PZ clerk rec'd 12.04

EXHIBIT A

Updated Narrative For Tilden Commons

NARRATIVE FOR TILDEN COMMONS

Prepared for New Lebanon's Planning Board

December 4, 2025

Project Overview

The proposed development is a mixed-use development on a 3.2-acre parcel in the Town's Central Commercial District. We are seeking to build a new space for a nearby grocery business and to build housing that is affordable to middle-class individuals and families who live in the area.

We are seeking local permitting for the housing, as a multifamily dwelling use, and for the grocery, as a retail store use. We expect this project to have a major positive impact on the downtown community and the Town overall. The project also includes 116 parking spaces, an outdoor courtyard and play area, and green spaces for tenants and customers.

Rendering from the corner of Route 20 and Tilden Road. Landscaping subject to change.

Rendering from residential vehicle entry along Tilden Road. Landscaping subject to change.

HOUSING — The proposed development includes 41 apartments, a mix of 21 one-bedroom apartments and 20 two-bedroom apartments. We anticipate reserving 10 apartments for seniors aged 62 and up. Based on substantial previous experience with similar developments, we expect an average of 1.25 people across the one-bedroom apartments and an average of 3.0 people across two-bedrooms apartments. Thus we expect this development to house approximately 86 people.

Using State and Federal funds will require all of these apartments to be "affordable," which is defined as total housing costs no greater than 30% of a household's gross income. We are targeting households whose gross incomes are 60% of Area Median Income (AMI). Here is a selection of levels of AMI by number of people in the household:

	HOUSEHOLD SIZE			
	1 person	2 persons	3 persons	4 persons
100% of AMI	$78,900	$90,200	$101,400	$112,700
60% of AMI	$47,340	$54,120	$60,840	$67,620

We anticipate the monthly rent for one-bedroom apartments to be roughly $1100 and for two-bedroom apartments to be roughly $1300.

GROCERY — The proposed project also includes a roughly 12,500 square-foot grocery including 9500 square feet of retail space and an off-street 2-bay loading dock suitable for anticipated deliveries. We have in place an agreement with the New Lebanon Farmers Market & Grocery to be the tenant for this space. It is committed to supporting local farmers and food producers. It expects this expansion from its current size of 2,400 square feet to enable it to scale its operations, lower prices, and serve a dramatically greater share of the local community.

Design and construction

The design team is led by Ari Goldstein of Substrate Architecture, based in Austerlitz, NY, and includes Brendon Becker of Lamont Engineers, based in Cobleskill, NY, and landscape designer Jocine Valesco, based in New Lebanon, NY.

The design takes inspiration from the Town's rural and agricultural character and Shaker history. Its design adheres to strict design guidelines authored by New York State's Homes and Community Renewal, a recent copy of which can be accessed online at **https://tinyurl.com/hcr-design**. The project is a model for the newly revised zoning code and the comprehensive plan, including parking located in the rear, architectural details reflective of Shaker and rural vernacular buildings, and dark sky compliant lighting.

The project will take place on a corner lot. It will conform to 50ft front setbacks from the center lines of Route 20 and Tilden Rd. It will conform to a 40ft side setback from the northerly property (i.e., 19.2-1-20) and to a 25ft rear setback from the easterly properties (e.g., 19.2-1-68). It is within the 50’ height and 3-story limit. Lot coverage is roughly 19%, while the maximum allowable is 75%.

Environmental and safety considerations

WETLANDS — The DEC “has determined that there are no DEC regulated freshwater wetlands and/or adjacent areas identified on the parcel.” *See LETTER OF NO JURISDICTION – FRESHWATER WETLANDS dated December 1, 2025.*

WATER SOURCE — This project will comply with New York State Department of Health (DOH) regulations as a community water system. We have performed comprehensive testing, including a 72-hour draw down pumping test to ensure that the well is more than able to meet the calculated demands. During this test, the hydrogeologist installed monitoring equipment on existing wells within a 1000–1500-foot radius of the existing well on the project site. We have submitted full results from this Hydrogeologic Evaluation Report, which confirms both that the existing well will suffice for the development and that anticipated water withdrawal during extreme conditions will not affect the wells on any nearby property. The proposed water system will include chlorination and treatment in compliance with DOH regulations. *See Hydrogeologic Evaluation Report, prepared by Hanson Van Vleet, PLLC.*

DOH has our most recent water system designs, and we have had several phone conversations regarding same with Sean Howard at DOH. One such call included James Malcolm at the New

York State Department of Environmental Conservation (DEC). Review of our most recent water system designs is underway.

WASTEWATER — The proposed wastewater system will fall under the review and regulations of DEC as an intermediate system. The development will use an advanced treatment system for wastewater treatment with clean discharge. This will require that the development obtain a State Pollutant Discharge Elimination System (SPDES) permit from the DEC, and the wastewater system will need to comply with the treatment quality requirements of such permit. The anticipated treatment system is a conventional septic tank for solids removal, an Orenco Advantex treatment system for secondary treatment, and UV disinfection. These treatment steps render the wastewater as clean as stormwater. All wastewater will then discharge to an underground infiltrator system, ensuring that all wastewater stays on the site and filters safely back into the earth.

DEC has our most recent designs, and we have had several phone conversations with James Malcolm regarding same. One call included Sean Howard at DOH. Review of our most recent wastewater system designs is underway. In addition, we have submitted correspondence from Lena Phillips at DEC indicating that the proposed wastewater system is eligible for a SPDES General Permit. *See Tilden Commons DEC ID 4-1048-00120 (T) New Lebanon, Columbia County.*

STORMWATER — Proposed stormwater treatment for the new impervious surface areas for the project site will be provided mostly by infiltration basins at the northern portion of the site. Deep test pits have been completed to ensure this is a viable treatment option. The stormwater basins will allow stormwater to percolate slowly into the soils and avoid any impact on any of the existing roadway drainage systems. These infiltration basins will be landscaped with appealing plantings. The filtration media will be maintained according to a maintenance plan.

Traffic

We have submitted a traffic assessment produced by Creighton Manning Engineering & Surveying, PLLC (CM). *See Traffic Assessment, Tilden Mixed-Use Development, 538 Route 20, Town of New Lebanon, Columbia County, New York; CM Project No. R251170.00.*

These are the key conclusions:

- The intersection and stopping sight distances meet relevant guidelines.
- The proposed project is expected to generate 56 new vehicle trips during the AM peak hour, 133 new vehicle trips during the PM peak hour, and 160 new vehicle trips during the Saturday peak hour.
- The relevant intersections — including US20 and NY22; US20 and Tilden Rd; US20 and West St / Shaker Rd — will operate at Level of Service C or better during peak hours, with an increase in average vehicle delay less than two seconds.
- Site Driveway intersections on US Route 20 and Tilden Road will operate at Level of Service B or better during peak hours.

- The development will not significantly increase queuing in the study area during peak hours.

We have submitted a letter indicating that New York State Department of Transportation (NYSDOT) will permit the development's proposed curb cut on US20. *See Letter from the Department of Transportation dated November 24, 2025, and signed by William C. First.*

Electricity

NYSEG completed a load study and confirmed that the grid currently has enough power to serve the site. The development will likely need to install several new poles and transformers. *See NYSEG email dated Wednesday August 6 2025 from Sierra Dexheimer.*

Project timeline

Our timeline is anchored to the State's annual application process for affordable housing. Given the competitiveness of this funding, the State effectively requires projects that are shovel-ready and fully permitted. If the State approves the application, we anticipate breaking ground in 3Q 2026 and beginning operation in 1Q 2028.

Key changes since prior submission

Below is a list of key changes since our prior submission. Some of these are responsive to notes made in Barton & Loguidice's memo dated September 24, 2025.

Traffic, parking, and deliveries

- Provided a traffic assessment by Creighton Manning.
- Modified the site entrance on US-20 to comply with the NYS DOT Minor Commercial Driveway requirements.
- Modified the curb cut and driveway servicing the loading dock on Tilden Rd to fully accommodate 53-foot trailers.
- Modified the handicap parking layout on the site plan and added spot elevations to the site plan at all ADA spots.

Water, wastewater, and stormwater

- Following infiltration testing and deep test pits completed on September 26 with B&L engineer, updated our stormwater design and our SWPPP.

- Updated our wastewater design, moving the Orenco pods and subsurface infiltrator system to the northerly portion of the site.

- Provided updated Water and Sanitary Systems Report.

- Provided updated Stormwater Pollution Prevention Plan (SWPPP).

- Provided Hydrogeologic Evaluation Report.

- Provided an underground grease trap.

Landscaping and site design

- Relocated the playground from the northerly portion of the site to the yard adjacent to the building's courtyard along Tilden Rd.

- Removed the walking path, play mound, and gazebo from the green space at the northerly portion of the site.

- Removed sidewalks in front of the loading dock, trash enclosure, and generator along Tilden Road.

- Provided fencing around the transformer.

- Included rooftop solar in the building design.

Updated landscape and lighting design will be submitted at a future date.

EXHIBIT B

New York State Department of Environmental Conservation
Letter of No Jurisdiction – Freshwater Wetlands

NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Acting Commissioner

LETTER OF NO JURISDICTION – FRESHWATER WETLANDS

December 1, 2025
Brendon Becker
197 Elm Street
Cobleskill, NY 12043
Sent via email to: BBecker@lamontengineers.com

Re: DEC Freshwater Wetlands Parcel Jurisdictional Determination for
19.2-1-69, 538 US Route 20, New Lebanon, NY 12125

Dear Mr. Akins,

Based on the parcel identified in your request, the New York State Department of Environmental Conservation (DEC) has determined that there are no DEC regulated freshwater wetlands and/or adjacent areas identified on the parcel referenced above. Therefore, in accordance with Article 24 of the Environmental Conservation Law (ECL) and 6 NYCRR Part 663, no freshwater wetlands permit is required. Pursuant to ECL section 24-0703, this letter shall remain valid for a period of five years from the date it is issued (through _12_/_1_/_2030)

Please note that this letter does not relieve you of the responsibility of obtaining any necessary permits or approvals from other agencies or local municipalities.

If you have questions regarding this determination, please email FWWjurisdiction@dec.ny.gov.

Sincerely,

Ron Kichurchak-Ecologist
NYSDEC Region 4
1130 North Wescott Road
Schenectady, NY 12306

EXHIBIT C

Hanson Van Vleet, PLLC
Hydrogeologic Evaluation Report

HANSON VAN VLEET
est. 2004
Hydrogeologic Consultants, PLLC

HYDROGEOLOGIC EVALUATION REPORT

Production Well PW-1
Tilden Road Development
Town of New Lebanon, New York

Prepared for:

Lamont Engineers
197 Elm Street
Cobleskill, New York 12043

Prepared By:

Hanson Van Vleet, PLLC
902 Route 146, Suite 2
Clifton Park, New York 12065

December 3, 2025

DRAFT

TABLE OF CONTENTS

1.0 CONCLUSIONS 4
2.0 RECOMMENDATIONS 4
3.0 INTRODUCTION 4
4.0 PURPOSE 5
5.0 METHODS OF STUDY 5
5.1 Introduction 5
5.2 Solicitation of Surrounding Private Water Well Users 5
5.3 Well Construction Information 6
5.3.1 Production Well PW-1 6
5.3.2 528 Route 20 7
5.3.2 550 Route 20 7
5.3.3 4 County Route 5A 7
5.3.4 13 County Route 5A 7
5.3.5 17 County Route 5A 7
5.3.6 43 Tilden Road 8
5.4 Aquifer Pumping Test of PW-1 8
5.4.1 Background Monitoring Period 8
5.4.2 Drawdown Monitoring Period 8
5.4.3 Recovery Monitoring Period 9
5.5 Water Quality Sampling 9
5.6 Precipitation 9
5.7 Data Analysis 10
6.0 PUMPING TEST RESULTS 10
6.1 Background Data 10
6.2 Drawdown Data 11
6.3 Recovery Data 14
6.4 Surface Water Level 14
6.5 Precipitation 14
7.0 WATER QUALITY 15
8.0 WELL PREDICTIONS 15
8.1 Production Well PW-1 15
8.2 Off-site Water Users 16

ATTACHMENTS LIST PROVIDED ON THE FOLLOWING PAGE

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FIGURES

Figure 1 – Site Location Map
Figure 2 – Pumping Test Schematic

APPENDICES

Appendix A: **Surrounding Private Water Well Documentation**
Appendix B: **NYSDEC Well Completion Reports**
Appendix C: **Background Graphs**
Appendix D: **Surface Water Level Graphs**
Appendix E: **Drawdown Graphs**
Appendix F: **Drawdown Data**
Appendix G: **Recovery Graphs**
Appendix H: **Recovery Data**
Appendix I: **Water Quality Data**
Appendix J: **180-Day Projection Graphs**

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1.0 CONCLUSIONS

1.1 A 72-hour constant rate pumping test was performed on production well PW-1 at a discharge rate of 13 gallons per minute (gpm).

1.2 A well construction log was not available for PW-1. The well construction details will be verified via downhole video inspection at a later date.

1.3 Based on the data evaluated, PW-1 is capable of a long-term yield of at least 13 gpm.

1.4 Based on the data evaluated, pumping of PW-1 at 13 gpm will not adversely impact normal use of the surrounding private water wells.

1.5 The initial analytical results of the sample collected from PW-1 indicated the water is in compliance with the 10 NYCRR Subpart 5-1 Drinking Water requirements for all parameters included in the required laboratory analysis, except iron, manganese, chloride, turbidity, and total coliform.

Follow-up analytical results collected from PW-1 indicate the water is in compliance with the 10 NYCRR Subpart 5-1 Drinking Water requirements for all parameters included in the required laboratory analysis, except manganese, combined iron and manganese, and total coliform.

2.0 RECOMMENDATIONS

2.1 Based on the data collected during the constant rate pumping test of production well PW-1, Hanson Van Vleet Hydrogeologic Consultants, PLLC (HVV) recommends that production well PW-1 be put on line at a pumping rate of 13 gpm after it has been properly chlorinated, purged of residual chlorine and has a negative total coliform sample result.

2.2 In order to satisfy the 10 NYCRR Subpart 5-1 Drinking Water requirements, treatment options to decrease the individual concentration of manganese and the combined concentration of iron and manganese should be considered.

2.3 The 6-inch diameter permanent well casing at production well PW-1 was measured at 0.30 feet above grade. The current New York State Department of Health (NYSDOH) regulations require that the permanent casing for all groundwater sources shall project at least 12 inches above the pumphouse, well platform floor or concrete apron surface and at least 18 inches above final ground surface. Therefore, the permanent 6-inch casing should be extended in accordance with NYSDOH regulations.

3.0 INTRODUCTION

This report presents data, evaluations, and conclusions from the performance of the 72-hour constant rate pumping test of production well PW-1. Production well PW-1 is owned by Tilden Road Development. This hydrogeologic investigation, completed by HVV, was performed to determine the long-term sustainable yield of PW-1, as well as to provide data and analysis needed to evaluate the wells' current compliance with the New York State Department of Environmental Conservation (NYSDEC) and New York State

Department of Health (NYSDOH) requirements.

The subject property containing the pre-existing production well PW-1 is located north of US Route 20, between Tilden Road and Route 5A, in the Town of New Lebanon, Columbia County, New York (Figure 1). Mr. Michael Augello, Field Technician of HVV, performed the test data collection. Mr. Steven Catalano, P.G., Senior Hydrogeologist of HVV, completed the data analysis and report preparation. Mr. James Gironda, P.G., Partner/Senior Hydrogeologist of HVV, provided supervision and guidance throughout testing and analysis, and reviewed the report for quality and content. O'Connor Water Pumps (NYRD10948), of Richmondville, New York, performed all pump-related work to facilitate the pumping test.

4.0 PURPOSE

The evaluation was performed to determine the long-term yield of PW-1 and to collect the necessary drinking water samples to meet the 10 NYCRR Subpart 5-1 Drinking Water regulations.

5.0 METHODS OF STUDY

5.1 Introduction

The investigation consisted of four phases:

Phase 1: Constant Rate Pumping Test;

Phase 2: Water Quality Sample Collection and Analysis;

Phase 3: Data Evaluation; and

Phase 4: Reporting

5.2 Solicitation of Surrounding Private Water Well Users

Attempts were made to contact all property owners with a private water source located within 500 feet of production well PW-1, except at 43 Tilden Road which extended the radius to approximately 770 feet, to solicit their participation in the groundwater monitoring network during testing activities. An attempt was made to contact the owners of properties located at the addresses listed below. A summary of the outreach results is provided in Table 1 below.

Table 1
Surrounding Private Water Well User Outreach

Property Address	Contact Method	Access Agreement Returned	Well Survey Returned	Monitored During Testing	Notes
7, 9, 11 and 17 Tilden Road	(1)	No	No	No	--
21 Tilden Road	(2)	No	No	No	Well located in building unsafe for entry

36 Tilden Road	(1)	No	No	No	Declined to participate in-person
43 Tilden Road	(1)	Yes	Yes	Yes	Well and pond monitored.
516 Route 20	(1) + (2)	No	No	No	--
523 Route 20	(1)	No	No	No	Well was inaccessible.
528 Route 20	(1)	Yes	Yes	Yes	--
531 Route 20	(1)	No	No	No	Declined to participate in-person
536C Route 20	(1)	No	No	No	--
550 Route 20	(1)	Yes	Yes	Yes	--
614 Route 20	(1)	No	No	No	--
4 County Route 5A	(1)	Yes	Yes	Yes	--
7A County Route 5A	(1) + (2)	No	No	No	Declined to participate in-person
9 County Route 5A	(1)	No	No	No	--
13 County Route 5A	(1)	Yes	Yes	Yes	--
17 County Route 5A	(2)	Yes	Yes	Yes	--

(1) In-person
(2) USPS certified mail

Details regarding the well construction information provided by the property owners are provided in Section 5.3 of this report. The monitored off-site wells consisted of active residential or commercial wells, except 550 Route 20, which is an inactive well on the property for the Town library.

The signed access agreement forms, completed water well survey forms and USPS Certified Mail Receipts are attached in Appendix A.

5.3 Well Construction Information

5.3.1 Production Well PW-1

The well construction information at PW-1 was provided by the drilling firm that originally installed the well, Goold Well & Pumps of Valatie, New York. Well construction of PW-1 consisted of 93 feet of 6-inch diameter casing, 30 feet of 5-inch diameter casing from 93 to 123 feet and an open rock bore to 352 feet. The permanent 6-inch diameter casing was measured at 0.30 feet above grade.

A lithologic description was unavailable for PW-1. The NYS Surficial Geologic Map of New York, Hudson-Mohawk Sheet and DEC Well Completion Reports (WCRs) available on the online DECinfo Locator database were reviewed for the area within approximately 1,500 feet of PW-1. The surficial geology is mapped as outwash sand and gravel and was verified by the surrounding available well logs. The available DEC WCRs also depict a glacial till layer, 25 to 90 feet thick, overlying bedrock. The permanent casing set at a depth of 123 feet below grade and the static water level measured at 7.29 feet btoc indicates significant artesian pressure in the bedrock aquifer encountered at PW-1. This significant confining layer and artesian conditions exhibited at the well help prevent surficial contamination sources from entering the aquifer serving PW-1.

5.3.2 528 Route 20

The property owner of 528 Route 20 did not provide any information on the well construction of the well at the property. However, a NYSDEC WCR was located on the online DECinfo Locator database. The NYSDEC WCR indicates the well drilled at 528 State Route 20 consisted of 107 feet of 6-inch diameter casing and a total well depth of 220 feet below grade. The NYSEC WCR indicates the lithology encountered at the well consisted of sand and gravel to 25 feet below grade, hard pan from 25 to 80 feet below grade, clay from 80 to 94 feet below grade and limestone from 94 to 220 feet below grade. At the surface, the well consisted of 1.13 feet of 6-inch diameter steel casing above grade.

The NYSDEC WCR is included in Appendix B.

5.3.2 550 Route 20

The property owner of 550 Route 20 did not provide any information on the well construction of the well at the property. At the surface, the well consisted of 1.21 feet of 6-inch diameter steel casing above grade.

5.3.3 4 County Route 5A

The property owner indicated the well was installed by Goold Wells, Inc. to 200 feet below grade in 1968 with a yield of 20 gpm. No other well construction information was provided by the property owner. At the surface, the well consisted of 1.13 feet of 6-inch diameter steel casing above grade.

However, a weighted 200-foot measuring tape was extended to its full length and the bottom of the well was not encountered. Therefore, the well depth is known to be greater than 200 feet btoc.

5.3.4 13 County Route 5A

The property owner indicated the well was installed by Hanson Well Drilling. No other well construction information was provided by the property owner. At the surface, the well consisted of 0.67 feet of 6-inch diameter steel casing above grade.

5.3.5 17 County Route 5A

The property owner indicated the well was installed by Hanson Well Drilling to 360 feet below grade. No other well construction information was provided by the property owner. At the surface, the well consisted of 1.58 feet of 6-inch diameter steel casing above grade.

5.3.6 43 Tilden Road

The property owner indicated the well was installed by Goold Wells, Inc. to 180 feet below grade. No other well construction information was provided by the property owner. At the surface, the well consisted of 1.38 feet of 6-inch diameter steel casing above grade.

5.4 Aquifer Pumping Test of PW-1

5.4.1 Background Monitoring Period

Background data collection was initiated on June 17, 2025, which is 12 days before the start of the constant rate pumping test at PW-1. A preliminary aquifer pumping test on PW-1 was completed from June 24 through 25, 2025, which was prematurely terminated due to pump issues. The pump issues were remedied, and then the 72-hour pumping test presented in this report was completed. An In-Situ brand Level TROLL data logging pressure transducer collected water level measurements in production well PW-1 from June 17 through 29, 2025. A Global Water brand manual sonic water level meter was utilized to monitor water levels at all off-site observation wells, except 550 US Route 20, for several hours prior to the constant rate pumping test of PW-1. Since the primary well servicing the property at 550 US Route 20 was inaccessible for water level monitoring, the inactive well that did not contain any downhole pump equipment was monitored manually with a Solinst brand water level meter during the background monitoring period.

Graphs of the background water level monitoring data are included in Appendix C.

5.4.2 Drawdown Monitoring Period

The constant rate pumping test of PW-1 was performed from June 29 through July 2, 2025. A temporary submersible test pump capable of approximately 30 gpm was used for the pumping test of PW-1. Water level data was collected with an In-situ Level TROLL data logging pressure transducer and manually with a Solinst brand water level meter from production well PW-1 for the duration of the pumping test. A Global Water brand manual sonic water level meter was utilized to monitor water levels at all off-site observation wells, except 550 US Route 20, for the duration of the pumping test due to the elevated risk of entanglement with downhole equipment. Since the primary well servicing the property at 550 US Route 20 was inaccessible for water level monitoring, the inactive well that did not contain any downhole pump equipment was monitored manually with a Solinst brand water level meter.

Discharge rates were measured and monitored with a totalizing flowmeter and regularly verified with a timed bucket test. The pumping rate was controlled by an in-line ball valve. The initial flow rate for production well PW-1 was selected based on the results from an initial pumping test that was prematurely terminated due to pump issues. The pump issues were remedied, and then the pumping test presented in this report was completed. Discharge water from PW-1 was directed downgradient of the pumping well via approximately 300 feet of discharge hose onto the ground surface that flows further away from the pumping well and eventually into a stormwater catch basin located adjacent to US Route 20.

The surface water levels at Wyomanock Creek and an unnamed pond on the property of 43 Tilden Road were measured at least once immediately prior to the start of the pumping test, at regular intervals throughout the 72-hour pumping test and during the recovery period at staff gauges SG-1 and SG-2, respectively. The surface water level graphs are included in Appendix D.

A site schematic depicting the well locations and pumping test discharge location is included in Figure 2. The pumping test drawdown graphs and data are included in Appendix E and Appendix F, respectively.

5.4.3 Recovery Monitoring Period

Upon completion of the drawdown portion of the pumping test, recovery measurements were collected from production well PW-1 at one-minute intervals. Recovery measurements continued at production well PW-1 for 24 hours after the cessation of pumping. A Global Water brand manual sonic water level meter was utilized to monitor water levels at all off-site observation wells, except 550 US Route 20, during the recovery monitoring period. Since the primary well servicing the property at 550 US Route 20 was inaccessible for water level monitoring, the inactive well that did not contain any downhole pump equipment was monitored manually with a Solinst brand water level meter during the recovery monitoring period.

The recovery graphs and data are included in Appendix G and Appendix H, respectively.

5.5 Water Quality Sampling

Due to elevated turbidity at the conclusion of the constant rate pumping test, water quality samples were not collected during the constant rate pumping test. Additional development was completed at PW-1 via extended-duration pumping. The initial water quality sample was collected by Lamont on July 8, 2025. The sample was placed on ice and delivered to Capital Region Environmental Laboratory, an Environmental Laboratory Approval Program (ELAP)-accredited laboratory of Rensselaer, New York, under formal chain-of-custody procedures.

Based on the results of the initial water quality sample, a follow-up water quality sample was collected from PW-1 by Lamont after additional extended-duration pumping was completed. The follow-up sample was placed on ice and delivered to Capital Region Environmental Laboratory on October 30, 2025.

5.6 Precipitation

Precipitation data during the background and recovery monitoring periods for the individual pumping tests of PW-1 were collected from a U.S. Cooperative Network weather station identified as “Pittsield 2.8 W” with the station identification of GHCND: US1MABE0031, and located approximately four miles east of production well PW-1. The precipitation data during the drawdown period were collected using an on-site manual rain gauge with an accuracy of 0.01 inches.

5.7 Data Analysis

The water level data collected during the pumping portion of the test were converted to drawdown measurements. The drawdown data were plotted graphically on linear plots, with elapsed time on the x-axis and drawdown on the y-axis.

Water level data at PW-1 during the drawdown period of the constant rate pumping test was analyzed to verify if it attained stabilized drawdown per the requirements described in the NYSDEC Recommended Pumping Test Procedures for Water Withdrawal Permit Applications, Section 3.A. The recommendations indicate the stabilized water level shall not:

1. Fluctuate more than plus or minus 0.5 foot (i.e., within a vertical tolerance of one foot) for each 100 feet of water in the well (i.e., pre-test static water level to the top of the deepest water bearing fracture that contributes at least 10% of total well yield) over at least a six-hour period of constant pumping flow rate.
2. Show a trend of decreasing water level

Additionally, graphical 180-day semi-log projections of the drawdown data were used to predict long-term well yield. The semi-log projection was prepared in accordance with and met the criteria prescribed in the NYSDEC Recommended Pumping Test Procedures, Section 3.B.ii. The use of logarithmic prediction for drawdown assumes the aquifer is of uniform thickness, isotropic and of infinite areal extent. All aquifer modeling methods considered valid by the NYSDEC and NYSDOH make similar assumptions of aquifer conditions. The available drawdown predicted at the end of the 180-day semi-log projections for the production well in the pumping scenarios modeled, provides adequate margin for error typically exhibited by the analytical model employed. The lack of precipitation recharge for 180 days included in the semi-log projection method is effective in creating a conservative prediction of the long-term yield capabilities of the well.

Total drawdown from simultaneously pumping the production well and regular use of each homeowner well was estimated by utilizing the principle of superposition. The principle of superposition states that linear systems governed by linear differential equations can be algebraically added together to obtain composite solutions. Total drawdown from simultaneously pumping the proposed production well and regular use of each homeowner well was estimated by algebraically combining the total measured drawdown during each pumping test and from regular use of the homeowner wells.

The water level data collected during the recovery portion of the test were converted to residual drawdown measurements. The residual drawdown data was plotted graphically on linear plots as T' (time since the cessation of pumping) versus residual drawdown. The recovery data was analyzed mathematically by verifying that the water levels recover to 90 percent of static water levels within 24 hours of cessation of pumping.

6.0 PUMPING TEST RESULTS

6.1 Background Data

On June 17, 2025, the water level at PW-1 was measured at 6.54 feet btoc. The water level declined to approximately 79.5 feet btoc during the first failed pumping test. After the first

failed pumping test, the water level at PW-1 recovered to 7.29 feet btoc immediately prior to the 72-hour pumping test of PW-1. Off-site pumping appears to influence the water level at PW-1 approximately 0.5 feet during approximately 4 to 6-hour off-site pumping cycles.

Background water level measurements at 550 Route 20 were collected 1 hour and 49 minutes prior to the constant rate pumping test of PW-1. The static water level at 550 Route 20 was stable between 6.74 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025.

Background water level measurements at 43 Tilden Road were collected 1 hour and 44 minutes prior to the constant rate pumping test of PW-1. The water level at 43 Tilden Road rose from 4.06 to 3.08 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025.

Background water level measurements at 4 West Street were collected 1 hour and 30 minutes prior to the constant rate pumping test of PW-1. The water level at 4 West Street declined from 18.5 to 19.1 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025.

Background water level measurements at 528 Route 20 were collected 1 hour and 23 minutes prior to the constant rate pumping test of PW-1. The water level at 528 Route 20 declined from 20.4 to 21.0 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025.

Background water level measurements at 13 West Street were collected 1 hour and 16 minutes prior to the constant rate pumping test of PW-1. The water level at 13 West Street declined from 12.1 to 12.7 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025

Background water level measurements at 17 West Street were collected 1 hour and 10 minutes prior to the constant rate pumping test of PW-1. The water level at 17 West Street declined from 11.0 to 12.6 feet btoc, then rose to 12.0 feet btoc leading up to the start of the constant rate pumping test of PW-1 on June 29, 2025.

Graphs of the background water level monitoring data are included in Appendix C. The estimated distance of the observation wells in relation to the pumping well is provided in Table 2 below.

6.2 Drawdown Data

The 72-hour constant rate pumping test of PW-1 was initiated at 12:00 p.m. on June 29, 2025, when PW-1 was turned on at a pumping rate of 13 gpm. The rate was maintained at 13 gpm for 72 hours.

The static water level at PW-1 was measured at 7.29 feet btoc prior to initiating the pumping test. The pumping water level at PW-3 declined to 75.07 feet btoc during the initial six hours of pumping, then continued to gradually decline to 79.72 feet btoc during the initial 24 hours of pumping. During the final 48 hours of pumping, the water level fluctuated between 79.70 to 80.93 feet btoc, with a final pumping water level of 80.72 feet

btoc at the conclusion of the 72-hour pumping test. There were three events that caused a slight decline in water level during the final 48 hours of pumping, including: 1) approximately 0.7 feet between 2,130 and 2,490 minutes of pumping (6-hour period), 2) approximately 0.45 feet between 3,360 and 3,600 minutes of pumping (4-hour period), and 3) approximately 0.7 feet between 3,970 and 4,250 minutes of pumping (4.67-hour period). The three events that resulted in a decline in water level are attributed to off-site pumping influence. Off-site pumping negatively affected the ability of PW-1 to attain stabilized drawdown criteria without interference from off-site pumping.

After approximately seven hours of pumping, the turbidity at PW-1 was measured at 101 NTU and steadily declined throughout the 72-hour pumping test. After 44, 60 and 68.5 hours of pumping at PW-1, the turbidity measured declined to 51, 45 and 33 NTU. Due to the elevated turbidity measurements, a water quality sample was not collected for laboratory analysis at the conclusion of the 72-hour pumping test.

The initial water level during the drawdown period at 550 Route 20 was measured at 6.74 feet btoc. The water level at 550 Route 20 declined 0.63 feet during the 72-hour pumping test. However, the water level at 550 Route 20 continued to decline 0.04 feet for approximately 3.5 hours after the cessation of pumping, then rose 0.02 feet over the next approximately 1.5 hours. The continued decline in water level after the cessation of pumping at PW-1 indicates that an off-site pumping source is influencing the water level at 550 Route 20. The final water level at 550 Route 20 during the drawdown period was measured at 7.37 feet btoc.

The initial water level during the drawdown period at 43 Tilden Road was measured at 3.08 feet btoc, but was recovering from a recent pumping cycle. Due to frequent pumping cycles observed at 43 Tilden Road during testing activities, direct pumping influence from PW-1 was challenging to quantify. The final water level at 43 Tilden Road during the drawdown period was measured at 9.53 feet btoc, but was recovering from a recent pumping cycle. The water level at 43 Tilden Road declined up to 11.89 feet due to typical pumping at 43 Tilden Road. The water level at 43 Tilden Road was influenced less than 1.79 feet during the 72-hour pumping test of PW-1.

The initial water level during the drawdown period at 4 West Street was declining slightly leading up to the start of the drawdown period of testing. The initial water level at 4 West Street during the drawdown period was measured at 19.1 feet btoc. The water level at 4 West Street declined 10.4 feet during the 72-hour pumping test. However, the water level at 4 West Street continued to decline 0.9 feet for 26 minutes after the cessation of pumping, then generally rose 5.7 feet over the next approximately 4.5 hours. The continued decline in water level after the cessation of pumping at PW-1 indicates that an off-site pumping source is influencing the water level at 4 West Street. The final water level at 4 West Street during the drawdown period was measured at 28.9 feet btoc. The water level at 4 West Street declined up to 5.7 feet due to typical pumping at 4 West Street.

The initial water level during the drawdown period at 528 Route 20 was declining slightly, leading up to the start of the drawdown period of testing. The initial water level at 528 Route 20 during the drawdown period was measured at 21.0 feet btoc. The water level during the drawdown period at 528 Route 20 declined 5.3 feet during the 72-hour pumping

test. However, the 72-hour pumping test was concluded after recent pumping at 528 Route 20. The water level at 528 Route 20 declined up to 1.9 feet due to typical pump cycles at 528 Route 20.

The initial water level at 13 West Street during the drawdown period was measured at 12.7 feet btoc. The water level at 13 West Street declined 3.3 feet during the 72-hour pumping test with a final water level measurement of 15.7 feet btoc. However, the 72-hour pumping test was concluded after recent pumping at 13 West Street. The water level declined up to 10.7 feet due to typical pump cycles at 13 West Street.

The initial water level at 17 West Street during the drawdown period was measured at 12.0 feet btoc. The water level at 17 West Street declined 4.5 feet during the 72-hour pumping test with a final water level measurement of 15.5 feet btoc. However, the 72-hour pumping test was concluded after recent pumping at 17 West Street. The water level declined up to 6.1 feet due to typical pump cycles at 17 West Street.

The maximum drawdown observed at the pumping well and observation wells is summarized in Table 2. Maximum drawdown listed in Table 2 represents the maximum drawdown observed at each well while pumping production well PW-1 at the pumping rate of 13 gpm.

Table 2
Maximum Drawdown Observed During 72-Hour Pumping Test of PW-1
PW-1 Pumping Rate = 13 gpm

Well ID	Distance from Pumping Well PW-1 (ft)	Static Water Level (ft btoc)	Maximum Drawdown[(1)] (ft)
PW-1	0	7.29	73.43
550 Route 20	515	6.74	0.63[(2)]
43 Tilden Road	770	2.42[(3)]	1.79[(4)]
4 West Street	330	18.5[(3)]	10.2[(2)(4)]
528 Route 20	290	20.4[(3)]	4.2[(4)]
13 West Street	320	10.9[(3)]	3.3[(4)]
17 West Street	430	11.0[(3)]	3.6[(4)]

(1) The maximum drawdown reported is the maximum drawdown observed based on correlation with the start of pumping at PW-1 and excludes drawdown directly corresponding to active pumping at the off-site well.

(2) The water level continues to gradually decline after the pump at PW-1 turns off, which indicates the decline in water level is partially attributed to a source other than PW-1.

(3) Due to the recovering or declining water level at the start of pumping at PW-1, the static water level utilized during the data analysis was the shallowest water level during testing activities.

(4) Due to frequent pumping cycles at the off-site well, direct pumping influence from PW-1 was challenging to quantify. The best estimation of influence was provided based on the data collected.

6.3 Recovery Data

Pumping at PW-1 was terminated at 12:30 p.m. on July 2, 2025. The water level at PW-1 recovered to approximately 90 percent of its pre-test static water level within 4 hours and 20 minutes after the cessation of pumping at PW-1.

The recovery graphs and data are included in Appendix G and Appendix H, respectively.

6.4 Surface Water Level

The surface water level at SG-1 in the Wyomanock Creek was stable during the 2 hours and 35 minutes leading to the start of the constant rate pumping test. The surface water level at SG-1 in the Wyomanock Creek gradually declined 0.06 feet during the initial approximately 34 hours of pumping, then gradually rose 0.04 feet until the conclusion of the 72-hour pumping test. After the cessation of pumping at PW-1, the water level continued to rise 0.02 feet over approximately four hours. No apparent influence from pumping at PW-1 was observed at SG-1.

The surface water level at SG-2 in the unnamed pond at 43 Tilden Road gradually declined 0.02 feet during the 1 hour and 44 minutes leading to the start of the constant rate pumping test. The surface water level at SG-2 in the unnamed pond at 43 Tilden Road gradually declined 0.06 feet during the initial approximately 65.5 hours of pumping, then generally rose 0.01 feet until the conclusion of the 72-hour pumping test. After the cessation of pumping at PW-1, the water level remained at the same elevation over approximately five hours. No apparent influence from pumping at PW-1 was observed at SG-2.

The maximum drawdown observed at surface water monitoring locations is summarized in Table 3 below. The surface water level data is included in Appendix D.

Table 3
Maximum Drawdown Observed During 72-Hour Pumping Test of PW-1
PW-1 Pumping Rate = 13 gpm

Monitoring Location	Distance from Pumping Well PW-1 (ft)	Static Water Level (ft btoc)	Maximum Drawdown(1) (ft)
SG-1	1,330	3.66	0.00
SG-2	530	3.15	0.00

6.5 Precipitation

Two precipitation events occurred during the background monitoring period and one precipitation event occurred during the drawdown monitoring period of testing. The precipitation events are summarized in Table 4 below. The precipitation observed did not negatively impact the analysis of the pumping test data.

Table 4
Precipitation Summary during the Constant Rate Pumping Test of PW-1

Phase of Testing	Date	Precipitation Measurement (inches)	Precipitation Type
Background	June 23, 2025	0.17	Rain
Background	June 27, 2025	0.03	Rain
Drawdown	July 1, 2025	0.26	Rain

7.0 WATER QUALITY

The discharge water was identified with elevated turbidity at the conclusion of the 72-hour pumping test. Additional pumping of the well was initiated to decrease the turbidity at PW-1 after completion of the recovery monitoring period. The initial analytical results of the sample collected from PW-1 indicated the water is in compliance with the 10 NYCRR Subpart 5-1 Drinking Water requirements for all parameters included in the required laboratory analysis, except iron, manganese, chloride, turbidity, and total coliform.

Follow-up analytical results collected from PW-1 indicate the water is in compliance with the 10 NYCRR Subpart 5-1 Drinking Water requirements for all parameters included in the required laboratory analysis, except manganese, combined iron and manganese, and total coliform.

A follow-up water quality sample should be collected from PW-1 for total coliform and submitted to an ELAP-accredited laboratory after the well has been properly chlorinated and purged of residual chlorine.

In order to satisfy the 10 NYCRR Subpart 5-1 Drinking Water requirements, treatment options to decrease the individual concentration of manganese and the combined concentration of iron and manganese should be considered.

8.0 WELL PREDICTIONS

8.1 Production Well PW-1

The water level at PW-1 likely would have attained stabilized drawdown criteria during the final 48 hours of pumping if it were not for three off-site pumping events causing additional drawdown in the water level at PW-1. The off-site pumping influence resulted in the following declining water levels: 1) approximately 0.7 feet between 2,130 and 2,490 minutes of pumping (6-hour period), 2) approximately 0.45 feet between 3,360 and 3,600 minutes of pumping (4-hour period), and 3) approximately 0.7 feet between 3,970 and 4,250 minutes of pumping (4.67-hour period).

Between 1,440 and 2,100 minutes of pumping, the water level started and ended at 79.72 and 79.89 feet btoc, respectively. The shallowest and deepest water levels during that time period were recorded at 79.70 and 80.04 feet btoc, respectively, which is up to 0.34 feet of fluctuation during the 11-hour period.

Between 2,760 and 3,360 minutes of pumping, the water level started and ended at 80.16 to 80.15 feet btoc, respectively. The shallowest and deepest water levels during that time period were recorded at 80.00 and 80.23 feet btoc, which is up to 0.23 feet of fluctuation during the 10-hour period.

If the pump intake is set 10 feet off the bottom of the well, at a depth of 342 feet below grade, the available water column would be 334.41 feet (342 feet below grade minus the static water level of 7.29 feet btoc and 0.30 feet of stickup), this would estimate 1.67 feet of allowable water level fluctuation during a six-hour stabilized drawdown period in accordance with NYSDEC regulations. There was an 11-hour and 10-hour period during the 72-hour pumping test that resulted in up to 0.34 and 0.23 feet of fluctuation, which were interrupted due to off-site pumping influence. Based on the NYSDEC stabilized drawdown criteria, PW-1 attained stabilized drawdown and is capable of a long-term withdrawal rate of 13 gpm.

Additionally, the long-term predictions of well yield were made by extending the semi-log time versus drawdown graph at the end of pumping PW-1 at 13 gpm. Extending the drawdown data from the end of the 72-hour pumping test at PW-1 to a point on the graph representing 180 days of continuous pumping, estimates the water level would decline to approximately 81.5 feet btoc when pumping PW-1 at a discharge rate of 13 gpm. With an assumed pump intake setting at 342.30 feet btoc, this would provide approximately 260.8 feet before the 180-day drawdown prediction reaches the depth of the pump intake. The 180-day projected drawdown graph of PW-1 is included in Appendix J.

8.2 Off-site Water Users

Production well PW-1 appeared to have the most influence on the water level at the off-site well located at 4 West Street. The maximum drawdown observed at 4 West Street was approximately 10.4 feet at the conclusion of the 72-hour pumping test. During the final 12 hours of the 72-hour pumping test, the water level at 4 West Street declined between 0.2 to 0.4 feet (the water level influence from PW-1 during the final 1 hour and 40 minutes of pumping was obscured by pumping at 4 West Street). Extending the drawdown data at 4 West Street to a point on the graph representing 180 days of continuous pumping, estimates the water level would decline to approximately 35.5 feet btoc or 22.7 feet from static conditions. Since PW-1 attained stabilized drawdown, the water level at 4 West Street can be expected to attain stabilized drawdown in a reasonable timeframe. The 180-day stabilized drawdown is a conservative estimate of the long-term pumping impacts at 4 West Street.

The water level at 4 West Street declined up to 5.7 feet due to typical pumping at 4 West Street. Utilizing a combination of semi-log graphical projection of the observed drawdown data and the principle of superposition at 4 West Street, the estimated cumulative drawdown at 4 West Street from typical pumping at 4 West Street and long-term pumping PW-1 at 13 gpm would result in an estimated decline of the water level to approximately 41.2 feet btoc. The total well depth at 4 West Street is unknown. However, the well depth is greater than 200 feet btoc because a 200-foot measuring tape was extended in the well without any obstruction. A conservative estimate of the total well depth of 200 feet below grade at 4 West Street and the static water level of 18.5 feet btoc, the 22.7-foot decline in

water level from the 180-day projection represents approximately 12.5 percent of the available water column. The 5.7-foot decline in water level from typical pumping at 4 West Street represents approximately 3 percent of the available water column. The estimated 12.8 percent utilization of the available water column at 4 West Street from the combined use of 4 West Street and PW-1 is considered very unlikely to adversely impact the long-term use of the well located at 4 West Street.

Frequent use of the off-site monitoring wells caused difficulty in quantifying the influence of pumping at PW-1 on the off-site wells. However, the water level at many of the off-site wells stabilized or had a very slightly declining water level during the later portion of the 72-hour pumping test, which suggests limited to no additional drawdown would be expected at the off-site wells from additional pumping from PW-1.

Based on the data collected during the 72-hour pumping test of PW-1, all off-site wells monitored during testing activities observed less drawdown than at 4 West Street. The well with the next most water level influence was located at 528 Route 20, which resulted in 4.2 feet of drawdown at the conclusion of the 72-hour pumping test. Well construction information was not available for many of the off-site monitoring wells. However, based on the available data, it can be reasonably assumed that a total well depth of 200 feet btoc at the off-site wells is a conservative estimate. Given the data collected during testing activities and assumed total well depths, it can be reasonably assumed that pumping PW-1 at 13 gpm will likely not adversely impact the long-term use of the wells located at the off-site properties.

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FIGURES

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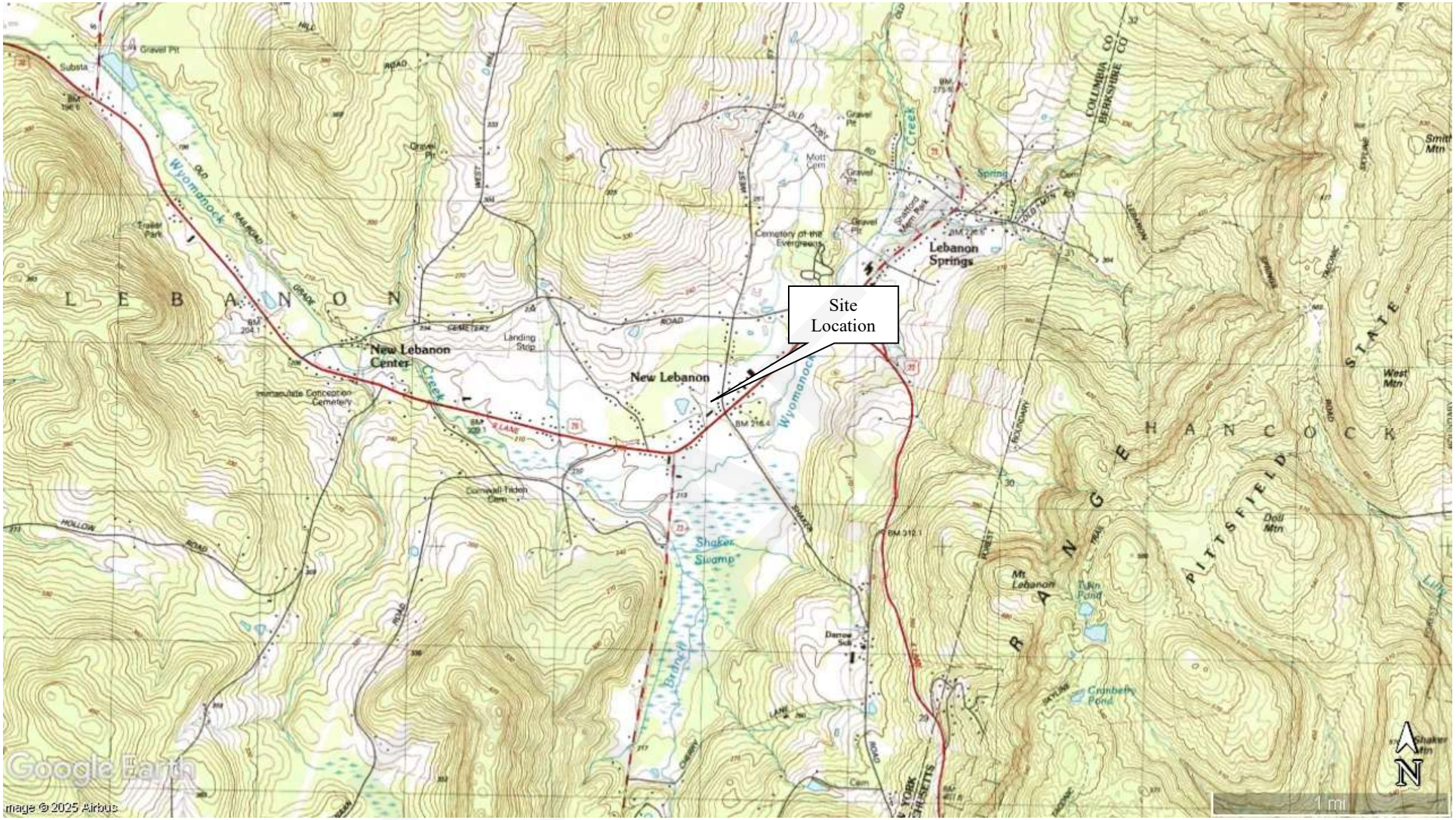

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Figure 1
Site Location Map
Tilden Road Development
Pumping Test of Production Well PW-1
New Lebanon, New York

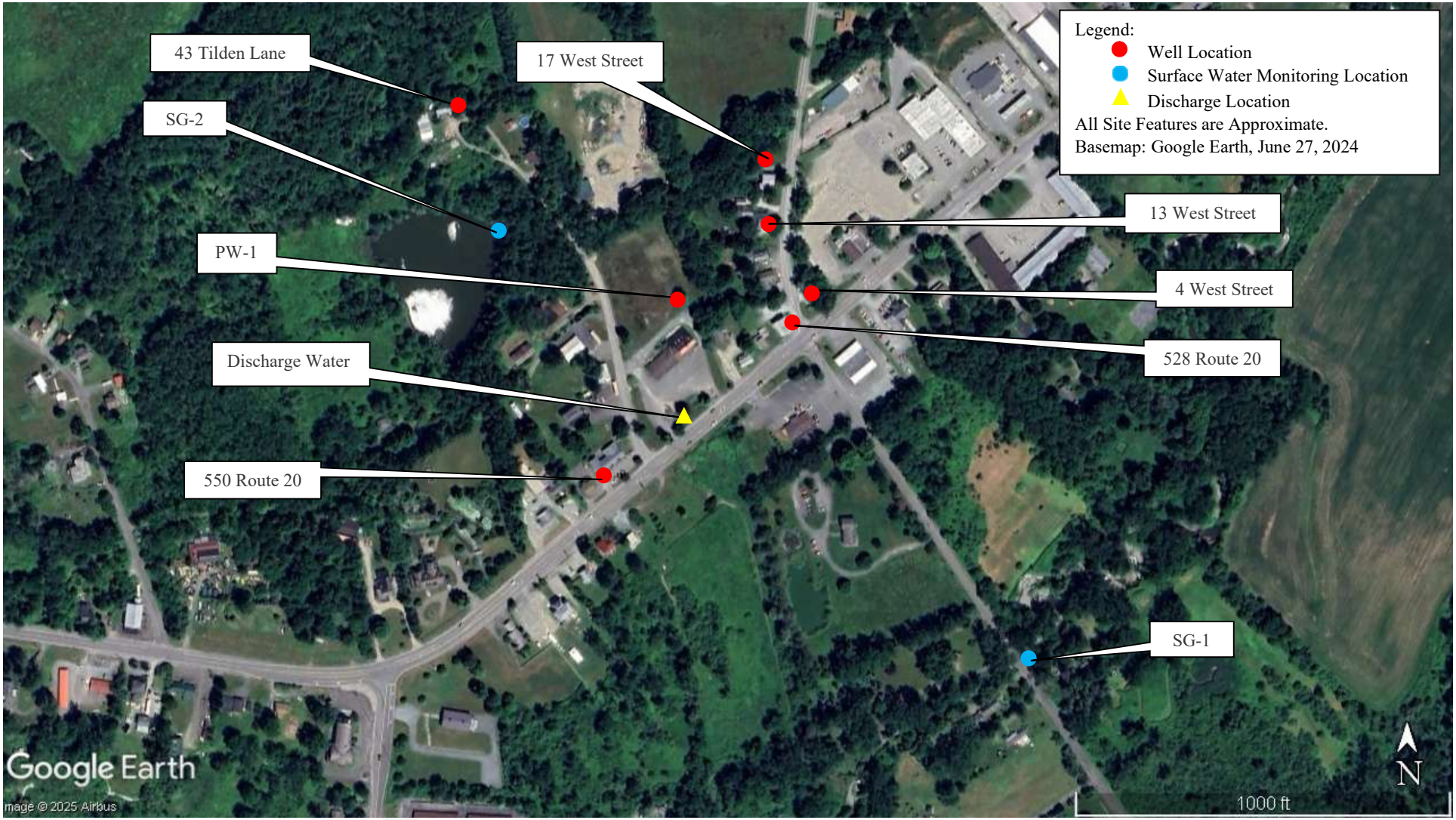

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Figure 2
Pumping Test Site Schematic
Tilden Road Development
Production Well PW-1
New Lebanon, New York

FIGURES

Figure 1 – Site Location Map
Figure 2 – Pumping Test Schematic

APPENDICES

Appendix A: Surrounding Private Water Well Documentation
Appendix B: NYSDEC Well Completion Reports
Appendix C: Background Graphs
Appendix D: Surface Water Level Graphs
Appendix E: Drawdown Graphs
Appendix F: Drawdown Data
Appendix G: Recovery Graphs
Appendix H: Recovery Data
Appendix I: Water Quality Data
Appendix J: 180-Day Projection Graphs

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Appendix A
Surrounding Private Water Well Documentation

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PROPERTY ACCESS CONSENT FORM

I, Michelle Hoffman, do hereby attest that I am the owner or authorized agent of the owner of the property as described below. I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

Address: 550 State RT 20, New Lebanon, NY 12125

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

Date: 06/20/2025

Signature: Michelle Hoffman Print Name: Michelle Hoffman

Date: _____

Signature: _____ Print Name: _____

Phone/ Email: librarydirector@newlebanonlibrary.org 518-794-8844

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VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: New Lebanon Library

Address: 550 State RT 20, New Lebanon, NY 12125

Date: 06/20/2025

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well ?) Dug Well

Formation: Bedrock Sand & Gravel (unsure)

Depth of Well: unknown **Date Drilled:** unknown

Well Driller: unknown **Yield of Well:** unknown gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? (YES) NO

   If yes, was this during a drought period? (YES) NO

2) Have you ever had cloudy water? (YES) NO

3) Has your water ever had any noticeable color? (YES) NO

4) Has your water ever had any noticeable odor? (YES) NO

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? rotten egg

5) Do you have a water treatment system? (YES) NO

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? sediment & taste filtering, water softener, UV filter, and use iron-removing pellets in softener

6) Do you have any water quality testing data? (YES) NO

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

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Claverack WELL & PUMP SERVICE

8960 State Route 22
Hillsdale, NY 12529-5001
(518) 325-4679
www.claverackpumpservice.com

Estimate Date 7/9/2024

Billing Address
New Lebanon Library
550 U.S. 20
New Lebanon, NY 12125 USA

Job Address
New Lebanon Library
550 U.S. 20
New Lebanon, NY 12125 USA

Description of work

Estimate for water filtration

Service #	Description	Quantity	Your Price	Total
MRD	**Mineral Description**: **Hardness:** Wastes soap, forms scale, clogs hot water heater and pipes. /0-3 gpg soft, 3-6 gpg moderately hard, 6-9 gpg hard water, 9+ gpg extremely hard. (1 gpg = 17.1 ppm) **Iron:** The E.P.A. recommends under 0.3 ppm. Over 0.3 ppm may cause red /Staining on plumbing fixtures and clothes. **pH:** 7.0 indicates water is neutral, under 7.0 is acidic, over 7.0 is alkaline, /6.8 or under is corrosive to fixtures and piping. **Manganese:** The E.P.A. recommends under .05 ppm. Over .05 ppm can cause /Brown/black stains on plumbing fixtures and clothes. **Sulfur:** Rotten egg odor corrodes pipes. Cause blackish stains on plumbing & fixtures and clothes. **TDS:** Total of minerals dissolved in water.	1.00	$0.00	$0.00
MRB	Mineral Report Before Filtration: Hardness: 15 Iron: Trace pH: 7.5 Manganese: Trace Sulfur: 0 TDS: 311	1.00	$0.00	$0.00

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Thank you for choosing Claverack Well and Pump Service, LLC. We appreciate your business!

THIS IS AN ESTIMATE, NOT A CONTRACT FOR SERVICES. The summary above is furnished by Claverack Well & Pump Service, LLC as a good faith estimate of work to be performed at the location described above and is based on our evaluation and does not include material price increases or additional labor and materials which may be required. Should unforeseen problems arise after the work has started, I understand that the final cost of the work may differ from the estimate, perhaps materially. THIS IS NOT A GUARANTEE OF THE FINAL PRICE OF WORK TO BE PERFORMED. I agree and authorize the work as summarized on these estimated terms, and I agree to pay the full amount for all work performed.

Sign/Date Here_____

ACCEPTANCE OF THIS ESTIMATE REQUIRES A SIGNED COPY RETURNED ALONG WITH A 50% DEPOSIT, BEFORE ANY WORK CAN BEGIN. IF THIS JOB IS CONSIDERED A CAPITAL IMPROVEMENT AND TAX EXEMPT, PLEASE SIGN AND RETURN THE CAPITAL IMPROVEMENT FORM PRIOR TO OUR BILLING.

The manufacturer(s) recommends annual servicing on all filtration installations. We also offer a salt delivery service (if applicable) if you are interested, please inquire.

PROPERTY ACCESS CONSENT FORM

I, Anna Duhon, do hereby attest that I am the owner or authorized agent of the property as described below (address).

Address: 43 Tilden Rd. New Lebanon, NY 12125

X I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well in order to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

_____ I respectively decline, for the above mentioned property, to participate in any of the described water well/water testing surveillance.

Date: 6/23/25

Signature: Anna Duhon Print Name: Anna Duhon

Date: _____

Signature: _____ Print Name: _____

Phone/ Email: 518-794-0021 annaduhon@gmail.com

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HANSON VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: Anna Duhon + Paul Rix

Address: 43 Tilden Rd. New Lebanon, NY 12125

Date: 6/20/25

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well) Dug Well

Formation: Bedrock Sand & Gravel

Depth of Well: 180 ft. **Date Drilled:** ?

Well Driller: Gould **Yield of Well:** 5? gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? YES (NO)

   If yes, was this during a drought period? YES (NO) ?

2) Have you ever had cloudy water? YES (NO)

3) Has your water ever had any noticeable color? YES (NO)

4) Has your water ever had any noticeable odor? (YES) NO

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? Antiseptic/chemical

5) Do you have a water treatment system? (YES) NO

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? Carbon

6) Do you have any water quality testing data? (YES) NO

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

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PROPERTY ACCESS CONSENT FORM

I, Linda Hursa, do hereby attest that I am the owner or authorized agent of the owner of the property as described below. I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

Address: 4 County Route 5A New Lebanon NY 12125

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

Date: 06/20/25

Signature: Linda Hursa Print Name: Linda Hursa

Date: 06/20/25

Signature: Ashley Savage Print Name: Ashley Savage

Phone/ Email: 518-410-8396 - Linda - lindahursa@gmail.com
578-794-8800 - Ashley - angelstrumpetflowers.nl@gmail.com

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HANSON VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: Linda Hursa

Address: 4 West Street

Date: 6/20/25

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well) Dug Well

Formation: Bedrock Sand & Gravel

Depth of Well: 200 ft **Date Drilled:** 1968

Well Driller: Gould Wells Inc. **Yield of Well:** 20 gall gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? YES (NO)

   If yes, was this during a drought period? YES NO

2) Have you ever had cloudy water? YES (NO)

3) Has your water ever had any noticeable color? YES (NO)

4) Has your water ever had any noticeable odor? YES (NO)

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? _____

5) Do you have a water treatment system? YES (NO)

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? _____

6) Do you have any water quality testing data? (YES) NO

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

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PROPERTY ACCESS CONSENT FORM

I, Phoebe Young, do hereby attest that I am the owner or authorized agent of the owner of the property as described below. I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

Address: 528 Route 20, New Lebanon, NY 12125

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

Date: June 17, 2025

Signature: Phoebe S Young Print Name: Phoebe Young

Date: _____

Signature: _____ Print Name: _____

Phone/ Email: 608-234-2620 / phoebe.young@gmail.com

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VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: Phoebe Young

Address: 528 Route 20, New Lebanon, NY 12125

Date: June 17, 2025

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well) Dug Well

Formation: (Bedrock) Sand & Gravel

Depth of Well: Unsure **Date Drilled**: Unsure

Well Driller: Unsure **Yield of Well**: 20?? gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? YES (NO)

   If yes, was this during a drought period? YES NO

2) Have you ever had cloudy water? (YES) NO

3) Has your water ever had any noticeable color? (YES) NO

4) Has your water ever had any noticeable odor? (YES) NO

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? Rotten egg

5) Do you have a water treatment system? (YES) NO

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? Unsure

6) Do you have any water quality testing data? YES (NO)

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

DRAFT

HANSON

VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: Margaret Brueckmann / Amy Brueckmann

Address: 13 County Route 5A, New Lebanon NY 12125

Date: 6/23/2025

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well) Dug Well

Formation: Bedrock Sand & Gravel

Hanson Well Drilling

Depth of Well: _____ **Date Drilled:** _____

Well Driller: ~~Hanson Well Drilling~~ **Yield of Well:** _____ gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? YES (NO)

   If yes, was this during a drought period? YES (NO)

2) Have you ever had cloudy water? YES (NO)

3) Has your water ever had any noticeable color? (YES) NO Sometimes a rusty color

4) Has your water ever had any noticeable odor? YES (NO)

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? _____

5) Do you have a water treatment system? YES (NO)

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? _____

6) Do you have any water quality testing data? YES (NO)

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

DRAFT

PROPERTY ACCESS CONSENT FORM

I, Margaret Brueckmann do hereby attest that I am the owner or authorized agent of the owner of the property as described below. I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

Address: 13 County Route 5A, New Lebanon, NY 12125

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

Date: 6/23/2025

Signature: Margaret Brueckmann Print Name: MARGARET BRUECKMANN

Date: _____

Signature: _____ Print Name: _____

Phone/ Email: (413) 281-0197 cell _____

DRAFT

PROPERTY ACCESS CONSENT FORM

I, William Hayes do hereby attest that I am the owner or authorized agent of the owner of the property as described below. I consent to provide the authorized personnel of Hanson Van Vleet, PLLC, with offices at 902 NY-146, Clifton Park, New York 12065, access to this property, at reasonable times and under reasonable conditions, for the purpose of completing well testing activities.

Address: 17 County Route 5a, New Lebanon, NY

I understand that this activity may involve several visits to the site. I do hereby consent to allow, at reasonable times, access to this property for well testing activities, including removing the well cap to measure the water level in the well with a sonic meter. The sonic meter measures the water level by way of a soundwave projected down the well bore. Nothing will be physically inserted down the well to measure the water level.

I agree to hold harmless Hanson Van Vleet, PLLC in the event any damage is caused to my well equipment due to the age or condition of the equipment. I understand that Hanson Van Vleet, PLLC is not responsible for replacement of pumps or other equipment that may fail during the testing period for reasons unrelated to the water level monitoring activities described above.

Date: 6-28-2025

Signature: _____ Print Name: William Hayes Jr

Date: _____

Signature: _____ Print Name: _____

Phone/ Email: 518-524-5341 / hayesw2@RPI.EDU

DRAFT

HANSON

VAN VLEET, PLLC

HYDROGEOLOGIC CONSULTANTS

WATER WELL SURVEY

Name: William Hayes Jr

Address: 17 County Route 5a, New Lebanon, NY

Date: 6-23-2025

Do you presently have a water well? (YES) NO

If "YES", please answer the following:

Type of Well: Well Point (Drilled Well) Dug Well

Formation: Bedrock Sand & Gravel

Depth of Well: 360' **Date Drilled:** _____

Well Driller: Hanson **Yield of Well:** _____ gallons per minute

***Please attach well log if available.**

1) Have you ever lost well yield? YES (NO)

   If yes, was this during a drought period? YES NO

2) Have you ever had cloudy water? YES (NO)

3) Has your water ever had any noticeable color? YES (NO)

4) Has your water ever had any noticeable odor? (YES) NO

   If yes, describe the type of odor (i.e. rotten egg smell, effervescence)? _____

5) Do you have a water treatment system? YES (NO)

   If yes, what type of treatment system do you have (i.e. sediment filter, chlorination, water softener, RO, Iron Removal, De-gas, etc.)? _____

6) Do you have any water quality testing data? YES (NO)

   If yes, please provide a copy of the laboratory report.

Please use the space below and on the back to describe any "yes" answers and any additional information you feel is relevant.

DRAFT

Appendix B
NYSDEC Well Completion Reports

DRAFT

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

(1) COUNTY Columbia

(2) TOWN New Lebanon

WATER WELL COMPLETION REPORT

(3) DEC Well Number CB4302

(4) OWNER The Phoenix Project of Eastern NY Inc

(5) ADDRESS P.O. Bx 768 New Lebanon NY 12125

(6) LOCATION OF WELL (See Instructions On Reverse) (Check here ☐ if address is same as above)
528 State Route 20 New Lebanon

(7) LATITUDE/LONGITUDE AND METHOD USED ☒ GPS ☐ Map N42° 28.003 W 73° 23.561

(8) TAX MAP NO.

(9) DEPTH OF WELL BELOW LAND SURFACE (feet) 220'

(10) DEPTH TO GROUNDWATER BELOW LAND SURFACE (feet) 20ft DATE MEASURED 1/7/16

CASINGS

(11) DIAMETER	6 in.	in.	in.	in.
(12) LENGTH	107 ft.	ft.	ft.	ft.

(13) GROUT TYPE / SEALING Bentonite/Drive Shoe

(14) GROUT / SEALING INTERVAL (feet) FROM 107 TO 0

SCREENS

(15) MAKE & MATERIAL		(16) OPENINGS		
(17) DIAMETER	in.	in.	in.	in.
(18) LENGTH	ft.	ft.	ft.	ft.

(19) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(20) DATE 1/7/16

(21) DURATION OF TEST 4 hrs.

(22) LIFT METHOD ☐ Pump ☑ Air Lift ☐ Bailer

(23) STABILIZED DISCHARGE (GPM) 20±

(24) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing) 20ft

(25) MAXIMUM DRAWDOWN (Stabilized) (feet/inches below top of casing) 220ft

(26) RECOVERY (Time in hours/minutes) 15 MIN

(27) Was the water produced during the test discharged away from immediate area? Yes ✓ No ___

PUMP INSTALLATION

(28) PUMP INSTALLED? YES ___ NO ✓

(29) DATE

(30) CERTIFIED PUMP INSTALLER

(31) TYPE

(32) MAKE

(33) MODEL

(34) MAXIMUM CAPACITY (GPM)

(35) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet)

DRILLER INFORMATION

(36) METHOD OF DRILLING ☒ Rotary ☐ Cable Tool ☐ Other

(37) USE OF WATER (See instructions for choices) Domestic

(38) DATE DRILLING WORK STARTED 1-6-2016

(39) DATE DRILLING WORK COMPLETED 1-7-2016

(40) DATE REPORT FILED 1-8-16

(41) REGISTERED COMPANY W. Gordon Goold Inc

(42) DEC REGISTRATION NO. NYRD 10055

(43) CERTIFIED DRILLER (Print name) Brent Roberts

(44) CERTIFIED DRILLER SIGNATURE Brent Roberts

* By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by Environmental Conservation Law 15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is true, accurate and complete, and I understand that any false statement made herein is punishable as a Class A Misdemeanor under Penal Law §210.45.

10/2013

(45) WELL LOG

Depth to Bedrock 94 (ft. below land surface)

Ground Elevation _____ (ft. above sea level)

Top of Casing 1 (ft. above ~~(-)~~ or below (-) land surface)

TOP OF WELL

0-25	Sand + Gravel
25-80	Hard pan
80-94	Clay
94-220	Limestone

220'

BOTTOM OF HOLE

NYSDEC

LOCATION SKETCH - Indicate north

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Appendix C
Background Graphs

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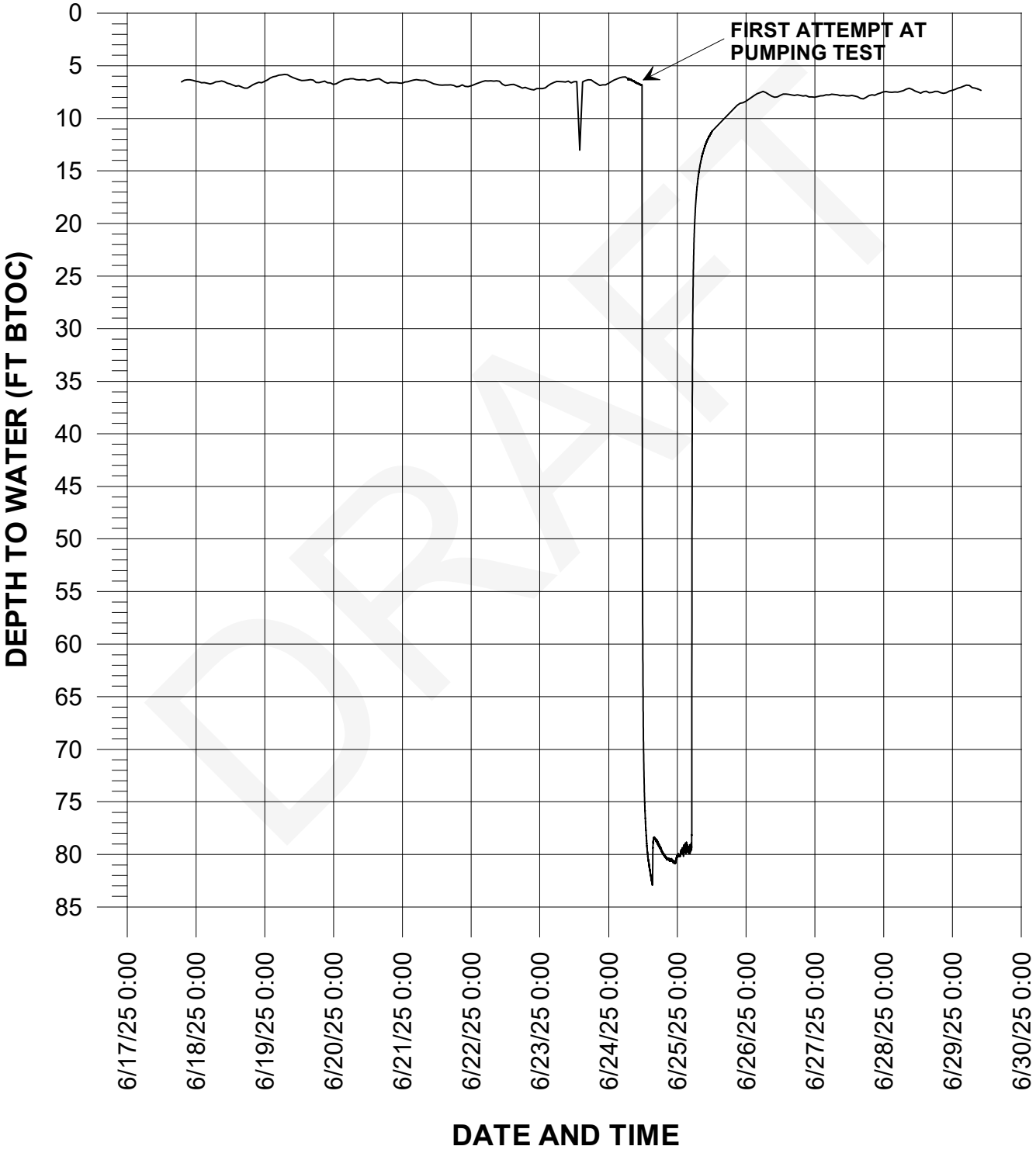
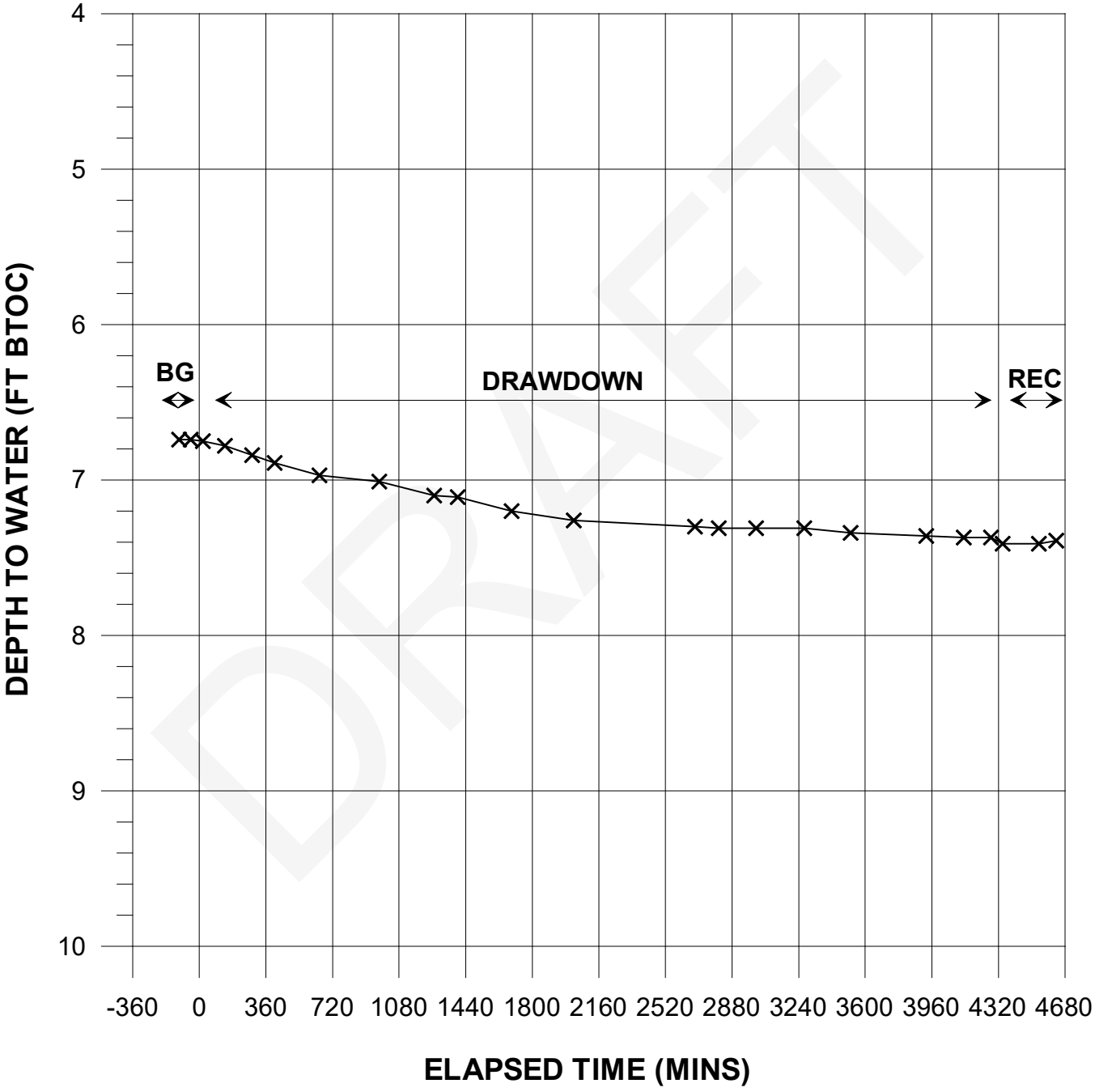
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
BACKGROUND DEPTH TO WATER OBSERVATION AT PW-1
06/17/25 - 06/29/25



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 550 US ROUTE 20
06/29/25 - 07/02/25



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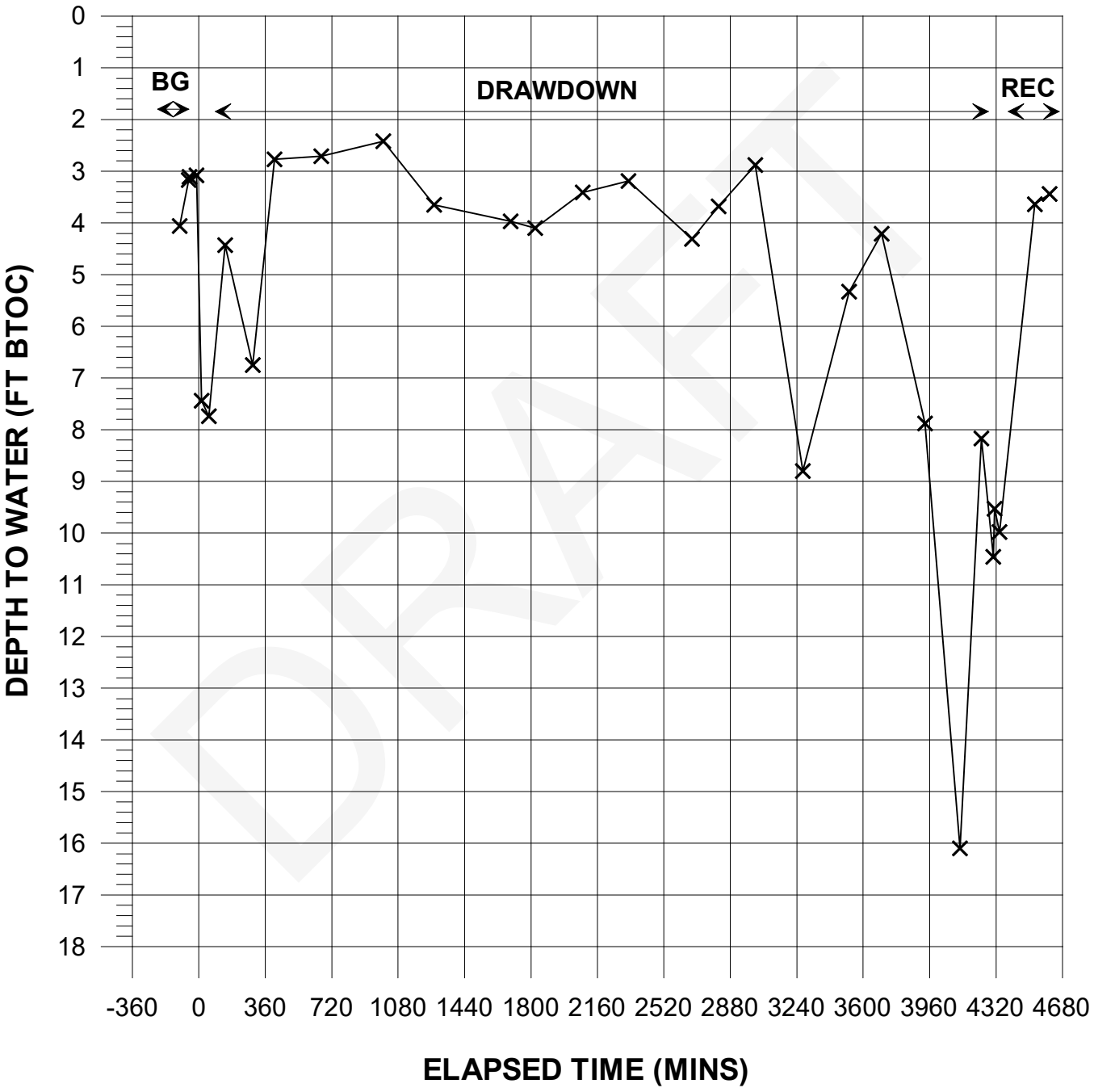
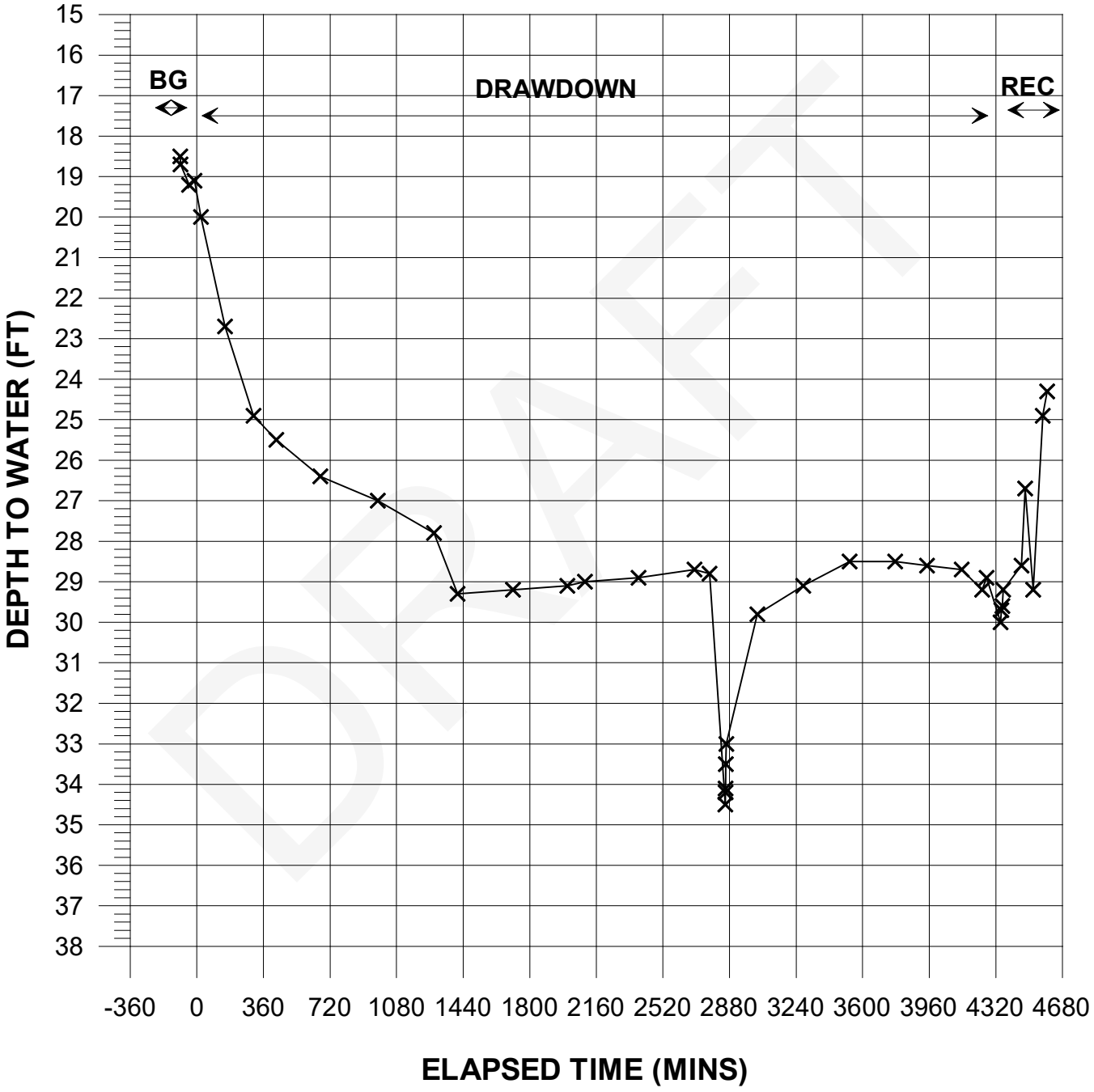
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 43 TILDEN ROAD
06/29/25 - 07/02/25



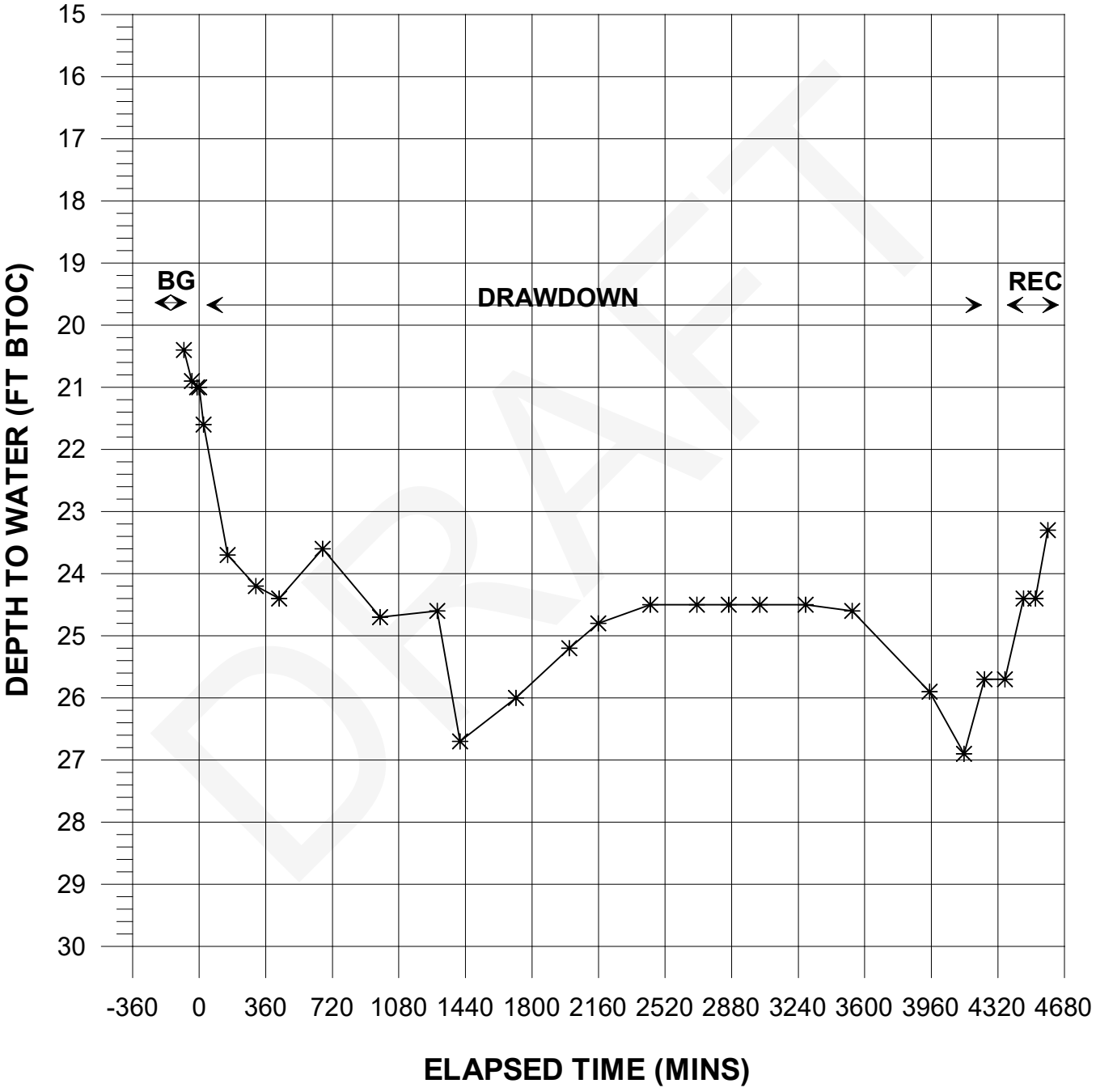
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 4 WEST STREET
06/29/25 - 07/02/25



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 528 US ROUTE 20
06/29/25 - 07/02/25



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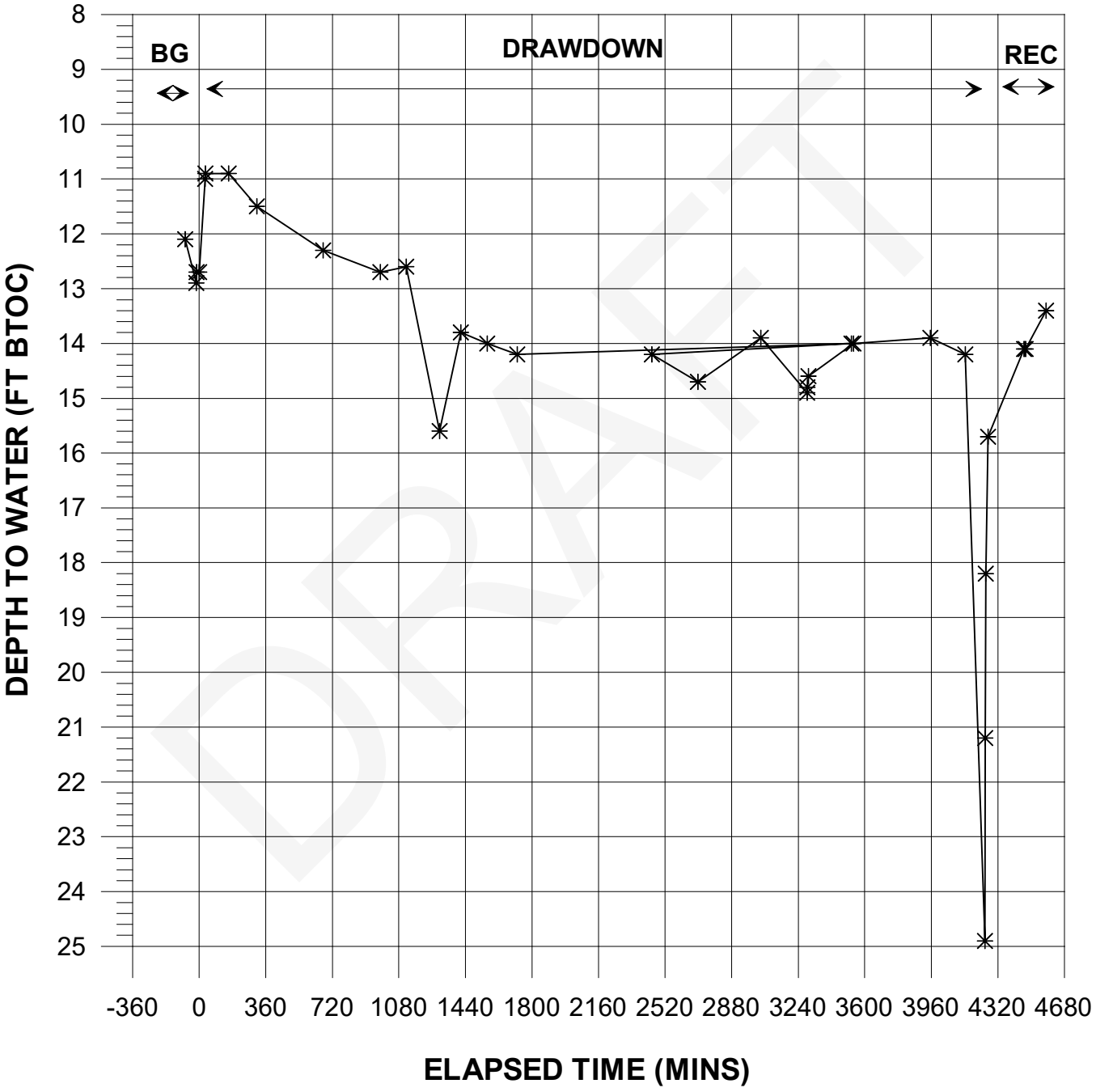
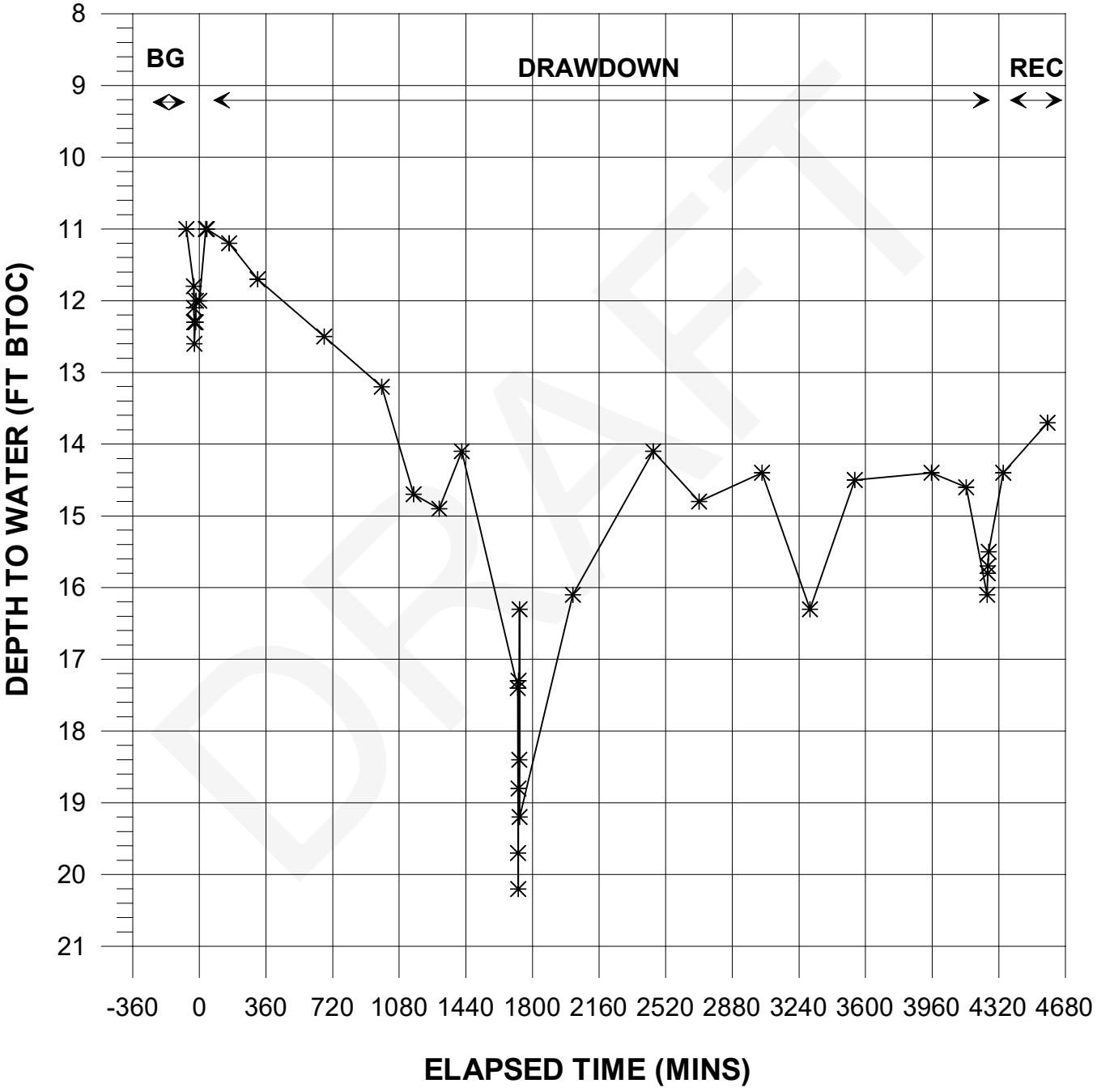
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 13 WEST STREET
06/29/25 - 07/02/25



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 17 WEST STREET
06/29/25 - 07/02/25



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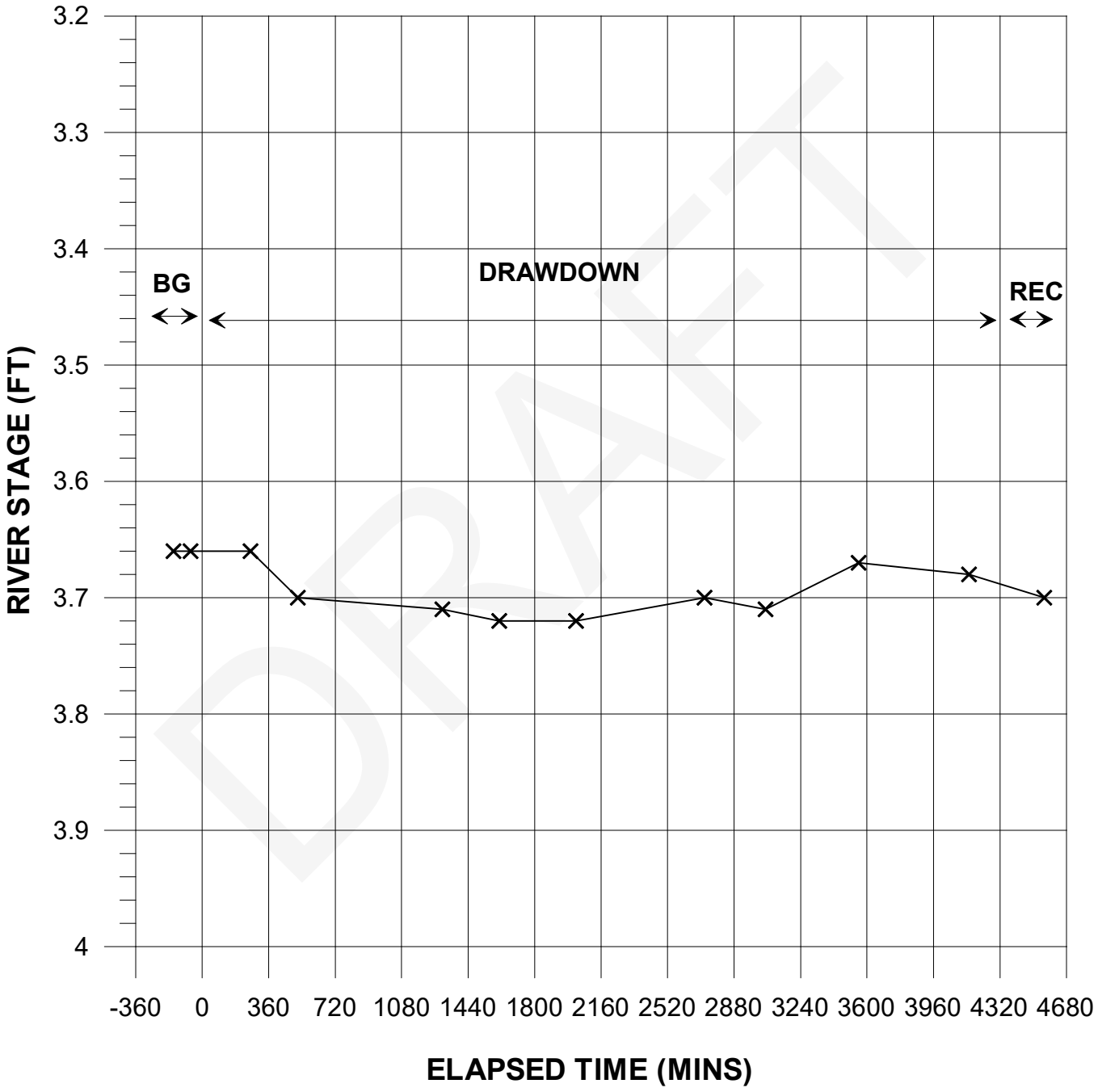
Appendix D
Surface Water Level Graphs

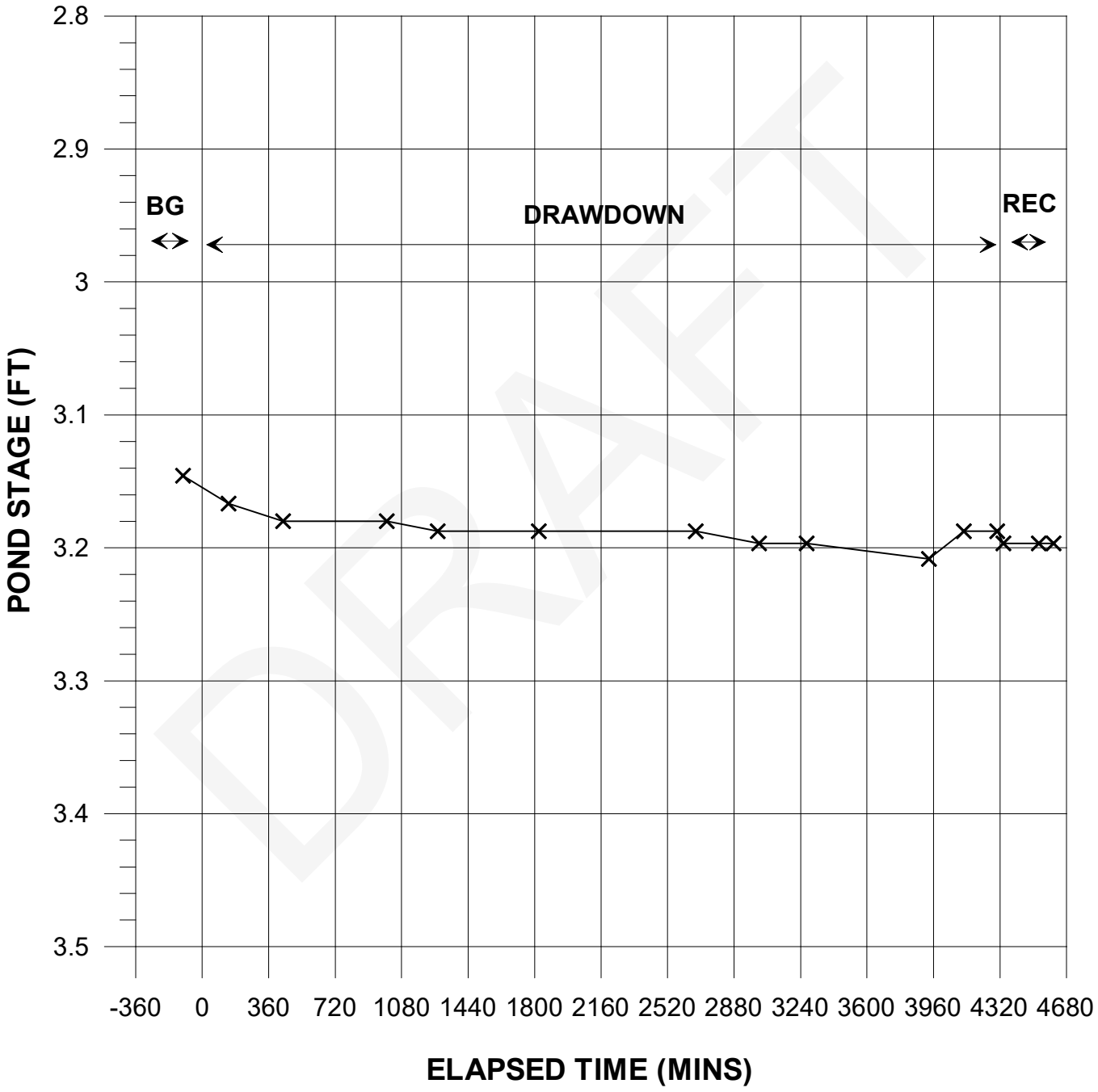
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
SURFACE WATER LEVEL OBSERVATIONS AT WYOMANOCK CREEK
06/29/25 - 07/02/25



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
SURFACE WATER LEVEL OBSERVATIONS AT POND
06/29/25 - 07/02/25

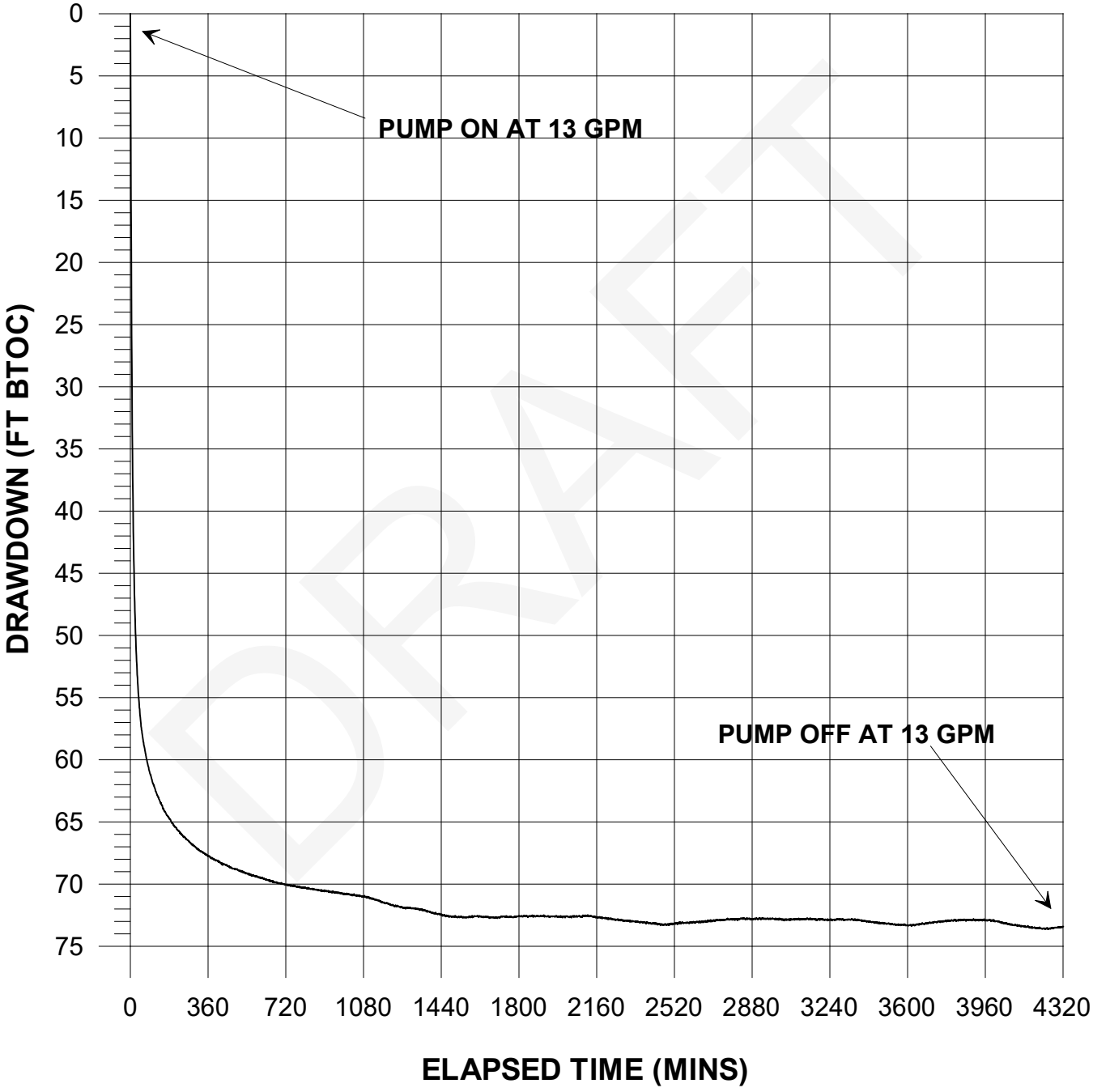


DRAFT

Appendix E
Drawdown Graphs

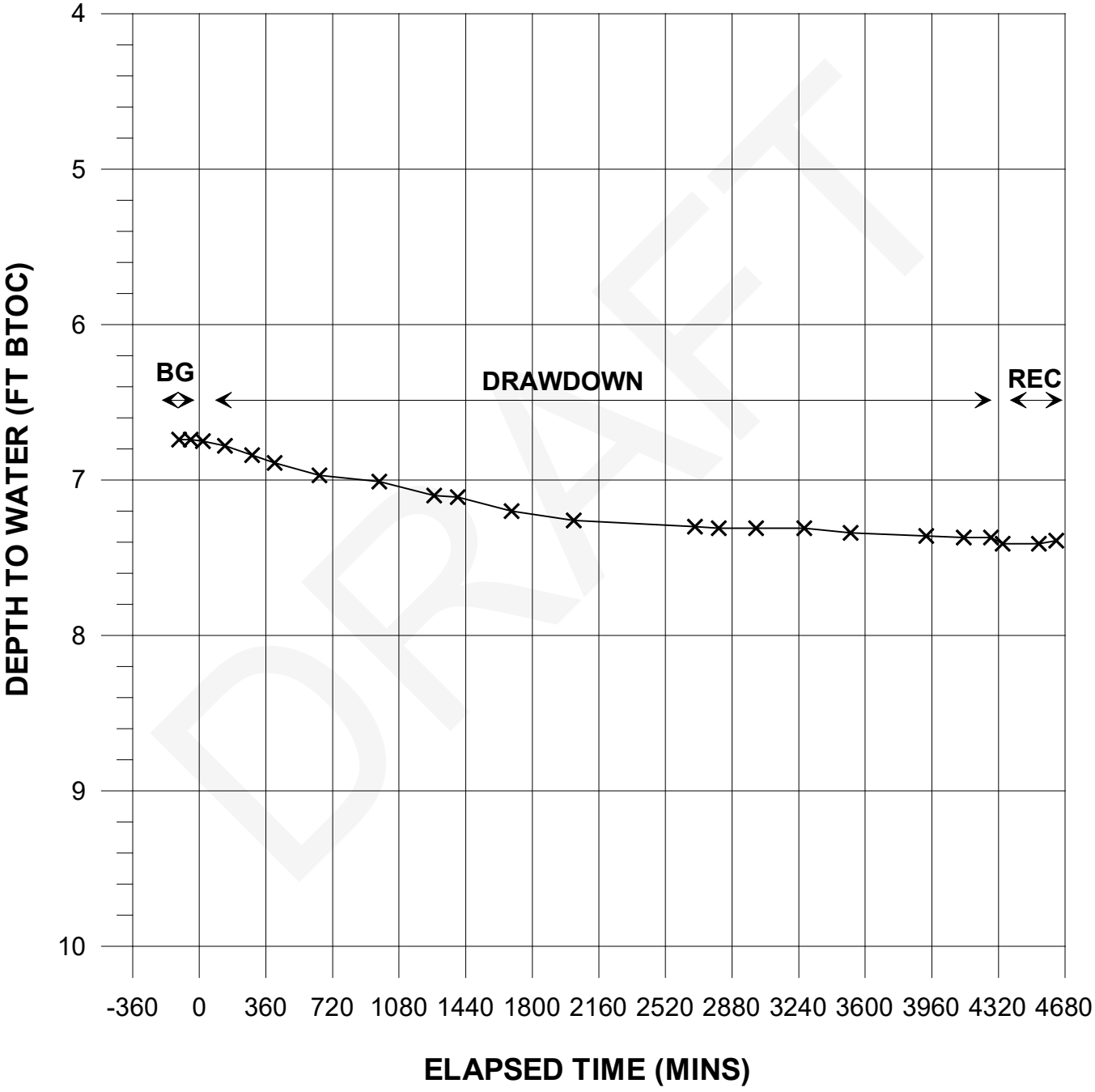
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25



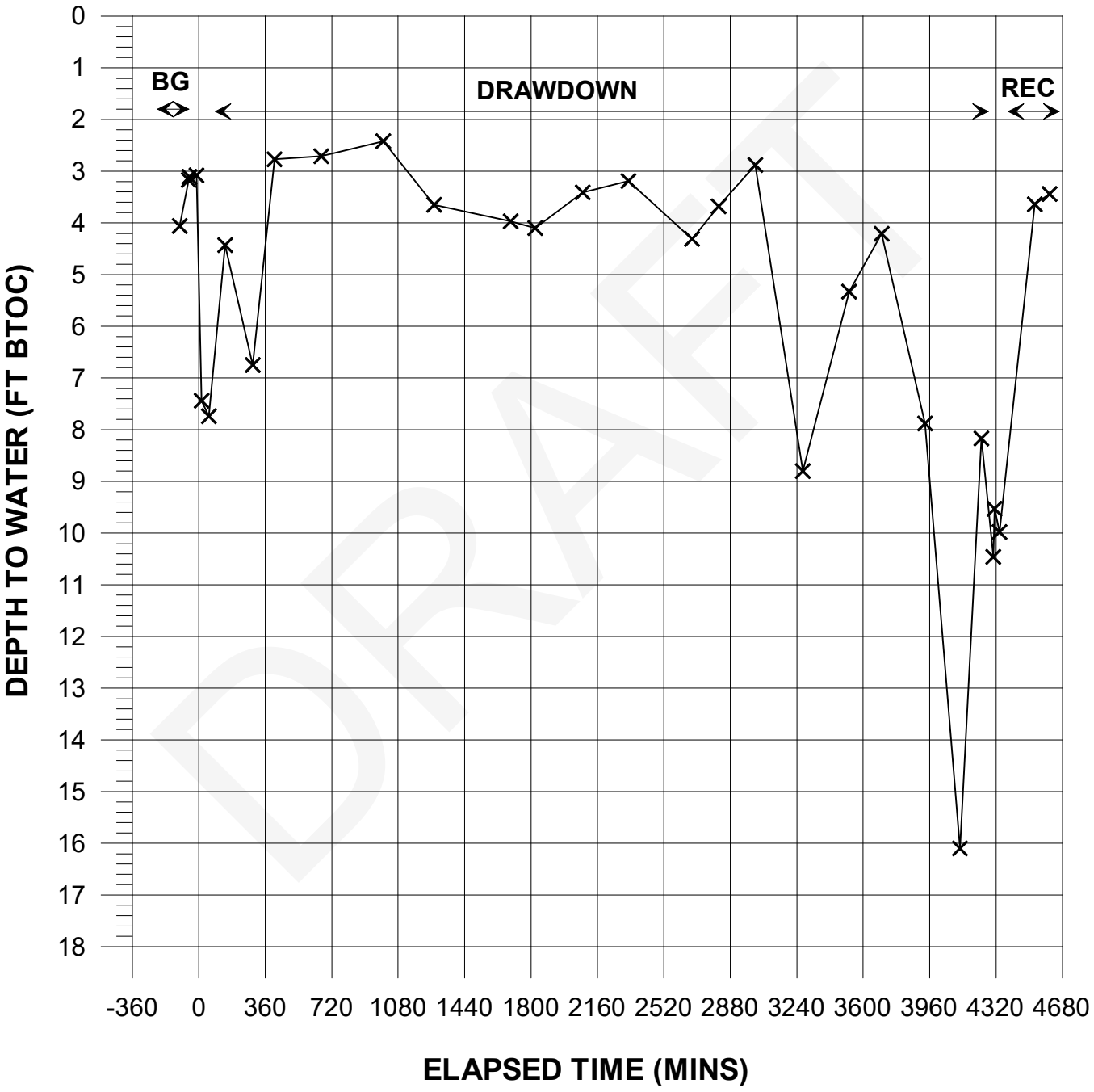
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 550 US ROUTE 20
06/29/25 - 07/02/25



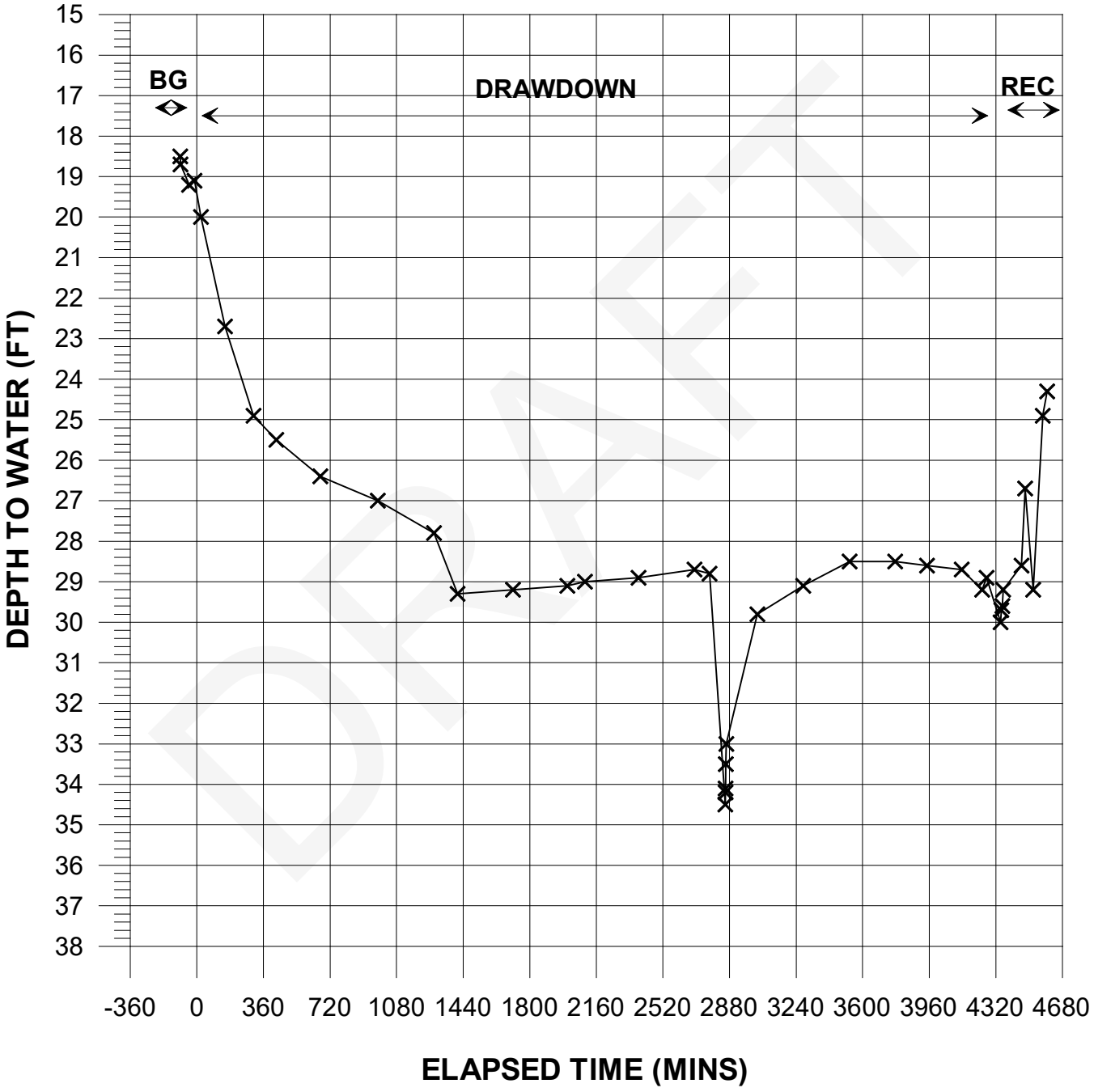
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 43 TILDEN ROAD
06/29/25 - 07/02/25



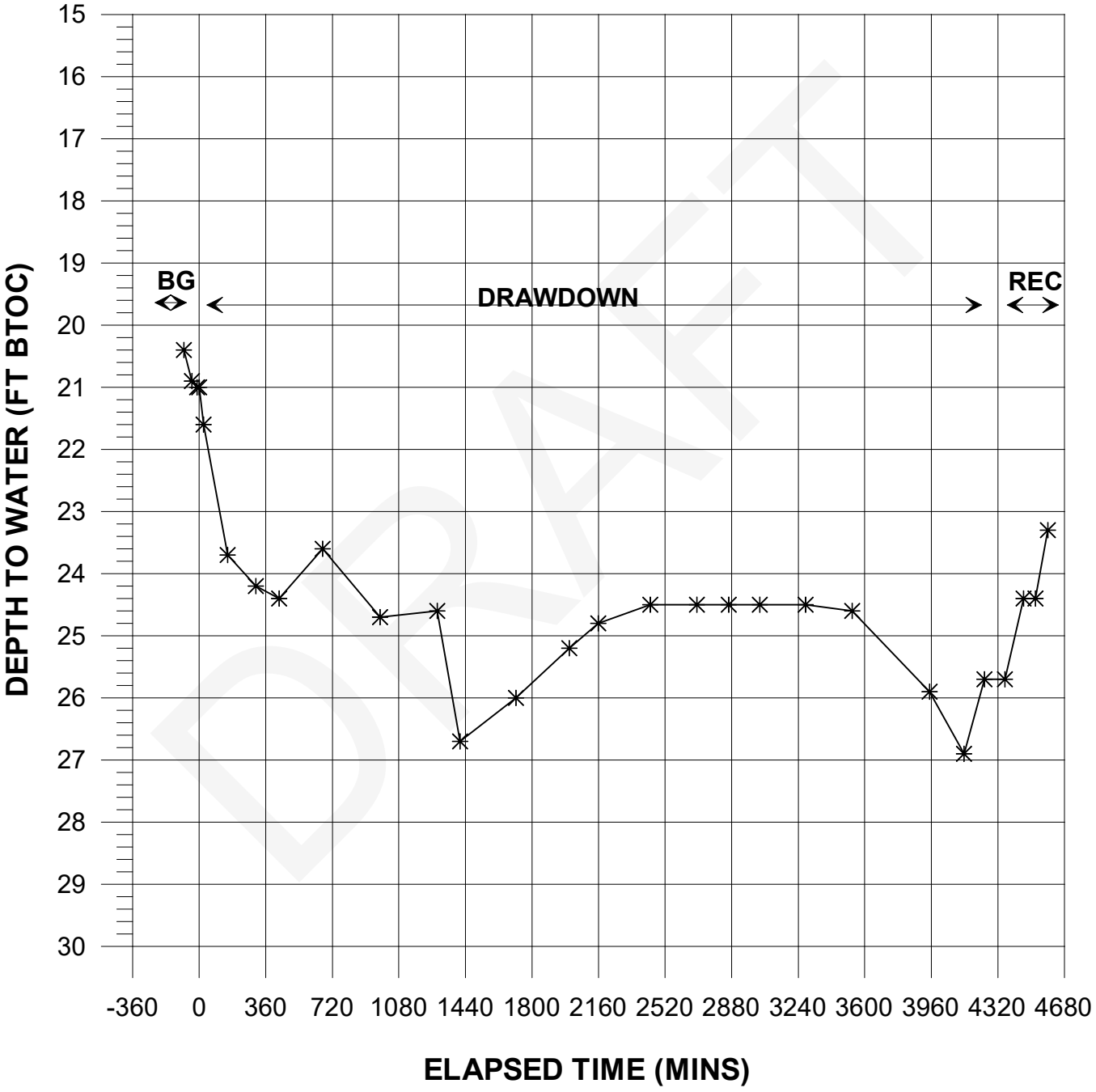
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 4 WEST STREET
06/29/25 - 07/02/25



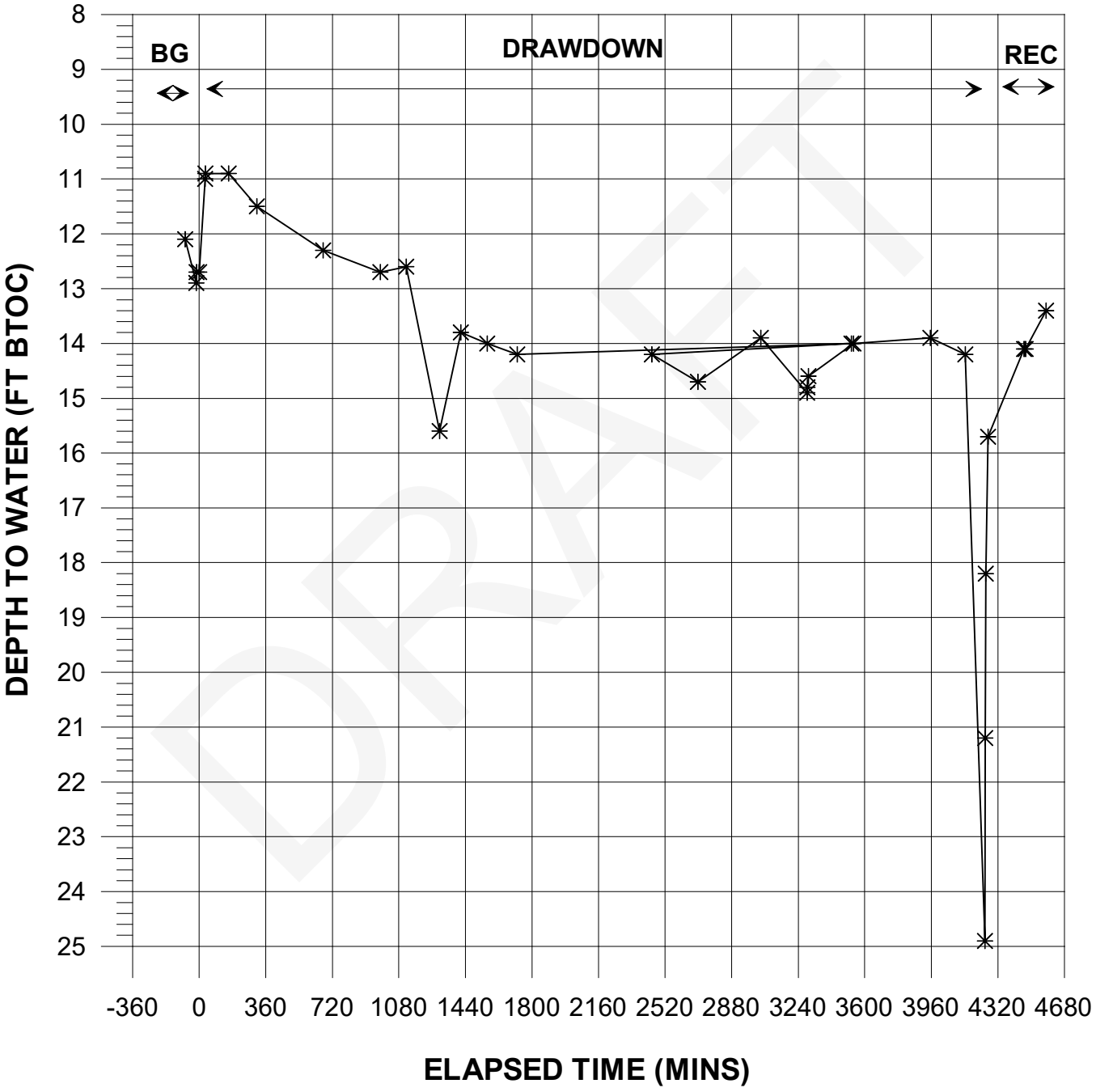
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 528 US ROUTE 20
06/29/25 - 07/02/25



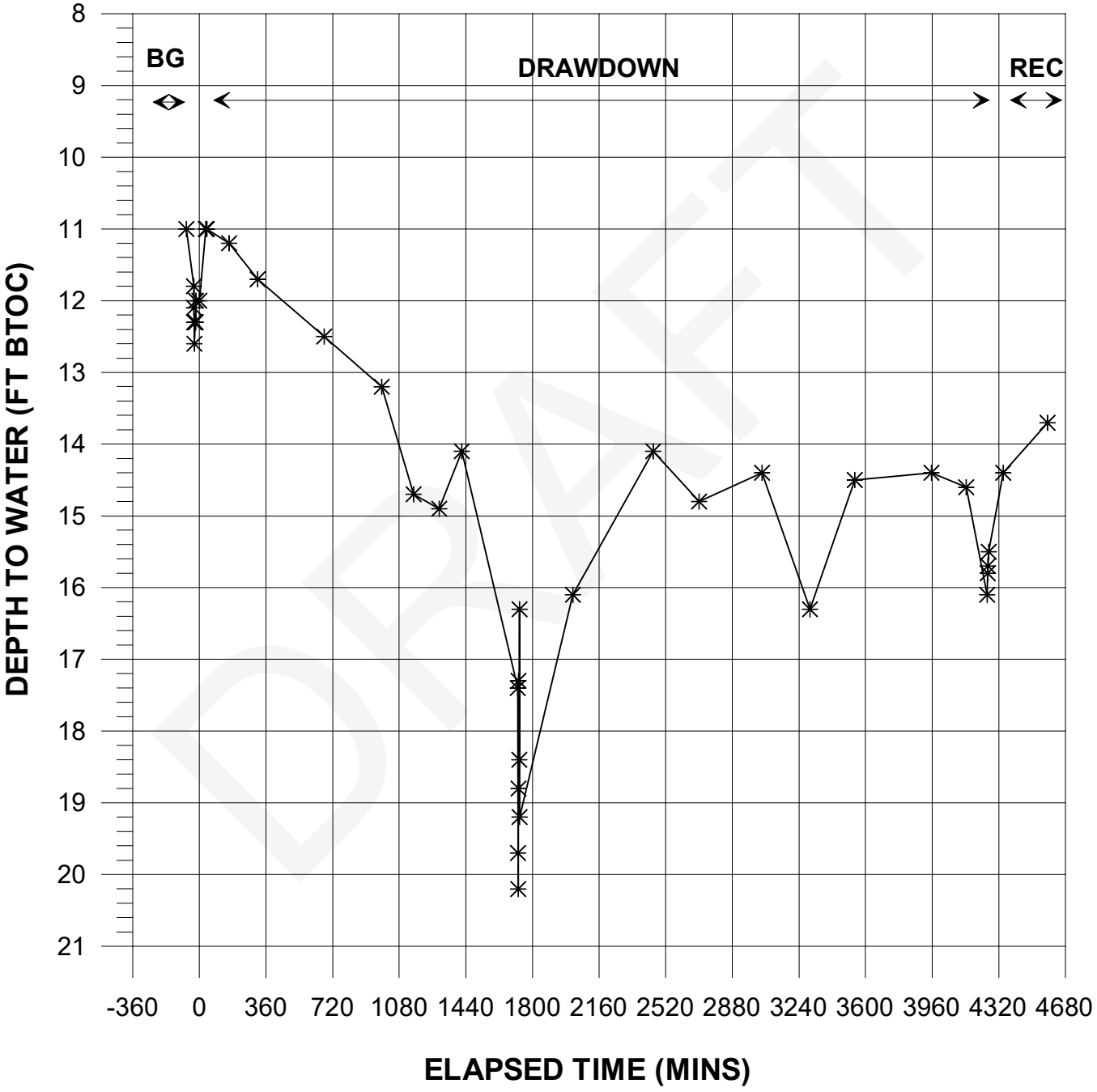
DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 13 WEST STREET
06/29/25 - 07/02/25



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 17 WEST STREET
06/29/25 - 07/02/25



DRAFT

Appendix F
Drawdown Data

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
6/29/25 12:30	0	7.29	0.00
6/29/25 12:31	1	9.99	2.70
6/29/25 12:32	2	17.45	10.16
6/29/25 12:33	3	22.07	14.78
6/29/25 12:34	4	25.83	18.54
6/29/25 12:35	5	29.45	22.16
6/29/25 12:36	6	33.09	25.80
6/29/25 12:37	7	35.90	28.61
6/29/25 12:38	8	38.21	30.92
6/29/25 12:39	9	40.71	33.42
6/29/25 12:40	10	42.82	35.53
6/29/25 12:41	11	44.61	37.32
6/29/25 12:42	12	46.20	38.91
6/29/25 12:43	13	47.64	40.35
6/29/25 12:44	14	48.94	41.65
6/29/25 12:45	15	50.14	42.85
6/29/25 12:46	16	51.15	43.86
6/29/25 12:47	17	52.13	44.84
6/29/25 12:48	18	53.04	45.75
6/29/25 12:49	19	53.92	46.63
6/29/25 12:50	20	54.62	47.33
6/29/25 12:51	21	55.31	48.02
6/29/25 12:52	22	56.00	48.71
6/29/25 12:53	23	56.60	49.31
6/29/25 12:54	24	57.08	49.79
6/29/25 12:55	25	57.53	50.24
6/29/25 12:56	26	58.06	50.77
6/29/25 12:57	27	58.45	51.16
6/29/25 12:58	28	58.92	51.63
6/29/25 12:59	29	59.33	52.04
6/29/25 13:00	30	59.68	52.39
6/29/25 13:01	31	60.04	52.75
6/29/25 13:02	32	60.44	53.15
6/29/25 13:03	33	60.69	53.40
6/29/25 13:04	34	61.03	53.74
6/29/25 13:05	35	61.38	54.09
6/29/25 13:06	36	61.64	54.35
6/29/25 13:07	37	61.91	54.62
6/29/25 13:08	38	62.17	54.88
6/29/25 13:09	39	62.34	55.05
6/29/25 13:10	40	62.64	55.35
6/29/25 13:11	41	62.83	55.54
6/29/25 13:12	42	63.10	55.81
6/29/25 13:13	43	63.21	55.92

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
6/29/25 13:14	44	63.48	56.19
6/29/25 13:15	45	63.68	56.39
6/29/25 13:16	46	63.86	56.57
6/29/25 13:17	47	64.02	56.73
6/29/25 13:18	48	64.27	56.98
6/29/25 13:19	49	64.36	57.07
6/29/25 13:20	50	64.60	57.31
6/29/25 13:21	51	64.72	57.43
6/29/25 13:22	52	64.89	57.60
6/29/25 13:23	53	64.96	57.67
6/29/25 13:24	54	65.13	57.84
6/29/25 13:25	55	65.20	57.91
6/29/25 13:26	56	65.37	58.08
6/29/25 13:27	57	65.44	58.15
6/29/25 13:28	58	65.63	58.34
6/29/25 13:29	59	65.69	58.40
6/29/25 13:30	60	65.86	58.57
6/29/25 13:31	61	65.88	58.59
6/29/25 13:32	62	66.03	58.74
6/29/25 13:33	63	66.12	58.83
6/29/25 13:34	64	66.19	58.90
6/29/25 13:35	65	66.26	58.97
6/29/25 13:36	66	66.37	59.08
6/29/25 13:37	67	66.46	59.17
6/29/25 13:38	68	66.55	59.26
6/29/25 13:39	69	66.67	59.38
6/29/25 13:40	70	66.77	59.48
6/29/25 13:41	71	66.81	59.52
6/29/25 13:42	72	66.97	59.68
6/29/25 13:43	73	67.00	59.71
6/29/25 13:44	74	67.18	59.89
6/29/25 13:45	75	67.20	59.91
6/29/25 13:46	76	67.28	59.99
6/29/25 13:47	77	67.36	60.07
6/29/25 13:48	78	67.45	60.16
6/29/25 13:49	79	67.54	60.25
6/29/25 13:50	80	67.58	60.29
6/29/25 13:51	81	67.65	60.36
6/29/25 13:52	82	67.77	60.48
6/29/25 13:53	83	67.80	60.51
6/29/25 13:54	84	67.87	60.58
6/29/25 13:55	85	67.93	60.64
6/29/25 13:56	86	68.08	60.79
6/29/25 13:57	87	68.14	60.85

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
6/29/25 13:58	88	68.18	60.89
6/29/25 13:59	89	68.28	60.99
6/29/25 14:00	90	68.35	61.06
6/29/25 14:01	91	68.38	61.09
6/29/25 14:02	92	68.45	61.16
6/29/25 14:03	93	68.50	61.21
6/29/25 14:04	94	68.49	61.20
6/29/25 14:05	95	68.59	61.30
6/29/25 14:06	96	68.63	61.34
6/29/25 14:07	97	68.73	61.44
6/29/25 14:08	98	68.78	61.49
6/29/25 14:09	99	68.84	61.55
6/29/25 14:10	100	68.88	61.59
6/29/25 14:11	101	68.98	61.69
6/29/25 14:12	102	69.07	61.78
6/29/25 14:13	103	69.12	61.83
6/29/25 14:14	104	69.17	61.88
6/29/25 14:15	105	69.19	61.90
6/29/25 14:16	106	69.23	61.94
6/29/25 14:17	107	69.25	61.96
6/29/25 14:18	108	69.37	62.08
6/29/25 14:19	109	69.35	62.06
6/29/25 14:20	110	69.38	62.09
6/29/25 14:21	111	69.47	62.18
6/29/25 14:22	112	69.54	62.25
6/29/25 14:23	113	69.56	62.27
6/29/25 14:24	114	69.60	62.31
6/29/25 14:25	115	69.67	62.38
6/29/25 14:26	116	69.74	62.45
6/29/25 14:27	117	69.82	62.53
6/29/25 14:28	118	69.81	62.52
6/29/25 14:29	119	69.86	62.57
6/29/25 14:30	120	69.95	62.66
6/29/25 15:00	150	71.12	63.83
6/29/25 15:30	180	72.05	64.76
6/29/25 16:00	210	72.74	65.45
6/29/25 16:30	240	73.36	66.07
6/29/25 17:00	270	73.82	66.53
6/29/25 17:30	300	74.27	66.98
6/29/25 18:00	330	74.67	67.38
6/29/25 18:30	360	75.07	67.78
6/29/25 19:00	390	75.30	68.01
6/29/25 19:30	420	75.62	68.33
6/29/25 20:00	450	75.84	68.55

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
6/29/25 20:30	480	76.07	68.78
6/29/25 21:00	510	76.25	68.96
6/29/25 21:30	540	76.40	69.11
6/29/25 22:00	570	76.58	69.29
6/29/25 22:30	600	76.72	69.43
6/29/25 23:00	630	76.94	69.65
6/29/25 23:30	660	77.01	69.72
6/30/25 0:00	690	77.20	69.91
6/30/25 0:30	720	77.32	70.03
6/30/25 1:00	750	77.42	70.13
6/30/25 1:30	780	77.55	70.26
6/30/25 2:00	810	77.54	70.25
6/30/25 2:30	840	77.69	70.40
6/30/25 3:00	870	77.82	70.53
6/30/25 3:30	900	77.77	70.48
6/30/25 4:00	930	77.95	70.66
6/30/25 4:30	960	77.94	70.65
6/30/25 5:00	990	78.06	70.77
6/30/25 5:30	1020	78.12	70.83
6/30/25 6:00	1050	78.18	70.89
6/30/25 6:30	1080	78.34	71.05
6/30/25 7:00	1110	78.41	71.12
6/30/25 7:30	1140	78.59	71.30
6/30/25 8:00	1170	78.77	71.48
6/30/25 8:30	1200	78.92	71.63
6/30/25 9:00	1230	79.04	71.75
6/30/25 9:30	1260	79.15	71.86
6/30/25 10:00	1290	79.19	71.90
6/30/25 10:30	1320	79.21	71.92
6/30/25 11:00	1350	79.33	72.04
6/30/25 11:30	1380	79.47	72.18
6/30/25 12:00	1410	79.69	72.40
6/30/25 12:30	1440	79.72	72.43
6/30/25 13:00	1470	79.84	72.55
6/30/25 13:30	1500	79.96	72.67
6/30/25 14:00	1530	79.91	72.62
6/30/25 14:30	1560	79.94	72.65
6/30/25 15:00	1590	79.90	72.61
6/30/25 15:30	1620	79.88	72.59
6/30/25 16:00	1650	79.94	72.65
6/30/25 16:30	1680	79.96	72.67
6/30/25 17:00	1710	79.99	72.70
6/30/25 17:30	1740	79.91	72.62
6/30/25 18:00	1770	79.93	72.64

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
6/30/25 18:30	1800	79.88	72.59
6/30/25 19:00	1830	79.91	72.62
6/30/25 19:30	1860	79.86	72.57
6/30/25 20:00	1890	79.88	72.59
6/30/25 20:30	1920	79.89	72.60
6/30/25 21:00	1950	79.90	72.61
6/30/25 21:30	1980	79.92	72.63
6/30/25 22:00	2010	79.91	72.62
6/30/25 22:30	2040	79.95	72.66
6/30/25 23:00	2070	79.93	72.64
6/30/25 23:30	2100	79.89	72.60
7/1/25 0:00	2130	79.89	72.60
7/1/25 0:30	2160	79.94	72.65
7/1/25 1:00	2190	80.02	72.73
7/1/25 1:30	2220	80.11	72.82
7/1/25 2:00	2250	80.18	72.89
7/1/25 2:30	2280	80.18	72.89
7/1/25 3:00	2310	80.25	72.96
7/1/25 3:30	2340	80.34	73.05
7/1/25 4:00	2370	80.35	73.06
7/1/25 4:30	2400	80.44	73.15
7/1/25 5:00	2430	80.42	73.13
7/1/25 5:30	2460	80.51	73.22
7/1/25 6:00	2490	80.55	73.26
7/1/25 6:30	2520	80.47	73.18
7/1/25 7:00	2550	80.37	73.08
7/1/25 7:30	2580	80.38	73.09
7/1/25 8:00	2610	80.35	73.06
7/1/25 8:30	2640	80.35	73.06
7/1/25 9:00	2670	80.30	73.01
7/1/25 9:30	2700	80.20	72.91
7/1/25 10:00	2730	80.16	72.87
7/1/25 10:30	2760	80.16	72.87
7/1/25 11:00	2790	80.13	72.84
7/1/25 11:30	2820	80.08	72.79
7/1/25 12:00	2850	80.13	72.84
7/1/25 12:30	2880	80.09	72.80
7/1/25 13:00	2910	80.09	72.80
7/1/25 13:30	2940	80.08	72.79
7/1/25 14:00	2970	80.08	72.79
7/1/25 14:30	3000	80.06	72.77
7/1/25 15:00	3030	80.17	72.88
7/1/25 15:30	3060	80.09	72.80
7/1/25 16:00	3090	80.12	72.83

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
06/29/25 - 07/02/25

DATE TIME	ET	DTW	DD
7/1/25 16:30	3120	80.12	72.83
7/1/25 17:00	3150	80.14	72.85
7/1/25 17:30	3180	80.17	72.88
7/1/25 18:00	3210	80.16	72.87
7/1/25 18:30	3240	80.19	72.90
7/1/25 19:00	3270	80.18	72.89
7/1/25 19:30	3300	80.10	72.81
7/1/25 20:00	3330	80.15	72.86
7/1/25 20:30	3360	80.15	72.86
7/1/25 21:00	3390	80.27	72.98
7/1/25 21:30	3420	80.35	73.06
7/1/25 22:00	3450	80.40	73.11
7/1/25 22:30	3480	80.41	73.12
7/1/25 23:00	3510	80.48	73.19
7/1/25 23:30	3540	80.51	73.22
7/2/25 0:00	3570	80.58	73.29
7/2/25 0:30	3600	80.61	73.32
7/2/25 1:00	3630	80.59	73.30
7/2/25 1:30	3660	80.52	73.23
7/2/25 2:00	3690	80.44	73.15
7/2/25 2:30	3720	80.35	73.06
7/2/25 3:00	3750	80.30	73.01
7/2/25 3:30	3780	80.31	73.02
7/2/25 4:00	3810	80.24	72.95
7/2/25 4:30	3840	80.21	72.92
7/2/25 5:00	3870	80.27	72.98
7/2/25 5:30	3900	80.17	72.88
7/2/25 6:00	3930	80.24	72.95
7/2/25 6:30	3960	80.19	72.90
7/2/25 7:00	3990	80.23	72.94
7/2/25 7:30	4020	80.29	73.00
7/2/25 8:00	4050	80.45	73.16
7/2/25 8:30	4080	80.58	73.29
7/2/25 9:00	4110	80.66	73.37
7/2/25 9:30	4140	80.67	73.38
7/2/25 10:00	4170	80.76	73.47
7/2/25 10:30	4200	80.84	73.55
7/2/25 11:00	4230	80.85	73.56
7/2/25 11:30	4260	80.84	73.55
7/2/25 12:00	4290	80.79	73.50
7/2/25 12:30	4320	80.72	73.43

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT 550 US ROUTE 20
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	10:41	-109	6.74	0.00
6/29/25	11:44	-46	6.74	0.00
6/29/25	12:49	19	6.75	0.01
6/29/25	14:49	139	6.78	0.04
6/29/25	17:16	286	6.84	0.10
6/29/25	19:18	408	6.89	0.15
6/29/25	23:20	650	6.97	0.23
6/30/25	4:43	973	7.01	0.27
6/30/25	9:40	1270	7.10	0.36
6/30/25	11:47	1397	7.11	0.37
6/30/25	16:38	1688	7.20	0.46
6/30/25	22:14	2024	7.26	0.52
7/1/25	9:10	2680	7.30	0.56
7/1/25	11:18	2808	7.31	0.57
7/1/25	14:40	3010	7.31	0.57
7/1/25	19:00	3270	7.31	0.57
7/1/25	23:11	3521	7.34	0.60
7/2/25	6:00	3930	7.36	0.62
7/2/25	9:22	4132	7.37	0.63
7/2/25	11:50	4280	7.37	0.63
7/2/25	12:52	4342	7.41	0.67
7/2/25	16:08	4538	7.41	0.67
7/2/25	17:42	4632	7.39	0.65

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 43 TILDEN ROAD
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	10:46	-104	4.06	1.64
6/29/25	11:35	-55	3.17	0.75
6/29/25	11:40	-50	3.11	0.69
6/29/25	12:18	-12	3.08	0.66
6/29/25	12:45	15	7.44	5.02
6/29/25	13:24	54	7.74	5.32
6/29/25	14:52	142	4.43	2.01
6/29/25	17:22	292	6.75	4.33
6/29/25	19:20	410	2.77	0.35
6/29/25	23:34	664	2.71	0.29
6/30/25	5:10	1000	2.42	0.00
6/30/25	9:45	1275	3.65	1.23
6/30/25	16:40	1690	3.97	1.55
6/30/25	18:52	1822	4.10	1.68
6/30/25	23:10	2080	3.41	0.99
7/1/25	3:18	2328	3.19	0.77
7/1/25	9:02	2672	4.31	1.89
7/1/25	11:26	2816	3.68	1.26
7/1/25	14:45	3015	2.88	0.46
7/1/25	19:03	3273	8.80	6.38
7/1/25	23:14	3524	5.33	2.91
7/2/25	2:10	3700	4.21	1.79
7/2/25	6:05	3935	7.88	5.46
7/2/25	9:15	4125	16.10	13.68
7/2/25	11:11	4241	8.17	5.75
7/2/25	12:15	4305	10.46	8.04
7/2/25	12:22	4312	9.53	7.11
7/2/25	12:49	4339	9.98	7.56
7/2/25	16:00	4530	3.64	1.22
7/2/25	17:20	4610	3.44	1.02

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 4 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:00	-90	18.5	0.0
6/29/25	11:02	-88	18.7	0.2
6/29/25	11:48	-42	19.2	0.7
6/29/25	12:18	-12	19.1	0.6
6/29/25	12:52	22	20.0	1.5
6/29/25	15:02	152	22.7	4.2
6/29/25	17:36	306	24.9	6.4
6/29/25	19:40	430	25.5	7.0
6/29/25	23:37	667	26.4	7.9
6/30/25	4:48	978	27.0	8.5
6/30/25	9:52	1282	27.8	9.3
6/30/25	12:00	1410	29.3	10.8
6/30/25	17:00	1710	29.2	10.7
6/30/25	21:54	2004	29.1	10.6
6/30/25	23:28	2098	29.0	10.5
7/1/25	4:18	2388	28.9	10.4
7/1/25	9:20	2690	28.7	10.2
7/1/25	10:42	2772	28.8	10.3
7/1/25	12:07	2857	34.5	16.0
7/1/25	12:08	2858	34.2	15.7
7/1/25	12:09	2859	34.1	15.6
7/1/25	12:10	2860	33.5	15.0
7/1/25	12:12	2862	33.0	14.5
7/1/25	15:00	3030	29.8	11.3
7/1/25	19:08	3278	29.1	10.6
7/1/25	23:19	3529	28.5	10.0
7/2/25	3:25	3775	28.5	10.0
7/2/25	6:18	3948	28.6	10.1
7/2/25	9:25	4135	28.7	10.2
7/2/25	11:16	4246	29.2	10.7
7/2/25	11:40	4270	28.9	10.4
7/2/25	12:56	4346	30.0	11.5
7/2/25	13:00	4350	29.7	11.2
7/2/25	13:05	4355	29.6	11.1
7/2/25	13:10	4360	29.2	10.7
7/2/25	14:48	4458	28.6	10.1
7/2/25	15:08	4478	26.7	8.2
7/2/25	15:52	4522	29.2	10.7
7/2/25	16:44	4574	24.9	6.4
7/2/25	17:08	4598	24.3	5.8

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 528 US ROUTE 20
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:07	-83	20.4	0.0
6/29/25	11:50	-40	20.9	0.5
6/29/25	12:19	-11	21.0	0.6
6/29/25	12:30	0	21.0	0.6
6/29/25	12:54	24	21.6	1.2
6/29/25	15:04	154	23.7	3.3
6/29/25	17:37	307	24.2	3.8
6/29/25	19:42	432	24.4	4.0
6/29/25	23:38	668	23.6	3.2
6/30/25	4:49	979	24.7	4.3
6/30/25	9:57	1287	24.6	4.2
6/30/25	12:01	1411	26.7	6.3
6/30/25	17:03	1713	26.0	5.6
6/30/25	21:52	2002	25.2	4.8
7/1/25	0:28	2158	24.8	4.4
7/1/25	5:10	2440	24.5	4.1
7/1/25	9:22	2692	24.5	4.1
7/1/25	12:15	2865	24.5	4.1
7/1/25	15:02	3032	24.5	4.1
7/1/25	19:10	3280	24.5	4.1
7/1/25	23:22	3532	24.6	4.2
7/2/25	6:20	3950	25.9	5.5
7/2/25	9:27	4137	26.9	6.5
7/2/25	11:17	4247	25.7	5.3
7/2/25	13:08	4358	25.7	5.3
7/2/25	14:49	4459	24.4	4.0
7/2/25	15:54	4524	24.4	4.0
7/2/25	17:00	4590	23.3	2.9

DRAFT

PROPOSED 538 US RT 20 NEW LEBANON COMPLEX
538 US RT 20 - NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 13 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:14	-76	12.1	1.2
6/29/25	12:14	-16	12.9	2.0
6/29/25	12:16	-14	12.7	1.8
6/29/25	12:30	0	12.7	1.8
6/29/25	13:02	32	11.0	0.1
6/29/25	13:03	33	10.9	0.0
6/29/25	15:10	160	10.9	0.0
6/29/25	17:42	312	11.5	0.6
6/29/25	23:41	671	12.3	1.4
6/30/25	4:50	980	12.7	1.8
6/30/25	7:10	1120	12.6	1.7
6/30/25	10:10	1300	15.6	4.7
6/30/25	12:06	1416	13.8	2.9
6/30/25	14:28	1558	14.0	3.1
6/30/25	17:10	1720	14.2	3.3
7/1/25	23:18	3528	14.0	3.1
7/1/25	5:18	2448	14.2	3.3
7/1/25	9:28	2698	14.7	3.8
7/1/25	15:08	3038	13.9	3.0
7/1/25	19:18	3288	14.9	4.0
7/1/25	19:20	3290	14.8	3.9
7/1/25	19:25	3295	14.6	3.7
7/1/25	23:29	3539	14.0	3.1
7/2/25	6:24	3954	13.9	3.0
7/2/25	9:33	4143	14.2	3.3
7/2/25	11:20	4250	24.9	14.0
7/2/25	11:22	4252	21.2	10.3
7/2/25	11:25	4255	18.2	7.3
7/2/25	11:37	4267	15.7	4.8
7/2/25	14:52	4462	14.1	3.2
7/2/25	15:00	4470	14.1	3.2
7/2/25	16:50	4580	13.4	2.5

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 17 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:20	-70	11.0	0.0
6/29/25	12:00	-30	11.8	0.8
6/29/25	12:01	-29	12.1	1.1
6/29/25	12:02	-28	12.3	1.3
6/29/25	12:03	-27	12.6	1.6
6/29/25	12:08	-22	12.3	1.3
6/29/25	12:10	-20	12.3	1.3
6/29/25	12:12	-18	12.0	1.0
6/29/25	12:30	0	12.0	1.0
6/29/25	13:05	35	11.0	0.0
6/29/25	13:10	40	11.0	0.0
6/29/25	15:11	161	11.2	0.2
6/29/25	17:45	315	11.7	0.7
6/29/25	23:45	675	12.5	1.5
6/30/25	4:56	986	13.2	2.2
6/30/25	7:48	1158	14.7	3.7
6/30/25	10:06	1296	14.9	3.9
6/30/25	12:08	1418	14.1	3.1
6/30/25	17:11	1721	17.4	6.4
6/30/25	17:12	1722	19.7	8.7
6/30/25	17:13	1723	20.2	9.2
6/30/25	17:14	1724	18.8	7.8
6/30/25	17:15	1725	17.3	6.3
6/30/25	17:18	1728	18.4	7.4
6/30/25	17:20	1730	16.3	5.3
6/30/25	17:21	1731	19.2	8.2
6/30/25	22:08	2018	16.1	5.1
7/1/25	5:22	2452	14.1	3.1
7/1/25	9:31	2701	14.8	3.8
7/1/25	15:10	3040	14.4	3.4
7/1/25	19:30	3300	16.3	5.3
7/1/25	23:32	3542	14.5	3.5
7/2/25	6:26	3956	14.4	3.4
7/2/25	9:34	4144	14.6	3.6
7/2/25	11:27	4257	16.1	5.1
7/2/25	11:30	4260	15.8	4.8
7/2/25	11:32	4262	15.7	4.7
7/2/25	11:35	4265	15.5	4.5
7/2/25	12:54	4344	14.4	3.4
7/2/25	16:53	4583	13.7	2.7

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Appendix G
Recovery Graphs

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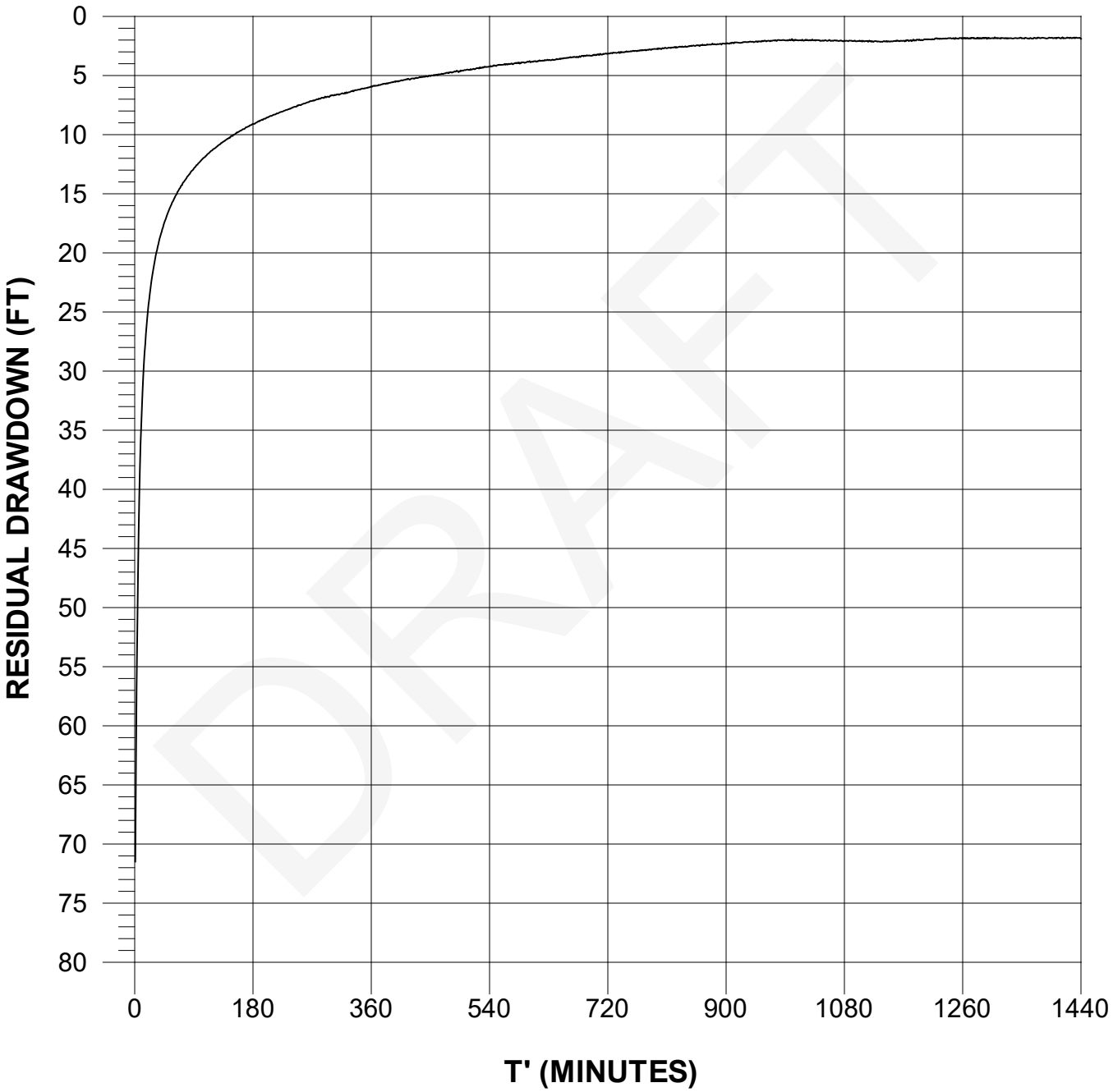
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
RECOVERY OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
07/02/25 - 07/03/25



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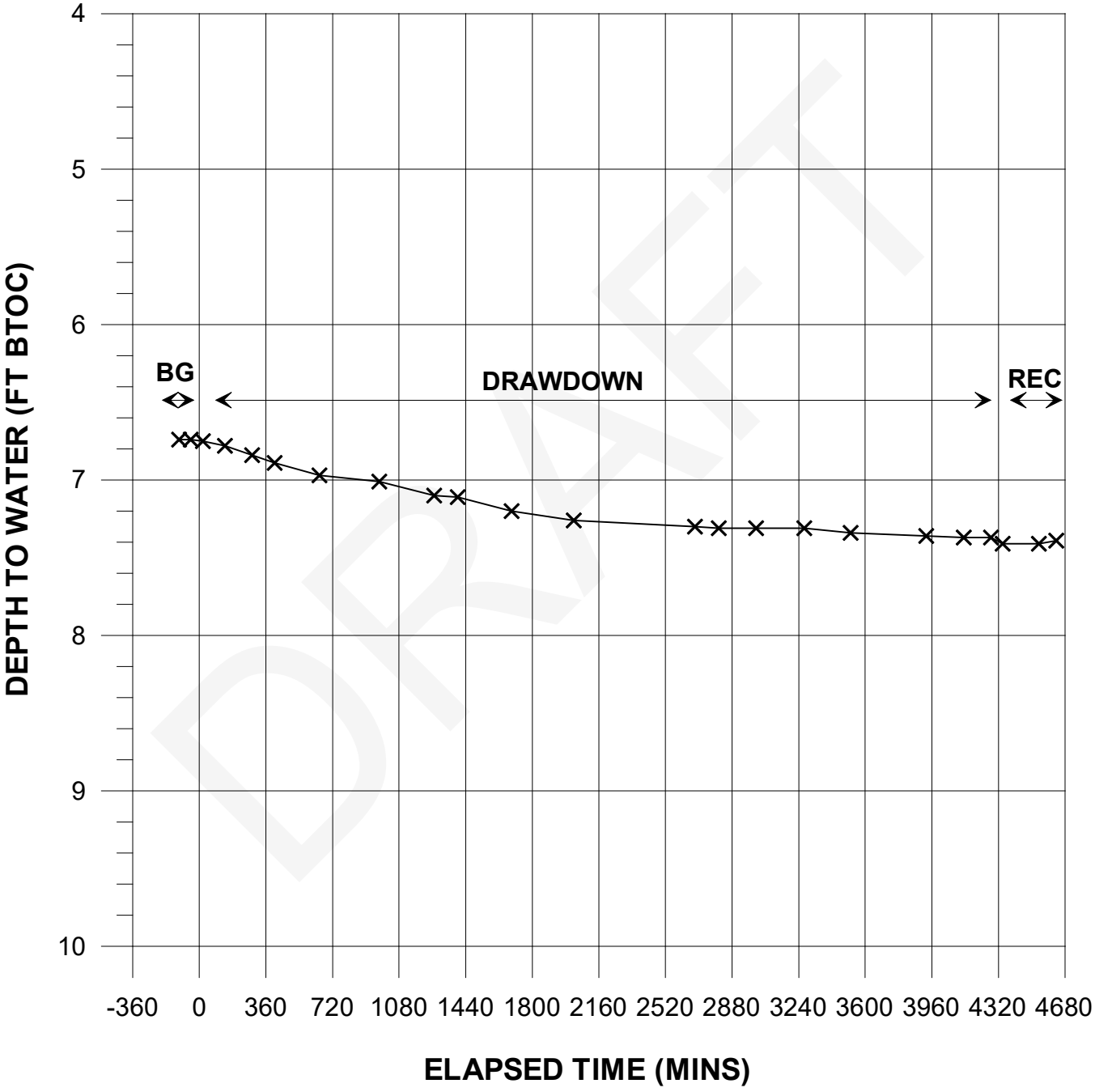
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 550 US ROUTE 20
06/29/25 - 07/02/25



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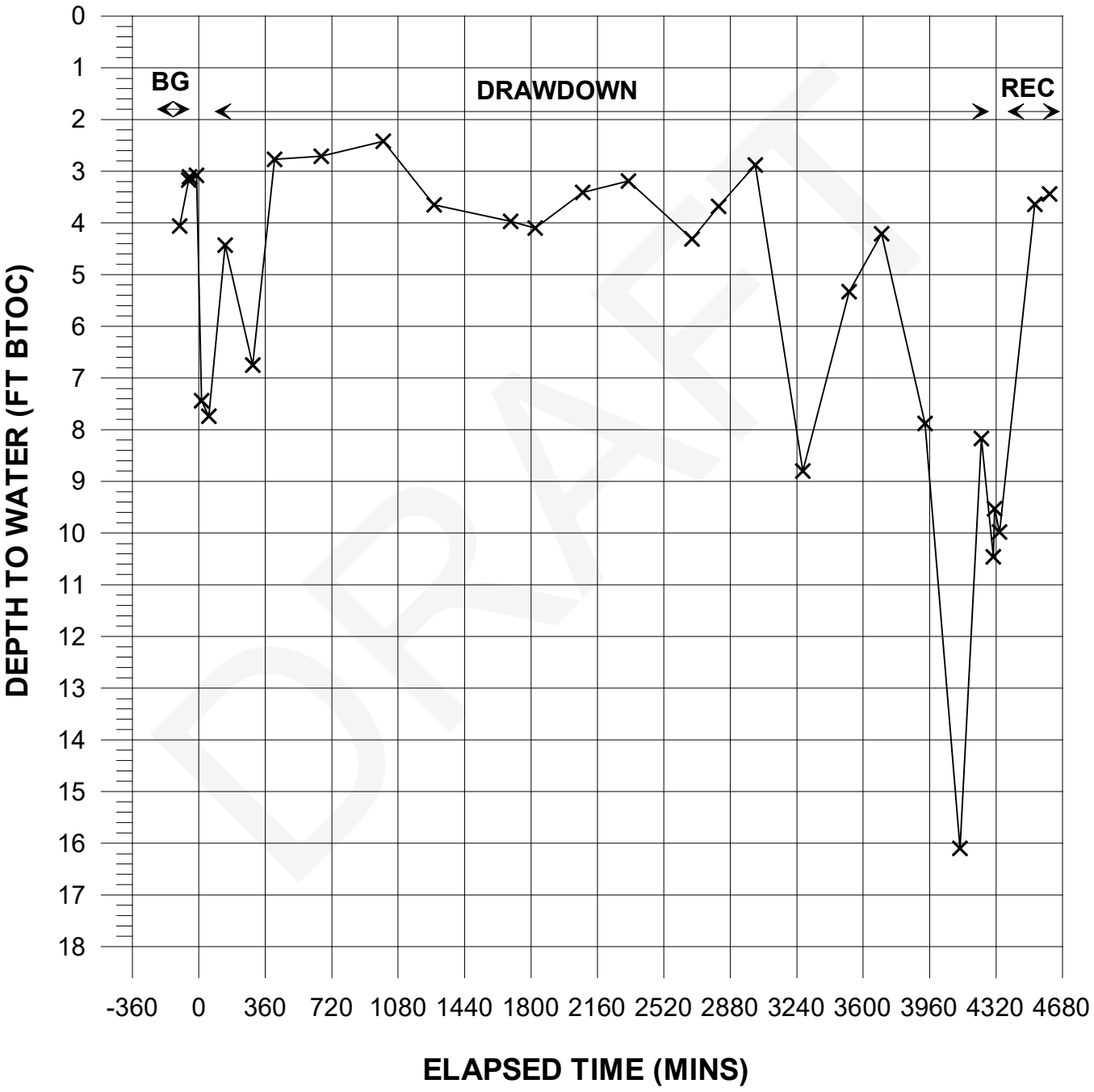
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 43 TILDEN ROAD
06/29/25 - 07/02/25



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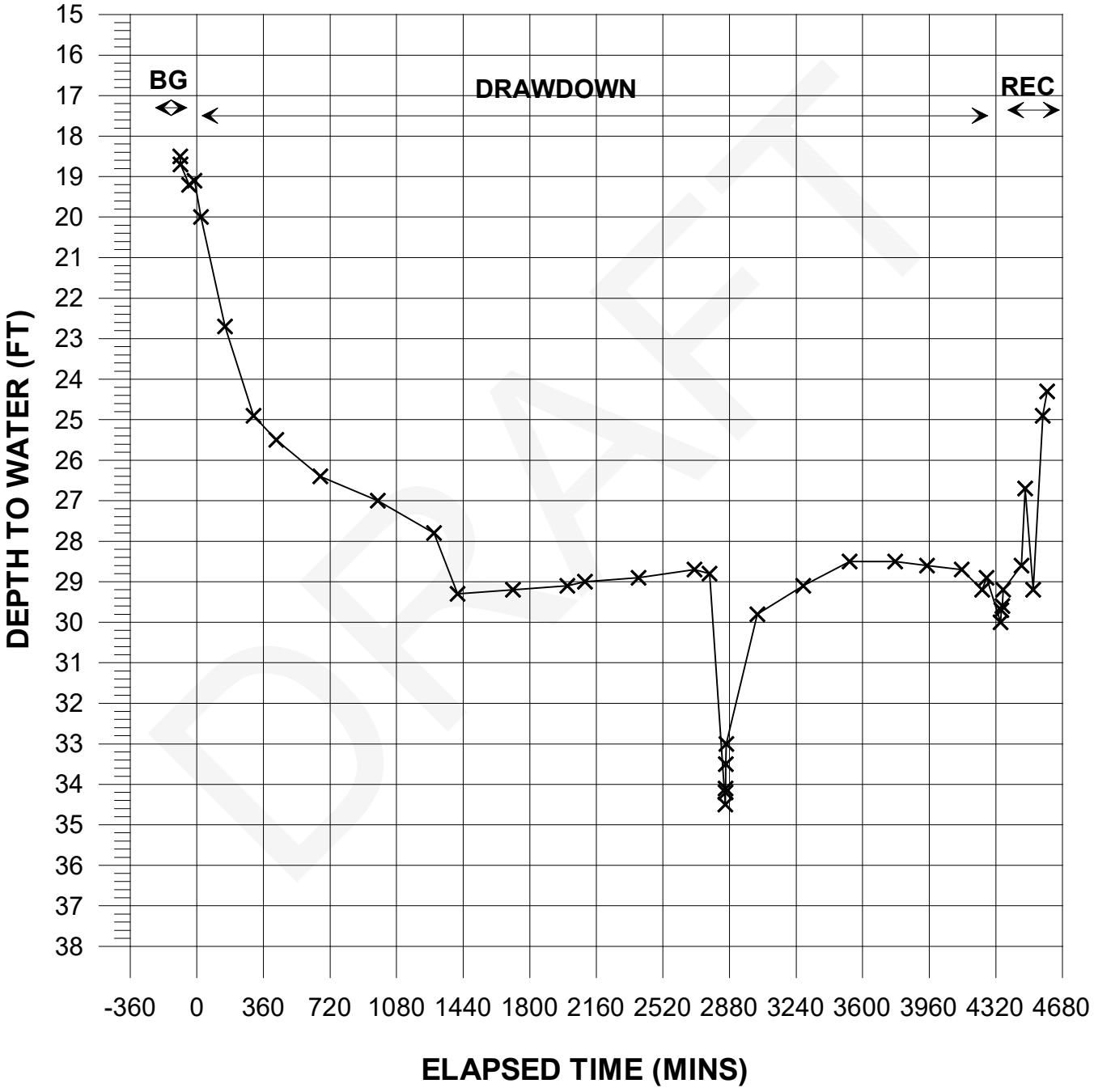
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 4 WEST STREET
06/29/25 - 07/02/25



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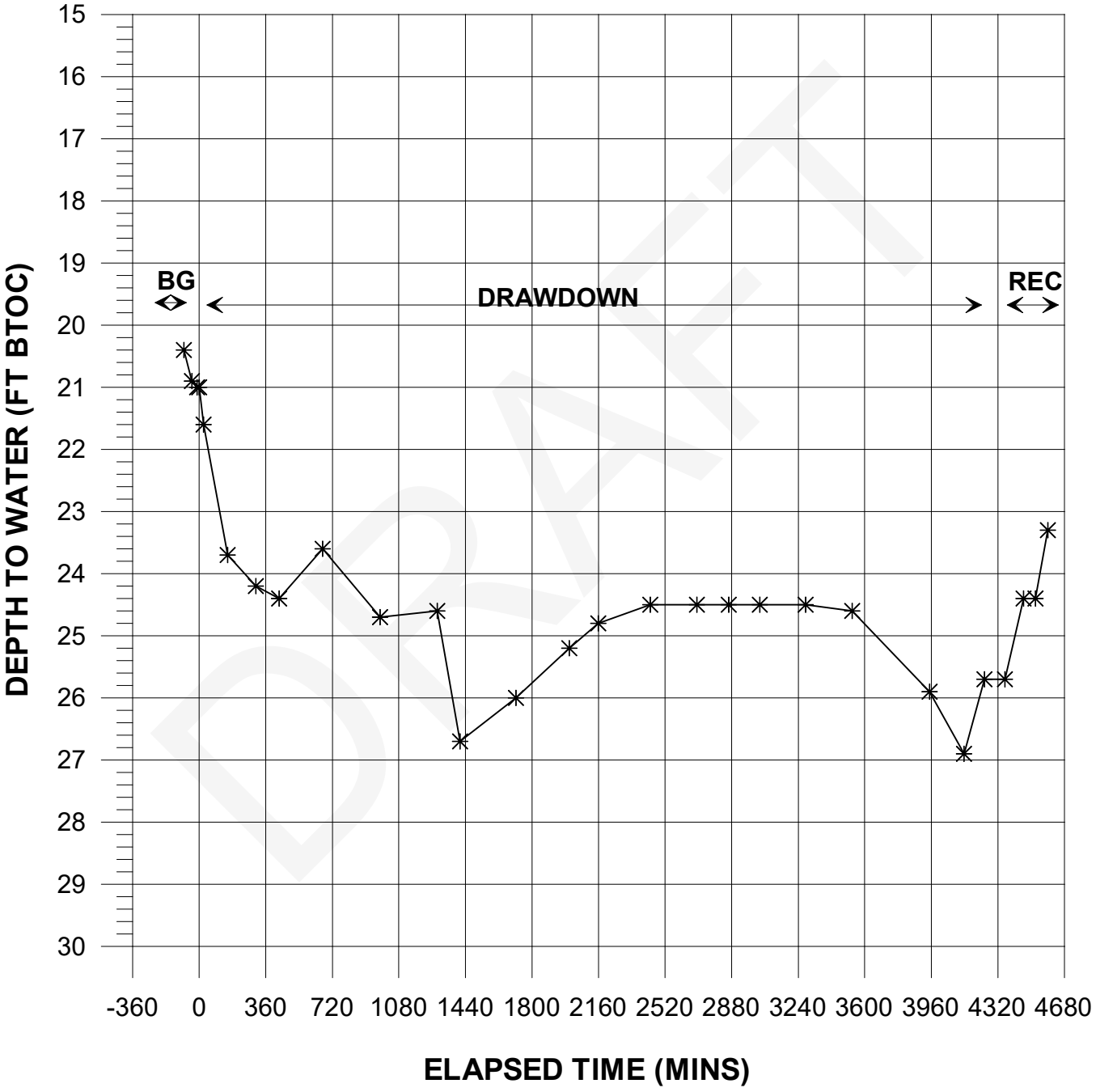
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 528 US ROUTE 20
06/29/25 - 07/02/25



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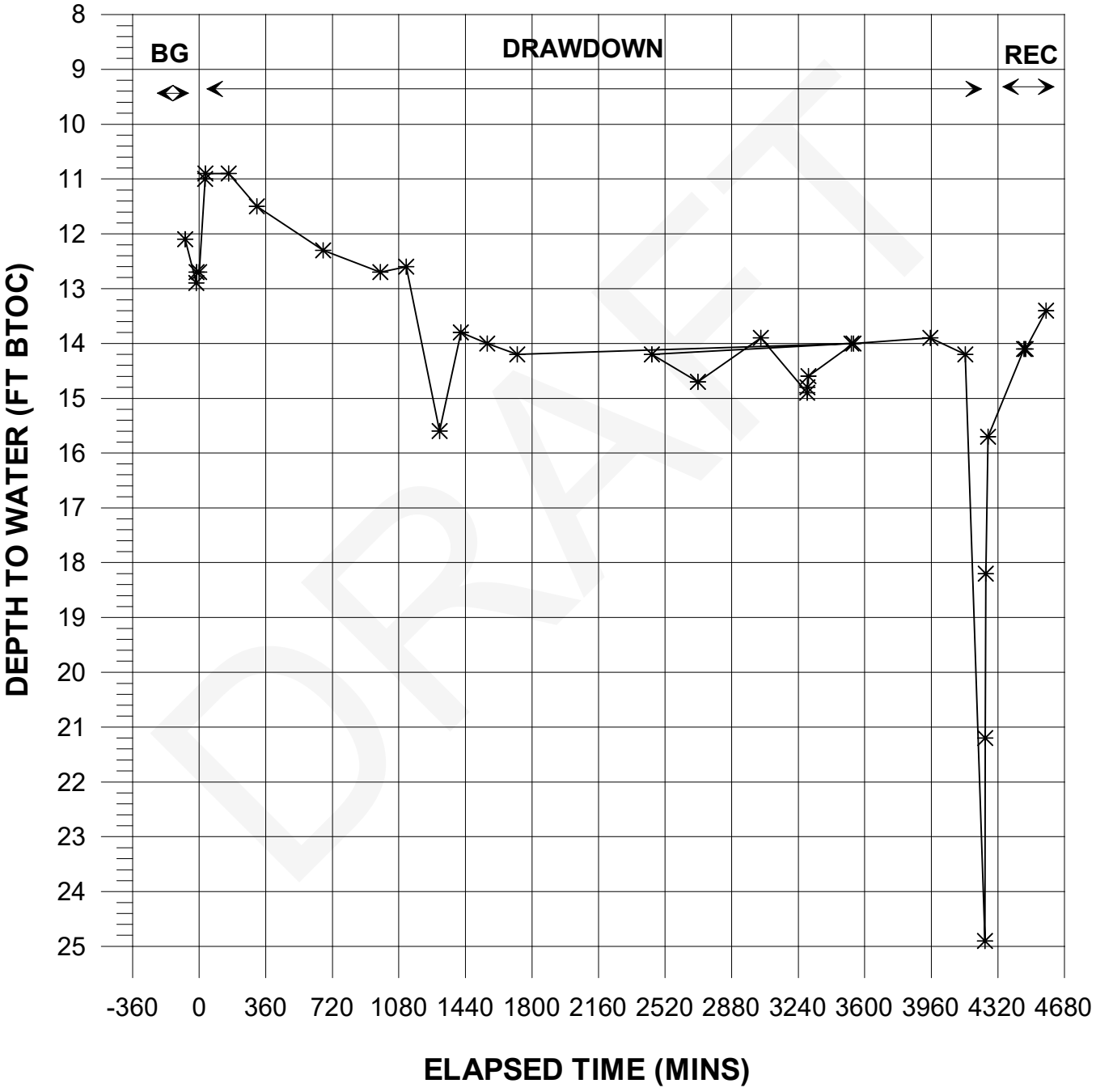
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 13 WEST STREET
06/29/25 - 07/02/25



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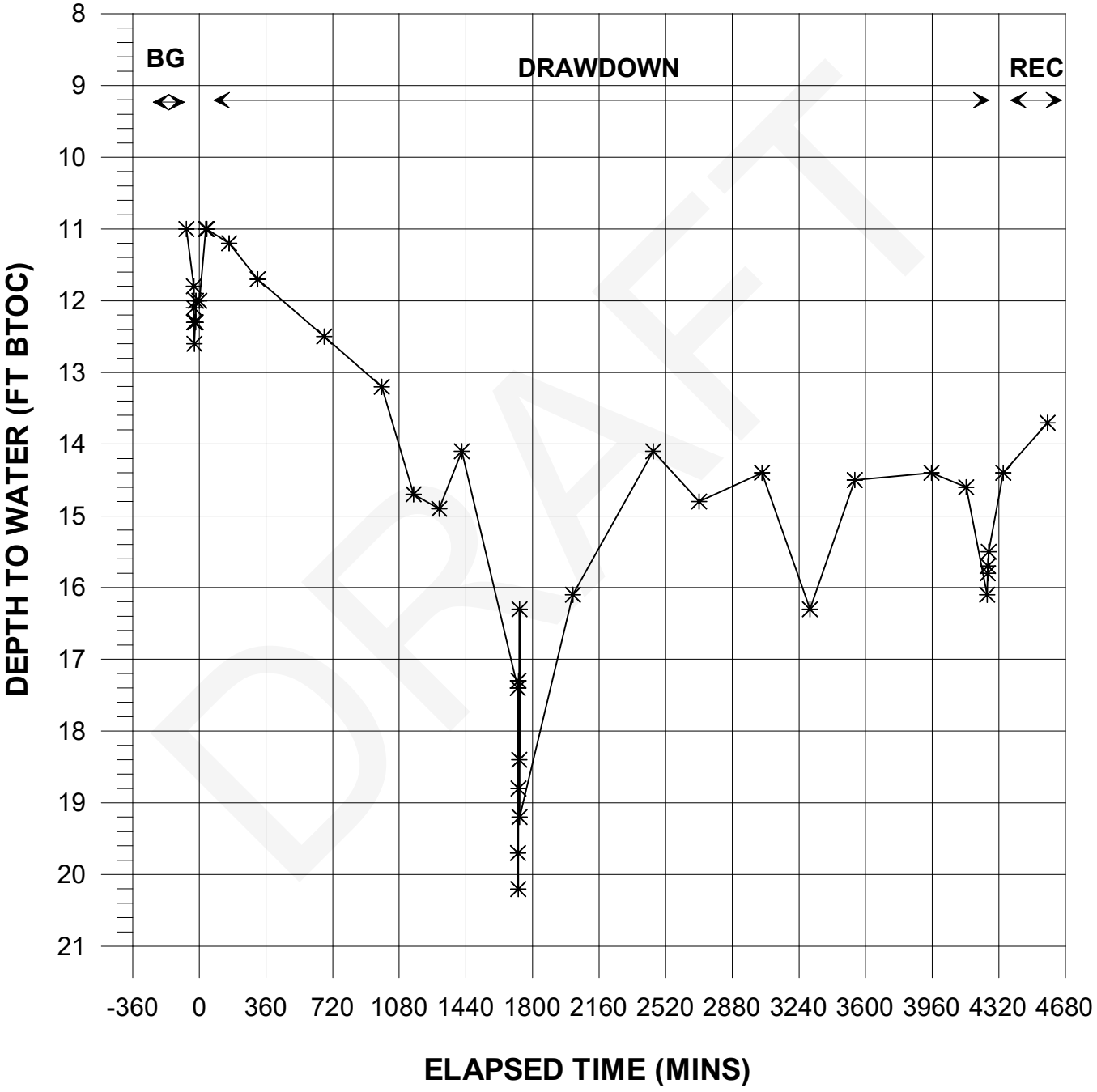
TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DEPTH TO WATER OBSERVATIONS AT 17 WEST STREET
06/29/25 - 07/02/25



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Appendix H
Recovery Data

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
RECOVERY OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
07/02/25 - 07/03/25

DATE	TIME	T	T'	T/T'	DTW	RES DD
7/2/25	12:31	4321	1	4321.00	78.80	71.51
7/2/25	12:32	4322	2	2161.00	70.53	63.24
7/2/25	12:33	4323	3	1441.00	64.01	56.72
7/2/25	12:34	4324	4	1081.00	58.74	51.45
7/2/25	12:35	4325	5	865.00	54.43	47.14
7/2/25	12:36	4326	6	721.00	50.88	43.59
7/2/25	12:37	4327	7	618.14	47.91	40.62
7/2/25	12:38	4328	8	541.00	45.51	38.22
7/2/25	12:39	4329	9	481.00	43.47	36.18
7/2/25	12:40	4330	10	433.00	41.72	34.43
7/2/25	12:41	4331	11	393.73	40.26	32.97
7/2/25	12:42	4332	12	361.00	38.93	31.64
7/2/25	12:43	4333	13	333.31	37.78	30.49
7/2/25	12:44	4334	14	309.57	36.71	29.42
7/2/25	12:45	4335	15	289.00	35.82	28.53
7/2/25	12:46	4336	16	271.00	34.99	27.70
7/2/25	12:47	4337	17	255.12	34.15	26.86
7/2/25	12:48	4338	18	241.00	33.50	26.21
7/2/25	12:49	4339	19	228.37	32.88	25.59
7/2/25	12:50	4340	20	217.00	32.30	25.01
7/2/25	12:51	4341	21	206.71	31.72	24.43
7/2/25	12:52	4342	22	197.36	31.21	23.92
7/2/25	12:53	4343	23	188.83	30.73	23.44
7/2/25	12:54	4344	24	181.00	30.31	23.02
7/2/25	12:55	4345	25	173.80	29.88	22.59
7/2/25	12:56	4346	26	167.15	29.50	22.21
7/2/25	12:57	4347	27	161.00	29.15	21.86
7/2/25	12:58	4348	28	155.29	28.76	21.47
7/2/25	12:59	4349	29	149.97	28.44	21.15
7/2/25	13:00	4350	30	145.00	28.15	20.86
7/2/25	13:01	4351	31	140.35	27.83	20.54
7/2/25	13:02	4352	32	136.00	27.54	20.25
7/2/25	13:03	4353	33	131.91	27.28	19.99
7/2/25	13:04	4354	34	128.06	27.04	19.75
7/2/25	13:05	4355	35	124.43	26.76	19.47
7/2/25	13:06	4356	36	121.00	26.55	19.26
7/2/25	13:07	4357	37	117.76	26.30	19.01
7/2/25	13:08	4358	38	114.68	26.07	18.78
7/2/25	13:09	4359	39	111.77	25.90	18.61
7/2/25	13:10	4360	40	109.00	25.67	18.38
7/2/25	13:11	4361	41	106.37	25.50	18.21
7/2/25	13:12	4362	42	103.86	25.27	17.98
7/2/25	13:13	4363	43	101.47	25.16	17.87

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
RECOVERY OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
07/02/25 - 07/03/25

DATE	TIME	T	T'	T/T'	DTW	RES DD
7/2/25	13:14	4364	44	99.18	24.93	17.64
7/2/25	13:15	4365	45	97.00	24.75	17.46
7/2/25	13:16	4366	46	94.91	24.58	17.29
7/2/25	13:17	4367	47	92.91	24.45	17.16
7/2/25	13:18	4368	48	91.00	24.29	17.00
7/2/25	13:19	4369	49	89.16	24.13	16.84
7/2/25	13:20	4370	50	87.40	23.98	16.69
7/2/25	13:21	4371	51	85.71	23.86	16.57
7/2/25	13:22	4372	52	84.08	23.68	16.39
7/2/25	13:23	4373	53	82.51	23.54	16.25
7/2/25	13:24	4374	54	81.00	23.42	16.13
7/2/25	13:25	4375	55	79.55	23.31	16.02
7/2/25	13:26	4376	56	78.14	23.20	15.91
7/2/25	13:27	4377	57	76.79	23.03	15.74
7/2/25	13:28	4378	58	75.48	22.93	15.64
7/2/25	13:29	4379	59	74.22	22.83	15.54
7/2/25	13:30	4380	60	73.00	22.70	15.41
7/2/25	13:31	4381	61	71.82	22.61	15.32
7/2/25	13:32	4382	62	70.68	22.48	15.19
7/2/25	13:33	4383	63	69.57	22.40	15.11
7/2/25	13:34	4384	64	68.50	22.32	15.03
7/2/25	13:35	4385	65	67.46	22.13	14.84
7/2/25	13:36	4386	66	66.45	22.08	14.79
7/2/25	13:37	4387	67	65.48	21.99	14.70
7/2/25	13:38	4388	68	64.53	21.86	14.57
7/2/25	13:39	4389	69	63.61	21.82	14.53
7/2/25	13:40	4390	70	62.71	21.67	14.38
7/2/25	13:41	4391	71	61.85	21.57	14.28
7/2/25	13:42	4392	72	61.00	21.56	14.27
7/2/25	13:43	4393	73	60.18	21.40	14.11
7/2/25	13:44	4394	74	59.38	21.34	14.05
7/2/25	13:45	4395	75	58.60	21.27	13.98
7/2/25	13:46	4396	76	57.84	21.19	13.90
7/2/25	13:47	4397	77	57.10	21.10	13.81
7/2/25	13:48	4398	78	56.38	21.03	13.74
7/2/25	13:49	4399	79	55.68	20.96	13.67
7/2/25	13:50	4400	80	55.00	20.84	13.55
7/2/25	13:51	4401	81	54.33	20.80	13.51
7/2/25	13:52	4402	82	53.68	20.71	13.42
7/2/25	13:53	4403	83	53.05	20.63	13.34
7/2/25	13:54	4404	84	52.43	20.60	13.31
7/2/25	13:55	4405	85	51.82	20.48	13.19
7/2/25	13:56	4406	86	51.23	20.41	13.12

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
RECOVERY OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
07/02/25 - 07/03/25

DATE	TIME	T	T'	T/T'	DTW	RES DD
7/2/25	13:57	4407	87	50.66	20.34	13.05
7/2/25	13:58	4408	88	50.09	20.30	13.01
7/2/25	13:59	4409	89	49.54	20.23	12.94
7/2/25	14:00	4410	90	49.00	20.16	12.87
7/2/25	14:01	4411	91	48.47	20.07	12.78
7/2/25	14:02	4412	92	47.96	20.04	12.75
7/2/25	14:03	4413	93	47.45	19.97	12.68
7/2/25	14:04	4414	94	46.96	19.87	12.58
7/2/25	14:05	4415	95	46.47	19.85	12.56
7/2/25	14:06	4416	96	46.00	19.79	12.50
7/2/25	14:07	4417	97	45.54	19.70	12.41
7/2/25	14:08	4418	98	45.08	19.66	12.37
7/2/25	14:09	4419	99	44.64	19.61	12.32
7/2/25	14:10	4420	100	44.20	19.53	12.24
7/2/25	14:11	4421	101	43.77	19.48	12.19
7/2/25	14:12	4422	102	43.35	19.41	12.12
7/2/25	14:13	4423	103	42.94	19.35	12.06
7/2/25	14:14	4424	104	42.54	19.31	12.02
7/2/25	14:15	4425	105	42.14	19.26	11.97
7/2/25	14:16	4426	106	41.75	19.21	11.92
7/2/25	14:17	4427	107	41.37	19.19	11.90
7/2/25	14:18	4428	108	41.00	19.10	11.81
7/2/25	14:19	4429	109	40.63	19.07	11.78
7/2/25	14:20	4430	110	40.27	19.00	11.71
7/2/25	14:21	4431	111	39.92	18.93	11.64
7/2/25	14:22	4432	112	39.57	18.89	11.60
7/2/25	14:23	4433	113	39.23	18.85	11.56
7/2/25	14:24	4434	114	38.89	18.78	11.49
7/2/25	14:25	4435	115	38.57	18.75	11.46
7/2/25	14:26	4436	116	38.24	18.68	11.39
7/2/25	14:27	4437	117	37.92	18.65	11.36
7/2/25	14:28	4438	118	37.61	18.61	11.32
7/2/25	14:29	4439	119	37.30	18.54	11.25
7/2/25	14:30	4440	120	37.00	18.50	11.21
7/2/25	15:00	4470	150	29.80	17.32	10.03
7/2/25	15:30	4500	180	25.00	16.39	9.10
7/2/25	16:00	4530	210	21.57	15.65	8.36
7/2/25	16:30	4560	240	19.00	15.02	7.73
7/2/25	17:00	4590	270	17.00	14.43	7.14
7/2/25	17:30	4620	300	15.40	13.95	6.66
7/2/25	18:00	4650	330	14.09	13.60	6.31
7/2/25	18:30	4680	360	13.00	13.19	5.90
7/2/25	19:00	4710	390	12.08	12.87	5.58

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
RECOVERY OBSERVATIONS AT PW-1
FINAL PUMPING RATE = 13 GPM
07/02/25 - 07/03/25

DATE TIME	T	T'	T/T'	DTW	RES DD
7/2/25 19:30	4740	420	11.29	12.59	5.30
7/2/25 20:00	4770	450	10.60	12.34	5.05
7/2/25 20:30	4800	480	10.00	12.01	4.72
7/2/25 21:00	4830	510	9.47	11.83	4.54
7/2/25 21:30	4860	540	9.00	11.53	4.24
7/2/25 22:00	4890	570	8.58	11.34	4.05
7/2/25 22:30	4920	600	8.20	11.13	3.84
7/2/25 23:00	4950	630	7.86	11.00	3.71
7/2/25 23:30	4980	660	7.55	10.80	3.51
7/3/25 0:00	5010	690	7.26	10.60	3.31
7/3/25 0:30	5040	720	7.00	10.42	3.13
7/3/25 1:00	5070	750	6.76	10.29	3.00
7/3/25 1:30	5100	780	6.54	10.10	2.81
7/3/25 2:00	5130	810	6.33	9.98	2.69
7/3/25 2:30	5160	840	6.14	9.88	2.59
7/3/25 3:00	5190	870	5.97	9.71	2.42
7/3/25 3:30	5220	900	5.80	9.56	2.27
7/3/25 4:00	5250	930	5.65	9.47	2.18
7/3/25 4:30	5280	960	5.50	9.35	2.06
7/3/25 5:00	5310	990	5.36	9.32	2.03
7/3/25 5:30	5340	1020	5.24	9.32	2.03
7/3/25 6:00	5370	1050	5.11	9.32	2.03
7/3/25 6:30	5400	1080	5.00	9.34	2.05
7/3/25 7:00	5430	1110	4.89	9.41	2.12
7/3/25 7:30	5460	1140	4.79	9.38	2.09
7/3/25 8:00	5490	1170	4.69	9.35	2.06
7/3/25 8:30	5520	1200	4.60	9.27	1.98
7/3/25 9:00	5550	1230	4.51	9.15	1.86
7/3/25 9:30	5580	1260	4.43	9.12	1.83
7/3/25 10:00	5610	1290	4.35	9.13	1.84
7/3/25 10:30	5640	1320	4.27	9.12	1.83
7/3/25 11:00	5670	1350	4.20	9.15	1.86
7/3/25 11:30	5700	1380	4.13	9.12	1.83
7/3/25 12:00	5730	1410	4.06	9.12	1.83
7/3/25 12:30	5760	1440	4.00	9.18	1.89

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATIONS AT 550 US ROUTE 20
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	10:41	-109	6.74	0.00
6/29/25	11:44	-46	6.74	0.00
6/29/25	12:49	19	6.75	0.01
6/29/25	14:49	139	6.78	0.04
6/29/25	17:16	286	6.84	0.10
6/29/25	19:18	408	6.89	0.15
6/29/25	23:20	650	6.97	0.23
6/30/25	4:43	973	7.01	0.27
6/30/25	9:40	1270	7.10	0.36
6/30/25	11:47	1397	7.11	0.37
6/30/25	16:38	1688	7.20	0.46
6/30/25	22:14	2024	7.26	0.52
7/1/25	9:10	2680	7.30	0.56
7/1/25	11:18	2808	7.31	0.57
7/1/25	14:40	3010	7.31	0.57
7/1/25	19:00	3270	7.31	0.57
7/1/25	23:11	3521	7.34	0.60
7/2/25	6:00	3930	7.36	0.62
7/2/25	9:22	4132	7.37	0.63
7/2/25	11:50	4280	7.37	0.63
7/2/25	12:52	4342	7.41	0.67
7/2/25	16:08	4538	7.41	0.67
7/2/25	17:42	4632	7.39	0.65

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 43 TILDEN ROAD
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	10:46	-104	4.06	1.64
6/29/25	11:35	-55	3.17	0.75
6/29/25	11:40	-50	3.11	0.69
6/29/25	12:18	-12	3.08	0.66
6/29/25	12:45	15	7.44	5.02
6/29/25	13:24	54	7.74	5.32
6/29/25	14:52	142	4.43	2.01
6/29/25	17:22	292	6.75	4.33
6/29/25	19:20	410	2.77	0.35
6/29/25	23:34	664	2.71	0.29
6/30/25	5:10	1000	2.42	0.00
6/30/25	9:45	1275	3.65	1.23
6/30/25	16:40	1690	3.97	1.55
6/30/25	18:52	1822	4.10	1.68
6/30/25	23:10	2080	3.41	0.99
7/1/25	3:18	2328	3.19	0.77
7/1/25	9:02	2672	4.31	1.89
7/1/25	11:26	2816	3.68	1.26
7/1/25	14:45	3015	2.88	0.46
7/1/25	19:03	3273	8.80	6.38
7/1/25	23:14	3524	5.33	2.91
7/2/25	2:10	3700	4.21	1.79
7/2/25	6:05	3935	7.88	5.46
7/2/25	9:15	4125	16.10	13.68
7/2/25	11:11	4241	8.17	5.75
7/2/25	12:15	4305	10.46	8.04
7/2/25	12:22	4312	9.53	7.11
7/2/25	12:49	4339	9.98	7.56
7/2/25	16:00	4530	3.64	1.22
7/2/25	17:20	4610	3.44	1.02

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 4 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:00	-90	18.5	0.0
6/29/25	11:02	-88	18.7	0.2
6/29/25	11:48	-42	19.2	0.7
6/29/25	12:18	-12	19.1	0.6
6/29/25	12:52	22	20.0	1.5
6/29/25	15:02	152	22.7	4.2
6/29/25	17:36	306	24.9	6.4
6/29/25	19:40	430	25.5	7.0
6/29/25	23:37	667	26.4	7.9
6/30/25	4:48	978	27.0	8.5
6/30/25	9:52	1282	27.8	9.3
6/30/25	12:00	1410	29.3	10.8
6/30/25	17:00	1710	29.2	10.7
6/30/25	21:54	2004	29.1	10.6
6/30/25	23:28	2098	29.0	10.5
7/1/25	4:18	2388	28.9	10.4
7/1/25	9:20	2690	28.7	10.2
7/1/25	10:42	2772	28.8	10.3
7/1/25	12:07	2857	34.5	16.0
7/1/25	12:08	2858	34.2	15.7
7/1/25	12:09	2859	34.1	15.6
7/1/25	12:10	2860	33.5	15.0
7/1/25	12:12	2862	33.0	14.5
7/1/25	15:00	3030	29.8	11.3
7/1/25	19:08	3278	29.1	10.6
7/1/25	23:19	3529	28.5	10.0
7/2/25	3:25	3775	28.5	10.0
7/2/25	6:18	3948	28.6	10.1
7/2/25	9:25	4135	28.7	10.2
7/2/25	11:16	4246	29.2	10.7
7/2/25	11:40	4270	28.9	10.4
7/2/25	12:56	4346	30.0	11.5
7/2/25	13:00	4350	29.7	11.2
7/2/25	13:05	4355	29.6	11.1
7/2/25	13:10	4360	29.2	10.7
7/2/25	14:48	4458	28.6	10.1
7/2/25	15:08	4478	26.7	8.2
7/2/25	15:52	4522	29.2	10.7
7/2/25	16:44	4574	24.9	6.4
7/2/25	17:08	4598	24.3	5.8

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 528 US ROUTE 20
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:07	-83	20.4	0.0
6/29/25	11:50	-40	20.9	0.5
6/29/25	12:19	-11	21.0	0.6
6/29/25	12:30	0	21.0	0.6
6/29/25	12:54	24	21.6	1.2
6/29/25	15:04	154	23.7	3.3
6/29/25	17:37	307	24.2	3.8
6/29/25	19:42	432	24.4	4.0
6/29/25	23:38	668	23.6	3.2
6/30/25	4:49	979	24.7	4.3
6/30/25	9:57	1287	24.6	4.2
6/30/25	12:01	1411	26.7	6.3
6/30/25	17:03	1713	26.0	5.6
6/30/25	21:52	2002	25.2	4.8
7/1/25	0:28	2158	24.8	4.4
7/1/25	5:10	2440	24.5	4.1
7/1/25	9:22	2692	24.5	4.1
7/1/25	12:15	2865	24.5	4.1
7/1/25	15:02	3032	24.5	4.1
7/1/25	19:10	3280	24.5	4.1
7/1/25	23:22	3532	24.6	4.2
7/2/25	6:20	3950	25.9	5.5
7/2/25	9:27	4137	26.9	6.5
7/2/25	11:17	4247	25.7	5.3
7/2/25	13:08	4358	25.7	5.3
7/2/25	14:49	4459	24.4	4.0
7/2/25	15:54	4524	24.4	4.0
7/2/25	17:00	4590	23.3	2.9

DRAFT

PROPOSED 538 US RT 20 NEW LEBANON COMPLEX
538 US RT 20 - NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 13 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:14	-76	12.1	1.2
6/29/25	12:14	-16	12.9	2.0
6/29/25	12:16	-14	12.7	1.8
6/29/25	12:30	0	12.7	1.8
6/29/25	13:02	32	11.0	0.1
6/29/25	13:03	33	10.9	0.0
6/29/25	15:10	160	10.9	0.0
6/29/25	17:42	312	11.5	0.6
6/29/25	23:41	671	12.3	1.4
6/30/25	4:50	980	12.7	1.8
6/30/25	7:10	1120	12.6	1.7
6/30/25	10:10	1300	15.6	4.7
6/30/25	12:06	1416	13.8	2.9
6/30/25	14:28	1558	14.0	3.1
6/30/25	17:10	1720	14.2	3.3
7/1/25	23:18	3528	14.0	3.1
7/1/25	5:18	2448	14.2	3.3
7/1/25	9:28	2698	14.7	3.8
7/1/25	15:08	3038	13.9	3.0
7/1/25	19:18	3288	14.9	4.0
7/1/25	19:20	3290	14.8	3.9
7/1/25	19:25	3295	14.6	3.7
7/1/25	23:29	3539	14.0	3.1
7/2/25	6:24	3954	13.9	3.0
7/2/25	9:33	4143	14.2	3.3
7/2/25	11:20	4250	24.9	14.0
7/2/25	11:22	4252	21.2	10.3
7/2/25	11:25	4255	18.2	7.3
7/2/25	11:37	4267	15.7	4.8
7/2/25	14:52	4462	14.1	3.2
7/2/25	15:00	4470	14.1	3.2
7/2/25	16:50	4580	13.4	2.5

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TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
DRAWDOWN OBSERVATION AT 17 WEST STREET
06/29/25 - 07/02/25

DATE	TIME	ET	DTW	Δ
6/29/25	11:20	-70	11.0	0.0
6/29/25	12:00	-30	11.8	0.8
6/29/25	12:01	-29	12.1	1.1
6/29/25	12:02	-28	12.3	1.3
6/29/25	12:03	-27	12.6	1.6
6/29/25	12:08	-22	12.3	1.3
6/29/25	12:10	-20	12.3	1.3
6/29/25	12:12	-18	12.0	1.0
6/29/25	12:30	0	12.0	1.0
6/29/25	13:05	35	11.0	0.0
6/29/25	13:10	40	11.0	0.0
6/29/25	15:11	161	11.2	0.2
6/29/25	17:45	315	11.7	0.7
6/29/25	23:45	675	12.5	1.5
6/30/25	4:56	986	13.2	2.2
6/30/25	7:48	1158	14.7	3.7
6/30/25	10:06	1296	14.9	3.9
6/30/25	12:08	1418	14.1	3.1
6/30/25	17:11	1721	17.4	6.4
6/30/25	17:12	1722	19.7	8.7
6/30/25	17:13	1723	20.2	9.2
6/30/25	17:14	1724	18.8	7.8
6/30/25	17:15	1725	17.3	6.3
6/30/25	17:18	1728	18.4	7.4
6/30/25	17:20	1730	16.3	5.3
6/30/25	17:21	1731	19.2	8.2
6/30/25	22:08	2018	16.1	5.1
7/1/25	5:22	2452	14.1	3.1
7/1/25	9:31	2701	14.8	3.8
7/1/25	15:10	3040	14.4	3.4
7/1/25	19:30	3300	16.3	5.3
7/1/25	23:32	3542	14.5	3.5
7/2/25	6:26	3956	14.4	3.4
7/2/25	9:34	4144	14.6	3.6
7/2/25	11:27	4257	16.1	5.1
7/2/25	11:30	4260	15.8	4.8
7/2/25	11:32	4262	15.7	4.7
7/2/25	11:35	4265	15.5	4.5
7/2/25	12:54	4344	14.4	3.4
7/2/25	16:53	4583	13.7	2.7

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Appendix I
Water Quality Data

DRAFT

Capital Region Environmental Laboratory

137 Columbia Turnpike, Rensselaer, NY 12144

(518) 949-2020

Lamont Engineers

PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025

Sample ID: **BG08097**

Date Received: 07/09/2025

Time Received: 09:09

Date Finalized: 8/8/2025

PO Number:

Your Ref:

Customer: Lamont Engineers

Owner: Tilden Development

Sample Loc: 538 US Route 20 New Lebanon

Sample Pt: Tilden Well

Collect Date: 07/08/2025

Collect Time: 19:28

Collected by: BB

Receipt Temp: 6.4 C on ice chilling

Water Source:

Chlorinated: No *Field Residual Chlorine:*

Potable: Yes

Grab/Comp: Grab

Laboratory Report

Test	Result	MCL	Qualifiers	Units	Method Used	Analyst	Analysis Date
1,4-Dioxane	<0.200	1		ug/L	EPA 522	SUB*	7/15/2025
E. coli	Negative			per 100 mL	SM 22 9223B	GG/NW	7/9/2025
Total Coliform	Positive		X	per 100 mL	SM 22 9223B	GG/NW	7/9/2025
Color	<5	15		UNITS	SM 22 2120B	NW	7/9/2025
Turbidity	25	5	X	NTU	EPA180.1 Rev2.0	NW	7/9/2025
Odor	1	3		TON	SM 22 2150B	RM	7/9/2025
pH	7.5		HZ	Std. units	SM 22 4500-H B	NW	7/9/2025
Alkalinity Tot(CaCO3) to pH 4.5	109			mg/L	SM 22 2320B	GG	7/16/2025
Nitrate as N	<0.01	10		mg/L	EPA 300.0 Rev 2.	EL	7/9/2025
Iron	2.70	0.3	X	mg/L	EPA200.7 Rev4.4	MN	7/17/2025
Manganese	0.76	0.3	X	mg/L	EPA200.7 Rev4.4	MN	7/17/2025
Chloride	281	250	X	mg/L	EPA 300.0 Rev 2.	EL	7/10/2025
Sulfate	35	250		mg/L	EPA 300.0 Rev 2.	EL	7/9/2025
Sodium	88.4			mg/L	EPA200.7 Rev4.4	MN	7/15/2025
Fluoride	<0.20	2.2		mg/L	EPA 300.0 Rev 2.	EL	7/9/2025
Antimony	<0.0004	0.006		mg/L	SM 22 3113B	SUB*	7/18/2025
Arsenic	0.0022	0.01		mg/L	SM 22 3113B	MN	7/24/2025
Barium	0.12	2		mg/L	EPA200.7 Rev4.4	MN	7/22/2025
Beryllium	<0.0002	0.004		mg/L	EPA200.7 Rev4.4	MN	7/23/2025
Cadmium	<0.001	0.005		mg/L	EPA200.7 Rev4.4	MN	7/23/2025
Chromium	0.005	0.1		mg/L	EPA200.7 Rev4.4	MN	7/23/2025
Copper	0.01	1.3		mg/L	EPA200.7 Rev4.4	MN	7/22/2025
Lead	0.001	0.015		mg/L	SM 22 3113B	MN	7/11/2025
Mercury	<0.0002	0.002		mg/L	EPA245.1 Rev.3.0	SUB*	7/14/2025
Nickel	0.010	0.1		mg/L	EPA200.7 Rev4.4	MN	7/24/2025
Selenium	<0.0010	0.05		mg/L	SM 22 3113B	SUB*	7/18/2025
Silver	<0.01	0.1		mg/L	EPA200.7 Rev4.4	MN	7/24/2025
Thallium	<0.0003	0.002		mg/L	SM 22 3113B	SUB*	7/18/2025
Zinc	0.02	5		mg/L	EPA200.7 Rev4.4	MN	7/24/2025
Corrosivity Result@20C	0.11			@20C	SM 22 2330	MN	7/29/2025

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Capital Region Environmental Laboratory

137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025

Sample ID: **BG08097**
Date Received: 07/09/2025
Time Received: 09:09
Date Finalized: 8/8/2025
PO Number:
Your Ref:

Customer: Lamont Engineers
Owner: Tilden Development
Sample Loc: 538 US Route 20 New Lebanon
Sample Pt: Tilden Well

Collect Date: 07/08/2025
Collect Time: 19:28
Collected by: BB
Receipt Temp: 6.4 C on ice chilling

Water Source:
Chlorinated: No *Field Residual Chlorine:*

Potable: Yes
Grab/Comp: Grab

Cyanide, Total	<0.010	0.2	S-T	mg/L	EPA 335.4 Rev1.0	SUB*	7/17/2025
Dissolved Solids, Total	647	500	X	mg/L	SM 22 2540C	MN	7/9/2025
Hardness as CaCO3, Total	424	120		mg/L	SM 22 2340C	GG	7/16/2025
Hardness, Ca	289			mg/L	SM 22 2340C	EL	7/21/2025
Nitrite as N	<0.01	1		mg/L	SM 22 4500NO2B	EL	7/10/2025
Sulfide	<0.10		T	mg/L	SM4500S2D-2011	SUB*	7/10/2025
Suspended Solids, Total	397			mg/L	SM 22 2540 D-201	MN	7/11/2025
UV Absorbance at 254	0.030		T	cm-1@254nm	SM5910B-00	SUB*	7/9/2025
Perfluorooctanoic acid PFOA	<2.02	10		ng/L	EPA 537.1	SUB*	7/15/2025
Perfluorooctanesulfonic acid PFOS	<2.02	10		ng/L	EPA 537.1	SUB*	7/15/2025
1,1 Dichloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1 Dichloroethene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1 Dichloropropene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1,1 Trichloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1,1,2 Tetrachloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1,2 Trichloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,1,2,2 Tetrachloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2 Dichlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2 Dichloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2 Dichloropropane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2,3 Trichlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2,3 Trichloropropane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2,4 Trichlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,2,4 Trimethylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,3 Dichlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,3 Dichloropropane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,3,5 Trimethylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
1,4 Dichlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
2 Chlorotoluene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
2,2 Dichloropropane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
4 Chlorotoluene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Benzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Bromobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025

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Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025 Page 3 of 7

Sample ID: **BG08097**
Date Received: 07/09/2025
Time Received: 09:09
Date Finalized: 8/8/2025
PO Number:
Your Ref:

Customer: Lamont Engineers
Owner: Tilden Development
Sample Loc: 538 US Route 20 New Lebanon
Sample Pt: Tilden Well

Collect Date: 07/08/2025
Collect Time: 19:28
Collected by: BB
Receipt Temp: 6.4 C on ice chilling

Water Source:
Chlorinated: No *Field Residual Chlorine:*

Potable: Yes
Grab/Comp: Grab

Bromochloromethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Bromomethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Carbon Tetrachloride	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Chlorobenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Chloroethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Chloromethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
cis 1,2 Dichloroethene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
cis 1,3 Dichloropropene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Dibromomethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Dichlorodifluoromethane	<0.5	5	S+	ug/L	EPA 524.2	BC	7/16/2025
Ethylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Hexachlorobutadiene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Isopropylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Methylene Chloride	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Methyltertbutylether (MTBE)	<0.5	10		ug/L	EPA 524.2	BC	7/16/2025
Naphthalene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
n-Butylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
n-Propylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
p-Isopropyltoluene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
sec-Butylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Styrene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
tert-Butylbenzene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Tetrachloroethene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Toluene	1.7	5		ug/L	EPA 524.2	BC	7/16/2025
Total Xylenes	<1.5	5		ug/L	EPA 524.2	BC	7/16/2025
trans 1,2 Dichloroethene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Trans 1,3 Dichloropropene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Trichloroethene	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Trichlorofluoromethane	<0.5	5		ug/L	EPA 524.2	BC	7/16/2025
Vinyl Chloride	<0.5	2		ug/L	EPA 524.2	BC	7/16/2025
1,2 Dibromoethane	<0.00941	0.05		ug/L	EPA 504.1	SUB*	7/16/2025
1,2 Dibromo3chloropropane	<0.00941	0.2		ug/L	EPA 504.1	SUB*	7/16/2025
Aroclor 1221	<20.0			ug/l	EPA 505	SUB*	7/14/2025

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Capital Region Environmental Laboratory

137 Columbia Turnpike, Rensselaer, NY 12144

(518) 949-2020

Lamont Engineers

PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025

Sample ID: **BG08097**

Date Received: 07/09/2025

Time Received: 09:09

Date Finalized: 8/8/2025

PO Number:

Your Ref:

Customer: Lamont Engineers

Owner: Tilden Development

Sample Loc: 538 US Route 20 New Lebanon

Sample Pt: Tilden Well

Collect Date: 07/08/2025

Collect Time: 19:28

Collected by: BB

Receipt Temp: 6.4 C on ice chilling

Water Source:

Chlorinated: No *Field Residual Chlorine:*

Potable: Yes

Grab/Comp: Grab

Aroclor 1232	<0.500			ug/l	EPA 505	SUB*	7/14/2025
Aroclor 1242	<0.300			ug/l	EPA 505	SUB*	7/14/2025
Aroclor 1248	<0.100			ug/l	EPA 505	SUB*	7/14/2025
Aroclor 1254	<0.100			ug/l	EPA 505	SUB*	7/14/2025
Aroclor 1260	<0.200			ug/l	EPA 505	SUB*	7/14/2025
Chlordane	<0.200	2		ug/l	EPA 505	SUB*	7/14/2025
Dieldrin	<0.0200			ug/l	EPA 505	SUB*	7/14/2025
Endrin	<0.0100	2		ug/l	EPA 505	SUB*	7/14/2025
Toxaphene	<1.00	3		ug/l	EPA 505	SUB*	7/14/2025
Aroclor 1016	<0.0800			ug/l	EPA 505	SUB*	7/14/2025
Dalapon	<1.00	50		ug/L	EPA 515.3	SUB*	7/18/2025
Dicamba	<0.100	50		ug/L	EPA 515.3	SUB*	7/18/2025
Dinoseb	<0.200	7		ug/L	EPA 515.3	SUB*	7/18/2025
Pentachlorophenol	<0.0400	1		ug/L	EPA 515.3	SUB*	7/18/2025
Picloram	<0.100	50		ug/L	EPA 515.3	SUB*	7/18/2025
Silvex(2,4,5-TP)	<0.200	10		ug/L	EPA 515.3	SUB*	7/18/2025
2,4,D	<0.100	50		ug/L	EPA 515.3	SUB*	7/18/2025
Aldrin	<0.100	5		ug/L	EPA 525.2	SUB*	7/21/2025
Atrazine	<0.100	3		ug/L	EPA 525.2	SUB*	7/21/2025
Benzo(A)pyrene	<0.020	0.2	I-	ug/L	EPA 525.2	SUB*	7/21/2025
Butachlor	<0.100	50		ug/L	EPA 525.2	SUB*	7/21/2025
Di(2-ethylhexyl)adipate	<0.600	50		ug/L	EPA 525.2	SUB*	7/21/2025
Di(2-ethylhexyl)phthalate	<0.600	6	I-	ug/L	EPA 525.2	SUB*	7/21/2025
Heptachlor	<0.040	0.4		ug/L	EPA 525.2	SUB*	7/21/2025
Heptachlor Epoxide	<0.020	0.2		ug/L	EPA 525.2	SUB*	7/21/2025
Hexachlorobenzene	<0.100	1		ug/L	EPA 525.2	SUB*	7/21/2025
Hexachlorocyclopentadiene	<0.100	5		ug/L	EPA 525.2	SUB*	7/21/2025
Lindane	<0.020	0.2		ug/L	EPA 525.2	SUB*	7/21/2025
Methoxychlor	<0.100	40	I-	ug/L	EPA 525.2	SUB*	7/21/2025
Metolachlor	<0.100	50		ug/L	EPA 525.2	SUB*	7/21/2025
Metribuzin	<0.100	50		ug/L	EPA 525.2	SUB*	7/21/2025
Propachlor	<0.100	50		ug/L	EPA 525.2	SUB*	7/21/2025
Simazine	<0.070	4		ug/L	EPA 525.2	SUB*	7/21/2025

DRAFT

Capital Region Environmental Laboratory
137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

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Date Received: 07/09/2025
Time Received: 09:09
Date Finalized: 8/8/2025
PO Number:
Your Ref:

Customer: Lamont Engineers
Owner: Tilden Development
Sample Loc: 538 US Route 20 New Lebanon
Sample Pt: Tilden Well

Collect Date: 07/08/2025
Collect Time: 19:28
Collected by: BB
Receipt Temp: 6.4 C on ice chilling

Water Source:
Chlorinated: No *Field Residual Chlorine:*

Potable: Yes
Grab/Comp: Grab

Alachlor	<0.200	2	ug/L	EPA 525.2	SUB*	7/21/2025
Aldicarb	<0.500	3	ug/L	EPA 531.2	SUB*	7/16/2025
Aldicarb sulfone	<0.800	2	ug/L	EPA 531.2	SUB*	7/16/2025
Aldicarb sulfoxide	<0.500	4	ug/L	EPA 531.2	SUB*	7/16/2025
Carbaryl	<0.500	50	ug/L	EPA 531.2	SUB*	7/16/2025
Carbofuran	<0.900	40	ug/L	EPA 531.2	SUB*	7/16/2025
Methomyl	<0.500	50	ug/L	EPA 531.2	SUB*	7/16/2025
Oxamyl	<1.00	50	ug/L	EPA 531.2	SUB*	7/16/2025
3-Hydroxycarbofuran	<0.500		ug/L	EPA 531.2	SUB*	7/16/2025
Radiological -Alpha	9.95	15	pCi/L	EPA900.0	SUB*	7/19/2025
Radium 226	0.431	5	pCi/L	EPA903.1	SUB*	8/5/2025
Radium 228	1.02	5	pCi/L	EPA904.0	SUB*	7/29/2025

Qualifiers Key:

X Exceeds maximum contamination limit
R Duplication outside acceptance limits
H Hold time exceeded
T Temperature outside specifications
A Sample contained air bubble or headspace
B Analyte detected in blank
C(+/-) CCV outside acceptancee limits
Z Analysis is not state-certified
G Incorrect bottle received

Legend: < Less Than, > Greater Than
mg/L=PPM, ug/L=PPB
If no collection time was given, 00:00 is reported

MCL = Maximum Contaminant Level referenced from New York State Subpart 5-1 of the Public Drinking Water Standards and/or National Primary/Secondary Drinking Water Standards.

Note 1: Per ELAP requirements, water analyzed for alkalinity, color, conductivity, nitrate, nitrite, sulfate, organics, UV absorbance, non-potable bacteriological analyses, BOD/CBOD, solids and phosphorus are required to be on ice to indicate the chilling process has begun. Samples must be between 0-6C and not frozen.

Comments:

For drinking water samples, any positive result for total coliform and/or Escherichia coli is unacceptable.

Total Coliform 32.4 MPN/100 mL

Sample was NEGATIVE when screened for total residual chlorine in laboratory.
Bacteriological sample was set up on 07/09/2025 at 11:40.

1,4-DIOXANE: SUB* 1,4-Dioxane analysis was completed by ELAP Lab #12058. Prep done on 07/11/25.
Surrogates:
1,4-Dioxane-d8 72.0% (70-130%)
ANTIMONY, SELENIUM, and THALLIUM: SUB* Metals analyses were completed by NYS DOH Lab. #10709. Method used was EPA 200.8 Rev 5.4. Prep was done on 07/18/25.

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Capital Region Environmental Laboratory
137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025
Sample ID: **BG08097**
Date Received: 07/09/2025
Time Received: 09:09
Date Finalized: 8/8/2025
PO Number:
Your Ref:

Customer: Lamont Engineers
Owner: Tilden Development
Sample Loc: 538 US Route 20 New Lebanon
Sample Pt: Tilden Well

Collect Date: 07/08/2025
Collect Time: 19:28
Collected by: BB
Receipt Temp: 6.4 C on ice chilling

Water Source:
Chlorinated: No *Field Residual Chlorine:*

Potable: Yes
Grab/Comp: Grab

CORROSIVITY: The temperature used in the calculation of corrosivity was 20C. The reference is Standard Method 2330B, 18th Edition. The value of your corrosivity is non-corrosive.
CYANIDE: SUB* Cyanide analysis was completed by NYS DOH Lab. #10709. Prep 335.4 was completed on 07/17/25.
EPA524.2: The surrogate recoveries of BFB and 1,2-dichlorobenzene-d4 were within acceptable limits at 98% and 100%. The acceptable limits are 80-120%. The accompanying trip blank was found to be less than the reporting limit for toluene.
HARDNESS: With your value of greater than 120 mg/L, water softening is an option if mineral scale deposits are noticeable and/or bothersome.
IRON/MANGANESE: The total of the two should not exceed 0.50 mg/L.
MERCURY: SUB* Mercury analysis was completed by NYS DOH Lab. #10709. Prep method EPA 245.1 was completed on 07/14/25.
NITRATE: Nitrate was set up on 07/09/25 at 13:31.
NITRITE: Nitrite was set up on 07/10/25 at 14:00.
PFAS: SUB* PFAS analyses by EPA Method 533 were completed by NYS DOH Lab. #12058. Samples were prepared on 07/10/25.
Surrogates: Surrogate recovery for surrogate MPFBA was below acceptable limits. Isotope dilution applied. All other surrogate recoveries within acceptable limits.
PHYSICAL CHARACTERISTICS: Color, turbidity and pH testing were set up on 07/09/25 at 10:35. Hold time for pH testing per ELAP requirements is 15 minutes for all water samples. pH was tested at 16 degrees Celsius. Odor was set up on 07/09/25 at 11:20. Odor was tested at 59 degrees Celsius. A threshold odor number (TON) of 1 is equivalent to odor not being detected or odor being not detected after diluting with an equal amount of water. Odor results up to 3 TON are within acceptable limits. Color is reported as apparent color.
RADIOLOGICAL: SUB* Radiological analyses were completed by NYS DOH Lab. #11501. The total concentration of Radium 226 and Radium 228 combined is 1.451 pCi/L. The acceptable limit is up to 5 pCi/L.
Additional Information-

Test	Uncertainty	MDC	Units	Barium / Yttrium Tracer Recovery
Gross Alpha	+/-2.18	2.01	pCi/L	
Radium 226	+/-0.301	0.395	pCi/L	
Radium 228	+/-0.399	0.520	pCi/L	113% / 96.2% (25-125%)

SOC: SUB* SOC analyses were completed by NYS DOH Lab. #11549. All surrogate recoveries were within acceptable limits. The acceptable limits are 70-130%.
EPA 504.1 - Tetrachloro-m-xylene 92.5%
EPA 505 - Tetrachloro-m-xylene 87.0%
EPA 515.3 - 2,4-Dichloropenylacetic acid 110% / 2,4-Dichloropenylacetic acid[2C] 102%
EPA 525.2 - 1,3-Dimethyl-2-nitrobenzene 97.0% / Pyrene-d10 94.0% / Triphenyl phosphate 126%
EPA 531.2 - 4-Bromo-3,5-dimethylphenyl-N-methylcarbamate 97.5%
SULFIDE: SUB* Sulfide analysis was completed by NYS DOH Lab. #10709.
UVABS: SUB* UV Absorbance analysis was completed by NYS DOH Lab. #10709 on 07/09/25 at 16:06. UV Transmittance result was 93.4.

Test procedures for all analyses meet NELAC requirements unless noted. If you have any questions, please call the laboratory.

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Capital Region Environmental Laboratory
137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Printed On : 8/8/2025
Sample ID: **BG08097**
Date Received: 07/09/2025
Time Received: 09:09
Date Finalized: 8/8/2025
PO Number:
Your Ref:

Customer:	Lamont Engineers	*Collect Date:*	07/08/2025
Owner:	Tilden Development	*Collect Time:*	19:28
Sample Loc:	538 US Route 20 New Lebanon	*Collected by:*	BB
Sample Pt:	Tilden Well	*Receipt Temp:*	6.4 C on ice chilling
Water Source:		*Potable:*	Yes
Chlorinated:	No *Field Residual Chlorine:*	*Grab/Comp:*	Grab

DRAFT

Brian Collins
Lead Technical Director Environmental Laboratory
and contact person
If you have questions, please call.

Reviewed by Brian Collins
These results relate to samples as received.

New York State DOH E.L.A.P. # 10350

MassDEP Cert. # M-NY934

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Capital Region Environmental Laboratory
137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Printed On 11/18/2025

Sample ID: **BG14014**
Date Received: 10/30/2025
Time Received: 14:55
Date Finalized:
PO Number:
Your Ref:

Customer: Lamont Engineers
Owner: Tilden
Sample Loc: Tilden
Sample Pt: Well Head Hose

Collect Date: 10/30/2025
Collect Time: 14:00
Collected by: MARK CHRISTMAN
Receipt Temp: 8.5 C On Ice Chilling

Water Source: Drilled Well
Chlorinated: No *Field Residual Chlorine:*

Potable: Yes
Grab/Comp: Grab

Laboratory Report

Test	Result	MCL	Qualifiers	Units	Method Used	Analyst	Analysis Date
E. coli	Negative			per 100 mL	SM 22 9223B	AJ/RM	10/30/2025
Total Coliform	Positive		X	per 100 mL	SM 22 9223B	AJ/RM	10/30/2025
Iron	0.22	0.3		mg/L	EPA200.7 Rev4.4	MN	11/6/2025
Manganese	0.61	0.3	X	mg/L	EPA200.7 Rev4.4	MN	11/6/2025
Sodium	69.9			mg/L	EPA200.7 Rev4.4	MN	11/3/2025
Chloride	227	250		mg/L	EPA 300.0 Rev 2.	EL	10/30/2025
Dissolved Solids, Total	623	500	X	mg/L	SM 22 2540C (-97	MN	11/3/2025
Hardness as CaCO3, Total	72	120		mg/L	SM 22 2340C	EL	11/4/2025
Suspended Solids, Total	<5			mg/L	SM2540D	MN	11/3/2025
Turbidity	0.60	5		NTU	EPA180.1 Rev2.0	RM	10/30/2025
UV Absorbance at 254	0.009			cm-1@254nm	SM5910B-00	SUB*	10/31/2025

Qualifiers Key:

X	Exceeds maximum contamination limit	R	Duplication outside acceptance limits	H	Hold time exceeded
T	Temperature outside specifications	A	Sample contained air bubble or headspace	B	Analyte detected in blank
C(+/-)	CCV outside acceptancee limits	Z	Analysis is not state-certified	G	Incorrect bottle received
S(+/-)	Lab control sample outside acceptance limits	M(+/-)	Matrix spike recovery outside acceptance limits	P	Sample preserved at lab
J	Analyte detected below quantitation limit	I(+/-)	IS/Surrogate outside acceptance limits		

(+ Result may be biased high / - Result may be biased low)

Legend: < Less Than, > Greater Than mg/L=PPM, ug/L=PPB If no collection time was given, 00:00 is reported

MCL = Maximum Contaminant Level referenced from New York State Subpart 5-1 of the Public Drinking Water Standards and/or National Primary/Secondary Drinking Water Standards.

Note 1: Per ELAP requirements, water analyzed for alkalinity, color, conductivity, nitrate, nitrite, sulfate, organics, UV absorbance, non-potable bacteriological analyses, BOD/CBOD, solids and phosphorus are required to be on ice to indicate the chilling process has begun. Samples must be between 0-6C and not frozen.

Comments:

For drinking water samples, any positive result for total coliform and/or Escherichia coli is unacceptable.

Total Coliform 27.1 MPN/100 mL

Sample was NEGATIVE when screened for total residual chlorine in laboratory.
Bacteriological sample was set up on 10/30/25 at 15:10.

HARDNESS: There are no specific levels set for hardness since excessive levels do not render the water unfit for consumption. However, when the level reaches the 120 mg/L plus range, problems with scale deposition on pipes and utensils and in hot water tanks increase. With a value of less than 120 mg/L, water softening is not necessary.
IRON/MANGANESE: The total of the two should not exceed 0.50 mg/L.

DRAFT

Capital Region Environmental Laboratory
137 Columbia Turnpike, Rensselaer, NY 12144
(518) 949-2020

Lamont Engineers
PO Box 610

Cobleskill ,NY 12043

Sample ID: **BG14014**
Date Received: 10/30/2025
Time Received: 14:55
Date Finalized:
PO Number:
Your Ref:

Customer:	Lamont Engineers	*Collect Date:*	10/30/2025
Owner:	Tilden	*Collect Time:*	14:00
Sample Loc:	Tilden	*Collected by:*	MARK CHRISTMAN
Sample Pt:	Well Head Hose	*Receipt Temp:*	8.5 C On Ice Chilling
Water Source:	Drilled Well	*Potable:*	Yes
Chlorinated:	No *Field Residual Chlorine:*	*Grab/Comp:*	Grab

SODIUM: The following are suggested limits for those persons on physician ordered sodium restricted diets: Moderately restricted diet---water should contain less than 270 mg/L; Severely restricted diet---water should contain less than 20 mg/L.
TURBIDITY: Turbidity was set up on 10/30/25 at 16:00.
UVABS: SUB* UV Absorbance analysis was completed by NYS DOH Lab. #10709 on 10/31/25 at 16:07. UV Transmittance was 98.0.

Test procedures for all analyses meet NELAC requirements unless noted.

DRAFT

Brian P. Collins

Brian Collins
Lead Technical Director Environmental Laboratory
and contact person
If you have questions, please call.
(518) 949-2020

These results relate to samples as received.

New York State DOH E.L.A.P. # 10350 **MassDEP Cert. # M-NY934**

Preliminary results only, pending final review.

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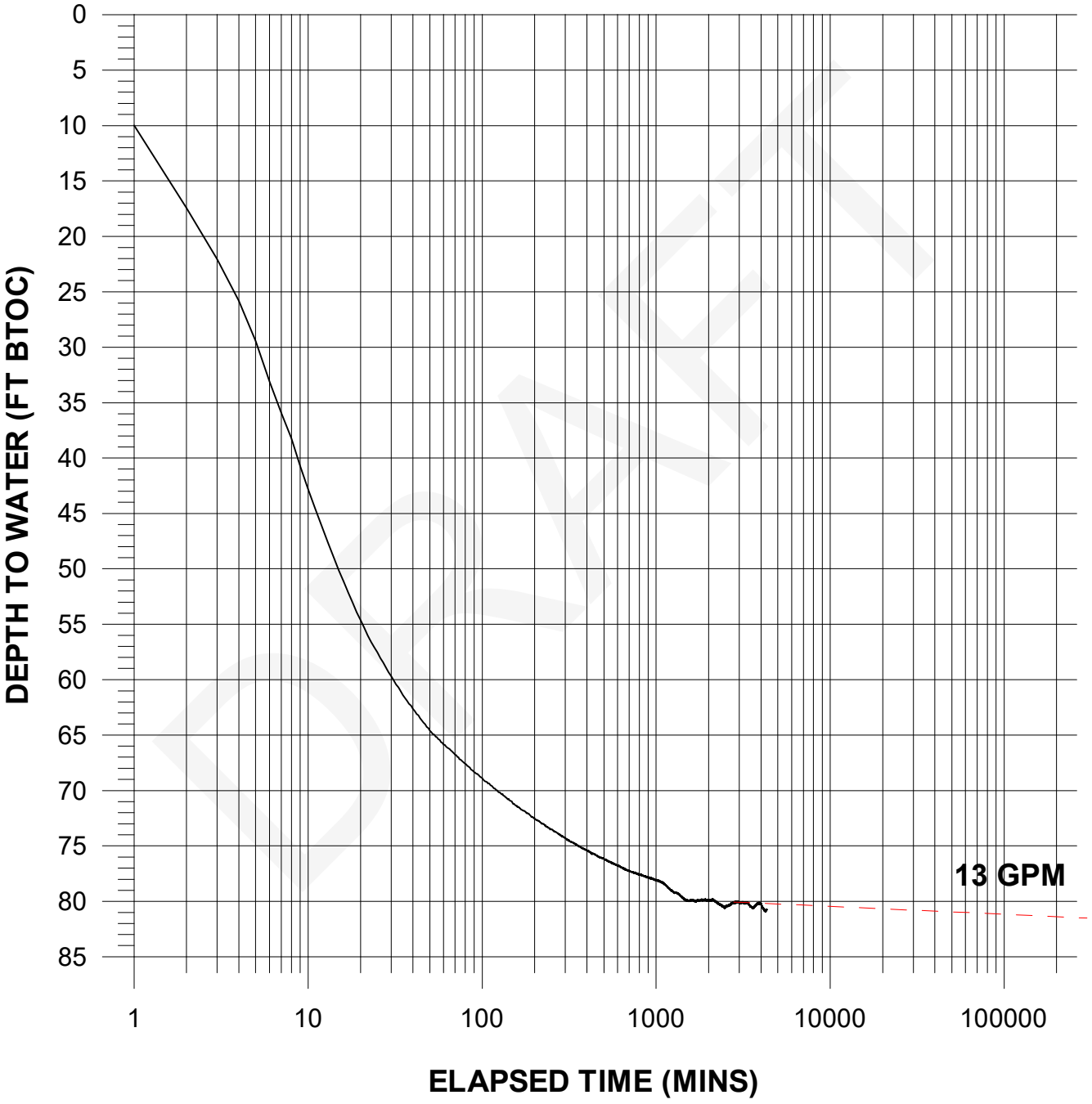
Appendix J
180-Day Projected Drawdown Graphs

DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
FINAL PUMPING RATE = 13 GPM
180-DAY DRAWDOWN PROJECTION AT PW-1



DRAFT

TILDEN ROAD DEVELOPMENT WATER SUPPLY
NEW LEBANON, NEW YORK
72-HOUR CONSTANT RATE PUMPING TEST OF PW-1
180-DAY PROJECTION AT 4 WEST STREET

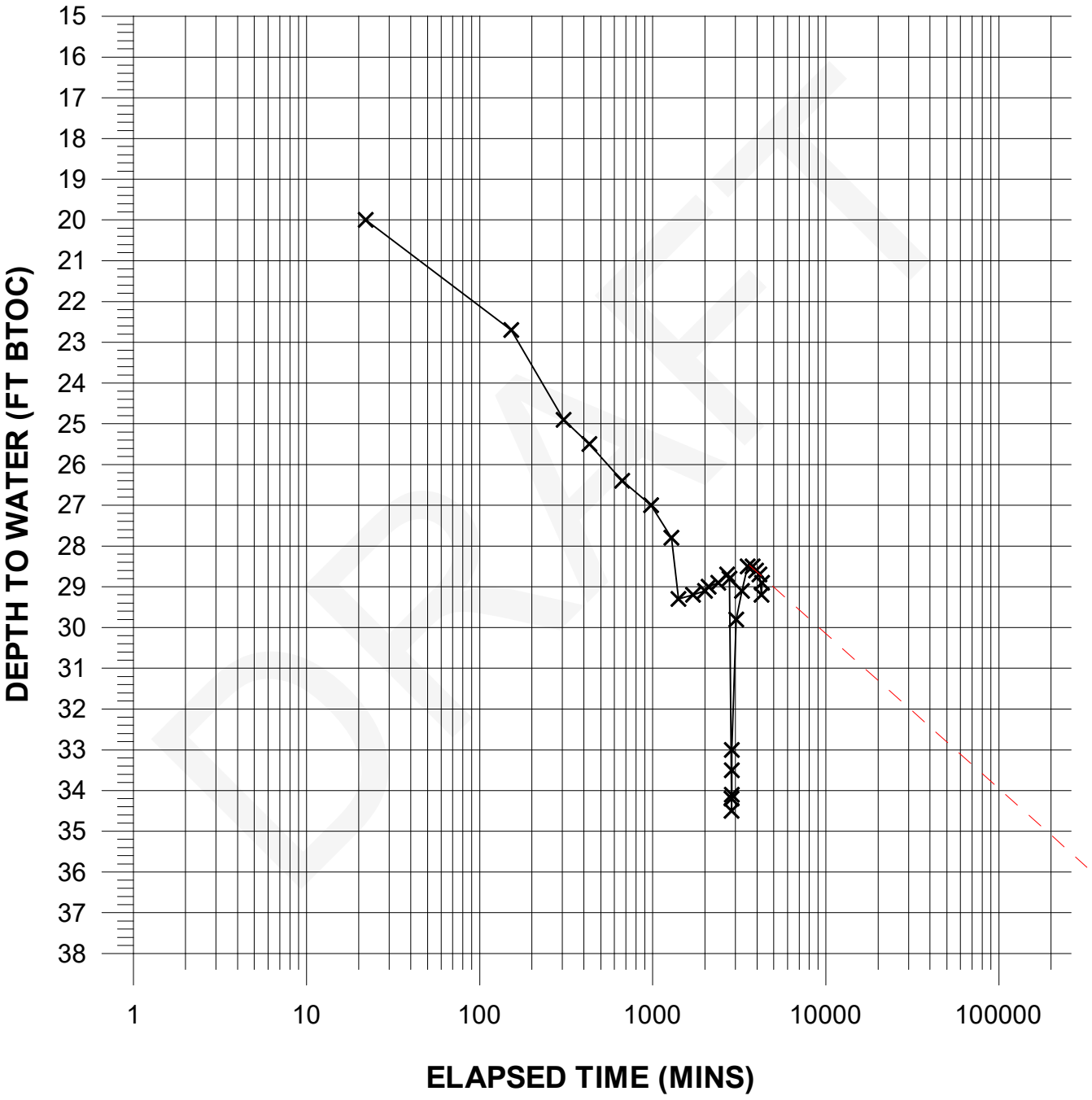


EXHIBIT D

New York State Department of Environmental Conservation
Email Correspondence Regarding SPDES General Permit

From:	Phillips, Lena M (DEC)
To:	Brendon Becker
Cc:	Asa Snyder; Malcolm, James E (DEC)
Subject:	Tilden Commons DEC ID 4-1048-00120 (T) New Lebanon, Columbia County
Date:	Tuesday, November 25, 2025 11:43:13 AM

Good morning,

Based on the information that has been provided, the Tilden Commons wastewater system is eligible for the SPDES General Permit for PCI Discharges to Groundwater of Treated Sanitary Sewage (PCI General Permit) that authorizes discharges to groundwater of between 1,000 gallons per day (gpd) and 10,000 gpd per onsite wastewater treatment system (OWTS) of treated sanitary sewage, and a combined facility discharge of less than 30,000 gpd.

To apply for the SPDES General Permit for PCI Discharges to Groundwater, a Notice of Intent (eNOI) for coverage must be submitted using the online nForm system: https://dec.ny.gov/maps/nysdec-nform.

Additional information and required forms can be found on DEC's website: https://dec.ny.gov/regulatory/permits-licenses/general-permits/spdes-private-commercial-institutional. If you have any questions or need assistance with the application process, please contact pci.generalpermit@dec.ny.gov.

It is advised that a SEQR determination be issued **prior to applying** for the SPDES PCI General Permit.

Please let me know if you have any questions.

Thanks!

Lena Phillips
Environmental Analyst
New York State Department of Environmental Conservation
Region 4 | Division of Environmental Permits
1130 North Westcott Road, Schenectady, NY 12306
518-357-2447 | lena.phillips@dec.ny.gov
dec.ny.gov

EXHIBIT E

Creighton Manning Engineering & Surveying, PLLC
Traffic Assessment Report

November 25, 2025

Mr. Brendon Becker
Lamont Engineers, P.C.
197 Elm Street
Cobleskill, New York 12043

RE: Traffic Assessment, Tilden Mixed-Use Development, 538 Route 20, Town of New Lebanon, Columbia County, New York; CM Project No. R251170.00

Dear Mr. Becker:

Creighton Manning Engineering & Surveying, PLLC (CM) has conducted a *Traffic Assessment* for the proposed *Tilden Mixed-Use Development* project located on US Route 20 in the Town of New Lebanon. This evaluation is based on the proposed "Site Plan" prepared by the Lamont Engineers dated October 1, 2025 (Attachment A).

1.0 Project Description

The proposed project includes the construction of a mixed-use development that includes 41 apartment units and an approximate 12,500 square-foot (SF) grocery store located in the northeast quadrant of the US Route 20/Tilden Road intersection. It is anticipated that primary access to the site will continue to be provided via an existing cub cut located on US Route 20 approximately 215-feet east of Tilden Road. In addition, a curb cut located approximately 400-feet north of US Route 20 will be provided for access to the rear of the parcel. It is noted that the existing curb cut on Tilden Road will be repurposed as the *Service* Driveway and shifted to the south approximately 125-feet north of US Route 20 in order to provide a separate access for truck deliveries. An existing curb cut on US Route 20 located approximately 60-feet east of Tilden Road will be eliminated which is consistent with access management principles. It is anticipated that the proposed development will be fully built and occupied by 2028. The project location is shown on Figure 1.

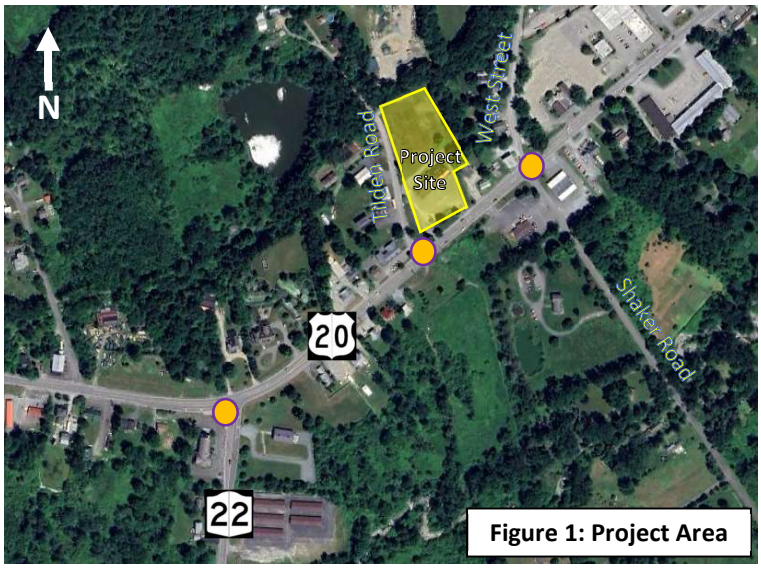


Figure 1: Project Area

2.0 Existing Conditions

Roadway Serving the Site

- US Route 20 is an east-west roadway that travels through the Town of New Lebanon and is classified as a rural principal arterial other. US Route 20 provides a single 12-foot wide travel lane in each direction with 4 to 6-foot-wide paved shoulders on both sides of the roadway in the vicinity of the site as well as a 12-foot wide two-way left-turn lane median (TWLTL). Land uses along the roadway generally consist of commercial and residential uses. There are no sidewalks on US Route 20; however, a $2.5M CRP Grant was awarded for the proposed *New Lebanon Walkable Downtown project.* This will add 5-foot wide stone dust sidewalks to the following sections of US Route 20:

- North Side – 4,600-foot sidewalk from *New Lebanon High School* to the *New Lebanon Library*
- South Side – 1,000-foot sidewalk from *Midtown Mall* to the *Roaring 20's Brewery & Taphouse*

In addition, pedestrian crossings with refuge islands will be provided west of the Tilden Road intersection at the *New Lebanon Library* and near *Valley Plaza* and the *Midtown Mall* commercial businesses (see Aerial 1 of crossing near project site).

- Tilden Road (Photo #1) is classified as a rural local road that travels north from US Route 20 before it dead-ends. Tilden Road provides an approximate 22 to 24-foot wide roadway with a travel lane in each direction and no shoulders. Sidewalk are not provided on either side of the road and the posted speed limit is 30-mph. Land uses along the roadway generally consist of commercial and residential uses.

Photo #1 – Tilden Road

Study Area Intersections

- US Route 20/NY Route 22 – This is a three-leg intersection operating under stop-sign control on the northbound NY Route 22 approach. In addition, a flashing traffic signal is also provided with amber lights on the eastbound and westbound US Route 20 approaches and a flashing red light on the northbound US Route 20 approach. The eastbound US Route 20 approach provides a through lane and a separate right-turn lane while the eastbound US Route 20 approach provides an exclusive left-turn lane and a through lane. The northbound NY Route 22 approach provides separate left and right turn lanes. Sidewalks, marked crosswalks, and pedestrian push buttons with countdown timers are not provided.
- US Route 20/Tilden Road – This is a three-leg intersection operating under stop-sign control on the southbound Tilden Road approach. The eastbound US Route 20 approach provides a through lane and the TWLTL for left-turns while the westbound US Route 20 approach provides a single lane for shared through/right-turn movements. A single lane is provided on the southbound Tilden Road approaches for shared left and right turn movements. Sidewalks and marked crosswalks are not provided at this intersection.

- US Route 20/Shaker Road/West Street – This is a four-leg intersection operating under stop-sign control on the northbound Shaker Road approach and the southbound West Street approach. The eastbound and westbound US Route 20 approaches provide a shared through/right-turn lane and a TWLTL for left-turn traffic. Sidewalks and marked crosswalks are not provided at this intersection.

Transit, Pedestrians, and Bicyclists

The Town of New Lebanon does not have its own dedicated transit service. As noted above, pedestrian accommodations are generally not provided in the project vicinity; however, construction of the *New Lebanon Walkable Downtown* project will significantly improve pedestrian connectivity in the Town. The following bike routes are also provided in the vicinity of the project:

- State Bicycle Route 5 is a signed, on-road bicycle route that extends 365 miles from Niagara Falls across New York to the Massachusetts state line. The route travels through the Town of New Lebanon on US Route 20 past the site.
- State Bike Route 22 is a signed, on-road bicycle route extending 48 miles in Columbia County. It begins at the Dutchess/Columbia County line on NY Route 22 and ends at US Route 20 in the Town of New Lebanon where it intersects with State Bike Route 5.

Table 1 shows the existing pedestrians and bicyclists observed during the peak hours of the traffic counts at the study area intersections.

Table 1 – Pedestrian and Bicycle Activity Summary

Intersection	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Pedestrians	Bikes	Pedestrians	Bikes	Pedestrians	Bikes
US Route 20/NY Route 22	0	0	0	0	0	0
US Route 20/Tilden Road	0	0	0	0	0	0
US Route 20/Shaker Road/West Street	1	0	2	0	0	0

Motor Vehicle Collision Analysis

Crash data was requested from NYSDOT to quantify the number of crashes and identify any crash patterns or concentrations at the study area intersections and on the segment of US Route 20 near the project site. CLEAR system data was provided by NYSDOT from July 1, 2020 through June 30, 2025 (five years). Table 2 summarizes the predominant crash types for the segment of US Route 20 near the project site and for the study area intersections.

Table 2 – Accident Type and Severity

Segments and Intersections	Collision Severity				Collision Type						
	Non-Reportable	Property Damage	Injury	Fatality	Rear-End	Overtaking	Left Turn	Right Angle	Animal	Fixed Object	Total
US Route 20/NY Route 22	0	5	0	0	1	2	1	0	1	0	**5**
US Route 20 – NY Route 22 to Tilden Road	0	4	0	0	0	0	0	0	3	1	**4**
US Route 20/Tilden Road	0	0	0	0	0	0	0	0	0	0	**0**
US Route 20 – Tilden Road to Shaker Road/West Street	0	0	0	0	0	0	0	0	0	0	**0**
US Route 20/Shaker Road/West Street	1	4	0	0	1	0	0	3	0	1	**5**
Total	**1**	**13**	**0**	**0**	**2**	**2**	**1**	**3**	**4**	**2**	**14**

There was a total of 14 crashes on the segments and intersections of US Route 20 between NY Route 22 and Shaker Road/West Street. There were 13 crashes that resulted in property damage only (PDO) and one (1) non-reportable (NR) crash. There were no fatal or injury accidents. The predominant collision types were animal crashes and right-angle/left-turn collisions. Predominant apparent factors for these collisions include failure to yield right of way and improper lane use. An accident summary (TE-213 equivalent) is provided under Attachment B. The following summary is provided for each location.

- US Route 20/NY Route 22 – There were two (2) overtaking crashes that occurred when trucks traveling northbound on NY Route 22 attempted to make a right-turn onto US Route 20; however, these larger vehicles used the left-turn lane in order to make the swing. At the same time, passenger cars were attempting to make the same turn from the right-turn lane and were struck by the trailer of the trucks due to a failure to yield the right-of-way and improper turning. The left-turn crash occurred when a motorist made a northbound left-turn from NY Route 22 and failed to yield the right-if-way to an eastbound vehicle due to a disregard of the stop-sign. The rear-end collision occurred on the northbound approach due to following too closely. There was one deer strike at this intersection.
- Segment of US Route 20 – NY Route 22 to Tilden Road – There were three (3) collisions with a deer and one collision with a sign post due to a driver leaving the roadway after becoming ill on this segment of US Route 20.
- US Route 20/Shaker Road/West Street – The rear-end crash occurred when a vehicle traveling eastbound on US Route 20 was struck by a motorist that was following too closely at an unsafe speed while the fixed object collision occurred when a vehicle slid through the intersection due to poor weather conditions. There were two (2) right-angle crashes that involved a southbound motorist on West Street failing to yield the right-of-way to an eastbound vehicle on US Route 20 due to glare and driver inattention. There was also a right-angle collision that involved a northbound motorist on Shaker Road that failed to yield the right-of-way to a westbound vehicle on US Route 20.

Data Collection

Turning movement counts were conducted at the study area intersections on Wednesday, November 12, 2025 during the morning peak period (7:00 to 9:00 a.m.) and during the evening peak period (3:00 to 5:00 p.m.). Turning movement counts were also conducted during the peak weekend time period on Saturday, November 8, 2025 from 11:00 a.m. to 1:00 p.m. The observed peak hours generally occurred during the following times:

- AM Peak Hour – 7:15 to 8:15 a.m.
- PM Peak Hour –4:00 to 5:00 p.m.
- Saturday Peak Hour – 11:15 a.m. to 12:15 p.m.

The Existing 2025 Traffic Volumes at the study area intersections during the weekday morning and afternoon hours and during the weekend Saturday hours are shown on Figure 2-1.

The New York State Department of Transportation (NYSDOT) has a continuous count station (CCS) on US Route 20 located approximately ¼ mile west of Tilden Road. Traffic volume count data from May 2025 indicates that US Route 20 currently serves approximately 8,275 vehicles per day (vpd). The data also indicates that the 85th percentile speed[1] on US Route 20 is approximately 47-mph in the eastbound direction and 48-mph in the westbound direction. The raw turning movement count and CCS data is included under Attachment C.

1 The 85th percentile speed is the speed in which 85 percent of drivers were observed driving at or below.

3.0 Sight Distance

A sight distance evaluation was completed at the proposed shared Site Driveway locations on US Route 20 and Tilden Road. Available *intersection* sight distance was measured from the perspective of a vehicle exiting the Site Driveways. It was also measured for a vehicle traveling eastbound along US Route 20 and southbound on Tilden Road looking straight ahead to turn left onto the Site Driveways. The available intersection sight distance should provide drivers a sufficient view of the intersecting roadway to allow passenger cars to enter or exit the intersection without excessively slowing vehicles traveling at or near the operating speed on the intersecting mainline.

Stopping sight distance was also measured on US Route 20 and Tilden Road at the Site Driveway locations. Stopping sight distance is the length of the roadway ahead that is visible to the driver. The available stopping sight distance on a roadway should be of sufficient length to enable a vehicle traveling at or near the operating speed to stop before reaching a stationary object in its path.

The sight distances measured in the field were compared to the guidelines presented in *A Policy on Geometric Design of Highways and Streets, 2018* published by the American Association of State Highway Transportation Officials (AASHTO) and the current NYSDOT design guidance presented in the *Highway Design Manual Chapter 5 and Chapter 7* (Appendix 5C and Exhibit 7-7) for a 50-mph travel speed in the eastbound and westbound directions on US Route 20. In addition, a 35-mph operating speed was used for northbound vehicles on Tilden Road (speed limit plus 5-mph); however, it is noted that the proposed Site Driveway on Tilden Road is located approximately 150-feet south of the dead-end associated with the public road (See Photo #2). Vehicles traveling southbound from the uses coming from the dead-end will be traveling at approximately 10-mph (or slower) as they enter Tilden Road; therefore, the available sight distances associated with vehicle traveling to/from the north for the Site Driveway were compared to AASHTO guidelines for a 10-mph operating speed. The results of the sight distance analysis are summarized in Table 3 for the applicable design speeds for the approaches noted above.

Photo #2 – End of Tilden Road

Table 3 – Sight Distance Summary (feet)

Intersection		Intersection Sight Distance[1]				Stopping Sight Distance[2]	
		Right-Turn from Site Driveway (D_L)	Left-Turn from Site Driveway		Left-Turn from US Route 20 and Tilden Road (D_S)	$SSD_{EB, NB}$	$SSD_{WB, SB}$
			Looking Left (D_L)	Looking Right (D_R)			
US Route 20/ Site Driveway	Available	>900	>900	>900	>900	>900	>900
	Recommended[3]	480	555	555	405	390	390
Tilden Road/ Site Driveway	Available	425	425	150*	425	400	125*
	Recommended[3]	335	390	115	285	225	40

XXX = Available Sight Distance, XXX* = Sight distance to end of public street.

[1] Intersection sight distance is measured at 14.5 feet back from the travel way at an object height of 3.5 feet and an eye height of 3.5 feet.

[2] Stopping sight distance measured for a 2-foot object located in the path of eastbound/westbound vehicles on US Route 20 and northbound/southbound vehicles on Tilden Road at an eye height of 3.5 feet.

[3] The 85th percentile speed was measured to be approximately 50-mph in each direction on US Route 20 and is assumed to be 35-mph in the northbound direction and 10-mph in the southbound direction on Tilden Road.

The sight distance evaluation at the proposed Site Driveways on US Route 20 and Tilden Road indicates that the available intersection and stopping sight distances meet AASHTO guidelines for the operating speeds.

4.0 Traffic Assessment

Trip Generation

Trip generation determines the quantity of traffic expected to travel to/from a given site. The Institute of Transportation Engineers (ITE) *Trip Generation*, 12th edition, is the industry standard used for estimating trip generation for a proposed land use based on data collected at similar uses. Traffic estimates for the proposed *Tilden Mixed-Use Development* were prepared using the Land Use Code (LUC) 220 for Multifamily Housing (Low-Rise) and LUC 850 for a Supermarket to determine how much traffic the site will generate during the weekday AM and PM peak hours and during the weekend Saturday peak hour.

It can be expected that some trips to the proposed grocery store will originate from traffic that is already passing the site on US Route 20. Pass-by trips are vehicles that will stop at the site before continuing on to their primary destination. For example, a driver traveling eastbound on US Route 20 leaving work may stop at the grocery store and then continue eastbound towards home. This type of trip would be considered a pass-by trip. Based on a review of data published by ITE, a pass-by trip percentage was applied to trips generated by the site. The peak hour trip generation estimate is summarized in Table 4.

Table 4 – Trip Generation Summary

Land Use	Land Use Code	Size	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Multifamily Housing (Low-Rise)	LUC 220	41 units	7	20	27	17	10	27	8	12	20
Grocery Store	LUC 850	12,500 SF	22	15	37	70	70	140	86	86	172
Pass-By – AM/PM = 24%, SAT = 19%			-4	-4	-8	-17	-17	-34	-16	-16	-32
Total			**25**	**31**	**56**	**70**	**63**	**133**	**78**	**82**	**160**

Accounting for pass-by trips, the proposed project is expected to generate 56 new vehicle trips during the AM peak hour, 133 new vehicle trips during the PM peak hour, and 160 new vehicle trips during the Saturday peak hour. The total number of trips expected at the Site Driveways is the sum of the new trips and the pass-by. It is noted that the distribution of travel in and out of the site will result in a maximum increase of approximately 35 new trips on any one approach of the study area intersections.

The trip generation estimate did not account for a multi-use trip credit even though it is anticipated that the proposed residential units and the grocery store will share trips between the two uses. It is also noted that the applicant has an agreement with the *New Lebanon Farmer's Market & Grocery* to occupy the grocery space which will allow them to expand from their existing store located in the northwest quadrant of the US Route 20/Shaker Road/West Road intersection. The trip generation estimate did not account for a trip credit associated with the existing store which is currently generating traffic in the area. For these reasons, the trip generation estimate is considered conservative.

Future Traffic Volumes

To evaluate the impact of the proposed development, traffic projections were prepared for the expected year of completion, 2028. Historical traffic volume data published by the NYSDOT indicates that traffic volume growth in the vicinity of the site has decreased by approximately ½ percent per year on US Route 20 over the past several years. In order to provide a conservative assessment, a growth rate of ½ percent per year was used to estimate general background growth in traffic volumes. In addition, the Town of New

Lebanon Planning Board Chairman was contacted and indicated that there are no other development projects approved or pending in the project area that will impact background traffic conditions; therefore, the general background growth rate was applied to the existing traffic volumes to develop the 2028 No-Build Traffic Volumes, representing future traffic volumes in the study area *without* the proposed development. These volumes are illustrated in Figure 2-2.

The primary trip distribution patterns and trip assignment for the proposed development are shown on Figure 3-1 and Figure 3-2 while the pass-by trip distributions and trip assignments are shown on Figure 4-1 and Figure 4-2. The site generated trips were added to the No-Build 2028 Traffic Volumes resulting in the Build 2028 Traffic Volumes for the weekday AM and PM peak hours and the weekend Saturday peak hour as shown on Figure 5.

Traffic Operations

Intersection Level of Service (LOS) and capacity analysis relate traffic volumes to the physical characteristics of an intersection. Intersection evaluations were made using the Synchro 11 Software, which automates the procedures contained in the *Highway Capacity Manual.* Table 5 summarizes the results of the level of service calculations for the proposed project. The detailed level of service analyses are included under Attachment D.

Table 5 – Level of Service Summary

Intersection		Control	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
			2025 Existing	2028 No-Build	2028 Build	2025 Existing	2028 No-Build	2028 Build	2025 Existing	2028 No-Build	2028 Build
US Route 20/NY Route 22		u									
US Route 20 WB	L		A (8.2)	A (8.3)	A (8.3)	A (8.0)	A (8.0)	A (8.1)	A (8.1)	A (8.1)	A (8.2)
NY Route 22 NB	L		B (13.0)	B (13.1)	B (13.4)	B (12.8)	B (12.9)	B (13.4)	B (13.5)	B (13.6)	B (14.3)
	R		B (10.3)	B (10.4)	B (10.5)	B (10.3)	B (10.3)	B (10.6)	B (10.3)	B (10.4)	B (10.7)
US Route 20/Tilden Road		U									
US Route 20 EB	L		A (8.2)	A (8.2)	A (8.3)	A (7.9)	A (7.9)	A (8.0)	A (8.8)	A (8.8)	A (9.0)
Tilden Road SB	LR		B (10.6)	B (10.6)	B (10.9)	B (11.5)	B (11.6)	B (11.3)	B (11.7)	B (11.8)	B (12.0)
US Route 20/Shaker Road/ West Street		U									
US Route 20 EB	L		A (7.9)	A (7.9)	A (7.9)	A (7.9)	A (8.0)	A (8.1)	A (8.1)	A (8.1)	A (8.2)
US Route 20 WB	L		A (7.9)	A (7.9)	A (7.9)	A (7.9)	A (7.9)	A (8.0)	A (8.0)	A (8.0)	A (8.1)
Shaker Rod NB	LTR		B (13.6)	B (13.7)	B (14.2)	B (13.9)	B (14.0)	C (15.1)	C (15.9)	C (16.0)	C (17.9)
West Street SB	LTR		B (12.7)	B (12.8)	B (13.1)	B (14.3)	B (14.5)	C (15.1)	C (16.3)	C (16.5)	C (18.0)
US Route 20/Site Driveway		U									
US Route 20 EB	L		--	--	A (7.8)	--	--	A (8.1)	--	--	A (8.3)
Site Driveway SB	LR		--	--	B (11.2)	--	--	B (12.7)	--	--	B (13.4)
Tilden Road/Site Driveway		U									
Tilden Road SB	L		--	--	A (0.0)	--	--	A (0.0)	--	--	A (0.0)
Site Driveway WB	LR		--	--	A (8.6)	--	--	A (8.6)	--	--	A (8.6)

U = Unsignalized intersection (stop-sign control)
EB, WB, NB, SB = Eastbound, Westbound, Northbound, and Southbound intersection approaches
L, T, R = Left-turn, Through, and/or Right-turn movements
X (Y.Y) = Level of service (Average delay in seconds per vehicle)

The impact of the project can be described by comparing the analysis of the No-Build and Build operating conditions. The level of service analysis indicates that the unsignalized study area intersections will operate at LOS C or better through Build conditions during the AM and PM peak hours with an increase in average vehicle delay less than two (2) seconds to any movement. No mitigation is recommended at these existing locations.

The analysis of the Site Driveway intersection on US Route 20 indicates that the southbound Site Driveway approach will operate at LOS B and that the left-turn movement from US Route 20 into the site will operate at LOS A during the peak hours. It is recommended that the southbound Site Driveway approach operate under stop-sign control and that a single lane be provided for shared left and right turn movements. In addition, the analysis of the Site Driveway intersection on Tilden Road indicates that all movements at this intersection will operate at LOS A during the peak hours. It is recommended that the westbound Site Driveway approach operate under stop-sign control and that a single lane be provided for shared left and right turn movements.

Queuing Evaluation

A queuing evaluation was conducted at the unsignalized US Route 20/Tilden Road intersection to determine if queuing associated with future traffic operations will impact the adjacent Site Driveway intersections. It is noted that the Site Driveway and Service Driveway on Tilden Road will be located approximately 400-feet and 125-feet north of US Route 20, respectively and can accommodate approximately sixteen (16) vehicles and five (5) vehicles in queue before operations of these new intersections will be impacted. In addition, summary of queuing at the Site Driveway intersections was also conducted to ensure that internal operations of the site will not be impacted by vehicles exiting the development. Table 6 summarizes the queues at these intersections.

Table 6 – 95th Percentile Queuing Summary (in feet)

Intersection		Available Storage	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
			No-Build	Build	No-Build	Build	No-Build	Build
US Route 20/Tilden Road								
US Route 20 EB	L	100	0	0	0	0	0	0
Tilden Road SB	LR	400	0	25	0	25	25	25
US Route 20/Site Driveway								
US Route 20 EB	L	125	--	0	--	25	--	25
Site Driveway SB	LR	50	--	25	--	25	--	25
Tilden Road/Site Driveway								
Tilden Road SB	L	250	--	0	--	0	--	0
Site Driveway WB	LR	50	--	0	--	0	--	0

NB, SB, EB, WB = Northbound, Southbound, Eastbound, and Westbound intersection approaches
L, T, R = Left-turn, Through, and/or Right-turn movements

Build Conditions – The Synchro model indicates that the southbound Tilden Road approach will experience 95th percentile vehicle queues of approximately one vehicle (25-feet) or less during the peak hours. This indicates that the 95th percentile queues on the southbound Tilden Road approach will not block the Site Driveway and Service Driveway intersections during the peak hours. In addition, the 95th percentile queues on the Site Driveways will have queues of approximately one (1) vehicle (25-feet) or less during the peak hours which will not impact operations of the internal parking lot. A review of Table 6 indicates that construction of the *Tilden Mixed-Use Development* will not significantly increase queuing in the study area during the peak hours when compared to No-Build conditions. A review of the SimTraffic simulation indicates that adequate traffic operations will be provided at the Site Driveway intersections on US Route 20 and Tilden Road.

5.0 Conclusions

The proposed project includes the construction of a mixed-use development that includes 41 apartment units and an approximate 12,500 SF grocery store located in the northeast quadrant of the US Route 20/Tilden Road intersection. It is anticipated that primary access to the site will continue to be provided via

an existing cub cut located on US Route 20 approximately 215-feet east of Tilden Road. In addition, a curb cut located approximately 400-feet north of US Route 20 will be provided for access to the rear of the parcel. It is noted that the existing curb cut on Tilden Road will be repurposed as the Service Driveway and shifted to the south approximately 125-feet north of US Route 20 in order to provide a separate access for truck deliveries. An existing curb cut on US Route 20 located approximately 60-feet east of Tilden Road will be eliminated which is consistent with access management principles. It is anticipated that the proposed development will be fully built and occupied by 2028. The following is noted regarding the proposed project:

- A review of US Route 20 indicates that there are no sidewalks in the vicinity of the project site; however, a $2.5M CRP Grant was awarded for the proposed *New Lebanon Walkable Downtown project.* This will add 5-foot wide stone dust sidewalks to the following sections of US Route 20:
    - North Side – 4,600-foot sidewalk from *New Lebanon High School* to the *New Lebanon Library*
    - South Side – 1,000-foot sidewalk from *Midtown Mall* to the *Roaring 20's Brewery & Taphouse*

  In addition, pedestrian crossings with refuge islands will be provided west of the Tilden Road intersection at the *New Lebanon Library* and near *Valley Plaza* and the *Midtown Mall* commercial businesses.
- The sight distance evaluation at the proposed Site Driveways on US Route 20 and Tilden Road indicates that the available intersection and stopping sight distances meet AASHTO guidelines for the operating speeds.
- Accounting for pass-by trips, the proposed project is expected to generate 56 new vehicle trips during the AM peak hour, 133 new vehicle trips during the PM peak hour, and 160 new vehicle trips during the Saturday peak hour. The total number of trips expected at the Site Driveways is the sum of the new trips and the pass-by. It is noted that the distribution of travel in and out of the site will result in a maximum increase of approximately 35 new trips on any one approach of the study area intersections.
- The level of service analysis indicates that the unsignalized study area intersections will operate at LOS C or better through Build conditions during the AM and PM peak hours with an increase in average vehicle delay less than two (2) seconds to any movement. No mitigation is recommended at these existing locations.
- The analysis of the Site Driveway intersections on US Route 20 and Tilden Road indicates that all movements will operate at LOS B or better during the peak hours. It is recommended that the Site Driveway approaches operate under stop-sign control and that a single lane be provided for shared left and right turn movements.
- A review of expected queuing at the study area intersections indicates that construction of the *Tilden Mixed-Use Development* will not significantly increase queuing during the peak hours when compared to No-Build conditions. The SimTraffic simulation indicates that adequate traffic operations will be provided at the Site Driveway intersections on US Route 20 and Tilden Road.

Please feel free to call our office if you have any questions or comments regarding the above evaluation.

Respectfully submitted,
Creighton Manning Engineering & Surveying, PLLC

Mark Nadolny
Associate

Mark A. Sargent, P.E.
Group Leader/Senior Project Manager

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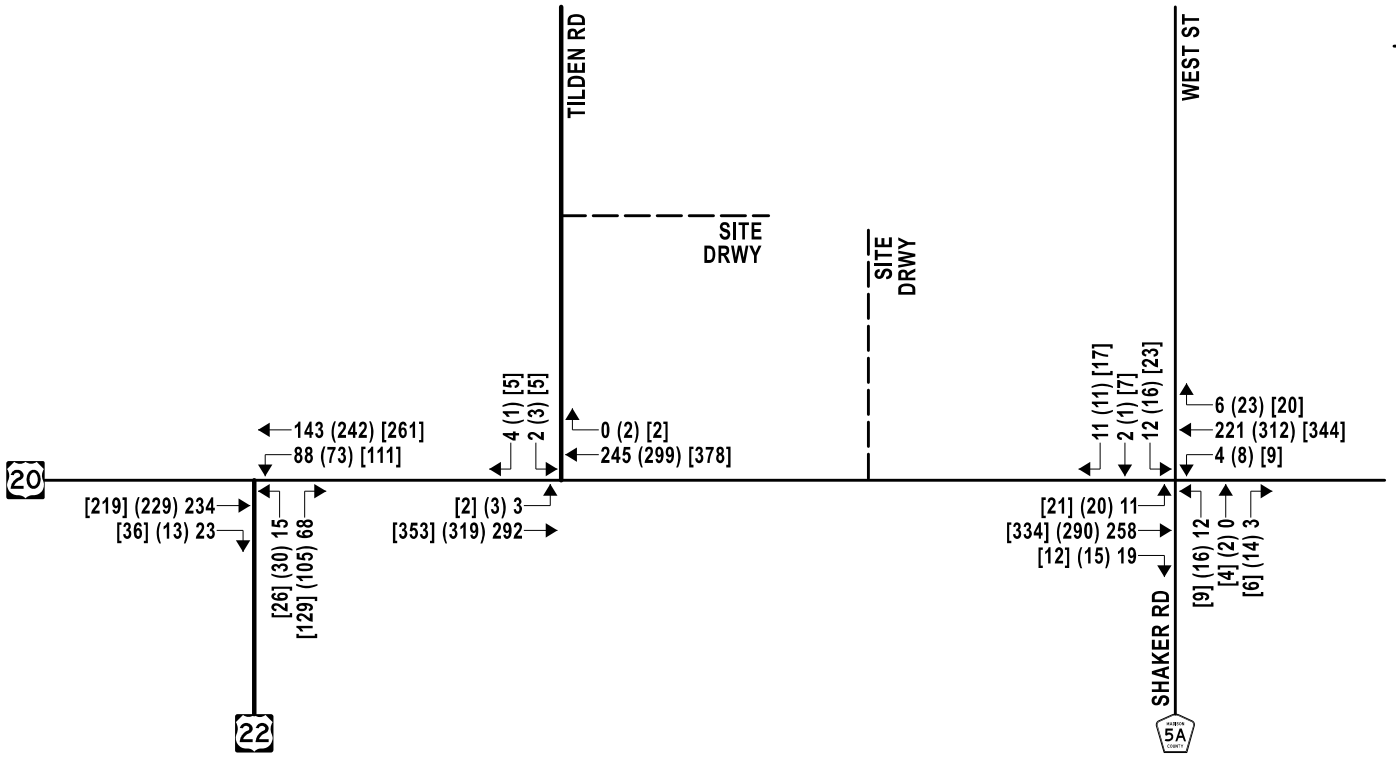
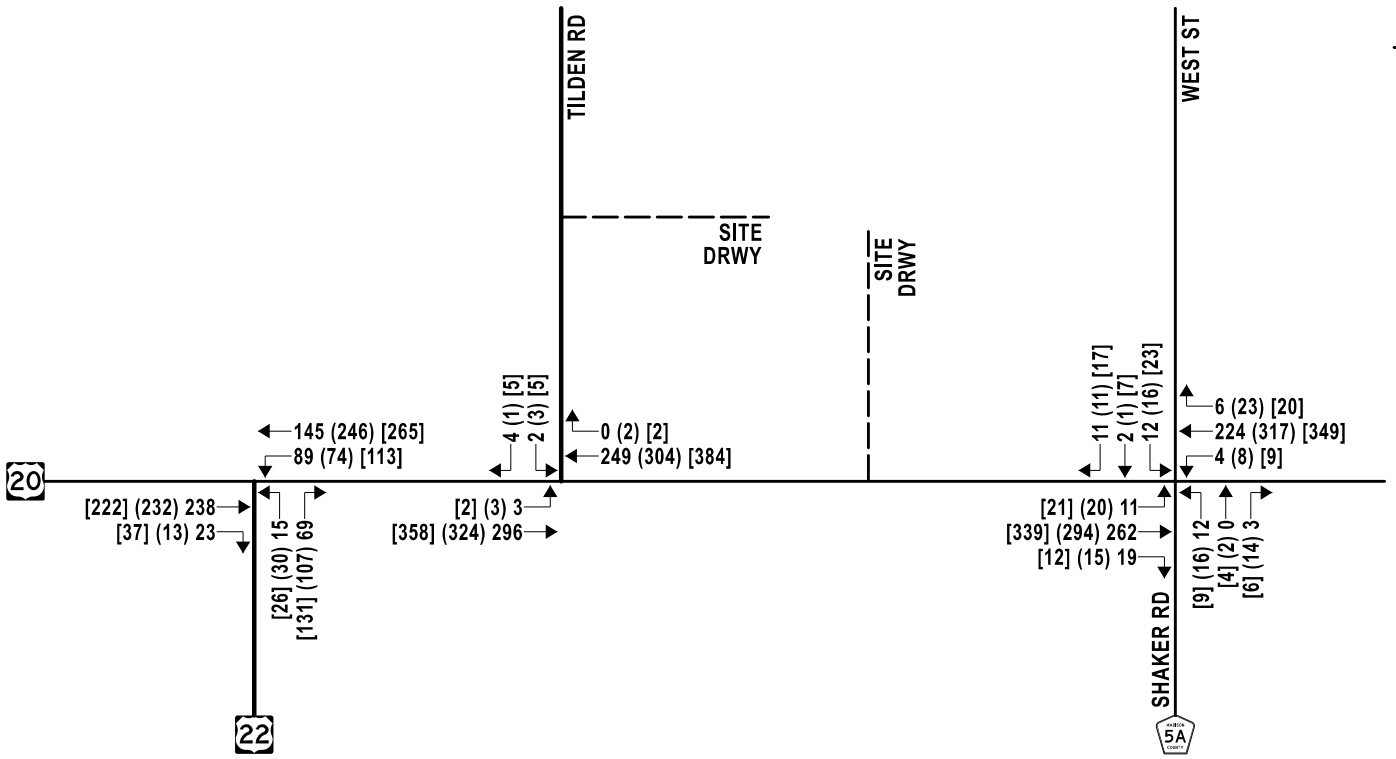
① EXISTING 2025 TRAFFIC VOLUMES



AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

② NO-BUILD 2028 TRAFFIC VOLUMES



AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

EXISTING AND NO-BUILD TRAFFIC VOLUMES

TILDEN MIXED-USE DEVELOPMENT
TOWN OF NEW LEBANON, NEW YORK

Creighton Manning
a GAI Company

PROJECT: R251170.00	DATE: 11/2025	FIGURE: 2

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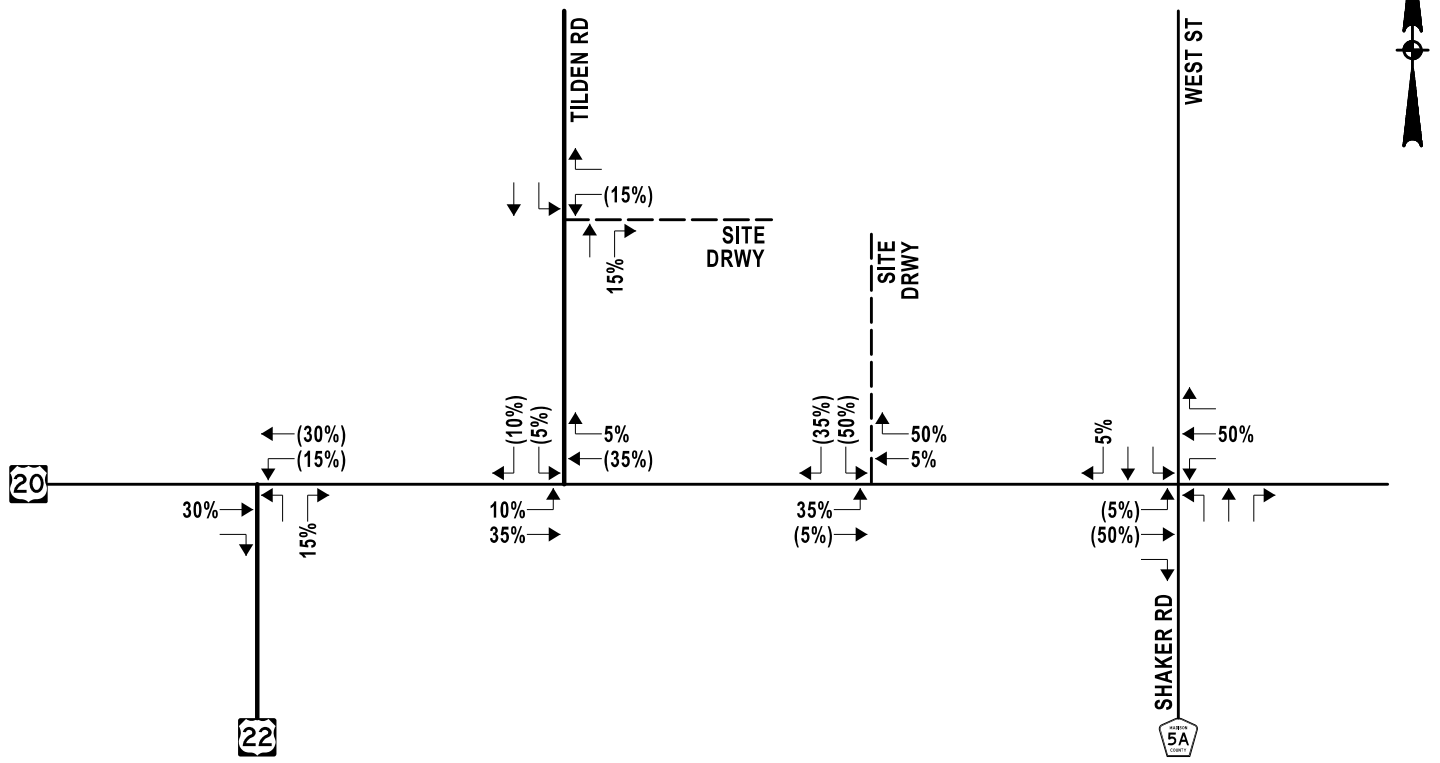

ENTERING (EXITING)

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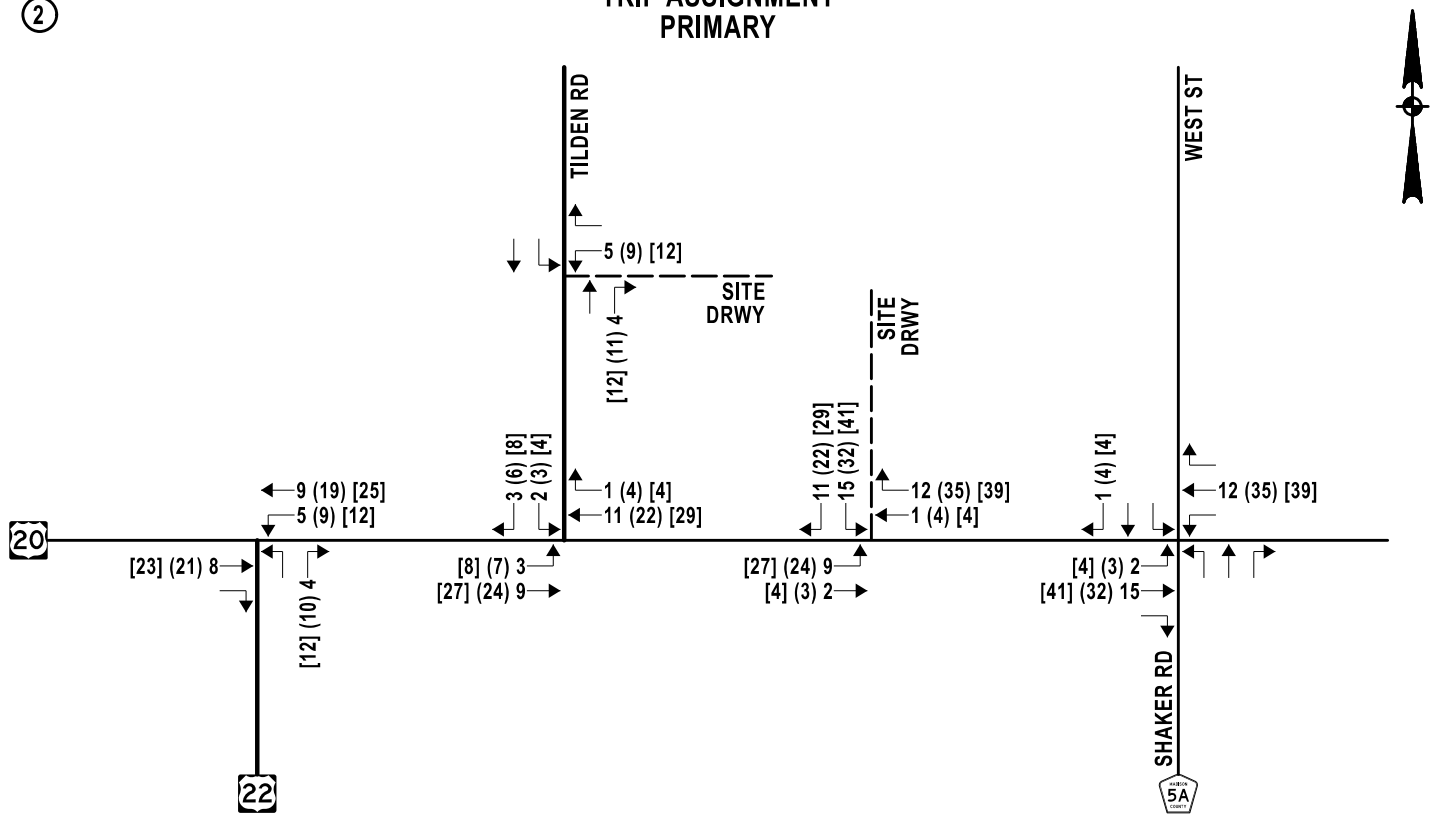

AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

PRIMARY TRIP DISTRIBUTION AND ASSIGNMENT

TILDEN MIXED-USE DEVELOPMENT
TOWN OF NEW LEBANON, NEW YORK

Creighton Manning
a GAI Company

PROJECT: R251170.00	DATE: 11/2025	FIGURE: 3

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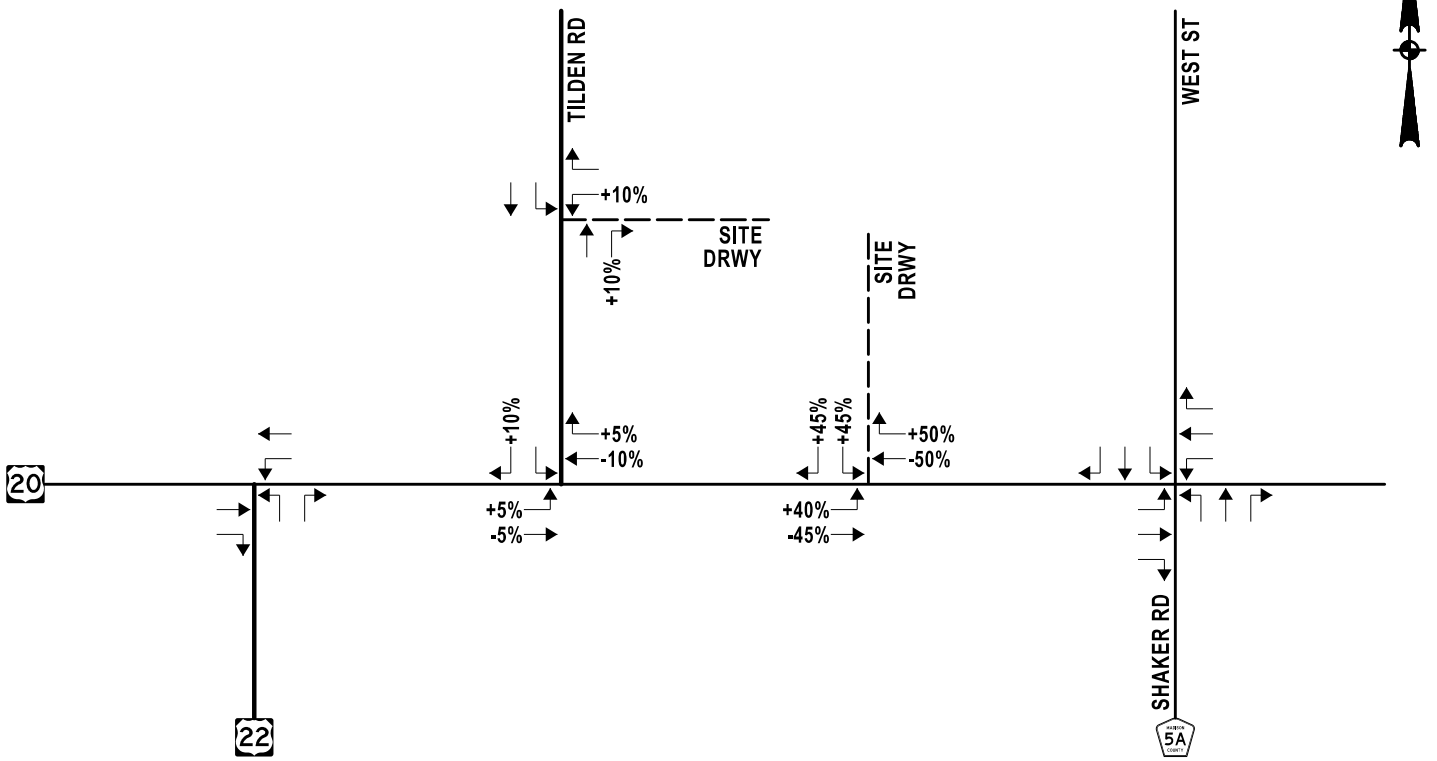
① TRIP DISTRIBUTION PASS-BY



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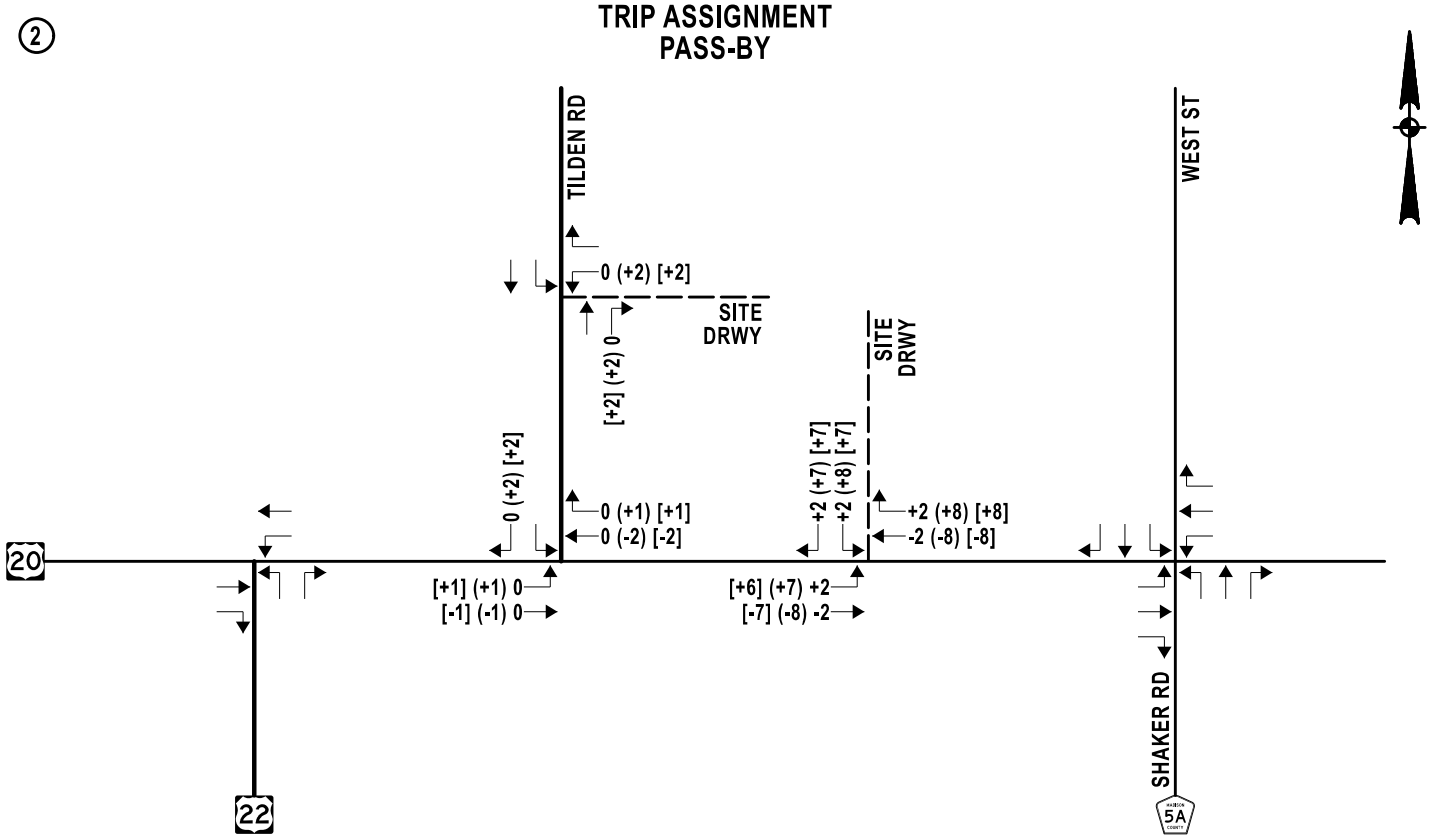

AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

PASS-BY TRIP DISTRIBUTION AND ASSIGNMENT

TILDEN MIXED-USE DEVELOPMENT
TOWN OF NEW LEBANON, NEW YORK

Creighton Manning
a GAI Company

PROJECT: R251170.00	DATE: 11/2025	FIGURE: 4

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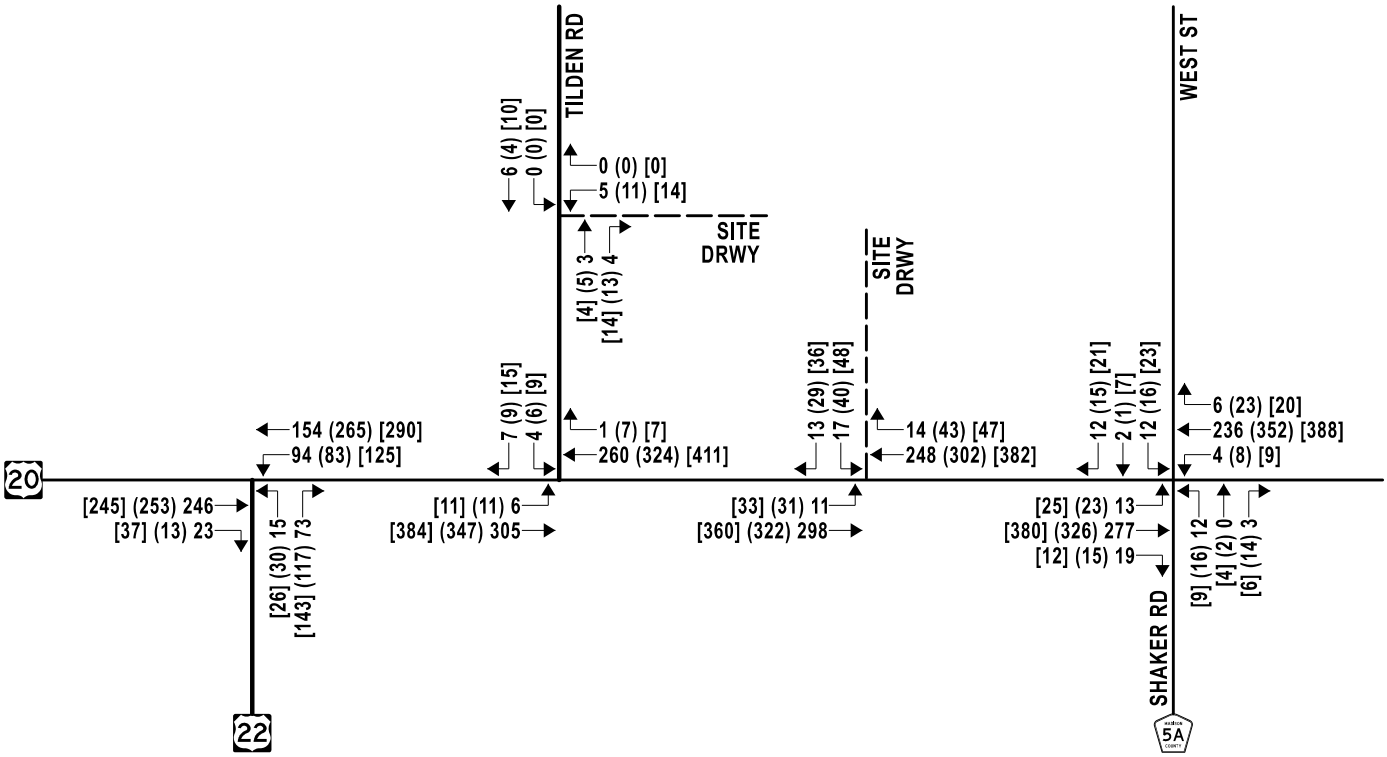
BUILD 2028 TRAFFIC VOLUMES



AM PEAK HOUR (PM PEAK HOUR) [SATURDAY PEAK HOUR]

BUILD TRAFFIC VOLUMES

TILDEN MIXED-USE DEVELOPMENT
TOWN OF NEW LEBANON, NEW YORK

Creighton Manning
a GAI Company

PROJECT: R251170.00	DATE: 11/2025	FIGURE: 5

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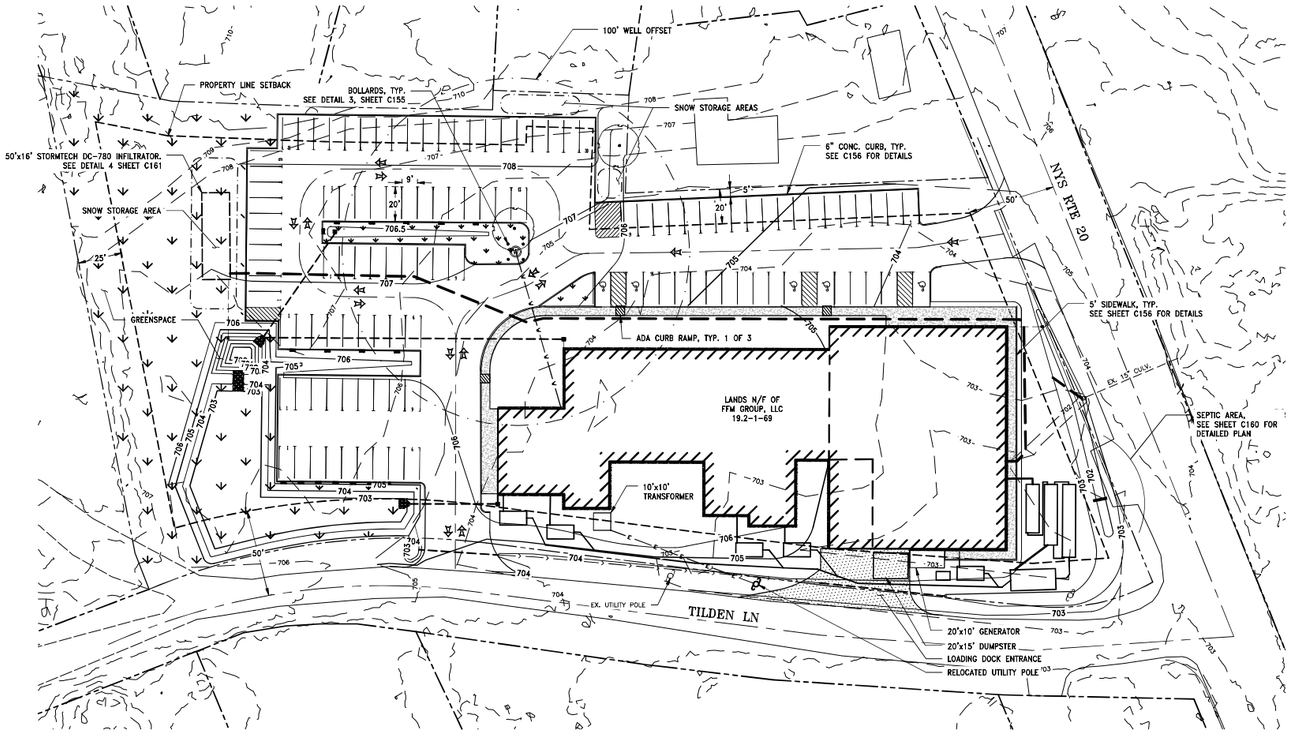
Attachment A
Site Plan

Tilden Mixed-Use Development
Town of New Lebanon, New York



OVERALL SITE PLAN
1"=40'

GRAPHIC SCALE

40 20 0 20 40 80 160

1 INCH = 40 FEET

LEGEND	
	PROPERTY LINE
700	EX. CONTOURS
W	EX. WELL
	EX. CULVERT AND CATCH BASIN
700	PROPOSED CONTOURS
W W W	PROPOSED WATER LINE
	PROPOSED SEWER LINE
	PROPOSED CULVERT
> > >	PROPOSED DRAINAGE DITCH
E E E	PROPOSED ELECTRICAL
SF SF	SILT FENCE

SITE PLAN NOTES:

1. SEE SHEET C100 AND SECTION 02100 FOR CLEARING AND GRUBBING REQUIREMENTS AND LIMITATIONS.
2. ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS.
3. PERFORM EXCAVATION AND GRADING WORK IN ACCORDANCE WITH SECTIONS 02218, 02222, 02223 & 02225.
4. ALL DISTURBED AREAS NOT RECEIVING ASPHALT OR CRUSHED STONE WEARING SURFACES SHALL BE TOPSOILED AND SEEDED. ADDITIONALLY, SOME AREAS REQUIRE PREPARATORY SOIL RESTORATION.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING, OF ANY ERRORS OR DISCREPANCIES.
6. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING, OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE OWNER.
7. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EX. SUBSURFACE UTILITIES AT THE SITE PRIOR TO SETTING HEAVY EQUIPMENT (E.G. CRANES) AND MATERIALS ON THE SITE.
8. PRIOR TO CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING DIG SAFE NEW YORK AND ANY REGIONAL UTILITIES TO LOCATE ALL RELATED UTILITIES.
9. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATIONS, ETC.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINE AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES, AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTIONS TO THE SATISFACTION OF THE OWNER AND HIS REPRESENTATIVES BEFORE AS-BUILT PLANS WILL BE ACCEPTED.
12. CONTRACTOR SHALL FIELD VERIFY ALL LAYOUT DIMENSIONS AND ELEVATIONS WITH ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE A FIELD VISIT WITH ENGINEER TO REVIEW LAYOUT AND DIMENSIONS. CONTRACTOR SHALL SCHEDULE FIELD VISIT WITH ENGINEER TO CONFIRM FINISHED FLOOR ELEVATION.
13. ALL SUITABLE TOPSOIL TO BE TEMPORARILY STOCKPILED (AS APPLICABLE) FOR REUSE.
14. ALL MATERIALS TRANSPORTED OFF-SITE SHALL BE HANDLED IN SUCH A MANNER AS TO PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DE-WATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK, IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN.
16. BUILDING DIMENSIONS TO BE TAKEN FROM BUILDING CONSTRUCTION PLANS.
17. ALL AREAS WITHIN THE LIMIT OF DISTURBANCE (SEE SHEET C100) MAY BE USED FOR STOCKPILING, EQUIPMENT STORAGE, AND FIELD OFFICES. ADDITIONAL SEDIMENT AND EROSION CONTROL PRACTICES MAY BE NEEDED TO PROTECT SENSITIVE AREAS. COORDINATE WITH ENGINEER.
18. SEE ELECTRICAL DRAWINGS FOR ON-SITE ELECTRICAL, CONTROLS, AND INTERNET WIRING.

PARKING:

TOTAL SPACES: 116
GROCERY: 37
APARTMENTS: 79
ACCESSIBLE: 5

REFUGE CALCULATIONS:

RESIDENTIAL:
41 APTS x 2 x 30GAL / 7.48 / 27 = 12 YARDS
GROCERY:
8 YARDS
TOTAL AREA NEEDED: 20 YARDS

20'x15' REFUGE AREA WILL FIT 3 - 8 YARD DUMPSTERS
TOTAL AREA PROVIDED: 24 YARDS

REQUIRED AREA								
	MIN. LOT REQUIREMENTS		MINIMUM YARD DIMENSIONS			MAX. STORIES	MAX. BUILDING HEIGHT	MIN. ROAD FOOTAGE
DISTRICT	AREA	MAX. BLDG COVERAGE	SETBACK CL	REAR	SIDE			
GENERAL COMMERICAL	30,000 SQ. FT.	75% OF LOT	50'	25'	20'	3	40'	100'

Lamont Engineers
ENGINEERS - PLANNERS
FACILITY OPERATIONS
197 ELM ST., COBLESKILL, NY 12043
(518) 234-4028
www.lamontengineers.com

Consultant

TILDEN COMMONS
NEW LEBANON DEVELOPMENT, LLC.
COLUMBIA COUNTY NEW YORK STATE

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Stamp

STATE OF NEW YORK · BRENDON J. BROSS · 091625 · LICENSED PROFESSIONAL ENGINEER

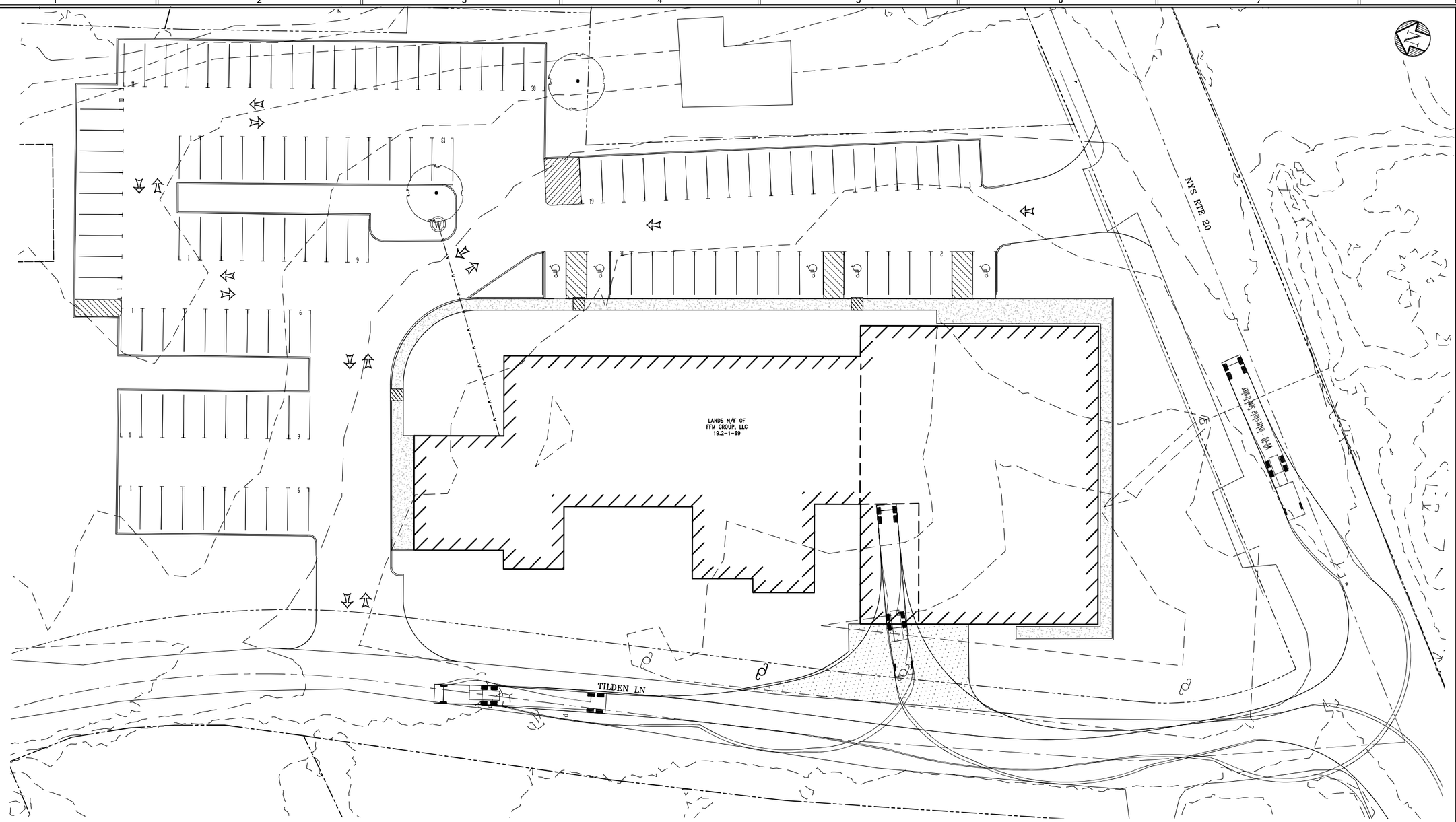
Issue Rev.	Date	Remarks
A	6/6/25	FOR ZBA REVIEW
B	7/1/25	PLANNING BOARD COMMENTS
1	10/1/25	PER PLANNING BOARD COMMENTS
2	10/1/25	

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/7/24
Scale	1"=40'
File Name	BM_TILDEN

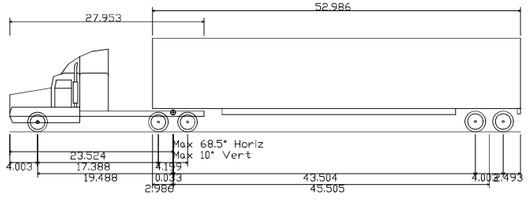
Sheet Title
SITE PLAN

Sheet No.
C110

K:\AMP\2024\2024125\CAD\C110SITE_PLAN.dwg, C110 Overall, 10/1/2025 4:52:01 PM



TURNING RADIUS PLAN
1"=20'



WB-20 - Interstate Semi-Trailer

Overall Length	73.524ft
Overall Width	8.497ft
Overall Body Height	13.484ft
Min Body Ground Clearance	1.335ft
Max Track Width	8.497ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

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Stamp

STATE OF NEW YORK
BENTON J. BROOKS
097605
LICENSED PROFESSIONAL ENGINEER

Issue	Rev.	Date	Remarks
	B	7/7/25	PLANNING BOARD COMMENTS
	C	8/4/25	PER PLANNING BOARD COMMENTS
1		9/4/25	PER PLANNING BOARD COMMENTS
2		10/1/25	PER PLANNING BOARD COMMENTS

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title
TURNING RADIUS PLAN

Sheet No.
C120

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Attachment B
Crash Summary

Tilden Mixed-Use Development
Town of New Lebanon, New York

STUDY NO. R251170.00 P.I.N. INVENTORY NO.			US Route 20 - NY Route 22 to Shaker Road/West Street Town of New Lebanon								COUNTY: Columbia MUNICIPALITY: New Lebanon BY: MDN DATE: 11/13/2025		
NO. OF MONTHS 60 Begin Date 7/1/2020 End Date 6/30/2025			LIGHT CONDITIONS (LC) 1. Daylight 2. Dawn 3. Dusk 4. Dark Road Lighted 5. Dark Road Unlighted			ROADWAY CHARACTER (RC) 1. Straight & Level 2. Straight & Grade 3. Straight at Hillcrest 4. Curve & Level 5. Curve & Grade 6. Curve at Hillcrest		ROADWAY SURFACE CONDITION (RSC) 1. Dry 2. Wet 3. Muddy 4. Snow/Ice 5. Slush 10. Other			WEATHER (WEA) 1. Clear 2. Cloudy 3. Rain 4. Snow 5. Sleet/Hail/Freezing Rain 6. Fog/Smog/Smoke		
No.	**Case Num.**	**Date**	**Time**	**# of Veh.**	**Crash Severity**	**Light Condition**	**Roadway Characteristic**	**Road Surface Condition**	**Weather Condition**	**Crash Type**	**OVERTAKING**	**Apparent Factor**	**Description**	**Intersection**
1	38497278	7/8/2020	12:30 PM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLOUDY	COLLISION WITH MOTOR VEHICLE	OVERTAKING	V1:(FAILURE TO YIELD RIGHT OF WAY) / V2:(NOT APPLICABLE)	V2 WAS DRIVING NORTH ON STATE ROUTE 22 IN THE TOWN OF NEW LEBANON PREPARING TO MAKE A RIGHT HAND TURN TO GO EAST ON STATE ROUTE 20. OP-VI FAILED TO OBSERVE V2'S RIGHT DIRECTIONAL AND ALSO ATTEMPTED TO MAKE A RIGHT HAND TURN TO GO EAST ON STATE ROUTE 20. V2'S TRAILER SUBSEQUENTLY STRUCK V 1 IN THE PROCESS OF MAKING SAID RIGHT TURN. BOTH VEHICLE'S WERE DRIVEN FROM THE SCENE AND NO INJURIES WERE REPORTED.	US Route 20/ NY Route 22
2	40143452	12/23/2023	8:37 AM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLOUDY	COLLISION WITH MOTOR VEHICLE	OVERTAKING	V1:(NOT APPLICABLE) / V2:(PASSING OR LANE USAGE IMPROPERLY,TURNING IMPROPER)	V1 and V2 were turning EB onto State Route 20, from State Route 22, in the Town of New Lebanon, when V2 struck V1 causing damage to the front drivers side quarter panel and tire of V1, while causing damage to the passenger side of the Trailer on V2. Operator of V1 stated that she was traveling NB on State Route 22 when she stopped at the intersection of State Route 22 and State Route 20. Operator of V1 stated that she was in the right tum lane to make a right hand turn onto State Route 20 when V2 was in the left lane, as if they were going to make a left hand turn. Operator of V1 stated that she was in the right hand turn lane and V2 was not, when she attempted to make the right hand turn, but V2 also made the right hand turn at the same time, causing V2 to strike V1 going the same direction. Operator of V2 stated that he was in the left lane because he had to be in order to make the right hand turn. Operator of V2 stated that he then attempted to make the right hand turn and did not realize that V1 was also making the right hand turn. Both Operators stated that no one was injured and they did not need a tow.	US Route 20/ NY Route 23
3	40185774	1/25/2024	5:10 PM	2	PROPERTY DAMAGE	ARK-ROAD LIGHTE	STRAIGHT AND LEVEL	WET	CLOUDY	COLLISION WITH MOTOR VEHICLE	LEFT TURN (AGAINST OTHER CAR)	V1:(FAILURE TO YIELD RIGHT OF WAY,TRAFFIC CONTROL DEVICES DISREGARDED) / V2:(NOT APPLICABLE)	V1 was making a left turn on to SR 20 from SR 22. V2 traveling EB on SR 20. V1 fails to see V2, executes his turn and strikes V2, causing damage to same. No injuries.	US Route 20/ NY Route 24
4	40368204	6/21/2024	12:12 PM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH MOTOR VEHICLE	REAR END	V1:(NOT APPLICABLE) / V2:(FOLLOWING TOO CLOSELY)	V1 was traveling NB on Route 22 in the Town of New Lebanon and came to a stop at the intersection with Route 20. V2 was traveling NB on Route 22 and struck the back end of VI because V2 was following too closely. No involved parties had complaints of injuries and declined medical attention.	US Route 20/ NY Route 25
5	40953554	11/10/2024	1:50 PM	1	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLOUDY	COLLISION WITH DEER	DEER	V1:(ANIMALS ACTION)	V1 WAS TRAVELING EB ON ROUTE 20 IN THE TOWN OF NEW LEBANON. A DEER ENTERED THE ROADWAY FROM THE NORTH SHOULDER OF THE ROAD. VI WAS UNABLE TO AVOID HITTING THE DEER AND HIT SAME. DEER DECEASED ON ARRIVAL	US Route 20/ NY Route 26
6	38415775	5/17/2020	2:35 PM	1	PROPERTY DAMAGE	DAYLIGHT	CURVE AND LEVEL	DRY	CLEAR	COLLISION WITH SIGN POST	FIXED OBJECT	V1:(UNSAFE SPEED,ILLNESS)	V1 was traveling east on State Route 20, in the Town of New Lebanon, when driver of V1 felt sick. V1 left the roadway and struck a DOT sign. No injuries reported on scene and V1 was driven from the scene by the operator. State DOT notified of sign damage.	Rt 22 to Tilden
7	38805253	3/24/2021	7:40 PM	1	PROPERTY DAMAGE	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	WET	RAIN	COLLISION WITH DEER	DEER	V1:(ANIMAL ACTION)	Deer appeared out of no where and was standing in the middle of the lane. Driver applied immediately but it jumped across the front of the van.	Rt 22 to Tilden
8	39452701	7/22/2022	2:34 AM	1	PROPERTY DAMAGE	DARK-ROAD LIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH DEER	DEER	V1:(ANIMALS ACTION)	V1 WAS TRAVELING EB ON STATE ROUTE20 IN THE TOWN OF NEW LEBANON. WHEN A DEER THEN ENTERED THE ROADWAY FROM THE NORTHERLY SHOULDER AND STRUCK VI'S DRIVER SIDE FRONT QUARTER PANEL AND FRONT CORNER, CAUSING DAMAGE TO THOSE AREAS. NO INJURIES WERE REPORTED AND VI DID NOT REQUIRE A TOW.	Rt 22 to Tilden
9	39545823	10/9/2022	9:50 PM	1	PROPERTY DAMAGE	DARK-ROAD UNLIGHTED	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH DEER	DEER	V1:(ANIMALS ACTION)	VI was traveling EB on State Route 20 in the Town of New Lebanon when VI struck a deer. The vehicle sustained damage to its front bumper however did not require a tow. The operator and passenger in VI stated no injuries.	Rt 22 to Tilden
10	38693625	12/30/2020	7:05 PM	2	PROPERTY DAMAGE	DARK-ROAD LIGHTED	STRAIGHT AND LEVEL	WET	RAIN	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	V1:(FAILURE TO YIELD RIGHT OF WAY) / V2:(NOT APPLICABLE)	VI NB attempting to cross Route 20 from County 5A to Shaker Rd and fails to yield right of way oncoming WB tractor trailer (V2). tractor trailer strikes VI pushing it onto shoulder of Route 20 WB lane. No injuries.	US Route 20/ Shaker Road/ West Street
11	38713634	2/9/2021	8:55 AM	1	NON-REPORTABLE	DAYLIGHT	STRAIGHT AND LEVEL	SNOW/ICE	SNOW	COLLISION WITH SIGN POST	FIXED OBJECT	V1:(PAVEMENT SLIPPERY)	VI was making tum from State Route 20 on to Shaker Road when it slid on snow-covered pavement through the intersection into the Stop sign pole. Stop sign was knocked over. Minor damage to the front of VI. No injuries reported. Vehicle driven from scene. Snowfall was heavy at the time of the accident.	US Route 20/ Shaker Road/ West Street
12	39452695	7/23/2022	5:47 PM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	V1:(GLARE,VIEW OBSTRUCTED/LIMITED) / V2:(NOT APPLICABLE)	V1 SB was stopped on West Street when V1 pulled into traffic striking V2 EB causing damage to the driver side front quarter panel. V1 causing damage to the driver side rear quarter panel of V2. V stated that she as stopped at the stopped sign and couldn't see well due to the glare. V2 was traveking EB when V1 pulled out in front of the car.	US Route 20/ Shaker Road/ West Street
13	39833753	5/18/2023	1:40 PM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH MOTOR VEHICLE	RIGHT ANGLE	V1:(FAILURE TO YIELD RIGHT OF WAY,TURNING IMPROPER) / V2:(NOT APPLICABLE)	V1 SB waiting to tum left on to State Route 20 from West Street. V2 traveling EB on State Route 20. V1 fails to see V2 and enters State Route 20 striking V1 in front end causing damage to same. No injuries. Both vehicles driven from scene.	US Route 20/ Shaker Road/ West Street
14	39907978	7/15/2023	10:49 AM	2	PROPERTY DAMAGE	DAYLIGHT	STRAIGHT AND LEVEL	DRY	CLEAR	COLLISION WITH MOTOR VEHICLE	REAR END	V1:(FOLLOWING TOO CLOSELY,UNSAFE SPEED) / V2:(NOT APPLICABLE)	V2 traveling WB on SR-20 slowing/stopping to make a right on CR 5A. VI also traveling WB on SR-20 behind V2. Operator of VI failed to notice V2 slowing/stopping and VI rear ended V2 causing damage. There were no injuries on scene and both cars were driven away from the scene.	US Route 20/ Shaker Road/ West Street

Attachment C
Traffic Volume Data

Tilden Mixed-Use Development
Town of New Lebanon, New York

R251170: US-20 & NY-22 AM - TMC

Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357951, Location: 42.464133, -73.396667, Site Code: R251170

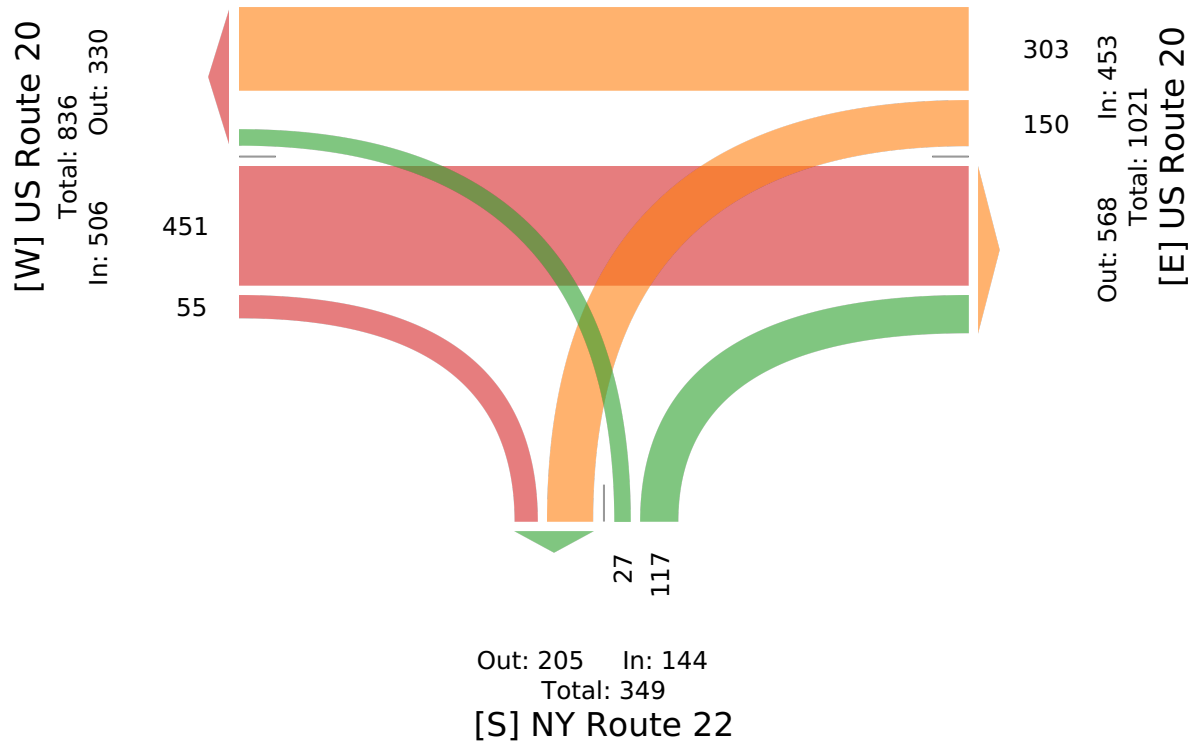
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					NY Route 22					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 7:00AM	48	9	0	**57**	0	18	28	0	**46**	0	1	11	0	**12**	0	**115**
7:15AM	56	4	0	**60**	0	29	33	0	**62**	0	2	19	0	**21**	0	**143**
7:30AM	71	8	0	**79**	0	19	37	0	**56**	0	6	18	0	**24**	0	**159**
7:45AM	48	6	0	**54**	0	20	27	0	**47**	0	2	15	0	**17**	0	**118**
Hourly Total	223	27	0	**250**	0	86	125	0	**211**	0	11	63	0	**74**	0	**535**
8:00AM	59	5	0	**64**	0	20	46	0	**66**	0	5	16	0	**21**	0	**151**
8:15AM	48	5	0	**53**	0	16	45	0	**61**	0	2	11	0	**13**	0	**127**
8:30AM	64	10	0	**74**	0	18	42	0	**60**	0	5	12	0	**17**	0	**151**
8:45AM	57	8	0	**65**	0	10	45	0	**55**	0	4	15	0	**19**	0	**139**
Hourly Total	228	28	0	**256**	0	64	178	0	**242**	0	16	54	0	**70**	0	**568**
9:00AM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	451	55	0	**506**	0	150	303	0	**453**	0	27	117	0	**144**	0	**1103**
% Approach	89.1%	10.9%	0%	**-**	-	33.1%	66.9%	0%	**-**	-	18.8%	81.3%	0%	**-**	-	-
% Total	40.9%	5.0%	0%	**45.9%**	-	13.6%	27.5%	0%	**41.1%**	-	2.4%	10.6%	0%	**13.1%**	-	-
Lights	387	47	0	**434**	-	131	264	0	**395**	-	22	96	0	**118**	-	947
% Lights	85.8%	85.5%	0%	**85.8%**	-	87.3%	87.1%	0%	**87.2%**	-	81.5%	82.1%	0%	**81.9%**	-	85.9%
Articulated Trucks and Single-Unit Trucks	50	8	0	**58**	-	17	30	0	**47**	-	4	19	0	**23**	-	128
% Articulated Trucks and Single-Unit Trucks	11.1%	14.5%	0%	**11.5%**	-	11.3%	9.9%	0%	**10.4%**	-	14.8%	16.2%	0%	**16.0%**	-	11.6%
Buses	14	0	0	**14**	-	2	9	0	**11**	-	1	2	0	**3**	-	28
% Buses	3.1%	0%	0%	**2.8%**	-	1.3%	3.0%	0%	**2.4%**	-	3.7%	1.7%	0%	**2.1%**	-	2.5%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 AM - TMC
Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357951, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & NY-22 AM - TMC

Wed Nov 12, 2025
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357951, Location: 42.464133, -73.396667, Site Code: R251170

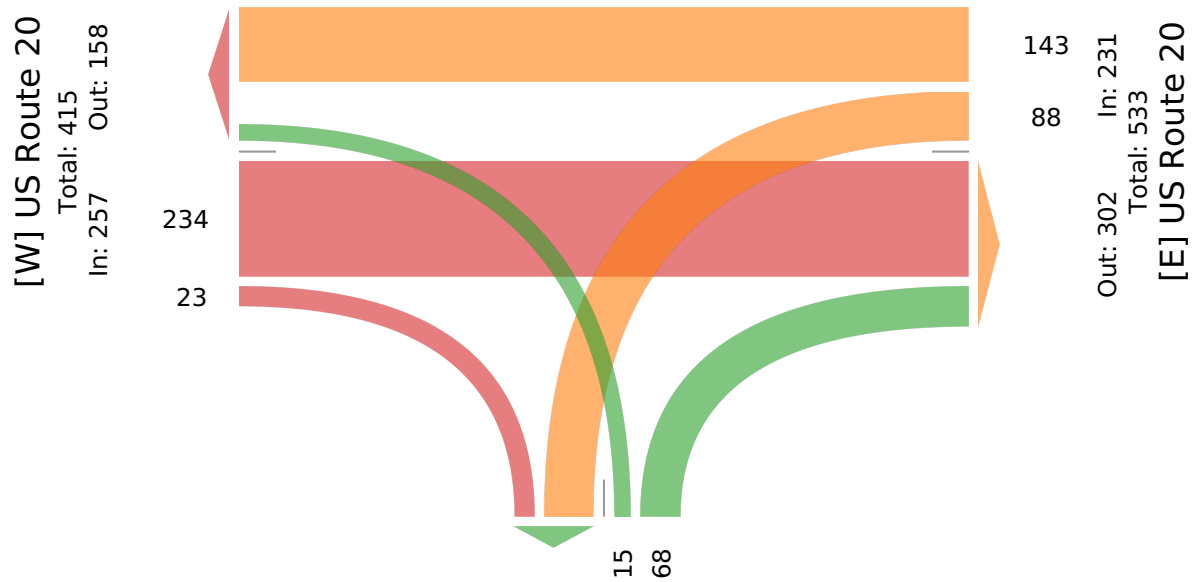
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					NY Route 22					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 7:15AM	56	4	0	**60**	0	29	33	0	**62**	0	2	19	0	**21**	0	**143**
7:30AM	71	8	0	**79**	0	19	37	0	**56**	0	6	18	0	**24**	0	**159**
7:45AM	48	6	0	**54**	0	20	27	0	**47**	0	2	15	0	**17**	0	**118**
8:00AM	59	5	0	**64**	0	20	46	0	**66**	0	5	16	0	**21**	0	**151**
Total	234	23	0	**257**	0	88	143	0	**231**	0	15	68	0	**83**	0	**571**
% Approach	91.1%	8.9%	0%	**-**	-	38.1%	61.9%	0%	**-**	-	18.1%	81.9%	0%	**-**	-	-
% Total	41.0%	4.0%	0%	**45.0%**	-	15.4%	25.0%	0%	**40.5%**	-	2.6%	11.9%	0%	**14.5%**	-	-
PHF	0.824	0.719	-	**0.813**	-	0.759	0.777	-	**0.875**	-	0.625	0.895	-	**0.865**	-	0.898
Lights	202	19	0	**221**	-	76	133	0	**209**	-	10	59	0	**69**	-	499
% Lights	86.3%	82.6%	0%	**86.0%**	-	86.4%	93.0%	0%	**90.5%**	-	66.7%	86.8%	0%	**83.1%**	-	87.4%
Articulated Trucks and Single-Unit Trucks	24	4	0	**28**	-	10	6	0	**16**	-	4	8	0	**12**	-	56
% Articulated Trucks and Single-Unit Trucks	10.3%	17.4%	0%	**10.9%**	-	11.4%	4.2%	0%	**6.9%**	-	26.7%	11.8%	0%	**14.5%**	-	9.8%
Buses	8	0	0	**8**	-	2	4	0	**6**	-	1	1	0	**2**	-	16
% Buses	3.4%	0%	0%	**3.1%**	-	2.3%	2.8%	0%	**2.6%**	-	6.7%	1.5%	0%	**2.4%**	-	2.8%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 AM - TMC
Wed Nov 12, 2025
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357951, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & NY-22 PM - TMC

Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357952, Location: 42.464133, -73.396667, Site Code: R251170

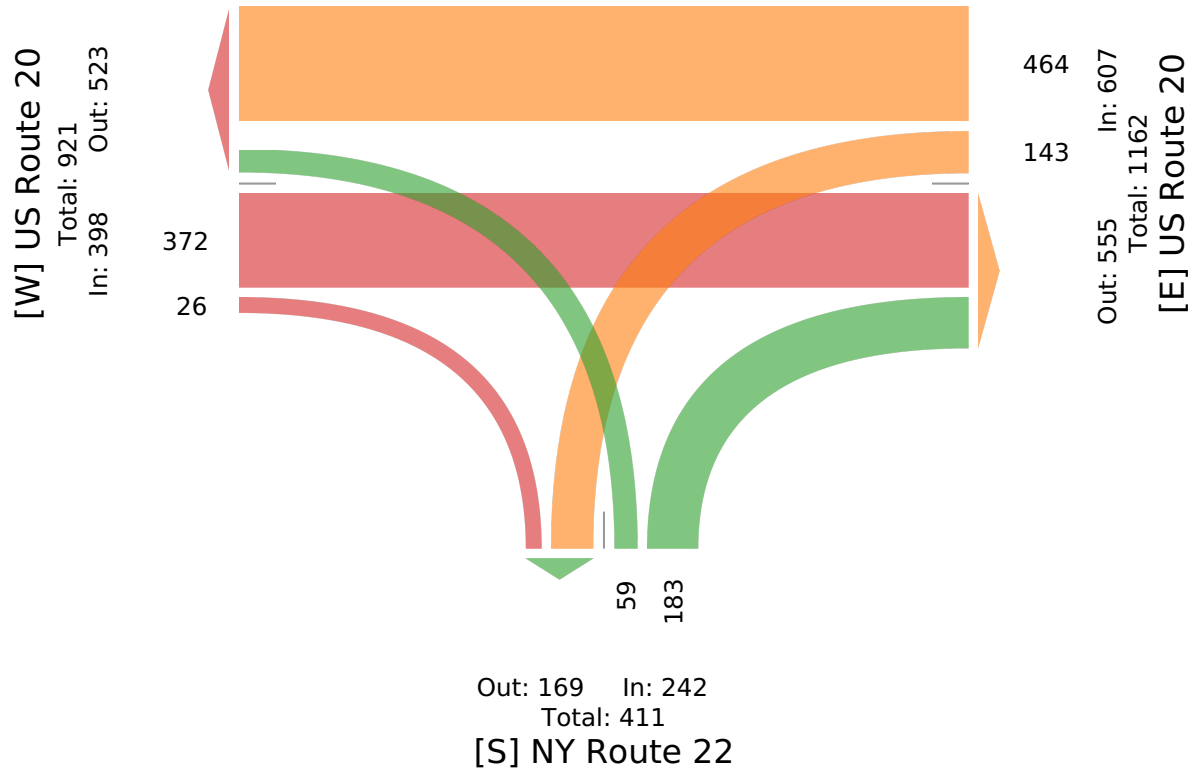
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					NY Route 22					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 4:00PM	60	6	0	**66**	0	13	55	0	**68**	0	10	27	0	**37**	0	**171**
4:15PM	54	4	0	**58**	0	21	72	0	**93**	0	10	18	0	**28**	0	**179**
4:30PM	65	2	0	**67**	0	22	60	0	**82**	0	4	30	0	**34**	0	**183**
4:45PM	50	1	0	**51**	0	17	55	0	**72**	0	6	30	0	**36**	0	**159**
Hourly Total	229	13	0	**242**	0	73	242	0	**315**	0	30	105	0	**135**	0	**692**
5:00PM	40	3	0	**43**	0	17	52	0	**69**	0	8	14	0	**22**	0	**134**
5:15PM	36	3	0	**39**	0	13	57	0	**70**	0	8	23	0	**31**	0	**140**
5:30PM	37	4	0	**41**	0	17	61	0	**78**	0	8	23	0	**31**	0	**150**
5:45PM	30	3	0	**33**	0	23	52	0	**75**	0	5	18	0	**23**	0	**131**
Hourly Total	143	13	0	**156**	0	70	222	0	**292**	0	29	78	0	**107**	0	**555**
6:00PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	372	26	0	**398**	0	143	464	0	**607**	0	59	183	0	**242**	0	**1247**
% Approach	93.5%	6.5%	0%	**-**	-	23.6%	76.4%	0%	**-**	-	24.4%	75.6%	0%	**-**	-	-
% Total	29.8%	2.1%	0%	**31.9%**	-	11.5%	37.2%	0%	**48.7%**	-	4.7%	14.7%	0%	**19.4%**	-	-
Lights	369	25	0	**394**	-	133	438	0	**571**	-	57	176	0	**233**	-	1198
% Lights	99.2%	96.2%	0%	**99.0%**	-	93.0%	94.4%	0%	**94.1%**	-	96.6%	96.2%	0%	**96.3%**	-	96.1%
Articulated Trucks and Single-Unit Trucks	2	1	0	**3**	-	8	24	0	**32**	-	1	6	0	**7**	-	42
% Articulated Trucks and Single-Unit Trucks	0.5%	3.8%	0%	**0.8%**	-	5.6%	5.2%	0%	**5.3%**	-	1.7%	3.3%	0%	**2.9%**	-	3.4%
Buses	1	0	0	**1**	-	2	2	0	**4**	-	1	1	0	**2**	-	7
% Buses	0.3%	0%	0%	**0.3%**	-	1.4%	0.4%	0%	**0.7%**	-	1.7%	0.5%	0%	**0.8%**	-	0.6%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 PM - TMC
Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357952, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & NY-22 PM - TMC

Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357952, Location: 42.464133, -73.396667, Site Code: R251170

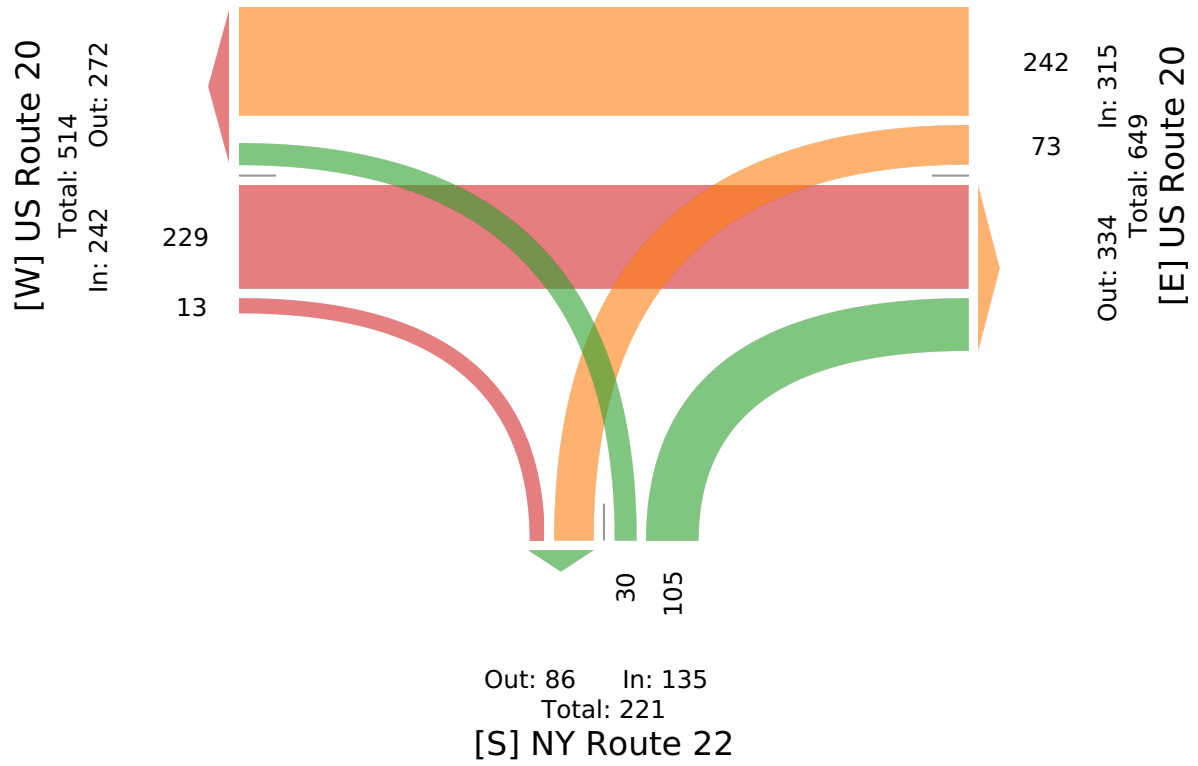
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg Direction	US Route 20 Eastbound					US Route 20 Westbound					NY Route 22 Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 4:00PM	60	6	0	**66**	0	13	55	0	**68**	0	10	27	0	**37**	0	**171**
4:15PM	54	4	0	**58**	0	21	72	0	**93**	0	10	18	0	**28**	0	**179**
4:30PM	65	2	0	**67**	0	22	60	0	**82**	0	4	30	0	**34**	0	**183**
4:45PM	50	1	0	**51**	0	17	55	0	**72**	0	6	30	0	**36**	0	**159**
Total	229	13	0	**242**	0	73	242	0	**315**	0	30	105	0	**135**	0	**692**
% Approach	94.6%	5.4%	0%	**-**	-	23.2%	76.8%	0%	**-**	-	22.2%	77.8%	0%	**-**	-	-
% Total	33.1%	1.9%	0%	**35.0%**	-	10.5%	35.0%	0%	**45.5%**	-	4.3%	15.2%	0%	**19.5%**	-	-
PHF	0.881	0.542	-	**0.903**	-	0.830	0.840	-	**0.847**	-	0.750	0.875	-	**0.912**	-	0.945
Lights	227	12	0	**239**	-	68	224	0	**292**	-	28	100	0	**128**	-	659
% Lights	99.1%	92.3%	0%	**98.8%**	-	93.2%	92.6%	0%	**92.7%**	-	93.3%	95.2%	0%	**94.8%**	-	95.2%
Articulated Trucks and Single-Unit Trucks	1	1	0	**2**	-	5	17	0	**22**	-	1	5	0	**6**	-	30
% Articulated Trucks and Single-Unit Trucks	0.4%	7.7%	0%	**0.8%**	-	6.8%	7.0%	0%	**7.0%**	-	3.3%	4.8%	0%	**4.4%**	-	4.3%
Buses	1	0	0	**1**	-	0	1	0	**1**	-	1	0	0	**1**	-	3
% Buses	0.4%	0%	0%	**0.4%**	-	0%	0.4%	0%	**0.3%**	-	3.3%	0%	0%	**0.7%**	-	0.4%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 PM - TMC
Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357952, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & NY-22 Saturday - TMC

Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357949, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

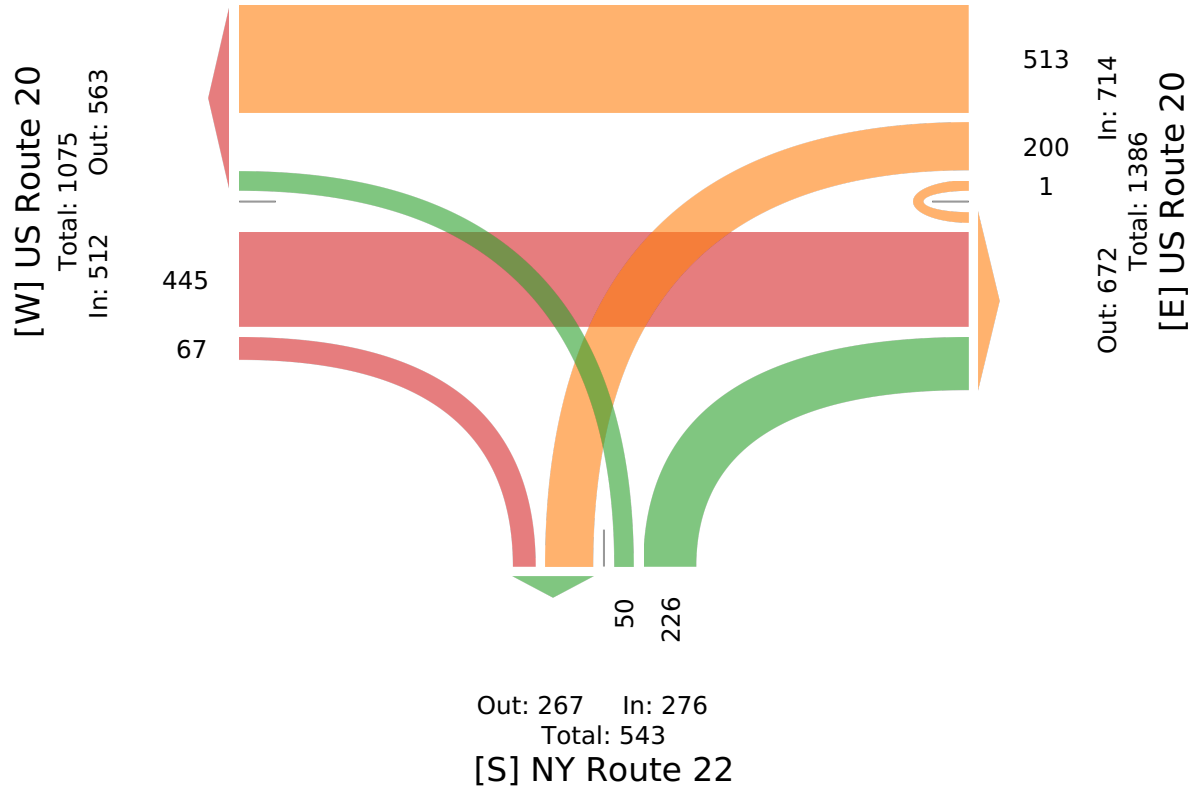
Leg	US Route 20					US Route 20					NY Route 22					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-08 11:00AM	51	5	0	**56**	0	24	64	1	**89**	0	8	19	0	**27**	0	**172**
11:15AM	64	14	0	**78**	0	36	48	0	**84**	0	10	32	0	**42**	0	**204**
11:30AM	42	5	0	**47**	0	25	77	0	**102**	0	4	33	0	**37**	0	**186**
11:45AM	68	7	0	**75**	0	24	59	0	**83**	0	6	35	0	**41**	0	**199**
Hourly Total	225	31	0	**256**	0	109	248	1	**358**	0	28	119	0	**147**	0	**761**
12:00PM	45	10	0	**55**	0	26	77	0	**103**	0	6	29	0	**35**	0	**193**
12:15PM	56	11	0	**67**	0	23	60	0	**83**	0	7	28	0	**35**	0	**185**
12:30PM	49	9	0	**58**	0	21	70	0	**91**	0	6	28	0	**34**	0	**183**
12:45PM	70	6	0	**76**	0	21	58	0	**79**	0	3	22	0	**25**	0	**180**
Hourly Total	220	36	0	**256**	0	91	265	0	**356**	0	22	107	0	**129**	0	**741**
1:00PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	445	67	0	**512**	0	200	513	1	**714**	0	50	226	0	**276**	0	**1502**
% Approach	86.9%	13.1%	0%	**-**	-	28.0%	71.8%	0.1%	**-**	-	18.1%	81.9%	0%	**-**	-	**-**
% Total	29.6%	4.5%	0%	**34.1%**	-	13.3%	34.2%	0.1%	**47.5%**	-	3.3%	15.0%	0%	**18.4%**	-	**-**
Lights	444	64	0	**508**	-	194	507	1	**702**	-	49	221	0	**270**	-	1480
% Lights	99.8%	95.5%	0%	**99.2%**	-	97.0%	98.8%	100%	**98.3%**	-	98.0%	97.8%	0%	**97.8%**	-	98.5%
Articulated Trucks and Single-Unit Trucks	1	3	0	**4**	-	6	5	0	**11**	-	1	4	0	**5**	-	20
% Articulated Trucks and Single-Unit Trucks	0.2%	4.5%	0%	**0.8%**	-	3.0%	1.0%	0%	**1.5%**	-	2.0%	1.8%	0%	**1.8%**	-	1.3%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	0	1	0	**1**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.4%	0%	**0.4%**	-	0.1%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	0	0	**0**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0.2%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 Saturday - TMC

Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357949, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & NY-22 Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357949, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

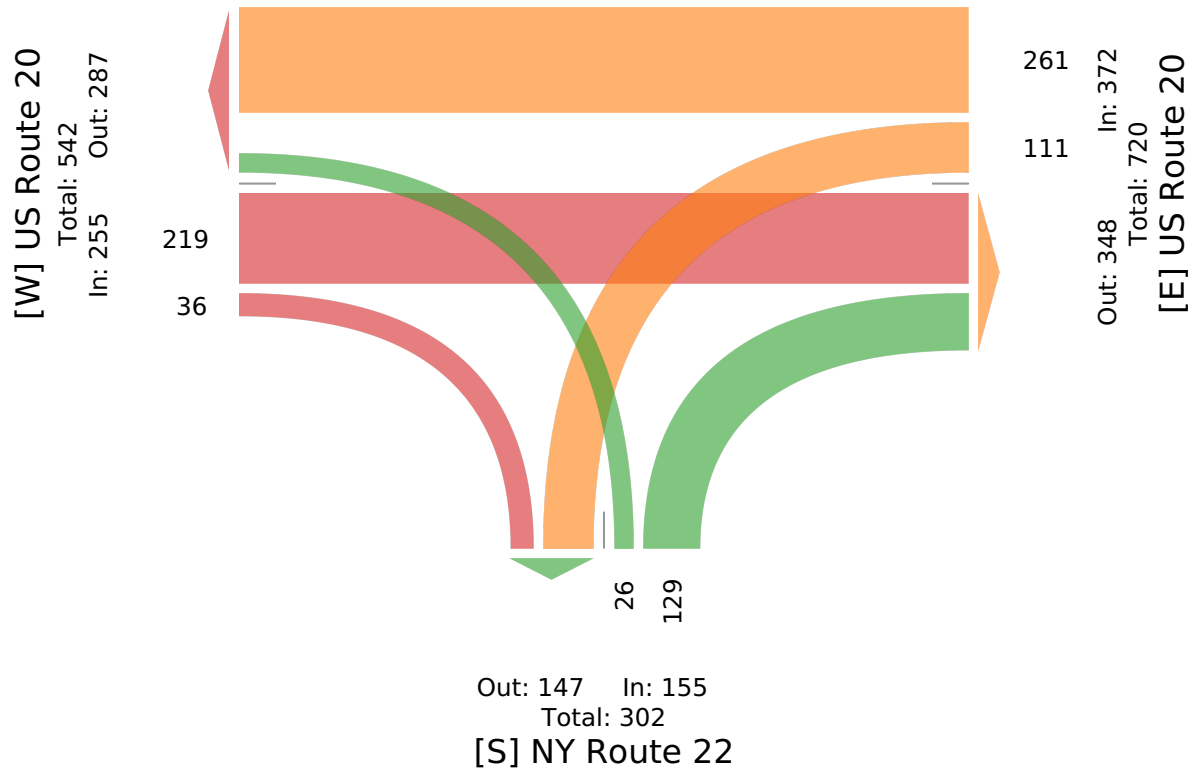
Leg	US Route 20					US Route 20					NY Route 22					
Direction	Eastbound					Westbound					Northbound					
Time	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-08 11:15AM	64	14	0	**78**	0	36	48	0	**84**	0	10	32	0	**42**	0	**204**
11:30AM	42	5	0	**47**	0	25	77	0	**102**	0	4	33	0	**37**	0	**186**
11:45AM	68	7	0	**75**	0	24	59	0	**83**	0	6	35	0	**41**	0	**199**
12:00PM	45	10	0	**55**	0	26	77	0	**103**	0	6	29	0	**35**	0	**193**
Total	219	36	0	**255**	0	111	261	0	**372**	0	26	129	0	**155**	0	**782**
% Approach	85.9%	14.1%	0%	**-**	-	29.8%	70.2%	0%	**-**	-	16.8%	83.2%	0%	**-**	-	-
% Total	28.0%	4.6%	0%	**32.6%**	-	14.2%	33.4%	0%	**47.6%**	-	3.3%	16.5%	0%	**19.8%**	-	-
PHF	0.805	0.643	-	**0.817**	-	0.771	0.847	-	**0.903**	-	0.650	0.921	-	**0.923**	-	0.958
Lights	218	35	0	**253**	-	108	259	0	**367**	-	26	126	0	**152**	-	772
% Lights	99.5%	97.2%	0%	**99.2%**	-	97.3%	99.2%	0%	**98.7%**	-	100%	97.7%	0%	**98.1%**	-	98.7%
Articulated Trucks and Single-Unit Trucks	1	1	0	**2**	-	3	2	0	**5**	-	0	2	0	**2**	-	9
% Articulated Trucks and Single-Unit Trucks	0.5%	2.8%	0%	**0.8%**	-	2.7%	0.8%	0%	**1.3%**	-	0%	1.6%	0%	**1.3%**	-	1.2%
Buses	0	0	0	**0**	-	0	0	0	**0**	-	0	1	0	**1**	-	1
% Buses	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.8%	0%	**0.6%**	-	0.1%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & NY-22 Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357949, Location: 42.464133, -73.396667, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd AM - TMC

Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357976, Location: 42.465622, -73.394019, Site Code: R251170

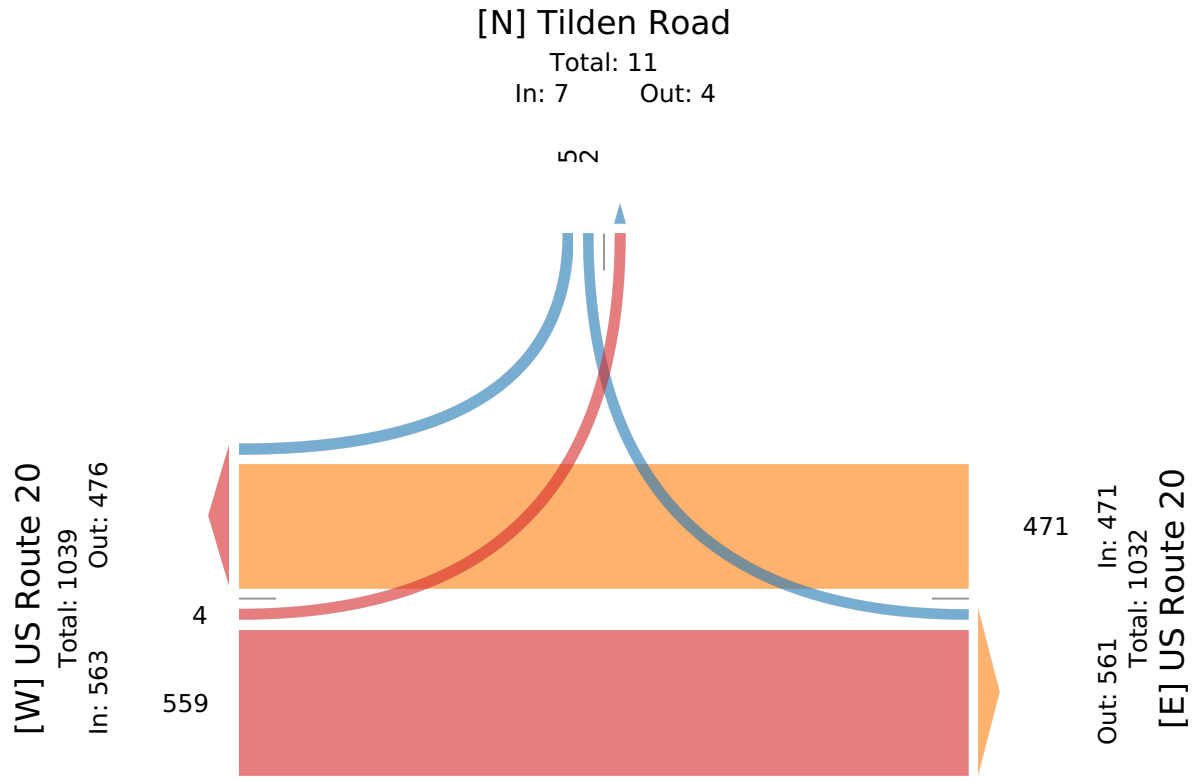
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 7:00AM	0	61	0	**61**	0	49	0	0	**49**	0	0	0	0	**0**	0	**110**
7:15AM	0	72	0	**72**	0	61	0	0	**61**	0	0	0	0	**0**	0	**133**
7:30AM	0	88	0	**88**	0	64	0	0	**64**	0	1	1	0	**2**	0	**154**
7:45AM	0	56	0	**56**	0	57	0	0	**57**	0	0	0	0	**0**	0	**113**
Hourly Total	0	277	0	**277**	0	231	0	0	**231**	0	1	1	0	**2**	0	**510**
8:00AM	3	76	0	**79**	0	63	0	0	**63**	0	1	3	0	**4**	0	**146**
8:15AM	0	57	0	**57**	0	62	0	0	**62**	0	0	1	0	**1**	0	**120**
8:30AM	0	78	0	**78**	0	60	0	0	**60**	0	0	0	0	**0**	0	**138**
8:45AM	1	70	0	**71**	0	55	0	0	**55**	0	0	0	0	**0**	0	**126**
Hourly Total	4	281	0	**285**	0	240	0	0	**240**	0	1	4	0	**5**	0	**530**
9:00AM	0	1	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	**1**
Hourly Total	0	1	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	**1**
Total	4	559	0	**563**	0	471	0	0	**471**	0	2	5	0	**7**	0	**1041**
% Approach	0.7%	99.3%	0%	**-**	-	100%	0%	0%	**-**	-	28.6%	71.4%	0%	**-**	-	-
% Total	0.4%	53.7%	0%	**54.1%**	-	45.2%	0%	0%	**45.2%**	-	0.2%	0.5%	0%	**0.7%**	-	-
Lights	3	475	0	**478**	-	403	0	0	**403**	-	2	4	0	**6**	-	887
% Lights	75.0%	85.0%	0%	**84.9%**	-	85.6%	0%	0%	**85.6%**	-	100%	80.0%	0%	**85.7%**	-	85.2%
Articulated Trucks and Single-Unit Trucks	0	72	0	**72**	-	59	0	0	**59**	-	0	0	0	**0**	-	131
% Articulated Trucks and Single-Unit Trucks	0%	12.9%	0%	**12.8%**	-	12.5%	0%	0%	**12.5%**	-	0%	0%	0%	**0%**	-	12.6%
Buses	1	12	0	**13**	-	9	0	0	**9**	-	0	1	0	**1**	-	23
% Buses	25.0%	2.1%	0%	**2.3%**	-	1.9%	0%	0%	**1.9%**	-	0%	20.0%	0%	**14.3%**	-	2.2%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd AM - TMC
Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357976, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd AM - TMC

Wed Nov 12, 2025
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357976, Location: 42.465622, -73.394019, Site Code: R251170

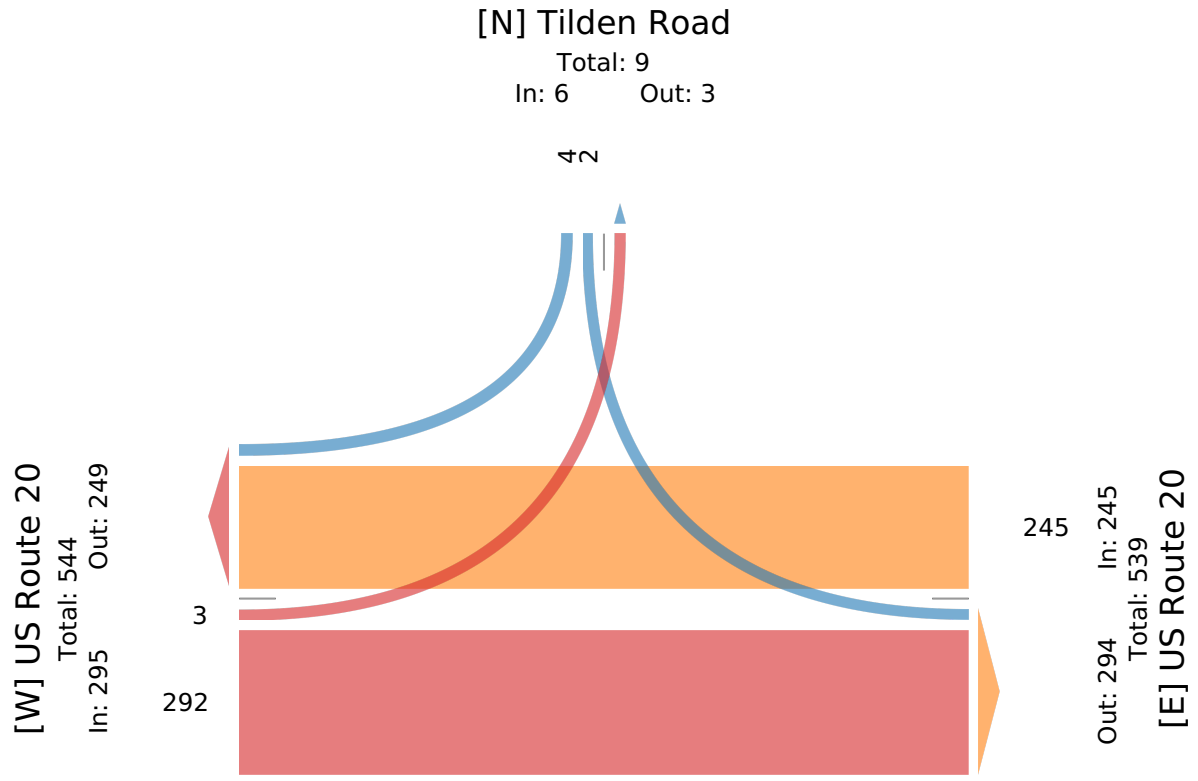
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 7:15AM	0	72	0	**72**	0	61	0	0	**61**	0	0	0	0	**0**	0	**133**
7:30AM	0	88	0	**88**	0	64	0	0	**64**	0	1	1	0	**2**	0	**154**
7:45AM	0	56	0	**56**	0	57	0	0	**57**	0	0	0	0	**0**	0	**113**
8:00AM	3	76	0	**79**	0	63	0	0	**63**	0	1	3	0	**4**	0	**146**
Total	3	292	0	**295**	0	245	0	0	**245**	0	2	4	0	**6**	0	**546**
% Approach	1.0%	99.0%	0%	**-**	-	100%	0%	0%	**-**	-	33.3%	66.7%	0%	**-**	-	-
% Total	0.5%	53.5%	0%	**54.0%**	-	44.9%	0%	0%	**44.9%**	-	0.4%	0.7%	0%	**1.1%**	-	-
PHF	0.250	0.830	-	**0.838**	-	0.957	-	-	**0.957**	-	0.500	0.333	-	**0.375**	-	0.886
Lights	2	251	0	**253**	-	218	0	0	**218**	-	2	3	0	**5**	-	476
% Lights	66.7%	86.0%	0%	**85.8%**	-	89.0%	0%	0%	**89.0%**	-	100%	75.0%	0%	**83.3%**	-	87.2%
Articulated Trucks and Single-Unit Trucks	0	34	0	**34**	-	22	0	0	**22**	-	0	0	0	**0**	-	56
% Articulated Trucks and Single-Unit Trucks	0%	11.6%	0%	**11.5%**	-	9.0%	0%	0%	**9.0%**	-	0%	0%	0%	**0%**	-	10.3%
Buses	1	7	0	**8**	-	5	0	0	**5**	-	0	1	0	**1**	-	14
% Buses	33.3%	2.4%	0%	**2.7%**	-	2.0%	0%	0%	**2.0%**	-	0%	25.0%	0%	**16.7%**	-	2.6%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd AM - TMC
Wed Nov 12, 2025
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357976, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd PM - TMC

Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357978, Location: 42.465622, -73.394019, Site Code: R251170

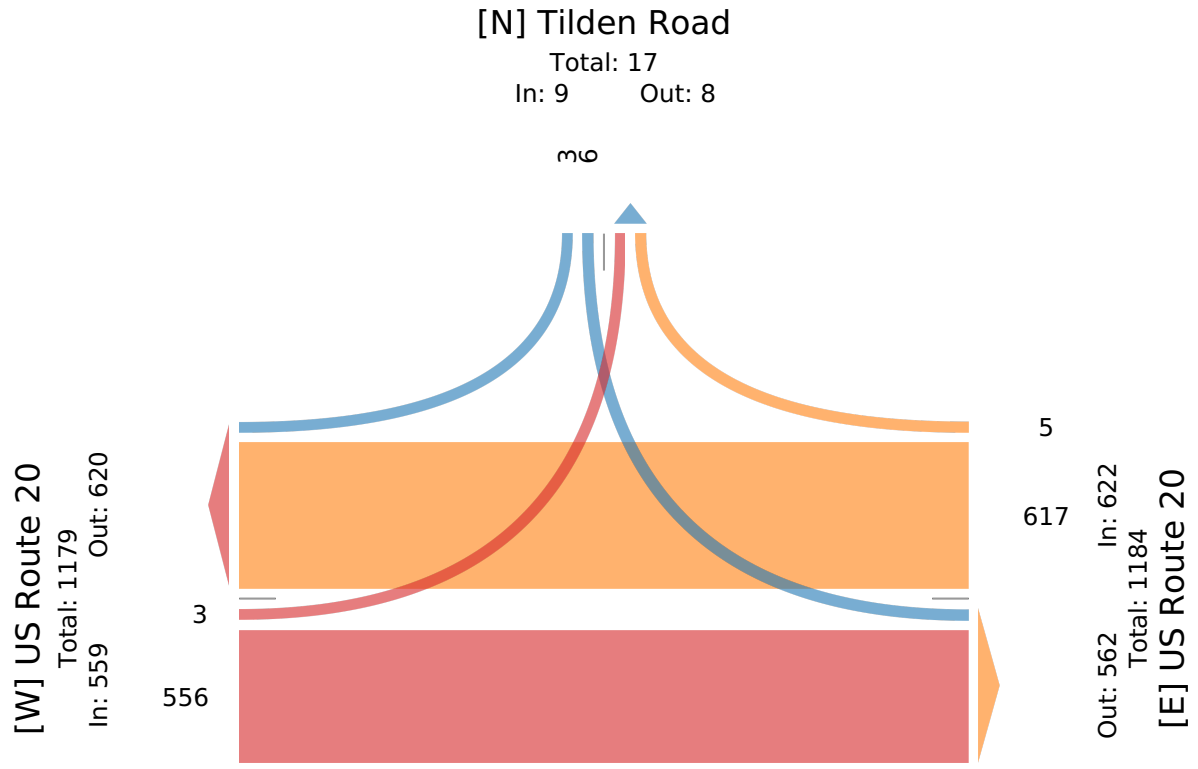
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 4:00PM	1	86	0	**87**	0	70	0	0	**70**	0	0	1	0	**1**	0	**158**
4:15PM	1	68	0	**69**	0	94	1	0	**95**	0	1	0	0	**1**	0	**165**
4:30PM	1	96	0	**97**	0	82	1	0	**83**	0	0	0	0	**0**	0	**180**
4:45PM	0	75	0	**75**	0	75	0	0	**75**	0	2	0	0	**2**	0	**152**
Hourly Total	3	325	0	**328**	0	321	2	0	**323**	0	3	1	0	**4**	0	**655**
5:00PM	0	55	0	**55**	0	69	1	0	**70**	0	1	0	0	**1**	0	**126**
5:15PM	0	65	0	**65**	0	72	1	0	**73**	0	0	1	0	**1**	0	**139**
5:30PM	0	60	0	**60**	0	85	0	0	**85**	0	2	1	0	**3**	0	**148**
5:45PM	0	51	0	**51**	0	70	1	0	**71**	0	0	0	0	**0**	0	**122**
Hourly Total	0	231	0	**231**	0	296	3	0	**299**	0	3	2	0	**5**	0	**535**
6:00PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Total	3	556	0	**559**	0	617	5	0	**622**	0	6	3	0	**9**	0	**1190**
% Approach	0.5%	99.5%	0%	**-**	-	99.2%	0.8%	0%	**-**	-	66.7%	33.3%	0%	**-**	-	-
% Total	0.3%	46.7%	0%	**47.0%**	-	51.8%	0.4%	0%	**52.3%**	-	0.5%	0.3%	0%	**0.8%**	-	-
Lights	3	547	0	**550**	-	582	5	0	**587**	-	6	3	0	**9**	-	1146
% Lights	100%	98.4%	0%	**98.4%**	-	94.3%	100%	0%	**94.4%**	-	100%	100%	0%	**100%**	-	96.3%
Articulated Trucks and Single-Unit Trucks	0	7	0	**7**	-	32	0	0	**32**	-	0	0	0	**0**	-	39
% Articulated Trucks and Single-Unit Trucks	0%	1.3%	0%	**1.3%**	-	5.2%	0%	0%	**5.1%**	-	0%	0%	0%	**0%**	-	3.3%
Buses	0	2	0	**2**	-	3	0	0	**3**	-	0	0	0	**0**	-	5
% Buses	0%	0.4%	0%	**0.4%**	-	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	**0%**	-	0.4%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd PM - TMC
Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357978, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd PM - TMC

Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357978, Location: 42.465622, -73.394019, Site Code: R251170

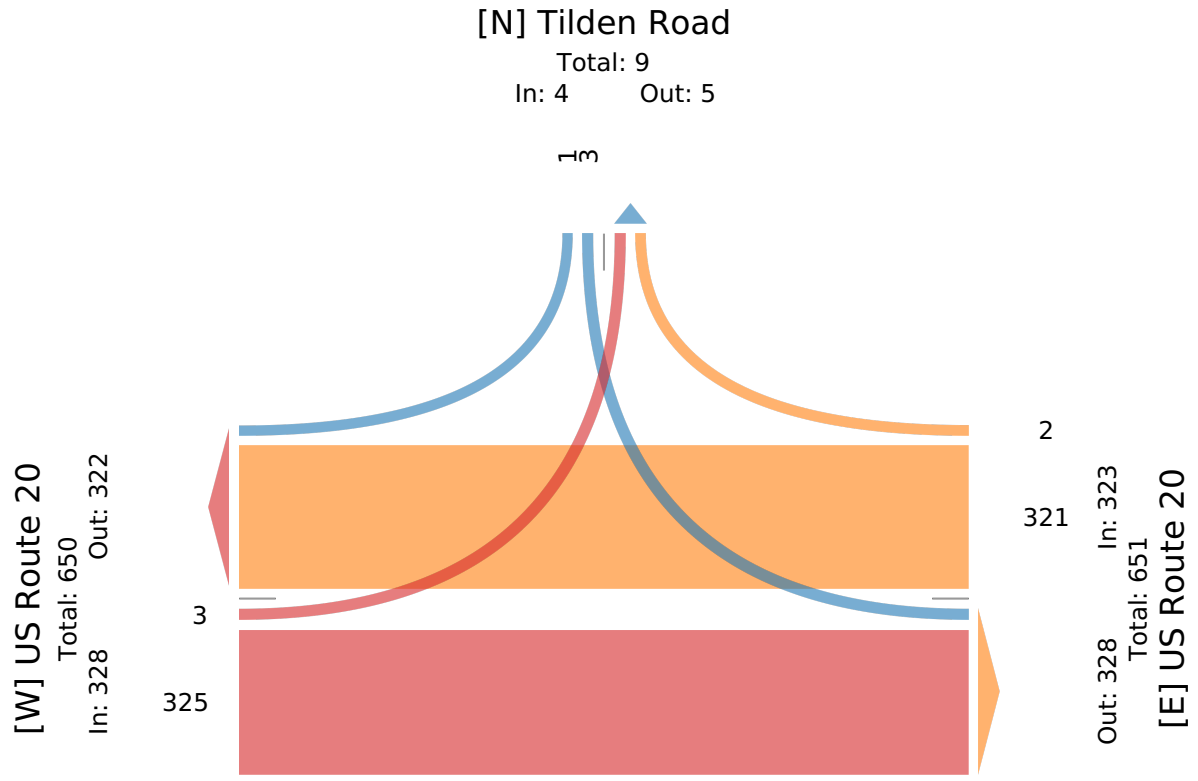
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-12 4:00PM	1	86	0	**87**	0	70	0	0	**70**	0	0	1	0	**1**	0	**158**
4:15PM	1	68	0	**69**	0	94	1	0	**95**	0	1	0	0	**1**	0	**165**
4:30PM	1	96	0	**97**	0	82	1	0	**83**	0	0	0	0	**0**	0	**180**
4:45PM	0	75	0	**75**	0	75	0	0	**75**	0	2	0	0	**2**	0	**152**
Total	3	325	0	**328**	0	321	2	0	**323**	0	3	1	0	**4**	0	**655**
% Approach	0.9%	99.1%	0%	**-**	-	99.4%	0.6%	0%	**-**	-	75.0%	25.0%	0%	**-**	-	-
% Total	0.5%	49.6%	0%	**50.1%**	-	49.0%	0.3%	0%	**49.3%**	-	0.5%	0.2%	0%	**0.6%**	-	-
PHF	0.750	0.846	-	**0.845**	-	0.854	0.500	-	**0.850**	-	0.375	0.250	-	**0.500**	-	0.910
Lights	3	319	0	**322**	-	299	2	0	**301**	-	3	1	0	**4**	-	627
% Lights	100%	98.2%	0%	**98.2%**	-	93.1%	100%	0%	**93.2%**	-	100%	100%	0%	**100%**	-	95.7%
Articulated Trucks and Single-Unit Trucks	0	5	0	**5**	-	21	0	0	**21**	-	0	0	0	**0**	-	26
% Articulated Trucks and Single-Unit Trucks	0%	1.5%	0%	**1.5%**	-	6.5%	0%	0%	**6.5%**	-	0%	0%	0%	**0%**	-	4.0%
Buses	0	1	0	**1**	-	1	0	0	**1**	-	0	0	0	**0**	-	2
% Buses	0%	0.3%	0%	**0.3%**	-	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	**0%**	-	0.3%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd PM - TMC
Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357978, Location: 42.465622, -73.394019, Site Code: R251170

Creighton Manning
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd Saturday - TMC

Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357974, Location: 42.465622, -73.394019, Site Code: R251170

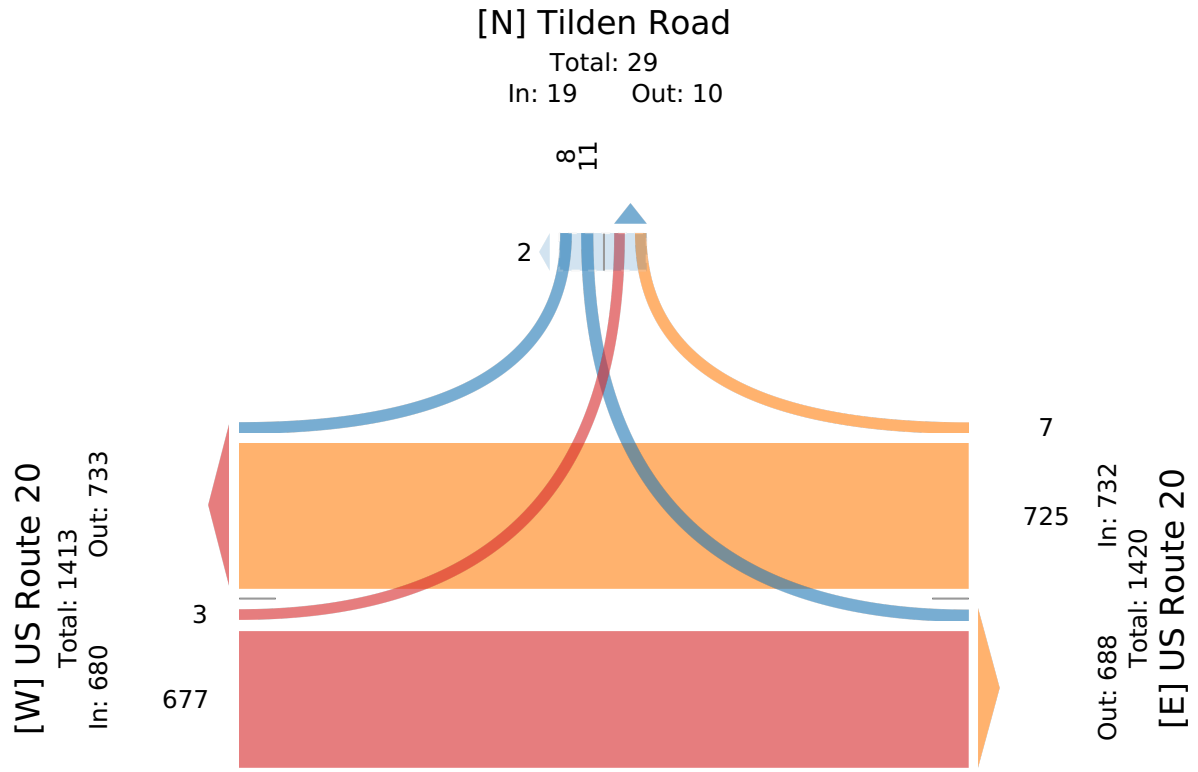
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-08 11:00AM	0	74	0	**74**	0	90	1	0	**91**	0	4	0	0	**4**	0	**169**
11:15AM	0	95	0	**95**	0	96	0	0	**96**	0	0	0	0	**0**	0	**191**
11:30AM	2	74	0	**76**	0	103	2	0	**105**	0	3	3	0	**6**	0	**187**
11:45AM	0	108	0	**108**	0	78	0	0	**78**	0	1	2	0	**3**	0	**189**
Hourly Total	2	351	0	**353**	0	367	3	0	**370**	0	8	5	0	**13**	0	**736**
12:00PM	0	76	0	**76**	0	101	0	0	**101**	0	1	0	0	**1**	0	**178**
12:15PM	1	82	0	**83**	0	84	1	0	**85**	0	0	0	0	**0**	0	**168**
12:30PM	0	77	0	**77**	0	89	2	0	**91**	0	0	2	0	**2**	2	**170**
12:45PM	0	90	0	**90**	0	84	1	0	**85**	0	2	1	0	**3**	0	**178**
Hourly Total	1	325	0	**326**	0	358	4	0	**362**	0	3	3	0	**6**	2	**694**
1:00PM	0	1	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	**1**
Hourly Total	0	1	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	**1**
Total	3	677	0	**680**	0	725	7	0	**732**	0	11	8	0	**19**	2	**1431**
% Approach	0.4%	99.6%	0%	**-**	-	99.0%	1.0%	0%	**-**	-	57.9%	42.1%	0%	**-**	-	-
% Total	0.2%	47.3%	0%	**47.5%**	-	50.7%	0.5%	0%	**51.2%**	-	0.8%	0.6%	0%	**1.3%**	-	-
Lights	2	673	0	**675**	-	709	6	0	**715**	-	10	7	0	**17**	-	1407
% Lights	66.7%	99.4%	0%	**99.3%**	-	97.8%	85.7%	0%	**97.7%**	-	90.9%	87.5%	0%	**89.5%**	-	98.3%
Articulated Trucks and Single-Unit Trucks	1	2	0	**3**	-	16	0	0	**16**	-	1	0	0	**1**	-	20
% Articulated Trucks and Single-Unit Trucks	33.3%	0.3%	0%	**0.4%**	-	2.2%	0%	0%	**2.2%**	-	9.1%	0%	0%	**5.3%**	-	1.4%
Buses	0	2	0	**2**	-	0	0	0	**0**	-	0	0	0	**0**	-	2
% Buses	0%	0.3%	0%	**0.3%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.1%
Bicycles on Road	0	0	0	**0**	-	0	1	0	**1**	-	0	1	0	**1**	-	2
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	14.3%	0%	**0.1%**	-	0%	12.5%	0%	**5.3%**	-	0.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd Saturday - TMC
Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357974, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Tilden Rd Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357974, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

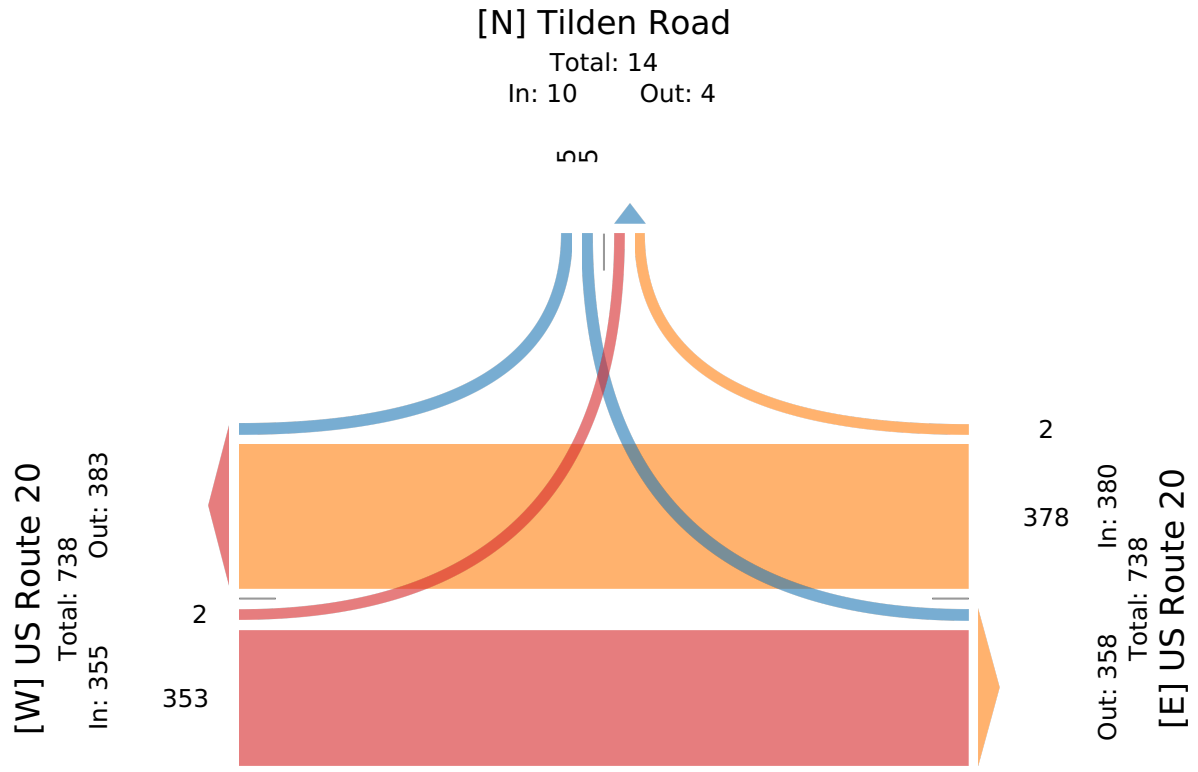
Leg	US Route 20					US Route 20					Tilden Road					
Direction	Eastbound					Westbound					Southbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2025-11-08 11:15AM	0	95	0	**95**	0	96	0	0	**96**	0	0	0	0	**0**	0	**191**
11:30AM	2	74	0	**76**	0	103	2	0	**105**	0	3	3	0	**6**	0	**187**
11:45AM	0	108	0	**108**	0	78	0	0	**78**	0	1	2	0	**3**	0	**189**
12:00PM	0	76	0	**76**	0	101	0	0	**101**	0	1	0	0	**1**	0	**178**
Total	2	353	0	**355**	0	378	2	0	**380**	0	5	5	0	**10**	0	**745**
% Approach	0.6%	99.4%	0%	**-**	-	99.5%	0.5%	0%	**-**	-	50.0%	50.0%	0%	**-**	-	-
% Total	0.3%	47.4%	0%	**47.7%**	-	50.7%	0.3%	0%	**51.0%**	-	0.7%	0.7%	0%	**1.3%**	-	-
PHF	0.250	0.817	-	**0.822**	-	0.917	0.250	-	**0.905**	-	0.417	0.417	-	**0.417**	-	0.975
Lights	1	351	0	**352**	-	373	2	0	**375**	-	4	5	0	**9**	-	736
% Lights	50.0%	99.4%	0%	**99.2%**	-	98.7%	100%	0%	**98.7%**	-	80.0%	100%	0%	**90.0%**	-	98.8%
Articulated Trucks and Single-Unit Trucks	1	1	0	**2**	-	5	0	0	**5**	-	1	0	0	**1**	-	8
% Articulated Trucks and Single-Unit Trucks	50.0%	0.3%	0%	**0.6%**	-	1.3%	0%	0%	**1.3%**	-	20.0%	0%	0%	**10.0%**	-	1.1%
Buses	0	1	0	**1**	-	0	0	0	**0**	-	0	0	0	**0**	-	1
% Buses	0%	0.3%	0%	**0.3%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0.1%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Tilden Rd Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357974, Location: 42.465622, -73.394019, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Shakerd Rd/West St AM - TMC

Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357958, Location: 42.46657, -73.392487, Site Code: R251170

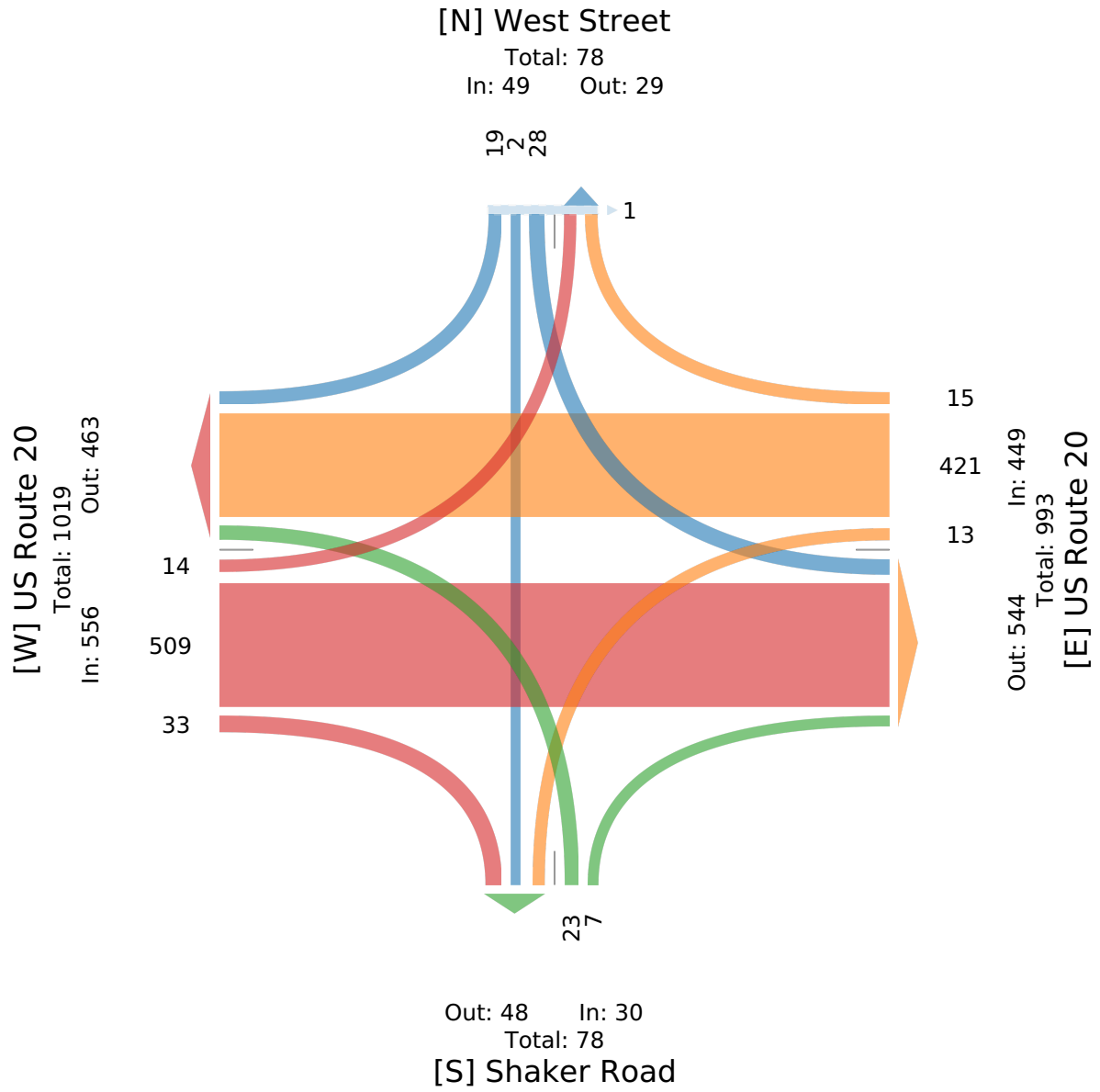
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-12 7:00AM	0	61	0	0	**61**	0	1	39	2	0	**42**	0	0	0	0	0	**0**	0	2	0	6	0	**8**	0	**111**
7:15AM	0	63	1	0	**64**	0	2	55	1	0	**58**	0	3	0	0	0	**3**	0	1	0	4	0	**5**	0	**130**
7:30AM	2	80	8	0	**90**	0	0	58	0	0	**58**	0	3	0	0	0	**3**	0	4	1	3	0	**8**	0	**159**
7:45AM	5	48	5	0	**58**	0	1	52	2	0	**55**	0	4	0	0	0	**4**	0	5	0	0	0	**5**	0	**122**
Hourly Total	7	252	14	0	**273**	0	4	204	5	0	**213**	0	10	0	0	0	**10**	0	12	1	13	0	**26**	0	**522**
8:00AM	4	67	5	0	**76**	0	1	56	3	0	**60**	0	2	0	3	0	**5**	0	2	1	4	0	**7**	1	**148**
8:15AM	1	55	3	0	**59**	0	2	54	1	0	**57**	0	4	0	1	0	**5**	0	5	0	2	0	**7**	0	**128**
8:30AM	1	70	6	0	**77**	0	3	57	2	0	**62**	0	2	0	3	0	**5**	0	3	0	0	0	**3**	0	**147**
8:45AM	1	65	5	0	**71**	0	3	50	4	0	**57**	0	5	0	0	0	**5**	0	6	0	0	0	**6**	0	**139**
Hourly Total	7	257	19	0	**283**	0	9	217	10	0	**236**	0	13	0	7	0	**20**	0	16	1	6	0	**23**	1	**562**
9:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Total	14	509	33	0	**556**	0	13	421	15	0	**449**	0	23	0	7	0	**30**	0	28	2	19	0	**49**	1	**1084**
% Approach	2.5%	91.5%	5.9%	0%	**-**	-	2.9%	93.8%	3.3%	0%	**-**	-	76.7%	0%	23.3%	0%	**-**	-	57.1%	4.1%	38.8%	0%	**-**	-	-
% Total	1.3%	47.0%	3.0%	0%	**51.3%**	-	1.2%	38.8%	1.4%	0%	**41.4%**	-	2.1%	0%	0.6%	0%	**2.8%**	-	2.6%	0.2%	1.8%	0%	**4.5%**	-	-
Lights	13	425	32	0	**470**	-	13	362	13	0	**388**	-	23	0	6	0	**29**	-	23	2	16	0	**41**	-	928
% Lights	92.9%	83.5%	97.0%	0%	**84.5%**	-	100%	86.0%	86.7%	0%	**86.4%**	-	100%	0%	85.7%	0%	**96.7%**	-	82.1%	100%	84.2%	0%	**83.7%**	-	85.6%
Articulated Trucks and Single-Unit Trucks	1	70	0	0	**71**	-	0	50	2	0	**52**	-	0	0	0	0	**0**	-	4	0	2	0	**6**	-	129
% Articulated Trucks and Single-Unit Trucks	7.1%	13.8%	0%	0%	**12.8%**	-	0%	11.9%	13.3%	0%	**11.6%**	-	0%	0%	0%	0%	**0%**	-	14.3%	0%	10.5%	0%	**12.2%**	-	11.9%
Buses	0	14	1	0	**15**	-	0	9	0	0	**9**	-	0	0	1	0	**1**	-	1	0	1	0	**2**	-	27
% Buses	0%	2.8%	3.0%	0%	**2.7%**	-	0%	2.1%	0%	0%	**2.0%**	-	0%	0%	14.3%	0%	**3.3%**	-	3.6%	0%	5.3%	0%	**4.1%**	-	2.5%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St AM - TMC
Wed Nov 12, 2025
Full Length (7 AM-9 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357958, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Shakerd Rd/West St AM - TMC

Wed Nov 12, 2025
Forced Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357958, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-12 7:15AM	0	63	1	0	**64**	0	2	55	1	0	**58**	0	3	0	0	0	**3**	0	1	0	4	0	**5**	0	**130**
7:30AM	2	80	8	0	**90**	0	0	58	0	0	**58**	0	3	0	0	0	**3**	0	4	1	3	0	**8**	0	**159**
7:45AM	5	48	5	0	**58**	0	1	52	2	0	**55**	0	4	0	0	0	**4**	0	5	0	0	0	**5**	0	**122**
8:00AM	4	67	5	0	**76**	0	1	56	3	0	**60**	0	2	0	3	0	**5**	0	2	1	4	0	**7**	1	**148**
Total	11	258	19	0	**288**	0	4	221	6	0	**231**	0	12	0	3	0	**15**	0	12	2	11	0	**25**	1	**559**
% Approach	3.8%	89.6%	6.6%	0%	**-**	-	1.7%	95.7%	2.6%	0%	**-**	-	80.0%	0%	20.0%	0%	**-**	-	48.0%	8.0%	44.0%	0%	**-**	-	-
% Total	2.0%	46.2%	3.4%	0%	**51.5%**	-	0.7%	39.5%	1.1%	0%	**41.3%**	-	2.1%	0%	0.5%	0%	**2.7%**	-	2.1%	0.4%	2.0%	0%	**4.5%**	-	-
PHF	0.550	0.806	0.594	-	**0.800**	-	0.500	0.953	0.500	-	**0.963**	-	0.750	-	0.250	-	**0.750**	-	0.600	0.500	0.688	-	**0.781**	-	0.879
Lights	10	217	18	0	**245**	-	4	196	6	0	**206**	-	12	0	2	0	**14**	-	10	2	10	0	**22**	-	487
% Lights	90.9%	84.1%	94.7%	0%	**85.1%**	-	100%	88.7%	100%	0%	**89.2%**	-	100%	0%	66.7%	0%	**93.3%**	-	83.3%	100%	90.9%	0%	**88.0%**	-	87.1%
Articulated Trucks and Single-Unit Trucks	1	34	0	0	**35**	-	0	21	0	0	**21**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	58
% Articulated Trucks and Single-Unit Trucks	9.1%	13.2%	0%	0%	**12.2%**	-	0%	9.5%	0%	0%	**9.1%**	-	0%	0%	0%	0%	**0%**	-	16.7%	0%	0%	0%	**8.0%**	-	10.4%
Buses	0	7	1	0	**8**	-	0	4	0	0	**4**	-	0	0	1	0	**1**	-	0	0	1	0	**1**	-	14
% Buses	0%	2.7%	5.3%	0%	**2.8%**	-	0%	1.8%	0%	0%	**1.7%**	-	0%	0%	33.3%	0%	**6.7%**	-	0%	0%	9.1%	0%	**4.0%**	-	2.5%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St AM - TMC
Wed Nov 12, 2025
Forced Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357958, Location: 42.46657, -73.392487, Site Code: R251170

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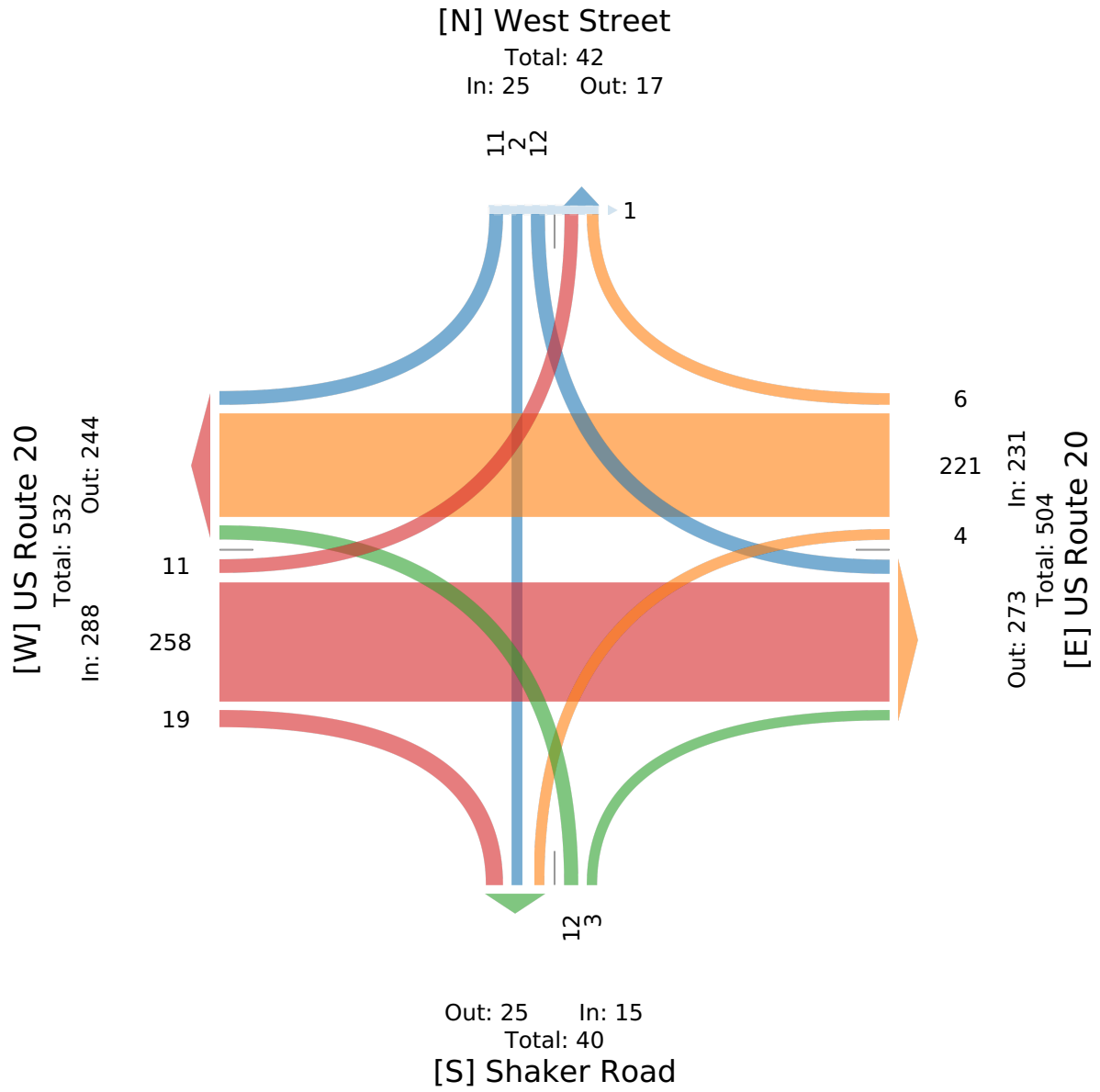


R251170: US-20 & Shakerd Rd/West St PM - TMC

Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357959, Location: 42.46657, -73.392487, Site Code: R251170

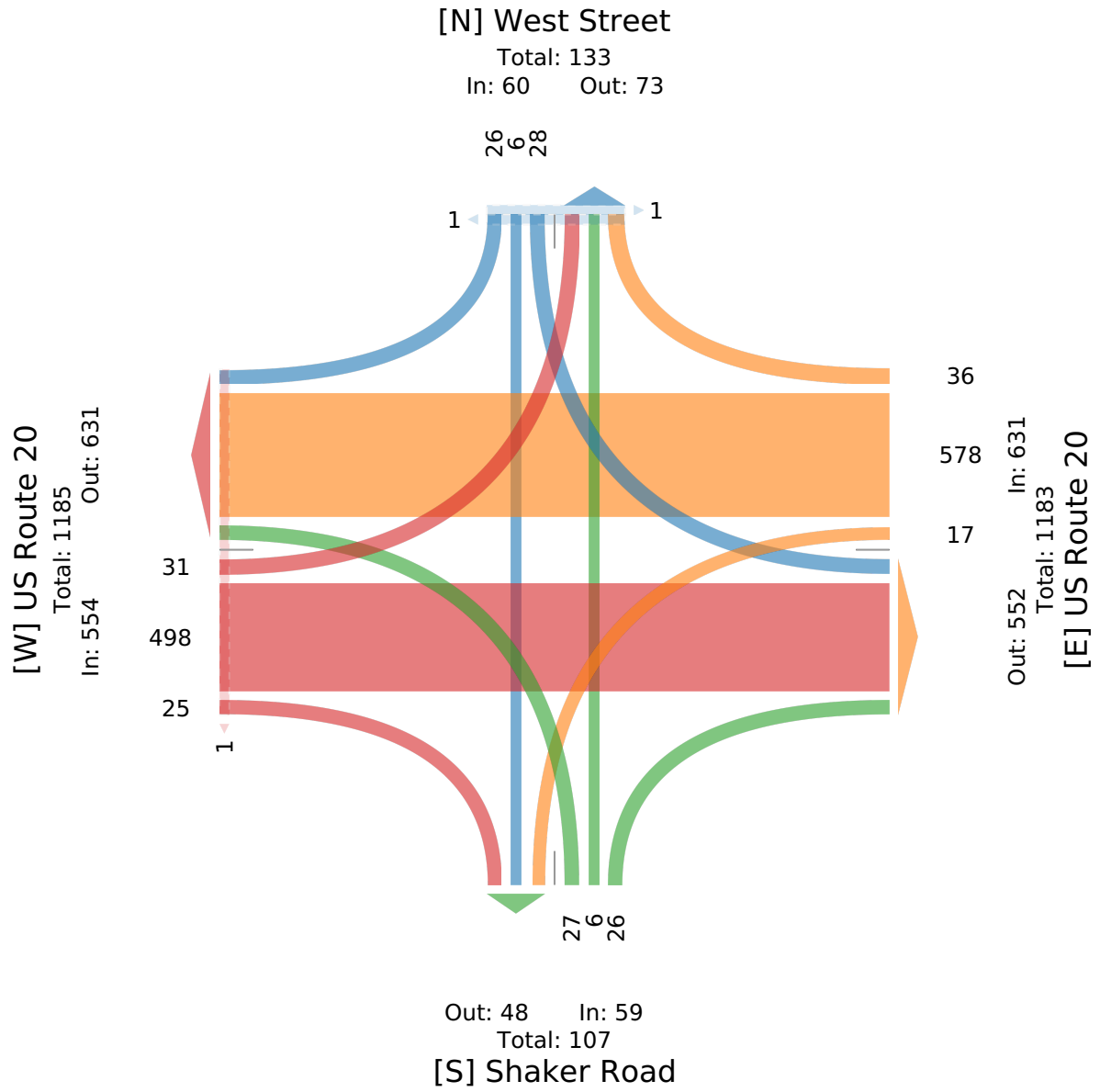
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-12 4:00PM	6	81	3	0	**90**	0	3	74	9	0	**86**	0	3	0	4	0	**7**	0	0	0	3	0	**3**	0	**186**
4:15PM	4	61	2	0	**67**	0	0	90	6	0	**96**	0	4	1	5	0	**10**	0	2	0	3	0	**5**	0	**178**
4:30PM	2	80	7	0	**89**	0	3	76	3	0	**82**	0	6	0	1	0	**7**	0	9	1	4	0	**14**	0	**192**
4:45PM	8	68	3	0	**79**	1	2	72	5	0	**79**	0	3	1	4	0	**8**	0	5	0	1	0	**6**	1	**172**
Hourly Total	20	290	15	0	**325**	1	8	312	23	0	**343**	0	16	2	14	0	**32**	0	16	1	11	0	**28**	1	**728**
5:00PM	4	51	2	0	**57**	0	2	64	2	0	**68**	0	1	0	0	0	**1**	0	3	1	4	0	**8**	1	**134**
5:15PM	1	59	0	0	**60**	0	4	71	6	0	**81**	0	1	2	6	0	**9**	0	3	0	1	0	**4**	0	**154**
5:30PM	6	51	4	0	**61**	0	1	74	4	0	**79**	0	6	2	3	0	**11**	0	5	0	4	0	**9**	0	**160**
5:45PM	0	47	4	0	**51**	0	2	57	1	0	**60**	0	3	0	3	0	**6**	0	1	4	6	0	**11**	0	**128**
Hourly Total	11	208	10	0	**229**	0	9	266	13	0	**288**	0	11	4	12	0	**27**	0	12	5	15	0	**32**	1	**576**
6:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**0**
Total	31	498	25	0	**554**	1	17	578	36	0	**631**	0	27	6	26	0	**59**	0	28	6	26	0	**60**	2	**1304**
% Approach	5.6%	89.9%	4.5%	0%	**-**	-	2.7%	91.6%	5.7%	0%	**-**	-	45.8%	10.2%	44.1%	0%	**-**	-	46.7%	10.0%	43.3%	0%	**-**	-	-
% Total	2.4%	38.2%	1.9%	0%	**42.5%**	-	1.3%	44.3%	2.8%	0%	**48.4%**	-	2.1%	0.5%	2.0%	0%	**4.5%**	-	2.1%	0.5%	2.0%	0%	**4.6%**	-	-
Lights	31	489	24	0	**544**	-	17	543	34	0	**594**	-	27	6	26	0	**59**	-	28	6	25	0	**59**	-	1256
% Lights	100%	98.2%	96.0%	0%	**98.2%**	-	100%	93.9%	94.4%	0%	**94.1%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	96.2%	0%	**98.3%**	-	96.3%
Articulated Trucks and Single-Unit Trucks	0	8	0	0	**8**	-	0	33	1	0	**34**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	43
% Articulated Trucks and Single-Unit Trucks	0%	1.6%	0%	0%	**1.4%**	-	0%	5.7%	2.8%	0%	**5.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	3.8%	0%	**1.7%**	-	3.3%
Buses	0	1	1	0	**2**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5
% Buses	0%	0.2%	4.0%	0%	**0.4%**	-	0%	0.3%	2.8%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St PM - TMC
Wed Nov 12, 2025
Full Length (4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357959, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Shakerd Rd/West St PM - TMC

Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357959, Location: 42.46657, -73.392487, Site Code: R251170

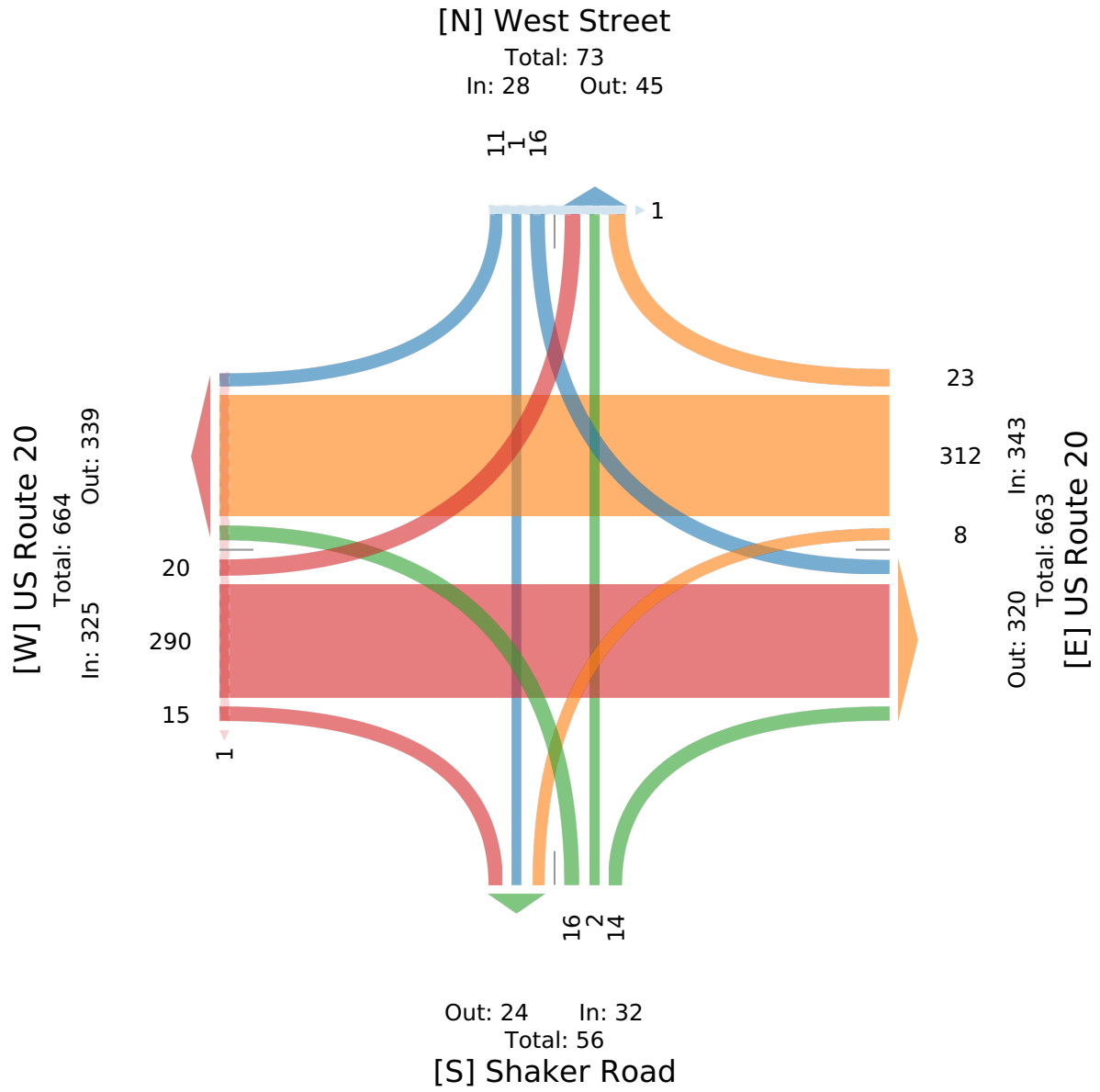
Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-12 4:00PM	6	81	3	0	**90**	0	3	74	9	0	**86**	0	3	0	4	0	**7**	0	0	0	3	0	**3**	0	**186**
4:15PM	4	61	2	0	**67**	0	0	90	6	0	**96**	0	4	1	5	0	**10**	0	2	0	3	0	**5**	0	**178**
4:30PM	2	80	7	0	**89**	0	3	76	3	0	**82**	0	6	0	1	0	**7**	0	9	1	4	0	**14**	0	**192**
4:45PM	8	68	3	0	**79**	1	2	72	5	0	**79**	0	3	1	4	0	**8**	0	5	0	1	0	**6**	1	**172**
Total	20	290	15	0	**325**	1	8	312	23	0	**343**	0	16	2	14	0	**32**	0	16	1	11	0	**28**	1	**728**
% Approach	6.2%	89.2%	4.6%	0%	**-**	-	2.3%	91.0%	6.7%	0%	**-**	-	50.0%	6.3%	43.8%	0%	**-**	-	57.1%	3.6%	39.3%	0%	**-**	-	-
% Total	2.7%	39.8%	2.1%	0%	**44.6%**	-	1.1%	42.9%	3.2%	0%	**47.1%**	-	2.2%	0.3%	1.9%	0%	**4.4%**	-	2.2%	0.1%	1.5%	0%	**3.8%**	-	-
PHF	0.625	0.895	0.536	-	**0.903**	-	0.667	0.867	0.639	-	**0.893**	-	0.667	0.500	0.700	-	**0.800**	-	0.444	0.250	0.688	-	**0.500**	-	0.948
Lights	20	283	15	0	**318**	-	8	290	21	0	**319**	-	16	2	14	0	**32**	-	16	1	10	0	**27**	-	696
% Lights	100%	97.6%	100%	0%	**97.8%**	-	100%	92.9%	91.3%	0%	**93.0%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	90.9%	0%	**96.4%**	-	95.6%
Articulated Trucks and Single-Unit Trucks	0	6	0	0	**6**	-	0	21	1	0	**22**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	29
% Articulated Trucks and Single-Unit Trucks	0%	2.1%	0%	0%	**1.8%**	-	0%	6.7%	4.3%	0%	**6.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	9.1%	0%	**3.6%**	-	4.0%
Buses	0	1	0	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Buses	0%	0.3%	0%	0%	**0.3%**	-	0%	0.3%	4.3%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St PM - TMC
Wed Nov 12, 2025
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357959, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US



R251170: US-20 & Shakerd Rd/West St Saturday - TMC

Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357955, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
2 Winners Circle, Albany, NY, 12205, US

Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2025-11-08 11:00AM	4	69	2	0	**75**	0	0	85	3	0	**88**	0	1	0	1	0	**2**	0	5	0	7	0	**12**	0	**177**
11:15AM	4	94	2	0	**100**	0	2	79	4	0	**85**	0	1	1	0	0	**2**	0	11	1	4	0	**16**	0	**203**
11:30AM	6	72	4	0	**82**	0	2	101	7	0	**110**	0	1	2	3	0	**6**	0	6	4	6	0	**16**	0	**214**
11:45AM	10	93	4	0	**107**	0	4	77	4	0	**85**	0	2	0	1	0	**3**	0	2	1	4	0	**7**	0	**202**
Hourly Total	24	328	12	0	**364**	0	8	342	18	0	**368**	0	5	3	5	0	**13**	0	24	6	21	0	**51**	0	**796**
12:00PM	1	75	2	0	**78**	0	1	87	5	0	**93**	0	5	1	2	0	**8**	0	4	1	3	0	**8**	0	**187**
12:15PM	2	76	0	0	**78**	0	2	80	10	0	**92**	0	1	1	2	0	**4**	0	4	0	2	0	**6**	0	**180**
12:30PM	2	73	2	0	**77**	0	2	83	4	0	**89**	0	0	1	4	0	**5**	0	4	0	3	0	**7**	0	**178**
12:45PM	1	90	3	0	**94**	0	0	71	6	0	**77**	0	5	1	2	0	**8**	0	2	0	3	0	**5**	0	**184**
Hourly Total	6	314	7	0	**327**	0	5	321	25	0	**351**	0	11	4	10	0	**25**	0	14	1	11	0	**26**	0	**729**
1:00PM	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Total	30	642	19	0	**691**	0	13	664	43	0	**720**	0	16	7	15	0	**38**	0	38	7	32	0	**77**	0	**1526**
% Approach	4.3%	92.9%	2.7%	0%	**-**	-	1.8%	92.2%	6.0%	0%	**-**	-	42.1%	18.4%	39.5%	0%	**-**	-	49.4%	9.1%	41.6%	0%	**-**	-	-
% Total	2.0%	42.1%	1.2%	0%	**45.3%**	-	0.9%	43.5%	2.8%	0%	**47.2%**	-	1.0%	0.5%	1.0%	0%	**2.5%**	-	2.5%	0.5%	2.1%	0%	**5.0%**	-	-
Lights	30	637	19	0	**686**	-	13	654	43	0	**710**	-	16	7	14	0	**37**	-	38	7	32	0	**77**	-	1510
% Lights	100%	99.2%	100%	0%	**99.3%**	-	100%	98.5%	100%	0%	**98.6%**	-	100%	100%	93.3%	0%	**97.4%**	-	100%	100%	100%	0%	**100%**	-	99.0%
Articulated Trucks and Single-Unit Trucks	0	3	0	0	**3**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	12
% Articulated Trucks and Single-Unit Trucks	0%	0.5%	0%	0%	**0.4%**	-	0%	1.4%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.8%
Buses	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	3
% Buses	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	6.7%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Bicycles on Road	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St Saturday - TMC
Sat Nov 8, 2025
Full Length (11 AM-1 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
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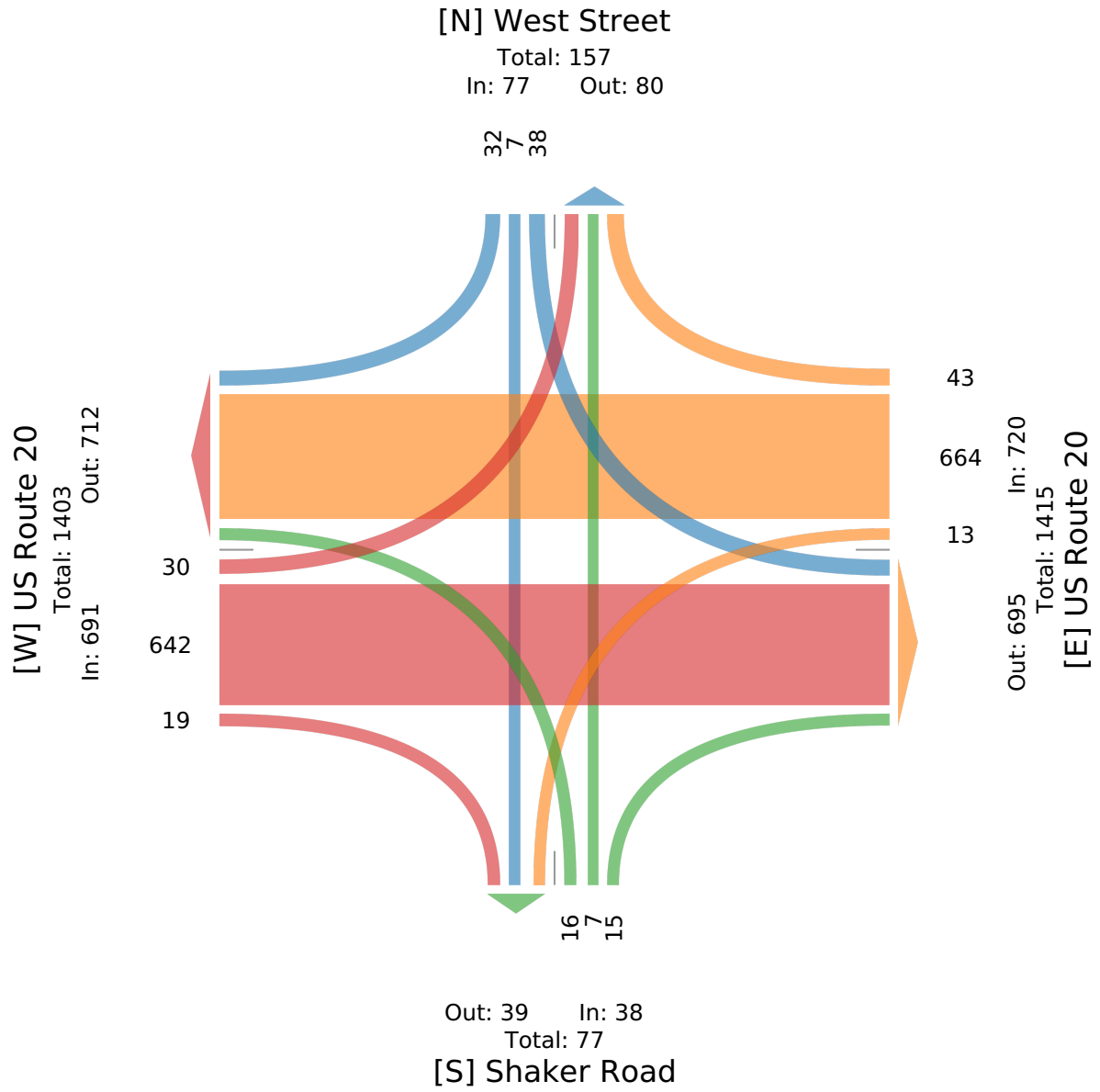

R251170: US-20 & Shakerd Rd/West St Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357955, Location: 42.46657, -73.392487, Site Code: R251170

Provided by: Creighton Manning Engineering
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Leg	US Route 20						US Route 20						Shaker Road						West Street						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2025-11-08 11:15AM	4	94	2	0	**100**	0	2	79	4	0	**85**	0	1	1	0	0	**2**	0	11	1	4	0	**16**	0	**203**
11:30AM	6	72	4	0	**82**	0	2	101	7	0	**110**	0	1	2	3	0	**6**	0	6	4	6	0	**16**	0	**214**
11:45AM	10	93	4	0	**107**	0	4	77	4	0	**85**	0	2	0	1	0	**3**	0	2	1	4	0	**7**	0	**202**
12:00PM	1	75	2	0	**78**	0	1	87	5	0	**93**	0	5	1	2	0	**8**	0	4	1	3	0	**8**	0	**187**
Total	21	334	12	0	**367**	0	9	344	20	0	**373**	0	9	4	6	0	**19**	0	23	7	17	0	**47**	0	**806**
% Approach	5.7%	91.0%	3.3%	0%	**-**	-	2.4%	92.2%	5.4%	0%	**-**	-	47.4%	21.1%	31.6%	0%	**-**	-	48.9%	14.9%	36.2%	0%	**-**	-	-
% Total	2.6%	41.4%	1.5%	0%	**45.5%**	-	1.1%	42.7%	2.5%	0%	**46.3%**	-	1.1%	0.5%	0.7%	0%	**2.4%**	-	2.9%	0.9%	2.1%	0%	**5.8%**	-	-
PHF	0.525	0.888	0.750	-	**0.857**	-	0.563	0.851	0.714	-	**0.848**	-	0.450	0.500	0.500	-	**0.594**	-	0.523	0.438	0.708	-	**0.734**	-	0.942
Lights	21	331	12	0	**364**	-	9	341	20	0	**370**	-	9	4	6	0	**19**	-	23	7	17	0	**47**	-	800
% Lights	100%	99.1%	100%	0%	**99.2%**	-	100%	99.1%	100%	0%	**99.2%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	99.3%
Articulated Trucks and Single-Unit Trucks	0	2	0	0	**2**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5
% Articulated Trucks and Single-Unit Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.6%
Buses	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Buses	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

R251170: US-20 & Shakerd Rd/West St Saturday - TMC

Sat Nov 8, 2025
Midday Peak (WKND) (11:15 AM - 12:15 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1357955, Location: 42.46657, -73.392487, Site Code: R251170

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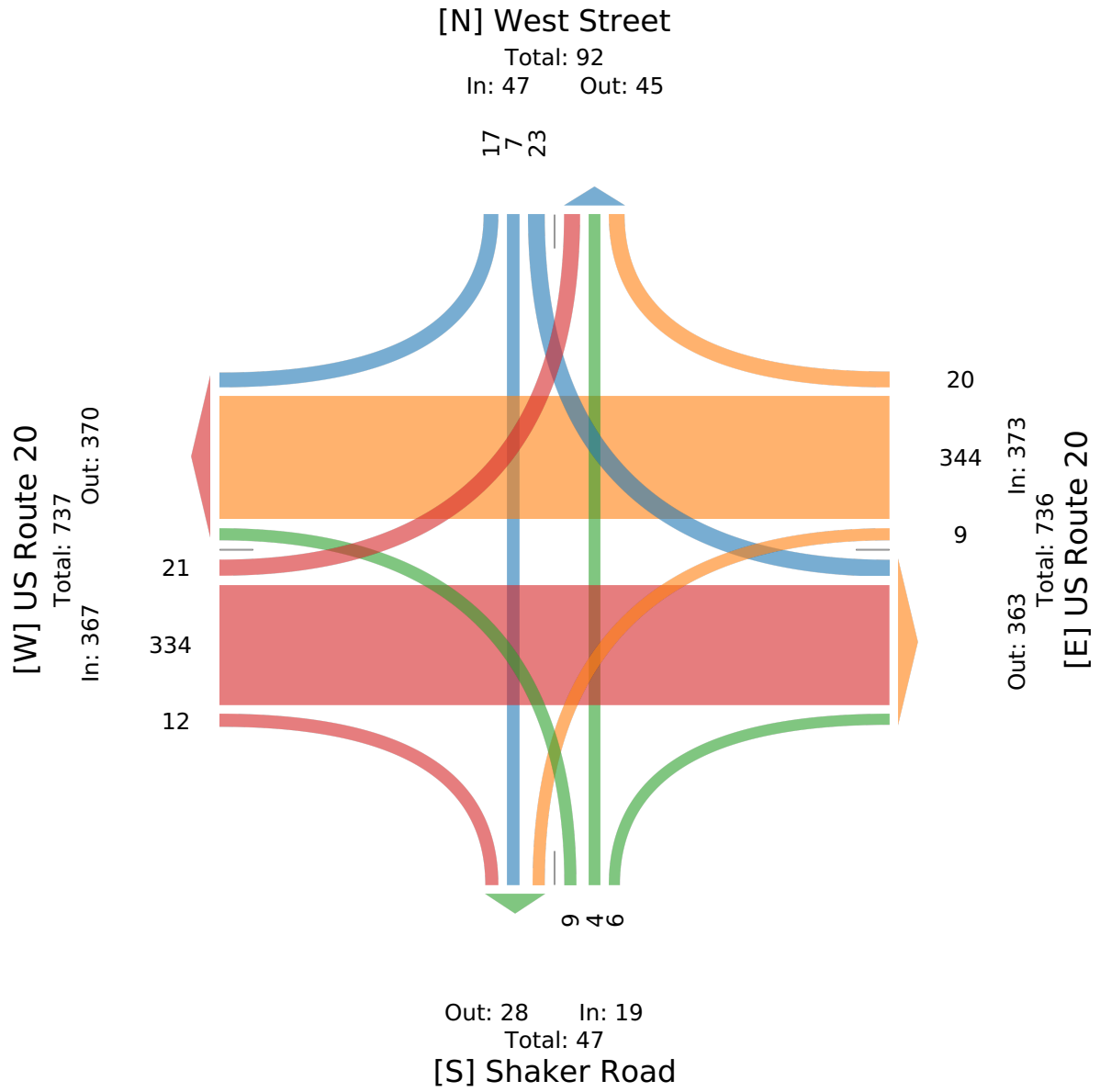

Attachment D
Level of Service Summary

Tilden Mixed-Use Development
Town of New Lebanon, New York

LOS Definitions

The following is an excerpt from the Highway Capacity Manual, 6th Edition (HCM).

Level of Service Criteria for Unsignalized Intersections

Level of service (LOS) for Two-Way Stop-Controlled (TWSC) intersections is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns by using criteria given in Exhibit 20-2. LOS is not defined for the intersection as a whole or for major-street approaches for three primary reasons: (a) major-street through vehicles are assumed to experience zero delay; (b) the disproportionate number of major-street through vehicles at a typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay for all vehicles; and (c) the resulting low delay can mask important LOS deficiencies for minor movements. LOS F is assigned to the movement if the volume-to-capacity (v/c) ratio for the movement exceeds 1.0, regardless of the control delay.

The LOS criteria for TWSC intersections are somewhat different from the criteria used in Chapter 18 for signalized intersections, primarily because user perceptions differ among transportation facility types. The expectation is that a signalized intersection is designed to carry higher traffic volumes and will present greater delay than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals, which can reduce users' delay tolerance.

The LOS criteria for All-Way Stop-Controlled (AWSC) intersections are given in Exhibit 21-8. LOS F is assigned if the v/c ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

Exhibits 20-2/21-8:
Level-of-Service Criteria for Stop Controlled Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c ≥ 1.0
10.0	A	F
>10.0 and ≤ 15.0	B	F
>15.0 and ≤ 25.0	C	F
>25.0 and ≤ 35.0	D	F
>35.0 and ≤ 50.0	E	F
>50.0	F	F

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	234	23	88	143	15	68
Future Vol, veh/h	234	23	88	143	15	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	14	17	14	7	33	13
Mvmt Flow	260	26	98	159	17	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	286	0	615	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.24	-	6.73	6.33
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	-	-	2.326	-	3.797	3.417
Pot Cap-1 Maneuver	-	-	1210	-	408	753
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	646	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1210	-	375	753
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	594	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	464	753	-	-	1210	-
HCM Lane V/C Ratio	0.036	0.1	-	-	0.081	-
HCM Control Delay (s)	13	10.3	-	-	8.2	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	292	245	0	2	4
Future Vol, veh/h	3	292	245	0	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	33	14	11	0	0	25
Mvmt Flow	3	328	275	0	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	275	0	-	0	609	275
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	334	-
Critical Hdwy	4.43	-	-	-	6.4	6.45
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.497	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1129	-	-	-	462	712
Stage 1	-	-	-	-	776	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1129	-	-	-	461	712
Mov Cap-2 Maneuver	-	-	-	-	553	-
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	730	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1129	-	-	-	650
HCM Lane V/C Ratio	0.003	-	-	-	0.01
HCM Control Delay (s)	8.2	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	258	19	4	221	6	12	0	3	12	2	11
Future Vol, veh/h	11	258	19	4	221	6	12	0	3	12	2	11
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	9	16	5	0	11	0	0	0	33	17	0	9
Mvmt Flow	13	293	22	5	251	7	14	0	3	14	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	259	0	0	315	0	0	602	599	304	598	607	256
Stage 1	-	-	-	-	-	-	330	330	-	266	266	-
Stage 2	-	-	-	-	-	-	272	269	-	332	341	-
Critical Hdwy	4.19	-	-	4.1	-	-	7.1	6.5	6.53	7.27	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Follow-up Hdwy	2.281	-	-	2.2	-	-	3.5	4	3.597	3.653	4	3.381
Pot Cap-1 Maneuver	1266	-	-	1257	-	-	414	418	669	393	414	766
Stage 1	-	-	-	-	-	-	687	649	-	708	692	-
Stage 2	-	-	-	-	-	-	738	690	-	651	642	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1265	-	-	1257	-	-	401	412	669	386	408	765
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	412	-	386	408	-
Stage 1	-	-	-	-	-	-	680	643	-	700	689	-
Stage 2	-	-	-	-	-	-	721	687	-	641	636	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	13.6	12.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	436	1265	-	-	1257	-	-	496
HCM Lane V/C Ratio	0.039	0.01	-	-	0.004	-	-	0.057
HCM Control Delay (s)	13.6	7.9	-	-	7.9	-	-	12.7
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	229	13	73	242	30	105
Future Vol, veh/h	229	13	73	242	30	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	8	7	7	7	5
Mvmt Flow	241	14	77	255	32	111

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	255	0	650	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	409	-
Critical Hdwy	-	-	4.17	-	6.47	6.25
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	-	-	2.263	-	3.563	3.345
Pot Cap-1 Maneuver	-	-	1281	-	426	791
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	660	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1281	-	400	791
Mov Cap-2 Maneuver	-	-	-	-	493	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	620	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	493	791	-	-	1281	-
HCM Lane V/C Ratio	0.064	0.14	-	-	0.06	-
HCM Control Delay (s)	12.8	10.3	-	-	8	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	319	299	2	3	1
Future Vol, veh/h	3	319	299	2	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	2	7	0	0	0
Mvmt Flow	3	351	329	2	3	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	331	0	-	0	687	330
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1240	-	-	-	416	716
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1240	-	-	-	415	716
Mov Cap-2 Maneuver	-	-	-	-	519	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	713	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1240	-	-	-	557
HCM Lane V/C Ratio	0.003	-	-	-	0.008
HCM Control Delay (s)	7.9	-	-	-	11.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	290	15	8	312	23	16	2	14	16	1	11
Future Vol, veh/h	20	290	15	8	312	23	16	2	14	16	1	11
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	7	9	0	0	0	0	0	9
Mvmt Flow	21	305	16	8	328	24	17	2	15	17	1	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	353	0	0	321	0	0	718	724	313	721	720	341
Stage 1	-	-	-	-	-	-	355	355	-	357	357	-
Stage 2	-	-	-	-	-	-	363	369	-	364	363	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.381
Pot Cap-1 Maneuver	1217	-	-	1250	-	-	347	354	732	345	356	686
Stage 1	-	-	-	-	-	-	666	633	-	665	632	-
Stage 2	-	-	-	-	-	-	660	624	-	659	628	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1216	-	-	1250	-	-	334	346	732	330	347	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	334	346	-	330	347	-
Stage 1	-	-	-	-	-	-	655	622	-	653	628	-
Stage 2	-	-	-	-	-	-	644	620	-	632	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	13.9	14.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	439	1216	-	-	1250	-	-	415
HCM Lane V/C Ratio	0.077	0.017	-	-	0.007	-	-	0.071
HCM Control Delay (s)	13.9	8	-	-	7.9	-	-	14.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	219	36	111	261	26	129
Future Vol, veh/h	219	36	111	261	26	129
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	3	3	1	0	2
Mvmt Flow	228	38	116	272	27	134

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	266	0	732	228
Stage 1	-	-	-	-	228	-
Stage 2	-	-	-	-	504	-
Critical Hdwy	-	-	4.13	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.227	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1292	-	391	811
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1292	-	356	811
Mov Cap-2 Maneuver	-	-	-	-	452	-
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	452	811	-	-	1292	-
HCM Lane V/C Ratio	0.06	0.166	-	-	0.089	-
HCM Control Delay (s)	13.5	10.3	-	-	8.1	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	353	378	2	5	5
Future Vol, veh/h	2	353	378	2	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	50	1	1	0	20	0
Mvmt Flow	2	360	386	2	5	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	388	0	-	0	751	387
Stage 1	-	-	-	-	387	-
Stage 2	-	-	-	-	364	-
Critical Hdwy	4.6	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.65	-	-	-	3.68	3.3
Pot Cap-1 Maneuver	951	-	-	-	354	665
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	665	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	951	-	-	-	353	665
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	951	-	-	-	545
HCM Lane V/C Ratio	0.002	-	-	-	0.019
HCM Control Delay (s)	8.8	-	-	-	11.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	334	12	9	344	20	9	4	6	23	7	17
Future Vol, veh/h	21	334	12	9	344	20	9	4	6	23	7	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	22	355	13	10	366	21	10	4	6	24	7	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	387	0	0	368	0	0	815	813	362	808	809	377
Stage 1	-	-	-	-	-	-	406	406	-	397	397	-
Stage 2	-	-	-	-	-	-	409	407	-	411	412	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1183	-	-	1202	-	-	298	315	687	302	317	674
Stage 1	-	-	-	-	-	-	626	601	-	633	607	-
Stage 2	-	-	-	-	-	-	623	601	-	622	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1183	-	-	1202	-	-	279	306	687	290	308	674
Mov Cap-2 Maneuver	-	-	-	-	-	-	279	306	-	290	308	-
Stage 1	-	-	-	-	-	-	614	590	-	621	602	-
Stage 2	-	-	-	-	-	-	594	596	-	600	587	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	15.9	16.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	351	1183	-	-	1202	-	-	369
HCM Lane V/C Ratio	0.058	0.019	-	-	0.008	-	-	0.136
HCM Control Delay (s)	15.9	8.1	-	-	8	-	-	16.3
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	238	23	89	145	15	69
Future Vol, veh/h	238	23	89	145	15	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	14	17	14	7	33	13
Mvmt Flow	264	26	99	161	17	77

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	290	0	623	264
Stage 1	-	-	-	-	264	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	-	-	4.24	-	6.73	6.33
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	-	-	2.326	-	3.797	3.417
Pot Cap-1 Maneuver	-	-	1206	-	404	749
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	643	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1206	-	371	749
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	461	749	-	-	1206	-
HCM Lane V/C Ratio	0.036	0.102	-	-	0.082	-
HCM Control Delay (s)	13.1	10.4	-	-	8.3	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	296	249	0	2	4
Future Vol, veh/h	3	296	249	0	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	33	14	11	0	0	25
Mvmt Flow	3	333	280	0	2	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	280	0	-	0	619	280
Stage 1	-	-	-	-	280	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	4.43	-	-	-	6.4	6.45
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.497	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1124	-	-	-	455	707
Stage 1	-	-	-	-	772	-
Stage 2	-	-	-	-	726	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1124	-	-	-	454	707
Mov Cap-2 Maneuver	-	-	-	-	548	-
Stage 1	-	-	-	-	770	-
Stage 2	-	-	-	-	726	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1124	-	-	-	645
HCM Lane V/C Ratio	0.003	-	-	-	0.01
HCM Control Delay (s)	8.2	-	-	-	10.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	262	19	4	224	6	12	0	3	12	2	11
Future Vol, veh/h	11	262	19	4	224	6	12	0	3	12	2	11
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	9	16	5	0	11	0	0	0	33	17	0	9
Mvmt Flow	13	298	22	5	255	7	14	0	3	14	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	263	0	0	320	0	0	611	608	309	607	616	260
Stage 1	-	-	-	-	-	-	335	335	-	270	270	-
Stage 2	-	-	-	-	-	-	276	273	-	337	346	-
Critical Hdwy	4.19	-	-	4.1	-	-	7.1	6.5	6.53	7.27	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Follow-up Hdwy	2.281	-	-	2.2	-	-	3.5	4	3.597	3.653	4	3.381
Pot Cap-1 Maneuver	1262	-	-	1251	-	-	409	413	664	387	409	762
Stage 1	-	-	-	-	-	-	683	646	-	704	690	-
Stage 2	-	-	-	-	-	-	735	688	-	647	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1261	-	-	1251	-	-	396	407	664	380	403	761
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	407	-	380	403	-
Stage 1	-	-	-	-	-	-	676	640	-	696	687	-
Stage 2	-	-	-	-	-	-	718	685	-	637	633	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	13.7	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	431	1261	-	-	1251	-	-	490
HCM Lane V/C Ratio	0.04	0.01	-	-	0.004	-	-	0.058
HCM Control Delay (s)	13.7	7.9	-	-	7.9	-	-	12.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	232	13	74	246	30	107
Future Vol, veh/h	232	13	74	246	30	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	8	7	7	7	5
Mvmt Flow	244	14	78	259	32	113

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	659	244
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	415	-
Critical Hdwy	-	-	4.17	-	6.47	6.25
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	-	-	2.263	-	3.563	3.345
Pot Cap-1 Maneuver	-	-	1278	-	421	787
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	656	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1278	-	395	787
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	616	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	489	787	-	-	1278	-
HCM Lane V/C Ratio	0.065	0.143	-	-	0.061	-
HCM Control Delay (s)	12.9	10.3	-	-	8	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	324	304	2	3	1
Future Vol, veh/h	3	324	304	2	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	2	7	0	0	0
Mvmt Flow	3	356	334	2	3	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	336	0	-	0	697	335
Stage 1	-	-	-	-	335	-
Stage 2	-	-	-	-	362	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1235	-	-	-	410	712
Stage 1	-	-	-	-	729	-
Stage 2	-	-	-	-	709	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1235	-	-	-	409	712
Mov Cap-2 Maneuver	-	-	-	-	514	-
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	709	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1235	-	-	-	552
HCM Lane V/C Ratio	0.003	-	-	-	0.008
HCM Control Delay (s)	7.9	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	294	15	8	317	23	16	2	14	16	1	11
Future Vol, veh/h	20	294	15	8	317	23	16	2	14	16	1	11
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	7	9	0	0	0	0	0	9
Mvmt Flow	21	309	16	8	334	24	17	2	15	17	1	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	359	0	0	325	0	0	728	734	317	731	730	347
Stage 1	-	-	-	-	-	-	359	359	-	363	363	-
Stage 2	-	-	-	-	-	-	369	375	-	368	367	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.381
Pot Cap-1 Maneuver	1211	-	-	1246	-	-	341	350	728	340	352	680
Stage 1	-	-	-	-	-	-	663	631	-	660	628	-
Stage 2	-	-	-	-	-	-	655	621	-	656	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1210	-	-	1246	-	-	328	342	728	325	344	679
Mov Cap-2 Maneuver	-	-	-	-	-	-	328	342	-	325	344	-
Stage 1	-	-	-	-	-	-	652	620	-	648	624	-
Stage 2	-	-	-	-	-	-	639	617	-	629	615	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	14	14.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	433	1210	-	-	1246	-	-	410
HCM Lane V/C Ratio	0.078	0.017	-	-	0.007	-	-	0.072
HCM Control Delay (s)	14	8	-	-	7.9	-	-	14.5
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	3.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	222	37	113	265	26	131
Future Vol, veh/h	222	37	113	265	26	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	3	3	1	0	2
Mvmt Flow	231	39	118	276	27	136

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	270	0	743	231
Stage 1	-	-	-	-	231	-
Stage 2	-	-	-	-	512	-
Critical Hdwy	-	-	4.13	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.227	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1288	-	386	808
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1288	-	350	808
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	447	808	-	-	1288	-
HCM Lane V/C Ratio	0.061	0.169	-	-	0.091	-
HCM Control Delay (s)	13.6	10.4	-	-	8.1	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	358	384	2	5	5
Future Vol, veh/h	2	358	384	2	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	50	1	1	0	20	0
Mvmt Flow	2	365	392	2	5	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	394	0	-	0	762	393
Stage 1	-	-	-	-	393	-
Stage 2	-	-	-	-	369	-
Critical Hdwy	4.6	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.65	-	-	-	3.68	3.3
Pot Cap-1 Maneuver	946	-	-	-	348	660
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	661	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	946	-	-	-	347	660
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	661	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	946	-	-	-	539
HCM Lane V/C Ratio	0.002	-	-	-	0.019
HCM Control Delay (s)	8.8	-	-	-	11.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	339	12	9	349	20	9	4	6	23	7	17
Future Vol, veh/h	21	339	12	9	349	20	9	4	6	23	7	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	22	361	13	10	371	21	10	4	6	24	7	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	392	0	0	374	0	0	826	824	368	819	820	382
Stage 1	-	-	-	-	-	-	412	412	-	402	402	-
Stage 2	-	-	-	-	-	-	414	412	-	417	418	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1178	-	-	1196	-	-	293	310	682	297	312	670
Stage 1	-	-	-	-	-	-	621	598	-	629	604	-
Stage 2	-	-	-	-	-	-	620	598	-	617	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1178	-	-	1196	-	-	274	302	682	285	304	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	274	302	-	285	304	-
Stage 1	-	-	-	-	-	-	609	587	-	617	599	-
Stage 2	-	-	-	-	-	-	591	593	-	595	583	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	16	16.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	346	1178	-	-	1196	-	-	364
HCM Lane V/C Ratio	0.058	0.019	-	-	0.008	-	-	0.137
HCM Control Delay (s)	16	8.1	-	-	8	-	-	16.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	246	23	94	154	15	73
Future Vol, veh/h	246	23	94	154	15	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	14	17	14	7	33	13
Mvmt Flow	273	26	104	171	17	81

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	299	0	652	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	379	-
Critical Hdwy	-	-	4.24	-	6.73	6.33
Critical Hdwy Stg 1	-	-	-	-	5.73	-
Critical Hdwy Stg 2	-	-	-	-	5.73	-
Follow-up Hdwy	-	-	2.326	-	3.797	3.417
Pot Cap-1 Maneuver	-	-	1197	-	388	740
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	629	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	354	740
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	574	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.1	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	447	740	-	-	1197	-
HCM Lane V/C Ratio	0.037	0.11	-	-	0.087	-
HCM Control Delay (s)	13.4	10.5	-	-	8.3	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.4	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	305	260	1	4	7
Future Vol, veh/h	6	305	260	1	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	33	14	11	0	0	25
Mvmt Flow	7	343	292	1	4	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	293	0	-	0	650	293
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	4.43	-	-	-	6.4	6.45
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.497	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1111	-	-	-	437	695
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1111	-	-	-	434	695
Mov Cap-2 Maneuver	-	-	-	-	533	-
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	713	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1111	-	-	-	626
HCM Lane V/C Ratio	0.006	-	-	-	0.02
HCM Control Delay (s)	8.3	-	-	-	10.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	277	19	4	236	6	12	0	3	12	2	12
Future Vol, veh/h	13	277	19	4	236	6	12	0	3	12	2	12
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	9	16	5	0	11	0	0	0	33	17	0	9
Mvmt Flow	15	315	22	5	268	7	14	0	3	14	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	276	0	0	337	0	0	646	642	326	641	650	273
Stage 1	-	-	-	-	-	-	356	356	-	283	283	-
Stage 2	-	-	-	-	-	-	290	286	-	358	367	-
Critical Hdwy	4.19	-	-	4.1	-	-	7.1	6.5	6.53	7.27	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.27	5.5	-
Follow-up Hdwy	2.281	-	-	2.2	-	-	3.5	4	3.597	3.653	4	3.381
Pot Cap-1 Maneuver	1248	-	-	1234	-	-	387	395	649	367	391	749
Stage 1	-	-	-	-	-	-	666	633	-	693	681	-
Stage 2	-	-	-	-	-	-	722	679	-	630	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1247	-	-	1234	-	-	373	388	649	360	384	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	373	388	-	360	384	-
Stage 1	-	-	-	-	-	-	658	625	-	684	678	-
Stage 2	-	-	-	-	-	-	704	676	-	619	618	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.1	14.2	13.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	408	1247	-	-	1234	-	-	476
HCM Lane V/C Ratio	0.042	0.012	-	-	0.004	-	-	0.062
HCM Control Delay (s)	14.2	7.9	-	-	7.9	-	-	13.1
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	298	248	14	17	13
Future Vol, veh/h	11	298	248	14	17	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	14	11	0	0	0
Mvmt Flow	12	335	279	16	19	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	295	0	-	0	646	287
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	359	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1278	-	-	-	439	757
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	711	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1278	-	-	-	435	757
Mov Cap-2 Maneuver	-	-	-	-	533	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1278	-	-	-	611
HCM Lane V/C Ratio	0.01	-	-	-	0.055
HCM Control Delay (s)	7.8	-	-	-	11.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	3	4	0	6
Future Vol, veh/h	5	0	3	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	33	0	0	17
Mvmt Flow	6	0	3	4	0	7

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	12	5	0	0	7	0
Stage 1	5	-	-	-	-	-
Stage 2	7	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1013	1084	-	-	1627	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1013	1084	-	-	1627	-
Mov Cap-2 Maneuver	1013	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1021	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1013	1627	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	-	-	8.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	253	13	83	265	30	117
Future Vol, veh/h	253	13	83	265	30	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	8	7	7	7	5
Mvmt Flow	266	14	87	279	32	123

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	280	0	719	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	453	-
Critical Hdwy	-	-	4.17	-	6.47	6.25
Critical Hdwy Stg 1	-	-	-	-	5.47	-
Critical Hdwy Stg 2	-	-	-	-	5.47	-
Follow-up Hdwy	-	-	2.263	-	3.563	3.345
Pot Cap-1 Maneuver	-	-	1254	-	388	765
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	630	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1254	-	361	765
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	587	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	462	765	-	-	1254	-
HCM Lane V/C Ratio	0.068	0.161	-	-	0.07	-
HCM Control Delay (s)	13.4	10.6	-	-	8.1	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	347	324	7	6	9
Future Vol, veh/h	11	347	324	7	6	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	2	7	0	0	0
Mvmt Flow	12	381	356	8	7	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	364	0	-	0	765	360
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	405	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1206	-	-	-	374	689
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	678	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1206	-	-	-	370	689
Mov Cap-2 Maneuver	-	-	-	-	484	-
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	678	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1206	-	-	-	589
HCM Lane V/C Ratio	0.01	-	-	-	0.028
HCM Control Delay (s)	8	-	-	-	11.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	326	15	8	352	23	16	2	14	16	1	15
Future Vol, veh/h	23	326	15	8	352	23	16	2	14	16	1	15
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	2	0	0	7	9	0	0	0	0	0	9
Mvmt Flow	24	343	16	8	371	24	17	2	15	17	1	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	396	0	0	359	0	0	807	811	351	808	807	384
Stage 1	-	-	-	-	-	-	399	399	-	400	400	-
Stage 2	-	-	-	-	-	-	408	412	-	408	407	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.29
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.381
Pot Cap-1 Maneuver	1174	-	-	1211	-	-	302	316	697	302	317	648
Stage 1	-	-	-	-	-	-	631	606	-	630	605	-
Stage 2	-	-	-	-	-	-	624	598	-	624	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1173	-	-	1211	-	-	288	307	697	288	308	647
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	307	-	288	308	-
Stage 1	-	-	-	-	-	-	618	594	-	617	600	-
Stage 2	-	-	-	-	-	-	604	593	-	596	589	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	15.1	15.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	390	1173	-	-	1211	-	-	390
HCM Lane V/C Ratio	0.086	0.021	-	-	0.007	-	-	0.086
HCM Control Delay (s)	15.1	8.1	-	-	8	-	-	15.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	322	302	43	40	29
Future Vol, veh/h	31	322	302	43	40	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	2	7	0	0	0
Mvmt Flow	34	354	332	47	44	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	379	0	-	0	778	356
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	422	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1191	-	-	-	368	693
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	666	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1191	-	-	-	357	693
Mov Cap-2 Maneuver	-	-	-	-	473	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1191	-	-	-	546
HCM Lane V/C Ratio	0.029	-	-	-	0.139
HCM Control Delay (s)	8.1	-	-	-	12.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	0	5	3	0	4
Future Vol, veh/h	11	0	5	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	12	0	5	3	0	4

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	11	7	0	0	8	0
Stage 1	7	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1014	1081	-	-	1625	-
Stage 1	1021	-	-	-	-	-
Stage 2	1024	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1014	1081	-	-	1625	-
Mov Cap-2 Maneuver	1014	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1024	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1014	1625	-
HCM Lane V/C Ratio	-	-	0.012	-	-
HCM Control Delay (s)	-	-	8.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	245	37	125	290	26	143
Future Vol, veh/h	245	37	125	290	26	143
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	275	200	-	0	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	3	3	1	0	2
Mvmt Flow	255	39	130	302	27	149

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	294	0	817	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	562	-
Critical Hdwy	-	-	4.13	-	6.4	6.22
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.227	-	3.5	3.318
Pot Cap-1 Maneuver	-	-	1262	-	349	784
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1262	-	313	784
Mov Cap-2 Maneuver	-	-	-	-	416	-
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	516	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.5	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	416	784	-	-	1262	-
HCM Lane V/C Ratio	0.065	0.19	-	-	0.103	-
HCM Control Delay (s)	14.3	10.7	-	-	8.2	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.7	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	384	411	7	9	15
Future Vol, veh/h	11	384	411	7	9	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	175	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	50	1	1	0	20	0
Mvmt Flow	11	392	419	7	9	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	426	0	-	0	837	423
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	414	-
Critical Hdwy	4.6	-	-	-	6.6	6.2
Critical Hdwy Stg 1	-	-	-	-	5.6	-
Critical Hdwy Stg 2	-	-	-	-	5.6	-
Follow-up Hdwy	2.65	-	-	-	3.68	3.3
Pot Cap-1 Maneuver	918	-	-	-	314	635
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	630	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	918	-	-	-	310	635
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	918	-	-	-	536
HCM Lane V/C Ratio	0.012	-	-	-	0.046
HCM Control Delay (s)	9	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	380	12	9	388	20	9	4	6	23	7	21
Future Vol, veh/h	25	380	12	9	388	20	9	4	6	23	7	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	175	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	27	404	13	10	413	21	10	4	6	24	7	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	434	0	0	417	0	0	923	919	411	914	915	424
Stage 1	-	-	-	-	-	-	465	465	-	444	444	-
Stage 2	-	-	-	-	-	-	458	454	-	470	471	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1136	-	-	1153	-	-	252	273	645	256	275	634
Stage 1	-	-	-	-	-	-	581	566	-	597	579	-
Stage 2	-	-	-	-	-	-	587	573	-	578	563	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1136	-	-	1153	-	-	232	264	645	244	266	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	264	-	244	266	-
Stage 1	-	-	-	-	-	-	567	552	-	583	574	-
Stage 2	-	-	-	-	-	-	554	568	-	554	549	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	17.9	18
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	300	1136	-	-	1153	-	-	332
HCM Lane V/C Ratio	0.067	0.023	-	-	0.008	-	-	0.163
HCM Control Delay (s)	17.9	8.2	-	-	8.1	-	-	18
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	360	382	47	48	36
Future Vol, veh/h	33	360	382	47	48	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	34	367	390	48	49	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	438	0	-	0	849	414
Stage 1	-	-	-	-	414	-
Stage 2	-	-	-	-	435	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1133	-	-	-	334	643
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	657	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1133	-	-	-	324	643
Mov Cap-2 Maneuver	-	-	-	-	446	-
Stage 1	-	-	-	-	651	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1133	-	-	-	513
HCM Lane V/C Ratio	0.03	-	-	-	0.167
HCM Control Delay (s)	8.3	-	-	-	13.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	0	4	14	0	10
Future Vol, veh/h	14	0	4	14	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	0	4	14	0	10

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	21	11	0	0	18	0
Stage 1	11	-	-	-	-	-
Stage 2	10	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	1001	1076	-	-	1612	-
Stage 1	1017	-	-	-	-	-
Stage 2	1018	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1001	1076	-	-	1612	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1018	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1001	1612	-
HCM Lane V/C Ratio	-	-	0.014	-	-
HCM Control Delay (s)	-	-	8.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

EXHIBIT F

New York State Department of Transportation
Concurrence Letter

NEW YORK STATE | Department of Transportation

KATHY HOCHUL
Governor

MARIE THERESE DOMINGUEZ
Commissioner

November 24, 2025

Brendon Becker, P.E.

Lamont Engineers

PO Box 610

Cobleskill, NY 12043

Dear Brendon,

NYSDOT has reviewed your latest plan set and Traffic Study submitted by Lamont Engineers for the Proposed Tildon Development Project at 536 State Route 20 and Tilden Rd. in the Town of New Lebanon.

NYSDOT has found that they are concurrent with NYSDOT regulations and requirements. At this point, the project has completed the technical review process and upon providing the contractor's insurance and bonding certificates, NYSDOT can issue a permit for the project.

Once this permit is issued, work on the NYSDOT Right-Of-Way may not commence until April 1, 2026 at the earliest.

If you have any questions or concerns, please contact my office.

Regards,

William C. First

Acting ARE, Field Permit Engineer-Columbia County

New York State Department of Transportation, Hudson Valley Region

307 Route 66, Hudson, NY 12534

518-828-9401 William.First @dot.ny.gov

www.dot.ny.gov

EXHIBIT G

New York State Electric & Gas
Email Correspondence

From: Dexheimer, Sierra
To: Brendon Becker
Subject: RE: #538 US RT 20
Date: Wednesday, August 6, 2025 12:02:41 PM

Hi Brendon,

Yes we have the power to serve this new buildings load as long as these upgrades happen, this comes down to whether or not the customer wants to pay for the upgrades. The rough estimate is around $120,000 for Nyseg to upgrade the system to handle this, obviously this number can change as well.

For your side of customer protection the distribution planning that handled this study said that a 750kva padmount transformer should be installed here to service the amount of load requested, nyseg supplies the transformer you would just have to supply the vaultpad for it. If this goes through then we can meet on site and discuss locations.

Thank you

Internal Use

From: Brendon Becker <BBecker@lamontengineers.com>
Sent: Friday, August 1, 2025 5:33 PM
To: Dexheimer, Sierra <sdexheimer@nyseg.com>
Subject: RE: #538 US RT 20

EXTERNAL SENDER: Be cautious, especially with links and attachments. Report phishing if suspicious.

Hi Sierra,

Glad to hear it's completed. We'll look forward to the details. Sounds like at least that the power is available and the substation is sufficient but we just need to upgrade distribution to get it there? The planning board is just going to ask "do we have the power to serve this".

Thanks,

Brendon Becker

Sent from my Verizon, Samsung Galaxy smartphone

-------- Original message --------
From: "Dexheimer, Sierra" <sdexheimer@nyseg.com>

Date: 7/30/25 7:41 AM (GMT-05:00)
To: Brendon Becker <BBecker@lamontengineers.com>
Subject: #538 US RT 20

Good morning,

I received the load study back and I just have to put together prices for everything that has to be upgraded on our system since the customer will be responsible for this. After I get this completed I can send a rough estimate of what the costs will be for this to see if they would still like to move forward.

Thank you

Internal Use

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EXHIBIT H

Lamont Engineers
Revised Water and Sanitary System
Engineer's Report

Lamont Engineers
ENGINEERS • PLANNERS • FACILITY OPERATIONS

Dedicated to Service…Committed to Excellence

2024125

December 2, 2025

Sean Howard, P.E.
County Engineer
Columbia County Department of Health
325 Columbia Street
Hudson, New York 12534
michael.deruzzio@columbiacountyny.com

RE: Tilden Commons LLC
538 US route 20, New Lebanon
Water and Sanitary System Engineer's Report - REVISED

Dear Mr. Howard:

Lamont Engineers, P.C. is pleased to submit this letter report summarizing the design/installation of the water system and wastewater system for the proposed Tilden Commons development at 538 US Route 20 in the Town of New Lebanon, Columbia County, New York. This is a revision to address the changes in project scope and modifications of the report previously submitted in July 2025. Below is a summary of the anticipated water and sanitary needs for this project:

I. Introduction

It is our understanding that the proposed construction will include a three-story building located approximately as indicated on the site drawing in Attachment A. The building is proposed as a mixed-use building with approximately 10,000 SF commercial space on the 1st floor of the south side of the building and 41 residential apartments and community space in the remainder of the building, for a total square footage of 60,000 SF. The building will be required to have a sprinkler system to comply with current NYS adopted IBC codes. The building sprinkler system will be supplied with a below grade waters storage tank. Because the project involves the construction of 41 residential units, the water system for this building will be considered a community water system regulated by the Department of Health and to comply with the NYS DOH Part 5 regulations.

The site currently has an existing well that served the commercial building currently on the site, to be demolished. This well will be evaluated for use at the supply source for the proposed water system.

II. Projected Water System Demand

The projected water demand of the site is summarized in Table I below. The average daily flow amounts were developed using the NYSDEC intermediate wastewater system design standards. Detailed water demand calculations are provided in Attachment B.

Table I – Water System Demand

	Average Daily Demand (gpd)	Maximum Daily Demand (gpd) 1.5x
Residential Space	6,710	10,065
Commercial Space	2,000	3,000
Total =	8,710	13,065

Based on these figures, the following can be deduced:

1. In accordance with NYSDOH requirements, a water source must have a capacity equal to or greater than the estimated Maximum Daily Demand. The average daily demand is 8,710 GPD, which equated to about 6 gpm. The maximum daily demand of 13,065 gpd equates to 9 gpm. This site has an existing well that was evaluated for capacity for the proposed use as described above. A 72-hour pump test was completed on the well showing that the well has a safe long-term draw down capacity of 13 gpm, so it is suitable to meet the system demand. Results of this test will be provided in a separate hydrogeological report. The well is still awaking the full water quality results to determine if treatment is required.. Utilizing the fixture count as show in Attachment C, we should design the system to supply a maximum water supply demand of 101 gpm.

III. Water Sources

The existing Groundwater Well #1 has been on the site for several years, long enough that the DOH office does not have any records on file regarding the construction but we were able to obtain notes and records from the local well driller. The pump was pulled to verify the depth to compare the notes provided by the well driller. Pertinent well information, including drawdown test information for the well based on the investigations to date is presented in the well detail drawing the Attachment C and in Table II below:

Table II – Summary of Groundwater Supply

	Production Well
Well Depth	352 ft.

Pump Setting Depth	90 ft.
Casing Depth	124 ft.
Rated Yield	13 gpm
Drawdown (feet) @ Rated Yield	80 ft. @ 13 gpm

A 72-hour pump test performed on June 29 – July 2 of the existing well indicated that this well has a yield of 13 gallons per minute (gpm) with 80 ft. of drawdown.

The initial basic water quality results were pulled from the well prior to the pump test. The results of these tests showed the water to be very turbid and high in iron. This is most likely a result of the well sitting for such a long period (At least 1 year) being out of service with no flow. Upon initial start of the pump test, the water turbidity exceeded 200 NTU, toward the end of the pump test the turbidity was approaching 20 NTU so we are confident that once the well has been flowed for an extended period of time the turbidity and likely the iron levels will improve. Following the completion of the well recovery after the July 2 completion of the pump test, a full Part-5 water quality sample will be pulled for laboratory testing. This information will be provided to amend this report once able. If water quality still shows concerns with the existing well, treatment will need to be considered.

The well location on the site has been considered for the majority of the other components on the site. The well is located on the opposite side of the proposed wastewater treatment system and it is currently close to the middle of the site. The development parcel is only about 200’ in width. The property contains most of the area to be within the required 100’ well projection area but there would be no location on this property able to meet the 200’ well control area as suggested by the DOH requirements. The 72-hour pump test included monitoring of several other wells within a 500’ radius of the site to ensure the draw down of this well does not affect nearby property owners. That data will also be used to evaluate the suspected cone of influence for this well to determine if that 200’ protection area for this well is a major concern or if some consideration can be given for a narrow cone of influence on a lower flow production well of this size regarding well setback restrictions.

IV. Well Pump and Supply Pump

Well #1 is already equipped with a Goulds 10GS10422C submersible well pump with 1.5 HP motor that will convey water from the well to the proposed facility. The well pump will pump to an underground clearwell tank located within the building foundation. The pump will operated by floats located within the clear well tank. The proposed pumping rate for the well pump is 11 GPM.

This pump can pump 15 GPM with a pump depth of 100' against 30 psi system head. This will be sufficient to pump the proposed 11 GPM at 164 TDH estimated head from the pump to the clearwell.

Water will be pumped from the clearwell tank to the building plumbing distribution system. Water supply and system pressure will be provided by a constant pressure style booster pump. The proposed pumping system is a Goulds 125MS1G2G2 pump with an AQUAVAR e-AB2 variable speed pump controller. The pump will be adjust drive speed based on system pressure to maintain a constant system pressure as long as there is system demand. This pump it capable of pumping 101 GPM at 47 psi, and a range of lower flow rates as it ramps down. Three (3) 120-gallon hydro-pneumatic pressure tank will be installed to serve as a buffer during low demand periods. A pressure transducer will relay system pressure information to the pump's controller which will adjust the operating capacities of the pump to maintain system flows and pressures. A pressure of 55 psi will be maintained in the water treatment facility. Distribution pressures will vary throughout the system from 70 psi to 30 psi.

V. Iron and Turbidity Treatment

This will only be required if final water quality analysis reveals the well iron levels are over the DOH Maximum Contaminant Limit (MCL).

VI. Chemical Treatment & Water Storage

In accordance with current groundwater treatment standards as set forth by the NYSDOH, adequate disinfection must be provided to achieve 4-log (99.99%) inactivation of viruses.

Disinfection will be achieved by injecting Sodium Hypochlorite (NaOCl) prior to the clearwell/contact tank. CT calculations were completed to determine the contact volume required to achieve 4.0-log virus inactivation at the anticipated peak flow rate of 11 gpm with a minimum free chlorine residual of 0.5 ppm based on a tank configuration, inlet/outlet baffling, and intra-basin baffling, corresponding to a baffling factor of 0.9. Based on this baffling factor, a flow rate of 11 gpm, and an average pH of 7 at a temperature of 10°C, the volume of water required to achieve 4-log inactivation is approximately 150 gallons. The system should be designed to the need to be able to meet the maximum fixture demand flow in the building of 101 GPM during peak demand for a 2-hour period and also provide a buffer of at least 150 gallons to ensure the contact time is still provided of the full demand volume is used. 101 GPM x 2 hours x 60 mins/hours = 12,120 gallons. Therefore, we recommend a clearwell tank of at least 13,000 gallons be provided to meet the system demand flow and ensure contact time is provided. Refer to Attachment C for CT storage volume calculations.

Chemical Feed Rate & Equipment

12.5% Sodium Hypochlorite (NaOCl) solution will be injected prior to the clearwell. The chemical feed pump will operate simultaneously with the well pump by means of a dry contact in the simplex well pump control panel and will be capable of providing a free residual of 0.5 ppm to 2 ppm. Assuming a free chlorine residual of 0.5 ppm, a flow of 11 gpm and a dilution ratio of 9 parts H_2O to 1 part chlorine, the required chemical feed rate is 0.53 gpd or 0.02 gph. Assuming a free chlorine residual of 2.0 ppm, and the same flow and dilution ratio, the required chemical feed rate is 2.13 gpd or 0.09 gph. A Stenner Peristaltic Adjustable-Rate Feed Pump, Model 45MHP2, with a max. capacity of 10 gpd at a maximum working pressure of 100 psi and a turndown ratio of 20:1 is provided. Refer to Attachment C for chemical feed calculations and chemical feed pump information.

The treated water will be supplied to a 13,000 gallon clearwell tank capable of providing a flow of 101 GPM for 120 minutes during peak demand. A booster pump will draw water from the clearwell and supply the domestic water system with pressurized water throughout the building. A variable speed booster pump in conjunction with a 120 gallon hydropneumatics tank and pressure switch will ensure 40 – 60 psi of pressure is supplied to the building at all times. A Goulds 5AVN315HM03 booster pump system with variable speed controller or similar will be provided.

VII. Sprinkler System

A 30,000 Gallon water storage tank will need to be provided below grade to serve as the storage supply for the sprinkler system. This would be capable of providing 500 GPM for 60 minutes through the use of a fire pump to be designed with the sprinkler system. This tank and piping for the fire system will be separated from the domestic water system using a double check backflow preventer as it will likely sit unused for long periods of time.

VIII. Wastewater System

The proposed wastewater treatment system for the facility will be as follows:

- Primary Treatment: Standard septic tank settling – PER NYSDEC standards
- Secondary Treatment – Orenco AX MAX treatment system with pre-anoxic tank.
- UV Treatment system
- Surface Water Discharge

As mentioned above, primary treatment will be provided by conventional septic tanks. Residential waste has been separated from the commercial waste portion of the building. The total residential flow is estimated at 6,710 gallons. Using the NYSDEC design standards, the required tank sizing for this treatment would be 1.5 x 6,710= 10,065 gallons. Rather than provide this in one tank, and for the ease of connecting plumbing in the building, we have proposed separating the building sewers to collect in 5 separate 2,500 gallon septic tanks with effluent lines connected together. A

separate 3,000 gallon tank will be provided for the commercial flow requirements of 2,000 gal x 1.5 = 3,000.

From the septic tanks the effluent will flow by gravity to a pump station which will pump the wastewater to the northern area of the site for secondary treatment. Secondary treatment will be provide with a pre-anoxic tank of the Orenco treatment system. This tank will aid the removal of nitrogen from the wastewater. From there, wastewater flows by gravity to the Orenco AX-MAX treatment units. This is separated into 3 units, the first two being part of the 1-stage of treatment and the 3rd the 2nd stage. Wastewater sits within these tanks and the hanging biomedia within them. Pumps will recirculate the wastewater within the tanks to header pipes and spray nozzles to coat the media, and aerate. Blowers will feed air to these treatment units to support the aeration process. In the final stage, a portion of the flow will be sent back to the pre-anoxic tank and a portion will be pumped to the UV Treatment system. The UV treatment system will provide disinfection prior to the discharge of the wastewater to a subsurface stormwater dispersal structure to allow the wastewater to percolate into the existing site soils. The entire treatment system is intended to meet the anticipated intermittent stream discharge limits as shown below, even though being dispersed subsurface similar to a leach field:

Table B-4B Typical Effluent Limits for Intermittent Streams[32]

Parameter	Type	Limitation	Units
BOD_5	Daily Maximum	5	mg/L
TSS	Daily Maximum	10	mg/L
Settleable Solids	Daily Maximum	0.1	ml/L
Total Residual Chlorine	Daily Maximum	0.02	mg/L
Ammonia[33]	Daily Maximum or Average	2.2 in winter 1.5 in summer	mg/L as NH_3
Dissolved Oxygen	Daily Minimum	≥ 7.0	mg/L
pH	Range	6.0 – 9.0	SU
Total Phosphorus	Site-specific	Site-specific	mg/L as P
Coliform, fecal, when disinfecting	30-day geometric mean	200	Number of colonies per 100 ml
Coliform, fecal, when disinfecting	7 consecutive-day geometric mean	400	Number of colonies per 100 ml

These treatment limits will need to be confirmed following the processing of the attached SPDES permit application.

If you have any questions or comments, please feel free to contact me at your convenience.

Sincerely,

Brendon Becker, P.E.

Project Engineer
Lamont Engineers, P.C.

Attachments:

A. Site Plans and Details
B. Demand Calculations
C. Chemical Disinfection Calcs & Information
D. SPDES Permit

Cc: Town of New Lebanon Planning Board
Tilden Commons LLC.

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ATTACHMENT B

WATER SYSTEM DEMAND CALCULATIONS

ATTACHMENT B
Oorah Inc. - The Village Water System
Water System Demand Calculations

AVERAGE & MAX. DAILY DEMAND

Area	Item [1]	Unit	Flow (Gal./Day)	Total Average Daily Flow (Gal./Day)	Maximum Day Demand Factor (1.5)	Maximum Day Demand (Gal./Day)		
Residential	1 Bedroom Apartment	21	110	2310	1.5	3465		
Residential	2 Bedroom Apartment	20	220	4400	1.5	6600		
Residential	3 Bedroom Apartment	0	330	0	1.5	0		
							6710	10065
commercial	Grocery (0.1 gpd/SF)	10000	0.1	1000	1.5	1500		
commercial	Food Service (2 Seats Per table)	10	70	700	1.5	1050		
commercial	Employees	20	15	300	1.5	450		
1) Design Wastewater Flows taken from NYSDEC Design Standards for Intermediate Wastewater System			TOTALS =	8710		13065		
				6	gpm	9	2000	3000
							8710	13065

ESTIMATED PEAK DEMAND

Area	Item	Qty.	Fixture Unit	Fixture Value
Residential				
	Lavatory	41	2	82
	Water Closet	41	3	123
	Combo Shower/Bathtub	41	8	328
	Kitchen Sink	41	3	123
	Washing Machine	5	5	25
	Mop/Service Sink	3	3	9
	Hose Bibbs	6	10	60
	Dishwasher	41	7	287
		Total Fixture Value, Residential =		1037
		Estimated Peak Demand, GPM =		61
Commercial				
	Lavatory	2	2	4
	Water Closet	2	3	6
	Service Sink	3	4	12
	Kitchen Sink	2	3	6
		Total Fixture Value, Commercial =		28
		Estimated Peak Demand, GPM =		40

1) Based on AWWA Figure 4.4, Water Flow Demand per Fixture Unit Value
2) Fixture Unit Values taken from AWWA Table 4.3, Plumbing Fixture Unit Values

Total Peak Demand = **101** GPM

TABLE 4.3
Plumbing Fixture Value

Fixture Type	Fixture Value Based on 35 psi at Meter Outlet
Bathtub	8
Bedpan washers	10
Combination sink and tray	3
Dental unit	1
Dental lavatory	2
Drinking fountain (cooler)	1
Drinking fountain (public)	2
Kitchen sink: 1/2-in. connection	3
3/4-in. connection	7
Lavatory: 3/8-in. connection	2
1/2-in. connection	4
Laundry tray: 1/2-in. connection	3
3/4-in. connection	7
Shower head (shower only)	4
Service sink: 1/2-in. connection	3
3/4-in. connection	7
Urinal: Pedestal flush valve	35
Wall or stall	12
Trough (2-ft unit)	2
Wash sink (each set of faucets)	4
Water closet: Flush valve	35
Tank type	3
Dishwasher: 1/2-in. connection	4
3/4-in. connection	10
Washing machine: 1/2-in. connection	5
3/4-in. connection	12
1-in. connection	25
Hose connections (wash down): 1/2-in.	6
3/4-in.	10
Hose (50-ft length—wash down): 1/2-in.	6
5/8 in.	9
3/4 in.	12

value of a number of units by simply multiplying the single value times the number of fixtures in the customer's use to get a total value. The list of plumbing items in Table 4.3 represents those most commonly used; however, the estimator will eventually encounter special equipment that will need to be evaluated. Since the fixture flow requirements in gallons per minute and the fixture values are the same in Table 4.3, the engineer can list the demand in gallons per minute for the special equipment, along with the other fixtures, to obtain one total.

Demand

After the fixture values have been determined, the results can be applied to a graph to obtain the customer demand in gallons per minute at 35 psi at the meter outlet. The maximum water flow of any one fixture is above the average of any one of a number of fixtures when operated in a customer's service. This is because the probability of all

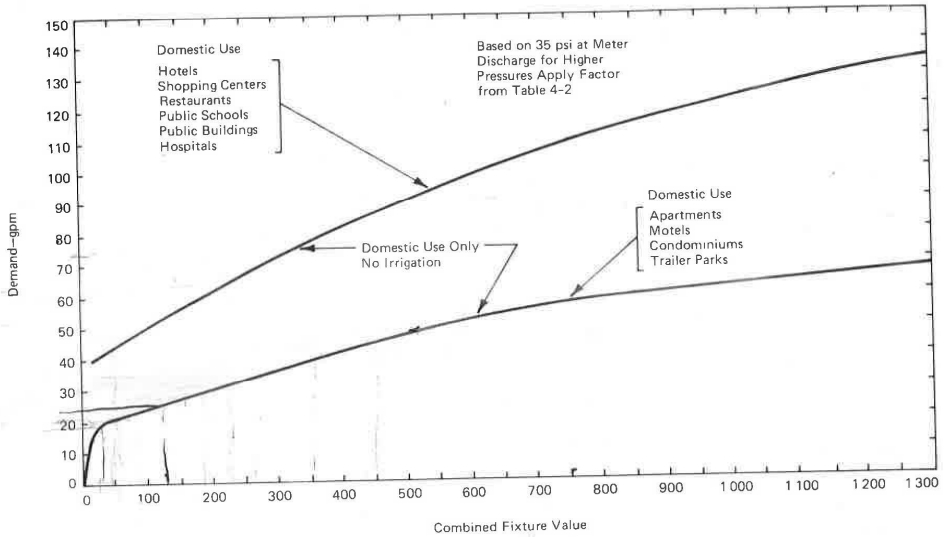


Fig. 4.4. Water-Flow Demand per Fixture Value—Low Range

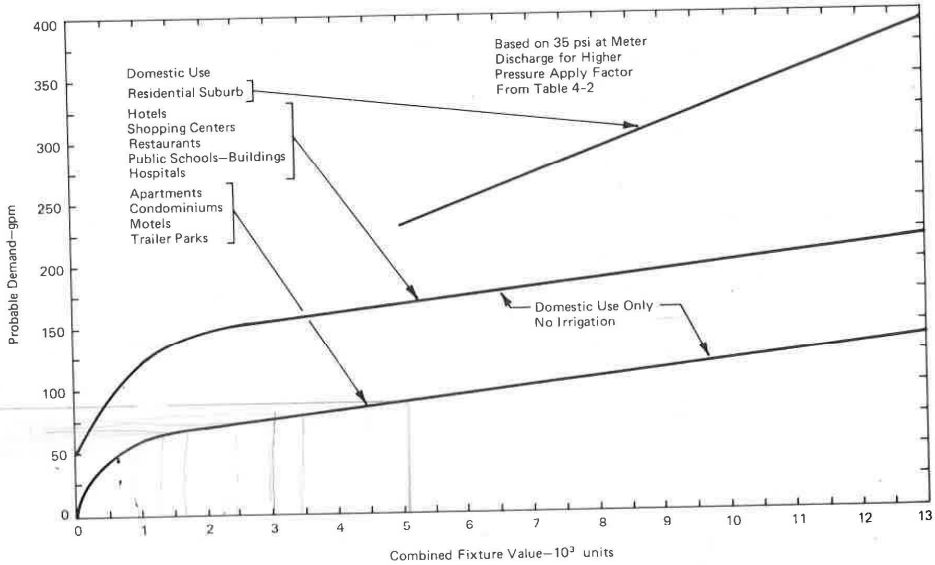


Fig. 4.5. Water-Flow Demand per Fixture Value—High Range

detailed lists of fixtures before estimates can be prepared. If the structure is in the planning stage, the mechanical engineer or architect is the best source of information, and, if construction is underway, the plumbing contractor or the building permits section of the city will have the information. Field trips by the estimator are often necessary to assist the customer as well as to properly assess the project when

ATTACHMENT C

CHEMICAL DISINFECTION CALCS & INFORMATION

Tilden Development LLC

CT provided by Clearwell Tank

Baffling Factor (BF) 0.5

1	2	3	4	5	6	7	8	9	10	11
Cl Conc	**pH**	**Temp**	**Peak Flow**	**Storage**	**Total Detention**	**Contact Time**	**CT calc**	**CT req**	**Inactivation Ratio**	**Log Removal**
mg/L		°C	GPM	**Volume**	**Time (TDT)**	min	Cl Conc x	table B-2	CT calc/CT req	4 X Inact. Ratio
				Gallons	Vol/Peak Flow	TDT x BF	Contact Time			
0.5	7	10	11	270	24.55	12.27	6.14	6	1.02	4.09

Table 4-2

Baffling Factors

Factor	Description
0.1	None, agitated basin, very low length to width ratio, high inlet/outlet velocities
0.3	Single or multiple unbaffled inlets or outlets, no intra-basin baffles
0.5	Baffled inlet/outlet with some intra-basin baffling
0.7	Perforated inlet baffle, serpentine or perforated intra-basin baffles, outlet weir or perforated launders
1	Very high length to width ratio (pipeline flow) perforated inlet, outlet and intra-basin baffles

TABLE B-2

CT VALUES* FOR

4- LOG INACTIVATION OF VIRUSES BY FREE CHLORINE

T (°C)	pH	
	6-9	10
0.5	12	90
5	8	60
10	6	45
15	4	30
20	3	22
25	2	15

ATTACHMENT D

SPDES Permit Application

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

State Pollutant Discharge Elimination System (SPDES) Application Form: Private, Commercial & Institutional (P/C/I) Discharge of Treated Sanitary Sewage

(•) New Application ( ) Renewal Application ( ) Modification Application

SPDES Number [ ] NY######## **DEC Authorization** [ ] #-####-#####

Applicant/Owner Information

Type of Ownership: (•) Corporate ( ) Individual ( ) Partnership ( ) Public

Name: Tilden Project LLC
Taxpayer ID: 33-4506787
Mailing Address: 58 Pool Hill Rd
City: New Lebanon
State: NY
Zip: 12125
Phone: 9174881061
Email: joshuanyoung@gmail.com

Contact/Agent Information

Name: Brendon Becker
Title: Engineer
Mailing Address: PO Box 610
City: Cobleskill
State: NY
Zip: 12043
Phone: 518-234-4028
Email: bbecker@lamontengineers.com

Facility Information

Facility Name: Tilden Commons
Nature of Business or Facility: Mixed Use
Population Served: 100
Street Address: 538 US Route 20
City: New Lebanon
State: NY
Zip: 12125

Municipality: (•) Town ( ) Village ( ) City
Municipality Name: New Lebanon
County: COLUMBIA

Additional Facility Location Information (if needed): Intersection of US Route 20 and Tilden Road

Tax Map Information: Section 19.2 Block 1 Lot 69

Certification: I hereby affirm under penalty of perjury that the information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Signature of Applicant/Owner | JOSH YOUNG Printed Name | MANAGING MEMBER Title | 10/8/2025 Date

Applicable discharge data on the following pages must be completed. Discharges from this facility are not authorized until this application form is attached to the permit signed and authorized by the New York State Department of Environmental Conservation or its designated agency.

Please Indicate Whether Your Facility 'Discharges To Groundwater', 'Discharges To Surface Water', or both.

☒ Discharges To Groundwater

☒ Discharges To Surface Water

SPDES Application for P/C/I Discharge of Treated Sanitary Sewage

Discharges To Groundwater - 1 of 1

Facility Name Tilden Commons

SPDES Number _____ **DEC Authorization** _____

To Add or Remove outfalls, click on the Green + or the Red X respectively. + X

Complete this page of the application if your facility has any discharges to groundwater. Use additional copies of this page to list additional groundwater outfalls. Sampling information is only required if the disposal system is designed to discharge, or discharges 30,000 GPD or more.

Outfall Information:

Outfall No. _____

Outfall Status ◉ Proposed ○ Replacement ○ Existing ○ Expansion

Design Flow _____ Gal/Day

Outfall Location (if subsurface system, indicate center of disposal system area)

Latitude _____ ° _____ ' _____ "

Longitude _____ ° _____ ' _____ "

Treatment:

Standard On Site Treatment: Septic Tanks with:		Alternative On Site Treatment: Septic Tanks with:	
☐ Absorption Trenches	☐ Cut and Fill Systems	☐ Absorption Trenches Using An Alternative Aggregate	☐ Single-Pass Sand Filters & Pressurized Shallow Narrow Drainfields
☐ Shallow Absorption Trenches	☐ Raised Systems	☐ Shallow Absorption Trenches Using An Alternate Aggregate	☐ Mound Systems
☐ Absorption Beds	☐ Seepage Pits	☐ Absorption Beds Using An Alternate Aggregate	☐ Drip Dispersal or Other Low Profile Dispersal System

☐ Other (describe) _____

Frequency of Discharge Months/Year _____ Days/Week _____

Name of Nearest Surface Waters	Distance	Soil Type	Depth To Water Table
	_____ Ft.		_____ Ft.

SPDES Application for P/C/I Discharge of Treated Sanitary Sewage

Discharges to Groundwater

Facility Name Tilden Commons

SPDES Number _____ **DEC Authorization** _____

Outfall No. _____

Sampling Information

Include the following sampling information if the disposal system is designed to discharge, or discharges, 30,000 GPD or more. Please indicate whether the values listed are from sampling results (include the date), estimated from the treatment system design as installed, or estimated from the proposed treatment system design.

Plant Design Pollutant Information	Influent		Effluent		Number of Samples or Source of Estimate
	mg/l	lbs/day	mg/l	lbs/day	
BOD5					
Percent removal, BOD5					
pH, Range					
Nitrate, as N					
Nitrite, as N					
Ammonia, as N					
Nitrogen, Total, as N					
Phosphorus, Total, as P					
Total Residual Chlorine, if used					
Solids, Total Dissolved (Nassau/Suffolk only)					

SPDES Application for P/C/I Discharge of Treated Sanitary Sewage

Discharges To Surfacewater - 1 of 1

Facility Name Tilden Commons

SPDES Number | **DEC Authorization**

To Add or Remove outfalls, click on the Green + or the Red X respectively.

Complete this page of the application if your facility has any discharges to surface water. Complete this form for each surface water outfall.

Discharge Data

Outfall No.	Outfall Status	Design Flow
1	(•) Proposed ( ) Replacement ( ) Existing ( ) Expansion	8710 Gal/Day

Outfall Location (end of pipe or conveyance)

Latitude 42 ° 27 ' 57.8 "

Longitude 73 ° 23 ' 37.6 "

Type of Treatment

Primary treatment provided by conventional septic tank settling, secondary provided by an Orenco filter and UV disinfection

Frequency of Discharge Months/Year 12 Days/Week 7

Name of Receiving Water	Classification	Water Index Number
Wyomanock Creek	C(TS)	H-204- 2-25

SPDES Application for P/C/I Discharge of Treated Sanitary Sewage

Discharges to Surface Water

Facility Name Tilden Commons

SPDES Number | **DEC Authorization**

Outfall No. 1

Sampling Information

Include the following sampling information. Please indicate whether the values listed are from sampling results (include the date), estimated from the treatment system design as installed, or estimated from the proposed treatment system design.

Plant Design Pollutant Information	Influent		Effluent		Number of Samples or Source of Estimate
	mg/l	lbs/day	mg/l	lbs/day	
BOD5	250		5		Estimate on similar resi system
Suspended solids	250		10		Estimate on similar resi system
Percent removal, BOD/TSS	-		98%		Estimate on similar resi system
pH, Range	7-8		6-9		Estimate on similar resi system
Settleable solids, ml/l	10		0.1		Estimate on similar resi system
Solids, total dissolved	500		500		Metcalf & Eddy
Dissolved oxygen	1		7		Estimate on similar resi system
Ammonia, as N	45		1.5/2.2		Estimate on similar resi system
Nitrogen, Total, as N	90		10		Estimate on similar resi system
Phosphorus, Total, as P	8				Assuming not in permit
Fecal Coliform, MPN	10,000		200/400		
Total Residual Chlorine (if used)	-	-	-	-	Not Used
Temperature, Degrees F, Summer	50		50		Degree F, similar system
Temperature, Degrees F, Winter	50		50		Degree F, similar system

EXHIBIT I

Lamont Engineers
Updated Stormwater Pollution Prevention Plan

Stormwater Pollution Prevention Plan

TILDEN PROJECT LLC
TILDEN COMMONS
538 US ROUTE 20, NEW LEBANON

COLUMBIA COUNTY **NEW YORK STATE**

Prepared: July 2025

Revision A: September 2025

Revision B: October 2025

Lamont Engineers
ENGINEERS • PLANNERS • FACILITY OPERATIONS
197 Elm Street – PO Box 610
Cobleskill, New York 12043
(518) 234-4028

R:\2024125\swppp\001 SWPPP Z1.docx

Table of Contents

1. PROJECT INFORMATION 1

1.1. Introduction 1
1.2. Project Location, Description and Scope 1
1.3. SWPPP Contacts 2

2. EXISTING AND PROPOSED MAPPING AND PLANS 2

2.1. Vicinity Map and Project Boundary 2
2.2. Existing and Proposed Topography and Land Use 2
2.3. Map and Description of Soils from USDA Soil Survey and On-site soil testing 2
2.4. Boundaries of Existing Vegetation and Proposed Limits of Clearing 3
2.5. Wetlands and Watercourses 3
2.6. Name and Locations of Receiving Waters 3
2.7. Existing and Proposed Utilities (Sewer, Water, Gas, etc) and Easements 3
2.8. Location of Floodplain/Floodway Limits 3
2.9. Other Environmentally Sensitive Areas 3
2.10. Historic Preservation 3
2.11. Climate Change Considerations 4
2.12. Other Permits and Approvals 4

3. CONSTRUCTION EROSION AND SEDIMENT CONTROL 4

3.1. Temporary and Permanent Structural and Vegetative Measures 4
3.2. Dimensions, Installation Details, and Material Specifications for Erosion and Sediment Control Practices 5
3.3. Design Elements not in Conformance with the New York State Standards and Specifications for Erosion and Sediment Control 5
3.4. Inspection Schedule and Operation and Maintenance Schedule of all Erosion and Sediment Control Practices 5
3.5. Staging Areas, Equipment Storage Areas, Borrow Pits, Waste Areas, and Concrete Washout Areas 5
3.6. Construction Phasing and Sequencing Plans 5
3.7. Pollution Prevention Measures 5

4. STORMWATER SITE PLANNING, PRACTICE SELECTION AND DETAILS 9

4.1. Site Planning 9
4.2. Determine Water Quality Treatment Volume (WQv) 9
4.3. Runoff Reduction by Applying Green Infrastructure Techniques and Standard Stormwater Management Practices with RRv Capacity 10
4.4. Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume 11
4.5. Apply Volume Peak Rate Control Practices if Needed to Meet Requirements 11
4.6. Conveyance Criteria 11
4.7. Identification of Design Elements not in Conformance with the New York State Stormwater Management Design Manual 12
4.8. Descriptions, Dimensions, Material Specifications and Installation Details for Post-Construction Stormwater Control Practices 12
4.9. Long Term Operation and Maintenance of Post-Construction Stormwater Management Practices 12

APPENDICES

ENOI **1.1**

LOCATION MAP **1.2**

CONTRACTOR'S CERTIFICATION FORM **1.3**

SOIL MAP & DESCRIPTIONS **2.3**

DEC ENVIRONMENTAL RESOURCE MAPS **2.6**

CONSTRUCTION INSPECTION LOG BOOK **3.9**

RUNOFF REDUCTION WORKSHEETS **4.3**

WATERSHED SCHEMATICS AND HYDROLOGIC CALCULATIONS **4.5**

OPERATION AND MAINTENANCE MANUAL **4.9**

OTHER ITEMS MADE A PART OF THIS REPORT BY REFERENCE BUT PROVIDED UNDER SEPARATE COVER

CONTRACT DRAWINGS ENTITLED "TILDEN COMMONS, SITE DEVELOPMENT", BY LAMONT ENGINEERS DATED JUNE 2025.

1. Project Information

1.1. Introduction

This SWPPP is prepared in accordance with the requirements of Article 17, Titles 7, 8 and Article 70 of the New York State Environmental Conservation Law to obtain coverage by the SPDES General Permit for Stormwater Discharge from Construction Activities (GP-0-25-001).

A copy of the Electronic Notice of Intent (eNOI) is presented in Appendix 1.1.

The design standards and practices outlined herein are in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control* and the *New York State Stormwater Management Design Manual.*

This report addresses both construction and post-construction measures to control and mitigate stormwater runoff for site preparation and infrastructure construction of the project.

1.2. Project Location, Description and Scope

The Tilden Commons project is located at 538 US-20 in the Town of New Lebanon in Columbia County. The site is approximately 3.2 acres and currently contains a commercial business.

The project consists of the construction of a single three-story building fronting US Route 20/22 on a 3 acre lot in downtown New Lebanon. The building will house a roughly 10,000 sf grocery store, a 2,000 sf community and space and 41 apartments. The project will also include site grading, the construction of a driveway and parking area, the installation of drainage and storm water practices, drilling a new well and the construction of an on-site wastewater treatment system.

The UTM 18 coordinates of the site are E: 632045, N: 4702801. The work occupies a parcel identified as tax parcel 19.2-1-69. A Location map is included in Appendix 1.2.

Soil disturbing activities include:

- Building and parking lot demolition
- Clearing and grubbing of existing ground cover within the area to be disturbed for construction.
- Removal and stockpiling of topsoil.
- Excavations for the installation of underground utilities and foundations
- Well drilling

- Paving
- Alteration of drainage patterns and construction of stormwater management facilities.
- Landscaping, topsoiling and seeding of disturbed areas.

1.3. SWPPP Contacts

Owner/Operator
Tilden Project LLC
58 Pool Hill Road
New Lebanon, NY 12125
917-488-1061
joshuanyoung@gmail.com

Engineer
Lamont Engineers
PO Box 610
197 Elm Street
Cobleskill, NY 12043
Brendon Becker, P.E.
Principal Engineer
518-234-4028
bbecker@lamontengineers.com

A copy of the Contractor's Certification Form is provided in Appendix 1.3.

2. EXISTING AND PROPOSED MAPPING AND PLANS

2.1. Vicinity Map and Project Boundary

A general plan of the project is shown on the Contract Drawings, provided under separate cover, where the project boundary is shown in more detail.

2.2. Existing and Proposed Topography and Land Use

The project site consists of an existing commercial building with asphalt and gravel driveways and parking, as well as open lawn space.

The site topography generally slopes to the south at very shallow slopes.

2.3. Map and Description of Soils from USDA Soil Survey and On-site soil testing

Information made available through the US Department of Agriculture Soil and Water Conservation Service and the Columbia County Soil and Water District identifies that the soils within the project area are Occum Loam (Om), hydrologic soil group B. Soils testing conducted on the site support this information, as the soils are generally well-drained and composed of

sandy loam. For the purposes of this report, the entire site was designed as containing hydrologic soil group C soils.

Soil maps and descriptions can be found in Appendix 2.3.

2.4. Boundaries of Existing Vegetation and Proposed Limits of Clearing

A limit of disturbance as well as existing vegetation limits are shown on the Contract Drawings.

2.5. Wetlands and Watercourses

No wetlands or watercourses have been identified on the project site.

2.6. Name and Locations of Receiving Waters

All runoff from the project area leaves the site through an existing drainage conveyance system, which discharges on the south side of US-20. It is believed that all runoff is tributary to the Wyomanock Creek, which is about 1,100 feet south of the project site.

NYSDEC Environmental Resource Maps are included in Appendix 2.6

2.7. Existing and Proposed Utilities (Sewer, Water, Gas, etc) and Easements

There are minimal existing underground utilities at the project site. New utilities for the proposed project will be installed, including sewer, water, and electrical. There are no known existing utility easements; there are no proposed utility easements.

2.8. Location of Floodplain/Floodway Limits

There are no regulated floodplains or floodways within the project site.

2.9. Other Environmentally Sensitive Areas

None. There are no known threatened or endangered species within in the project vicinity, according to the available NYS online resource maps.

2.10. Historic Preservation

The project does not have the potential to affect a property that is listed or determined to be eligible for listing on the National or State Register of Historic Places, according to the available NYS online resource maps. Available online resource maps also indicate that the project site is not located in or adjacent to an area designated as sensitive for archeological sites on the NY State Historic Preservation Office archaeological site inventory.

2.11. Climate Change Considerations

As previously stated, no areas within the project site are located in a regulated floodway/flood plain.

Due to the project site's natural resilience to potential risks due to climate change, no additional measures were considered necessary.

2.12. Other Permits and Approvals

- Town of New Lebanon
  - Highway
  - Planning Board
  - Zoning Board
- Columbia County
  - Columbia County DOH
- New York State
  - NYSDEC
  - NYSHPO
  - Hudson River Housing

3. CONSTRUCTION EROSION AND SEDIMENT CONTROL

3.1. Temporary and Permanent Structural and Vegetative Measures

Immediate stabilization: for areas near wetlands or on steep (>10%) slopes, work area shall be mulched with wood chips hay or straw immediately after rough grading following each soil disturbing operation. Stabilization shall be completed no later than the end of each day.

Temporary stabilization: Topsoil stockpiles and disturbed portions of the site where construction activity temporarily ceases shall be stabilized with temporary seed and mulch immediately after the temporary cessation of construction activity in that area. All areas must be stabilized no later than 7 days after work has ceased. The temporary seed shall be applied at the rate of 30 pounds per acre. Mulch and water shall be applied per table 4.2 of the New York State Standards and Specifications for Erosion and Sediment Control Manual. Slopes over 3H:1V shall be stabilized with anchored stabilization matting until such time as vegetation has been established. Areas to be paved shall be temporarily stabilized with geotextiles and stone subbase material, as shown on the Contract Drawings, provided under separate cover, until pavement is installed.

Permanent Stabilization: Disturbed portions of the site where construction activities have permanently ceased shall be stabilized with permanent seed no later than 14 days after the last construction activity. Prior to permanent

seeding, fertilizer and lime shall be applied to the soil per vegetation specification. Permanent seed shall be installed, mulched, and maintained per the requirements detailed on the Contract Drawings.

3.2. Dimensions, Installation Details, and Material Specifications for Erosion and Sediment Control Practices

All dimensions, installation details and materials specifications are shown on the Contract Drawings, provided under separate cover.

3.3. Design Elements not in Conformance with the New York State Standards and Specifications for Erosion and Sediment Control

All erosion and sediment control practices have been designed in accordance with this reference.

3.4. Inspection Schedule and Operation and Maintenance Schedule of all Erosion and Sediment Control Practices

A schedule of inspection and maintenance of erosion and sediment control practices is shown on the Contract Drawings, provided under separate cover.

3.5. Staging Areas, Equipment Storage Areas, Borrow Pits, Waste Areas, and Concrete Washout Areas

Temporary staging, stockpile, and spoil areas have been located on the Contract Drawings, provided under a separate cover. The contractor will be required to locate any additional staging, stockpile, storage, borrow and waste areas. Staging, stockpile, and waste areas are to be approved by the Engineer and Regulatory Agencies.

3.6. Construction Phasing and Sequencing Plans

A sequence of major construction activities can be found on the Contract Drawings, provided under separate cover.

3.7. Pollution Prevention Measures

A. Spill Prevention Plan

All Contractors are responsible for implementing and enforcing the contents of a Spill Prevention Plan as outlined below:

1. Waste Disposal

All construction wastes, hazardous wastes, and sanitary wastes shall be disposed of according to New York State Department of Environmental Conservation standards and regulations. No burning,

burying, or dumping of wastes will be permitted on-site. Transportation and ultimate disposal of wastes off-site shall be done according to all relevant State and local regulations.

2. Material Management Practices

The materials or substances listed below are expected to be present on-site during construction:

- Concrete Products
- Detergents
- Paints
- Structural Steel
- PVC Piping
- Hydraulic Equipment
- Fertilizers
- Petroleum Based Products
- Cleaning Solvents
- Wood
- Metal Building Materials
- HDPE Piping

3. Housekeeping Procedures

- An effort will be made to store only enough products as required to complete the job.
- All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or some other enclosure.
- Products will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used-up before disposing of the container.
- Manufacturers' recommendations for proper use, storage, cleaning, and disposal shall be followed if State or local regulations do not apply.
- There shall be daily inspections to ensure proper use, storage, and disposal of all materials on-site during construction.

4. Hazardous Materials

- Products shall be kept in original containers unless they are not re-sealable, in which case re-sealable containers shall be provided and shall be clearly marked as to contents and potential hazards.
- Original labels and material safety data sheets shall be always retained on the site when such materials are present on the site.
- If surplus products must be disposed, manufacturers' and State and local recommended methods for proper disposal shall be followed.

5. Petroleum Products

- All on-site vehicles shall be monitored for leaks and shall receive regular preventative maintenance to minimize leakage.

- On site fuel storage shall have secondary containment provisions.
- All on site fueling of equipment shall be performed by personnel trained in spill prevention and spill response.
- During on site fueling operations personnel must stay at the pump control, operator shall not rely on automatic shut-offs on fuel pumps.
- Fueling of small equipment shall be performed on non-absorbent surfaces if at all possible.

6. Fertilizers

Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to stormwater runoff. Fertilizers shall be stored in a covered area and the contents of any partially used bags shall be transferred to a sealable plastic container to avoid spills or leaks.

7. Paints

All containers shall be tightly sealed and stored in a protected "fire safe" area when not required for use. Containers shall be clearly marked as to their contents. Excess paint shall not be discharged into storm or sanitary sewer systems and shall be properly disposed of according to manufacturers' instructions or State and local regulation.

8. Spill Control Practices

- A Spill Prevention Plan (SPP) shall be prepared by the contractor and shall be based on manufacturers' recommended methods for spill cleanup. The SPP shall be clearly posted, and site personnel shall be made aware of the procedures and the locations of all information and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in the material storage areas on-site. Equipment and materials shall include, but not be limited to brooms, dust pans, mops, rags, shovels, gloves, goggles, kitty litter, sand, sawdust, and plastic & metal trash containers specifically for this purpose. Safety equipment such as fire extinguishers and first-aid kits shall be kept on site at all times in case of emergencies.
- All spills shall be cleaned-up immediately after discovery.
- The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous materials shall be reported to the appropriate State and local authorities, regardless of the size.

- The Spill Prevention Plan shall be modified and adjusted as necessary to prevent reoccurrence of spills after they have occurred, and shall include new clean-up procedures when necessary. A description of the spill, what caused it, and clean-up/prevention procedures to be followed in the future shall be included in the SPP and posted on-site after a spill.
- A spill prevention coordinator shall be designated for the Contract. The coordinator shall designate at least three other personnel who will receive spill prevention and clean-up training. These personnel shall become responsible for a particular phase of prevention and clean-up, and their names shall be posted along with the Spill Prevention Plan.

9. Dust Control

- All Contracts shall provide and apply water for the control of dust within the limits of their respective Work. Water application shall be the primary method of dust control.
- When used on roadways, the water shall be applied uniformly over a width of not less than eight (8) feet by means of an approved pressure distributor spray bar.
- When used on areas that will later be sodded or seeded, the water shall be free from oils, acids, alkalies, salts, or any other substances injurious to plant growth.
- Paved areas shall be kept clean by periodic sweeping with approved equipment.

B. Non-Stormwater Discharges

Concrete Trucks

- Concrete trucks shall be allowed to wash-out or discharge surplus concrete only at locations specifically approved by the Engineer.

Dewatering Effluent

- The Contractor shall pump dewatering effluent to geotextile sediment bags, a stable upland vegetated area, or temporary settling basin to remove suspended sediment prior to discharge to any watercourse.

Clearing and Grubbing Spoil

- No dumping shall be allowed in any stream, corridor, wetland, surface area, floodplain, or at unspecified locations or at locations not approved by the Engineer and regulatory agencies.

4. Stormwater Site Planning, Practice Selection and Details

4.1. Site Planning

The first step in developing a comprehensive stormwater management plan using green infrastructure is to avoid or minimize land disturbance by preserving natural resources and utilizing the hydrology of the site.

Implementation of "green" infrastructure practices aid in the reduction of runoff by proactively reducing runoff volume, peak flow and flow duration. It also promotes infiltration and evapotranspiration to improve groundwater recharge and relieve pollutants for the "end of pipe" stormwater treatment practice. The green infrastructure techniques utilized in this SWPPP are detailed in Section 4.3.

4.2. Determine Water Quality Treatment Volume (WQv)

The analysis uses existing conditions = current conditions. Watershed schematics are presented in Appendix 4.5.

Water quality volumes were computed using the NYS Stormwater Design Manual equation of WQv=[P*Rv*A]/12, where:

P= 90% rainfall = 1.1"
A= Site Area
I= % Impervious
Rv=0.05+0.009*I

The project consists of redevelopment and new development activities. The project site is a 3.22 acre parcel which was previously developed with commercial shops, asphalt parking, and gravel driveways. For planning purposes, the previously developed southern portion of the project site (approximately 1.44 acres) is considered redevelopment, and the mostly undeveloped northern portion of the project site is considered new development.

The redevelopment portion of the project site has an existing impervious area of 1.07 acres. The proposed impervious area in this portion of the project site is approximately 1.13 acres, which is about a 6% increase. To account for this increase, a minimum 31% (25% standard redevelopment + 6% increase) of the proposed redevelopment area will be directed to standard SMPs providing 100% WQv treatment.

A summary of the minimum required water quality volume is below:

Calculate Required WQv					
Area	Contributing Area (acres)	Impervious Area (acres)	Percent Impervious	Rv	WQv (cf)
New-Dev	1.74	0.90	52	0.52	3,582
Re-Dev	1.44	1.13	78	0.75	4,312

Redevelopment adjustment: 4,312 cf x 31% = 1,337 cf

Total Adjusted WQv = 4,919 cf (0.113 acre-ft)

4.3. Runoff Reduction by Applying Green Infrastructure Techniques and Standard Stormwater Management Practices with RRv Capacity

The majority of runoff is treated with green infrastructure techniques.

100% reduction of the WQv will be achieved by an Infiltration.

A small portion of runoff from new impervious surfaces are not directed to RRv practices due to hydraulic and siting infeasibility.

Runoff Reduction Volumes were computed using the NYS Stormwater Design Manual equation of $RRv_{min}=[P*Rv*Aic*S]/12$, where:

P= 90% rainfall = 1.1”
Aic= Area of Impervious Cover = 0.91 Acres (New-Dev)
Rv= 0.05+0.009*100 = 0.95
S= Hydrologic Soil Group Specific Reduction Factor = 0.4

Minimum RRv: 1381 cf (0.032 acre-ft)

1. RRv Practice 1: Infiltration Basin 1 (I-2)
    a. Provides 4,933 cf RRv

Total RRv Provided = 4,933 cf > 4,919 cf WQv

The full WQv is reduced via Green Infrastructure Techniques.

Green Infrastructure Worksheets are presented in Appendix 4.3

4.4. Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

The full WQv is reduced via Green Infrastructure Techniques.

4.5. Apply Volume Peak Rate Control Practices if Needed to Meet Requirements

Channel Protection Volume (CPv) Requirements:
CPv requirements are designed to protect stream channels from erosion. This is typically accomplished by providing 24-hr extended detention of the 1-year, 24-hr design storm that remains after runoff reduction.

Discharge Point:
As a predominantly redevelopment project, the typical channel protection requirement is relaxed. The hydrologic analysis for the project site shows that the post-construction 1-year 24-hour peak discharge rate and volume is less than pre-construction amounts, therefore the CPv requirement has been satisfied.

CPv Provided: 0.258 acre-ft

Overbank Flood (Qp) & Extreme Storm (Qf) Requirements:
Overbank Flood: Control the peak discharge from the 10-yr storm to 10-yr predevelopment rates.

Extreme Storm: Control the peak discharge from the 100-yr storm to 100-yr predevelopment rates. Safely pass the 100-yr storm event.

Hydrologic DP: Runoff from Site to Existing Culvert			
	1-year (cfs)	10-year (cfs)	100-year (cfs)
Pre-Development	3.08	7.67	16.54
Post-Development	3.60	9.28	20.26
Post-Mitigation	2.58	6.06	12.43
Delta	-0.50	-1.61	-4.11

Watershed Schematics and Hydrologic Calculations are presented in Appendix 4.5.

4.6. Conveyance Criteria

Typically, the targeted storm frequencies for conveyance are the 2-yr and 10-yr storms. The 2-yr event is used to ensure non-erosive flows through roadside swales, overflow channels, pond pilot channels, and over berms within practices. The 10-year storm is typically used as a safe conveyance criterion for open channel practices and overflow channels

2-yr Storm

1. Roadside Swales
    a. All swales are non-erosive during the 2-year storm.
2. Pilot Channels
    a. No pilot channels proposed
3. In-Practice Berms
    a. The sediment forebay berm is not overtopped during the 2-year storm.

10-yr Storm

1. Open Channel Practices
    a. All swales safely convey the 10-yr storm.
2. Overflow Channels
    a. All overflow channels safely convey the 10-yr storm.

4.7. Identification of Design Elements not in Conformance with the New York State Stormwater Management Design Manual

Not all proposed impervious surfaces are directed to RRv practices. This was previously detailed in Section 4.3.

The proposed pre-treatment methods for the infiltration basins are not in full conformance with the design manual. The proposed methods, in conjunction with proper and timely maintenance of the practices will adequately protect the basins from buildup of sediment deposits and ensure functionality of the practices.

4.8. Descriptions, Dimensions, Material Specifications and Installation Details for Post-Construction Stormwater Control Practices

Refer to the Contract Drawings, provided under separate cover, for dimensions and installation details of the stormwater management practices.

4.9. Long Term Operation and Maintenance of Post-Construction Stormwater Management Practices

Tilden Project LLC is responsible for long-term operation and maintenance of all post-construction SMPs and their appurtenances. A long-term operation and maintenance manual is presented in Appendix 4.9.

Appendix 1.1

Electronic Notice of Intent (eNOI)

Construction General Permit (CGP) Electronic Notice of Intent (eNOI) GP-0-25-001

version 1.11

(Submission #: HQD-SK74-3APBS, version 1)

Details

Originally Started By	Asa Snyder
Alternate Identifier	Tilden Commons—Region 4
Submission ID	HQD-SK74-3APBS
Status	Draft

Form Input

Eligibility

Disturbance Threshold

1. Will the construction activity involve soil disturbances listed in Part I.A.1 of GP-0-25-001?
Yes

1.a. Will any runoff from the site enter a sewer system classified as a combined sewer?
No

1.b. Is this a remediation project being done under a Department approved work plan (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) with a SWPPP which meets the substantive requirements of GP-0-25-001?
No

1.c. Is the construction activity related to a stormwater discharge that does not require a permit as described in 40 CFR 122.3(e), e.g. non-point source agriculture or silviculture activities?
No

Other SPDES Permits

2. Will the discharge from the construction activity meet all conditions listed in Part I.A.2 of GP-0-25-001?
Yes

Threatened and Endangered Species

3. Will the construction activity potentially adversely affect a species that is endangered or threatened per Part I.A.3.?
No

State Historic Preservation Act (SHPA)

4. Is the construction activity designated by the Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP), pursuant to 9 NYCRR §§428.12 or 428.13 as exempt from the SHPA review (see Attachment 2 of the Letter of Resolution between NYSDEC and OPRHP, dated January 9, 2015)?
No

4.a. Will the construction activity:

a) occur within an archeologically sensitive area indicated on the sensitivity map, or

b) have the potential to affect a property that is listed or determined to be eligible for listing on the Na or State Registers of Historic Places, or

c) include a new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old and OPRHP, a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determinec historically/archeologically significant building, structure, or object:

- 1-5 acres of disturbance—20 feet
- 5-20 acres of disturbance—50 feet
- 20+ acres of disturbance—100 feet?

No

4.b. Is there documentation at the construction site demonstrating:

a) that the construction activity is not within an archeologically sensitive area indicated on the sensiti map, and that the construction activity is not immediately adjacent to a property listed or determined t eligible for listing on the National or State Registers of Historic Places, and

b) that there is no new permanent building to be built on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that OPRHP, a Historic Preserva Commission of a Certified Local Government, or a qualified preservation professional has determinec the building, structure, or object more than 50 years old is not historically/archeologically significant:

- 1-5 acres of disturbance – 20 feet
- 5-20 acres of disturbance – 50 feet
- 20+ acres of disturbance – 100 feet?

Yes

State Environmental Quality Review (SEQR)

5. Is the construction activity subject to SEQR (Part I.A.5.), or the equivalent environmental review from another NYS or federal agency (Part I.A.6.)?
Yes

5.a. Has the owner/operator obtained documentation that the project review pursuant to SEQR, or the equivalent, has been satisfied per Part I.A.5. or I.A.6. of GP-0-25-001?
NONE PROVIDED

Uniform Procedures Act (UPA) Permits

6. Has the owner/operator obtained all necessary UPA permits from NYSDEC, or the equivalent from another NYS or federal agency per Part I.A.7.a. of GP-0-25-001?
NONE PROVIDED

Steep Slope

7. Is the construction activity within the watershed of surface waters of the State classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website?
No

Owner/Operator Information

8. Owner/Operator Name
Tilden Project LLC

9. Owner/Operator Contact Person Information

First and Last Name	Phone	E-mail
Joshua Young	9174881061	joshuayoung@gmail.com

10. Owner/Operator Mailing Address
58 Pool Hill Road
New Lebanon, NY 12125
USA

11. Is the billing contact different from the Owner/Operator Contact?
No

12. What type of organization is the owner/operator?
Corporation

12.b. Is the owner/operator registered with the Department of State to do business in New York State?
NONE PROVIDED

Site Information

13. Project/Site Name
Tilden Commons

14. Site Address
538 US 20
New Lebanon, NY 12125
Columbia

DEC Region
4

15. Site Latitude & Longitude
42.46642326263599,-73.39380523246572

Project Details

16. This eNOI submission is for:
A construction activity not part of a common plan of development or sale in accordance with Part I.D.1.a.

17. Does the project type fall under Table 1 or Table 2 of Appendix B of GP-0-25-001? If any portion of the construction activity falls under Table 2, regardless of the size of the disturbance, select "Table 2".
Table 2

18. Consistent with Part III.B.1.c.i. of GP-0-25-001, provide a concise overview of the project. Describe existing and proposed conditions, and include any other relevant information.
The project site consists of an existing commercial building with asphalt and gravel driveways and parking, as well as open lawn space.

The site topography generally slopes to the south at very shallow slopes.

The project consists of the construction of a single three-story building fronting US Route 20/22 on a 3 acre lot in downtown New Lebanon. The existing building and parking areas will be demolished.

The new building will house a roughly 10,000 sf grocery store, a 2,000 sf community and space and 41 apartments. The project will also include site grading, the construction of a driveway and parking area, the installation of drainage and storm water practices, drilling a new well and the construction of an on-site wastewater treatment system.

Enter the total project site acreage, the acreage to be disturbed, and the future impervious area (acreage) within the disturbed area, rounded to the nearest tenth of an acre.

19. Total Site Area (acres)
3.2

20. Total Area to be Disturbed (acres)
3.2

21. Existing Impervious Area to be Disturbed (acres)
1.0

22. Future Impervious Area Within Disturbed Area (acres)
1.9

Nature of the project:
Redevelopment with increase in impervious area

23. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

24. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
0

B (%)
100

C (%)
0

D (%)
0

25. Enter the planned start and end dates of the disturbance activities.

Start Date
NONE PROVIDED

End Date
NONE PROVIDED

26. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Wyomanock Creek and tribs - 1310-0039

27. Type of waterbody identified in question 26?
Stream/Creek Off Site

28. Has the surface waterbody in question 26 been identified as a 303(d) segment in Appendix D of GP-0-25-001?
No

29. Is this project located in one of the Watersheds identified in Appendix C of GP-0-25-001?
No

30. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

31. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
Yes

31.a. What is the name of the municipality/entity that owns the separate storm sewer system? If the separate sewer system is owned by an MS4 Operator, enter the MS4 Operator name.
NYSDOT

32. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

33. Is this property owned by a state authority, state agency, federal government or local government?
No

Required SWPPP Components

General SWPPP Requirements

34. Has a SWPPP been developed in conformance with the requirements in Part III. of GP-0-25-001?
Yes

35. Does the SWPPP demonstrate consideration of the future physical risks due to climate change pursuant to the CRRA, 6 NYCRR Part 490, and associated guidance per Part III.A.2. of GP-0-25-001?
Yes

36. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

37. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the NYS Stormwater Management Design Manual?
NONE PROVIDED

SWPPP Preparer

39. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

40. Name of the person who prepared the SWPPP
Brendon Becker

41. SWPPP Preparer Organization Name
Lamont Engineers

42. SWPPP Preparer Contact Information

First and Last Name	Phone	E-mail
Brendon Becker	518-234-4028	bbecker@lamontengineers.com

43. SWPPP Preparer Address

PO Box 610

Cobleskill, NY 12043

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form
3) Upload the completed form
Download SWPPP Preparer Certification Form

44. Please upload the SWPPP Preparer Certification
NONE PROVIDED
Comment
NONE PROVIDED

44.a. Has the SWPPP Preparer Certification Form been signed by the SWPPP preparer in accordance with Part VII.J of GP-0-25-001?
NONE PROVIDED

Erosion & Sediment Control Criteria

45. Has a construction sequence schedule for the planned management practices been prepared?
Yes

Post-Construction Criteria

Site Planning and Soil Restoration

46. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Sidewalk Reduction

47. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6 ("Soil Restoration") of the Design Manual.
All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).

Water Quality Criteria

49. Water Quality Sizing Criteria

Total WQv required (acre-feet)	Total RRv provided (acre-feet)	Minimum RRv (acre-feet)	Total WQv provided (acre-feet)	Sum of RRv and WQv provided
.097	.104			NaN

Water Quantity Criteria

50. Per Section 9.2.1.C.VI and VII of the 2024 Design Manual, is there 0% change to hydrology that increases the discharge rate and volume from the project site?
No

51. Does one of the waiver conditions apply to the channel protection for this construction activity?
No

51.b.i. CPv Required (acre-feet)
0.283

51.b.ii. CPv Provided (acre-feet)
0.283

52. Does one of the waiver conditions apply to the Qp and Qf for this construction activity?
No

Overbank Flood Control Criteria (Qp)

52.b.i. Pre-Development (CFS)
7.67

52.b.ii. Post-Development (CFS)
5.69

Total Extreme Flood Control Criteria (Qf)

52.b.iii. Pre-Development (CFS)
16.54

52.b.iv. Post-Development (CFS)
15.05

Operation and Maintenance

53. Has a long-term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

53.a. Identify the entity responsible for the long-term Operation and Maintenance.
Tilden Project LLC

Post-Construction SMP Identification

54. Post-Construction RR Techniques and Standard SMPs

RR Techniques and SMPs	Contributing Impervious Area (acres)	Total Contributing Area (acres)
Infiltration Basin (I-2)	0.560	
Infiltration Bioretention (F-4)	0.580	

55. Alternative SMPs

Type of Alternative SMP	Manufacturer of the Alternative SMP	Name of the Alternative SMP	Contributing Impervious Area (acres)
NONE PROVIDED	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*

Other Permits

56. Identify other permits, existing and new, that are required for this project/facility.
Individual SPDES

57. Is this NOI for a change in owner/operator per Part I.G.?
No

58. Is this eNOI for informational purposes only?
No

MS4 SWPPP Acceptance

59. Will the construction activities be within the municipal boundary(ies) of Traditional Land Use Control MS4 Operator(s) and discharge to the MS4(s)?
No

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the Owner/Operator Certification Form by clicking the link below.
Owner/Operator Certification Form

61. Upload Owner/Operator Certification Form

NONE PROVIDED

Comment

NONE PROVIDED

61.a. Has the Owner/Operator Certification Form from Appendix J been signed by the owner/operator, or a representative of the owner/operator in accordance with Part VII.J of GP-0-25-001 and uploaded to the eNOI?

NONE PROVIDED

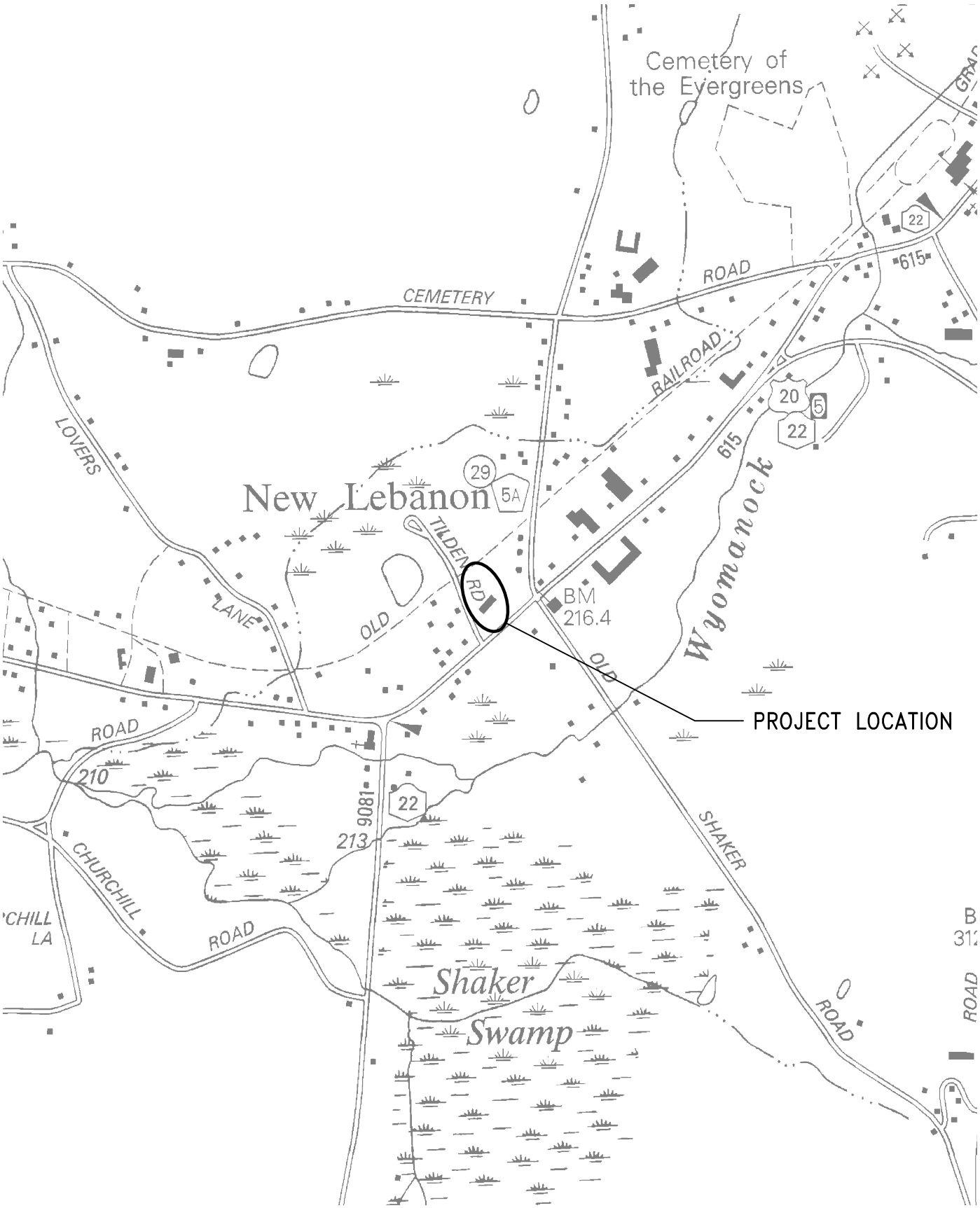
Additional Project Information

62. Enter any additional pertinent project information in the text box below.

NONE PROVIDED

Appendix 1.2

Location Map



DATE	PROJECT NO.	HUDSON RIVER HOUSING INC. PROJECT LOCATION MAP	Lamont Engineers
5/23/25	2024125		ENGINEERS • PLANNERS • FACILITY OPERATIONS
SCALE	DRAWN		
1"=1000'	JW	COLUMBIA COUNTY NEW YORK STATE	

K:\APPS\SDSKPROJ\2024125\Aerial Map.dwg, 5/23/2025 10:04:30, DWG To PDF.pc3

Appendix 1.3

Contractor Certification Form

CONTRACTOR and SUBCONTRACTOR CERTIFICATION STATEMENT

for the New York State Department of Environmental Conservation (DEC) State Pollutant Discharge Elimination System Permit for Stormwater Discharges from Construction Activity (GP-0-25-001)

As per *Part III.A.6* on page 31 of GP-0-25-001, effective 1/29/2025

'Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and sub-contractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.'

The *owner or operator* shall have each contractor and subcontractor involved in soil disturbance sign a copy of the following certification statement before they commence <u>any</u> *construction activity*:

_____	**NYR** _____	_____
Name of Construction Site	*DEC Permit ID*	*Municipality (MS4)*

I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.

Responsible Corporate Officer/Partner Signature	Date
Name of above Signatory	Name of Company
Title of above Signatory	Mailing Address
Telephone of Company	City, State and Zip

Identify the specific elements of the SWPPP the contractor or subcontractor is responsible for:

***'TRAINED CONTRACTOR'* FOR THE CERTIFIED CONTRACTOR OR SUBCONTRACTOR**

_____	_____	_____
Name of Trained Employee	*Title of Trained Employee*	*NYSDEC SWT #*

A copy of this signed contractor certification statement must be maintained at the SWPPP on site

Appendix 2.3

Soil Map and Descriptions

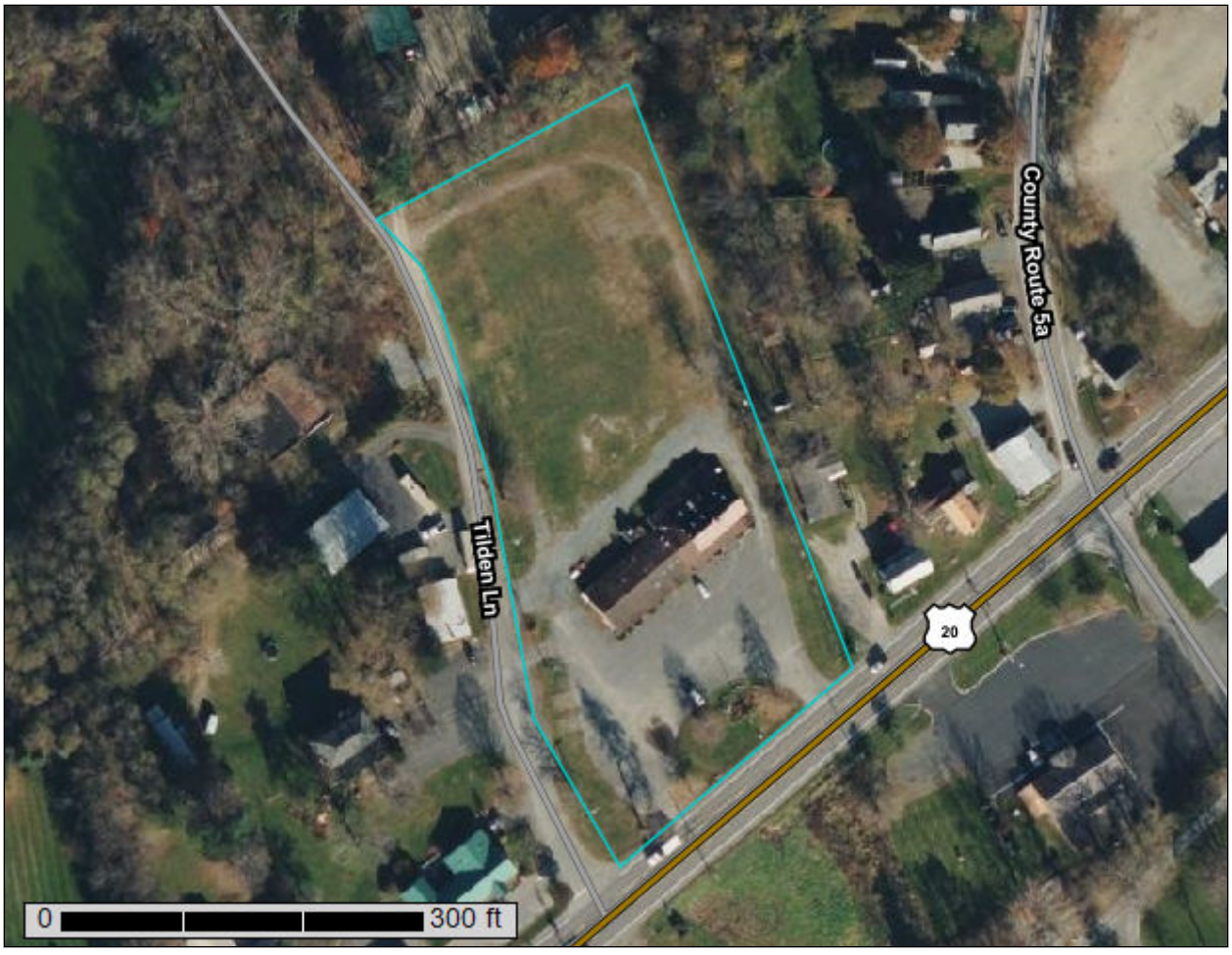
United States Department of Agriculture

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 Columbia County, New York



May 27, 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.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Columbia County, New York.....13
Om—Occum loam.....13
References.....15

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

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.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,150 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Columbia County, New York
Survey Area Data: Version 20, Aug 29, 2024

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

Date(s) aerial images were photographed: Aug 15, 2021—Nov 8, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background 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
Om	Occum loam	2.9	100.0%
Totals for Area of Interest		**2.9**	**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.

Columbia County, New York

Om—Occum loam

Map Unit Setting

National map unit symbol: 9r1h
Elevation: 0 to 1,030 feet
Mean annual precipitation: 38 to 46 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 115 to 195 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Occum and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Occum

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy over sandy alluvium

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 25 inches: fine sandy loam
H3 - 25 to 33 inches: coarse sandy loam
H4 - 33 to 60 inches: stratified very gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F144AY010NH - Sandy High Floodplain
Hydric soil rating: No

Minor Components

Linlithgo

Percent of map unit: 8 percent
Hydric soil rating: No

Limerick

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: Yes

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Appendix 2.6

NYSDEC Environmental Resource Maps

Tilden Project

July 1, 2025

1:4,514

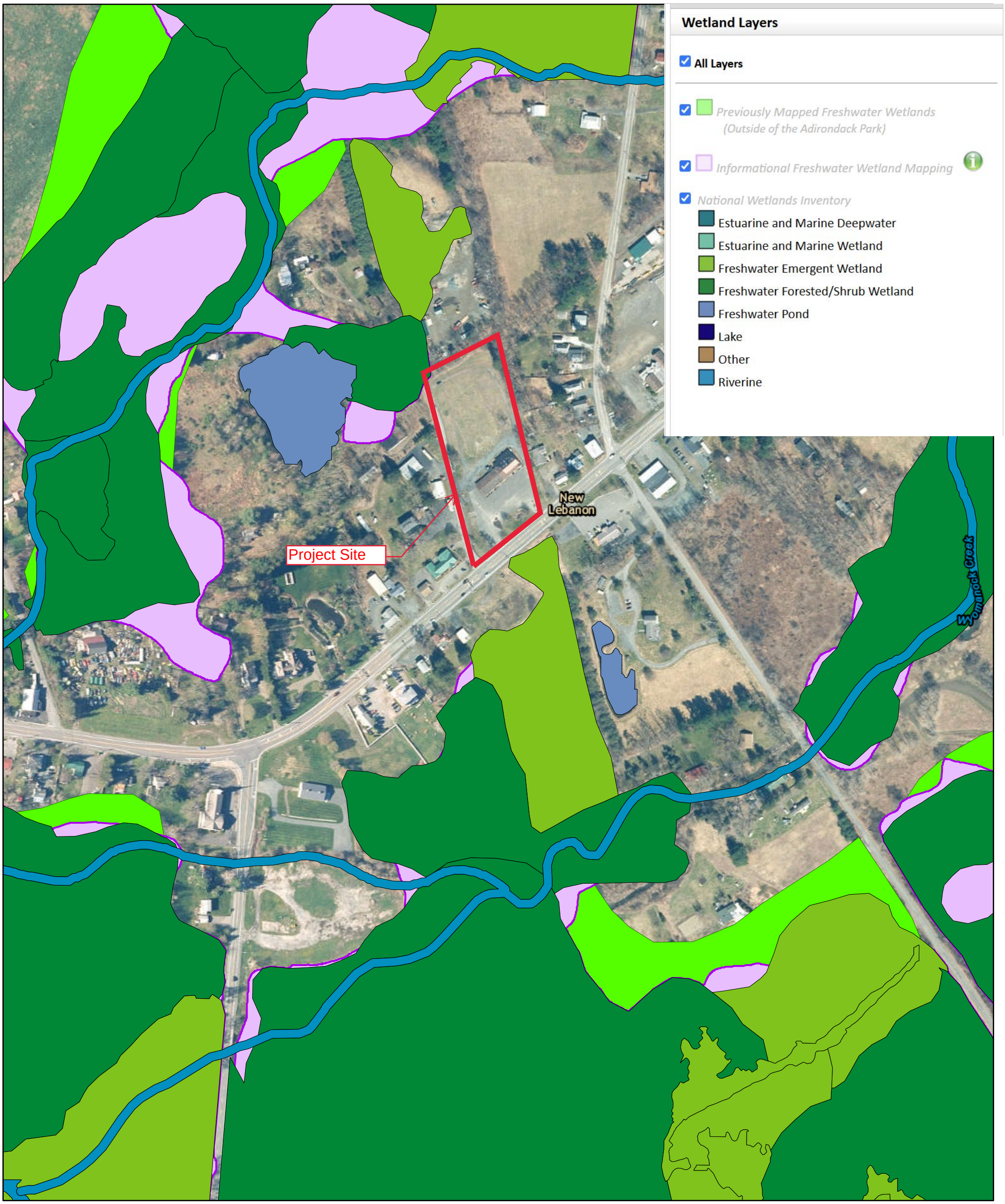
0 0.04 0.07 0.15 mi

0 0.05 0.1 0.2 km

New York State, Maxar, Esri, HERE, Garmin, iPC

NYS Department of Environmental Conservation
Not a legal document

Tilden Project



July 1, 2025

1:4,514

0 0.04 0.07 0.15 mi

0 0.05 0.1 0.2 km

New York State, Maxar, Esri, HERE, Garmin, iPC

NYS Department of Environmental Conservation
Not a legal document

Appendix 3.9

Construction Inspection Log Book

Lamont Engineers
ENGINEERS • PLANNERS • FACILITY OPERATIONS
Dedicated to Service…Committed to Excellence

STORMWATER INSPECTION REPORT

Permit No.:	GP-0-25-001
PROJECT NAME:	Boondocks Motocross Track
CONTRACT NO.:	1
ENGINEER:	Lamont Engineers
CONTRACTOR:	
PROJECT NO.:	2024181
Date/Time:	
Inspector:	
Title:	

INSTRUCTIONS:

1. Describe all construction not in conformance with SWPPP.
2. Identify all corrective measures to be taken.
3. Identify all corrective measures taken since last inspection.
4. Attach map/sketch of disturbed area.
5. Insert photos.

INSPECTION SCHEDULE:
Inspections to be performed at least once every 7 days. If >5 acres are disturbed, perform inspection twice every 7 days. Perform inspections every 30 days during shutdowns.

WEATHER	
TEMPERATURE	°F

SITE CONDITIONS:

Soil Conditions:
- ☐ Dry
- ☐ Wet
- ☐ Saturated
- ☐ Frozen
- ☐ Snow Covered

Discharge:
- ☐ None
- ☐ Light
- ☐ Moderate
- ☐ Heavy

Offsite Sediment Tracking:
- ☐ None
- ☐ Light
- ☐ Moderate
- ☐ Heavy

Condition of Discharge:
- ☐ N/A
- ☐ Clean
- ☐ Evidence of Turbidity

Contrast to Receiving Water:
- ☐ Yes
- ☐ No
- ☐ N/A

Disturbance:

Y	N	
☐	☐	Within Limits of the approved plans
☐	☐	Impacting adjacent property

Stockpiles and Waste Areas:

Y	N	
☐	☐	Areas Approved
☐	☐	Perimeter Controls in Place
☐	☐	Stabilized within 7 days of last use

COMMENTS:
Describe or show on map: Total area of active disturbance, total area inactive disturbance, total area with temporary stabilization and total area with final stabilization.

STORMWATER INSPECTION REPORT

SITE MANAGEMENT PRACTICES:

- ☐ Stabilized Construction Entrance
- ☐ Construction Road Stabilization
- ☐ Dust Control
- ☐ Concrete Truck Washout
- ☐ Protected Areas
- ☐ Temporary Culverts
- ☐ Winter Stabilization
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other

EROSION CONTROL PRACTICES:

- ☐ Check Dams
- ☐ Dewatering Sump Pit
- ☐ Diversions
- ☐ Jute Mesh/RECP
- ☐ Mulch
- ☐ Seeding
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other

SEDIMENT CONTROL PRACTICES:

- ☐ Filter Strip
- ☐ Dirt Bag
- ☐ Sediment Basin/Trap
- ☐ Silt Fence
- ☐ Storm Drain Inlet Protection
- ☐ Turbidity Curtain
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other
- ☐ Other

Describe current stage of all SMP's and identify all construction activity not in conformance with SWPPP and technical standards:

Describe corrective action that must be taken to install, repair, replace or maintain E&SC practices and to correct deficiencies with construction of SMP's:

Describe status of all corrective actions that were required by previous inspection:

Photos:

Comments:

Photos:

Comments:

Photos:

Comments:

Photos:

Comments:

Photos:

Comments:

Photos:

Comments:

Signature of
Qualified Inspector: _____

Appendix 4.3

Runoff Reduction Worksheets

Step 2 - Calculate Water Quality Volume

Is this project subject to Section 4.3 of the NYS Design Manual for Enhanced Phosphorus Removal?	No
What is the nature of this construction project?	Redevelopment with increase in impervious area

Design Point:	1		
P=	1.10	inches	*Enter 90% Rainfall Event as P*

Calculate Required WQv

Drainage Area Number	**Contributing Area** (Acres)	**Impervious Area** (Acres)	**Percent Impervious** %	**Rv**	**WQv** (cf)	**SMP Description**
1	2.21	1.25	57	0.56	4,933	Infiltration Basin

Infiltration Basin (I-2)

Design Point:	1

Enter Site Data For Drainage Area to be Treated by Practice							
Drainage Area Number	**Contributing Area** (Acres)	**Impervious Area** (Acres)	**Percent Impervious** %	**Rv**	**WQv** (cf)	**Precipitation** (in)	**Description**
1	2.21	1.25	57	0.56	4,933	1.10	Infiltration Basin

Design Criteria		
Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D)	6	
Is the contributing area to the practice an "Infiltration Restricted" stormwater hotspot?	No	
Is the contributing area to the practice an "Infiltration Prohibited" stormwater hotspot?	No	
Maximum contributing area (acres)	25	
Is the contributing area greater than the maximum allowed contributing area?	No	
Enter depth to seasonal high water table (ft)	6	
Enter depth to bedrock (ft)	8	
Enter pretreatment volume provided (cf)	1250	
Enter depth of freeboard (ft)	1	
Enter depth of basin (ft)	1	
Enter slope of maintenance access (%)	1	
Enter width of maintenance access (ft)	12	

Sizing Criteria				
		Value	Units	Notes
Water Quality Volume	WQv	4933	cf	
Basin depth	db	1.0	ft	
Required Surface Area	Ab	4,933	sf	
Enter Surface Area Provided	Ab	5060	sf	

Determine Runoff Reduction		
RRv Provided	**4,933**	***cf***

Appendix 4.5

Watershed Schematics and Hydrologic Calculations

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(518) 234-4028

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538 US ROUTE 30
NEW LEBANON
COLUMBIA COUNTY NEW YORK STATE

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Project Number	2024125
Drawn By	AS
Designed By	AHJ/AS
Checked By	BJB
Date	6/20/25
Scale	1" = 60'
File Name	tilden wshed

Sheet Title

WATERSHED SCHEMATIC EXISTING

Sheet No.

4.5

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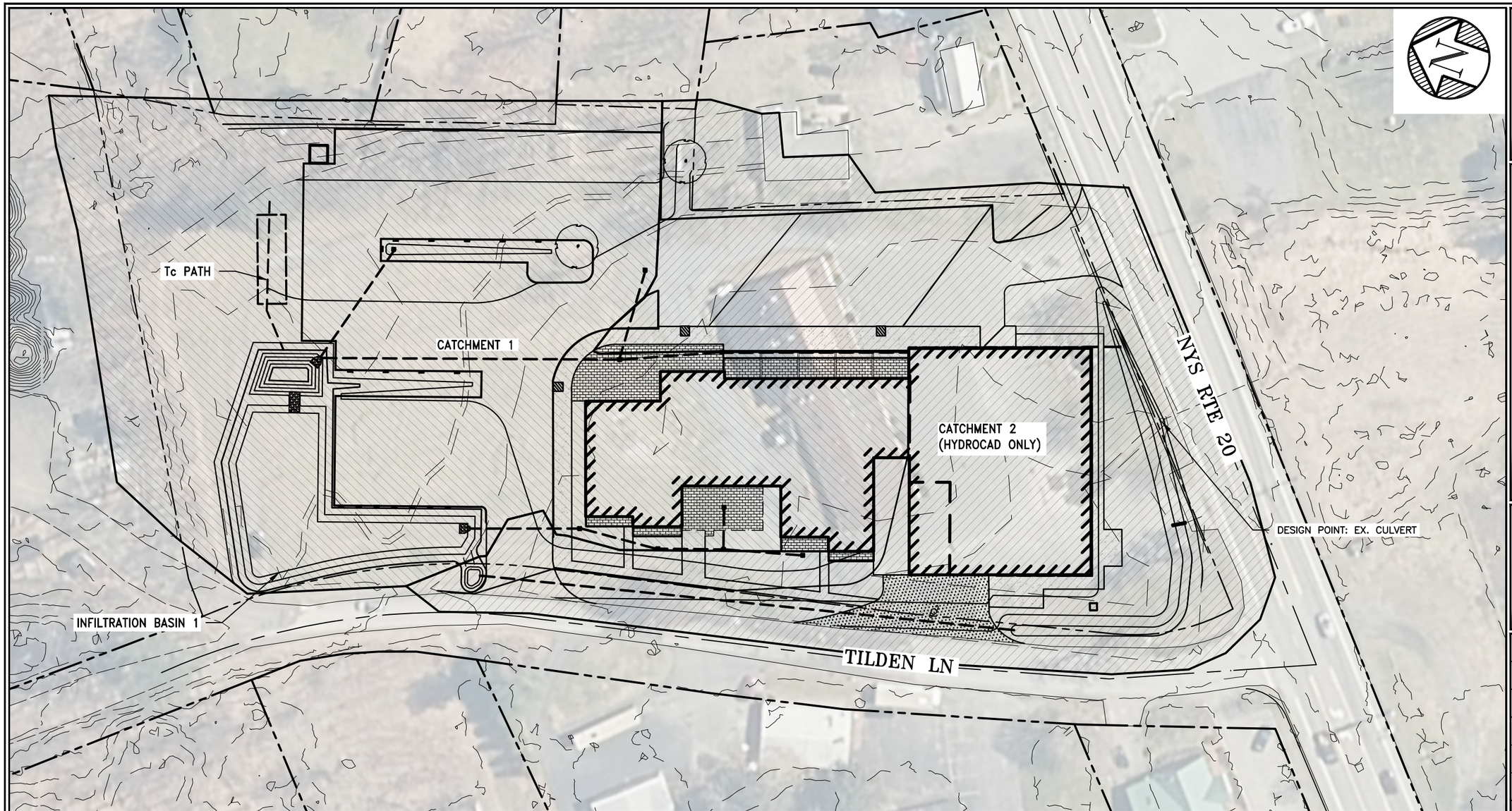

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Designed By	AHJ/AS
Checked By	BJB
Date	6/20/25
Scale	1" = 60'
File Name	tilden wshed

Sheet Title

WATERSHED SCHEMATIC PROPOSED

Sheet No.

4.5

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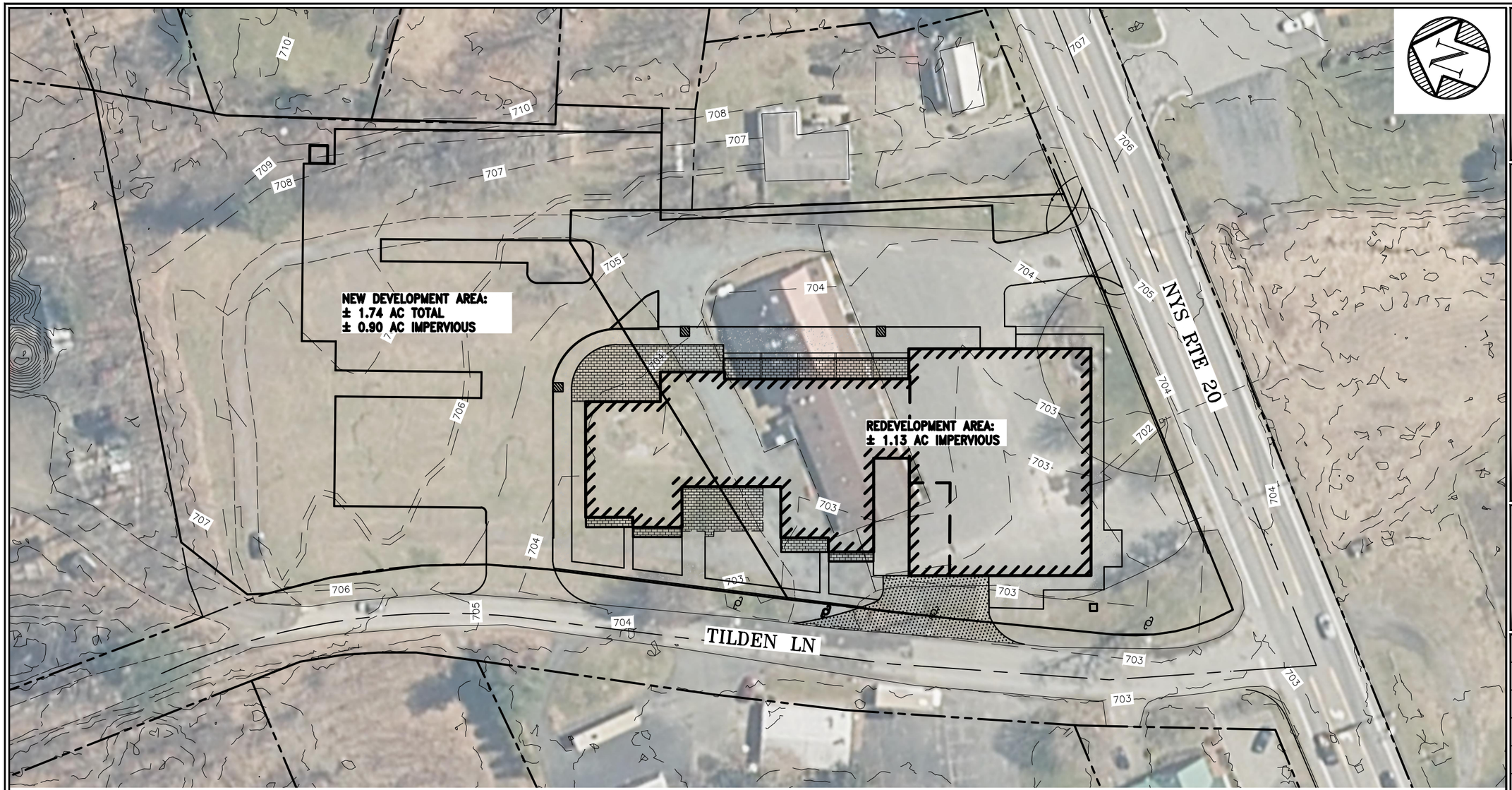

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Project Number	2024125
Drawn By	AS
Designed By	AHJ/AS
Checked By	BJB
Date	6/20/25
Scale	1" = 60'
File Name	tilden wshed

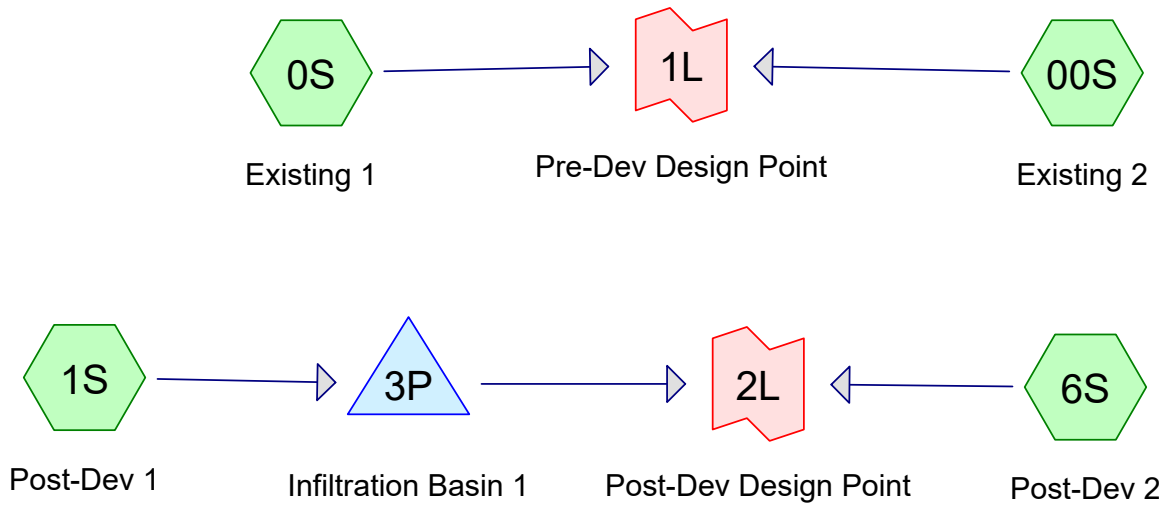
Sheet Title

WATERSHED SCHEMATIC REDEVELOPMENT

Sheet No.

4.5

K:\APPS\SDS\PROJ\2024125\Tilden Watersheds.dwg, 003 PROP WATERSHED, 10/7/2025 1:49:25 PM



Subcat Reach Pond Link

Routing Diagram for Tilden Hydrology

Prepared by {enter your company name here}, Printed 10/7/2025

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Project Notes

Defined 9 rainfall events from NY-Tilden IDF
Copied 9 events from NY-Tilden 24-hr S1 storm

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	NY-Tilden 24-hr S1	1-yr	Default	24.00	1	2.37	2
2	2-yr	NY-Tilden 24-hr S1	2-yr	Default	24.00	1	2.78	2
3	10-yr	NY-Tilden 24-hr S1	10-yr	Default	24.00	1	4.09	2
4	100-yr	NY-Tilden 24-hr S1	100-yr	Default	24.00	1	7.14	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.198	79	<50% Grass cover, Poor, HSG B (00S)
2.436	61	>75% Grass cover, Good, HSG B (0S, 1S, 6S)
0.049	98	Ex. Impervious (Off-Site) (00S)
0.105	98	Ex. Impervious (On-Site) (00S)
0.250	98	Existing Impervious (Off-Site) (0S)
1.077	98	Existing Impervious (On-Site) (0S)
0.990	98	Impervious (1S)
0.288	98	Off-Site Impervious (6S)
0.856	98	On-Site Impervious (6S)
0.563	58	Woods/grass comb., Good, HSG B (00S)
7.811	**81**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
4.197	HSG B	00S, 0S, 1S, 6S
0.000	HSG C	
0.000	HSG D	
3.615	Other	00S, 0S, 1S, 6S
7.811		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	1.198	0.000	0.000	0.000	1.198	<50% Grass cover, Poor	00S
0.000	2.436	0.000	0.000	0.000	2.436	>75% Grass cover, Good	0S, 1S, 6S
0.000	0.000	0.000	0.000	0.049	0.049	Ex. Impervious (Off-Site)	00S
0.000	0.000	0.000	0.000	0.105	0.105	Ex. Impervious (On-Site)	00S
0.000	0.000	0.000	0.000	0.250	0.250	Existing Impervious (Off-Site)	0S
0.000	0.000	0.000	0.000	1.077	1.077	Existing Impervious (On-Site)	0S
0.000	0.000	0.000	0.000	0.990	0.990	Impervious	1S
0.000	0.000	0.000	0.000	0.288	0.288	Off-Site Impervious	6S
0.000	0.000	0.000	0.000	0.856	0.856	On-Site Impervious	6S
0.000	0.563	0.000	0.000	0.000	0.563	Woods/grass comb., Good	00S
0.000	**4.197**	**0.000**	**0.000**	**3.615**	**7.811**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00S: Existing 2 Runoff Area=1.915 ac 8.04% Impervious Runoff Depth>0.46"
Flow Length=675' Tc=29.7 min CN=74 Runoff=0.57 cfs 0.073 af

Subcatchment 0S: Existing 1 Runoff Area=90,141 sf 64.11% Impervious Runoff Depth>0.97"
Tc=6.0 min CN=85 Runoff=2.99 cfs 0.167 af

Subcatchment 1S: Post-Dev 1 Runoff Area=2.040 ac 48.53% Impervious Runoff Depth>0.66"
Flow Length=85' Slope=0.0230 '/' Tc=12.7 min CN=79 Runoff=1.43 cfs 0.113 af

Subcatchment 6S: Post-Dev 2 Runoff Area=1.787 ac 64.02% Impervious Runoff Depth>0.97"
Tc=6.0 min CN=85 Runoff=2.58 cfs 0.145 af

Pond 3P: Infiltration Basin 1 Peak Elev=703.11' Storage=563 cf Inflow=1.43 cfs 0.113 af
Discarded=0.75 cfs 0.112 af Primary=0.00 cfs 0.000 af Outflow=0.75 cfs 0.112 af

Link 1L: Pre-Dev Design Point Inflow=3.08 cfs 0.240 af
Primary=3.08 cfs 0.240 af

Link 2L: Post-Dev Design Point Inflow=2.58 cfs 0.145 af
Primary=2.58 cfs 0.145 af

Total Runoff Area = 7.811 ac Runoff Volume = 0.498 af Average Runoff Depth = 0.76"
53.73% Pervious = 4.197 ac 46.27% Impervious = 3.615 ac

Summary for Subcatchment 00S: Existing 2

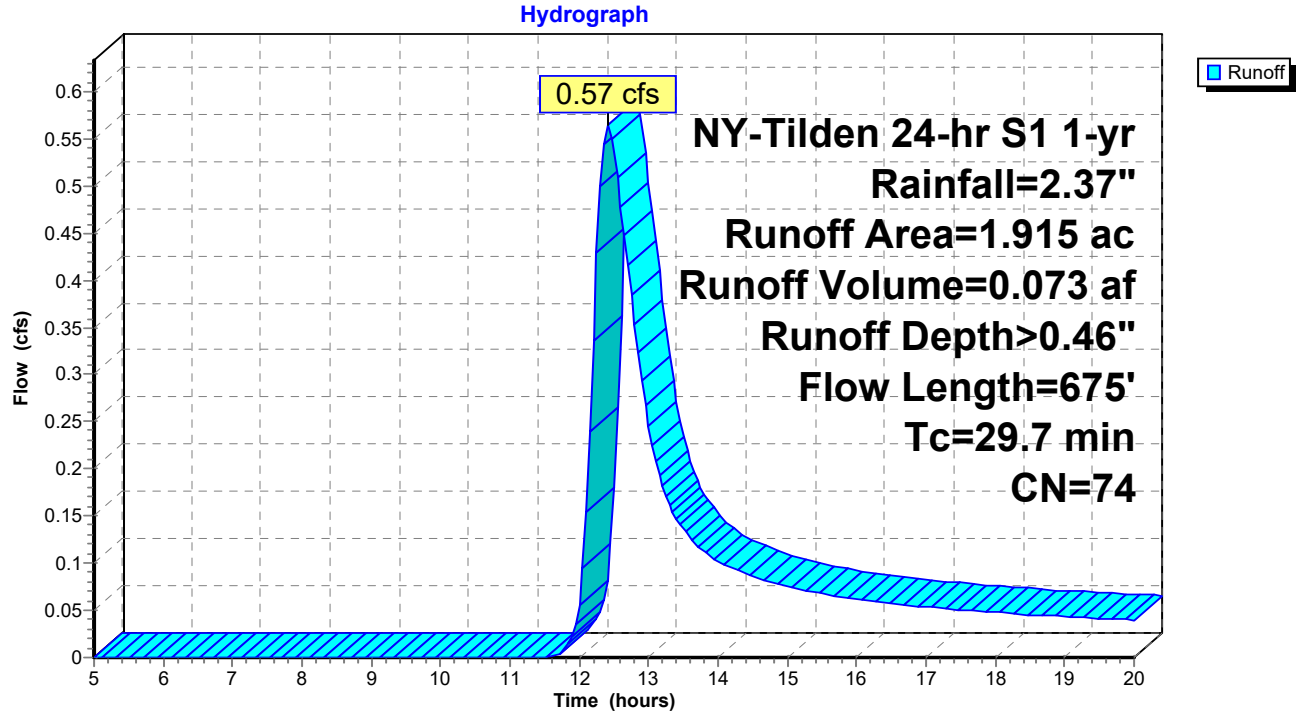
Runoff = 0.57 cfs @ 12.42 hrs, Volume= 0.073 af, Depth> 0.46"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 1-yr Rainfall=2.37"

	Area (ac)	CN	Description
*	0.049	98	Ex. Impervious (Off-Site)
*	0.105	98	Ex. Impervious (On-Site)
	1.198	79	<50% Grass cover, Poor, HSG B
	0.563	58	Woods/grass comb., Good, HSG B
	1.915	74	Weighted Average
	1.761		91.96% Pervious Area
	0.154		8.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.2	150	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.78"
9.0	380	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	145	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
29.7	675	Total			

Subcatchment 00S: Existing 2



Summary for Subcatchment 0S: Existing 1

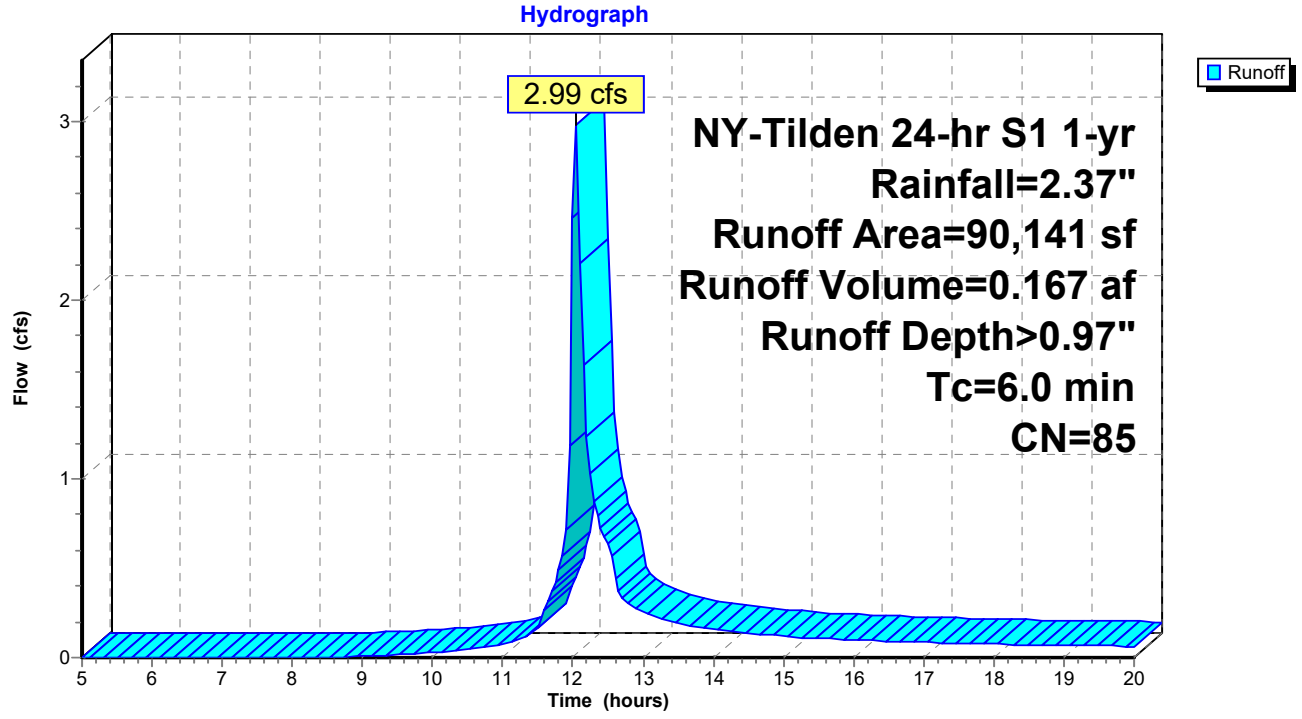
Runoff = 2.99 cfs @ 12.05 hrs, Volume= 0.167 af, Depth> 0.97"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 1-yr Rainfall=2.37"

	Area (sf)	CN	Description
*	46,902	98	Existing Impervious (On-Site)
*	10,889	98	Existing Impervious (Off-Site)
	32,350	61	>75% Grass cover, Good, HSG B
	90,141	85	Weighted Average
	32,350		35.89% Pervious Area
	57,791		64.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 0S: Existing 1



Summary for Subcatchment 1S: Post-Dev 1

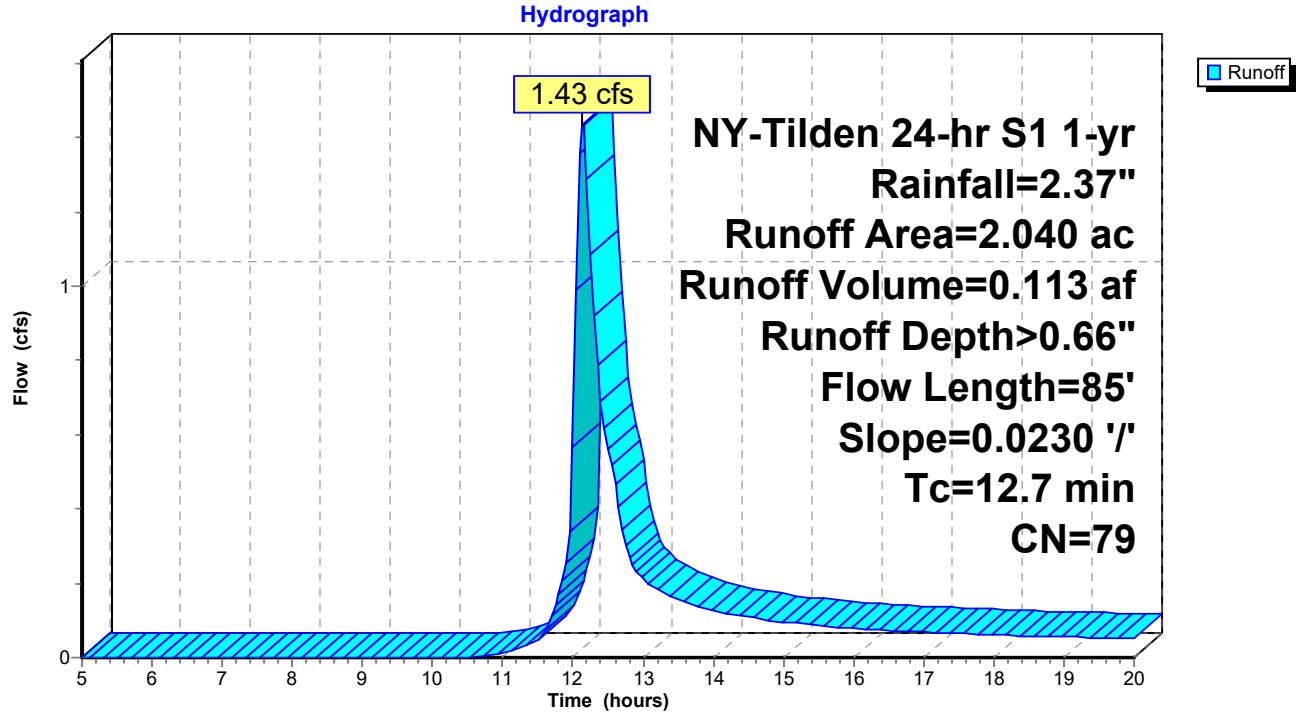
Runoff = 1.43 cfs @ 12.14 hrs, Volume= 0.113 af, Depth> 0.66"
Routed to Pond 3P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 1-yr Rainfall=2.37"

	Area (ac)	CN	Description
*	0.990	98	Impervious
	1.050	61	>75% Grass cover, Good, HSG B
	2.040	79	Weighted Average
	1.050		51.47% Pervious Area
	0.990		48.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	85	0.0230	0.11		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.78"

Subcatchment 1S: Post-Dev 1



Summary for Subcatchment 6S: Post-Dev 2

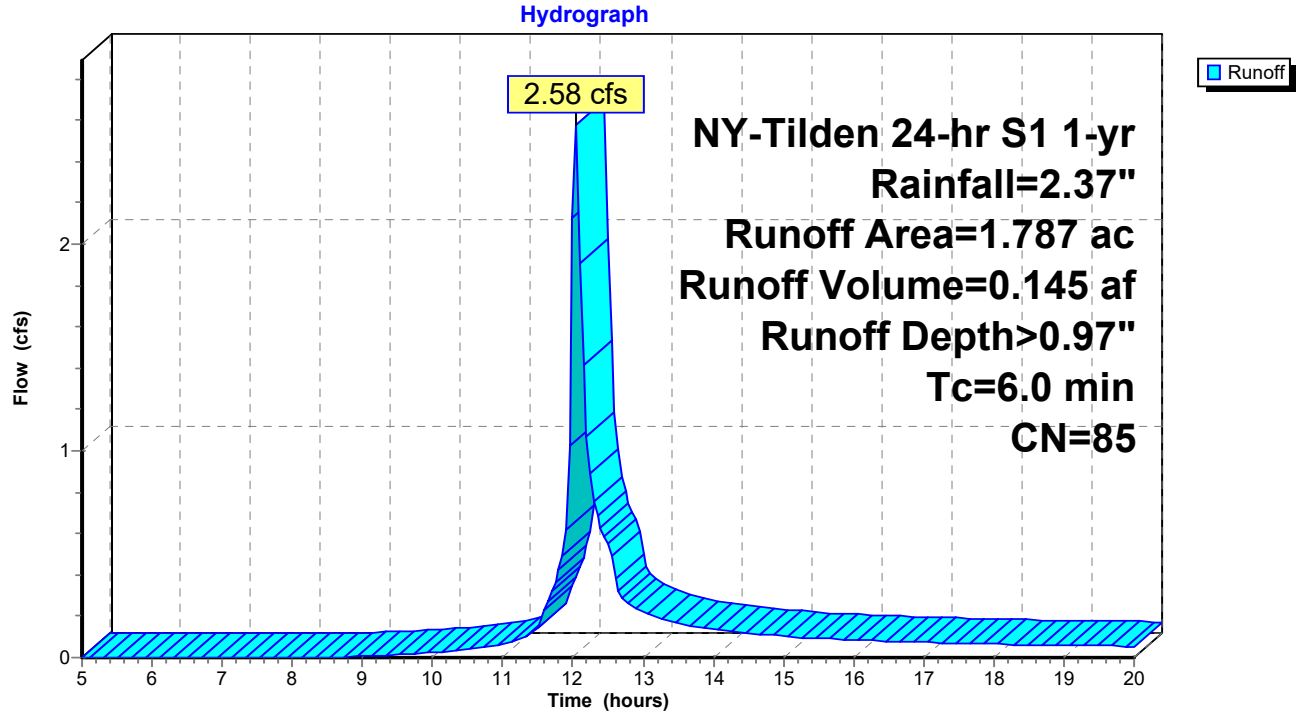
Runoff = 2.58 cfs @ 12.05 hrs, Volume= 0.145 af, Depth> 0.97"
Routed to Link 2L : Post-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 1-yr Rainfall=2.37"

	Area (ac)	CN	Description
*	0.856	98	On-Site Impervious
*	0.288	98	Off-Site Impervious
	0.643	61	>75% Grass cover, Good, HSG B
	1.787	85	Weighted Average
	0.643		35.98% Pervious Area
	1.144		64.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 6S: Post-Dev 2



Summary for Pond 3P: Infiltration Basin 1

Inflow Area = 2.040 ac, 48.53% Impervious, Inflow Depth > 0.66" for 1-yr event
Inflow = 1.43 cfs @ 12.14 hrs, Volume= 0.113 af
Outflow = 0.75 cfs @ 12.37 hrs, Volume= 0.112 af, Atten= 48%, Lag= 13.7 min
Discarded = 0.75 cfs @ 12.37 hrs, Volume= 0.112 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 2L : Post-Dev Design Point

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 703.11' @ 12.37 hrs Surf.Area= 5,245 sf Storage= 563 cf

Plug-Flow detention time= 5.2 min calculated for 0.112 af (100% of inflow)
Center-of-Mass det. time= 4.6 min (833.5 - 828.9)

Volume	Invert	Avail.Storage	Storage Description
#1	703.00'	14,280 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

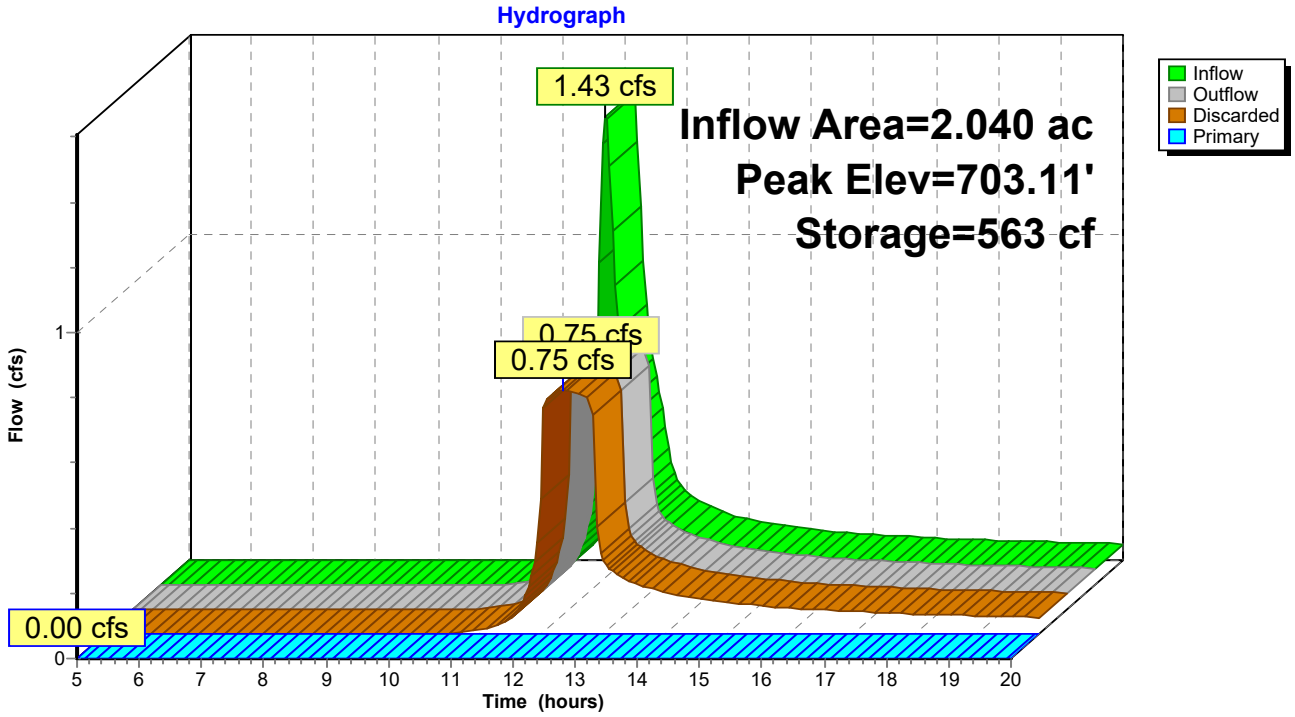
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
703.00	5,060	0	0
704.00	6,750	5,905	5,905
705.00	10,000	8,375	14,280

Device	Routing	Invert	Outlet Devices
#1	Discarded	703.00'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 699.00'
#2	Primary	704.50'	**5.0' long + 3.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.75 cfs @ 12.37 hrs HW=703.11' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.75 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=703.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Infiltration Basin 1

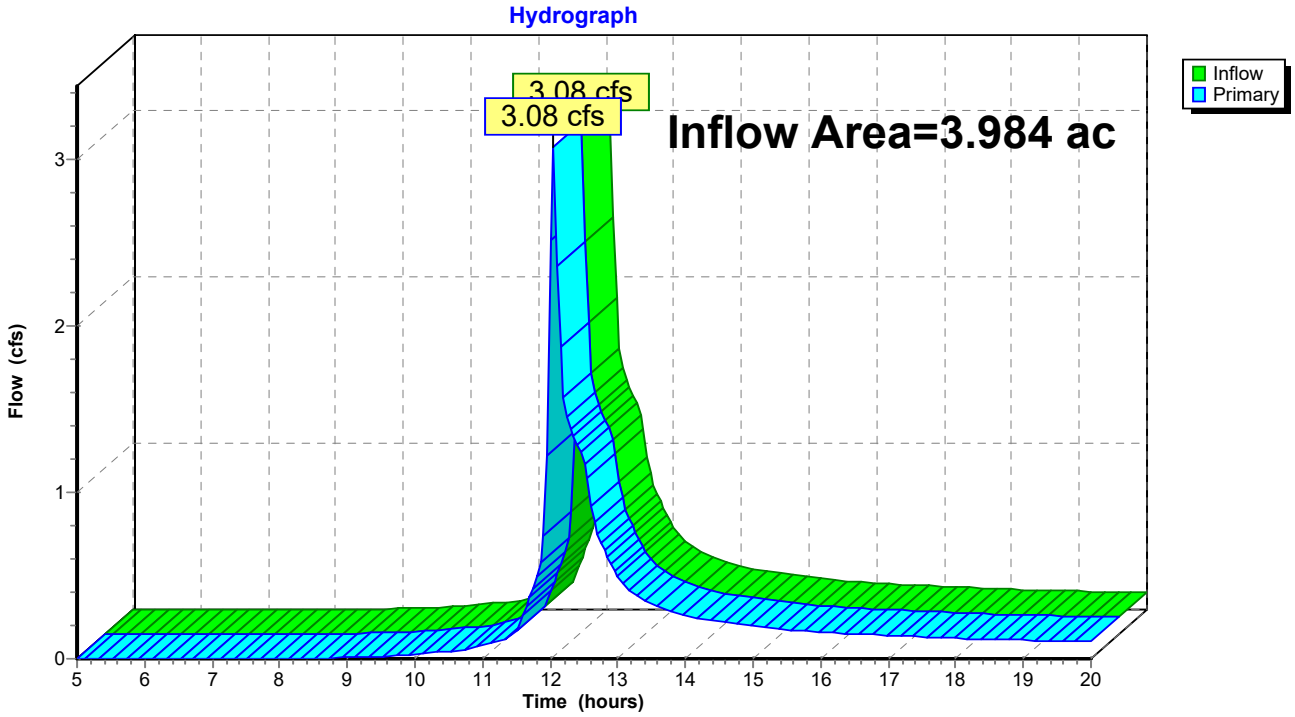


Summary for Link 1L: Pre-Dev Design Point

Inflow Area = 3.984 ac, 37.16% Impervious, Inflow Depth > 0.72" for 1-yr event
Inflow = 3.08 cfs @ 12.05 hrs, Volume= 0.240 af
Primary = 3.08 cfs @ 12.05 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: Pre-Dev Design Point

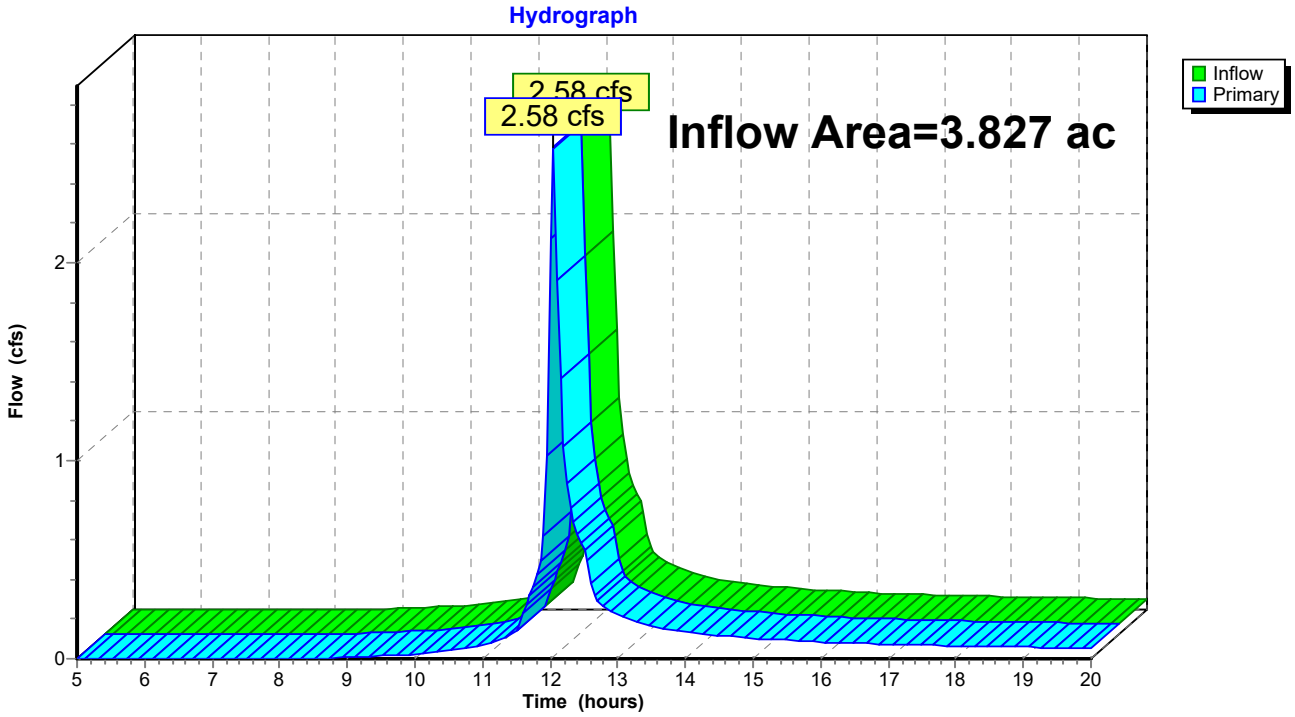


Summary for Link 2L: Post-Dev Design Point

Inflow Area = 3.827 ac, 55.76% Impervious, Inflow Depth > 0.45" for 1-yr event
Inflow = 2.58 cfs @ 12.05 hrs, Volume= 0.145 af
Primary = 2.58 cfs @ 12.05 hrs, Volume= 0.145 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: Post-Dev Design Point



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00S: Existing 2 Runoff Area=1.915 ac 8.04% Impervious Runoff Depth>0.67"
Flow Length=675' Tc=29.7 min CN=74 Runoff=0.91 cfs 0.107 af

Subcatchment 0S: Existing 1 Runoff Area=90,141 sf 64.11% Impervious Runoff Depth>1.28"
Tc=6.0 min CN=85 Runoff=4.04 cfs 0.221 af

Subcatchment 1S: Post-Dev 1 Runoff Area=2.040 ac 48.53% Impervious Runoff Depth>0.92"
Flow Length=85' Slope=0.0230 '/' Tc=12.7 min CN=79 Runoff=2.09 cfs 0.157 af

Subcatchment 6S: Post-Dev 2 Runoff Area=1.787 ac 64.02% Impervious Runoff Depth>1.28"
Tc=6.0 min CN=85 Runoff=3.49 cfs 0.191 af

Pond 3P: Infiltration Basin 1 Peak Elev=703.24' Storage=1,263 cf Inflow=2.09 cfs 0.157 af
Discarded=0.80 cfs 0.156 af Primary=0.00 cfs 0.000 af Outflow=0.80 cfs 0.156 af

Link 1L: Pre-Dev Design Point Inflow=4.23 cfs 0.328 af
Primary=4.23 cfs 0.328 af

Link 2L: Post-Dev Design Point Inflow=3.49 cfs 0.191 af
Primary=3.49 cfs 0.191 af

Total Runoff Area = 7.811 ac Runoff Volume = 0.676 af Average Runoff Depth = 1.04"
53.73% Pervious = 4.197 ac 46.27% Impervious = 3.615 ac

Summary for Subcatchment 00S: Existing 2

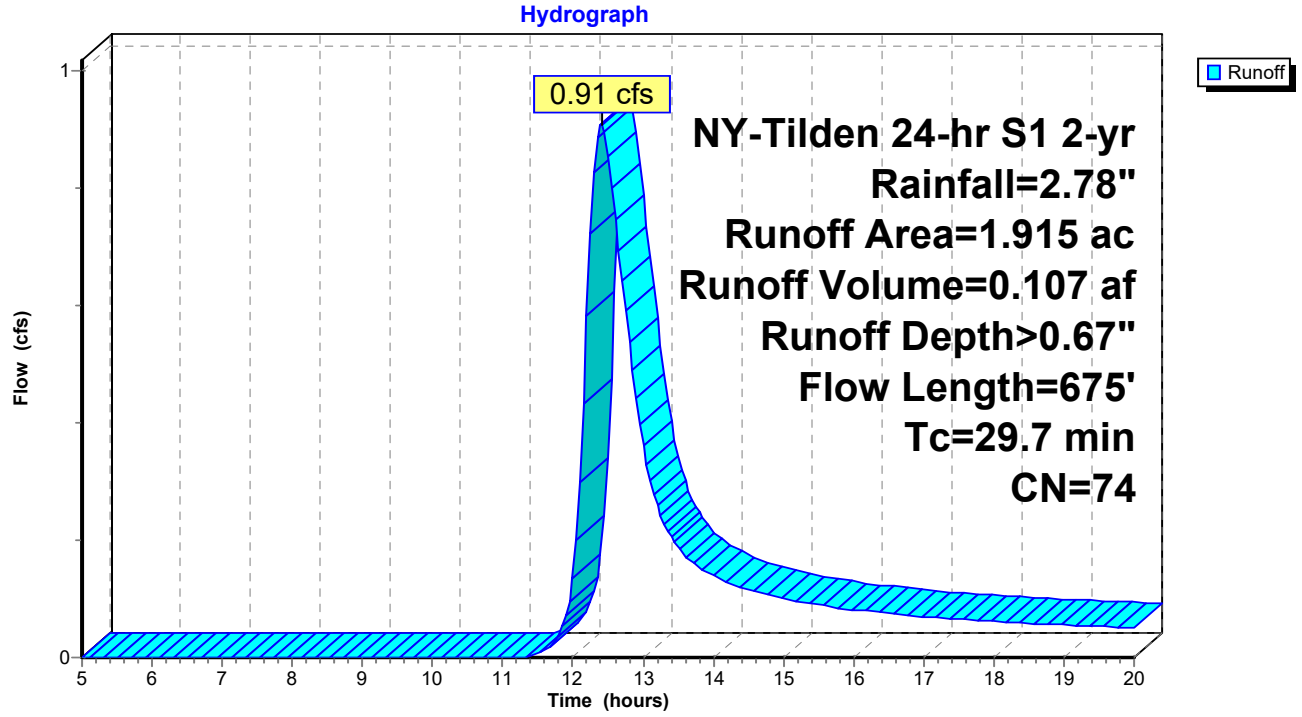
Runoff = 0.91 cfs @ 12.41 hrs, Volume= 0.107 af, Depth> 0.67"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 2-yr Rainfall=2.78"

	Area (ac)	CN	Description
*	0.049	98	Ex. Impervious (Off-Site)
*	0.105	98	Ex. Impervious (On-Site)
	1.198	79	<50% Grass cover, Poor, HSG B
	0.563	58	Woods/grass comb., Good, HSG B
	1.915	74	Weighted Average
	1.761		91.96% Pervious Area
	0.154		8.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.2	150	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.78"
9.0	380	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	145	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
29.7	675	Total			

Subcatchment 00S: Existing 2



Summary for Subcatchment 0S: Existing 1

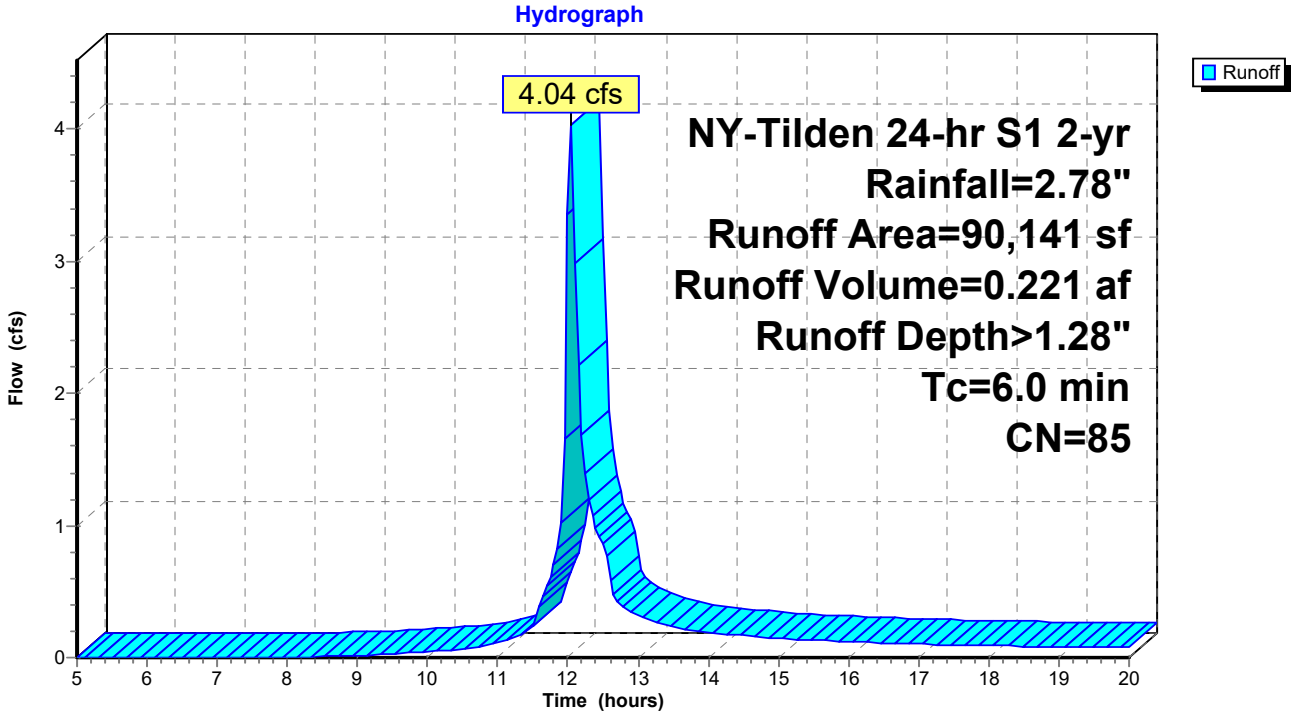
Runoff = 4.04 cfs @ 12.04 hrs, Volume= 0.221 af, Depth> 1.28"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 2-yr Rainfall=2.78"

	Area (sf)	CN	Description
*	46,902	98	Existing Impervious (On-Site)
*	10,889	98	Existing Impervious (Off-Site)
	32,350	61	>75% Grass cover, Good, HSG B
	90,141	85	Weighted Average
	32,350		35.89% Pervious Area
	57,791		64.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 0S: Existing 1



Summary for Subcatchment 1S: Post-Dev 1

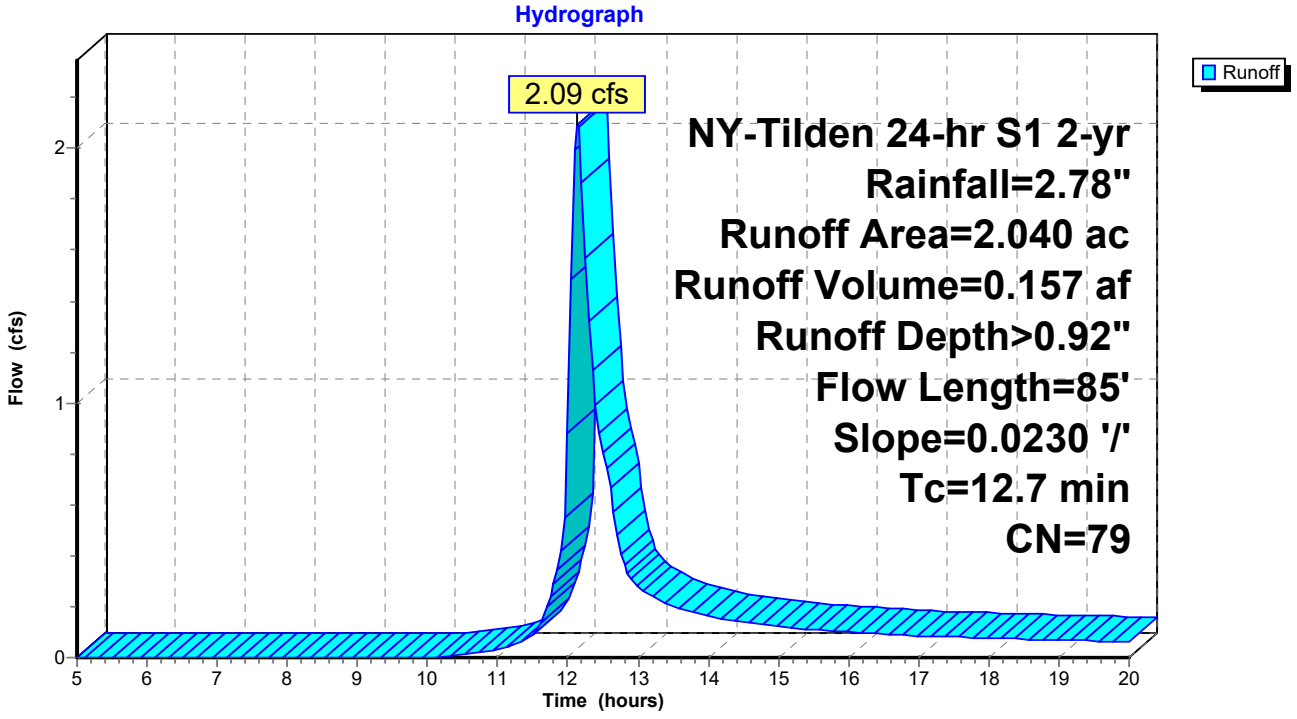
Runoff = 2.09 cfs @ 12.14 hrs, Volume= 0.157 af, Depth> 0.92"
Routed to Pond 3P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 2-yr Rainfall=2.78"

	Area (ac)	CN	Description
*	0.990	98	Impervious
	1.050	61	>75% Grass cover, Good, HSG B
	2.040	79	Weighted Average
	1.050		51.47% Pervious Area
	0.990		48.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	85	0.0230	0.11		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.78"

Subcatchment 1S: Post-Dev 1



Summary for Subcatchment 6S: Post-Dev 2

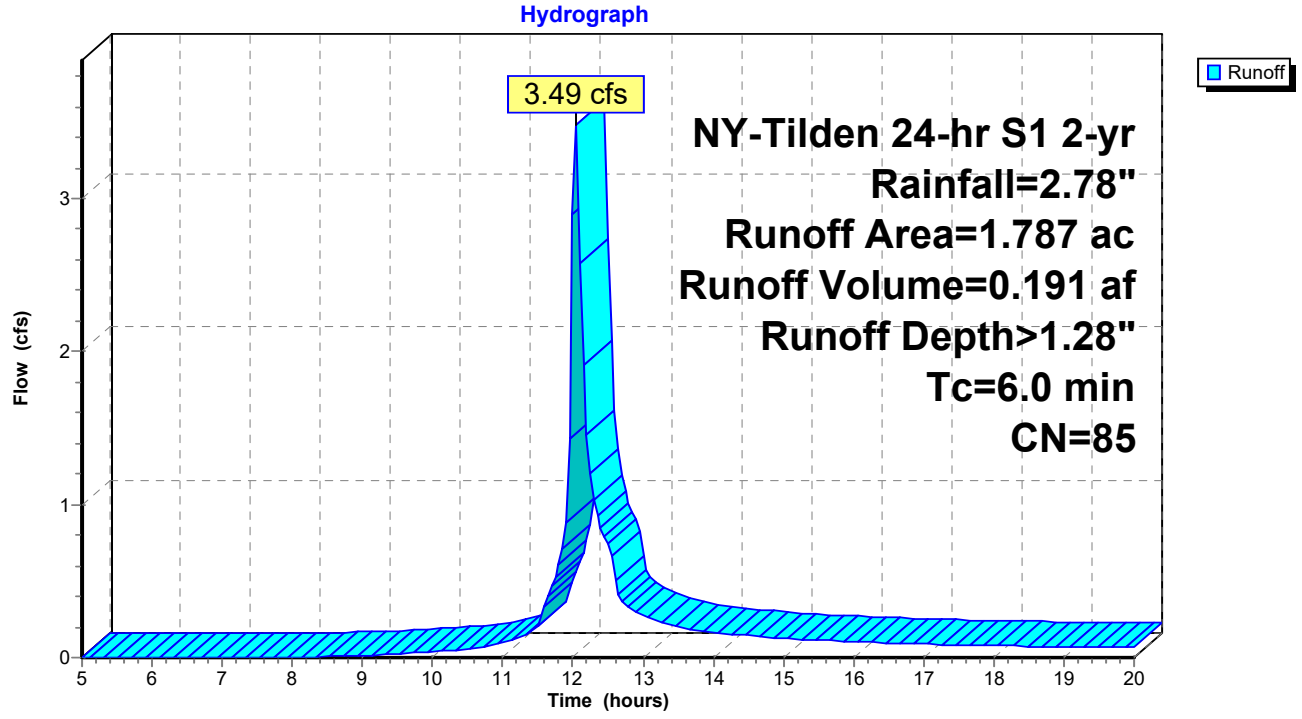
Runoff = 3.49 cfs @ 12.04 hrs, Volume= 0.191 af, Depth> 1.28"
Routed to Link 2L : Post-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 2-yr Rainfall=2.78"

	Area (ac)	CN	Description
*	0.856	98	On-Site Impervious
*	0.288	98	Off-Site Impervious
	0.643	61	>75% Grass cover, Good, HSG B
	1.787	85	Weighted Average
	0.643		35.98% Pervious Area
	1.144		64.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 6S: Post-Dev 2



Summary for Pond 3P: Infiltration Basin 1

Inflow Area = 2.040 ac, 48.53% Impervious, Inflow Depth > 0.92" for 2-yr event
Inflow = 2.09 cfs @ 12.14 hrs, Volume= 0.157 af
Outflow = 0.80 cfs @ 12.50 hrs, Volume= 0.156 af, Atten= 62%, Lag= 21.9 min
Discarded = 0.80 cfs @ 12.50 hrs, Volume= 0.156 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 2L : Post-Dev Design Point

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 703.24' @ 12.50 hrs Surf.Area= 5,465 sf Storage= 1,263 cf

Plug-Flow detention time= 10.6 min calculated for 0.156 af (100% of inflow)
Center-of-Mass det. time= 10.1 min (828.6 - 818.4)

Volume	Invert	Avail.Storage	Storage Description
#1	703.00'	14,280 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

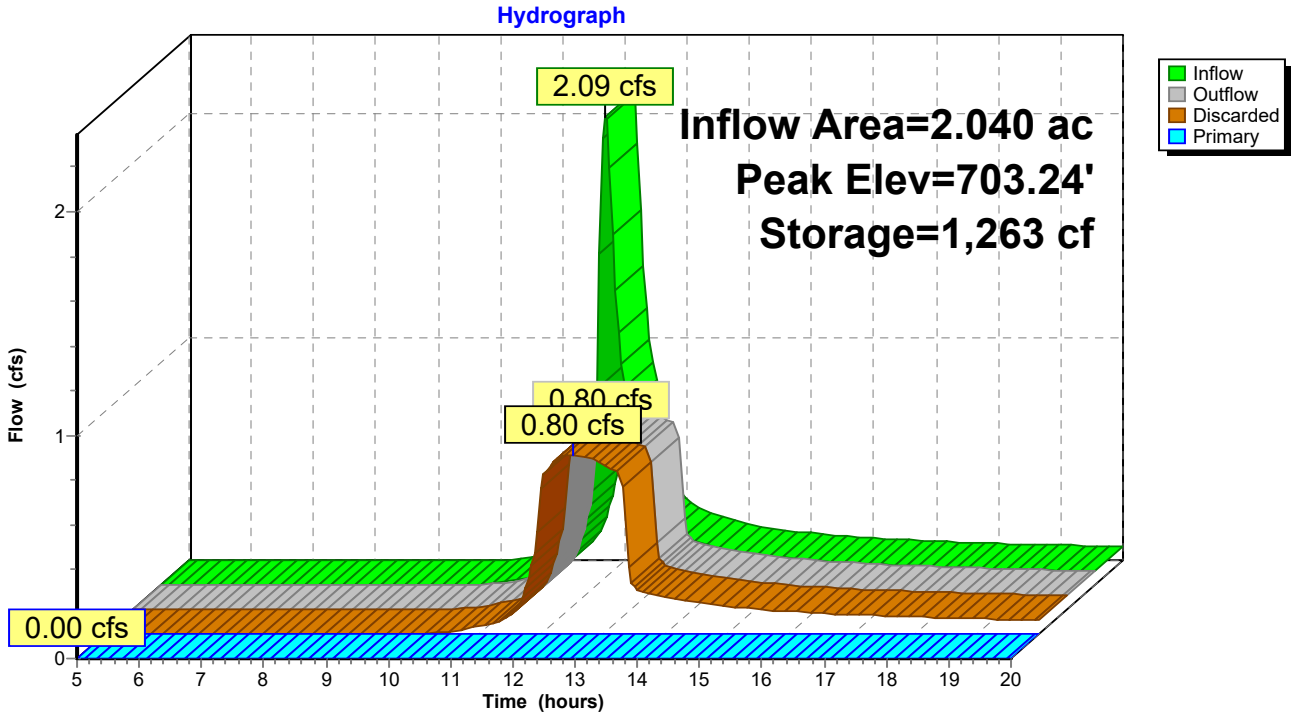
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
703.00	5,060	0	0
704.00	6,750	5,905	5,905
705.00	10,000	8,375	14,280

Device	Routing	Invert	Outlet Devices
#1	Discarded	703.00'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 699.00'
#2	Primary	704.50'	**5.0' long + 3.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=0.80 cfs @ 12.50 hrs HW=703.24' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.80 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=703.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Infiltration Basin 1

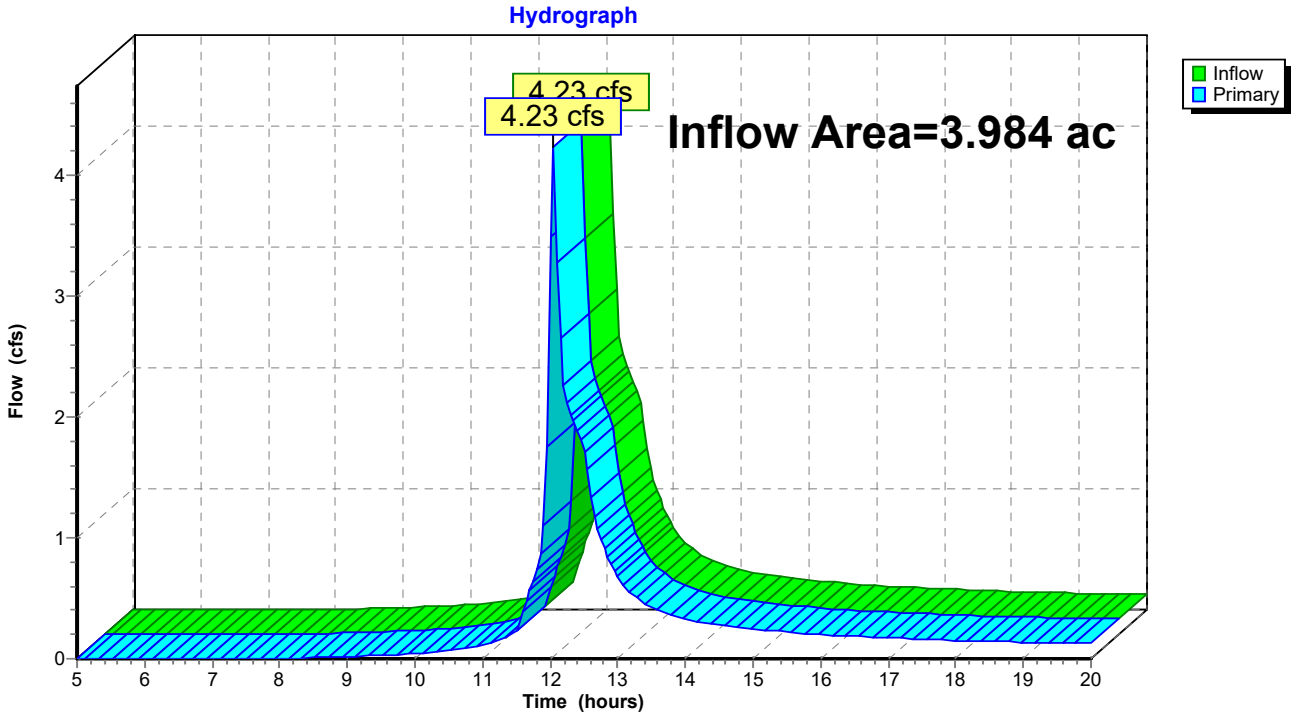


Summary for Link 1L: Pre-Dev Design Point

Inflow Area = 3.984 ac, 37.16% Impervious, Inflow Depth > 0.99" for 2-yr event
Inflow = 4.23 cfs @ 12.05 hrs, Volume= 0.328 af
Primary = 4.23 cfs @ 12.05 hrs, Volume= 0.328 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: Pre-Dev Design Point

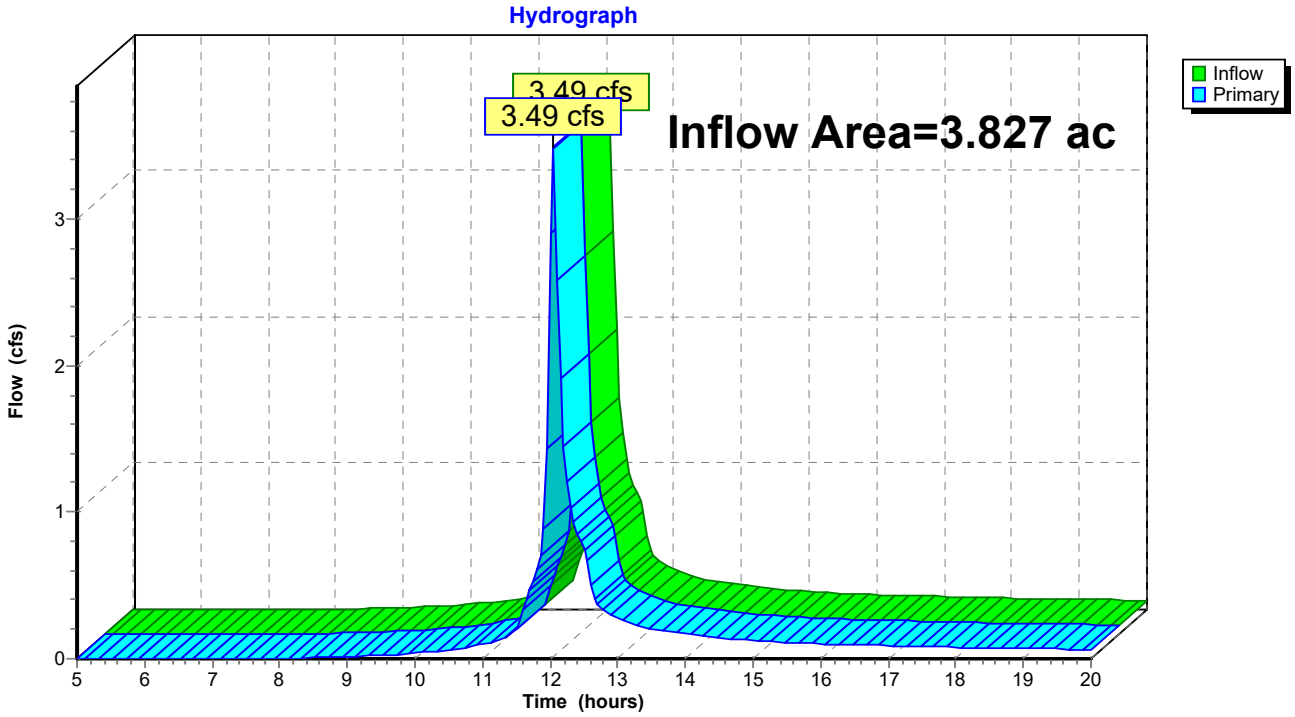


Summary for Link 2L: Post-Dev Design Point

Inflow Area = 3.827 ac, 55.76% Impervious, Inflow Depth > 0.60" for 2-yr event
Inflow = 3.49 cfs @ 12.04 hrs, Volume= 0.191 af
Primary = 3.49 cfs @ 12.04 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: Post-Dev Design Point



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00S: Existing 2 Runoff Area=1.915 ac 8.04% Impervious Runoff Depth>1.49"
Flow Length=675' Tc=29.7 min CN=74 Runoff=2.13 cfs 0.237 af

Subcatchment 0S: Existing 1 Runoff Area=90,141 sf 64.11% Impervious Runoff Depth>2.35"
Tc=6.0 min CN=85 Runoff=7.01 cfs 0.404 af

Subcatchment 1S: Post-Dev 1 Runoff Area=2.040 ac 48.53% Impervious Runoff Depth>1.86"
Flow Length=85' Slope=0.0230 '/' Tc=12.7 min CN=79 Runoff=4.20 cfs 0.316 af

Subcatchment 6S: Post-Dev 2 Runoff Area=1.787 ac 64.02% Impervious Runoff Depth>2.35"
Tc=6.0 min CN=85 Runoff=6.06 cfs 0.349 af

Pond 3P: Infiltration Basin 1 Peak Elev=703.74' Storage=4,232 cf Inflow=4.20 cfs 0.316 af
Discarded=1.02 cfs 0.315 af Primary=0.00 cfs 0.000 af Outflow=1.02 cfs 0.315 af

Link 1L: Pre-Dev Design Point Inflow=7.67 cfs 0.642 af
Primary=7.67 cfs 0.642 af

Link 2L: Post-Dev Design Point Inflow=6.06 cfs 0.349 af
Primary=6.06 cfs 0.349 af

Total Runoff Area = 7.811 ac Runoff Volume = 1.307 af Average Runoff Depth = 2.01"
53.73% Pervious = 4.197 ac 46.27% Impervious = 3.615 ac

Summary for Subcatchment 00S: Existing 2

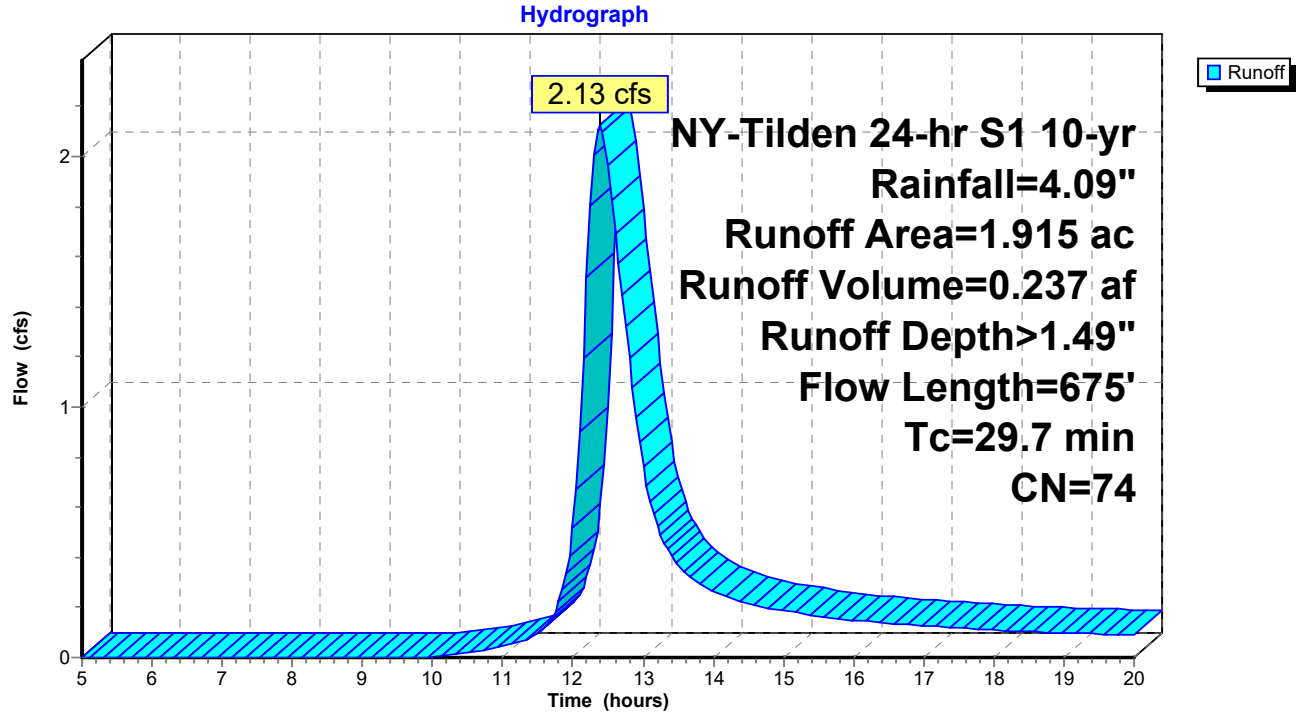
Runoff = 2.13 cfs @ 12.39 hrs, Volume= 0.237 af, Depth> 1.49"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 10-yr Rainfall=4.09"

	Area (ac)	CN	Description
*	0.049	98	Ex. Impervious (Off-Site)
*	0.105	98	Ex. Impervious (On-Site)
	1.198	79	<50% Grass cover, Poor, HSG B
	0.563	58	Woods/grass comb., Good, HSG B
	1.915	74	Weighted Average
	1.761		91.96% Pervious Area
	0.154		8.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.2	150	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.78"
9.0	380	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	145	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
29.7	675	Total			

Subcatchment 00S: Existing 2



Summary for Subcatchment 0S: Existing 1

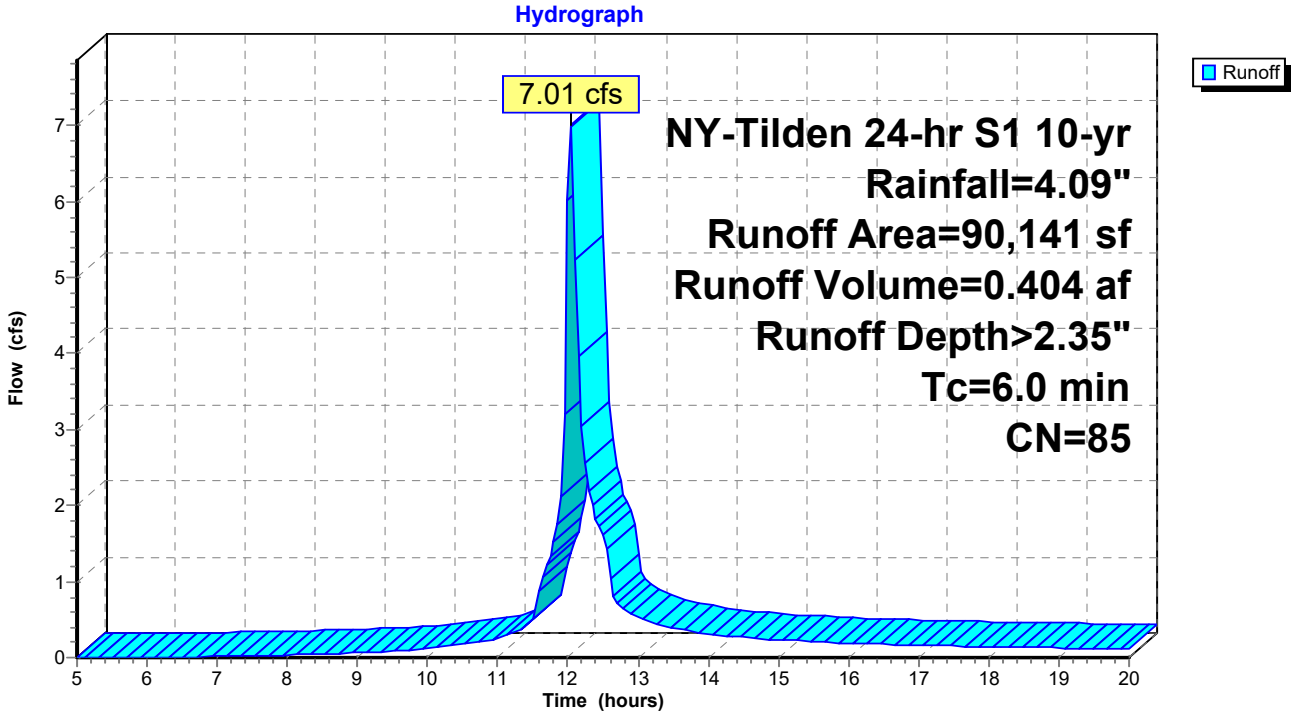
Runoff = 7.01 cfs @ 12.04 hrs, Volume= 0.404 af, Depth> 2.35"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 10-yr Rainfall=4.09"

	Area (sf)	CN	Description
*	46,902	98	Existing Impervious (On-Site)
*	10,889	98	Existing Impervious (Off-Site)
	32,350	61	>75% Grass cover, Good, HSG B
	90,141	85	Weighted Average
	32,350		35.89% Pervious Area
	57,791		64.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 0S: Existing 1



Summary for Subcatchment 1S: Post-Dev 1

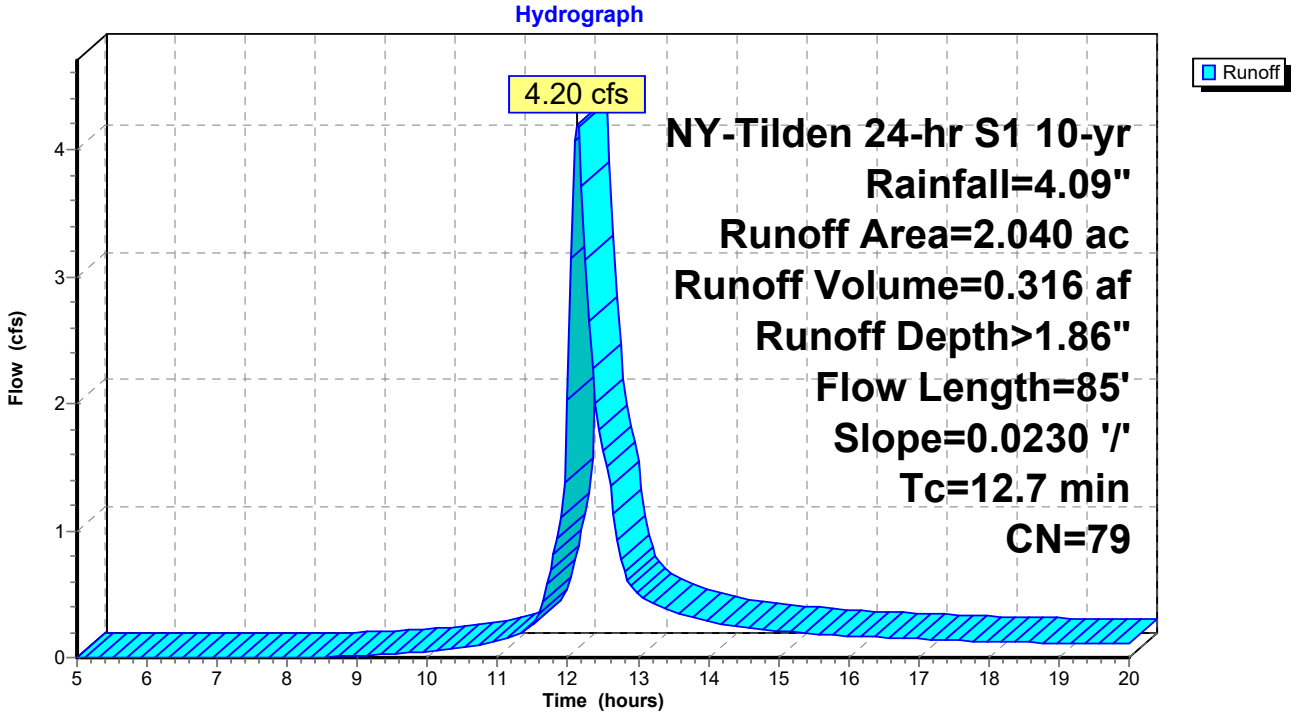
Runoff = 4.20 cfs @ 12.13 hrs, Volume= 0.316 af, Depth> 1.86"
Routed to Pond 3P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 10-yr Rainfall=4.09"

	Area (ac)	CN	Description
*	0.990	98	Impervious
	1.050	61	>75% Grass cover, Good, HSG B
	2.040	79	Weighted Average
	1.050		51.47% Pervious Area
	0.990		48.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	85	0.0230	0.11		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.78"

Subcatchment 1S: Post-Dev 1



Summary for Subcatchment 6S: Post-Dev 2

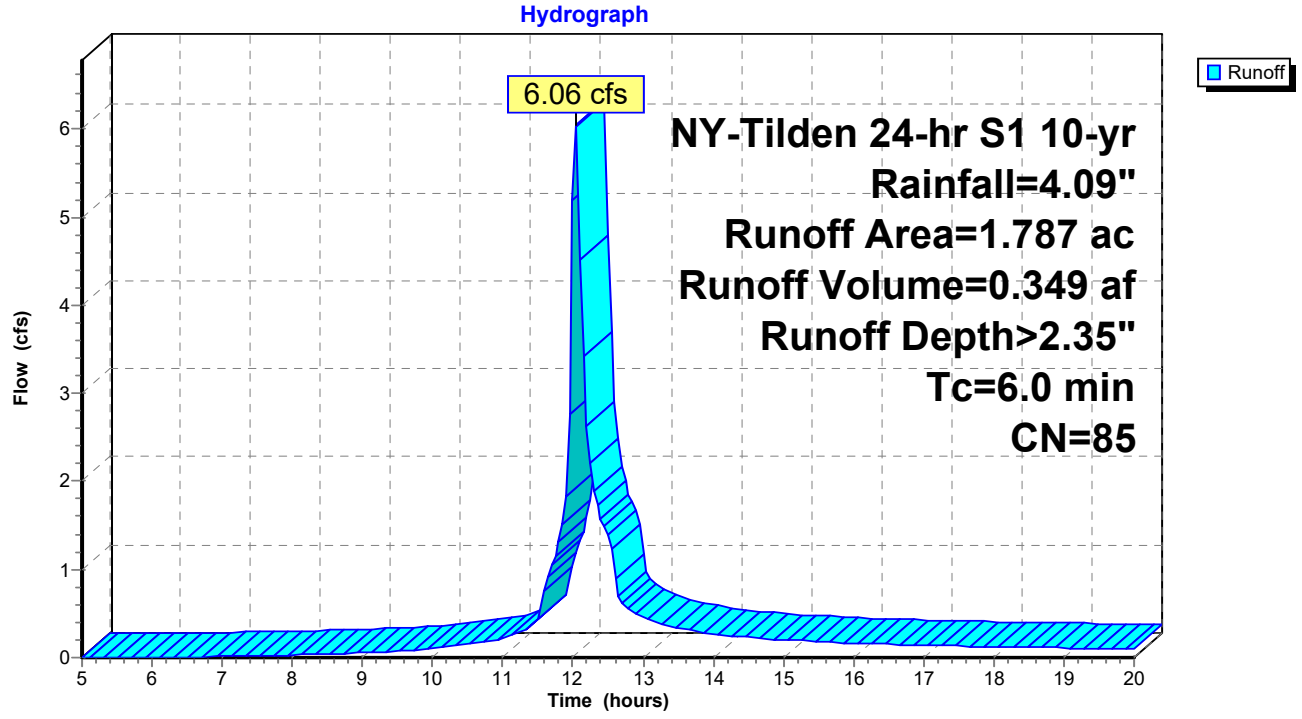
Runoff = 6.06 cfs @ 12.04 hrs, Volume= 0.349 af, Depth> 2.35"
Routed to Link 2L : Post-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 10-yr Rainfall=4.09"

	Area (ac)	CN	Description
*	0.856	98	On-Site Impervious
*	0.288	98	Off-Site Impervious
	0.643	61	>75% Grass cover, Good, HSG B
	1.787	85	Weighted Average
	0.643		35.98% Pervious Area
	1.144		64.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 6S: Post-Dev 2



Summary for Pond 3P: Infiltration Basin 1

Inflow Area = 2.040 ac, 48.53% Impervious, Inflow Depth > 1.86" for 10-yr event
Inflow = 4.20 cfs @ 12.13 hrs, Volume= 0.316 af
Outflow = 1.02 cfs @ 12.68 hrs, Volume= 0.315 af, Atten= 76%, Lag= 32.6 min
Discarded = 1.02 cfs @ 12.68 hrs, Volume= 0.315 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Link 2L : Post-Dev Design Point

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 703.74' @ 12.68 hrs Surf.Area= 6,317 sf Storage= 4,232 cf

Plug-Flow detention time= 31.7 min calculated for 0.315 af (100% of inflow)
Center-of-Mass det. time= 31.3 min (832.2 - 800.9)

Volume	Invert	Avail.Storage	Storage Description
#1	703.00'	14,280 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

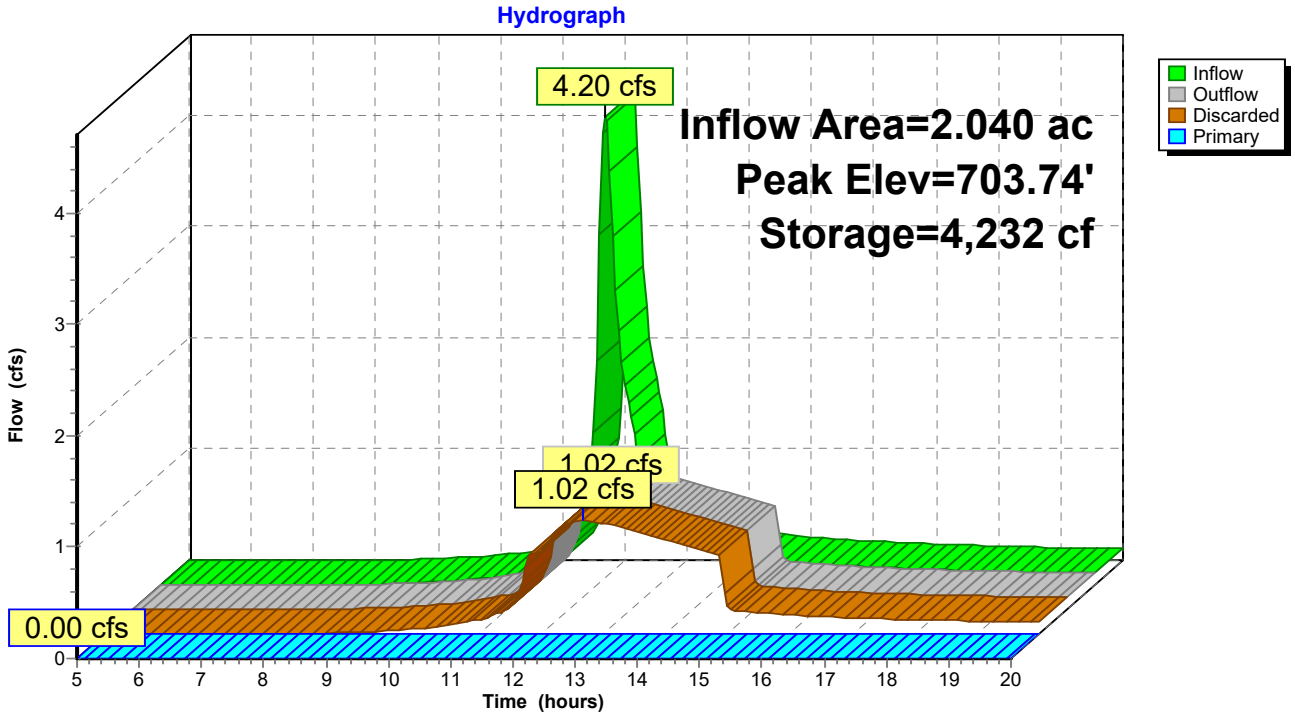
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
703.00	5,060	0	0
704.00	6,750	5,905	5,905
705.00	10,000	8,375	14,280

Device	Routing	Invert	Outlet Devices
#1	Discarded	703.00'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 699.00'
#2	Primary	704.50'	**5.0' long + 3.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=1.02 cfs @ 12.68 hrs HW=703.74' (Free Discharge)
↑—**1=Exfiltration** (Controls 1.02 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=703.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Infiltration Basin 1

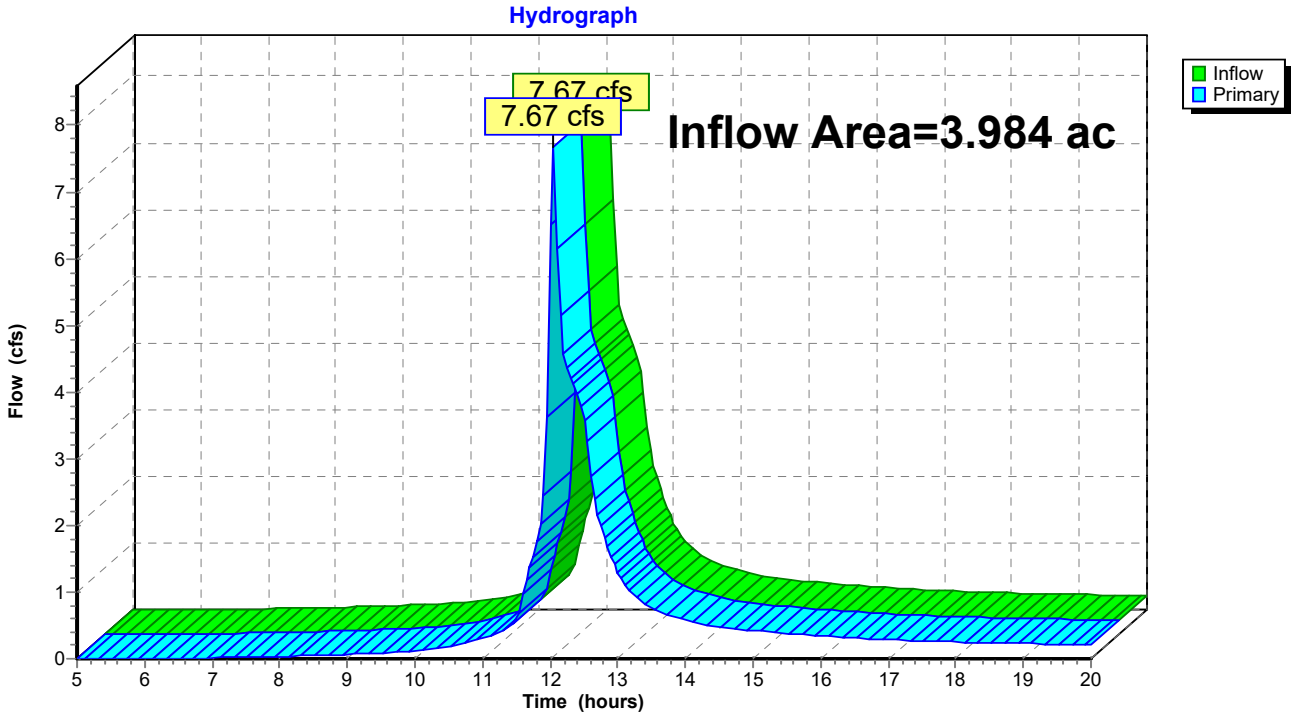


Summary for Link 1L: Pre-Dev Design Point

Inflow Area = 3.984 ac, 37.16% Impervious, Inflow Depth > 1.93" for 10-yr event
Inflow = 7.67 cfs @ 12.05 hrs, Volume= 0.642 af
Primary = 7.67 cfs @ 12.05 hrs, Volume= 0.642 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: Pre-Dev Design Point

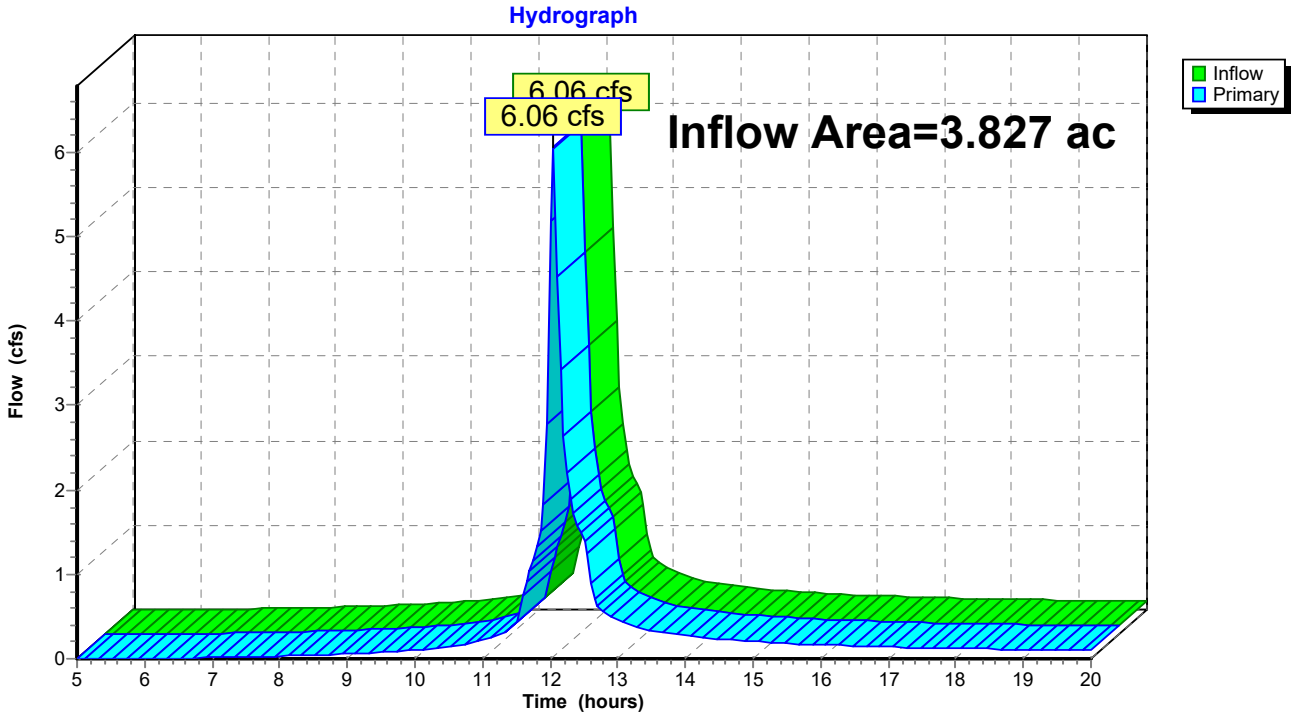


Summary for Link 2L: Post-Dev Design Point

Inflow Area = 3.827 ac, 55.76% Impervious, Inflow Depth > 1.10" for 10-yr event
Inflow = 6.06 cfs @ 12.04 hrs, Volume= 0.349 af
Primary = 6.06 cfs @ 12.04 hrs, Volume= 0.349 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: Post-Dev Design Point



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 00S: Existing 2 Runoff Area=1.915 ac 8.04% Impervious Runoff Depth>3.82"
Flow Length=675' Tc=29.7 min CN=74 Runoff=5.65 cfs 0.610 af

Subcatchment 0S: Existing 1 Runoff Area=90,141 sf 64.11% Impervious Runoff Depth>5.04"
Tc=6.0 min CN=85 Runoff=14.39 cfs 0.870 af

Subcatchment 1S: Post-Dev 1 Runoff Area=2.040 ac 48.53% Impervious Runoff Depth>4.38"
Flow Length=85' Slope=0.0230 '/' Tc=12.7 min CN=79 Runoff=9.80 cfs 0.744 af

Subcatchment 6S: Post-Dev 2 Runoff Area=1.787 ac 64.02% Impervious Runoff Depth>5.04"
Tc=6.0 min CN=85 Runoff=12.43 cfs 0.751 af

Pond 3P: Infiltration Basin 1 Peak Elev=704.74' Storage=11,830 cf Inflow=9.80 cfs 0.744 af
Discarded=1.67 cfs 0.677 af Primary=1.67 cfs 0.067 af Outflow=3.34 cfs 0.744 af

Link 1L: Pre-Dev Design Point Inflow=16.54 cfs 1.480 af
Primary=16.54 cfs 1.480 af

Link 2L: Post-Dev Design Point Inflow=12.43 cfs 0.818 af
Primary=12.43 cfs 0.818 af

Total Runoff Area = 7.811 ac Runoff Volume = 2.975 af Average Runoff Depth = 4.57"
53.73% Pervious = 4.197 ac 46.27% Impervious = 3.615 ac

Summary for Subcatchment 00S: Existing 2

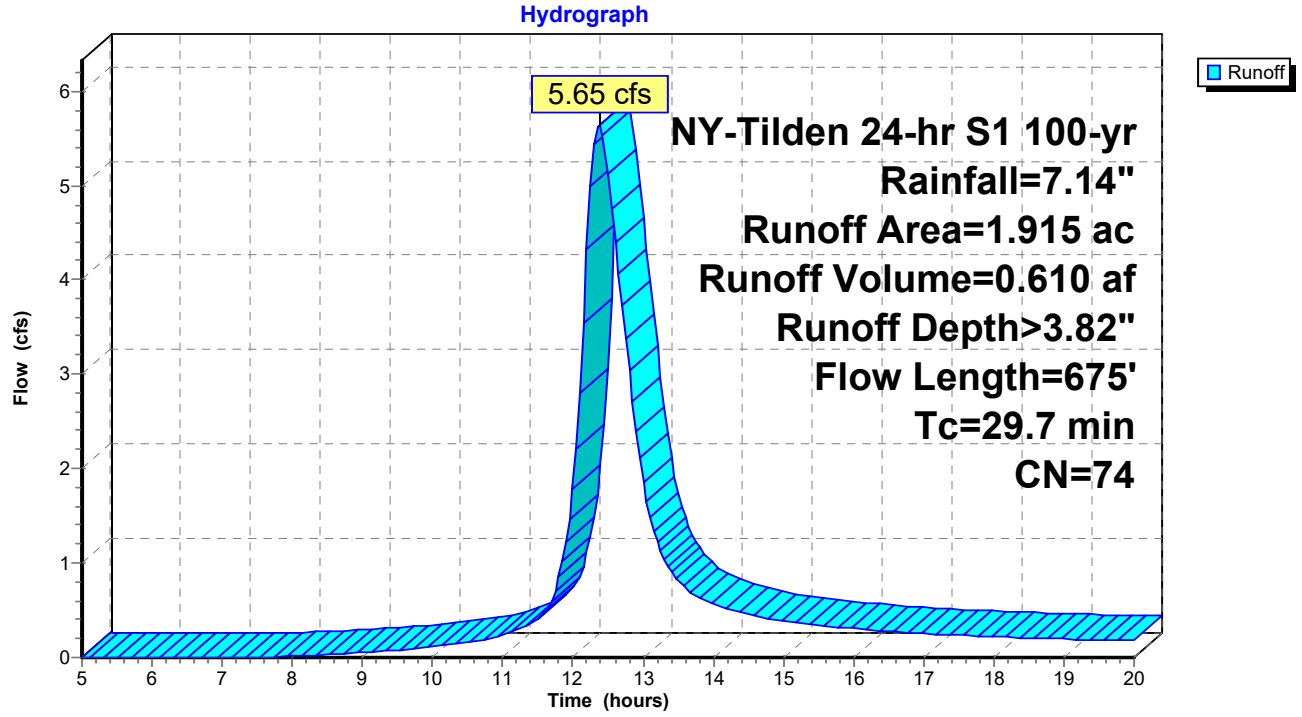
Runoff = 5.65 cfs @ 12.37 hrs, Volume= 0.610 af, Depth> 3.82"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 100-yr Rainfall=7.14"

	Area (ac)	CN	Description
*	0.049	98	Ex. Impervious (Off-Site)
*	0.105	98	Ex. Impervious (On-Site)
	1.198	79	<50% Grass cover, Poor, HSG B
	0.563	58	Woods/grass comb., Good, HSG B
	1.915	74	Weighted Average
	1.761		91.96% Pervious Area
	0.154		8.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.2	150	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.78"
9.0	380	0.0100	0.70		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	145	0.0060	1.57		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
29.7	675	Total			

Subcatchment 00S: Existing 2



Summary for Subcatchment 0S: Existing 1

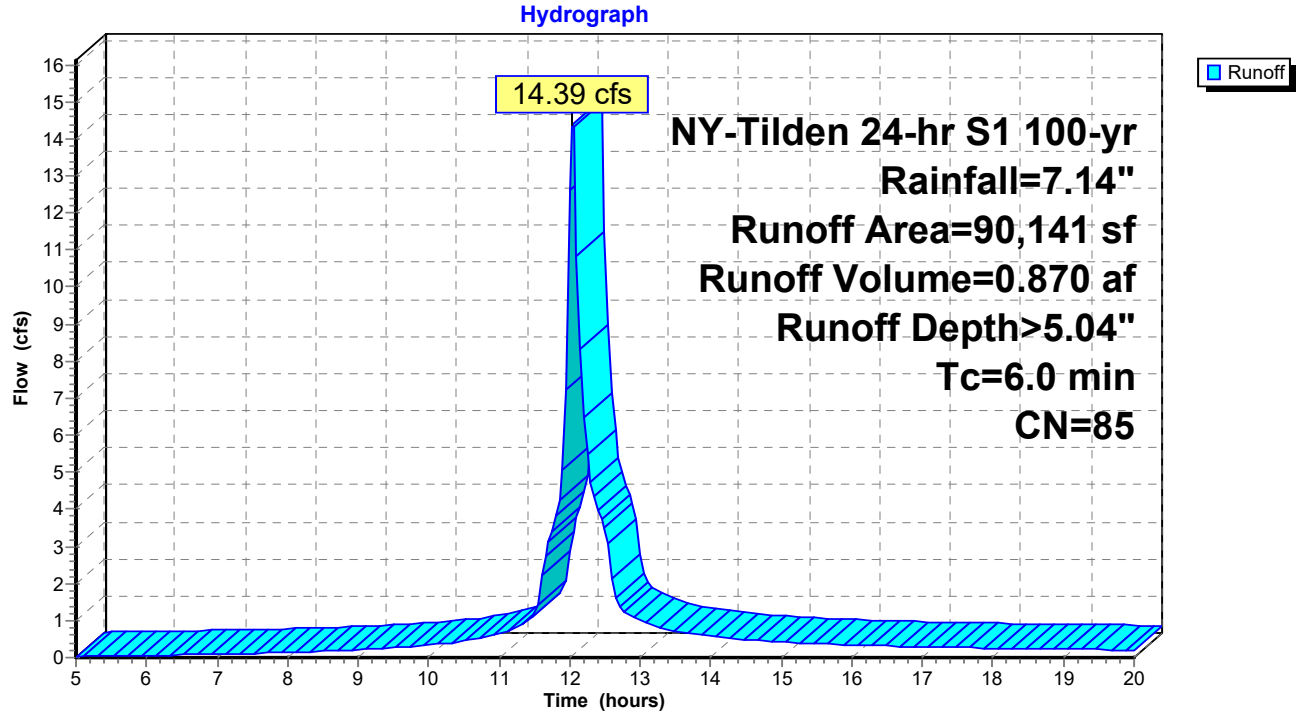
Runoff = 14.39 cfs @ 12.04 hrs, Volume= 0.870 af, Depth> 5.04"
Routed to Link 1L : Pre-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 100-yr Rainfall=7.14"

	Area (sf)	CN	Description
*	46,902	98	Existing Impervious (On-Site)
*	10,889	98	Existing Impervious (Off-Site)
	32,350	61	>75% Grass cover, Good, HSG B
	90,141	85	Weighted Average
	32,350		35.89% Pervious Area
	57,791		64.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 0S: Existing 1



Summary for Subcatchment 1S: Post-Dev 1

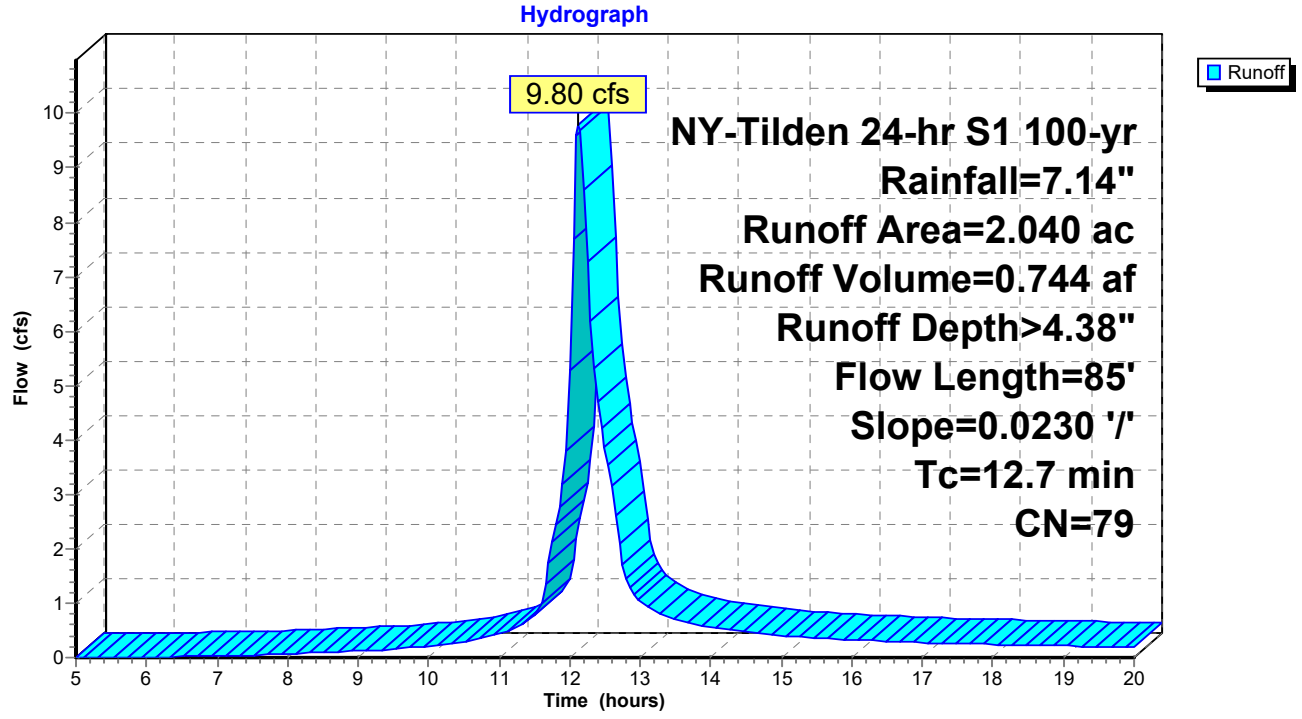
Runoff = 9.80 cfs @ 12.13 hrs, Volume= 0.744 af, Depth> 4.38"
Routed to Pond 3P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 100-yr Rainfall=7.14"

	Area (ac)	CN	Description
*	0.990	98	Impervious
	1.050	61	>75% Grass cover, Good, HSG B
	2.040	79	Weighted Average
	1.050		51.47% Pervious Area
	0.990		48.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.7	85	0.0230	0.11		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.78"

Subcatchment 1S: Post-Dev 1



Summary for Subcatchment 6S: Post-Dev 2

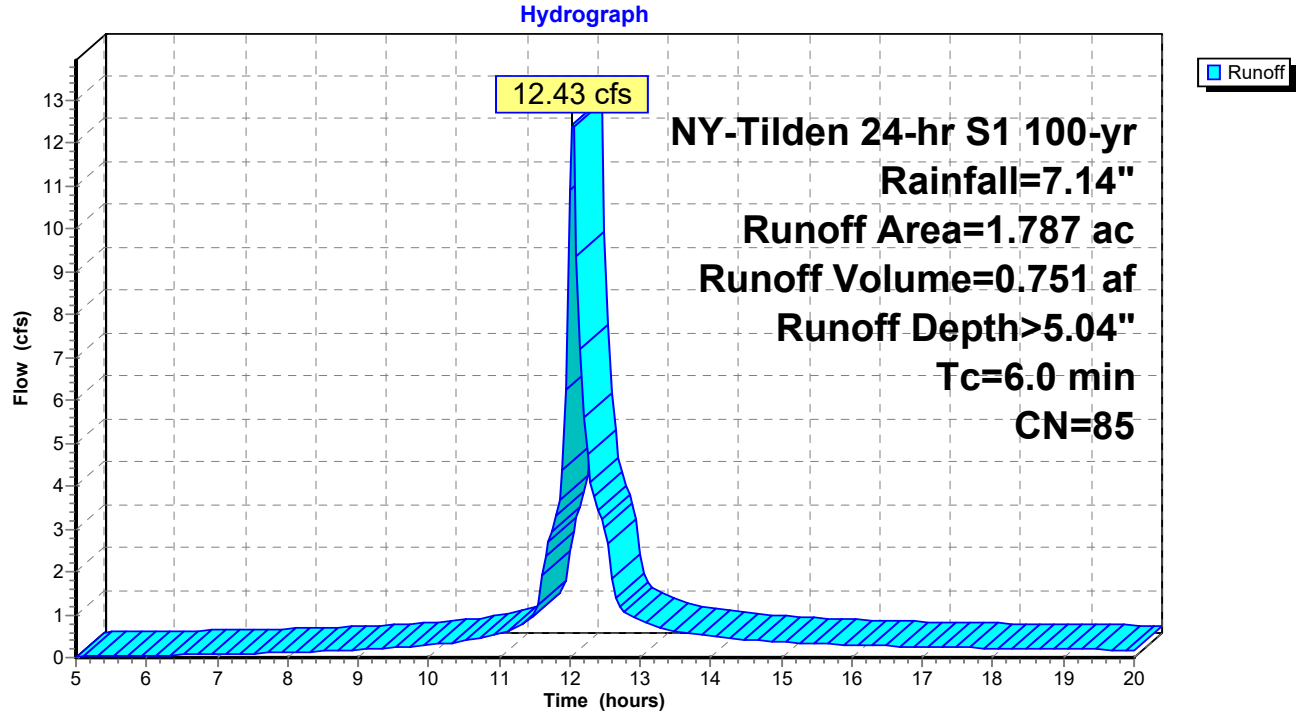
Runoff = 12.43 cfs @ 12.04 hrs, Volume= 0.751 af, Depth> 5.04"
Routed to Link 2L : Post-Dev Design Point

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
NY-Tilden 24-hr S1 100-yr Rainfall=7.14"

	Area (ac)	CN	Description
*	0.856	98	On-Site Impervious
*	0.288	98	Off-Site Impervious
	0.643	61	>75% Grass cover, Good, HSG B
	1.787	85	Weighted Average
	0.643		35.98% Pervious Area
	1.144		64.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 6S: Post-Dev 2



Summary for Pond 3P: Infiltration Basin 1

Inflow Area = 2.040 ac, 48.53% Impervious, Inflow Depth > 4.38" for 100-yr event
Inflow = 9.80 cfs @ 12.13 hrs, Volume= 0.744 af
Outflow = 3.34 cfs @ 12.58 hrs, Volume= 0.744 af, Atten= 66%, Lag= 26.9 min
Discarded = 1.67 cfs @ 12.58 hrs, Volume= 0.677 af
Primary = 1.67 cfs @ 12.58 hrs, Volume= 0.067 af
Routed to Link 2L : Post-Dev Design Point

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 704.74' @ 12.58 hrs Surf.Area= 9,169 sf Storage= 11,830 cf

Plug-Flow detention time= 59.8 min calculated for 0.741 af (100% of inflow)
Center-of-Mass det. time= 59.3 min (838.6 - 779.3)

Volume	Invert	Avail.Storage	Storage Description
#1	703.00'	14,280 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

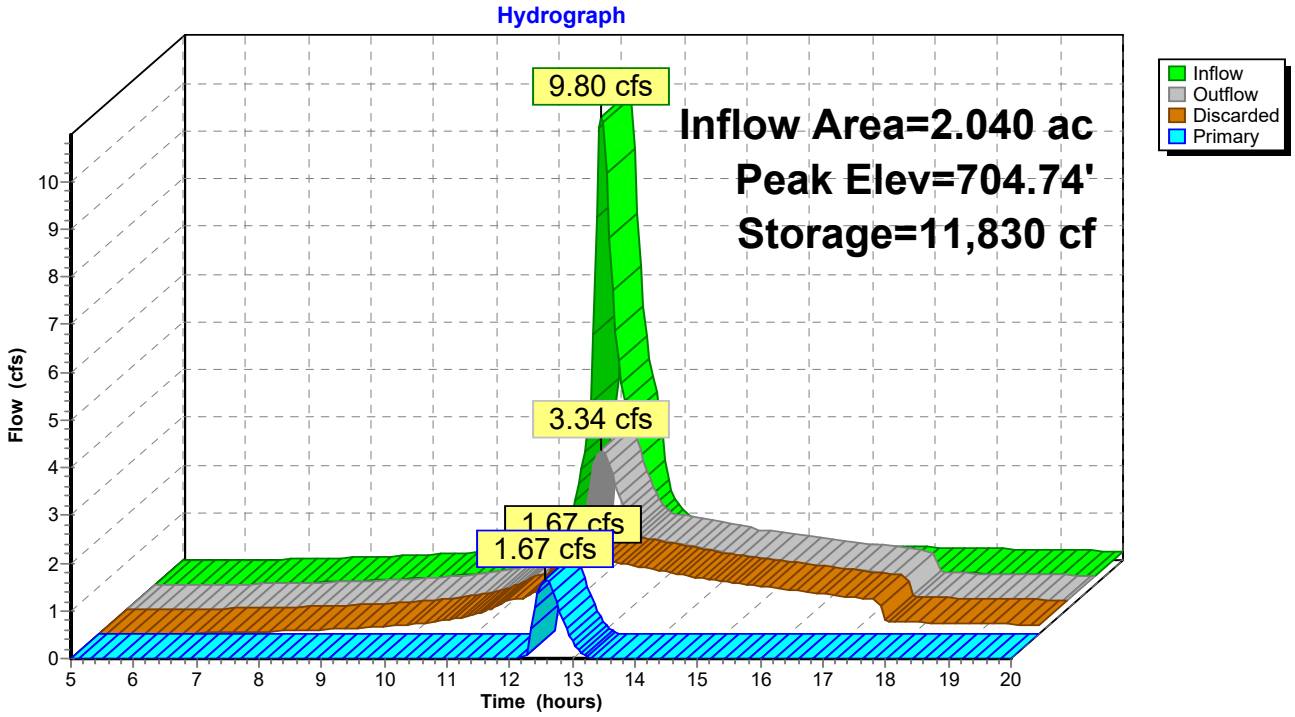
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
703.00	5,060	0	0
704.00	6,750	5,905	5,905
705.00	10,000	8,375	14,280

Device	Routing	Invert	Outlet Devices
#1	Discarded	703.00'	**6.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 699.00'
#2	Primary	704.50'	**5.0' long + 3.0 '/' SideZ x 3.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Discarded OutFlow Max=1.67 cfs @ 12.58 hrs HW=704.74' (Free Discharge)
↑—**1=Exfiltration** (Controls 1.67 cfs)

Primary OutFlow Max=1.66 cfs @ 12.58 hrs HW=704.74' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 1.66 cfs @ 1.19 fps)

Pond 3P: Infiltration Basin 1

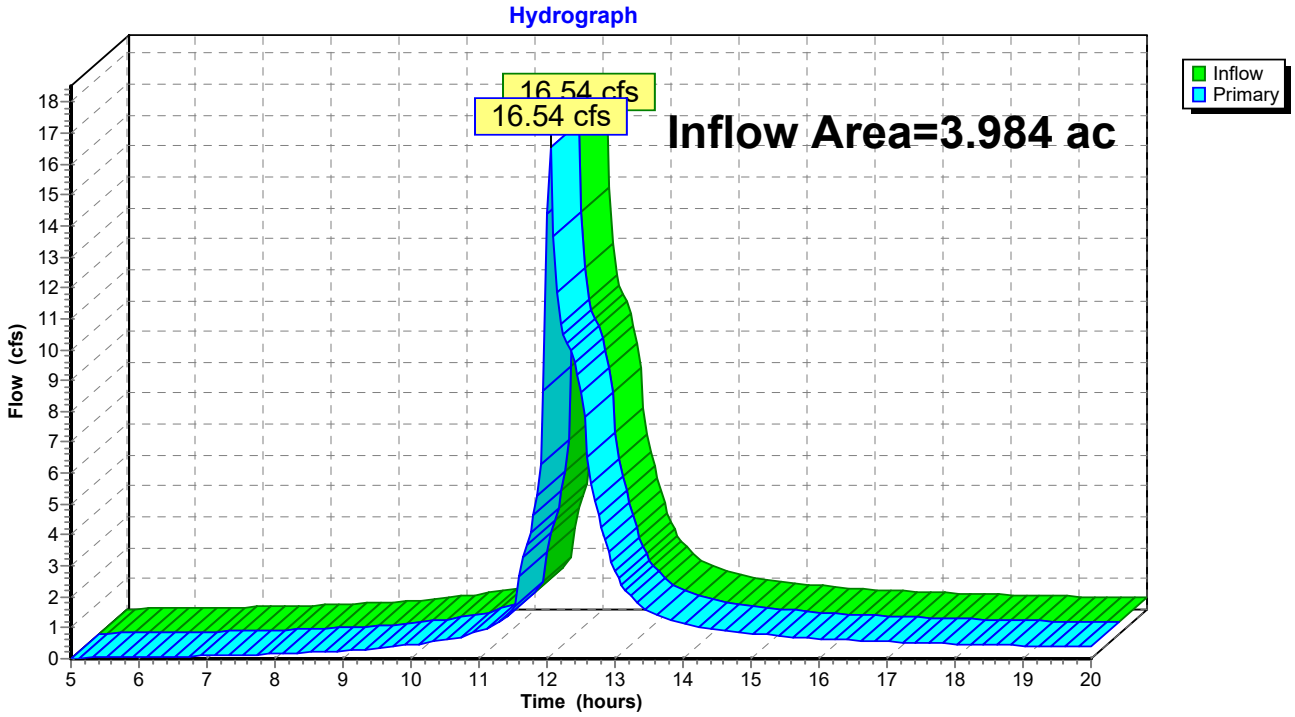


Summary for Link 1L: Pre-Dev Design Point

Inflow Area = 3.984 ac, 37.16% Impervious, Inflow Depth > 4.46" for 100-yr event
Inflow = 16.54 cfs @ 12.05 hrs, Volume= 1.480 af
Primary = 16.54 cfs @ 12.05 hrs, Volume= 1.480 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: Pre-Dev Design Point

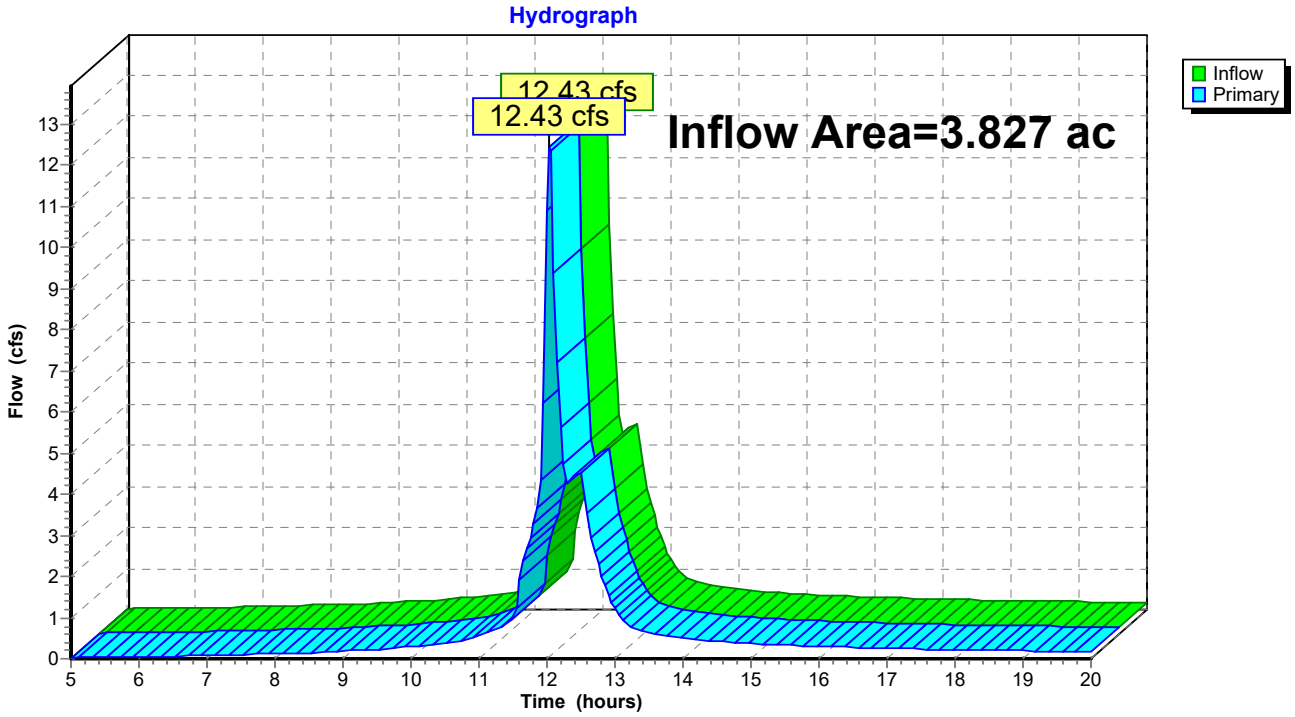


Summary for Link 2L: Post-Dev Design Point

Inflow Area = 3.827 ac, 55.76% Impervious, Inflow Depth > 2.56" for 100-yr event
Inflow = 12.43 cfs @ 12.04 hrs, Volume= 0.818 af
Primary = 12.43 cfs @ 12.04 hrs, Volume= 0.818 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: Post-Dev Design Point



Appendix 4.9

Operation and Maintenance Manual

LONG TERM OPERATION AND MAINTENANCE OF POST-CONSTRUCTION STORMWATER MANAGEMENT PRACITCES

Additional maintenance guidance can be found at the following:
dec.ny.gov/environmental-protection/water/water-quality/stormwater/construction-stormwater-toolbox

Swales

- Clean debris from channel and contributing area monthly and after major storm events.
- Mow as needed – monthly or less often.
- Remove sediment annually.

Infiltration Bioretention Basins

- Routine landscaping maintenance: weeding, mulching, thinning plants, replacing dead plants, watering. Re-mulch annually.
- Monthly and after major storm events, inspect the basin components, vegetation, and clean out debris.
- Annually and after major storm events, check sumps for evidence of sediment buildup and standing water, clean sediment from swale, check that the spillway is in good repair with no sign of erosion, and filter bed has not been blocked.
- Repair erosion on earthen berm as needed.

Infiltration Basins

- Routine landscaping maintenance: mowing and watering as required.
- Monthly and after major storm events, inspect the basin components, vegetation, and clean out debris.
- Annually and after major storm events, check for evidence of sediment buildup and standing water, clean sediment as req'd, check that the spillway is in good repair with no sign of erosion.
- Repair erosion on earthen berm as needed.

Outlet Structures

- Monthly and after major storm events, inspect catch basins, inlet pipes, and outlet pipes for sediment and debris.
- Clean all debris and remove sediment when it accumulates to 6" of depth.
- Remove sediment manually or with a vacuum truck.

Outfalls

- Inspect yearly and after major storm events.
- Repair erosion as needed.
- Replace stone outfall material as needed.

Disposal

- Disposal of all material removed from all practices shall be done in accordance with local regulations.

Soil Restoration Maintenance:

- First year maintenance operations includes:
  1. Initial inspections for the first six months (once after each storm greater than half-inch)
  2. Reseeding to repair bare or eroding areas to assure grass stabilization
  3. Water once every three days for first month, and then provide a half inch of water per week during first year. irrigation plan may be adjusted according to the rain event.
  4. Fertilization may be needed in the fall after the first growing season to increase plant vigor
  5. Keep site free of vehicular and foot traffic or other weight loads.

EXHIBIT J

Engineering and Architecture Plans

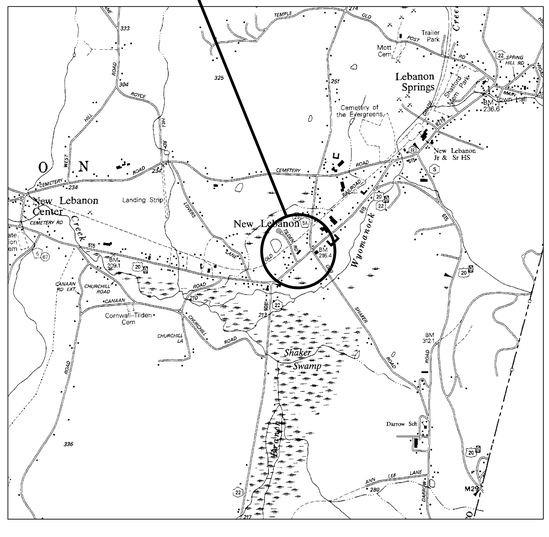
TILDEN COMMONS
NEW LEBANON DEVELOPMENT, LLC.

TOWN OF NEW LEBANON

COLUMBIA COUNTY NEW YORK

JULY 2025

PROJECT LOCATION



PORTION OF USGS 7.5
MINUTE QUADRANGLE
1" = 2000'

SHEET NO. DRAWING INDEX

C10	TITLE PAGE, LOCATION MAP AND DRAWING INDEX
C30	WORK ZONE TRAFFIC CONTROL DETAILS
C31	WORK ZONE TRAFFIC CONTROL DETAILS
C35	STORMWATER POLLUTION PREVENTION NOTES
C36	EROSION AND SEDIMENT CONTROL DETAILS
C37	EROSION AND SEDIMENT CONTROL DETAILS
C100	EXISTING CONDITIONS & DEMOLITION PLAN
C110	SITE PLAN
C115	GRADING
C125	TURNING RADIUS PLAN
C130	NYSDOT ENTRANCE GENERAL PLAN
C131	NYSDOT ENTRANCE SITE PLAN & DETAILS
C150	STORMWATER DETAILS
C151	STORMWATER DETAILS
C155	SITE DETAILS
C156	SITE DETAILS
C160	SEPTIC PLAN
C161	SANITARY DETAILS
C162	SANITARY DETAILS
C163	SANITARY DETAILS
C164	SANITARY DETAILS
C165	UV SYSTEM PLAN AND SECTION

Lamont Engineers
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FACILITY OPERATIONS
197 ELM ST., COBLESKILL, NY 12043
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Consultant

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NEW LEBANON DEVELOPMENT, LLC.
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Stamp

STATE OF NEW YORK
BRENDON J. BRUSH
091908
LICENSED PROFESSIONAL ENGINEER

Issue Rev.	Date	Remarks
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B	8/4/25	PER PLANNING BOARD COMMENTS
C	9/2/25	PER PLANNING BOARD COMMENTS
1	10/16/25	FOR SEC REVIEW
D	10/29/25	PLANNING BOARD
E	12/2/25	PLANNING BOARD
F		

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/25/25
Scale	AS SHOWN
File Name	C10 – COVER

Sheet Title

TITLE PAGE,
LOCATION MAP
AND
DRAWING INDEX

Sheet No.

C10

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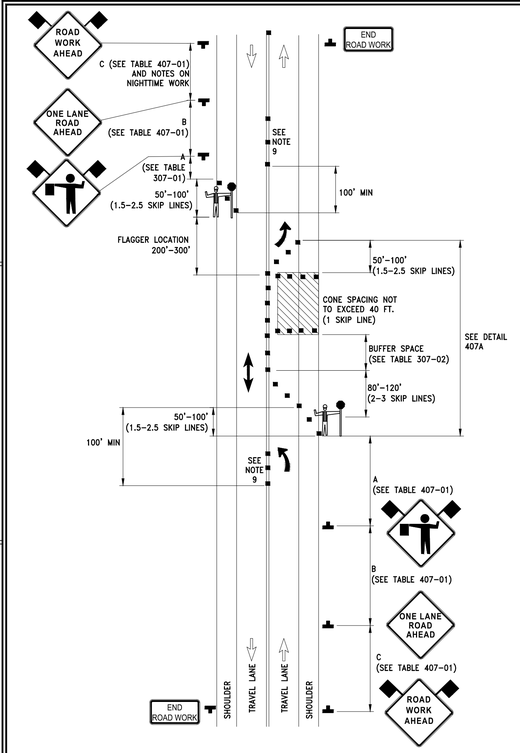
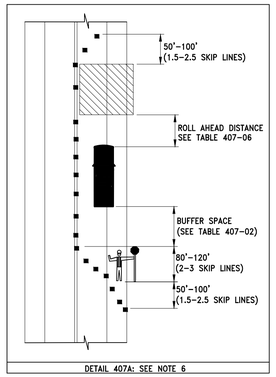
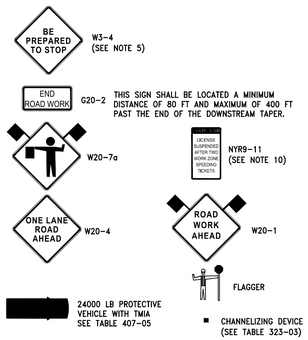




DETAIL 407A: SEE NOTE 6



NOTES:

1. INTERMEDIATE-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.
2. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE ROADWAY WITHIN A WORK ZONE TRAFFIC CONTROL AREA, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AND/OR FLAGGERS SHALL BE PLACED AS NEEDED. ADDITIONAL FLAGGERS SHALL BE LOCATED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK SPACE. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.
3. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 20' IN THE ACTIVE WORK SPACE.
4. CHANNELIZING DEVICES SHALL BE PLACED TRANSVERSELY A MINIMUM OF EVERY 800' AS SHOWN WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 800'.
5. IF THE TRAFFIC IS EXPECTED TO QUEUE PAST THE W20-4 SIGN, A W3-4 SIGN SHOULD BE ADDED HALFWAY BETWEEN THE W20-4 AND W20-1 SIGNS.
6. IF CONDITION WARRANTS, PROTECTIVE VEHICLE WITH APPROPRIATE ROLL AHEAD DISTANCE MAY BE USED IN ADVANCE OF THE WORK AREA. TO USE PROTECTIVE VEHICLE, BUFFER SPACE SHALL BE PROVIDED ACCORDINGLY, AND THE WHEELS SHALL BE ALIGNED WITH THE LANE STRIPING.
7. FLAGGER SIGN (W20-7a) AND ONE LANE ROAD AHEAD SIGN (W20-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
8. ALL FLAGGERS SHALL USE 24" (MIN.) OCTAGON SHAPED STOP/SLOW PADDLES HAVING 6' STAFF. THE PADDLE IS THE PREFERRED DEVICE, BUT THE FLAG MAY BE USED AT INTERSECTIONS WHERE THE STOP/SLOW PADDLE WOULD OFFER CONTRADICTING INFORMATION TO DRIVERS TRAVELING IN OPPOSITE DIRECTIONS/LEGS OF THE INTERSECTION OR DURING INCIDENT MANAGEMENT SITUATIONS.
9. CENTERLINE CONES MAY BE ADDED TO ENHANCE THE VISIBILITY OF THE FLAGGER STATION. IF CONES ARE USED, PLACE THEM 100 FT. (MINIMUM) FROM FLAGGER.
10. THE NY9-11 SIGN IS RECOMMENDED. WHEN USED, IT SHALL BE PLACED IN ADVANCE OF THE FIRST ADVANCE WARNING SIGN. THE PLACEMENT DISTANCE SHALL BE 1000' FOR POSTED SPEED LIMITS OF 45 MPH OR HIGHER, AND 300' – 500' FOR POSTED SPEED LIMITS OF LESS THAN 45 MPH.

TABLE 407-01: ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS A (FT.)	B (FT.)	C (FT.)	SIGN LEGEND XX	YY
URBAN (≤ 30 MPH*)	100	100	100	100	100
URBAN (35–40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.

*PRECONSTRUCTION POSTED SPEED LIMIT

TABLE 407-02: LONGITUDINAL BUFFER SPACE

PRECONSTRCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.)/ # OF SKIP LINES
45	360/9
50	425/11
55	495/13
65	645/16

TABLE 407-03: CHANNELIZING DEVICE APPLICATION FOR INTERMEDIATE-TERM STATIONARY WORK ZONES

WORK ZONE PROVISIONS	MAXIMUM DEVICE SPACING (CENTER TO CENTER)	MUTCD COMPLIANT CHANNELIZING DEVICE: DRUMS	STANDARD CONES	TALL CONES	EXTRA TALL CONES	TEMPORARY TUBULAR MARKERS	INTERM TUBULAR MARKERS	VERTICAL PANELS	OVERSIZED VERTICAL PANELS	TYPE III BARRICADES
INTERMEDIATE-TERM STATIONARY WORK ZONES INVOLVE WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR										
SHOULDER/MERGING/ SHIFTING TAPERS	20 FT. *	X							X	
	40 FT.	X							X	
MARKING FOR TRANSVERSE BUMPS (1)	N/A	X (2)			X (2)				X (2)	
TRANSVERSE DEVICE WITHIN CLOSED TRAFFIC LANE AND/OR SHOULDER	800 FT.	X		X	X			X	X	0
REMOVAL OF EXISTING GUIDE RAIL	80 FT.	X		X	X	X		X	X	0
	40 FT.									

NOTES: X= ALLOWED, BLANK= NOT ALLOWED
1. – A TYPE 1 OBJECT MARKER MAY BE USED IN LIEU OF CHANNELIZING DEVICE
2. – CHANNELIZING DEVICES SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT

* SEE NOTE 3 ABOVE

TABLE 407-04: REQUIRED SIGN SIZES*

SIGN	NON-FREEWAY	FREEWAY
G20-2	36x18	48x24
W3-4	36x36	48x48
W20-1	36x36	48x48
W20-4	36x36	48x48
W20-7a	36x36	48x48
WARNING FLAG	18x18	18x18

*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

TABLE 407-05: PROTECTIVE VEHICLE REQUIREMENTS

CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY ≥ 45 MPH	35 – 40 MPH	≤ 30 MPH
	EXPOSURE CONDITIONS (1)			
LANE CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	P, TMIA	SEE NOTE 2
	OTHER HAZARDS NO WORKERS EXPOSED	P, TMIA	SEE NOTE 2	SEE NOTE 2
SHOULDER CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	SEE NOTE 2	SEE NOTE 2
	OTHER HAZARDS NO WORKERS EXPOSED	SEE NOTE 2	SEE NOTE 2	SEE NOTE 2

LEGEND

P: PROTECTIVE VEHICLE REQUIRED FOR EACH CLOSED LANE & EACH CLOSED PAVED SHOULDER 8' OR WIDER, IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE PROTECTIVE VEHICLE SHALL BE REPOSITIONED ACCORDINGLY

TMIA: TMIA REQUIRED

NOTES:

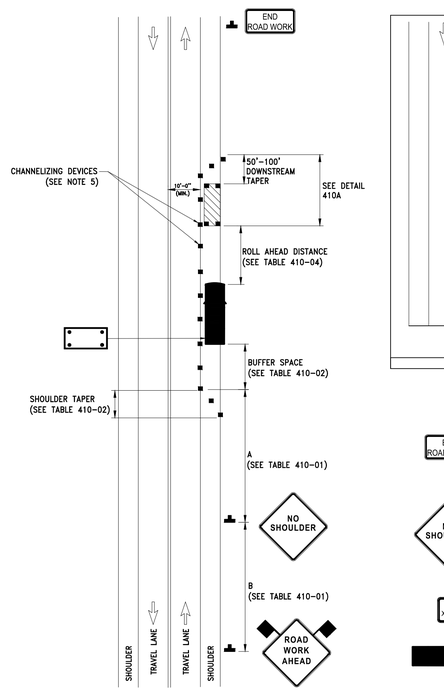
1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT
2. EITHER A PROTECTIVE VEHICLE OR THE STANDARD BUFFER SPACE SHALL BE PROVIDED

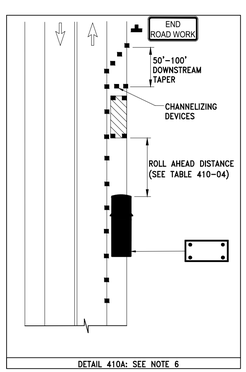
TABLE 407-06: ROLL AHEAD DISTANCE

ROLL AHEAD DISTANCE (FT.)/# OF SKIP LINES FOR VEHICLES		
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION MIN	MAX
≥ 55	120/3	200/5
45–50	80/2	160/4
≤ 40	40/1	120/3

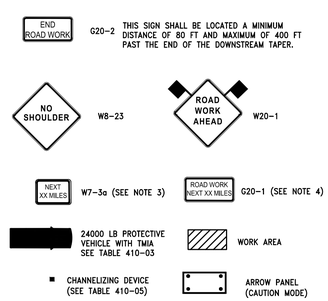
FLAGGING OPERATION
SINGLE LANE CLOSURE ON 2-LANE 2-WAY ROADWAY

(NOT TO SCALE)





DETAIL 410A: SEE NOTE 6



NOTES:

1. INTERMEDIATE-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.
2. WHEN A SIDE ROAD OR DRIVEWAY INTERSECTS THE ROADWAY WITHIN A WORK ZONE TRAFFIC CONTROL AREA, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AND/OR FLAGGERS SHALL BE PLACED AS NEEDED. ADDITIONAL FLAGGERS SHALL BE LOCATED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK SPACE. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.
3. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 20' IN THE ACTIVE WORK SPACE.
4. CHANNELIZING DEVICES SHALL BE PLACED TRANSVERSELY A MINIMUM OF EVERY 800' AS SHOWN WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 800'.
5. IF THE TRAFFIC IS EXPECTED TO QUEUE PAST THE W20-4 SIGN, A W3-4 SIGN SHOULD BE ADDED HALFWAY BETWEEN THE W20-4 AND W20-1 SIGNS.
6. IF CONDITION WARRANTS, PROTECTIVE VEHICLE WITH APPROPRIATE ROLL AHEAD DISTANCE MAY BE USED IN ADVANCE OF THE WORK AREA. TO USE PROTECTIVE VEHICLE, BUFFER SPACE SHALL BE PROVIDED ACCORDINGLY, AND THE WHEELS SHALL BE ALIGNED WITH THE LANE STRIPING.
7. FLAGGER SIGN (W20-7a) AND ONE LANE ROAD AHEAD SIGN (W20-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
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9. CENTERLINE CONES MAY BE ADDED TO ENHANCE THE VISIBILITY OF THE FLAGGER STATION. IF CONES ARE USED, PLACE THEM 100 FT. (MINIMUM) FROM FLAGGER.
10. THE NY9-11 SIGN IS RECOMMENDED. WHEN USED, IT SHALL BE PLACED IN ADVANCE OF THE FIRST ADVANCE WARNING SIGN. THE PLACEMENT DISTANCE SHALL BE 1000' FOR POSTED SPEED LIMITS OF 45 MPH OR HIGHER, AND 300' – 500' FOR POSTED SPEED LIMITS OF LESS THAN 45 MPH.

TABLE 410-01: ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS A (FT.)	B (FT.)
URBAN (≤ 30 MPH*)	100	100
URBAN (35–40 MPH*)	200	200
URBAN (≥ 45 MPH*)	350	350
RURAL	500	500

*PRECONSTRUCTION POSTED SPEED LIMIT

TABLE 410-02: LONGITUDINAL BUFFER SPACE AND TAPER LENGTHS

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.)/ # OF SKIP LINES	TAPER LENGTH: L (FT.)/# OF SKIP LINES/ # OF CHANNELIZING DEVICES FOR LANE WIDTH IN FT. (LATERAL SHIFT OF TRAFFIC FLOW PATH) 10	11	12	SHOULDER TAPER LENGTH: L/3 (FT.)/ # OF SKIP LINES/ # OF CHANNELIZING DEVICES FOR SHOULDER WIDTH		
25	155/4	120/3/4	120/3/4	120/3/4	40/1/2	40/1/2	40/1/2
30	200/5	160/4/5	160/4/5	200/5/6	40/1/2	40/1/2	40/1/2
35	250/6	200/5/6	240/6/7	240/6/7	40/1/2	40/1/2	80/2/3
40	305/8	280/7/8	320/8/9	320/8/9	40/1/2	80/2/3	80/2/3
45	360/9	440/11/12	520/13/14	560/14/15	80/2/3	80/2/3	120/3/4
50	425/11	520/13/14	560/14/15	600/15/16	80/2/3	120/3/4	160/4/5
55	495/13	560/14/15	600/15/16	680/17/18	80/2/3	120/3/4	160/4/5

TABLE 410-03: PROTECTIVE VEHICLE REQUIREMENTS

CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY ≥ 45 MPH	35 – 40 MPH	≤ 30 MPH
	EXPOSURE CONDITIONS (1)			
LANE CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	P, TMIA	SEE NOTE 2
	OTHER HAZARDS NO WORKERS EXPOSED	P, TMIA	SEE NOTE 2	SEE NOTE 2
SHOULDER CLOSURE OR ENCROACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	SEE NOTE 2	SEE NOTE 2
	OTHER HAZARDS NO WORKERS EXPOSED	SEE NOTE 2	SEE NOTE 2	SEE NOTE 2

LEGEND

P: PROTECTIVE VEHICLE REQUIRED FOR EACH CLOSED LANE & EACH CLOSED PAVED SHOULDER 8' OR WIDER, IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE PROTECTIVE VEHICLE SHALL BE REPOSITIONED ACCORDINGLY

TMIA: TMIA REQUIRED

NOTES:

1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT
2. EITHER A PROTECTIVE VEHICLE OR THE STANDARD BUFFER SPACE SHALL BE PROVIDED

TABLE 410-04: ROLL AHEAD DISTANCE

ROLL AHEAD DISTANCE (FT.)/# OF SKIP LINES FOR VEHICLES		
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION MIN	MAX
≥ 55	120/3	200/5
45–50	80/2	160/4
≤ 40	40/1	120/3

TABLE 410-05: CHANNELIZING DEVICE APPLICATION FOR INTERMEDIATE-TERM STATIONARY WORK ZONES

WORK ZONE PROVISIONS	MAXIMUM DEVICE SPACING (CENTER TO CENTER)	MUTCD COMPLIANT CHANNELIZING DEVICE: DRUMS	STANDARD CONES	TALL CONES	EXTRA TALL CONES	TEMPORARY TUBULAR MARKERS	INTERM TUBULAR MARKERS	VERTICAL PANELS	OVERSIZED VERTICAL PANELS	TYPE III BARRICADES
INTERMEDIATE-TERM STATIONARY WORK ZONES INVOLVE WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR										
SHOULDER/MERGING/ SHIFTING TAPERS	20 FT. *	X							X	
	40 FT.	X							X	
MARKING FOR TRANSVERSE BUMPS (1)	N/A	X (2)			X (2)				X (2)	
TRANSVERSE DEVICE WITHIN CLOSED TRAFFIC LANE AND/OR SHOULDER	800 FT.	X		X	X			X	X	0
REMOVAL OF EXISTING GUIDE RAIL	80 FT.	X		X	X	X		X	X	0
	40 FT.									

NOTES: X= ALLOWED, BLANK= NOT ALLOWED
1. – A TYPE 1 OBJECT MARKER MAY BE USED IN LIEU OF CHANNELIZING DEVICE
2. – CHANNELIZING DEVICES SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT

* SEE NOTE 3 ABOVE

TABLE 410-06: REQUIRED SIGN SIZES*

SIGN	NON-FREEWAY	FREEWAY
G20-2	36x18	48x24
W20-1	36x36	48x48
W21-5	36x36	48x48
W7-3a	24x18	36x30
G20-1	36x18	48x24
WARNING FLAG	18x18	18x18

*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

SHOULDER CLOSURE
2-LANE 2-WAY ROADWAY

(NOT TO SCALE)

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Consultant

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1	10/29/25	PLANNING BOARD
D	12/1/25	PLANNING BOARD
E		
F		

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/25/25
Scale	AS SHOWN
File Name	C30

Sheet Title

WORK ZONE TRAFFIC CONTROL DETAILS

Sheet No.

C30

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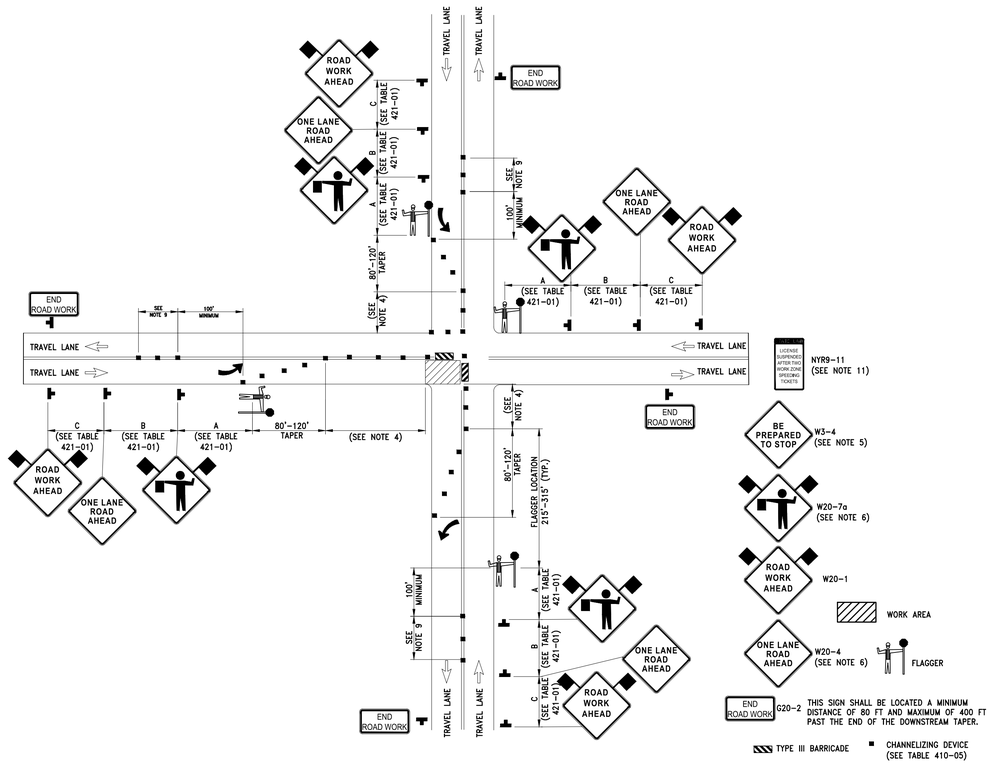


NOTES:

1. INTERMEDIATE-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.
2. AT SIGNALIZED INTERSECTIONS, SIGNALS SHALL BE TURNED OFF FOR ANY FLAGGING OPERATIONS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
3. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL NOT EXCEED 20' IN THE ACTIVE WORK SPACE.
4. IF CONDITIONS WARRANT, PROTECTIVE VEHICLE WITH APPROPRIATE ROLL AHEAD DISTANCE MAY BE USED IN ADVANCE OF THE WORK AREA. TO USE PROTECTIVE VEHICLE, BUFFER SPACE SHALL BE PROVIDED ACCORDINGLY AND THE VEHICLE SHALL BE POSITIONED PARALLEL TO TRAFFIC AND HAVE THE WHEELS ALIGNED WITH THE LANE STRIPING.
5. IF THE TRAFFIC IS EXPECTED TO QUEUE PAST THE W20-4 SIGN, A W3-4 SIGN SHOULD BE ADDED HALFWAY BETWEEN THE W20-4 AND W20-1 SIGNS.
6. FLAGGER SIGN (W20-7a) AND ONE LANE ROAD AHEAD SIGN (W20-4) SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ROAD USERS WHEN FLAGGING OPERATIONS ARE NOT OCCURRING.
7. ALL FLAGGERS SHALL USE 24" (MIN.) OCTAGON SHAPED STOP/SLOW PADDLES HAVING 6' STAFF. THE PADDLE IS THE PREFERRED DEVICE, BUT THE FLAG MAY BE USED AT INTERSECTIONS WHERE THE STOP/SLOW PADDLE WOULD OFFER CONTRADICTING INFORMATION TO DRIVERS TRAVELING IN OPPOSITE DIRECTIONS/LEGS OF THE INTERSECTION OR DURING INCIDENT MANAGEMENT SITUATIONS.
8. ADDITIONAL FLAGGERS SHALL BE LOCATED AT ALL INTERSECTIONS AND COMMERCIAL DRIVEWAYS LOCATED WITHIN OR NEAR THE ACTIVE WORK AREA.
9. CENTERLINE CONES MAY BE ADDED TO ENHANCE THE VISIBILITY OF THE FLAGGER STATION. IF CONES ARE USED, PLACE THEM 100 FT. (MINIMUM) FROM FLAGGER.
10. NO WORK ACTIVITY, EQUIPMENT, OR STORAGE OF VEHICLES, OR MATERIAL SHALL OCCUR WITHIN THE BUFFER SPACE AT ANY TIME.
11. THE NYR9-11 SIGN IS RECOMMENDED. WHEN USED, IT SHALL BE PLACED IN ADVANCE OF THE FIRST ADVANCE WARNING SIGN. THE PLACEMENT DISTANCE SHALL BE 1000' FOR POSTED SPEED LIMITS OF 45 MPH OR HIGHER, AND 300' – 500' FOR POSTED SPEED LIMITS OF LESS THAN 45 MPH.

TABLE 421-01: ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (≤ 30 MPH*)	100	100	100	100	100
URBAN (35–40 MPH*)	200	200	200	AHEAD	AHEAD
URBAN (≥ 45 MPH*)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.
*PRECONSTRUCTION POSTED SPEED LIMIT					

TABLE 421-02: CHANNELIZING DEVICE APPLICATION FOR INTERMEDIATE-TERM STATIONARY WORK ZONES

WORK ZONE PROVISIONS	MAXIMUM DEVICE SPACING (CENTER TO CENTER)	MUTCD COMPLIANT CHANNELIZING DEVICE								
		DRUMS	STANDARD CONES	TALL CONES	EXTRA TALL CONES	TEMPORARY TUBULAR MARKERS	INTERIM TUBULAR MARKERS	VERTICAL PANELS	OVERSIZED VERTICAL PANELS	TYPE III BARRICADES
INTERMEDIATE-TERM STATIONARY WORK ZONES INVOLVE WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR										
SHOULDER/MERGING/ SHIFTING TAPERS	20 FT. *	X							X	
	40 FT.	X							X	
MARKING FOR TRANSVERSE BUMPS (1)	N/A	X (2)			X (2)				X (2)	
TRANSVERSE DEVICE WITHIN CLOSED TRAFFIC LANE AND/OR SHOULDER	800 FT.	X		X	X			X	X	0
REMOVAL OF EXISTING GUIDE RAIL	80 FT.	X		X	X	X		X	X	0
	40 FT.									

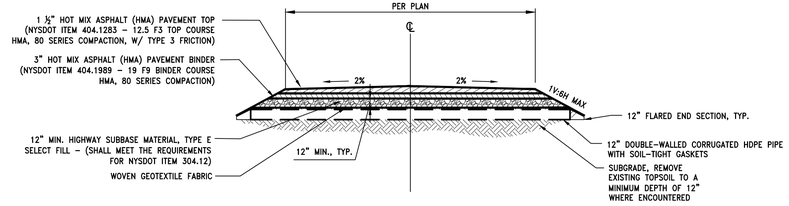
NOTES: X= ALLOWED, BLANK= NOT ALLOWED
1. – A TYPE 1 OBJECT MARKER MAY BE USED IN LIEU OF CHANNELIZING DEVICE
2. – CHANNELIZING DEVICES SHALL BE EQUIPPED WITH A FLASHING WARNING LIGHT

* SEE NOTE 3 ABOVE

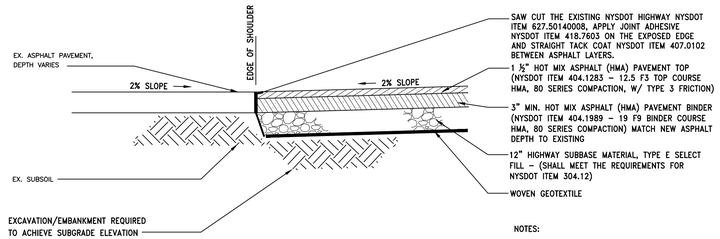
TABLE 421-03: REQUIRED SIGN SIZES*

SIGN	NON-FREEWAY	FREEWAY
W20-1	36x36	48x48
W20-4	36x36	48x48
W20-7A	36x36	48x48
G20-2	36x18	48x24
WARNING FLAG	18x18	18x18
*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.		

FLAGGING OPERATION
2-LANE 2-WAY ROADWAY INTERSECTION
(NOT TO SCALE)



1 / C31 TYPICAL ASPHALT PAVEMENT CROSS SECTION
SCALE: N.T.S



NOTES:
1. REFERENCE NYSDOT STANDARD DETAIL SHEETS 608-03, SHEET 5 FOR RECONSTRUCTION DETAILS

2 / C31 PAVEMENT TRANSITION DETAIL
SCALE: N.T.S

NYSDOT NOTES:

1. NYSDOT HIGHWAY WORK PERMIT SHALL BE ISSUED AND PRESENT AT THE JOB LOCATION AT ALL TIMES, WITH THE STAMPED NYSDOT APPROVED PLANS. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AND CONDITIONS ATTACHED TO THE NYSDOT WORK PERMIT.
2. DETAILS ARE INTENDED TO SHOW FINAL DESIGN. MODIFICATIONS MAY BE REQUIRED TO SUIT EXISTING FIELD DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE REQUIRED WORK.
3. ALL WORK WITHIN THE NYSDOT RIGHT-OF-WAY OR WORK THAT MAY IMPACT IT SHALL BE CONSTRUCTED TO THE CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.
4. THE WORK ZONE TRAFFIC CONTROL PLAN IS A VERY CRITICAL PART OF THE WORK PERMIT AND SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT 619 NYSDOT STANDARD SERIES SPECIFICATION, THE NATIONAL MANUAL OF TRAFFIC CONTROL DEVICES, AND THE NYS SUPPLEMENT.
5. THE NYSDOT RIGHT-OF-WAY IS NOT TO BE USED FOR MATERIAL AND/OR EQUIPMENT STAGING.
6. A ROADWORK REPORTING FORM SHALL BE PROVIDED 7 DAYS PRIOR TO ANY WORK WITHIN THE NYSDOT RIGHT-OF-WAY.
7. NO WORK SHALL OCCUR WITHIN THE NYSDOT RIGHT-OF-WAY DURING ACTIVE SNOW & ICE REMOVAL OPERATIONS.
8. AS-BUILT PLANS SHALL BE SUPPLIED TO THE REGIONAL PERMITTING OFFICE.
9. THE NYSDOT RESERVES THE RIGHT TO CANCEL ANY WORK OPERATIONS AT ANY POINT DURING THE PROJECT.
10. CONTRACTOR SHALL COORDINATE WITH THE RESIDENCY:
COLUMBIA RESIDENCY
RESIDENT ENGINEER – DARRIN MORET
EMAIL – DARRIN.MORRET@DOT.NY.GOV

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COLUMBIA COUNTY NEW YORK STATE

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Stamp

Issue Rev.	Date	Remarks
B	7/1/25	PLANNING BOARD
C	8/4/25	PER PLANNING BOARD COMMENTS
1	9/3/25	PER PLANNING BOARD COMMENTS
E	10/29/25	PLANNING BOARD
F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/25/25
Scale	AS SHOWN
File Name	C30

Sheet Title

WORK ZONE TRAFFIC CONTROL DETAILS

Sheet No.

C31

Plot By: Sarah Kuchta | Plot Date: 12/2025 11:13:51 AM | File: W:\2024\2024125\Drawings\Plans\C31.dwg

STORMWATER POLLUTION PREVENTION PLAN NOTES (SWPPP)

THIS SWPPP WAS PREPARED IN COMPLIANCE WITH THE SPDES GENERAL PERMIT GP-0-25-001.

THE OWNER IS SOLELY RESPONSIBLE FOR IMPLEMENTING AND ENFORCING THE CONTENTS OF THIS STORMWATER POLLUTION PREVENTION PLAN DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE FOR ALL POST-CONSTRUCTION INSPECTION AND MAINTENANCE DUTIES.
SEE CERTIFICATION REQUIREMENTS IN SECTION I.

I. CERTIFICATION:

THIS STORMWATER POLLUTION PREVENTION PLAN REFLECTS ALL REQUIREMENTS AS DESCRIBED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY. TO ENSURE COMPLIANCE, THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE LATEST EDITION OF "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" MANUAL PUBLISHED BY THE EMPIRE STATE SOIL AND WATER CONSERVATION SOCIETY, AND THE NYSDEC PUBLICATION ENTITLED "STORMWATER MANAGEMENT DESIGN MANUAL – JULY 2024".

ALL CONTRACTORS AND SUBCONTRACTORS RESPONSIBLE FOR SITEWORK ON THIS CONTRACT SHALL SIGN A COPY OF THE FOLLOWING STATEMENT BEFORE UNDERTAKING ANY CONSTRUCTION ACTIVITY ON THE PROJECT. A COPY OF THIS STATEMENT IS INCLUDED IN THE SWPPP.

"I HEREBY CERTIFY THAT I UNDERSTAND AND AGREE TO COMPLY WITH THE TERMS AND CONDITIONS OF THE SWPPP AND AGREE TO IMPLEMENT ANY CORRECTIVE ACTIONS IDENTIFIED BY THE QUALIFIED INSPECTOR DURING A SITE INSPECTION. I ALSO UNDERSTAND THAT THE OWNER OR OPERATOR MUST COMPLY WITH THE TERMS AND CONDITIONS OF THE MOST CURRENT VERSION OF THE NEW YORK STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES AND THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS. FURTHERMORE, I UNDERSTAND THAT CERTIFYING FALSE, INCORRECT OR INACCURATE INFORMATION IS A VIOLATION OF THE REFERENCED PERMIT AND THE LAWS OF NEW YORK STATE AND COULD SUBJECT ME TO CRIMINAL, CIVIL AND/OR ADMINISTRATIVE PROCEEDINGS."

THE CERTIFICATION MUST INCLUDE THE NAME AND TITLE OF THE PERSON PROVIDING THE SIGNATURE IN ACCORDANCE WITH PART V.H OF THE GENERAL PERMIT; THE NAME ADDRESS AND PHONE NO. OF THE CONTRACTING FIRM; THE ADDRESS OF THE SITE; AND THE DATE THE CERTIFICATION IS MADE. SEE THE COMPLETE SWPPP FOR CERTIFICATION FORM.

II. SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES:

NO WORK WILL BE ALLOWED TO BE COMPLETED OUT OF SEQUENCE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER. CONTRACTOR MAY NOT DISTURB MORE THAN 5 ACRES AT ANY ONE TIME.

1. STAKE OUT LIMIT OF DISTURBANCE. STAKEOUT POINTS SHALL HAVE A MAXIMUM SPACING OF 15'. COORDINATE WITH RESIDENT PROJECT REPRESENTATIVE.
2. PROVIDE CONSTRUCTION/SNOW FENCE ALONG SENSITIVE AREAS DESIGNATED ON DRAWINGS AHEAD OF ALL FURTHER OPERATIONS. DO NOT TRENCH IN.
3. ACCESS WORK AREAS FROM APPROVED ACCESS WAYS SHOWN ON THE DRAWING.
4. PROVIDE SILT FENCE AS INDICATED ON THE DRAWINGS OR ORDERED BY ENGINEER.
5. PROVIDE STABILIZED CONSTRUCTION ENTRANCES AS INDICATED ON THE DRAWINGS.
6. FIELD LOCATE AND CONSTRUCT TEMPORARY STAGING AND STOCKPILING AREAS. COORDINATE WITH ENGINEER.
7. CONDUCT DEMOLITION WORK, INCLUDING BUILDINGS, ASPHALT, AND SUBBASE.
8. CLEAR TREES AND BRUSH WITHIN THE WORK AREA LIMITS. DO NOT DISTURB TREES AND BRUSH OUTSIDE THE LIMIT OF DISTURBANCE. DO NOT DISTURB TREES SCHEDULED TO REMAIN.
9. REMOVE ALL TOPSOIL WITHIN PROPOSED GRADING AREAS AND STOCKPILE AT LOCATIONS DESIGNATED ON PLANS.
10. REMOVE SUBSOIL AS REQUIRED, STOCKPILE ON-SITE OR DISPOSE SURPLUS OFF-SITE.
11. CONSTRUCT FOUNDATIONS AND ESTABLISH ROUGH GRADE TO WITHIN 6" OF FINISHED GRADE. CONSTRUCT UTILITY PIPING AND STRUCTURES.
12. PROVIDE PAVED PARKING/DRIVEWAY AREA SUBBASE.
13. CONSTRUCT BUILDING.
14. UPON COMPLETION OF ROUGH GRADING WORK, INCLUDING RE-USE OF STOCKPILED SUBSOIL, CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITHIN 7 DAYS.
15. EXCESS NATIVE SOIL NOT USED FOR THE PROJECT SHALL BE DISPOSED OF OFF-SITE AT AN APPROPRIATE SPOILS AREA.
16. CONSTRUCT INFILTRATION AND INFILTRATION BIORETENTION BASINS. IF SOILS WITHIN THESE AREAS ARE COMPACTED DURING CONSTRUCTION, CONTRACTOR SHALL PROVIDE SOIL RESTORATION AS REQUIRED BY ENGINEER.
17. CONTRACTOR SHALL PROVIDE JUTE MESH ON SLOPES GREATER THAN 3H:1V, AS INDICATED ON THE DRAWINGS, OR AS ORDERED BY ENGINEER.
18. ESTABLISH FINISHED GRADE. PROVIDE DRIVEWAY AND PARKING AREA ASPHALT PAVEMENT. REMOVE TEMPORARY STAGING/STOCKPILE AREAS AND RESTORE PER PLANS.
19. CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS WITH SEEDING AS OUTLINED IN SEEDING SCHEDULE.
20. UPON ESTABLISHMENT OF TURF, CONTRACTOR SHALL REMOVE ALL EROSION AND SEDIMENT CONTROL DEVICES AND RESTORE THOSE AREAS AS NECESSARY.

III. NON-STORMWATER DISCHARGES

DEWATERING

1. EXCAVATION DEWATERING SHALL BE ACCOMPLISHED BY INSTALLING A PERFORATED STANDPIPE PACKED IN STONE, IN A SUMP, ADJACENT TO THE WORK AREA
2. DO NOT PUMP WATER DIRECTLY FROM THE EXCAVATION
3. DIVERT SURFACE WATER AWAY FROM THE EXCAVATION AND WORK AREA
4. DEWATERING EFFLUENT SHALL BE PUMPED TO A STABLE GRASSY AREA, TO A GEOTEXTILE SEDIMENT BAG OR TO A TEMPORARY SETTLING BASIN FOR FILTERING AND SETTLING
5. FILTERING OR SETTLING PRACTICE SHALL BE APPROPRIATELY SIZED FOR THE PUMP USED
6. LOCATION OF FILTERING OR SETTLING PRACTICE SHALL BE APPROVED BY THE ENGINEER
7. DEWATERING EFFLUENT ENTERING ANY STREAM OR WATERCOURSE SHALL CAUSE NO VISIBLE CONTRAST TO THE RECEIVING WATERS
8. IF DEWATERING EFFLUENT FILTERING/SETTLING PRACTICES ARE FOUND TO BE INEFFECTIVE, CONTRACTOR SHALL CEASE OPERATIONS IMMEDIATELY AND CORRECT THE PROCEDURE.

CONCRETE TRUCK WASHOUT

CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE ONLY AT LOCATIONS SPECIFICALLY APPROVED BY THE ENGINEER. CONCRETE TRUCKS SHALL NOT, UNDER ANY CIRCUMSTANCES, BE ALLOWED TO DISCHARGE WASH WATER INTO WETLANDS, WATER COURSES, OR STORM DRAINS. ALL CONCRETE TRUCK WASH AREAS SHALL BE ALLOWED TO DRY AND THEN BE BROKEN UP INTO PIECES NO LARGER THAN 4" IN ANY DIMENSION AND BURIED BELOW NEW PAVEMENT SURFACES.

THE WASHOUT SHALL BE LOCATED A MINIMUM OF 100 FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS AND OTHER WATER SURFACES. PREVENT SURFACE WATER FROM ENTERING THE STRUCTURE EXCEPT FOR THE ACCESS ROAD. PROVIDE APPROPRIATE ACCESS WITH A GRAVEL ACCESS ROAD SLOPED DOWN TO THE STRUCTURE. SIGNS SHALL BE PLACED TO DIRECT DRIVERS TO THE FACILITY AFTER THEIR LOAD IS DISCHARGED.

IV. CONSTRUCTION EROSION & SEDIMENT CONTROLS:

IMMEDIATE STABILIZATION: FOR AREAS NEAR WETLANDS MULCH WORK AREA WITH WOOD CHIPS, HAY OR STRAW IMMEDIATELY AFTER ROUGH GRADING FOLLOWING EACH SOIL DISTURBING OPERATION. ANY WORK AREA ON SLOPES OF 10% OR GREATER SHALL BE STABILIZED NO LATER THAN THE END OF EACH DAY. SEE SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES ON SHEETS C100-C102.

TEMPORARY STABILIZATION: TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH IMMEDIATELY AFTER THE TEMPORARY CESSATION OF CONSTRUCTION ACTIVITY IN THAT AREA. ALL AREAS MUST BE STABILIZED NO LATER THAN 7 DAYS AFTER WORK HAS CEASED. THE TEMPORARY SEED SHALL BE RYE APPLIED AT THE RATE OF 30 POUNDS PER ACRE. STRAW (CEREAL GRAIN) MULCH SHALL BE APPLIED AT A RATE OF 2 TON/ACRE. SLOPES OVER 3(H):1(V) SHALL BE STABILIZED WITH JUTE MESH, UNTIL SUCH TIME AS VEGETATION HAS BEEN ESTABLISHED. AREAS TO BE PAVED SHALL BE TEMPORARILY STABILIZED WITH GEOTEXTILES AND STONE SUB-BASE MATERIAL, AS SHOWN ON THE PLANS, UNTIL PAVEMENT IS INSTALLED.

PERMANENT STABILIZATION: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. PRIOR TO PERMANENT SEEDING, APPLY LIME TO THE SOIL TO ATTAIN A pH OF 6.5 IN THE UPPER 2 INCHES OF SOIL. APPLY COMMERCIAL FERTILIZER AT 850 LBS OF 5-5-10 OR EQUIVALENT PER ACRE.

PERMANENT SEED SHALL BE AS FOLLOWS:
LAWN/GRADED AREAS: 65% CREEPING RED FESCUE (85-114 LBS/ACRE), 20% PERENNIAL RYEGRASS (26-35 LBS/ACRE) 15% FINE FESCUE (19-26 LBS/ACRE)

NON-GRADED AREAS: CONSERVATION MIX BY NEW ENGLAND WETLAND PLANTS, OR EQUAL. APPLY AT 25 LBS/ACRE OR MANUFACTURERS RECOMMENDATION.

APPLY OTHER SEED MIXES AS NOTED ON THE DRAWINGS AT THE RESPECTIVE MANUFACTURERS RECOMMENDATIONS.

APPLY STRAW (CEREAL GRAIN) MULCH AT A RATE OF 2 TONS/ACRE.

MAINTAIN A pH OF 6.0-7.0 IN PERMANENT SEEDED AREAS. FERTILIZE IN LATE MAY TO EARLY JUNE AND REPEAT IN LATE AUGUST IF SOD DENSITY IS NOT ADEQUATE. AVOID FERTILIZING WHEN HEAT IS GREATER THAN 85°F.

SILT FENCING: AT A MINIMUM, SILT FENCING SHALL BE INSTALLED AT LOCATIONS SHOWN AND AS DETAILED ON THE DRAWINGS, CONTRACTOR MAY BE REQUIRED TO PROVIDE ADDITIONAL SILT FENCING, TO PROVIDE NECESSARY SEDIMENT CONTROL WHERE ACTIVITIES OF THE CONTRACTOR MAY RESULT IN OFF-SITE SEDIMENT DISCHARGE.

CONSTRUCTION FENCING: SHALL BE INSTALLED AT LOCATIONS SHOWN AND AS DETAILED ON THE DRAWINGS. THE PURPOSE OF THE FENCING IS TO DELINEATE THE LIMITS OF DISTURBANCE AND TO PROTECT THE BUFFER ZONE VEGETATION.

OFFSITE TRACKING OF VEHICLES: A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED, IF NECESSARY, TO REDUCE VEHICLE TRACKING OF SEDIMENTS ONTO THE ADJACENT PARKING AREAS AND ONTO STREETS. ALL SEDIMENTS TRACKED ONTO STREETS SHALL BE IMMEDIATELY REMOVED AND SEDIMENTS TRACKED ONTO THE PARKING AREAS SHALL BE REMOVED AT THE END OF EACH WORK DAY. SITEWORK CONTRACTOR SHALL PROVIDE TRUCK TIRE CLEANING AT ALL SITE EGRESS POINTS AS NEEDED TO PREVENT TRACKING ONTO STREETS AND THE EXISTING PARKING AREAS.

EXCAVATION: ALL EXCAVATED MATERIAL AND SIDE CAST FROM TRENCHING ACTIVITIES SHALL BE TEMPORARILY PLACED AWAY FROM ANY ENVIRONMENTALLY SENSITIVE AREA.

DUST CONTROL: ALL CONTRACTS SHALL APPLY WATER FOR THE CONTROL OF DUST WITHIN THE LIMITS OF THEIR RESPECTIVE WORK. WATER APPLICATION SHALL BE THE PRIMARY METHOD OF DUST CONTROL. CALCIUM CHLORIDE WILL NOT BE ALLOWED.

OTHER TEMPORARY CONTROLS: AS CONDITIONS WARRANT, OTHER TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE UTILIZED SO THAT ALL REQUIREMENTS OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" MANUAL ARE MET. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ADDITIONAL TEMPORARY MEASURES REQUIRED AS A RESULT OF THE CONTRACTOR'S PHASING OF THE WORK.

V. PERMANENT STORMWATER MANAGEMENT CONTROLS:

THE PERMANENT STORMWATER CONTROL SYSTEM WILL CONSIST OF A INFILTRATION BIORETENTION BASINS, INFILTRATION BASINS, A GRASS SWALE, CULVERTS, AND STORM SEWERS.

VI. SPILL PREVENTION PLAN (SPP):

ALL CONTRACTORS ARE RESPONSIBLE FOR IMPLEMENTING AND ENFORCING THE CONTENTS OF A SPILL PREVENTION PLAN AS OUTLINED IN THE SWPPP

VII. MAINTENANCE AND INSPECTION OF EROSION, SEDIMENT & STORMWATER MANAGEMENT PRACTICES BY THE CONTRACTOR:

THE CONTRACTOR SHALL NOT BEGIN THE WORK UNTIL ALL EROSION AND SEDIMENT CONTROLS ARE IN PLACE AND HAVE BEEN INSPECTED AND CERTIFIED AS DESCRIBED BELOW.

THE CONTRACTOR SHALL INSPECT THE SITE DAILY AND AFTER EVERY RAINFALL EVENT.

ANY DEFICIENCIES SHALL BE REPAIRED AND BROUGHT INTO COMPLIANCE DAILY.

CONSTRUCTION PHASE	SCHEDULED MAINTENANCE
-STABILIZED CONSTRUCTION ENTRANCE	-PROVIDE ADDITIONAL STONE AND MAINTENANCE AS NEEDED. ALL SEDIMENT TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
-TEMPORARY DRAINAGE SWALES/DITCHES	-ADD STONE RIP RAP AND CLEAN AS NEEDED.
-TEMPORARY SILT FENCES	-MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.
-FABRIC DROP INLET PROTECTION	-INSPECT FABRIC BARRIER AFTER EACH RAIN EVENT. MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY WITH CARE NOT TO DAMAGE FILTER.
-CONCRETE WASHOUT	-REMOVED HARDENED MATERIAL WHEN 75% OF STORAGE CAPACITY IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL AND PROPERLY DISPOSED OF OFF-SITE. THE PLASTIC LINER SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.
-TEMPORARY SEDIMENT TRAPS	-INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT. REPAIR AS NEEDED.
-ANCHORED STABILIZATION MATTING	-INSPECT WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 80% COVERAGE THROUGHOUT BLANKETED AREA.
-GENERAL SITE INSPECTION	-INSPECT THE CLEARING AND GRADING LIMITS ADJACENT TO THE ENVIRONMENTALLY SENSITIVE AREAS TO ENSURE THAT SEDIMENT IS NOT ENTERING THESE PROTECTED AREAS. ONCE A MONTH INSPECT THE PERIMETER OF THE SITE AND NOTE ANY AREAS IN NEED OF ADDITIONAL EROSION CONTROLS OR MAINTENANCE.

POST-CONSTRUCTION PHASE

THE CONTRACTOR SHALL CONTINUE TO PERFORM INSPECTION AND MAINTENANCE OF THE WORK UNTIL THE FINAL SITE INSPECTION AND CERTIFICATION HAS BEEN PERFORMED AS DESCRIBED BELOW

-STORMWATER TREATMENT FACILITIES	-AFTER ALL UPHILL AREAS ARE PERMANENTLY STABILIZED, REMOVE ACCUMULATED SILT AND TEMPORARY EROSION CONTROLS IN THE DESIGNATED AREA.
-BIORETENTION BASINS	-DURING FIRST 6 MONTHS, INSPECT AFTER EACH STORM EVENT GREATER THAN 0.5". BIORETENTION BASIN AND PLANTINGS SHALL BE PRUNED, WEEDED, AND MOWED AROUND AT MINIMUM 4 TIMES DURING GROWING SEASON. REMOVE SEDIMENT, TRASH, DEBRIS, AS NEEDED. REPAIR OR REPLACE DAMAGED/DEAD VEGETATION AS NEEDED. RESTORE EROSION AND REPLENISH MULCH AS NEEDED.

VIII. INSPECTION OF EROSION, SEDIMENT & STORMWATER MANAGEMENT PRACTICES BY THE OPERATOR (OWNER):

THE OPERATOR (OWNER) AGREES TO HAVE A QUALIFIED PROFESSIONAL CONDUCT AN ASSESSMENT OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CERTIFY IN AN INSPECTION REPORT THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROLS DESCRIBED IN THE SWPPP HAVE BEEN ADEQUATELY INSTALLED OR IMPLEMENTED TO ENSURE OVERALL PREPAREDNESS OF THE SITE FOR THE COMMENCEMENT OF CONSTRUCTION. FOLLOWING COMMENCEMENT OF CONSTRUCTION, SITE INSPECTIONS SHALL BE CONDUCTED BY A QUALIFIED PROFESSIONAL AT LEAST 2 TIMES EVERY 7 CALENDAR DAYS WHILE MORE THAN 5 ACRES IS DISTURBED AND AT LEAST 1 TIME EVERY 7 CALENDAR DAYS WHEN LESS THAN 5 ACRES IS DISTURBED.

THE OPERATOR (OWNER) SHALL MAINTAIN A RECORD OF ALL INSPECTION REPORTS IN A SITE LOG BOOK. THE SITE LOG BOOK SHALL BE MAINTAINED ON SITE AND BE MADE AVAILABLE TO THE PERMITTING AUTHORITIES UPON REQUEST. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE OPERATOR SHALL CERTIFY IN THE SITE LOG BOOK THAT THE SWPPP MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS.

PRIOR TO FILING THE NOTICE OF TERMINATION OR THE END OF THE PERMIT TERM, THE OPERATOR (OWNER) SHALL HAVE THE QUALIFIED PROFESSIONAL PERFORM A FINAL SITE INSPECTION. THE QUALIFIED PROFESSIONAL SHALL CERTIFY THAT THE SITE HAS UNDERGONE FINAL STABILIZATION USING EITHER VEGETATIVE OR STRUCTURAL STABILIZATION METHODS AND THAT ALL TEMPORARY EROSION AND SEDIMENT CONTROLS NOT NEEDED FOR LONG-TERM EROSION CONTROL HAVE BEEN REMOVED.

THE OWNERS QUALIFIED PROFESSIONAL SHALL REPORT ANY DEFICIENCIES IN THE CONTRACTORS EROSION AND SEDIMENT CONTROL DEVICES AND THE CONTRACTOR SHALL IMMEDIATELY MAKE CORRECTIVE ACTIONS AS REQUIRED. FAILURE OF CONTRACTOR TO MAKE SATISFACTORY CORRECTIVE MEASURES WILL BE GROUNDS FOR THE OWNER TO WITHHOLD DISBURSEMENTS FROM CONTRACTORS PAYMENT REQUEST.

IX. WINTER STABILIZATION:

THIS APPLIES TO ALL CONSTRUCTION ACTIVITIES INVOLVED WITH ONGOING LAND DISTURBANCE AND EXPOSURE BETWEEN NOVEMBER 15TH TO THE FOLLOWING APRIL 1ST.

WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ONE TIME.

SNOW MANAGEMENT

1. EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO A SNOW EVENT
2. CONTRACTOR SHALL USE AREAS DESIGNATED ON THE PLANS TO STOCKPILE SNOW. INSTALL SILT FENCE DOWNHILL OF STOCKPILE AREA.
3. ON ACCESS ROADS, SNOW SHALL BE STORED ON THE DOWNHILL SIDE TO AVOID RUNOFF FROM SNOWMELT CROSSING THE ROADWAY.
4. A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED FROM ALL PERIMETER CONTROLS SUCH AS SILT FENCE. MARK SILT FENCE WITH TALL STAKES THAT ARE VISIBLE ABOVE THE SNOW PACK.
5. EDGES OF DISTURBED AREAS THAT DRAIN TO A WATERBODY WITHIN 100 FEET SHALL HAVE 2 ROWS OF SILT FENCE, 5 FEET APART, INSTALLED ON THE CONTOUR.
6. DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS. ALL DEBRIS, ICE DAMS, OR DEBRIS FROM PLOWING OPERATIONS, THAT RESTRICT THE FLOW OF RUNOFF AND MELTWATER, SHALL BE REMOVED.
7. SEDIMENT BARRIERS SHALL BE INSTALLED AT ALL APPROPRIATE PERIMETER AND SENSITIVE LOCATIONS. SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED BEFORE THE GROUND FREEZES.
8. SOIL STOCKPILES SHALL BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED STRAW MULCH, ROLLED STABILIZATION MATTING, OR OTHER DURABLE COVERING. A BARRIER SHALL BE INSTALLED AT LEAST 15 FEET FROM THE TOE OF THE STOCKPILE TO PREVENT SOIL MIGRATION AND TO CAPTURE LOOSE SOIL.
9. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES SHALL BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN THREE (3) DAYS. ROLLED EROSION CONTROL BLANKETS MUST BE USED ON ALL SLOPES 3 HORIZONTAL TO 1 VERTICAL OR STEEPER.
10. STRAW MULCH ALONE IS USED FOR TEMPORARY STABILIZATION, IT SHALL BE APPLIED AT DOUBLE THE STANDARD RATE OF 2 TONS PER ACRE, MAKING THE APPLICATION RATE 4 TONS PER ACRE. OTHER MANUFACTURED MULCHES SHALL BE APPLIED AT DOUBLE THE MANUFACTURER'S RECOMMENDED RATE.
11. TO ENSURE ADEQUATE STABILIZATION OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL SHALL BE STABILIZED AT THE END OF EACH WORK DAY UNLESS:
    a. WORK WILL RESUME WITHIN 24 HOURS IN THE SAME AREA AND NO PRECIPITATION IS FORECAST OR;
    b. THE WORK IS IN DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, FOUNDATION EXCAVATIONS, OR WATER MANAGEMENT AREAS.
12. USE STONE PATHS TO STABILIZE ACCESS PERIMETERS OF BUILDINGS UNDER CONSTRUCTION AND AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED. STONE PATHS SHALL BE A MINIMUM OF 10 FEET IN WIDTH BUT WIDER AS NECESSARY TO ACCOMMODATE EQUIPMENT.

MAINTENANCE

THE SITE SHALL BE INSPECTED FREQUENTLY TO ENSURE THAT THE EROSION AND SEDIMENT CONTROL PLAN IS PERFORMING ITS WINTER STABILIZATION FUNCTION. IF THE SITE WILL NOT HAVE EARTH DISTURBING ACTIVITIES ONGOING DURING THE "WINTER SEASON", ALL BARE EXPOSED SOIL MUST BE STABILIZED BY ESTABLISHED VEGETATION, STRAW OR OTHER ACCEPTABLE MULCH, MATTING, ROCK, OR OTHER APPROVED MATERIAL SUCH AS ROLLED EROSION CONTROL PRODUCTS. SEEDING OF AREAS WITH MULCH COVER IS PREFERRED BUT SEEDING ALONE IS NOT ACCEPTABLE FOR PROPER STABILIZATION.

COMPLIANCE INSPECTIONS SHALL BE PERFORMED ONCE PER MONTH AND REPORTS FILED PROPERLY IN ACCORDANCE WITH THE SWPPP FOR ALL SITES UNDER A WINTER SHUTDOWN.

X. SOIL RESTORATION – DEEP RIPPING AND DE-COMPACTION:

ALL DISTURBED SOILS SHALL BE RESTORED IN ACCORDANCE WITH TABLE 4.6 OF THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, OR AS ORDERED BY ENGINEER. RESTORATION SHALL OCCUR DURING THE ESTABLISHMENT OF FINAL GRADING SEQUENCE.

ALL ON-SITE SOILS HAVE BEEN IDENTIFIED AS HSG B.

FULL SOIL RESTORATION CRITERA:

1. APPLY 3 INCHES OF COMPOST OVER SUBSOIL.
2. TILL COMPOST INTO SUBSOIL TO DEPTH OF 12 INCHES USING CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC OR TILLER, MIXING AND CIRCULATING AIR AND COMPOST INTO SUBSOILS.
3. ROCK PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF > 4 INCHES ARE REMOVED.
4. APPLY TOPOSOIL TO A DEPTH OF 6".
5. PROVIDE DENSE VEGETATION AS REQUIRED PER PLANS.

TABLE 4.6 – 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A&B	HSG C&D	Protect area from any ongoing construction activities.
	Apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A&B	HSG C&D	
	Aerate* and apply 6 inches of topsoil	Apply full Soil Restoration**	
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area.		

* Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.
** Per "Deep Ripping and De-compaction, DEC 2008".

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F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/25/25
Scale	AS SHOWN
File Name	C30

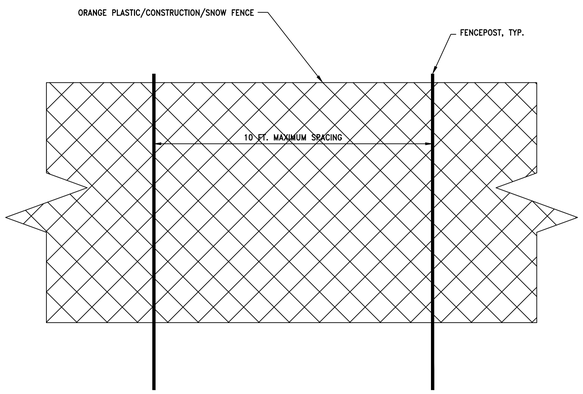
Sheet Title

STORMWATER POLLUTION PREVENTION PLAN

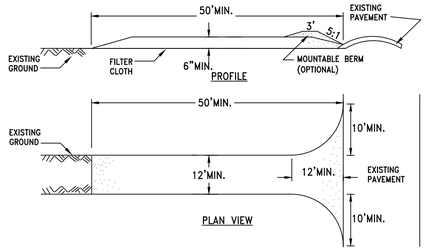
Sheet No.

C35

AM 11:51:12 12/02/25 USER: Brendon Brown Plot By: BROWN,BRENDON,J



1 C36 DETAIL – CONSTRUCTION FENCE
SCALE: NTS



CONSTRUCTION SPECIFICATIONS

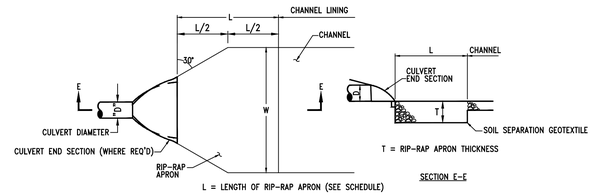
1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON– STRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

2 C36 STABILIZED CONSTRUCTION ENTRANCE
SCALE: NTS

RIP–RAP SHALL BE INSTALLED AS PER NYSDOT "STANDARD SPECIFICATIONS – CONSTRUCTION AND MATERIALS" (1/2/90) SECTIONS 620–3.02 & 3.03. RIP–RAP GRADATION SHALL BE AS PER FIGURE 620–1 AND BELOW:

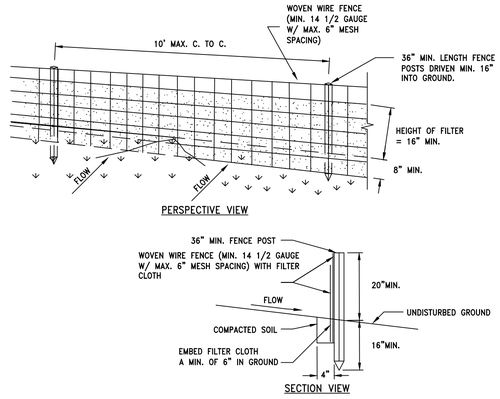
CULVERT OUTLET RIP–RAP APRON SCHEDULE				
"D" CULVERT OUTLET DIAMETER	L	T	W	NYSDOT GRADATION
12"ø	6 ft.	12"	±54"	"LIGHT"
15"ø	7.5 ft.	12"	±67"	"LIGHT"
24"ø	12 ft.	12"	±107"	"LIGHT"

NOTE: L=LENGTH OF APRON
T=THICKNESS OF RIP–RAP APRON



RIP–RAP APRON

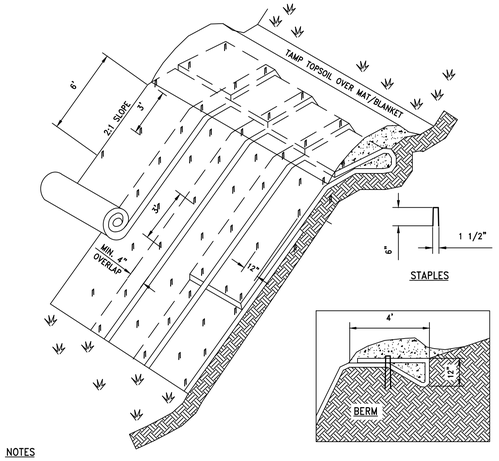
3 C36 STABILIZED OUTLET STRUCTURE
SCALE: N.T.S.



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

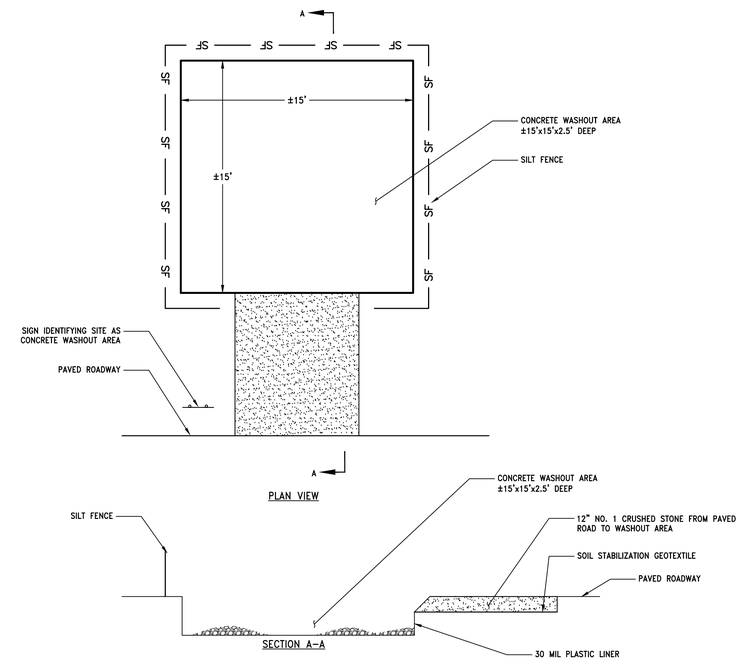
4 C36 SILT FENCE
SCALE: NTS



NOTES

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH
4. MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.

5 C36 TYPICAL JUTE MESH SLOPE STABILIZATION
SCALE: NTS



6 C36 CONCRETE WASHOUT AREA
SCALE: NTS

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F		

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Designed By	BJB
Checked By	BJB
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Sheet Title

EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.

C36

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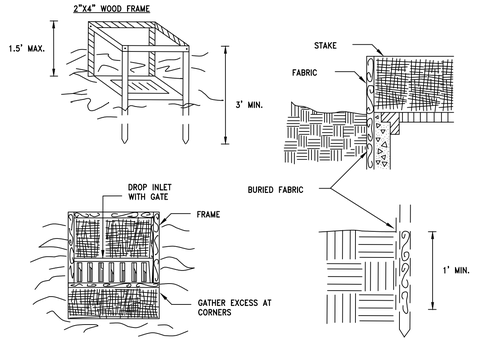
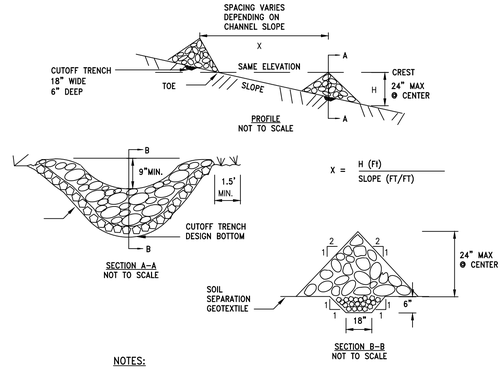


CONSTRUCTION SPECIFICATIONS

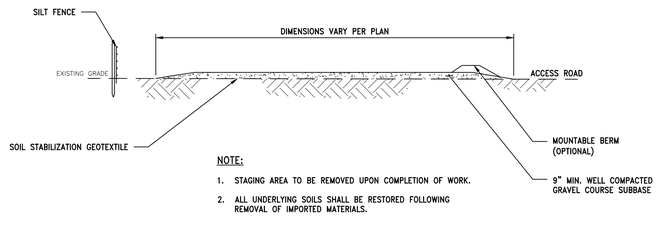
NOTES:
1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

1 / C37 FILTER FABRIC DROP INLET PROTECTION
SCALE: NTS



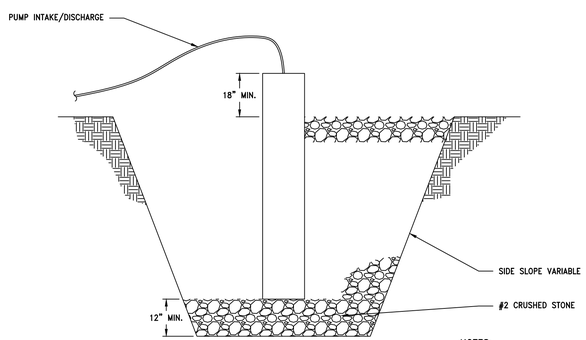
NOTES:
1. PLACE STONE ON A SOIL SEPARATION GEOTEXTILE FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLANS.
2. STONE CHECK DAM MATERIAL: NYSDOT LIGHT STONE FILL.
3. CUTOFF TRENCH MATERIAL: #2 STONE.
4. SET SPACING OF THE CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
5. EXTEND STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
6. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
7. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

2 / C37 CHECK DAM DETAIL
SCALE: NTS



NOTE:
1. STAGING AREA TO BE REMOVED UPON COMPLETION OF WORK.
2. ALL UNDERLYING SOILS SHALL BE RESTORED FOLLOWING REMOVAL OF IMPORTED MATERIALS.

3 / C37 TEMPORARY STAGING/STOCKPILING AREA
SCALE: NTS



NOTES:
1. PIT DIMENSIONS ARE VARIABLE.
2. PIT SURROUNDING STANDPIPE SHALL BE BACKFILLED WITH #2 CRUSHED STONE.
3. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE SHALL BE WRAPPED WITH FILTER CLOTH BEFORE INSTALLATION.

4 / C37 DEWATERING SUMP PIT DETAIL
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Project Number	2024125
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Designed By	BJB
Checked By	BJB
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File Name	C30

Sheet Title
EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.
C37

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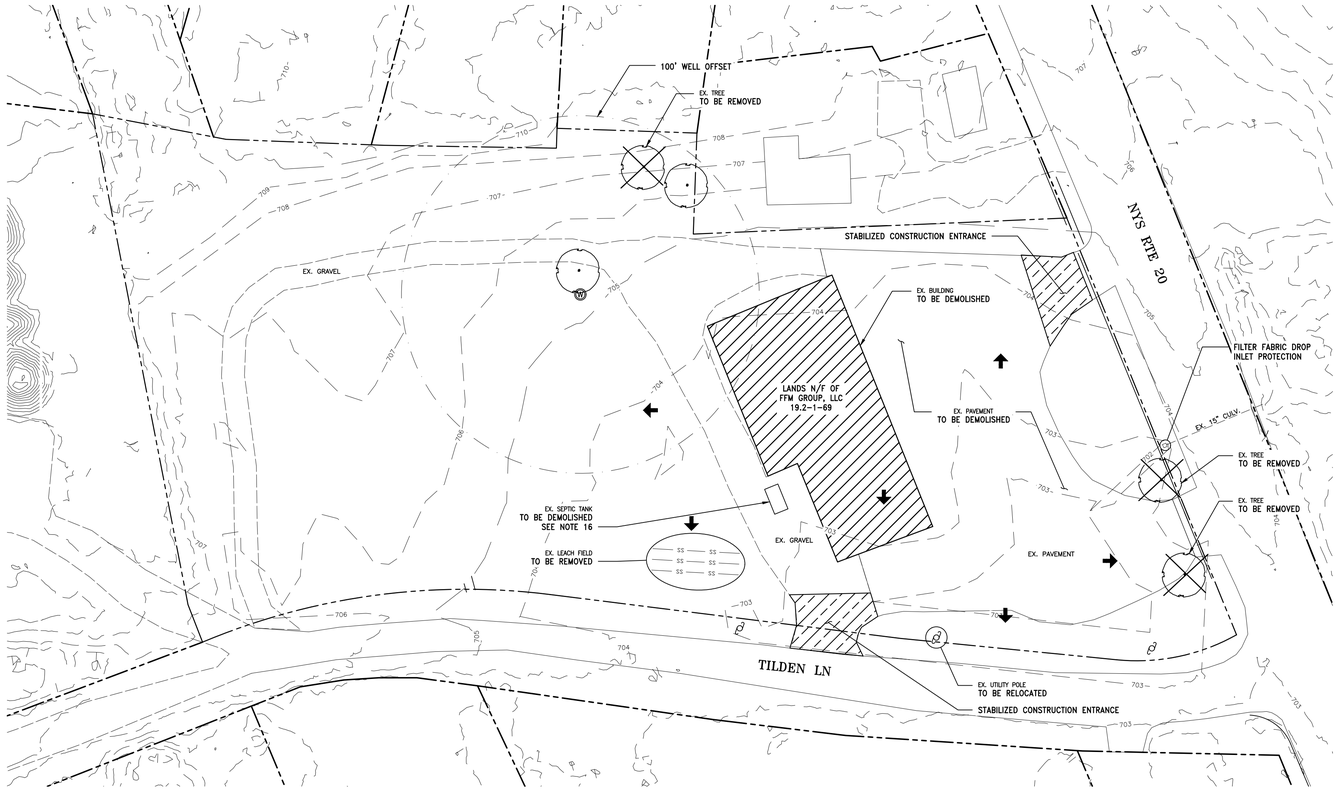

EXISTING CONDITIONS AND DEMOLITION SITE PLAN
1"=40'

GRAPHIC SCALE

40 20 0 20 40 80 160

1 INCH = 40 FEET

ACKNOWLEDGEMENTS:

1. PARCEL 19.2-1-69 PROPERTY LINE SHOWN DIGITIZED FROM A SURVEY MAP PREPARED BY FREDERICK J. HALEY PLS LLC, TITLED "LANDS OF THE ESTATE OF FRANK JOHN RUBINO, SR. A/K/A FRANK RUBINO TO BE CONVEYED TO ASHLEY ZAPP", DATED 12/7/2022.
2. PROJECT SITE TOPOGRAPHY DEVELOPED BY LIMITED IN-FIELD GPS SURVEYS CONDUCTED BY LAMONT ENGINEERS.
3. OFF-SITE TOPOGRAPHY DEVELOPED FROM DIGATAL ELEVATION MODELS AS PROVIDED BY A PARTENERSHIP BETWEEN USGS AND NYSDEC.

GENERAL DEMOLITION NOTES:

1. IN ACCORDANCE WITH THIS DRAWING, ALL AT-GRADE OR ABOVE GRADE WOOD AND/OR METAL FRAMED STRUCTURES ARE TO BE DEMOLISHED, REMOVED FROM THE SITE, AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES, RULES, LAWS, REQUIREMENTS PERTAINING TO SUCH WORK.
2. ALL DEMOLITION WORK MUST CONFORM TO INDUSTRIAL CODE RULE 56 OF THE NEW YORK STATE LABOR DEPARTMENT AND CURRENT PUBLICATION OF NFPA 241, CHAPTER 14 OF THE NEW YORK STATE FIRE CODE AND ANY APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
3. ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, STANDARDS AND CODES GOVERNING ASBESTOS ABATEMENT AND ANY OTHER TRADE WORK DONE IN CONJUNCTION WITH THE ABATEMENT.
4. CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK (1-800-962-7962) TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES 72 HOURS PRIOR TO ANY DEMOLITION WORK.
5. ALL MATERIALS TRANSPORTED OFF-SITE SHALL BE HANDLED IN SUCH A MANNER AS TO PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
6. THE CONTRACTOR SHALL PROVIDE FOR DUST CONTROL AT ALL TIMES. NO DUST SHALL BE ALLOWED TO LEAVE THE LIMITS OF THE PROJECT PROPERTY. CONTRACTOR SHALL FURNISH ALL WATER NECESSARY TO PROVIDE DUST CONTROL. THE OWNERS EXISTING WELL SHALL NOT BE USED AS A SOURCE OF WATER FOR THE CONTRACTOR.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING APPROPRIATE BARRICADES, FENCES, AND OTHER DEVICES, IN ACCORDANCE WITH NEW YORK STATE DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 23, FOR THE PROTECTION OF THE PUBLIC.
8. ACTUAL DEMOLITION OPERATIONS SHALL TAKE PLACE IN ACCORDANCE WITH ALL APPLICABLE LAWS, RULES AND REGULATIONS GOVERNING DEMOLITION PROCEDURES AND DUST CONTROL. THE OWNER DOES NOT, AND WILL NOT IN ANY WAY DIRECT OR CONTROL THE MEANS OR METHODS EMPLOYED BY THE DEMOLITION CONTRACTOR TO ACCOMPLISH THE DEMOLITION. IT IS THE AFFIRMATIVE DUTY OF THE CONTRACTOR TO COMPLY WITH ANY APPLICABLE PROVISIONS OF THE NEW YORK STATE INDUSTRIAL CODE.
9. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT ALL PUBLIC UTILITIES, RIGHTS-OF-WAY, PROPERTY MONUMENTATION, ETC., AND IF DAMAGES TO FACILITIES OCCUR (BY THE CONTRACTOR OR DUE TO ANY ACTIVITY RELATED TO THE DEMOLITION), THE CONTRACTOR SHALL BE REQUIRED TO PERFORM REPAIRS AS NECESSARY BY THE TO SATISFY THE BODY HAVING AUTHORITY. THE CONTRACTOR IS ENCOURAGED TO TAKE PRECONSTRUCTION PHOTOGRAPHS PRIOR TO THE START OF WORK.
10. ALL BURIED OIL TANKS ENCOUNTERED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE STANDARD. NO BURIED TANKS ARE KNOWN TO EXIST AT THE SITE.
11. ALL DEMOLISHED TELEPHONE POLES AND ELECTRICAL WIRING SHALL REMAIN THE PROPERTY OF THE OWNER. CONTRACTOR SHALL DISPOSE OF AT A LOCATION AT THE SITE AS DIRECTED BY OWNER.
12. CONTRACTOR MUST MAINTAIN A VALID PERMIT(S) FOR DISPOSAL OF WASTE AT ALL WASTE DISPOSAL FACILITIES THAT CONTRACTOR THE UTILIZES.
13. CONTRACTOR SHALL SUPPLY THE OWNER WITH COPIES OF BILLS OF LADING AND INVOICES THERETO. BILL OF LANDINGS, DUMP TICKETS FOR HAZARDOUS AND NONHAZARDOUS WASTE, AND FINAL AIR MONITORING REPORT (IF APPLICABLE) SHALL BE SUBMITTED BEFORE ANY PAYMENT WILL BE MADE.
14. CONTRACTOR SHALL NOTIFY THE OWNERS OF PROPERTIES ADJACENT TO THE PROPOSED DEMOLITION (WITHIN 0.1 MILES OF SITE). NOTIFICATION SHALL TAKE PLACE AT LEAST TEN (10) BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF OPERATIONS. AT THIS TIME, THEY WILL BE NOTIFIED OF THEIR RIGHT TO HAVE PLASTIC PLACED ON OPENINGS OF THEIR BUILDING PER REGULATION.
15. THE OWNER SHALL BE RESPONSIBLE FOR SECURING ANY SITE-SPECIFIC VARIANCES PRIOR TO THE WORK TAKING PLACE. THE OWNER WILL BE RESPONSIBLE FOR ANY AIR-QUALITY MONITORING DURING ABATEMENT AND DEMOLITION ACTIVITIES. CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST TEN (10) BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF ABATEMENT AND DEMOLITION OPERATIONS. NO WORK SHALL TAKE PLACE UNTIL ALL CONTROL AND MONITORING ARE IN PLACE.
16. THE HOURS OF WORK FOR DEMOLITION ACTIVITIES SHALL BE LIMITED TO BETWEEN 8:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY.
17. EXISTING SEPTIC TANK SHALL BE EMPTIED, DEMOLISHED, REMOVED AND BACKFILLED WITH CLEAN STRUCTURAL FILL. TANK SHALL BE EMPTIED BY A LICENSED NYS SEPTIC HAULER.

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Stamp

STATE OF NEW YORK
BRENDON J. BROWN
092603
LICENSED PROFESSIONAL ENGINEER

Issue Rev.		Date	Remarks
A			
	1	7/1/25	PLANNING BOARD
	2	9/4/25	PER PLANNING BOARD COMMENTS
		10/1/25	PLANNING BOARD
		10/29/25	PLANNING BOARD
	E	12/2/25	PLANNING BOARD
	F		

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/7/24
Scale	1"=40'
File Name	BM_TILDEN

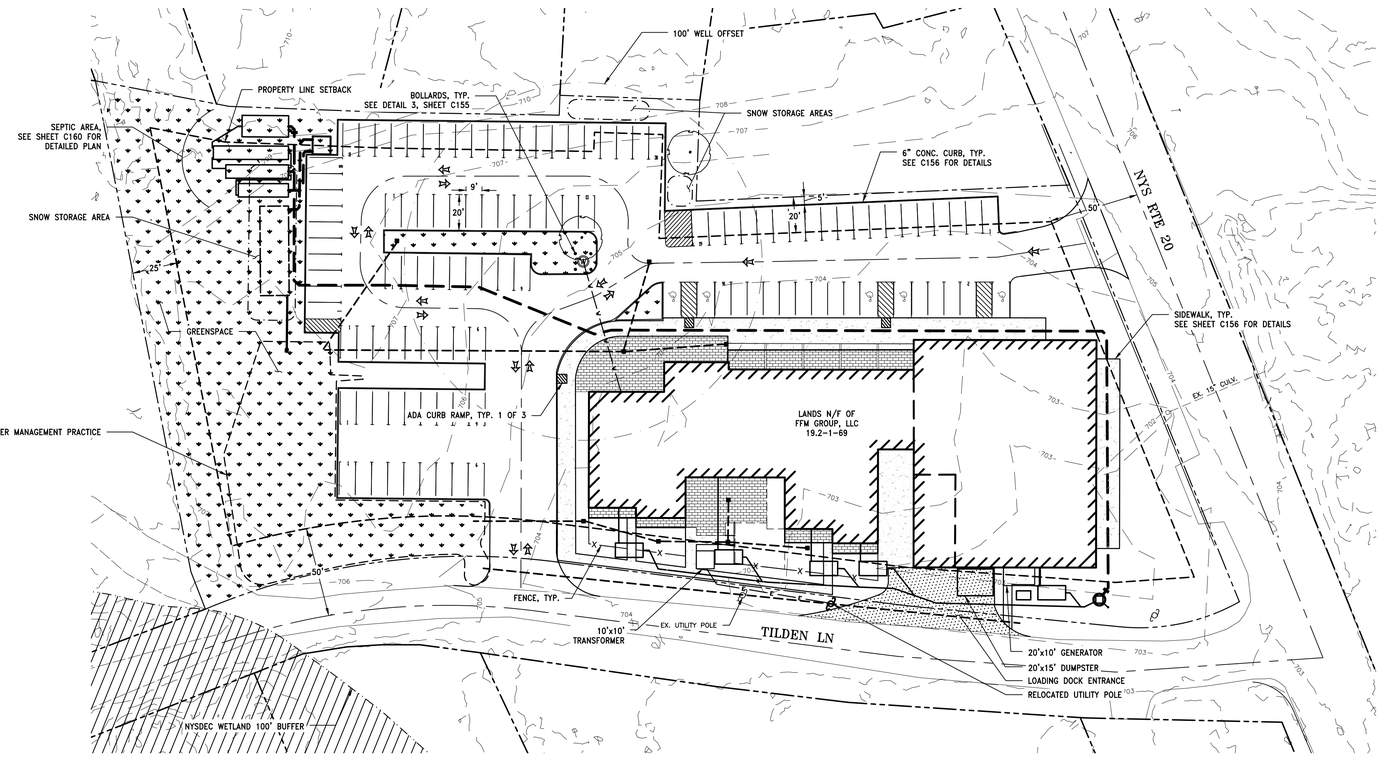
Sheet Title

EXISTING CONDITIONS & DEMOLITION PLAN

Sheet No.

C100

K:\PROJECTS\2024\2024125\BM_Tilden.dwg C100, 12/4/2025 12:14:59 PM



OVERALL SITE PLAN
1"=40'

GRAPHIC SCALE

40 20 0 20 40 80 160

1 INCH = 40 FEET

LEGEND

	PROPERTY LINE
700	EX. CONTOURS
W	EX. WELL
	EX. CULVERT AND CATCH BASIN
700	PROPOSED CONTOURS
V V V	PROPOSED WATER LINE
	PROPOSED SEWER LINE
	PROPOSED CULVERT
› › ›	PROPOSED DRAINAGE DITCH
E E E	PROPOSED ELECTRICAL
SF SF	SILT FENCE

SITE PLAN NOTES:

1. SEE SHEET C100 AND SECTION 02100 FOR CLEARING AND GRUBBING REQUIREMENTS AND LIMITATIONS.
2. ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS.
3. PERFORM EXCAVATION AND GRADING WORK IN ACCORDANCE WITH SECTIONS 02218, 02222, 02223 & 02225.
4. ALL DISTURBED AREAS NOT RECEIVING ASPHALT OR CRUSHED STONE WEARING SURFACES SHALL BE TOPSOILED AND SEEDED. ADDITIONALLY, SOME AREAS REQUIRE PREPARATORY SOIL RESTORATION.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING, OF ANY ERRORS OR DISCREPANCIES.
6. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING, OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE OWNER.
7. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EX. SUBSURFACE UTILITIES AT THE SITE PRIOR TO SETTING HEAVY EQUIPMENT (E.G. CRANES) AND MATERIALS ON THE SITE.
8. PRIOR TO CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING DIG SAFE NEW YORK AND ANY REGIONAL UTILITIES TO LOCATE ALL RELATED UTILITIES.
9. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATIONS, ETC.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINE AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES, AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTIONS TO THE SATISFACTION OF THE OWNER AND HIS REPRESENTATIVES BEFORE AS-BUILT PLANS WILL BE ACCEPTED.
12. CONTRACTOR SHALL FIELD VERIFY ALL LAYOUT DIMENSIONS AND ELEVATIONS WITH ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE A FIELD VISIT WITH ENGINEER TO REVIEW LAYOUT AND DIMENSIONS. CONTRACTOR SHALL SCHEDULE FIELD VISIT WITH ENGINEER TO CONFIRM FINISHED FLOOR ELEVATION.
13. ALL SUITABLE TOPSOIL TO BE TEMPORARILY STOCKPILED (AS APPLICABLE) FOR REUSE.
14. ALL MATERIALS TRANSPORTED OFF-SITE SHALL BE HANDLED IN SUCH A MANNER AS TO PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR DE-WATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK, IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN.
16. BUILDING DIMENSIONS TO BE TAKEN FROM BUILDING CONSTRUCTION PLANS.
17. ALL AREAS WITHIN THE LIMIT OF DISTURBANCE (SEE SHEET C100) MAY BE USED FOR STOCKPILING, EQUIPMENT STORAGE, AND FIELD OFFICES. ADDITIONAL SEDIMENT AND EROSION CONTROL PRACTICES MAY BE NEEDED TO PROTECT SENSITIVE AREAS. COORDINATE WITH ENGINEER.
18. SEE ELECTRICAL DRAWINGS FOR ON-SITE ELECTRICAL, CONTROLS, AND INTERNET WIRING.

PARKING:

TOTAL SPACES: 116
GROCERY: 37
APARTMENTS: 79
ACCESSIBLE: 5

DIMENSIONS: 9'x20'

REFUGE CALCULATIONS:

RESIDENTIAL:
41 APTS x 2 x 30GAL. / 7.48 / 27 = 12 YARDS
GROCERY:
8 YARDS
TOTAL AREA NEEDED: 20 YARDS

20'x15' REFUGE AREA WILL FIT 3 - 8 YARD DUMPSTERS
TOTAL AREA PROVIDED: 24 YARDS

REQUIRED AREA

	MIN. LOT REQUIREMENTS		MINIMUM YARD DIMENSIONS			MAX. STORIES	MAX. BUILDING HEIGHT	MIN. ROAD FOOTAGE
DISTRICT	AREA	MAX. BLDG COVERAGE	SETBACK CL	REAR	SIDE			
GENERAL COMMERICAL	30,000 SQ. FT.	75% OF LOT	50'	25'	20'	3	40'	100'

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STATE OF NEW YORK
BRENDON J. BROWN
091908
LICENSED PROFESSIONAL ENGINEER

Issue Rev.	Date	Remarks
A	5/3/25	FOR ZBA REVIEW
B	7/1/25	PLANNING BOARD
1	9/3/25	PER PLANNING BOARD COMMENTS
2	10/1/25	PER PLANNING BOARD COMMENTS
C	11/20/25	PLANNING BOARD
D	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/7/24
Scale	1"=40'
File Name	BM_TILDEN

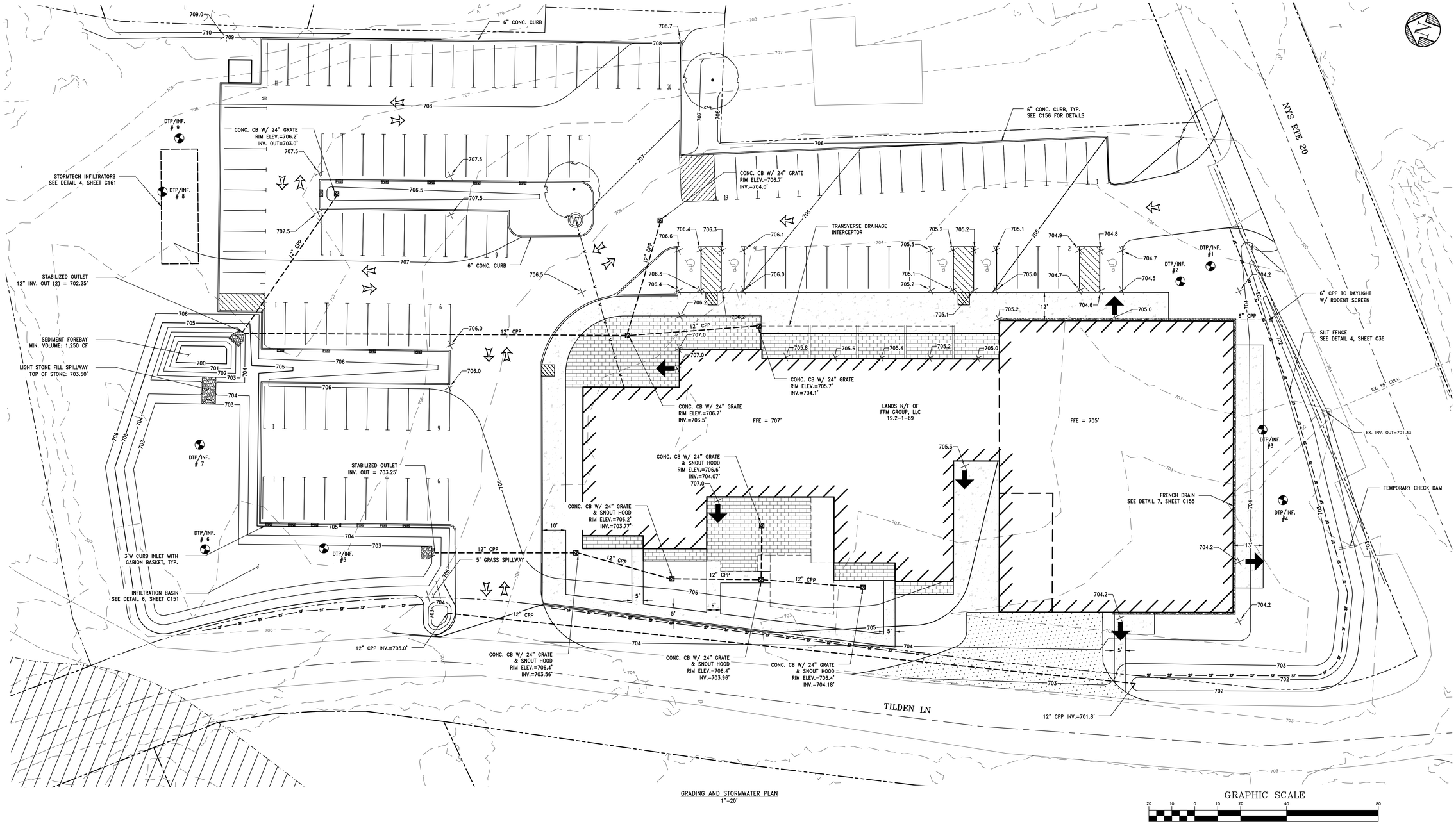
Sheet Title

SITE PLAN

Sheet No.

C110

K:\PROJECTS\2024\2024125\BM_Tilden.dwg, C110 Overall SP, 12/4/2025 12:16:51 PM



GRADING AND STORMWATER PLAN
1"=20'

GRAPHIC SCALE
20 10 0 10 20 40 80
1 INCH = 20 FEET

NOTE:
ROOTS @ 10"
WATER AT 7'5"
NO BEDROCK
MOTTLING AT 6'

DEEP TEST PIT NO. 1
SCALE: N.T.S.

9:29, 11:56, 19:37, 20:14
20:14 MIN:SEC PER INCH
±3 INCHES PER HOUR

INFILTRATION TEST NO. 1

NOTE:
ROOTS @ 10"
WATER AT 7'5"
NO BEDROCK
MOTTLING AT 6'

DEEP TEST PIT NO. 2
SCALE: N.T.S.

9:04, 11:31, 25:39, 26:12
26:12 MIN:SEC PER INCH
±2.3 INCHES PER HOUR

INFILTRATION TEST NO. 2

NOTE:
ROOTS @ 10"
WATER AT 7'5"
NO BEDROCK
MOTTLING AT 5'5"

DEEP TEST PIT NO. 3
SCALE: N.T.S.

4:04, 9:33, 11:39, 16:20, 29:57, 30:42
30:42 MIN:SEC PER INCH
±1.9 INCHES PER HOUR

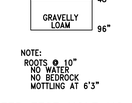
INFILTRATION TEST NO. 3

NOTE:
ROOTS @ 10"
WATER AT 7'5"
NO BEDROCK
MOTTLING AT 5'4"

DEEP TEST PIT NO. 4
SCALE: N.T.S.

2:00, 2:18, 4:18, 4:15, 5:18, 5:57
5:57 MIN:SEC PER INCH
±10.1 INCHES PER HOUR

INFILTRATION TEST NO. 4

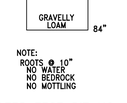


NOTE:
ROOTS @ 10"
NO WATER
NO BEDROCK
MOTTLING AT 6'3"

DEEP TEST HOLE NO. 5
SCALE: N.T.S.

0:10, 0:10, 0:10, 0:10
0:10 MIN:SEC PER INCH
±10 INCHES PER HOUR

INFILTRATION TEST NO. 5



NOTE:
ROOTS @ 10"
NO WATER
NO BEDROCK
NO MOTTLING

DEEP TEST PIT NO. 6
SCALE: N.T.S.

0:33, 4:11, 4:51, 6:20, 8:38, 9:24
9:24 MIN:SEC PER INCH
±6.4 INCHES PER HOUR

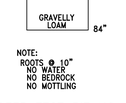
INFILTRATION TEST NO. 6

NOTE:
ROOTS @ 10"
NO WATER
NO BEDROCK
NO MOTTLING

DEEP TEST HOLE NO. 7
SCALE: N.T.S.

0:35, 1:35, 4:43, 6:15, 7:30, 7:24
7:24 MIN:SEC PER INCH
±8.1 INCHES PER HOUR

INFILTRATION TEST NO. 7

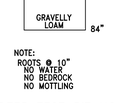


NOTE:
ROOTS @ 10"
NO WATER
NO BEDROCK
NO MOTTLING

DEEP TEST PIT NO. 8
SCALE: N.T.S.

2:41, 2:46, 2:35, 2:49, 3:38, 4:38, 5:31
5:31 MIN:SEC PER INCH
±10.9 INCHES PER HOUR

INFILTRATION TEST NO. 8



NOTE:
ROOTS @ 10"
NO WATER
NO BEDROCK
NO MOTTLING

DEEP TEST PIT NO. 9
SCALE: N.T.S.

0:33, 1:28, 2:33, 2:57, 3:58
5:35, 7:15, 8:02
8:02 MIN:SEC PER INCH
±7.5 INCHES PER HOUR

INFILTRATION TEST NO. 9

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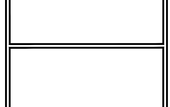


Issue Rev.	Date	Remarks
A	7/1/25	PLANNING BOARD COMMENTS
B	8/4/25	PER PLANNING BOARD COMMENTS
C	9/3/25	PER PLANNING BOARD COMMENTS
1	10/1/25	PER PLANNING BOARD COMMENTS
2	11/10/25	PLANNING BOARD
D	12/2/25	PLANNING BOARD
E		
F		

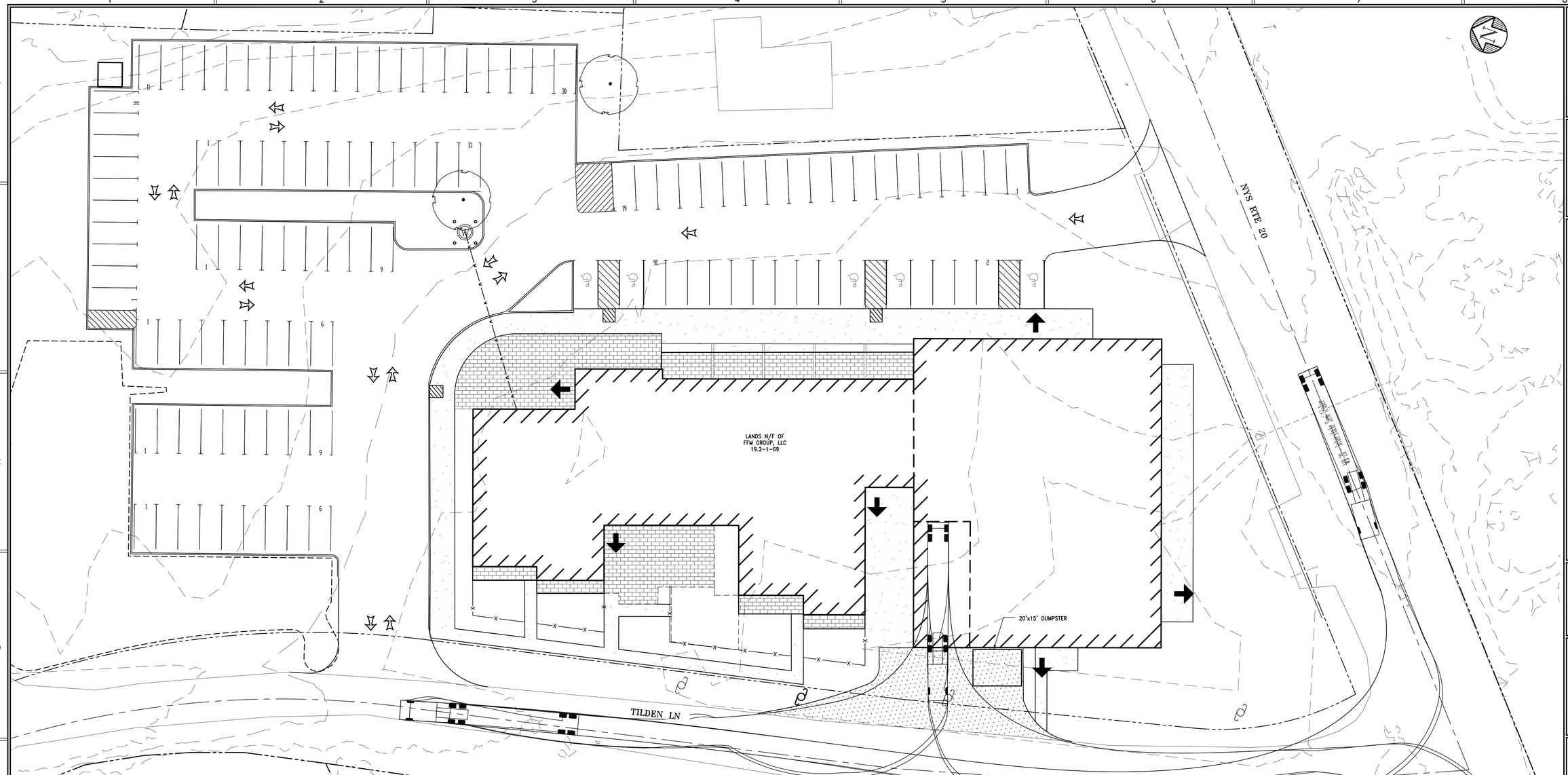
Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title

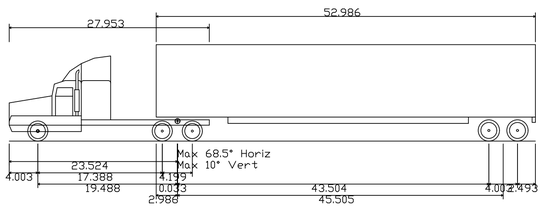
GRADING PLAN

Sheet No.

C115



TURNING RADIUS PLAN
1"=20'



WB-20 - Interstate Semi-Trailer

Overall Length	73.524ft
Overall Width	8.497ft
Overall Body Height	13.484ft
Min Body Ground Clearance	1.335ft
Max Track Width	8.497ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

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Issue Rev.	Date	Remarks
A	7/1/25	PLANNING BOARD
B	8/4/25	PER PLANNING BOARD COMMENTS
C	9/2/25	PER PLANNING BOARD COMMENTS
1	10/7/25	PER PLANNING BOARD COMMENTS
2	11/7/25	PLANNING BOARD
E	12/2/25	PLANNING BOARD
F		

Project Number	2024125
Drawn By	SK
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title

TURNING RADIUS PLAN

Sheet No.

C120

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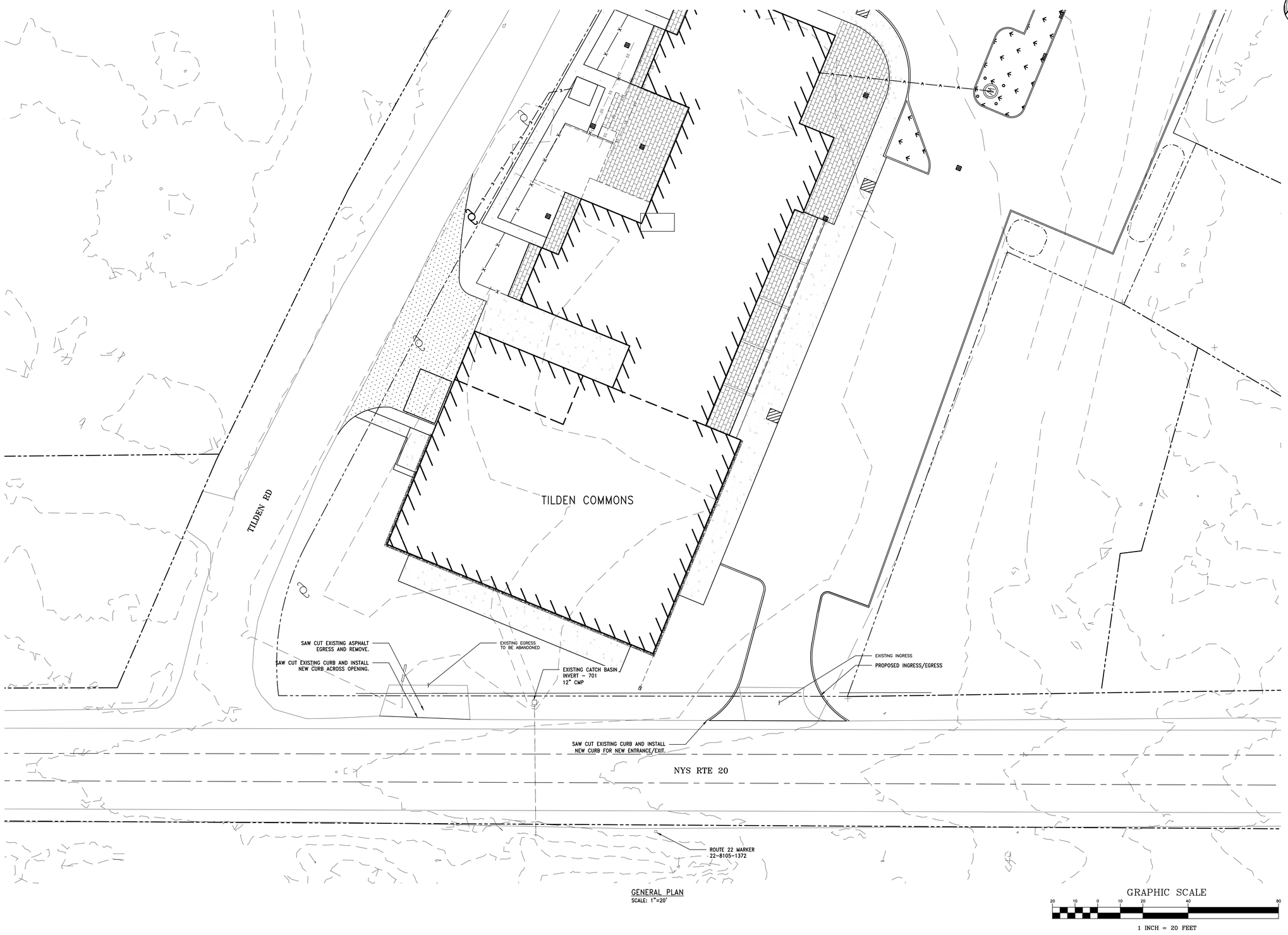

GENERAL PLAN
SCALE: 1"=20'

GRAPHIC SCALE
20 10 0 10 20 40 80
1 INCH = 20 FEET

ACKNOWLEDGEMENTS:

1. PARCEL 19.2-1-69 PROPERTY LINE SHOWN DIGITIZED FROM A SURVEY MAP PREPARED BY FREDERICK J. HALEY PLS LLC, TITLED "LANDS OF THE ESTATE OF FRANK JOHN RUBINO, SR. A/K/A FRANK RUBINO TO BE CONVEYED TO ASHLEY ZAPP", DATED 12/7/2022.
2. PROJECT SITE TOPOGRAPHY DEVELOPED BY LIMITED IN-FIELD GPS SURVEYS CONDUCTED BY LAMONT ENGINEERS.
3. OFF-SITE TOPOGRAPHY DEVELOPED FROM DIGATAL ELEVATION MODELS AS PROVIDED BY A PARTENERSHIP BETWEEN USGS AND NYSDEC.

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Issue Rev.	Date	Remarks
A	6/7/25	TOM REVIEW
B	7/1/25	PLANNING BOARD
1	9/3/25	PER PLANNING BOARD COMMENTS
2	10/1/25	PER PLANNING BOARD COMMENTS
C	10/7/25	FOR NYSDOT
E	10/29/25	PLANNING BOARD
3	11/11/25	REVISED TOM 11/07
F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	JW
Designed By	BJB
Checked By	BJB
Date	6/7/24
Scale	1"=20'
File Name	BM_TILDEN

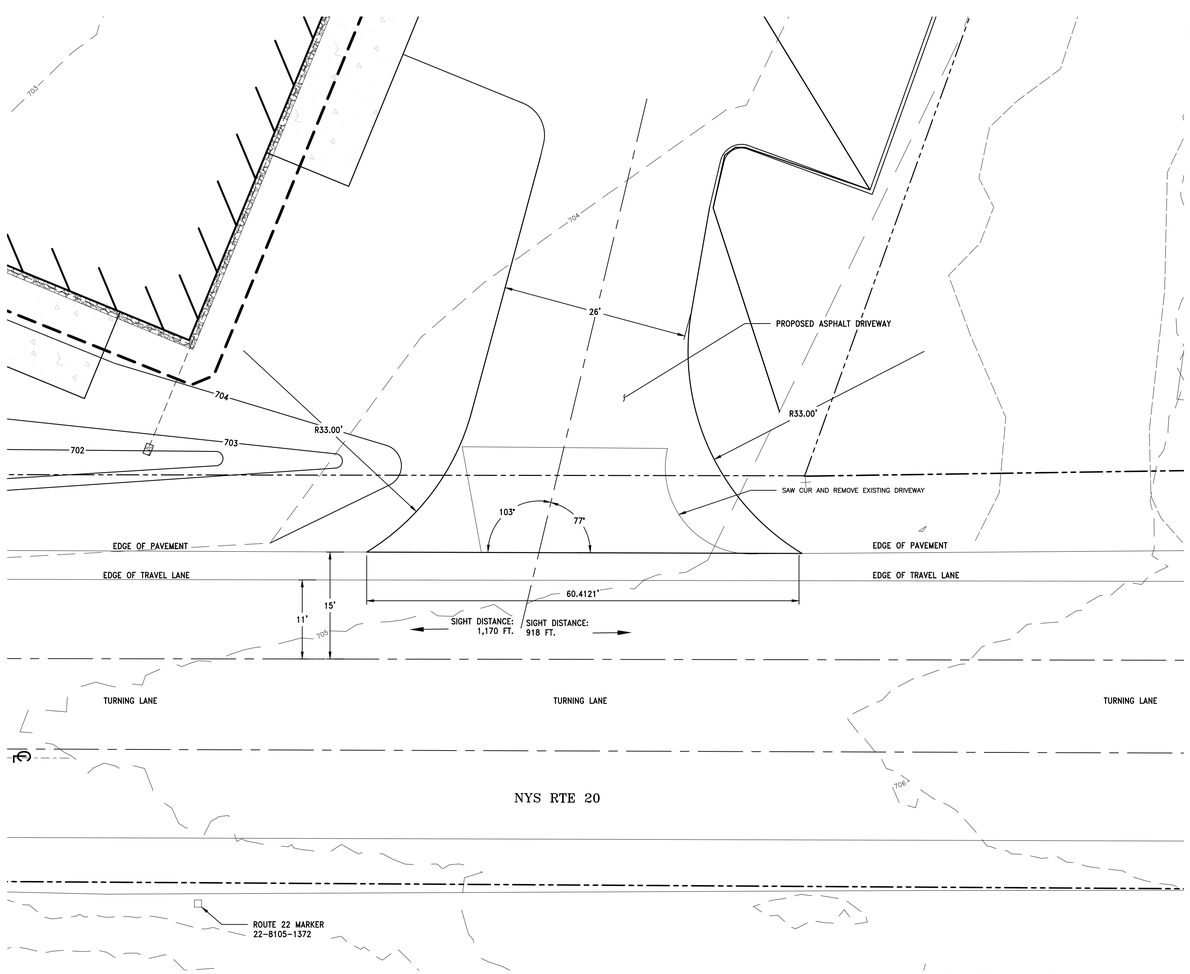
Sheet Title

NYSDOT ENTRANCE GENERAL PLAN

Sheet No.

C130

PM 9/5/25, 10:04:10, \\DC01\DATA\PROJECTS\2024\2024125\Drawings\LD\2024125 TILDEN COMMONS.dwg



ENTRANCE SITE PLAN
SCALE: 1"=10'

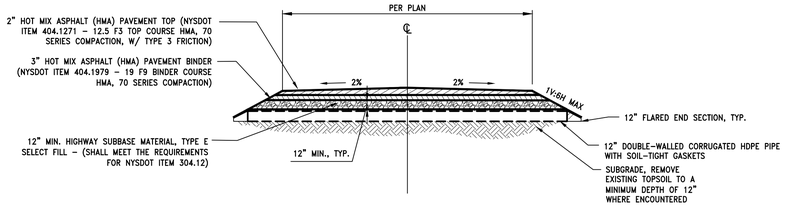
GRAPHIC SCALE

10 5 0 5 10 20 40

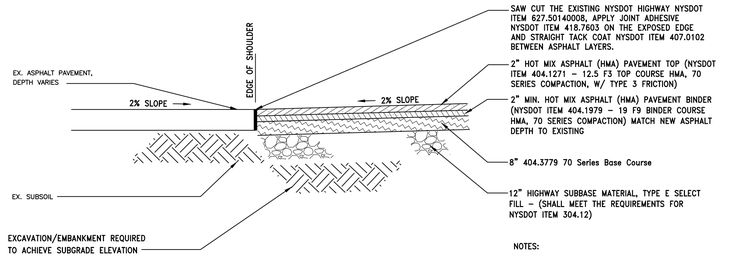
1 INCH = 10 FEET

NYSDOT NOTES:

1. NYSDOT HIGHWAY WORK PERMIT SHALL BE ISSUED AND PRESENT AT THE JOB LOCATION AT ALL TIMES, WITH THE STAMPED NYSDOT APPROVED PLANS. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AND CONDITIONS ATTACHED TO THE NYSDOT WORK PERMIT.
2. DETAILS ARE INTENDED TO SHOW FINAL DESIGN. MODIFICATIONS MAY BE REQUIRED TO SUIT EXISTING FIELD DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE REQUIRED WORK.
3. DRIVEWAY ENTRANCE SHALL CONFORM TO NYSDOT STANDARD SHEETS 608-03.
4. THE MINIMUM PAVING LIMIT SHALL BE 30' FROM THE EDGE OF THE TRAVEL LANE OR TO THE R.O.W., WHICHEVER IS GREATER.
5. ALL WORK WITHIN THE NYSDOT RIGHT-OF-WAY OR WORK THAT MAY IMPACT IT SHALL BE CONSTRUCTED TO THE CURRENT NYSDOT STANDARDS AND SPECIFICATIONS.
6. THE WORK ZONE TRAFFIC CONTROL PLAN IS A VERY CRITICAL PART OF THE WORK PERMIT AND SHALL BE PROVIDED IN ACCORDANCE WITH THE CURRENT 619 NYSDOT STANDARD SERIES SPECIFICATION, THE NATIONAL MANUAL OF TRAFFIC CONTROL DEVICES, AND THE NYS SUPPLEMENT.
7. THE NYSDOT RIGHT-OF-WAY IS NOT TO BE USED FOR MATERIAL AND/OR EQUIPMENT STAGING.
8. A ROADWORK REPORTING FORM SHALL BE PROVIDED 7 DAYS PRIOR TO ANY WORK WITHIN THE NYSDOT RIGHT-OF-WAY.
9. NO WORK SHALL OCCUR WITHIN THE NYSDOT RIGHT-OF-WAY DURING ACTIVE SNOW & ICE REMOVAL OPERATIONS.
10. AS-BUILT PLANS SHALL BE SUPPLIED TO THE REGIONAL PERMITTING OFFICE.
11. THE NYSDOT RESERVES THE RIGHT TO CANCEL ANY WORK OPERATIONS AT ANY POINT DURING THE PROJECT.
12. CONTRACTOR SHALL COORDINATE WITH THE RESIDENCY:
    COLUMBIA RESIDENCY
    RESIDENT ENGINEER – DARRIN MORET
    EMAIL – DARRIN.MORRET@DOT.NY.GOV



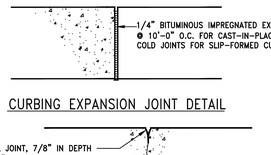
TYPICAL ASPHALT PAVEMENT CROSS SECTION
SCALE: N.T.S



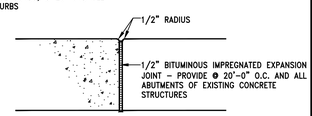
NOTES:

1. REFERENCE NYSDOT STANDARD DETAIL SHEETS 608-03, SHEET 5 FOR RECONSTRUCTION DETAILS

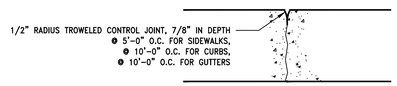
PAVEMENT TRANSITION DETAIL
SCALE: N.T.S



CURBING EXPANSION JOINT DETAIL

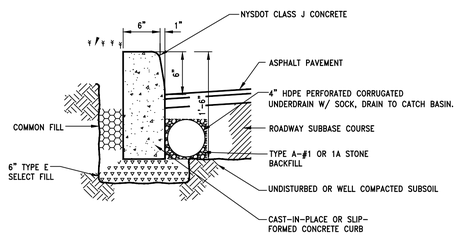


EXPANSION JOINT DETAIL

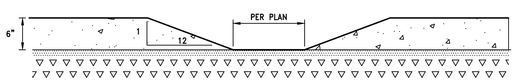


CONTROL JOINT DETAIL

TYPICAL CONSTRUCTION DETAILS FOR SIDEWALKS, CURBS AND GUTTERS
SCALE: NTS



CAST IN PLACE CURB
SCALE: NTS



CURB DROP DETAIL
SCALE: NTS

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Issue Rev.	Date	Remarks
A	4/7/25	FOR TAC REVIEW
B	5/7/25	PLANNING BOARD
1	9/2/25	PER PLANNING BOARD COMMENTS
2	10/7/25	PER PLANNING BOARD COMMENTS
	10/7/25	FOR NYSDOT
C	10/29/25	PLANNING BOARD
E	11/17/25	REVISED FOR LOT
3	12/2/25	PLANNING BOARD
F		

Project Number	2024125
Drawn By	JW
Designed By	BJB
Checked By	BJB
Date	6/7/24
Scale	AS NOTED
File Name	BM_TILDEN

Sheet Title

NYSDOT
SITE PLAN
& DETAILS

Sheet No.

C131

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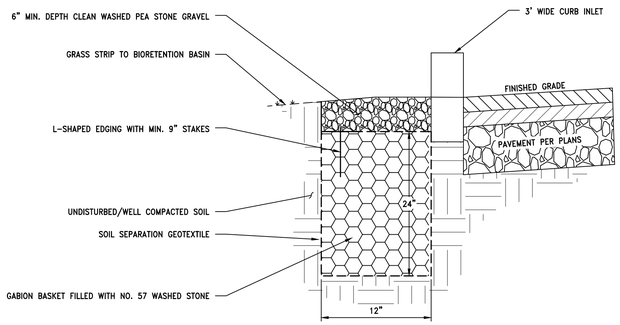
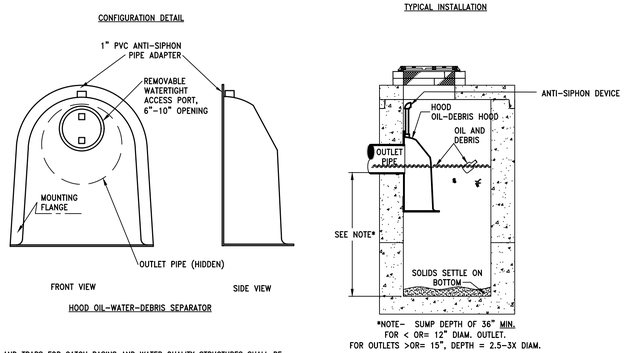


1 C150 TYPICAL GABION BASKET CURB INLET
SCALE: NTS



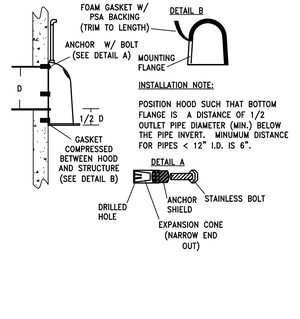
HOOD OIL-WATER-DEBRIS SEPARATOR

*NOTE- SUMP DEPTH OF 36" MIN. FOR < OR= 12" DIAM. OUTLET. FOR OUTLETS >OR= 15", DEPTH = 2.5-3X DIAM.

NOTES:

1. ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY:
   BEST MANAGEMENT PRODUCTS, INC.
   53 MT. ARCHER RD.
   LYME, CT 06371
   (860) 434-0277, (860) 434-3195 FAX
   TOLL FREE: (800) 504-8008 OR (888) 434-0277
   WEB SITE: www.bmpinc.com
   OR PRE-APPROVED EQUAL
2. ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
3. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW AS DRAWN. (SEE CONFIGURATION DETAIL)
4. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (HOOD SIZE ALWAYS LARGER THAN PIPE SIZE).
5. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
6. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
7. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
8. THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER. (SEE INSTALLATION DETAIL)
9. INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT.
   INSTALLATION KIT SHALL INCLUDE:
   A. INSTALLATION INSTRUCTIONS
   B. PVC ANTI-SIPHON VENT PIPE AND ADAPTER
   C. OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING
   D. 3/8" STAINLESS STEEL BOLTS
   E. ANCHOR SHIELDS

INSTALLATION DETAIL



INSTALLATION NOTE:

POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

2 C150 HOOD DETAILS AND NOTES
SCALE: N.T.S.

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STATE OF NEW YORK · BRENDON J. BROWN · LICENSED PROFESSIONAL ENGINEER · 091605

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B	7/1/25	PLANNING BOARD
C	8/4/25	PER PLANNING BOARD COMMENTS
–	9/3/25	PER PLANNING BOARD
E	10/29/25	PLANNING BOARD
F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	AS
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title

STORMWATER DETAILS

Sheet No.

C150

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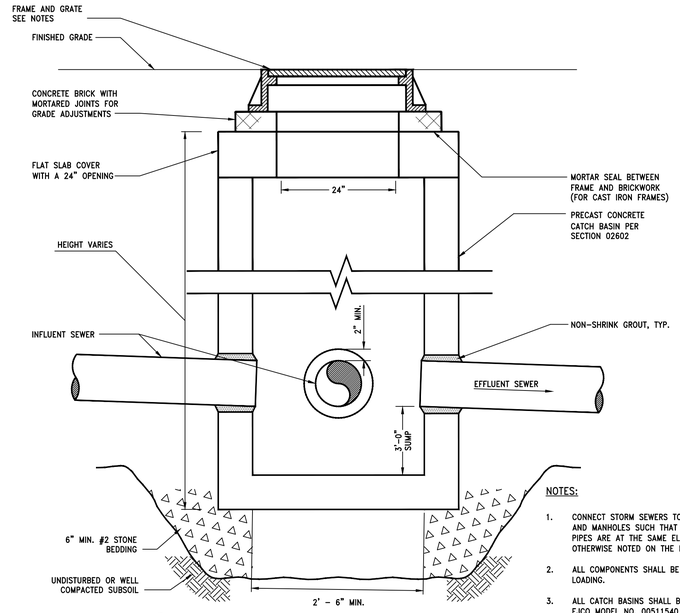
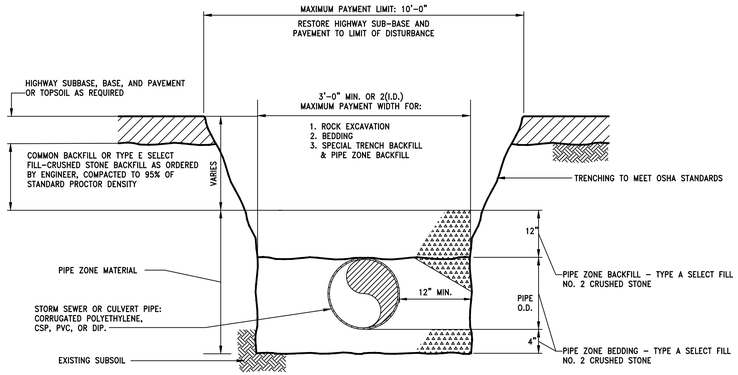


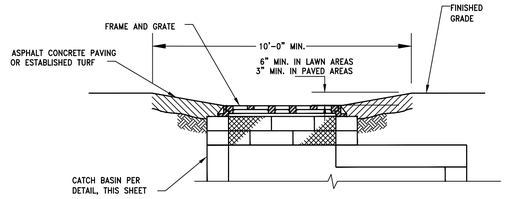
NOTES:

1. CONNECT STORM SEWERS TO CATCH BASINS AND MANHOLES SUCH THAT THE TOP OF THE PIPES ARE AT THE SAME ELEVATION UNLESS OTHERWISE NOTED ON THE PROFILES.
2. ALL COMPONENTS SHALL BE RATED FOR H20 LOADING.
3. ALL CATCH BASINS SHALL BE EQUIPPED WITH EJCO MODEL NO. 00511540 BICYCLE PROOF GRATE, OR EQUAL.
4. ALL DRAINAGE MANHOLES SHALL BE EQUIPPED WITH A FRAME AND SOLID COVER. EJCO MODEL NO. 00166567, OR EQUAL.

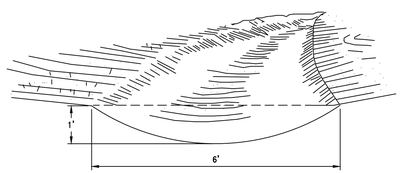
1 C151 CATCH BASIN AND MANHOLE DETAIL
SCALE: N.T.S.



2 C151 TYPICAL STORM SEWER TRENCH DETAIL
SCALE: N.T.S.



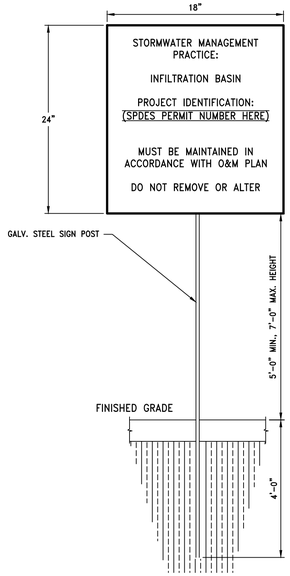
3 C151 OPEN AREA FRAME AND GRATE DETAIL
SCALE: N.T.S.



NOTES:

1. SEED SWALE WITH THE FOLLOWING MIX:
   1.1. PERENNIAL RYGRASS @ 30 LBS/ACRE
   1.2. TALL FESCUE @ 20 LBS/ACRE
   1.3. REDTOP @ 2 LBS/ACRE
2. MULCH PER PLAN. APPLY ANCHORED STABILIZATION MATTING IF RILLING OCCURS, OR A.O.B.E.
3. GRADE SWALE SO THAT IT IS MOW-ABLE.

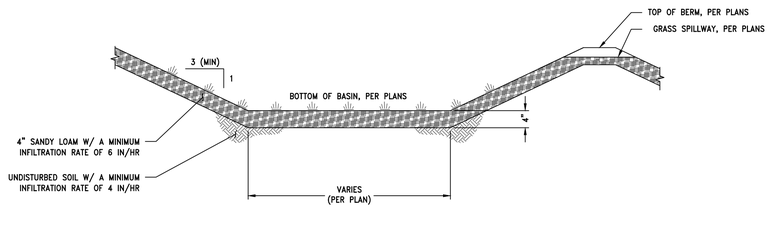
4 C151 TYPICAL GRASS SWALE
SCALE: NTS



NOTES:

1. STORMWATER PRACTICE NAMED IN THIS DETAIL IS FOR EXAMPLE. ACTUAL PRACTICE NAME SHALL BE USED FOR EACH PRACTICE.

5 C151 STORMWATER SIGN
SCALE: N.T.S.



6 C151 TYPICAL INFILTRATION BASIN CROSS SECTION
SCALE: N.T.S.

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BRENDON T. BROOKS
091609
LICENSED PROFESSIONAL ENGINEER

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Project Number	2024125
Drawn By	AS
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title
STORMWATER DETAILS

Sheet No.
C151

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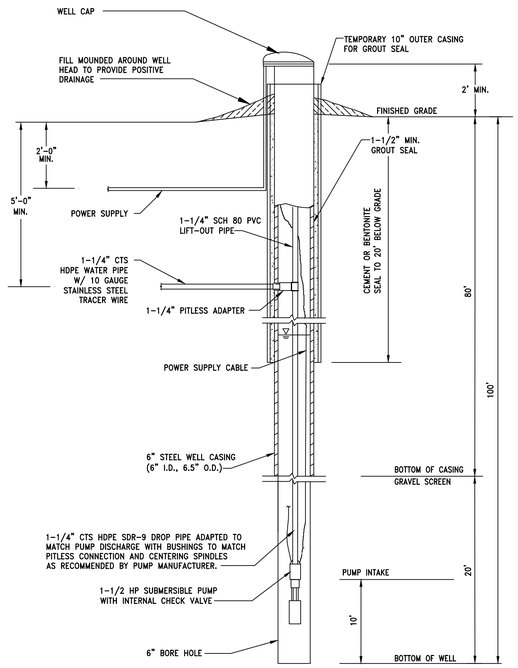
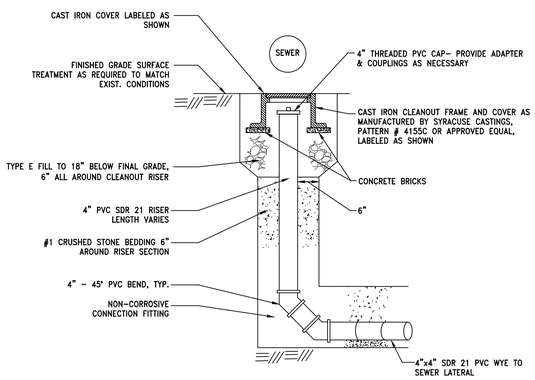


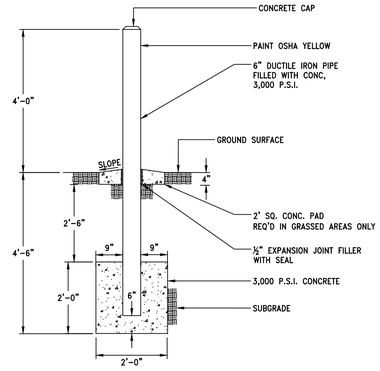
NOTE:

1. PLACE A 6" WIDE STRIP OF METALLIC BLUE BURIED PIPELINE TAPE 2'-0' BELOW FINAL GRADE FOR THE WELL WATER PIPE.

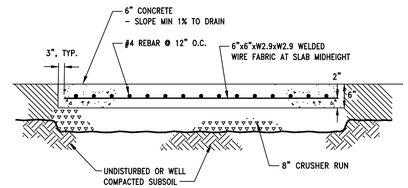
1 C155 WELL DETAIL
SCALE: N.T.S.



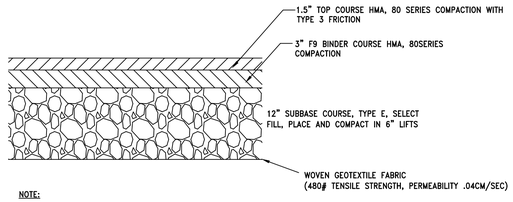
2 C155 TYPICAL PVC CLEANOUT DETAIL
SCALE: NTS



3 C155 TYPICAL BOLLARD DETAIL
SCALE: NTS



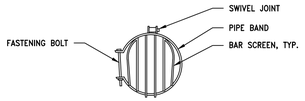
4 C155 TYPICAL CONCRETE EQUIPMENT PAD DETAIL
SCALE: N.T.S.



NOTE:

1. DETAIL APPLIES TO ASPHALT PAVEMENT OUTSIDE OF NYSDOT RIGHT-OF-WAY ONLY.

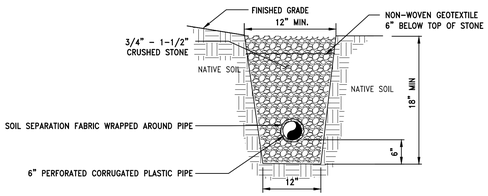
5 C155 STANDARD ASPHALT PAVEMENT DETAIL
SCALE: N.T.S.



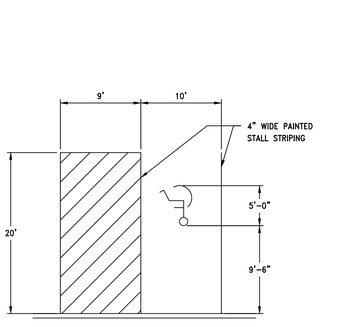
NOTES:

1. FOR PVC PIPE USE BAND-TYPE RAT GUARD BY AGRIDRAIN, OR EQUAL.
2. FOR CORRUGATED HDPE PIPE USE EXTERNAL RODENT GUARDS BY AGRIDRAIN, OR EQUAL.
3. PROVIDE APPROPRIATELY SIZED SCREEN PER PIPE DIAMETER.
4. ALL SCREENS SHALL BE SECURED TO THE EXTERIOR OF THE PIPE'S OUTLET. INTERNAL MESH GUARDS SHALL NOT BE ACCEPTED.

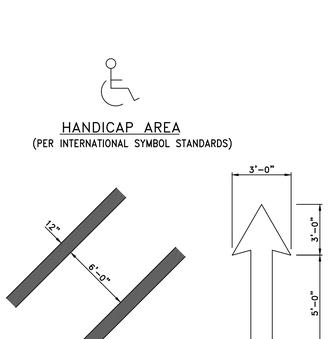
6 C155 TYPICAL RODENT SCREEN DETAIL
SCALE: NTS



7 C155 FRENCH DRAIN DETAIL
SCALE: N.T.S.

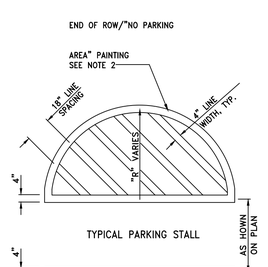


8 C155 HC PARKING STALL
SCALE: N.T.S.



NOTES:

1. HANDICAP PARKING SIGNS SHALL BE SETON #M5398 OR APPROVED EQUAL.
2. HANDICAP ACCESS AISLE SIGNS SHALL BE SETON #37899 OR APPROVED EQUAL.

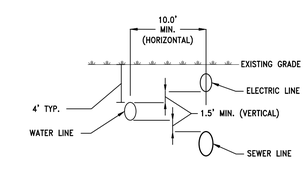


PARKING STALL/MEDIAN

NOTES:

1. PAVEMENT MARKING MATERIALS AND CONSTRUCTION SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 640 FOR REFLECTORIZED PAVEMENT MARKINGS. STALL STRIPING SHALL BE WHITE, "NO PARKING" STRIPING SHALL BE YELLOW, ALL HANDICAP AREAS SHALL BE BLUE.
2. "NO PARKING AREA" RADII AND SHAPE SHALL BE AS INDICATED ON SITE PLAN.
3. PROVIDE ALL NECESSARY HANDICAP SIGNAGE AS REQUIRED PER CODE.

9 C155 PAVEMENT MARKINGS DETAILS
SCALE: N.T.S.



WATER/SEWER CROSSINGS

10 C155 TYPICAL DETAILS FOR UTILITY CROSSINGS
SCALE: NOT TO SCALE

NOTES:
1. ALL SEWER MAIN AND WATER MAINS SHALL BE SEPARATED BY DISTANCES SPECIFIED IN THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (10 STATES STANDARDS).
2. PIPE JOINTS ARE TO BE ARRANGED SO THAT SEWER MAIN JOINTS AND WATER MAIN JOINTS ARE SEPARATED AS FAR AS POSSIBLE FROM EACH OTHER.

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Project Number	2024125
Drawn By	AS
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Checked By	BJB
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Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title

SITE DETAILS

Sheet No.

C155

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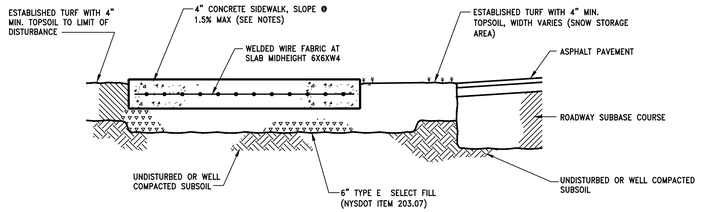
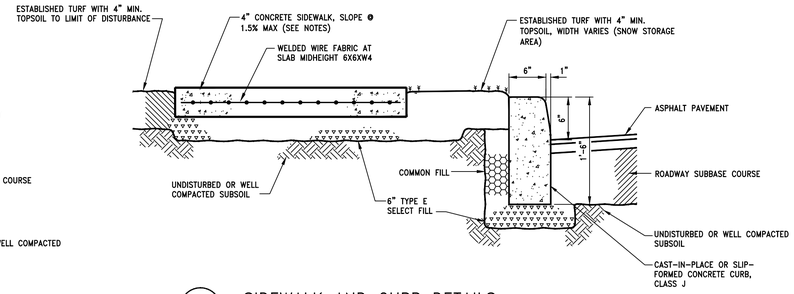
NOTES:

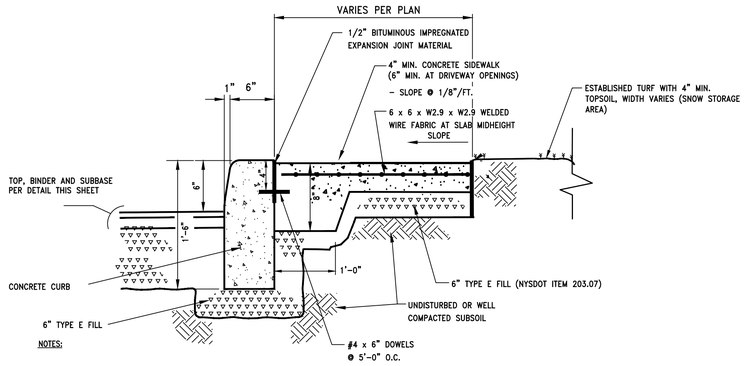
1. INCREASE SIDEWALK THICKNESS TO 6" MIN. AND INCREASE REINFORCEMENT PER SECTION 02520 THROUGHOUT LENGTH OF DRIVEWAY OPENINGS.
2. MATCH EXISTING SIDEWALK WIDTHS BY PROVIDING A 10'-0" LONG TAPER SECTION.
3. SIDEWALK CONCRETE SHALL BE NYSDOT CLASS D (NYSDOT ITEM 608.0101) WITH FIBER MESH (2 LBS/CY).



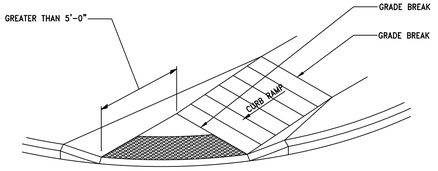
1 C156 SIDEWALK DETAILS
SCALE: N.T.S.



2 C156 SIDEWALK AND CURB DETAILS
SCALE: N.T.S.



3 C156 INTEGRAL SIDEWALK AND CURBING DETAILS
SCALE: N.T.S.

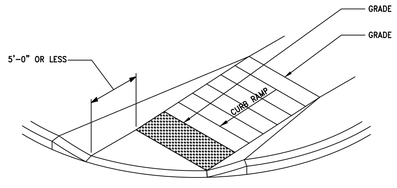


DETECTABLE WARNING PLACEMENT DETAIL 1

NOTE: IF THE DISTANCE FROM THE BOTTOM GRADE BREAK IS GREATER THAN OF EQUAL TO 5'-0", DETECTABLE WARNINGS SHOULD BE PLACED ALONG THE RADIUS OF THE CURVE AS SHOWN IN THE ABOVE DETAIL.

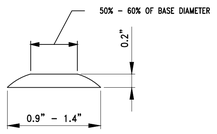
DETECTABLE WARNING NOTES:

1. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
2. DETECTABLE WARNING UNIT DIMENSIONS:
   THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.
3. DOME ALIGNMENT:
   THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.
4. WHERE DOMES ARE ARRAYED RADIALLY THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.
5. COLOR REQUIREMENTS:
   THE DETECTABLE WARNING FIELD SHALL BE THE COLOR SPECIFIED IN THE CONTRACT DOCUMENTS OR MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
6. DETECTABLE WARNINGS LOCATIONS:
   DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR THE ROADWAY EDGE (12" WHERE TRAVERSABLE CURB IS USED).

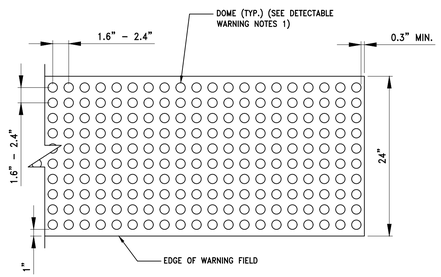


DETECTABLE WARNING PLACEMENT DETAIL 2

NOTE: IF THE DISTANCE FROM THE BOTTOM GRADE BREAK IS LESS THAN OR EQUAL TO 5'-0", DETECTABLE WARNINGS SHOULD BE PLACED ON THE CURB RAMP ALONG THE BOTTOM GRADE BREAK WITH ONE CORNER 5" TO 9" FROM THE FRONT OF THE CURB OR EDGE OF THE ROADWAY.

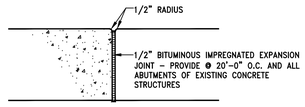


DOME SECTION

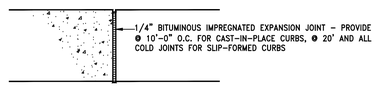


DOME SPACING

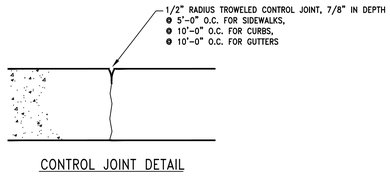
4 C156 CONCRETE SIDEWALK DETECTABLE WARNING DETAILS
SCALE: N.T.S.



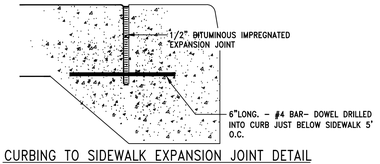
EXPANSION JOINT DETAIL



CURBING EXPANSION JOINT DETAIL



CONTROL JOINT DETAIL



CURBING TO SIDEWALK EXPANSION JOINT DETAIL

NOTE:
1. SIDEWALKS TO BE PICTURE FRAMED W/ BROOM FINISH.

5 C156 TYPICAL CONSTRUCTION DETAILS FOR SIDEWALKS AND CURBS
SCALE: N.T.S.

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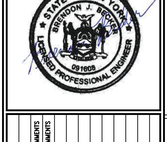

Issue/Rev.	Date	Remarks
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1	9/3/25	PLANNING BOARD
E	10/29/25	PLANNING BOARD
F	12/4/25	PLANNING BOARD

Project Number	2024125
Drawn By	AS
Designed By	BJB
Checked By	BJB
Date	6/30/25
Scale	AS SHOWN
File Name	BM_TILDEN

Sheet Title
SITE DETAILS

Sheet No.
C156

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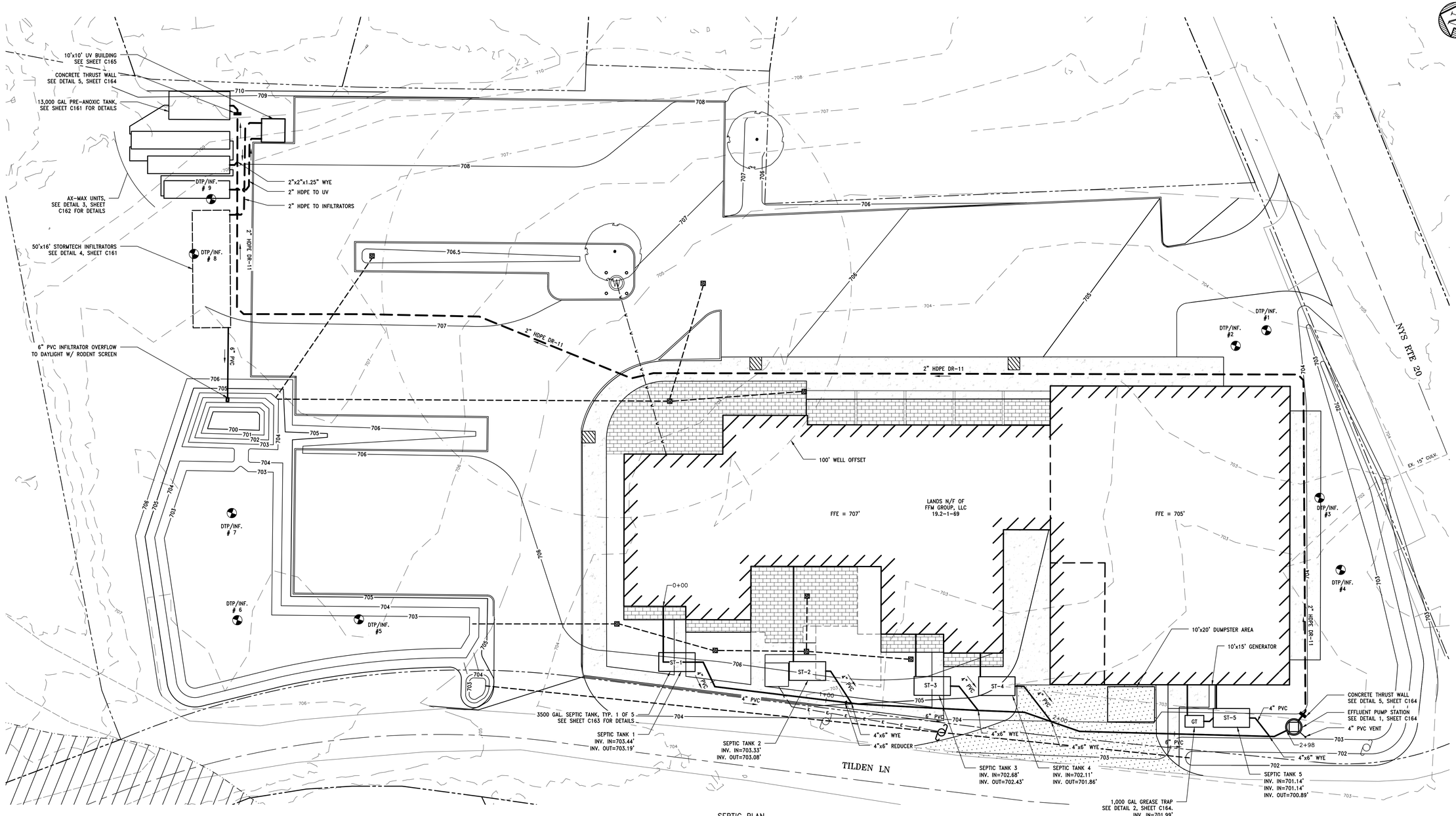

SEPTIC PLAN
1"=20'

GRAPHIC SCALE

20 10 0 10 20 40 80

1 INCH = 20 FEET

UTILITY NOTES:

1. CONTRACTOR SHALL INSTALL ALL GRAVITY SEWER LINES WITH A MINIMUM 1.0% SLOPE POSITIVE DRAINAGE.
2. CONTRACTOR SHALL MAINTAIN ALL MINIMUM WELL OFFSETS TO NYSDOH & NYSDEC STANDARDS.
3. ALL NEW MANHOLES CONSTRUCTED WITHIN PAVED AREAS SHALL HAVE THE TOPS SET FLUSH WITH THE EXISTING PAVEMENT GRADE. IN LANDSCAPED AREAS, ALL FRAMES SHALL BE 0.1' ABOVE GRADE.
4. PROVIDE TWO (2) 45° BENDS INSTEAD OF ONE (1) 90° BEND AT ALL "RIGHT-ANGLE" BENDS IN GRAVITY FLOW PIPING (UNLESS OTHERWISE NOTED) -- PROVIDE WYES WITH 45° BENDS AT ALL "T-TYPE" JUNCTIONS IN GRAVITY FLOW PIPING.
5. AT LEAST 2 DAYS PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL CONTACT ENGINEER IN ORDER TO SCHEDULE INSPECTIONS. IF CONSTRUCTION CEASES FOR MORE THAN 7 DAYS ENGINEER WILL BE RE-CONTACTED AT LEAST 2 DAYS PRIOR TO RESTART OF CONSTRUCTION. ENGINEER SHALL BE NOTIFIED 1 BUSINESS DAY BEFORE BURYING ANY COMPONENT OF THE APPROVED DESIGN.
6. SEE SHEET C110 FOR STORMTECH INFILTRATOR SYSTEM LOCATION. SEE DETAIL 2, SHEET C161 FOR DETAILS.
7. SEE SHEET C161 FOR SEWER PROFILE.

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1	9/2/25	PLANNING BOARD
2	10/1/25	PER PLANNING BOARD COMMENTS
D	10/15/25	FOR DOCKET REVIEW
E	10/29/25	PLANNING BOARD
F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	SK
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Checked By	BJB
Date	6/30/25
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File Name	BM_TILDEN

Sheet Title

SEPTIC PLAN

Sheet No.

C160

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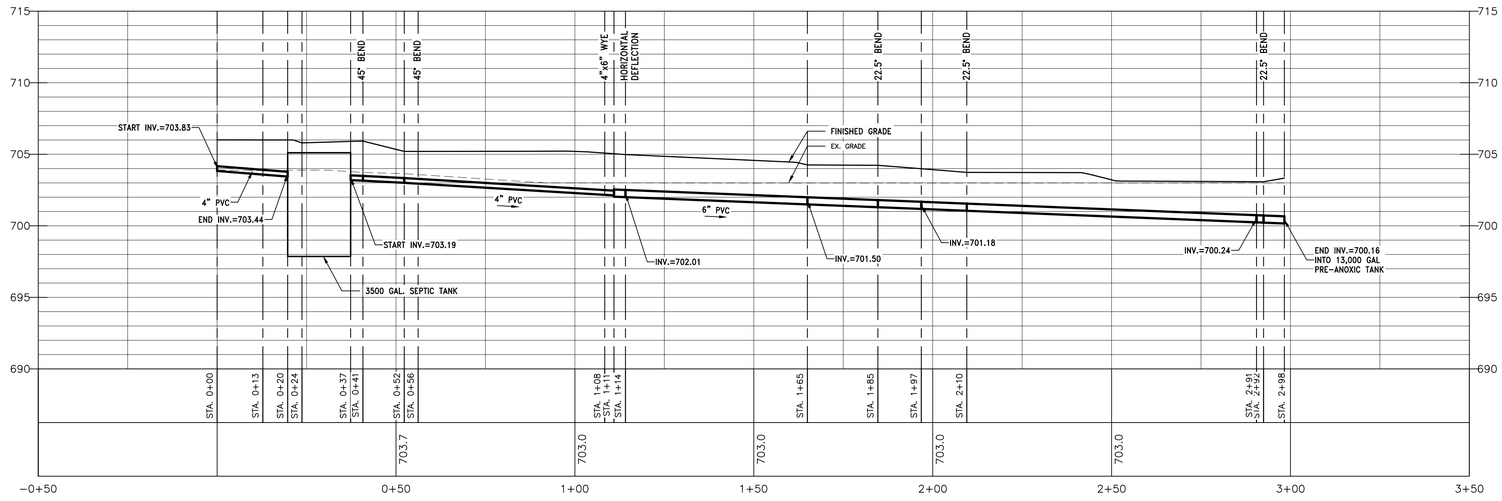
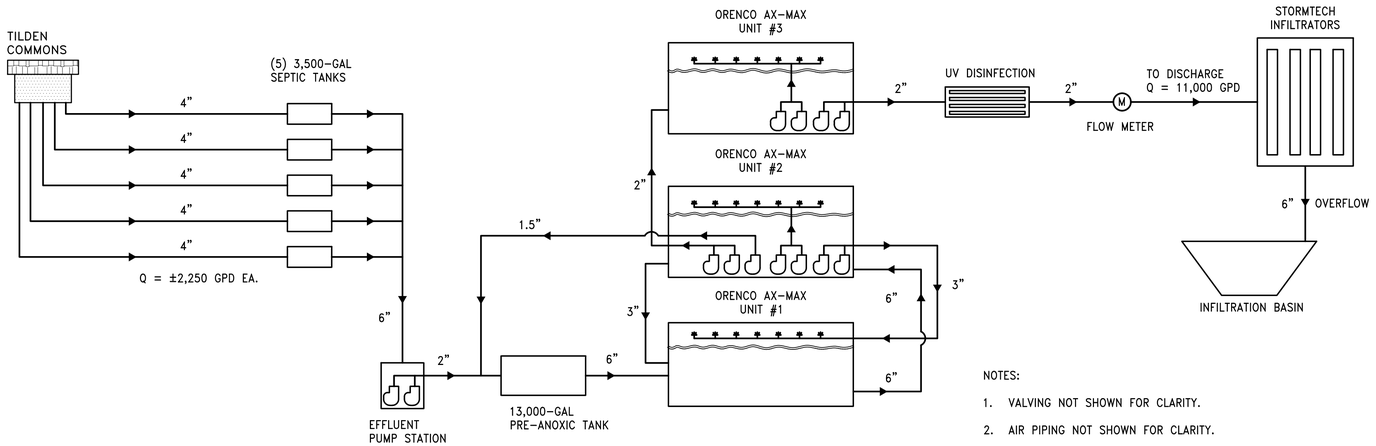


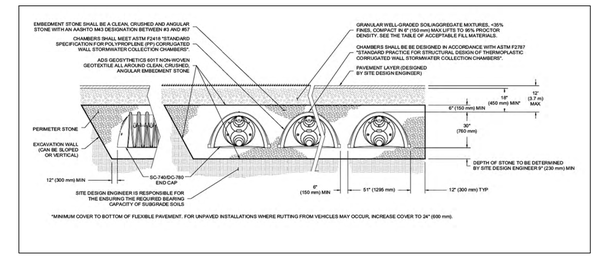
SEPTIC PROFILE
H: 1"=20' / V: 1"=5'



NOTES:

1. VALVING NOT SHOWN FOR CLARITY.
2. AIR PIPING NOT SHOWN FOR CLARITY.

1 C161 PROCESS FLOW DIAGRAM
SCALE: NTS



2 C161 TYPICAL STORMTECH DC-780 INFILTRATOR DETAIL
SCALE: NTS

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Project Number	2024125
Drawn By	LM
Designed By	BJB
Checked By	BJB
Date	6/30/2025
Scale	NTS
File Name	SEPTIC DETAILS

Sheet Title
SANITARY DETAILS

Sheet No.
C161

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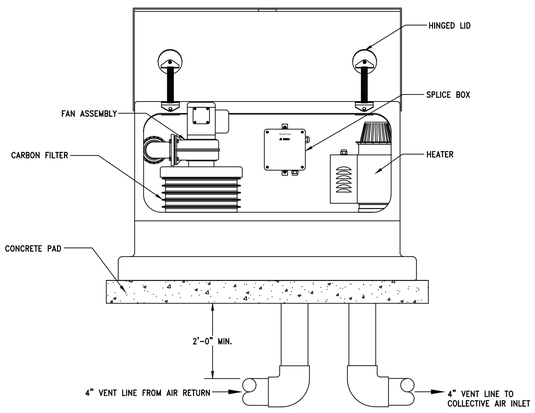
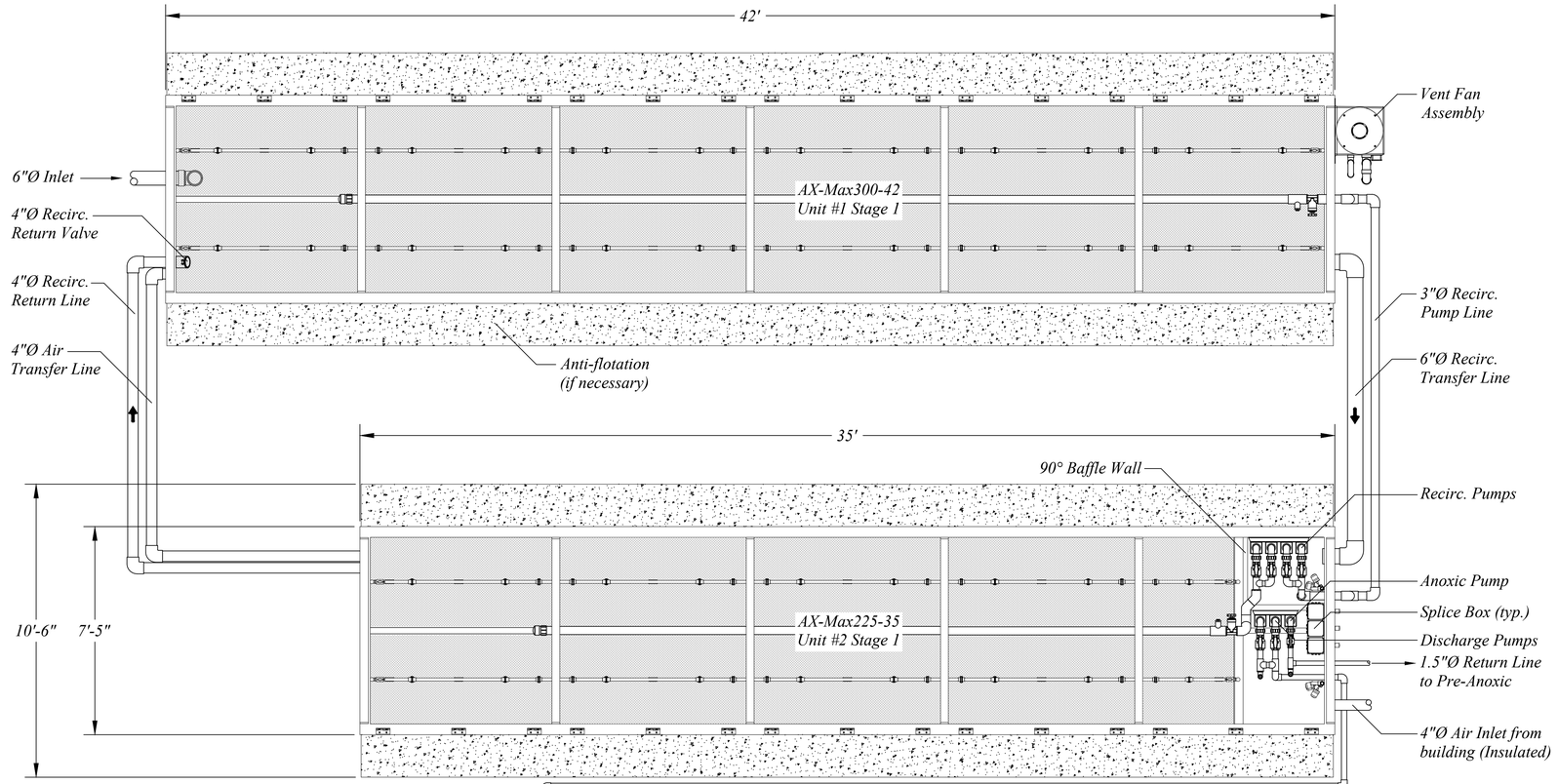
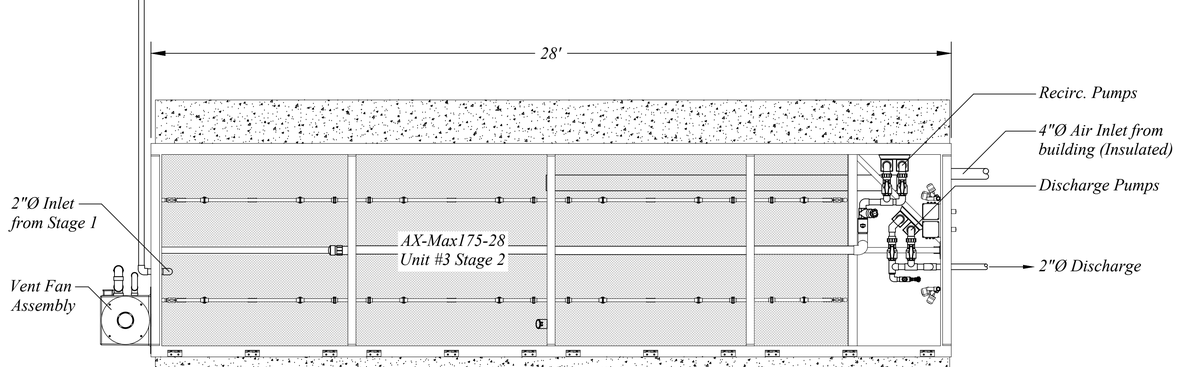
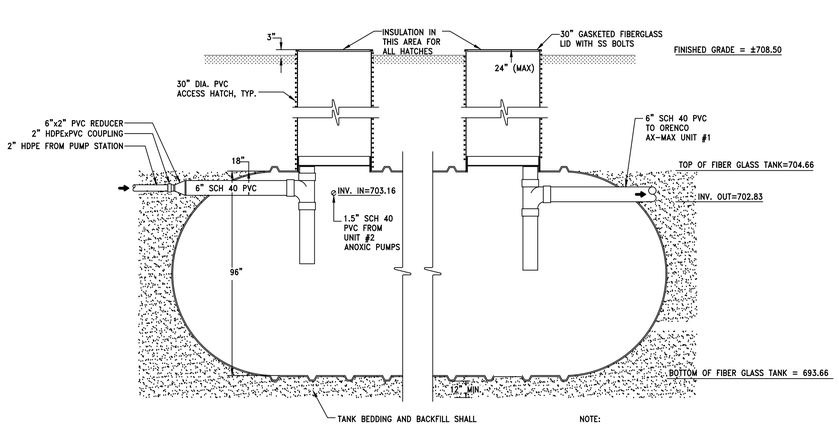


1 C162 ABOVE GROUND FAN ASSEMBLY
SCALE: NTS







2 C162 8' DIAMETER PRE-ANOXIC TANK - 13,000 GALLONS
SCALE: NTS

Design Parameters

Q_{avg} = 11,000 gpd
Q_{max} = 22,000 gpd

Influent (Avg.):
BOD: 250 mg/L
TSS: 250 mg/L
TKN: 65 mg/L
NH3-N: 45 mg/L (Summer)
NH3-N: 45 mg/L (Winter)
pH: 7 - 8

Effluent Limits:
BOD: 5 mg/L
TSS: 10 mg/L
NH3-N: 1.5 mg/L (Summer)
NH3-N: 2.2 mg/L (Winter)
pH: 6 - 9
SS: 0.1 mg/L
DO: 7 mg/L

Note: AX-Max units are designed to withstand lateral loads, uniform loads, and buoyancy forces. Consult Orenco Engineering for spacing requirements and the most up-to-date structural calculations.

3 C162 AX-MAX UNITS
SCALE: NTS

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Project Number	2024125
Drawn By	LM
Designed By	BJB
Checked By	BJB
Date	7/1/25
Scale	NTS
File Name	SEPTIC DETAILS

Sheet Title
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Sheet No.
C162

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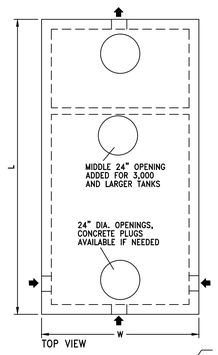
SEPTIC TANK SCHEDULE

TANK NO.	1	2	3	4	5
INVERT IN (FT)	703.44	703.10	702.68	702.50	701.68
INVERT OUT (FT)	703.19	702.85	702.43	702.25	701.43

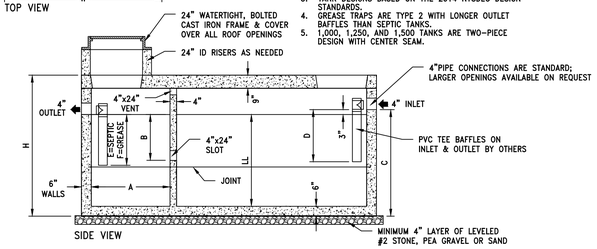


TOP VIEW

GALLONS	L	W	H	LL	A	B	C	D	E	F
3,500	15'-6"	8'	7'-3"	58"	52"	31"	67"	32"	29"	46"
4,000	17'-2"	8'	7'-3"	58"	58"	31"	67"	32"	29"	46"
5,000	18'-8"	9'	7'-3"	58"	70"	31"	67"	32"	29"	46"
6,000	20'-0"	9'-6"	7'-3"	60"	70"	33"	69"	32"	30"	48"

NOTES:

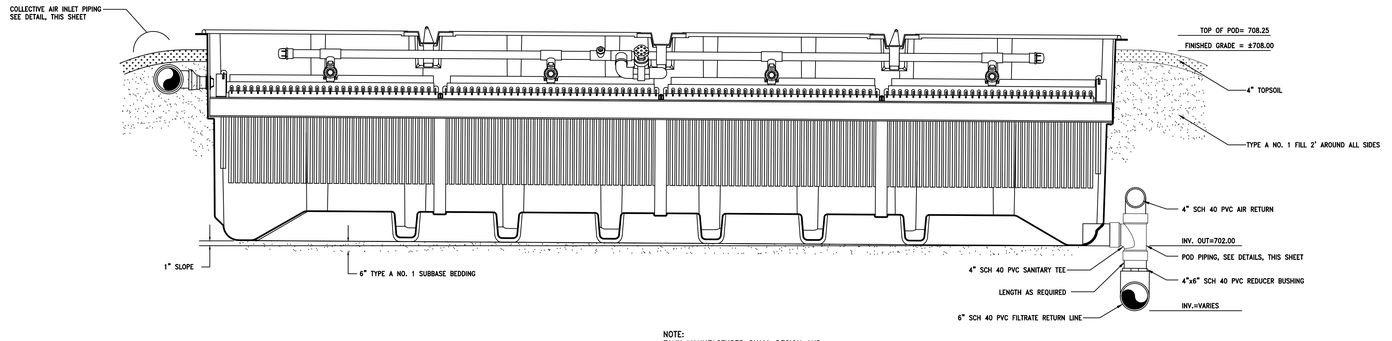
1. EFFLUENT OUTLET FILTERS ARE AVAILABLE AS WELL AS HIGH LEVEL ALARMS.
2. GAS DEFLECTORS ARE AVAILABLE FOR 4" OUTLET PIPES.
3. TANK DESIGNS BASED ON THE 2014 NYSDEC DESIGN STANDARDS.
4. GREASE TRAPS ARE TYPE 2 WITH LONGER OUTLET BAFFLES THAN SEPTIC TANKS.
5. 1,000, 1,250, AND 1,500 TANKS ARE TWO-PIECE DESIGN WITH CENTER SEAM.



SIDE VIEW

1 / C163 TYPICAL SEPTIC TANK DETAIL – 3,500 GAL TO 6,000 GAL

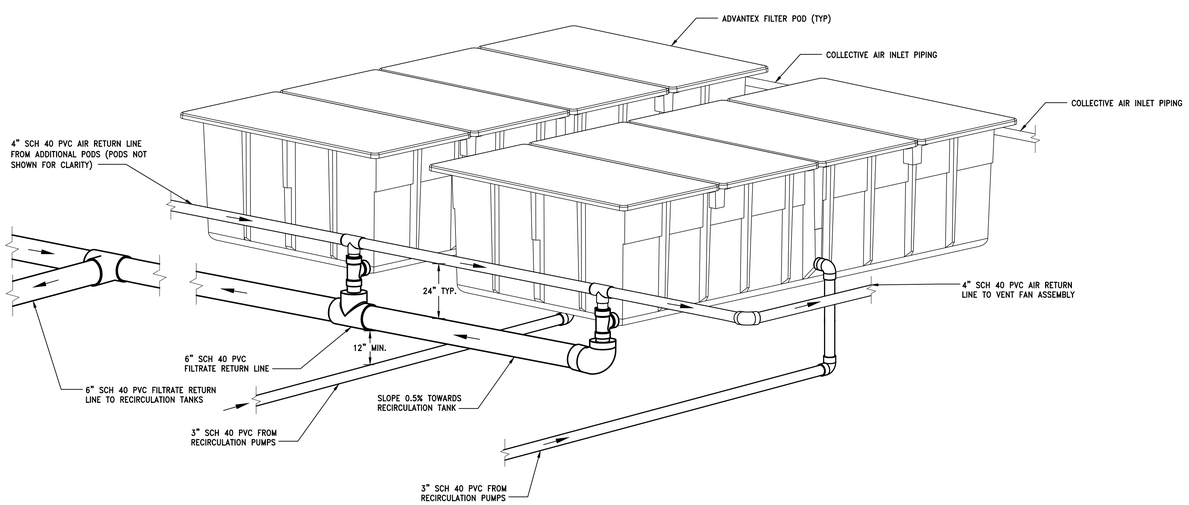
SCALE: NTS



NOTE:
TANK MANUFACTURER SHALL DESIGN AND CONTRACTOR SHALL PROVIDE APPROPRIATE ANTI-FLOATATION MEASURE.

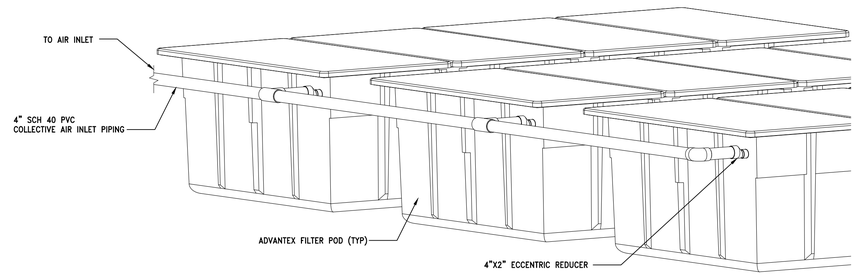
2 / C163 ADVANTEX FILTER DETAIL

SCALE: NTS



3 / C163 TYPICAL POD PIPING DETAIL

SCALE: NTS



4 / C163 COLLECTIVE AIR INLET PIPING

SCALE: NTS

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Project Number	2024125
Drawn By	LM
Designed By	BJB
Checked By	BJB
Date	7/1/25
Scale	NTS
File Name	SEPTIC DETAILS

Sheet Title

SANITARY DETAILS

Sheet No.

C163

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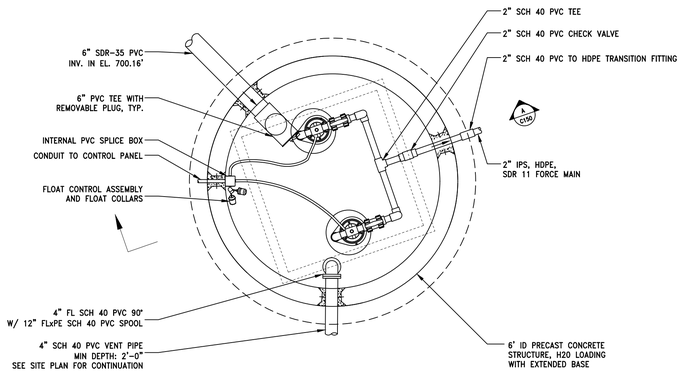
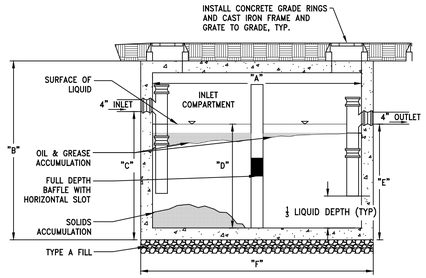


PLAN VIEW

TANK SIZE (GAL.)	DETAIL	A	B	C	D	E	F
~~500~~	~~1~~	~~6'-1 3/4"~~	~~4'-8"~~	~~4'-0"~~	~~3'-8"~~	~~3'-3"~~	~~6'-7"~~
1000	1	7'-6 3/4"	5'-0"	4'-4"	3'-10"	4'-1"	8'-0"

GREASE TRAP DIMENSION CHART

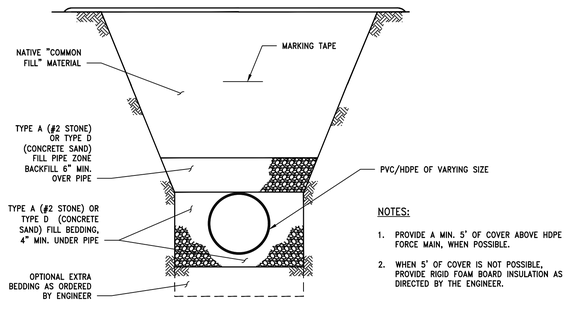


NOTES:

1. GREASE TRAP SIZING: PER NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS MARCH 2014. TABLE D-1.
2. THE OUTLET TEE SHALL HAVE A VERTICAL PIPE RISE 6" ABOVE THE FLOW LINE AND PIPE DROP EXTENDING DOWN TO TYPICALLY THE BOTTOM THIRD OF THE TANK, BUT NO CLOSER THAN 12" FROM THE TANK FLOOR.
3. THE OUTLET TEE SHALL BE LOCATED NO FARTHER THAN 6" FROM THE OUTLET END WALL.
4. TEES SHALL BE LOCATED DIRECTLY UNDER ACCESS MANHOLES.
5. GREASE TRAPS SHALL HAVE ACCESS OPENINGS WITH A 24-INCH MINIMUM DIMENSION OVER THE INFLUENT AND EFFLUENT TEE.
6. THE HORIZONTAL SLOT BETWEEN COMPARTMENTS SHALL BE LOCATED IN THE MIDDLE 25 PERCENT OF THE DISTANCE BETWEEN THE TANK FLOOR AND THE WATERLINE, AND BE A MINIMUM AREA OF 50 SQUARE INCHES.
7. THE INLET COMPARTMENT OF TANK SHALL HAVE A CAPACITY OF 65 TO 75 PERCENT OF THE TOTAL CAPACITY.
8. THE FULL DEPTH BAFFLE SHALL EXTEND FROM THE TANK BOTTOM TO SIX INCHES ABOVE THE FLOW LINE AND SHOULD NOT EXTEND TO THE ROOF INTERIOR.
9. BED GREASE TRAP ON 12" TYPE A FILL.
10. GREASE TRAP INLET PIPE SHALL BE SET AT 3" ABOVE LIQUID LEVEL.
11. PROVIDE FLEXIBLE BOOT FOR ALL PIPE PENETRATIONS.

2 / C164 GREASE TRAP DETAIL
SCALE: NTS

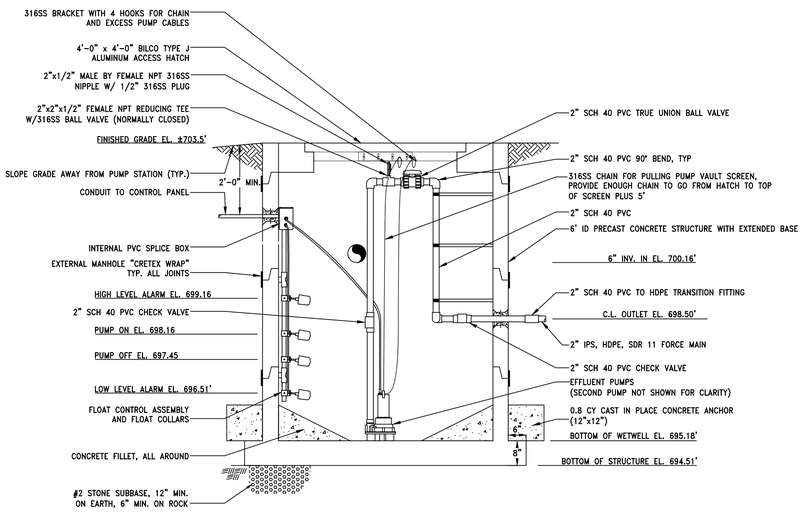
POLY VINYL CHLORIDE PIPE (SDR-35)								
PIPE DIMENSIONS I			TRENCH DIMENSIONS					
NOMINAL SIZE I.D.	MIN. WALL THICKNESS T	BARREL O.D. (AVG.) Bc	I.D./4	Bc/8	Bc/6	Bc/4	Bc/2	Bd (FT.)	ROCK EXCAVATION BELOW PIPE (d)
4"	0.120"	4.215"	1"	1"	1"	1"	2"	3.0'	7"
6"	0.180"	6.275"	2"	1"	2"	2"	4"	3.0'	7"
8"	0.240"	8.400"	2"	2"	2"	3"	5"	3.0'	7"



NOTES:

1. PROVIDE A MIN. 5' OF COVER ABOVE HDPE FORCE MAIN, WHEN POSSIBLE.
2. WHEN 5' OF COVER IS NOT POSSIBLE, PROVIDE RIGID FOAM BOARD INSULATION AS DIRECTED BY THE ENGINEER.

4 / C164 TYPICAL BEDDING DETAILS FOR PVC/HDPE PIPE
SCALE: NTS



SECTION VIEW

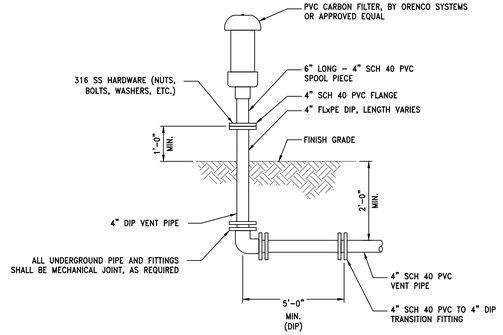
PUMP STATION NOTES:

1. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING ON-SITE ELECTRICAL SERVICES PRIOR TO ORDERING EQUIPMENT.
2. THE PUMPS AND PANEL LISTED BELOW WERE SELECTED WITH THE ASSUMPTION THAT THE ELECTRICAL SERVICE WILL BE 120V/1P.
3. CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED FOR A COMPLETE INSTALLATION.
4. PUMPS SHALL BE 1/2 HP FL51A SUBMERSIBLE EFFLUENT PUMPS BY LIBERTY PUMPS, OR APPROVED EQUAL.
5. DESIGN PUMPING CAPABILITY: 30 GPM @ 24' TDH, TYP. EACH PUMP.
6. PROVIDE LIBERTY DUPLEX CONTROL PANEL, MODEL AE24L=4, OR APPROVED EQUAL.
7. PROVIDE LIBERTY MODEL K001347 FLOAT SWITCHES, OR APPROVED EQUAL.
8. FLOAT RACKS AND VALVES SHALL BE ACCESSIBLE FROM ACCESS HATCH WITHOUT ENTERING TANK.

PUMP STATION STARTUP NOTES:

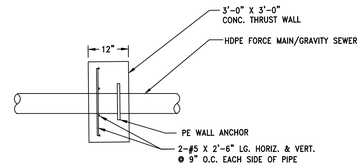
1. STARTUP: CONTRACTOR SHALL START PUMPS/MOTORS AND MAKE ADJUSTMENTS REQUIRED TO PLACE THE SYSTEM IN PROPER OPERATING CONDITION.
2. CONTRACTOR SHALL CONDUCT A FLOW TEST FOR EACH PUMP TO DETERMINE THAT THE PUMPS ARE PERFORMING ACCORDING TO THEIR RESPECTIVE PUMP CURVE AND SYSTEM CURVE. CONTRACTOR SHALL PROVIDE ALL MATERIALS (INCLUDING WATER) AND LABOR NECESSARY TO PERFORM THE PUMP FLOW TESTING. CONTRACTOR SHALL PROVIDE THE MEANS AND METHODS FOR MEASURING THE AVERAGE DISCHARGE THE FORCE MAIN FOR EACH PUMP UNDER NORMAL OPERATING CONDITIONS.ONE ACCEPTABLE METHOD WOULD BE TO MEASURE THE CHANGE IN THE WATER ELEVATION IN THE PUMP STATION WET WELL AT A SPECIFIC TIMING INTERVAL.

1 / C150 EFFLUENT PUMP STATION DETAIL
SCALE: 3/8" = 1'-0"



3 / C164 SEWER VENT DETAIL
SCALE: NTS

NOTE:
1. WHERE CALLED OUT ON PLANS. PROVIDE BOLLARDS AROUND VENT FOR PROTECTION.



5 / C164 HDPE THRUST WALL DETAIL
SCALE: N.T.S

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FACILITY OPERATIONS
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(518) 234-4028
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Consultant

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NEW LEBANON DEVELOPMENT, LLC.
COLUMBIA COUNTY NEW YORK STATE

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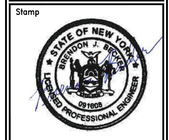
Stamp



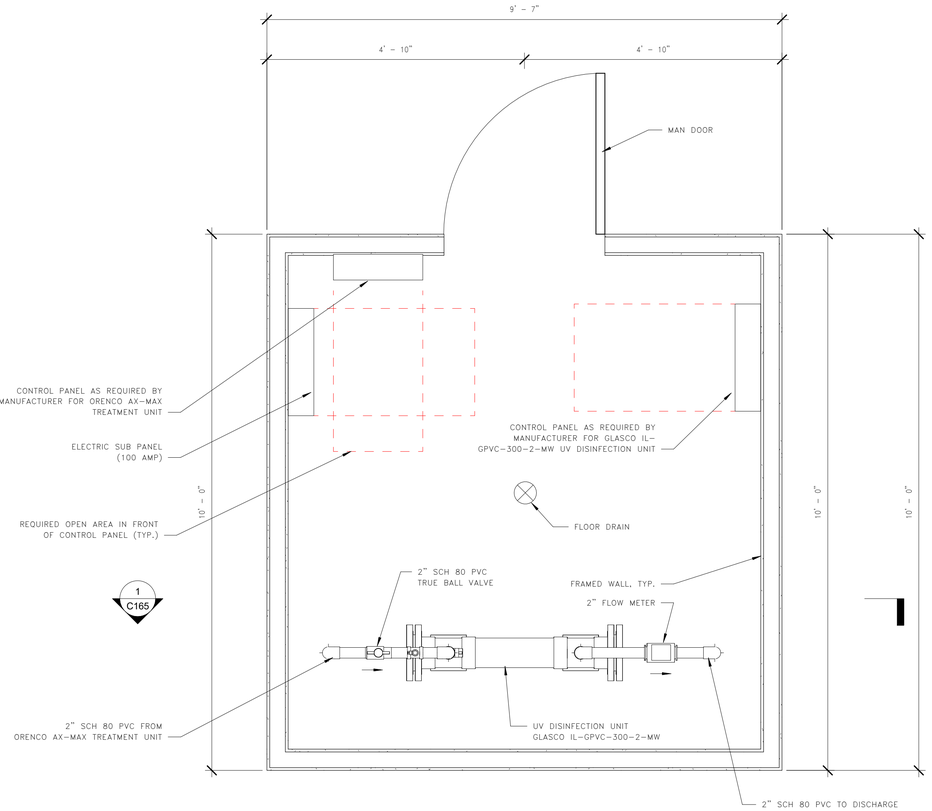
Issue Rev.	Date	Remarks
B	7/1/25	PLANNING BOARD
C	8/4/25	PER PLANNING BOARD COMMENTS
D	10/16/25	FOR SEC REVIEW
E	10/29/25	PLANNING BOARD
F	12/2/25	PLANNING BOARD

Project Number	2024125
Drawn By	LM
Designed By	BJB
Checked By	BJB
Date	7/1/25
Scale	NTS
File Name	SEPTIC DETAILS

Sheet Title
SANITARY DETAILS

Sheet No.
C164

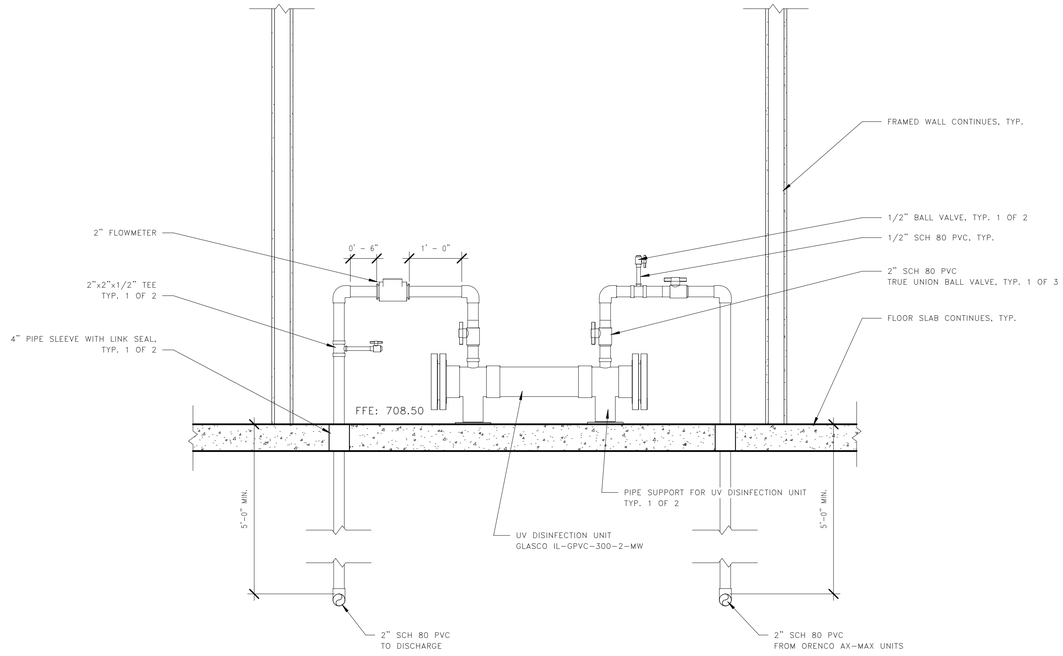
J:\PROJECTS\2024\2024125\PLOT\2024125 Reg 1 SEPTIC DETAILS.dwg, 12/4/2025 12:16:11 PM, APPROVED, LM, 1:1, 12/4/2025 12:16:11 PM



NOTE:

1. UV ROOM LOCATION AND ORIENTATION IN BUILDING TO BE DETERMINED

FLOOR PLAN
3/4" = 1'-0"



UV SYSTEM SECTION
3/4" = 1'-0"

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ENGINEERS - PLANNERS
FACILITY OPERATIONS
197 ELM ST., COBLESKILL, NY 12043
(518) 234-4028
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STATE OF NEW YORK
BRENDON J. BROWN
087905
LICENSED PROFESSIONAL ENGINEER

Issue	Rev.	Date	Remarks
B		7/1/25	PLANNING BOARD
C		8/4/2025	PER PLANNING BOARD COMMENTS
D		10/16/25	FOR TEC REVIEW
E		10/29/25	PLANNING BOARD
F		12-2-25	PLANNING BOARD

Project Number	2024125
Drawn By	AS
Designed By	BJB
Checked By	BJB
Date	12-5-19
Scale	3/4" = 1'-0"
File Name	UV TREATMENT...

Sheet Title

UV SYSTEM PLAN AND SECTION

Sheet No.

C165

12/3/2025 2:07:18 PM

K:\LAP\SUBDIV\2024125\mxd\UV Treatment.mxd

TILDEN COMMONS

538 US ROUTE 20
NEW LEBANON, NY 12125

SCOPE OF WORK: NEW CONSTRUCTION OF A THREE-STORY MIXED-USE BUILDING INCLUDING RETAIL AND 41 RESIDENTIAL APARTMENTS.

ARCHITECTURE DRAWING LIST	
SHEET NUMBER	**SHEET NAME**
C-002	COVER SHEET
G-005	AREA SUMMARY
G-014	CODE ANALYSIS SECTION
A-100	SITE PLAN
A-101	1ST FLOOR PLAN
A-110	ROOF PLAN
A-201	EXTERIOR ELEVATIONS
A-202	EXTERIOR ELEVATIONS
A-203	EXTERIOR ELEVATIONS

Grand total: 9

	ENGINEERING DRAWING LIST
SHEET NO.	DRAWING INDEX
C10	TITLE PAGE, LOCATION MAP AND DRAWING INDEX
C30	WORK ZONE TRAFFIC CONTROL DETAILS
C31	WORK ZONE TRAFFIC CONTROL DETAILS
C35	STORMWATER POLLUTION PREVENTION NOTES
C36	EROSION AND SEDIMENT CONTROL DETAILS
C37	EROSION AND SEDIMENT CONTROL DETAILS
C100	EXISTING CONDITIONS & DEMOLITION PLAN
C110	SITE PLAN
C115	GRADING
C125	TURNING RADIUS PLAN
C130	NYSDOT ENTRANCE GENERAL PLAN
C131	NYSDOT ENTRANCE SITE PLAN & DETAILS
C132	NYSDOT ENTRANCE NOTES
C150	STORMWATER DETAILS
C151	STORMWATER DETAILS
C155	SITE DETAILS
C156	SITE DETAILS
C160	SEPTIC PLAN
C161	SANITARY DETAILS
C162	SANITARY DETAILS
C163	SANITARY DETAILS
C164	SANITARY DETAILS
C165	UV SYSTEM PLAN AND SECTION

SITE OWNER:
TILDEN PROJECT LLC
MANAGING PARTNER: JOSH YOUNG
58 POOL HILL ROAD
NEW LEBANON, NY 12125

DEVELOPMENT TEAM:
HUDSON RIVER HOUSING, INC
JAVIER GOMEZ
VP OPERATIONS
MARY LINGE
VP RE DEVELOPMENT
313 MILL STREET
POUGHKEEPSIE, NY 12601

AND

TILDEN DEVELOPMENT LLC
JOSH YOUNG & ARIEL GOLDSTEIN
MANAGING PARTNERS
58 POOL HILL ROAD
NEW LEBANON, NY 12125

ARCHITECT:
ARIEL GOLDSTEIN, AIA
SUBSTRATE ARCHTECTURE LLC
33 UPPER HOLLOW ROAD
HILLSDALE, NY 12529

ENGINEER:
BRENDON BECKER, PE
LAMONT ENGINEERS
197 ELM STREET
COBLESKILL, NY 12043

LANDSCAPE DESIGNER:
JOCINE VELASQUEZ
217 CHAIR FACTORY ROAD
NEW LEBANON, NY 12125

LIGHTING DESIGNER:
SARA SCHONOUR
LUXSI
555 US ROUTE 20
NEW LEBANON, NY 12125

GENERAL CONTRACTOR:
PIKE CONSTRUCTION
ONE CIRCLE STREET
ROCHESTER, NY 14607

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NEW LEBANON, NY 12125

ENGINEER:
LAMONT ENGINEERS
197 ELM STREET
COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

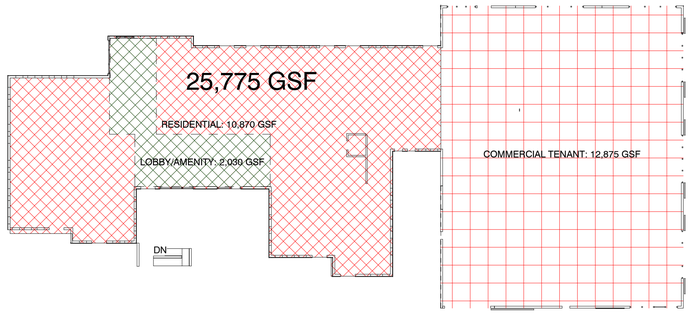
STAMPS:

NORTH:

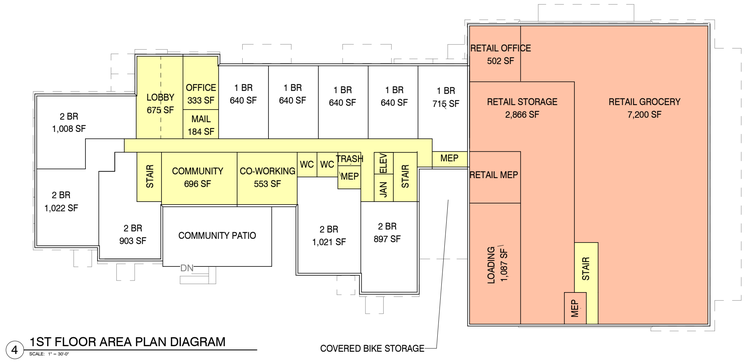
PROJECT:
Tilden Commons

Drawing Tile:
COVER SHEET

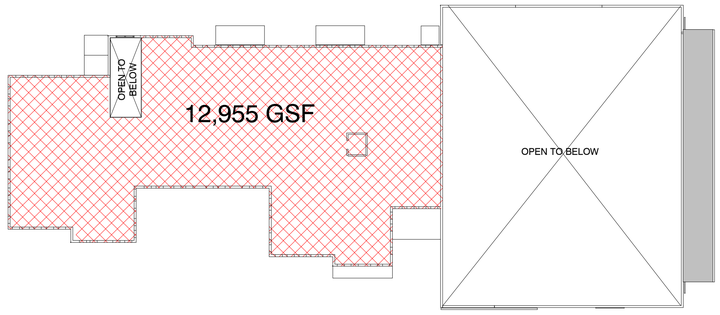
Date: 12/03/2025
Scale:
Seal/Signature:
Drawing #: C-002
Sheet #: of



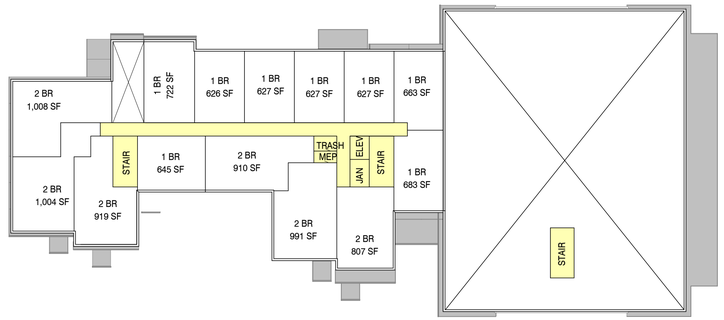
1 1ST FLR GSF
SCALE: 1" = 30'-0"



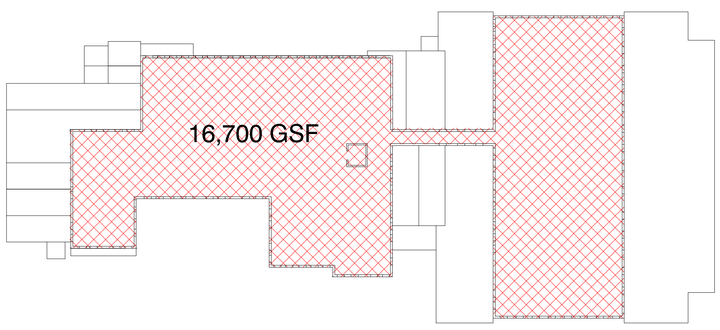
4 1ST FLOOR AREA PLAN DIAGRAM
SCALE: 1" = 30'-0"



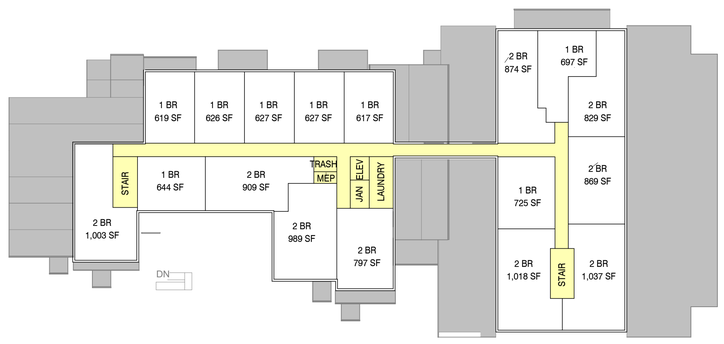
2 2ND FLR GSF
SCALE: 1" = 30'-0"



5 2ND FLOOR AREA PLAN DIAGRAM
SCALE: 1" = 30'-0"



3 3RD FLR GSF
SCALE: 1" = 30'-0"



6 3RD FLOOR AREA PLAN DIAGRAM
SCALE: 1" = 30'-0"

SHEET NOTES

1. NET AREAS SHOWN ARE TO INSIDE FACE OF EXTERIOR WALL AND CENTERLINE OF INTERIOR WALL PER HCR GUIDELINES.

GROSS BUILDING AREA (TO SLAB EDGE): 55,430 GSF

RESIDENTIAL GSF
43,325 (77%)

COMMERCIAL GSF
12,875 (23%)

NET COMMON AREA / NET RESIDENTIAL AREA
8,755 NSF / 32,495 NSF = 26.9%

MEETS HCR TABLE 3.4.1
ALLOWABLE RESIDENTIAL COMMON SPACE RATIO
25% NEW CONSTRUCTION OUTSIDE NYC
+ 2% CO-WORKING AMENITY SPACE

UNIT MIX

1 BR	617 SF
1 BR	619 SF
1 BR	626 SF
1 BR	626 SF
1 BR	627 SF
1 BR	627 SF
1 BR	627 SF
1 BR	627 SF
1 BR	640 SF
1 BR	640 SF
1 BR	640 SF
1 BR	640 SF
1 BR	644 SF
1 BR	645 SF
1 BR	663 SF
1 BR	683 SF
1 BR	697 SF
1 BR	715 SF
1 BR	722 SF
1 BR	725 SF
1 BR: 21	13,677 SF

UNIT MIX

2 BR	797 SF
2 BR	807 SF
2 BR	829 SF
2 BR	869 SF
2 BR	874 SF
2 BR	897 SF
2 BR	903 SF
2 BR	909 SF
2 BR	910 SF
2 BR	919 SF
2 BR	989 SF
2 BR	991 SF
2 BR	1,003 SF
2 BR	1,004 SF
2 BR	1,008 SF
2 BR	1,008 SF
2 BR	1,018 SF
2 BR	1,021 SF
2 BR	1,022 SF
2 BR	1,037 SF
2 BR: 20	18,817 SF
Grand total: 41	32,494 SF

NONRESIDENTIAL INTERIOR GROSS AREA

COMMERCIAL TENANT	
LOADING	1,087 SF
MEP	122 SF
RETAIL GROCERY	7,200 SF
RETAIL MEP	463 SF
RETAIL OFFICE	502 SF
RETAIL STORAGE	2,866 SF
	12,240 SF

COMMON	
CO-WORKING	553 SF
COMMUNITY	696 SF
CORRIDOR	3,166 SF
ELEV	230 SF
JAN	281 SF
LAUNDRY	217 SF
LOBBY	675 SF
MAIL	184 SF
MEP	284 SF
OFFICE	333 SF
STAIR	1,776 SF
TRASH	175 SF
WC	176 SF
	8,746 SF

ADDITIONAL GROSS AREA TO INCLUDE EXT WALL

1 BR EW	240 SF
2 BR EW	534 SF
COMMUNITY EW	29 SF
CORRIDOR EW	17 SF
COWORKING EW	23 SF
LOBBY EW (INCLUDES 2X FOR DOUBLE HT SPACE)	56 SF
MEP EW	13 SF
OFFICE EW	16 SF
RETAIL EW (INCLUDES 2X FOR DOUBLE HT SPACE)	716 SF
TENANT/UNIT EW	36 SF
	1,681 SF

UNIT COUNT BY FLOOR

1ST FLOOR RESIDENTIAL

1 BR	640 SF
1 BR	640 SF
1 BR	640 SF
1 BR	640 SF
1 BR	715 SF
5	3,277 SF
2 BR	897 SF
2 BR	903 SF
2 BR	1,008 SF
2 BR	1,021 SF
2 BR	1,022 SF
5	4,852 SF
1ST FLOOR RESIDENTIAL:	8,128 SF
10	

UNIT COUNT BY FLOOR

2ND FLOOR

1 BR	626 SF
1 BR	627 SF
1 BR	627 SF
1 BR	627 SF
1 BR	645 SF
1 BR	663 SF
1 BR	683 SF
1 BR	722 SF
8	5,219 SF
2 BR	807 SF
2 BR	910 SF
2 BR	919 SF
2 BR	991 SF
2 BR	1,004 SF
2 BR	1,008 SF
6	5,640 SF
2ND FLOOR:	10,859 SF
14	

UNIT COUNT BY FLOOR

3RD FLOOR

1 BR	617 SF
1 BR	619 SF
1 BR	626 SF
1 BR	627 SF
1 BR	627 SF
1 BR	644 SF
1 BR	697 SF
1 BR	725 SF
8	5,182 SF
2 BR	797 SF
2 BR	829 SF
2 BR	869 SF
2 BR	874 SF
2 BR	909 SF
2 BR	989 SF
2 BR	1,003 SF
2 BR	1,018 SF
2 BR	1,037 SF
9	8,325 SF
3RD FLOOR:	13,507 SF
17	
Grand total: 41	32,494 SF

0 15' 30' 60'
0 2"
1" = 30'-0"

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NEW LEBANON, NY 12125

ENGINEER:
LAMONT ENGINEERS
197 ELM STREET
COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

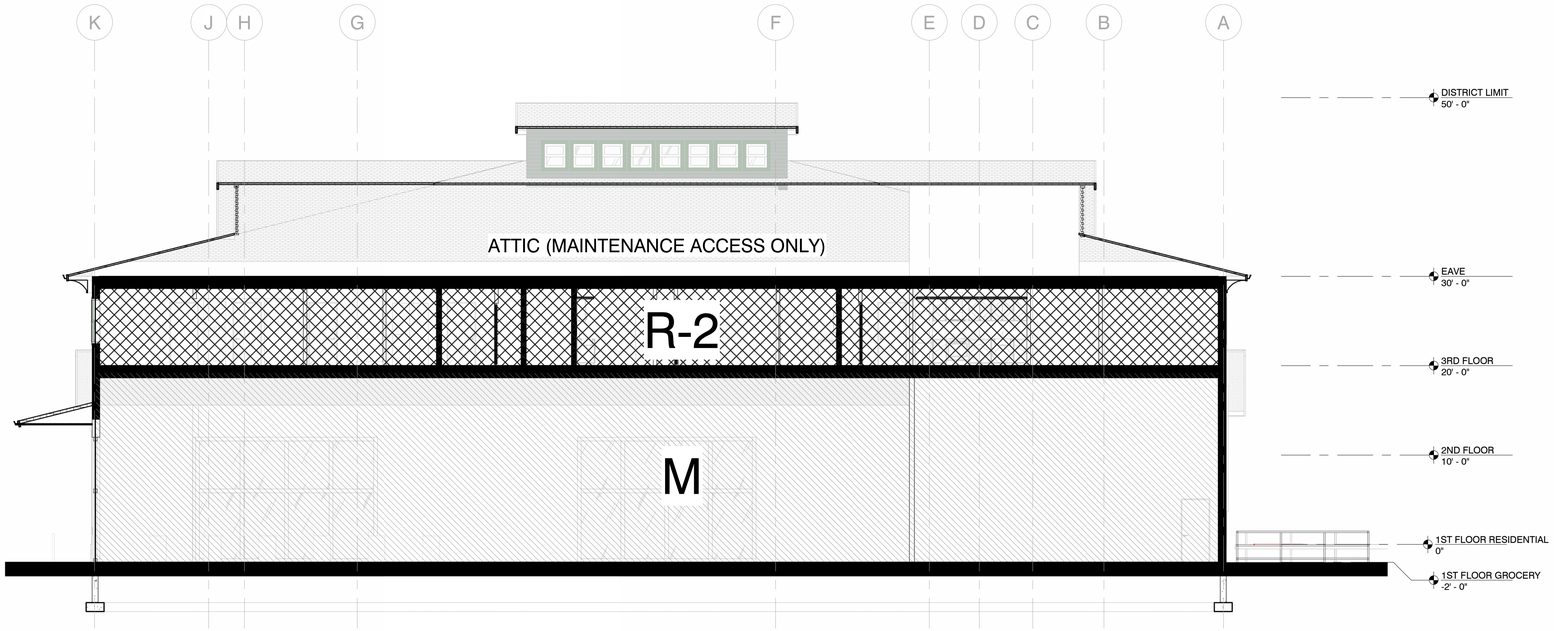
AREA SUMMARY

Date: 12/03/2025 **Scale:** As indicated

Seal/Signature:

Drawing #: G-005

Sheet #: of



1 CODE REVIEW BUILDING SECTION EW
SCALE: 1/8" = 1'-0"

CODE PLAN LEGEND

88888 SF / ### = ###
OCCUPANCY TAG:
SPACE AREA
OCCUPANT LOAD FACTOR
NUMBER OF OCCUPANTS

EXIT PATH

1 HOUR FIRE RATED ASSEMBLY

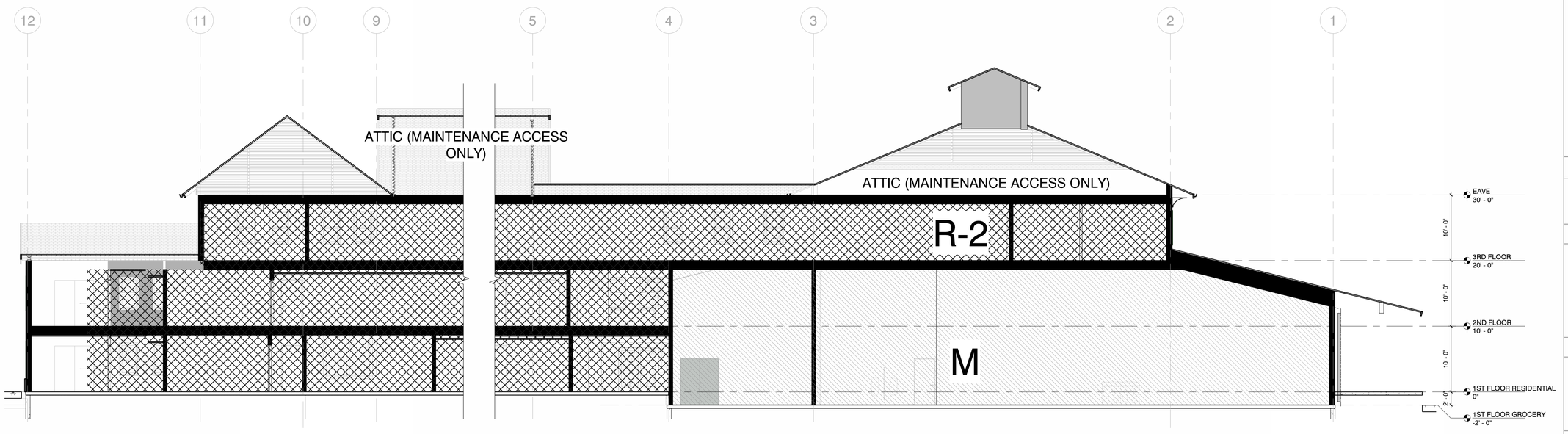
60M
UL RATED FIRE DOOR AND FRAME WITH RATING AS INDICATED
- SEE SHEET G-010

FEC
FIRE EXTINGUISHER CABINET AND EXTINGUISHER - SEE SPECIFICATIONS

FE
SURFACE MOUNTED FIRE EXTINGUISHER - SEE SPECIFICATIONS

S#
SURFACE MOUNTED SIGN - SEE 3/F101

NOTE: SEE ELECTRICAL FOR ILLUMINATED EXIT SIGNS.



2 CODE REVIEW BUILDING SECTION NS Copy 1
SCALE: 1/8" = 1'-0"

0 4' 8' 16'
0 2'
1/8" = 1'-0"

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COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

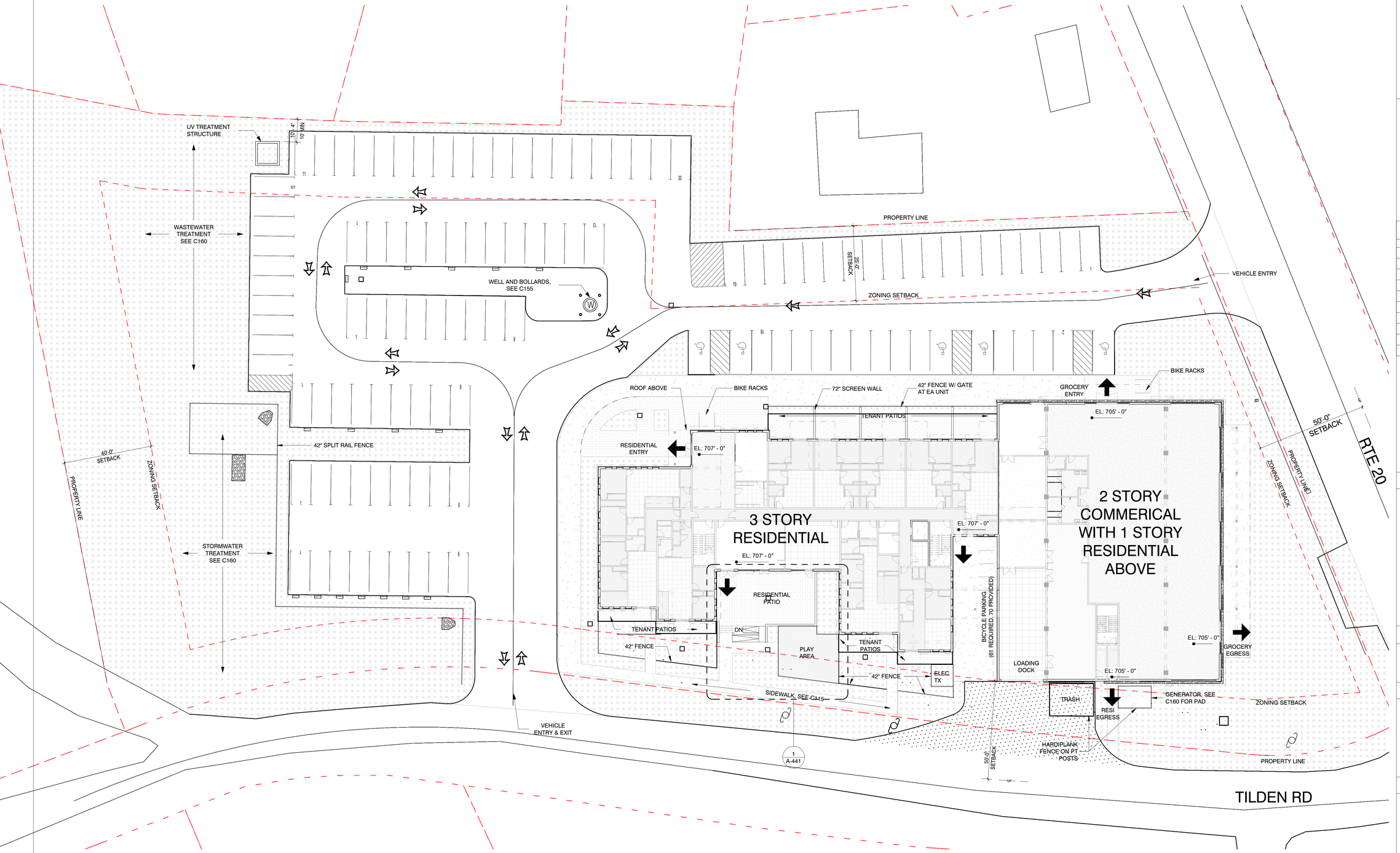
CODE ANALYSIS SECTION

Date: 12/03/2025 **Scale:** 1/8" = 1'-0"

Seal/Signature:

Drawing #: G-014

Sheet #: of



1 SITE PLAN
SCALE: 1" = 20'-0"

0 10' 20' 40'
0 2'
1" = 20'-0"

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COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

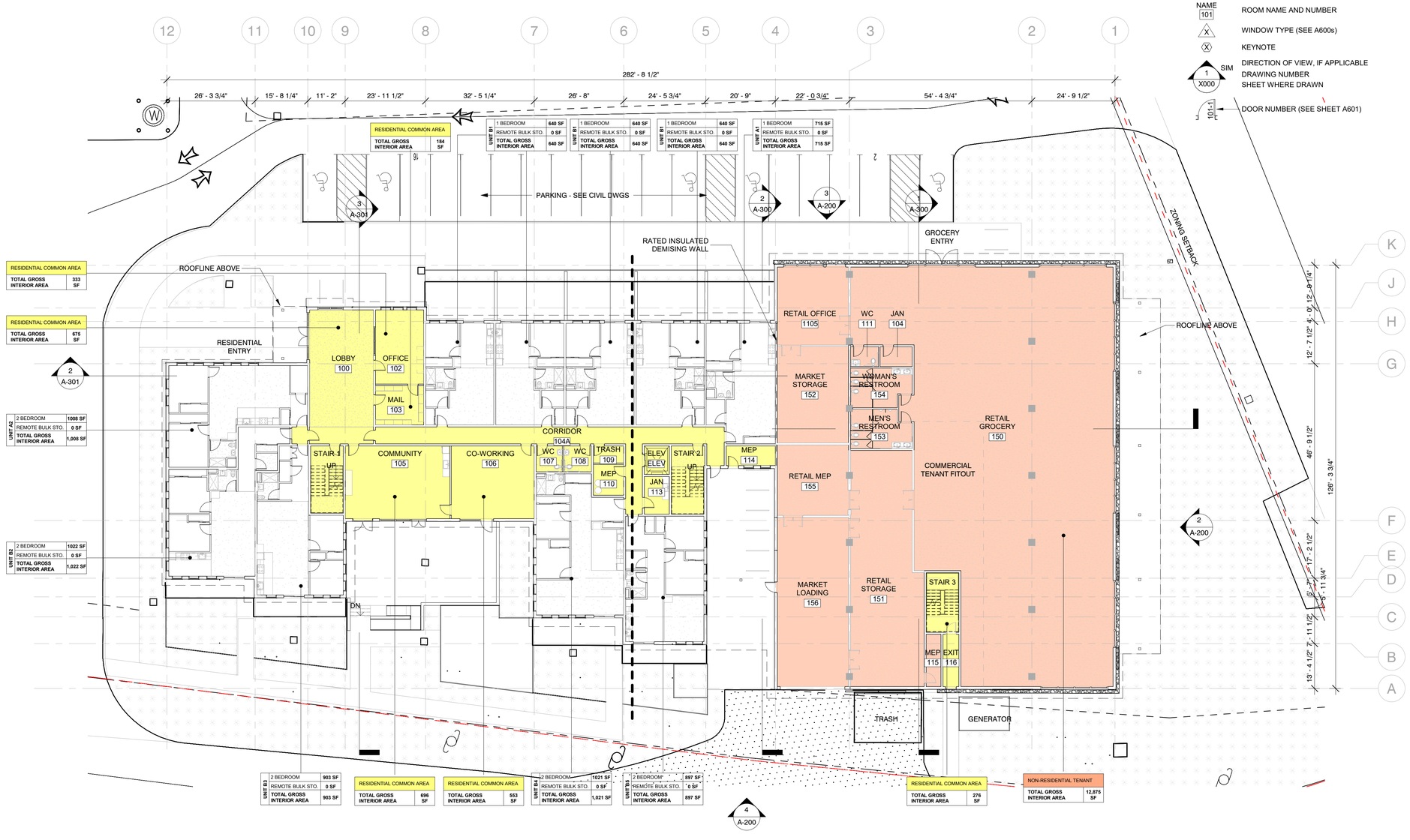
STAMPS:

NORTH:

PROJECT:
Tilden Commons

Drawing Tile:
SITE PLAN

Date: 12/03/2025
Scale: 1" = 20'-0"
Seal/Signature:
Drawing #: A-100
Sheet #: of



1 1ST FLOOR PLAN
SCALE: 1/16" = 1'-0"

PLAN LEGEND

- W## / 1 — ASSEMBLY TYPE (SEE ASSEMBLIES SHEET) / ASSEMBLY MODIFIER, PER TYPE
- NAME / 101 — ROOM NAME AND NUMBER
- X — WINDOW TYPE (SEE A600s)
- X — KEYNOTE
- 1 / X000 SIM — DIRECTION OF VIEW, IF APPLICABLE / DRAWING NUMBER / SHEET WHERE DRAWN
- 101 — DOOR NUMBER (SEE SHEET A601)

0 8' 16' 32'
0 2'
1/16" = 1'-0"

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NEW LEBANON, NY 12125

ENGINEER:
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197 ELM STREET
COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

1ST FLOOR PLAN

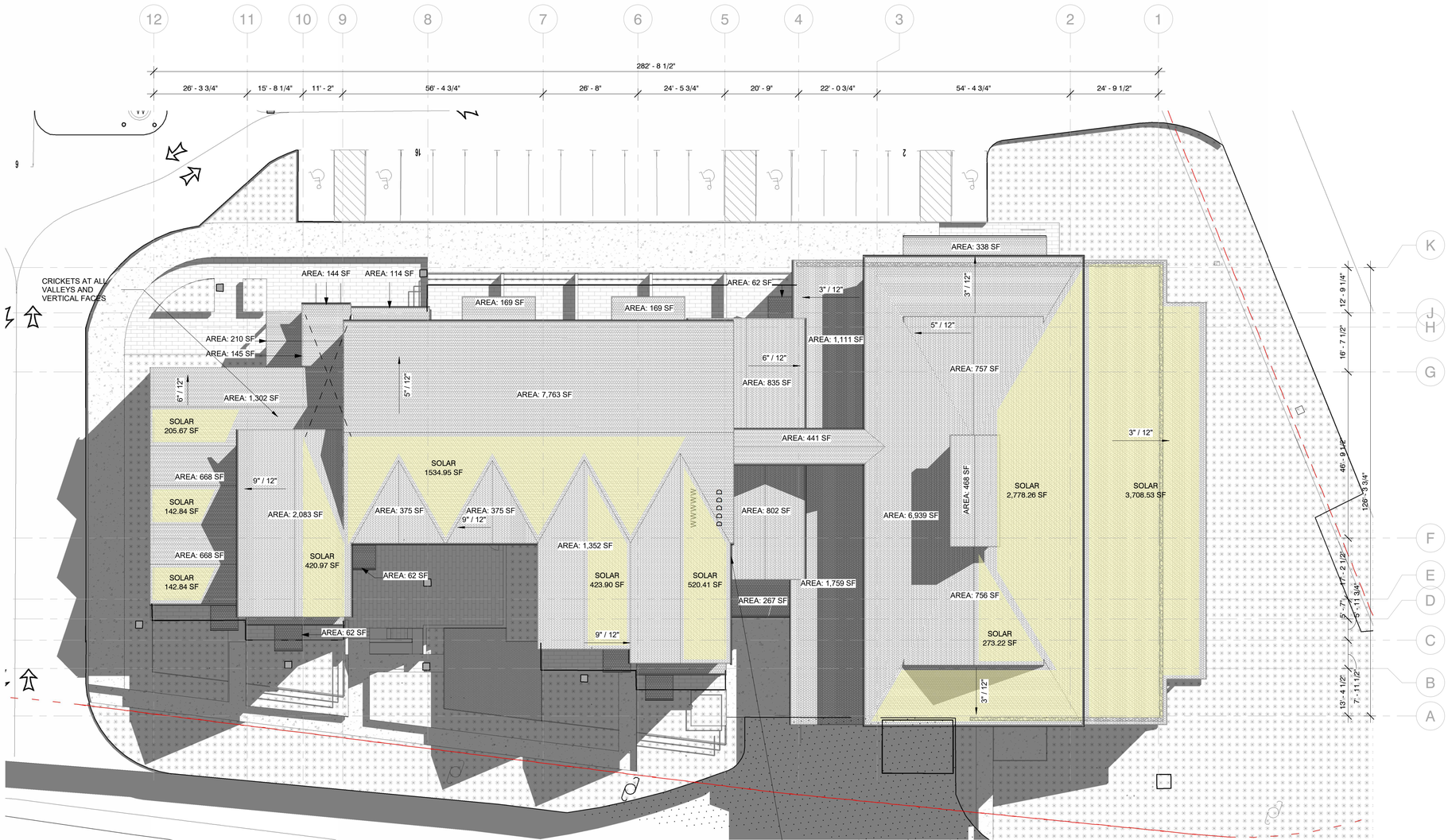
Date: 12/03/2025

Scale: As indicated

Seal/Signature:

Drawing #: A-101

Sheet #: of



1 ROOF PLAN
SCALE: 1/16" = 1'-0"

TOTAL SHINGLED ROOF AREA
AREA
370 SF
90 SF
110 SF
280 SF
150 SF
340 SF
210 SF
270 SF
340 SF
750 SF
440 SF
470 SF
1,340 SF
1,510 SF

TOTAL SHINGLED ROOF AREA
AREA
800 SF
840 SF
1,110 SF
1,300 SF
1,350 SF
1,760 SF
2,080 SF
2,400 SF
4,820 SF
6,940 SF
7,760 SF
37,840 SF

SOLAR ANALYSIS SCHEDULE	
TOTAL AREA	10,295 SF

0 8' 16' 32'
0 1' 2'
1/16" = 1'-0"

NOT FOR CONSTRUCTION

SUBSTRATE

SUBSTRATE ARCHITECTURE LLC
33 UPPER HOLLOW ROAD
HILLSDALE, NY 12529

WWW.SUBSTRATEAC.COM
ARI@SUBSTRATEAC.COM
646-282-8253

OWNER:
NEW LEBANON DEVELOPMENT LLC
58 POOL HILL ROAD
NEW LEBANON, NY 12125

ENGINEER:
LAMONT ENGINEERS
197 ELM STREET
COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

ROOF PLAN

Date: 12/03/2025

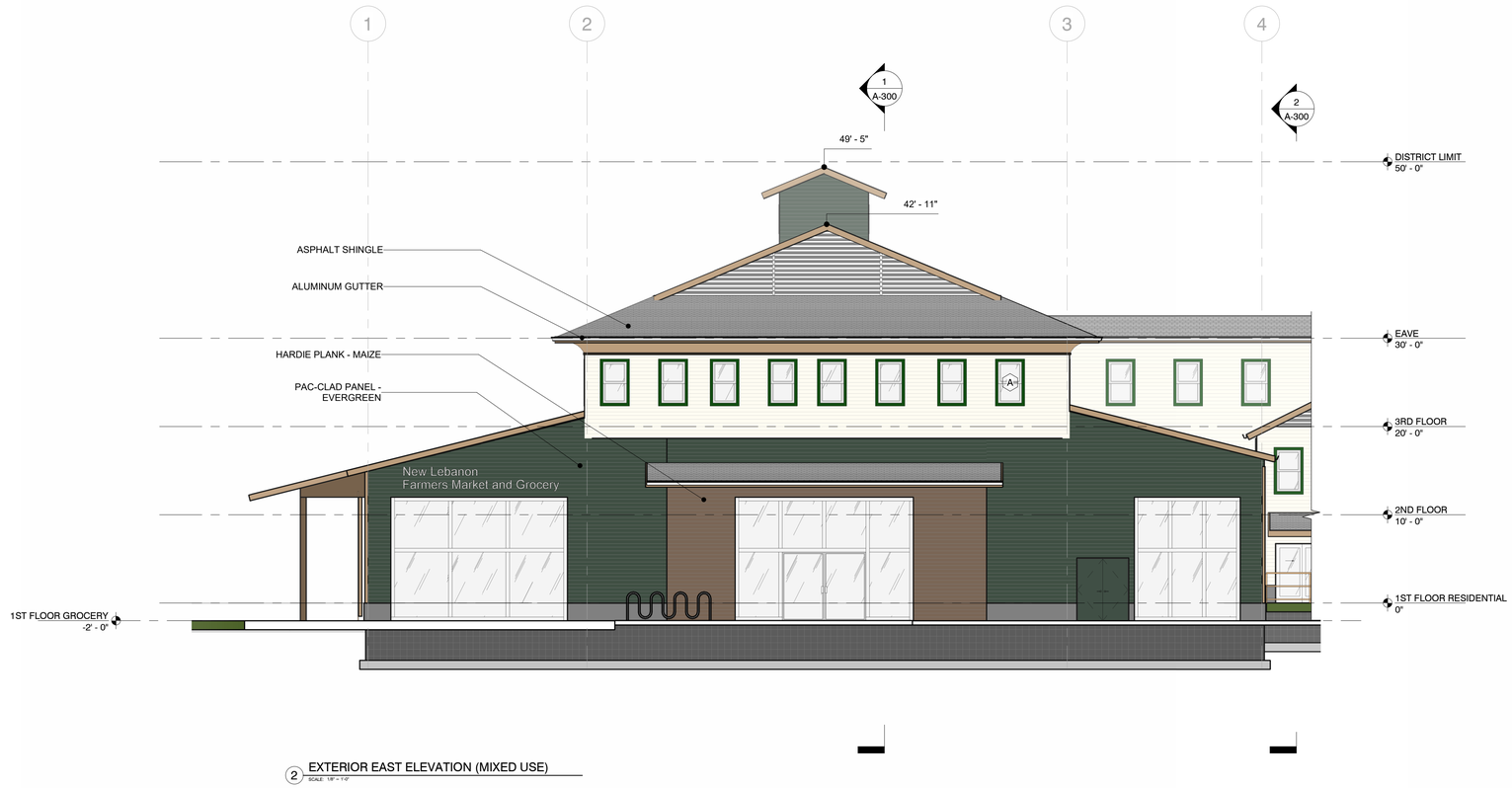
Scale: As indicated

Seal/Signature:

Drawing #: A-110

Sheet #: of

1 EXTERIOR EAST ELEVATION (RESIDENTIAL)
SCALE: 1/8" = 1'-0"



2 EXTERIOR EAST ELEVATION (MIXED USE)
SCALE: 1/8" = 1'-0"

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518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

EXTERIOR
ELEVATIONS

Date: 09/11/2025

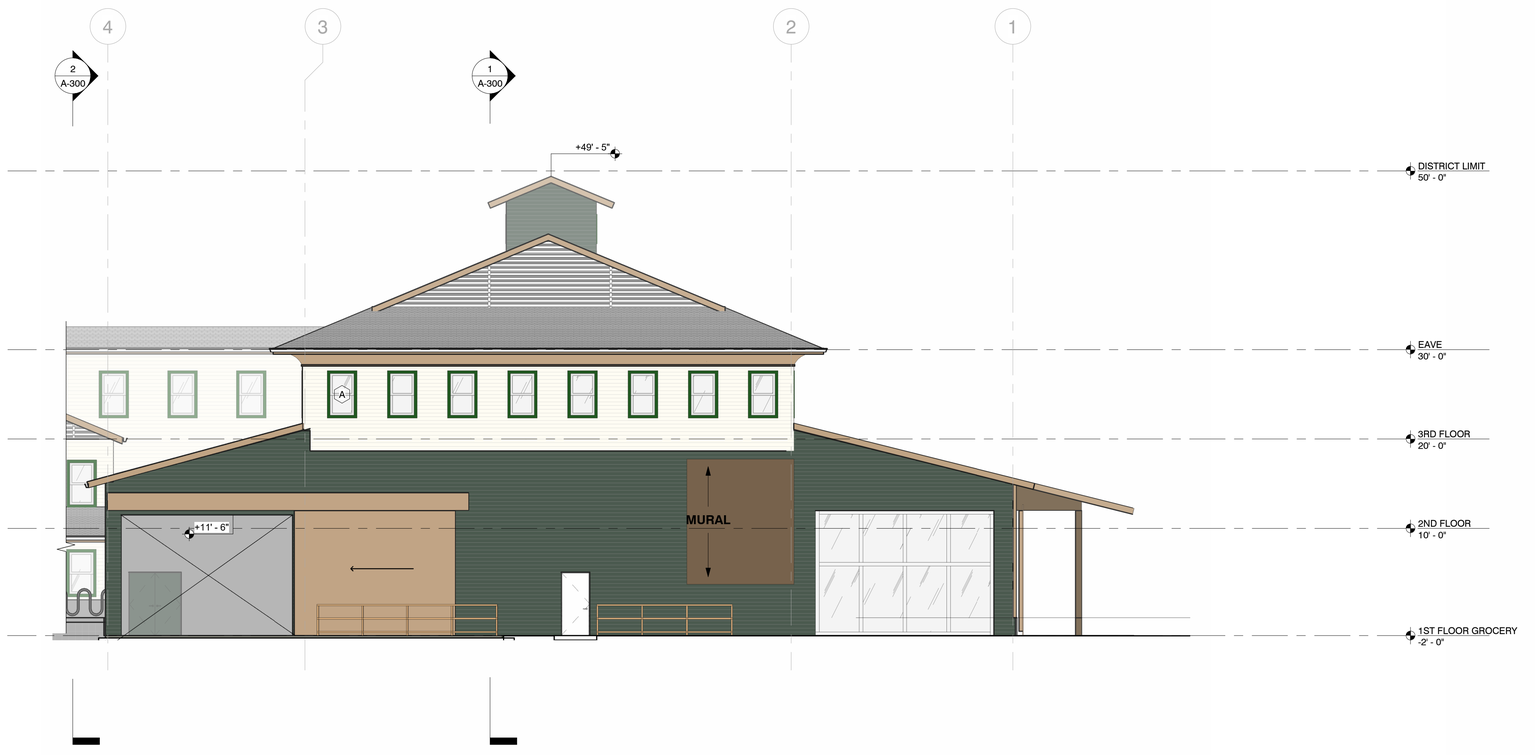
Scale: 1/8" = 1'-0"

Seal/Signature:

Drawing #:
A-201

Sheet #: of

1 EXTERIOR WEST ELEVATION (RESIDENTIAL)
SCALE: 1/8" = 1'-0"



2 EXTERIOR WEST ELEVATION (MIXED USE)
SCALE: 1/8" = 1'-0"

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COBLESKILL, NY 12043
518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

EXTERIOR ELEVATIONS

Date: 09/11/2025

Scale: 1/8" = 1'-0"

Seal/Signature:

Drawing #: A-202

Sheet #: of

1 SOUTH ELEVATION (RTE 20)
SCALE: 1/8" = 1'-0"

2 NORTH ELEVATION (RESIDENTIAL)
SCALE: 1/8" = 1'-0"

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518-234-4028

Issue Dates

#	Description	Date

STAMPS:

NORTH:

PROJECT:

Tilden Commons

Drawing Tile:

EXTERIOR ELEVATIONS

Date: 09/11/2025

Scale: 1/8" = 1'-0"

Seal/Signature:

Drawing #: A-203

Sheet #: of