CSARCH

Addendum No. 4

Date: 3/31/2026
Project Name and Phase: BCSD 2024 Capital Project
CSArch Project No. 215-2402
SED Control No.
Theodore Roosevelt Elementary School 03-02-00-01-0-010-014

Previously Issued Addenda Incorporated Into Bid Documents:
Addendum No. 1 Dated 3/18/2026
Addendum No. 2 Dated 3/23/2026
Addendum No. 3 Dated 3/26/2026

REGISTRATION EXPIRATION DATE 01/31/2029
Architect's Seal

This Addendum No. 4 forms part of the Contract Documents and modifies the original bidding documents dated March 12, 2026. Addendum No. 4 consists of 1 page(s), 3 specification sections and 8 full-size drawings.

REVISIONS TO THE PROJECT MANUAL

1. Section 000114 – TABLE OF CONTENTS. **REPLACE** with attached.
2. Section 000115 – DRAWING INDEX, **REPLACE** with attached.
3. VOLUME 4 - STORMWATER POLLUTION PREVENTION PLAN, **ADD** attached.

REVISIONS TO THE CONTRACT DRAWINGS

1. C102 – NOTES, **REPLACE** with attached.
2. C110 – EXISTING CONDITIONS, **ADD** attached.
3. C120 – DEMOLITION PLAN. **REPLACE** with attached.
4. C130 – SITE PLAN. **REPLACE** with attached.
5. C140 – UTILITY, EROSION AND SEDIMENT CONTROL & GRADING PLAN. **REPLACE** with attached.
6. C150 – SITE LIGHTING & LANDSCAPE PLAN. **REPLACE** with attached.
7. C530 – SITE DETAILS. **REPLACE** with attached.
8. C531 – STORMWATER EROSION AND SEDIMENT CONTROL DETAILS. **REPLACE** with attached.

END OF ADDENDUM NO. 4

TABLE OF CONTENTS *REVISED BY ADDENDUM 3, 4*

Volume 1

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 01 - GENERAL REQUIREMENTS

VOLUME 2

DIVISION 02 – EXISTING CONDITIONS

DIVISION 33 - UTILITIES

331102	WATER UTILITY DISTRIBUTION PIPING
334100	STORM DRAINAGE PIPING
334900	STORM DRAINAGE STRUCTURES
335900	SANITARY SEWER PIPING
335903	SANITARY SEWER STRUCTURES

VOLUME 4 - Appendix

GEOTECHNICAL EVALUATION
FLOODPLAIN MAP
ROOF SCANS
HAZARDOUS MATERIAL TESTING REPORT
ASBESTOS ABATEMENT (EXTERIOR) – DRAFT SITE SPECIFIC VARIANCE
ASBESTOS ABATEMENT (MASS DEMO) – DRAFT SITE SPECIFIC VARIANCE
ASBESTOS ABATEMENT (RENOVATION)– DRAFT SITE SPECIFIC VARIANCE
STORMWATER POLLUTION PREVENTION PLAN – ADDED ADDENDUM #4

END OF SECTION

DOCUMENT 000115 - DRAWING INDEX REVISED ADDENDUM #4

PART 1 – GENERAL

A. DRAWING PROJECT TITLE: Binghamton Central School District, 2024 Capital Project.

B. This Drawing Index completes the Project Documents. Bidder shall verify receipt of all within the separately bound drawings.

VOLUME 1

GENERAL DRAWINGS

G001	SYMBOLS, ABBREVIATIONS, AND MISC
G101	OVERALL BASEMENT FLOOR PLAN
G111	OVERALL FIRST FLOOR PLAN
G121	OVERALL SECOND FLOOR PLAN
G400	OVERALL ROOF PLAN

LIFE SAFETY DRAWINGS

LS101	BASEMENT LIFE SAFETY PLANS
LS111	FIRST FLOOR LIFE SAFETY PLANS
LS121	SECOND FLOOR LIFE SAFETY PLANS

HAZARDOUS MATERIALS DRAWINGS

HZ101	ABATEMENT NOTES AND SCHEDULES
HZ102	ABATEMENT PLAN - BASEMENT
HZ103	ABATEMENT PLAN- FIRST FLOOR
HZ104	ABATEMENT PLANS - SECOND AND THIRD FLOORS
HZ105	ABATEMENT PLAN - ROOF

SITE DRAWINGS

C102	NOTES
C110	EXISTING CONDITIONS *ADDED ADDENDUM #4*
C120	DEMOLITION PLAN
C130	SITE PLAN
C140	UTILITY, EROSION AND SEDIMENT CONTROL & GRADING PLAN
C150	LIGHTING AND LANDSCAPING PLAN
C530	SITE DETAILS
C531	STORMWATER, EROSION AND SEDIMENT CONTROL DETAILS

STRUCTURAL GENERAL DRAWINGS

S001 GENERAL NOTES
S002 DESIGN CRITERIA AND SCHEDULES
S003 COLUMN SCHEDULE
S004 C&C DIAGRAMS
S005 C&C AND SNOW DRIFT DIAGRAMS
S006 SPECIAL INSPECTIONS

STRUCTURAL DEMOLITION DRAWINGS

SD100 STRUCTURAL DEMO PLANS

STRUCTURAL DRAWINGS

S100 OVERALL FOUNDATION PLAN
S101 FOUNDATION/ SLAB PLAN - AREA 1
S102 FOUNDATION/ SLAB PLAN - AREA 2
S103 FOUNDATION/ SLAB PLAN - AREA 3
S110 OVERALL 2ND FLOOR/LOW ROOF FRAMING PLAN
S111 2ND FLOOR/LOW ROOF FRAMING PLAN - AREA 1
S112 2ND FLOOR/LOW ROOF FRAMING PLAN - AREA 2
S113 2ND FLOOR/LOW ROOF FRAMING PLAN - AREA 3
S120 OVERALL HIGH ROOF FRAMING PLAN
S123 HIGH ROOF FRAMING PLAN - AREA 3
S201 PARTIAL PLANS AND DETAILS
S202 PARTIAL PLANS AND DETAILS
S301 FOUNDATION SECTIONS & DETAILS
S302 PIER AND PILASTER DETAILS
S303 FRAMING SECTIONS & DETAILS
S304 FRAMING SECTIONS & DETAILS
S305 FRAMING SECTIONS & DETAILS
S306 FRAMING SECTIONS & DETAILS
S307 FRAMING SECTIONS & DETAILS
S401 BRACED FRAME ELEVATIONS
S501 TYPICAL CONCRETE DETAILS
S502 TYPICAL CONCRETE DETAILS
S503 TYPICAL MASONRY DETAILS
S504 TYPICAL STEEL DETAILS
S505 TYPICAL STEEL DETAILS

ARCHITECTURAL DEMOLITION DRAWINGS

AD100 OVERALL BASEMENT FLOOR DEMOLITION PLAN
AD101 PARTIAL BASEMENT FLOOR DEMOLITION PLAN - AREA '1'
AD102 PARTIAL BASEMENT FLOOR DEMOLITION PLAN - AREA '2'
AD110 OVERALL FIRST FLOOR DEMOLITION PLAN
AD111 PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA '1'
AD112 PARTIAL FIRST FLOOR DEMOLITION PLAN - AREA '2'
AD122 SECOND AND THIRD FLOOR DEMOLITION PLANS - AREA '2'
AD411 PARTIAL ROOF DEMOLITION PLAN - AREA '1'
AD412 PARTIAL ROOF DEMOLITION PLAN - AREA '2'
AD811 PARTIAL FIRST FLOOR DEMOLITION RCP - AREA '1'

VOLUME 2

ARCHITECTURAL DRAWINGS

A101 PARTIAL BASEMENT FLOOR PLAN - AREA '1'
A111 PARTIAL FIRST FLOOR PLAN - AREA '1'
A112 PARTIAL FIRST FLOOR PLAN - AREA '2'
A113 PARTIAL FIRST FLOOR PLAN - AREA '3'
A114-A CANOPY ALTERNATE
A123 PARTIAL SECOND FLOOR PLAN - AREA '3'
A201 EXTERIOR ELEVATIONS
A202 EXTERIOR ELEVATIONS
A203 EXTERIOR ELEVATIONS
A204 EXTERIOR ELEVATIONS
A251 BUILDING SECTIONS
A252 BUILDING SECTIONS
A301 WALL SECTIONS
A302 WALL SECTIONS
A303 WALL SECTIONS
A304 WALL SECTIONS
A305 WALL SECTIONS
A351 SECTION DETAILS
A352 SECTION DETAILS & MARQUEE DETAILS
A353 SECTION DETAILS
A361 PLAN DETAILS
A362 PLAN DETAILS
A363 PLAN DETAILS
A411 PARTIAL ROOF PLAN - AREA '1'

A412	PARTIAL ROOF PLAN - AREA '2'
A413	PARTIAL ROOF PLAN - AREA '3'
A451	TYPICAL ROOF DETAILS - RECOAT
A452	TYPICAL ROOF DETAILS - NEW ROOF
A453	TYPICAL ROOF DETAILS
A454	TYPICAL ROOF DETAILS
A501	STAIR PLANS AND SECTIONS
A502	ELEVATOR PLANS, SECTIONS AND DETAILS
A551	STAIR DETAILS
A601	TYPICAL EQUIPMENT PLANS, ELEVATIONS AND DETAILS
A602	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '1'
A603	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '1'
A604	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '1'
A605-A	INTERIOR ELEVATIONS - AREA '1' - ALTERNATE
A606-A	INTERIOR ELEVATIONS - AREA '1' - ALTERNATE
A607	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '1'
A608	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '2'
A609	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '2'
A610	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '2'
A611	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '2'
A612	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '3'
A613	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '3'
A614	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS - AREA '3'
A651	CASEWORK DETAILS
A652	CASEWORK DETAILS
A653	CASEWORK DETAILS
A654	CASEWORK DETAILS
A701	PARTITION TYPES
A702	PARTITION TYPES

A811 PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - AREA '1'
A812 PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - AREA '2'
A813 PARTIAL FIRST FLOOR REFLECTED CEILING PLAN - AREA '3'
A814 ENLARGED FIRST FLOOR REFLECTED CEILING PLAN - AREA '1'
A823 PARTIAL SECOND FLOOR REFLECTED CEILING PLAN - AREA '3'
A901 DOOR SCHEDULE
A902 DOOR ELEVATIONS AND DETAILS
A911 WINDOW ELEVATIONS AND DETAILS
A921 STOREFRONT ELEVATIONS AND DETAILS

ARCHITECTURAL FINISHES
AF001 MATERIAL SCHEDULE
AF002 ROOM FINISH SCHEDULE
AF003 FINISH MATERIAL DETAILS
AF004 FINISH MATERIAL DETAILS
AF005 FINISH MATERIAL DETAILS
AF111 FIRST FLOOR FINISH PLAN - AREA '1'
AF112 FIRST FLOOR FINISH PLAN - AREA '2'
AF113 FIRST FLOOR FINISH PLAN - AREA '3'
AF123 SECOND FLOOR FINISH PLAN - AREA '3'
AF201 SIGN TYPES
AF202 SIGN SCHEDULE

FURNITURE AND EQUIP. FLOOR PLANS
FE111 FIRST FLOOR FURNITURE PLAN - AREA '1'
FE112 FIRST FLOOR FURNITURE PLAN - AREA '2'
FE113 FIRST FLOOR FURNITURE PLAN - AREA '3'
FE123 SECOND FLOOR FURNITURE PLAN - AREA '3'

VOLUME 3

FIRE PROTECTION GENERAL DRAWING
FP001 FIRE PROTECTION LEGEND, NOTES AND DETAILS

FIRE PROTECTION DRAWINGS
FP312 PARTIAL FIRST FLOOR FIRE PROTECTION PLAN - AREA 2
FP313 PARTIAL FIRST FLOOR FIRE PROTECTION PLAN - AREA 3
FP323 PARTIAL SECOND FLOOR FIRE PROTECTION PLAN - AREA 3

PIPING AND INSTRUMENTATION DIAGRAM GENERAL DRAWING
DJ000 GENERAL NOTES, LEGENDS AND ABBREVIATIONS

PIPING AND INSTRUMENTATION DIAGRAM DRAWINGS
DJ101 MECHANICAL PID
DJ201 PLUMBING PID

PLUMBING GENERAL DRAWING
PG000 GENERAL NOTES, LEGENDS AND ABBREVIATIONS

PLUMBING DEMOLITION DRAWINGS
PD101 BASEMENT DEMOLITION PLAN - AREA '1'
PD102 BASEMENT DEMOLITION PLAN - AREA '2'
PD111 FIRST FLOOR DEMOLITION PLAN - AREA '1'
PD112 DEMOLITION FLOOR PLANS - AREA '2'
PD401 ROOF DEMOLITION PLAN

PLUMBING DRAWINGS
P101 BASEMENT PLAN - AREA '1'
P102 UNDERSLAB PLAN - AREA '2'
P103 UNDERSLAB PLAN - AREA '3'
P111 FIRST FLOOR PLAN - AREA '1'
P112 FIRST FLOOR PLAN - AREA '2'
P113 FIRST FLOOR PLAN - AREA '3'
P123 SECOND FLOOR PLAN - AREA '3'
P401 ROOF PLAN
P501 DOMESTIC RISER DIAGRAMS
P502 SANITARY RISER DIAGRAMS
P601 DETAILS
P901 SCHEDULES

MECHANICAL GENERAL DRAWING
MG000 GENERAL NOTES, LEGENDS AND ABBREVIATIONS

MECHANICAL DEMOLITION DRAWINGS
MD101 BASEMENT DEMOLITION PLAN - AREA '1'
MD111 FIRST & SECOND FL DEMOLITION PLANS - AREA '1'
MD401 ROOF DEMOLITION PLAN - AREA '1'

MECHANICAL DRAWINGS

M111 FIRST FLOOR PLAN - AREA '1'
M112 FIRST FLOOR PLAN - AREA '2'
M113 FIRST FLOOR PLAN - AREA '3'
M123 SECOND FLOOR PLAN - AREA '3'
M211 FIRST FLOOR PLAN - AREA '1'
M212 FIRST FLOOR PLAN - AREA '2'
M213 FIRST FLOOR PLAN - AREA '3'
M223 SECOND FLOOR PLAN - AREA '3'
M311 ENLARGED PLANS
M312 SECTIONS
M401 ROOF PLAN
M601 DETAILS
M901 VENTILATION SCHEDULE
M902 SCHEDULES
M903 SCHEDULES

VOLUME 4

ELECTRICAL GENERAL DRAWING

EG000 GENERAL NOTES, LEGENDS AND ABBREVIATIONS

ELECTRICAL DEMOLITION DRAWINGS

ED101 OVERALL BASEMENT DEMOLITION PLAN
ED111 FIRST FLOOR DEMOLITION PLANS - AREA '1'
ED112 DEMOLITION PLANS - AREA '2'
ED301 ENLARGED DEMOLITION PLANS
ED401 ROOF DEMOLITION PLANS - AREA '1'

ELECTRICAL DRAWINGS

E001 ELECTRICAL SITE PLAN
E111 FIRST FLOOR POWER PLAN - AREA '1'
E112 FIRST FLOOR POWER PLAN - AREA '2'
E113 FIRST FLOOR POWER PLAN - AREA '3'
E123 SECOND FLOOR POWER PLAN - AREA '3'
E130 ROOF POWER PLAN
E211 FIRST FLOOR LIGHTING PLAN - AREA '1'
E212 FIRST FLOOR LIGHTING PLAN - AREA '2'

E213 FIRST FLOOR LIGHTING PLAN - AREA '3'
E221 SECOND FLOOR LIGHTING PLAN - AREA '3'
E301 ENLARGED POWER PLANS
E501 ELECTRICAL RISER DIAGRAMS & SCHEDULES
E901 SCHEDULES AND DETAILS
E902 PANEL SCHEDULES

TECHNOLOGY DRAWINGS
T111 FIRST FLOOR TECHNOLOGY PLAN - AREA '1'
T112 FIRST FLOOR TECHNOLOGY PLAN - AREA '2'
T113 FIRST FLOOR TECHNOLOGY PLAN - AREA '3'
T123 SECOND FLOOR TECHNOLOGY PLAN - AREA '3'
T301 TECHNOLOGY ENLARGED PLANS

FIRE ALARM GENERAL DRAWING
FA000 GENERAL NOTES, LEGENDS AND ABBREVIATIONS

FIRE ALARM DRAWINGS
FA101 OVERALL BASEMENT FIRE ALARM PLAN
FA111 FIRST FLOOR FIRE ALARM PLAN - AREA '1'
FA112 FIRST FLOOR FIRE ALARM PLAN - AREA '2'
FA113 FIRST FLOOR FIRE ALARM PLAN - AREA '3'
FA123 SECOND FLOOR FIRE ALARM PLAN - AREA '3'
FA130 ROOF FIRE ALARM PLAN
FA301 FIRE ALARM ENLARGED PLANS

END OF DOCUMENT 000115

20213157.0006

THEODORE ROOSEVELT ELEMENTARY SCHOOL 2024 CAPITAL PROJECT

SED PROJECT # 03-02-00-01-0-010-014

PREPARED FOR:
Binghamton City School District
Theodore Roosevelt Elementary School
9 Ogden St, Binghamton, NY 13901

March 31, 2026

TABLE OF CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

Theodore Roosevelt Elementary School (TRES) is located at 9 Ogden St, Binghamton, Broome County, New York 13901. The project is located on a parcel of approximately 5.25 acres. The project is a redevelopment project with increase in impervious area and includes partial demolition of an existing elementary school building, construction of a building addition, and installation of new driveways, parking areas, sidewalks, poured-in-place playground surfaces, equipment relocations, and new site lighting.

Stormwater currently drains via sheet flow, shallow concentrated flow, and pipe flow to existing catch basins located along Brownson Street and Ogden Street. Stormwater runoff from the existing building is conveyed to reputed drywells and infiltrates into the underlying soil.

Under developed conditions, stormwater runoff from the building addition generally flows to five proposed drywells located on the east side of the property near the entrance to Brownson Street. Two infiltration basins are located to the northwest of the property and capture drainage from the new parking area identified as Drainage Area 6 (DA6). The remaining runoff flows as sheet flow and shallow concentrated flow toward Brownson Street and Ogden Street, where it is collected by existing catch basins.

The proposed infiltration basins and drywells provide treatment and attenuation of stormwater runoff to meet the New York State Department of Environmental Conservation (NYSDEC) water quality and quantity requirements. The proposed stormwater pollution prevention plan meets minimum stormwater quality and quantity requirements set forth by the NYSDEC.

2.0 INTRODUCTION

Theodore Roosevelt Elementary School (TRES) is located at 9 Ogden Steet, Binghamton New York. The project is located on a parcel of approximately 5.25 acres. The project is a redevelopment project with increase in impervious area, and includes partial demolition of an existing elementary school building, construction of a building addition, and installation of new driveways, parking areas, sidewalks, poured-in-place playground surfaces, equipment relocations, and new site lighting.

The proposed project is a redevelopment project with increase in impervious area and this Stormwater Pollution Prevention Plan (SWPPP) has been developed in accordance with the criteria described in Chapter 9 of the 2024 New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual (SWDM), the requirements of the State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-20-01) for Stormwater Discharges from Construction Activity, and Erosion and Sediment controls were designed in conformance with New York Standards and Specifications for Erosion and Sediment Controls.

For proposed stormwater analysis, the project area is divided into two drainage areas corresponding to Design Point 1 (Brownson Street) and Design Point 2 (Ogden Street). The eastern portion of the site, tributary to Design Point 1, includes a building addition, installation of an asphalt driveway and sidewalk, and reconstruction of the playground and associated paved areas. The western portion of the site, tributary to Design Point 2, includes construction of a new driveway and parking area in the northwest section, as well as repaving and installation of a new sidewalk. The proposed project will disturb approximately ±2.28 acres.

A copy of this SWPPP and associated inspection logs will be kept on site in an appropriate location that will remain accessible during standard work hours. Additional copies will be kept by the Owner and Preparer as described below.

Owner/Operator	**SWPPP Preparer**
Theodore Roosevelt Elementary School	Passero Associates
9 Ogden Street	6 Front Street, 2nd Floor
Binghamton, NY 13901	Newburgh, NY 12550
Contact: Dr. Tonia Thompson 607-762-8100	Contact(s): Chris LaPorta, P.E. 585-455-0157 Rahul Verma, P.E. 914-924-7816

3.0 EXISTING SITE CONDITIONS

3.1 Topography/ Drainage

The site is situated on terrain with slopes ranging from approximately 0% to 2%. It is developed with an existing school building, along with playgrounds, asphalt-paved parking areas and driveways, and a grassy open lawn located on the northern portion of the property.

Existing Drainage Area 1:

Drainage Area 1 encompasses approximately 0.89 acres in the northeastern portion of the site. It is bound by Brownson Street to the east and Bevier Street to the north. The area is predominantly covered with maintained lawn grass. Stormwater runoff occurs primarily as sheet flow, transitioning to shallow concentrated flow. The Curve Number (CN) for this area is 49, and the time of concentration (Tc) is 31.3 minutes.

Existing Drainage Area 2:

Drainage Area 2 consists of approximately 0.19 acres located along the eastern portion of the site. Approximately half of the area is impervious (asphalt pavement), with the remaining portion consisting of grass cover. Stormwater runoff begins as sheet flow over a slope of approximately 0.8% and transitions to shallow concentrated flow at approximately 2%, ultimately discharging to an existing catch basin, which serves as the design point 1 The weighted CN s 69, and the Tc is 23.8 minutes.

Existing Drainage Area 3:

Drainage Area 3 includes approximately 0.94 acres located to the east and southeast of the site. This area contains portions of the existing elementary school building and adjacent play areas. Stormwater runoff occurs as sheet flow and shallow concentrated flow over a slope of approximately 0.5%. The CN is 96, and the Tc is 6 minutes.

Existing Drainage Area 4:

Drainage Area 4 encompasses approximately 0.45 acres in the southern and southeastern portions of the site. The area is primarily covered with asphalt pavement, with small sections of lawn and a canopy associated with the existing elementary school building. Stormwater runoff occurs as sheet flow transitioning to shallow concentrated flow over a slope of approximately 1%. The CN is 83, and the Tc is assumed to be 8.3 minutes.

Existing Drainage Area 5:

Drainage Area 5 is the largest drainage area, comprising approximately 1.99 acres on the western side of the project site. The northern portion consists primarily of lawn areas, while the southern portion includes asphalt driveways and parking areas. Stormwater runoff occurs as sheet flow and shallow concentrated flow across relatively flat terrain, with slopes ranging from approximately 0.3% to 1.4%. The CN is 69, and the Tc is 39.6 minutes.

Existing Drainage Area 6:

Drainage Area 6 includes approximately 0.72 acres located to the north of the project site. The area consists of playgrounds and lawn surfaces and is relatively flat, with slopes ranging from approximately 0.3% to 0.6%. Stormwater runoff occurs as sheet flow transitioning to shallow concentrated flow. The composite CN is 63, and the Tc is 32.2 minutes.

3.2 Wetlands/Tributary

Publicly available records were reviewed to determine the presence of federal and/or stated regulated wetlands within the property boundary and are provided in Appendix E. Federal wetlands were researched using the National Wetlands Inventory (NWI) provided by U.S. Fish and Wildlife website search. State regulated wetlands were researched using the Environmental Resource Mapper provided by the NYSDEC. No federal or state regulated wetlands were identified within the property boundary.

3.3 Floodplain

The presence of floodplains was evaluated using the FEMA Firmette tool. Review of the FEMA maps 36071C0331E dated 08/03/2009 indicate that floodplains are not present on the site. The FEMA Firmette is provided in Appendix G.

3.4 NYSDEC Environmental Resources

The NYSDEC Environmental Resource Mapper is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern. It displays the following:

- Animals and plants that are rare in New York, including those listed as Endangered or Threatened (generalized locations). [Updated May 2008]
- Significant natural communities, such as rare or high-quality forests, wetlands, and other habitat types.
- New York's streams, rivers, lakes, and ponds; water quality classifications are also displayed.

According to this database, rare and/or endangered species have not been reported in the vicinity of the project area. The Environmental Resource Mapper map is provided in Appendix D.

3.5 State Historic Preservation Office Review

The presence of archeologically sensitive areas within the property boundary was researched using the Cultural Resource Information System (CRIS) provided by the NYS Historic Preservation Office (SHPO). Based on the CRIS research, the school building is listed as Eligible. A SHPO application has been submitted by the project architect.

4.0 DEVELOPED SITE CONDITIONS

The site will be segmented into six proposed drainage areas described below:

4.1 Proposed Drainage Area 1:

Proposed Drainage Area 1 encompasses approximately 0.43 acres at the northeastern end of the project site. It is bound by Brownson Street to the east and Bevier Street to the north. The area includes a proposed parent drop-off asphalt driveway, curb and sidewalk infrastructure, and landscaped grass areas. Stormwater runoff occurs as sheet flow transitioning to shallow concentrated flow over an average slope of approximately 1%. Runoff is directed to a catch basin and conveyed via a closed pipe system to a drywell. The Tc is 6 minutes, and the CN is 60.

4.2 Proposed Drainage Area 2:

Proposed Drainage Area 2 consists of approximately 1.11 acres and includes the proposed school addition roof as well as a small portion of the existing elementary school roof that is redirected to the new drainage system. Stormwater runoff is collected via roof drains and conveyed through piping to two drywells located just outside the drainage area. The Tc is 6 minutes, and CN is 98.

4.3 Proposed Drainage Area 3:

Proposed Drainage Area 3 includes approximately 0.31 acres located in the southeastern portion of the site. The area consists of proposed playground surfaces, a building canopy, and lawn areas. Stormwater runoff occurs as sheet flow and shallow concentrated flow across the site to where to design point one at Browson Street entrance. The Tc is 6 minutes and the CN is 96.

4.4 Proposed Drainage Area 4:

Proposed Drainage Area 4 encompasses approximately 0.53 acres located in the southern portion of the site. This area includes an existing building canopy, reconstructed sidewalk areas, and newly established lawn areas where impervious surfaces have been removed. Stormwater runoff occurs as sheet flow transitioning to shallow concentrated flow over slopes ranging from approximately 0.8% to 1.0%. The Tc is 6 minutes, and the CN is 83.

4.5 Proposed Drainage Area 5:

Proposed Drainage Area 5 includes approximately 1.39 acres and covers the western portion of the site. This area consists of the western section of the existing building roof, reconstructed sidewalks, rehabilitated asphalt driveways, and existing parking areas, along with small, landscaped shrub areas. Stormwater runoff occurs as sheet flow and shallow concentrated flow. The Tc is 6 minutes, and the composite CN is 98.

4.6 Proposed Drainage Area 6:

Proposed Drainage Area 6 encompasses approximately 1.43 acres located along the northern and western portions of the site. The area includes lawn, proposed sidewalks, playground areas, a proposed driveway, and a new parking area, as well as proposed infiltration basins designed to manage additional runoff from the building expansion. Stormwater runoff occurs as sheet flow and shallow concentrated flow directed into the infiltration basins. The composite CN is 63, and the Tc is 38.4 minutes.

4.7 Proposed Drainage Area 7:

Proposed Drainage Area 7 consists of approximately 0.08 acres located near the center of the site. This area primarily includes proposed poured-in-place surfacing and stamped concrete surface in the courtyard. Stormwater runoff occurs as sheet flow directed to a catch basin and conveyed via piping to a drywell. The Tc is 6 minutes, and the CN is 98.

5.0 STORMWATER QUALITY

The proposed development will increase the impervious surface on the site and modify existing stormwater runoff flow patterns. As described in the SWDM, this increased impervious surface typically reduces water quality and requires treatment in accordance with the requirements described in the SWDM. Stormwater quality requirements [Water Quality Volume (WQv) is achieved using standard stormwater practices based on the guidance provided in the SWDM.

Redevelopment criteria in Chapter 9 of the SWDM are applicable to this project. These criteria require water quality treatment for 100% of the stormwater runoff from new impervious areas and 25% of the stormwater runoff from existing impervious areas.

This project will use infiltration basins and dry wells to meet the requirements for maintaining stormwater quality.

5.1 Infrastructure Practice: Infiltration Trench (I-2):

To meet the applicable water quality requirements established by the NYSDEC, two infiltration trenches are proposed in the northwestern portion of the site. These trenches are designed to capture and treat stormwater runoff generated from the new driveway and adjacent parking areas.

Each trench will incorporate a forebay to provide pretreatment by promoting sedimentation of coarse particles prior to runoff entering the main infiltration area. This pretreatment measure enhances the long-term performance of the system by reducing the potential for clogging within the infiltration surface.

The infiltration trenches are sized to manage the required WQv by temporarily storing runoff and allowing it to infiltrate into the underlying soils. In addition to infiltration within the basin, overflow and controlled discharge will be directed to subsurface dry wells, which will function as the outlet structures. These dry wells provide additional infiltration capacity and ensure that excess runoff from larger storm events is managed without adverse downstream impacts.

5.2 Infrastructure Practice: Drywells (I-3):

To further satisfy the water quality requirements established by the NYSDEC, five dry wells are proposed in the eastern portion of the site to treat and attenuate runoff from the proposed building addition and other impervious surfaces. These systems are designed to manage stormwater runoff by promoting direct infiltration into the subsurface.

The dry wells are designed to capture and treat the required WQv by temporarily storing runoff and allowing it to infiltrate into the surrounding soils. By infiltrating stormwater close to its source, the dry wells provide both water quality treatment and quantity control, reducing peak runoff rates and overall discharge from the site.

As a stormwater management practice (SMP), the proposed dry wells contribute to compliance with NYSDEC criteria by facilitating groundwater recharge and removing pollutants through natural filtration processes within the soil.

Using the stormwater practices/methods described above, the stormwater quality requirements for the proposed development are satisfied and summarized in Table 1. The WQv provided exceeds the WQv required as the dry wells are used to attenuate and infiltrate the water quantity volume. New stormwater connections to the municipal storm sewer is not permitted, as the municipal storm sewer is a combined sewer system and is subject to a NYSDEC

Consent Order prohibiting new connections and/or increased flow.

Table 1: *Stormwater Quality Comparison*

Water Quality	
Description:	
New Impervious (sq-ft)	37,657
25% of Redeveloped Impervious (sq-ft)	15,077
Removed Existing Impervious (sq-ft)	5,383
Total WQv Area (sq.ft)	47,351
Required WQv (cu.ft)	**4,124**
Provided WQv (cu.ft)	**15,408**

The HydroCad analysis and drainage area maps are included in Appendix J.

6.0 STORMWATER QUANTITY

The proposed development will increase impervious area on site, which increases the rate of stormwater runoff from the site. This post-development runoff rate must be reduced to be equal to or less than the runoff rate from pre-development conditions, calculated at each design point. Runoff rate reduction for this project is achieved through a proposed dry wells that will store and infiltrate stormwater runoff from the redevelopment project, with no increase in discharge off-site.

The proposed building addition and driveway expansion increase impervious areas within Drainage Areas 1 and 2. Additionally, a new asphalt driveway and parking area contribute to an increase in impervious surface within Drainage Area 6. Increased runoff from the proposed redevelopment is routed into dry wells, which provide on site infiltration and attenuation.

7.0 CONSTRUCTION EROSION CONTROL PRACTICES & INSPECTIONS

The Owner is responsible for having SWPPP inspections completed once per week starting when site disturbance occurs. The inspections shall review and document the following at a minimum: visual inspection of the outlet structure(s), check of the outlets for excessive sediment accumulation, burrowing, vegetation degradation, or any other issues of concern. The SWPPP inspections must be completed by a person qualified to conduct such inspection based on the NYSDEC criteria for inspector qualifications. Copies of the SWPPP inspection reports will be sent to the owner and contractor; and deficiencies should be addressed immediately.

Several erosion control practices will be implemented by the contractor during construction by the contractor and are based on the erosion and sediment control plan included in this SWPPP. These practices are explained below and shown on the Plans attached in Appendix S:

- Stabilized Construction Entrance → A stabilized construction entrance will be installed by the contractor at the construction entrance to the project. Multiple and/or relocated stabilized construction entrances may be required based on construction phasing. The contractor shall ensure that mud is not tracked onto the adjacent roadways and that the stone entrance properly removes mud and debris from construction vehicles.

- Drop Inlet Protection → All field inlets and catch basins shall have inlet protection in accordance with the details in the Appendix S. Drop Inlet protection can be removed from catch basins in the roadway when the sub base is installed, and from the field inlets when the adjacent area is brought to final grade and stabilized.

- Seeding and Stabilization → The contractor shall seed and stabilize all disturbed areas not to be worked for 7 days within 7 days of the last disturbance. Stabilization measures may include but are not limited to straw mulching, wood chip mulching, jute mesh and hydroseeding. The SMA and adjacent areas shall be stabilized immediately following their shaping and installation. All embankments greater than 3:1 shall be stabilized with jute mesh.

- Concrete Truck Washdown area → a concrete truck washdown area will be provided by the contractor to control concrete discharge during construction. The washdown area will be maintained by the contractor.

- Winter Shutdown → The contractor may request to enter winter shutdown provided the contractor has fulfilled the requirements set forth in the NYSDEC Blue Book Standard and Specifications for Winter Stabilization contained in Appendix Q of this report. The certified SWPPP inspector will then perform an inspection and upon agreement with the contractor's practice, shall complete the "Notice to reduce Frequency of SPDES Site Inspections" Form contained in Appendix Q of this report. The form will then be submitted to the regulatory MS4 (or NYSDEC regional office should there be no MS4 for the project area) for review. After the regulatory MS4 or NYSDEC regional office has approved the request, the site will enter winter shutdown and SPDES site inspections may drop to monthly. Should the certified SWPPP inspector find any problems during winter shutdown, the contractor is liable to correct the issues on site in the same timely manner as an active project

Additional measures may be required during construction at the guidance of the owner or certified SWPPP Inspector. The contractor shall begin to make all adjustments to the erosion control within 24 hours of receipt of any deficiencies.

Any modifications to the SWPPP will be documented and reported to the Owner and Engineer in writing prior to implementation. The contractor is responsible for having a NYSDEC erosion control qualified person on site while work is occurring, in accordance with GP-0-20-001. Once the site has been stabilized in accordance with GP-0-20-001, and this has been verified by the Engineer, the Owner may complete the Notice of Termination and submit it to the NYSDEC. Removal of all temporary erosion and sediment control practices is required prior to demobilization.

8.0 POST CONSTRUCTION

The owner is responsible for operation and maintenance of all post construction stormwater practices. The post construction practices include performing annual inspections of the stormwater management system to verify proper operation and ensure continual stabilized cover of the project area(s). Any silt or debris removed from the stormwater practices will be disposed in accordance with applicable laws and regulations. The infiltration basin should be routinely mowed to prevent woody growth. Woody growth in either of these areas must be removed, including roots, to avoid compromising the integrity of the embankments.

Additionally, annual monitoring of the storm sewer structures will be completed by the owner to ensure that they are functioning properly. All documentation related to this SWPPP and post construction monitoring reports, shall be kept by the owner for five years after project completion. These inspections will be certified by a Professional Engineer and a copy of the inspection report will be kept by the Engineer.

APPENDICES

APPENDIX A: SWPPP PRACTICES PROCEDURES AND CERTIFICATIONS

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: _____

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges From Construction Activity (GP-0-20-001)

Project Site Information

Project/Site Name

Theodore Roosevelt Elementary School

Owner/Operator Information

Owner/Operator (Company Name/Private Owner/Municipality Name)

Binghamton City School District

Certification Statement – SWPPP Preparer

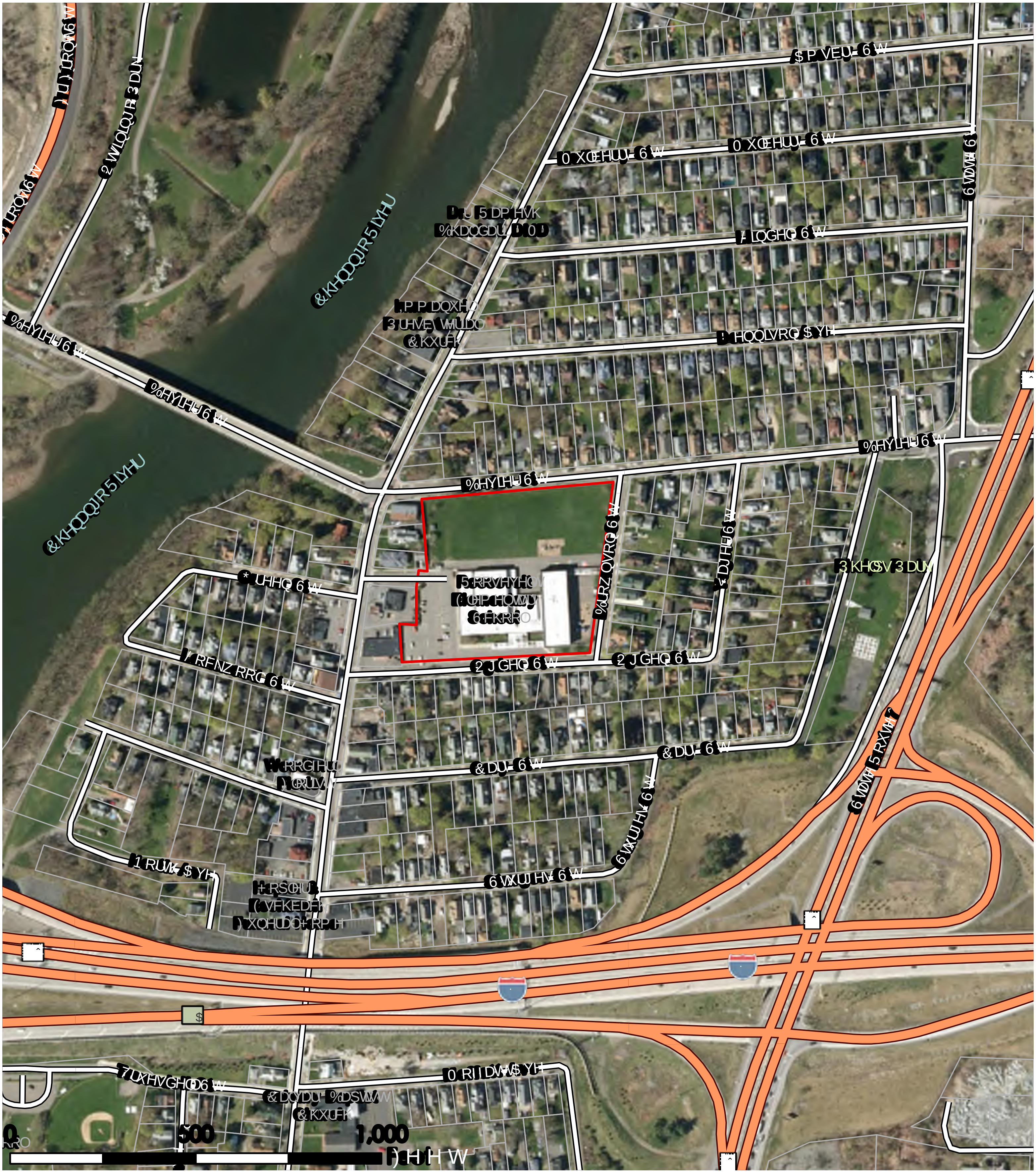
I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Chris	J	LaPorta
First name	MI	Last Name

Signature

Date

APPENDIX B: AERIAL PHOTOGRAPH



/HJHQG

3URMHFW /RFDWLRQ

3DUFHOV

7KHRGRUH 5RRVHYHOW (OH...

/RFDWLRQ 0DS

0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV
&56 1$' 6WDWH 3ODQH 1HZ <RUN &HQWUDO
0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ
6RXUFH %URRPH &RXQW\ *,6

PASSERO
architecture engineering

6HUYLFH &UHGLWV

'DWH

APPENDIX C: USGS QUADRANGLE MAP

/HJHQG

3URMHFW /RFDWLRQ

86*6 0DS

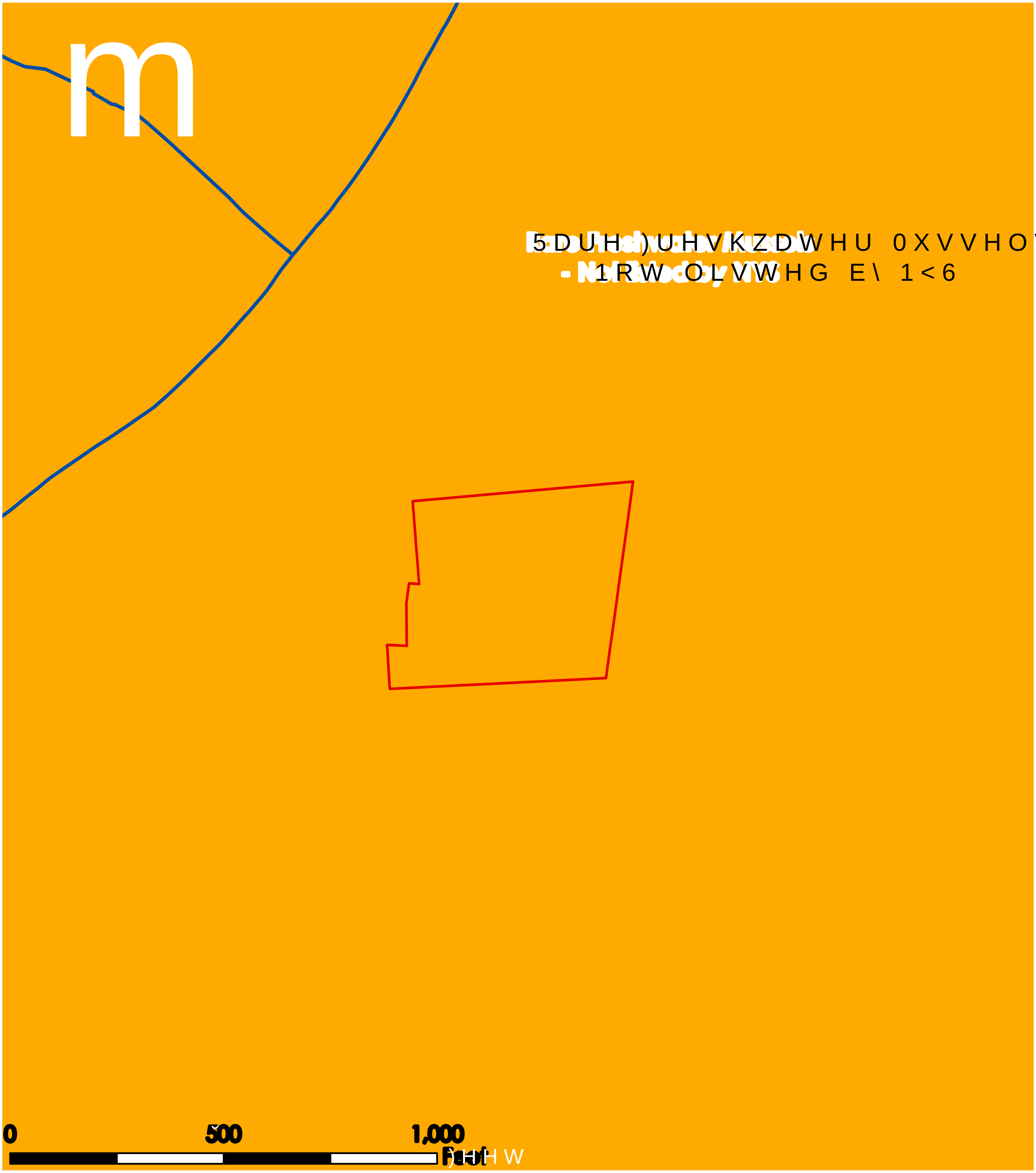
0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV &56 1$'' 6WDWH 3ODQH 1HZ <RUN &HQWUDO 0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ 6RXUFH 8QLWHG 6WDWHV *HRORJLFDO 6XUYH\

PASSERO
architecture engineering

6HUYLFH &UHGLWV

'DWH

APPENDIX D: ENVIRONMENTAL RESOURCE MAPPER



Legend

- Streams Rivers
- Project Location
- Informational Freshwater Wetland Mapping
- Previously Mapped Freshwater Wetlands
- ft Buffer
- Rare Plants Animals
- Significant Natural Communities

Environmental Resource Mapper

Maps created by: Passero Associates
CRS: NAD State Plane New York Central
Municipality: City of Binghamton
Source: Environmental Resource Mapper

PASSERO
architecture engineering

Service Credits:
Bureau of Water Assessment
Management NYSDEC New York
Vendor

Date:

APPENDIX E: WETLAND MAPPING

/HJHQG

- 3URMHFW /RFDWLRQ
-)UHVKZDWHU (PHUJHQW :HWODQG
-)UHVKZDWHU)RUHVWHG 6KUXE :HWODQG
-)UHVKZDWHU 3RQG
- /DNH
- 2WKHU
- 5LYHULQH

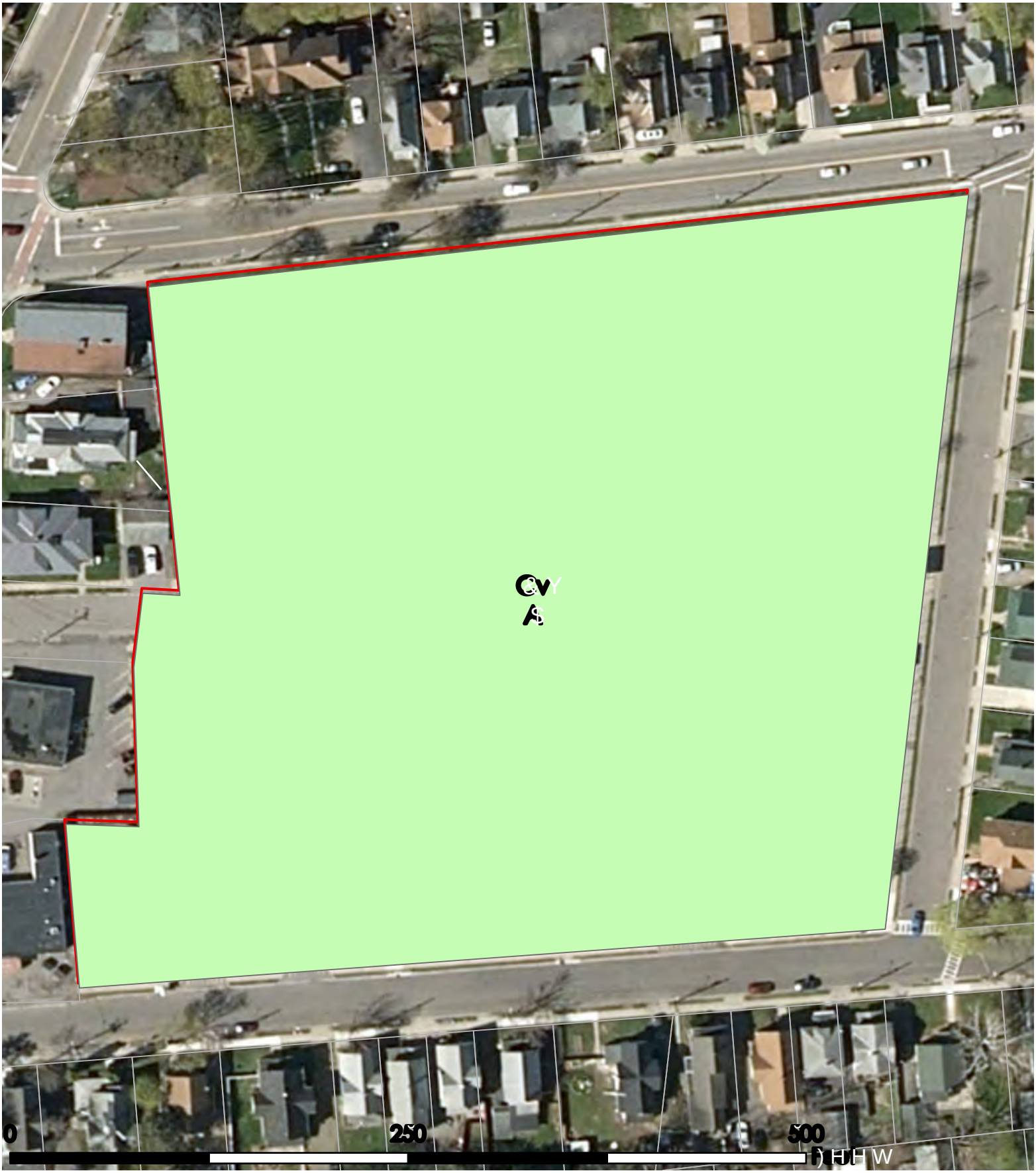
86):6 1DWLRQDO :HWODQGV 'DWD

0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV ;6 $9
&56 1$'' 6WDWH 3ODQH 1HZ <RUN &HQWUDO
0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ
6RXUFH 8 6)LVK DQG :LOGOLIH 6HUYLFH

PASSERO
architecture engineering
6HUYLFH &UHGLWV
1HZ <RUN 6WDWH 9DQWRU

'DWH

APPENDIX F: SOILS MAP



/HJHQG

3URMHFW /RFDWLRQ

6RLOV

+\GURORJLF 6RLO 5DWLQJ

$

6RLO 0DS

0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV XVLQJ
&56 1$'' 6WDWH 3ODQH 1HZ <RUN &HQWUDO
0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ
6RXUFH 15&6 :HE 6RLO 6XUYH\

PASSERO
architecture engineering

6HUYLFH &UHGLWV
1HZ <RUN 6WDWH 0LFURZRUN

'DWH

APPENDIX G: FEMA MAPPING

/HJHQG

3URMHFW /RFDWLRQ

3UHOLPLQDU\ )ORRG +D]DUG =RQHV

$QQXDO &KDQFH)ORRG +D]DUG

$QQXDO &KDQFH)ORRG +D]DUG

)XWXUH &RQGLWLRQV $QQXDO &KDQFH)ORRG +D]DUG

5HJXODWRU\ )ORRGZD\

$UHD ZLWK 5HGXFHG 5LVN 'XH WR /HYHH

6SHFLDO)ORRGZD\

)(0$)ORRG $UHDV 0DS

0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV

&56 1$' 6WDWH 3ODQH 1HZ <RUN &HQWUDO

0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ

6RXUFH)(0$),50HWWH &

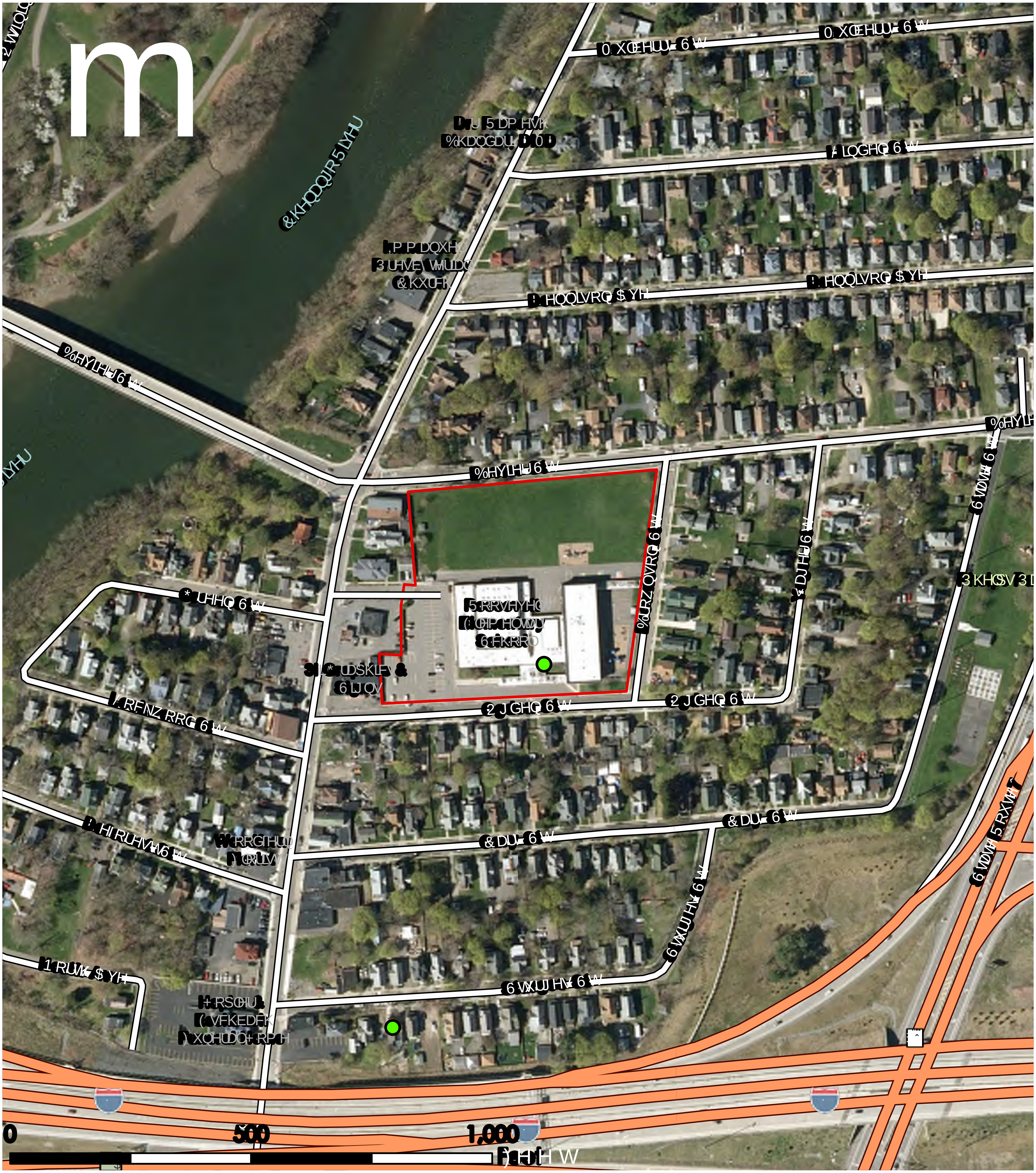
PASSERO architecture engineering

6HUYLFH &UHGLWV

1HZ <RUN 6WDWH *,6 0LFURVRIW 9DQWRU $9

'DWH

APPENDIX H: ARCHEOLOGICAL SENSITIVE AREAS MAP



/HJHQG

3URMHFW /RFDWLRQ

1DWLRQDO 5HJLVWHU %XLOGLQJ /LVWLQJV

+LVWRULF ',VWULFWV

(OLJLEOH

/LVWHG

+LVWRULF 3RLQWV

(OLJLEOH

/LVWHG

$UFKHRORJLFDO 6HQVLWLYLW\ $UHD

0DSV FUHDWHG E\ 3DVVHUR $VVRFLDWHV

&56 1$' 6WDWH 3ODQH 1HZ <RUN &HQWUDO

0XQLFLSDOLW\ &LW\ RI %LQJKDPWRQ

6RXUFH &XOWXUDO 5HVRXUFH ,QIRUPDWLRQ 6\VWHP

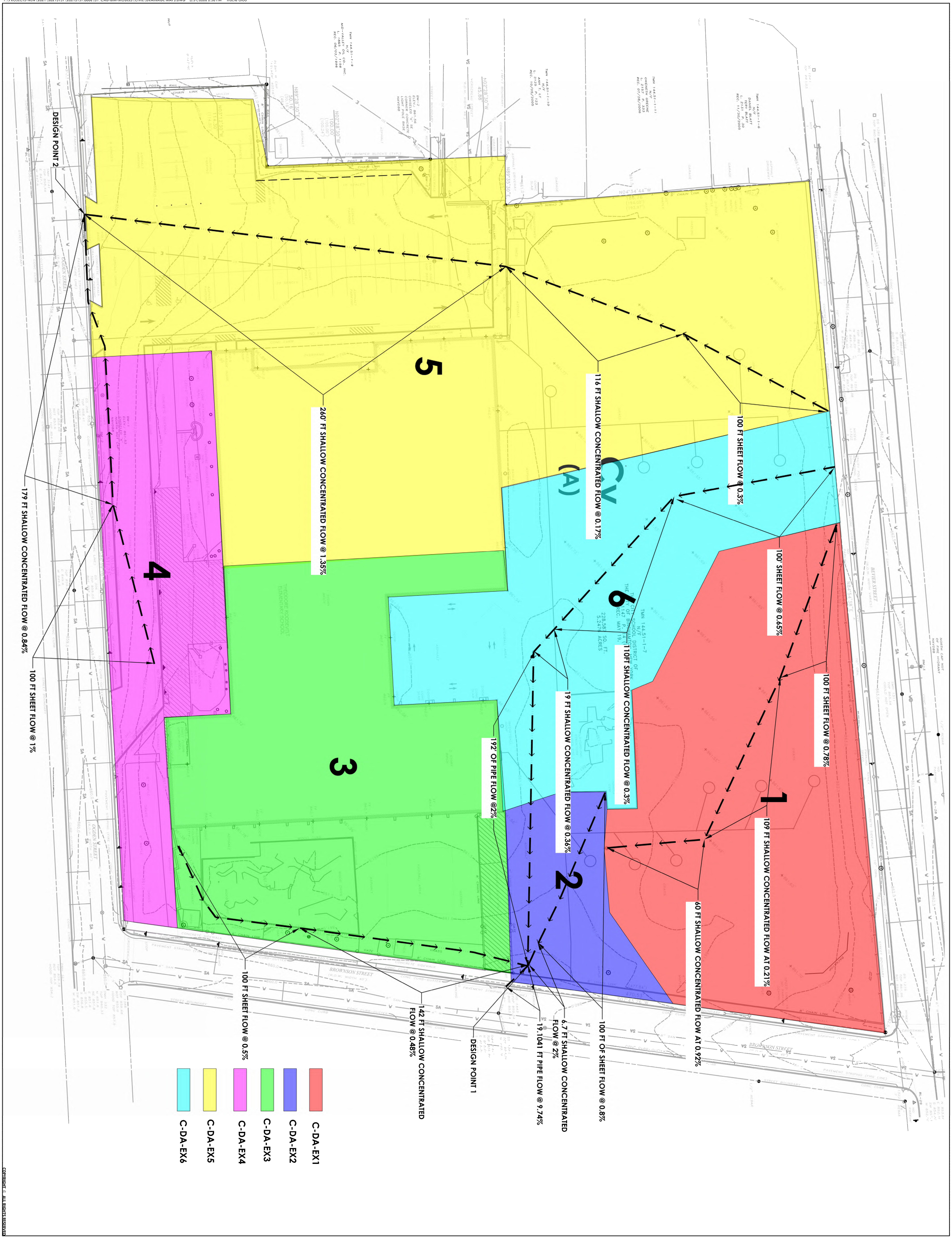
6HUYLFH &UHGLWV

6RXUFHV (VUL 7RP7RP *DUPLQ

'DWH

APPENDIX J: HYDROGRAPH CALCULATIONS

Y:\PROJECTS-NEW\2021\20213157\20213157.0006\01 CAD-BIM-MODELS\CIVIL\DRAINAGE MAPS.DWG 3/31/2026 2:58 PM Tracie Oloo



Sheet No.: TRES

Sheet Title: EXISTING DRAINAGE MAP

Drawn By: TO
Checked By: RV
Proj. #: 03-02-00-01-0-010-014
CSArch Proj. #: 215-2402
CD Submission: 03/12/2026

#	DATE	DESCRIPTION
4	03/30/2026	BID ADDENDUM

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

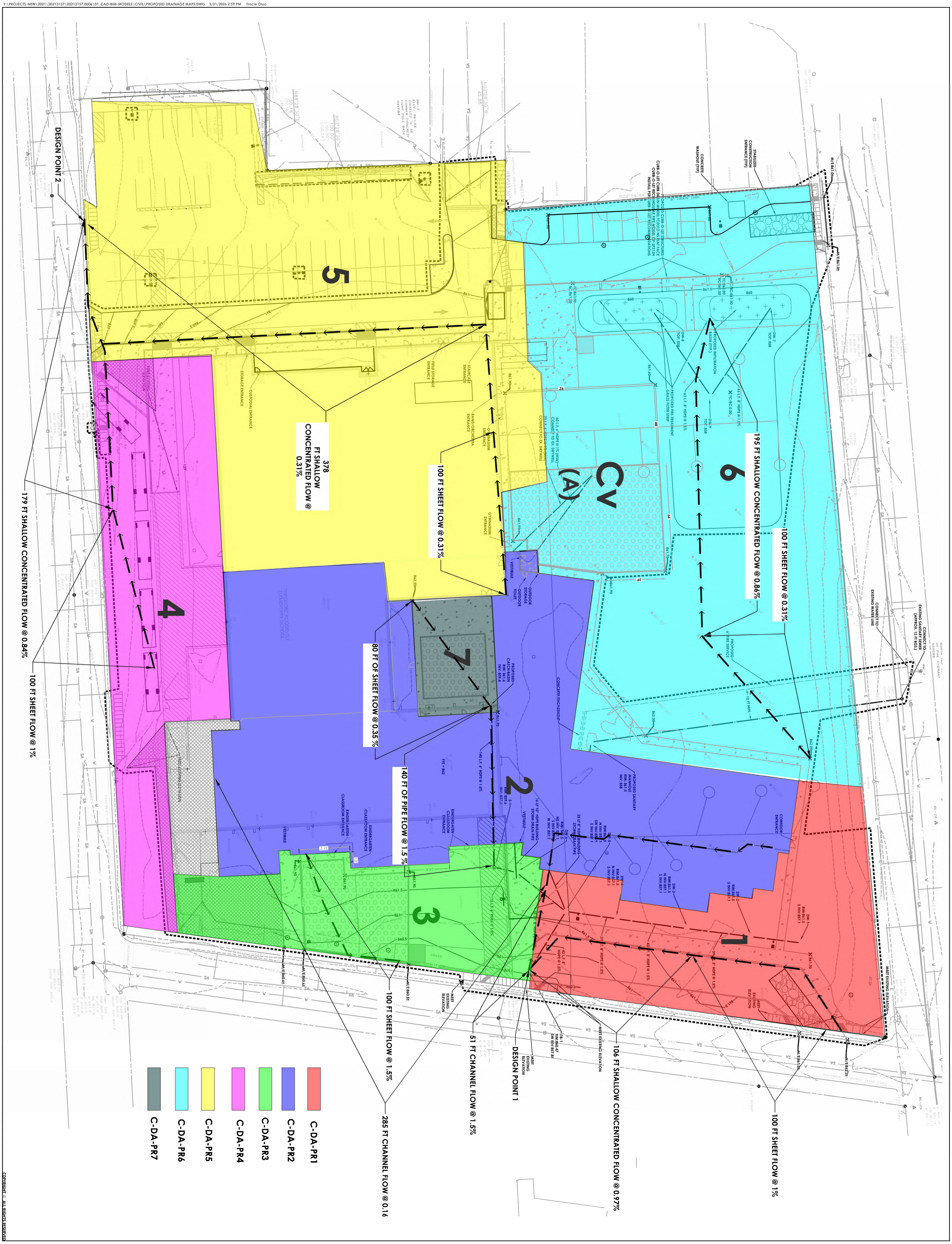
THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE, AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2

Consultant

PASSERO engineering architecture
6 Front St. · Newburgh New York 12550-7601

19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

CSARCH



Sheet No. TRES

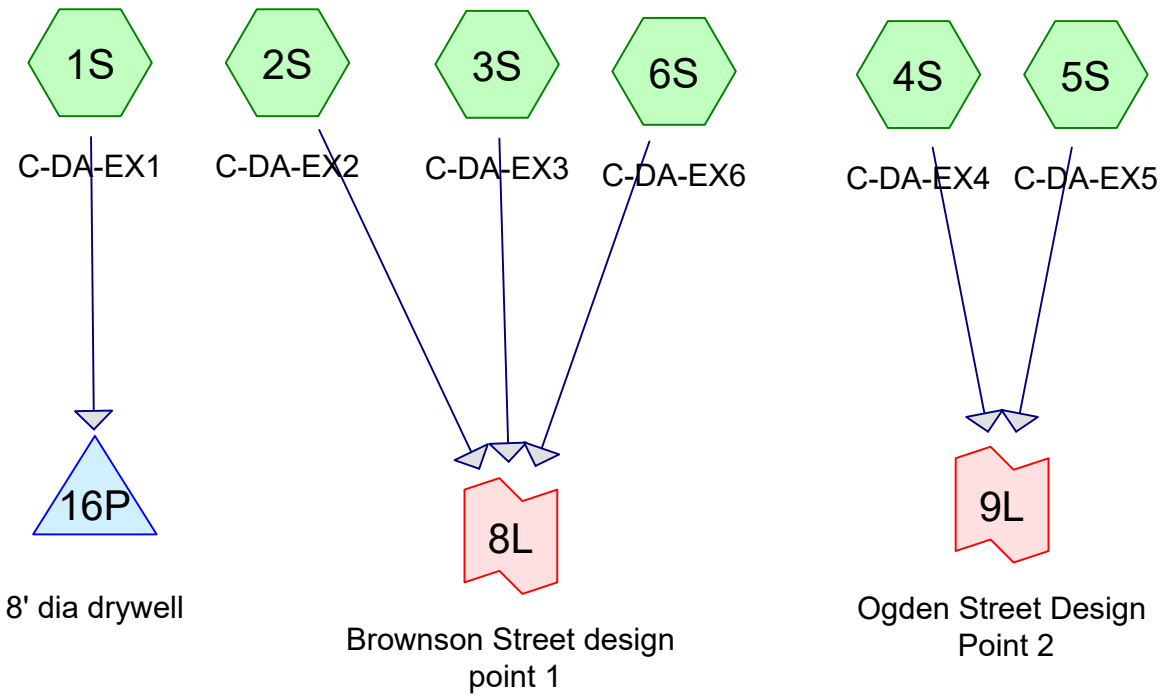
Sheet Title: PROPOSED DRAINAGE MAP

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

Consultant
PASSERO engineering architecture
6 Front St. · Newburgh New York 12550-7601

19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com
CSARCH



Subcat Reach Pond Link

Routing Diagram for 20213157.006_Existing
Prepared by Passero Associates, Printed 3/31/2026

Project Notes

Defined 9 rainfall events from TRES IDF
Defined 9 rainfall events from TRES IDF
Defined 9 rainfall events from TRES IDF

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Type II 24-hr		Default	24.00	1	2.07	2
2	10-yr	Type II 24-hr		Default	24.00	1	3.51	2
3	100-yr	Type II 24-hr		Default	24.00	1	6.07	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.725	63	(6S)
0.890	49	50-75% Grass cover, Fair, HSG A (1S)
1.980	69	50/50 GRASS/PAVED (5S)
0.187	69	>75% Grass cover, Good, HSG A (2S)
0.944	96	Gravel surface, HSG A (3S)
0.465	83	Paved parking, HSG A (4S)
5.190	**71**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.486	HSG A	1S, 2S, 3S, 4S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
2.705	Other	5S, 6S
5.190		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	0.725	0.725		6S
0.890	0.000	0.000	0.000	0.000	0.890	50-75% Grass cover, Fair	1S
0.000	0.000	0.000	0.000	1.980	1.980	50/50 GRASS/PAVED	5S
0.187	0.000	0.000	0.000	0.000	0.187	>75% Grass cover, Good	2S
0.944	0.000	0.000	0.000	0.000	0.944	Gravel surface	3S
0.465	0.000	0.000	0.000	0.000	0.465	Paved parking	4S
2.486	**0.000**	**0.000**	**0.000**	**2.705**	**5.190**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	6S	0.00	0.00	192.0	0.0200	0.012	0.0	6.0	0.0	

Time span=2.00-60.00 hrs, dt=0.01 hrs, 5801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: C-DA-EX1 Runoff Area=38,768 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=269' Tc=31.3 min CN=49 Runoff=0.00 cfs 0.000 af

Subcatchment2S: C-DA-EX2 Runoff Area=8,128 sf 0.00% Impervious Runoff Depth=0.24"
Flow Length=107' Tc=23.8 min CN=69 Runoff=0.03 cfs 0.004 af

Subcatchment3S: C-DA-EX3 Runoff Area=41,132 sf 0.00% Impervious Runoff Depth=1.64"
Flow Length=242' Tc=6.0 min CN=96 Runoff=2.56 cfs 0.129 af

Subcatchment4S: C-DA-EX4 Runoff Area=20,253 sf 0.00% Impervious Runoff Depth=0.74"
Flow Length=279' Tc=6.0 min CN=83 Runoff=0.62 cfs 0.029 af

Subcatchment5S: C-DA-EX5 Runoff Area=86,243 sf 0.00% Impervious Runoff Depth=0.24"
Flow Length=476' Tc=39.2 min CN=69 Runoff=0.20 cfs 0.040 af

Subcatchment6S: C-DA-EX6 Runoff Area=31,574 sf 0.00% Impervious Runoff Depth=0.12"
Flow Length=421' Tc=32.2 min CN=63 Runoff=0.02 cfs 0.007 af

Pond 16P: 8' dia drywell Peak Elev=846.64' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Link 8L: Brownson Street design point 1 Inflow=2.56 cfs 0.140 af
Primary=2.56 cfs 0.140 af

Link 9L: Ogden Street Design Point 2 Inflow=0.62 cfs 0.069 af
Primary=0.62 cfs 0.069 af

Total Runoff Area = 5.190 ac Runoff Volume = 0.209 af Average Runoff Depth = 0.48"
100.00% Pervious = 5.190 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: C-DA-EX1

[45] Hint: Runoff=Zero

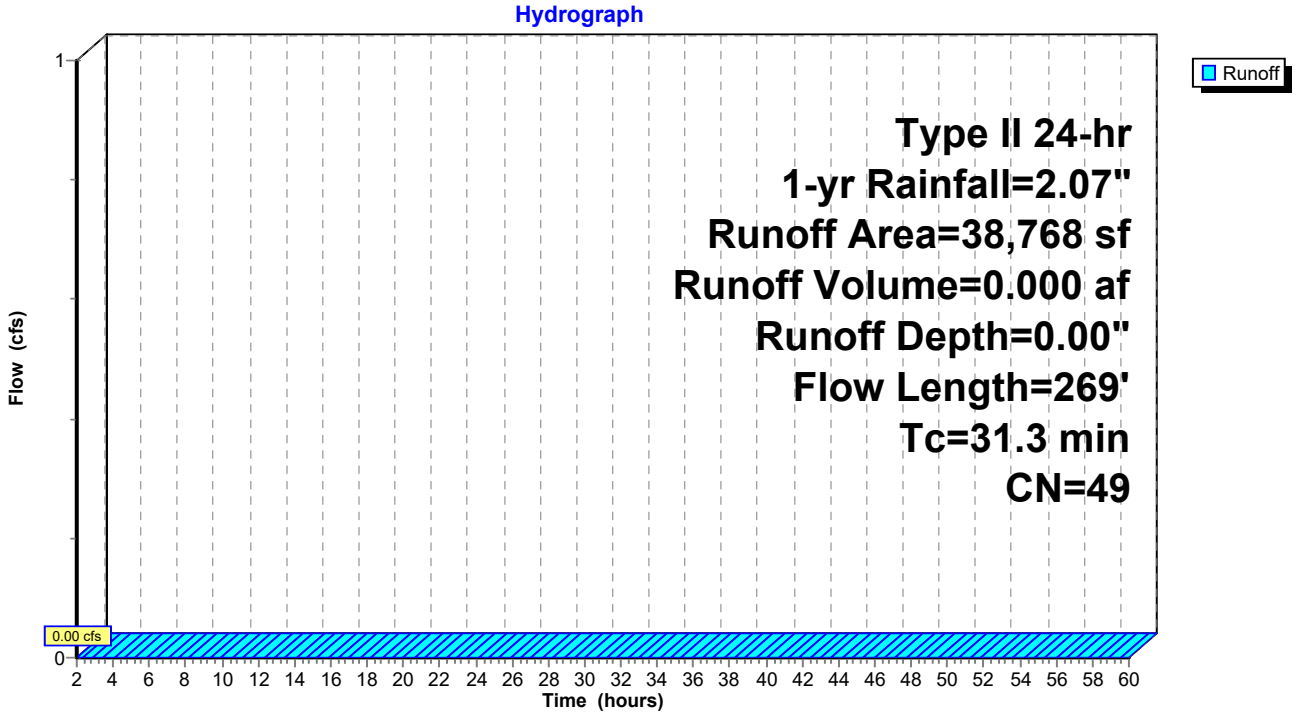
Runoff = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond 16P : 8' dia drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
38,768	49	50-75% Grass cover, Fair, HSG A
38,768		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.1	100	0.0078	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
5.7	109	0.0021	0.32		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	60	0.0092	0.67		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
31.3	269	Total			

Subcatchment 1S: C-DA-EX1



Summary for Subcatchment 2S: C-DA-EX2

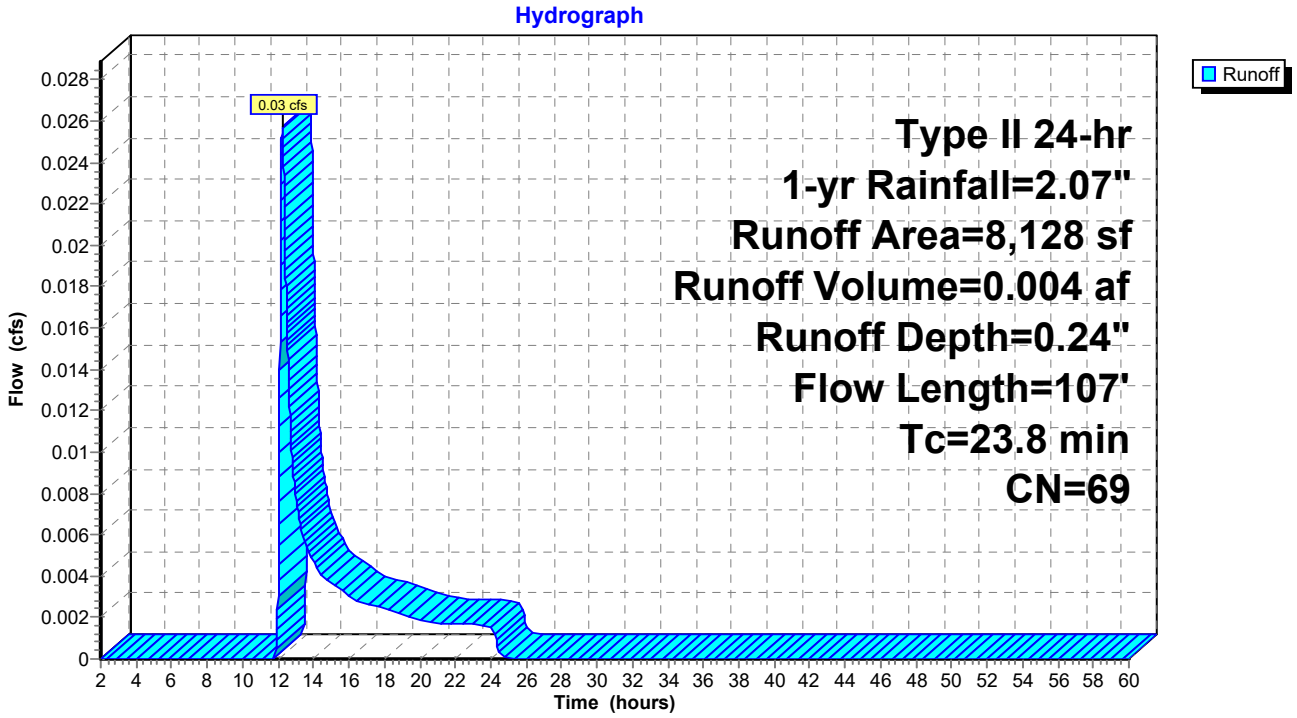
Runoff = 0.03 cfs @ 12.24 hrs, Volume= 0.004 af, Depth= 0.24"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	8,128	69	>75% Grass cover, Good, HSG A
	8,128		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.8	100	0.0080	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
0.0	7	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
23.8	107	Total			

Subcatchment 2S: C-DA-EX2



Summary for Subcatchment 3S: C-DA-EX3

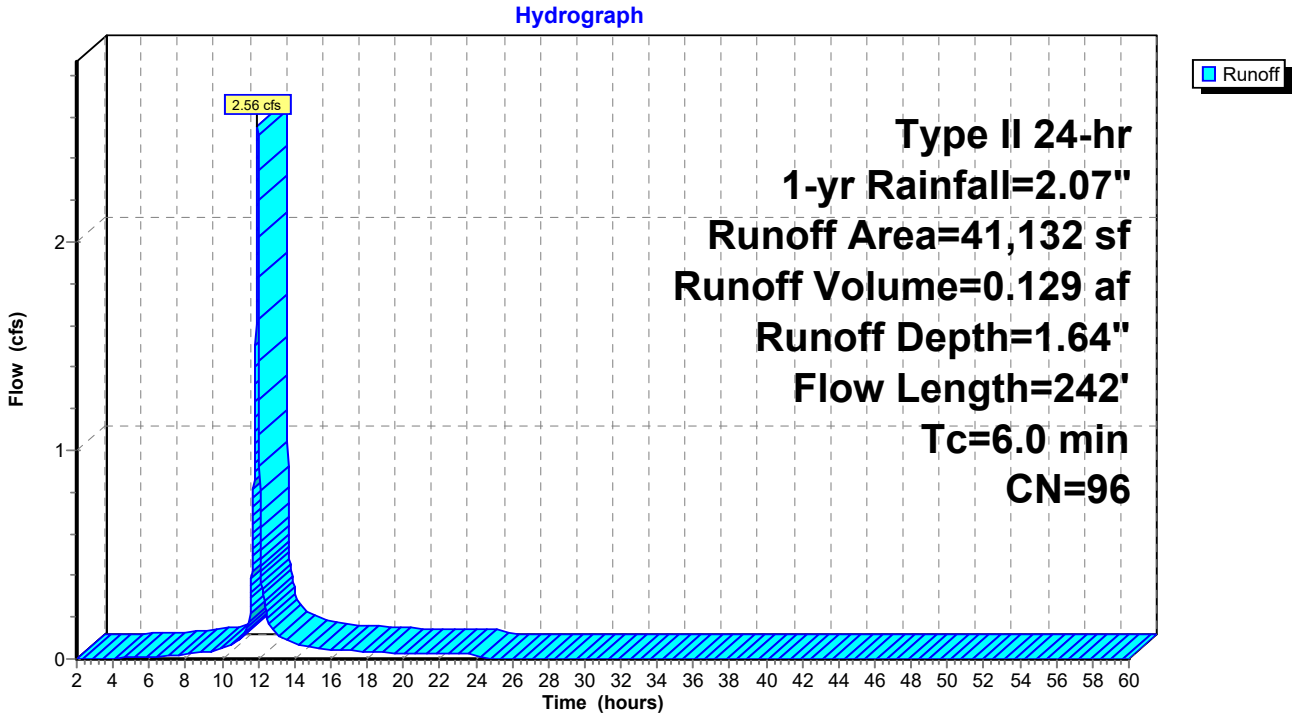
Runoff = 2.56 cfs @ 11.97 hrs, Volume= 0.129 af, Depth= 1.64"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
41,132	96	Gravel surface, HSG A
41,132		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	100	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	142	0.0480	4.45		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.9	242	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: C-DA-EX3



Summary for Subcatchment 4S: C-DA-EX4

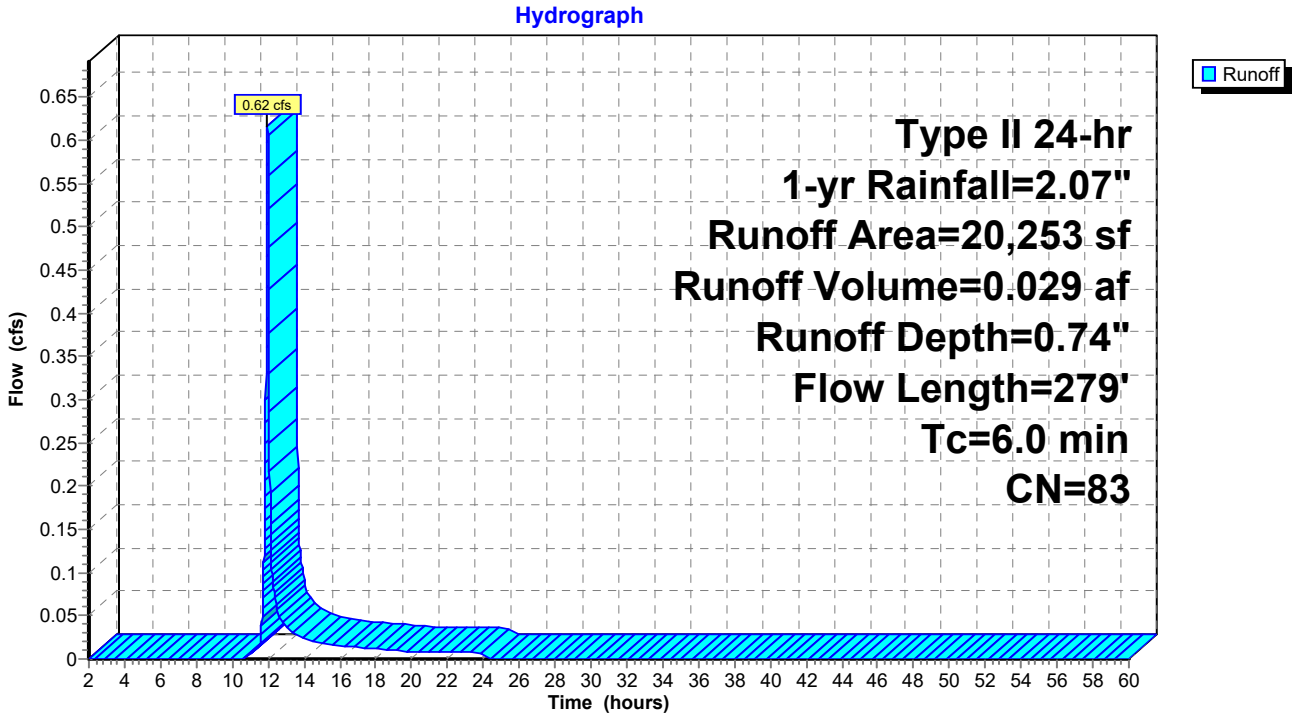
Runoff = 0.62 cfs @ 11.98 hrs, Volume= 0.029 af, Depth= 0.74"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	20,253	83	Paved parking, HSG A
	20,253		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
1.6	179	0.0084	1.86		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	279	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4S: C-DA-EX4



Summary for Subcatchment 5S: C-DA-EX5

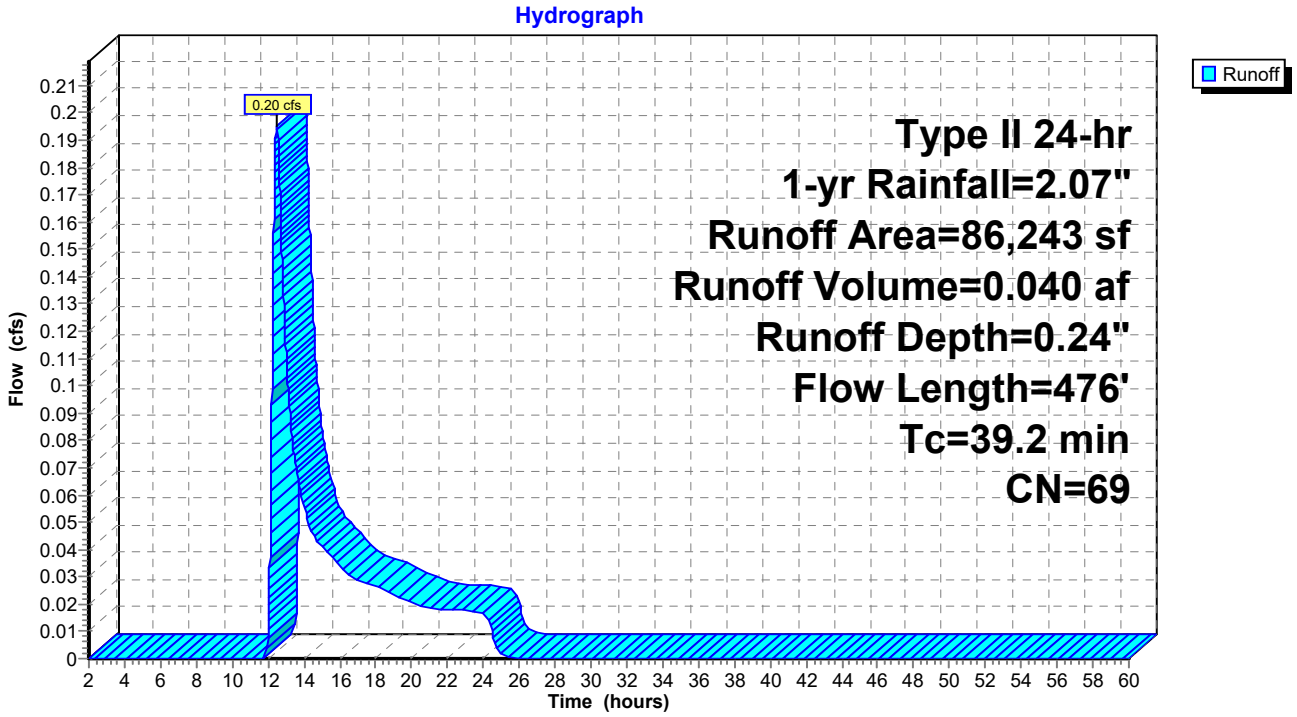
Runoff = 0.20 cfs @ 12.50 hrs, Volume= 0.040 af, Depth= 0.24"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	86,243	69	50/50 GRASS/PAVED
	86,243		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.3	100	0.0030	0.05		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
2.1	116	0.0170	0.91		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.8	260	0.0135	2.36		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
39.2	476	Total			

Subcatchment 5S: C-DA-EX5



Summary for Subcatchment 6S: C-DA-EX6

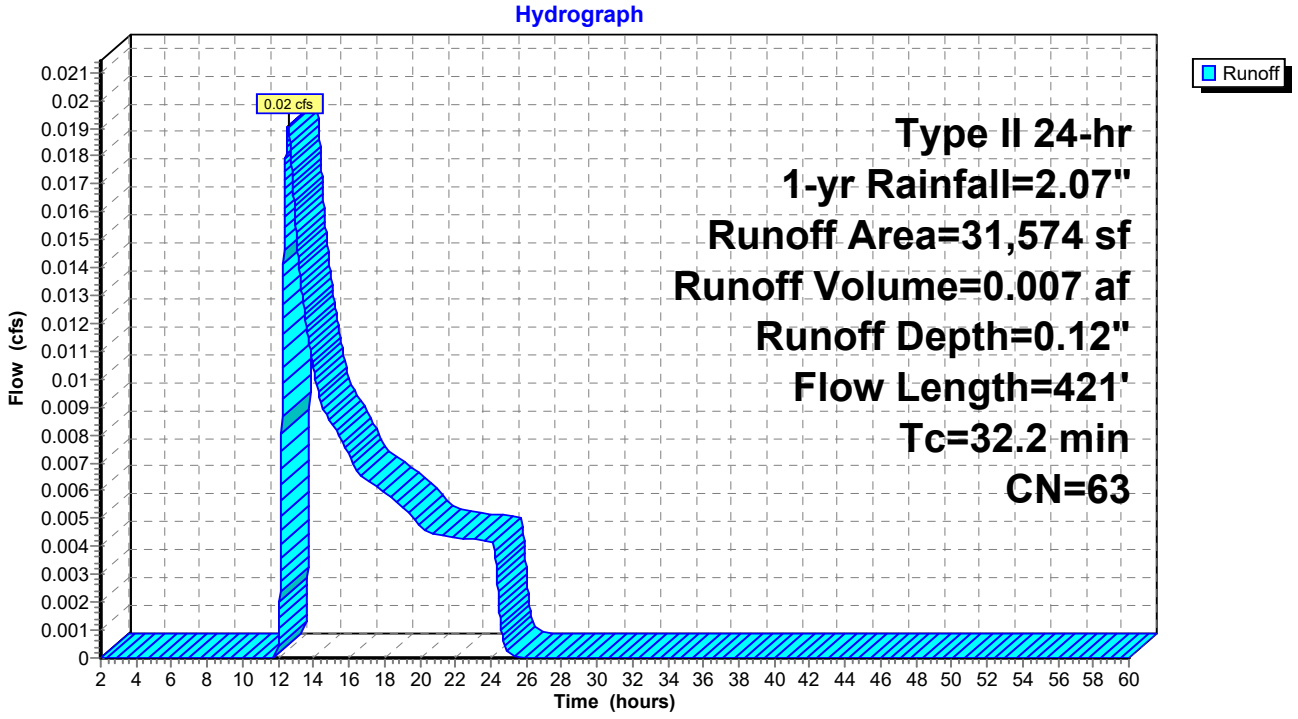
Runoff = 0.02 cfs @ 12.56 hrs, Volume= 0.007 af, Depth= 0.12"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	31,574	63	
	31,574		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0065	0.06		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
4.8	110	0.0030	0.38		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.8	19	0.0036	0.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.7	192	0.0200	4.38	0.86	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012 Corrugated PP, smooth interior
32.2	421	Total			

Subcatchment 6S: C-DA-EX6



Summary for Pond 16P: 8' dia drywell

[92] Warning: Device #2 is above defined storage

Inflow Area = 0.890 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af
Secondary = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 846.64' @ 2.00 hrs Surf.Area= 64 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

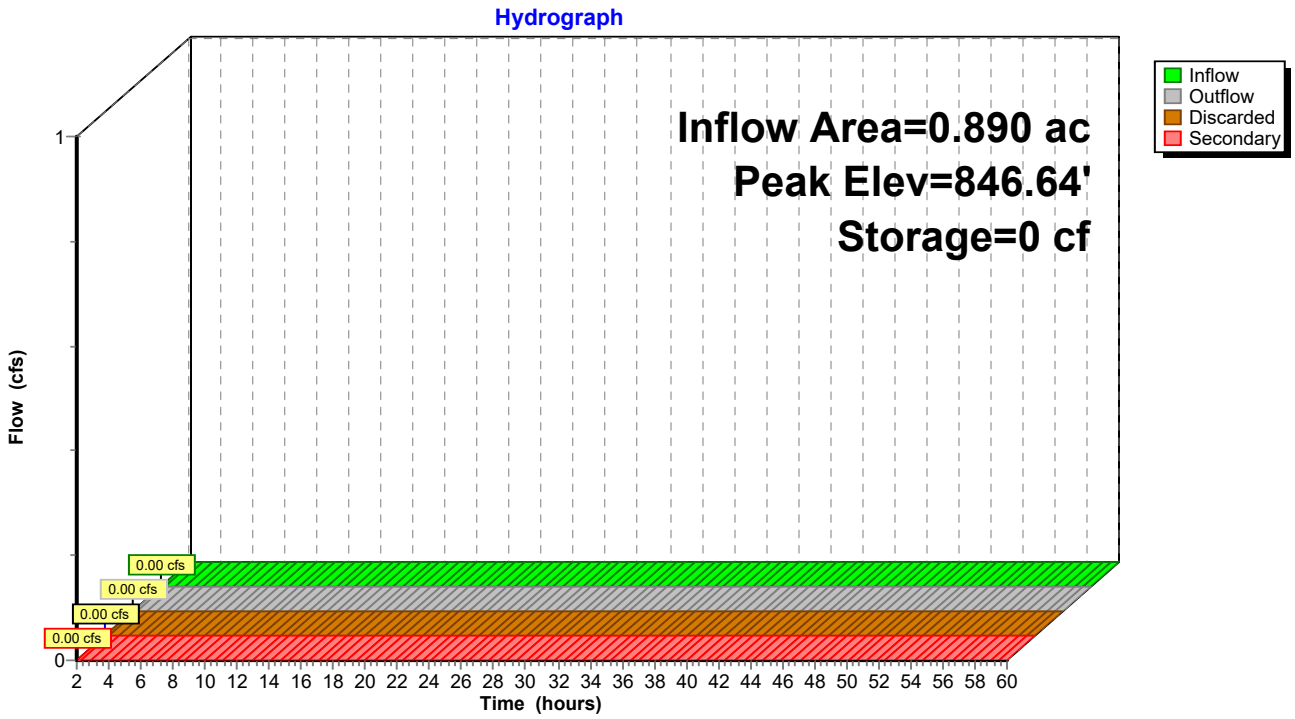
Volume	Invert	Avail.Storage	Storage Description
#1	846.64'	2,414 cf	**9.00'D x 14.00'H Vertical Cone/Cylinder Z=1.0** 6,535 cf Overall - 500 cf Embedded = 6,035 cf x 40.0% Voids
#2	847.64'	368 cf	**6.00'D x 13.00'H Vertical Cone/Cylinder**Inside #1 500 cf Overall - 6.0" Wall Thickness = 368 cf
		2,781 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	846.64'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	860.94'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.00 cfs @ 2.00 hrs HW=846.64' (Free Discharge)
↑—**1=Exfiltration** (Passes 0.00 cfs of 0.00 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 2.00 hrs HW=846.64' (Free Discharge)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 16P: 8' dia drywell

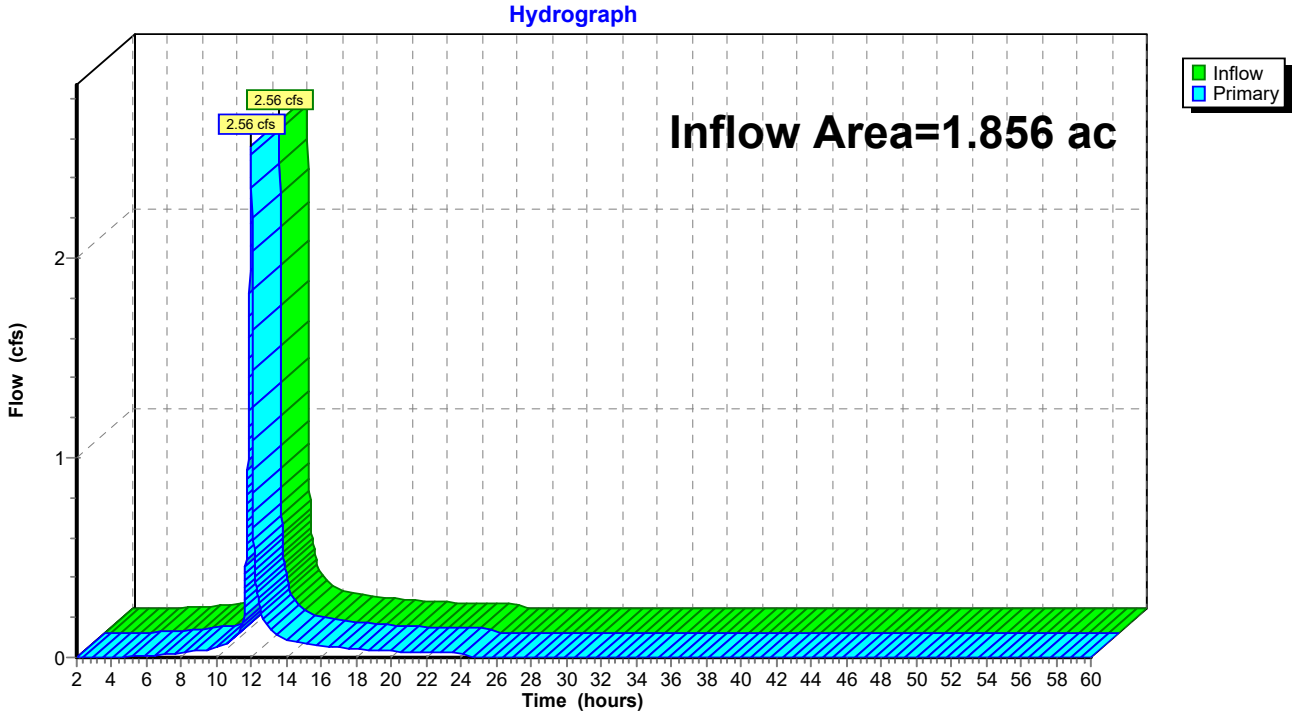


Summary for Link 8L: Brownson Street design point 1

Inflow Area = 1.856 ac, 0.00% Impervious, Inflow Depth = 0.91" for 1-yr event
Inflow = 2.56 cfs @ 11.97 hrs, Volume= 0.140 af
Primary = 2.56 cfs @ 11.97 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 8L: Brownson Street design point 1

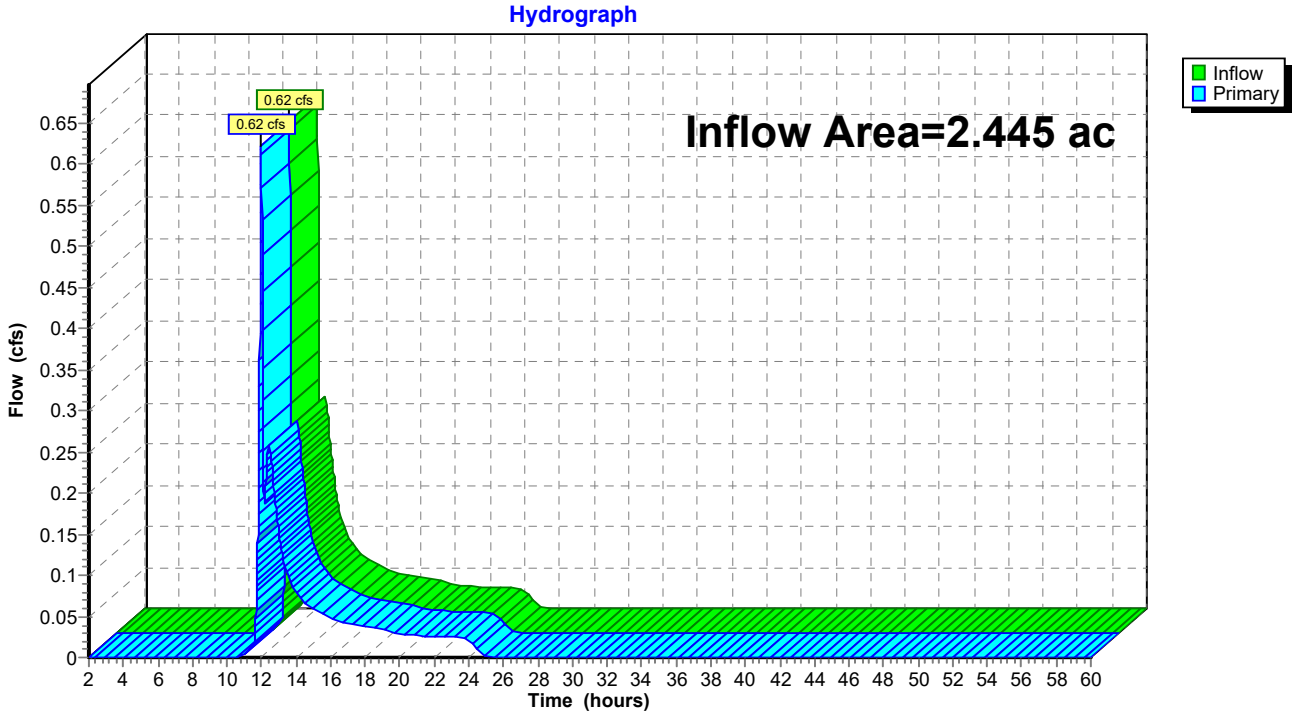


Summary for Link 9L: Ogden Street Design Point 2

Inflow Area = 2.445 ac, 0.00% Impervious, Inflow Depth = 0.34" for 1-yr event
Inflow = 0.62 cfs @ 11.98 hrs, Volume= 0.069 af
Primary = 0.62 cfs @ 11.98 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 9L: Ogden Street Design Point 2



Time span=2.00-60.00 hrs, dt=0.01 hrs, 5801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: C-DA-EX1 Runoff Area=38,768 sf 0.00% Impervious Runoff Depth=0.17"
Flow Length=269' Tc=31.3 min CN=49 Runoff=0.03 cfs 0.013 af

Subcatchment2S: C-DA-EX2 Runoff Area=8,128 sf 0.00% Impervious Runoff Depth=0.96"
Flow Length=107' Tc=23.8 min CN=69 Runoff=0.16 cfs 0.015 af

Subcatchment3S: C-DA-EX3 Runoff Area=41,132 sf 0.00% Impervious Runoff Depth=3.06"
Flow Length=242' Tc=6.0 min CN=96 Runoff=4.57 cfs 0.240 af

Subcatchment4S: C-DA-EX4 Runoff Area=20,253 sf 0.00% Impervious Runoff Depth=1.87"
Flow Length=279' Tc=6.0 min CN=83 Runoff=1.54 cfs 0.072 af

Subcatchment5S: C-DA-EX5 Runoff Area=86,243 sf 0.00% Impervious Runoff Depth=0.96"
Flow Length=476' Tc=39.2 min CN=69 Runoff=1.21 cfs 0.158 af

Subcatchment6S: C-DA-EX6 Runoff Area=31,574 sf 0.00% Impervious Runoff Depth=0.66"
Flow Length=421' Tc=32.2 min CN=63 Runoff=0.30 cfs 0.040 af

Pond 16P: 8' dia drywell Peak Elev=850.10' Storage=205 cf Inflow=0.03 cfs 0.013 af
Discarded=0.01 cfs 0.013 af Secondary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.013 af

Link 8L: Brownson Street design point 1 Inflow=4.65 cfs 0.295 af
Primary=4.65 cfs 0.295 af

Link 9L: Ogden Street Design Point 2 Inflow=1.71 cfs 0.231 af
Primary=1.71 cfs 0.231 af

Total Runoff Area = 5.190 ac Runoff Volume = 0.539 af Average Runoff Depth = 1.25"
100.00% Pervious = 5.190 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: C-DA-EX1

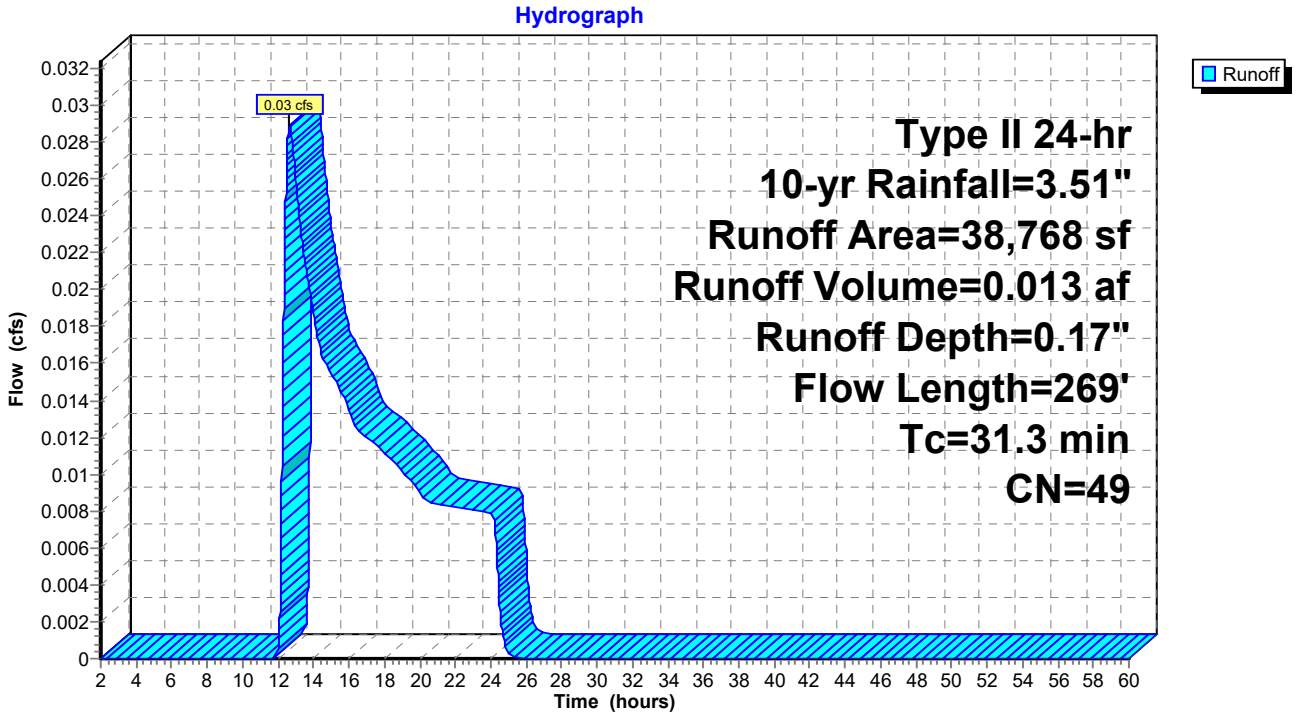
Runoff = 0.03 cfs @ 12.66 hrs, Volume= 0.013 af, Depth= 0.17"
Routed to Pond 16P : 8' dia drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
38,768	49	50-75% Grass cover, Fair, HSG A
38,768		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.1	100	0.0078	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
5.7	109	0.0021	0.32		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	60	0.0092	0.67		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
31.3	269	Total			

Subcatchment 1S: C-DA-EX1



Summary for Subcatchment 2S: C-DA-EX2

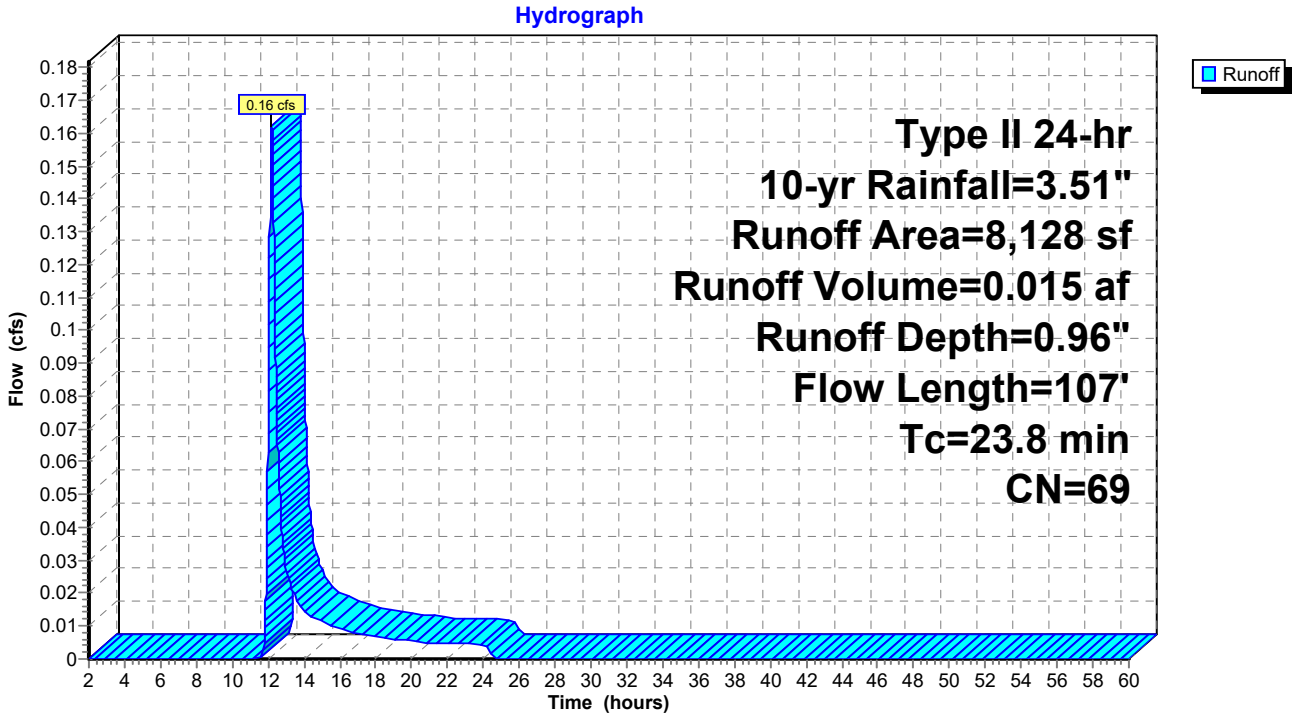
Runoff = 0.16 cfs @ 12.19 hrs, Volume= 0.015 af, Depth= 0.96"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	8,128	69	>75% Grass cover, Good, HSG A
	8,128		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.8	100	0.0080	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
0.0	7	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
23.8	107	Total			

Subcatchment 2S: C-DA-EX2



Summary for Subcatchment 3S: C-DA-EX3

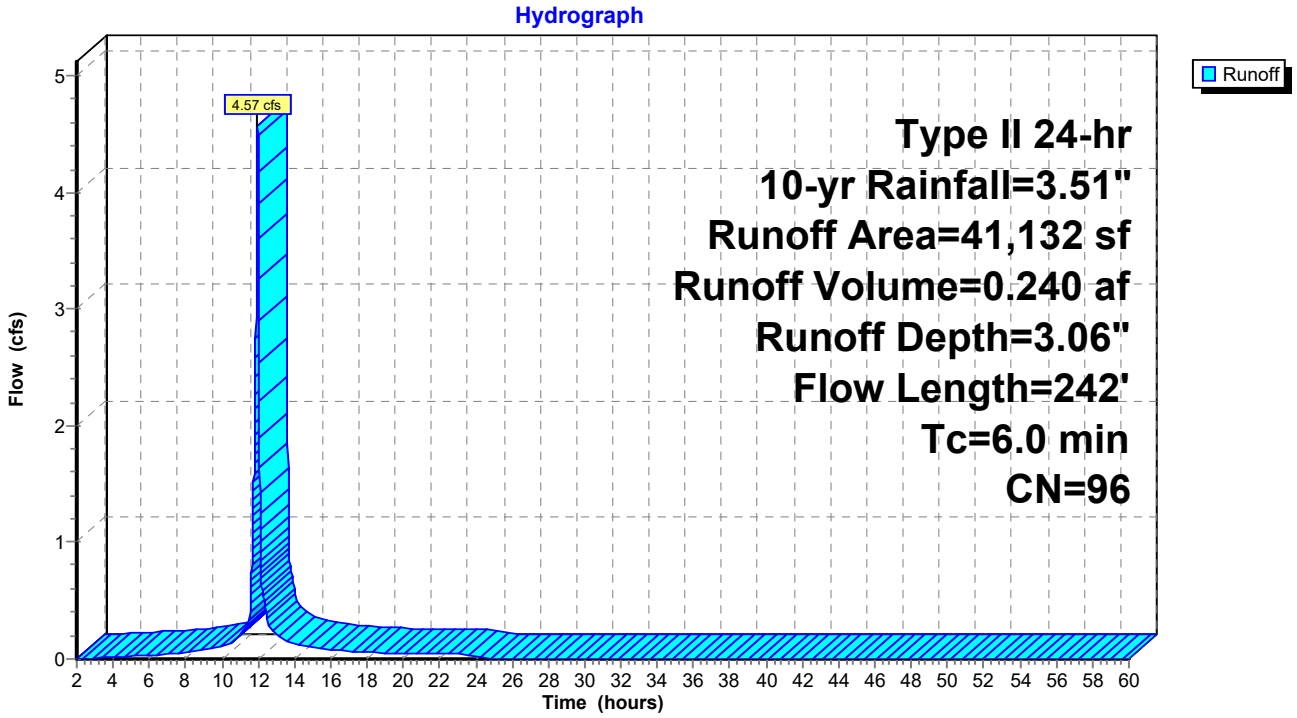
Runoff = 4.57 cfs @ 11.97 hrs, Volume= 0.240 af, Depth= 3.06"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
41,132	96	Gravel surface, HSG A
41,132		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	100	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	142	0.0480	4.45		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.9	242	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: C-DA-EX3



Summary for Subcatchment 4S: C-DA-EX4

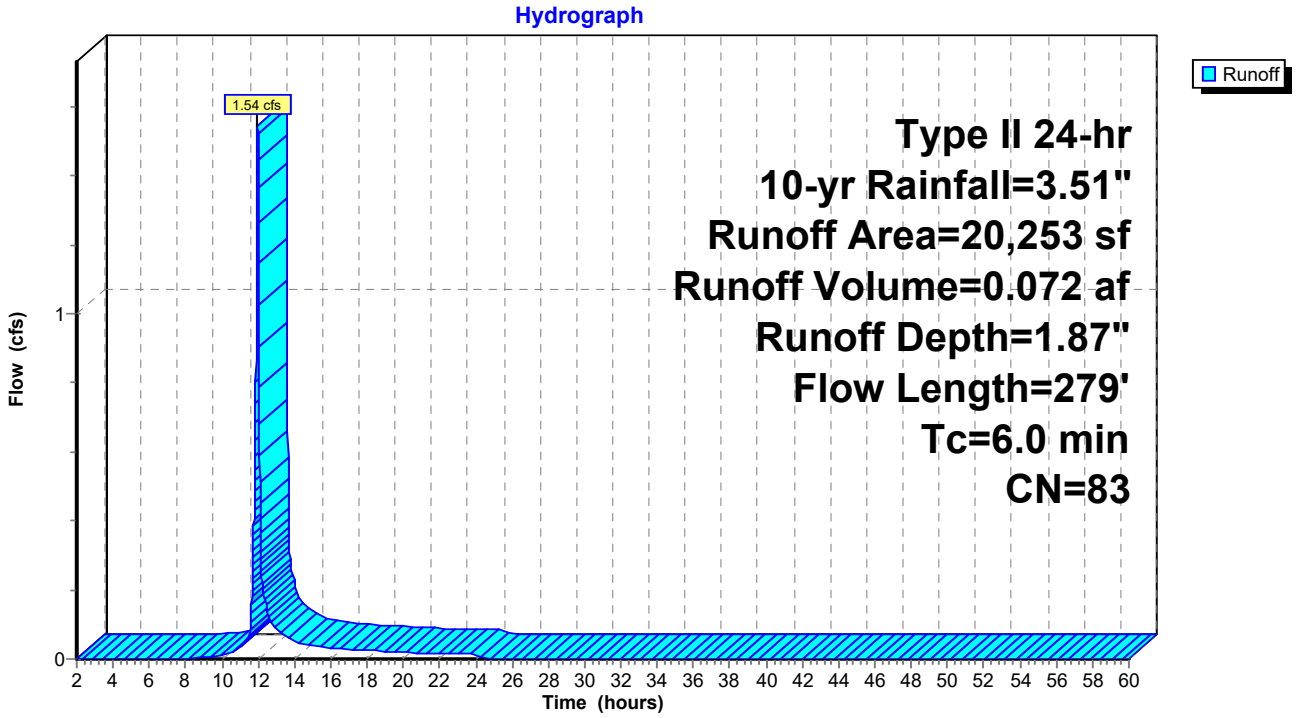
Runoff = 1.54 cfs @ 11.97 hrs, Volume= 0.072 af, Depth= 1.87"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	20,253	83	Paved parking, HSG A
	20,253		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
1.6	179	0.0084	1.86		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	279	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4S: C-DA-EX4



Summary for Subcatchment 5S: C-DA-EX5

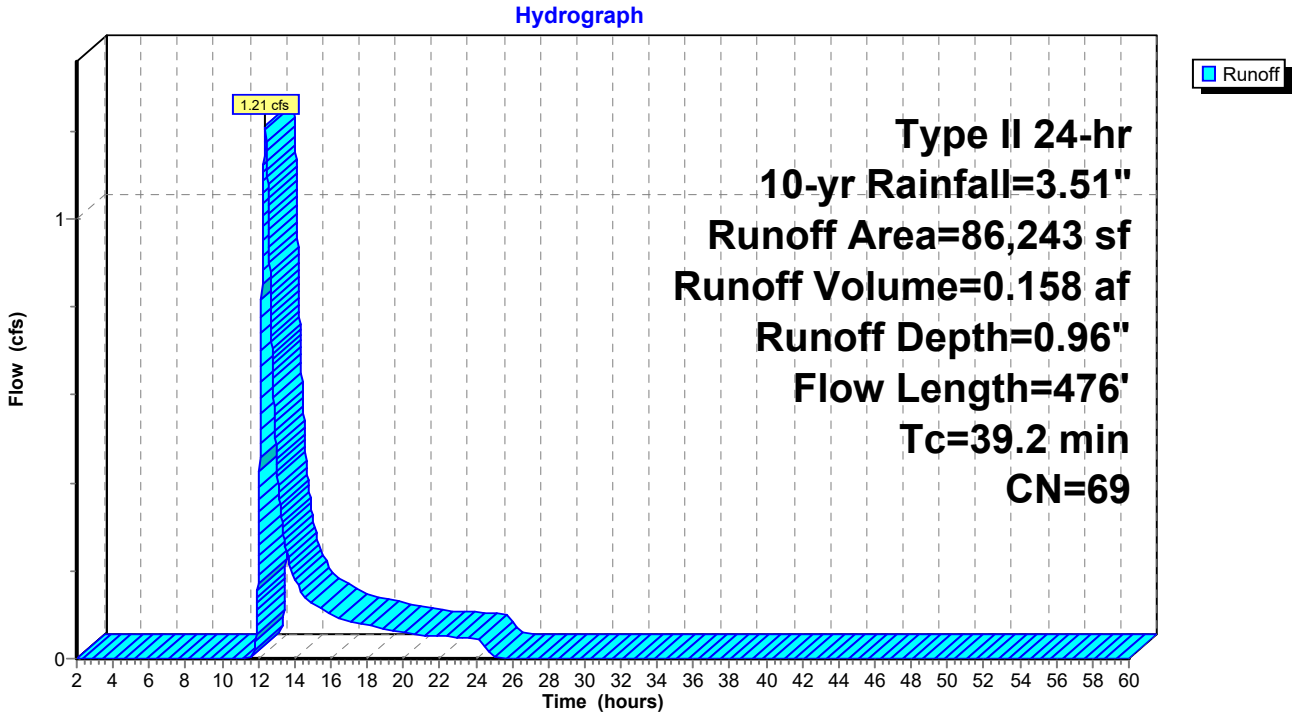
Runoff = 1.21 cfs @ 12.41 hrs, Volume= 0.158 af, Depth= 0.96"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	86,243	69	50/50 GRASS/PAVED
	86,243		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.3	100	0.0030	0.05		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
2.1	116	0.0170	0.91		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.8	260	0.0135	2.36		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
39.2	476	Total			

Subcatchment 5S: C-DA-EX5



Summary for Subcatchment 6S: C-DA-EX6

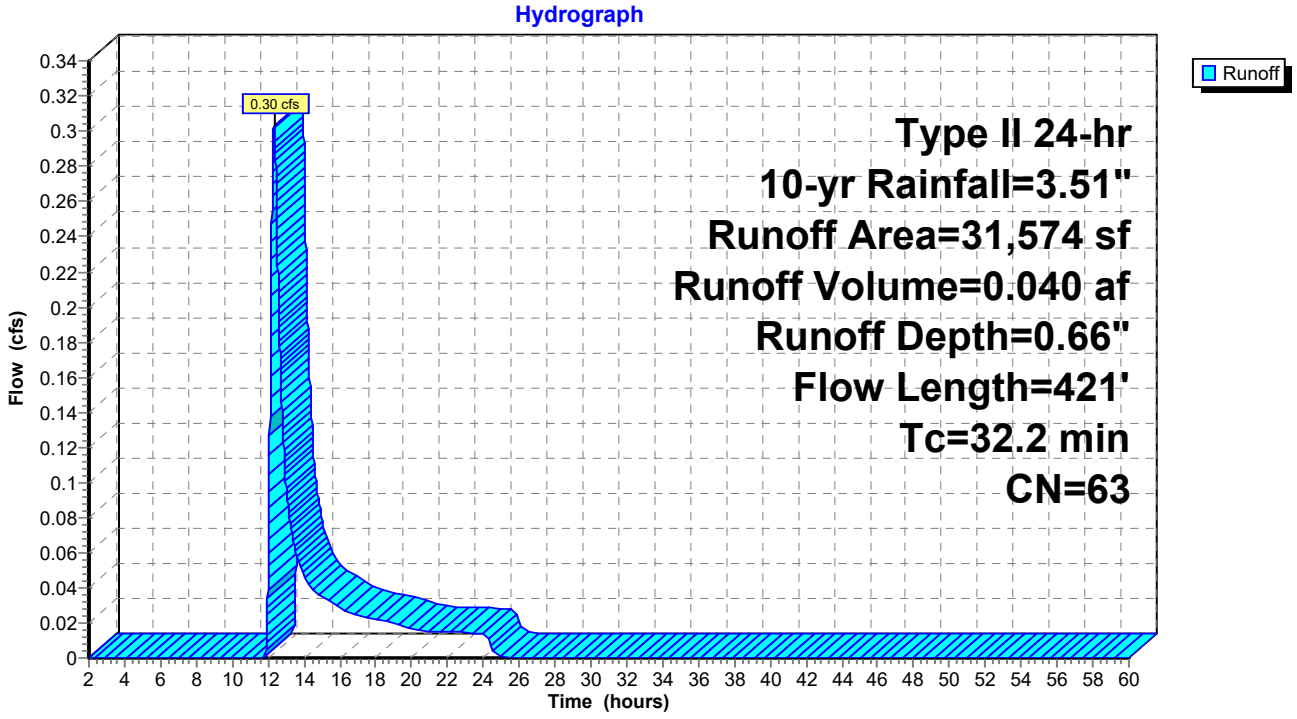
Runoff = 0.30 cfs @ 12.34 hrs, Volume= 0.040 af, Depth= 0.66"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	31,574	63	
	31,574		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0065	0.06		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
4.8	110	0.0030	0.38		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.8	19	0.0036	0.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.7	192	0.0200	4.38	0.86	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012 Corrugated PP, smooth interior
32.2	421	Total			

Subcatchment 6S: C-DA-EX6



Summary for Pond 16P: 8' dia drywell

[92] Warning: Device #2 is above defined storage

Inflow Area = 0.890 ac, 0.00% Impervious, Inflow Depth = 0.17" for 10-yr event
Inflow = 0.03 cfs @ 12.66 hrs, Volume= 0.013 af
Outflow = 0.01 cfs @ 19.83 hrs, Volume= 0.013 af, Atten= 68%, Lag= 429.9 min
Discarded = 0.01 cfs @ 19.83 hrs, Volume= 0.013 af
Secondary = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 850.10' @ 19.83 hrs Surf.Area= 199 sf Storage= 205 cf

Plug-Flow detention time= 303.6 min calculated for 0.013 af (100% of inflow)
Center-of-Mass det. time= 303.7 min (1,324.0 - 1,020.4)

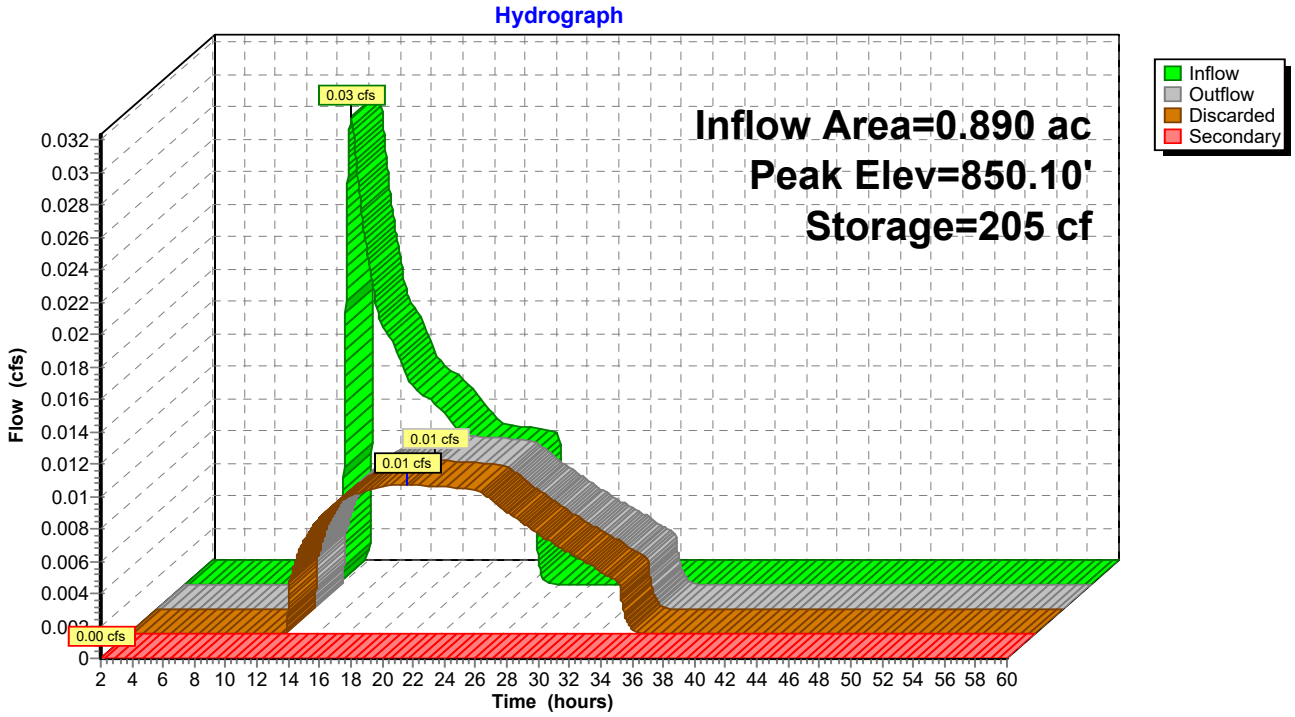
Volume	Invert	Avail.Storage	Storage Description
#1	846.64'	2,414 cf	**9.00'D x 14.00'H Vertical Cone/Cylinder Z=1.0** 6,535 cf Overall - 500 cf Embedded = 6,035 cf x 40.0% Voids
#2	847.64'	368 cf	**6.00'D x 13.00'H Vertical Cone/Cylinder**Inside #1 500 cf Overall - 6.0" Wall Thickness = 368 cf
		2,781 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	846.64'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	860.94'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.01 cfs @ 19.83 hrs HW=850.10' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Secondary OutFlow Max=0.00 cfs @ 2.00 hrs HW=846.64' (Free Discharge)
↑**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 16P: 8' dia drywell

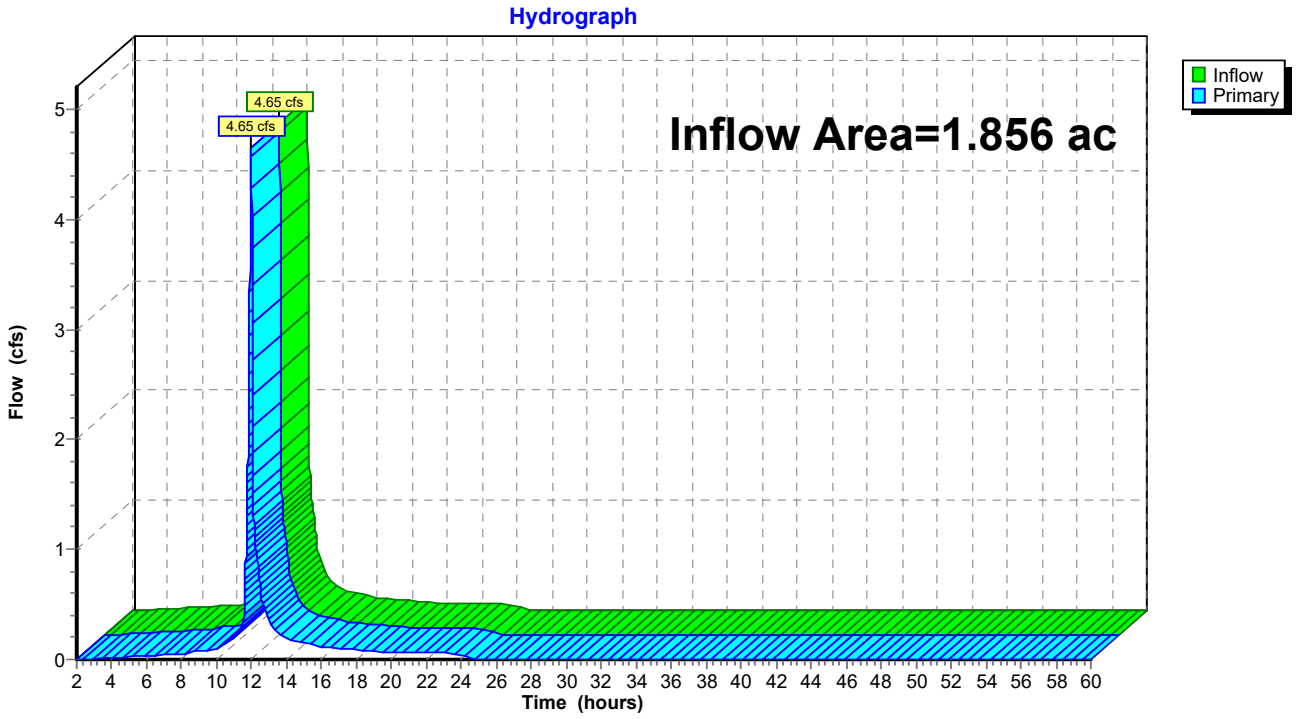


Summary for Link 8L: Brownson Street design point 1

Inflow Area = 1.856 ac, 0.00% Impervious, Inflow Depth = 1.91" for 10-yr event
Inflow = 4.65 cfs @ 11.97 hrs, Volume= 0.295 af
Primary = 4.65 cfs @ 11.97 hrs, Volume= 0.295 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 8L: Brownson Street design point 1

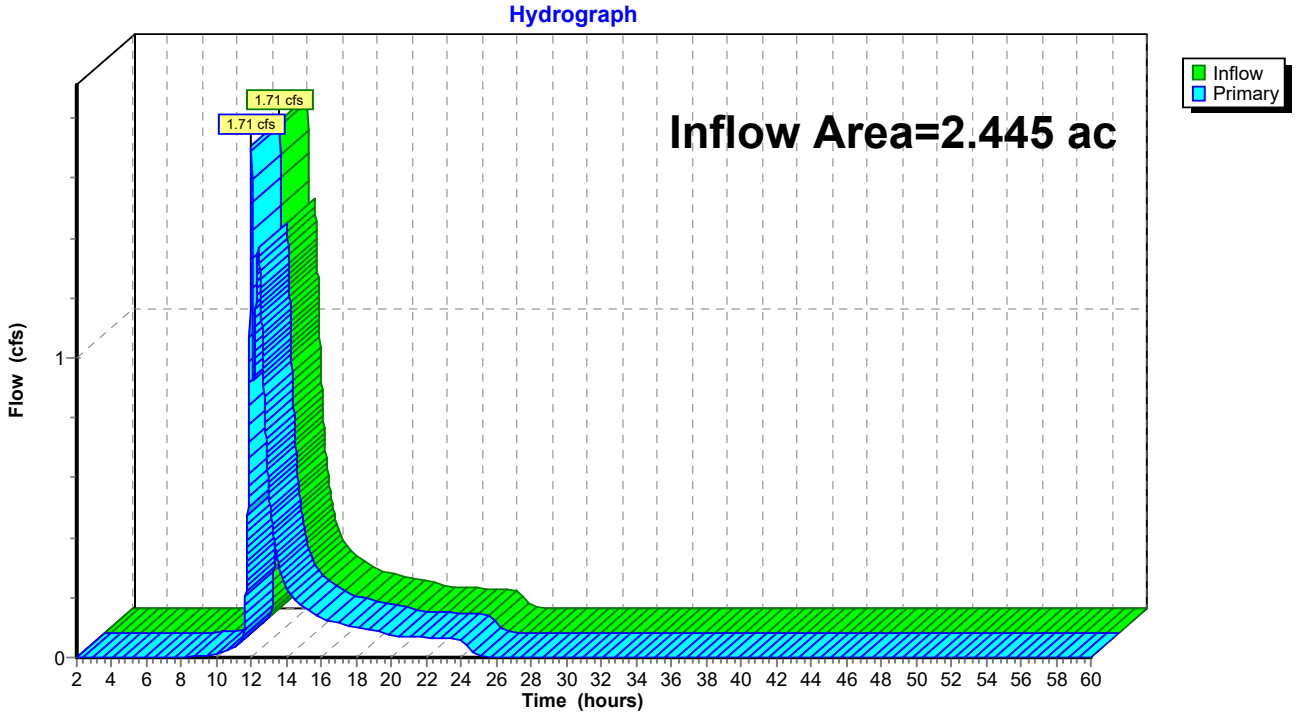


Summary for Link 9L: Ogden Street Design Point 2

Inflow Area = 2.445 ac, 0.00% Impervious, Inflow Depth = 1.13" for 10-yr event
Inflow = 1.71 cfs @ 11.98 hrs, Volume= 0.231 af
Primary = 1.71 cfs @ 11.98 hrs, Volume= 0.231 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 9L: Ogden Street Design Point 2



Time span=2.00-60.00 hrs, dt=0.01 hrs, 5801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: C-DA-EX1 Runoff Area=38,768 sf 0.00% Impervious Runoff Depth=1.10"
Flow Length=269' Tc=31.3 min CN=49 Runoff=0.62 cfs 0.082 af

Subcatchment2S: C-DA-EX2 Runoff Area=8,128 sf 0.00% Impervious Runoff Depth=2.77"
Flow Length=107' Tc=23.8 min CN=69 Runoff=0.51 cfs 0.043 af

Subcatchment3S: C-DA-EX3 Runoff Area=41,132 sf 0.00% Impervious Runoff Depth>5.59"
Flow Length=242' Tc=6.0 min CN=96 Runoff=8.09 cfs 0.440 af

Subcatchment4S: C-DA-EX4 Runoff Area=20,253 sf 0.00% Impervious Runoff Depth=4.16"
Flow Length=279' Tc=6.0 min CN=83 Runoff=3.33 cfs 0.161 af

Subcatchment5S: C-DA-EX5 Runoff Area=86,243 sf 0.00% Impervious Runoff Depth=2.77"
Flow Length=476' Tc=39.2 min CN=69 Runoff=3.89 cfs 0.457 af

Subcatchment6S: C-DA-EX6 Runoff Area=31,574 sf 0.00% Impervious Runoff Depth=2.23"
Flow Length=421' Tc=32.2 min CN=63 Runoff=1.27 cfs 0.134 af

Pond 16P: 8' dia drywell Peak Elev=858.80' Storage=2,041 cf Inflow=0.62 cfs 0.082 af
Discarded=0.04 cfs 0.082 af Secondary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.082 af

Link 8L: Brownson Street design point 1 Inflow=8.64 cfs 0.618 af
Primary=8.64 cfs 0.618 af

Link 9L: Ogden Street Design Point 2 Inflow=4.27 cfs 0.618 af
Primary=4.27 cfs 0.618 af

Total Runoff Area = 5.190 ac Runoff Volume = 1.317 af Average Runoff Depth = 3.05"
100.00% Pervious = 5.190 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: C-DA-EX1

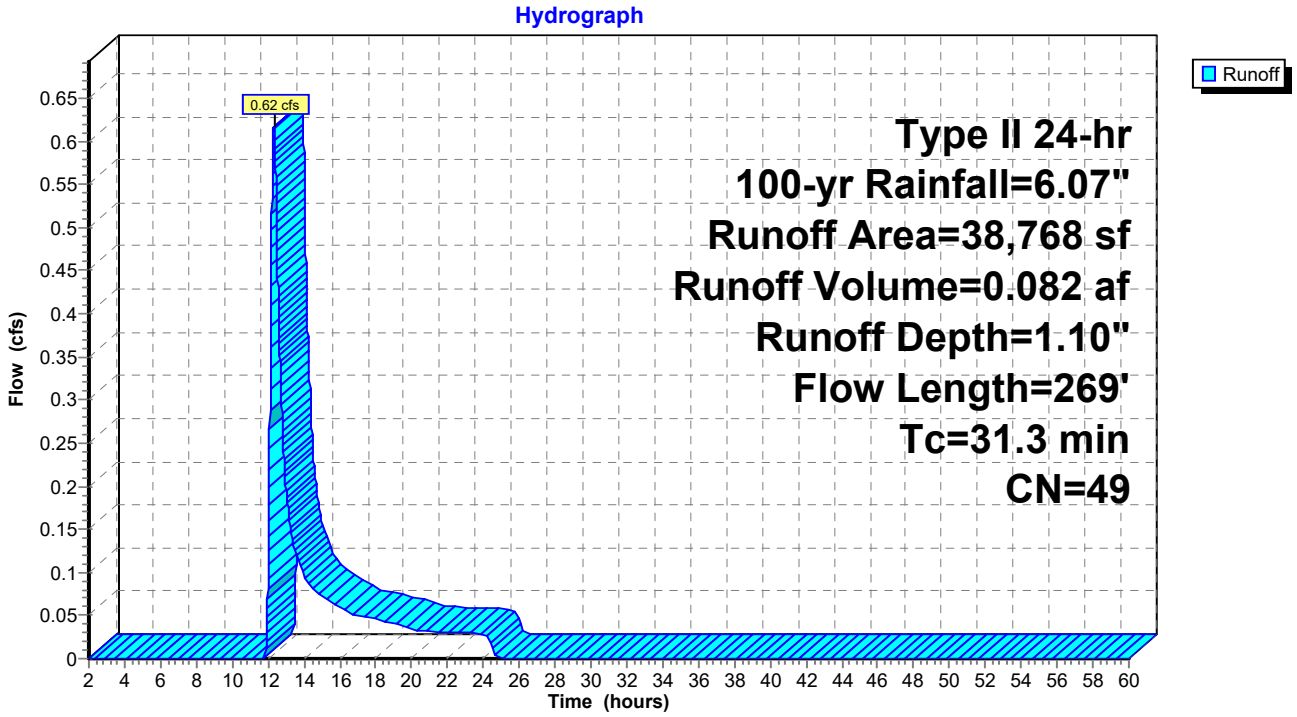
Runoff = 0.62 cfs @ 12.32 hrs, Volume= 0.082 af, Depth= 1.10"
Routed to Pond 16P : 8' dia drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

Area (sf)	CN	Description
38,768	49	50-75% Grass cover, Fair, HSG A
38,768		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.1	100	0.0078	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
5.7	109	0.0021	0.32		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.5	60	0.0092	0.67		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
31.3	269	Total			

Subcatchment 1S: C-DA-EX1



Summary for Subcatchment 2S: C-DA-EX2

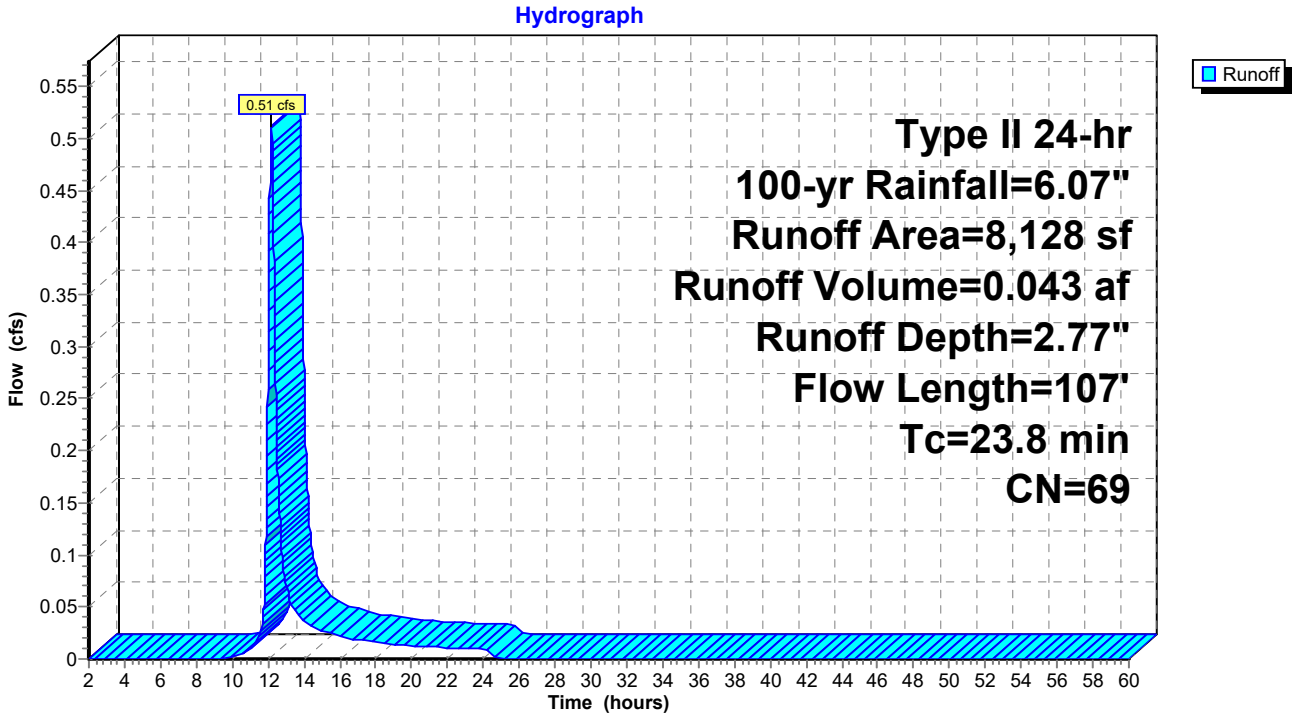
Runoff = 0.51 cfs @ 12.18 hrs, Volume= 0.043 af, Depth= 2.77"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

	Area (sf)	CN	Description
*	8,128	69	>75% Grass cover, Good, HSG A
	8,128		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.8	100	0.0080	0.07		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
0.0	7	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
23.8	107	Total			

Subcatchment 2S: C-DA-EX2



Summary for Subcatchment 3S: C-DA-EX3

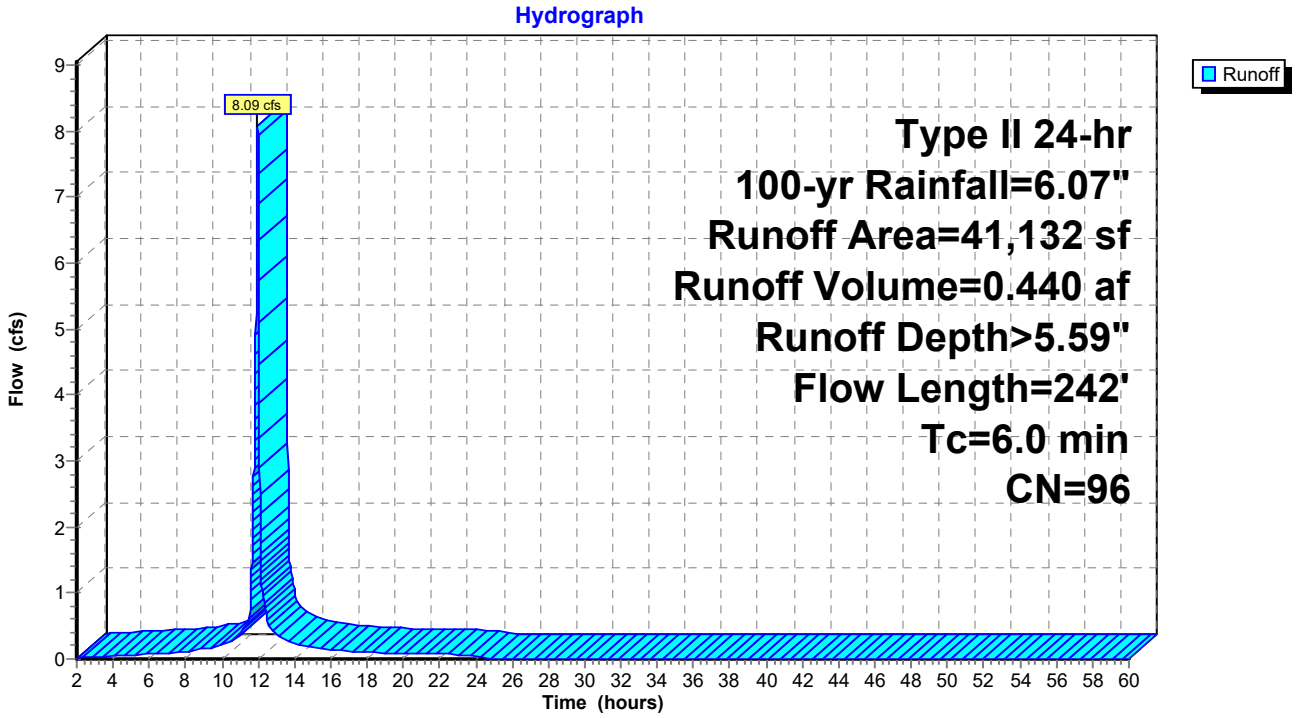
Runoff = 8.09 cfs @ 11.97 hrs, Volume= 0.440 af, Depth> 5.59"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

Area (sf)	CN	Description
41,132	96	Gravel surface, HSG A
41,132		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	100	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	142	0.0480	4.45		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.9	242	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: C-DA-EX3



Summary for Subcatchment 4S: C-DA-EX4

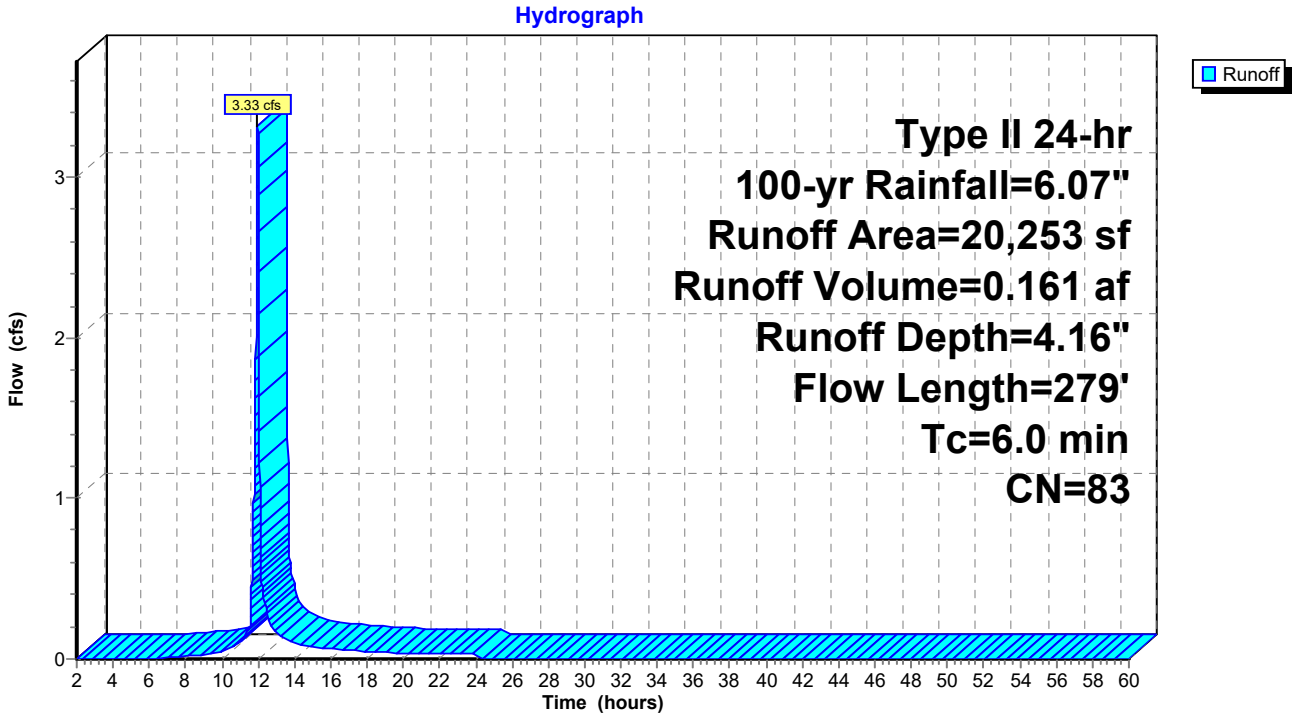
Runoff = 3.33 cfs @ 11.97 hrs, Volume= 0.161 af, Depth= 4.16"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

	Area (sf)	CN	Description
*	20,253	83	Paved parking, HSG A
	20,253		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
1.6	179	0.0084	1.86		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	279	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4S: C-DA-EX4



Summary for Subcatchment 5S: C-DA-EX5

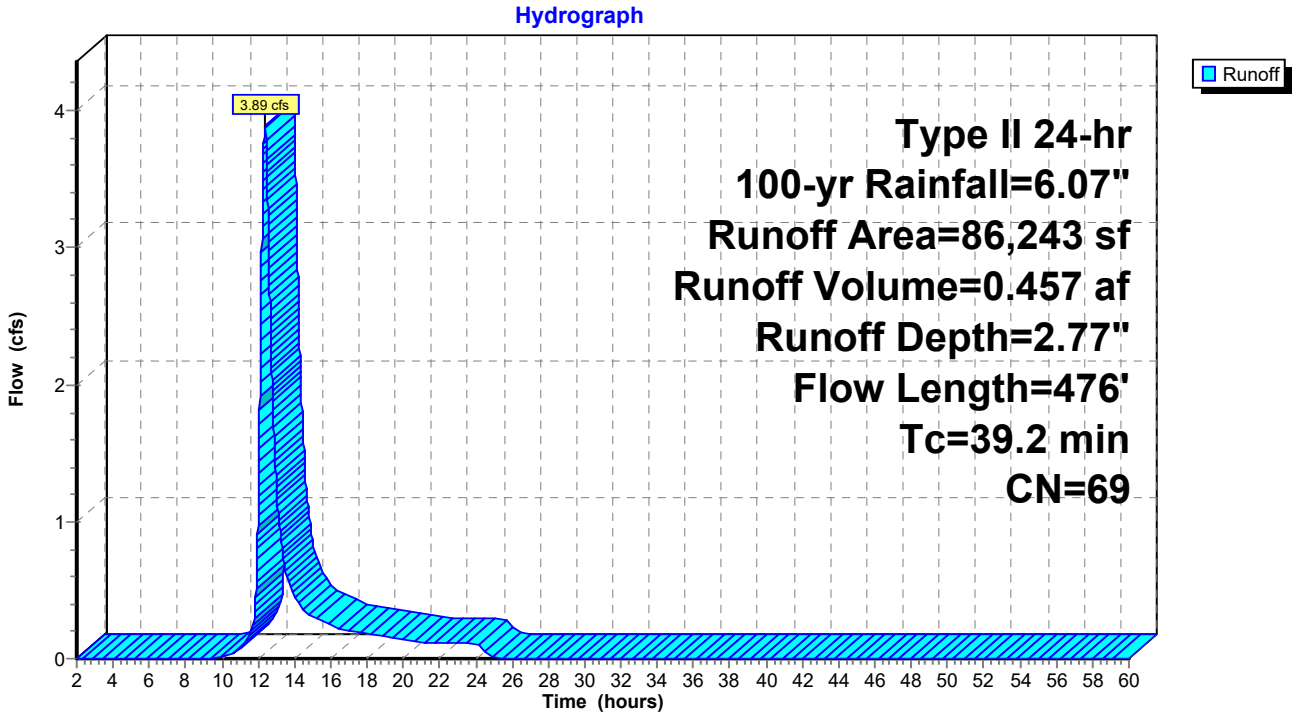
Runoff = 3.89 cfs @ 12.37 hrs, Volume= 0.457 af, Depth= 2.77"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

	Area (sf)	CN	Description
*	86,243	69	50/50 GRASS/PAVED
	86,243		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.3	100	0.0030	0.05		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
2.1	116	0.0170	0.91		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.8	260	0.0135	2.36		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
39.2	476	Total			

Subcatchment 5S: C-DA-EX5



Summary for Subcatchment 6S: C-DA-EX6

[47] Hint: Peak is 148% of capacity of segment #4

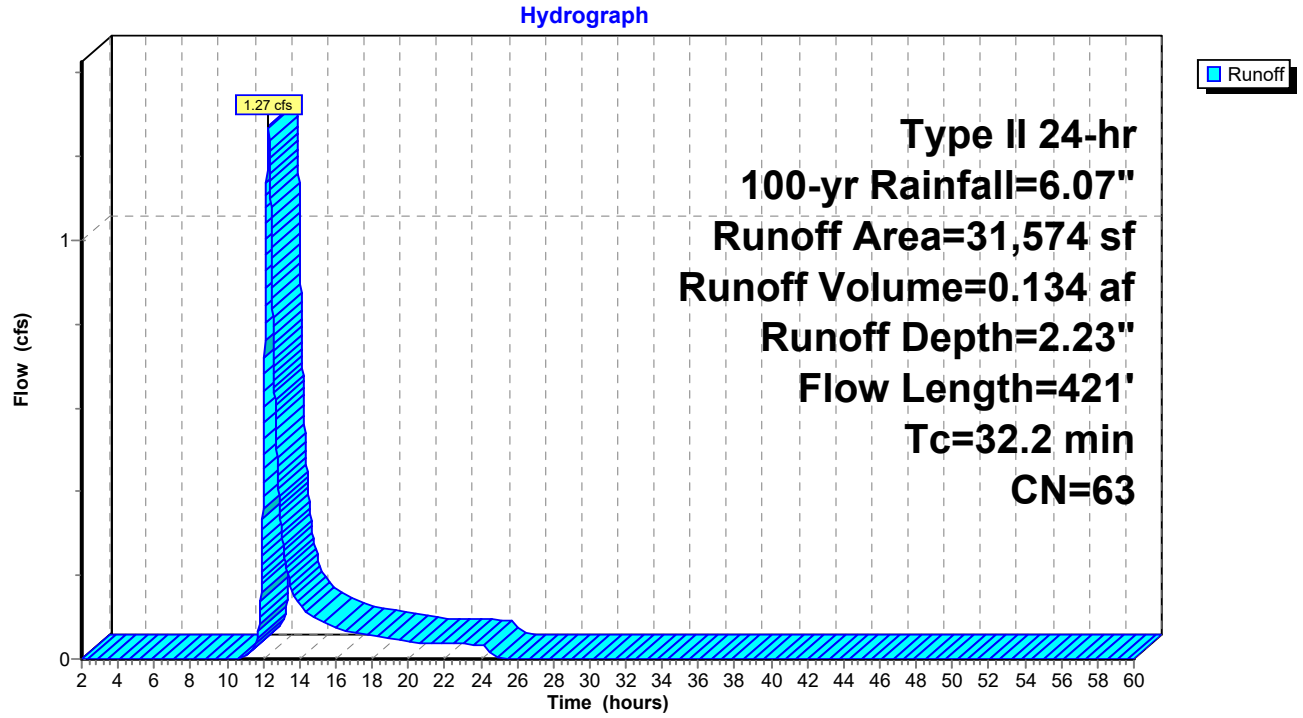
Runoff = 1.27 cfs @ 12.28 hrs, Volume= 0.134 af, Depth= 2.23"
Routed to Link 8L : Brownson Street design point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=6.07"

	Area (sf)	CN	Description
*	31,574	63	
	31,574		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0065	0.06		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
4.8	110	0.0030	0.38		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.8	19	0.0036	0.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.7	192	0.0200	4.38	0.86	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012 Corrugated PP, smooth interior
32.2	421	Total			

Subcatchment 6S: C-DA-EX6



Summary for Pond 16P: 8' dia drywell

[92] Warning: Device #2 is above defined storage

Inflow Area = 0.890 ac, 0.00% Impervious, Inflow Depth = 1.10" for 100-yr event
Inflow = 0.62 cfs @ 12.32 hrs, Volume= 0.082 af
Outflow = 0.04 cfs @ 19.03 hrs, Volume= 0.082 af, Atten= 93%, Lag= 402.7 min
Discarded = 0.04 cfs @ 19.03 hrs, Volume= 0.082 af
Secondary = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 858.80' @ 19.03 hrs Surf.Area= 872 sf Storage= 2,041 cf

Plug-Flow detention time= 709.0 min calculated for 0.082 af (100% of inflow)
Center-of-Mass det. time= 709.0 min (1,627.4 - 918.4)

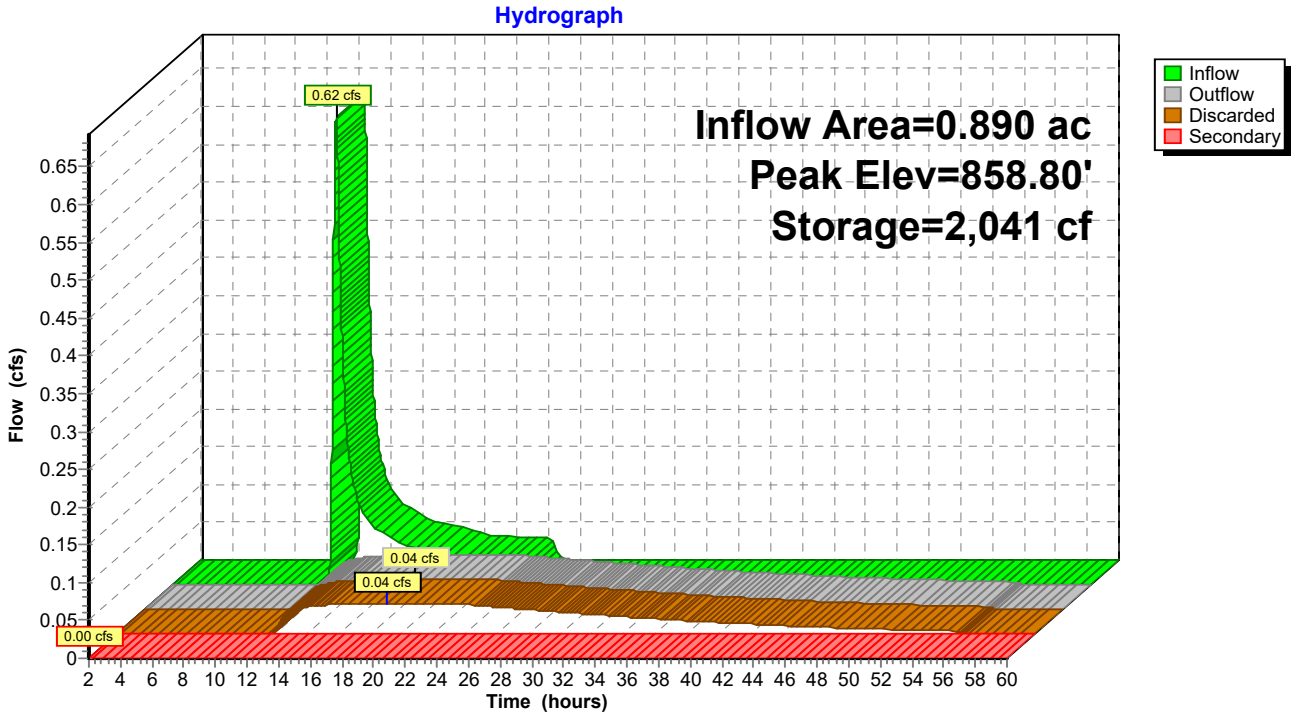
Volume	Invert	Avail.Storage	Storage Description
#1	846.64'	2,414 cf	**9.00'D x 14.00'H Vertical Cone/Cylinder Z=1.0** 6,535 cf Overall - 500 cf Embedded = 6,035 cf x 40.0% Voids
#2	847.64'	368 cf	**6.00'D x 13.00'H Vertical Cone/Cylinder**Inside #1 500 cf Overall - 6.0" Wall Thickness = 368 cf
		2,781 cf	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	846.64'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	860.94'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.04 cfs @ 19.03 hrs HW=858.80' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Secondary OutFlow Max=0.00 cfs @ 2.00 hrs HW=846.64' (Free Discharge)
↑—**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 16P: 8' dia drywell

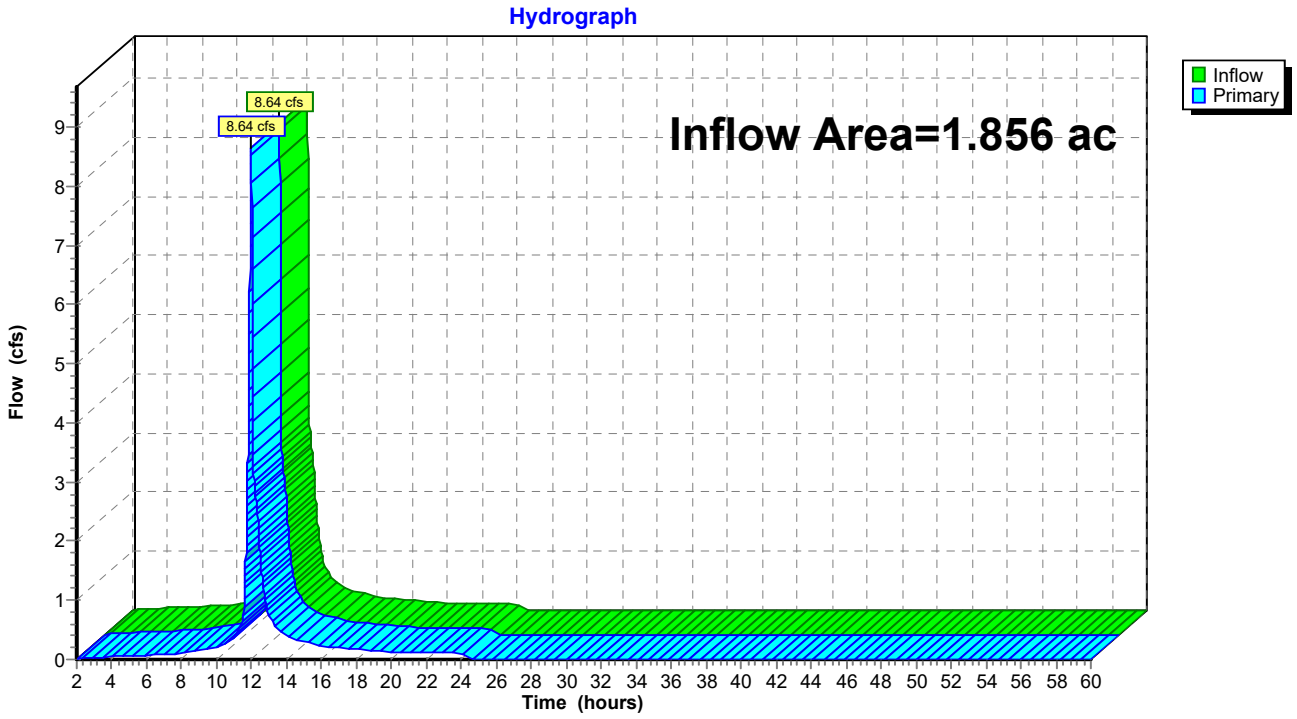


Summary for Link 8L: Brownson Street design point 1

Inflow Area = 1.856 ac, 0.00% Impervious, Inflow Depth > 3.99" for 100-yr event
Inflow = 8.64 cfs @ 11.97 hrs, Volume= 0.618 af
Primary = 8.64 cfs @ 11.97 hrs, Volume= 0.618 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 8L: Brownson Street design point 1

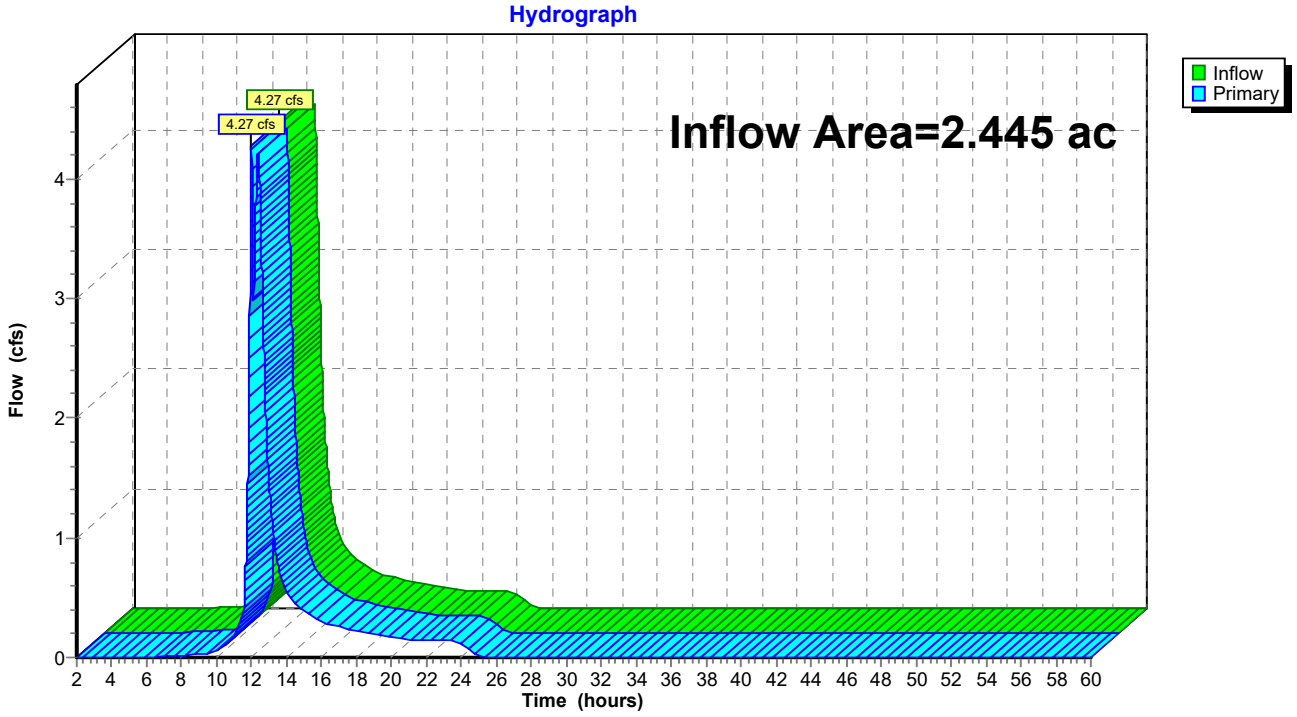


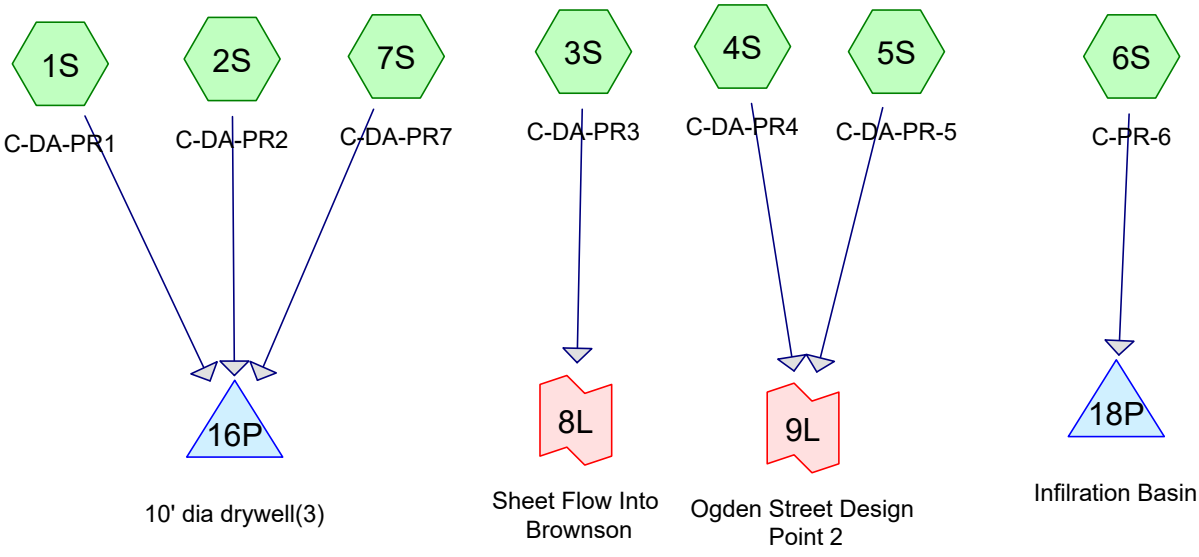
Summary for Link 9L: Ogden Street Design Point 2

Inflow Area = 2.445 ac, 0.00% Impervious, Inflow Depth = 3.03" for 100-yr event
Inflow = 4.27 cfs @ 11.98 hrs, Volume= 0.618 af
Primary = 4.27 cfs @ 11.98 hrs, Volume= 0.618 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 2.00-60.00 hrs, dt= 0.01 hrs

Link 9L: Ogden Street Design Point 2





Subcat Reach Pond Link

Routing Diagram for 20213157.006_Proposed
Prepared by Passero Associates, Printed 3/31/2026

Project Notes

Defined 9 rainfall events from TRES IDF
Defined 9 rainfall events from TRES IDF
Defined 9 rainfall events from TRES IDF

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Type II 24-hr		Default	24.00	1	2.07	2
2	10-yr	Type II 24-hr		Default	24.00	1	3.51	2
3	100-yr	Type II 24-hr		Default	24.00	1	6.07	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.465	83	(4S)
1.431	63	50/50 GRASS/PAVED (6S)
0.433	60	Composite CN Lawna and pavement (1S)
0.298	96	Gravel surface, HSG A (3S)
1.391	98	Paved parking, HSG A (5S)
0.080	98	Unconnected pavement, HSG A (7S)
1.031	98	Unconnected roofs, HSG A (2S)
5.128	**84**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
2.799	HSG A	2S, 3S, 5S, 7S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
2.328	Other	1S, 4S, 6S
5.128		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchr Numbers
0.000	0.000	0.000	0.000	0.465	0.465		
0.000	0.000	0.000	0.000	1.431	1.431	50/50 GRASS/PAVED	
0.000	0.000	0.000	0.000	0.433	0.433	Composite CN Lawna and pavement	
0.298	0.000	0.000	0.000	0.000	0.298	Gravel surface	
1.391	0.000	0.000	0.000	0.000	1.391	Paved parking	
0.080	0.000	0.000	0.000	0.000	0.080	Unconnected pavement	
1.031	0.000	0.000	0.000	0.000	1.031	Unconnected roofs	
2.799	**0.000**	**0.000**	**0.000**	**2.328**	**5.128**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	1S	0.00	0.00	51.0	0.0150	0.012	0.0	6.0	0.0	
2	2S	0.00	0.00	46.0	0.0100	0.010	0.0	6.0	0.0	
3	2S	0.00	0.00	112.0	0.0100	0.010	0.0	8.0	0.0	
4	2S	0.00	0.00	32.0	0.0100	0.010	0.0	10.0	0.0	
5	7S	0.00	0.00	140.0	0.0150	0.010	0.0	6.0	0.0	

Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: C-DA-PR1 Runoff Area=18,860 sf 0.00% Impervious Runoff Depth=0.07"
Flow Length=257' Tc=6.0 min CN=60 Runoff=0.00 cfs 0.003 af

Subcatchment2S: C-DA-PR2 Runoff Area=44,896 sf 100.00% Impervious Runoff Depth>1.82"
Flow Length=190' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=2.97 cfs 0.156 af

Subcatchment3S: C-DA-PR3 Runoff Area=12,963 sf 0.00% Impervious Runoff Depth>1.64"
Flow Length=242' Tc=6.0 min CN=96 Runoff=0.81 cfs 0.041 af

Subcatchment4S: C-DA-PR4 Runoff Area=20,253 sf 0.00% Impervious Runoff Depth=0.74"
Flow Length=279' Tc=6.0 min CN=83 Runoff=0.62 cfs 0.029 af

Subcatchment5S: C-DA-PR-5 Runoff Area=60,581 sf 100.00% Impervious Runoff Depth>1.82"
Flow Length=478' Slope=0.0031 '/' Tc=8.6 min CN=98 Runoff=3.69 cfs 0.211 af

Subcatchment6S: C-PR-6 Runoff Area=62,314 sf 0.00% Impervious Runoff Depth=0.12"
Flow Length=295' Tc=38.4 min CN=63 Runoff=0.04 cfs 0.014 af

Subcatchment7S: C-DA-PR7 Runoff Area=3,487 sf 100.00% Impervious Runoff Depth>1.82"
Flow Length=220' Tc=6.0 min CN=98 Runoff=0.23 cfs 0.012 af

Pond 16P: 10' dia drywell(3) Peak Elev=853.28' Storage=2,432 cf Inflow=3.20 cfs 0.171 af
Discarded=0.50 cfs 0.171 af Secondary=0.00 cfs 0.000 af Outflow=0.50 cfs 0.171 af

Pond 18P: Infilration Basin Peak Elev=858.22' Storage=76 cf Inflow=0.04 cfs 0.014 af
Outflow=0.02 cfs 0.014 af

Link 8L: Sheet Flow Into Brownson Inflow=0.81 cfs 0.041 af
Primary=0.81 cfs 0.041 af

Link 9L: Ogden Street Design Point 2 Inflow=4.30 cfs 0.240 af
Primary=4.30 cfs 0.240 af

Total Runoff Area = 5.128 ac Runoff Volume = 0.465 af Average Runoff Depth = 1.09"
51.21% Pervious = 2.626 ac 48.79% Impervious = 2.501 ac

Summary for Subcatchment 1S: C-DA-PR1

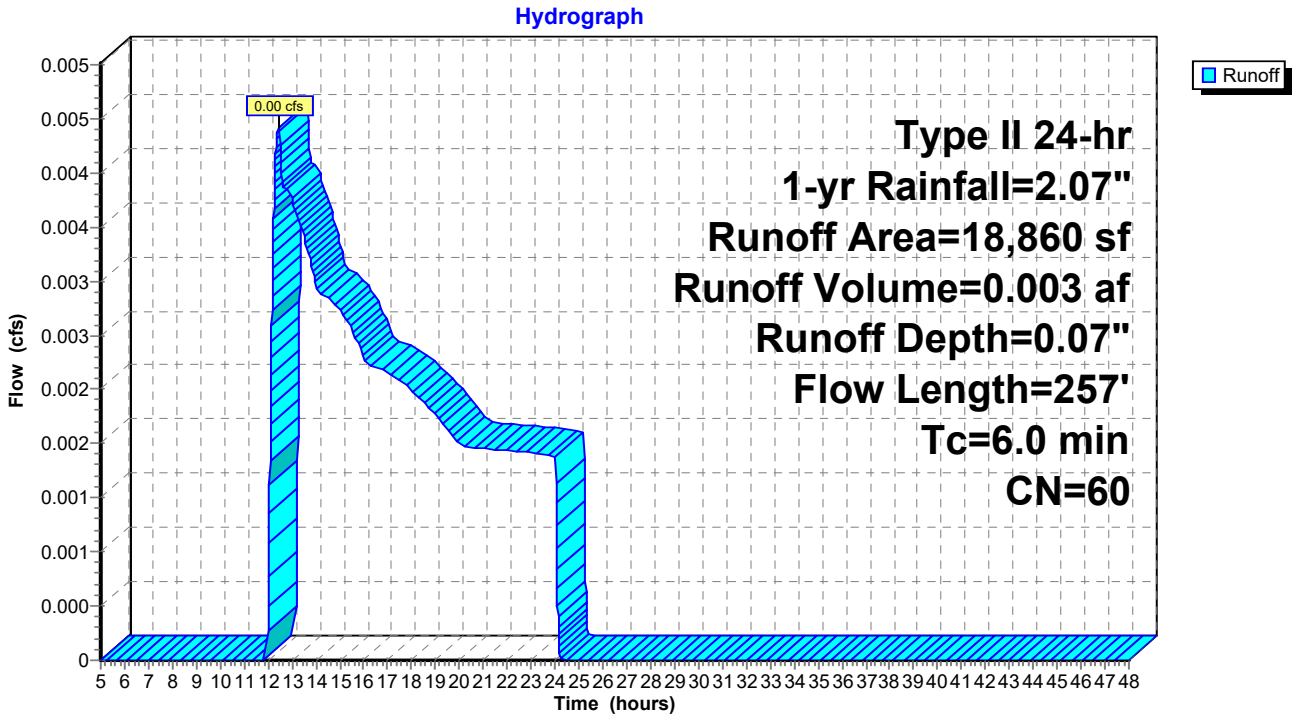
Runoff = 0.00 cfs @ 12.41 hrs, Volume= 0.003 af, Depth= 0.07"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	18,860	60	Composite CN Lawna and pavement
	18,860		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.9	106	0.0090	1.93		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	51	0.0150	3.79	0.74	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012 Corrugated PP, smooth interior
2.9	257	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1S: C-DA-PR1



Summary for Subcatchment 2S: C-DA-PR2

[47] Hint: Peak is 408% of capacity of segment #1
[47] Hint: Peak is 189% of capacity of segment #2
[47] Hint: Peak is 104% of capacity of segment #3

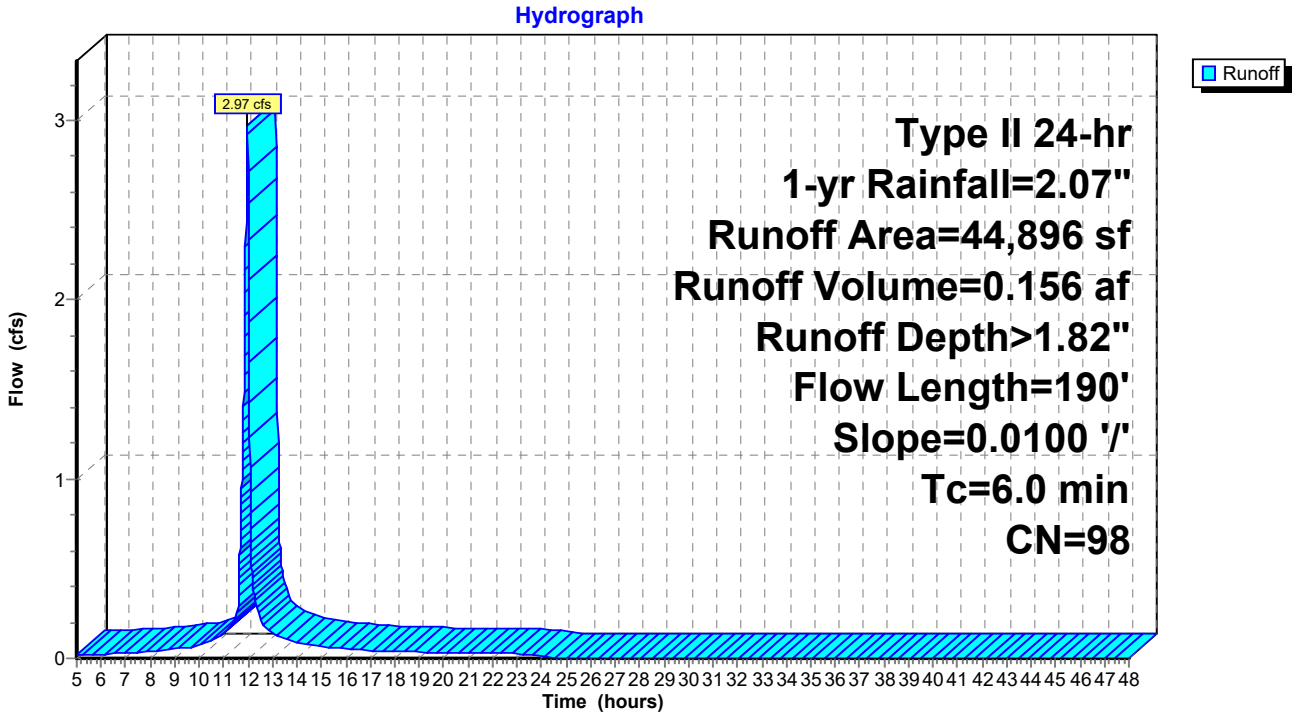
Runoff = 2.97 cfs @ 11.97 hrs, Volume= 0.156 af, Depth> 1.82"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
44,896	98	Unconnected roofs, HSG A
44,896		100.00% Impervious Area
44,896		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	46	0.0100	3.71	0.73	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.4	112	0.0100	4.50	1.57	**Pipe Channel,** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.1	32	0.0100	5.22	2.85	**Pipe Channel,** 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
0.7	190	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 2S: C-DA-PR2



Summary for Subcatchment 3S: C-DA-PR3

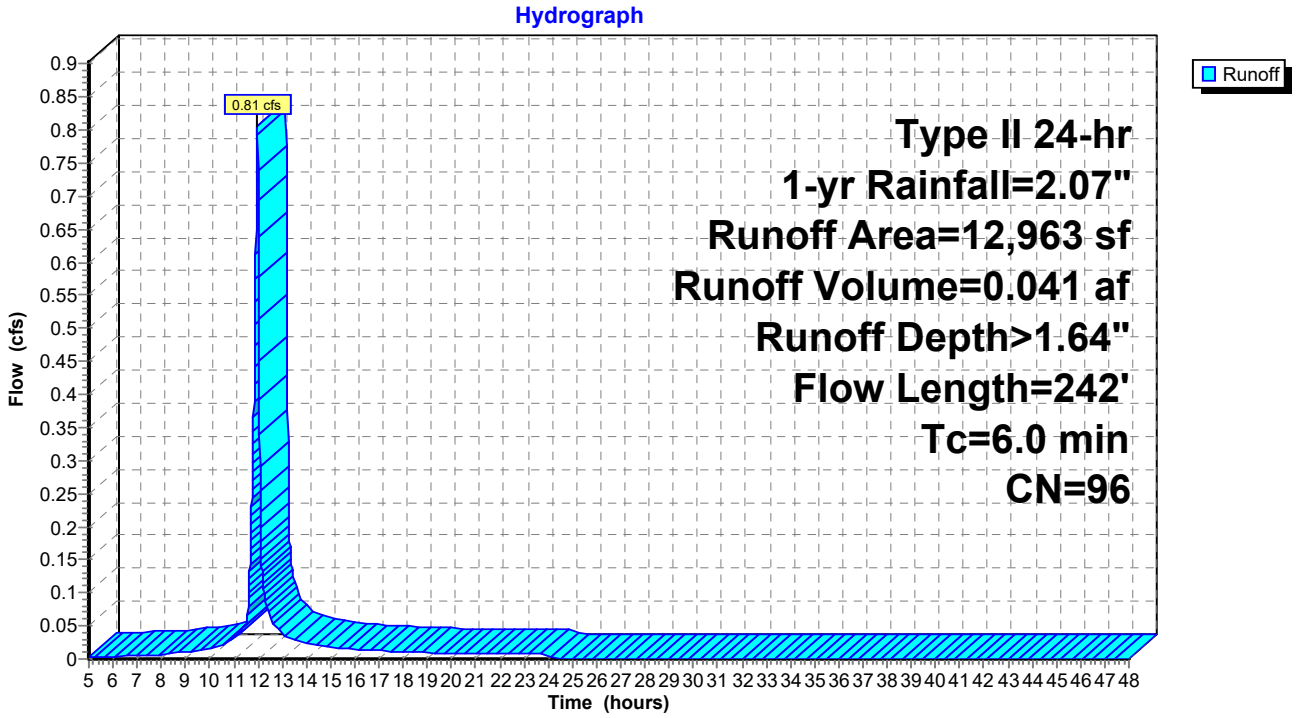
Runoff = 0.81 cfs @ 11.97 hrs, Volume= 0.041 af, Depth> 1.64"
Routed to Link 8L : Sheet Flow Into Brownson

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
12,963	96	Gravel surface, HSG A
12,963		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	100	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	142	0.0480	4.45		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.9	242	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: C-DA-PR3



Summary for Subcatchment 4S: C-DA-PR4

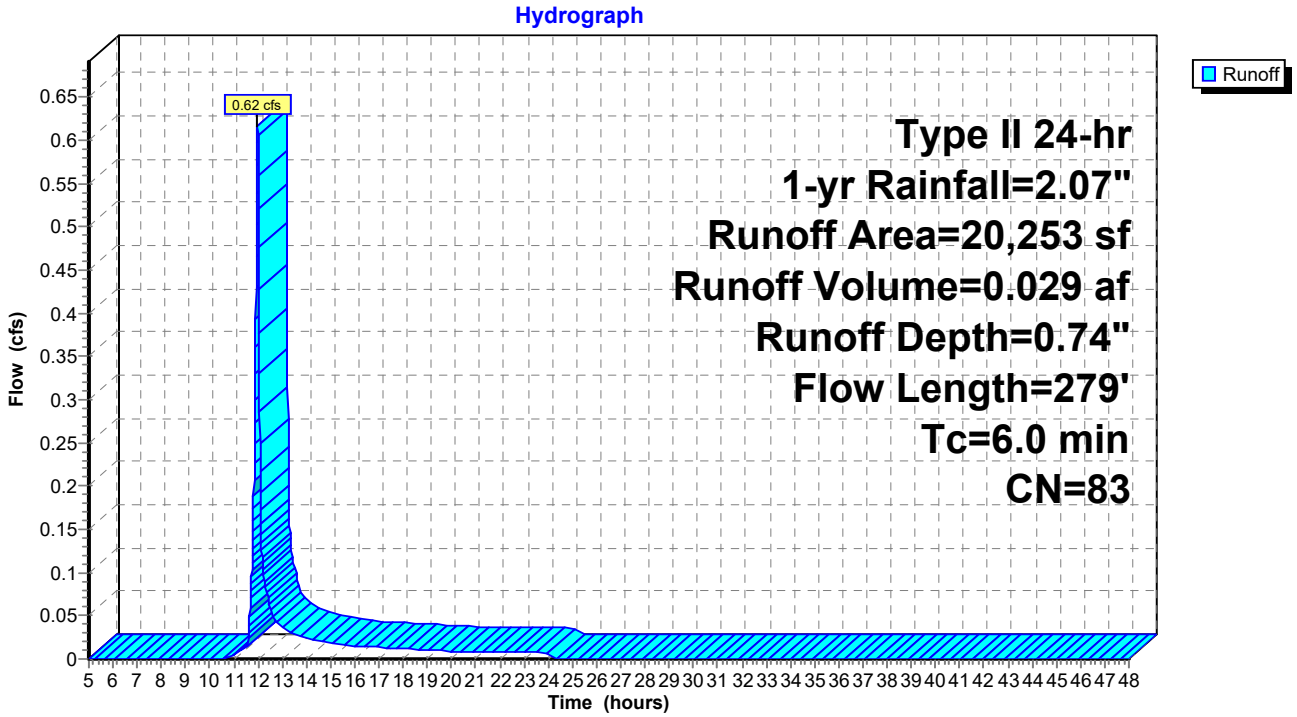
Runoff = 0.62 cfs @ 11.98 hrs, Volume= 0.029 af, Depth= 0.74"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	20,253	83	
	20,253		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
1.6	179	0.0084	1.86		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	279	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4S: C-DA-PR4



Summary for Subcatchment 5S: C-DA-PR-5

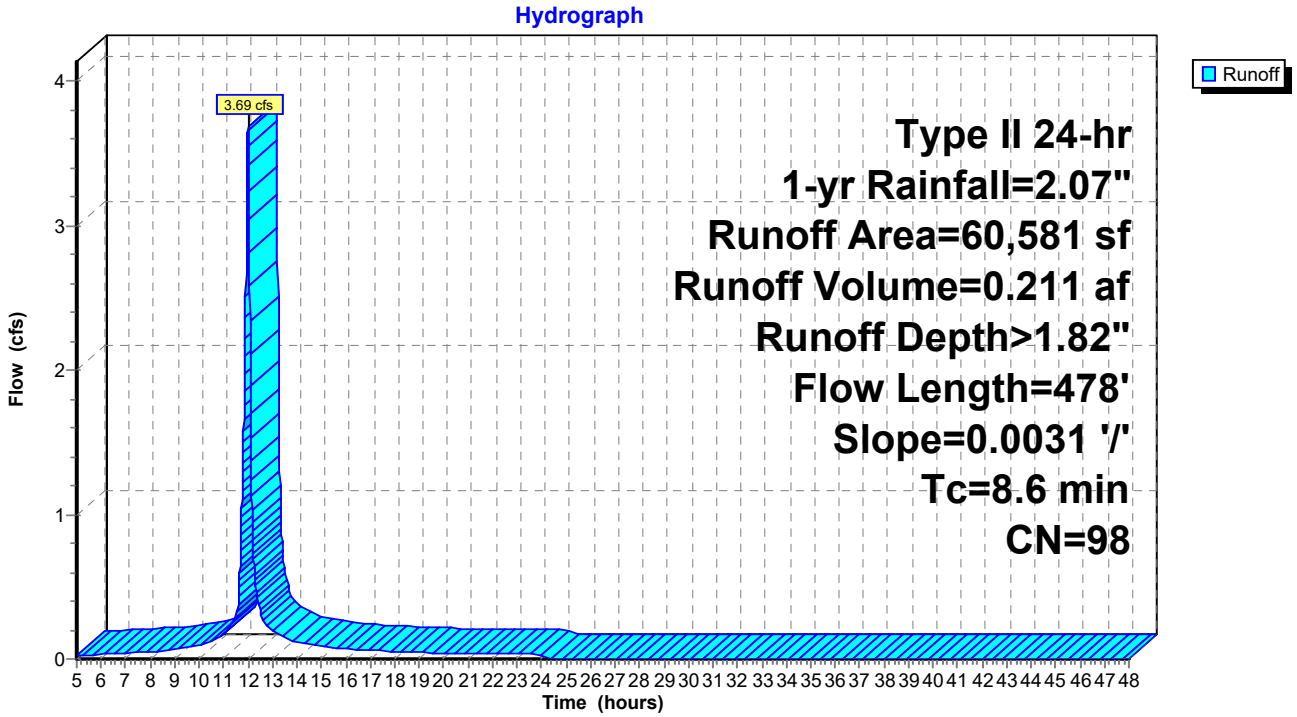
Runoff = 3.69 cfs @ 11.99 hrs, Volume= 0.211 af, Depth> 1.82"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
60,581	98	Paved parking, HSG A
60,581		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	100	0.0031	0.56		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
5.6	378	0.0031	1.13		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	478	Total			

Subcatchment 5S: C-DA-PR-5



Summary for Subcatchment 6S: C-PR-6

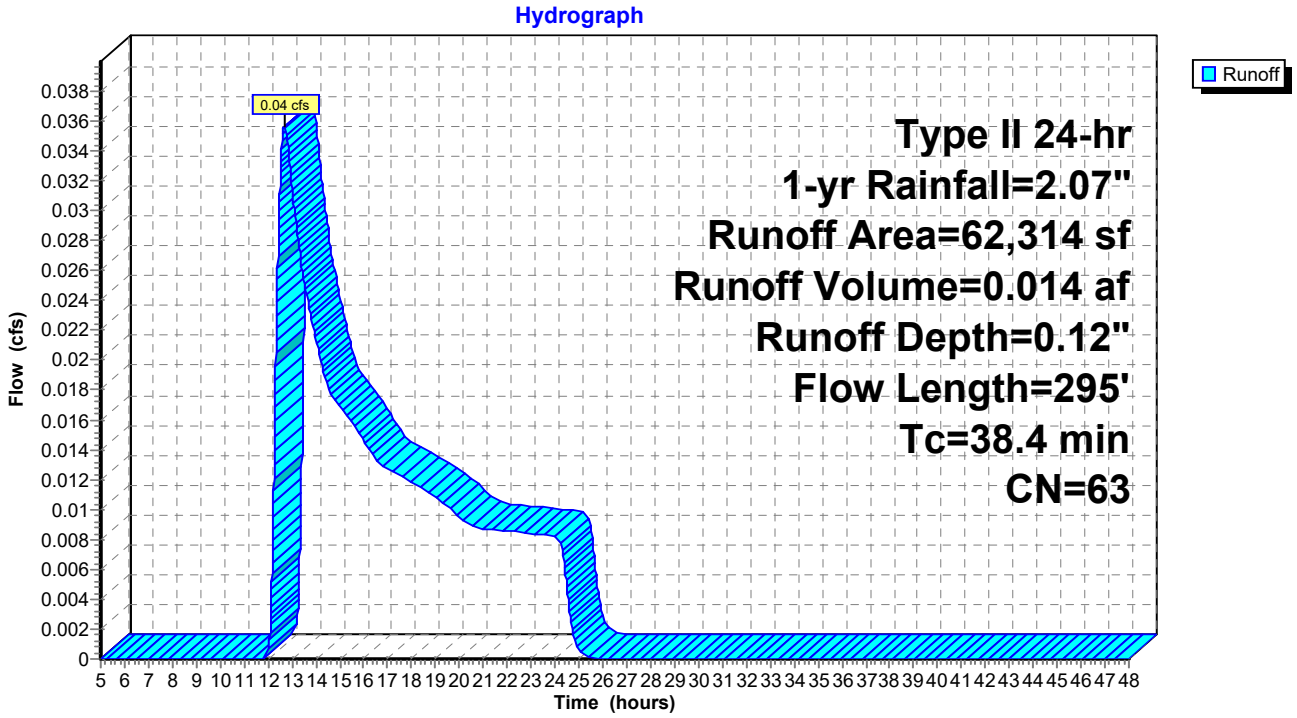
Runoff = 0.04 cfs @ 12.67 hrs, Volume= 0.014 af, Depth= 0.12"
Routed to Pond 18P : Infilration Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

	Area (sf)	CN	Description
*	62,314	63	50/50 GRASS/PAVED
	62,314		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.8	100	0.0031	0.05		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
3.6	195	0.0170	0.91		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
38.4	295	Total			

Subcatchment 6S: C-PR-6



Summary for Subcatchment 7S: C-DA-PR7

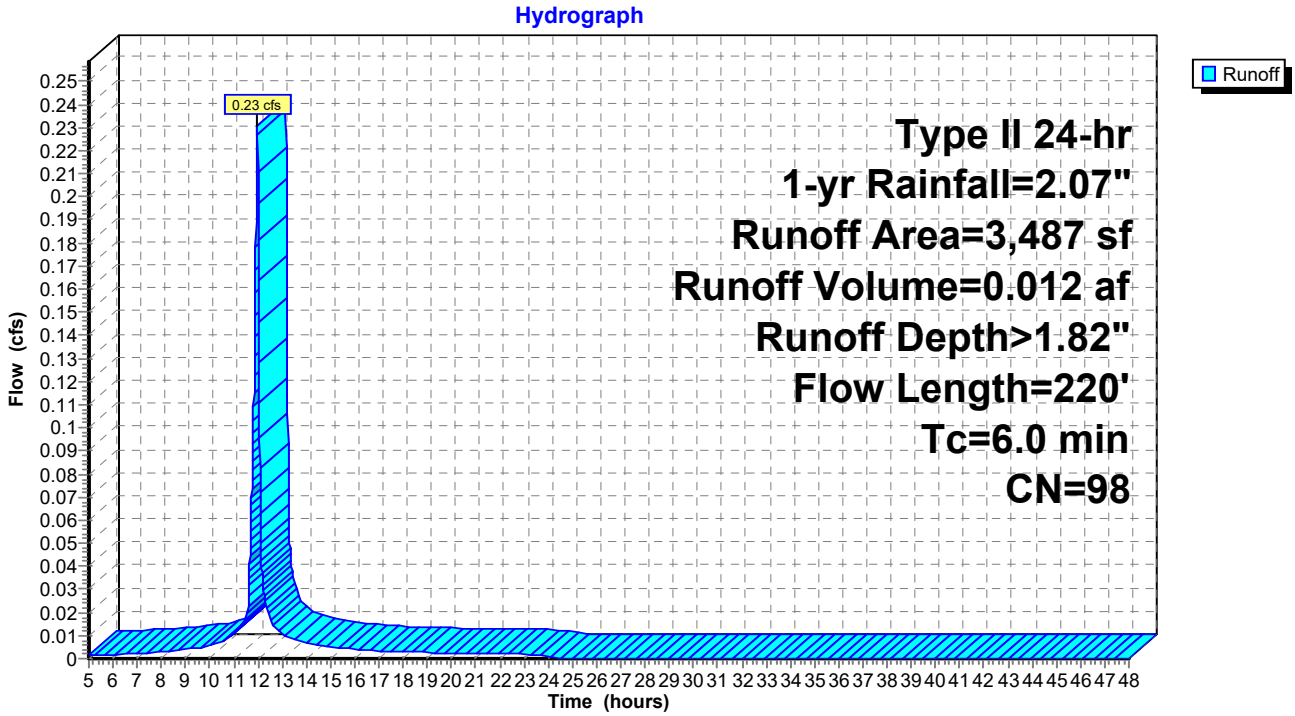
Runoff = 0.23 cfs @ 11.97 hrs, Volume= 0.012 af, Depth> 1.82"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=2.07"

Area (sf)	CN	Description
3,487	98	Unconnected pavement, HSG A
3,487		100.00% Impervious Area
3,487		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	80	0.0035	0.57		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	140	0.0150	4.55	0.89	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
2.9	220	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 7S: C-DA-PR7



Summary for Pond 16P: 10' dia drywell(3)

[82] Warning: Early inflow requires earlier time span
[92] Warning: Device #2 is above defined storage

Inflow Area = 1.544 ac, 71.95% Impervious, Inflow Depth > 1.33" for 1-yr event
Inflow = 3.20 cfs @ 11.97 hrs, Volume= 0.171 af
Outflow = 0.50 cfs @ 12.17 hrs, Volume= 0.171 af, Atten= 84%, Lag= 12.0 min
Discarded = 0.50 cfs @ 12.17 hrs, Volume= 0.171 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 853.28' @ 12.17 hrs Surf.Area= 2,165 sf Storage= 2,432 cf

Plug-Flow detention time= 33.6 min calculated for 0.171 af (100% of inflow)
Center-of-Mass det. time= 33.5 min (807.8 - 774.3)

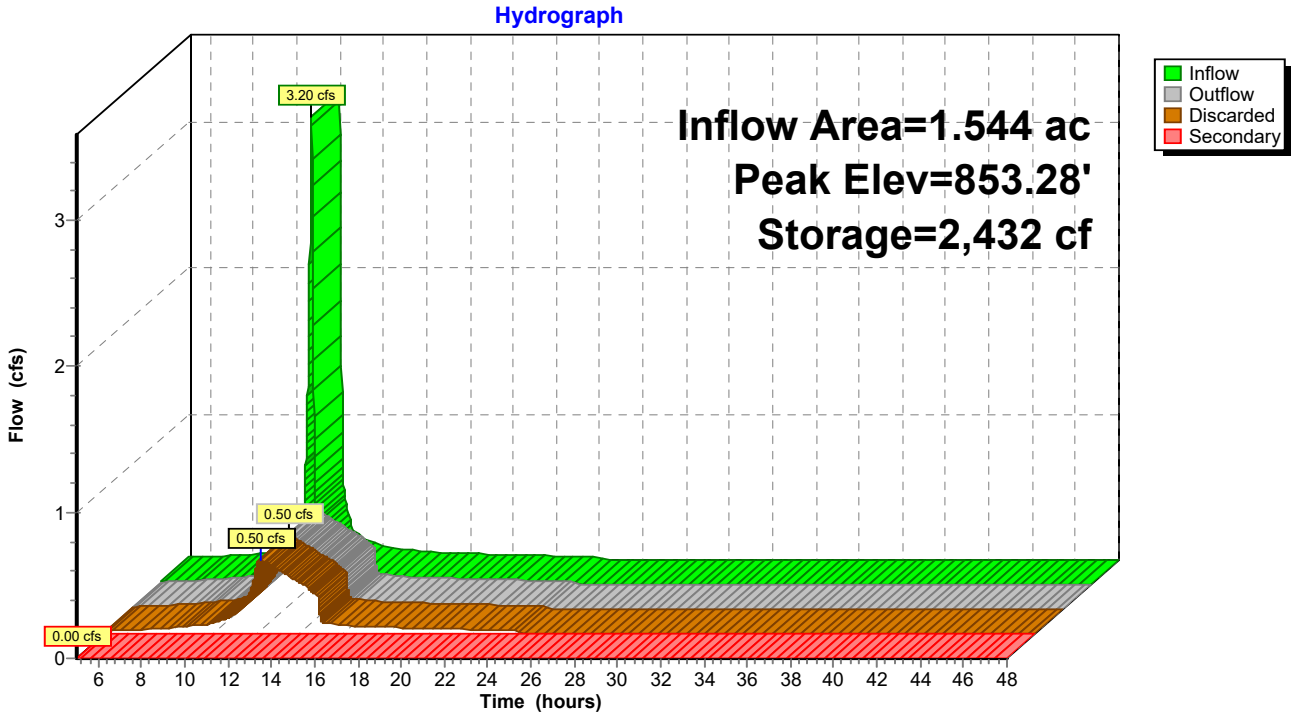
Volume	Invert	Avail.Storage	Storage Description
#1	850.50'	7,263 cf	**13.00'D x 11.00'H Vertical Cone/Cylinder Z=1.0** x 4 21,299 cf Overall - 3,142 cf Embedded = 18,157 cf x 40.0% Voids
#2	851.50'	3,142 cf	**10.00'D x 10.00'H Vertical Cone/Cylinder** x 4 Inside #1
		10,405 cf	x 2.00 = 20,809 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	850.50'	**10.000 in/hr Exfiltration over Surface area**
#2	Secondary	861.50'	**24.0" Horiz. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.50 cfs @ 12.17 hrs HW=853.28' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.50 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=850.50' (Free Discharge)
↑**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 16P: 10' dia drywell(3)



Summary for Pond 18P: Infilration Basin

Inflow Area = 1.431 ac, 0.00% Impervious, Inflow Depth = 0.12" for 1-yr event
Inflow = 0.04 cfs @ 12.67 hrs, Volume= 0.014 af
Outflow = 0.02 cfs @ 14.43 hrs, Volume= 0.014 af, Atten= 48%, Lag= 105.7 min
Discarded = 0.02 cfs @ 14.43 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 858.22' @ 14.43 hrs Surf.Area= 401 sf Storage= 76 cf

Plug-Flow detention time= 37.7 min calculated for 0.014 af (100% of inflow)
Center-of-Mass det. time= 37.7 min (1,051.0 - 1,013.3)

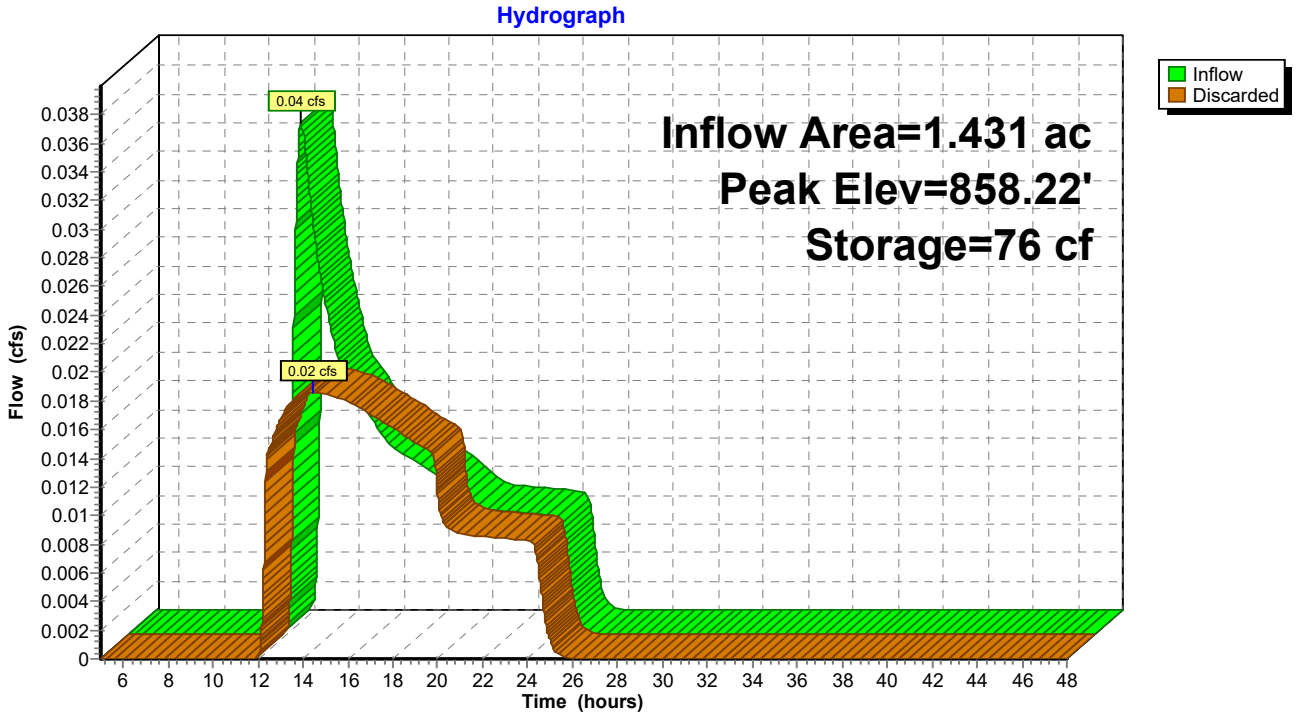
Volume	Invert	Avail.Storage	Storage Description
#1	858.00'	1,893 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
858.00	298	211.0	0	0	298
860.00	1,808	289.0	1,893	1,893	3,442

Device	Routing	Invert	Outlet Devices
#1	Discarded	858.00'	**2.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.02 cfs @ 14.43 hrs HW=858.22' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.02 cfs)

Pond 18P: Infilration Basin

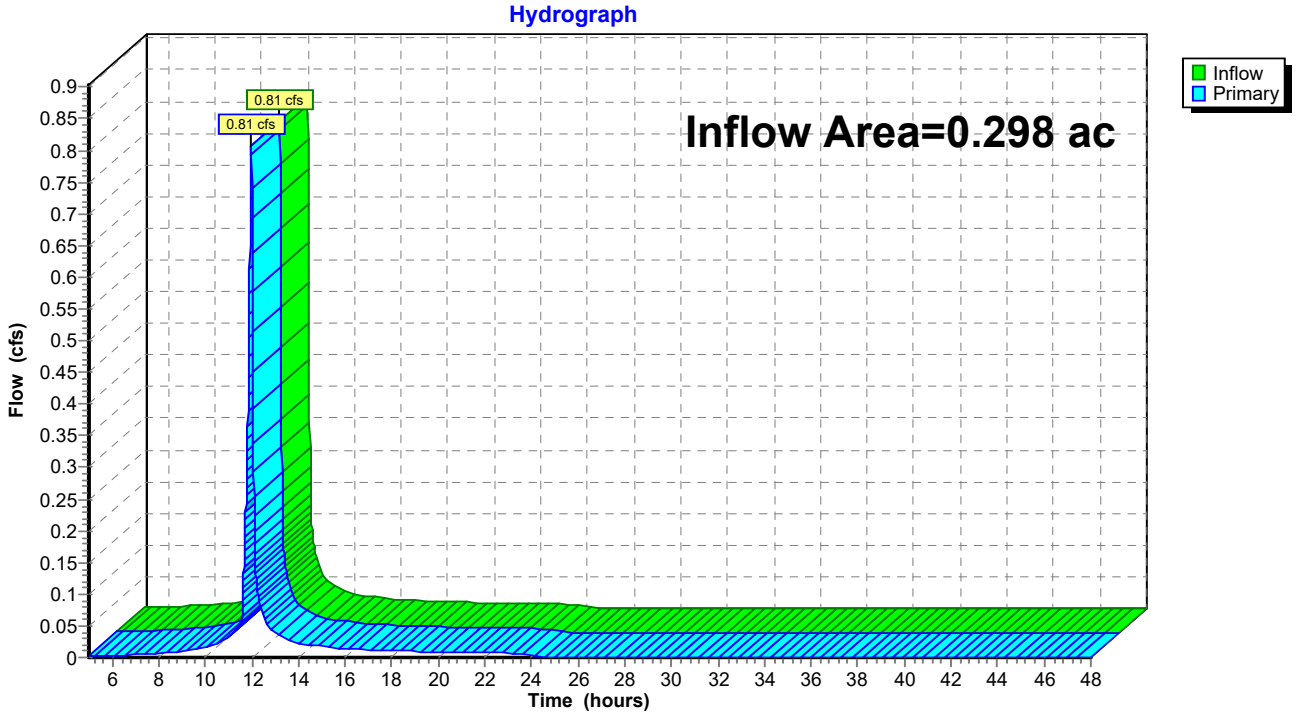


Summary for Link 8L: Sheet Flow Into Brownson

Inflow Area = 0.298 ac, 0.00% Impervious, Inflow Depth > 1.64" for 1-yr event
Inflow = 0.81 cfs @ 11.97 hrs, Volume= 0.041 af
Primary = 0.81 cfs @ 11.97 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs

Link 8L: Sheet Flow Into Brownson

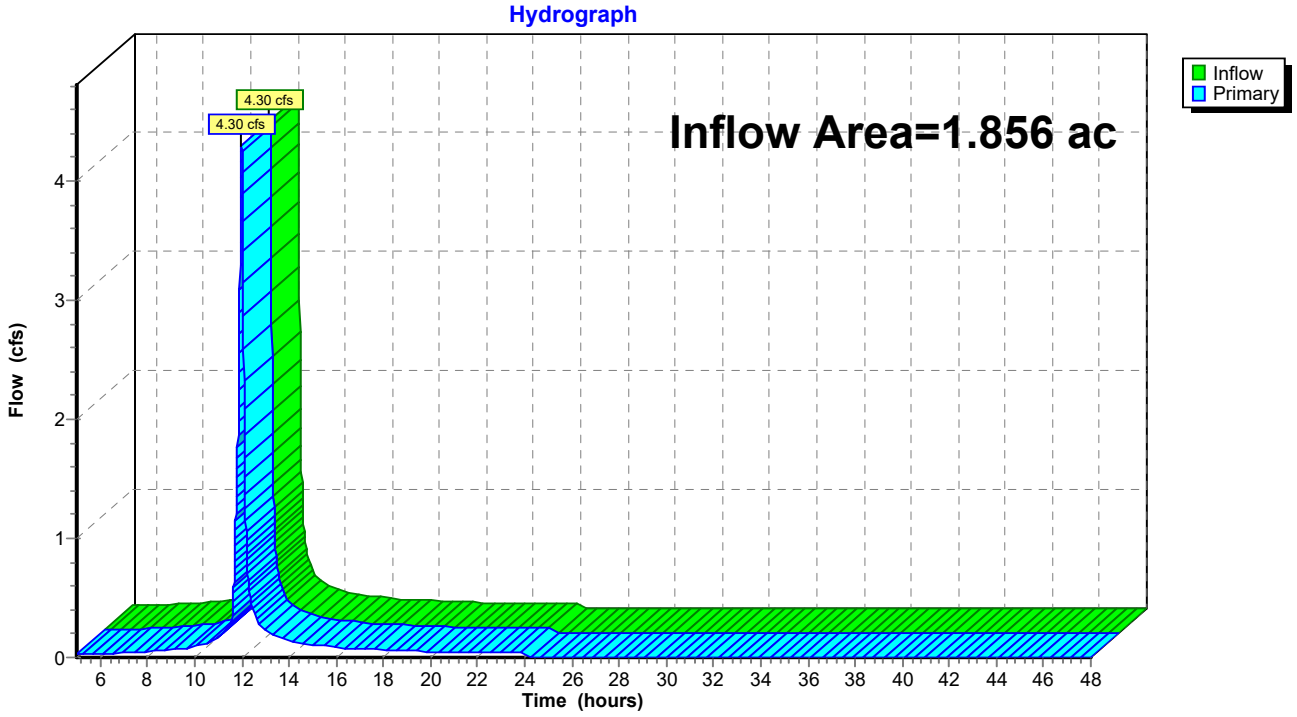


Summary for Link 9L: Ogden Street Design Point 2

Inflow Area = 1.856 ac, 74.94% Impervious, Inflow Depth > 1.55" for 1-yr event
Inflow = 4.30 cfs @ 11.99 hrs, Volume= 0.240 af
Primary = 4.30 cfs @ 11.99 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs

Link 9L: Ogden Street Design Point 2



Time span=5.00-48.00 hrs, dt=0.01 hrs, 4301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: C-DA-PR1 Runoff Area=18,860 sf 0.00% Impervious Runoff Depth=0.54"
Flow Length=257' Tc=6.0 min CN=60 Runoff=0.35 cfs 0.019 af

Subcatchment2S: C-DA-PR2 Runoff Area=44,896 sf 100.00% Impervious Runoff Depth>3.20"
Flow Length=190' Slope=0.0100 '/' Tc=6.0 min CN=98 Runoff=5.12 cfs 0.274 af

Subcatchment3S: C-DA-PR3 Runoff Area=12,963 sf 0.00% Impervious Runoff Depth>3.02"
Flow Length=242' Tc=6.0 min CN=96 Runoff=1.44 cfs 0.075 af

Subcatchment4S: C-DA-PR4 Runoff Area=20,253 sf 0.00% Impervious Runoff Depth=1.87"
Flow Length=279' Tc=6.0 min CN=83 Runoff=1.54 cfs 0.072 af

Subcatchment5S: C-DA-PR-5 Runoff Area=60,581 sf 100.00% Impervious Runoff Depth>3.20"
Flow Length=478' Slope=0.0031 '/' Tc=8.6 min CN=98 Runoff=6.37 cfs 0.371 af

Subcatchment6S: C-PR-6 Runoff Area=62,314 sf 0.00% Impervious Runoff Depth=0.66"
Flow Length=295' Tc=38.4 min CN=63 Runoff=0.53 cfs 0.079 af

Subcatchment7S: C-DA-PR7 Runoff Area=3,487 sf 100.00% Impervious Runoff Depth>3.20"
Flow Length=220' Tc=6.0 min CN=98 Runoff=0.40 cfs 0.021 af

Pond 16P: 10' dia drywell(3) Peak Elev=855.06' Storage=4,954 cf Inflow=5.84 cfs 0.315 af
Discarded=0.71 cfs 0.315 af Secondary=0.00 cfs 0.000 af Outflow=0.71 cfs 0.315 af

Pond 18P: Infilration Basin Peak Elev=859.74' Storage=1,452 cf Inflow=0.53 cfs 0.079 af
Outflow=0.07 cfs 0.079 af

Link 8L: Sheet Flow Into Brownson Inflow=1.44 cfs 0.075 af
Primary=1.44 cfs 0.075 af

Link 9L: Ogden Street Design Point 2 Inflow=7.87 cfs 0.443 af
Primary=7.87 cfs 0.443 af

Total Runoff Area = 5.128 ac Runoff Volume = 0.912 af Average Runoff Depth = 2.13"
51.21% Pervious = 2.626 ac 48.79% Impervious = 2.501 ac

Summary for Subcatchment 1S: C-DA-PR1

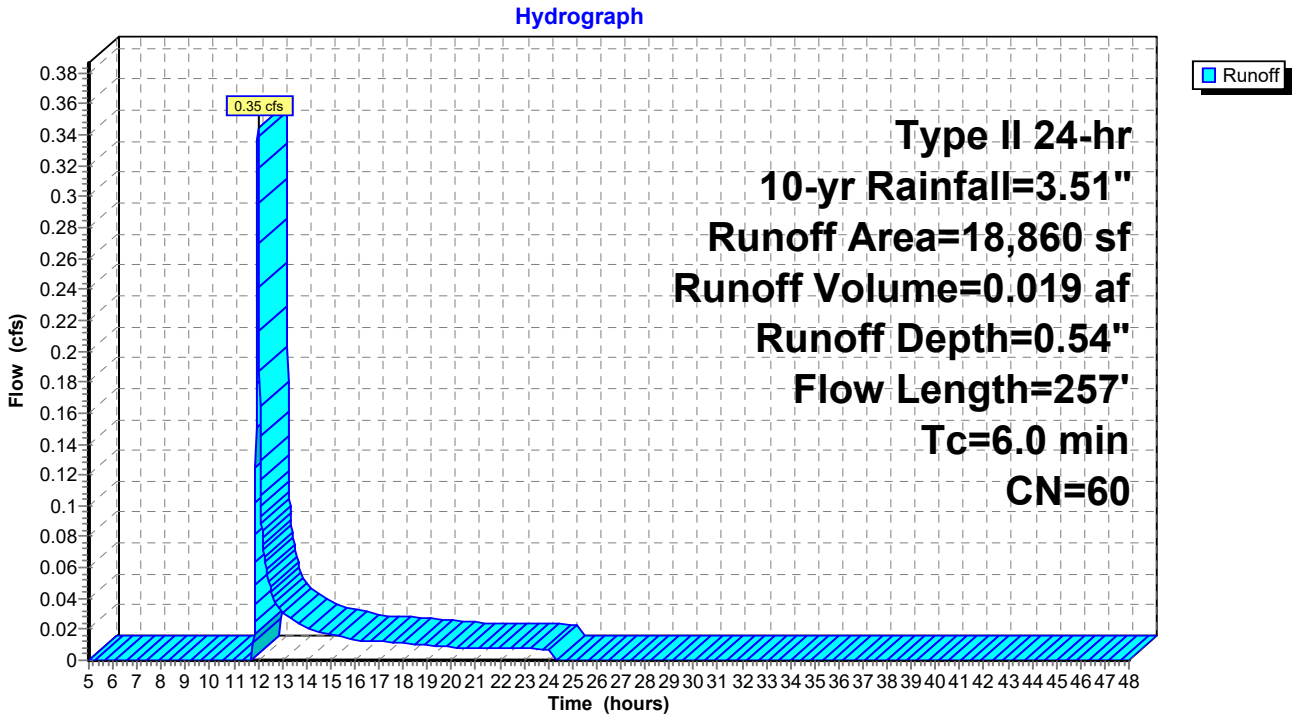
Runoff = 0.35 cfs @ 11.99 hrs, Volume= 0.019 af, Depth= 0.54"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	18,860	60	Composite CN Lawna and pavement
	18,860		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.9	106	0.0090	1.93		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	51	0.0150	3.79	0.74	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.012 Corrugated PP, smooth interior
2.9	257	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1S: C-DA-PR1



Summary for Subcatchment 2S: C-DA-PR2

[47] Hint: Peak is 702% of capacity of segment #1
[47] Hint: Peak is 326% of capacity of segment #2
[47] Hint: Peak is 180% of capacity of segment #3

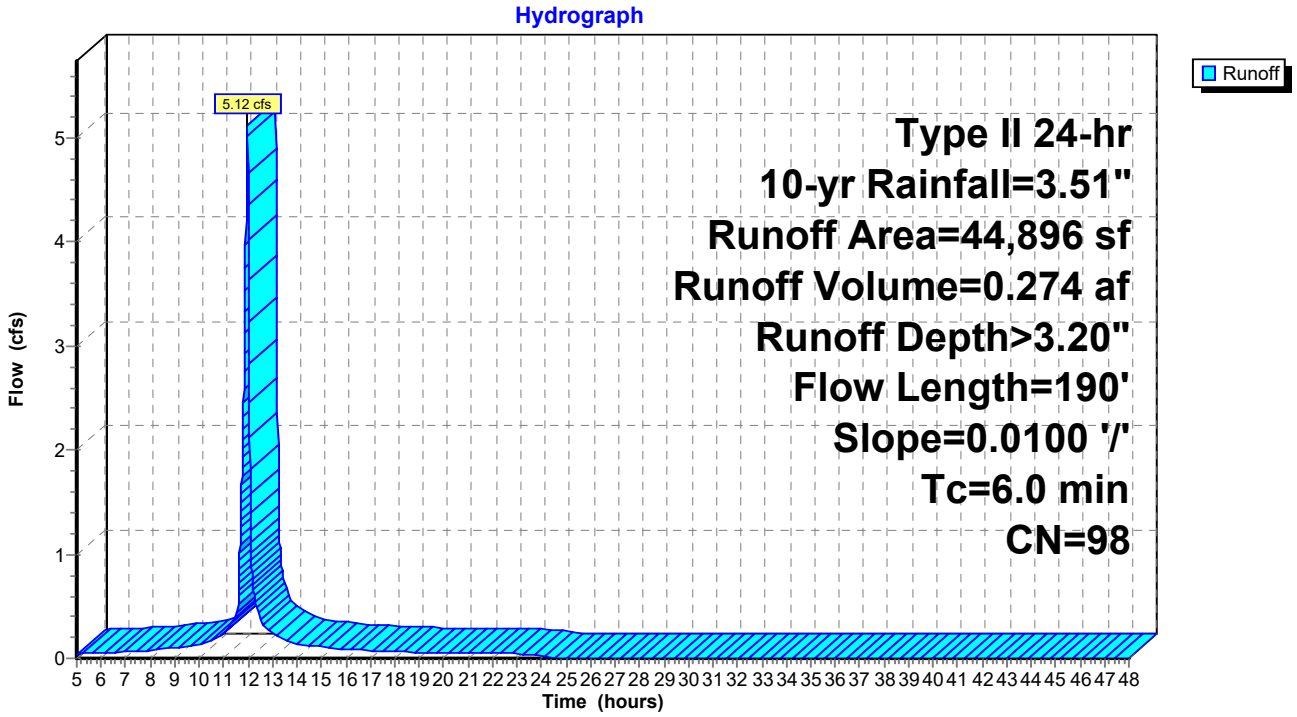
Runoff = 5.12 cfs @ 11.97 hrs, Volume= 0.274 af, Depth> 3.20"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
44,896	98	Unconnected roofs, HSG A
44,896		100.00% Impervious Area
44,896		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	46	0.0100	3.71	0.73	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
0.4	112	0.0100	4.50	1.57	**Pipe Channel,** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.1	32	0.0100	5.22	2.85	**Pipe Channel,** 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.010 PVC, smooth interior
0.7	190	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 2S: C-DA-PR2



Summary for Subcatchment 3S: C-DA-PR3

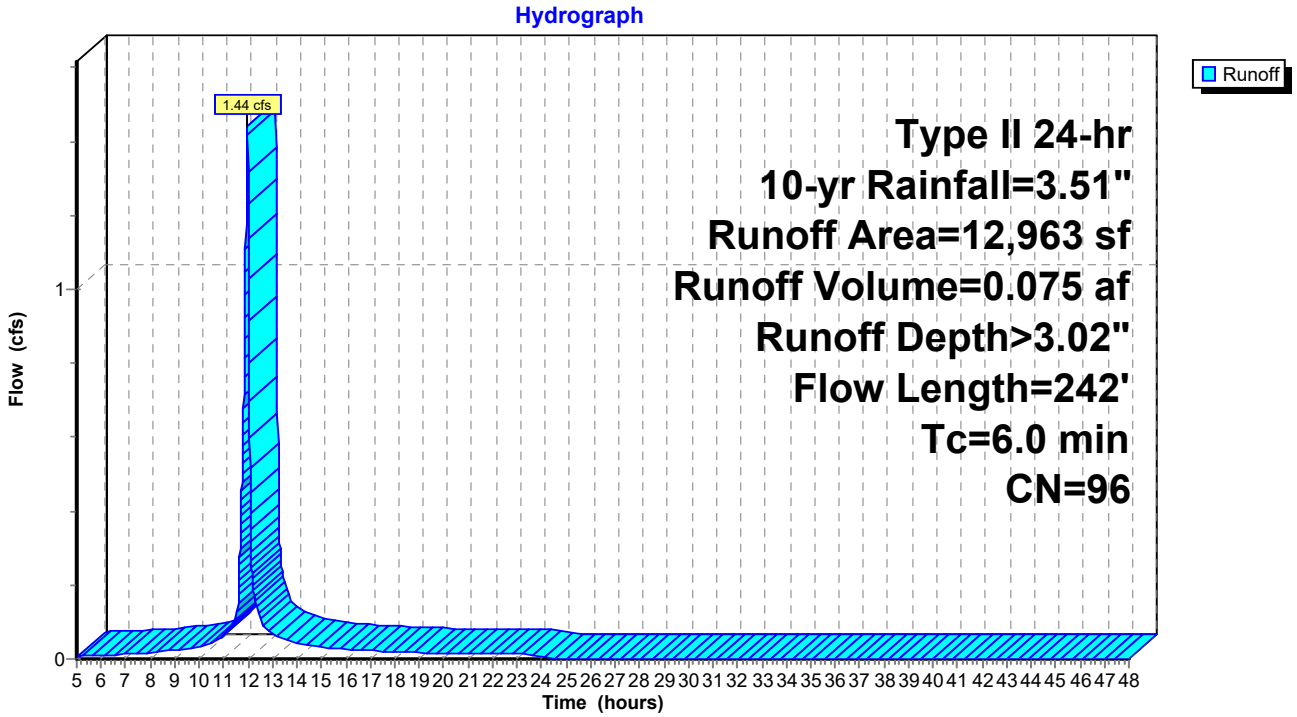
Runoff = 1.44 cfs @ 11.97 hrs, Volume= 0.075 af, Depth> 3.02"
Routed to Link 8L : Sheet Flow Into Brownson

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
12,963	96	Gravel surface, HSG A
12,963		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	100	0.0050	0.68		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	142	0.0480	4.45		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
2.9	242	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: C-DA-PR3



Summary for Subcatchment 4S: C-DA-PR4

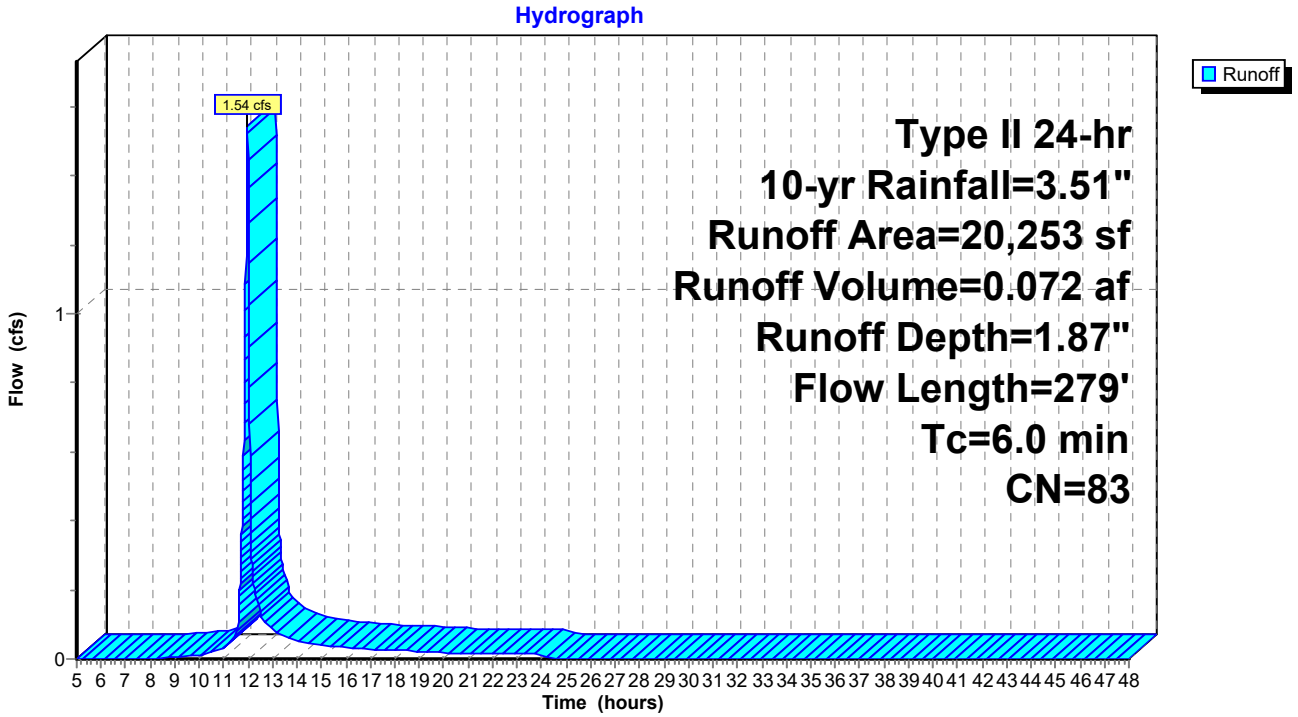
Runoff = 1.54 cfs @ 11.97 hrs, Volume= 0.072 af, Depth= 1.87"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	20,253	83	
	20,253		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	100	0.0100	0.90		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
1.6	179	0.0084	1.86		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
3.4	279	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 4S: C-DA-PR4



Summary for Subcatchment 5S: C-DA-PR-5

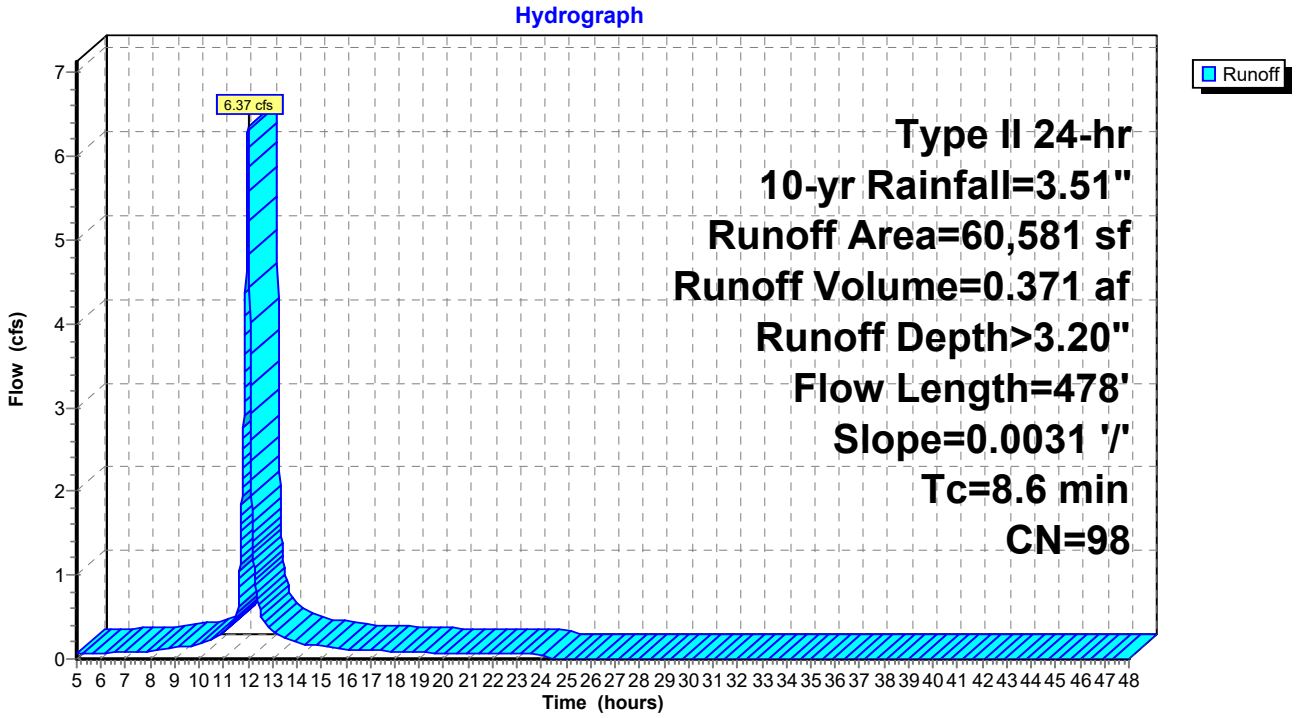
Runoff = 6.37 cfs @ 11.99 hrs, Volume= 0.371 af, Depth> 3.20"
Routed to Link 9L : Ogden Street Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
60,581	98	Paved parking, HSG A
60,581		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	100	0.0031	0.56		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
5.6	378	0.0031	1.13		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
8.6	478	Total			

Subcatchment 5S: C-DA-PR-5



Summary for Subcatchment 6S: C-PR-6

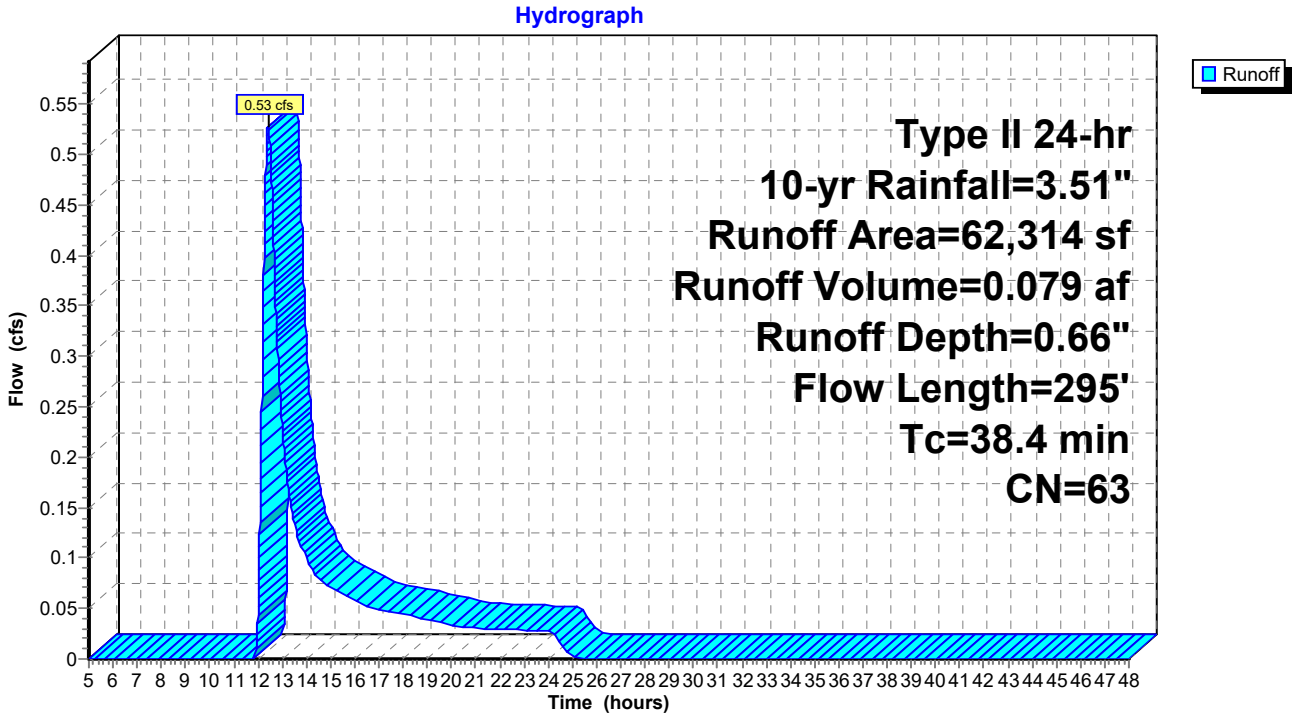
Runoff = 0.53 cfs @ 12.42 hrs, Volume= 0.079 af, Depth= 0.66"
Routed to Pond 18P : Infilration Basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

	Area (sf)	CN	Description
*	62,314	63	50/50 GRASS/PAVED
	62,314		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.8	100	0.0031	0.05		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.39"
3.6	195	0.0170	0.91		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
38.4	295	Total			

Subcatchment 6S: C-PR-6



Summary for Subcatchment 7S: C-DA-PR7

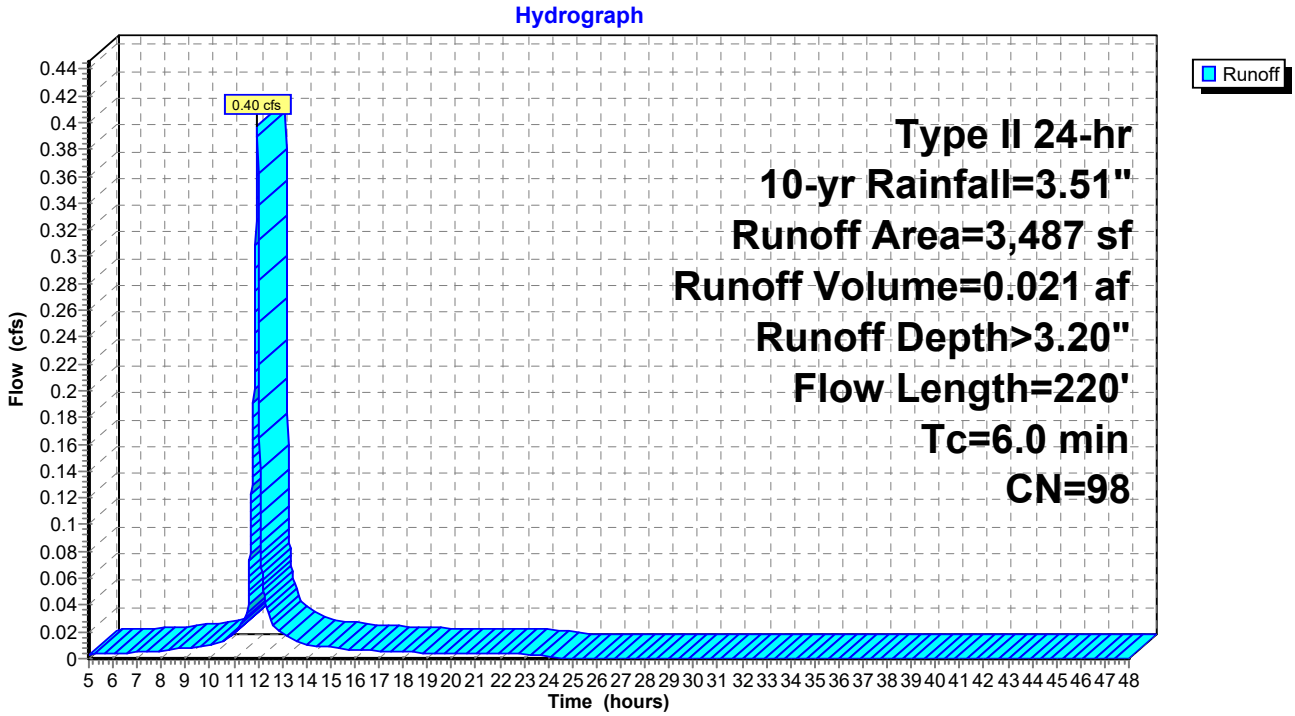
Runoff = 0.40 cfs @ 11.97 hrs, Volume= 0.021 af, Depth> 3.20"
Routed to Pond 16P : 10' dia drywell(3)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.51"

Area (sf)	CN	Description
3,487	98	Unconnected pavement, HSG A
3,487		100.00% Impervious Area
3,487		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	80	0.0035	0.57		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.39"
0.5	140	0.0150	4.55	0.89	**Pipe Channel,** 6.0" Round Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010 PVC, smooth interior
2.9	220	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 7S: C-DA-PR7



Summary for Pond 16P: 10' dia drywell(3)

[82] Warning: Early inflow requires earlier time span
[92] Warning: Device #2 is above defined storage

Inflow Area = 1.544 ac, 71.95% Impervious, Inflow Depth > 2.45" for 10-yr event
Inflow = 5.84 cfs @ 11.97 hrs, Volume= 0.315 af
Outflow = 0.71 cfs @ 12.26 hrs, Volume= 0.315 af, Atten= 88%, Lag= 17.4 min
Discarded = 0.71 cfs @ 12.26 hrs, Volume= 0.315 af
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 855.06' @ 12.26 hrs Surf.Area= 3,074 sf Storage= 4,954 cf

Plug-Flow detention time= 56.4 min calculated for 0.315 af (100% of inflow)
Center-of-Mass det. time= 56.3 min (829.1 - 772.7)

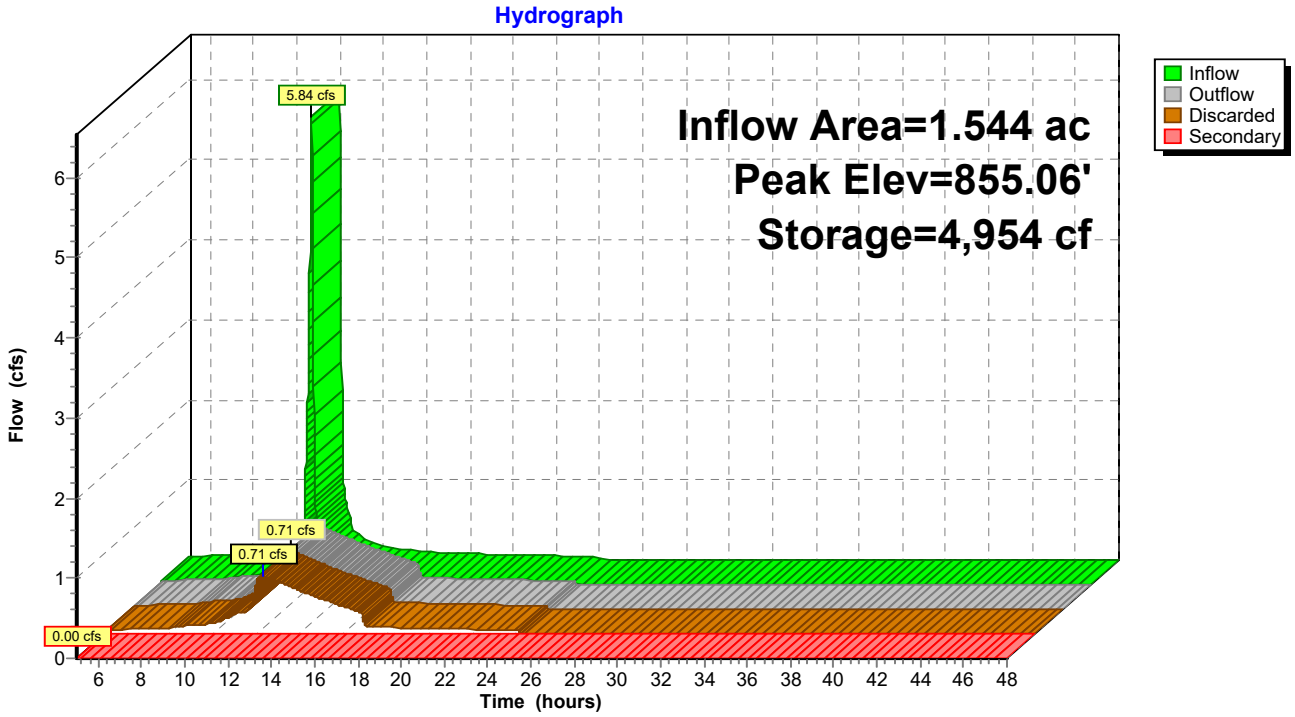
Volume	Invert	Avail.Storage	Storage Description
#1	850.50'	7,263 cf	**13.00'D x 11.00'H Vertical Cone/Cylinder Z=1.0** x 4 21,299 cf Overall - 3,142 cf Embedded = 18,157 cf x 40.0% Voids
#2	851.50'	3,142 cf	**10.00'D x 10.00'H Vertical Cone/Cylinder** x 4 Inside #1
		10,405 cf	x 2.00 = 20,809 cf Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	850.50'	**10.000 in/hr Exfiltration over Surface area**
#2	Secondary	861.50'	**24.0" Horiz. Orifice/Grate X 4.00** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.71 cfs @ 12.26 hrs HW=855.06' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.71 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=850.50' (Free Discharge)
↑**2=Orifice/Grate** (Controls 0.00 cfs)

Pond 16P: 10' dia drywell(3)



Summary for Pond 18P: Infilration Basin

Inflow Area = 1.431 ac, 0.00% Impervious, Inflow Depth = 0.66" for 10-yr event
Inflow = 0.53 cfs @ 12.42 hrs, Volume= 0.079 af
Outflow = 0.07 cfs @ 14.99 hrs, Volume= 0.079 af, Atten= 87%, Lag= 154.2 min
Discarded = 0.07 cfs @ 14.99 hrs, Volume= 0.079 af

Routing by Stor-Ind method, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 859.74' @ 14.99 hrs Surf.Area= 1,535 sf Storage= 1,452 cf

Plug-Flow detention time= 279.6 min calculated for 0.079 af (100% of inflow)
Center-of-Mass det. time= 279.6 min (1,202.0 - 922.4)

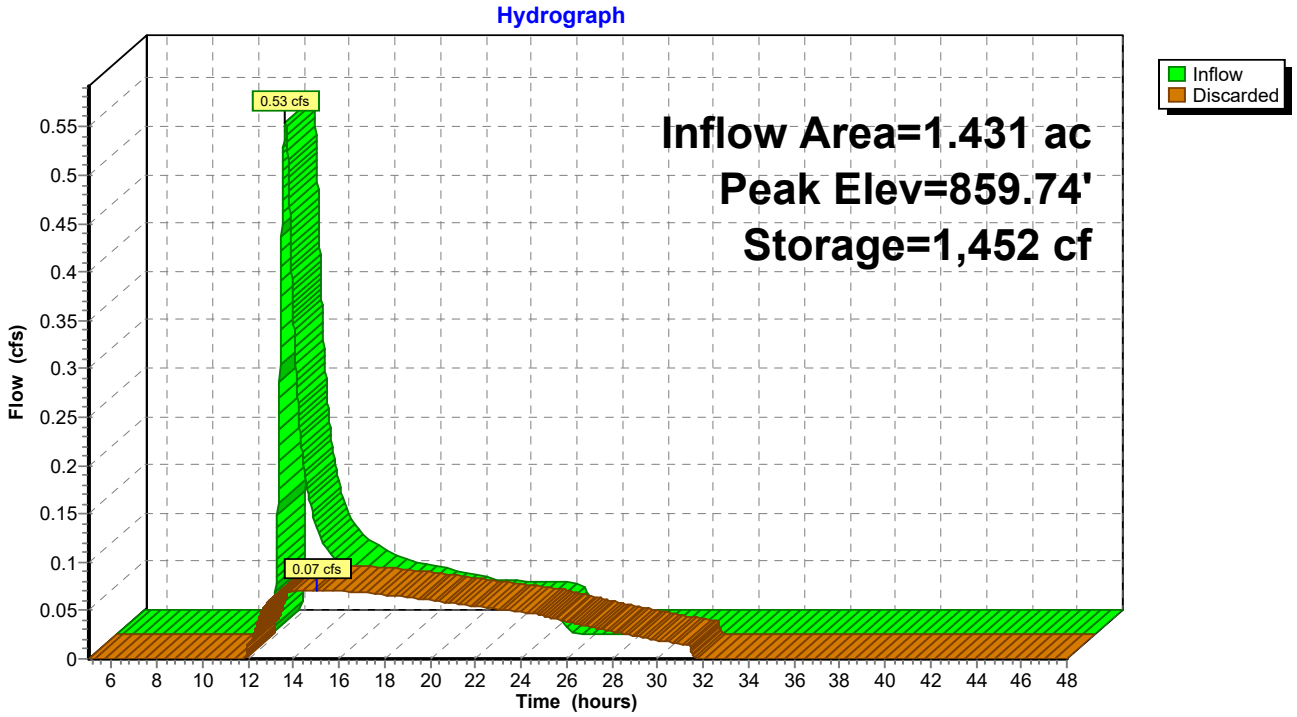
Volume	Invert	Avail.Storage	Storage Description
#1	858.00'	1,893 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
858.00	298	211.0	0	0	298
860.00	1,808	289.0	1,893	1,893	3,442

Device	Routing	Invert	Outlet Devices
#1	Discarded	858.00'	**2.000 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.07 cfs @ 14.99 hrs HW=859.74' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.07 cfs)

Pond 18P: Infilration Basin

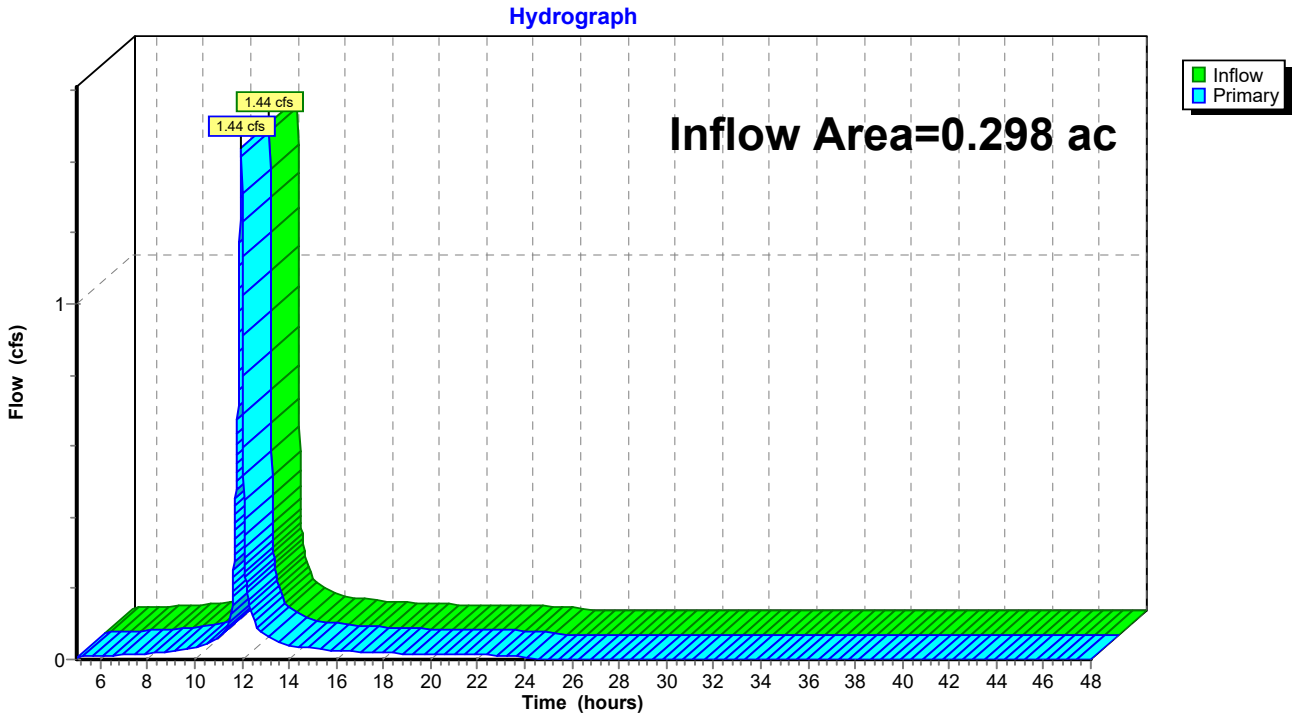


Summary for Link 8L: Sheet Flow Into Brownson

Inflow Area = 0.298 ac, 0.00% Impervious, Inflow Depth > 3.02" for 10-yr event
Inflow = 1.44 cfs @ 11.97 hrs, Volume= 0.075 af
Primary = 1.44 cfs @ 11.97 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs

Link 8L: Sheet Flow Into Brownson

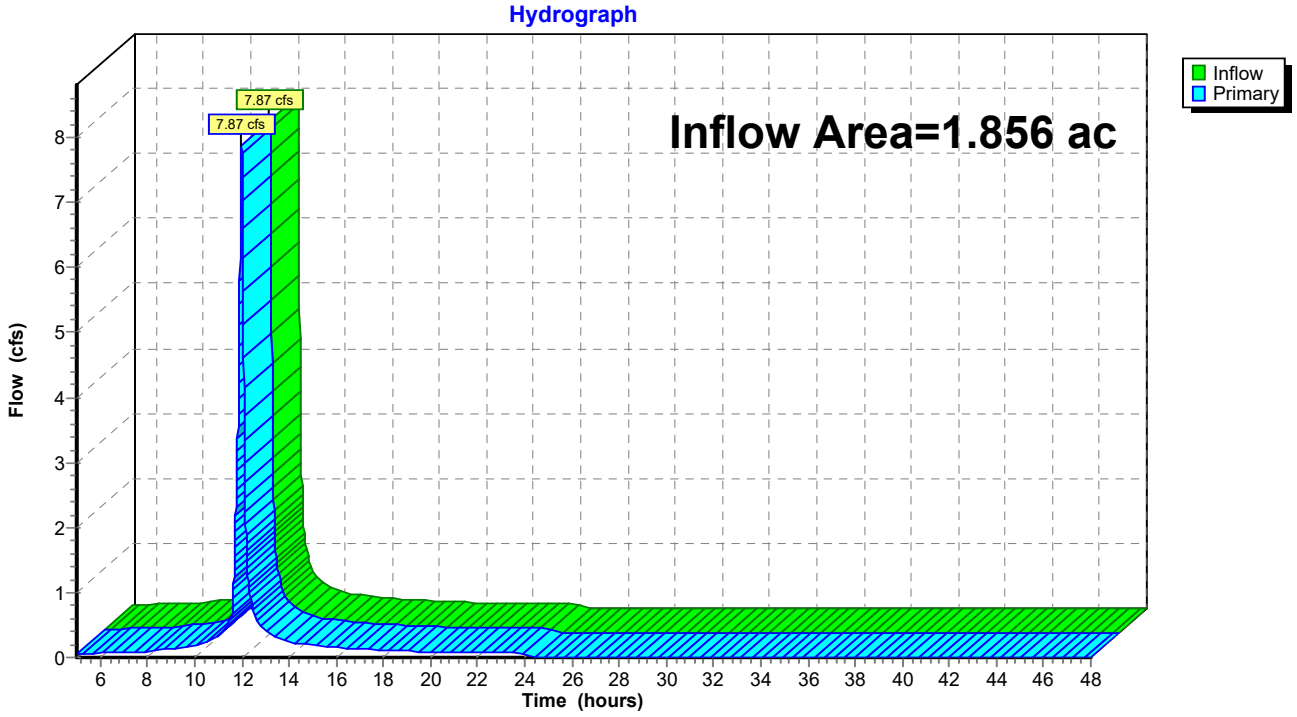


Summary for Link 9L: Ogden Street Design Point 2

Inflow Area = 1.856 ac, 74.94% Impervious, Inflow Depth > 2.86" for 10-yr event
Inflow = 7.87 cfs @ 11.99 hrs, Volume= 0.443 af
Primary = 7.87 cfs @ 11.99 hrs, Volume= 0.443 af, Atten= 0%, Lag= 0.0 min
Routed to nonexistent node 10L

Primary outflow = Inflow, Time Span= 5.00-48.00 hrs, dt= 0.01 hrs

Link 9L: Ogden Street Design Point 2



APPENDIX K: WATER QUALITY CALCULATIONS

Infiltration Trench (I-1)

Design Point:	

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**
2	0.42	0.42	100	0.95	1,608	1.10	Infiltration Trench

Design Criteria		
Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D)	10	
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	
Is the contributing area greater than 5 acres?	No	
Is the practice located in a sole source aquifer?	No	
Enter depth to seasonal high water table (ft)	25	
Enter depth to bedrock (ft)	25	
Enter pretreatment volume provided (cf)	402	
Enter depth of pea gravel (inches)	4	
Enter depth of stone reservoir (ft)	3.5	
Is an observation well provided?	Yes	
What slope is the practice located on? (%)	0.86	

Sizing Criteria				
		Value	Units	Notes
Water Quality Volume	WQv	1608	cf	
Porosity	n	0.40		
Stone Reservoir Depth	dt	3.5	ft	
Required Surface Area	At	1,149.00	sf	
Enter Surface Area Provided	At	1240	sf	

Determine Runoff Reduction		
RRv Provided	**1,608**	***cf***

Dry Well (I-3)

Design Point:	

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**
3	0.62	0.62	100	0.95	2,363	1.10	Dry Well

Design Criteria		
Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D)	10	
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	
Contributing area (acres)	0.62	For larger tributary areas, use multiple dry wells in series
Is the practice located in a sole source aquifer?	No	
Enter depth to seasonal high water table (ft)	25	
Enter depth to bedrock (ft)	25	
Enter pretreatment volume provided (cf)		
Enter stone reservoir thickness (ft)	1	
Is an observation well provided?	Yes	

Sizing Criteria				
		Value	Units	Notes
Inside Radius of Dry Well	r	10.00	ft	
Inside Height of Dry Well	H	10.00	ft	
Inside Volume of Dry Well	Vi	3,141.6	cf	
Dry Well Wall Thickness	t	0.50	ft	
Volume of Stone Reservoir	Vs	276.5	cf	
Volume Provided Per Drywell	Vw	3,418.1	cf	
Number of Dry Wells	N	4		
Water Quality Volume Provided	WQv	13672.4	cf	

Determine Runoff Reduction		
RRv Provided	**0**	***cf***

APPENDIX L:

NYSDEC SPEDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (PERMIT NO. GP-0-20-001)

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION (NYSDEC)

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-25-001

Construction General Permit (CGP)

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2025 Expiration Date: January 28, 2030

Scott E. Sheeley

Chief Permit Administrator

Scott E. Sheeley JAN. 29, 2025

Authorized Signature Date

Address: NYSDEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act (CWA), and 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), *stormwater discharges* from certain *construction activities* are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York State administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and Article 70, as well as 6 NYCRR Parts 621 and 750.

C*onstruction activities* constitute construction of a *point source* and, therefore, pursuant to ECL sections 17-0505, 17-0701, and 17-0803, the *owner or operator* must have coverage under a SPDES permit prior to *commencement of construction activities*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES CONSTRUCTION GENERAL PERMIT (CGP) GP-0-25-001
FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

Table of Contents

Part I. How to Obtain Coverage and General Requirements

To be covered under this permit, the *owner or operator* must meet all eligibility requirements in Part I.A. and follow the requirements for obtaining permit coverage in Part I.D., F., or G.

A. Eligibility Requirements

For a *common plan of development or sale*, the *phase(s)* that meet the eligibility requirements in Part I.A. may obtain coverage under this permit even if other *phase(s)* of the same *common plan of development or sale* do not meet the eligibility requirements and require an individual SPDES permit.

1. The *owner's or operator's construction activities* involve soil disturbances of:

    a. one or more acres; or

    b. less than one acre which are part of a *common plan of development or sale* that will ultimately disturb one or more acres; or

    c. less than one acre where NYSDEC has determined that a SPDES permit is required for *stormwater discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of pollutants to *surface waters of the State*.

        i. 5,000 square feet or more, but less than one acre, and are in the New York City Watershed located east of the Hudson River, Appendix C Figure 1; or

        ii. 20,000 square feet or more, but less than one acre, within the municipal boundaries of the City of New York (NYC); or

        iii. less than 20,000 square feet which are part of a *common plan of development or sale* that will ultimately disturb 20,000 square feet or more, but less than one acre, within the municipal boundaries of NYC; or

        iv. that creates 5,000 square feet or more of *impervious area* within the municipal boundaries of NYC.

2. *Discharges* from the *owner's or operator's construction activities* are/were not:

    a. already covered by a different SPDES permit; or

    b. covered under a different SPDES permit that was denied, terminated, or revoked; or

    c. identified in an expired individual SPDES permit that was not renewed; or

    d. required to obtain an individual SPDES permit or another general SPDES permit in accordance with Part VII.K.

3. If *construction activities* may adversely affect a species that is endangered or threatened, the *owner or operator* must obtain a:

    a. permit issued pursuant to 6 NYCRR Part 182 for the project; or

    b. letter issued by NYSDEC of non-jurisdiction pursuant to 6 NYCRR Part 182 for the project.

4. If *construction activities* have the potential to affect an *historic property*, the *owner or operator* must obtain one of the following:

    a. documentation that the *construction activity* is not within an archeological buffer area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building 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 NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant:

        i. 1-5 acres of disturbance - 20 feet; or

        ii. 5-20 acres of disturbance - 50 feet; or

iii. 20+ acres of disturbance - 100 feet.

b. NYSDEC consultation form sent to OPRHP,[1] and copied to NYSDEC's Agency Historic Preservation Officer (APO), and

i. the State Environmental Quality Review Act (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or

ii. documentation from OPRHP that the *construction activity* will result in No Impact; or

iii. documentation from OPRHP providing a determination of No Adverse Impact; or

iv. a Letter of Resolution signed by the *owner or operator*, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA).

c. documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

i. No Affect; or

ii. No Adverse Affect; or

iii. Executed Memorandum of Agreement.

d. documentation that SHPA Section 14.09 has been completed by NYSDEC or another state agency.

5. If *construction activities* are subject to SEQR, the *owner or operator* must obtain documentation that SEQR has been satisfied.

6. If *construction activities* are not subject to SEQR, but subject to the equivalent environmental review from another New York State or federal agency, the

[1] The consultation form can be submitted, along with other project information, through OPRHP's Cultural Resource Information System (CRIS) portal. If submitted through CRIS, paper copies of the consultation form need not be mailed.

owner or operator must obtain documentation that project review, pursuant to a process equivalent to SEQR from another New York State or federal agency, has been satisfied.

7. If *construction activities* require Uniform Procedures Act (UPA) Permits (see 6 NYCRR Part 621) from NYSDEC, or the equivalent from another New York State or federal agency, the *owner or operator* must:

    a. obtain all such necessary permits; or

    b. receive notification from NYSDEC pursuant to 6 NYCRR 621.3(a)(4) excepting Part I.A.7.a.

8. *Construction activities* are not eligible if they meet the following criteria in Part I.A.8.a. or b.:

    a. For linear transportation and linear utility project types, the *construction activities*:

        i. are 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; and

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb two or more acres of *steep slope*.

    b. For all other project types, the *construction activities*:

        i. are 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; and

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb one or more acres of *steep slope*.

B. Types of *Discharges* Authorized

1. The following *stormwater discharges* are authorized under this permit:

   a. *Stormwater discharges*, including *stormwater* runoff, snowmelt runoff, and surface runoff and drainage, associated with *construction activity*, are authorized under this permit provided that appropriate *stormwater* controls are designed, installed, and maintained in accordance with Part II. and Part III.

   b. *Stormwater discharges* from construction support activities at the *construction site* (including concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, and borrow areas) if the following requirements are met:

      i. The support activity is directly related to the *construction site* required to have permit coverage for *stormwater discharges*; and

      ii. The support activity is not a commercial operation, nor does it serve multiple unrelated *construction sites*; and

      iii. The support activity does not continue to operate beyond the completion of the *construction activity* at the site it supports; and

      iv. *Stormwater* controls are implemented in accordance with Part II. and Part III. for *discharges* from the support activity areas.

2. The following non-*stormwater discharges* associated with *construction activity* are authorized under this permit:

   a. Non-*stormwater discharges* listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "*Discharges* from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; and

   b. Non-*stormwater discharges* of waters to which other components have not been added that are used in accordance with the *SWPPP* to control dust or irrigate vegetation in stabilized areas; and

   c. Uncontaminated *discharges* from *dewatering* operations

3. Authorized *discharges* of *stormwater* or authorized *discharges* of non-*stormwater*, commingled with a *discharge* authorized by a different SPDES permit and/or a *discharge* that does not require SPDES permit authorization, are also authorized under this permit.

C. Prohibited *Discharges*

1. Non-*stormwater discharges* prohibited under this permit include but are not limited to:

    a. Wastewater from washout of concrete; and

    b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials; and

    c. Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance; and

    d. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and

    e. Toxic or hazardous substances from a spill or other release.

D. Electronic Notice of Intent (eNOI) Submittal

To receive authorization in accordance with Part I.D.3.b., the *owner or operator* must submit a complete eNOI in accordance with the requirements in Part I.D. The eNOI contains questions to: ensure eligibility requirements in Part I.A. have been met; obtain *owner or operator* contact information; obtain the total area to be disturbed and the existing/future *impervious areas* (rounded to the nearest tenth of an acre); confirm *Traditional Land Use Control MS4 Operator* jurisdiction over construction projects; satisfy the EPA eRule requirements; confirm that the Water Quality-Based Effluent Limitations in Part II. have been met; demonstrate consideration of the future risks due to climate change in accordance with Part III.A.2.; and confirm that the other *Stormwater Pollution Prevention Plan (SWPPP)* requirements in Part III. have been met.

1. An eNOI may be submitted for:

    a. *construction activities* that are not part of a *common plan of development or sale*; or

b. an entire *common plan of development or sale*; or

c. separate *phase(s)* of a *common plan of development or sale* if the following requirements are met:

    i. the *common plan of development or sale* meets the eligibility requirements of Part I.A.5. or 6.; and

    ii. the *phase(s)* meet(s) all other eligibility requirements of Part I.A.; and

    iii. Part III.C. Required *SWPPP* Components by Project Type is based on the *common plan of development or sale*, not the *phase(s)*; or

d. *tree clearing* that is associated with, or will support, a *renewable energy* generation, transmission, or storage project that meets Part I.A.5. and 6., if the *tree clearing*:

    i. meets all other eligibility requirements of Part I.A.; and

    ii. will occur in NYSDEC's Regions 3-9; and

    iii. is not within ¼ mile of a bat hibernaculum protected pursuant to 6 NYCRR Part 182; and

    iv. will occur between November 1st and March 31st.

2. As prerequisites for submitting an eNOI, the *owner or operator* must:

    a. prepare a *SWPPP* for Part I.D.1.a., b., c., or d. in accordance with Part III.; and

    b. based on the following criteria, upload the following signature forms signed in accordance with Part VII.J. to the eNOI prior to submission:

        i. for all eNOIs:

            1. the SWPPP Preparer Certification Form, Appendix F, signed by the *SWPPP* preparer; and

2. the Owner/Operator Certification Form, Appendix J, signed by the *owner or operator*; and

ii. if an eNOI includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that will *discharge* to the *MS4(s)*:

1. determine if the *Traditional Land Use Control MS4 Operator(s)* have review authority. A *Traditional Land Use Control MS4 Operator* does not have review authority where:

a. the *owner or operator* of the *construction activities* in Part I.D.2.b.ii. is the same entity as the *Traditional Land Use Control MS4 Operator* identified in Part I.D.2.b.ii.; or

b. there is a statute exempting the *owner or operator* from zoning review by the *Traditional Land Use Control MS4 Operator*; or

c. there is no such statute per Part I.D.2.b.ii.1.b., the *Traditional Land Use Control MS4 Operator* concludes, after public hearing, that it does not have zoning review authority in accordance with Legal Memorandum LU14 Updated January 2020 “Governmental Immunity from Zoning and Other Legislation”; and

2. if the *Traditional Land Use Control MS4 Operator(s)* have review authority, submit the *SWPPP* to the *Traditional Land Use Control MS4 Operator(s)* for review and have:

a. if outside the municipal boundaries of NYC: the MS4 SWPPP Acceptance Form, Appendix G, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.; or

b. if within the municipal boundaries of NYC: The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval Form, Appendix H, signed by the principal executive officer or ranking elected official from the Traditional Land Use Control MS4 Operator, or by a duly authorized representative of that person in accordance with Part VII.J.2.; and

3. if the *Traditional Land Use Control MS4 Operator* does not have review authority, have the MS4 No Jurisdiction Form, Appendix I, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.

3. Submitting an eNOI:

a. The *owner or operator* must submit a complete Notice of Intent electronically using a NYSDEC approved form.[2]

b. The *owner or operator* is authorized to *commence construction activity* as of the authorization date indicated in the Letter of Authorization (LOA), which is sent by NYSDEC after a complete eNOI is submitted.

i. If an eNOI is received for a *SWPPP* that deviates from one of the technical standards but demonstrates *equivalence* in accordance with Part III.B.1.a.ii. or Part III.B.2.b.ii., if the *SWPPP* includes *construction activities* that are not within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)*, and/or if the *SWPPP* includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that do not have review authority in accordance with Part I.D.2.b.ii.1., the authorization date indicated in the LOA will be 60 business days after the eNOI submission date.

[2] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

c. If *Traditional Land Use Control MS4 Operator(s)* have review authority in accordance with Part I.D.2.b.ii.2., the *owner or operator* must, within five business days of receipt of the LOA, send an electronic copy of the LOA to the *Traditional Land Use Control MS4 Operator(s)* with review authority.

E. General Requirements for *Owners or Operators* with Permit Coverage

1. As of the date the LOA is received, the *owner or operator* must make the eNOI, *SWPPP*, and LOA available for review and copying in accordance with the requirements in Part VII.H. When applicable, as of the date an updated LOA is received, the *owner or operator* must make the updated LOA available for review and copying in accordance with the requirements in Part VII.H.

2. The *owner or operator* must ensure compliance with all requirements of this permit and that the provisions of the *SWPPP*, including any changes made to the *SWPPP* in accordance with Part III.A.5., are properly implemented and maintained from the *commencement of construction activity* until:

   a. all areas of disturbance have achieved *final stabilization;* and

   b. the owner's or operator's coverage under this permit is terminated in accordance with Part V.A.5.a.

3. As of the date of the *commencement of construction activities* until Part I.E.2.a. and b. have been met, the *owner or operator* must maintain at the *construction site*, a copy of:

   a. all documentation necessary to demonstrate eligibility with this permit; and

   b. this permit; and

   c. the *SWPPP*; and

   d. the signed SWPPP Preparer Certification Form; and

   e. the signed MS4 SWPPP Acceptance Form or signed NYCDEP SWPPP Acceptance/Approval Form or signed MS4 No Jurisdiction Form (when applicable); and

   f. the signed Owner/Operator Certification Form; and

g. the eNOI; and

h. the LOA; and

i. the LOA transmittal to the Traditional Land Use Control MS4 Operator in accordance with Part I.D.3.c. (when applicable).

4. The *owner or operator* must maintain at the *construction site*, until Part I.E.2.a. and b. have been met, as of the date the documents become final or are received, a copy of the:

   a. responsible contractor's or subcontractor's certification statement(s) in accordance with Part III.A.7.; and

   b. inspection reports in accordance with Part IV.C.4. and 6.; and

   c. Request to Disturb Greater Than Five Acres and the Authorization Letter to Disturb Greater Than Five Acres in accordance with Part I.E.6. (when applicable); and

   d. Request to Continue Coverage and the Letter of Continued Coverage (LOCC) in accordance with Part I.F.2. and 4. (when applicable); and

   e. The updated LOA(s) in accordance with Part I.E.9. (when applicable).

5. The *owner or operator* must maintain the documents in Part I.E.3. and 4. in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection. The documents must be paper documents unless electronic documents are accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be. If electronic documents are kept on site, the *owner or operator* must maintain functional equipment on site available to an inspector during normal hours of operation such that an inspector may view the electronic documents in a format that can be read in a similar manner as a paper record and in a legally dependable format with no less evidentiary value than their paper equivalent.

6. The *owner or operator* must meet the following requirements prior to disturbing greater than five acres of soil at any one time:

   a. The *owner or operator* must submit a written Request to Disturb Greater Than Five Acres to:

i. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, if a *Traditional Land Use Control MS4 Operator* does not have review authority in accordance with Part I.D.2.b.ii.1.; or

ii. the *Traditional Land Use Control MS4 Operator*, if a *Traditional Land Use Control MS4 Operator* has review authority in accordance with Part I.D.2.b.ii.1.; or

iii. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, and each involved *Traditional Land Use Control MS4 Operator*, if the project spans multiple municipalities with more than one *Traditional Land Use Control MS4 Operator* involved with review authority in accordance with Part I.D.2.b.ii.1.

b. The written Request to Disturb Greater Than Five Acres must include:

i. The SPDES permit identification number (Permit ID); and

ii. Full technical justification demonstrating why alternative methods of construction that would result in five acres of soil disturbance or less at any one time are not feasible; and

iii. The phasing plan for the project and sequencing plans for all *phases* from the *SWPPP* in accordance with Part III.B.1.d.; and

iv. Plans with locations and details of erosion and sediment control practices such that the heightened concern for erosion when disturbing greater than five acres at one time has been addressed; and

v. Acknowledgment that "the *owner or operator* will comply with the requirements in Part IV.C.2.b."; and

vi. Acknowledgment that "the *owner or operator* will comply with the requirements in Part II.B.1.b."

c. The *owner or operator* must be in receipt of an Authorization Letter to Disturb Greater Than Five Acres, which will include when the

authorization begins and ends and indicate a maximum area (acres) of soil disturbance allowed at any one time, from:

i. NYSDEC, if Part I.E.6.a.i. or iii. apply; or

ii. the *Traditional Land Use Control MS4 Operator*, if Part I.E.6.a.ii. applies.

7. Upon a finding of significant non-compliance with the practices described in the *SWPPP* or violation of this permit, NYSDEC may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order must be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

8. If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE).[3] *Construction activity* shall not resume until written permission to do so has been received from the RWE.

9. To be authorized to implement modifications to the information previously submitted in the eNOI, the *owner or operator* must:

   a. notify NYSDEC via email at Stormwater_info@dec.ny.gov requesting access to update the eNOI; and

   b. update the eNOI to reflect the modifications and resubmit the eNOI in accordance with Part I.D.; and

   c. receive an updated LOA.

10. The eNOI, *SWPPP*, LOA, updated LOAs (when applicable), and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

[3] The Regional Water Manager where a DEC Region does not have a RWE.

F. Permit Coverage for *Discharges* Authorized Under GP-0-20-001

When applicable:

1. Upon the effective date of this permit, an *owner or operator* of *a construction activity*, with coverage under GP-0-20-001, will have interim coverage under GP-0-25-001 for 45 calendar days starting on the effective date of GP-0-25-001 so long as the *owner or operator* maintains compliance with all applicable requirements of this permit.

2. Within 30 calendar days of the effective date of this permit, the *owner or operator*, with coverage under GP-0-20-001, must submit a complete Request to Continue Coverage electronically using a NYSDEC approved form,[4] which contains the information identified in Part I.F.3. below, if:

   a. the *owner or operator* continues to implement the SMP component in conformance with the technical standards in place at the time of initial project authorization; and

   b. the *owner or operator* will comply with all non-design requirements of GP-0-25-001.

3. The Request to Continue Coverage form contains questions to: ensure eligibility requirements in Part I.A. have been met; verify *owner or operator* contact information; verify the permit identification number; verify the original eNOI submission ID, if applicable; verify Part I.F.2.a. and b.; verify the version of the Design Manual that the technical/design components conform to; and receive an updated Owner/Operator Certification Form, Appendix I.

4. The *owner or operator* has obtained continued coverage under GP-0-25-001 as of the date indicated in the LOCC, which is sent by NYSDEC after a complete Request to Continue Coverage form is submitted.

5. If the owner or operator does not submit the Request to Continue Coverage form in accordance with Part I.F.2. and 3., coverage under this permit is automatically terminated after interim coverage expires.

[4] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

G. Change of *Owner or Operator*

When applicable:

1. When property ownership changes, or when there is a change in operational control over the construction plans and specifications, the following process applies:

    a. The new *owner or operator* must meet the applicable prerequisites for submitting an eNOI in accordance with Part I.D.2.; and

    b. The new *owner or operator* must submit an eNOI in accordance with Part I.D.3.; and

    c. Permit coverage for the new *owner or operator* will be effective upon receipt of the LOA in accordance with Part I.D.3.b.; and

    d. The new *owner or operator*, upon receipt of their LOA, must provide their Permit ID to the original *owner or operator*; and

    e. If the original *owner or operator* will no longer be the *owner or operator* of the *construction activity* identified in the original *owner's or operator's* eNOI, the original *owner or operator*, upon receipt of the new *owner's or operator's* Permit ID in accordance with Part I.G.1.d., must submit to NYSDEC a completed eNOT in accordance with Part V. that includes the name and Permit ID of the new *owner or operator*; or

    f. If the original *owner or operator* maintains ownership of a portion of the *construction activity*, the original *owner or operator* must maintain their coverage under the permit by modifying their eNOI; modifications to the eNOI must include:

        i. the revised area of disturbance and/or *impervious area(s)*; and

        ii. the revised SMP information, if applicable; and

        iii. a narrative description of what has changed; and

        iv. the new *owner's or operator's* Permit ID for the portion of the project removed from the eNOI.

    Owners or operators must follow Part I.E.9. to modify the eNOI.

Part II. Water Quality-Based Effluent Limitations

A. Maintaining Water Quality

NYSDEC expects that compliance with the requirements of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any *discharge* to either cause or contribute to a violation of the following *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York:

1. There must be no increase in turbidity that will cause a substantial visible contrast to natural conditions; and

2. There must be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There must be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the *stormwater discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standard,* the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this permit and document in accordance with Part IV.C.4. of this permit. To address the *water quality standard* violation the *owner or operator* must include and implement appropriate controls in the *SWPPP* to correct the problem or obtain an individual SPDES permit.

If, despite compliance with the requirements of this permit, it is demonstrated that the *stormwater discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or if NYSDEC determines that a modification of this permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s will no longer be eligible for coverage under this permit, and the *owner or operator* must obtain an individual SPDES permit prior to further *discharges* from the *construction site*.

B. Effluent Limitations Applicable to *Discharges* from *Construction Activities*

*Discharge*s authorized by this permit must achieve, at a minimum, the effluent limitations in Part II.B.1.a., b., c., d., and e. These limitations represent the

degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement, and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part II.B.1.a., b., c., d., and e. and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (BB), dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in *SWPPP* the reason(s) for the deviation, or alternative design, and provide information in the *SWPPP* demonstrating that the deviation or alternative design is *equivalent* to the technical standard.

    a. **Erosion and Sediment Controls.** At a minimum, erosion and sediment controls must be selected, designed, installed, implemented, and maintained to:

        i. *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s; and

        ii. Control *stormwater discharge*s, including both peak flow rates and total *stormwater* volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points; and

        iii. *Minimize* the amount of soil exposed during *construction activity*; and

        iv. *Minimize* the disturbance of *steep slope*; and

        v. *Minimize* sediment *discharge*s from the site; and

        vi. Provide and maintain *natural buffers* around surface waters, direct *stormwater* to vegetated areas and maximize *stormwater* infiltration to reduce *pollutant discharge*s, unless *infeasible*; and

        vii. *Minimize* soil compaction. *Minimizing* soil compaction is not required

where the intended function of a specific area of the site dictates that it be compacted; and

viii. Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

ix. *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of *pollutants* that could be discharged from the site.

b. **Soil Stabilization**. In areas where soil disturbance activity has ceased, whether permanently or *temporarily ceased*, the application of soil stabilization measures must be initiated by the end of the next business day and completed within 14 calendar days from the date the current soil disturbance activity ceased. For *construction sites* that *directly discharge* to one of the 303(d) segments listed in Appendix D, or are located in one of the watersheds listed in Appendix C, or are authorized to disturb greater than five acres in accordance with Part I.E.5.a.viii., the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven calendar days from the date the soil disturbance activity ceased.

c. **Dewatering**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. Select, design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be selected, designed, installed, implemented, and maintained to:

i. *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. Soaps, detergents and solvents cannot be used; and

ii. *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation

and to *stormwater*. *Minimization* of exposure is not required in cases where the exposure to precipitation and to *stormwater* will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of *stormwater* contamination (such as final products and materials intended for outdoor use); and

iii. Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Surface Outlets.** When discharging from basins and impoundments, the surface outlets must be designed, constructed, and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

C. Post-Construction Stormwater Management Practice (SMP) Requirements

1. The *owner or operator* of a *construction activity* that requires post-construction SMPs, in accordance with Part III.C., must select, design, install, implement, and maintain the SMPs to meet the *performance criteria* in the New York State Stormwater Management Design Manual, dated July 31, 2024 (DM), using sound engineering judgment. Where SMPs are not designed in conformance with the *performance criteria* in the DM, the *owner or operator* must include in the *SWPPP* the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. The *owner or operator* of a *construction activity*, that requires SMPs in accordance with Part III.C., must design the practices to meet the applicable *sizing criteria* in Part II.C.2.a., b., c., or d.

a. Sizing Criteria for *New Development*

i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the total WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv must be calculated in accordance with the criteria in Section 4.2 of the DM; or

2. Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the requirements in Part II.C.2.a.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

   In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.4 of the DM. The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.

ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:

   1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

   2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs without detention or velocity controls; or

   3. The site *directly discharges* into a fifth order or larger water body (stream, river, or lake), or tidal waters, where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

b. *Sizing Criteria* for *New Development* in Enhanced Phosphorus Removal Watersheds

i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24-hour design storm over the post-developed watershed and must be calculated in accordance with the criteria in Section 4.3 of the DM; or

2. Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part II.C.2.b.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include

documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible.*

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.5 of the DM. The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.

ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:

1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs; or

3. The site *directly discharges* to tidal waters, or a fifth order or larger water body (stream, river, or lake) where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

c. *Sizing Criteria* for *Redevelopment Activity*

i. Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* must be addressed by one of the following options, as outlined in Section 9.2.1. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C) must calculate the WQv in accordance with Section 4.3 of the DM. All other *redevelopment activities* must calculate the WQv in accordance with Section 4.2 of the DM.

1. Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the DM must be applied to all newly created pervious areas; or

2. Capture and treat 100% of the required WQv, for a minimum of 25% of the disturbed redevelopment *impervious area*, by implementation of standard SMPs or reduced by application of runoff reduction techniques; or

3. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a volume-based alternative SMP, as defined in Section 9.4 of the DM; or

4. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a flow-through alternative SMP sized to treat the peak rate of runoff from the WQv design storm; or

5. Application of a combination of 1 through 4 above that provide a weighted average of at least two of the above methods. Application of this method must be in accordance with the criteria in Section 9.2.1(A)(V) of the DM; or

6. If there is an existing SMP located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 through 5 above.

ii. Channel Protection Volume (CPv) is not required if there is 0% change to hydrology that increases the *discharge* rate and volume from the project site.

iii. *Overbank* Flood Control (Qp) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

iv. Extreme Flood Control (Qf) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

d. *Sizing Criteria* for Combination of *Redevelopment Activity* and *New Development*

Construction projects, that include both *new development* and *redevelopment activity*, must use SMPs that meet the *sizing criteria* calculated as an aggregate of the *sizing criteria* in Part II.C.2.a. or b. for the *new development* portion of the project and Part II.C.2.c. for the *redevelopment activity* portion of the project.

Part III. Stormwater Pollution Prevention Plan (SWPPP)

A. General *SWPPP* Requirements

1. A *SWPPP* must be prepared and implemented by the *owner or operator* of all *construction activity* covered by this permit. All authorized *discharges* must be identified in the *SWPPP*. The *SWPPP* must document the selection, design, installation, implementation and maintenance of the control measures and

practices that will be used to meet the effluent limitations in Part II.B. and, where applicable, the SMP requirements in Part II.C.

2. The *SWPPP* must demonstrate consideration in narrative format of the future physical risks due to climate change pursuant to the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490, and associated guidance.

    a. The owner or operator must consider:

        i. the following physical risks due to climate change:

            (i) increasing temperature; and

            (ii) increasing precipitation; and

            (iii) increasing variability in precipitation, including chance of drought; and

            (iv) increasing frequency and severity of flooding; and

            (v) rising sea level; and

            (vi) increasing storm surge; and

            (vii) shifting ecology.

        ii. for each of the following:

            (i) overall site planning; and

            (ii) location, elevation, and sizing of:

                a. control measures and practices; and

                b. conveyance system(s); and

                c. detention system(s).

3. The *SWPPP* must describe the erosion and sediment control practices and where required, SMPs that will be used and/or constructed to reduce the *pollutants* in *stormwater discharges* and to assure compliance with the

requirements of this permit. In addition, the *SWPPP* must identify potential sources of pollution which may reasonably be expected to affect the quality of *stormwater discharges*.

4. All *SWPPPs*, that require the SMP component in accordance with Part III.B.2., must be prepared by a *qualified professional*.

5. The *owner or operator* must keep the *SWPPP* current so that, at all times, it accurately documents the erosion and sediment control practices that are being used or will be used during construction, and all SMPs that will be constructed on the site. At a minimum, the *owner or operator* must modify the *SWPPP*, including construction drawings:

   a. whenever the current provisions prove to be ineffective in *minimizing pollutants* in *stormwater discharges* from the site; and

   b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*; and

   c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* NYSDEC, or other regulatory authority; and

   d. to document the final construction conditions in an as-built drawing.

6. NYSDEC may notify the *owner or operator* at any time that the *SWPPP* does not meet one or more of the minimum requirements of this permit. The notification must be in writing and identify the provisions of the *SWPPP* that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by NYSDEC, the *owner or operator* must make the required changes to the *SWPPP* and submit written notification to NYSDEC that the changes have been made. If the *owner or operator* does not respond to NYSDEC's comments in the specified time frame, NYSDEC may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4.

7. 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 SMPs included in the *SWPPP*. The *owner or operator* must have each of the contractors and subcontractors identify at least one person from their company to be *trained contractor* that will be responsible for implementation of the *SWPPP*. The *owner or operator* must ensure that at least one *trained contractor* is on site daily when soil disturbance activities are being performed.

The *owner or operator* must have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before the *commencement of construction activities*:

> "I hereby certify under penalty of law that I understand and agree to comply with the requirements 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 requirements of the most current version of the New York State Pollutant Discharge Elimination System (SPDES) Construction General Permit (CGP) 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"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the *SWPPP* that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for *SWPPP* implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* must attach the certification statement(s) to the copy of the *SWPPP* that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the *SWPPP* after the *commencement of construction activities*, they must also sign the certification statement and provide the information listed above prior to performing *construction activities*.

B. Required *SWPPP* Contents

1. Erosion and sediment control component - The *owner or operator* must prepare a *SWPPP* that includes erosion and sediment control practices.

    a. Erosion and sediment control practices must be designed:

        i. in conformance with the BB; or

        ii. *equivalent* to the BB if deviating from Part III.B.1.a.i.

    b. If the erosion and sediment control practices are designed in conformance with Part III.B.1.a.ii., the *SWPPP* must include a demonstration of *equivalence* to the BB.

    c. At a minimum, the erosion and sediment control component of the *SWPPP* must include the following:

        i. Background information about the scope of the project, including the location, type and size of project; and

        ii. A site map/construction drawing(s) with north arrows for the project, including a general location map. At a minimum, the site map must show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the *stormwater discharge*(s) and receiving surface water(s); and

        iii. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG); and

        iv. A phasing plan for the project and sequencing plans for all *phases*, both of which must address clearing and grubbing, excavation and grading, utility and infrastructure installation, *final stabilization*,

and any other *construction activity* at the site that will result in soil disturbance.

1. The phasing plan must include:

    a. a map delineating and labeling the limits of soil disturbance for all *phases* of a project; and

    b. a table identifying the order and intended schedule of when each *phase* will begin and end its sequencing plan. The table must identify the total disturbed area for each *phase* at any one time and the total disturbed area for the overall project at any one time all on one timeline showing all overlapping quantities of disturbed area at any one time; and

2. A sequencing plan for a specific *phase* must include:

    a. a table indicating the order and intended schedule of *construction activities* within a *phase*, and corresponding construction drawings with a description of the work to be performed; and

    b. all permanent and *temporary stabilization* measures; and

v. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented; and

vi. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice; and

vii. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any

temporary sediment basins and structural practices that will be used to divert flows from exposed soils; and

viii. A maintenance inspection schedule for the contractor(s) and subcontractor(s) identified in Part III.A.7. to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule must be in accordance with the requirements in the BB technical standard; and

ix. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the *stormwater discharges*; and

x. A description and location of any *stormwater discharges* associated with industrial activity other than construction at the site, including, but not limited to, *stormwater discharges* from asphalt plants and concrete plants located on the *construction site*; and

xi. Identification of any elements of the design that are not in conformance with the design criteria in the BB technical standard. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. SMP component – The *owner or operator* of *construction activity* identified in Table 2 of Appendix B must prepare a *SWPPP* that includes SMPs.

   a. SMPs must be designed in conformance with the applicable *sizing criteria* in Part II.C.2.a., c., or d.; and

   b. SMPs must be designed in conformance with the *performance criteria*:

      i. in the DM; or

      ii. *equivalent* to the DM if deviating from Part III.B.2.b.i.; or

      iii. in the New York State Stormwater Management Design Manual, dated January 2015 (2015 Design Manual), or *equivalent* to it, if the following criteria are met:

1. The eNOI is submitted in accordance with Part I.D. before January 29, 2027 for *construction activities* that are either:

    a. subject to governmental review and approval:

        i. where the *owner or operator* made any application to that governmental entity prior to the effective date of this permit; and

        ii. such application included a *SWPPP* developed using the 2015 Design Manual or *equivalent* to it; or

    b. not subject to governmental review and approval:

        i. where a fiscal allocation for the *construction activities* has been developed and approved by a governmental entity; and

        ii. the *SWPPP* was developed using the 2015 Design Manual or *equivalent* to it; and

c. If SMPs are designed in conformance with Part III.B.2.b.ii., the *SWPPP* must include the reason(s) for the deviation or alternative design and a demonstration of *equivalence* to the DM; and

d. If SMPs are designed in conformance with Part III.B.2.b.iii., the *SWPPP* must include supporting information or documentation demonstrating that Part III.B.2.b.iii.1.a. or b. apply; and

e. The SMP component of the *SWPPP* must include the following:

    i. Identification of all SMPs to be constructed as part of the project, including which option the SMP designs conform to, either Part III.B.2.b.i., ii., or iii. Include the dimensions, material specifications and installation details for each SMP; and

    ii. A site map/construction drawing(s) showing the specific location and size of each SMP; and

iii. A Stormwater Modeling and Analysis Report that includes:

(i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points; and

(ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and SMPs; and

(iii) Results of *stormwater* modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre- and post-development runoff rates and volumes for the different storm events; and

(iv) Summary table, with supporting calculations, which demonstrates that each SMP has been designed in conformance with the *sizing criteria* included in the DM; and

(v) Identification of any *sizing criteria* that is not required based on the requirements included in Part II.C.; and

(vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the DM. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the DM.

iv. Soil testing results and locations (test pits, borings); and

v. Infiltration test results, when required in accordance with Part III.B.2.a.; and

vi. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each SMP. The plan must identify the entity

that will be responsible for the long-term operation and maintenance of each practice; and

3. Enhanced Phosphorus Removal Standards - The *owner or operator* of *construction activity* identified in Table 2 of Appendix B that is located in a watershed identified in Appendix C must prepare a *SWPPP* that includes SMPs designed in conformance with the applicable *sizing criteria* in Part II.C.2.b., c., or d. and the *performance criteria* Enhanced Phosphorus Removal Standards included in the DM. At a minimum, the SMP component of the *SWPPP* must meet the requirements of Part III.B.2.

C. Required *SWPPP* Components by Project Type

Owners or operators of *construction activities*, identified in Table 1 of Appendix B, are required to prepare a *SWPPP* that only includes erosion and sediment control practices designed in accordance with Part III.B.1. *Owners or operators* of the *construction activities*, identified in Table 2 of Appendix B, must prepare a *SWPPP* that also includes SMPs designed in accordance with Part III.B.2 or 3.

For the entire area of disturbance, including the entire *common plan of development or sale* if applicable, the owner or operator must evaluate every bullet from Appendix B Table 1 and Table 2 separately. If bullets from both Table 1 and Table 2 apply, the *SWPPP* must include erosion and sediment control practices for all *construction activities* but SMPs for only those portions of the *construction activities* that fall under Table 2 bullet(s).

Part IV. Inspection and Maintenance Requirements

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures), and all SMPs identified in the *SWPPP*, are inspected and maintained in accordance with Part IV.B. and C.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity*, identified in Tables 1 and 2 of Appendix B, must have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being

implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor must:

a. if the corrective action does not require engineering design:

    i. begin implementing corrective actions within one business day; and

    ii. complete the corrective actions within five business days; or

b. if the corrective action requires engineering design:

    i. begin the engineering design process within five business days; and

    ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

2. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. The *trained contractor* must begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

3. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational.

C. *Qualified Inspector* Inspection Requirements

1. With the exception of the following *construction activities* identified in Tables 1 and 2 of Appendix B, a *qualified inspector* must conduct site inspections for all other *construction activities* identified in Tables 1 and 2 of Appendix B:

    a. the construction of a single-family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than or equal to five (5) acres and is

not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D; and

b. the construction of a single-family home that involves soil disturbances of one (1) or more acres but less than or equal to five (5) acres and is not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D; and

c. construction on *agricultural property* that involves soil disturbances of one (1) or more acres but less than five (5) acres; and

d. *construction activities* located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances of 5,000 square feet or more, but less than one acre.

2. The *qualified inspector* must conduct site inspections in accordance with the following timetable:

a. For *construction sites* where soil disturbance activities are on-going, the *qualified inspector* must conduct a site inspection at least once every seven (7) calendar days; or

b. For *construction sites* where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part I.E.6. to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days; or

c. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* must conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas under the jurisdiction of a *Traditional Land Use Control MS4 Operator,* the *Traditional Land Use Control MS4 Operator* (provided the *Traditional Land Use Control MS4 Operator* is not the *owner or operator* of the *construction activity*) by hard copy or email prior to reducing the inspections to this frequency and again by hard copy or email prior to re-commencing construction; or

d. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the requirement to have the *qualified inspector* conduct inspections ceases if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1., the *Traditional Land Use Control MS4 Operator(s)* (provided the *Traditional Land Use Control MS4 Operator(s)* are not the *owners or operators* of the *construction activity*) in writing prior to the shutdown and again in writing prior to resuming *construction activity*. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* must terminate coverage by meeting the requirements of Part V; or

e. For *construction sites* involving soil disturbance of one (1) or more acres that *directly discharge* to one of the 303(d) segments listed in Appendix D or is located in one of the watersheds listed in Appendix C, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* must inspect:

   a. all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness; and

   b. all SMPs under construction to ensure that they are constructed in conformance with the *SWPPP*; and

   c. all areas of disturbance that have not achieved *final stabilization*; and

   d. all points of *discharge* to *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site*; and

   e. all points of *discharge* from the *construction site*.

4. The *qualified inspector* must prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report must include and/or address all of the following, for all *construction activities* except those listed in Part IV.C.1.:

   a. Permit identification number; and

   b. Date and time of inspection; and

   c. Name and title of person(s) performing inspection; and

   d. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection, including the temperature at the time of the inspection; and

   e. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This must include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow; and

   f. A description of the condition of all *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This must include identification of any *discharges* of sediment to the *surface waters of the State*; and

   g. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance; and

   h. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced; and

   i. Description and sketch (map) of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection; and

   j. Estimates, in square feet or acres, of the following areas:

i. Total area with active soil disturbance (not requiring either *temporary stabilization* or *final stabilization*); and

ii. Total area with inactive soil disturbance (requiring either *temporary stabilization* or *final stabilization*); and

iii. Total area that has achieved *temporary stabilization*; and

iv. Total area that has achieved *final stabilization*; and

k. Current stage of construction of all SMPs and identification of all *construction activity* on site that is not in conformance with the *SWPPP* and technical standards; and

l. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the SMP(s); and

m. Identification and status of all corrective actions that were required by previous inspection; and

n. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* must attach color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* must also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* must attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* must notify the *owner or operator*, and appropriate contractor or subcontractor identified in Part III.A.7., of any corrective actions that need to be taken. The contractor or subcontractor must:

a. if the corrective action does not require engineering design:

i. begin implementing corrective actions within one business day; and

ii. complete the corrective actions within five business days; or

b. if the corrective action requires engineering design:

i. begin the engineering design process within five business days; and

ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

6. All inspection reports must be signed by the *qualified inspector.* In accordance with Part I.E.3., the inspection reports must be maintained on site with the *SWPPP*.

Part V. How to Terminate CGP Coverage

A. Electronic Notice of Termination (eNOT) Submittal

The eNOT contains questions to ensure requirements in Part V.A. have been met.

1. An *owner or operator* must terminate coverage when one or more of the following requirements have been met:

a. Total project completion:

i. all *construction activity* identified in the *SWPPP* has been completed; and

ii. all areas of disturbance have achieved *final stabilization*; and

iii. all temporary, structural erosion and sediment control measures have been removed; and

iv. all SMPs have been constructed in conformance with the *SWPPP* and are operational; and

v. an as-built drawing has been prepared; or

b. Planned shutdown with partial project completion:

   i. all soil disturbance activities have ceased; and

   ii. all areas disturbed as of the project shutdown date have achieved *final stabilization*; and

   iii. all temporary, structural erosion and sediment control measures have been removed; and

   iv. all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational; and

   v. an as-built drawing has been prepared; or

c. In accordance with Part I.G. Change of Owner or Operator; or

d. The *owner or operator* has obtained coverage under an alternative general SPDES permit or an individual SPDES permit.

2. For *construction activities* that require *qualified inspector* inspections in accordance with Part IV.C.1. and have met Part V.A.1.a. or b., the *owner or operator* must have the *qualified inspector* perform a final site inspection prior to submitting the eNOT. The *qualified inspector* must, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice(s)" certification statements on the eNOT, certify that all the requirements in Part V.A.1.a. or b. have been achieved.

3. For *construction activities* that are subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1. and meet Part V.A.1.a. or b., the *owner or operator* must have the *Traditional Land Use Control MS4 Operator(s)* sign the "MS4 Acceptance" statement on the eNOT in accordance with the requirements in Part VII.J. A *Traditional Land Use Control MS4 Operator* official, by signing this statement, determined that it is acceptable for the *owner or operator* to submit the eNOT in accordance with the requirements of this Part. A *Traditional Land Use Control MS4 Operator* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) when required in Part V.A.2.

4. For *construction activities* that require SMPs and meet Part V.A.1.a. or b., the *owner or operator* must, prior to submitting the eNOT, ensure one of the following:

    a. for SMP(s) that were constructed by a private entity, but will be owned, operated, and maintained by a public entity, the SMP(s) and any right-of-way(s) needed to operate and maintain such practice(s) have been deeded to the municipality in which the practice(s) is located; or

    b. for SMP(s) that are privately owned, but will be operated and maintained by a public entity, an executed operation and maintenance agreement is in place with the municipality that will operate and maintain the SMP(s); or

    c. for SMP(s) that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record; or

    d. for SMP(s) that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility, the *owner or operator* has policies and procedures in place that ensure operation and maintenance of the practices in accordance with the operation and maintenance plan.

5. An *owner or operator* that has met the requirements of Part V.A.1., 2., 3., and 4. must request termination of coverage under this permit by submitting a complete Notice of Termination form electronically using a NYSDEC approved form.[5]

    a. The owner's or operator's coverage is terminated as of the termination date indicated in the Letter of Termination (LOT), which is sent by NYSDEC after a complete eNOT is submitted.

[5] Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to Stormwater_info@dec.ny.gov or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

Part VI. Record Retention and Reporting

A. Record Retention

The *owner or operator* must retain a copy of the documents listed in Part I.E.3. and a copy of the LOT for a period of at least five years from the date that NYSDEC accepts a complete NOT submitted in accordance with Part V.

B. Reporting

Except for the eNOI, the signature forms associated with the eNOI, and the eNOT, all other written correspondence requested by NYSDEC, including individual permit applications, must be sent to the address of the appropriate DOW (SPDES) Program contact at the Regional Office listed in Appendix E.

Part VII. Standard Permit Requirements

For the purposes of this permit, examples of contractors and subcontractors include: third-party maintenance and construction contractors.

A. Duty to Comply

The *owner or operator*, and all contractors or subcontractors, must comply with all requirements of this permit. Any non-compliance with the requirements of this permit constitutes a violation of the New York State Environmental Conservation Law (ECL), and its implementing regulations, and is grounds for enforcement action. Filing of a request for termination of coverage under this permit, or a notification of planned changes or anticipated non-compliance, does not limit, diminish or stay compliance with any requirements of this permit.

B. Need to Halt or Reduce Activity Not a Defense

The necessity to halt or reduce the *construction activity* regulated by this permit, in order to maintain compliance with the requirements of this permit, must not be a defense in an enforcement action.

C. Penalties

There are substantial criminal, civil, and administrative penalties associated with violating the requirements of this permit. Fines of up to $37,500 per day for each

violation and imprisonment for up to 15 years may be assessed depending upon the nature and degree of the offense.

D. False Statements

Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance must, upon conviction, be punished in accordance with ECL §71-1933 and or New York State Penal Law Articles 175 and 210.

E. Re-Opener Clause

Upon issuance of this permit, a determination has been made on the basis of a submitted Notice of Intent, plans, or other available information, that compliance with the specified permit requirements will reasonably protect classified water use and assure compliance with applicable *water quality standards*. Satisfaction of the requirements of this permit notwithstanding, if operation pursuant to this permit causes or contributes to a condition in contravention of State *water quality standards* or guidance values, or if NYSDEC determines that a modification is necessary to prevent impairment of the best use of the waters or to assure maintenance of *water quality standards* or compliance with other provisions of ECL Article 17 or the Clean Water Act (CWA), or any regulations adopted pursuant thereto, NYSDEC may require such modification and the Commissioner may require abatement action to be taken by the *owner or operator* and may also prohibit such operation until the modification has been implemented.

F. Duty to Mitigate

The *owner or operator*, and its contractors and subcontractors, must take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

G. Requiring Another General Permit or Individual SPDES Permit

NYSDEC may require any *owner or operator* authorized to *discharge* in accordance with this permit to apply for and obtain an individual SPDES permit or apply for authorization to *discharge* in accordance with another general SPDES permit.

1. Cases where an individual SPDES permit or authorization to discharge in accordance with another general SPDES permit may be required include, but is not limited to the following:

a. the *owner or operator* is not in compliance with the conditions of this permit or does not meet the requirements for coverage under this permit; and

b. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the *point source*; and

c. new effluent limitation guidelines or new source performance standards are promulgated that are applicable to *point sources* authorized to *discharge* in accordance with this permit; and

d. existing effluent limitation guidelines or new source performance standards that are applicable to *point sources* authorized to *discharge* in accordance with this permit are modified; and

e. a water quality management plan containing requirements applicable to such *point sources* is approved by NYSDEC; and

f. circumstances have changed since the time of the request to be covered so that the *owner or operator* is no longer appropriately controlled under this permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary; and

g. the *discharge* is in violation of section 17-0501 of the ECL; and

h. the *discharge(s)* is a significant contributor of *pollutants*. In making this determination, NYSDEC may consider the following factors:

   i. the location of the *discharge(s)* with respect to *surface waters of the State*; and

   ii. the size of the *discharge(s)*; and

   iii. the quantity and nature of the *pollutants discharged* to *surface waters of the State*; and

   iv. other relevant factors including compliance with other provisions of ECL Article 17, or the CWA.

2. When NYSDEC requires any *owner or operator* authorized by this permit to apply for an individual SPDES permit as provided for in this subdivision, it must notify the *owner or operator* in writing that a permit application is required. This notice must include a brief statement of the reasons for this decision, an application

form, a statement setting a time for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from the *owner's or operator's* receipt of the notification letter, whereby the authorization to *discharge* under this permit must be terminated. NYSDEC may grant additional time upon demonstration, to the satisfaction of the RWE,[6] that additional time to apply for an alternative authorization is necessary or where NYSDEC has not provided a permit determination in accordance with 6 NYCRR Part 621.

3. When an individual SPDES permit is issued to an *owner or operator* authorized to *discharge* under this permit for the same *discharge(s)*, this permit authorization for *construction activities* authorized under the individual SPDES permit is automatically terminated on the effective date of the individual SPDES permit unless termination is earlier in accordance with 6 NYCRR Part 750.

H. Duty to Provide Information

The *owner or operator* must furnish to NYSDEC, within five business days, unless otherwise set forth by NYSDEC, any information that NYSDEC may request to determine whether cause exists to determine compliance with this permit or to determine whether cause exists for requiring an individual SPDES permit in accordance with 6 NYCRR 750-1.21(e) (see Part VII.G. Requiring Another General Permit or Individual Permit).

The *owner or operator* must make available to NYSDEC, for inspection and copying, or furnish to NYSDEC within 25 business days of receipt of a NYSDEC request for such information, any information retained in accordance with this permit.

Except for Part I.D.4. and 5. and Part I.G., the following applies: where the *owner or operator* becomes aware that it failed to submit any relevant facts on the Notice of Intent, or submitted incorrect information in a Notice of Intent or in any report to NYSDEC, the *owner or operator* must submit such facts or corrected information to NYSDEC within five business days.

I. Extension

In the event a new permit is not issued and effective prior to the expiration of this permit, and this permit is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, then the *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the requirements of this permit until a new permit is issued and effective.

[6] The Regional Water Manager where a DEC Region does not have a RWE.

J. Signatories and Certification

The Notice of Intent, Notice of Termination, and reports required by this permit must be signed as provided in 40 CFR §122.22.

1. All Notices of Intent and Notices of Termination must be signed as follows:

    a. For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

        (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

        (ii) the manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

        Note: NYSDEC does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR §122.22(a)(1)(i). NYSDEC will presume that these responsible corporate officers have the requisite authority to sign the Notice of Intent or Notice of Termination unless the corporation has notified NYSDEC to the contrary. Corporate procedures governing authority to sign a Notice of Intent or Notice of Termination may provide for assignment or delegation to applicable corporate positions under 40 CFR §122.22(a)(1)(ii) rather than to specific individuals.

    b. For a partnership or sole proprietorship. By a general partner or the proprietor, respectively.

c. For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

    1. the chief executive officer of the agency; or

    2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. All reports required by this permit, and other information requested by NYSDEC, must be signed by a person described in Part VII.J.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Part VII.J.1. or using the Duly Authorized Form, found on the DEC website; and

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

    c. The written authorization is submitted to NYSDEC.

3. Changes to authorization. If an authorization under Part VII.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the *construction activity*, a new authorization satisfying the requirements of Part VII.J.2. must be submitted to NYSDEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under Part VII.J.1. or 2. must make the following certification:

    I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who

manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

5. Electronic reporting. If documents described in Part VII.J.1. or 2. are submitted electronically by or on behalf of the *construction activity* with coverage under this permit, any person providing the electronic signature for such documents must meet all relevant requirements of this section, and must ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3) (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

K. Inspection and Entry

The *owner or operator* must allow NYSDEC, the USEPA Regional Administrator, the applicable county health department, or any authorized representatives of those entities, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the *discharge*, upon the presentation of credentials and other documents as may be required by law, to:

1. enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the requirements of this permit; and

2. have access to and copy at reasonable times, any records that must be kept under the requirements of this permit, including records required to be maintained for purposes of operation and maintenance; and

3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

4. sample or monitor at reasonable times, for the purposes of assuring general SPDES permit compliance or as otherwise authorized by the CWA or ECL, any substances or parameters at any location; and

5. enter upon the property of any contributor to the regulated facility or activity under authority of the *owner or operator*.

L. Confidentiality of Information

The following must not be held confidential: this permit, the fact sheet for this permit, the name and address of any *owner or operator*, effluent data, the Notice of Intent, and information regarding the need to obtain an individual permit or an alternative general SPDES permit. This includes information submitted on forms themselves and any attachments used to supply information required by the forms (except information submitted on usage of substances). Upon the request of the *owner or operator*, NYSDEC must make determinations of confidentiality in accordance with 6 NYCRR Part 616, except as set forth in the previous sentence. Any information accorded confidential status must be disclosed to the Regional Administrator upon his or her written request. Prior to disclosing such information to the Regional Administrator, NYSDEC will notify the Regional Administrator of the confidential status of such information.

M. Other Permits May Be Required

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

N. NYSDEC Orders or Civil Decrees/Judgments

The issuance of this permit by the NYSDEC, and the coverage under this permit by the *owner or operator*, does not supersede, revoke, or rescind any existing order on consent or civil Decree/Judgment, or modification to any such documents or to any order issued by the Commissioner, or any of the terms, conditions, or requirements contained in such order or modification therefore, unless expressly noted.

O. Property Rights

Coverage under this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the *discharge* authorized.

P. Compliance with Interstate Standards

If the *construction activity* covered by this permit originates within the jurisdiction of an interstate water pollution control agency, then the *construction activity* must also comply with any applicable effluent standards or *water quality standards* promulgated by that interstate agency and as set forth in this permit for such *construction activities*.

Q. Oil and Hazardous Substance Liability

Coverage under this permit does not affect the imposition of responsibilities upon, or the institution of any legal action against, the *owner or operator* under section 311 of the CWA, which must be in conformance with regulations promulgated pursuant to section 311 governing the applicability of section 311 of the CWA to *discharges* from facilities with *NPDES* permits, nor must such issuance preclude the institution of any legal action or relieve the *owner or operator* from any responsibilities, liabilities, or penalties to which the *owner or operator* is or may be subject pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. section 9601 et seq. (CERCLA).

R. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, must not be affected thereby.

S. NYSDEC Approved Forms

The *owner or operator* must provide all relevant information that is requested by NYSDEC, and required by this permit, on all NYSDEC approved forms.

APPENDIX A – Abbreviations and Definitions

Abbreviations

APO – Agency Preservation Officer
BB – New York State Standards and Specifications for Erosion and Sediment Control (Blue Book), dated November 2016
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
CPv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DM – New York State Stormwater Management Design Manual (Design Manual), dated July 31, 2024
DOW – Division of Water
EAF – Environmental Assessment Form
ECL – chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law
EPA – U.S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
NYC – The City of New York
NYCDEP – The City of New York Department of Environmental Protection
NYSDEC – The New York State Department of Environmental Conservation
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RR – Runoff Reduction
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SMP – Post-Construction Stormwater Management Practice
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit. If a word is not italicized in the permit, use its common definition.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property – the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023).

Alter Hydrology from Pre- to Post-Development Conditions – the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer System – a sewer system which conveys sewage and *stormwater* through a single pipe system to a publicly owned treatment works.

Commence (Commencement of) Construction Activities – the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the *SWPPP*. See definition for "*Construction Activity(ies)*" also.

Common Plan of Development or Sale – a contiguous area where multiple separate and distinct *construction activities* are occurring, or may occur, under one plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQR) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating *construction activities* may occur on a specific plot. A *common plan of development or sale* is comprised of two or more *phases*.

Common plan of development or sale does not include separate and distinct *construction activities* that are occurring, or may occur, under one plan that are at least 1/4 mile apart provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Construction Activity(ies) – identified within 40 CFR 122.26(b)(14)(x), 122.26(b)(15)(i), and 122.26(b)(15)(ii), any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, mechanized logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal.

Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, which is excluded from the calculation of the soil disturbance for a project. Routine maintenance includes, but is not limited to:

- Re-grading of gravel roads or parking lots; and
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and maintains or improves the hydraulic capacity of the ditch; and
- Replacement of existing culverts that maintains the approximate original line and grade, and maintains or improves the hydraulic capacity of a ditch; and
- Replacement of existing bridges that maintains the approximate original line and grade, and maintains or improves the hydraulic capacity beneath the bridges; and
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch); and
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*; and
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material; and
- Long-term use of equipment storage areas at or near highway maintenance facilities; and
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*; and
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts; and
- Maintenance of ski trails including brush hog use and mowing; and
- Above ground snowmaking pipe replacement; and
- Replacement of existing utility poles; etc.

Construction Site – the land area where *construction activity(ies)* will occur. See also the definitions for "*Commence (Commencement of) Construction Activities"* and "*Common Plan of Development or Sale."*

Dewatering – the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

Directly Discharge(s)(ing) (to a specific surface waterbody) – runoff flows from a *construction site* by overland flow and the first point of *discharge* is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system and the first point of *discharge* from the separate storm sewer system is the specific surface waterbody.

Discharge(s)(d) – any addition of any *pollutant* to waters of the State through an outlet or *point source*.

Embankment – an earthen or rock slope that supports a road/highway.

Equivalent (Equivalence) – the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization – all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other *equivalent* stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

Historic Property – any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

Impervious Area (Cover) – all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and compacted gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – not technologically possible, or not economically practicable and achievable considering best industry practices.

Minimize(ing)(ation) – reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, *stormwater*, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that *discharges* to *surface waters of the State*; and

2. designed or used for collecting or conveying *stormwater*; and

3. which is not a *combined sewer system*; and

4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Natural Buffer(s) – an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – any land disturbance that does not meet the definition of *Redevelopment Activity* included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

Nonpoint Source(s) – any source of water pollution or *pollutants* which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank – flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator – the person, persons, or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit requirements.

Performance Criteria – the six performance criteria for each group of SMPs in Chapters 5 and 6 of the technical standard, New York State Stormwater Management Design Manual (DM), dated July 31, 2024. These include feasibility, conveyance, pretreatment, treatment, landscaping, and maintenance. It does not include the *Sizing Criteria* (i.e. WQv, RRv, CPv, Qp and Qf) in Part I.C.2. of the permit.

Phase – a defined area in which *construction activities* are occurring or will occur separate from other defined area(s).

Point Source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be *discharged*.

Pollutant(s) – dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast *discharged* into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq.

Qualified Inspector – a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder or other NYSDEC endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any SMPs that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional – a person that is knowledgeable in the principles and practices of *stormwater* management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other NYSDEC endorsed individual(s). Individuals preparing *SWPPPs* that require the SMP component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the *SWPPP* that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Redevelopment Activity(ies) – the disturbance and reconstruction of existing *impervious area*, including *impervious areas* that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Renewable Energy – electricity or thermal energy generated by renewable energy systems through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity.

Site Limitations – site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical *site limitations* include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of *site limitations* shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – the criteria included in Part I.C.2 of the permit that are used to size SMPs. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

Steep Slope – land area designated on the current United States Department of Agriculture (USDA) Soil Survey as Soil Slope Phase D, (provided the map unit name or description is inclusive of slopes greater than 25%), or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Stormwater – that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

Streambank – the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – a project specific report, including construction drawings, that among other things: describes the *construction activity(ies)*, identifies the potential sources of pollution at the *construction site*; describes and shows the *stormwater* controls that will be used to control the *pollutants* (i.e. erosion and sediment controls; for many projects, includes SMPs); and identifies procedures the *owner or operator* will implement to comply with the requirements of the permit. See Part III of the permit for a complete description of the information that must be included in the *SWPPP*.

Surface Waters of the State – shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization – exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Load (TMDL) – the sum of the allowable loads of a single *pollutant* from all contributing point and *nonpoint source*s. It is a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet *water quality standards*, and an allocation of that amount to the *pollutant's* sources. A TMDL stipulates Waste Load Allocations (WLA) for *point source discharges*, Load Allocations (LA) for *nonpoint source*s, and a margin of safety (MOS).

Traditional Land Use Control MS4 Operator – a city, town, or village with land use control authority that is authorized to *discharge* under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

Trained Contractor – an employee from the contracting (construction) company, identified in Part III.A.7., that has received four (4) hours of NYSDEC endorsed training

in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.7., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity).

The *trained contractor* is responsible for the day-to-day implementation of the *SWPPP*.

Tree Clearing – *construction activities* limited to felling and removal of trees.

Tree clearing does not include hand felling and leaving the trees in place with no support from mechanized equipment, which is not considered *construction activity* requiring coverage under this permit.

Water Quality Standard – such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B – Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following *construction activities* that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single-family home not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family residential subdivisions with 25% or less *impervious cover* at total site build-out and not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.
- Structural agricultural conservation practices as identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023) that include construction or reconstruction of *impervious area* or *alter hydrology from pre- to post-development* conditions.

The following *construction activities* that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

- All construction activities located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

Within the municipal boundaries of NYC:

- Stand-alone road reconstruction, where the total soil disturbance from only that road construction, is less than one (1) acre of land.

The following *construction activities*:

- Installation of underground linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation, *stormwater* retrofits, stream restoration, and resiliency projects that reconstruct shoreline areas to address sea level rise
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an *impervious cover*
- Cross-country ski trails, walking/hiking trails, and mountain biking trails, including a de minimis parking lot (maximum 10 spaces total, sized for passenger cars) with 35 feet minimum preservation of undisturbed area downgradient from the parking lot
- Dam rehabilitation (the structure of the dam itself)
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are not part of residential, commercial, or institutional development;
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path, or walking path.

Table 1 (Continued)
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following *construction activities*:

- Slope stabilization
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Vegetated open space (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) that do not *alter hydrology from pre- to post-development* conditions
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre- to post-development* conditions
- Demolition where vegetation will be established, and no *redevelopment activity* is planned[1]
- Installation or replacement of either an overhead electric transmission line or a ski lift tower that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*.
- Solar array field areas that have tables elevated off the ground, spaced one table width apart, do not *alter hydrology from pre- to post-development conditions*, and address water quality volume and runoff reduction volume by maintaining sheet flow on slopes less than 8%.
- Structural agricultural conservation practices as identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023) that do not include construction or reconstruction of *impervious area* and do not *alter hydrology from pre- to post-development* conditions.
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary *impervious areas* that will be restored to pre-construction conditions once the *construction activity* is complete (in this context, "temporary" means the *impervious area* will be in place for two years or less)
- Other *construction activities* that do not include the construction or reconstruction of *impervious area*, and do not *alter hydrology from pre- to post-development* conditions, and are not listed in Table 2.

1. If the site is redeveloped in the future, a new eNOI must be submitted.

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPS)

The following *construction activities*:

- Single-family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family home that disturbs five (5) or more acres of land
- Single-family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of between 20,000 square feet and one (1) acre of land within the municipal boundaries of NYC with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single-family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a *common plan of development or sale* that will ultimately disturb five (5) or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Creation of 5,000 square feet or more of *impervious area* in the municipal boundaries of NYC
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) that involves soil disturbance greater than five acres.
- Structural agricultural conservation practices as identified in Table II in the “Agricultural Best Management Practice Systems Catalogue” (dated June 2023) that involves soil disturbance greater than five acres and include the construction or reconstruction of *impervious area* or *alter hydrology from pre- to post-development* conditions.
- Facility buildings, including ski lodges, restroom buildings, pumphouses, ski lift terminals, and maintenance and groomer garages
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills; including creation of landfills or capping landfills.
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTWs, water treatment plants, and water storage tanks
- Golf courses
- Office complexes

Table 2 (Continued)

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPS)

The following *construction activities*:

- Permanent laydown yards and equipment storage lots
- Playgrounds that include the construction or reconstruction of *impervious area*
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surfaces
- Road construction or reconstruction, outside the municipal boundaries of NYC
- Road construction within the municipal boundaries of NYC
- Stand-alone road reconstruction, within the municipal boundaries of NYC where the total soil disturbance from that road reconstruction involves soil disturbance of one (1) acre or more of land
- Parking lot construction or reconstruction (as with all Table 2 bullets, this includes parking lots constructed as part of the *construction activities* listed in Table 1, unless a Table 1 bullet specifies otherwise)
- Athletic fields (natural grass) that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations, and well drilling pads, surfaced with *impervious cover,* and constructed as part of an overhead electric transmission line, wind-power, cell tower, oil or gas well drilling, sewer or water main, ski lift, or other linear utility project
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of a residential, commercial or institutional development
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of highway construction or reconstruction
- Solar array field areas on slopes greater than 8% that cannot maintain sheet flow using management practices identified in the BB or the DM
- Solar array field areas on slopes less than 8% that will *alter the hydrology from pre- to post-development* conditions
- Solar array field areas with tables that are not elevated high enough to achieve *final stabilization* beneath the tables
- Traditional *impervious areas* associated with solar development (e.g. roads, buildings, transformers)
- Utility pads surfaced with *impervious cover*, including electric vehicle charging stations
- All other *construction activities* that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre- to post-development* conditions, and are not listed in Table 1

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

Watersheds where *owners or operators* of *construction activities* identified in Table 2 of Appendix B must prepare a *SWPPP* that includes SMPs designed in conformance with the Enhanced Phosphorus Removal Standards included in the DM technical standard.

- Entire New York City Watershed located east of the Hudson River – Figure 1
- Onondaga Lake Watershed – Figure 2
- Greenwood Lake Watershed – Figure 3
- Oscawana Lake Watershed – Figure 4
- Kinderhook Lake Watershed – Figure 5

Figure 1 - New York City Watershed East of the Hudson

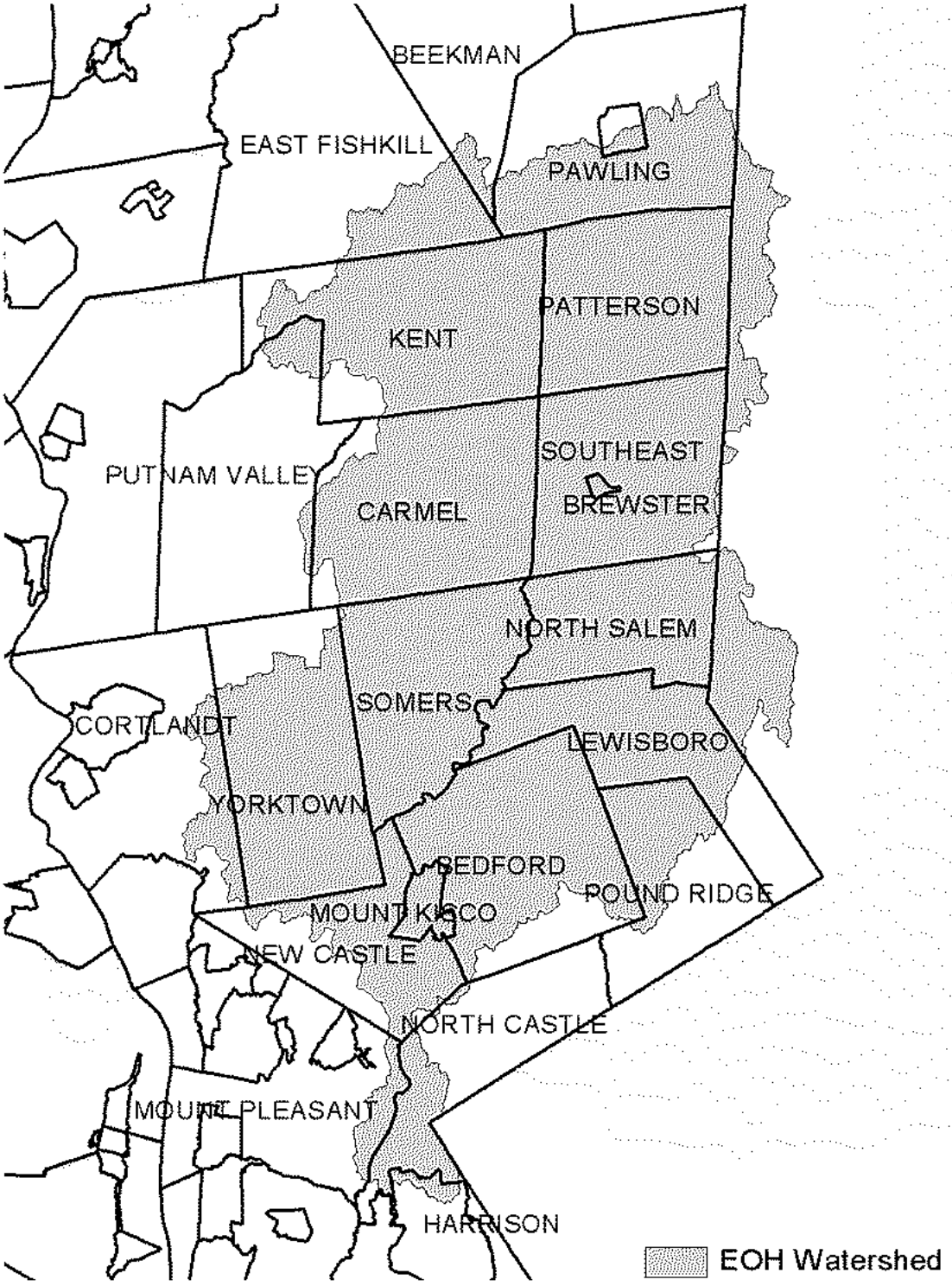


Figure 2 - Onondaga Lake Watershed

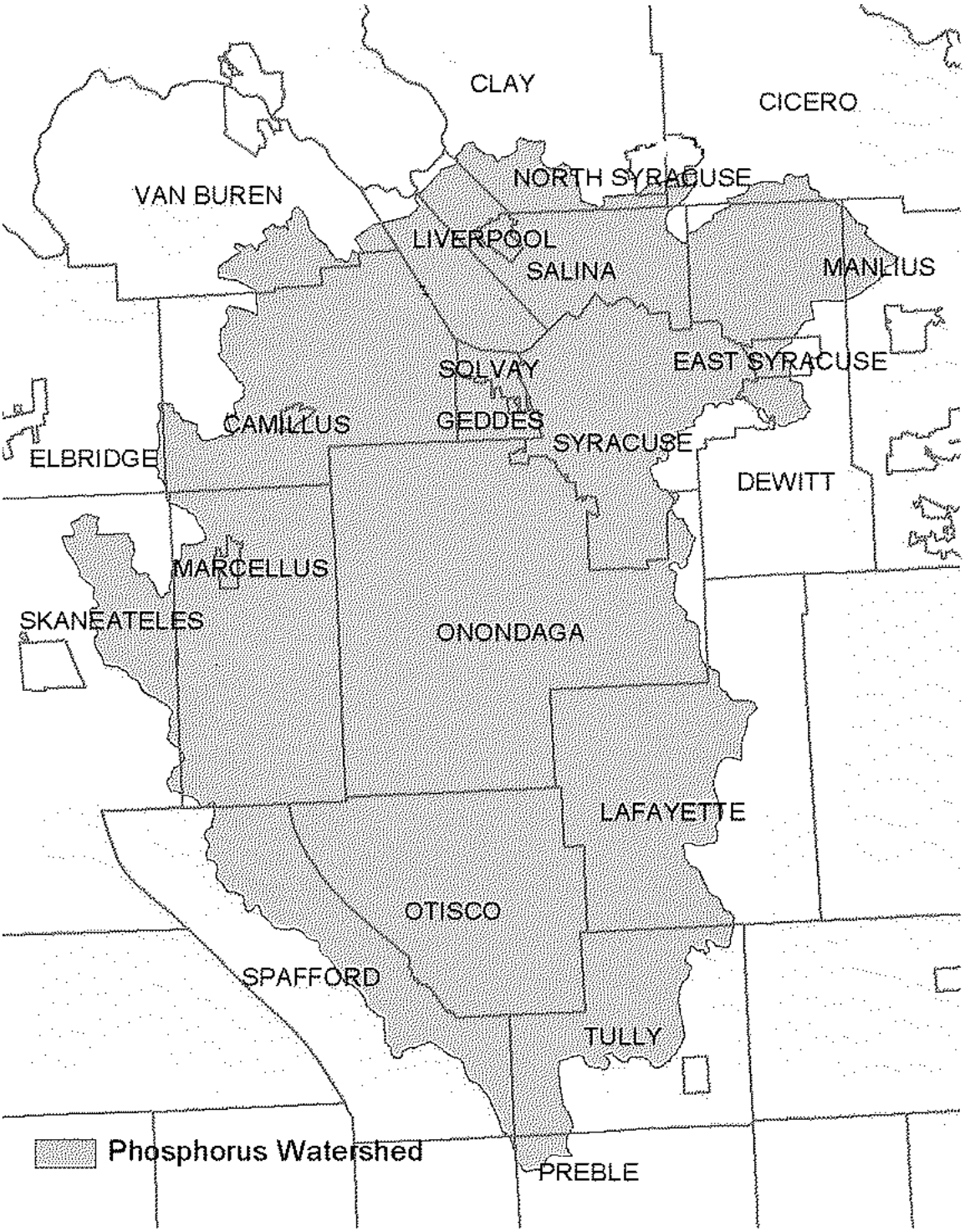


Figure 3 - Greenwood Lake Watershed

Figure 4 - Oscawana Lake Watershed

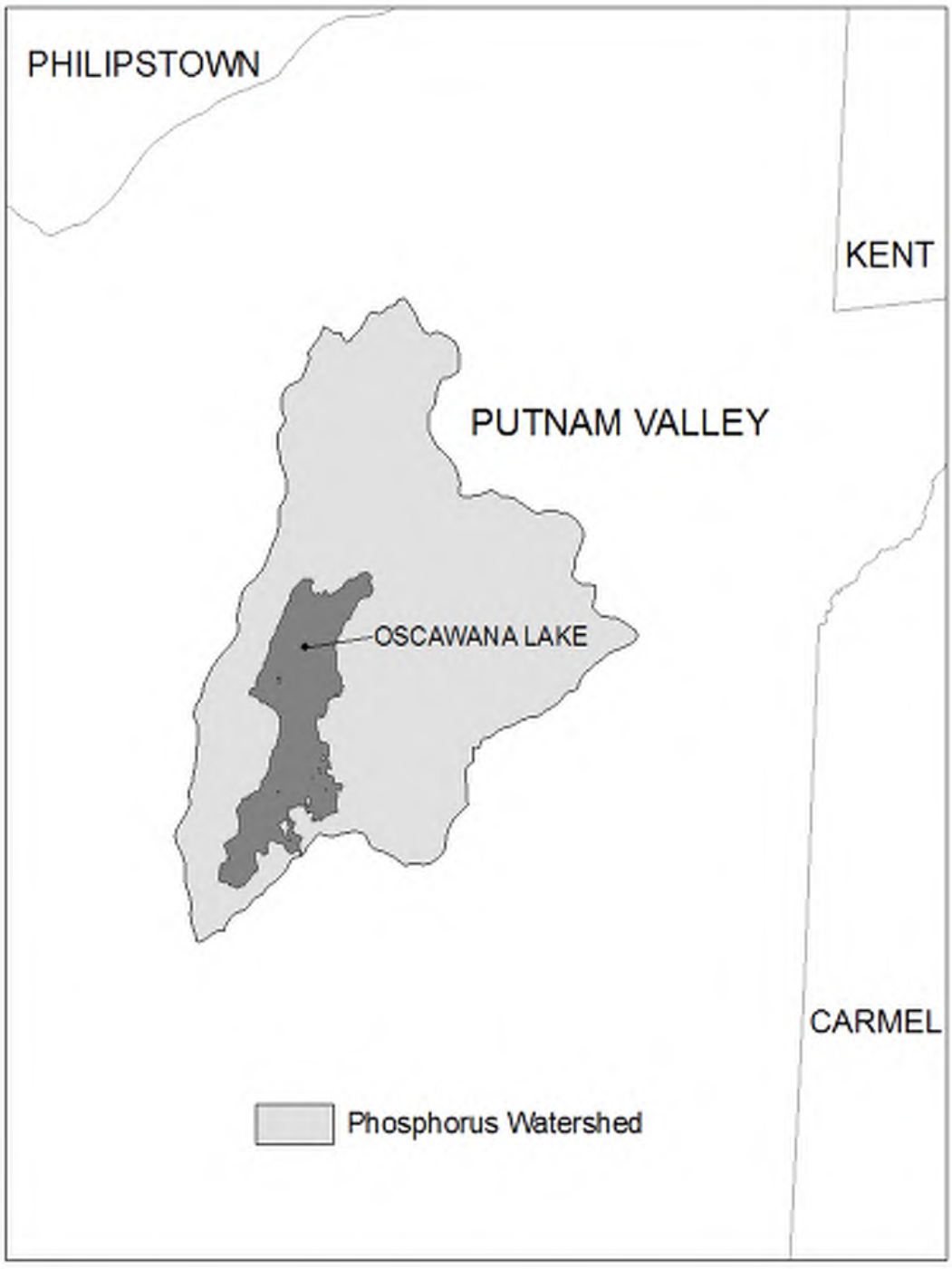
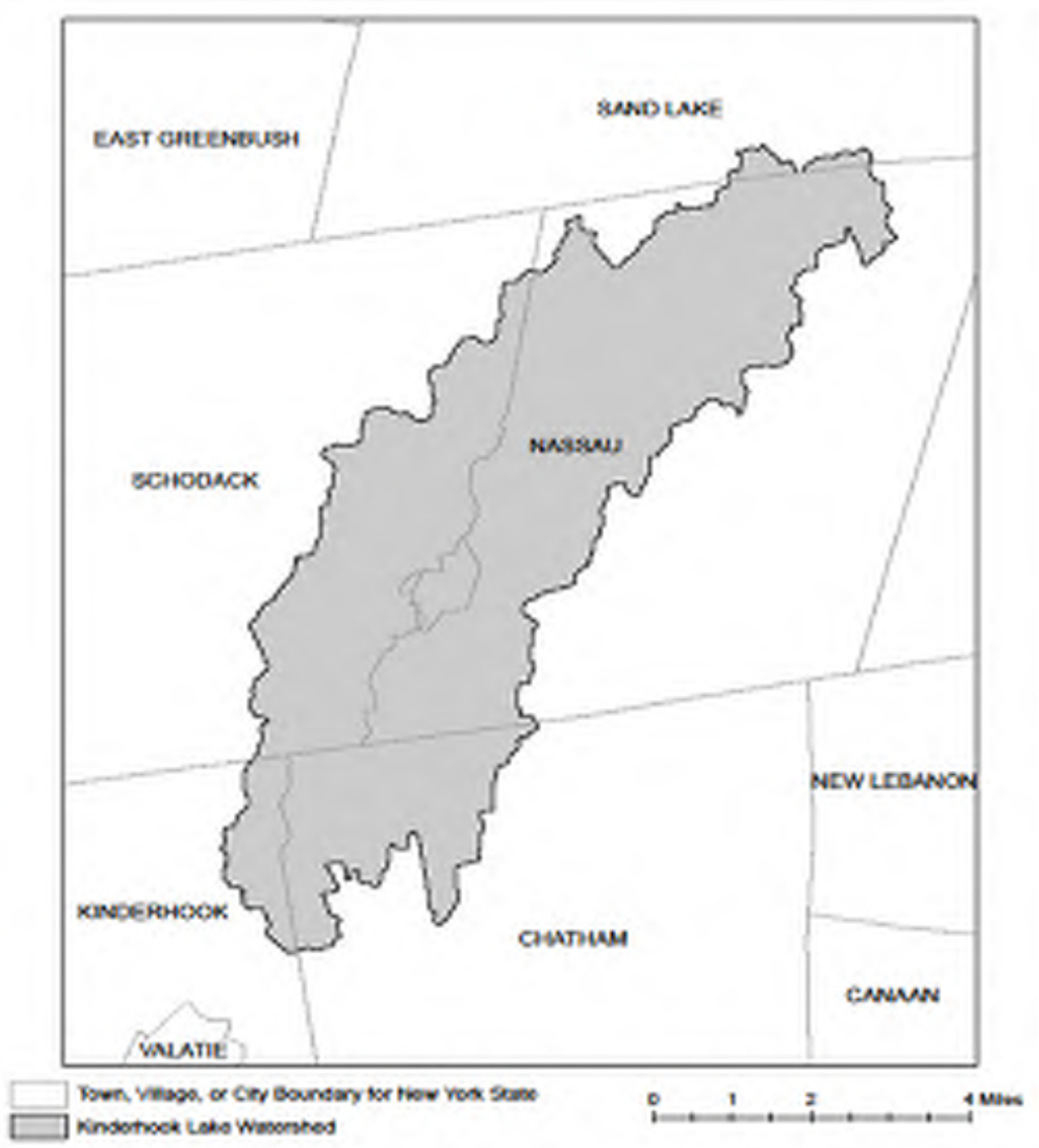


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Impaired Waterbodies (by Construction Related Pollutants)

List of waterbodies impaired by *pollutants* related to *construction activity*, including turbidity, silt/sediment, and nutrients (e.g. nitrogen, phosphorus). This list is a subset of "The Final New York State 2018 Section 303(d) List of Impaired Waters Requiring a TMDL" dated June 2020.

County	Waterbody	Pollutant
Albany	Ann Lee (Shakers) Pond, Stump Pond (1201-0096)	Phosphorus
Albany	Lawsons Lake (1301-0235)	Phosphorus
Allegany	Amity Lake, Saunders Pond (0403-0054)	Phosphorus
Allegany	Andover Pond (0403-0056)	Phosphorus
Bronx	Reservoir No.1/Lake Isle (1702-0075)	Phosphorus
Bronx	Van Cortlandt Lake (1702-0008)	Phosphorus
Broome	Blueberry, Laurel Lakes (1404-0033)	Phosphorus
Broome	Fly Pond, Deer Lake (1404-0038)	Phosphorus
Broome	Minor Tribs to Lower Susquehanna (0603-0044)	Phosphorus
Broome	Whitney Point Lake/Reservoir (0602-0004)	Phosphorus
Cattaraugus	Allegheny River/Reservoir (0201-0023)	Phosphorus
Cattaraugus	Beaver Lake/Alma Pond (0201-0073)	Phosphorus
Cattaraugus	Case Lake (0201-0020)	Phosphorus
Cattaraugus	Linlyco/Club Pond (0201-0035)	Phosphorus
Cayuga	Duck Lake (0704-0025)	Phosphorus
Cayuga	Owasco Inlet, Upper, and tribs (0706-0014)	Nutrients
Chautauqua	Chadakoin River and tribs (0202-0018)	Phosphorus
Chautauqua	Hulburt/Clymer Pond (0202-0079)	Phosphorus
Chautauqua	Middle Cassadaga Lake (0202-0002)	Phosphorus
Clinton	Great Chazy River, Lower, Main Stem (1002-0001)	Silt/Sediment
Columbia	Robinson Pond (1308-0003)	Phosphorus
Cortland	Dean Pond (0602-0077)	Phosphorus
Dutchess	Fallkill Creek (1301-0087)	Phosphorus
Dutchess	Hillside Lake (1304-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Silt/Sediment
Erie	Beeman Creek and tribs (0102-0030)	Phosphorus
Erie	Delaware Park Pond (0101-0026)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Silt/Sediment
Erie	Green Lake (0101-0038)	Phosphorus
Erie	Little Sister Creek, Lower, and tribs (0104-0045)	Phosphorus
Erie	Murder Creek, Lower, and tribs (0102-0031)	Phosphorus

Erie	Rush Creek and tribs (0104-0018)	Phosphorus
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Phosphorus
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Phosphorus
Erie	Scajaquada Creek, Upper, and tribs (0101-0034)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Silt/Sediment
Genesee	Bigelow Creek and tribs (0402-0016)	Phosphorus
Genesee	Black Creek, Middle, and minor tribs (0402 0028)	Phosphorus
Genesee	Black Creek, Upper, and minor tribs (0402-0048)	Phosphorus
Genesee	Bowen Brook and tribs (0102-0036)	Phosphorus
Genesee	LeRoy Reservoir (0402-0003)	Phosphorus
Genesee	Mill Pond (0402-0050)	Phosphorus
Genesee	Oak Orchard Cr, Upper, and tribs (0301-0014)	Phosphorus
Genesee	Oatka Creek, Middle, and minor tribs (0402-0031)	Phosphorus
Genessee	Tonawanda Cr, Middle, Main Stem (0102-0002)	Phosphorus
Greene	Schoharie Reservoir (1202-0012)	Silt/Sediment
Greene	Sleepy Hollow Lake (1301-0059)	Silt/Sediment
Herkimer	Steele Creek tribs (1201-0197)	Phosphorus
Herkimer	Steele Creek tribs (1201-0197)	Silt/Sediment
Kings	Hendrix Creek (1701-0006) 18	Nitrogen
Kings	Prospect Park Lake (1701-0196)	Phosphorus
Lewis	Mill Creek/South Branch, and tribs (0801-0200)	Nutrients
Livingston	Christie Creek and tribs (0402-0060)	Phosphorus
Livingston	Conesus Lake (0402-0004)	Phosphorus
Livingston	Mill Creek and minor tribs (0404-0011)	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs (0402-0033)	Phosphorus
Monroe	Buck Pond (0301-0017)	Phosphorus
Monroe	Cranberry Pond (0301-0016)	Phosphorus
Monroe	Durand, Eastman Lakes (0302-0037)	Phosphorus
Monroe	Lake Ontario Shoreline, Western (0301-0069) 9	Phosphorus
Monroe	Long Pond (0301-0015)	Phosphorus
Monroe	Mill Creek and tribs (0302-0025)	Phosphorus 2
Monroe	Mill Creek/Blue Pond Outlet and tribs (0402-0049)	Phosphorus
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Phosphorus
Monroe	Rochester Embayment - East (0302-0002) [9]	Phosphorus
Monroe	Rochester Embayment - West (0301-0068) 9	Phosphorus
Monroe	Shipbuilders Creek and tribs (0302-0026)	Phosphorus 2
Monroe	Thomas Creek/White Brook and tribs (0302-0023)	Phosphorus

Nassau	Bannister Creek/Bay (1701-0380)	Nitrogen
Nassau	Beaver Lake (1702-0152)	Phosphorus
Nassau	Browswere Bay (1701-0383)	Nitrogen
Nassau	Camaans Pond (1701-0052)	Phosphorus
Nassau	East Meadow Brook, Upper, and tribs (1701-0211)	Silt/Sediment
Nassau	East Rockaway Channel (1701-0381)	Nitrogen
Nassau	Glen Cove Creek, Lower, and tribs (1702-0146)	Silt/Sediment
Nassau	Grant Park Pond (1701-0054)	Phosphorus
Nassau	Hempstead Bay, Broad Channel (1701-0032)	Nitrogen
Nassau	Hempstead Lake (1701-0015)	Phosphorus
Nassau	Hewlett Bay (1701-0382)	Nitrogen
Nassau	Hog Island Channel (1701-0220)	Nitrogen
Nassau	Massapequa Creek, Upper, and tribs (1701-0174)	Phosphorus
Nassau	Milburn/Parsonage Creeks, Upp, and tribs (1701-0212)	Phosphorus
Nassau	Reynolds Channel, East (1701-0215) [12]	Nitrogen
Nassau	Reynolds Channel, West (1701-0216) 12	Nitrogen
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Nitrogen
Nassau	Tribs (fresh) to East Bay (1701-0204)	Silt/Sediment
Nassau	Tribs (fresh) to East Bay (1701-0204)	Phosphorus
Nassau	Tribs to Smith Pond/Halls Pond (1701-0221)	Phosphorus
Nassau	Woodmere Channel (1701-0219)	Nitrogen
New York	Harlem Meer (1702-0103)	Phosphorus
New York	The Lake in Central Park (1702-0105)	Phosphorus
Niagara	Bergholtz Creek and tribs (0101-0004)	Phosphorus
Niagara	Hyde Park Lake (0101-0030)	Phosphorus
Niagara	Lake Ontario Shoreline, Western (0301-0053) 9	Phosphorus
Niagara	Lake Ontario Shoreline, Western (0301-0072) 9	Phosphorus
Oneida	Ballou, Nail Creeks (1201-0203)	Phosphorus
Onondaga	Ley Creek and tribs (0702-0001) 10	Nutrients (phosphorus)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nutrients (phosphorus)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nitrogen (NH3, NO2)
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Nutrients (phosphorus)
Onondaga	Onondaga Creek, Lower, and tribs (0702-0023)	Turbidity
Onondaga	Onondaga Creek, Middle, and tribs (0702-0004)	Turbidity
Onondaga	Onondaga Creek, Upper, and tribs (0702-0024)	Turbidity
Ontario	Great Brook and minor tribs (0704-0034)	Phosphorus 2
Ontario	Great Brook and minor tribs (0704-0034)	Silt/Sediment

Ontario	Hemlock Lake Outlet and minor tribs (0402-0013)	Phosphorus
Ontario	Honeoye Lake (0402-0032)	Phosphorus
Orange	Brown Pond Reservoir (1303-0013)	Phosphorus
Orange	Lake Washington (1303-0012)	Phosphorus
Orange	Minor Tribs to Middle Wallkill (1306-0061)	Phosphorus
Orange	Monhagen Brook and tribs (1306-0074)	Phosphorus
Orange	Orange Lake (1301-0008) [16]	Phosphorus
Orange	Quaker Creek and tribs (1306-0025)	Phosphorus
Orange	Wallkill River, Middle, Main Stem (1306-0038)	Phosphorus
Orange	Wallkill River, Upper, and Minor tribs (1306-0017)	Phosphorus
Orleans	Glenvwood Lake (0301-0041)	Phosphorus
Orleans	Lake Ontario Shoreline, Western (0301-0070) 9	Phosphorus
Orleans	Lake Ontario Shoreline, Western (0301-0071) 9	Phosphorus
Oswego	Lake Neatahwanta (0701-0018)	Nutrients (phosphorus)
Oswego	Pleasant Lake (0703-0047)	Phosphorus
Putnam	Lost Lake, Putnam Lake (1302-0053)	Phosphorus
Putnam	Minor Tribs to Croton Falls Reservoir (1302-0001)	Phosphorus
Queens	Bergen Basin (1701-0009) 18	Nitrogen
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005) 18	Nitrogen
Queens	Kissena Lake (1702-0258)	Phosphorus
Queens	Meadow Lake (1702-0030)	Phosphorus
Queens	Shellbank Basin (1701-0001) 18	Nitrogen
Queens	Willow Lake (1702-0031)	Phosphorus
Rensselaer	Nassau Lake (1310-0001)	Phosphorus
Rensselaer	Snyders Lake (1301-0043)	Phosphorus
Richmond	Grassmere Lake/Bradys Pond (1701-0357)	Phosphorus
Rockland	Congers Lake, Swartout Lake (1501-0019)	Phosphorus
Rockland	Rockland Lake (1501-0021)	Phosphorus
Saratoga	Ballston Lake (1101-0036)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Silt/Sediment
Saratoga	Lake Lonely (1101-0034)	Phosphorus
Saratoga	Round Lake (1101-0060)	Phosphorus
Saratoga	Tribs to Lake Lonely (1101-0001)	Phosphorus
Schenectady	Collins Lake (1201-0077)	Phosphorus
Schenectady	Duane Lake (1311-0006)	Phosphorus
Schenectady Lake	Mariaville Lake (1201-0113)	Phosphorus
Schuyler	Cayuta Lake (0603-0005)	Phosphorus

Seneca	Reeder Creek and tribs (0705-0074)	Phosphorus
St.Lawrence	Black Lake Outlet, Black Lake (0906-0001)	Phosphorus
St.Lawrence	Fish Creek and minor tribs (0906-0026)	Phosphorus
Steuben	Smith Pond (0502-0012)	Phosphorus
Suffolk	Agawam Lake (1701-0117)	Phosphorus
Suffolk	Big/Little Fresh Ponds (1701-0125)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Silt/Sediment
Suffolk	Fresh Pond (1701-0241)	Phosphorus
Suffolk	Great South Bay, East (1701-0039)	Nitrogen
Suffolk	Great South Bay, Middle (1701-0040)	Nitrogen
Suffolk	Great South Bay, West (1701-0173)	Nitrogen
Suffolk	Lake Ronkonkoma (1701-0020)	Phosphorus
Suffolk	Mattituck/Marratooka Pond (1701-0129)	Phosphorus
Suffolk	Mill and Seven Ponds (1701-0113)	Phosphorus
Suffolk	Millers Pond (1702-0013)	Phosphorus
Suffolk	Moriches Bay, East (1701-0305)	Nitrogen
Suffolk	Moriches Bay, West (1701-0038)	Nitrogen
Suffolk	Quantuck Bay (1701-0042)	Nitrogen
Suffolk	Shinnecock Bay and Inlet (1701-0033)	Nitrogen
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Nitrogen
Sullivan	Bodine, Mongomery Lakes (1401-0091)	Phosphorus
Sullivan	Davies Lake (1402-0047)	Phosphorus
Sullivan	Evens Lake (1402-0004)	Phosphorus
Sullivan	Pleasure Lake (1402-0055)	Phosphorus
Sullivan	Swan Lake (1401-0063)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Silt/Sediment
Ulster	Ashokan Reservoir (1307-0004)	Silt/Sediment
Ulster	Esopus Creek, Lower, Main Stem (1307-0010) [17]	Turbidity
Ulster	Esopus Creek, Middle, Main Stem (1307-0003) 17	Turbidity
Ulster	Esopus Creek, Upper, and minor tribs (1307-0007)[3]	Silt/Sediment
Ulster	Wallkill River, Lower, Main Stem (1306-0027)	Phosphorus
Warren	Hague Brook and tribs (1006-0006)	Silt/Sediment
Warren	Huddle/Finkle Brooks and tribs (1006-0003)	Silt/Sediment
Warren	Indian Brook and tribs (1006-0002)	Silt/Sediment
Warren	Lake George (1006-0016) and tribs	Silt/Sediment
Warren	Tribs to Lake George, East Shore (1006-0020)	Silt/Sediment
Warren	Tribs to Lake George, Lk.George Village (1006-0008)	Silt/Sediment

Washington	Wood Cr/Champlain Canal and tribs (1005-0036)	Phosphorus
Westchester	Lake Katonah (1302-0136)	Phosphorus
Westchester	Lake Lincolndale (1302-0089)	Phosphorus
Westchester	Lake Meahagh (1301-0053)	Phosphorus
Westchester	Lake Mohegan (1301-0149)	Phosphorus
Westchester	Lake Shenorock (1302-0083)	Phosphorus
Westchester	Mamaroneck River, Lower (1702-0071)	Silt/Sediment
Westchester	Mamaroneck River, Upp, & minor tribs (1702-0123)	Silt/Sediment
Westchester	Saw Mill River (1301-0007)	Phosphorus
Westchester	Saw Mill River, Middle, and tribs (1301-0100)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Silt/Sedimnt
Westchester	Silver Lake (1702-0040)	Phosphorus
Westchester	Teatown Lake (1302-0150)	Phosphorus
Westchester	Truesdale Lake (1302-0054)	Phosphorus
Westchester	Wallace Pond (1301-0140)	Phosphorus

APPENDIX E – List of NYSDEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	220 White Plains Road, Suite 110 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7438	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7165	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7070

APPENDIX F – SWPPP Preparer Certification Form

The SWPPP Preparer Certification Form required by this permit begins on the following page.

SWPPP Preparer Certification Form

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

Project/Site Name:

eNOI Submission ID:

Owner/Operator Name:

Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of GP-0-25-001. I certify under penalty of law that the SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SWPPP Preparer First Name | MI | SWPPP Preparer Last Name

Signature | Date

Revised: January 2025

APPENDIX G – MS4 SWPPP Acceptance Form

The MS4 SWPPP Acceptance Form required by this permit begins on the following page.

MS4 SWPPP Acceptance Form

for construction activities seeking authorization under the

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

I. Project Owner/Operator Information
1. Owner/Operator Name:
2. Contact Person:
3. Street Address:
4. City/State/Zip:
II. Project Site Information
5. Project/Site Name:
6. Street Address:
7. City/State/Zip:
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information
8. SWPPP Reviewed by:
9. Title/Position:
10. Date Final SWPPP Reviewed and Accepted:
IV. Regulated MS4 Information
11. Name of MS4 Operator:
12. MS4 SPDES Permit Identification Number: NYR20A
13. Street Address:
14. City/State/Zip:
15. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in section II. of this form has been reviewed and meets the substantive requirements in the SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP). Note: The MS4 Operator, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 Operator does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name[1]:

Title/Position:

Signature:

Date:

VI. Additional Information

[1] Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.

APPENDIX H – NYCDEP SWPPP Acceptance/Approval Form

The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval form required by this permit begins on the following page.

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Planning and Analysis
59-17 Junction Blvd., 9th Floor; Flushing, NY 11373

SWPPP Acceptance/Approval

Application Number:

I. Project Owner/Operator Information

1. Owner/Operator Name:
2. Contact Person:
3. Street Address:
4. City/State/Zip:

II. Project Site Information

5. Project/Site Name:
6. Street Address:
7. City/State/Zip:

III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance/Approval

8. SWPPP Reviewed by:
9. Title/Position: /
10. Date Final SWPPP Reviewed and Accepted:
11. Acceptance/Approval Expiration Date:

IV. Regulated MS4 Information for projects that require coverage under the NY State Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity

12. Name of MS4: *CITY OF NEW YORK*
13. MS4 SPDES Permit Identification Number: *NY-0287890*
14. Contact Person:
15. Street Address: *59-17 Junction Blvd. 9th Floor*
16. City/State/Zip: *Flushing, NY 11373*
17. Telephone Number:

Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).

Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Conditions of Acceptance/Approval and Additional Information

Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.

APPENDIX I – MS4 No Jurisdiction Form

The MS4 No Jurisdiction Form required by this permit begins on the following page.

MS4 No Jurisdiction Form

for construction activities seeking authorization under the

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

I. Project Owner/Operator Information

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

II. Project Site Information

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. eNOI Submission ID:

III. Traditional Land Use Control MS4 Operator Information

a. Name of MS4 Operator:

b. MS4 SPDES Permit ID Number: NYR20A

c. Street Address:

d. City/State/Zip:

e. Telephone Number:

IV. Certification Statement

In accordance with CGP Part I.D.2.b.ii.3., I hereby certify that the Traditional Land Use Control MS4 Operator identified in section III. of this form does not have review authority over the construction project identified in section II. of this form, which is owned/operated by the entity identified in section I. of this form. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.:

b. Title/Position:

c. Signature:

d. Date:

APPENDIX J – Owner/Operator Certification Form

The Owner/Operator Certification Form required by this permit begins on the following page.

Owner/Operator Certification Form

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b. or Part I.F.2. and 3., the completed form must be attached to the eNOI or the Request to Continue Coverage, and submitted to NYSDEC electronically.

Project/Site Name: _____

eNOI Submission ID: _____

eNOI Submitted by: ☐ **Owner/Operator** ☐ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I hereby certify that I read, and will comply with, the GP-0-25-001 permit requirements. I understand that authorization to discharge under the permit for the project/site named above is dependent on receipt of a Letter of Authorization (LOA) or a Letter of Continued Coverage (LOCC) from the New York State Department of Environmental Conservation (NYSDEC) in accordance with CGP Part I.D.3.b. or Part I.F.4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator First Name MI Owner/Operator Last Name

_____

Signature

_____

Date

Revised: January 2025

APPENDIX M:
CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG SHEETS

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

Standardized Qualified Inspector Form

Project Name and Location of Project: _____ _____ _____ Municipality:_____ County: _____ Qualified Inspector: _____ Qualified Inspector Title:_____	Date:	Weather:
	Permit #: **NYR10**	
	Entry Time:	Exit Time:
5 Acre Waiver: □ Yes □ No Name of SPDES Permittee:_____ Phone: _____Fax:_____ Name of Representative on Site: _____		

Qualified Inspector's Credentials & Certification

Qualified Inspector (QI) means a person that is knowledgeable in the principles and practices of erosion and sediment control (ESC). A person is considered qualified under the following conditions:

1. A licensed Professional Engineer; licensed Landscape Architect with documented training and education in the principles and practices of ESC;
2. An individual certified in ESC by CPESC, Incorporated or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources;
3. An individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect with documented training and education in the principles and practices of ESC **and has** completed the four (4) hour training program in the principles and practices of erosion and sediment control from either a Soil and Water Conservation District, CPESC or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources. This initial training must be completed no later than May 1, 2010. After receiving the initial training, an individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect must complete four (4) hours of training every three (3) years.
4. Any other individual endorsed by the NYS Department of Environmental Conservation by written documentation.
5. Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.1

Part I. CONSTRUCTION DURATION INSPECTIONS **Page 2 of _____**

a. SITE PLAN/SKETCH OF AREAS DISTURBED AT TIME OF INSPECTION AND AREAS THAT HAVE BEEN STABILIZED (TEMPORARY OR FINAL) SINCE LAST INSPECTION:

b. Other Permit Required Reporting

Maintaining Water Quality - *Attach Color Photographs of the site documenting discharge points and site conditions.*
Describe the condition of runoff at all points of discharge.
Is there an increase in turbidity causing a substantial visible contrast to natural conditions? _____
Is there residue from oil and floating substances, visible oil film, or globules or grease? _____
Is there evidence of silt deposition from project in a stream, wetland, or other water body? _____
If yes, where? _____remedial measure needed? _____
Provide a description of the conditions of all natural water bodies within or immediately adjacent to the project. _____

Area of Disturbance
Total area of disturbance (as shown on sketch plan and not including areas that have temporary or permanent stabilization measures applied) _____
Are all disturbances within the limits of the SWPPP? _____

Weather Conditions
A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
_____
_____

General Housekeeping
Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?_____
Is construction impacting the adjacent property? _____
Is dust adequately controlled?_____
Describe corrective action(s): _____
Date correction needed: _____

c. Runoff Controls *Direct runoff away from exposed soil surfaces and control water that falls onto the site*

Runoff conveyance systems ☐ N A
Are all runoff conveyance systems called for in the SWPPP installed, stabilized and working? _____
If not, what specific areas need detailing?_____
With minimum side slopes 2H:1V or flatter? _____ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring? _____Sediment-laden runoff directed to sediment trapping structure? _____
Describe corrective action(s): _____
Date correction needed: _____

Runoff Control Structures ☐ N A
Have all required runoff control structures (rock outlets and aprons) been installed and constructed per plan and according to the Blue Book?_____ Installed concurrently with pipe installation? _____
Describe corrective action(s): _____
Date correction needed: _____

Temporary Stream or Channel Crossing □ N A
Have construction crossings at concentrated flow areas been culverted?_____
Describe corrective action(s): _____
Date correction needed: _____

Stone Check Dam □ N A
Installed per standards? _____ channel stable (flow is not eroding soil underneath or around the structure). _____does sediment need to be removed? _____
Describe corrective action(s): _____
Date correction needed: _____

Excavation Dewatering □ N A
1. Flowing water □ N A – Upstream berm (sandbags, inflatable dams, etc. with one-foot minimum freeboard) and downstream berms are installed per plan? _____and functioning? (clean water from upstream pool is being pumped to the downstream pool)?
_____
2. Sediment laden water from work area □ N A - Is being discharged to a silt-trapping device? _____
3. Groundwater from excavations □ N A - is being managed properly (sumps and sediment control)? _____
Describe corrective action(s): _____
Date correction needed: _____

d. Soil Stabilization *Basic erosion control is achieved by covering all bare ground areas.*

Topsoil and Spoil Stockpiles □ N A
Stabilized - sediment controls at downhill slope? _____
Describe corrective action(s): _____
Date correction needed: _____

Revegetation/Stabilization □ N A
Has temporary or permanent seeding *and* mulch (as shown on site sketch plan) been applied to areas that have been inactive for 14 days or less (or, inactive for 7 days if over 5 acres disturbed)?_____
Has soil preparation been applied as specified in the SWPPP and in accordance with the Blue Book (Assure that all the necessary soil testing/fertilizer/lime, topsoil, decompaction has been applied)?
_____
Have rolled erosion control products specified for steep slopes or channels been installed? _____
Describe corrective action(s): _____
Date correction needed: _____

e. Sediment Controls

Stabilized Construction Entrance □ N A
Stone is clean and all access areas covered (entrances, construction routes, materials storage areas, equipment parking)?_____ Tracking onto public streets is minimized and cleaned daily? _____
Describe:_____
Date correction needed: _____

Silt Fence □ N A

Installed on contour? not across conveyance channels?_____ At least 10 feet from toe of slope?_____At appropriate spacing intervals based on slope?_____Wrapped ends for continuous support?_____Fabric is tight, without rips or frayed areas?_____Posts are stable?_____ buried 6 inches minimum?_____Any "bulges"?_____
Describe:_____
_____
Date correction needed: _____

Temporary Sediment Trap □ N A

Is outlet structure constructed properly?_____geotextile fabric has been placed beneath rock fill?_____Maintenance – depth of sediment in basin? _____ 50% capacity?
_____
Describe:_____
_____
Date correction needed: _____

Temporary Sediment Basin □ N A

Is basin and outlet structure constructed per the approved plan? _____
Are basin side slopes stabilized with seed/mulch?
_____
Maintenance – depth of sediment in basin? _____ 50% capacity?
_____
Describe:_____
_____
Date correction needed: _____

Drop Inlet Protection □ N A

Type(s) of inlet control? _____
Installed per Blue Book specifications: drainage area (typically 1 acre)? _____
Appropriate for location? _____
Describe:_____
_____
Date correction needed: _____

f. Digital Color Photographs of Deficient BMPs

The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of deficient BMPs with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions.

g. Digital Color Photographs of BMPs that have been Corrected

The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of corrected BMPs with date stamp, that clearly show the condition of the practice(s) after the corrective actions has been completed.

h. Post-Construction Stormwater Management

Report of any corrective action(s) that must be taken to install, correct, repair, replace or maintain any deficiencies identified with the construction of the post-construction stormwater management practice(s).
Report the current phase of construction of all post-construction stormwater management practice(s) and whether the installation appears to be geometrically consistent with the approved hydraulic design (e.g. the pond, the outlet structure, orifice, pipe sizing and slope is geometrically consistent with the SWPPP):_____

_____
_____
_____

i. Revisions to SWPPP

When the owner or operator becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any other report, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or impervious area) which were not reflected in the original NOI submitted to the Department and/or the MS4, they shall promptly submit such facts or information. Failure of the owner or operator to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a permit violation (GP-0-10-001 PartVII.G)

_____
_____
_____
_____

j. Inspection Notes and Signature

Inspection Notes:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Standardized Qualified Inspector Form

PART I. j. Signature

GP-0-10-001 Part VII.Q

Articles 175 and 210 of the New York State Penal Law provide for Criminal penalty of a fine and/or imprisonment for falsifying forms and reports required by this permit.

_____ _____

Qualified Inspector (print name) **Date of Inspection**

_____

Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Title: _____ Address: _____

Phone: _____ Email: _____

CPESC#: _____

Stormwater Training Number for *Trained Individuals*: _____
P.E. or L.A. Supervisor Name for *Trained Individuals*:_____

Compliance certification:

Received and reviewed by_____Title:_____

The above signed acknowledges receipt of this inspection report

APPENDIX N: MS4 SWPPP ACCEPTANCE FORM (NOT APPLICABLE)

APPENDIX O: NOTICE OF INTENT(TO BE PROVIDED AFTER CONTRACT AWARDS)

APPENDIX P: NOTICE OF TERMINATION

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. □ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): _____

9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ___ ___ ___ ___ ___ ___
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. □ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? □ yes □ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

_____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

□ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? □ yes □ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:	
Title/Position:	
Signature:	Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:	
Title/Position:	
Signature:	Date:

(NYS DEC Notice of Termination - January 2015)

APPENDIX Q:
MAINTENANCE/CONSTRUCTION INSPECTION REPORTS

Stormwater/Wetland Pond Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
Pre-Construction/Materials and Equipment		
Pre-construction meeting		
Pipe and appurtenances on-site prior to construction and dimensions checked		
1. Material (including protective coating, if specified)		
2. Diameter		
3. Dimensions of metal riser or pre-cast concrete outlet structure		
4. Required dimensions between water control structures (orifices, weirs, etc.) are in accordance with approved plans		
5. Barrel stub for prefabricated pipe structures at proper angle for design barrel slope		
6. Number and dimensions of prefabricated anti-seep collars		
7. Watertight connectors and gaskets		
8. Outlet drain valve		
Project benchmark near pond site		
Equipment for temporary de-watering		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
2. Subgrade Preparation		
Area beneath embankment stripped of all vegetation, topsoil, and organic matter		
3. Pipe Spillway Installation		
Method of installation detailed on plans		
A. Bed preparation		
Installation trench excavated with specified side slopes		
Stable, uniform, dry subgrade of relatively impervious material (If subgrade is wet, contractor shall have defined steps before proceeding with installation)		
Invert at proper elevation and grade		
B. Pipe placement		
Metal / plastic pipe		
1. Watertight connectors and gaskets properly installed		
2. Anti-seep collars properly spaced and having watertight connections to pipe		
3. Backfill placed and tamped by hand under “haunches” of pipe		
4. Remaining backfill placed in max. 8 inch lifts using small power tamping equipment until 2 feet cover over pipe is reached		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
3. Pipe Spillway Installation		
Concrete pipe		
1. Pipe set on blocks or concrete slab for pouring of low cradle		
2. Pipe installed with rubber gasket joints with no spalling in gasket interface area		
3. Excavation for lower half of anti-seep collar(s) with reinforcing steel set		
4. Entire area where anti-seep collar(s) will come in contact with pipe coated with mastic or other approved waterproof sealant		
5. Low cradle and bottom half of anti-seep collar installed as monolithic pour and of an approved mix		
6. Upper half of anti-seep collar(s) formed with reinforcing steel set		
7. Concrete for collar of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
8. Forms stripped and collar inspected for honeycomb prior to backfilling. Parge if necessary.		
C. Backfilling		
Fill placed in maximum 8 inch lifts		
Backfill taken minimum 2 feet above top of anti-seep collar elevation before traversing with heavy equipment		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Riser / Outlet Structure Installation		
Riser located within embankment		
A. Metal riser		
Riser base excavated or formed on stable subgrade to design dimensions		
Set on blocks to design elevations and plumbed		
Reinforcing bars placed at right angles and projecting into sides of riser		
Concrete poured so as to fill inside of riser to invert of barrel		
B. Pre-cast concrete structure		
Dry and stable subgrade		
Riser base set to design elevation		
If more than one section, no spalling in gasket interface area; gasket or approved caulking material placed securely		
Watertight and structurally sound collar or gasket joint where structure connects to pipe spillway		
C. Poured concrete structure		
Footing excavated or formed on stable subgrade, to design dimensions with reinforcing steel set		
Structure formed to design dimensions, with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing while curing, if necessary)		
Forms stripped & inspected for “honeycomb” prior to backfilling; parge if necessary		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
5. Embankment Construction		
Fill material		
Compaction		
Embankment		
1. Fill placed in specified lifts and compacted with appropriate equipment		
2. Constructed to design cross-section, side slopes and top width		
3. Constructed to design elevation plus allowance for settlement		
6. Impounded Area Construction		
Excavated / graded to design contours and side slopes		
Inlet pipes have adequate outfall protection		
Forebay(s)		
Pond benches		
7. Earth Emergency Spillway Construction		
Spillway located in cut or structurally stabilized with riprap, gabions, concrete, etc.		
Excavated to proper cross-section, side slopes and bottom width		
Entrance channel, crest, and exit channel constructed to design grades and elevations		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
8. Outlet Protection		
A. End section		
Securely in place and properly backfilled		
B. Endwall		
Footing excavated or formed on stable subgrade, to design dimensions and reinforcing steel set, if specified		
Endwall formed to design dimensions with reinforcing steel set as per plan		
Concrete of an approved mix and vibrated into place (protected from freezing, if necessary)		
Forms stripped and structure inspected for "honeycomb" prior to backfilling; parge if necessary		
C. Riprap apron / channel		
Apron / channel excavated to design cross-section with proper transition to existing ground		
Filter fabric in place		
Stone sized as per plan and uniformly place at the thickness specified		
9. Vegetative Stabilization		
Approved seed mixture or sod		
Proper surface preparation and required soil amendments		
Excelsior mat or other stabilization, as per plan		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
10. Miscellaneous		
Drain for ponds having a permanent pool		
Trash rack / anti-vortex device secured to outlet structure		
Trash protection for low flow pipes, orifices, etc.		
Fencing (when required)		
Access road		
Set aside for clean-out maintenance		
11. Stormwater Wetlands		
Adequate water balance		
Variety of depth zones present		
Approved pondscaping plan in place Reinforcement budget for additional plantings		
Plants and materials ordered 6 months prior to construction		
Construction planned to allow for adequate planting and establishment of plant community (April-June planting window)		
Wetland buffer area preserved to maximum extent possible		

Comments:

Actions to be Taken:

Bioretention Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility area cleared		
If designed as exfilter, soil testing for permeability		
Facility location staked out		
2. Excavation		
Size and location		
Lateral slopes completely level		
If designed as exfilter, ensure that excavation does not compact susoils.		
Longitudinal slopes within design range		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
3. Structural Components		
Stone diaphragm installed correctly		
Outlets installed correctly		
Underdrain		
Pretreatment devices installed		
Soil bed composition and texture		
4. Vegetation		
Complies with planting specs		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
5. Final Inspection		
Dimensions		
Proper stone diaphragm		
Proper outlet		
Soil/ filter bed permeability testing		
Effective stand of vegetation and stabilization		
Construction generated sediments removed		
Contributing watershed stabilized before flow is diverted to the practice		

Comments:

Actions to be Taken:

APPENDIX R: DRAFT STORMWATER MAINTENANCE AGREEMENT (NOT APPLICABLE)

APPENDIX S: SITE PLANS AND DETAILS

EXISTING CONDITIONS

1. BASE PLAN: THE TOPOGRAPHY AND SITE IMPROVEMENTS ARE BASED ON THE SURVEY "BOUNDARY/TOPOGRAPHIC SURVEY" BY HULBERT ENGINEERING AND LAND SURVEYING, P.C., DATED 10/30/2009.
   1.1. THESE PLANS SHOW THE REPUTED LOCATION OF EXISTING DRYWELLS, BASED ON THE PLAN "SITE WORK PLAN" BY CHARLES SALDUN, ARCHITECT AND DATED 03/15/1969. THE EXISTENCE AND LOCATION OF THESE DRYWELLS HAS NOT BEEN VERIFIED BY PASSERO OR THE SURVEY REFERENCED ABOVE. PRIOR TO STARTING WORK THE CONTRACTOR SHALL CONFIRM THE EXISTENCE, LOCATION, AND CONDITION OF THESE DRY WELLS AND REPORT TO THEIR FINDINGS TO THE ENGINEER.

4

2. GEOTECHNICAL DATA: GEOTECHNICAL REPORT DATED OCTOBER 6,2025 PREPARED BY ARM-NY INC. P.C.
3. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AFFECTING THE WORK AND IDENTIFY ANY DISCREPANCIES TO THE OWNER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

DOCUMENT USE

1. THESE PLANS AND CORRESPONDING CAD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF PASSERO ASSOCIATES. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO PASSERO ASSOCIATES.
2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, AND SHALL VERIFY FIELD-LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PRINTED VERSION OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

LAYOUT AND MATERIALS

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE CAST IN PLACE UNLESS OTHERWISE INDICATED ON THE CONTRACT DOCUMENTS.
4. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
5. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AT THE INTERFACE WITH PROPOSED SITE IMPROVEMENTS AND NOTIFY ENGINEER OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND DESIGN PRIOR TO PROCEEDING WITH THE WORK.

DEMOLITION NOTES

1. EXISTING UTILITIES SHALL BE TERMINATED IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
2. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.

4 THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.

5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

FIELD TESTING

4

PRIOR TO STARING ANY WORK, CONTRACTOR SHALL PERFORM INFILTRATION TESTING AT THE SIX TEST LOCATIONS (I1 - I6) SHOWN ON C110AND PROVIDE THE RESULTS TO ENGINEER. INFILTRATION TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE FIELD PERMEABILITY TEST REQUIREMENTS FOUND IN APPENDIX D OF THE NYSDEC STORMWATER MANAGEMENT DESIGN MANUAL. INFILTRATION TESTING BORINGS SHALL BE ADVANCED AT AT LEAST 2 FEET BELOW THE BOTTOM OF EACH PROPOSED DRY WELL. SEAL THE ANNULAR SPACE BETWEEN CASING AND BORING WITH BENTONITE IF NEEDED TO PREVENT LEAKAGE FROM THE BOTTOM OF THE BORING/CASING INTERFACE. BACKFILL BORINGS UPON COMPLETION OF TESTING.

CONSTRUCTION SEQUENCE FOR GRADING AND EROSION & SEDIMENT CONTROL

1. ALL EROSION AND SEDIMENT CONTROL METHODS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. AT THE VERY MINIMUM, EROSION CONTROL SHALL BE AS SHOWN ON THIS PLAN. EROSION CONTROL MAY CONSIST OF SEDIMENT TRAPS AND/OR ENVIRONMENTAL FENCES. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INTEGRITY, MAINTENANCE AND REMOVAL OF EROSION CONTROL MEASURES UNTIL NO LONGER DEEMED NECESSARY BY THE ENGINEER. THE SITE CONTRACTOR SHALL MAINTAIN THE STORM SEWER SYSTEM UNTIL THE PROJECT IS DEVELOPED AND APPROVED BY THE OWNER AND ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. THE PERMITTEE SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STONE FILL. CORRECTIVE ACTIONS, AS IDENTIFIED BY THE QUALIFIED SWPPP INSPECTOR SHALL BE INITIATED WITHIN 24 HOURS OF BEING REPORTED. THE ENGINEER MAY REVIEW THE PROJECT SITE AT ANY TIME. REVIEW OF EROSION CONTROL MEASURES BY THE ENGINEER DOES NOT RELIEVE THE SITE CONTRACTOR OF THEIR OBLIGATIONS UNDER THE NYSDEC SPDES GENERAL PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITY (GP-0-25-001).
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE). THE SCE LOCATION IS SHOWN SCHEMATICALLY ON THE PLANS AND SHALL BE MODIFIED BY THE CONTRACTOR ACCORDING TO SITE CONDITIONS AND OPERATIONS.
3. CONSTRUCT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT AREAS AS SHOWN ON THE PLANS AND AS REQUIRED BY SITE CONDITIONS. ADDITIONAL AND/OR MODIFIED EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON ACTUAL FIELD CONDITIONS AS ORDERED BY ENGINEER.
   3.1. TEMPORARY EROSION CONTROL MEASURES, INCLUDING SILT FENCES AND/OR STRAW BALE DIKES, DRAINAGE STRUCTURES, SEDIMENT TRAPS, SEDIMENTATION BASINS, PERIMETER SWALES/DIKES, AND RIP-RAP PROTECTION SHALL BE INSTALLED PRIOR TO GROUND DISTURBANCE FOR GRADING AND CONSTRUCTION.
4. CONSTRUCT TEMPORARY/PERMANENT SWALES AS SHOWN ON THE PLANS.
5. CLEAR AND GRUB THE WORK AREA(S).
6. STRIP TOPSOIL AND STOCKPILE ON-SITE AT A LOCATION APPROVED BY THE OWNER. STABILIZE THE STOCKPILE IN ACCORDANCE WITH MUNICIPAL AND NYSDEC REGULATIONS.
7. GRADE IMPROVEMENT AREAS WITHIN THE WORK AREA(S). AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND MULCH, OR OTHER METHOD APPROVED BY THE ENGINEER, WITHIN 7 DAYS OF THE LAST DISTURBANCE.
8. CONSTRUCT SEDIMENT BARRIERS AS SHOWN ON THE PLANS.
9. REPLACE TOPSOIL AND FINE GRADE WHERE APPLICABLE.
   9.1. MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED ON ALL GRASS AREAS.

12. HYDRO-SEED ALL DISTURBED AREAS WITHIN 10 DAYS AFTER FINAL GRADING. THE CONTRACTOR SHALL RE-APPLY HYDRO-SEED OR USE ANOTHER METHOD APPROVED BY THE ENGINEER IF THE HYDRO-SEED IS DAMAGED OR GROWTH IS UNSATISFACTORY.
13. UPON APPROVAL OF THE ENGINEER, CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS AND STABILIZE THE DISTURBED AREAS.

UTILITIES

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY BASED ON THE PROVIDED SURVEY(S), LIMITED SUBSURFACE UTILITY EXPLORATION (SUE), AND FIELD OBSERVATIONS. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES.
   1.1. CONTRACTOR SHALL PERFORM THEIR OWN SUBSURFACE UTILITY EXPLORATION IN THE WORK AREAS, OR AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED; THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE AND ENGINEER FOR THE RESOLUTION OF THE CONFLICT. CONTRACTOR'S FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE & PROJECT ENGINEER PRIOR TO PERFORMING THE WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
3. SET CATCH BASIN RIMS, PIPE INVERTS, AND OTHER DRAINAGE INFRASTRUCTURE IN ACCORDANCE WITH ELEVATIONS ON THE PLANS. A DEVIATION OF UP TO -0.1FT IS ACCEPTABLE.
4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
   4.1. PAVEMENTS AND CONCRETE SURFACES: FLUSH
   4.2. ALL SURFACES ALONG ADA ACCESSIBLE ROUTES: FLUSH
   4.3. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER TO THE ADJACENT HARDSCAPE/STRUCTURE ELEVATION.
5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY OWNER. FINAL DESIGN LOADS AND LOCATIONS FOR THESE UTILITIES SHALL BE COORDINATED WITH OWNER AND ENGINEER.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR UTILITY POLE RELOCATION/MODIFICATION AND/OR THE ALTERATION AND ADJUSTMENT OF EXISTING GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
   7.1. STORM DRAINAGE PIPES: HDPE UNLESS NOTED OTHERWISE
   7.2. PIPES INTERNAL TO THE BUILDING: PVC UNLESS NOTED OTHERWISE ON THESE PLANS AND/OR PLANS PREPARED BY OTHER PROFESSIONALS.
8. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
9. ALL DRAINAGE STRUCTURE INTERIOR DIAMETERS SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS, AND APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. THE MANUFACTURER'S RECOMMENDATIONS FOR STRUCTURE SIZE AND CONFIGURATION WILL SUPERCEDE THE INFORMATION IN THE CONTRACT DOCUMENTS, AND CONTRACT SHALL PROVIDE SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND ACCEPTANCE.

CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 561 3179
www.csarchpc.com

Consultant
PASSERO
engineering architecture
6 Front St. · Newburgh
New York 12550-7601

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

EXPIRES: 09/30/28

#	DATE	DESCRIPTION
4	03/30/2026	BID ADDENDUM 4

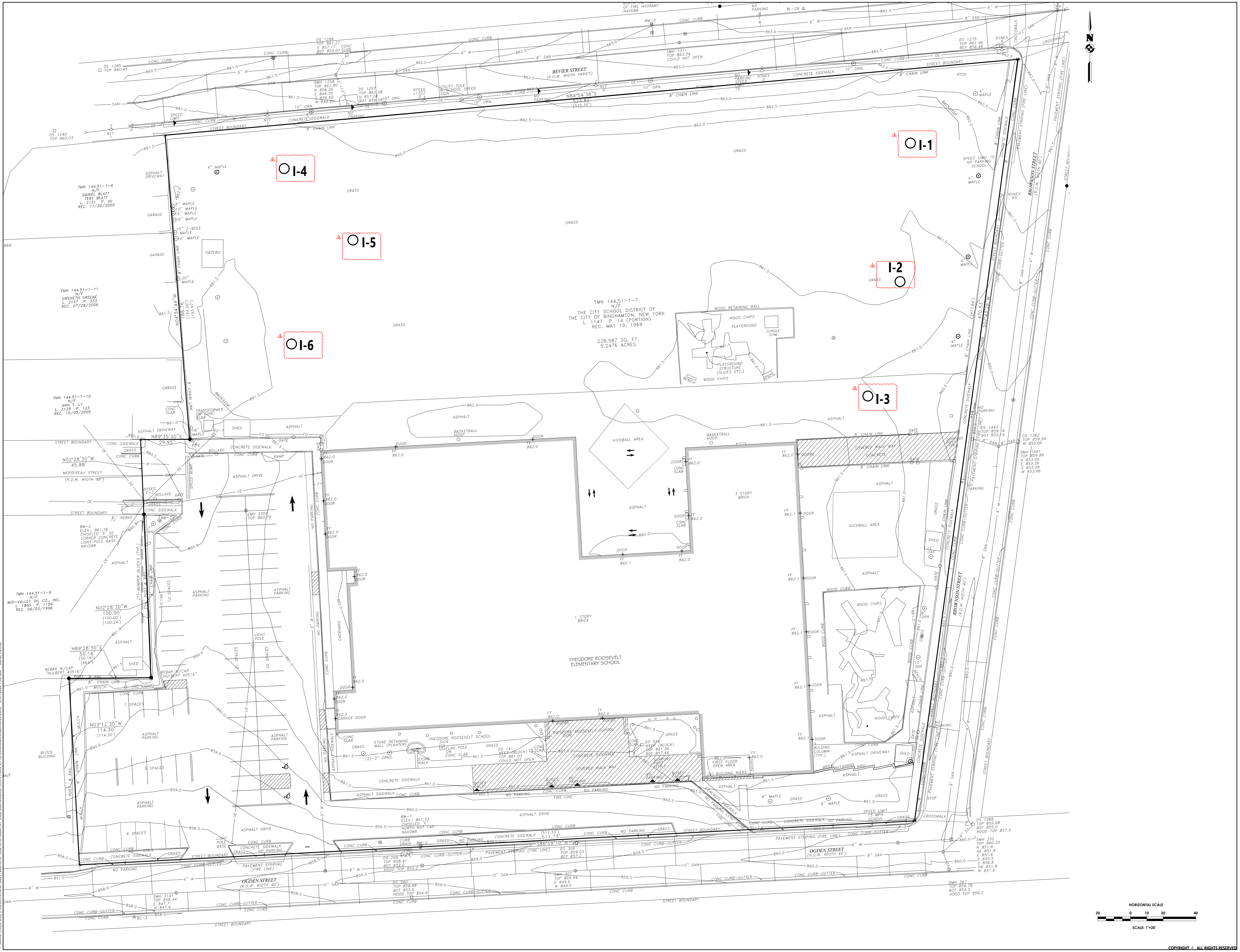
Drawn By:	TO
Checked By:	RV
Proj. #:	03-02-00-01-0-010-014
CSArch Proj. #:	215-2402
CD Submission:	03/12/2026

Sheet Title

NOTES

Sheet No.

TRES C102



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 561 3179
www.csarchpc.com

Consultant
PASSERO
engineering architecture
6 Front St. · Newburgh
New York 12550-7601

THE INFORMATION PROVIDED ON THIS SHEET HAS BEEN PREPARED BY OTHERS AND BEARS THE SEAL OF THE RESPONSIBLE PROFESSIONAL.

Project Title

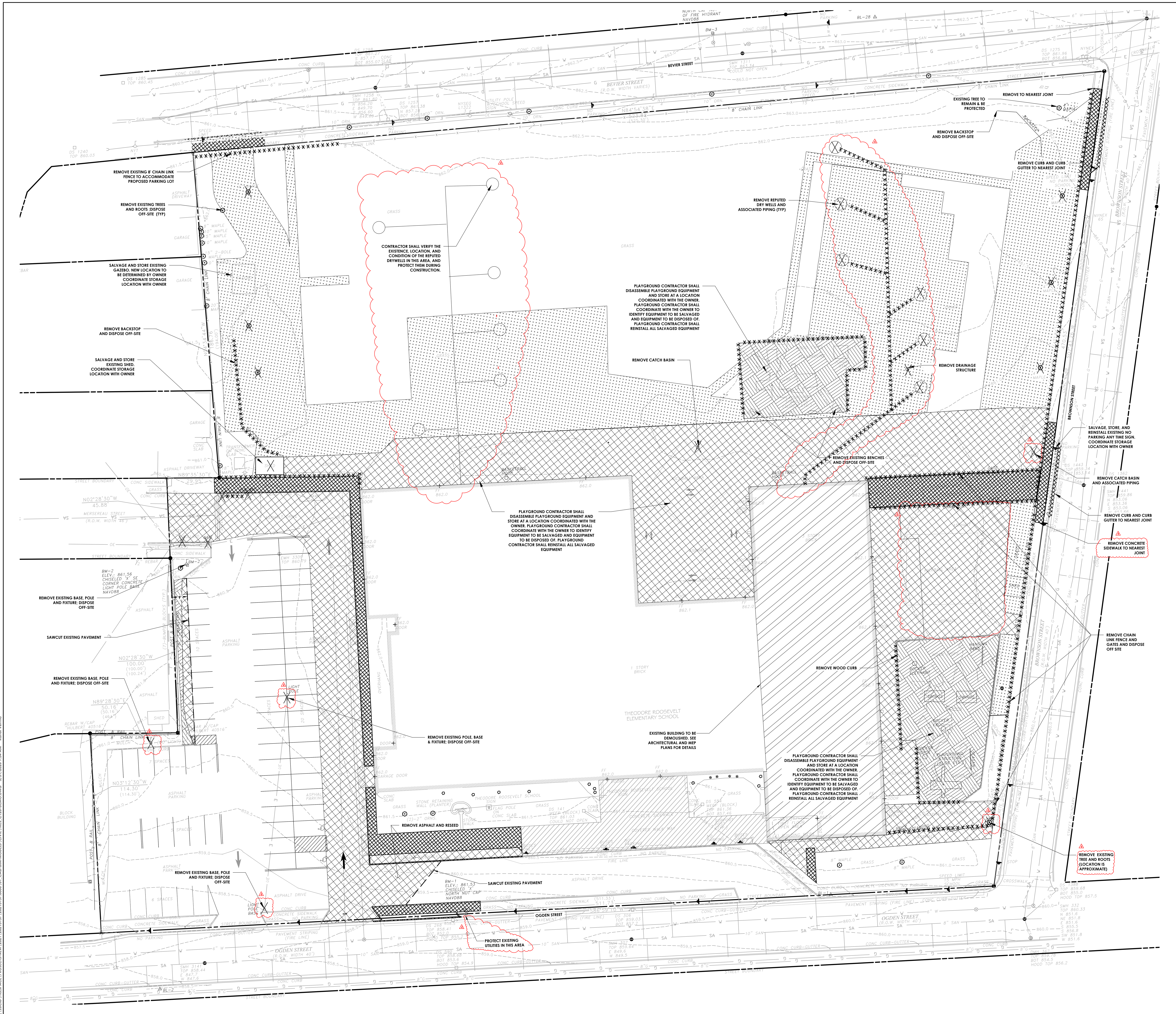
BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

NO.	DATE	DESCRIPTION
1	03/30/2026	BID ADDENDUM

Drawn By: TO
Checked By: RV
Proj. #: 03-02-00-01-0-010-014
CSArch Proj. #: 215-2402
CD Submission: 03/12/2026

Sheet Title
EXISTING CONDITIONS
w/ INFILTRATION TEST LOCATIONS

Sheet No.
TRES C110



HORIZONTAL SCALE
SCALE: 1"=20'
BEVIER STREET
OGDEN STREET
MERSEREAU STREET
BROWNSON STREET
THEODORE ROOSEVELT ELEMENTARY SCHOOL
REMOVE EXISTING 8' CHAIN LINK FENCE TO ACCOMMODATE PROPOSED PARKING LOT
REMOVE EXISTING TREES AND ROOTS ;DISPOSE OFF-SITE (TYP)
SALVAGE AND STORE EXISTING GAZEBO. NEW LOCATION TO BE DETERMINED BY OWNER COORDINATE STORAGE LOCATION WITH OWNER
REMOVE BACKSTOP AND DISPOSE OFF-SITE
SALVAGE AND STORE EXISTING SHED. COORDINATE STORAGE LOCATION WITH OWNER
CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND CONDITION OF THE REPUTED DRYWELLS IN THIS AREA, AND PROTECT THEM DURING CONSTRUCTION.
PLAYGROUND CONTRACTOR SHALL DISASSEMBLE PLAYGROUND EQUIPMENT AND STORE AT A LOCATION COORDINATED WITH THE OWNER. PLAYGROUND CONTRACTOR SHALL COORDINATE WITH THE OWNER TO IDENTIFY EQUIPMENT TO BE SALVAGED AND EQUIPMENT TO BE DISPOSED OF. PLAYGROUND CONTRACTOR SHALL REINSTALL ALL SALVAGED EQUIPMENT
REMOVE REPUTED DRY WELLS AND ASSOCIATED PIPING (TYP)
REMOVE CATCH BASIN
REMOVE DRAINAGE STRUCTURE
EXISTING TREE TO REMAIN & BE PROTECTED
REMOVE TO NEAREST JOINT
REMOVE BACKSTOP AND DISPOSE OFF-SITE
REMOVE CURB AND CURB GUTTER TO NEAREST JOINT
SALVAGE, STORE, AND REINSTALL EXISTING NO PARKING ANY TIME SIGN. COORDINATE STORAGE LOCATION WITH OWNER
REMOVE EXISTING BENCHES AND DISPOSE OFF-SITE
REMOVE CATCH BASIN AND ASSOCIATED PIPING
REMOVE CURB AND CURB GUTTER TO NEAREST JOINT
REMOVE CONCRETE SIDEWALK TO NEAREST JOINT
REMOVE CHAIN LINK FENCE AND GATES AND DISPOSE OFF SITE
REMOVE WOOD CURB
EXISTING BUILDING TO BE DEMOLISHED. SEE ARCHITECTURAL AND MEP PLANS FOR DETAILS
REMOVE EXISTING POLE, BASE & FIXTURE; DISPOSE OFF-SITE
REMOVE EXISTING BASE, POLE AND FIXTURE; DISPOSE OFF-SITE
SAWCUT EXISTING PAVEMENT
REMOVE ASPHALT AND RESEED
PROTECT EXISTING UTILITIES IN THIS AREA
REMOVE EXISTING TREE AND ROOTS (LOCATION IS APPROXIMATE)

LEGEND - DEMO:

- EXISTING BUILDING TO BE DEMOLISHED. SEE ARCHITECTURAL, MEP PLANS FOR ADDITIONAL INFORMATION
- EXISTING ASPHALT AND SUB-BASE TO BE REMOVED TO SUBGRADE AND DISPOSED OFF-SITE
- EXISTING SIDEWALK AND CURB OR CONCRETE SURFACE TO BE REMOVED AND DISPOSED OFF-SITE
- EXISTING GRASS TO BE REMOVED AND DISPOSED OFF-SITE
- EXISTING ENGINEERED WOOD FIBER TO BE REMOVED AND DISPOSED OFF-SITE
- SAWCUT EDGE OF PAVEMENT
- EXISTING FEATURE TO BE REMOVED
- EXISTING FEATURE TO BE REMOVED
- EXISTING BUIDLING CANOPY TO BE REMOVED AND DISPOSED OFF-SITE

CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
PASSERO engineering architecture
6 Front St. · Newburgh
New York 12550-7601

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE, AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

STATE OF NEW YORK · CHRISTOPHER J. LAPORTA · 102592 · LICENSED PROFESSIONAL ENGINEER
EXPIRES: 09/30/28

#	DATE	DESCRIPTION
4	03/30/2026	BID ADDENDUM 4

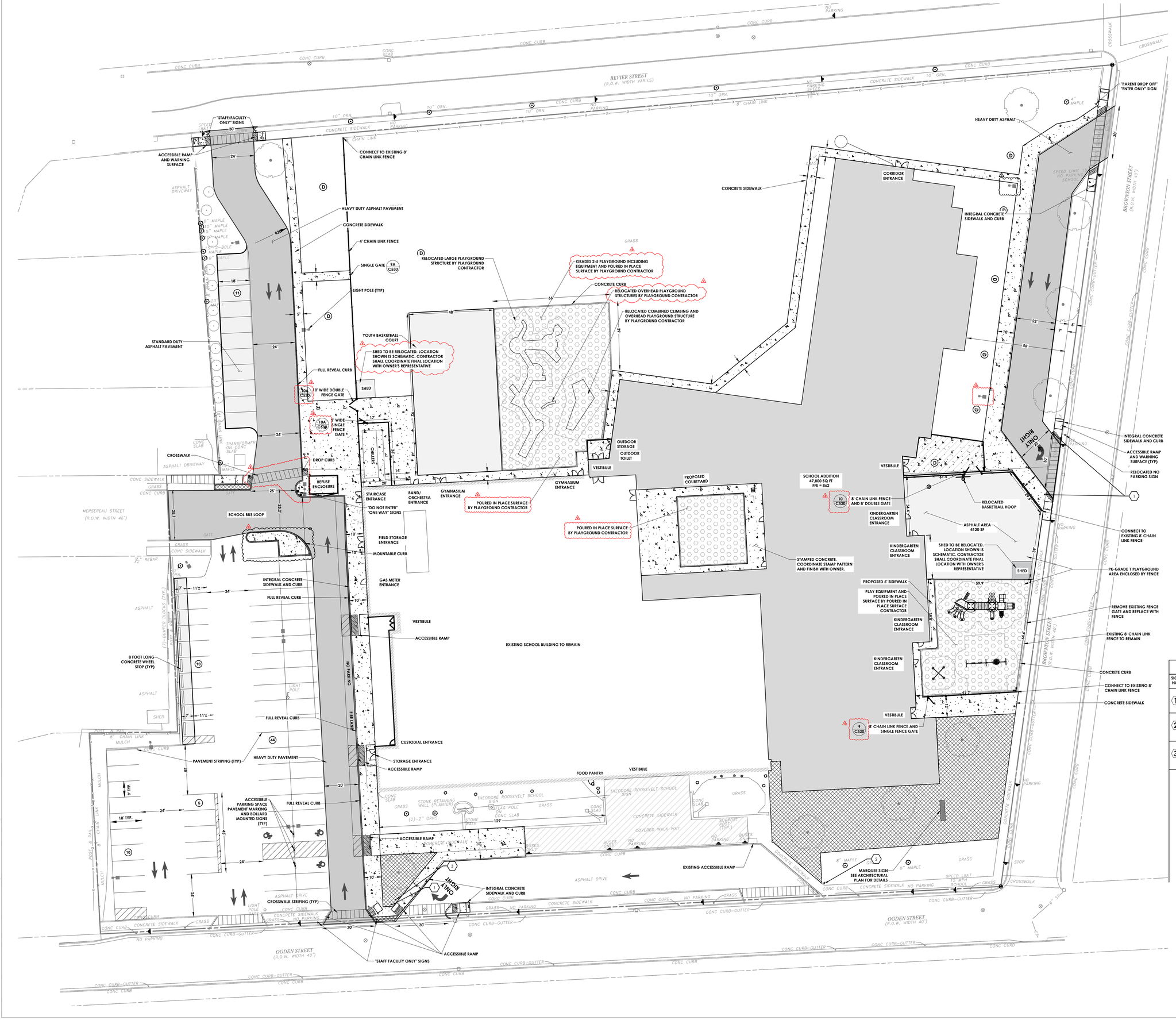
Drawn By:	TO
Checked By:	RV
Proj. #:	03-02-00-01-0-010-014
CSArch Proj. #:	215-2402
CD Submission:	03/12/2026

Sheet Title

DEMOLITION PLAN

Sheet No.

TRES C120



HORIZONTAL SCALE
20 0 10 20 40
SCALE: 1"=20'

N

LEGEND:

- PROPERTY BOUNDARY
- PROPOSED BUILDING
- PROPOSED BUILDING CANOPY
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- PROPOSED LAWN
- PROPOSED CONCRETE
- POURED IN PLACE SURFACE
- PROPOSED LIGHT
- PROPOSED CURB
- EXISTING BUILDING
- PROPOSED PAVEMENT STRIPING
- PROPOSED PARKING COUNT
- PROPOSED HISTORIC DISTRICT TREE PIT
- EXISTING STORM SEWER & CATCH BASIN
- PROPOSED WATER SERVICE W/ HYDRANT & VALVE
- PROPOSED SANITARY SEWER AND MANHOLE
- EXISTING CENTER LINE ROAD
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED SIGN

MUTCD SIGN SCHEDULE

SIGN NO.	SIGN FACE	MUTCD NUMBER	MIN SIZE	COLORS	
				BCKGRND	LEGEND
1	DO NOT ENTER	R5-1	30"X30"	RED	WHITE
2	NO PARKING	R8-3A	18"X24"	WHITE	RED

MUTCD SIGN SCHEDULE

SIGN NO.	SIGN FACE	MUTCD NUMBER	MIN SIZE	COLORS		MOUNTING
				BCKGRND	LEGEND	
1	DO NOT ENTER	R5-1	30"X30"	RED	WHITE	8 C530
2	DO NOT EXCEED BUSES ONLY	NA	18"X24"	WHITE (TOP) BLACK BOTTOM)	RED (TOP, OUTLINE) WHITE (BOTTOM)	8 C530
3	ONLY	R3-5	30"X36"	WHITE	BLACK	8 C530

CSARCH
19 Front St - Newburgh, New York 12550-7601
845 561 3119
www.csarch-pc.com

Consultant
PASSERO engineering architecture
6 Front St - Newburgh
New York 12550-7601

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, IN ANY WAY, EXCEPT BY THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE ENGINEER SHALL AFFIX TO THE DRAWINGS AND/OR IN THE SPECIFICATIONS, THE SIGN, SEAL, DATE, AND DESCRIBE THE ALTERATIONS. FAILURE TO DO SO IS A VIOLATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209.2)

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

Project Title

STATE OF NEW YORK
CHRISTOPHER J. LAPORTA
102597
LICENSED PROFESSIONAL ENGINEER
EXPIRES: 09/30/26

#	DATE	DESCRIPTION
4	03/30/2026	BID ADDENDUM

Drawn By: TO
Checked By: RV
Proj. #: 03-02-00-01-0-010-014
CSArch Proj. #: 215-2402
CD Submission: 03/12/2026

Sheet Title
SITE PLAN

Sheet No.
TRES
C130

HORIZONTAL SCALE
20 0 10 20 40
SCALE: 1"=20'

N

LEGEND :

	PROPERTY BOUNDARY
R.O.W.	R.O.W.
	EXISTING BUILDING
x x x	EXISTING FENCE
	EXISTING EASEMENT LINE
D CB	EXISTING STORM SEWER & MH
S MH	EXISTING SANITARY SEWER AND MANHOLE
PP OHW	EXISTING ELECTRIC LINE & POLE
LP	EXIST. LIGHT POLE
E MH	EXIST. ELECTRIC MANHOLE
HH ☐	EXIST. ELECTRIC HANDHOLE
GV ⊗	EXIST. GAS VALVE
G	EXIST. GAS MAIN
W	EXIST. WATER MAIN
E	EXIST. ELECTRIC LINE
UE	EXIST. UNDERGROUND ELECTRIC LINE
HYD WV	EXISTING WATER SERVICE & VALVE
+ 491.5	EXISTING SPOT ELEVATION
	PROPOSED CONCRETE
	PROPOSED BUILDING
D	PROPOSED STORM SEWER, INLET MH, CB & END SECTION
D DW-#	PROPOSED DRYWELL
WV W	PROPOSED WATER SERVICE W/ HYDRANT & VALVE
S	PROPOSED SANITARY SEWER AND MANHOLE
	PROPOSED INLET PROTECTION
SF	SILT FENCE
X 492.7 492.7	PROPOSED SPOT ELEVATION
	PROPOSED LIGHTING
	PROPOSED CURB
	PROPOSED SIGN
520	EXISTING MAJOR CONTOUR
521	EXISTING MINOR CONTOUR
520	PROPOSED MAJOR CONTOUR
521	PROPOSED MINOR CONTOUR
	PROPOSED LIMIT OF DISTURBANCE

CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
PASSERO
engineering architecture
6 Front St. · Newburgh
New York 12550-7601

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE, AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

CHRISTOPHER J. LAPORTA
102592
EXPIRES: 09/30/28

4	03/30/2026	BID ADDENDUM 4
#	DATE	DESCRIPTION

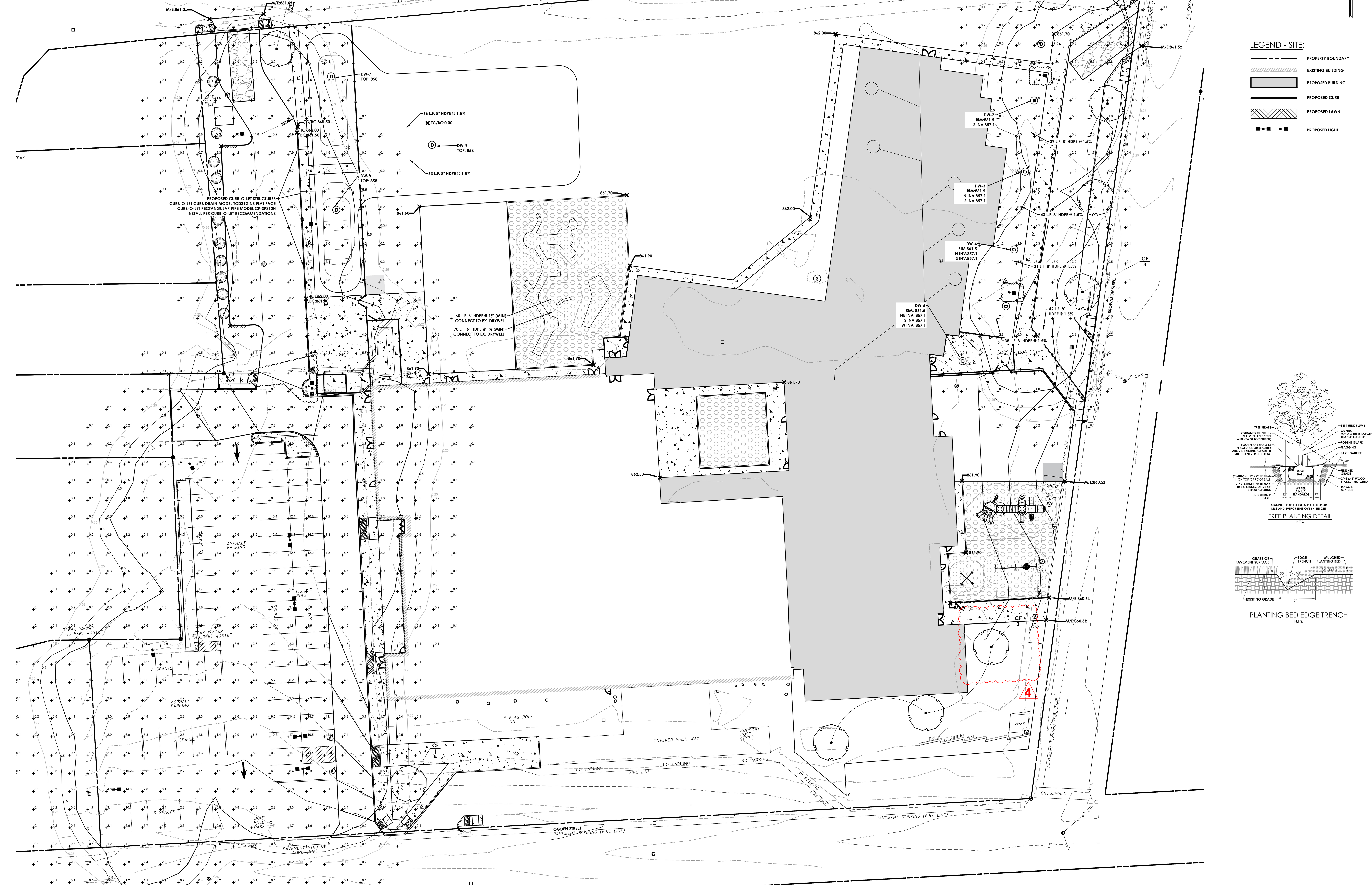
Drawn By: TO
Checked By: RV
Proj. #: 03-02-00-01-0-010-014
CSArch Proj. #: 215-2402
CD Submission: 03/12/2026

Sheet Title
UTILITY, EROSION AND SEDIMENT CONTROL & GRADING PLAN

Sheet No.
TRES C140

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	MIN. CALLIPER/HEIGHT	CONT.	REMARKS
DECIDUOUS TREES							
	CF	9	CORNUS FLORIDA	FLOWERING DOGWOOD	CAL. - 2.5-3"	B&B	
EVERGREEN TREES							
	TO	12	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	HT. - 5-6'	#5	



LUMINAIRE SCHEDULE								
LABEL	SYMBOL	QUANITITY	CATALOG NUMBER	DESCRIPTION	MOUNT HEIGHT	LUMENS	INPUT WATTAGE	BUG RATING
A	■-■	7	DSX2 LED P8 30K 80CRI T4M HS EGS-F	SINGLE POLE MOUNTED AREA LIGHT	17.5 FT	ABSOLUTE	462.5	B3-U0-G4
B	■-■-■	3	DSX2 LED P8 30K 80CRI T4M HS EGS-F	DOUBLE POLE MOUNTED AREA LIGHT	17.5 FT	ABSOLUTE	924.9	B3-U0-G4

CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179
www.csarchpc.com

Consultant
PASSERO engineering architecture
6 Front St. · Newburgh
New York 12550-7601

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

STATE OF NEW YORK · CHRISTOPHER J. LAPORTA · 102592 · LICENSED PROFESSIONAL ENGINEER
EXPIRES: 09/30/28

#	DATE	DESCRIPTION
4	03/30/2026	BID ADDENDUM 4

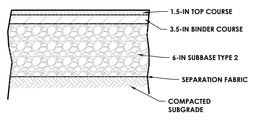
Drawn By:	TO
Checked By:	RV
Proj. #:	03-02-00-01-0-010-014
CSArch Proj. #:	215-2402
CD Submission:	03/12/2026

Sheet Title

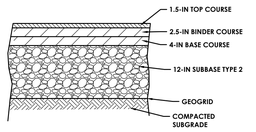
SITE LIGHTING & LANDSCAPING PLAN

Sheet No.

TRES C150



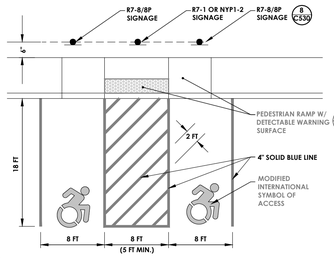
1A STANDARD DUTY ASPHALT PAVEMENT SECTION
N.T.S.



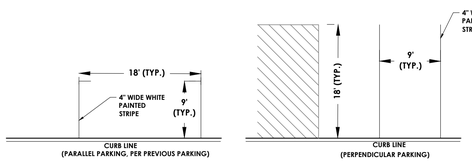
1B HEAVY DUTY PAVEMENT SECTION
N.T.S.

NOTES:

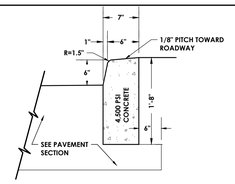
1. ALL DEPTHS ARE COMPACTED THICKNESS.
2. MAXIMUM LIFT THICKNESS= 6 INCHES
3. ALL MATERIALS SHALL BE AS SPECIFIED OR APPROVED EQUAL.
4. BINDER COURSE SHALL BE SWEPT CLEAR TO REMOVE ANY LOOSE MATERIAL PRIOR TO PLACING TOP COAT. IF TOP COURSE IS NOT PLACED WITHIN TWENTY FOUR HOURS OF BINDER PLACEMENT, A TACK COAT SHALL BE APPLIED TO CLEAN SURFACE PRIOR TO PLACEMENT OF TOP COURSE.



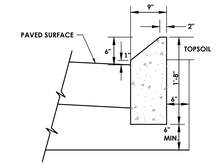
2 ACCESSIBLE PARKING SPACE PAVEMENT MARKING
N.T.S.



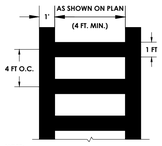
3 TYPICAL PARKING PAVEMENT MARKING LAYOUTS
N.T.S.



4 CONCRETE CURB
N.T.S.



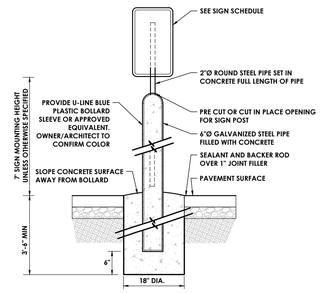
5 MOUNTABLE CONCRETE CURB DETAIL
N.T.S.



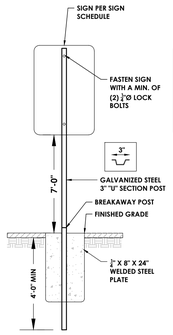
NOTE:

1. PAVEMENT MARKING COLOR SHALL BE WHITE.
2. PAVEMENT MARKING PAINT SHALL BE EPOXY REFLECTORIZED.

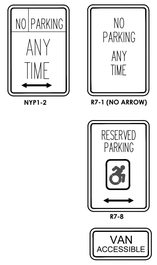
6 CROSSWALK
N.T.S.



BOLLARD MOUNTED SIGN
N.T.S.
(SIGN IN PARKING LOT OR DRIVE)

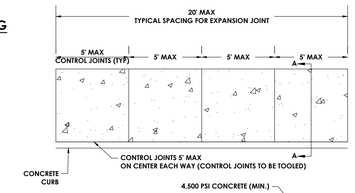


SINGLE POST SIGN MOUNTING DETAIL (SIGN IN LANDSCAPE AREA OR SIDEWALK)



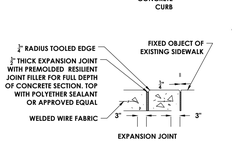
SIGN SCHEDULE

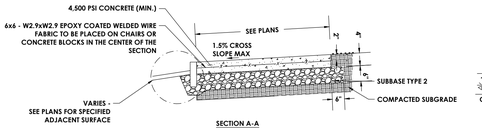
8 SIGN & MOUNTING DETAIL WITH SCHEDULE
N.T.S.

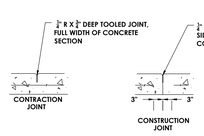


NOTES:

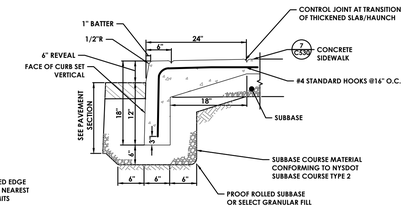
1. SIDEWALK WIDTH SHALL BE MEASURED FROM THE BACK OF THE CURB TO SIDEWALK EDGE OR SIDEWALK EDGE TO SIDEWALK EDGE UNLESS OTHERWISE SPECIFIED.
2. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSE OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE. THE FILL MATERIAL SHALL BE ON-SITE EXCAVATION SPOILS (IF SUITABLE) AND/OR IMPORTED GENERAL FILL FREE OF CONTAMINANTS AND DELETERIOUS MATERIALS.
3. SIDEWALKS SHALL HAVE A CROSS SLOPE OF 1.5% PER FOOT UNLESS OTHERWISE SPECIFIED ON THE PLANS.
4. ALL EXPOSED CONCRETE SURFACES SHALL BE BROOM FINISHED AND THE EDGES SHALL BE FINISHED WITH A 1.5" RADIUS EDGING TOOL.
5. THE FINISHED CONCRETE SURFACE SHALL BE TREATED WITH CONCRETE SEALER, HARDENER AND DUSTPROOFER. RATE AND METHOD OF APPLICATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



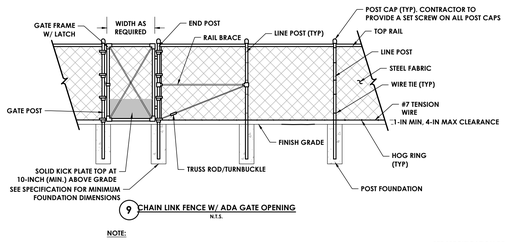




7 TYPICAL SIDEWALK
N.T.S.



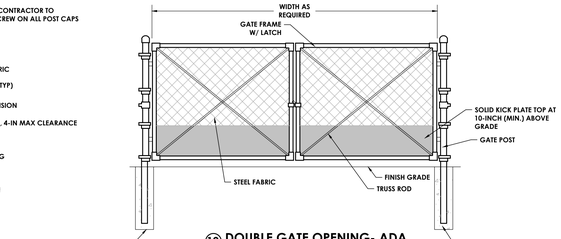
12 INTEGRAL CONCRETE CURB & SIDEWALK
N.T.S.



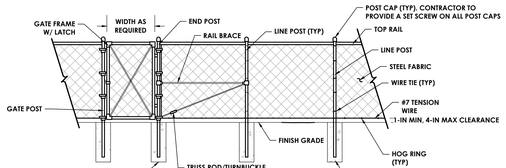
9 CHAIN LINK FENCE W/ ADA GATE OPENING
N.T.S.

NOTE:

GATES SHALL COMPLY WITH ANSI 117.1 AND 404.2.9



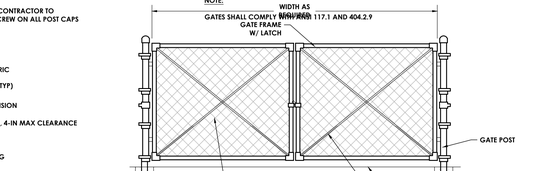
10 DOUBLE GATE OPENING- ADA
N.T.S.



9A CHAIN LINK FENCE W/ GATE OPENING
N.T.S.

NOTE:

GATES SHALL COMPLY WITH ANSI 117.1 AND 404.2.9



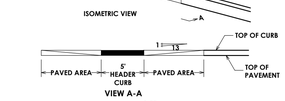
10A DOUBLE GATE OPENING
N.T.S.

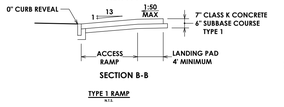
NOTE:

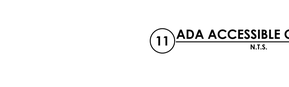
GATES SHALL COMPLY WITH ANSI 117.1 AND 404.2.9

TYPE 1 RAMP NOTES:

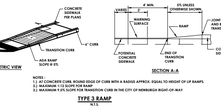
1. 1:13 IS MAXIMUM SLOPE OF ACCESS RAMP AND SIDE FLARE IN PAVED AREA.
2. SURFACE OF ACCESS RAMP IS TO BE STABLE, FIRM AND SLIP-RESISTANT. TEXTURE SURFACE WITH COARSE BROOM RUNNING TRANSVERSE TO SLOPE OF ACCESS RAMP.
3. ENTIRE AREA OF ACCESS RAMP AND LANDING PAD IS TO BE 7 INCH THICK CONCRETE.







TYPE 1 RAMP
N.T.S.



NOTES:

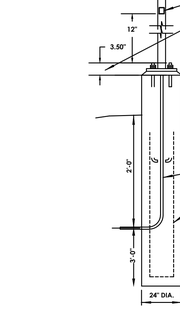
1. 1:13 IS MAXIMUM SLOPE OF ACCESS RAMP AND SIDE FLARES.
2. SURFACE OF ACCESS RAMP IS TO BE STABLE, FIRM AND SLIP-RESISTANT. TEXTURE SURFACE WITH COARSE BROOM RUNNING TRANSVERSE TO SLOPE OF ACCESS RAMP.
3. DETECTABLE WARNING SURFACE SHALL BE A MINIMUM OF 2 FEET IN DEPTH, EXTEND THE FULL WIDTH OF THE RAMP (EXCLUDING SIDES) OTHERWISE SPECIFIED. COLOR AND MATERIAL TO BE SELECTED BY OWNER.

TYPE 2 RAMP
N.T.S.

NOTES:
1.) AT CONCRETE CURB, ROUND EDGE OF CURB WITH A RADIUS APPROX. EQUAL TO HEIGHT OF UP RAMPS.
2.) MAXIMUM 1:12 SLOPE FOR RAMP.
3.) MAXIMUM 9.3% SLOPE FOR TRANSITION CURB IN THE CITY OF NEWBURGH RIGHT-OF-WAY

TYPE 3 RAMP
N.T.S.

11 ADA ACCESSIBLE CURB RAMPS
N.T.S.

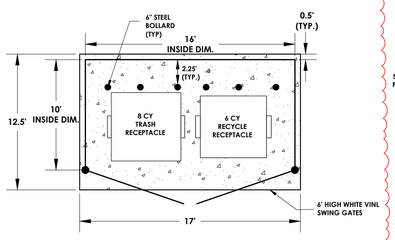


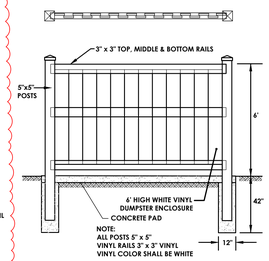
NOTES:

1. FOUNDATION SHOWN IS A TYPICAL DESIGN. WIND LOADS OF MORE THAN 90 MPH AND UNSTABLE SOIL MAY REQUIRE AN ALTERNATE DESIGN. CONTRACTOR SHALL ADVISE ENGINEER OF UNSTABLE SOIL CONDITIONS.
2. FOUNDATION SHALL EXTEND BELOW FROST DEPTH PER LOCAL CODES. 10-INCH DIAMETER AND REINFORCING CIRCLE SHALL BE COORDINATED WITH ANCHOR BOLT LIMITS.
3. BASIS OF DESIGN IS RAB AREA LIGHTS AS MANUFACTURED BY RAB LIGHTING.
4. FOUNDATION DIAMETER AND REINFORCING CIRCLE SHALL BE COORDINATED WITH ANCHOR BOLT LIMITS.
5. APPROVED EQUALS ARE ACCEPTABLE

13 LIGHT FIXTURE, POLE AND BASE
N.T.S.

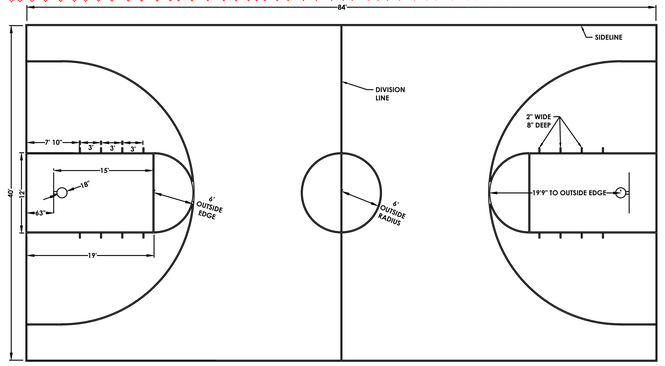
4





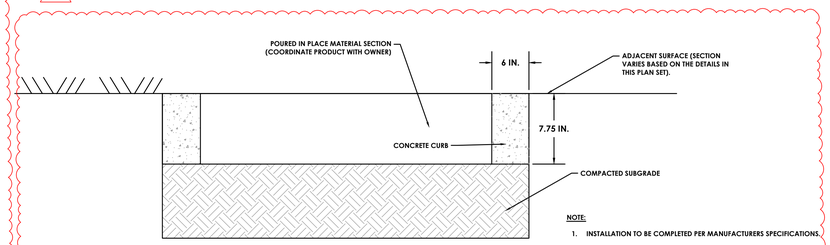
14 REFUSE ENCLOSURE PLAN
N.T.S.

4



15 BASKETBALL COURT DETAIL
N.T.S.

4



NOTE:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURERS SPECIFICATIONS.

17 TYPICAL SECTION- POURED IN PLACE SECTION TO ADJACENT SURFACE
N.T.S.

CSARCH
19 Front St Newburgh, New York 12550-7601
845 561 3313 www.csarch.com

Consultant
PASSERO engineering architecture
6 Front St Newburgh
New York 12550-7601

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS IN ANY WAY WITHOUT THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE ENGINEER SHALL AFFIX TO ANY SUCH SIGN, SEAL, DATE, AND DESCRIBE THE ALTERATIONS MADE. ALL ALTERATIONS ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209.2

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

Project Title

EXPIRES: 09/30/26

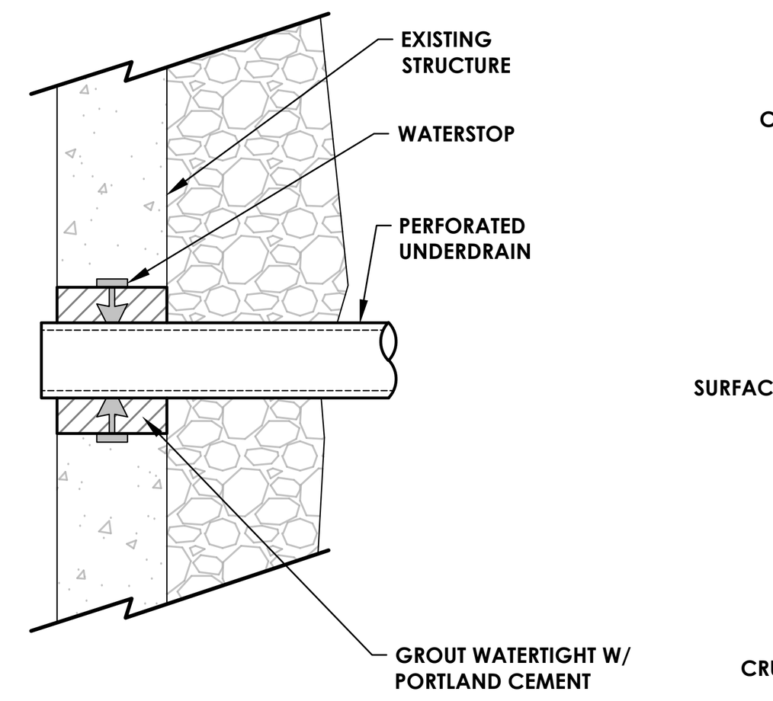
#	DATE	DESCRIPTION
2	03/10/2026	BID ADDENDUM

Drawn By:	TO
Checked By:	RV
Proj. #:	03-02-00-01-0-010-014
CSArch Proj. #:	215-2402
CD Submission:	03/12/2026

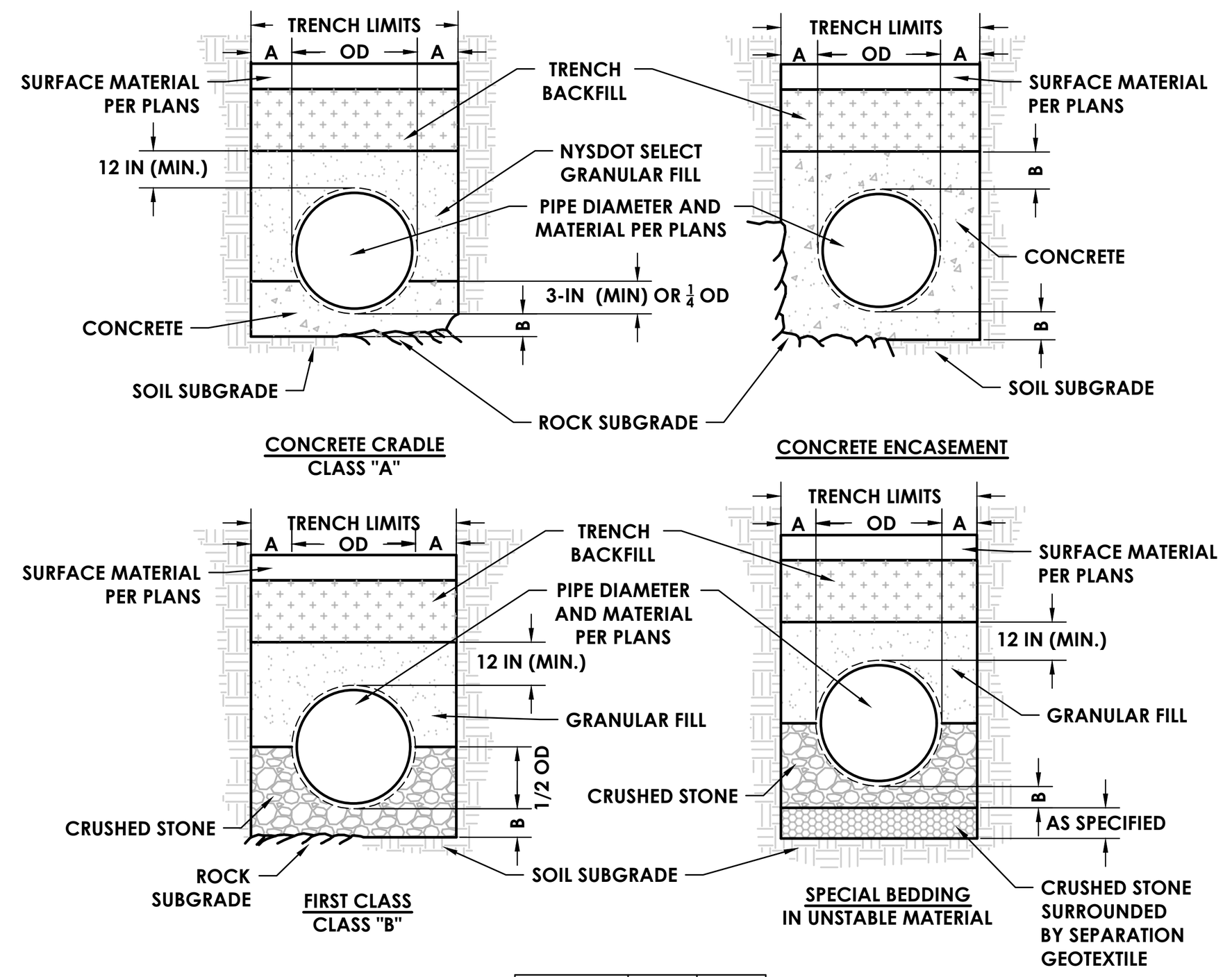
Sheet Title
SITE DETAILS

Sheet No.
TRES C530

\\UICIO FILESPACE\PROJECTS-NEW\2021\2021315720006\01 CAD-BIM-MODELS\CIVIL\TRES_C530- DETAILS.DWG 3/31/2026 9:36 AM Rahul Verma



(1) **CONNECTION TO EXISTING STRUCTURE**
N.T.S.

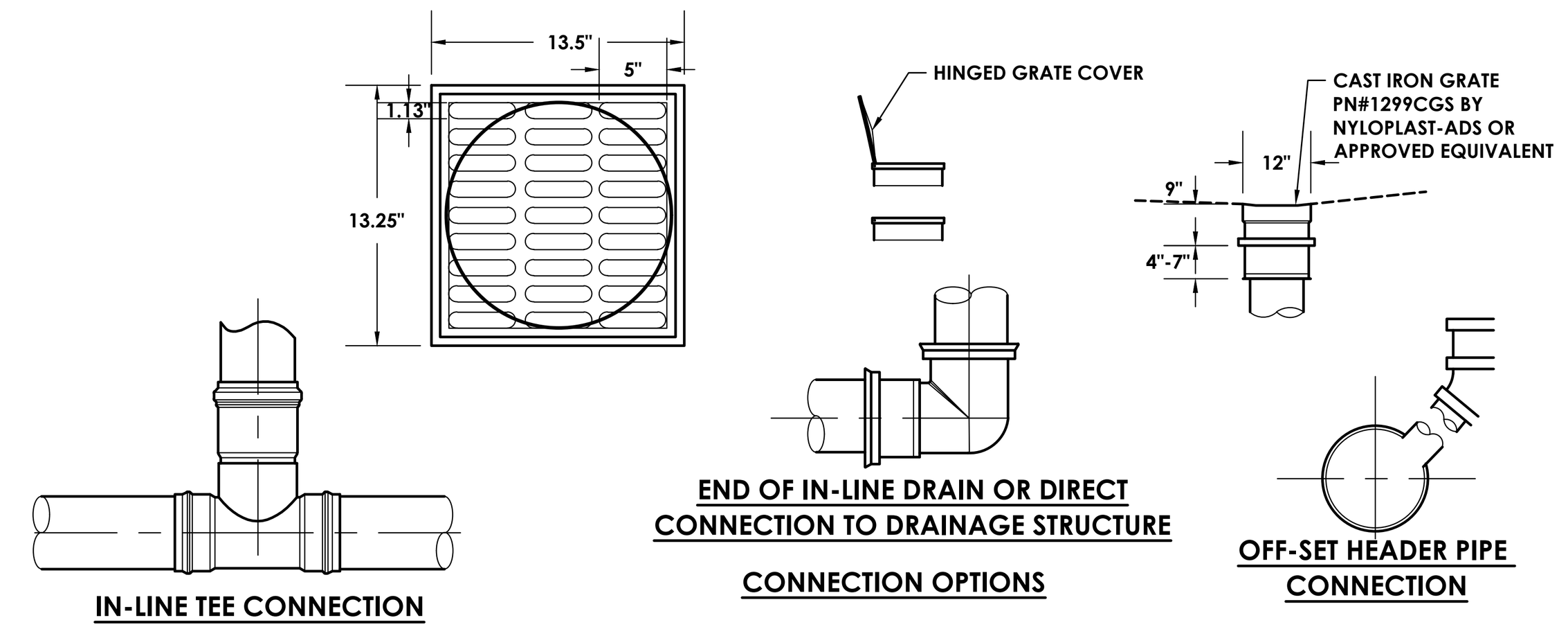


PIPE DIA.	DIM. A	DIM. B
UP TO 18"	1.0'	6"
21" TO 36"	1.5'	9"
OVER 36"	1.5'	12"

NOTES

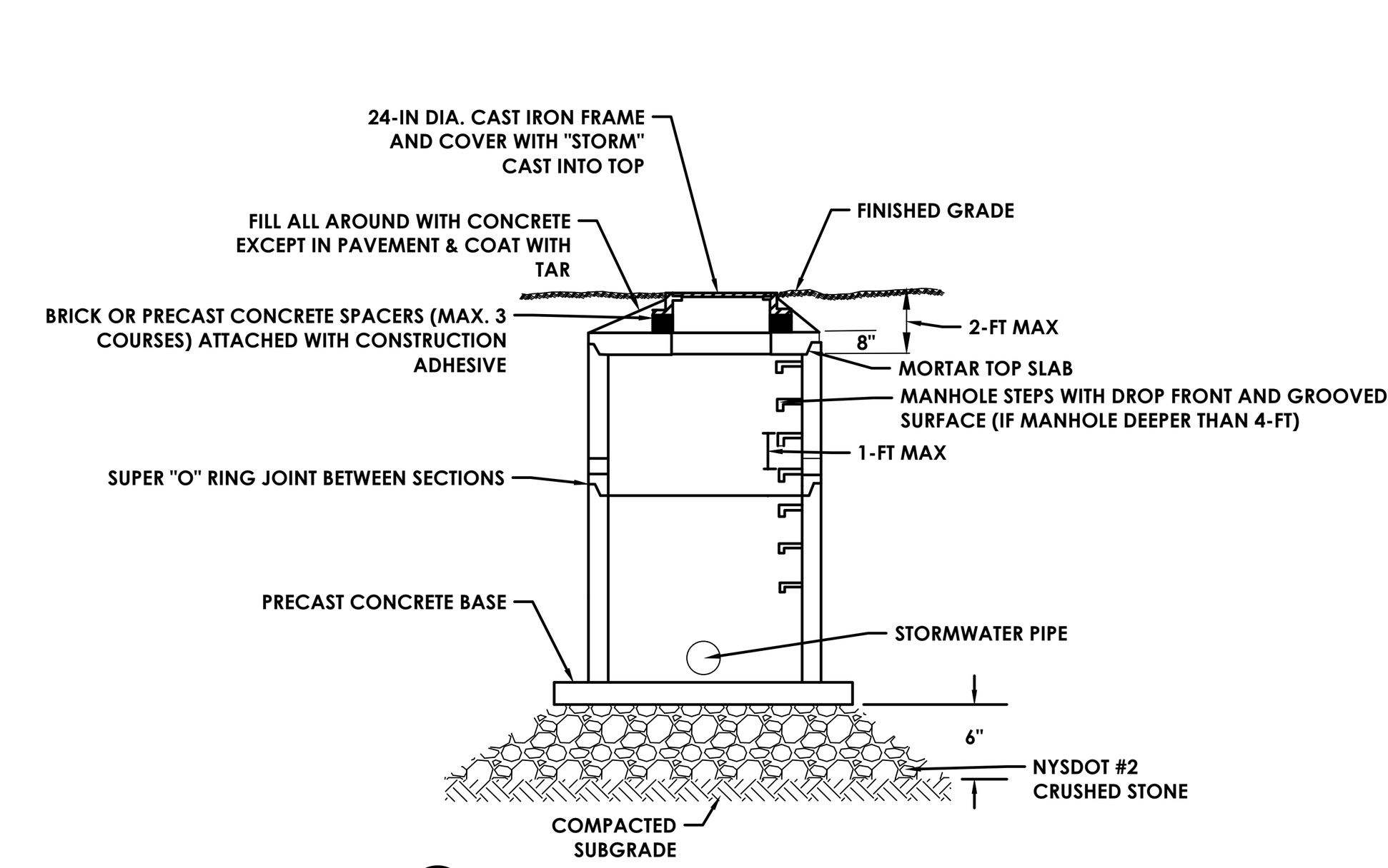
1. TRENCH BACKFILL SHALL GRANULAR FILL, OR SUITABLE NATIVE SOIL APPROVED BY THE ENGINEER AND SHALL BE COMPACTED.
2. SUBGRADE ON TRENCH BOTTOM SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT.

(2) **STORM SEWER/SANITARY SEWER BEDDING**
N.T.S.

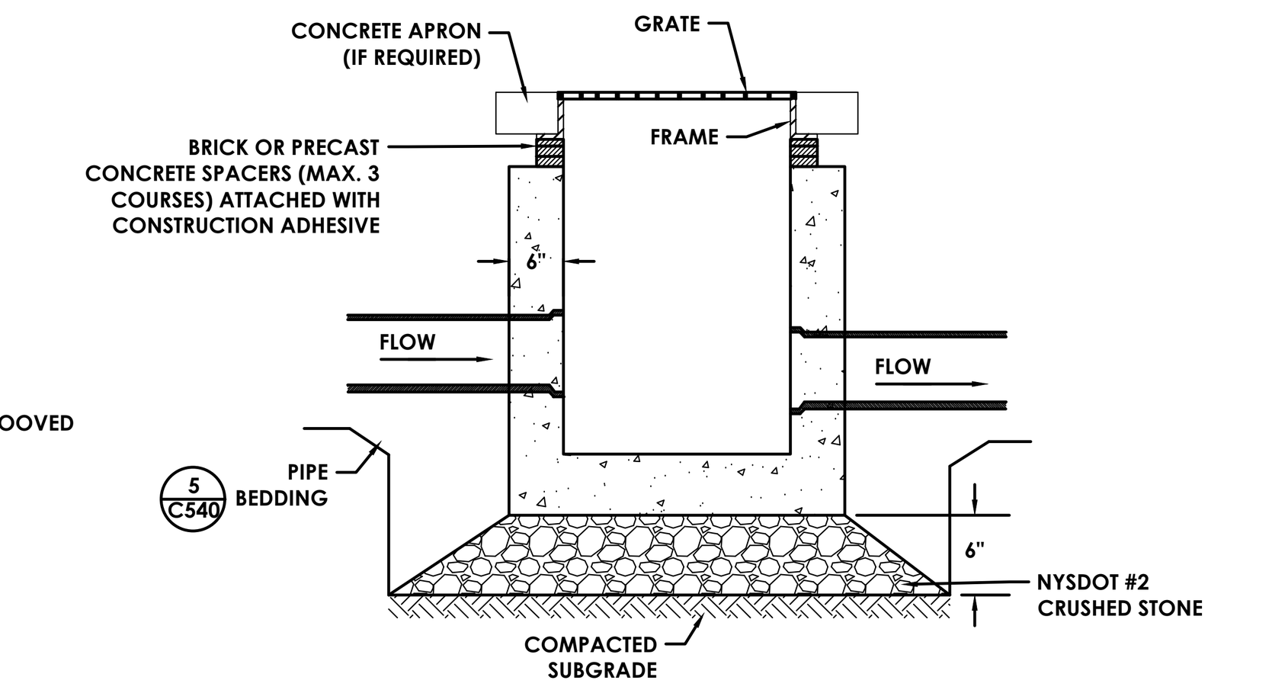


NOTES:
1. INLINE DRAIN SHALL BE BY NYLOPLAST OR APPROVED EQUIVALENT.
2. WHEN IN CONCRETE SIDEWALK AND PAVED AREAS, DRAIN SHALL BE SET IN A 13" WIDE CONCRETE COLLAR FROM THE CENTER OF DRAIN.
3. PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT.
4. PIPE AND STRUCTURE SHALL BE SET AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND TRENCH DETAILS.

(3) **YARD DRAIN AND GRATE**
N.T.S.



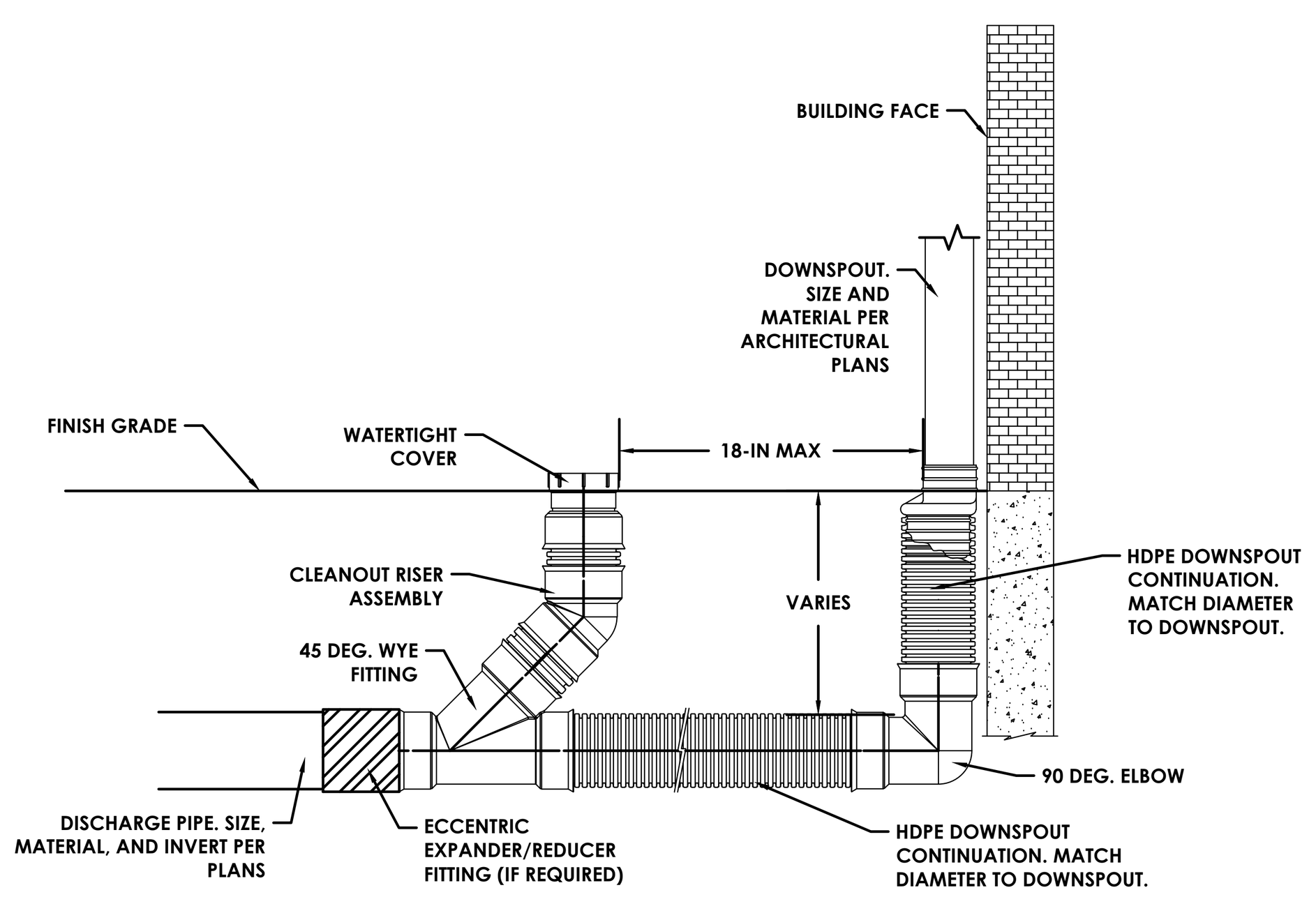
(4) **STANDARD STORM MANHOLE DETAIL**
N.T.S.



NOTES:

1. ALL CONCRETE IN CONTACT WITH ASPHALT PAVEMENT SHALL HAVE A TACK COAT INSTALLED AT THE CONCRETE/ASPHALT INTERFACE.
2. CATCH BASINS IN PEDESTRIAN WALKWAYS AND BICYCLE AREAS SHALL HAVE ADA COMPLIANT GRATES, OTHERWISE SHALL HAVE RETICULINE GRATES WITH THE LENGTH OF THE GRATE PARALLEL TO THE SURFACE FLOW.
3. CATCH BASIN SHALL BE PRECAST CONCRETE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
4. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
5. CATCH BASINS HAVING A DEPTH GREATER THAN 48" FROM FINISHED SURFACE TO THE TOP OF THE CONCRETE BASE SHALL BE PROVIDED WITH MANHOLE STEPS.
6. SUBGRADE SHALL BE COMPACTED TO A FIRM, UNYIELDING STATE PRIOR TO PLACEMENT OF ANY MATERIALS ABOVE IT. A WATER-PERMEABLE SEPARATION FABRIC SHALL BE INSTALLED BETWEEN THE SUBGRADE AND STONE MATERIALS.

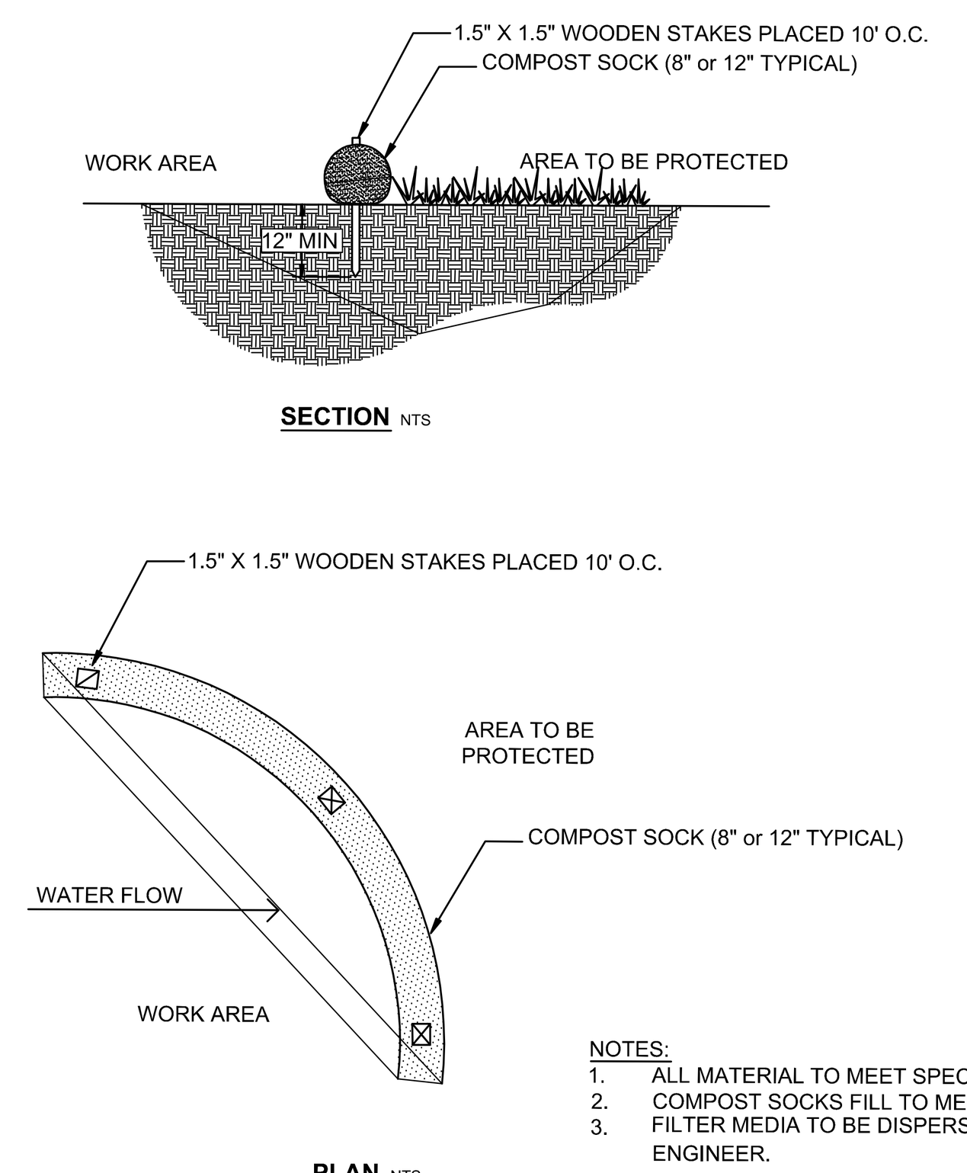
(5) **STANDARD CATCH BASIN**
N.T.S.



NOTES:

1. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND ACCESSORIES TO COMPLETE PIPE CONNECTIONS AND PROVIDE A USABLE CLEANOUT.
2. ALL FITTINGS SHALL BE WATERTIGHT.
3. CLEANOUT RISER DIAMETER SHALL MATCH DISCHARGE PIPE DIAMETER.
4. AN ECCENTRIC PIPE DIAMETER EXPANDER OR REDUCER FITTING SHALL BE INSTALLED IF REQUIRED. THIS FITTING SHALL BE COMPATIBLE WITH ADJACENT PIPE MATERIALS AND SOIL CONDITIONS.
5. CLEANOUT RISER ASSEMBLY DIAMETER SHALL MATCH THE DOWNSPOUT CONTINUATION PIPE DIAMETER.
6. WATERTIGHT COVER SHALL BE FLUSH WITH ADJACENT FINISH GRADE, UNLESS OTHERWISE SPECIFIED BY ENGINEER OR OWNER.

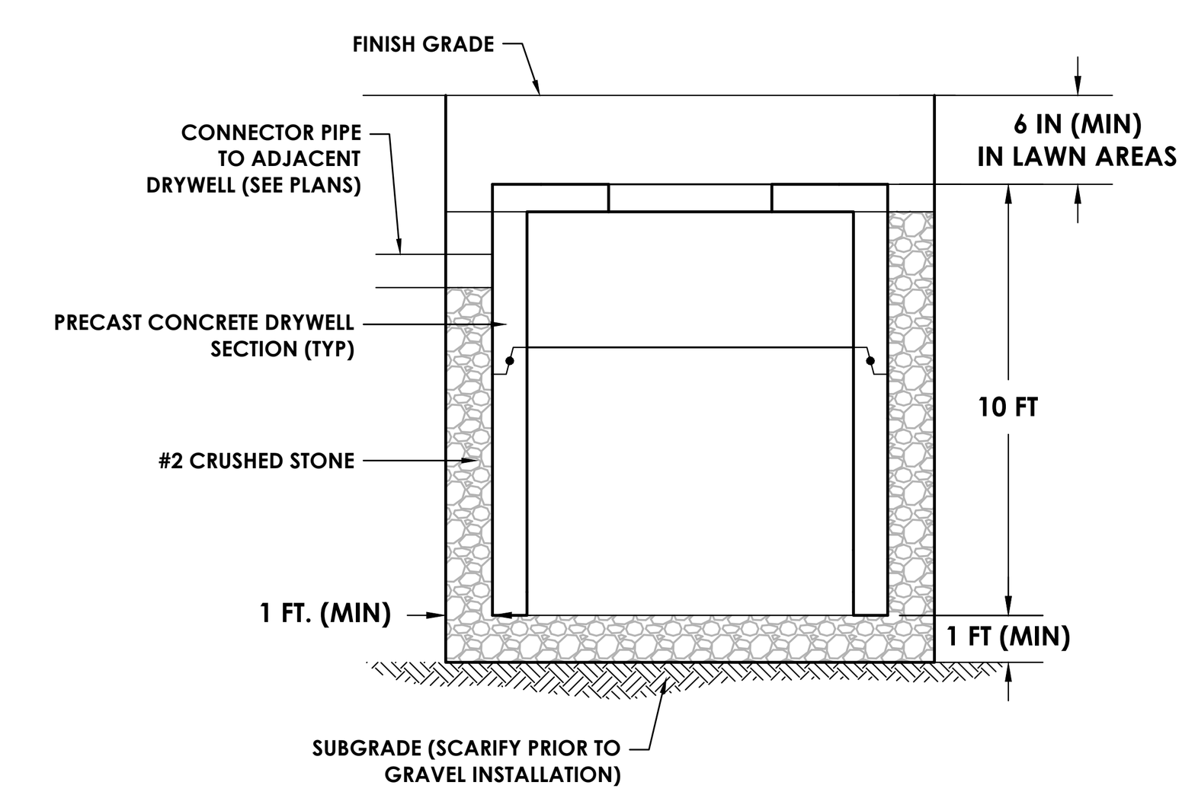
(6) **ROOF DRAIN W/WYE CLEANOUT**
N.T.S.



NOTES:
1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. COMPOST SOCKS FILL TO MEET APPLICATION REQUIREMENTS.
3. FILTER MEDIA TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

(7) **COMPOST SOCKS FOR SEDIMENT CONTROL**
N.T.S.

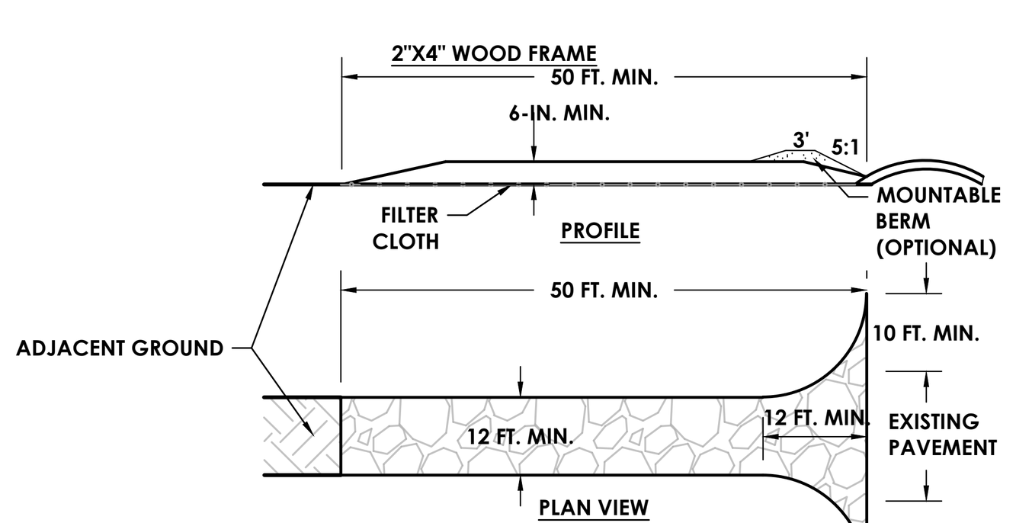
4



NOTES:

1. BASIS OF DESIGN IS A 10' DIA. PRECAST CONCRETE DRYWELL FROM MID-HUDSON CONCRETE PRODUCTS.
2. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
3. INSTALL IN ACCORDANCE WITH THESE PLANS AND MANUFACTURER REQUIREMENTS.

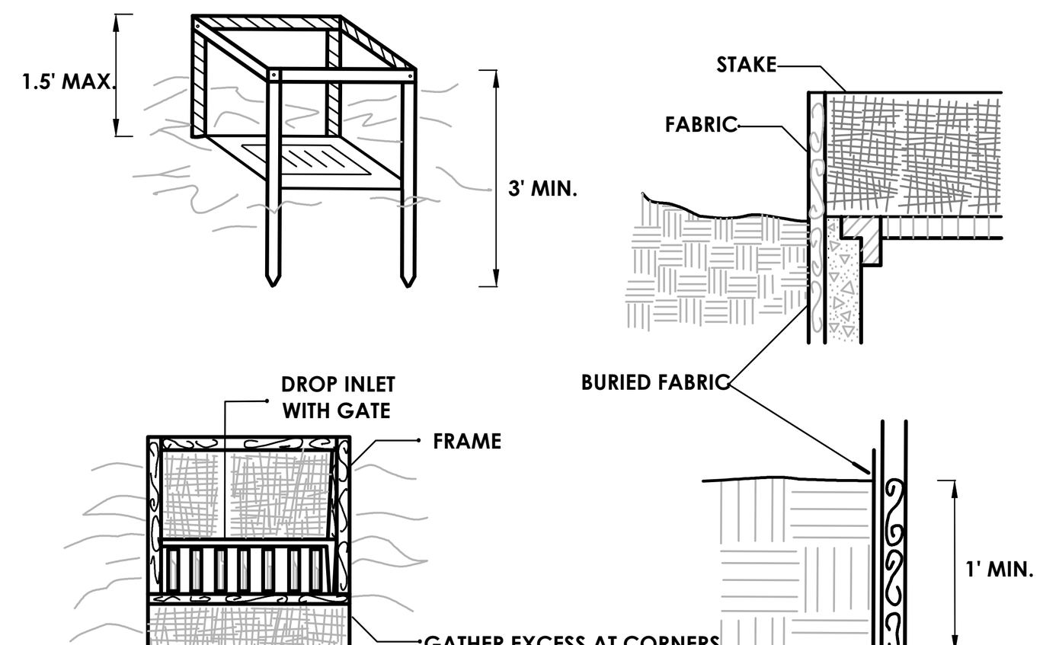
(8) **DRYWELL**
N.T.S.



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 CONSTRUCTION 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 TRACKED 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

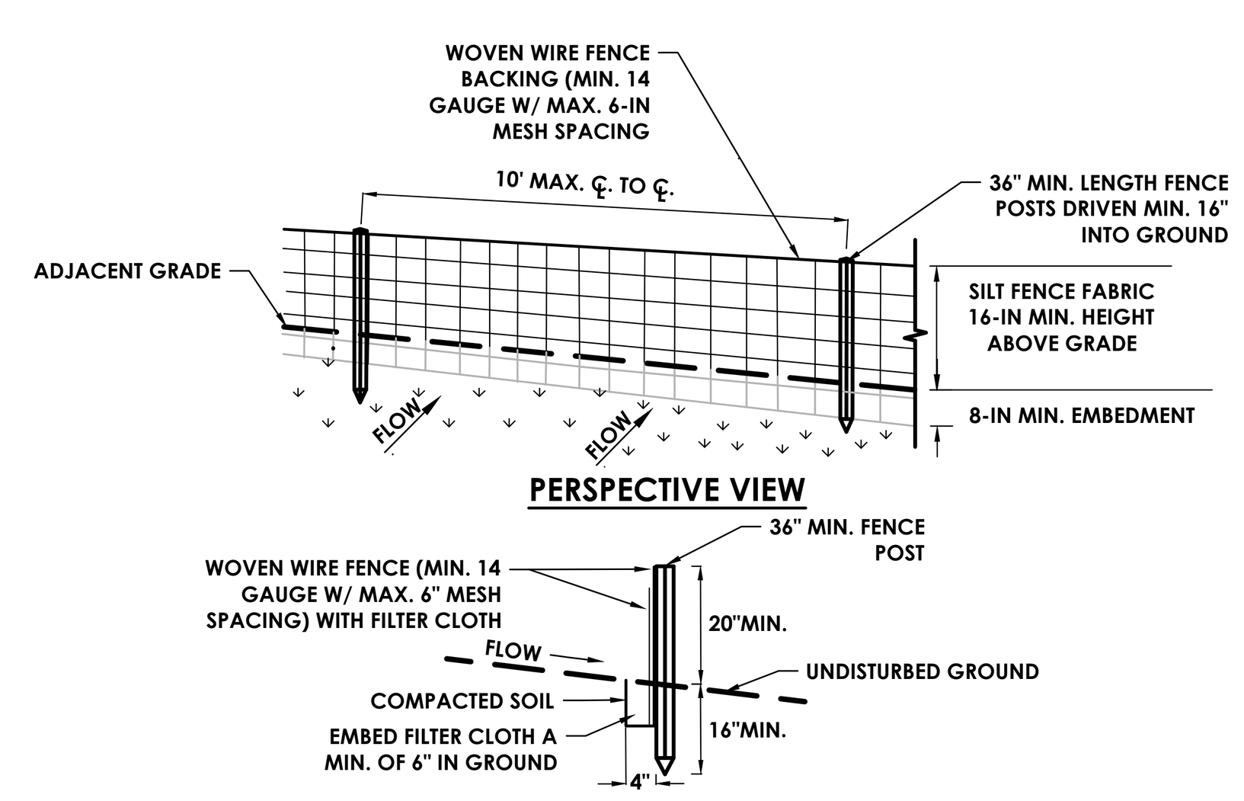
(9) **STABILIZED CONSTRUCTION ENTRANCE**
N.T.S.



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT 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. DRAINAGE AREA TO EACH PRACTICE SHALL NOT EXCEED 1 ACRE.

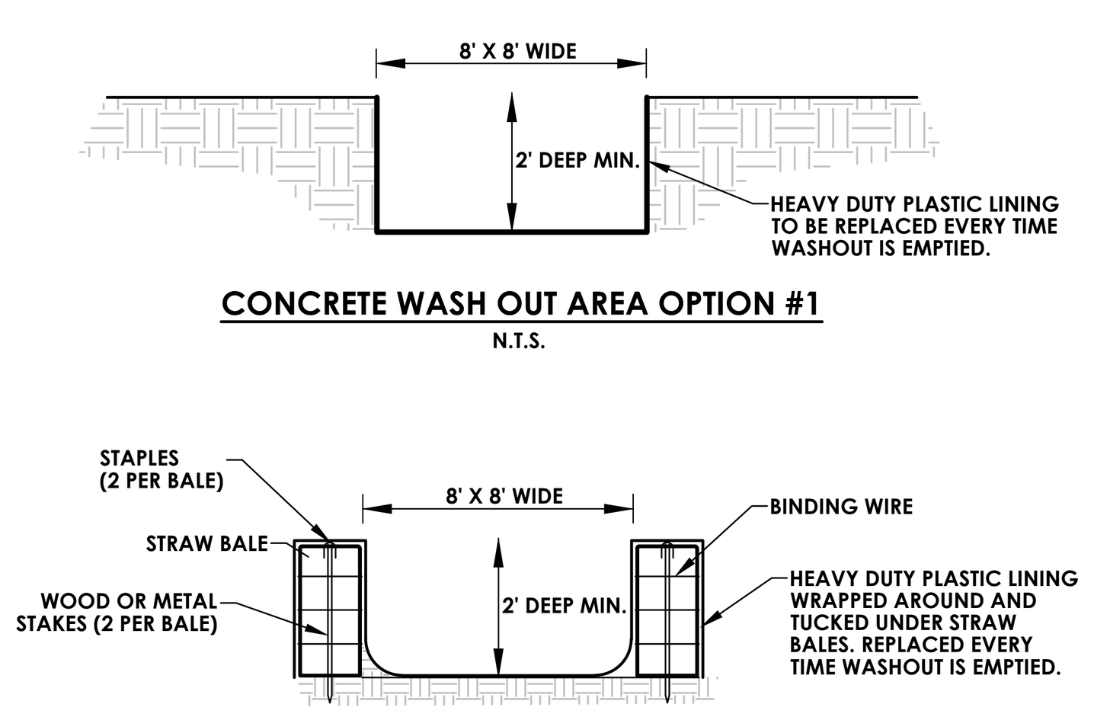
(10) **FILTER FABRIC DROP INLET PROTECTION**
N.T.S.



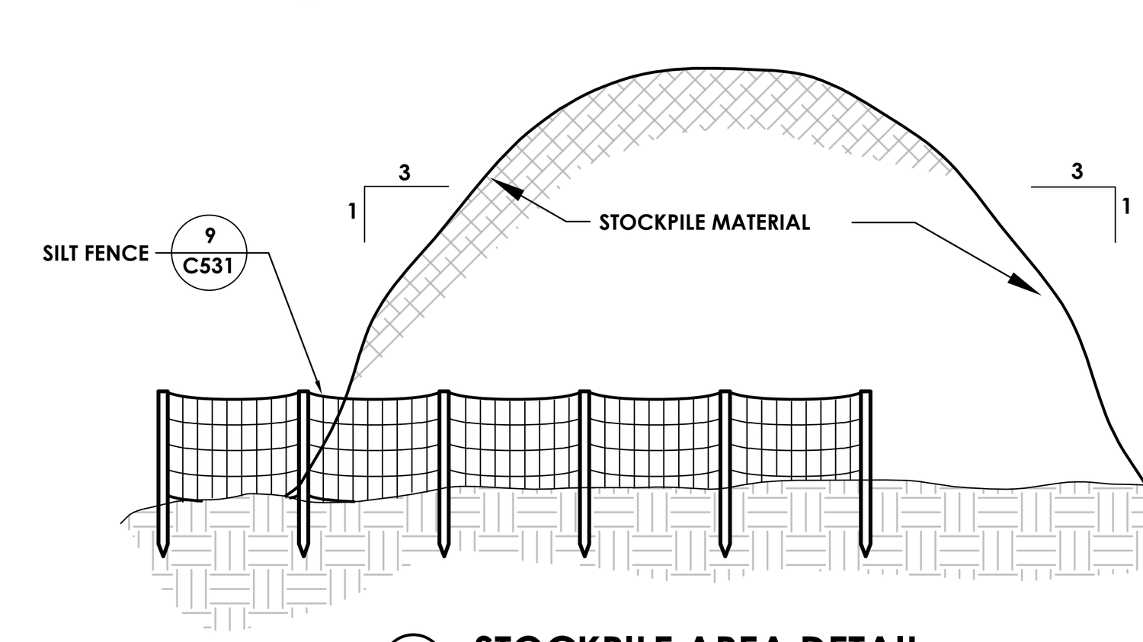
NOTES:

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, 14 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.

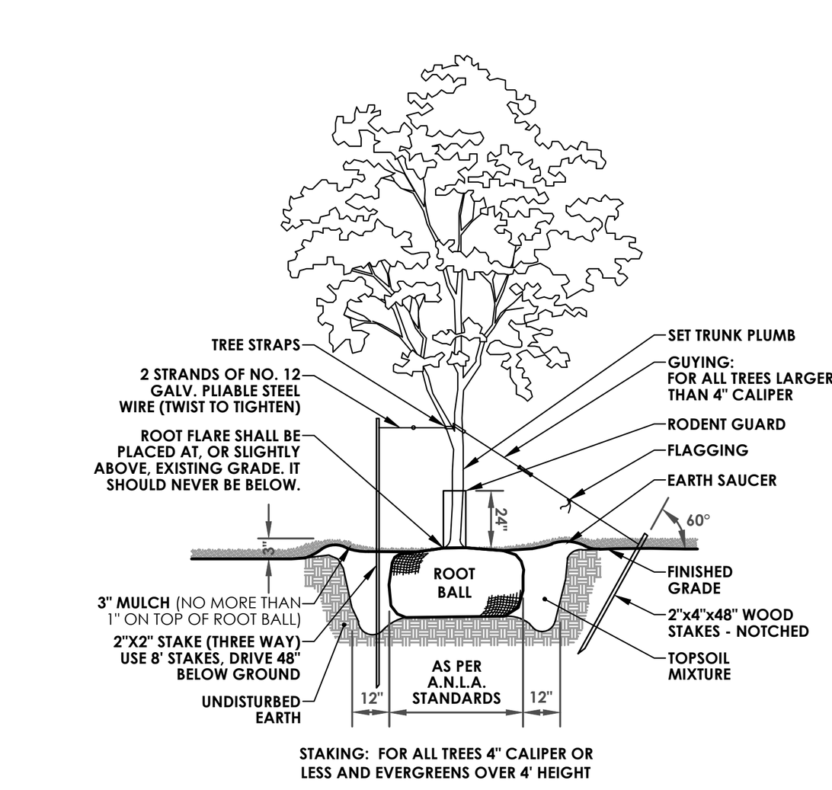
(11) **SILT FENCE DETAIL**
N.T.S.



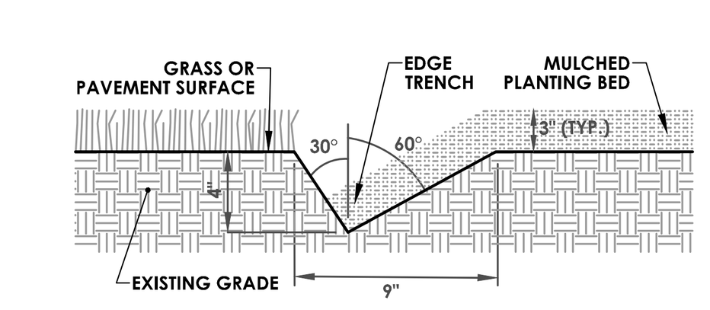
(12) **CONCRETE WASH OUT AREA**
N.T.S.



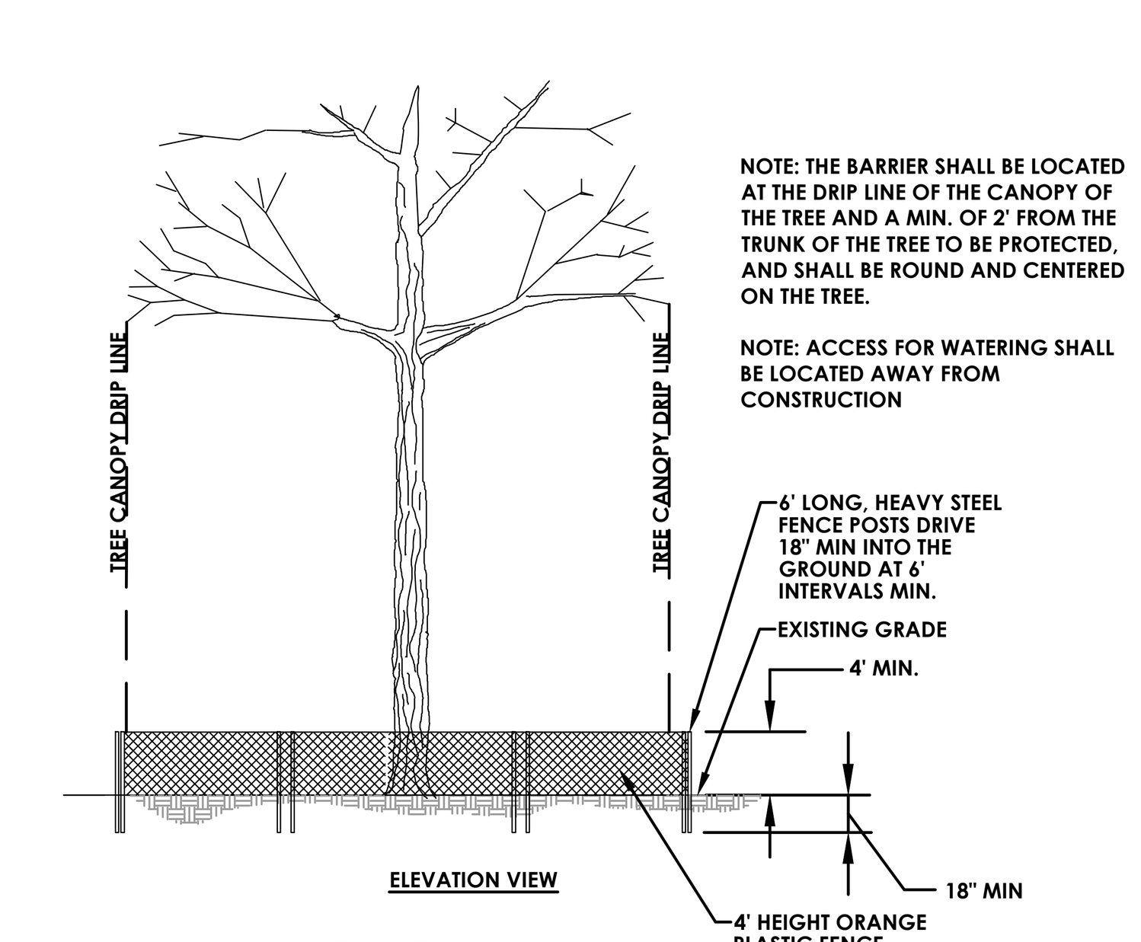
(13) **STOCKPILE AREA DETAIL**
N.T.S.



TREE PLANTING DETAIL
N.T.S.



PLANTING BED EDGE TRENCH
N.T.S.



(14) **TREE PROTECTION DETAIL**
N.T.S.

19 Front St. · Newburgh · New York 12550-7601
845 561 3179
www.csarchpc.com
CSARCH

Consultant
PASSERO engineering architecture
6 Front St. · Newburgh New York 12550-7601

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT IS UNDER THE DIRECTION OF A LICENSED ENGINEER. WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN, SEAL, DATE, AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATIONS. (NYS EDUCATION LAW SECTION 7209-2)

Project Title

BINGHAMTON CITY SCHOOL DISTRICT
THEODORE ROOSEVELT ELEMENTARY SCHOOL
2024 CAPITAL PROJECT

STATE OF NEW YORK · CHRISTOPHER J. LAPORTA · 102592 · LICENSED PROFESSIONAL ENGINEER

EXPIRES 05/31/27

No.	DATE	DESCRIPTION
1	03/30/2026	BID ADDENDUM

Drawn By:	TO
Checked By:	RV
Proj. #:	03-02-00-01-0-010-014
CSArch Proj. #:	215-2402
CD Submission:	03/12/2026

Sheet Title

STORMWATER, EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.

TRES C531