fescue	35	97	80
'Baron' and 'Midnight' Kentucky Bluegrass	30	85	80

Seeding Rate: 6.0 pounds per 1,000 square feet
Mulch: Straw or wood fiber mulch used with hydro seeding method at two tons per acre with trackifier, at the Village's discretion
Starting Fertilizer: 5:10:10 at 20 pounds per 1,000 square feet.

- For fall or early winter, seed with certified "arostock" winter rye (cereal rye) at 100 pounds per acre.
- Permanent stabilization for steep slopes 3:1 or greater shall include Jute Mesh blanket and Crown Vetch seed with perennial ryegrass.

STORMWATER POLLUTION PREVENTION PLAN NOTES

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 2.1**

DATE: 2025

SCALE: N.T.S.



The Village of Trumansburg requires the following notes to be added to the Plans:

7. All disturbed areas to remain pervious (i.e., lawns) shall receive soil restoration in accordance with the NYS Standards and Specifications for Erosion and Sediment Control.
8. The contractor shall locate, mark, safeguard and preserve all survey control monuments and right-of-way monuments in the areas of construction.
9. Dust shall be controlled during construction by the contractor to minimize effect on the adjacent properties. The contractor shall implement dust control measures as needed and/or as directed by the Village of Trumansburg.
10. The owner's contractor shall be responsible for the establishment, maintenance, cleaning, repair and replacement of erosion control measures during site construction.
11. Roadways and gutters shall be cleaned regularly to prevent sediment buildup. Material storage and stockpiles shall not be located over sidewalks or within roadways.
12. Trenches shall not be used for erosion and sediment control. Straw bales shall not be used in place of silt fence or compost filter sock.

STORMWATER POLLUTION PREVENTION PLAN NOTES

(CONTINUED FROM ST - 3.0)

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 2.2**

DATE: 2025

SCALE: N.T.S.



Small Site/Project Sequence of Construction:

Sequence – For small projects where no SWPPP is required, the contractor shall install erosion & sediment control measures in the following sequence. Construction sequences may be altered through the site plan review process and at the pre-construction meeting (if such a meeting is required):

- Install perimeter sediment controls, (i.e. erosion fencing).
- Install stabilized construction entrance.
- Protect vegetation to remain.
- Clear grub and construct diversionary swales, sediment basins, traps and other temporary measures.
- Complete clearing and grubbing operation.
- Install stormwater management facilities.
- Strip topsoil and provide erosion control measures around stockpiles locations.
- Maintain erosion control measures and place additional measures as earthwork and underground utilities are constructed.
- Restore areas as defined by contract documents.
- Remove erosion control measures as areas are reestablished with ground cover, once inspected by the Village.
- If site preparations occur between November 15 and April 1, additional erosion controls must be taken including reducing the size of disturbed areas and placing heavy straw mulch where practical.

SMALL SITE EROSION CONTROL SEQUENCE

(CONTINUED FROM ST - 3.1)

VILLAGE OF
TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 3.0**

DATE: 2025

SCALE: N.T.S.



NOTICE:

THIS PROJECT MAY BE SUBJECT TO STORMWATER INSPECTIONS BY
THE VILLAGE AND ITS REPRESENTATIVES.

FAILURE TO APPROPRIATELY UTILIZE AND MAINTAIN EROSION AND
SEDIMENT CONTROLS MAY RESULT IN THE ISSUANCE OF A NOTICE OF
NONCOMPLIANCE, NOTICE OF VIOLATION AND ORDER TO REMEDY,
AND/OR STOP WORK ORDER.

APPROVAL FROM THE VILLAGE OF TRUMANSBURG IS REQUIRED PRIOR
TO REDUCING SWPPP INSPECTION FREQUENCY OR REMOVING EROSION
AND SEDIMENT CONTROLS.

(the above note block shall be added to all project plans requiring a SWPPP)

STORMWATER INSPECTION NOTE BLOCK

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 4.0**

DATE: 2025

SCALE: N.T.S.



STORMWATER MAINTENANCE AGREEMENT

WHEREAS, the Village of Trumansburg (Village) and the _____ (Facility Owner) having an address of _____ want to enter into an agreement (this Agreement) to provide for the long term maintenance and continuation of permanent stormwater control facilities and measures approved by the Village for the project named below; and

WHEREAS, the Village and the Facility Owner desire that the permanent stormwater control facilities and measures, as detailed in the approved public record and site drawings entitled “_____” (Project), having drawing number(s) _____, prepared by _____ and last revised _____, (the “Plans”), to be built in accordance with the Plans and thereafter be maintained, cleaned, repaired, replaced, and continued in perpetuity in order to ensure optimum performance of the components. Reduced size versions of the Plans are attached hereto as Exhibit A. The Plans are on file in the Village Development Office.

Therefore, the Village and the Facility Owner agree as follows:

1. This Agreement binds the Village and the Facility Owner, its successors and assigns, to maintain the permanent stormwater control measures depicted on the Plans (as same may be amended), and as described in the approved Stormwater Pollution Prevention Plan (SWPPP) which are attached as Schedule A of this Agreement.
2. The Facility Owner shall maintain, clean, repair, replace and continue the stormwater control facilities and measures depicted on the Plans as necessary to ensure optimum performance of the measures to design specifications. If identified on the plans, the stormwater control measures shall include, but shall not be limited to, the following: drainage ditches, swales, dry wells, infiltrators, drop inlets, pipes, culverts, soil absorption devices, and retention ponds (collectively, the “Control Measures”).
3. The Facility Owner shall be responsible for all expenses related to the maintenance of the Control Measures, including inspections as required in Section 4.
4. The Facility Owner shall provide for the periodic inspection of the Control Measures, not less than once in every three-year period, to determine the condition and integrity of the Control Measures. The Facility Owner’s obligations to inspect the Control Measures under this Section 4 shall commence upon the issuance of the first certificate of occupancy for the project depicted on the Plans. Each inspection shall be performed by a Licensed Professional Engineer by the State of New York (the “Inspecting Engineer”), at the Facility Owner’s choosing. The Inspecting Engineer shall prepare and submit to the Municipality within 30 days of each inspection, a written report of the findings of his/her inspection including any recommendations necessary for the continued maintenance or repair of the Control Measures.
5. The Facility Owner shall grant Right of Entry to duly authorized representatives of the Village. Upon presentation of proper credentials, duly authorized representatives of the Village may enter at reasonable times upon the premises to inspect the implementation, condition or operation and maintenance of the Control Measures. The Facility Owner shall allow persons working on behalf of the Village ready access to all parts of the premises for the purposes of inspecting the Control Measures. Persons working on behalf of the Village shall have the right to temporarily locate, on any stormwater facility or Control Measure in the Village, such devices as are necessary to conduct monitoring and/or sampling of the discharges from such Control Measures.
6. Except in an emergency situation, or as permitted by Section 7 below, The Facility Owner shall not authorize, undertake, or permit any material alteration, abandonment, modification, or discontinuation of the Control Measures except in accordance with written approval of the Stormwater Management Program Coordinator. In the event of an emergency situation, the Facility Owner shall notify the Village as soon as reasonably possible. The notification shall include details regarding the nature of the emergency, the effects of this emergency on the Control Measures, the actions taken by the Facility Owner, and the current state of the Control Measures. An inspection shall be performed by the Inspecting Engineer within seven days after the emergency situation occurs. The Facility Owner shall be required to make any repairs or alterations recommended or requested by the Inspecting Engineer. The results of the inspection shall be reported to the Village.

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 4.1**

DATE: 2025

SCALE: N.T.S.



7. The Facility Owner shall undertake all necessary repairs, maintenance, or replacement of the Control Measures in accordance with the recommendations of the Inspecting Engineer, except to the extent such repairs, maintenance, or replacement are made necessary by the acts or omissions of the Village, including without limitation offsite grading. Such repair, maintenance, or replacement shall not require the approval of the Village.
8. This Agreement shall be recorded in the Office of the County Clerk, County of Tompkins together with the deed for the common property, and shall be included in the offering plan and/or prospectus approved pursuant to _____.
9. If ever the Stormwater Management Program Coordinator determines that the Facility Owner has failed to construct, maintain, clean, repair, replace, and continue the Control Measures in accordance with the Plans or has failed to undertake necessary corrective action in accordance with Section 7 above, the Stormwater Management Program Coordinator shall give the Facility Owner written notice of such a default. In the event the Facility Owner fails to cure such default within thirty (30) days from its receipt of such notice, the Village is authorized to undertake such steps as reasonably necessary for the preservation, continuation, or maintenance of the Control Measures. The actual cost of such steps, plus a service charge of 50% thereof to cover the cost of supervision and administration shall be certified by the Village of Trumansburg Code Enforcement Officer to the Village Supervisor and such certified amount shall thereupon be charged and assessed against the Facility Owner and, if different, the owner of the property on which the Facility is located. The expense, so assessed, shall constitute a lien and charge on the real property on which it is levied until paid or otherwise satisfied or discharged and shall be collected in the same manner and at the same time as other Village taxes and charges.
10. The parties agree and acknowledge that this Agreement shall cover not only the Control Measures set forth on the Plans, but it also shall cover any alterations or modifications to the Plans that may be approved by the Stormwater Management Program Coordinator after the execution of this Agreement.
11. This Agreement shall be binding upon, and inure to the benefit of, the respective successors and permitted assigns of the parties. This Agreement shall not be assignable by the Village but may be assigned or transferred by the Facility Owner.
12. All notices required or permitted hereunder shall be in writing and shall be sent to the parties at the following addresses:

If to the Municipality: Code Enforcement Officer
Village of Trumansburg
56 East Main Street
Trumansburg, New York 14886

If to the Facility Owner:

With copies to:

Any such notices may be sent by: (a) certified mail, return receipt requested, or
(b) a nationally recognized overnight courier

The above addresses may be changed by written notice to the other party. Any such notices shall be deemed effective upon receipts.

13. This Agreement sets forth all of the agreements, conditions, and understandings between the Village and the Facility Owner concerning the maintenance of the Control Measures and supersedes any and all prior agreements and understandings between the parties with respect thereto.
14. This Agreement shall be governed exclusively by the laws of the State of New York, without giving effect to choice of laws or choice of laws, rules or principles.

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 4.2**

DATE: 2025

SCALE: N.T.S.



15. Issuance of the first certificate of occupancy or certificate of compliance for the project depicted on the Plans shall be deemed an acknowledgement by the Village that the Control Measures have been constructed in accordance with the Plans.
16. This Agreement may be executed in several counterparts, including by facsimile, each of which shall be an original and all of which shall constitute but one and the same instrument.
17. This Agreement may not be amended, changed, modified, altered, or terminated, except by an instrument in writing, signed by the parties hereto.
18. This Agreement is effective upon full execution by both parties.

The parties have entered into this Agreement on this _____ day of _____, 20 ____.

MUNICIPALITY
VILLAGE OF TRUMANSBURG, NY

By: _____
Title: _____
Date: _____

FACILITY OWNER

By: _____
Title: _____
Date: _____

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VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 5.0**

DATE: 2025

SCALE: N.T.S.



STORMWATER SITE OBSERVATION REPORT

(SPDES General Permit for Stormwater Discharges from Construction Activity)

Project: _____ Permit#: _____

Date: _____ Time: _____ Weather: _____ Soil Conditions: ☐ Wet ☐ Dry

Contractor: _____ Email: _____ Reviewed On Site: ☐ Yes ☐ No

Owner/Operator: _____ Email: _____ ☐ Mailbox and SWPPP Updated

Inspection Frequency: ☐ Twice a Week ☐ Weekly ☐ Monthly ☐ Follow-up ☐ Other: _____

Approximate Area Opened: _____ AC ± Has a 5-Acre Waiver Been Issued: ☐ Yes ☐ No ☐ NA

- Are the adjacent properties negatively impacted by the proposed construction? ☐ Yes ☐ No ☐ NA
- At the discharge points of the site, are there traces of turbidity or sedimentation leaving the site? ☐ Yes ☐ No ☐ NA
- At the natural surface waterbodies located within or immediately adjacent to the project, is there evidence of impacts from the project construction? ☐ Yes ☐ No ☐ NA
- Are the public roads and site access roads being kept clean of mud and debris? ☐ Yes ☐ No ☐ NA
- Is construction site litter and debris being properly managed? ☐ Yes ☐ No ☐ NA
- Have all necessary erosion and sediment control measures been installed? ☐ Yes ☐ No ☐ NA
- Are the installed erosion and sediment control measures functioning properly? ☐ Yes ☐ No ☐ NA
- Are additional erosion control measures needed? ☐ Yes ☐ No ☐ NA
- Are there areas disturbed that should be stabilized? ☐ Yes ☐ No ☐ NA
- Are soil stockpiles in appropriate locations, properly stabilized, and/or protected? ☐ Yes ☐ No ☐ NA
- Have temporary stabilization measures, no longer needed, been removed? ☐ Yes ☐ No ☐ NA
- In regard to stormwater management, is the Contractor generally following the approved plans and sequence of construction? ☐ Yes ☐ No ☐ NA
- Have deficiencies been identified with the constructed post-construction stormwater practices? ☐ Yes ☐ No ☐ NA
- Is the concrete washout area being properly maintained and utilized? ☐ Yes ☐ No ☐ NA

Comments: _____

Required attachments: ☐ Sketch of Current Site Conditions ☐ Site Photographs

Are corrective actions required within 24 hours? ☐ Yes ☐ No

Signature: _____

SWT# _____

Date: _____

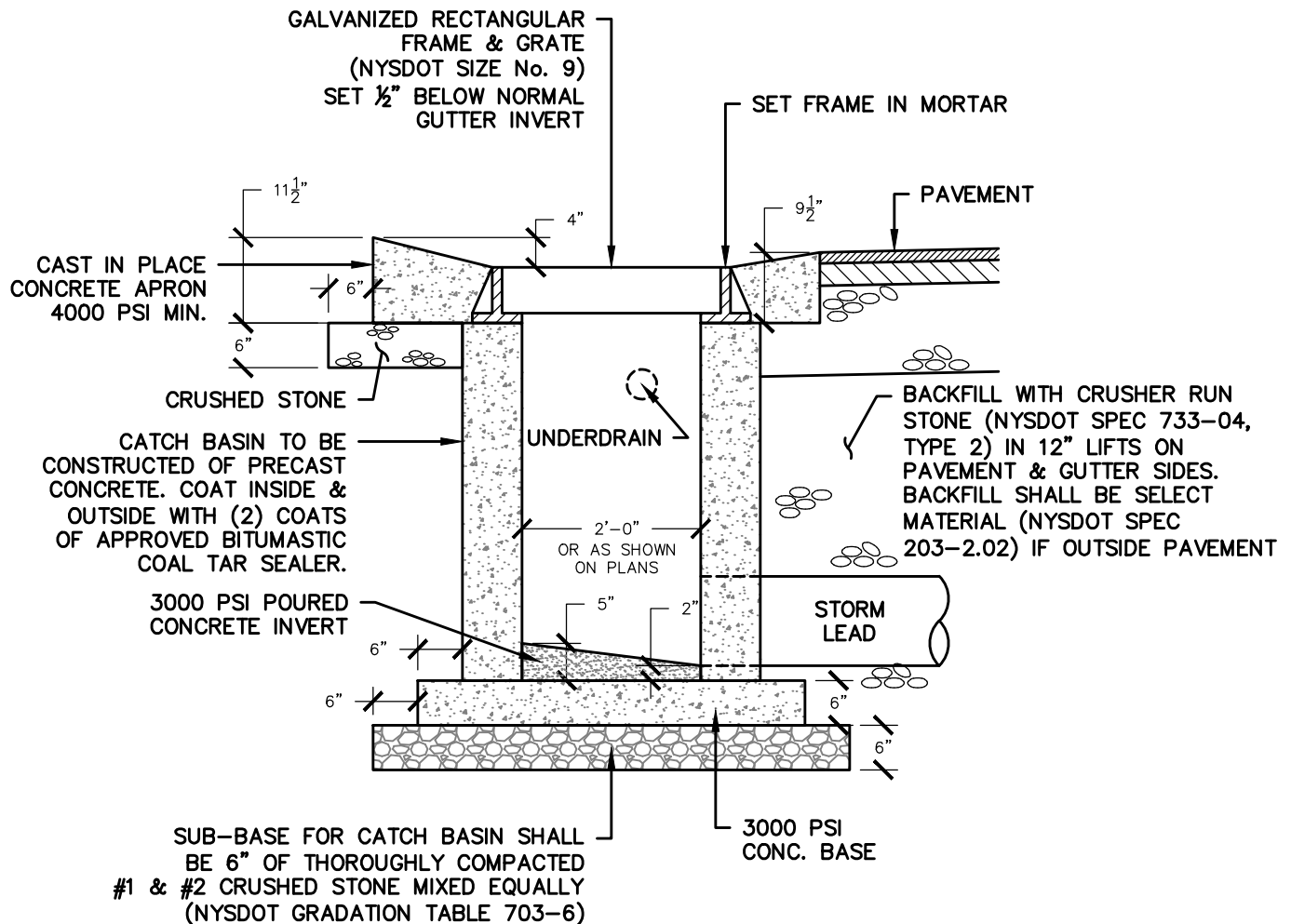
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 6.0**

DATE: 2025

SCALE: N.T.S.



NOTES:

1. TOWN MAY REQUIRE A 6" SUMP AT THE TOWN'S OPTION.

CATCH BASIN DETAIL

STORM SEWER AND CATCH BASIN MANHOLE

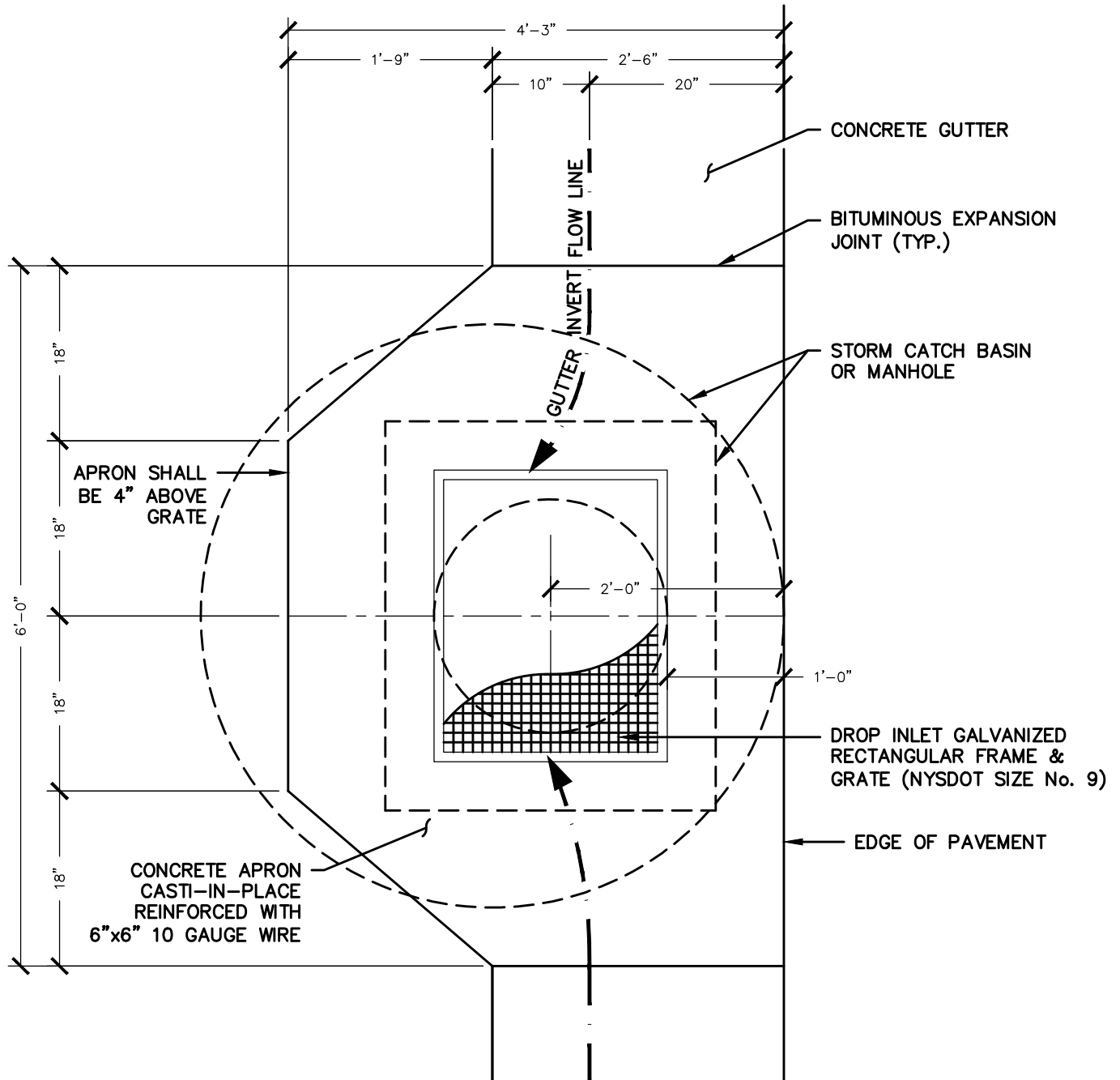
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 8.0**

DATE: 2025

SCALE: N.T.S.



NOTES:

1. CATCH BASINS SHOULD NOT BE PLACED IN DRIVEWAY AREAS OR IN FRONT OF DRIVEWAY AREAS.
2. SPECIAL DESIGN MAY BE REQUIRED FOR STEEP GRADE SECTIONS.

GUTTER AND CATCH BASIN APRON DETAIL

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 8.1**

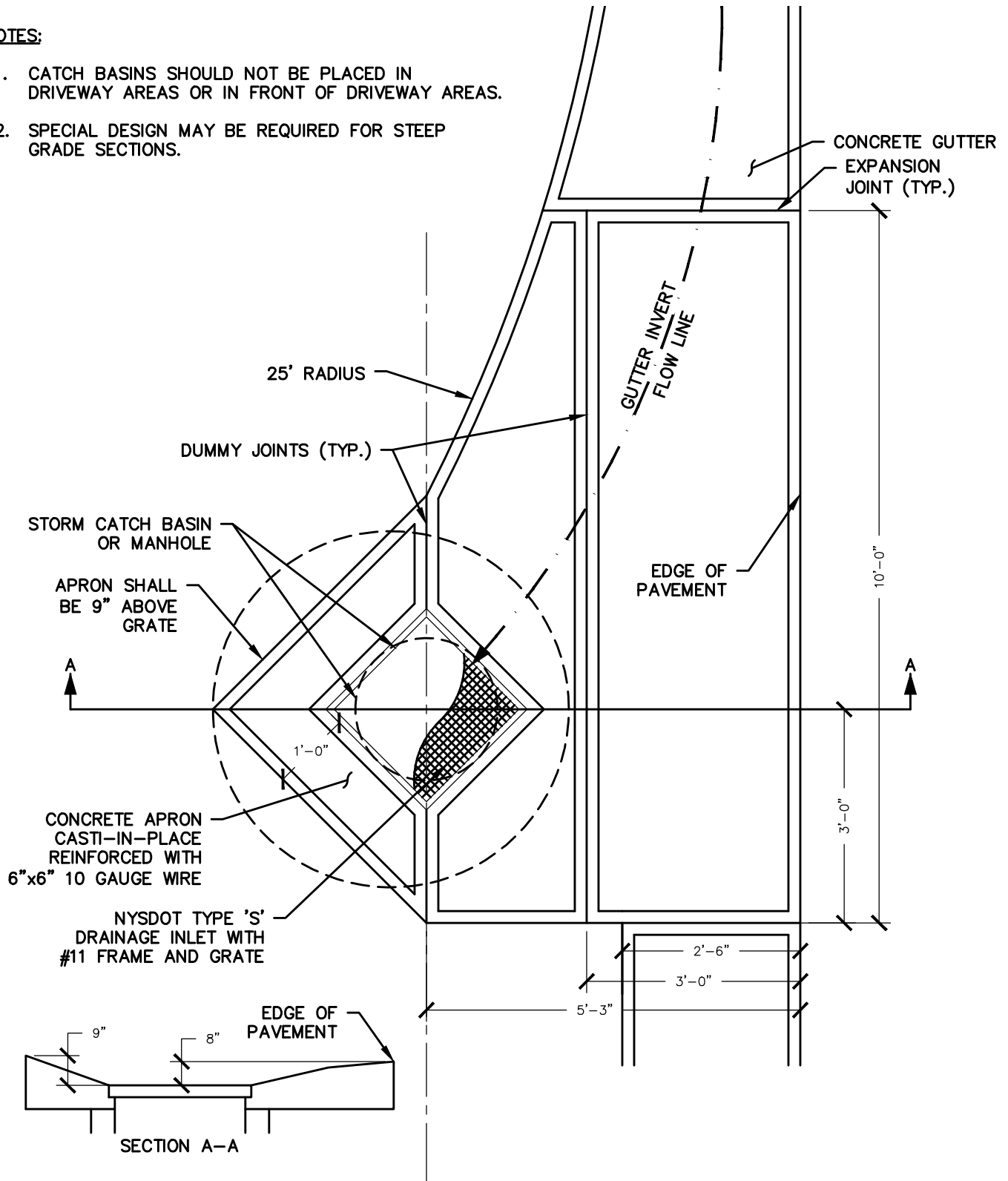
DATE: 2025

SCALE: N.T.S.



NOTES:

1. CATCH BASINS SHOULD NOT BE PLACED IN DRIVEWAY AREAS OR IN FRONT OF DRIVEWAY AREAS.
2. SPECIAL DESIGN MAY BE REQUIRED FOR STEEP GRADE SECTIONS.



SPECIAL GUTTER AND CATCH BASIN APRON DETAIL

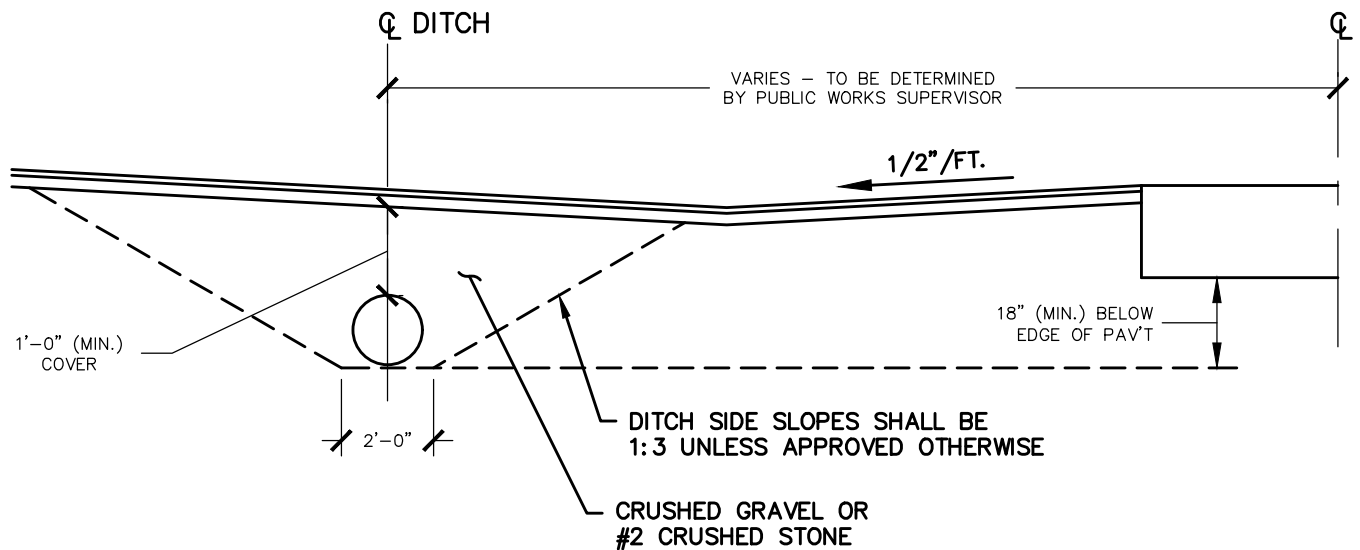
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 9.0**

DATE: 2025

SCALE: N.T.S.



SECTION VIEW

NOTES:

1. OWNER SHALL FURNISH AND INSTALL THE PROPER PIPE MATERIAL, MINIMUM LENGTH TO EXTEND AT LEAST THREE (3) FEET BEYOND THE OUTER EDGES OF THE NEW PROPOSED DRIVEWAY AT THE DITCH LINE. SIZE OF THE PIPE WILL BE DETERMINED BY THE VILLAGE OF TRUMANSBURG.
2. THE NEW PROPOSED DRIVEWAY CULVERT SHALL BE PLACED AT A LINE, GRADE AND OFFSET DETERMINED BY THE EXISTING DITCH LINE, GRADE AND OFFSET OF THE ADJACENT PROPERTIES ON EITHER SIDE OF THE NEW PROPOSED DRIVEWAY TO FLOW PROPERLY IN A MANNER SATISFACTORILY TO THE PUBLIC WORKS SUPERVISOR.
3. OWNER SHALL FURNISH AND INSTALL END SECTIONS ON EACH END OF THE NEW PROPOSED DRIVEWAY CULVERT. ENERGY DISSIPATING MATERIAL OR RIP RAP SHOULD BE USED AT EITHER END SECTION AS DIRECTED BY THE PUBLIC WORKS SUPERVISOR.
4. THE APPLICANT SHALL NOTIFY THE PUBLIC WORKS SUPERVISOR AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK TO SCHEDULE FIELD INSPECTION.

TYPICAL DRIVEWAY CULVERT DETAIL

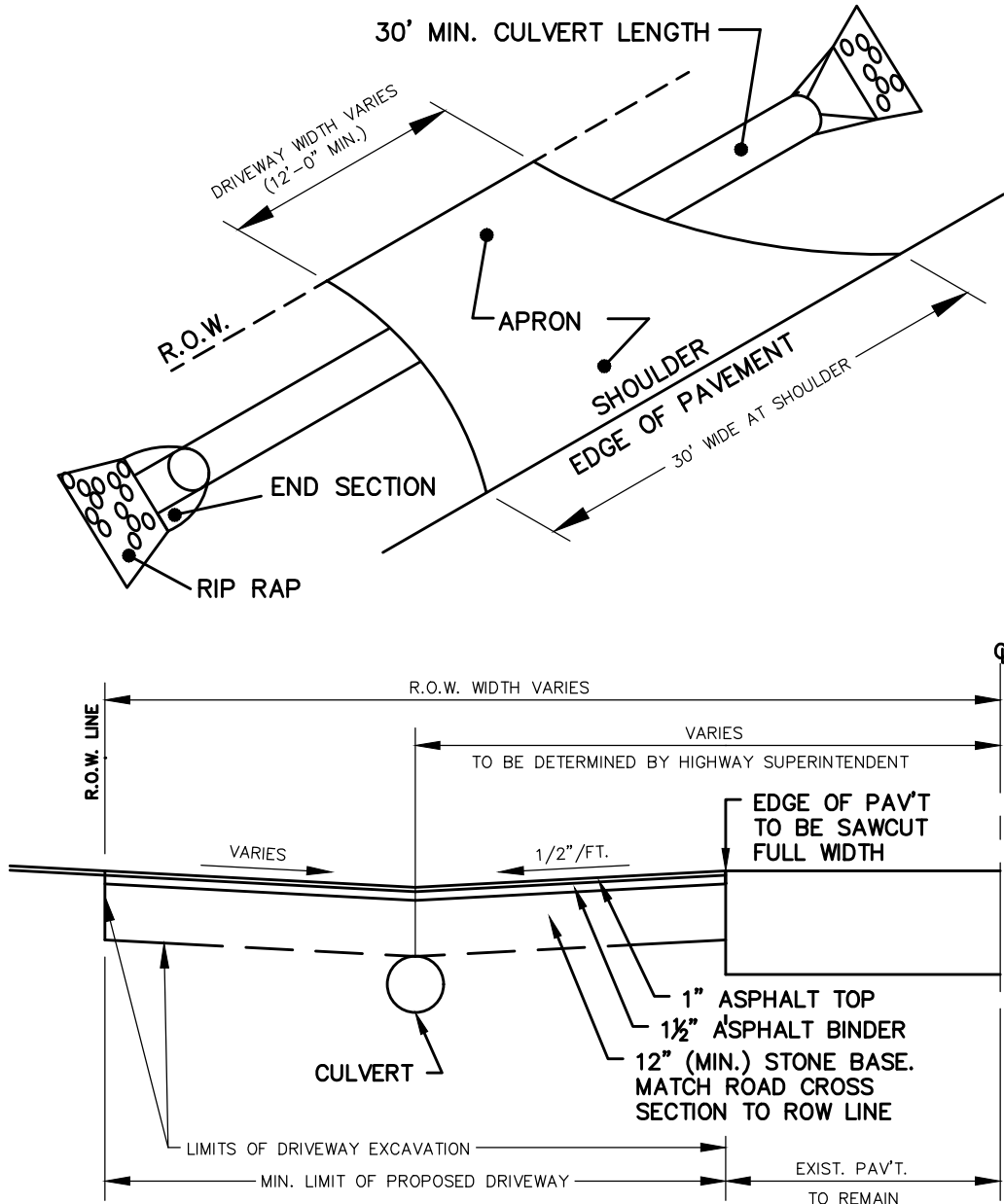
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 9.1**

DATE: 2025

SCALE: N.T.S.



NOTES:

1. THE APPLICANT SHALL NOTIFY THE PUBLIC WORKS SUPERVISOR AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK TO SCHEDULE A FIELD INSPECTION.
2. A MAXIMUM 3% LEVELING AREA SHOULD BE PROVIDED FOR THE FIRST 30-FEET FROM THE EDGE OF PAVEMENT.
3. SEE TYPICAL DRIVEWAY CULVERT DETAIL (ST-9.0)

TYPICAL DRIVEWAY CULVERT DETAIL (CONTINUED)

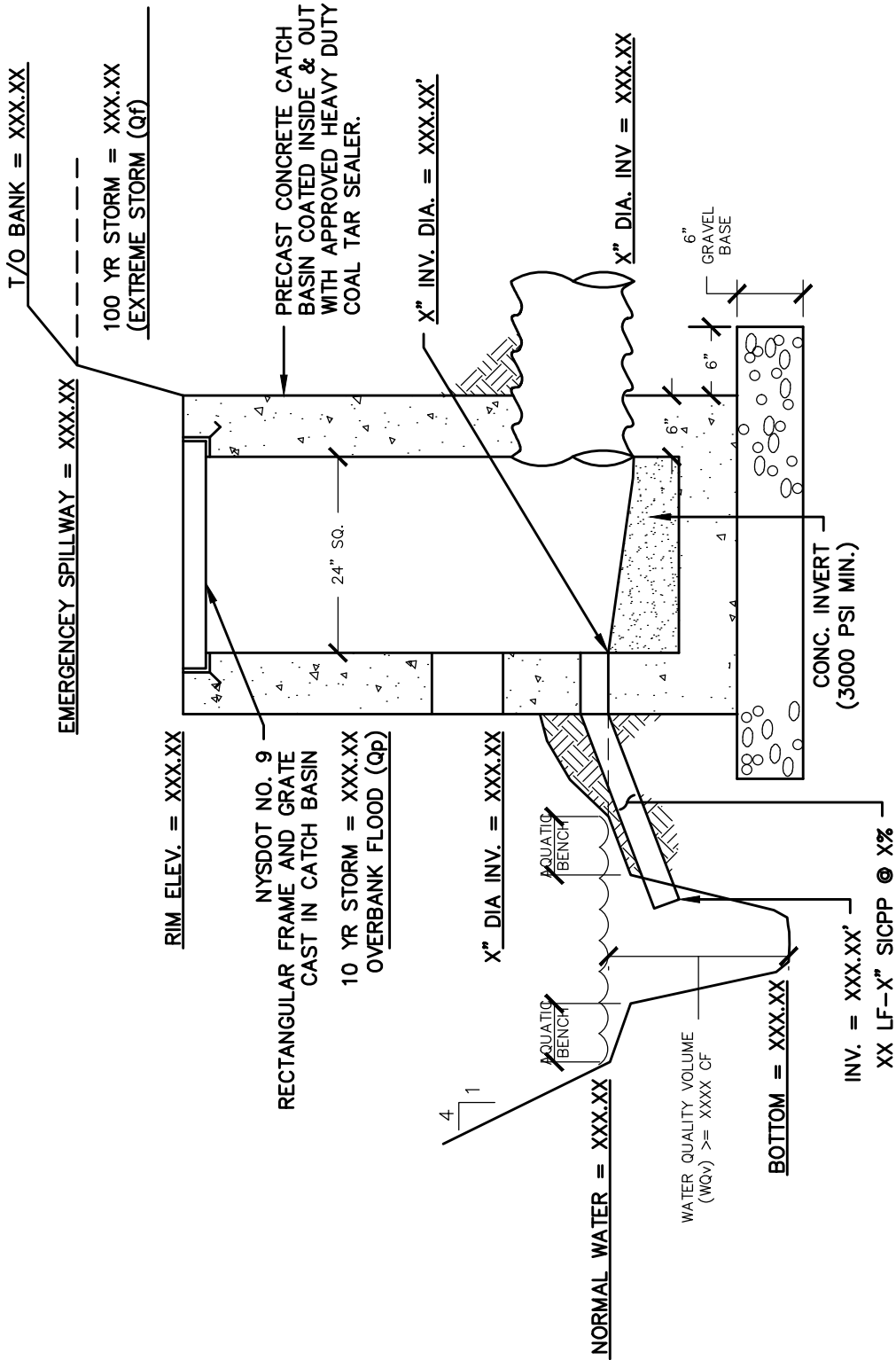
VILLAGE OF
TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: ST - 10.0

DATE: 2025

SCALE: N.T.S.



TYPICAL OUTLET CONTROL STRUCTURE DETAIL

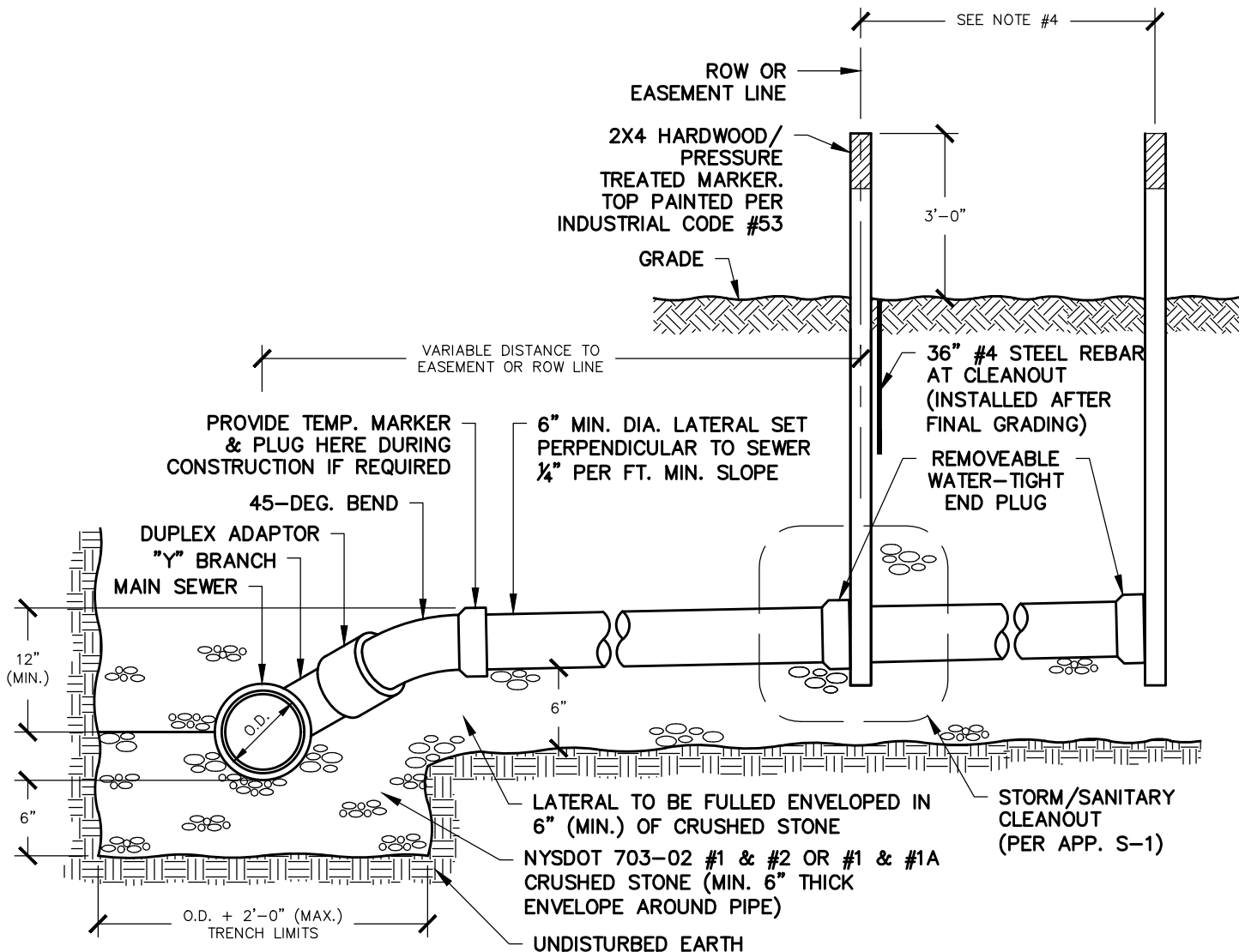
VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 11.0**

DATE: 2025

SCALE: N.T.S.



NOTES:

1. ALL LATERAL PIPING TO BE GASKETED PVC SDR-35 (NO GLUE FITTINGS ALLOWED)
2. ALL TEE CONNECTIONS TO BE INSERTA TEE SEWER FITTING (REFER TO APPENDIX ST-13)
3. CLEANOUTS SHALL BE PROVIDED AT A MAXIMUM DISTANCE OF 85' AND ONE SHALL ALSO BE LOCATED ON THE R.O.W. LINE. WHERE THE SEWER IS LOCATED OUTSIDE OF THE R.O.W. AND AN EASEMENT IS PROVIDED, PLACE CLEANOUT ON EASEMENT LINE.
4. EXTEND LATERAL 10' OR TO UTILITY EASEMENT (RG&E, CABLE, ETC.), WHICHEVER IS CLOSER

STORM LATERAL DETAIL

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 12.0**

DATE: 2025

SCALE: N.T.S.



PIPE BEDDING DETAILS FOR STORM LINES

TYPE OF UTILITY: STORM SEWER

PIPE MATERIAL: PVC

APPLICABLE PIPE SIZE: 4" TO 15"

TRENCH WIDTH: MAX. O.D. + 24"

TRENCH CONDITIONS: SELECT EARTH

BEDDING SPECIFICATION: THE TRENCH BOTTOM SHALL BE TRUE, EVEN, AND FREE OF LARGE STONES, LARGE DIRT CLOUDS, AND ANY OTHER FROZEN MATERIAL AS APPROVED BY THE ENGINEER. A MINIMUM OF THREE (3) INCHES OF NO. 1 AND NO. 1A CRUSHED STONE MIXED EQUALLY (NYS DOT GRADATION TABLE 703-4) SHALL BE INSTALLED AND TAMPED TO PROVIDE SATISFACTORY BEDDING FOR THE PIPE WHICH IS FIRM AND GIVES CONTINUOUS SUPPORT OF THE PIPE BARREL. DEPRESSIONS SHALL BE HOLLOWED IN THE TRENCH BOTTOM FOR PIPE BELLS AT ALL JOINTS IN THIS GRANULAR LIFT.

BACKFILL SPECIFICATION: INITIAL BACKFILL FROM THE TOP OF THE PIPE BEDDING MATERIAL TO THE SPRING LINE OF THE PIPE SHALL CONSIST OF NO. 1 AND NO. 1A CRUSHED STONE (NYS DOT GRADATION TABLE 703-4) MIXED EQUALLY.

FROM THE SPRING LINE OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE APPROVED SELECT BACKFILL MATERIAL, FREE OF LARGE STONES, DIRT CLOUDS, OR FROZEN MATERIAL WITH ANY DIMENSION GREATER THAN 1-1/2" SHALL BE INSTALLED.

THE REMAINDER OF THE BACKFILL MATERIAL NEED NOT BE AS CAREFULLY SELECTED AS THE INITIAL BACKFILL. LARGE STONES SHALL BE AVOIDED THAT COULD DAMAGE THE INSTALLED PIPE WHEN DROPPED OR WHEN FORCE THROUGH THE SOIL CUSHION OF THE INITIAL BACKFILL.

****REFER TO APPROPRIATE AGENCY FOR SANITARY SEWER BEDDING REQUIREMENTS****

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 12.1**

DATE: 2025

SCALE: N.T.S.



PIPE BEDDING DETAILS FOR STORM LINES

TYPE OF UTILITY: STORM SEWER

PIPE MATERIAL: PVC

APPLICABLE PIPE SIZE: 4" TO 15"

TRENCH WIDTH: MAX. O.D. + 24"

TRENCH CONDITIONS: ROCK OR HARD PAN

BEDDING SPECIFICATION: A MINIMUM CUSHION OF 6" OF NO. 1 AND NO. 1A CRUSHED STONE (NYSDOT GRADATION TABLE 703-4) SHALL BE USED WHEN EXCAVATING THROUGH ROCK OR HARD PAN. THE REMAINDER OF THE BEDDING INSTRUCTIONS SHALL BE AS THOSE FOR BEDDING IN SELECT EARTH.

BACKFILL SPECIFICATION: SEE INSTRUCTIONS FOR PVC SEWER PIPE, BACKFILL IN SELECT EARTH

TRENCH CONDITIONS: WET EARTH

BEDDING SPECIFICATION: IN ADDITION TO THE BEDDING REQUIRED FOR PVC SEWER PIPE IN SELECT EARTH, AN ADDITIONAL 6" OF NO. 2 AND NO. 3 CRUSHED STONE (NYSDOT GRADATION TABLE 703-4) MIXED EQUALLY SHALL BE INSTALLED TO SUPPORT THE SPECIFIED BEDDING MATERIAL, 3" OR NO. 1 AND NO 1A CRUSHED STONE.

BACKFILL SPECIFICATION: SEE INSTRUCTIONS FOR PVC SEWER PIPE, BACKFILL IN SELECT EARTH

****REFER TO APPROPRIATE AGENCY FOR SANITARY SEWER BEDDING REQUIREMENTS****

VILLAGE OF TRUMANSBURG

56 East Main Street
Trumansburg, NY 14886

APPENDIX: **ST - 12.2**

DATE: 2025

SCALE: N.T.S.



PIPE BEDDING DETAILS FOR STORM LINES

<u>TYPE OF UTILITY:</u>	STORM SEWER
<u>PIPE MATERIAL:</u>	REINFORCED CONCRETE PIPE (RCP) AND CORRUGATED STEEL PIPE (CSP), CORRUGATED HDPE
<u>APPLICABLE PIPE SIZE:</u>	12" TO 27" FOR RCP 12" TO 24" FOR CSP 12" TO 24" FOR C. HDPE
<u>TRENCH WIDTH:</u>	MAX. O.D. + 24"
<u>TRENCH CONDITIONS:</u>	SELECT EARTH
<u>BEDDING SPECIFICATION:</u>	SEE INSTRUCTIONS FOR PVC SEWER PIPE, BEDDING IN SELECT EARTH AND SUBSTITUTE NO. 1 AND NO. 2 CRUSHED STONE MIXED EQUALLY FOR NO. 1 AND NO. 1A CRUSHED STONE.
<u>BACKFILL SPECIFICATION:</u>	SEE INSTRUCTIONS FOR PVC SEWER PIPE, BACKFILL IN SELECT EARTH AND SUBSTITUTE NO. 1 AND NO. 2 CRUSHED STONE MIXED EQUALLY FOR NO. 1 AND NO. 1A CRUSHED STONE.
<u>TRENCH CONDITIONS:</u>	ROCK OR HARD PAN
<u>BEDDING SPECIFICATION:</u>	SEE INSTRUCTIONS FOR PVC, SEWER PIPE, BEDDING IN ROCK OR HARD PAN AND SUBSTITUTE NO. 1 AND NO. 2 CRUSHED STONE MIXED EQUALLY FOR NO. 1 AND NO. 1A CRUSHED STONE.
<u>TRENCH CONDITIONS:</u>	WET EARTH
<u>BEDDING SPECIFICATION:</u>	SEE INSTRUCTIONS FOR PVC, SEWER PIPE, BEDDING IN WET EARTH AND SUBSTITUTE NO. 1 AND NO. 2 CRUSHED STONE FOR NO. 1 AND NO. 1A CRUSHED STONE.
<u>BACKFILL SPECIFICATION:</u>	SEE INSTRUCTIONS FOR PVC SEWER PIPE, BACKFILL IN EARTH AND SUBSTITUTE NO. 1 AND NO. 2 CRUSHED STONE FOR NO. 1 AND NO. 1A CRUSHED STONE.

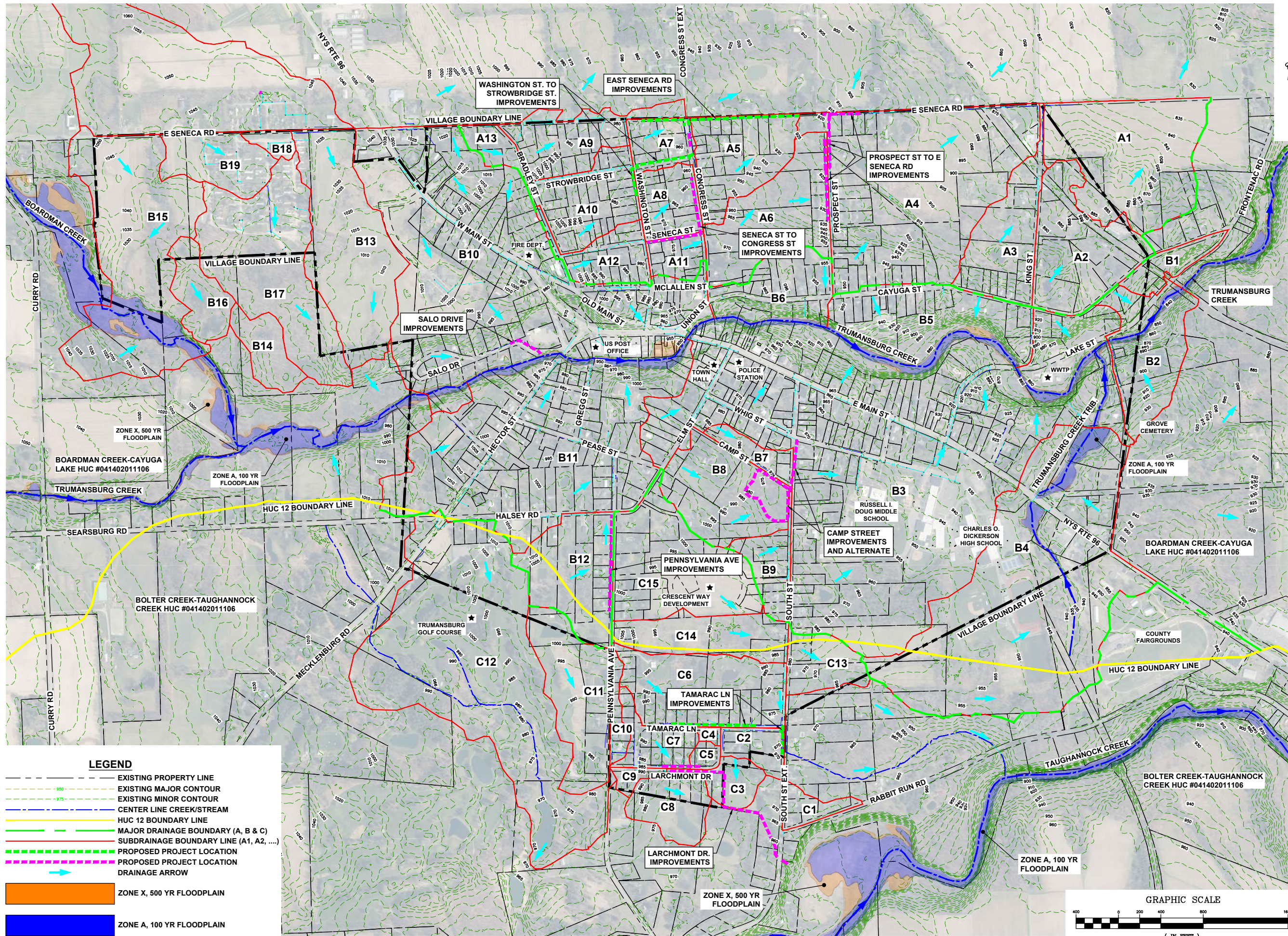
****REFER TO APPROPRIATE AGENCY FOR SANITARY SEWER BEDDING REQUIREMENTS****



Elevating Communities

APPENDIX C

C Village Overall Drainage Map



VILLAGE OF TRUMANSBURG
DRAINAGE EVALUATION

56 E. MAIN ST
TRUMANSBURG, NY 14886

CLIENT PROJECT #
2040.23004.000

MRB PROJECT #
2040.23004.000

DRAWN BY: JPL
CHECKED BY: TLF

DATE
SEPT. 2025

REVISION DESCRIPTION
AS ISSUED FOR REPORT

DRAINAGE MAP

OVERALL MAP

APPENDIX D***D NYSDEC Environmental Mapper, FEMA Map & HUC 12 Map***

Map Layers

Unique Geological Features

Waterbody Classifications for Rivers/Streams

Waterbody Classifications for Lakes

Waterbody Inventory/**Priority Waterbodies List**

Lakes and Reservoirs

Estuaries

Rivers and Streams

Shorelines

Wetland Layers

Previously Mapped Freshwater Wetlands

Informational Freshwater Wetland Mapping

National Wetlands Inventory

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

Reference Layers

NYS Counties

Cities

Towns

Villages

USGS Quadrangle

DEC Region

DEC Lands

Adirondack Park Boundary

42° 33'45.03" N,
76° 41'13.01" W

42° 33'45.03" N,
76° 39'22.51" W



42° 31'52.53" N,
76° 41'13.01" W

42° 31'52.53" N,
76° 39'22.51" W

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://msc.fema.gov)

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE)
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
OTHER GENERAL STRUCTURES		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes Zone X
OTHER FEATURES		Area with Flood Risk due to Levee Zone D
		Area of Minimal Flood Hazard Zone X
OTHER FEATURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance
OTHER FEATURES		Water Surface Elevation
		Coastal Transect
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
OTHER FEATURES		Hydrographic Feature
		Base Flood Elevation Line (BFE)
OTHER FEATURES		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about the Flood Insurance Rate Map (FIRM), available effective flood hazard information, or other information, please visit the FEMA National Flood Insurance Program (NFIP) website at <https://www.fema.gov/nfip>. The NFIP is the primary source for flood hazard information. The NFIP is a federal program that provides flood insurance to property owners in the United States. The NFIP is a federal program that provides flood insurance to property owners in the United States. The NFIP is a federal program that provides flood insurance to property owners in the United States.

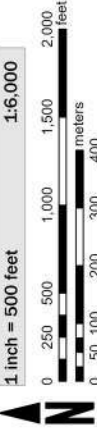
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-425-6220.

Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS).

The base map shown is the USGS National Map Orthorectified, Last referenced October, 2020.

Note: Some Special Flood Hazard Areas with elevations may not appear with elevation labels or the Base Flood Elevation or Contour lines which communicate the elevation for the location appear on the adjacent panel. Please see the Panel Locator Diagram on this map panel to determine the adjacent panel for the location of the flood hazard area. If the flood hazard area is not shown on this panel, it may be located on an adjacent panel. Please see the Panel Locator Diagram on this map panel to determine the adjacent panel for the location of the flood hazard area.

SCALE



Map Projection:
NAD 1983 StatePlane New York Central FIPS 3102 Feet
Vertical Datum: NAVD83

PANEL LOCATOR



0056	0057	0076*
	0059	0078
0062	0066	0086
0064	0068	0088
0152	0156	0176*

* PANEL NOT PRINTED

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

TOMPKINS COUNTY
NEW YORK
ALL JURISDICTIONS



Panel Contains:
COMMUNITY
TOWN OF ULYSSES
VILLAGE OF
TRUMANSBURG

NUMBER
360854

PANEL
0066

SUFFIX
D



MAP NUMBER
36109C0066D
EFFECTIVE DATE
June 18, 2025

42° 33'45.03" N,
76° 39'22.51" W

42° 33'45.03" N,
76° 37'30.01" W



42° 31'52.53" N,
76° 39'22.51" W

42° 31'52.53" N,
76° 37'30.01" W

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://NSC.FEMA.GOV](https://nsc.fema.gov)

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE)	With BFE or Depth	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile		
	Future Conditions 1% Annual Chance Flood Hazard		
	Area with Reduced Flood Risk due to Levee		
	Area with Flood Risk due to Levee		
OTHER AREAS	Area of Minimal Flood Hazard		
	Area of Undetermined Flood Hazard		
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer		
	Levee, Dike, or Floodwall		
OTHER FEATURES	Cross Sections with 1% Annual Chance		
	Water Surface Elevation		
OTHER FEATURES	Coastal Transect		
	Coastal Transect Baseline		
OTHER FEATURES	Profile Baseline		
	Hydrographic Feature		
OTHER FEATURES	Base Flood Elevation Line (BFE)		
	Limit of Study		
OTHER FEATURES	Jurisdiction Boundary		

NOTES TO USERS

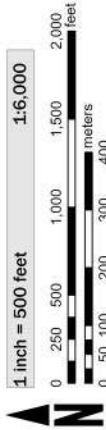
For information and questions about the Flood Insurance Rate Map (FIRM), available effective flood hazard mapping and insurance exchange at <https://nsc.fema.gov>. Available products may include previously issued letters of map change, flood insurance rate maps, and other products. Communities are encouraged to use the products can be downloaded from the website. Communities are encouraged to use the products can be downloaded from the website. Communities are encouraged to use the products can be downloaded from the website. These may be acquired directly from the Flood Map Service Center at the website listed above.

For community and countywide map data refer to the Flood Insurance Study Report for the jurisdiction. To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-426-4620.

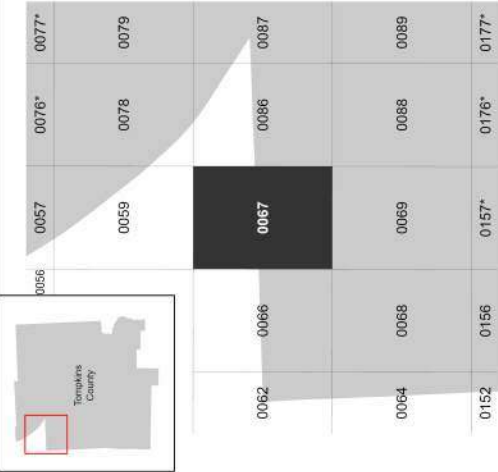
Base map information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The base map is the USGS National Map of Orthorectified, Last refreshed October, 2020.

Note: Some Special Flood Hazard Areas with elevations may not appear with elevation labels or the Base Flood Elevation or Contour lines which communicate the elevation for the location appear on the adjacent panel. Please see the Panel Locator Diagram on this map panel to determine the adjacent panel for the location. If the location is not shown on this map panel, please refer to the Flood Insurance Study report for detailed elevations by flood source.

SCALE



PANEL LOCATOR



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

TOMPKINS COUNTY
NEW YORK
ALL JURISDICTIONS

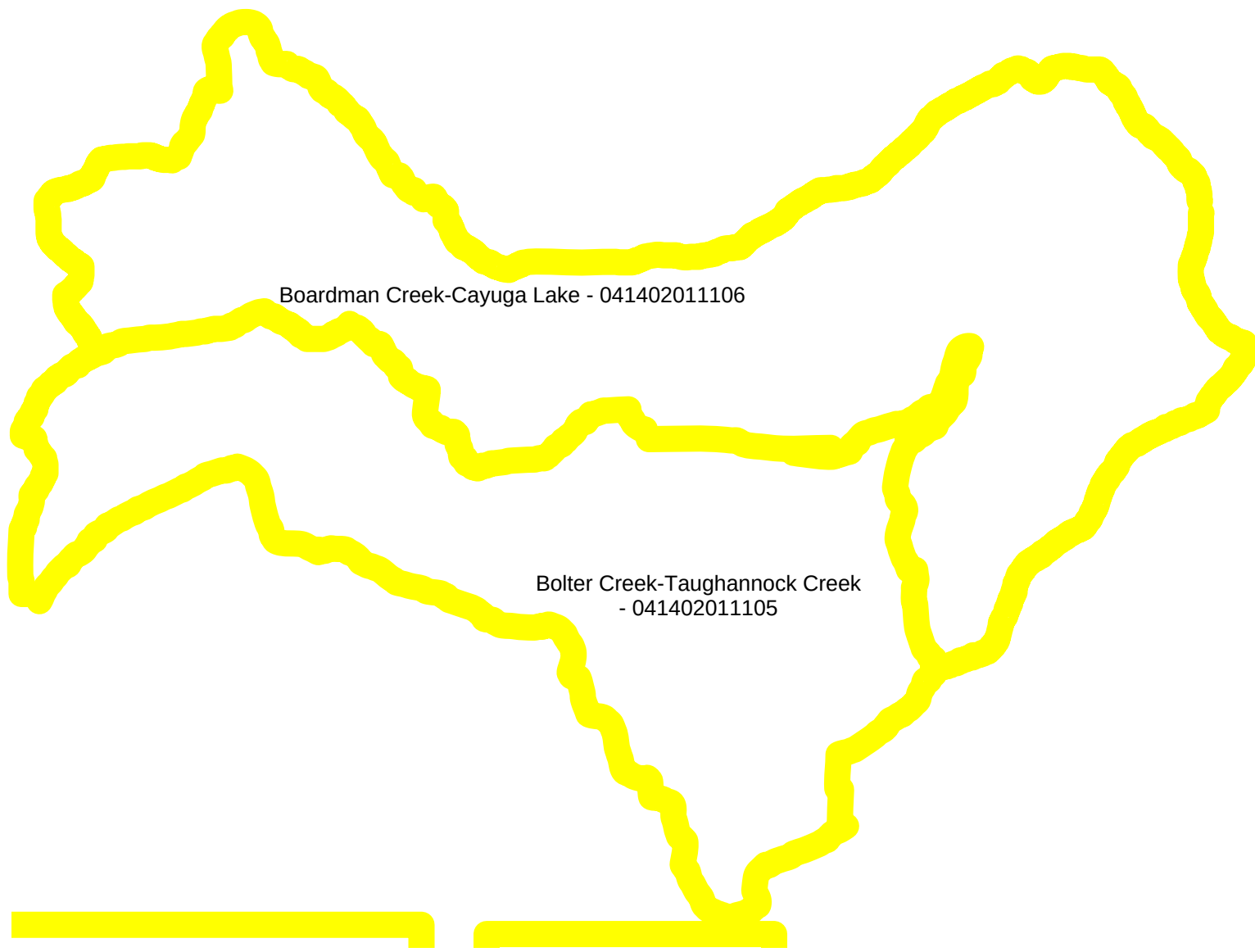


Panel Contains:
COMMUNITY
TOWN OF ULISSES
ULISSES
TRUMANSBURG

NUMBER PANEL SUFFIX
360854 0067 0067
363470 0067 0067



MAP NUMBER
36109C0067D
EFFECTIVE DATE
June 18, 2025



Boardman Creek-Cayuga Lake - 041402011106

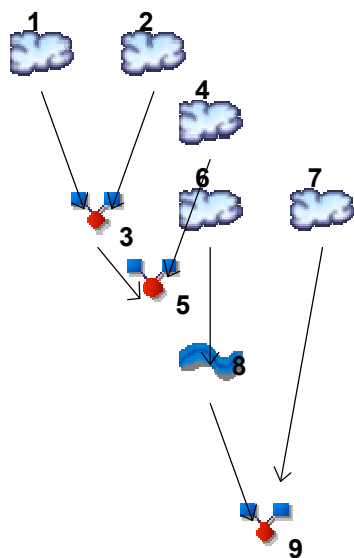
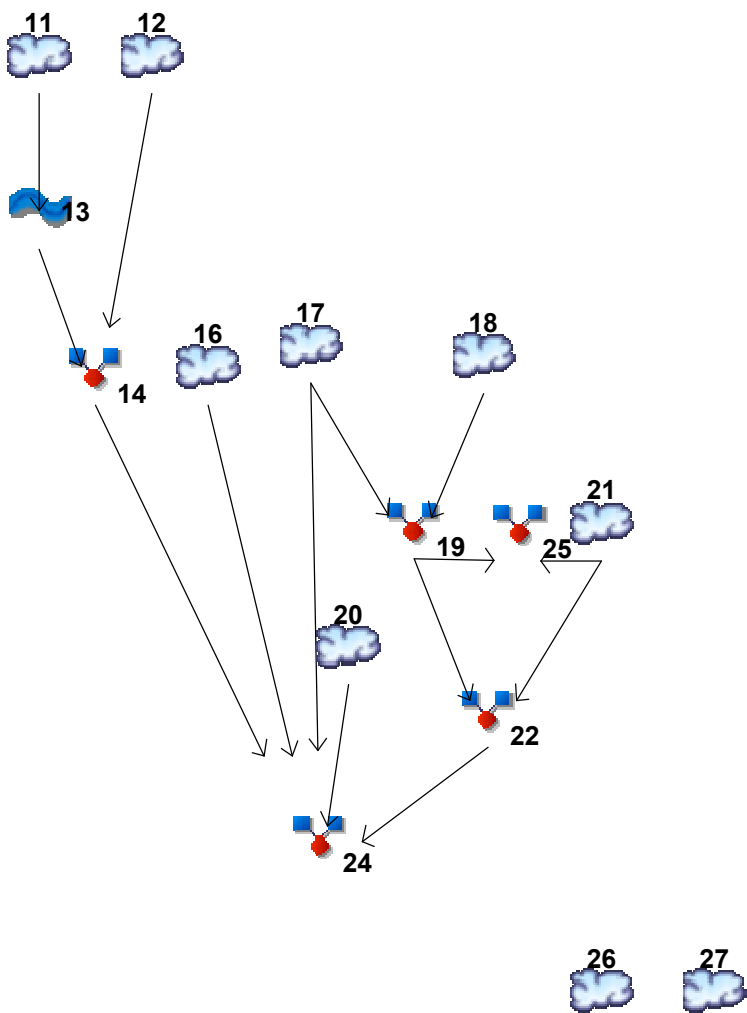
Bolter Creek-Taughannock Creek
- 041402011105

APPENDIX E

E Hydraflow Hydrographs

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025



Legend

Hyd.	Origin	Description
1	SCS Runoff	Camp St. - B8
2	SCS Runoff	Camp St. - B9
3	Combine	Camp St. - (B8 & B9)
4	SCS Runoff	Camp St. B7
5	Combine	Camp St. (B7, B8, B9)
6	SCS Runoff	Tamarack Ln - C14
7	SCS Runoff	Tamarack Ln - C6
8	Reach	C14 to C6
9	Combine	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	Bradley St. - A13
12	SCS Runoff	Seneca Rd - A9
13	Reach	A13 to A9
14	Combine	Combine (A9 & A13)
16	SCS Runoff	Seneca St. West - A12
17	SCS Runoff	Seneca St. East - A11
18	SCS Runoff	Congress St. West - A8
19	Combine	Combine A8 & A11
20	SCS Runoff	Strowbridge St. NE - A7
21	SCS Runoff	Strowbridge St. SW - A10
22	Combine	Combine A8, A11 & A10
24	Combine	Combine Seneca Rd Drainage
25	Combine	Combine A11, A8 & A10
26	SCS Runoff	Congress St. East - A5
27	SCS Runoff	Prospect St. West - A6

Watershed Model Schematic..... 1

Hydrograph Return Period Recap..... 2

1 - Year

Summary Report..... 3

5 - Year

Summary Report..... 4

10 - Year

Summary Report..... 5

25 - Year

Summary Report..... 6

50 - Year

Summary Report..... 7

100 - Year

Summary Report..... 8

IDF Report..... 9

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	0.000	-----	-----	0.083	0.315	1.512	3.568	7.143	Camp St. - B8
2	SCS Runoff	-----	0.025	-----	-----	0.465	1.102	2.646	4.454	6.960	Camp St. - B9
3	Combine	1, 2	0.024	-----	-----	0.445	1.168	3.784	7.555	13.44	Camp St. - (B8 & B9)
4	SCS Runoff	-----	0.000	-----	-----	0.029	0.114	0.453	0.975	1.825	Camp St. B7
5	Combine	3, 4	0.024	-----	-----	0.448	1.256	4.220	8.519	15.26	Camp St. (B7, B8, B9)
6	SCS Runoff	-----	1.372	-----	-----	5.209	8.040	13.16	18.17	24.45	Tamarack Ln - C14
7	SCS Runoff	-----	0.285	-----	-----	3.520	6.993	14.27	22.22	32.60	Tamarack Ln - C6
8	Reach	6	1.122	-----	-----	5.010	7.891	13.05	18.14	24.44	C14 to C6
9	Combine	7, 8	1.408	-----	-----	8.326	14.42	26.39	38.93	55.09	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	-----	0.558	-----	-----	2.147	3.287	5.315	7.297	9.791	Bradley St. - A13
12	SCS Runoff	-----	2.473	-----	-----	8.758	13.15	20.91	28.45	37.94	Seneca Rd - A9
13	Reach	11	0.440	-----	-----	1.740	2.706	4.463	6.203	8.410	A13 to A9
14	Combine	12, 13	2.772	-----	-----	10.09	15.34	24.71	33.86	45.27	Combine (A9 & A13)
16	SCS Runoff	-----	0.039	-----	-----	1.102	2.692	6.247	10.21	15.43	Seneca St. West - A12
17	SCS Runoff	-----	0.016	-----	-----	0.367	0.927	2.266	3.816	5.951	Seneca St. East - A11
18	SCS Runoff	-----	1.056	-----	-----	4.067	6.273	10.21	14.07	18.89	Congress St. West - A8
19	Combine	17, 18	1.056	-----	-----	4.418	7.199	12.48	17.87	24.78	Combine A8 & A11
20	SCS Runoff	-----	2.180	-----	-----	6.212	8.841	13.43	17.87	23.32	Strowbridge St. NE - A7
21	SCS Runoff	-----	1.118	-----	-----	6.918	11.59	20.16	28.70	39.53	Strowbridge St. SW - A10
22	Combine	19, 21	2.089	-----	-----	10.52	17.47	30.45	43.62	60.69	Combine A8, A11 & A10
24	Combine	14, 16, 17, 20, 22, 19, 21,	6.699	-----	-----	27.51	44.21	75.48	107.01	147.09	Combine Seneca Rd Drainage
25	Combine		2.089	-----	-----	10.52	17.47	30.45	43.62	60.69	Combine A11, A8 & A10
26	SCS Runoff	-----	0.795	-----	-----	5.611	9.708	17.54	25.42	35.46	Congress St. East - A5
27	SCS Runoff	-----	0.045	-----	-----	1.076	3.156	8.736	15.47	25.11	Prospect St. West - A6
Proj. file: TBurg Drainage Evaluation - Updated CN and Names.gpw										Wednesday, 10 / 1 / 2025	

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	Camp St. - B8
2	SCS Runoff	0.025	2	938	866	-----	-----	-----	Camp St. - B9
3	Combine	0.024	2	940	851	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	Camp St. B7
5	Combine	0.024	2	940	851	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	1.372	2	746	12,400	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	0.285	2	770	6,507	-----	-----	-----	Tamarack Ln - C6
8	Reach	1.122	2	770	12,389	6	-----	-----	C14 to C6
9	Combine	1.408	2	770	18,896	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	0.558	2	732	3,392	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	2.473	2	732	13,984	-----	-----	-----	Seneca Rd - A9
13	Reach	0.440	2	746	3,385	11	-----	-----	A13 to A9
14	Combine	2.772	2	732	17,369	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	0.039	2	898	1,350	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	0.016	2	926	564	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	1.056	2	738	7,711	-----	-----	-----	Congress St. West - A8
19	Combine	1.056	2	738	8,275	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	2.180	2	726	8,661	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	1.118	2	730	8,765	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	2.089	2	734	17,040	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	6.699	2	732	44,984	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	2.089	2	734	17,040		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	0.795	2	738	8,527	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	0.045	2	1106	1,476	-----	-----	-----	Prospect St. West - A6
TBurg Drainage Evaluation - Updated CN and Rainfall					Return Period: 1 Year			Wednesday, 10 / 1 / 2025	

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.083	2	1076	2,952	-----	-----	-----	Camp St. - B8
2	SCS Runoff	0.465	2	754	5,831	-----	-----	-----	Camp St. - B9
3	Combine	0.445	2	758	8,675	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	0.029	2	848	999	-----	-----	-----	Camp St. B7
5	Combine	0.448	2	758	9,674	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	5.209	2	744	33,545	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	3.520	2	740	28,206	-----	-----	-----	Tamarack Ln - C6
8	Reach	5.010	2	750	33,541	6	-----	-----	C14 to C6
9	Combine	8.326	2	748	61,747	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	2.147	2	730	9,175	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	8.758	2	730	36,551	-----	-----	-----	Seneca Rd - A9
13	Reach	1.740	2	740	9,169	11	-----	-----	A13 to A9
14	Combine	10.09	2	732	45,720	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	1.102	2	730	7,902	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	0.367	2	740	3,795	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	4.067	2	734	20,860	-----	-----	-----	Congress St. West - A8
19	Combine	4.418	2	736	24,655	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	6.212	2	726	20,702	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	6.918	2	726	27,882	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	10.52	2	728	52,537	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	27.51	2	728	130,657	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	10.52	2	728	52,537		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	5.611	2	732	28,510	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	1.076	2	748	14,398	-----	-----	-----	Prospect St. West - A6
TBurg Drainage Evaluation - Updated CN and Rainfall					Return Period: 5 Year			Wednesday, 10 / 1 / 2025	

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.315	2	802	8,483	-----	-----	-----	Camp St. - B8
2	SCS Runoff	1.102	2	746	10,147	-----	-----	-----	Camp St. - B9
3	Combine	1.168	2	756	18,444	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	0.114	2	784	2,402	-----	-----	-----	Camp St. B7
5	Combine	1.256	2	758	20,847	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	8.040	2	742	48,139	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	6.993	2	738	45,309	-----	-----	-----	Tamarack Ln - C6
8	Reach	7.891	2	748	48,136	6	-----	-----	C14 to C6
9	Combine	14.42	2	744	93,445	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	3.287	2	730	13,166	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	13.15	2	730	51,960	-----	-----	-----	Seneca Rd - A9
13	Reach	2.706	2	738	13,161	11	-----	-----	A13 to A9
14	Combine	15.34	2	730	65,120	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	2.692	2	728	13,451	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	0.927	2	734	6,605	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	6.273	2	734	29,935	-----	-----	-----	Congress St. West - A8
19	Combine	7.199	2	734	36,540	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	8.841	2	726	28,671	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	11.59	2	726	41,772	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	17.47	2	728	78,312	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	44.21	2	728	192,159	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	17.47	2	728	78,312		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	9.708	2	730	43,236	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	3.156	2	736	26,456	-----	-----	-----	Prospect St. West - A6
TBurg Drainage Evaluation - Updated CN and Rainfall					Return Period: 10 Year			Wednesday, 10 / 1 / 2025	

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1.512	2	766	22,338	-----	-----	-----	Camp St. - B8
2	SCS Runoff	2.646	2	742	18,831	-----	-----	-----	Camp St. - B9
3	Combine	3.784	2	750	40,823	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	0.453	2	760	5,702	-----	-----	-----	Camp St. B7
5	Combine	4.220	2	752	46,525	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	13.16	2	742	74,357	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	14.27	2	736	78,300	-----	-----	-----	Tamarack Ln - C6
8	Reach	13.05	2	746	74,355	6	-----	-----	C14 to C6
9	Combine	26.39	2	742	152,656	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	5.315	2	730	20,337	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	20.91	2	730	79,467	-----	-----	-----	Seneca Rd - A9
13	Reach	4.463	2	738	20,332	11	-----	-----	A13 to A9
14	Combine	24.71	2	730	99,798	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	6.247	2	726	24,496	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	2.266	2	734	12,257	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	10.21	2	734	46,240	-----	-----	-----	Congress St. West - A8
19	Combine	12.48	2	734	58,497	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	13.43	2	724	42,645	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	20.16	2	726	67,416	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	30.45	2	728	125,912	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	75.48	2	728	305,108	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	30.45	2	728	125,912		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	17.54	2	730	70,637	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	8.736	2	734	51,343	-----	-----	-----	Prospect St. West - A6
TBurg Drainage Evaluation - Updated CN and Return Period: 25 Year					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	3.568	2	756	39,271	-----	-----	-----	Camp St. - B8
2	SCS Runoff	4.454	2	742	28,169	-----	-----	-----	Camp St. - B9
3	Combine	7.555	2	748	66,922	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	0.975	2	752	9,595	-----	-----	-----	Camp St. B7
5	Combine	8.519	2	748	76,518	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	18.17	2	742	100,223	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	22.22	2	736	112,647	-----	-----	-----	Tamarack Ln - C6
8	Reach	18.14	2	744	100,221	6	-----	-----	C14 to C6
9	Combine	38.93	2	740	212,868	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	7.297	2	730	27,411	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	28.45	2	730	106,466	-----	-----	-----	Seneca Rd - A9
13	Reach	6.203	2	736	27,407	11	-----	-----	A13 to A9
14	Combine	33.86	2	730	133,873	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	10.21	2	726	36,253	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	3.816	2	732	18,335	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	14.07	2	734	62,324	-----	-----	-----	Congress St. West - A8
19	Combine	17.87	2	734	80,659	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	17.87	2	724	56,164	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	28.70	2	726	93,277	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	43.62	2	726	173,936	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	107.01	2	728	418,560	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	43.62	2	726	173,936		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	25.42	2	730	98,436	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	15.47	2	734	78,597	-----	-----	-----	Prospect St. West - A6
Tburg Drainage Evaluation - Updated CN and Rainfall					Return Period: 50 Year			Wednesday, 10 / 1 / 2025	

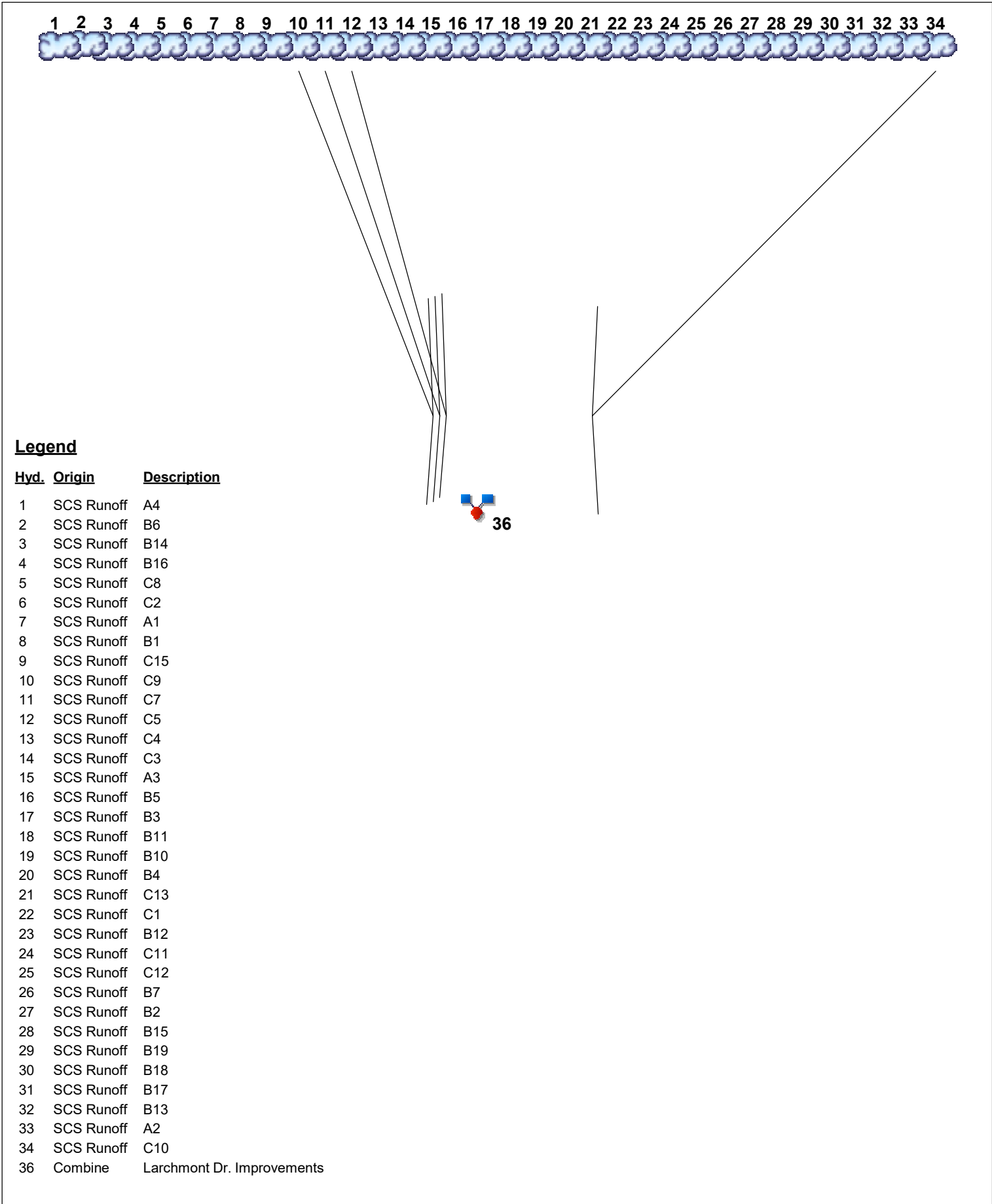
Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	7.143	2	750	63,890	-----	-----	-----	Camp St. - B8
2	SCS Runoff	6.960	2	740	40,661	-----	-----	-----	Camp St. - B9
3	Combine	13.44	2	746	103,804	1, 2	-----	-----	Camp St. - (B8 & B9)
4	SCS Runoff	1.825	2	750	15,128	-----	-----	-----	Camp St. B7
5	Combine	15.26	2	748	118,932	3, 4	-----	-----	Camp St. (B7, B8, B9)
6	SCS Runoff	24.45	2	742	132,797	-----	-----	-----	Tamarack Ln - C14
7	SCS Runoff	32.60	2	736	157,616	-----	-----	-----	Tamarack Ln - C6
8	Reach	24.44	2	744	132,795	6	-----	-----	C14 to C6
9	Combine	55.09	2	738	290,412	7, 8	-----	-----	Tamarack Ln Combine (C6 & C14)
11	SCS Runoff	9.791	2	728	36,320	-----	-----	-----	Bradley St. - A13
12	SCS Runoff	37.94	2	728	140,341	-----	-----	-----	Seneca Rd - A9
13	Reach	8.410	2	736	36,315	11	-----	-----	A13 to A9
14	Combine	45.27	2	730	176,656	12, 13	-----	-----	Combine (A9 & A13)
16	SCS Runoff	15.43	2	726	51,896	-----	-----	-----	Seneca St. West - A12
17	SCS Runoff	5.951	2	732	26,465	-----	-----	-----	Seneca St. East - A11
18	SCS Runoff	18.89	2	734	82,581	-----	-----	-----	Congress St. West - A8
19	Combine	24.78	2	732	109,046	17, 18	-----	-----	Combine A8 & A11
20	SCS Runoff	23.32	2	724	72,949	-----	-----	-----	Strowbridge St. NE - A7
21	SCS Runoff	39.53	2	724	126,367	-----	-----	-----	Strowbridge St. SW - A10
22	Combine	60.69	2	726	235,413	19, 21	-----	-----	Combine A8, A11 & A10
24	Combine	147.09	2	728	563,379	14, 16, 17, 20, 22, 19, 21,	-----	-----	Combine Seneca Rd Drainage
25	Combine	60.69	2	726	235,413		-----	-----	Combine A11, A8 & A10
26	SCS Runoff	35.46	2	730	134,158	-----	-----	-----	Congress St. East - A5
27	SCS Runoff	25.11	2	732	115,523	-----	-----	-----	Prospect St. West - A6
TBurg Drainage Evaluation - Updated CN and Return Period: 100 Year								Wednesday, 10 / 1 / 2025	

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025



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Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	11.75	-----	-----	34.42	49.67	76.22	101.70	133.04	A4
2	SCS Runoff	-----	0.260	-----	-----	2.908	5.580	11.04	16.81	24.29	B6
3	SCS Runoff	-----	0.000	-----	-----	0.000	0.000	0.026	0.086	0.324	B14
4	SCS Runoff	-----	0.013	-----	-----	0.211	0.536	1.396	2.476	4.058	B16
5	SCS Runoff	-----	0.378	-----	-----	2.672	4.623	8.350	12.10	16.89	C8
6	SCS Runoff	-----	0.327	-----	-----	1.452	2.331	3.969	5.602	7.663	C2
7	SCS Runoff	-----	2.312	-----	-----	14.15	23.87	41.88	59.88	82.70	A1
8	SCS Runoff	-----	0.000	-----	-----	0.009	0.029	0.203	0.977	2.790	B1
9	SCS Runoff	-----	8.174	-----	-----	18.37	24.70	35.35	45.28	57.24	C15
10	SCS Runoff	-----	0.016	-----	-----	0.395	0.834	1.754	2.709	3.951	C9
11	SCS Runoff	-----	0.044	-----	-----	1.790	3.953	8.409	13.01	19.00	C7
12	SCS Runoff	-----	0.009	-----	-----	0.153	0.332	0.732	1.179	1.786	C5
13	SCS Runoff	-----	0.038	-----	-----	0.267	0.462	0.835	1.210	1.689	C4
14	SCS Runoff	-----	0.021	-----	-----	0.602	1.471	3.414	5.578	8.434	C3
15	SCS Runoff	-----	7.002	-----	-----	17.87	24.81	36.91	48.38	62.37	A3
16	SCS Runoff	-----	2.598	-----	-----	10.87	17.14	28.43	39.55	53.50	B5
17	SCS Runoff	-----	4.037	-----	-----	34.98	64.41	123.58	185.70	265.82	B3
18	SCS Runoff	-----	34.51	-----	-----	74.14	98.45	139.31	177.28	222.83	B11
19	SCS Runoff	-----	4.959	-----	-----	27.37	46.04	81.86	118.18	164.41	B10
20	SCS Runoff	-----	2.724	-----	-----	15.84	27.24	49.55	72.62	102.22	B4
21	SCS Runoff	-----	2.642	-----	-----	7.530	10.72	16.28	21.66	28.26	C13
22	SCS Runoff	-----	1.621	-----	-----	3.719	5.028	7.251	9.340	11.86	C1
23	SCS Runoff	-----	1.701	-----	-----	5.140	7.558	11.84	16.00	21.15	B12
24	SCS Runoff	-----	1.971	-----	-----	19.50	35.84	68.77	102.57	146.07	C11
25	SCS Runoff	-----	1.284	-----	-----	7.957	14.05	26.54	39.97	57.64	C12
26	SCS Runoff	-----	0.000	-----	-----	0.029	0.114	0.453	0.975	1.825	B7
27	SCS Runoff	-----	0.069	-----	-----	2.253	5.492	12.72	20.54	30.80	B2
28	SCS Runoff	-----	6.203	-----	-----	20.39	30.41	48.14	65.34	86.69	B15
29	SCS Runoff	-----	3.038	-----	-----	8.392	11.88	17.90	23.66	30.76	B19
30	SCS Runoff	-----	2.146	-----	-----	3.580	4.390	5.685	6.844	8.206	B18
31	SCS Runoff	-----	0.656	-----	-----	4.384	7.849	14.95	22.54	32.45	B17
32	SCS Runoff	-----	1.462	-----	-----	8.224	13.83	24.58	35.44	49.25	B13
33	SCS Runoff	-----	0.035	-----	-----	0.900	3.268	10.11	18.52	30.40	A2
34	SCS Runoff	-----	0.018	-----	-----	0.526	1.176	2.594	4.090	6.045	C10

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
36	Combine	10, 11, 12, 34,	0.086	-----	-----	2.579	5.778	12.30	19.46	28.86	Larchmont Dr. Improvements
Proj. file: TBurg Drainage Evaluation Existing Additional Watersheds (6min minimum delay) Wed, 10 / 1 / 2025											

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	11.75	2	742	81,748	-----	-----	-----	A4
2	SCS Runoff	0.260	2	756	4,766	-----	-----	-----	B6
3	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	B14
4	SCS Runoff	0.013	2	1440	358	-----	-----	-----	B16
5	SCS Runoff	0.378	2	738	4,060	-----	-----	-----	C8
6	SCS Runoff	0.327	2	754	3,606	-----	-----	-----	C2
7	SCS Runoff	2.312	2	732	20,282	-----	-----	-----	A1
8	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	B1
9	SCS Runoff	8.174	2	746	54,470	-----	-----	-----	C15
10	SCS Runoff	0.016	2	752	418	-----	-----	-----	C9
11	SCS Runoff	0.044	2	798	1,368	-----	-----	-----	C7
12	SCS Runoff	0.009	2	818	293	-----	-----	-----	C5
13	SCS Runoff	0.038	2	738	406	-----	-----	-----	C4
14	SCS Runoff	0.021	2	898	738	-----	-----	-----	C3
15	SCS Runoff	7.002	2	726	25,721	-----	-----	-----	A3
16	SCS Runoff	2.598	2	738	20,488	-----	-----	-----	B5
17	SCS Runoff	4.037	2	758	65,986	-----	-----	-----	B3
18	SCS Runoff	34.51	2	736	168,674	-----	-----	-----	B11
19	SCS Runoff	4.959	2	754	60,707	-----	-----	-----	B10
20	SCS Runoff	2.724	2	770	41,714	-----	-----	-----	B4
21	SCS Runoff	2.642	2	726	10,498	-----	-----	-----	C13
22	SCS Runoff	1.621	2	732	7,230	-----	-----	-----	C1
23	SCS Runoff	1.701	2	780	21,504	-----	-----	-----	B12
24	SCS Runoff	1.971	2	746	29,188	-----	-----	-----	C11
25	SCS Runoff	1.284	2	826	29,523	-----	-----	-----	C12
26	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	B7
27	SCS Runoff	0.069	2	896	2,387	-----	-----	-----	B2
28	SCS Runoff	6.203	2	748	52,416	-----	-----	-----	B15
29	SCS Runoff	3.038	2	734	15,421	-----	-----	-----	B19
30	SCS Runoff	2.146	2	732	9,272	-----	-----	-----	B18
31	SCS Runoff	0.656	2	804	13,907	-----	-----	-----	B17
32	SCS Runoff	1.462	2	750	17,063	-----	-----	-----	B13
33	SCS Runoff	0.035	2	1440	979	-----	-----	-----	A2
34	SCS Runoff	0.018	2	804	553	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watersheds (61 Year Minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	0.086	2	800	2,632	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
TBurg Drainage Evaluation Existing Additional Watershed (61 Year Return Period Minimum).gpw						Wednesday, 10 / 1 / 2025			

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	34.42	2	740	195,393	-----	-----	-----	A4
2	SCS Runoff	2.908	2	734	19,157	-----	-----	-----	B6
3	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	B14
4	SCS Runoff	0.211	2	808	4,551	-----	-----	-----	B16
5	SCS Runoff	2.672	2	732	13,576	-----	-----	-----	C8
6	SCS Runoff	1.452	2	746	10,510	-----	-----	-----	C2
7	SCS Runoff	14.15	2	730	64,517	-----	-----	-----	A1
8	SCS Runoff	0.009	2	1440	154	-----	-----	-----	B1
9	SCS Runoff	18.37	2	746	112,757	-----	-----	-----	C15
10	SCS Runoff	0.395	2	726	1,972	-----	-----	-----	C9
11	SCS Runoff	1.790	2	722	7,143	-----	-----	-----	C7
12	SCS Runoff	0.153	2	746	1,531	-----	-----	-----	C5
13	SCS Runoff	0.267	2	732	1,358	-----	-----	-----	C4
14	SCS Runoff	0.602	2	730	4,319	-----	-----	-----	C3
15	SCS Runoff	17.87	2	726	58,356	-----	-----	-----	A3
16	SCS Runoff	10.87	2	736	57,420	-----	-----	-----	B5
17	SCS Runoff	34.98	2	738	247,552	-----	-----	-----	B3
18	SCS Runoff	74.14	2	736	341,934	-----	-----	-----	B11
19	SCS Runoff	27.37	2	742	193,111	-----	-----	-----	B10
20	SCS Runoff	15.84	2	752	139,468	-----	-----	-----	B4
21	SCS Runoff	7.530	2	726	25,093	-----	-----	-----	C13
22	SCS Runoff	3.719	2	732	15,293	-----	-----	-----	C1
23	SCS Runoff	5.140	2	772	52,865	-----	-----	-----	B12
24	SCS Runoff	19.50	2	732	109,501	-----	-----	-----	C11
25	SCS Runoff	7.957	2	786	110,759	-----	-----	-----	C12
26	SCS Runoff	0.029	2	848	999	-----	-----	-----	B7
27	SCS Runoff	2.253	2	726	13,976	-----	-----	-----	B2
28	SCS Runoff	20.39	2	746	132,741	-----	-----	-----	B15
29	SCS Runoff	8.392	2	732	35,887	-----	-----	-----	B19
30	SCS Runoff	3.580	2	732	15,589	-----	-----	-----	B18
31	SCS Runoff	4.384	2	770	52,175	-----	-----	-----	B17
32	SCS Runoff	8.224	2	740	54,277	-----	-----	-----	B13
33	SCS Runoff	0.900	2	738	12,459	-----	-----	-----	A2
34	SCS Runoff	0.526	2	726	2,885	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watersheds (65 Year Minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	2.579	2	722	13,530	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
TBurg Drainage Evaluation Existing Additional Watershed (65 Year minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	49.67	2	740	270,608	-----	-----	-----	A4
2	SCS Runoff	5.580	2	734	30,307	-----	-----	-----	B6
3	SCS Runoff	0.000	2	n/a	0	-----	-----	-----	B14
4	SCS Runoff	0.536	2	786	8,603	-----	-----	-----	B16
5	SCS Runoff	4.623	2	730	20,589	-----	-----	-----	C8
6	SCS Runoff	2.331	2	746	15,393	-----	-----	-----	C2
7	SCS Runoff	23.87	2	728	96,657	-----	-----	-----	A1
8	SCS Runoff	0.029	2	1048	1,033	-----	-----	-----	B1
9	SCS Runoff	24.70	2	746	149,297	-----	-----	-----	C15
10	SCS Runoff	0.834	2	724	3,229	-----	-----	-----	C9
11	SCS Runoff	3.953	2	720	11,901	-----	-----	-----	C7
12	SCS Runoff	0.332	2	742	2,550	-----	-----	-----	C5
13	SCS Runoff	0.462	2	730	2,059	-----	-----	-----	C4
14	SCS Runoff	1.471	2	728	7,351	-----	-----	-----	C3
15	SCS Runoff	24.81	2	726	79,546	-----	-----	-----	A3
16	SCS Runoff	17.14	2	734	83,225	-----	-----	-----	B5
17	SCS Runoff	64.41	2	738	385,659	-----	-----	-----	B3
18	SCS Runoff	98.45	2	736	449,654	-----	-----	-----	B11
19	SCS Runoff	46.04	2	742	289,309	-----	-----	-----	B10
20	SCS Runoff	27.24	2	750	211,509	-----	-----	-----	B4
21	SCS Runoff	10.72	2	726	34,753	-----	-----	-----	C13
22	SCS Runoff	5.028	2	732	20,391	-----	-----	-----	C1
23	SCS Runoff	7.558	2	772	73,829	-----	-----	-----	B12
24	SCS Runoff	35.84	2	730	170,590	-----	-----	-----	C11
25	SCS Runoff	14.05	2	780	172,551	-----	-----	-----	C12
26	SCS Runoff	0.114	2	784	2,402	-----	-----	-----	B7
27	SCS Runoff	5.492	2	726	23,790	-----	-----	-----	B2
28	SCS Runoff	30.41	2	744	187,001	-----	-----	-----	B15
29	SCS Runoff	11.88	2	732	49,301	-----	-----	-----	B19
30	SCS Runoff	4.390	2	732	19,245	-----	-----	-----	B18
31	SCS Runoff	7.849	2	764	81,283	-----	-----	-----	B17
32	SCS Runoff	13.83	2	740	81,315	-----	-----	-----	B13
33	SCS Runoff	3.268	2	730	23,550	-----	-----	-----	A2
34	SCS Runoff	1.176	2	726	4,807	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watersheds (616 Year Minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	5.778	2	722	22,487	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
TBurg Drainage Evaluation Existing Additional Watershed (610 Year Minimum).gpw						Wednesday, 10 / 1 / 2025			

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	76.22	2	740	402,500	-----	-----	-----	A4
2	SCS Runoff	11.04	2	732	51,573	-----	-----	-----	B6
3	SCS Runoff	0.026	2	1440	776	-----	-----	-----	B14
4	SCS Runoff	1.396	2	774	17,154	-----	-----	-----	B16
5	SCS Runoff	8.350	2	730	33,637	-----	-----	-----	C8
6	SCS Runoff	3.969	2	744	24,282	-----	-----	-----	C2
7	SCS Runoff	41.88	2	728	155,995	-----	-----	-----	A1
8	SCS Runoff	0.203	2	740	3,878	-----	-----	-----	B1
9	SCS Runoff	35.35	2	746	211,373	-----	-----	-----	C15
10	SCS Runoff	1.754	2	724	5,669	-----	-----	-----	C9
11	SCS Runoff	8.409	2	720	21,258	-----	-----	-----	C7
12	SCS Runoff	0.732	2	740	4,555	-----	-----	-----	C5
13	SCS Runoff	0.835	2	730	3,364	-----	-----	-----	C4
14	SCS Runoff	3.414	2	726	13,387	-----	-----	-----	C3
15	SCS Runoff	36.91	2	724	116,293	-----	-----	-----	A3
16	SCS Runoff	28.43	2	734	129,884	-----	-----	-----	B5
17	SCS Runoff	123.58	2	736	646,915	-----	-----	-----	B3
18	SCS Runoff	139.31	2	734	631,780	-----	-----	-----	B11
19	SCS Runoff	81.86	2	740	466,918	-----	-----	-----	B10
20	SCS Runoff	49.55	2	750	345,553	-----	-----	-----	B4
21	SCS Runoff	16.28	2	724	51,691	-----	-----	-----	C13
22	SCS Runoff	7.251	2	730	29,095	-----	-----	-----	C1
23	SCS Runoff	11.84	2	770	110,805	-----	-----	-----	B12
24	SCS Runoff	68.77	2	730	286,152	-----	-----	-----	C11
25	SCS Runoff	26.54	2	776	289,442	-----	-----	-----	C12
26	SCS Runoff	0.453	2	760	5,702	-----	-----	-----	B7
27	SCS Runoff	12.72	2	724	43,323	-----	-----	-----	B2
28	SCS Runoff	48.14	2	744	283,270	-----	-----	-----	B15
29	SCS Runoff	17.90	2	732	72,692	-----	-----	-----	B19
30	SCS Runoff	5.685	2	732	25,181	-----	-----	-----	B18
31	SCS Runoff	14.95	2	762	136,346	-----	-----	-----	B17
32	SCS Runoff	24.58	2	738	131,236	-----	-----	-----	B13
33	SCS Runoff	10.11	2	728	46,958	-----	-----	-----	A2
34	SCS Runoff	2.594	2	724	8,587	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watersheds (625 Year Minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	12.30	2	720	40,068	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
TBurg Drainage Evaluation Existing Additional Watershed (625 Year Return Period Minimum).gpw						Wednesday, 10 / 1 / 2025			

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	101.70	2	740	530,098	-----	-----	-----	A4
2	SCS Runoff	16.81	2	732	73,566	-----	-----	-----	B6
3	SCS Runoff	0.086	2	848	2,884	-----	-----	-----	B14
4	SCS Runoff	2.476	2	766	26,600	-----	-----	-----	B16
5	SCS Runoff	12.10	2	730	46,874	-----	-----	-----	C8
6	SCS Runoff	5.602	2	744	33,145	-----	-----	-----	C2
7	SCS Runoff	59.88	2	728	215,835	-----	-----	-----	A1
8	SCS Runoff	0.977	2	728	7,748	-----	-----	-----	B1
9	SCS Runoff	45.28	2	746	269,907	-----	-----	-----	C15
10	SCS Runoff	2.709	2	724	8,229	-----	-----	-----	C9
11	SCS Runoff	13.01	2	720	31,149	-----	-----	-----	C7
12	SCS Runoff	1.179	2	738	6,675	-----	-----	-----	C5
13	SCS Runoff	1.210	2	730	4,687	-----	-----	-----	C4
14	SCS Runoff	5.578	2	726	19,813	-----	-----	-----	C3
15	SCS Runoff	48.38	2	724	151,525	-----	-----	-----	A3
16	SCS Runoff	39.55	2	734	176,158	-----	-----	-----	B5
17	SCS Runoff	185.70	2	736	915,327	-----	-----	-----	B3
18	SCS Runoff	177.28	2	734	802,844	-----	-----	-----	B11
19	SCS Runoff	118.18	2	740	646,030	-----	-----	-----	B10
20	SCS Runoff	72.62	2	748	481,543	-----	-----	-----	B4
21	SCS Runoff	21.66	2	724	68,078	-----	-----	-----	C13
22	SCS Runoff	9.340	2	730	37,335	-----	-----	-----	C1
23	SCS Runoff	16.00	2	770	146,745	-----	-----	-----	B12
24	SCS Runoff	102.57	2	730	404,880	-----	-----	-----	C11
25	SCS Runoff	39.97	2	774	409,534	-----	-----	-----	C12
26	SCS Runoff	0.975	2	752	9,595	-----	-----	-----	B7
27	SCS Runoff	20.54	2	724	64,117	-----	-----	-----	B2
28	SCS Runoff	65.34	2	744	377,295	-----	-----	-----	B15
29	SCS Runoff	23.66	2	730	95,219	-----	-----	-----	B19
30	SCS Runoff	6.844	2	732	30,583	-----	-----	-----	B18
31	SCS Runoff	22.54	2	762	192,917	-----	-----	-----	B17
32	SCS Runoff	35.44	2	738	181,578	-----	-----	-----	B13
33	SCS Runoff	18.52	2	726	72,818	-----	-----	-----	A2
34	SCS Runoff	4.090	2	724	12,582	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watersheds (650 Year Minimum).gpw					Wednesday, 10 / 1 / 2025				

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	19.46	2	720	58,635	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
Tburg Drainage Evaluation Existing Additional Watershed (650 Year Minimum).gpw						Wednesday, 10 / 1 / 2025			

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	133.04	2	740	688,517	-----	-----	-----	A4
2	SCS Runoff	24.29	2	732	102,220	-----	-----	-----	B6
3	SCS Runoff	0.324	2	786	6,866	-----	-----	-----	B14
4	SCS Runoff	4.058	2	764	39,482	-----	-----	-----	B16
5	SCS Runoff	16.89	2	730	63,885	-----	-----	-----	C8
6	SCS Runoff	7.663	2	744	44,393	-----	-----	-----	C2
7	SCS Runoff	82.70	2	728	292,404	-----	-----	-----	A1
8	SCS Runoff	2.790	2	726	13,671	-----	-----	-----	B1
9	SCS Runoff	57.24	2	746	341,244	-----	-----	-----	C15
10	SCS Runoff	3.951	2	724	11,598	-----	-----	-----	C9
11	SCS Runoff	19.00	2	720	44,236	-----	-----	-----	C7
12	SCS Runoff	1.786	2	738	9,479	-----	-----	-----	C5
13	SCS Runoff	1.689	2	730	6,388	-----	-----	-----	C4
14	SCS Runoff	8.434	2	726	28,362	-----	-----	-----	C3
15	SCS Runoff	62.37	2	724	194,982	-----	-----	-----	A3
16	SCS Runoff	53.50	2	734	234,654	-----	-----	-----	B5
17	SCS Runoff	265.82	2	736	1,263,375	-----	-----	-----	B3
18	SCS Runoff	222.83	2	734	1,010,749	-----	-----	-----	B11
19	SCS Runoff	164.41	2	740	875,213	-----	-----	-----	B10
20	SCS Runoff	102.22	2	748	656,296	-----	-----	-----	B4
21	SCS Runoff	28.26	2	724	88,423	-----	-----	-----	C13
22	SCS Runoff	11.86	2	730	47,406	-----	-----	-----	C1
23	SCS Runoff	21.15	2	770	191,518	-----	-----	-----	B12
24	SCS Runoff	146.07	2	730	558,834	-----	-----	-----	C11
25	SCS Runoff	57.64	2	774	565,258	-----	-----	-----	C12
26	SCS Runoff	1.825	2	750	15,128	-----	-----	-----	B7
27	SCS Runoff	30.80	2	724	91,783	-----	-----	-----	B2
28	SCS Runoff	86.69	2	744	494,842	-----	-----	-----	B15
29	SCS Runoff	30.76	2	730	123,094	-----	-----	-----	B19
30	SCS Runoff	8.206	2	732	37,004	-----	-----	-----	B18
31	SCS Runoff	32.45	2	760	266,273	-----	-----	-----	B17
32	SCS Runoff	49.25	2	738	245,994	-----	-----	-----	B13
33	SCS Runoff	30.40	2	726	108,082	-----	-----	-----	A2
34	SCS Runoff	6.045	2	724	17,868	-----	-----	-----	C10
TBurg Drainage Evaluation Existing Additional Watershed (6100 Year)					Revised (6100 Year).gpw				Wednesday, 10 / 1 / 2025

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
36	Combine	28.86	2	720	83,182	10, 11, 12, 34,	-----	-----	Larchmont Dr. Improvements
TBurg Drainage Evaluation Existing Additional Watersheds (6100 Year Return Period)					Wednesday, 10 / 1 / 2025				

Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Wednesday, 10 / 1 / 2025

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	-----
2	69.8703	13.1000	0.8658	-----
3	0.0000	0.0000	0.0000	-----
5	79.2597	14.6000	0.8369	-----
10	88.2351	15.5000	0.8279	-----
25	102.6072	16.5000	0.8217	-----
50	114.8193	17.2000	0.8199	-----
100	127.1596	17.8000	0.8186	-----

File name: SampleFHA.idf

$$\text{Intensity} = B / (T_c + D)^E$$

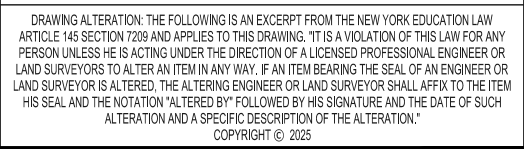
Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

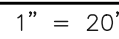
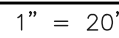
Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	1.96	2.31	0.00	2.85	3.35	4.15	4.87	5.72
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10

APPENDIX F***F Conceptual Design and Cost Estimate: East Seneca Road***



Note* - Choke point in system is the 24" cmp @ 2.8%



Subdrainage A7 (E Seneca Rd.)			Subdrainage A9 (Seneca Rd.)		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	8,661	2.18	1-Year	14,045	1.97
5-Year	20,702	6.21	5-Year	36,709	6.99
10-Year	28,671	8.41	10-Year	52,184	10.57
25-Year	42,645	13.43	25-Year	79,810	16.92
50-Year	56,164	17.87	50-Year	106,927	23.11
100-Year	72,949	23.32	100-Year	140,949	30.81



(IN FEET)
inch = 20 ft.

CLIENT PROJECT #

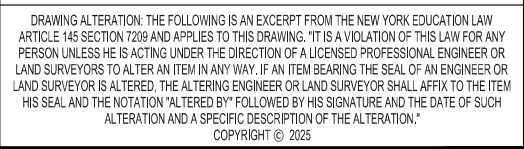
2040.23004

P.J.
T.F.

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CHECKED BY: _____

REVISION DESCRIPTION	DATE	BY
OWNER REVIEW	SEPT, 2025	

EAST SENECA ROAD IMPROVEMENTS



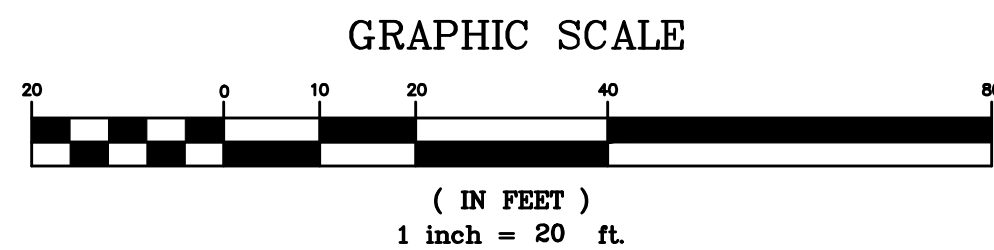
2 OF 3


$$1'' = 20'$$


 $1'' = 20'$

Storm Infrastructure - East Seneca Road (Improvements)				
Location	Proposed Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
South East Seneca Road	Swale, 1.5 Deep & 2:1 Slopes	2.00%	0.033	47.29
47 Congress St. Driveway	18" SICPP	1.00%	0.013	14.85
Congress St. Culvert	18" Corrugated Metal Pipe	6.90%	0.024	14.94
82-72 Seneca Road Driveway	36" SICPP	2.00%	0.013	94.32

Subdrainage A5 (E Seneca Rd.)			Combine Drainage (A5, A7, A8, A9, 10, A11, A13) Seneca Rd		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	8,257	0.80	1-Year	44,984	6.70
5-Year	28,510	5.61	5-Year	130,657	27.51
10-Year	43,236	9.71	10-Year	192,159	44.21
25-Year	706,377	17.54	25-Year	305,108	75.48
50-Year	98,436	25.42	50-Year	418,560	107.01
100-Year	134,158	35.46	100-Year	563,378	147.09

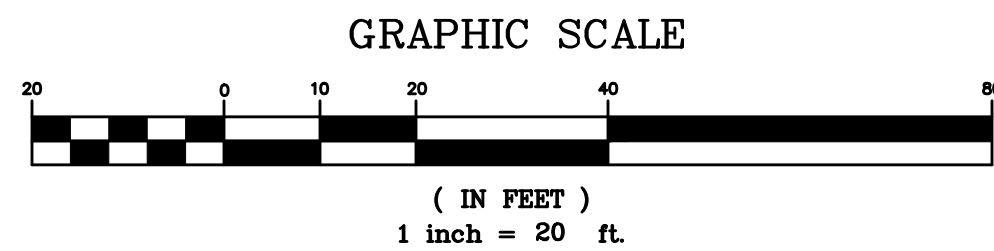



$$1'' = 20'$$

$$1'' = 20'$$

Storm Infrastructure - East Seneca Road (Improvements)				
Location	Proposed Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
South East Seneca Road	Swale, 1.5 Deep & 2:1 Slopes	2.00%	0.033	47.29
47 Congress St. Driveway	18" SICPP	1.00%	0.013	14.85
Congress St. Culvert	18" Corrugated Metal Pipe	6.90%	0.024	14.94
82-72 Seneca Road Driveway	36" SICPP	2.00%	0.013	94.32

Subdrainage A5 (E Seneca Rd.)			Combine Drainage (A5, A7, A8, A9, 10, A11, A13) Seneca Rd		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	8,257	0.80	1-Year	44,984	6.70
5-Year	28,510	5.61	5-Year	130,657	27.51
10-Year	43,236	9.71	10-Year	192,159	44.21
25-Year	706,377	17.54	25-Year	305,108	75.48
50-Year	98,436	25.42	50-Year	418,560	107.01
100-Year	134,158	35.46	100-Year	563,378	147.09



ENGINEER'S OPINION OF PROBABLE COST

Project: Comprehensive Stormwater Management Plan

Location: Village of Trumansburg, NY - E. Seneca Rd.

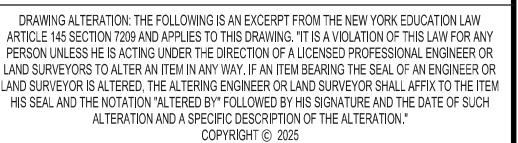
Estimate Type: Conceptual



Engineering, Architecture & Surveying, D.P.C.
145 Culver Road, Suite 160
Rochester, NY 14620

Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$25,000	\$25,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000
4	Removal of Existing Storm Structure	2	EA	\$600	\$1,200
5	Removal of Existing Storm Piping	855	LF	\$25	\$21,375
6	Swale Vegetation Removal and Re-seeding	6,235	SF	\$10	\$62,350
7	36" SICPP Storm Sewer	72	LF	\$200	\$14,400
8	Rip-Rap Outfall Protection (50 SF)	8	EA	\$1,000	\$8,000
9	Grass Swale	760	LF	\$25	\$19,000
10	Asphalt Driveway Restoration	1,040	SF	\$15	\$15,600
11	18" SICPP Storm Sewer	26	LF	\$160	\$4,160
12	Gravel Driveway Restoration	280	SF	\$10	\$2,800
13	12-18" End Section (Aluminum)	2	EA	\$700	\$1,400
14	24"-36" End Section (Aluminum)	6	EA	\$1,500	\$9,000
General Construction Cost:					\$199,285
Construction Contingency (20%):					\$39,857
Total Construction Cost:					\$239,142
Engineering, Legal, and Admin Services (25%):					\$49,821
Opinion of Probable Project Cost:					\$288,963
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$289,000

APPENDIX G***G Conceptual Design and Cost Estimate: Tamarac Lane***



VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

2040.23004

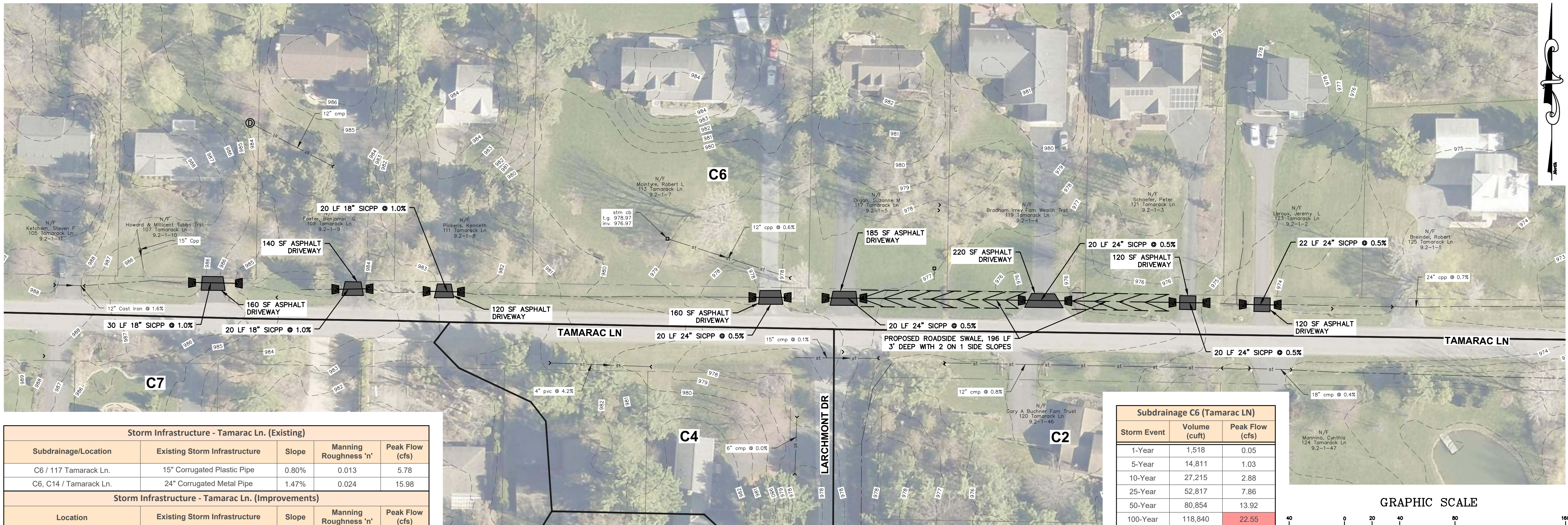
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DUPLICATE BY: _____ # | REVISION DESCRIPTION |

OWNER REVIEW

TAMARAC LANE IMPROVEMENTS

1 OF 2

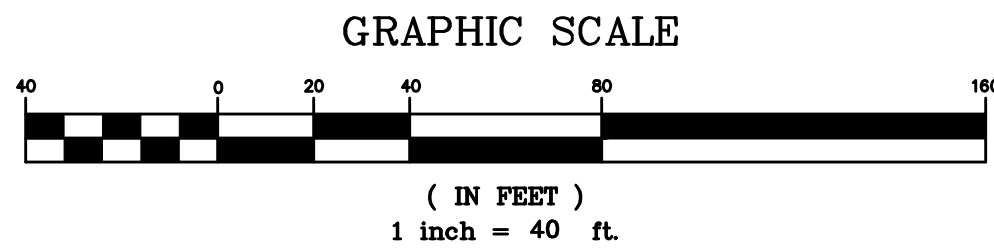


EXISTING AND DEMO PLAN

PROPOSED PLAN

Storm Infrastructure - Tamarac Ln. (Existing)				
Subdrainage/Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
C6 / 117 Tamarack Ln.	15" Corrugated Plastic Pipe	0.80%	0.013	5.78
C6, C14 / Tamarack Ln.	24" Corrugated Metal Pipe	1.47%	0.024	15.98
Storm Infrastructure - Tamarac Ln. (Improvements)				
Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
C6 / 117 Tamarack Ln.	24" SICPP	0.50%	0.013	16.0
C6, C14 / Tamarack Ln.	36" SICPP	0.50%	0.013	47.16

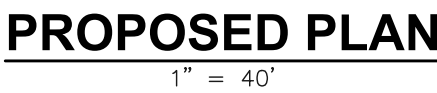
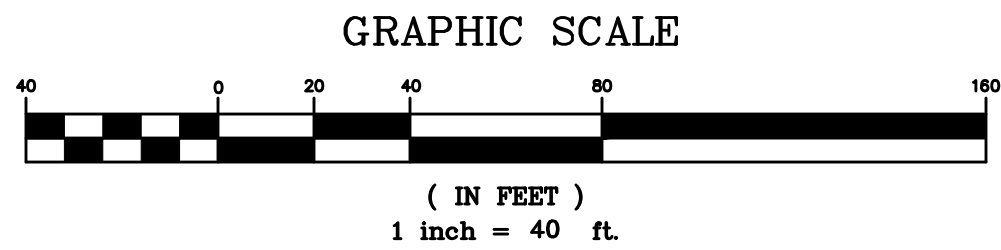
Subdrainage C6 (Tamarac LN)		
Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	1,518	0.05
5-Year	14,811	1.03
10-Year	27,215	2.88
25-Year	52,817	7.86
50-Year	80,854	13.92
100-Year	118,840	22.55





Subdrainage C14 (South St. Ext.)		
Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	15,029	1.88
5-Year	38,060	6.20
10-Year	53,618	9.24
25-Year	81,221	14.61
50-Year	108,180	19.82
100-Year	141,884	26.28
Subdrainage C6 (Tamarac LN)		
Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	1,518	0.05
5-Year	14,811	1.03
10-Year	27,215	2.88
25-Year	52,817	7.86
50-Year	80,854	13.92
100-Year	118,840	22.55
Combine C6 & C14 (Tamarac LN)		
Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year*	16,539	2.68
5-Year	52,868	7.03
10-Year*	80,831	15.78
25-Year	134,036	22.05
50-Year	189,032	33.00
100-Year*	260,722	77.01
*Plus Village Grove Peak Flows		

Storm Infrastructure - Tamarac Ln. (Existing)				
Subdrainage/Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
C6 / 117 Tamarack Ln.	15" Corrugated Plastic Pipe	0.80%	0.013	5.78
C6, C14 / Tamarack Ln.	24" Corrugated Metal Pipe	1.47%	0.024	15.98
Storm Infrastructure - Tamarac Ln. (Improvements)				
Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
C6 / 117 Tamarack Ln.	24" SICPP	0.50%	0.013	16.0
C6, C14 / Tamarack Ln.	36" SICPP	0.50%	0.013	47.16



DRAWING ALTERATION: THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING. "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYORS TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO IT HIS SEAL AND THE NOTATION "ALTERED BY FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

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VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

2040.23004

MRB PROJECT #

J.P.J.

DRAWN BY:

BY

SEPT 2025

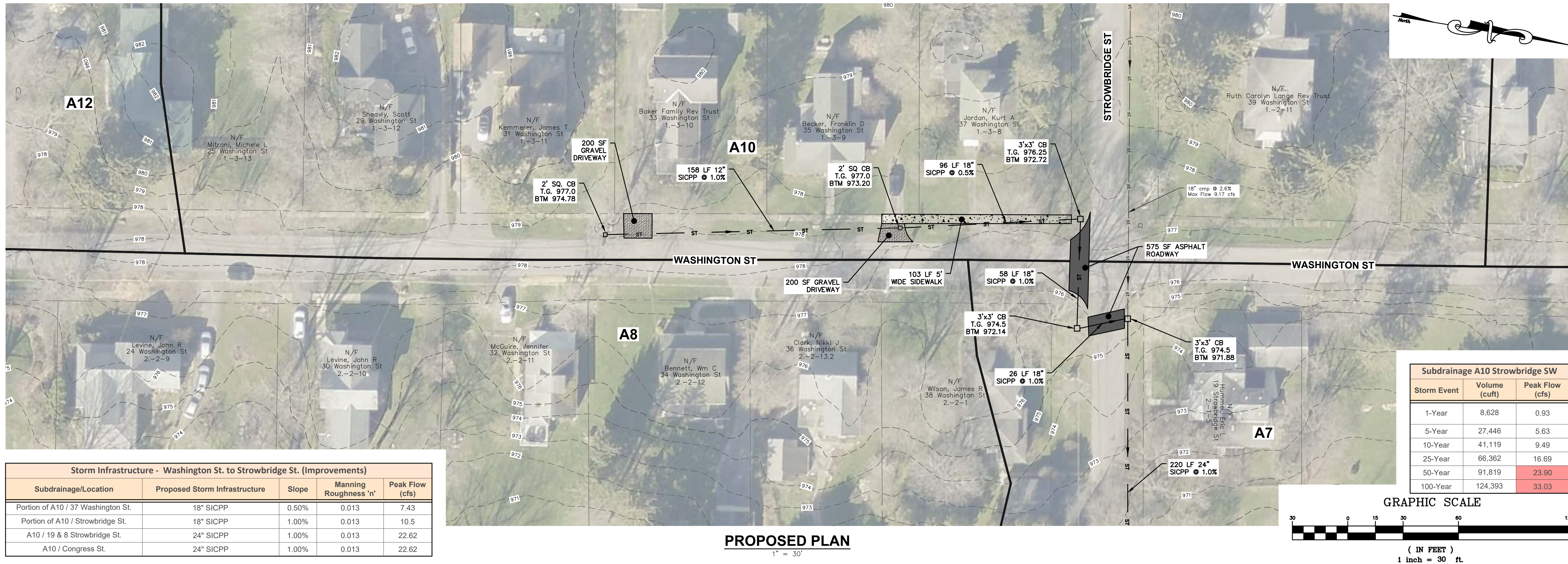
NOTICE

OWNED REVIEW

TAMARAC LANE IMPROVEMENTS

ENGINEER'S OPINION OF PROBABLE COST			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Tamarac Lane Estimate Type: Conceptual					
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$25,000	\$25,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$10,000	\$10,000
4	Removal of Existing Storm Structure	1	EA	\$600	\$600
5	Removal of Existing Storm Piping	456	LF	\$25	\$11,400
6	Swale Vegetation Removal and Re-seeding	5150	SF	\$10	\$51,500
7	18" SICPP Storm Sewer	70	LF	\$125	\$8,750
8	24" SICPP Storm Sewer	102	LF	\$160	\$16,320
9	12-18" End Section (Aluminum)	6	EA	\$700	\$4,200
10	Rip-Rap Outfall Protection (50 SF)	17	EA	\$1,000	\$17,000
11	Road Restoration (Asphalt)	120	SF	\$20	\$2,400
12	Asphalt Driveway Restoration	1595	SF	\$10	\$15,950
13	Grass Swale	196	SF	\$25	\$4,900
14	36" SICPP Storm Sewer	47	LF	\$200	\$9,400
15	24"-36" End Section (Aluminum)	11	EA	\$1,500	\$16,500
General Construction Cost: Construction Contingency (20%):					\$203,920 \$40,784
Total Construction Cost: Engineering, Legal, and Admin Services (25%):					\$244,704 \$50,980
Opinion of Probable Project Cost:					\$295,684
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$296,000

APPENDIX H***H Conceptual Design and Cost Estimate: Washington Street to Stowbridge Street***

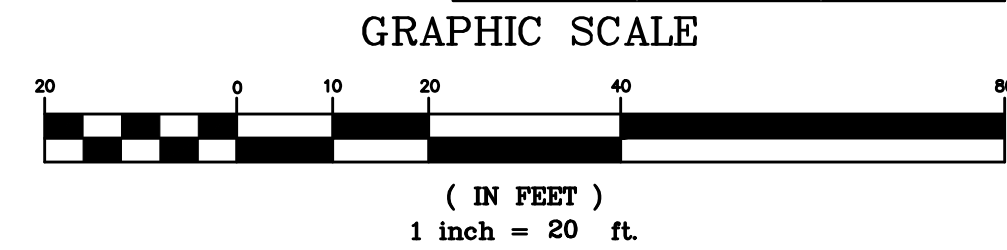


$$1'' = 20'$$

The map shows an aerial view of a residential area with various stormwater management features. Key elements include:

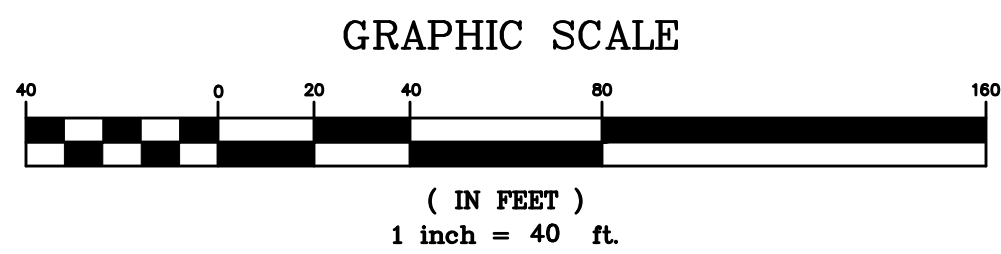
- Properties:**
 - N/F Hummel, Eric L 19 Strowbridge St 2.-1-5
 - N/F Herrick Family Trust 8 Strowbridge St 2.-1-4
 - N/F Povinelli, Paul T 45 Congress St 2.-1-3
- Stormwater Features:**
 - 220 LF 24" SICPP @ 1.0%
 - 15" c/s
 - 3"x3" CB T.G. 967.00 BTM 959.18
 - 12 LF 5' WIDE SIDEWALK
 - 400 SF ASPHALT DRIVEWAY
 - 280 LF 24" SICPP @ 1.0%
 - 28 LF 12" SICPP @ 0.5%
 - 2' SQ. CB T.G. 959.25 BTM 956.52
 - 3"x3" CB T.G. 959.0 BTM 956.38
 - 38 LF 24" SICPP @ 1.0%
 - 550 SF ASPHALT ROADWAY
 - 30" c/s
 - SEPARATE PROJECT
- Streets:** STROWBRIDGE ST, CONGRESS ST
- Other Labels:** A7, A8, RIP-RAP INV. 956.0, Inv. 955.79, Inv. 955.58
- Graphic Scale:** 0 to 40 feet
- Table: Subdrainage A10 Strowbridge SW**

Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	8,628	0.93
5-Year	27,446	5.63
10-Year	41,119	9.49
25-Year	66,362	16.69
50-Year	91,819	23.90
100-Year	124,393	33.03

$$1'' = 20'$$


ENGINEER'S OPINION OF PROBABLE COST			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Washington Street to Strowbridge Street Estimate Type: Conceptual					
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$30,000	\$30,000
2	Traffic Control (Assume Shoulder Closure)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000
4	Removal of Existing Storm Structure	9	EA	\$600	\$5,400
5	Removal of Existing Storm Piping	908	LF	\$25	\$22,700
6	5' Wide Concrete Sidewalk	115	LF	\$75	\$8,625
7	12" SICPP Storm Sewer	186	LF	\$96	\$17,856
8	18" SICPP Storm Sewer	180	LF	\$125	\$22,500
9	24" SICPP Storm Sewer	540	LF	\$180	\$97,200
10	24"-36" End Section (Aluminum)	1	EA	\$1,500	\$1,500
11	2' by 2' Catch Basin	3	EA	\$1,200	\$3,600
12	3' by 3' Catch Basin	5	EA	\$1,500	\$7,500
13	Asphalt Driveway Restoration	400	SF	\$15	\$6,000
14	Gravel Driveway Restoration	400	SF	\$10	\$4,000
15	Road Restoration (Asphalt)	1125	SF	\$20	\$22,500
16	Rip-Rap Outfall Protection (50 SF)	1	EA	\$1,000	\$1,000
General Construction Cost:					\$265,381
Construction Contingency (20%):					\$53,076
Total Construction Cost:					\$318,457
Engineering, Legal, and Admin Services (25%):					\$66,345
Opinion of Probable Project Cost:					\$384,802
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$385,000

APPENDIX I***I Conceptual Design and Cost Estimate: Camp Street***



Subdrainage B9 (Camp St.)			Subdrainage B8 (Camp St.)			Combine B8 & B9 (Camp St.)		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	866	0.03	1-Year	0	0.000	1-Year	851	0.02
5-Year	5,831	0.47	5-Year	2,952	0.08	5-Year	8,675	0.45
10-Year	10,147	1.10	10-Year	8,483	0.32	10-Year	18,444	1.05
25-Year	18,831	2.65	25-Year	22,338	1.51	25-Year	40,823	3.78
50-Year	28,169	4.45	50-Year	29,271	3.57	50-Year	66,922	7.56
100-Year	40,661	6.96	100-Year	63,890	7.14	100-Year	103,804	13.44

Storm Infrastructure - Camp Street (Existing)				
Subdrainage/Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
B9	18" Corrugated Plastic Pipe	3.10%	0.013	18.49
B8 & B9	12" Corrugated Metal Pipe	1.90%	0.024	3.40

DRAWING ALTERATION: THE FOLLOWING IS AN EXCERPT FROM THE NEW YORK EDUCATION LAW ARTICLE 145 SECTION 7209 AND APPLIES TO THIS DRAWING: "IT IS A VIOLATION OF THIS LAW FOR ANY PERSON UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYORS TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION."

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VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

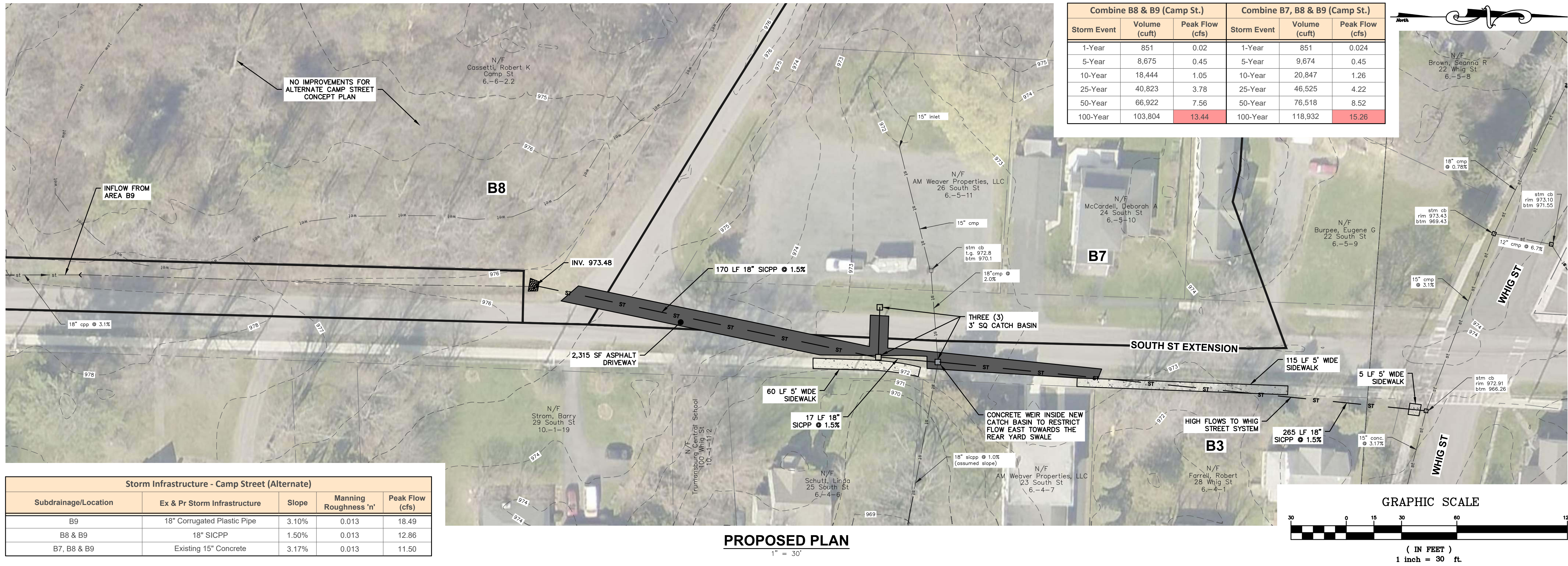
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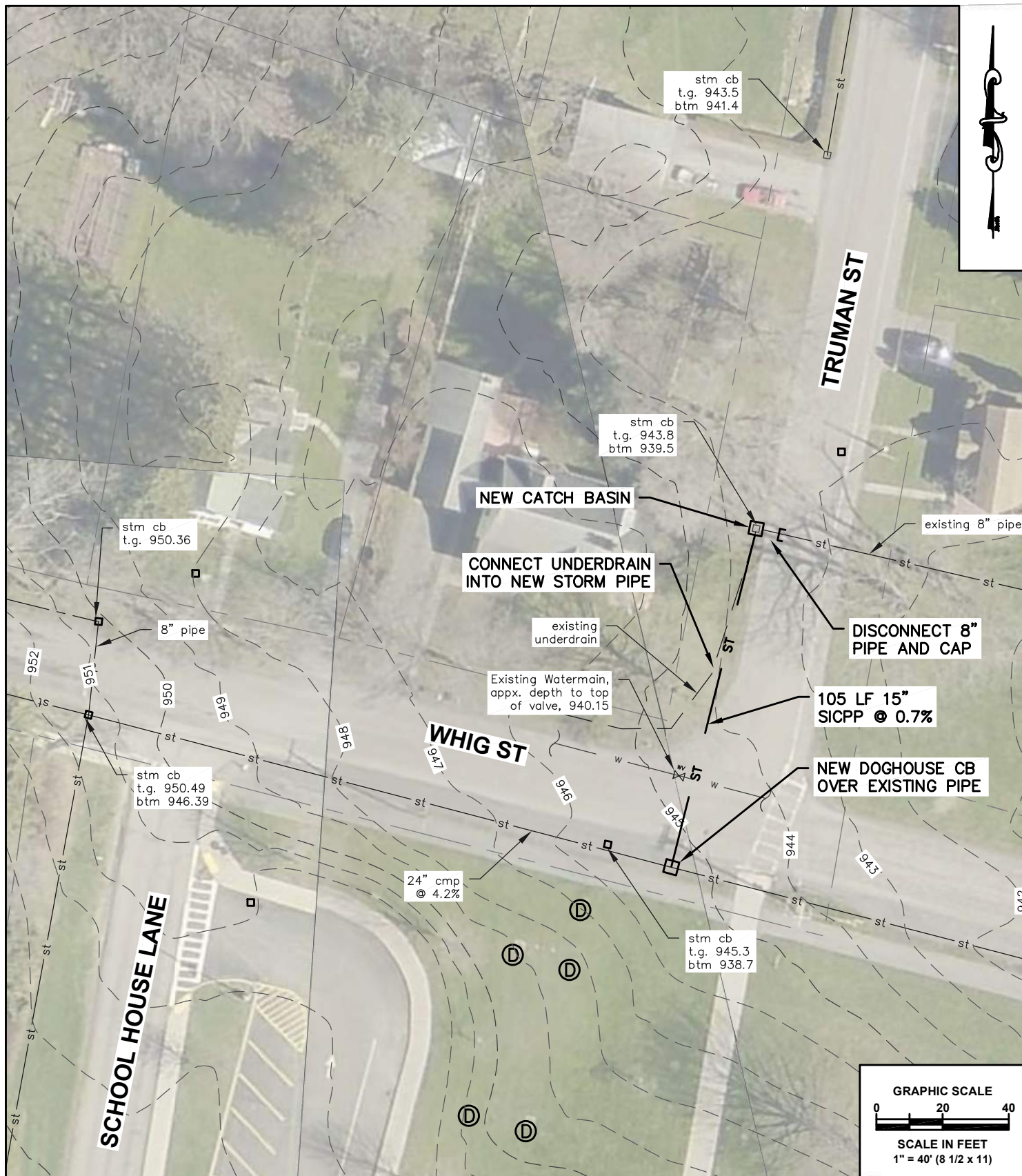
DRAWN BY:	J.P.J.
CHECKED BY:	T.J.F

DRAWN BY:
CHECKED BY:

FOR REPORT	REVISION DESCRIPTION
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CAMP STREET IMPROVEMENTS





VILLAGE OF TRUMANSBURG
COMPREHENSIVE STORMWATER MANAGEMENT PLAN
 TOMPKINS COUNTY, NY

**TRUMAN STREET
 IMPROVEMENTS**

DRAWN BY: JPJ
 CHECKED BY: MM

SCALE: 1"=40'
 DATE: 10.21.2026

MRB PROJECT #:
2040.23004

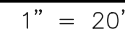
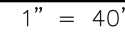
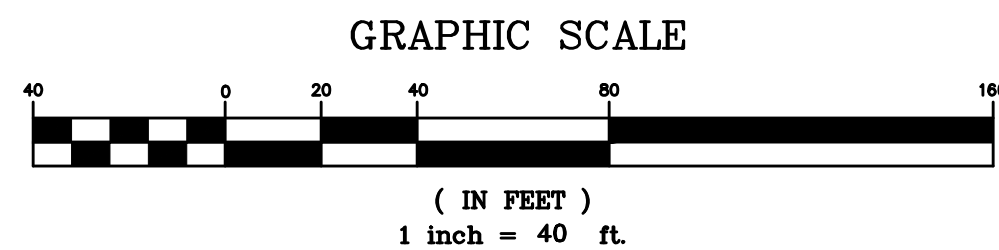
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3 OF 3

ENGINEER'S OPINION OF PROBABLE COST			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Camp Street Estimate Type: Conceptual (Revised)					
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$70,000	\$70,000
2	Traffic Control (Assume Lane Closure/Detour/Sidewalk)	1	LS	\$30,000	\$30,000
3	Erosion/Sediment Control	1	LS	\$65,000	\$65,000
4	Easement (3.1 acres)	3.1	AC	\$20,000	\$62,000
5	Tree Clearing, Site Grubbing and removal	2	AC	\$20,000	\$40,000
6	Excavation/Disposal	4000	CY	\$10	\$40,000
7	Wetland Landscaping and Tree Planting	1	LS	\$50,000	\$50,000
8	Swale Vegetation Removal and Re-seeding	7060	SF	\$10	\$70,600
9	Outfall Structure , Associated Piping & Rip-rap	1	LS	\$5,000	\$5,000
10	Stabilized Emergency Overflow	1	EA	\$35,000	\$35,000
11	Stabilized Overflow Rip-Rap (within Shallow Wetland Improvements)	5	EA	\$10,000	\$50,000
12	Fine Grading/Earth Berms for Forebays and Cells (Wetland Matting)	1	LS	\$250,000	\$250,000
13	Truman Street Improvements (Catch Basin, Doghouse CB, 15" SICPP)	1	LS	\$45,000	\$45,000
General Construction Cost: Construction Contingency (20%):					\$812,600 \$162,520
Total Construction Cost:					\$975,120
Engineering, Legal, and Admin Services (25%):					\$203,150
Opinion of Probable Project Cost:					\$1,178,270
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$1,179,000

ENGINEER'S OPINION OF PROBABLE COST Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Camp Street Alternate Estimate Type: Conceptual (Revised)			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$30,000	\$30,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$15,000	\$15,000
3	Erosion/Sediment Control	1	LS	\$10,000	\$10,000
4	Removal of Existing Storm Structure	1	EA	\$600	\$600
5	Removal of Existing Storm Piping	485	LF	\$25	\$12,125
6	Swale Vegetation Removal and Re-seeding	7060	SF	\$10	\$70,600
7	18" SICPP Storm Sewer	480	LF	\$125	\$60,000
8	12-18" End Section (Aluminum)	1	EA	\$700	\$700
9	Rip-Rap Outfall Protection (50 SF)	1	EA	\$1,000	\$1,000
10	Road Restoration (Asphalt)	2315	SF	\$20	\$46,300
11	5' Wide Concrete Sidewalk	180	LF	\$75	\$13,500
12	Truman Street Improvements (Catch Basin, Doghouse CB, 15" SICPP)	1	LS	\$45,000	\$45,000
General Construction Cost: Construction Contingency (20%):					\$304,825 \$60,965
Total Construction Cost: Engineering, Legal, and Admin Services (25%):					\$365,790 \$76,206
Opinion of Probable Project Cost:					\$441,996
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$442,000

APPENDIX J***J Conceptual Design and Cost Estimate: Larchmont Drive***



Subdrainage C9 (Larchmont Dr)

Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	402	0.02
5-Year	1,896	0.40
10-Year	3,104	0.83
25-Year	5,451	1.75
50-Year	7,913	2.71
100-Year	11,152	3.95

Subdrainage C5 (Larchmont Dr)			Subdrainage C10 (Larchmont Dr)		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	302	0.01	1-Year	796	0.02
5-Year	1,578	0.15	5-Year	2,774	0.53
10-Year	2,630	0.33	10-Year	4,622	1.18
25-Year	4,698	0.73	25-Year	8,256	2.59
50-Year	6,883	1.18	50-Year	12,098	4.09
100-Year	9,775	1.79	100-Year	17,181	6.05

Subdrainage C7 (Larchmont Dr)			Combine C5, C7, C9 & C10		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	1,283	0.04	1-Year	2,518	0.08
5-Year	6,696	1.79	5-Year	12,945	3.87
10-Year	11,157	3.95	10-Year	21,514	8.32
25-Year	19,929	8.41	25-Year	38,334	17.09
50-Year	29,202	13.01	50-Year	56,097	26.15
100-Year	41,472	19.00	100-Year	79,580	37.88

VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

VILLAGE OF TRUMANSBURG

MANAGEMENT PLAN

TOMPKINS COUNTY, NY

CLIENT PROJECT #

0040 23004

MRB PROJECT #

J.P.J.

DRAWN BY:

DATE	BY
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SEP 20 2025

 # | REVISION DESCRIPTION |

OWNED REVIEW/

LARCHMONT DRIVE IMPROVEMENTS



PROPOSED PLAN
1" = 40'

VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

2040.23004

MRB PROJECT #

J.P.J.
TJF

DRAWN BY:
CHECKED BY:

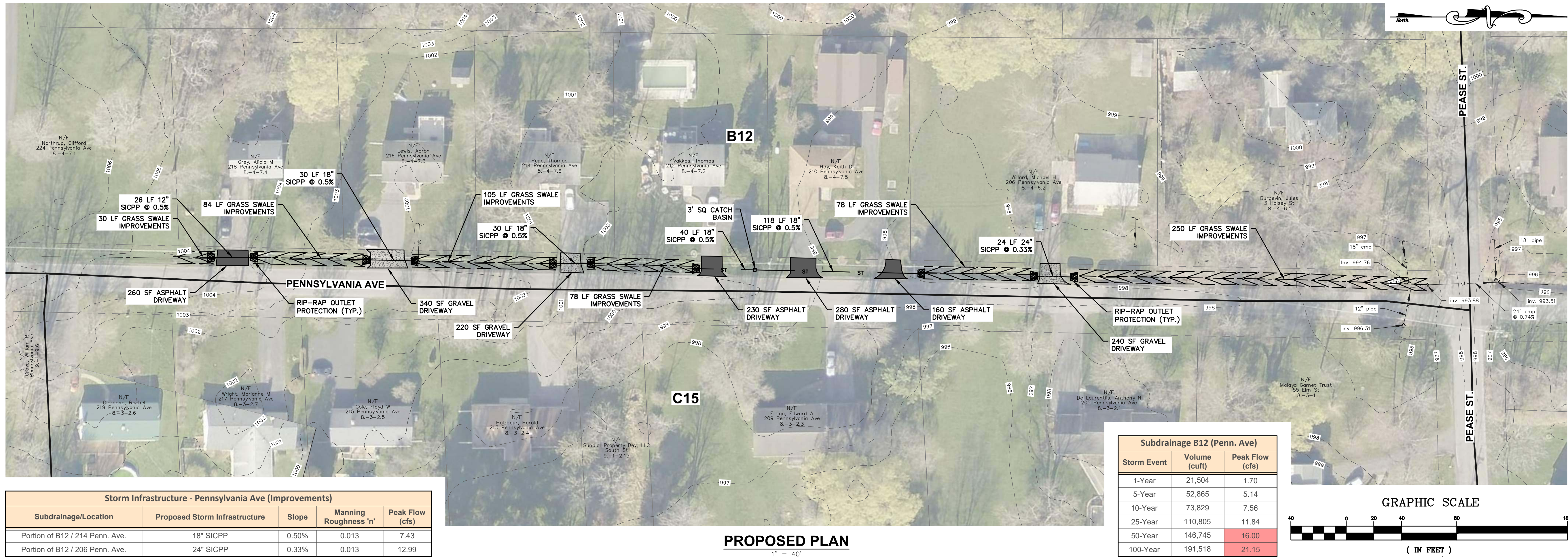
DATE	BY
SEPT. 2025	

REVISION DESCRIPTION	OWNER REVIEW

LARCHMONT DRIVE IMPROVEMENTS

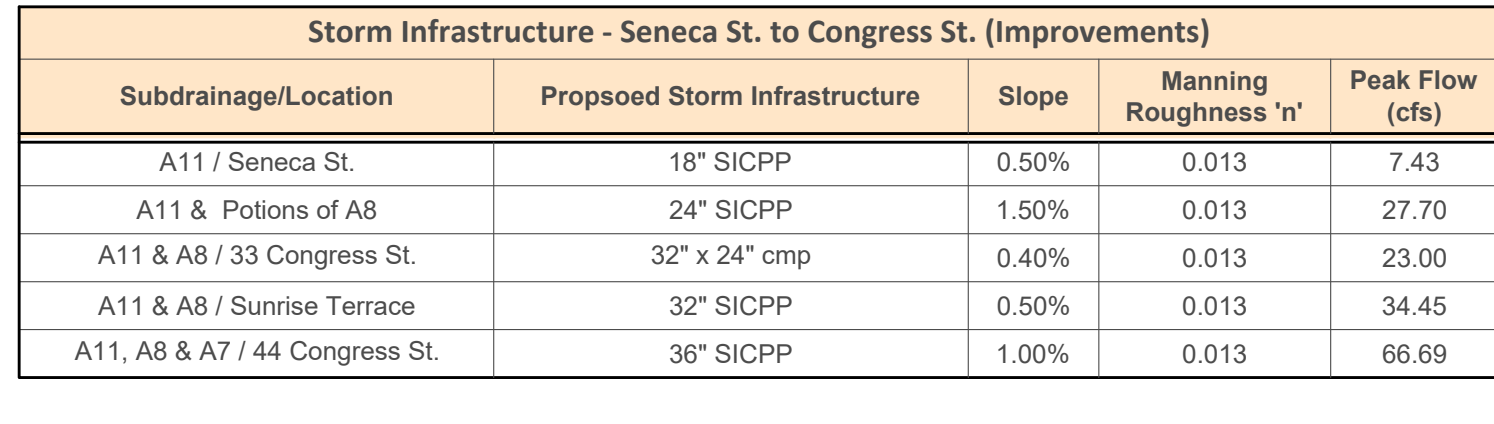
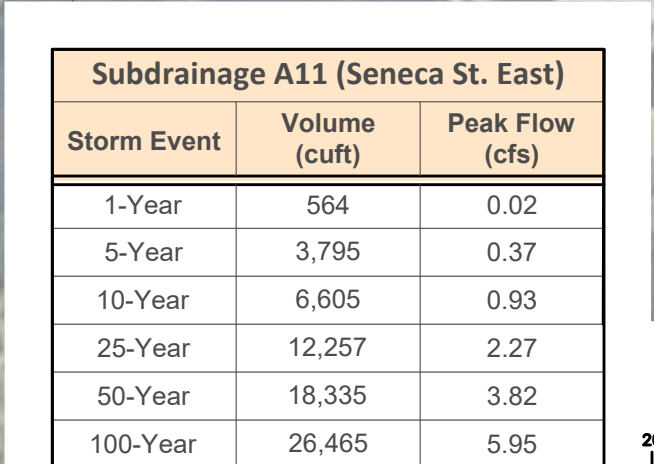
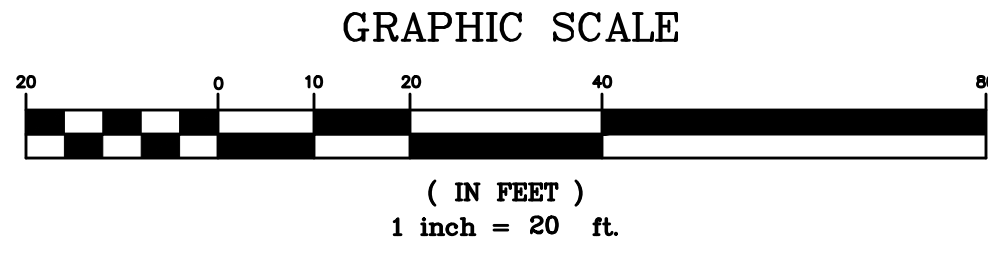
ENGINEER'S OPINION OF PROBABLE COST Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Larchmont Drive Estimate Type: Conceptual				 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620	
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$45,000	\$45,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$10,000	\$10,000
4	Removal of Existing Storm Structure	0	EA	\$600	\$0
5	Removal of Existing Storm Piping	324	LF	\$25	\$8,100
6	15" SICPP Storm Sewer	182	LF	\$107	\$19,474
7	18" SICPP Storm Sewer	244	LF	\$125	\$30,500
8	24" SICPP Storm Sewer	1075	LF	\$160	\$172,000
9	12-18" End Section (Aluminum)	8	EA	\$700	\$5,600
10	Rip-Rap Outfall Protection (50 SF)	8	LF	\$1,000	\$8,000
11	4' Dia. Storm Catch Basin Manhole	4	EA	\$5,400	\$21,600
12	Asphalt Driveway Restoration	1595	SF	\$10	\$15,950
13	Grass Swale	160	SF	\$25	\$4,000
14	Easement Acquisition	0.5	AC	\$20,000	\$10,000
15	24" SICPP Storm Sewer	1	EA	\$160	\$160
16	Road Restoration (Asphalt)	205	SF	\$20	\$4,100
General Construction Cost: Construction Contingency (20%): Total Construction Cost: Engineering, Legal, and Admin Services (25%): Opinion of Probable Project Cost:					\$364,484 \$72,897 \$437,381 \$91,121 \$528,502
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$529,000

APPENDIX K***K Conceptual Design and Cost Estimate: Pennsylvania Avenue***



ENGINEER'S OPINION OF PROBABLE COST Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Pennsylvania Street Estimate Type: Conceptual				 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620																															
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost																														
Sitework																																			
1	General Conditions & Mobilization/Demobilization	1	LS	\$15,000	\$15,000																														
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000																														
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000																														
4	Removal of Existing Storm Structure	0	EA	\$600	\$0																														
5	Removal of Existing Storm Piping	256	LF	\$25	\$6,400																														
6	12" SICPP Storm Sewer	26	LF	\$96	\$2,496																														
7	18" SICPP Storm Sewer	218	LF	\$125	\$27,250																														
8	12-18" End Section (Aluminum)	10	LF	\$700	\$7,000																														
9	3' by 3' Catch Basin	1	EA	\$1,500	\$1,500																														
10	Grass Swale	625	EA	\$25	\$15,625																														
11	Asphalt Driveway Restoration	930	SF	\$15	\$13,950																														
12	Gravel Driveway Restoration	800	SF	\$10	\$8,000																														
13	Rip-Rap Outfall Protection (50 SF)	10	EA	\$1,000	\$10,000																														
14	24" SICPP Storm Sewer	24	LF	\$160	\$3,840																														
15	24"-36" End Section (Aluminum)	2	EA	\$1,500	\$3,000																														
<table> <tr> <td colspan="4"></td><td>General Construction Cost:</td><td>\$129,061</td></tr> <tr> <td colspan="4"></td><td>Construction Contingency (20%):</td><td>\$25,812</td></tr> <tr> <td colspan="4"></td><td>Total Construction Cost:</td><td>\$154,873</td></tr> <tr> <td colspan="4"></td><td>Engineering, Legal, and Admin Services (25%):</td><td>\$32,265</td></tr> <tr> <td colspan="4"></td><td>Opinion of Probable Project Cost:</td><td>\$187,138</td></tr> </table>										General Construction Cost:	\$129,061					Construction Contingency (20%):	\$25,812					Total Construction Cost:	\$154,873					Engineering, Legal, and Admin Services (25%):	\$32,265					Opinion of Probable Project Cost:	\$187,138
				General Construction Cost:	\$129,061																														
				Construction Contingency (20%):	\$25,812																														
				Total Construction Cost:	\$154,873																														
				Engineering, Legal, and Admin Services (25%):	\$32,265																														
				Opinion of Probable Project Cost:	\$187,138																														
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$188,000																														

APPENDIX L***L Conceptual Design and Cost Estimate: Seneca Street to Congress Street***



A11

974
976
972
970
968

SENeca ST

ST

Hanson, Anthony D
21 Congress St
2.-2-5.2

3'x3' CB (STORM 5)
TO=969.28
NORTH INV.=964.63'
SOUTH INV.=964.83'

Concrete Slabwork

131 LF-24" SCPP @ 1.5%

152 LF-24" SCPP @ 1.5%

A66

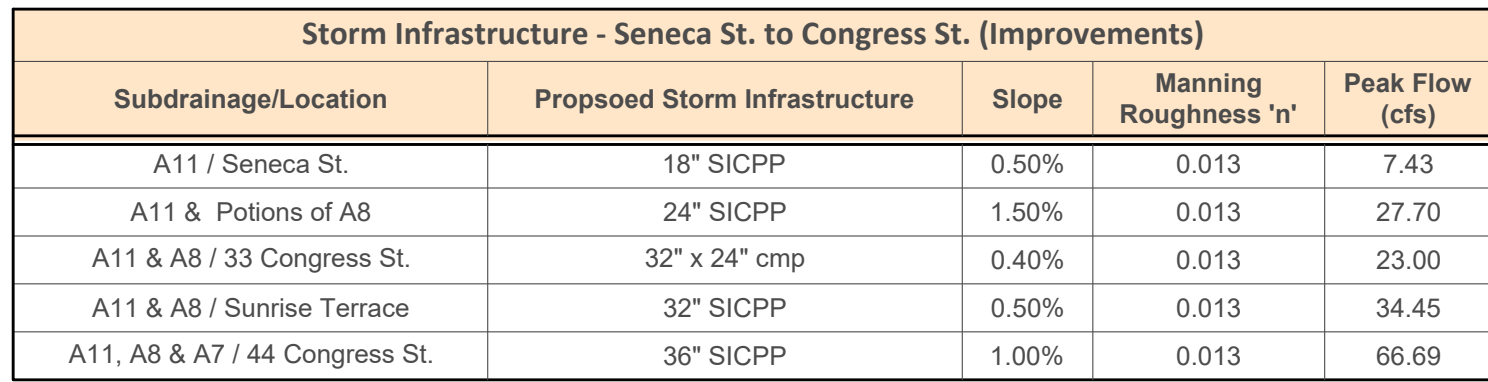
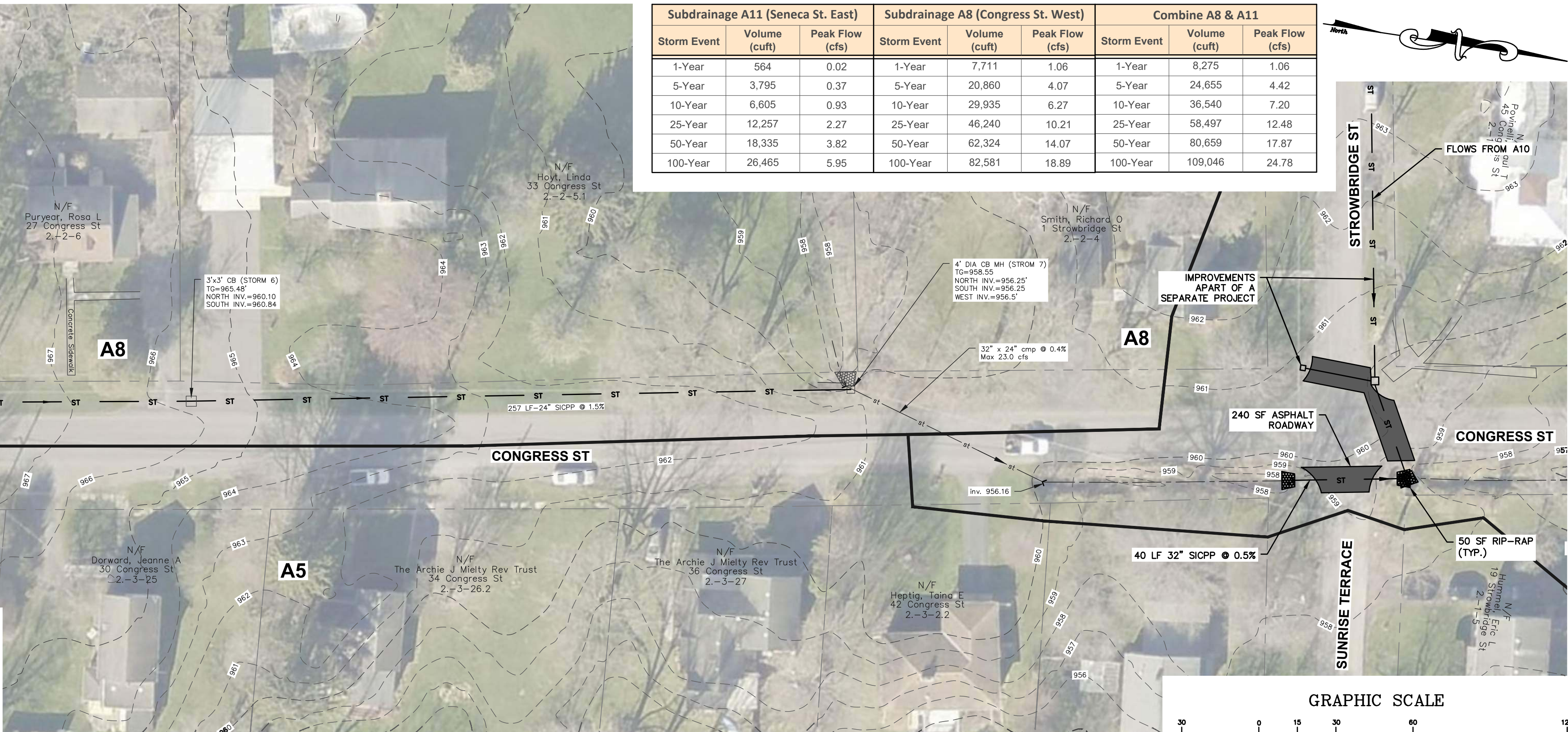
972
970
969
968

3'x3' CB (STORM 4)
TG=971.95
WEST INV.=967.95'
NORTH INV.=967.45'

N/F
Dembowski, Jeffrey C
24 Congress St
2.-3-23

N/F
Gorton, Lisa A
28 Congress St
2.-3-24

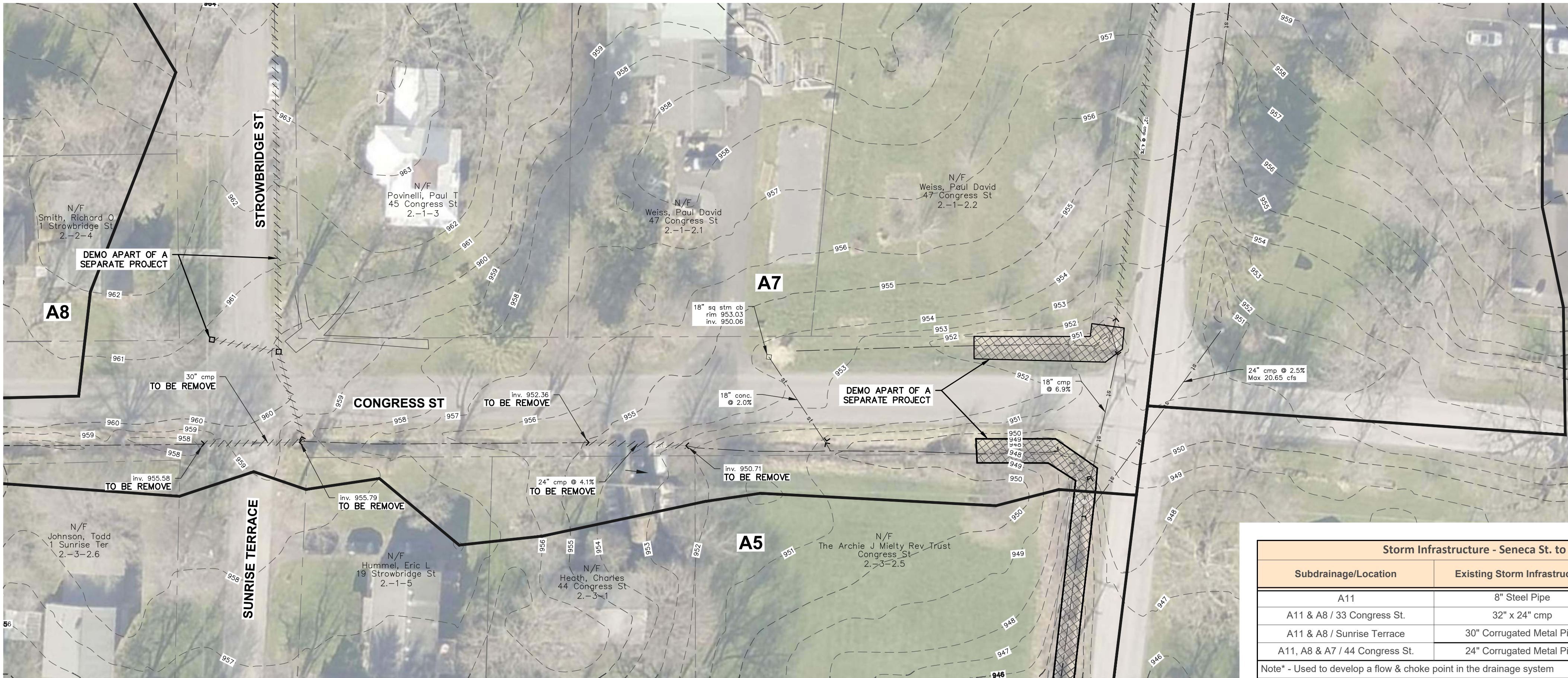
N/F
The Arcille J Merty Rev Trust



VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

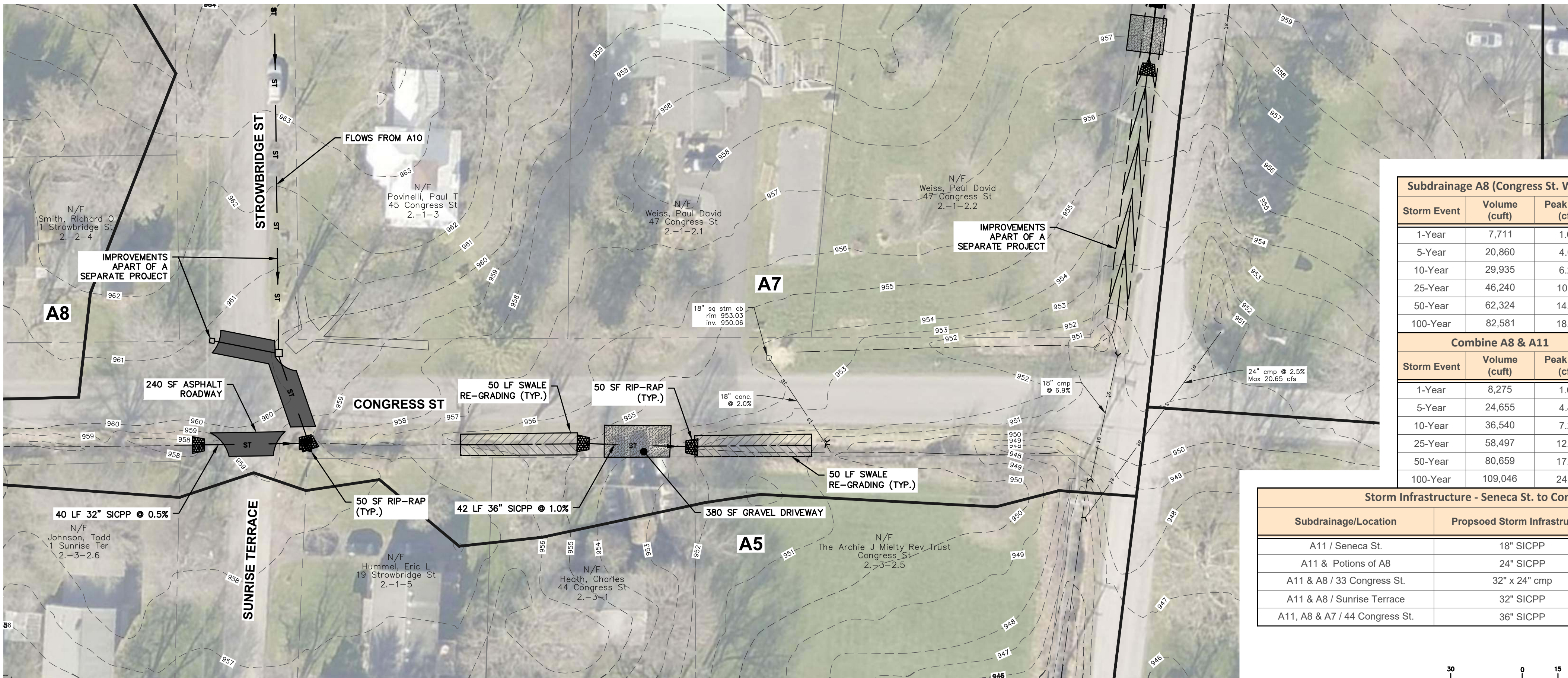
#	REVISION DESCRIPTION	DATE	BY
	OWNER REVIEW	SEPT, 2025	

SENECA STREET TO CONGRESS STREET IMPROVEMENTS



EXISTING AND DEMO PLAN

1" = 30'



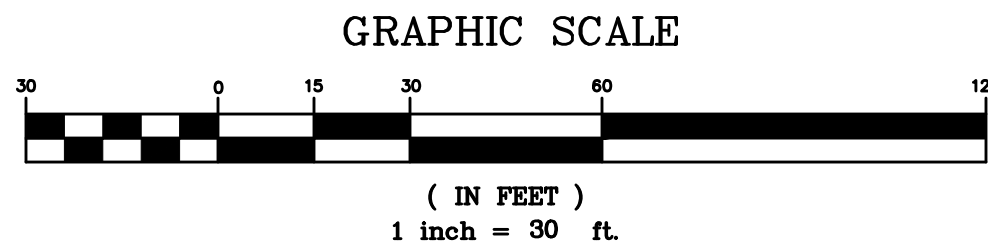
PROPOSED PLAN

1" = 30'

Storm Infrastructure - Seneca St. to Congress St. (Existing)				
Subdrainage/Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
A11	8" Steel Pipe	1.80%	0.012	2.07
A11 & A8 / 33 Congress St.	32" x 24" cmp	0.40%	0.024	23.00
A11 & A8 / Sunrise Terrace	30" Corrugated Metal Pipe	0.1%	0.024	7.03*
A11, A8 & A7 / 44 Congress St.	24" Corrugated Metal Pipe	4.10%	0.024	24.81
Note* - Used to develop a flow & choke point in the drainage system				

Subdrainage A8 (Congress St. West)			Subdrainage A11 (Seneca St. East)		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	7,711	1.06	1-Year	564	0.02
5-Year	20,860	4.07	5-Year	3,795	0.37
10-Year	29,935	6.27	10-Year	6,605	0.93
25-Year	46,240	10.21	25-Year	12,257	2.27
50-Year	62,324	14.07	50-Year	18,335	3.82
100-Year	82,581	18.89	100-Year	26,465	5.95
Combine A8 & A11			Combine A8, A11 & A10		
Storm Event	Volume (cuft)	Peak Flow (cfs)	Storm Event	Volume (cuft)	Peak Flow (cfs)
1-Year	8,275	1.06	1-Year	17,040	2.09
5-Year	24,655	4.42	5-Year	52,537	10.52
10-Year	36,540	7.20	10-Year	78,312	17.47
25-Year	58,497	12.48	25-Year	125,912	30.45
50-Year	80,659	17.87	50-Year	173,936	43.62
100-Year	109,046	24.78	100-Year	235,413	60.69

Storm Infrastructure - Seneca St. to Congress St. (Improvements)				
Subdrainage/Location	Proposed Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
A11 / Seneca St.	18" SICPP	0.50%	0.013	7.43
A11 & Portions of A8	24" SICPP	1.50%	0.013	27.70
A11 & A8 / 33 Congress St.	32" x 24" cmp	0.40%	0.013	23.00
A11 & A8 / Sunrise Terrace	32" SICPP	0.50%	0.013	34.45
A11, A8 & A7 / 44 Congress St.	36" SICPP	1.00%	0.013	66.69



VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

2040.23004

MRB PROJECT #

J.P.J.

DRAWN BY:
CHECKED BY:

DATE
SEPT, 2025

REVISION DESCRIPTION
OWNER REVIEW

SENECA STREET TO
CONGRESS STREET
IMPROVEMENTS

ENGINEER'S OPINION OF PROBABLE COST			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Seneca Street to Congress Street Estimate Type: Conceptual					
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$20,000	\$20,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000
4	Removal of Existing Storm Structure	2	EA	\$600	\$1,200
5	Removal of Existing Storm Piping	80	LF	\$25	\$2,000
6	5' Wide Concrete Sidewalk	10	LF	\$75	\$750
7	Swale Vegetation Removal and Re-seeding	100	LF	\$10	\$1,000
8	18" SICPP Storm Sewer	512	LF	\$125	\$64,000
9	24" SICPP Storm Sewer	0	LF	\$180	\$0
10	36" SICPP Storm Sewer	42	LF	\$200	\$8,400
11	3' by 3' Catch Basin	3	EA	\$1,500	\$4,500
12	4' Dia. Storm Catch Basin Manhole	0	EA	\$5,400	\$0
13	24"-36" End Section (Aluminum)	3	EA	\$1,500	\$4,500
14	Gravel Driveway Restoration	880	SF	\$10	\$8,800
15	Asphalt Driveway Restoration	180	SF	\$15	\$2,700
16	Road Restoration (Asphalt)	470	SF	\$20	\$9,400
17	Rip-Rap Outfall Protection (50 SF)	4	EA	\$1,000	\$4,000
18	32" SICPP Storm Sewer	40	LF	\$180	\$7,200
					\$0
General Construction Cost: Construction Contingency (20%):					\$153,450 \$30,690
Total Construction Cost:					\$184,140
Engineering, Legal, and Admin Services (25%):					\$38,363
Opinion of Probable Project Cost:					\$222,503
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$223,000

APPENDIX M***M Conceptual Design and Cost Estimate: Prospect Street to East Seneca Road***

This aerial map illustrates a proposed road project along Prospect St. Key features include:

- Property Owners and Addresses:**
 - Sibley, Joseph: 17 Prospect St
 - Davis, Timothy J: 19 Prospect St
 - Fay, Kathryn: 21 Prospect St
 - Farnham, Bradford A: 23 Prospect St
 - Robertson, Richard: 19 Prospect St
 - Cooke, Barbara P: 41 Prospect St
 - Trumansburg Properties, LLC: 18, 20, 22, 24, 26, 28 Prospect St
 - Liberatore, Brian: 40 Prospect St
 - Linkens, Jenna: 42 Prospect St
- Engineering Notes:**
 - "REMOVE VEGETATION WITHIN THE ROW SWALE, 3,350 SF"
 - "REMOVE VEGETATION WITHIN THE ROW SWALE, 1,800 SF"
 - "TO BE REMOVED"
- Elevation Data:** Numerous spot elevations are provided, such as 929.32, 928.41, 928.29, 927.88, 927.47, 926.89, 926.57, 926.33, 926.06, 925.75, 925.33, 925.06, 924.79, 924.36, 924.06, 923.72, 923.33, 923.06, 922.72, 922.47, 922.12, 921.80, 921.47, 921.12, 920.79, 920.47, 920.12, 919.80, 919.47, 919.12, 918.79, 918.47, 918.12, 917.80, 917.47, 917.12, 916.79, 916.47, 916.12, 915.80, 915.47, 915.12.
- Other Features:** The map shows existing structures, landscaping, and topographical contours. Specific areas like "A4" and "A6" are highlighted.

$$1'' = 40'$$

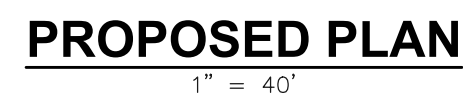
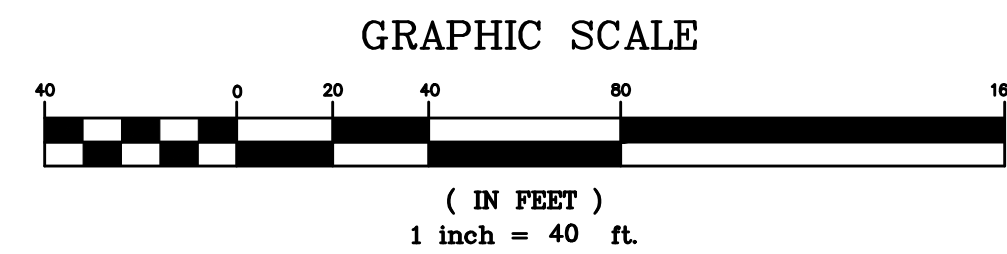
$$1'' = 40'$$

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



Storm Infrastructure - Prospect St. to East Seneca Rd. (Existing)				
Subdrainage/Location	Existing Storm Infrastructure	Slope	Manning Roughness 'n'	Peak Flow (cfs)
Prospect St. Road Culvert	8" Clay Pipe	2.90%	0.013	2.22
68, 66 East Seneca Rd. Driveway	15" Corrugated Plastic Pipe	1.70%	0.013	8.42
64, 62 East Seneca Rd. Driveway	30" SICPP	1.30%	0.013	46.76



VILLAGE OF TRUMANSBURG
**COMPREHENSIVE STORMWATER
MANAGEMENT PLAN**
TOMPKINS COUNTY, NY

CLIENT PROJECT #

2040.23004

DRAWN BY:	J.P.J.
CHECKED BY:	TJF

DRAWN BY:
CHECKED BY:

DATE	BY
SEPT, 2025	

REVISION DESCRIPTION

PROSPECT STREET TO EAST SENECA ROAD IMPROVEMENTS

ENGINEER'S OPINION OF PROBABLE COST

Project: Comprehensive Stormwater Management Plan

Location: Village of Trumansburg, NY - Prospect Street to East Seneca Road

Estimate Type: Conceptual



Engineering, Architecture & Surveying, D.P.C.
145 Culver Road, Suite 160
Rochester, NY 14620

Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$45,000	\$45,000
2	Traffic Control (Assume Shoulder Closure)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000
4	Removal of Existing Storm Structure	0	EA	\$600	\$0
5	Removal of Existing Storm Piping	665	LF	\$25	\$16,625
6	Swale Vegetation Removal and Re-seeding	5150	SF	\$10	\$51,500
7	18" SICPP Storm Sewer	583	LF	\$125	\$72,875
8	24" SICPP Storm Sewer	262	LF	\$160	\$41,920
9	32" SICPP Storm Sewer	240	LF	\$180	\$43,200
10	6' Dia. Storm Manhole Structure (Flow Splitter)	1	EA	\$26,000	\$26,000
11	4' Dia. Storm Catch Basin Manhole	1	EA	\$5,400	\$5,400
12	3' by 3' Catch Basin	2	EA	\$1,500	\$3,000
13	12-18" End Section (Aluminum)	3	EA	\$700	\$2,100
14	24"-36" End Section (Aluminum)	8	EA	\$1,500	\$12,000
15	Asphalt Driveway Restoration	865	SF	\$15	\$12,975
16	Gravel Driveway Restoration	1310	SF	\$10	\$13,100
17	Road Restoration (Asphalt)	500	SF	\$20	\$10,000
18	Permanent Check Dam	3	EA	\$500	\$1,500
General Construction Cost:					\$372,195
Construction Contingency (20%):					\$74,439
Total Construction Cost:					\$446,634
Engineering, Legal, and Admin Services (25%):					\$93,049
Opinion of Probable Project Cost:					\$539,683
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$540,000

APPENDIX N***N Conceptual Design and Cost Estimate: Salo Drive***



ENGINEER'S OPINION OF PROBABLE COST			 Engineering, Architecture & Surveying, D.P.C. 145 Culver Road, Suite 160 Rochester, NY 14620		
Project: Comprehensive Stormwater Management Plan Location: Village of Trumansburg, NY - Salo Drive Estimate Type: Conceptual					
Item No.	Description of Work Item	Quantity	Units	Unit Price	Cost
Sitework					
1	General Conditions & Mobilization/Demobilization	1	LS	\$8,000	\$8,000
2	Traffic Control (Assume Lane Closure/Detour)	1	LS	\$10,000	\$10,000
3	Erosion/Sediment Control	1	LS	\$5,000	\$5,000
4	Removal of Existing Storm Structure	0	EA	\$600	\$0
5	Removal of Existing Storm Piping	48	LF	\$25	\$1,200
6	18" SICPP Storm Sewer	0	LF	\$125	\$0
7	24" SICPP Storm Sewer	84	LF	\$160	\$13,440
8	24"-36" End Section (Aluminum)	4	EA	\$1,500	\$6,000
9	Rip-Rap Outfall Protection (50 SF)	4	EA	\$1,000	\$4,000
10	Grass Swale	225	EA	\$25	\$5,625
11	Asphalt Driveway Restoration	420	SF	\$15	\$6,300
12	Gravel Driveway Restoration	220	SF	\$10	\$2,200
General Construction Cost:					\$61,765
Construction Contingency (20%):					\$12,353
Total Construction Cost:					\$74,118
Engineering, Legal, and Admin Services (25%):					\$15,441
Opinion of Probable Project Cost:					\$89,559
OPINION OF PROBABLE PROJECT COST (ROUNDED):					\$90,000



Elevating Communities

APPENDIX O

O Village Websoils Report



United States
Department of
Agriculture

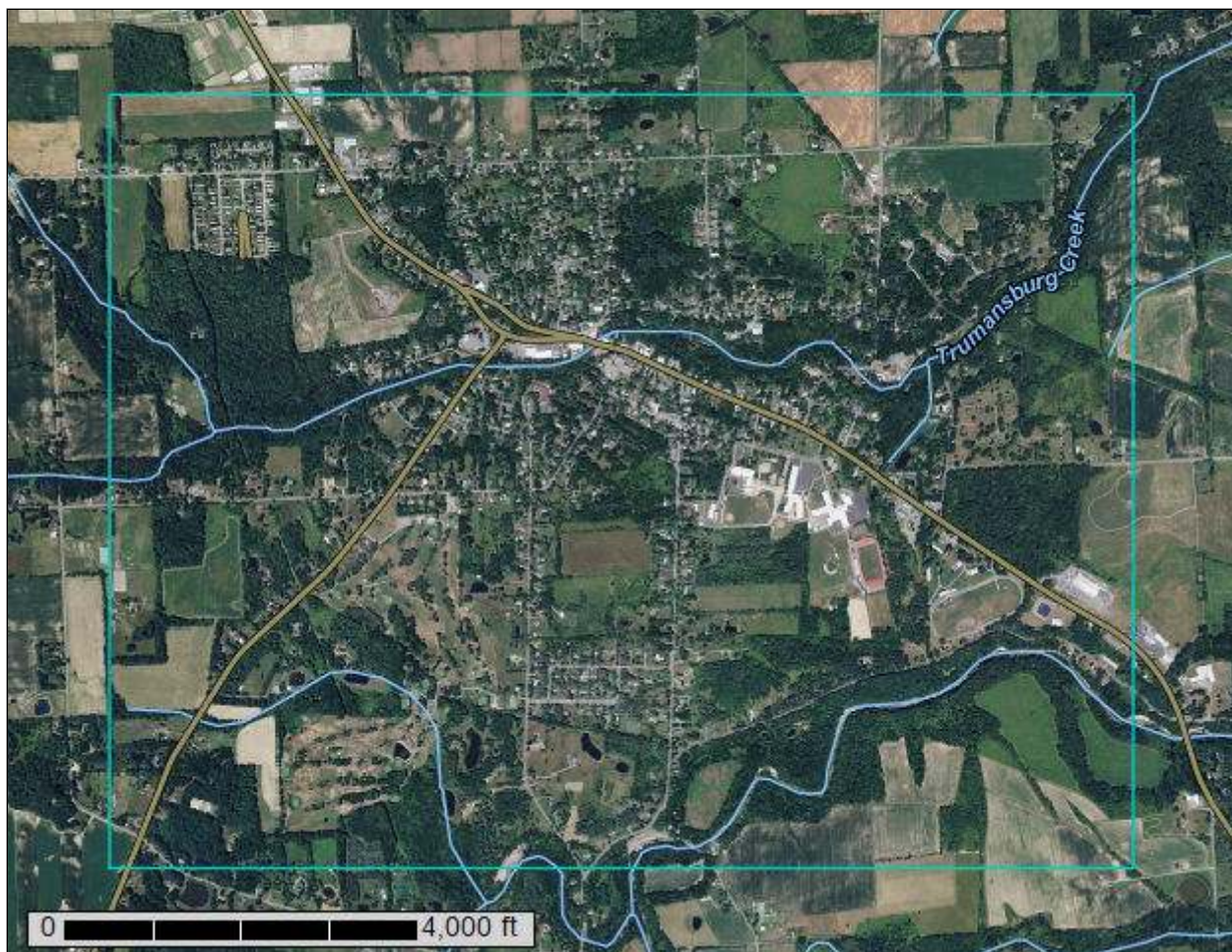
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Seneca County, New York, and Tompkins County, New York**

Village Of Trumansburg



August 12, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

[illegible]

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Seneca County, New York

Survey Area Data: Version 22, Aug 25, 2024

Soil Survey Area: Tompkins County, New York

Survey Area Data: Version 20, Aug 29, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ac	Alden mucky silt loam	0.4	0.0%
AoA	Appleton gravelly silt loam, 0 to 3 percent slopes	2.3	0.1%
AoB	Appleton gravelly silt loam, 3 to 8 percent slopes	0.9	0.0%
ApB	Appleton silt loam, 3 to 8 percent slopes	0.8	0.0%
AzF	Aurora and Farmington soils, 25 to 70 percent slopes	1.5	0.1%
CsA	Conesus gravelly silt loam, 0 to 3 percent slopes	21.5	0.9%
CsB	Conesus gravelly silt loam, 3 to 8 percent slopes	23.7	1.0%
HnB	Honeoye silt loam, 3 to 8 percent slopes	68.1	2.9%
HwC	Howard gravelly loam, 5 to 15 percent slopes	3.4	0.1%
LsB	Lansing gravelly silt loam, 3 to 8 percent slopes	30.6	1.3%
LtB	Lima silt loam, 3 to 8 percent slopes	10.8	0.5%
Ly	Lyons soils, 0 to 3 percent slopes	0.9	0.0%
Ma	Madalin and Odessa soils, 0 to 3 percent slopes	1.2	0.1%
Ng	Niagara silt loam	12.3	0.5%
PgA	Palmyra gravelly loam, 0 to 5 percent slopes	1.1	0.0%
PgC	Palmyra gravelly loam, 5 to 15 percent slopes	8.6	0.4%
PhD	Palmyra and Howard soils, 15 to 25 percent slopes	4.4	0.2%
W	Water	0.2	0.0%
Subtotals for Soil Survey Area		192.8	8.2%
Totals for Area of Interest		2,359.5	100.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ab	Alluvial land	26.0	1.1%
ArB	Arkport fine sandy loam, 2 to 6 percent slopes	106.7	4.5%
ArC	Arkport fine sandy loam, 6 to 12 percent slopes	7.0	0.3%

Custom Soil Resource Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CfA	Conesus gravelly silt loam, 0 to 3 percent slopes	6.0	0.3%
CfB	Conesus gravelly silt loam, 3 to 8 percent slopes	114.9	4.9%
CnB	Chenango gravelly loam, fan, 0 to 8 percent slopes	4.4	0.2%
Em	Eel silt loam	58.3	2.5%
FdB	Fredon silt loam, 0 to 5 percent slopes	76.7	3.3%
Ha	Halsey silt loam	127.7	5.4%
Hc	Halsey mucky silt loam	36.1	1.5%
HdA	Howard gravelly loam, 0 to 5 percent slopes	145.1	6.1%
HdC	Howard gravelly loam, 5 to 15 percent simple slopes	382.9	16.2%
HdCK	Howard gravelly loam, 5 to 15 percent complex slopes	322.3	13.7%
HdD	Howard gravelly loam, 15 to 25 percent slopes	93.4	4.0%
HmB	Honeoye gravelly silt loam, 2 to 8 percent slopes	58.0	2.5%
HpE	Howard and Palmyra soils, 25 to 35 percent slopes	13.1	0.6%
KaB	Kendaia silt loam, 3 to 8 percent slopes	15.5	0.7%
KnA	Kendaia and Lyons soils, 0 to 3 percent slopes	9.7	0.4%
LbA	Lansing gravelly silt loam, 0 to 3 percent slopes	7.8	0.3%
LbB	Lansing gravelly silt loam, 3 to 8 percent slopes	167.0	7.1%
LbC	Lansing gravelly silt loam, 8 to 15 percent slopes	2.0	0.1%
Ly	Lyons soils, 0 to 3 percent slopes	6.8	0.3%
Mc	Made land	8.1	0.3%
Mn	Madalin silty clay loam, 0 to 3 percent slopes	0.5	0.0%
NaB	Niagara silt loam, 2 to 6 percent slopes	61.4	2.6%
OaA	Ovid silt loam, 0 to 6 percent slopes	3.4	0.1%
PaC	Palmyra gravelly loam, 5 to 15 percent simple slopes	1.0	0.0%
PhA	Phelps gravelly silt loam, 0 to 3 percent slopes	34.5	1.5%
PhB	Phelps gravelly silt loam, 3 to 8 percent slopes	93.3	4.0%

Custom Soil Resource Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RkA	Rhinebeck silt loam, 0 to 2 percent slopes	46.0	1.9%
RkB	Rhinebeck silt loam, 2 to 6 percent slopes	36.1	1.5%
Ro	Rock outcrop	55.1	2.3%
W	Water	20.8	0.9%
Ws	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	19.1	0.8%
Subtotals for Soil Survey Area		2,166.6	91.8%
Totals for Area of Interest		2,359.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group (Village of Trumburg)

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

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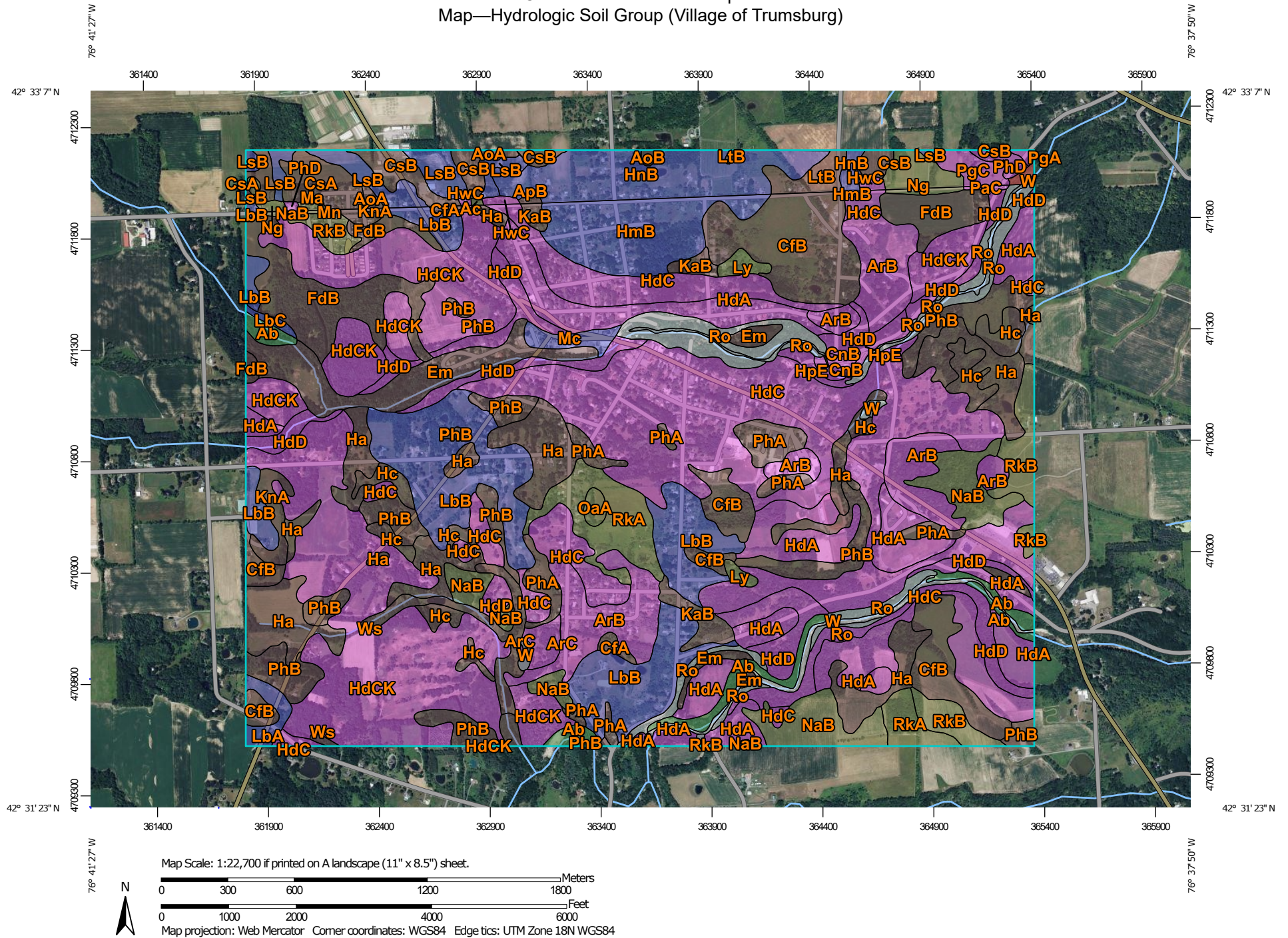
Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

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Map—Hydrologic Soil Group (Village of Trumburg)



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Seneca County, New York

Survey Area Data: Version 22, Aug 25, 2024

Soil Survey Area: Tompkins County, New York

Survey Area Data: Version 20, Aug 29, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group (Village of Trumburg)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ac	Alden mucky silt loam	C/D	0.4	0.0%
AoA	Appleton gravelly silt loam, 0 to 3 percent slopes	B/D	2.3	0.1%
AoB	Appleton gravelly silt loam, 3 to 8 percent slopes	B/D	0.9	0.0%
ApB	Appleton silt loam, 3 to 8 percent slopes	B/D	0.8	0.0%
AzF	Aurora and Farmington soils, 25 to 70 percent slopes	D	1.5	0.1%
CsA	Conesus gravelly silt loam, 0 to 3 percent slopes	B/D	21.5	0.9%
CsB	Conesus gravelly silt loam, 3 to 8 percent slopes	B/D	23.7	1.0%
HnB	Honeoye silt loam, 3 to 8 percent slopes	B	68.1	2.9%
HwC	Howard gravelly loam, 5 to 15 percent slopes	A	3.4	0.1%
LsB	Lansing gravelly silt loam, 3 to 8 percent slopes	B	30.6	1.3%
LtB	Lima silt loam, 3 to 8 percent slopes	B/D	10.8	0.5%
Ly	Lyons soils, 0 to 3 percent slopes	C/D	0.9	0.0%
Ma	Madalin and Odessa soils, 0 to 3 percent slopes	C/D	1.2	0.1%
Ng	Niagara silt loam	C/D	12.3	0.5%
PgA	Palmyra gravelly loam, 0 to 5 percent slopes	A	1.1	0.0%
PgC	Palmyra gravelly loam, 5 to 15 percent slopes	A	8.6	0.4%
PhD	Palmyra and Howard soils, 15 to 25 percent slopes	A	4.4	0.2%
W	Water		0.2	0.0%
Subtotals for Soil Survey Area			192.8	8.2%
Totals for Area of Interest			2,359.5	100.0%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ab	Alluvial land	A/D	26.0	1.1%
ArB	Arkport fine sandy loam, 2 to 6 percent slopes	A	106.7	4.5%
ArC	Arkport fine sandy loam, 6 to 12 percent slopes	A	7.0	0.3%
CfA	Conesus gravelly silt loam, 0 to 3 percent slopes	B/D	6.0	0.3%
CfB	Conesus gravelly silt loam, 3 to 8 percent slopes	B/D	114.9	4.9%
CnB	Chenango gravelly loam, fan, 0 to 8 percent slopes	A	4.4	0.2%
Em	Eel silt loam	B/D	58.3	2.5%
FdB	Fredon silt loam, 0 to 5 percent slopes	B/D	76.7	3.3%
Ha	Halsey silt loam	B/D	127.7	5.4%
Hc	Halsey mucky silt loam	B/D	36.1	1.5%
HdA	Howard gravelly loam, 0 to 5 percent slopes	A	145.1	6.1%
HdC	Howard gravelly loam, 5 to 15 percent simple slopes	A	382.9	16.2%
HdCK	Howard gravelly loam, 5 to 15 percent complex slopes	A	322.3	13.7%
HdD	Howard gravelly loam, 15 to 25 percent slopes	A	93.4	4.0%
HmB	Honeoye gravelly silt loam, 2 to 8 percent slopes	B	58.0	2.5%
HpE	Howard and Palmyra soils, 25 to 35 percent slopes	A	13.1	0.6%
KaB	Kendaia silt loam, 3 to 8 percent slopes	B/D	15.5	0.7%
KnA	Kendaia and Lyons soils, 0 to 3 percent slopes	B/D	9.7	0.4%
LbA	Lansing gravelly silt loam, 0 to 3 percent slopes	B	7.8	0.3%
LbB	Lansing gravelly silt loam, 3 to 8 percent slopes	B	167.0	7.1%
LbC	Lansing gravelly silt loam, 8 to 15 percent slopes	B	2.0	0.1%
Ly	Lyons soils, 0 to 3 percent slopes	C/D	6.8	0.3%

Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Mc	Made land	B	8.1	0.3%
Mn	Madalin silty clay loam, 0 to 3 percent slopes	C/D	0.5	0.0%
NaB	Niagara silt loam, 2 to 6 percent slopes	C/D	61.4	2.6%
OaA	Ovid silt loam, 0 to 6 percent slopes	C/D	3.4	0.1%
PaC	Palmyra gravelly loam, 5 to 15 percent simple slopes	A	1.0	0.0%
PhA	Phelps gravelly silt loam, 0 to 3 percent slopes	B/D	34.5	1.5%
PhB	Phelps gravelly silt loam, 3 to 8 percent slopes	B/D	93.3	4.0%
RkA	Rhinebeck silt loam, 0 to 2 percent slopes	C/D	46.0	1.9%
RkB	Rhinebeck silt loam, 2 to 6 percent slopes	C/D	36.1	1.5%
Ro	Rock outcrop		55.1	2.3%
W	Water		20.8	0.9%
Ws	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	B/D	19.1	0.8%
Subtotals for Soil Survey Area			2,166.6	91.8%
Totals for Area of Interest			2,359.5	100.0%

Rating Options—Hydrologic Soil Group (Village of Trumburg)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

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