MEMORANDUM

CITY OF WATERTOWN, NEW YORK
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT
245 WASHINGTON STREET, ROOM 305, WATERTOWN, NY 13601
PHONE: 315-785-7741 – FAX: 315-782-9014

TO: Planning Board Members

FROM: Michael A. Lumbis, Planning and Community Development Director

PRIMARY REVIEWER: Geoffrey T. Urda, Planner

SUBJECT: Site Plan Approval – 202 Factory Street and 176 Polk Street

DATE: April 27, 2023

Request: Site Plan Approval to construct a 40-space parking lot at **202 Factory Street and 176 Polk Street,** Parcel Numbers 6-02-206.000 and 6-02-205.000

Applicant: Kevin M. Bamann, P.E. of GYMO, D.P.C. on behalf of Knowlton Technologies, Inc.

Proposed Use: Off-Street Parking Lot

Property Owners: Knowlton Technologies, LLC

Submitted:	
Property Survey: Yes	Preliminary Architectural Drawings: N/A
Site Plan: Yes	Preliminary Site Engineering Plans: Yes
Vehicle and Pedestrian Circulation Plan: Yes	Construction Time Schedule: Yes
Landscaping and Grading Plan: Yes	Description of Uses, Hours & Traffic Volume: Yes

SEQRA: Unlisted

Jefferson County 239-m Review: No

Zoning Information:	
District: Downtown	Maximum Lot Coverage: None
Setback Requirements: F: 0', S: 0', R: 0'	Buffer Zones Required: Yes

Project Overview: The applicant proposes to construct an employee parking lot on the site of the former Mick's Place tavern, directly across Factory Street from the Knowlton Technologies building on Factory Street. The applicant has already obtained a demolition permit for the tavern structure.

Existing Conditions: The primary subject parcel (202 Factory Street) is a vacant lot that was formerly the site of Mick's Place. At the time of this writing, the applicant has begun demolishing the tavern structure. The enclosed site photographs represent the conditions as of the date of this memorandum.

The secondary subject parcel (176 Polk Street) is an existing paved parking lot accessed from Polk Street with a Cherry tree on either side of the entrance and a catch basin at the front of the drive aisle. Both subject parcels and all surrounding parcels are zoned Downtown.

Transportation Demand Management Plan: Section 310-36 of the Zoning Ordinance, which governs the maximum number of off-street surface parking spaces allowed for new development in each district, allows a maximum zero spaces in the Downtown District without a Transportation Demand Management Plan (TDMP). Section 310-36 (E)(4) specifically states:

"Parking lots of any size in the Downtown shall require a TDMP."

This is in line with the District Purpose as stated in Section 310-12:

"Intended to encourage pedestrian activity, the intent of the Downtown District is to cultivate a vibrant public realm and function as a regional employment hub, the Downtown District has the highest density of development with the greatest variety of uses. New infill development should respect the historic character of downtown, reinforce the urban character and emphasize walkability. Buildings are taller than in other parts of the city and parking needs are generally met by off-site lots, whether public or private. On-site parking, where it exists, is behind the building to preserve the historic building pattern and reinforce the pedestrian-oriented nature of downtown."

Section 310-36 of the Zoning ordinance further states:

"The TDMP shall, among other items described below, address the following review criteria:

a. Demonstration that the need for parking cannot reasonably be met through provision of on-street parking or shared parking with adjacent or nearby uses;

b. The proposed development demonstrates that its design and intended uses will continue to support high levels of existing or planned transit and pedestrian activity."

The applicant has submitted the required TDMP as part of their Engineering Report. The applicant states that the proposed project will not generate any new vehicular trips, as Knowlton is not planning to increase its workforce. Rather, Knowlton is seeking to redistribute existing parking demand from public spaces to a private lot. Appendix C of the Engineering Report contains an Existing Parking Utilization Map in which the applicant suggests that there is an employee parking deficit of approximately 36 spaces. The applicant further states that the proposed parking lot will increase the employee spaces on the site from 18 to 40, a net increase of 22 spaces.

While the applicant mentions spillover demand to public parking in the TDMP narrative, the only public spaces specifically identified in the Existing Parking Utilization Map are parallel spaces on Factory Street directly in front of the Knowlton campus. It does not identify the J.B. Wise parking lot or parallel spaces farther east on Factory Street for Knowlton employee utilization and omits them from its calculations.

However, it is noteworthy that the adjacent property to the east on Factory Street is the Watertown Urban Mission/Impossible Dream, and there is value in those spaces being available to visitors of that destination. It is also noteworthy that parking at the J.B. Wise lot would require Knowlton employees to cross two legs of the Mill Street/Black River Parkway/Factory Street intersection on foot, which would require at least one crossing of over 70 feet.

Based on the existing conditions described above, Staff's conclusion is that the applicant's TDMP provides sufficient justification for the proposed parking lot.

Vehicular and Pedestrian Circulation: Vehicular access to the proposed parking lot would be via a driveway connecting to Polk Street, approximately 175 feet south of the intersection with Factory Street. The applicant proposes a 24' wide drive aisle, which is sufficient for two-way internal traffic. The applicant also proposes grassed pavers within the required Landscaping Buffer (discussed below) that will allow cars in the northernmost spaces to perform a turning movement while backing out.

The applicant proposes a new concrete sidewalk at the northwest corner of the site that would connect to the Factory Street sidewalk. This proposed connection would be directly adjacent to the existing crosswalk across Factory Street at the intersection with Polk Street. This existing crosswalk is treated with brick pavers and enjoys the protection of an existing Rectangular Rapid Flash Beacon (RRFB). In addition to the RRFB, Factory Street is only 44 feet wide from curb to curb at this point, and the travel lanes only occupy 28 feet of that width, far less than at the Mill Street crossing discussed in the TDMP section above. This will allow the majority of Knowlton employees using the parking lot to walk safely to the Knowlton campus after leaving their cars. There is also an existing sidewalk along the Polk Street right-of-way for use by employees.

Electric Vehicle Charging and Bicycle Parking: Section 310-37 of the Zoning Ordinance, which governs parking lot standards, requires two electric vehicle (EV) charging ports for every 20 spaces. The applicant is proposing four EV ports to meet this requirement. Knowlton also has existing bicycle parking elsewhere on their campus to meet the bicycle parking standards found in the same section.

Zoning: The Zoning Ordinance allows an Off-Street Parking Lot in the Downtown District with Department Review, with the option for the Planning and Community Development Department to require Planning Commission Approval.

The applicant has worked with Staff over the last several weeks to bring the proposal into conformance with the Zoning Ordinance and meet other City Standards to Staff's satisfaction. However, given the site's prominent location approximately 600 feet from Public Square, Staff has concluded that it is appropriate to exercise the above option and forward this application to the Planning Commission for formal Site Plan Approval.

Knowlton Technologies is also a pre-existing industrial facility, defined in the Zoning Ordinance, as "an industrial facility which existed prior to the adoption of this code." A pre-existing industrial facility is an allowed use-by-right in the Downtown District, meaning the use conforms to the Zoning Ordinance and is not a legal-nonconforming ("grandfathered") use.

Comprehensive Plan: The City's adopted Comprehensive Plan recommends the future land use character area of these parcels as Downtown / Central Business District. The plan describes the Downtown / Central Business District future land use character area as follows:

"This district has the highest density, greatest variety of uses, and includes buildings of regional and historic significance. New infill development should reinforce the urban and historic character. Buildings are taller than in other parts of the City and parking is generally off-site. On-site parking, where it exists, is behind the building to preserve the historic building pattern and reinforce the walkable nature of downtown."

Regarding consistency with the future land use character area, the proposed parking lot is on a corner lot previously occupied by a building that had zero-foot setbacks. This parking lot will also be the only use on the parcel, meaning it will not be behind a building and will be visible from the street.

However, the applicant is proposing 16 trees around the perimeter of the site, in accordance with the Landscaping section of the Zoning Ordinance discussed below. From an urban design perspective, the trees will provide a vertical "answer" to the building across the street (similar to the trees on State Street across from the Marcy Building) and in the summer will partially shield the parking lot from view from the street. Additionally, the location will be safer for Knowlton employees to walk to work from than the J.B. Wise lot. This proposal is in harmony with the Comprehensive Plan.

Storm Water and Drainage: The City Engineering Department has no significant concerns regarding site drainage or storm water implications. The area proposed for disturbance is less than one acre so a Stormwater Pollution Prevention Plan (SWPPP) is not required. The proposed site plan will actually reduce impervious area with the addition of the landscaped buffer zones and rain garden.

Sections 310-39 of the Zoning Ordinance identifies low impact development parking lot standards and Section 310-40 identifies application requirements for these standards that the Planning Commission is tasked with enforcing. The applicant has worked with Planning Staff prior to this formal submission to the Planning Commission to bring the proposal up to these standards to Staff's satisfaction.

Lighting: The applicant submitted a photometric plan that includes a series of four overhead light fixtures around the perimeter of the proposed lot. All light spillage is within acceptable parameters.

Landscaping: Section 310-83 of the Zoning Ordinance requires a 15-foot landscaped strip along all Rights-of-Way in the Downtown District, unless a building utilizes a setback of 0-to-15 feet, in which case any available space between the building and the ROW shall be landscaped. Since there is no building proposed for this project, the full 15-foot requirement applies. The proposed site plan meets this 15-foot width requirement along both the State and Polk Street ROWs.

Additionally, Section 310-83 requires the following for Exterior Parking Lot Landscaping

"Within the perimeter landscaped strip, one (1) large deciduous tree (2" DBH minimum) shall be provided every forty (40) linear feet or one (1) small to medium deciduous tree (1.5" DBH minimum) shall be provided every twenty (20) linear feet or one (1) large coniferous tree (6' minimum) shall be provided every twenty (20) linear feet."

and the following for Interior Parking Lot Landscaping:

"Interior parking lot trees and landscaping is required in addition to the landscaped strip. Trees shall be provided in each parking lot at a minimum average density of one (1) large deciduous tree (two-inch DBH) for each fifteen (15) parking spaces, or any fraction thereof."

The proposed site plan meets the above requirements for the entire perimeter except for the Polk Street side, where a proposed rain garden will occupy most of a 65-foot gap between trees and the south side abutting the neighboring property at 154 Polk Street where the existing condition is already surface parking area paved to the property line. Interior parking lot trees are provided on three islands or bump out areas located in the southern portion of the site. Additionally, the applicant proposes grass pavers within the required buffer on the north side of the lot, where a turning bay is necessary for cars backing out of the northernmost spaces on either side of the drive aisle. These grass pavers will allow the applicant to meet the intent of the buffering Code while simultaneously allowing safe egress from these two spaces.

As the City will require the owner will to permanently maintain the landscaping in a healthy growing condition and assume responsibility for replacing any plant material that dies after planting, the applicant shall add a topsoil detail and note to the plan that indicates a minimum topsoil depth to be provided throughout the full width and length of the landscape setback areas. Staff recommends a minimum topsoil depth of 16 inches. The plan, as submitted, includes a detail for the rain garden area that depicts the soil media to be installed at a depth of 18".

SEQR: This project is considered an Unlisted Action under the State Environmental Quality Review Act (SEQRA). The applicant has submitted a completed Part 1 of a Short Environmental Assessment Form (EAF). The Planning Commission, as Lead Agency, must complete Part 2 of the Short EAF.

Permits: The applicant must obtain the following permits and other documentation, minimally, prior to construction: General City Permit for work within the Right-of-Way (ROW) and a Zoning Compliance Certificate.

Summary: The following should be included in the motion to recommend approval:

1. The applicant shall add a topsoil detail and note to the plans that require a minimum topsoil depth of 16" to be provided throughout the full width and length of the landscape setback areas.

2. The Planning Commission must complete Part 2 of the SEQR Short EAF and make a determination of significance.

3. The applicant must obtain, minimally, the following permits prior to construction: General City Permit for work within the Right-of-Way (ROW) and a Zoning Compliance Certificate.

cc: Michael Delaney, City Engineer
Kevin M. Bamann, P.E., GYMO, D.P.C., 18969 U.S. Route 11, Watertown, NY 13601.
Fred Goutremout, Knowlton Technologies, LLC, 213 Factory Street, Watertown, NY 13601

Site Photos

Above: A view looking north across Factory Street at the project site with the former Mick's Place structure partially demolished

Below: A view looking east across Polk Street at the project site with the former Mick's Place structure partially demolished.

Above: A view of the existing Rectangular Rapid Flash Beacon (RRFB) and enhanced crosswalk across Factory Street with brick pavers. The RRFB on the south side does not appear in these photos as it was temporarily removed during demolition.

Below: A view looking east across Polk Street of the existing surface parking area at 176 Polk Street, with the existing pavement already extending to the south property line with 154 Polk Street.

Below: A satellite view of the two parcels that will make up the proposed parking lot.

GYMO
Architecture ■ Construction Management
Engineering ■ Land Surveying

Patrick J. Scordo, PE
Matthew J. Cervini, PE
Scott W. Soules, AIA
Brandy W. Lucas, MBA
Gregory F. Ashley, PLS
Peter S. Clough
Kevin M. Bamann, PE
Zachary P. Scordo

18969 US Route 11
Watertown, New York 13601

Tel: (315) 788-3900
Fax: (315) 788-0668

E-mail: web@gymodpc.com

April 18, 2023

Mr. Michael Lumbis
Planning & Community Development Director
City of Watertown
245 Washington Street
Watertown, NY 13601

Re: Site Plan Approval – Knowlton Technologies Parking Lot Expansion

File: 2022-076

Dear Mr. Lumbis:

On behalf of Knowlton Technologies ("Knowlton"), GYMO Architecture, Engineering, & Land Surveying, D.P.C. ("GYMO") is submitting for site plan approval for the Knowlton Technologies Parking Lot Expansion Project.

The project entails the conversion of 202 Factory Street, formerly the Mick's Place Bar, to a parking lot that will be used to serve Knowlton's employees and guests. Knowlton currently owns property at 176 Polk Street, directly behind the aforementioned property, where they utilize a small parking lot for employees to park in (18 spaces). The 202 Factory Street and 176 Polk Street properties will together serve as a larger parking lot (40 proposed spaces) for Knowlton's use.

The former Mick's Place building is planned to be torn down in the spring or summer of 2023, with the parking lot planned to be constructed shortly thereafter.

Additionally, please note that it is our understanding that the proposed monument sign is not an allowed use in the zoning district. It is our intent to go to the zoning board of appeals to gain a zoning variance for this sign. Further information and detailing on the sign will be provided to the zoning board.

GYMO is submitting fifteen (15) collated sets of the following documents regarding the above mentioned project for Site Plan Approval.

- City of Watertown Site Plan Application;
- Engineering Report;
- Civil Drawings, (four 24"x36" sets and eleven 11"x17" sets);
- Revised Part 1 of Short EAF, and
- Minor Site Plan Application Fee

Upon completion of your review, GYMO will provide final stamped drawings and plans. If you have any questions or require any additional information, please do not hesitate to contact our office at your earliest convenience.

Sincerely,
GYMO Architecture, Engineering, and Land Surveying, D.P.C.

Kevin M Bamann, P.E.
Senior Project Engineer

Enclosure;
CC: Matthew Cervini, PE GYMO
Fred Goutremout – Knowlton with enclosures (electronically)

City of Watertown

SITE PLAN APPROVAL APPLICATION FORM

City of Watertown, Planning and Community Development Dept.
245 Washington Street, Room 305, Watertown, NY 13601
Phone: 315-785-7741 Email: planning@watertown-ny.gov

Received:

Please Note: The Site Plan Approval Application form is for projects where the building or parking area coverage of the lot will increase by more than 2,500 square feet.

Please provide responses for all sections and submit all required materials as noted on Page 2. Failure to submit all required information by the submittal deadline may result in Staff not placing your request on the agenda for the upcoming Planning Board meeting.

PROPERTY INFORMATION:

PROPOSED PROJECT NAME: Knowlton Technologies Parking Lot Expansion

TAX PARCEL NUMBER: 6-02-206.000 & 6-02-205.000

PROPERTY ADDRESS: 202 Factory Street & 176 Polk Street

ZONING DISTRICT: Downtown

APPLICANT INFORMATION:

NAME: Knowlton Technologies LLC (Contact: Fred Goutremout)

ADDRESS: 213 Factory Street

Watertown NY, 13601

PHONE NUMBER: 315-782-0600

E-MAIL ADDRESS: fgoutremout@knowlton-co.com

PROPERTY OWNER INFORMATION (if different from applicant):

NAME:

ADDRESS:

PHONE NUMBER:

E-MAIL ADDRESS:

ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT INFORMATION:

NAME: GYMO Architecture, Engineering, & Land Surveying, D.P.C.

ADDRESS: 18969 US Route 11

Watertown NY, 13601

PHONE NUMBER: 315-788-3900

E-MAIL ADDRESS: kbamann@gymodpc.com

REQUIRED MATERIALS:

** The following drawings with the listed information **ARE REQUIRED, NOT OPTIONAL**. If the required information is not included and/or addressed, Planning Staff **will not** process the Site Plan Application.

All of the following drawings **must** be adequately dimensioned, including radii and must use darker line work and text for proposed features than for existing features.

☑ **COVER LETTER:** Must clearly and fully explain the proposed project in sufficient detail.

☑ **BOUNDARY and TOPOGRAPHIC SURVEY:** Depict existing features as of the date of the Site Plan Application. A Professional Land Surveyor licensed and currently registered to practice in the State of New York must perform the survey and create the map. **At least one copy** must contain the surveyor's original PLS wet stamp and an original signature. The rest may be copies thereof. The survey drawing **must** depict and label all of the following:

- **All** existing features and utilities on and within 50 feet of the subject property
- **All** existing property lines (bearings and distances), margins, acreage, zoning, easements, right-of-ways, existing land use, reputed owner, adjacent reputed owners and tax parcel numbers
- One-foot contours are with appropriate spot elevations
- North arrow and graphic scale
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **DEMOLITION PLAN** (if applicable)

- Depict and label **all** existing features on and within 50 feet of the subject property and (using darker text) all items proposed for demolition.

☑ **SITE PLAN:** The drawing must clearly label **all** proposed features as "proposed" and use darker line work and text for all proposed features than for existing features. It must also include a reference to the coordinate system used (NYS NAD83-CF preferred). In addition, the drawing **must** depict and label all of the following:

- **All** proposed **above** ground features
- **All** proposed easements and right-of-ways
- Land use, zoning, and tax parcel number
- Proposed parking and loading spaces, including all required ADA accessible spaces
- Proposed snow storage areas
- Refuse Enclosure Area (Dumpster), if applicable. **Please note:** Section 161-19.1 of the Zoning Ordinance states, "No refuse vehicle or refuse container shall be parked or placed within 15 feet of a party line without the written consent of the adjoining owner, if the owner occupies any part of the adjoining property."
- North arrow and graphic scale

☑ **GRADING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **below** ground features, including elevations and inverts
- **All** proposed **above** ground features, including easements and right-of-ways
- One-foot existing contours (shown dashed and labeled with appropriate spot elevations)
- One-foot proposed contours (shown and labeled with appropriate spot elevations)
- Sediment and Erosion control, unless separate drawings are included as part of a Stormwater Pollution Prevention Plan (SWPPP).
- All elevations are North American Vertical Datum of 1988 (NAVD88).

☑ **UTILITY PLAN:** This drawing must include a note stating, "All water main and service work must be coordinated with the City of Watertown Water Department. The Water Department requirements supersede all other plans and specifications provided." It must also depict and label **all** of the following:

- **All** proposed above and below ground features
- **All** existing above and belowground utilities, including water, sanitary water, stormwater, electric, gas, telephone, cable, fiber optic, etc.
- **All** existing and proposed easements and right-of-ways.

☑ **LANDSCAPING PLAN:** This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- **All** proposed trees, shrubs, other plantings and other proposed landscaping additions, keyed to a plant schedule that includes the scientific name, common name, size, quantity, etc. **Please note:** For additional landscaping requirements where nonresidential districts and land uses abut land in any residential district, please refer to Section 310-59, Landscaping of the City's Zoning Ordinance.
- **The Site Plan complies with and meets acceptable guidelines set forth in Appendix A - Landscaping and Buffer Zone Guidelines (August 7, 2007).**

☑ **VEHICULAR AND PEDESTRIAN CIRCULATION PLAN**

- Depict all vehicular **and** pedestrian traffic circulation, including a delivery or refuse vehicle and a City fire truck entering and exiting the property.
- Sidewalks within the City Right-of-Way **must** meet Public-Right-of-Way (PROWAG) standards.
- **The Site Plan is consistent with and, wherever possible, incorporates principles set forth in Appendix B – City of Watertown Complete Streets Policy (January 17, 2017).**

☑ **PHOTOMETRIC PLAN** (if applicable): This drawing must depict and label **all** of the following:

- **All** proposed **above** ground features
- Photometric spot elevations or labeled photometric contours of the property. **Please note:** Light spillage across **all** property lines shall not exceed 0.5 foot-candles.

☑ **CONSTRUCTION DETAILS and NOTES:**

- Provide all details and notes necessary to complete the project including, but not limited to, landscaping, curbing, catch basins, manholes, water line, pavement, sidewalks, trench, lighting, trash enclosure, etc.
- Provide maintenance and protection and traffic plans and notes for all required work within City streets including driveways, water laterals, sanitary laterals, storm connections, etc.
- The drawings must include the following note: "All work to be performed within the City of Watertown margin will require sign-off from a Professional Engineer, licensed and currently registered to practice in the State of New York, that the work was built according to the approved site plan and applicable City of Watertown standards. Compaction testing will be required for all work to be performed within the City of Watertown margin and must be submitted to the City of Watertown Codes Department."

☐ **PRELIMINARY ARCHITECTUAL PLANS** (if applicable): These plans must include **all** of the following for proposed buildings: Floor plan drawings, including finished floor elevations, exterior elevations including exterior materials and colors, as well as roof outlines depicting shape, slope and direction. ***N/A - No Buildings Proposed***

☑ **ENGINEERING REPORT**

**** The engineering report at a minimum must include the following:**

- Project location and description
- Existing and proposed sanitary sewer flows and summary
- Water flows and pressure
- Storm Water Pre and Post Construction calculations and summary
- Traffic impacts
- Lighting summary
- Landscaping summary

☑ **COMPLETED SEQR ENVIRONMENTAL ASSESSMENT FORM:** (Contact us if you need help choosing between the Short EAF and the Full EAF). The Complete EAF is available online at: http://www.dec.ny.gov/permits/6191.html

☑ **GENERAL INFORMATION**

- **All** items must include a valid stamp and an original signature by a Professional Engineer, Architect, Landscape Architect, or Surveyor licensed and currently registered to practice in the State of New York.

- If required, submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the City of Watertown Engineering Department for review to obtain an MS4 SWPPP Acceptance Form. ***N/A - Disturbance under 1 Acre***

Post Construction SWPPP Requirements to Complete:

In accordance with City Code Section 260, provide the following:

- *Submit a detailed as-built topographic and boundary survey of the site with all stormwater practices.*
- *Perform and submit results of insitu infiltration testing, updated drainage area maps and hydraulic calculations in a comprehensive Engineering Report based on As-Built Conditions.*
- *Submit a detailed post construction Maintenance Plan for all Stormwater Management Practices (SMP's) and provide a Maintenance Agreement with irrevocable letter of credit for approval. Maintenance Agreement shall be filed at the County Clerk's Office as a deed restriction on the property.*

- ** If required, a copy of all submittals sent to the New York State Department of Environmental Conservation (NYSDEC) for the sanitary sewer extension permit will also be sent to the City of Watertown Engineering Department.

- ** If required, a copy of all submittals sent to the New York State Department of Health (NYSDOH) will also be sent to the City of Watertown Engineering Department.

- ** When NYSDEC or NYSDOH permitting is required, the property owner/applicant shall retain a licensed Professional Engineer to perform inspections of the proposed utility work and to certify the completed works were constructed in substantial conformance with the approved plans and specifications.**

- Signage is not approved as part of this submission. It requires a Sign Permit from the City Code Enforcement Bureau. See Section 310-52.2 of the Zoning Ordinance.

- For non-residential uses, the applicant must include the proposed Hours of Operation.

OPTIONAL MATERIALS:

☐ **PROVIDE AN ELECTRONIC (.DWG) COPY OF THE SITE PLAN WITH AS-BUILT REVISIONS.** This will assist the City in keeping our GIS mapping up-to-date.

SUBMITTAL INSTRUCTIONS:

☑ Submit 15 complete collated sets of all required materials, addressed to:

Michael A. Lumbis, Planning and Community Development Director
City of Watertown
245 Washington Street, Room 305
Watertown, NY 13601

If the application requires Jefferson County Planning Board review, then the applicant must submit 16 "sets." Planning Staff will inform the applicant if this is necessary.

☑ Submissions must be collated and properly folded.

☑ If the applicant is not the property owner, the submission must include a signature authorization form or letter signed by the owner authorizing the applicant to apply on behalf of the owner.

☑ For any item(s) not checked in the Site Plan Approval Checklist, attach an explanation and comments.

☑ Provide an electronic copy of the entire submission in the form of a single, combined PDF file of the entire application, including cover letter, plans, reports, and all submitted material.

☑ Submit the required Application Fee

$150 for Site Plan Minor

$250 for Site Plan Major (any proposal to disturb more than 1 acre represents a Site Plan Major)

SIGNATURE

I certify that the information provided above is true to the best of my knowledge.

Applicant's name (please print) Knowlton Technologies, LLC (Contact: Fred Goutremout)

Applicant's Signature  Date: 04/18/23

Meeting Information: The Planning Board normally meets at 3:00 p.m. on the first Tuesday of every month in Council Chambers at City Hall, 245 Washington Street. The application deadline is 14 days prior to the scheduled meeting date. Planning Board action does not represent final approval, as the Planning Board only votes to make a recommendation to City Council, which holds the sole authority to grant Site Plan Approval.

Occasionally, due to holidays or other reasons, meetings may occur on other dates and/or times. The City will announce any changes to meeting dates in advance on its website at www.watertown-ny.gov. Planning Staff *strongly* recommends scheduling a pre-application meeting prior to submitting a Site Plan Application. The entire site plan application process typically takes four-to-six weeks, depending on whether the application requires Jefferson County Planning Board review.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

Knowlton Technologies Parking Lot Expansion

Project Location (describe, and attach a location map):

202 Factory Street & 176 Polk Street, Watertown NY 13601

Brief Description of Proposed Action:

Conversion of 202 Factory Street from an existing building to an asphalt parking lot. Reconstructing parking lot on 176 Polk Street (adjoined to 202 Factory Street) with new asphalt to adjoin with 202 Factory Street.

Name of Applicant or Sponsor:	Telephone: 315-782-0600
Knowlton Technologies LLC	E-Mail:

Address:

213 Factory Street

City/PO:	State:	Zip Code:
Watertown	NY	13601

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:	☑	☐

3. a. Total acreage of the site of the proposed action? 0.50 acres
   b. Total acreage to be physically disturbed? 0.50 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 0.50 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☑ Industrial ☑ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☑

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☑	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☑
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☑

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☑

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☑	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☑	☐

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☐	☑
Buildings nearby to the project area along State Street are listed as Historic Places, however, the existing building(s) on site are not.	☐	☑
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☑	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____		
Black River is located across Factory Street. No Disturbance is proposed to this or any other wetlands or waterbodys as part of this project. _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Long-eared Bat	☐	☑
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☑
If Yes, briefly describe: Directed to Factory Street and Polk Street Storm Sewer System owned and maintained by the City of Watertown		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: Remediation was done on an off-site portion of Factory Street that is now a vacant park. No portions of the current project site were subject to remediation	☐	☑

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

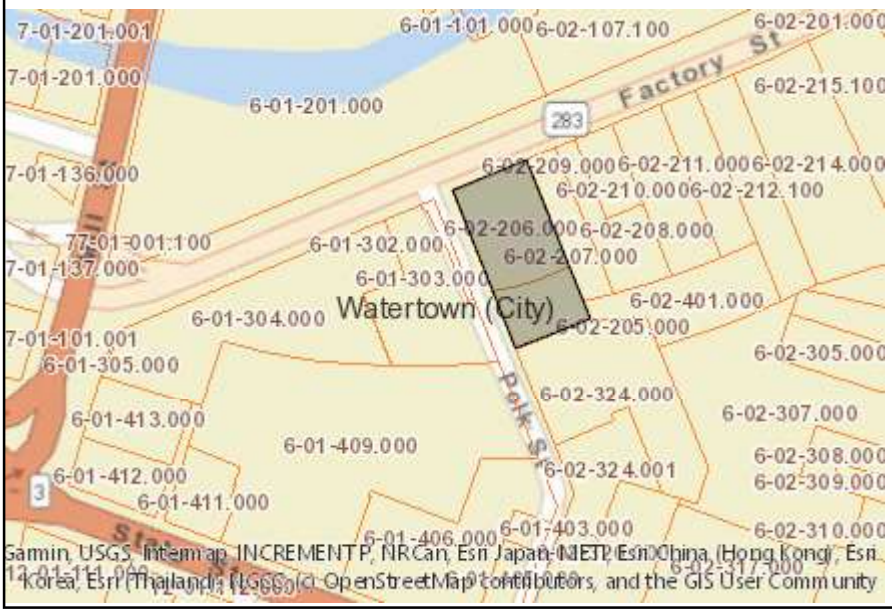
Applicant/sponsor/name: Knowlton Technologies LLC Date: 04-18-2023

Signature: Kevin M. Baum (signed on behalf of owner) Title: Engineer

PRINT FORM

EAF Mapper Summary Report

Monday, February 20, 2023 3:50 PM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Yes
Part 1 / Question 12b [Archeological Sites]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Long-eared Bat
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	Yes

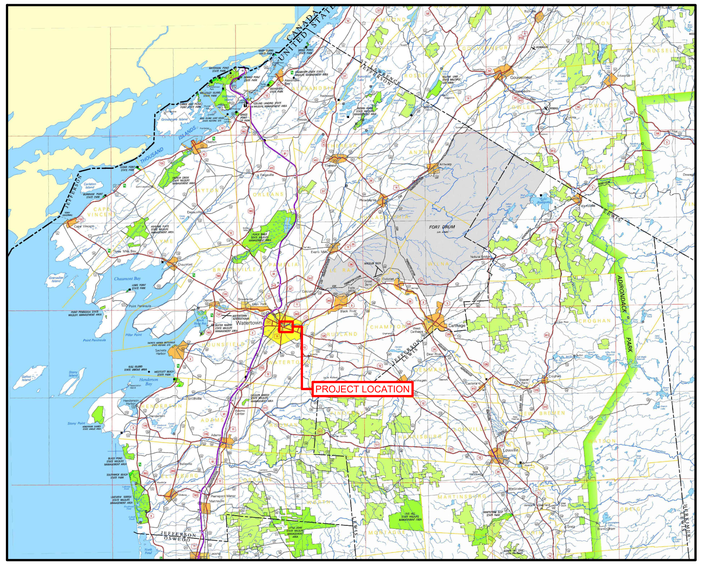
KNOWLTON TECHNOLOGIES
PARKING LOT EXPANSION

202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, COUNTY OF JEFFERSON, STATE OF NEW YORK
DATED: APRIL 18, 2023
SITE PLAN REVIEW

PREPARED BY: GYMO DPC - 18969 US ROUTE 11 WATERTOWN, NY 13601

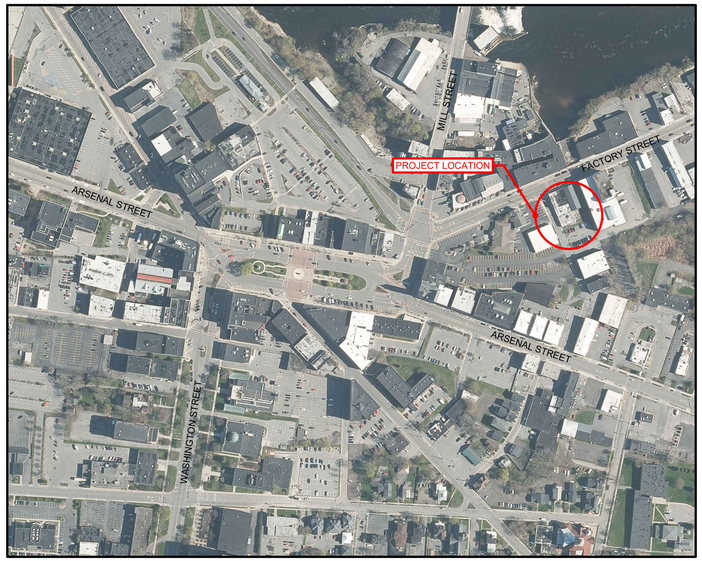
INDEX OF DRAWING:

CIVIL ENGINEERING SHEETS



VICINITY MAP - JEFFERSON COUNTY

NOT TO SCALE



LOCATION MAP

NOT TO SCALE

PREPARED BY:

GYMO
Architecture
Engineering
Land Surveying

WWW.GYMODPC.COM
18969 US Route 11 Watertown, NY 13601
315.788.3900

KEVIN M. BAMANN - PE
NEW YORK STATE REGISTRATION NO. 106044

PREPARED FOR:

KNOWLTON TECHNOLOGIES, LLC
Engineered Composites & Media
TOGETHER ... TURNING CHALLENGES INTO VALUE

KNOWLTON TECHNOLOGIES, LLC
213 FACTORY STREET
WATERTOWN , NY 13601
CONTACT:
MR. FRED GOUTREMOUT - MANUFACTURING ENGINEERING MANAGER
PHONE: (315) 755-2667

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

2022-076 - APRIL 18, 2023
KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, COUNTY OF JEFFERSON, STATE OF NEW YORK

GYMO
Architecture ■ Engineering ■ Surveying

GENERAL CONSTRUCTION NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN. PRIOR TO CONSTRUCTION CONTACT UNDERGROUND UTILITIES CALL CENTER OF NEW YORK FOR EXACT LOCATION OF ALL UNDERGROUND UTILITIES, (1-800-962-7962). CONTRACTOR IS RESPONSIBLE FOR LOCATING AND WORKING WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
2. THE TOPOGRAPHIC AND PLANIMETRIC SURVEY WAS PERFORMED BY GYMO, DPC IN THE FALL AND WINTER OF 2022.
3. ALL OUT-OF-SCOPE AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS WILL BE RESTORED TO CONDITIONS EQUAL TO OR BETTER THAN THAT PRIOR TO CONSTRUCTION. OUTSIDE OF PROPERTY BOUNDARIES AND EASEMENT AREAS THE CONTRACTOR IS REMINDED TO OBTAIN WRITTEN AUTHORIZATION TO USE PRIVATE PROPERTY AND ASSUMES ALL LIABILITY WHEN ACCESSING THOSE PROPERTIES.
4. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE CAUSED BY HIS OPERATIONS TO EXISTING FACILITIES. ALL DAMAGE TO THE EXISTING FACILITIES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST.
5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE CHARACTERISTICS AND EXTENT OF SUBSURFACE SOILS, ROCK, WATER TABLE LEVELS, ETC., PRIOR TO BIDDING.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, SECURITY, BONDS, FEES, AND PAYMENTS TO OBTAIN SAID PERMITS WHERE APPLICABLE.
7. WHEN THE PERFORMANCE OF THE CONTRACTOR'S WORK REQUIRES THE INTERRUPTION OF UTILITY SERVICES, HE/SHE SHALL ISSUE A 48 HOUR PRIOR NOTICE TO THE GOVERNING MUNICIPALITY.
8. A SWPPP PLAN IS NOT NECESSARY FOR THIS PROJECT
9. SITE CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROL AND DUST CONTROL.
10. UPON COMPLETION OF ESTABLISHMENT OF VEGETATION, ALL AREAS RECEIVING RUNOFF FROM THIS SITE SHALL BE CLEANED OF DEBRIS. ONLY AT THIS TIME SHALL THE EROSION AND SEDIMENTATION CONTROL MEASURES BE REMOVED.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAKING SURE THAT ALL LOCAL ROADS, DRIVEWAYS, INTERSECTIONS, PARKING LOTS, AND ADJOINING PROPERTIES ARE CLEAR OF DEBRIS AND MUD ON A DAILY BASIS DURING THE ENTIRE CONSTRUCTION PROCESS.
12. A LICENSED LAND SURVEYOR SHALL BE RETAINED FOR ALL UTILITY AND FIELD STAKEOUT AND AS-BUILTS AT THE CONTRACTORS EXPENSE.
13. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION UNTIL ESTABLISHMENT OF VEGETATIVE COVER. RUN-OFF CONTAINING SEDIMENTS FROM DISTURBED AREAS OF THE SITE SHALL NOT BE ALLOWED DIRECTLY OFF SITE OR INTO NATURAL STREAM CHANNELS.
14. ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR. CONSTRUCTION ACTIVITIES ADJACENT TO TREES SHALL BE CONDUCTED TO REDUCE THE IMPACT TO TREES TO THE MAXIMUM EXTENT PRACTICAL. ANY DAMAGE TO EXISTING TREES SHALL BE REPAIRED OR THE TREE REPLACED, AS DIRECTED BY THE OWNER AT THE CONTRACTORS EXPENSE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING, GRUBBING, CUTTING AND DISPOSING OF VEGETATION, TREES AND DEBRIS IN A NYSDEC ACCEPTABLE LOCATION.
16. DISPOSAL OF ALL CONSTRUCTION DEMOLITION DEBRIS SHALL BE IN ACCORDANCE WITH THE LOCAL AND 6 NYS CRR PART 360, PLUS OTHER APPLICABLE CODES. DISPOSAL SHALL BE AT THE CONTRACTOR'S EXPENSE.
17. CONTRACTOR SHALL PERFORM ALL NECESSARY EARTHWORK, INCLUDING THE STRIPPING, STOCKPILING AND REPLACING OF TOPSOIL IN ACCORDANCE WITH THE PLANS. EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE.
18. EXCAVATIONS SHALL BE TO DEPTHS SHOWN ON DRAWINGS. ALL UNSTABLE OR UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REMOVED TO SUCH DEPTH AS REQUIRED TO PROVIDE SUFFICIENT BEARING CAPACITY. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
19. COMPACTION OF PIPE BEDDING AND BACKFILL MATERIAL SHALL BE BY MEANS OF HAND-GUIDED POWER DRIVEN OR DRUM-TYPE OR PLATE TAMPERS. BACKFILLING SHOULD PROCEED IN ACCORDANCE WITH LIFT THICKNESS AND COMPACTION REQUIREMENTS AS SHOWN ON THE DRAWINGS. UNLESS OTHERWISE NOTED ON THE DRAWINGS, COMPACTION REQUIREMENTS REFER TO PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM STANDARD D - 1557 MODIFIED PROCTOR. CARE SHALL BE TAKEN TO SHAPE PIPE BEDDING TO FIT THE LOWER PART OF THE PIPE. BACKFILLING AND COMPACTION SHOULD PROGRESS EVENLY ALONG THE PIPE SIDEWALLS AND TO THE TOP OF THE PIPE BEDDING.
20. COMPACTION SHALL BE 90% MAXIMUM DRY DENSITY IN GRASS AREAS, 95% MAXIMUM DRY DENSITY IN GRAVEL AREAS, AND 98% MAXIMUM DRY DENSITY UNDER AND AROUND STRUCTURES. MAXIMUM DRY DENSITY SHALL BE AS DETERMINED BY ASTM - D1557 MODIFIED PROCTOR. THE CONTRACTOR SHALL HIRE AN INDEPENDENT TESTING AGENCY TO PERFORM TESTING AND PROVIDE THE RESULTS TO THE OWNER FOR REVIEW PRIOR TO FINAL PAYMENT.
21. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OF DIMENSIONS, ELEVATIONS AND LOCATIONS DURING PRECONSTRUCTION FIELD VERIFICATION, SUCH INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR VERIFICATION OR MODIFICATION OF THE PLANS.
22. THE CONTRACTOR SHALL DELIVER TO THE OWNER, AN AS-BUILT SURVEY, SIGNED AND SEALED BY A LAND SURVEYOR OR ENGINEER LICENSED IN THE STATE OF NEW YORK. AS-BUILT RECORD DRAWINGS SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING INFORMATION AS WELL AS ALL REQUIREMENTS OF THE SPECIFICATION:

* RECORD OF ALL UTILITIES ENCOUNTERED IN TRENCH EXCAVATION. INFORMATION SHALL INCLUDE DIAMETER OF UTILITY, DEPTH OF BURIAL AND LOCATION WITH REFERENCE TO NEAREST STRUCTURE SHOWN ON DRAWINGS. THIS INFORMATION SHALL BE KEPT CURRENT ON A WEEKLY BASIS. FAILURE TO DO SO MAY RESULT IN WITHHOLDING OF PAYMENTS.
* DISTANCE TIES TO ALL BENDS, VALVES, CORPORATION STOPS, WYES, MANHOLES, CLEAN OUTS, CATCH BASINS, ETC.
* UTILITY REPAIRS, SIDEWALK, AND DRIVEWAY REPLACEMENTS CENTERLINE.
* RIM AND INVERT ELEVATIONS AND HORIZONTAL LOCATION OF MANHOLES, CATCH BASINS, AND CLEANOUTS.
* STATIONS OF BENDS AND VALVES.
* FINAL GRADE ELEVATIONS TO NEAREST 0.1-FOOT AND FINISHED FLOOR ELEVATIONS.
* DENOTED BENCH MARK REFERENCES USED.
* PERIODIC OFFSETS
* NOTATION FROM THE ENGINEER OR SURVEYOR THAT THE GRADES ARE IN CONFORMANACE WITH THE SITE PLANS.
* RECORD DETAILS NOT SHOWN ON THE ORIGINAL CONTRACT DOCUMENTS. ANY FIELD CHANGES OF DIMENSIONS AND DETAILS AND ANY CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
* CERTIFICATE OF SUBSTANTIAL COMPLETION SHALL NOT BE ISSUED UNTIL AS-BUILT INFORMATION IS ACCEPTABLE.
* CONTRACTOR SHALL FURNISH AS-BUILT DATA ON PLAN SHEETS
* CONTRACTOR SHALL PROVIDE TWO (2) SETS OF FINAL COMPLETE RECORD DRAWINGS AND A PDF COPY OF THE FINAL COMPLETE RECORD DRAWINGS

24. CONTRACTOR SHALL PROVIDE SATISFACTORY DEWATERING AND DRAINAGE OF EXCAVATIONS. SEE DEWATERING AND DRAINAGE IN THE TECHNICAL SPECIFICATIONS FOR MORE DETAILED INFORMATION.
25. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION OPERATIONS WITH ANY AND ALL OTHER CONSTRUCTION ACTIVITIES WHICH MAY BE OCCURRING SIMULTANEOUSLY IN THE VICINITY OF THE SITE.
26. EXCAVATIONS AND TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH STATE OF NEW YORK INDUSTRIAL CODE, RULE 23, O.S.H.A. TITLE 29, PART 1926, NEW YORK STATE DEPARTMENT OF LABOR, TITLE 12, PART 23, AND ALL OTHER APPLICABLE SAFETY STANDARDS AND CODES.
27. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF AND TO CONFORM WITH ALL RULES AND RESPONSIBILITIES ASSOCIATED WITH PROVIDING A SAFE WORK PLACE. THE CONTRACTOR MUST COMPLY WITH OSHA 29 CFR PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION.
28. THE CONTRACTOR SHALL POST WARNING SIGNS AT ALL APPROACHES TO THE PROJECT AND AT CONSTRUCTION ENTRANCES. THE CONTRACTOR TO PROVIDE FLAGMEN WHEN NECESSARY.
29. ALL R.O.W. CONNECTION AND/OR ADJACENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH NYSDOT STNADARDS AND SPECIFICATIONS. ALL R.O.W. WORK SHALL BE IN ACCORDANCE WITH NYSDOT MAINTENANCE AND PROTECTION OF TRAFFIC REGULATIONS, INCLUDING FLAGMEN, BARRICADES, WARNING SIGNS/LIGHTS, ETC., WHERE WARRANTED.
30. THE CONTRACTOR SHALL SUBMIT ALL NECESSARY TRAFFIC CONTROL PLANS TO THE ENGINEER AND THE CITY OF WATERTOWN ENGINEER PRIOR TO CONSTRUCTION ACTIVITIES.
31. SURCHARGE LOADS FROM EXCAVATED MATERIAL, BACKFILL MATERIAL, EQUIPMENT, TRAFFIC LOADING ETC., MUST BE KEPT AWAY A DISTANCE EQUAL TO THE DEPTH OF EXCAVATION.
32. TRAFFIC OFFSET SHALL BE MAINTAINED AT A MINIMUM OF TEN FEET FROM ANY OPEN EXCAVATION TO AVOID UNWANTED SURCHARGE LOADS.
33. THE CONTRACT DOCUMENTS ALWAYS SUPERCEDE SUBMITTALS, SHOP DRAWINGS, OR ANY "OTHER" DOCUMENTS UNLESS INDICATED OTHERWISE BY THE ENGINEER. IN THE EVENT OF "OTHER" DOCUMENTS CONFLICTING WITH THE CONTRACT DOCUMENTS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BRING IT TO THE ATTENTION OF THE ENGINEER AS SOON AS IT IS DISCOVERED.
34. THE DETAIL PLANS AND SPECIFICATIONS FOR THE CONTRACT HAVE BEEN PREPARED WITH CARE AND ARE INTENDED TO SHOW AS CLEARLY AS IS PRACTICABLE THE WORK REQUIRED TO BE DONE. THE CONTRACTOR MUST REALIZE, HOWEVER, THAT CONSTRUCTION DETAILS CAN NOT ALWAYS BE ACCURATELY ANTICIPATED AND THAT IN EXECUTING THE WORK, FIELD CONDITIONS MAY REQUIRE REASONABLE MODIFICATIONS IN THE DETAILS OF PLANS AND QUANTITIES OF WORK INVOLVED. WORK UNDER ALL ITEMS IN THE CONTRACT MUST BE CARRIED OUT TO MEET THESE FIELD CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND IN ACCORDANCE WITH HIS INSTRUCTIONS AND THE CONTRACT SPECIFICATIONS
35. THE PRESENCE OF HAZARDOUS MATERIALS SHALL BE BROUGHT TO THE ENGINEERS OR OWNERS IMMEDIATE ATTENTION.
36. THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES WHICH IS NOT SHOWN OR NOTED ON PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR ONLY AFTER BEING AUTHORIZED BY THE OWNER AND ENGINEER WITH ADDITIONAL PAYMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE CONTRACT AGREEMENT WITH THE OWNER.

ABBREVIATIONS

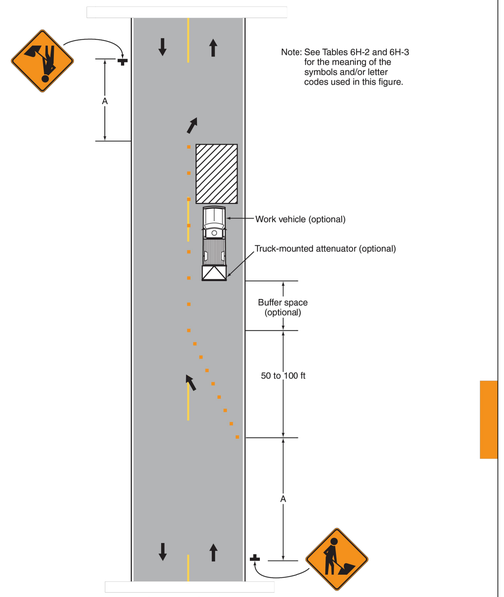
AC	ACRES
BC	BOTTOM OF CURB
BLDG	BUILDING
BOT	BOTTOM
BW	BOTTOM OF WALL
C	CURVE
CB	CATCH BASIN
CF	CUBIC FEET
CI	CUBIC INCHES
CL OR ℄	CENTERLINE
CO	COUNTY
CONC	CONCRETE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
DA	DELTA ANGLE
DA# OR DA NO.	DRAINAGE AREA NUMBER
DI	DUCTILE IRON
DIA	DIAMETER
DWG	DRAWING
DYLL	DOUBLE YELLOW LANE LINE
E	EAST
EG	EXISTING GRADE
EL	ELEVATION
ESC	EROSION AND SEDIMENT CONTROL
FF	FINISHED FLOOR
FG	FINISHED GRADE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HYD	HYDRANT
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
INT	INTERSECTION
INV	INVERT
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
N/A	NOT APPLICABLE
NO. OR #	NUMBER
NTS	NOT TO SCALE
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
NYSDOH	NEW YORK STATE DEPARTMENT OF HEALTH
OU	OVERHEAD UTILITY LINE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PT	POINT OF TANGENT
PVC	POLYVINYL CHLORIDE PIPE
R	RADIUS OR RADII
RCP	REINFORCED CONCRETE PIPE
ROC	RUN OF CRUSHER
ROW	RIGHT OR WAY
S	SOUTH
SAN	SANITARY
SB	SETBACK
SDR	STANDARD DIMENSION RATIO
SMH	SANITARY MANHOLE
STMH	STORM MANHOLE
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SWLL	SINGLE WHITE LANE LINE
TC	TOP OF CURB
TL	TANGENT LENGTH
TOC	TIME OF CONCENTRATION
(TYP)	TYPICAL
TW	TOP OF WALL
TS & V	TAPPING SLEEVE AND VALVE
UNO	UNLESS NOTED OTHERWISE
W	WEST

CITY OF WATERTOWN GENERAL PLAN NOTES:

1. ALL WORK TO BE PERFORMED WITHIN THE CITY OF WATERTOWN MARGIN WILL REQUIRE SIGN-OFF FROM A PROFESSIONAL ENGINEER, LICENSED AND CURRENTLY REGISTERED TO PRACTICE IN THE STATE OF NEW YORK, THAT THE WORK WAS BUILT ACCORDING TO THE APPROVED SITE PLAN AND APPLICABLE CITY OF WATERTOWN STANDARDS.
2. COMPACTION TESTING WILL BE REQUIRED FOR ALL WORK TO BE PERFORMED WITHIN THE CITY OF WATERTOWN MARGIN AND MUST BE SUBMITTED TO THE CITY OF WATERTOWN CODES DEPARTMENT.

2009 Edition Page 671

Figure 6H-18. Lane Closure on a Minor Street (TA-18)



Typical Application 18

December 2009 Sect. 6H.01

1	WORK ZONE TRAFFIC CONTROL PLAN	
G001	NOT TO SCALE	MUTCD-2009

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	N/A
DRAWN BY:	KMB/MT
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

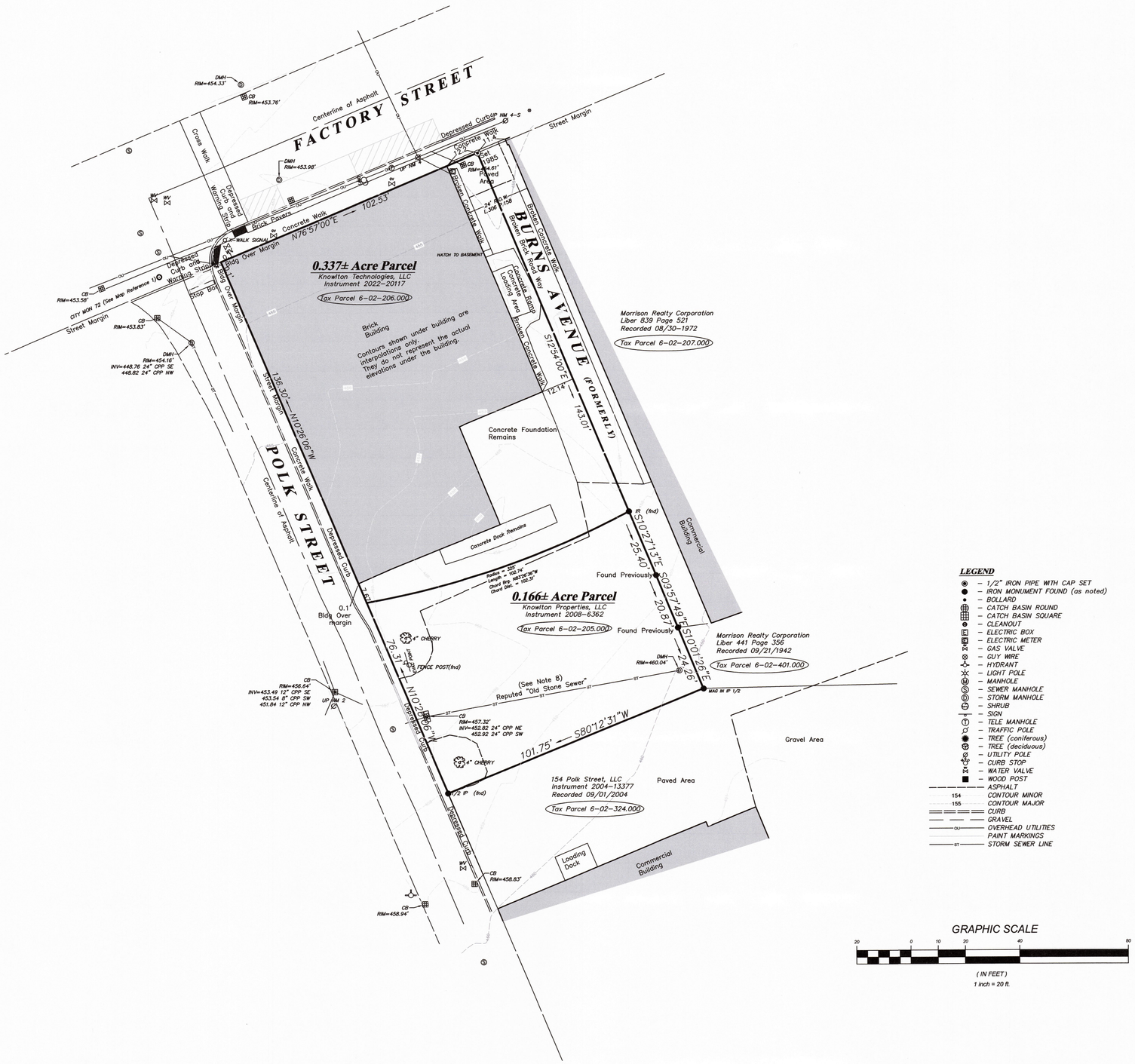
GENERAL NOTES AND ABBREVIATIONS

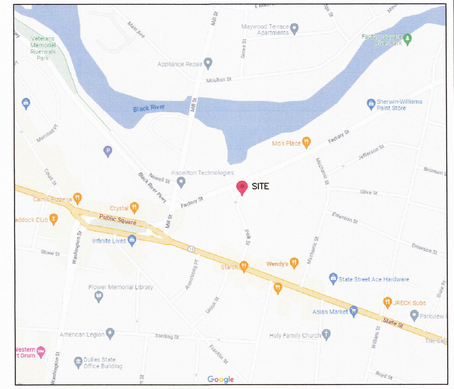
KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.
G001





PROJECT LOCATION MAP
NOT TO SCALE

LEGEND

- 1/2" IRON PIPE WITH CAP SET
- IRON MONUMENT FOUND (as noted)
- BOLLARD
- CATCH BASIN ROUND
- CATCH BASIN SQUARE
- CLEANOUT
- ELECTRIC BOX
- ELECTRIC METER
- GAS VALVE
- GUY WIRE
- HYDRANT
- LIGHT POLE
- MANHOLE
- SEWER MANHOLE
- STORM MANHOLE
- SHRUB
- SIGN
- TELE MANHOLE
- TRAFFIC POLE
- TREE (coniferous)
- TREE (deciduous)
- UTILITY POLE
- CURB STOP
- WATER VALVE
- WOOD POST
- ASPHALT
- 154 CONTOUR MINOR
- 155 CONTOUR MAJOR
- CURB
- GRAVEL
- OU OVERHEAD UTILITIES
- PAINT MARKINGS
- ST STORM SEWER LINE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

DEED REFERENCES

Johnson Family Real Property LLC
to
Knowlton Technologies, LLC
Instrument 2022-20117
Recorded 11/15/2022
Tax Parcel 6-02-206.000 (202 Factory Street)

Subject to and including the following as they may apply:

"...exclusive easement for parking of vehicles on a 25'x60' area in the extreme northeast corner of the premises known as No. 138 Factory Street, Watertown, New York..." Refer to deed for further details.

Notice of Appropriation dated March 13, 2014, recorded in the Jefferson County Clerk's Office on May 6, 2014, as Instrument Number 2014-5439.

A right of way easement along Burns Avenue recorded in Liber 306 of Deeds at Page 158 on February 24, 1903.

Knowlton Specialty Papers, Inc.
to
Knowlton Properties, LLC
Instrument 2008-6362
Recorded 04/17/2008
Tax Parcel 6-02-205.000 (176 Polk Street)

MAP REFERENCE

1. "SURVEY PLAT OF FACTORY STREET & MONUMENTATION, PREPARED FOR THE CITY OF WATERTOWN, FACTORY STREET, CITY OF WATERTOWN, COUNTY OF JEFFERSON, STATE OF NEW YORK", dated March 02, 2018, prepared by Storino Geomatics, Land Surveying Services & Consulting, PLLC, last revised April 06, 2018.

2. "SURVEY MAP of the LAND at- 202-212 FACTORY STREET, CITY of WATERTOWN, COUNTY of JEFFERSON, STATE of NEW YORK", dated 06/11/85, revised 03/28/2005 prepared by GYMO P.C.

3. "ALTA/ACSM LAND TITLE SURVEY MAP of the LANDS of – KNOWLTON PROPERTIES, LLC, 213 FACTORY STREET, MILL STREET & 176 POLK STREET, CITY of WATERTOWN, COUNTY of JEFFERSON, STATE of NEW YORK", dated June 4, 2014, prepared by GYMO P.C.

NOTES

1. *Field location was last performed on December 14, 2022.*
2. *The vertical datum referenced hereon is NAVD 1988 based on the NYS CORS Network.*
3. *All adjoiners are per the City of Watertwn Real Property Assessment Office.*
4. *Underground facilities, structures and utilities have not been plotted.*

   There may be underground facilities, structures and utilities, the existence of which is presently not known and therefore not shown on this map.

   Prior to construction contact Underground Facilities Protective Organization, (UFPO) at 1-800-962-7962 for exact location of all underground utilities.
5. *This survey was prepared without the benefit of an Updated Abstract of Title and is subject to any changes which may occur as a result of a more complete title search.*
6. *Subject parcels are City of Watertown Assessment Parcels Number 6-02-206.000 and 6-02-205.000.*
7. *The lands shown hereon are subject to any rights, restrictions, easements or covenants of record, expressed or implied by usage or custom.*
8. *Subject to all rights and restrictions that may exist in regard to an agreement between the New York Central Railroad Company and the City of Watertown concerning a 36" sewer line, by deed recorded in the Jefferson County Clerk's Office in Liber 422 at Page 519 on March 7, 1938.*

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

STATE OF NEW YORK
GREGORY FRED ASHLEY
090461
LICENSED LAND SURVEYOR

PROJECT NO:	2022-076
SCALE:	1" = 20'
DRAWN BY:	A.S.K.
CHECKED BY:	GFA
DATE:	02/27/2023

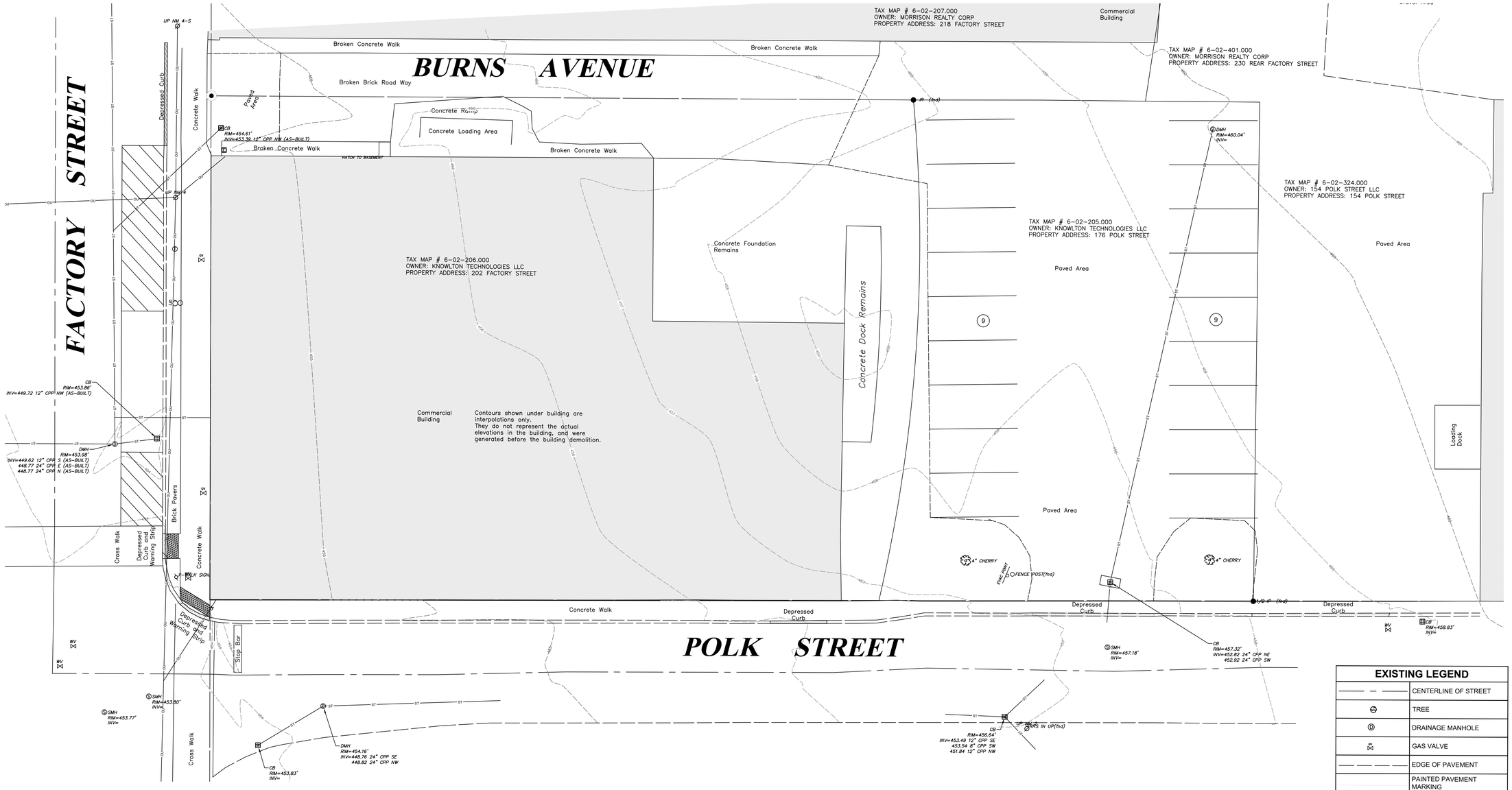
SURVEY MAP OF THE LANDS AT

202 FACTORY STREET & 176 POLK STREET
PREPARED FOR KNOWLTON PROPERTIES, LLC
CITY OF WATERTOWN, COUNTY OF JEFFERSON, STATE OF NEW YORK

DATE ISSUED: N/A

DRAWING NO.

S101



GENERAL SURVEY NOTES:

1. EXISTING CONDITIONS ARE BASED ON A FIELD SURVEY PERFORMED BY GYMO D.P.C. FIELD WORK AND SURVEY WERE COMPLETED IN WINTER OF 2022/2023.
2. THE SURVEY IS TIED HORIZONTALLY INTO THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
3. THE SURVEY IS TIED VERTICALLY INTO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

EXISTING CONDITIONS NOTES:

1. EXISTING CONDITIONS REPRESENT THE CONDITION OF THE SITE AT THE TIME THAT THE SURVEY WAS PERFORMED. DEMOLITION OF THE EXISTING BUILDING AND RELATED FEATURES BY OTHERS SHALL BE COMPLETED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THIS MAY RESULT IN THE EXISTING CONDITIONS INDICATED IN THE PLANS DIFFERING FROM THE CONDITION OF THE SITE AT THE START OF CONSTRUCTION.
2. INVERTS LABELED "AS-BUILT" WERE OBTAINED FROM THE AS-BUILT PLAN SHEETS FOR CITY OF WATERTOWN CONTRACT D032467, COMPLETED ON OCTOBER 6, 2017.
3. PARKING COUNTS AND PARKING LOT STRIPING INDICATED ON THE PLAN SHEETS HAVE BEEN GATHERED FROM AVAILABLE AERIAL IMAGERY.

EXISTING LEGEND

	CENTERLINE OF STREET
	TREE
D	DRAINAGE MANHOLE
GV	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
--154--	MINOR GROUND CONTOUR
--155--	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
E	ELECTRIC METER

NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

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SEAL:

PROJECT NO:	2022-076
SCALE:	1" = 10'
DRAWN BY:	KMB/MT
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

EXISTING CONDITIONS PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

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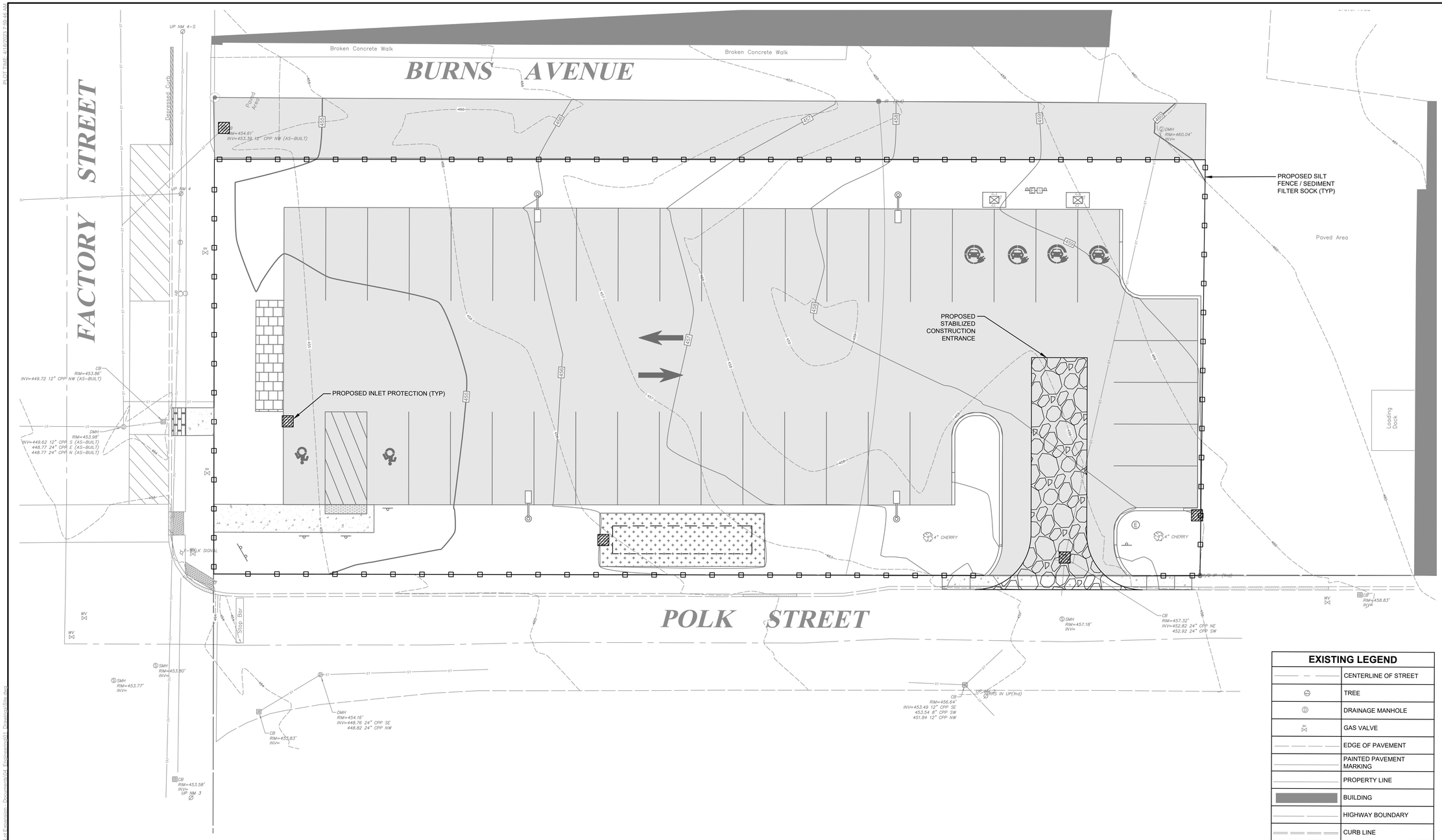
DRAWING NO.
C101



GENERAL DATUM NOTES:

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NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

EXISTING LEGEND	
	CENTERLINE OF STREET
	TREE
D	DRAINAGE MANHOLE
GV	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
155	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
OU	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
E	ELECTRIC METER

PROPOSED LEGEND	
	SILT FENCE / SEDIMENT FILTER SOCK
	CATCH BASIN INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE

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EROSION AND SEDIMENT CONTROL PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

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DRAWING NO.
C102

EXISTING LEGEND	
	CENTERLINE OF STREET
	TREE
D	DRAINAGE MANHOLE
GV	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
155	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
EM	ELECTRIC METER

DEMOLITION LEGEND	
	ASPHALT PAVEMENT REMOVAL
	DEMOLITION BY OTHERS
	CONCRETE REMOVAL
	CURB REMOVAL
	CLEAR AND GRUB
	SIGN REMOVAL
	PAVER DISASSEMBLY
	TREE PROTECTION

NORTH
BY DATUM

GRAPHIC SCALE
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DEMOLITION PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

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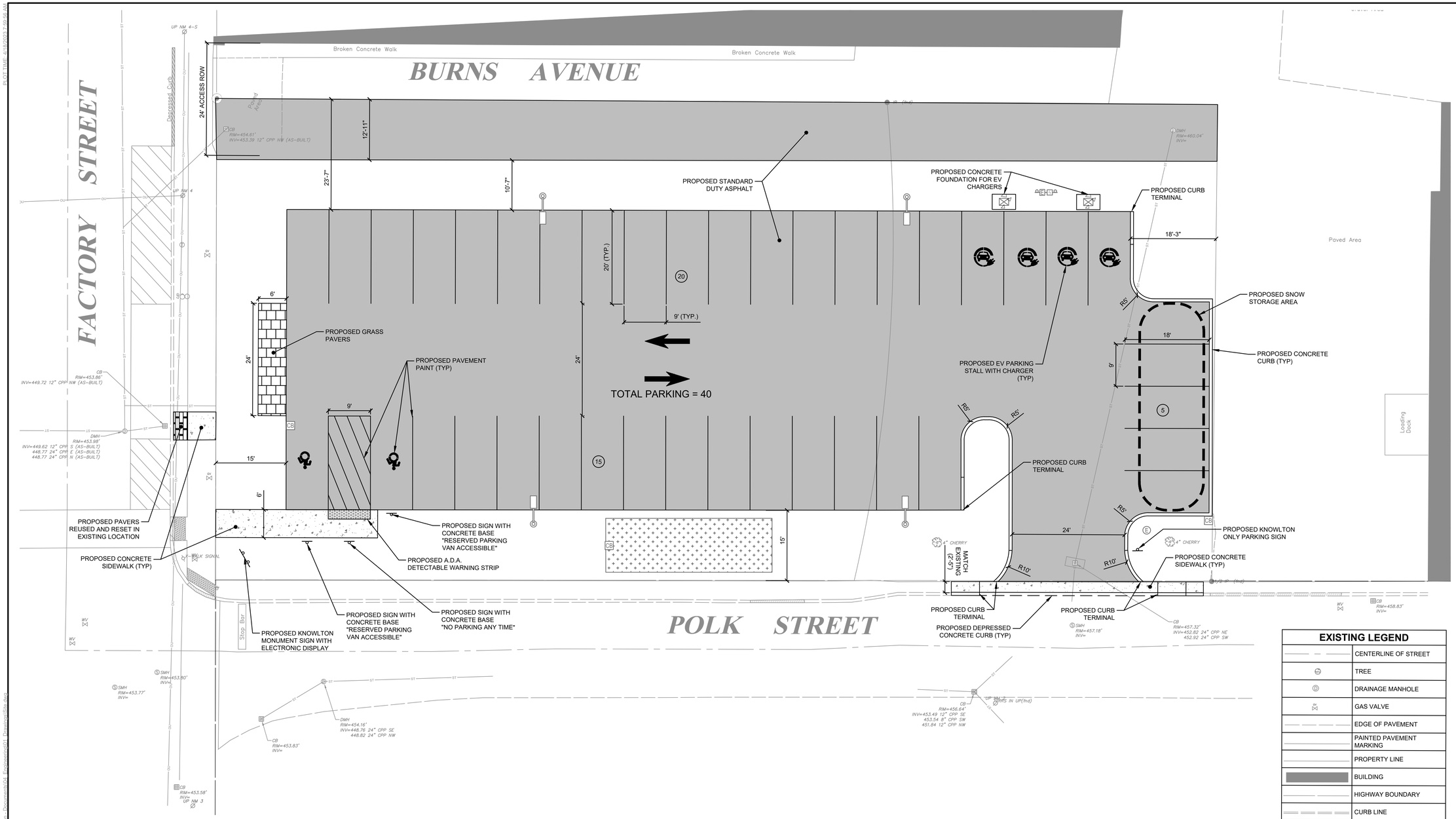
C103



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NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

PLANNING DATA

ZONING CLASSIFICATION: DOWNTOWN DISTRICT
PARCEL #: 6-02-206.000 & 6-02-205.000

ITEM	REQUIRED / ALLOWED	PROPOSED
MINIMUM LOT SIZE	NO MINIMUM	0.34 ac + 0.17 ac = 0.51 ac
FRONT YARD SETBACK	0' MIN. - 10' MAX.	N/A
SIDE YARD SETBACK	N/A	N/A
REAR YARD SETBACK	N/A	N/A
PARKING LOT AND DRIVEWAY SETBACKS	5'	15'-0", 23'-7", 0'-0", 15'-0"
FRONT YARD BUFFER	15'	15'-0", 15'-0"
SIDE AND REAR YARD BUFFER	10'	10'-7", 0'-0" (EX. CONDITION)
PARKING SPACES	0	40
EV PARKING SPACES	2 FOR EVERY 20 SPACES	4
IMPERVIOUS SURFACE COVERAGE	100% ALLOWED	69%
PLANTING UNITS	N/A	SEE PLAN

PROPOSED LEGEND

	CONCRETE
	ASPHALT PAVEMENT
	GRASS PAVERS
	RESET EXISTING PAVERS
	SNOW STORAGE
	CONCRETE CURB
	DEPRESSED CONCRETE CURB
	PAINTED STRIPING
	PAINTED RESERVED PARKING
	PAINTED EV PARKING
	PAINTED TRAFFIC ARROWS
	TRAFFIC SIGN

EXISTING LEGEND

	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
	MINOR GROUND CONTOUR
	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
	UTILITY POLE
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	OVERHEAD UTILITY
	WATER VALVE
	CATCH BASIN
	STORM SEWER LINE
	ELECTRIC METER

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SITE PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

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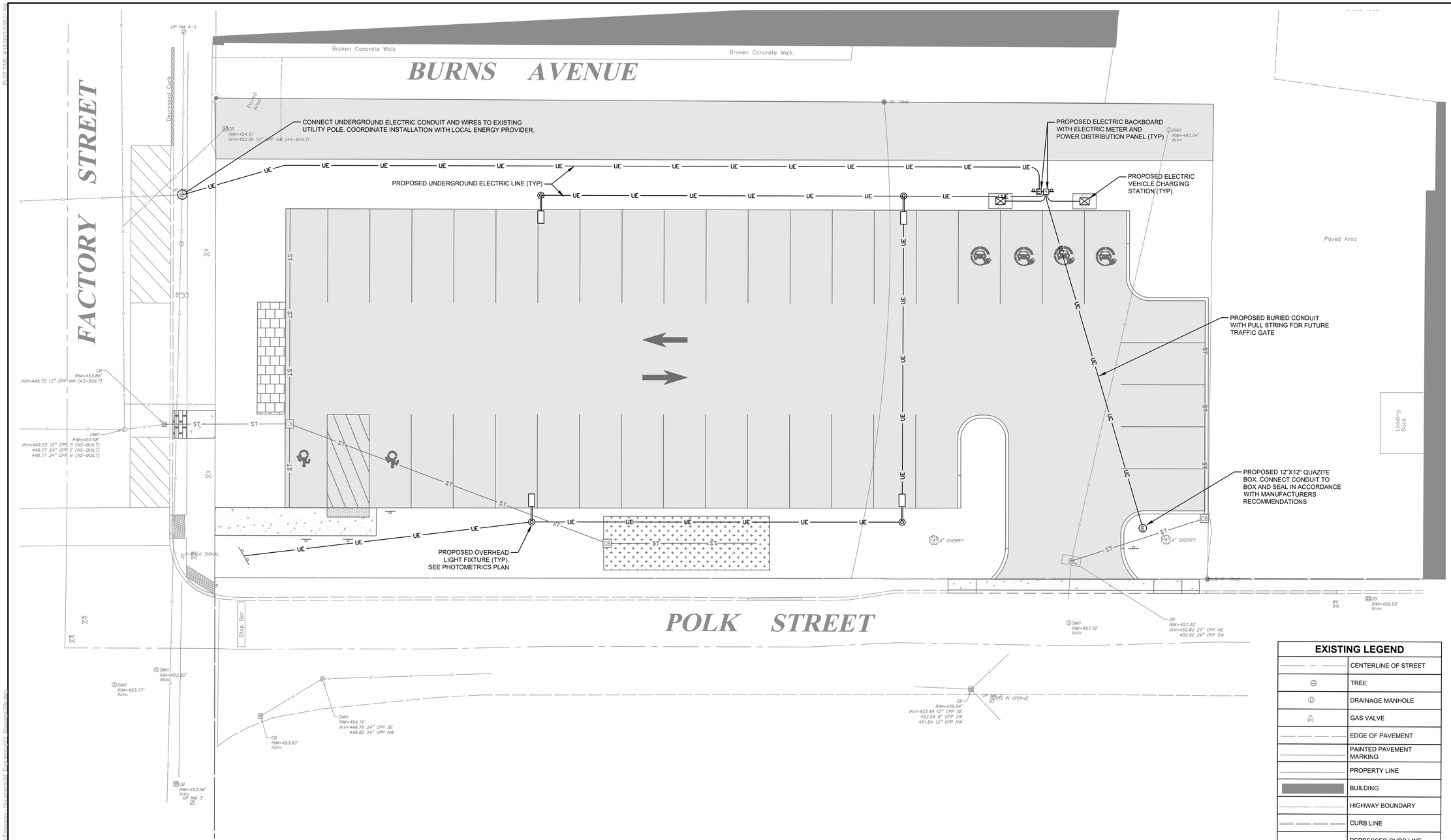
C104



PROPOSED LEGEND	
UE	UNDERGROUND ELECTRIC LINE
UC	BURIED CONDUIT WITH PULL STRING
	ELECTRIC METER
	ELECTRIC DISTRIBUTION PANEL
	OVERHEAD LIGHT FIXTURE
	EV CHARGING STATION
	ELECTRICAL BACKBOARD

EXISTING LEGEND	
	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
GAS	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
155	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
E	ELECTRIC METER

NORTH
BY DATUM

GRAPHIC SCALE
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5 0 5 10 20

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UTILITY PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

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DRAWING NO.
C105

BURNS AVENUE

POLK STREET

FACTORY STREET

Broken Concrete Walk

Broken Concrete Walk

Paved Area

Loading Dock

Depressed Curb

Stop Bar

MATCH EXISTING RIM ELEVATION AND GRADE FLUSH

MATCH EXISTING JOINT TO NEW AND GRADE FLUSH

MATCH EXISTING RIM ELEVATION AND GRADE FLUSH

PROPOSED END CAP
INV: 453.16

CORE EXISTING CATCH BASIN
INV IN: 449.82 - (SE 12")
CONTRACTOR TO FIELD VERIFY
EXISTING INVERTS AND PROPOSED
CONNECTION ELEVATION AND
REPORT FINDINGS TO ENGINEER PRIOR TO
ORDERING ANY DRAINAGE STRUCTURES

CB-1
RIM: 454.03
INV IN: 451.00 - (S 12")
INV IN: 451.98 - (NE 4")
INV IN: 451.98 - (SW 4")
INV OUT: 450.09 - (NW 12")

46.1 LF of 4" PERFORATED HDPE @ 2.66%

26.8 LF of 12" HDPE @ 1.01%

17.9 LF of 4" PERFORATED HDPE @ 1.84%

72.6 LF of 12" HDPE @ 1.40%

MATCH EXISTING JOINT TO NEW AND GRADE FLUSH

PROPOSED END CAP
INV: 452.31

CB-2
RIM: 455.75
INV IN: 452.75 - (SE 4")
INV OUT: 452.08 - (N 12")

32.0 LF of 4" PERFORATED HDPE @ 0.50%

PROPOSED END CAP
INV: 452.91

PROPOSED RAIN GARDEN

MATCH EXISTING JOINT TO NEW AND GRADE FLUSH

MATCH EXISTING RIM ELEVATION AND GRADE FLUSH

CORE EXISTING CATCH BASIN
INV IN: 453.92 - (SE 12")
CONTRACTOR TO FIELD VERIFY
EXISTING INVERTS AND PROPOSED
CONNECTION ELEVATION AND
REPORT FINDINGS TO ENGINEER PRIOR TO
ORDERING ANY DRAINAGE STRUCTURES

PROPOSED END CAP
INV: 455.85

46.6 LF of 4" PERFORATED HDPE @ 1.70%

29.9 LF of 12" HDPE @ 1.00%

CB-3
RIM: 458.96
INV IN: 455.06 - (NE 4")
INV OUT: 454.22 - (NW 12")

MATCH EXISTING JOINT TO NEW AND GRADE FLUSH

MATCH EXISTING JOINT TO NEW AND GRADE FLUSH

UP NM 4-S

UP NM 4

UP NM 3

WALK SIGNAL

Stop Bar

SMH
RIM=453.77'
INV=

SMH
RIM=453.80'
INV=

DMH
RIM=454.16'
INV=448.76 24" CPP SE
448.82 24" CPP NW

CB
RIM=453.83'
INV=

CB
RIM=453.58'
INV=
UP NM 3

CB
RIM=453.86'
INV=449.72 12" CPP NW (AS-BUILT)

DMH
RIM=453.98'
INV=449.62 12" CPP S (AS-BUILT)
448.77 24" CPP E (AS-BUILT)
448.77 24" CPP N (AS-BUILT)

SMH
RIM=457.18'
INV=

CB
RIM=457.32'
INV=452.82 24" CPP NE
452.92 24" CPP SW

CB
RIM=456.64'
INV=453.49 12" CPP SE
453.54 8" CPP SW
451.84 12" CPP NW

CB
RIM=458.83'
INV=

UP NM 5 IN UP(fnd)

4" CHERRY

4" CHERRY

EXISTING LEGEND

	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
GV	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
155	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
	ELECTRIC METER

PROPOSED LEGEND

155	MAJOR CONTOUR
154	MINOR CONTOUR
394.28 TC: 394.64 BC: 394.06	SPOT GRADE
ST	STORM PIPE
	RAIN GARDEN
CB	CATCH BASIN

GENERAL DATUM NOTES:

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NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

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SEAL:

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GRADING AND DRAINAGE PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

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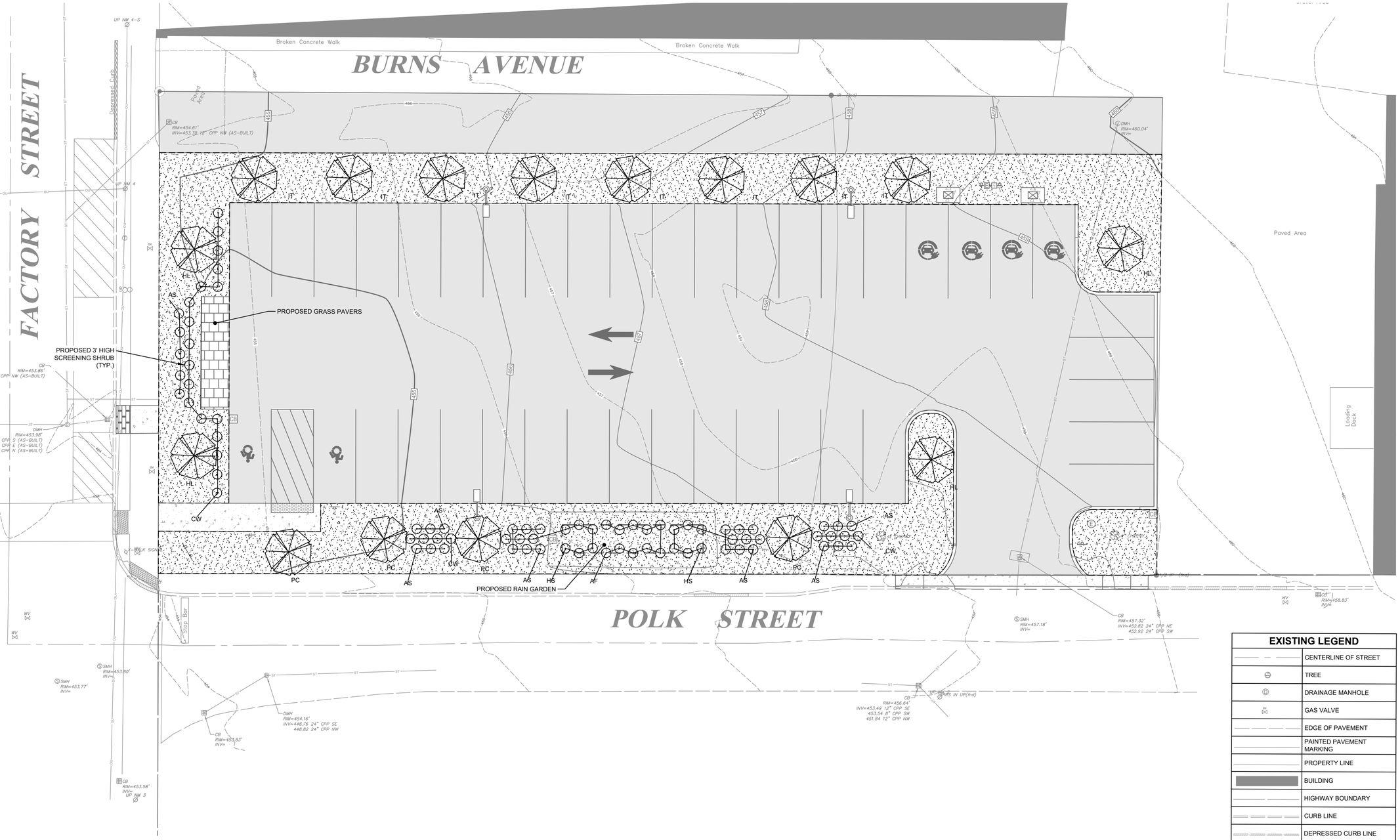
DRAWING NO.
C106



PLANT MATERIAL SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
TREES			
HL	GLEDITSIA TRIACANTHOS 'INERMIS'	HONEYLOCUST	2" CAL.
PC	MALUS 'PINK SPIRES'	PINK SPIRES CRABAPPLE	1.5" CAL.
IT	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK LILAC TREE	1.5" CAL.
SHRUBS			
CW	WEIGELA HYBRID 'SLINGCO 1'	CRIMSON KISSES WEIGELA	3 GAL.
AS	SPIREA X BUMALDA "ANTHONY WATERER'	ANTHONY WATERER SPIREA	3 GAL.
AF	CORNUS STOLONIFERA 'FARROW'	ARCTIC FIRE RED TWIG DOGWOOD	3 GAL
HS	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	HUMMINGBIRD SUMMERSWEET	3 GAL

PROPOSED LEGEND

	TOPSOIL, GRASS SEED, AND MULCH
	SCREENING SHRUB
	TREE

EXISTING LEGEND

	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
155	MAJOR GROUND CONTOUR
	EDGE OF CONCRETE
	TRAFFIC SIGNS
UP	UTILITY POLE
S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
	ELECTRIC METER

NORTH
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LANDSCAPING PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
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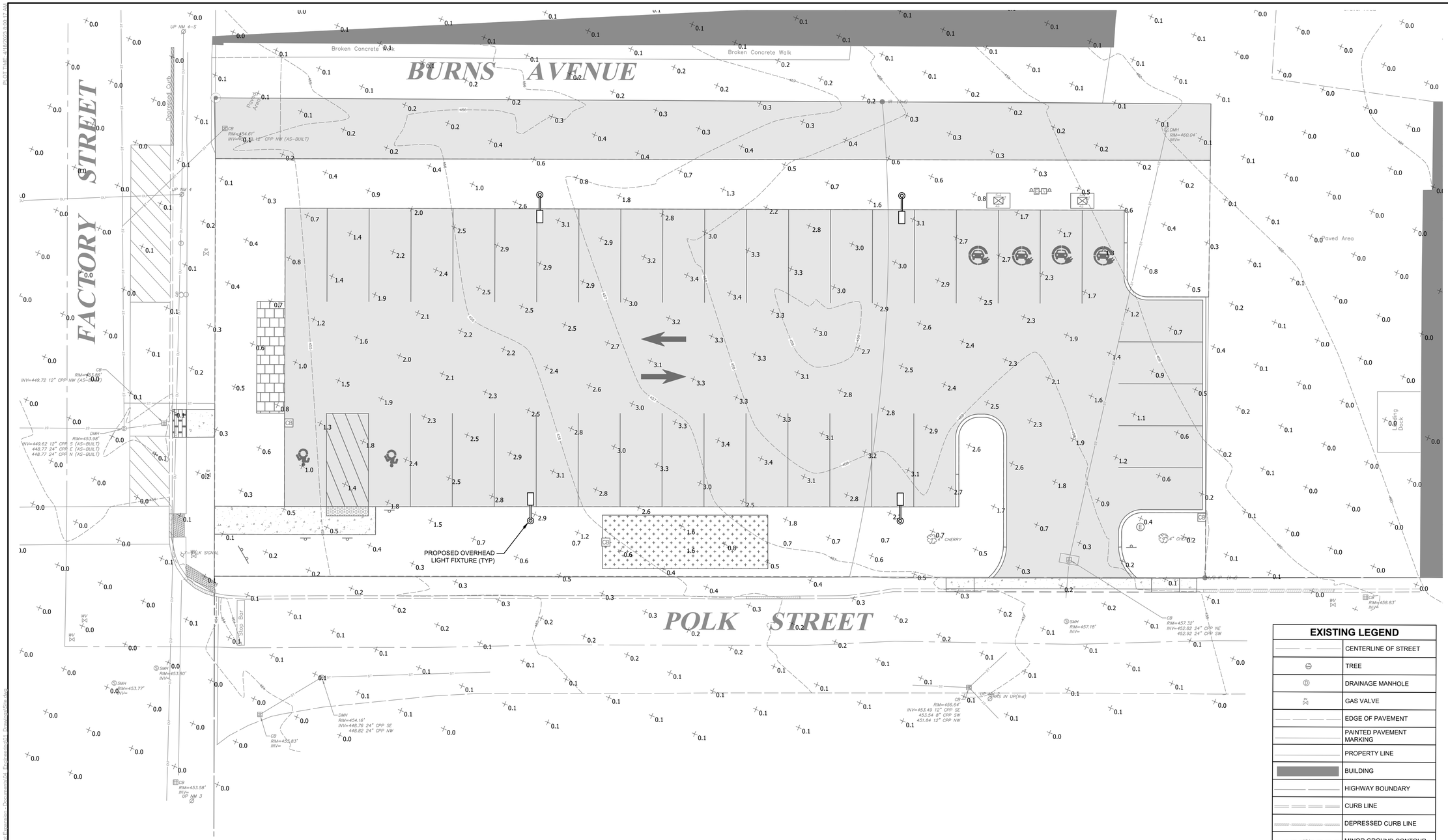
C107



Luminaire Schedule													
Symbol	Qty	MH	Arrangement	Lum. Lumens	Lum. Watts	Arr. Watts	Total Watts	LLD	LDD	BF	LLF	BUG Rating	Description
	4	25'	SINGLE	10591	108	108	432	0.950	0.950	1.000	0.903	B1-U0-G2	GALN-SA2C-730-U-SL4-HSS

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.58	3.4	0.0	N.A.	N.A.
Outside of Prop Line	Illuminance	Fc	0.05	0.4	0.0	N.A.	N.A.
Parking Lot Only	Illuminance	Fc	2.35	3.4	0.2	11.75	17.00

EXISTING LEGEND	
	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
	CURB LINE
	DEPRESSED CURB LINE
154	MINOR GROUND CONTOUR
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	EDGE OF CONCRETE
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PHOTOMETRICS PLAN

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
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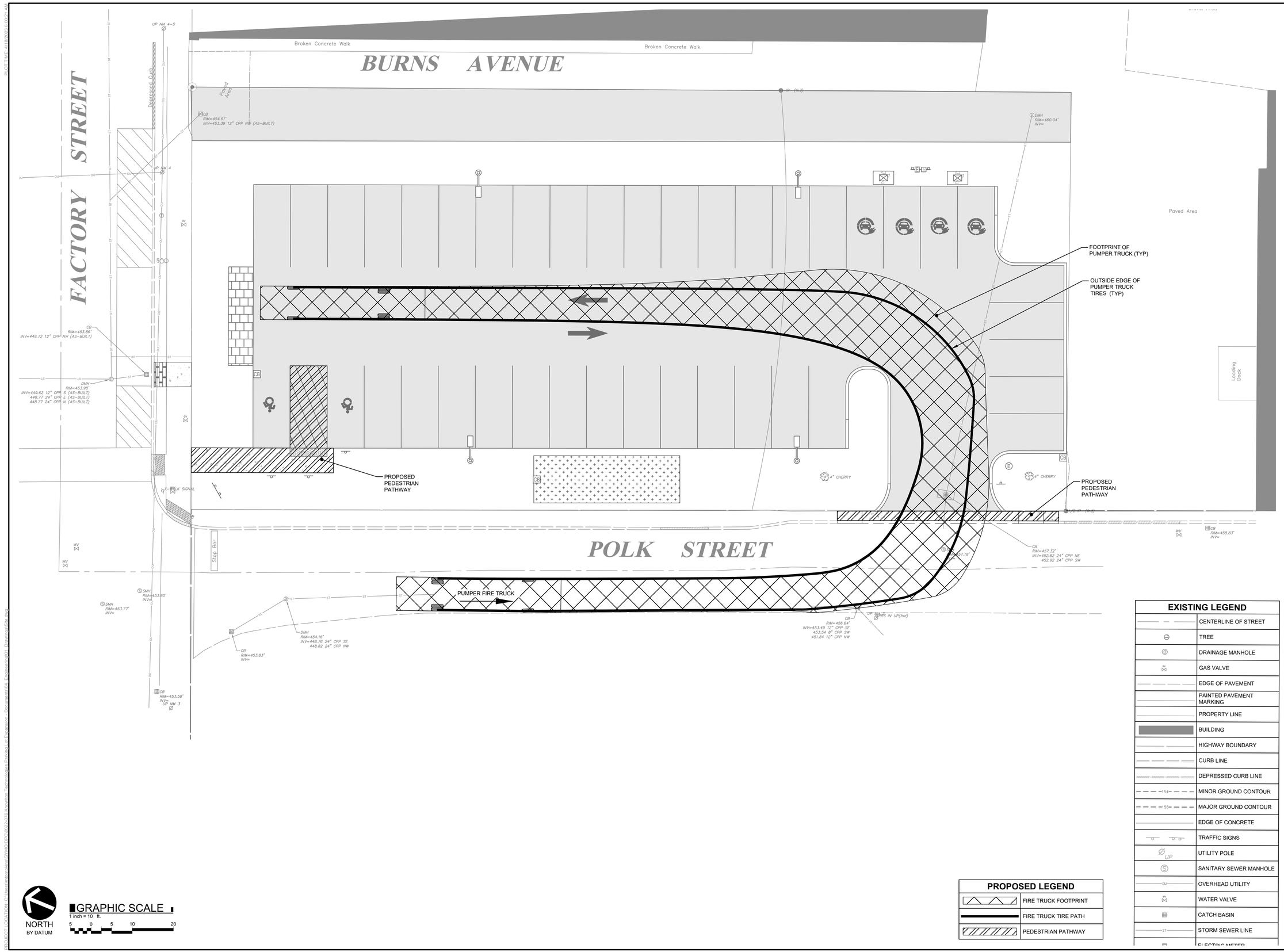
C108



EXISTING LEGEND

	CENTERLINE OF STREET
	TREE
	DRAINAGE MANHOLE
WV	GAS VALVE
	EDGE OF PAVEMENT
	PAINTED PAVEMENT MARKING
	PROPERTY LINE
	BUILDING
	HIGHWAY BOUNDARY
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	EDGE OF CONCRETE
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S	SANITARY SEWER MANHOLE
OU	OVERHEAD UTILITY
WV	WATER VALVE
	CATCH BASIN
ST	STORM SEWER LINE
EM	ELECTRIC METER

PROPOSED LEGEND

	FIRE TRUCK FOOTPRINT
	FIRE TRUCK TIRE PATH
	PEDESTRIAN PATHWAY

NORTH
BY DATUM

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VEHICULAR AND PEDESTRIAN CIRCULATION PLAN

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CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

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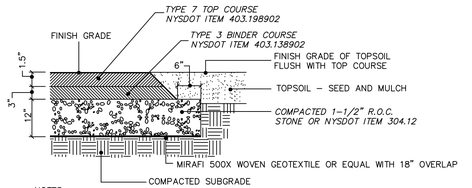
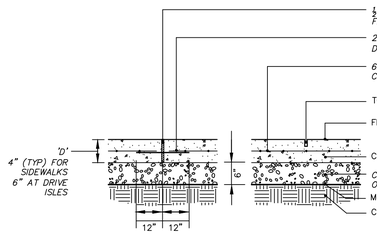
C109



NOTES:

1. ITEM NUMBERS FOR ASPHALT PAVEMENTS FROM NYSDOT STANDARDS AND SPECIFICATIONS DATED SEPTEMBER 4, 2008.

1	TYPICAL ASPHALT PAVEMENT DETAIL	
C501	NOT TO SCALE	D153–01

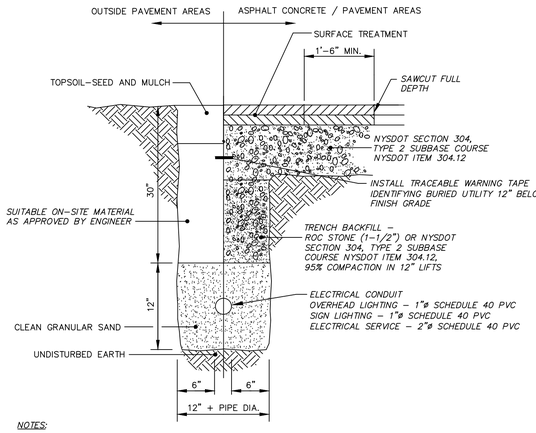


EXPANSION JOINT CONTRACTION JOINT

NOTES:

1. CROSS SLOPE IN SIDEWALK TO BE MAX. 2%, MIN. 1%
2. CONTRACTION JOINTS TO BE SPACED 5' O.C. MAX.
3. EXPANSION JOINTS TO BE SPACED 20' O.C. MAX.
4. WIDTH: PER SITE PLAN

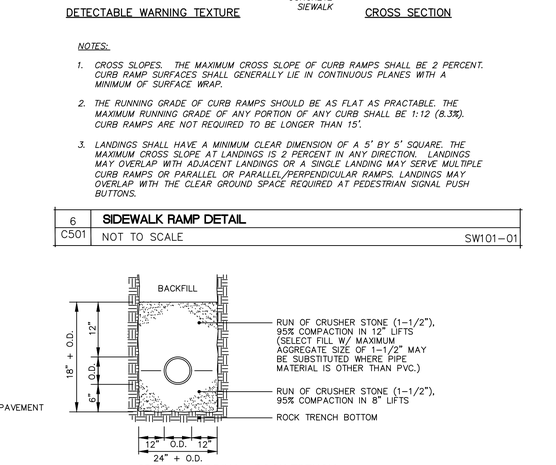
2	TYPICAL CONCRETE WALK SECTION AND JOINT DETAIL	
C501	NOT TO SCALE	D154–01



NOTES:

1. TRENCHES LOCATED ON ROAD SHOULDERS SHALL BE TREATED THE SAME AS UNDER PAVEMENT.
2. ELECTRICAL LINE TRENCH TO BE LOCATED A MINIMUM OF 2 FT. FROM COMMUNICATION LINE TRENCH

5	TYPICAL ELECTRICAL TRENCH DETAIL	
C501	NOT TO SCALE	E102–01

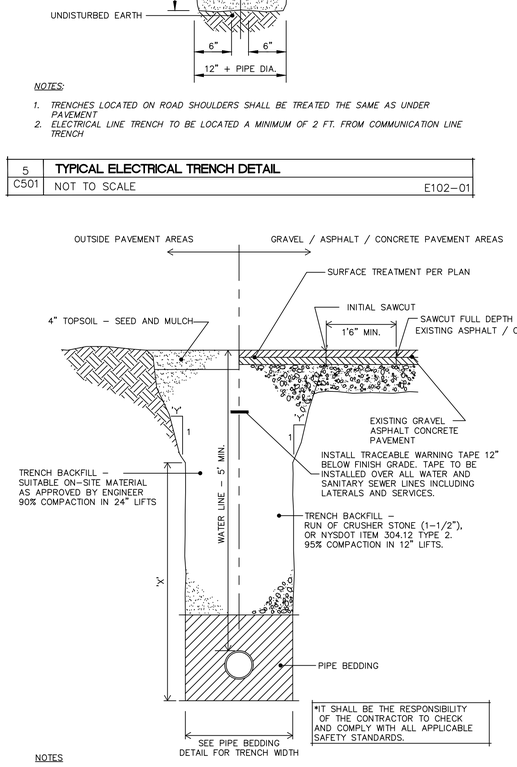


SPECIAL BEDDING – ROCK TRENCH

STANDARD BEDDING – STABLE SOIL

SPECIAL BEDDING – UNSTABLE SOIL

11	TYPICAL PIPE BEDDING DETAILS AND PAYMENT LIMITS	
C501	NOT TO SCALE	



NOTES

1. DIMENSIONS 'X' AND 'Y' SHOWN ABOVE SHALL BE DETERMINED BY CONTRACTOR TO COMPLY WITH O.S.H.A., NEW YORK STATE DEPARTMENT OF LABOR, NEW YORK STATE INDUSTRIAL CODE AND ALL OTHER APPLICABLE SAFETY STANDARDS.
2. SAFETY SHEETING OR TRENCH BOX MAY BE USED IN PLACE OF SLOPED TRENCH WALLS.
3. SHEETING, WHEN REQUIRED, TO BE CUT OFF AT LEAST 5 FEET BELOW STREET AND A MINIMUM OF 1 FOOT ABOVE TOP OF PIPE. WOOD SHEETING DRIVEN BELOW MID–DIAMETER OF THE PIPE SHALL BE LEFT IN PLACE. STEEL SHEETING DRIVEN BELOW MID–DIAMETER MAY BE WITHDRAWN IF APPROVED IN WRITING BY THE ENGINEER.
4. TRENCHES LOCATED ON ROAD SHOULDERS SHALL BE TREATED THE SAME AS UNDER PAVM'T.

10	TYPICAL UTILITY LINE TRENCH DETAIL AND PAYMENT LIMITS	
C501	NOT TO SCALE	D101–02

SPECIAL BEDDING – ROCK TRENCH

STANDARD BEDDING – STABLE SOIL

SPECIAL BEDDING – UNSTABLE SOIL

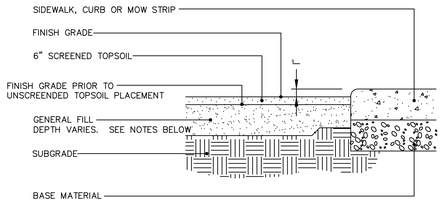
11	TYPICAL PIPE BEDDING DETAILS AND PAYMENT LIMITS	
C501	NOT TO SCALE	

DETECTABLE WARNING TEXTURE CROSS SECTION

NOTES:

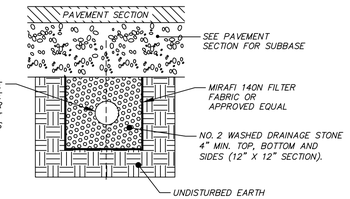
1. CROSS SLOPES. THE MAXIMUM CROSS SLOPE OF CURB RAMPS SHALL BE 2 PERCENT. CURB RAMP SURFACES SHALL GENERALLY LIE IN CONTINUOUS PLANES WITH A MINIMUM OF SURFACE WRAP.
2. THE RUNNING GRADE OF CURB RAMPS SHOULD BE AS FLAT AS PRACTABLE. THE MAXIMUM RUNNING GRADE OF ANY PORTION OF ANY CURB SHALL BE 1:12 (8.3%). CURB RAMPS ARE NOT REQUIRED TO BE LONGER THAN 15'.
3. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 5' BY 5' SQUARE. THE MAXIMUM CROSS SLOPE AT LANDINGS IS 2 PERCENT IN ANY DIRECTION. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS OR PARALLEL OR PARALLEL/PERPENDICULAR RAMPS. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.

6	SIDEWALK RAMP DETAIL	
C501	NOT TO SCALE	SW101–01



NOTES:
GRASSED AREAS – NO GENERAL FILL REQUIRED
PLANTINGBED AREAS – GENERAL FILL SHALL BE 14" IN DEPTH
TREE PLANTING AREAS – GENERAL FILL SHALL BE 20" IN DEPTH & 10' IN DIAMETER.

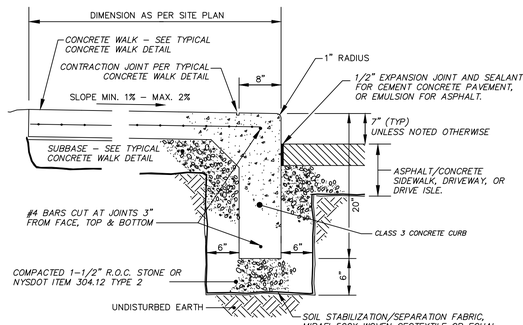
3	SOIL PROFILE – VARIOUS AREAS	
C501	NOT TO SCALE	D132–02



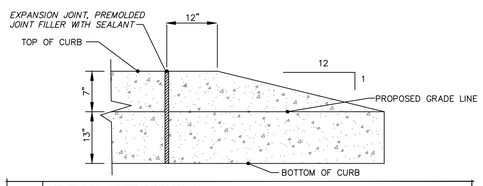
NOTES:

1. UNDERDRAIN TO BE INSTALLED WITH A MINIMUM SLOPE OF 0.5%

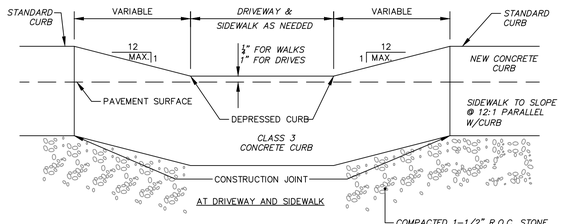
7	TYPICAL UNDERDRAIN DETAIL	
C501	NOT TO SCALE	D151–01



8	TYPICAL INTEGRAL CONCRETE CURB/WALK DETAIL	
C501	NOT TO SCALE	SW101–01



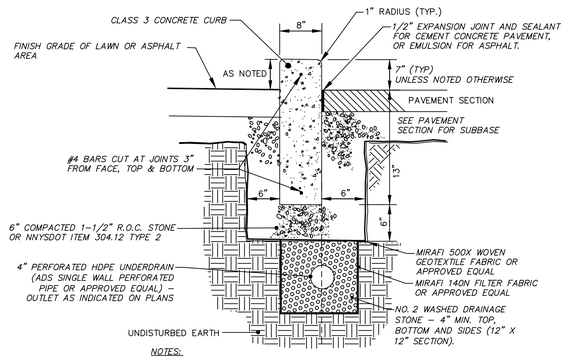
12	TYPICAL CURB TERMINAL	
C501	NOT TO SCALE	



NOTES

1. CONTRACTION JOINTS TO BE SPACED 10' O.C. MAX., EXPANSION JOINTS TO BE SPACED 20' O.C. MAX. EXPANSION JOINT TO BE COVERED WITH SEALANT.
2. SEE PAVEMENT SECTION FOR SUBBASE UNDER ASPHALT.
3. REFER TO NYS DOT METRIC STANDARD SHEETS: "SIDEWALK CURB RAMP DETAILS" (M608–3R3), "DETAILS ACCESSIBLE PARKING FOR PERSONS WITH DISABILITIES" (M608–4R1) AND "DETECTABLE WARNING DETAILS" (M608–5R1) FOR ADDITIONAL INFORMATION REGARDING SIDEWALK CONSTRUCTION AND HANDICAP ACCESSIBILITY.

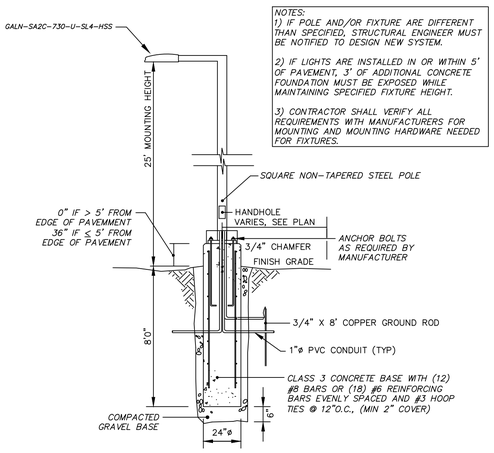
13	DEPRESSED CURB	
C501	NOT TO SCALE	



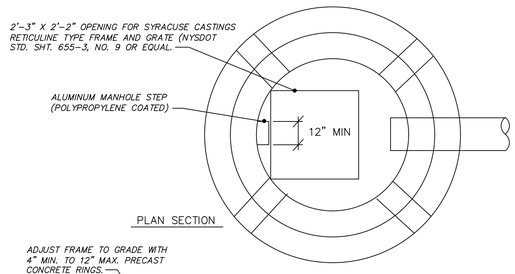
NOTES:

1. UNDERDRAIN TO BE INSTALLED WITH A MINIMUM SLOPE OF 0.5%

4	TYPICAL CONCRETE CURB DETAIL	
C501	NOT TO SCALE	



9	TYPICAL LIGHT POLE + BASE DETAIL	
C501	NOT TO SCALE	



14	TYPICAL CATCH BASIN DETAIL (CB)	
C501	NOT TO SCALE	

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	N/A
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

SITE DETAILS

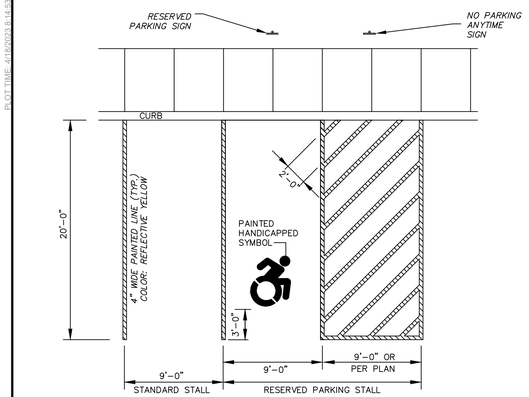
KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.

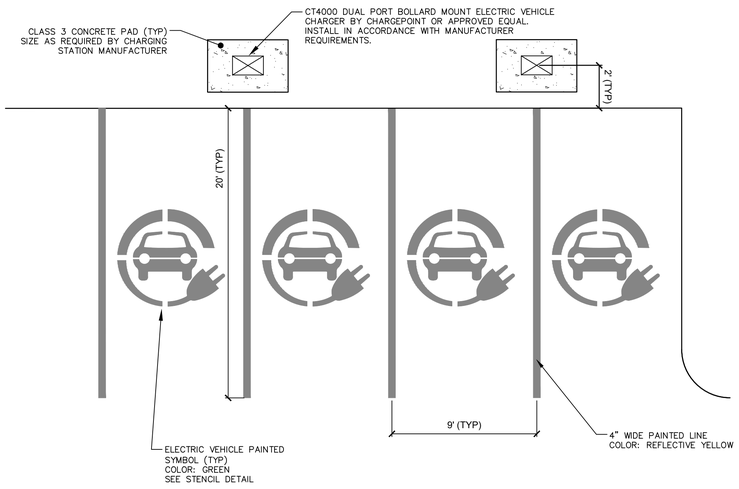
C501



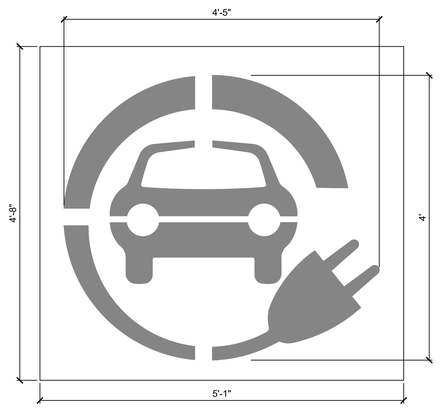
NOTES

1. MAX. PAVEMENT SLOPE TO BE 2% (1:50) IN ANY DIRECTION, FOR HANDICAP AREAS.

1	HANDICAP STALL MARKINGS AND PARKING LOT STRIPING DETAIL	
C502	NOT TO SCALE	SW136–01



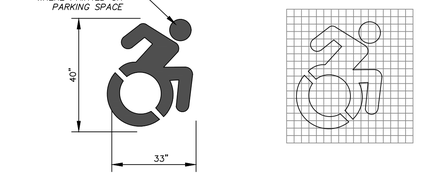
2	ELECTRIC VEHICLE PARKING STALLS DETAIL	
C502	NOT TO SCALE	



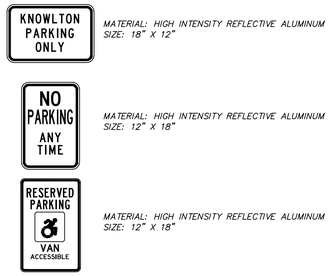
NOTES:

1. STENCIL (SKU SCC0794–048–L125) BY STENCILEASE.COM OR APPROVED EQUAL.
2. TRAFFIC ZONE MARKING PAINT COLOR: GREEN, BY RAE. (MFR. Model #5192)
3. MATERIAL – 1/8th inch and 1/16th LLDPE plastic

3	ELECTRIC VEHICLE CHARGING STATION CAR WITH PLUG STENCIL	
C502	NOT TO SCALE	



4	TYPICAL HANDICAP SYMBOL DETAIL	
C502	NOT TO SCALE	D156–01



MATERIAL: HIGH INTENSITY REFLECTIVE ALUMINUM SIZE: 18" X 12"

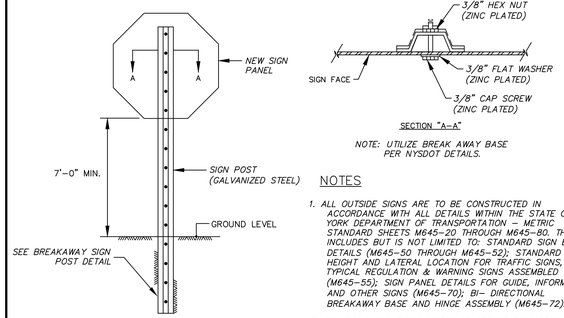
MATERIAL: HIGH INTENSITY REFLECTIVE ALUMINUM SIZE: 12" X 18"

MATERIAL: HIGH INTENSITY REFLECTIVE ALUMINUM SIZE: 12" X 18"

NOTES:

1. ALL OUTSIDE SIGNS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ALL DETAILS WITHIN THE STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION – METRIC STANDARD SHEETS M645–20 THROUGH M645–80. THIS INCLUDES BUT IS NOT LIMITED TO: STANDARD SIGN BLANK DETAILS (M645–50 THROUGH M645–52); STANDARD HEIGHT AND LATERAL LOCATION FOR TRAFFIC SIGNS, TYPICAL REGULATION & WARNING SIGNS ASSEMBLED (M645–55); SIGN PANEL DETAILS FOR GUIDE, INFORMATION AND OTHER SIGNS (M645–70); BI– DIRECTIONAL BREAKAWAY BASE AND HINGE ASSEMBLY (M645–72).
2. ALL SIGNS AND PAINT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AS OUTLINED IN THE LATEST VERSION OF THE NYS MUTCD.

5	TYPICAL SIGN DETAILS	
C502	NOT TO SCALE	

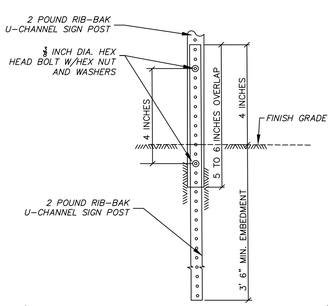


NOTE: UTILIZE BREAK AWAY BASE PER NYSDOT DETAILS.

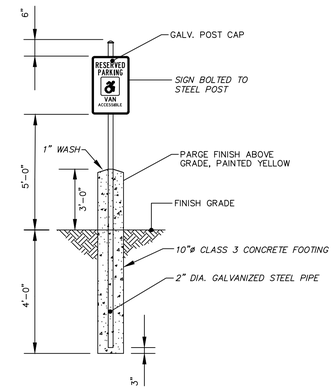
NOTES

1. ALL OUTSIDE SIGNS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ALL DETAILS WITHIN THE STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION – METRIC STANDARD SHEETS M645–20 THROUGH M645–80. THIS INCLUDES BUT IS NOT LIMITED TO: STANDARD SIGN BLANK DETAILS (M645–50 THROUGH M645–52); STANDARD HEIGHT AND LATERAL LOCATION FOR TRAFFIC SIGNS, TYPICAL REGULATION & WARNING SIGNS ASSEMBLED (M645–55); SIGN PANEL DETAILS FOR GUIDE, INFORMATION AND OTHER SIGNS (M645–70); BI– DIRECTIONAL BREAKAWAY BASE AND HINGE ASSEMBLY (M645–72).
2. ALL SIGNS AND PAINT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AS OUTLINED IN THE LATEST VERSION OF THE NYS MUTCD.

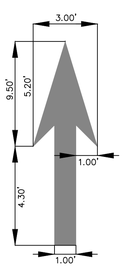
6	TYPICAL SIGN-IN GROUND INSTALLATION DETAIL	
C502	NOT TO SCALE	SW135–01



7	BREAK–AWAY SIGN POST DETAIL	
C502	NOT TO SCALE	D135–01



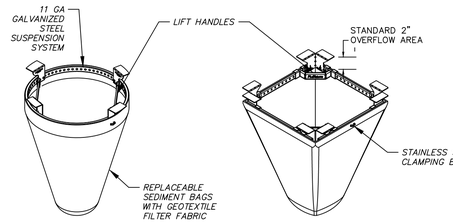
8	TYPICAL SIGN CONCRETE BASE DETAIL	
C502	NOT TO SCALE	D157–01



NOTES:

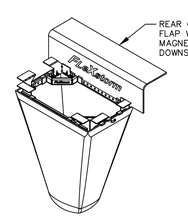
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.

9	TYPICAL TRAFFIC FLOW ARROWS	
C502	NOT TO SCALE	



STAINLESS STEEL ROUND INLET FILTERS for NYLOPLAST CASTINGS CATCH–ITS SPECIFIED W/ FX or FX–S BAGS

TYPICAL ROUND INLET FILTER



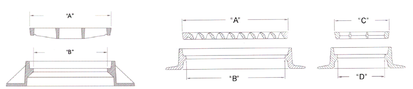
COMBINATION INLET FILTER FOR CURB HOODS

TYPICAL RECTANGULAR INLET FILTER

1. INDENTIFY YOUR FRAME STYLE AND SIZE			
STYLE		FRAME STYLE AND SIZE	Frame P/N:
ROUND		Small Round (up to 20.0" dia grates (A) dim)	62SRD
		Med Round (20.1" - 26.0" dia grates (A) up to 25" dia openings (B))	62MRD
		Large Round (26.1" - 32.0" dia grates (A) up to 30" openings (B))	62LRD
		XL Round (32.1" dia - 39" dia grates (A) up to 37" dia openings (B))	62XLRD
RECT/ SQUARE		Small Rect / Square (up to 16" (B) x 16" (D) openings or 64" perimeter)	62SSQ
		Med Rect / Square (up to 24" (B) x 24" (D) openings or 96" perimeter)	62MSQ
		Large Rect / Square (up to 36" (B) x 24" (D) openings or 120" perimeter)	62LSQ
		XL Rect / Square (side by side 2 pc set to fit up to 48" (B) x 36" (D) openings)	62XLSQ
COMBO INLETS		Small Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62SCB
		Med Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62MCB
		Large Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62LCB
		XL Rect / Square (ref Rect sizing; shipped with Magnetic Curb Flaps)	62XLCB
NYLOPLAST		12" diameter Nyloplast castings (Stainless Steel Framing standard)	6212NY
		15" diameter Nyloplast castings (Stainless Steel Framing standard)	6215NY
		18"diameter Nyloplast castings (Stainless Steel Framing standard)	6218NY
		24" diameter Nyloplast castings (Stainless Steel Framing standard)	6224NY
		30" diameter Nyloplast castings (Stainless Steel Framing standard)	6230NY

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE			
Nominal Bag Size	Solids Storage (CuFt)	Filtered Flow Rate at 50% Max (CFS) FX (Woven)	IL (NonWoven)
Small	1.6	1.2	0.9
Medium	2.1	1.7	1.3
Large	3.8	2.7	1.9
XL	4.2	3.6	2.6

2. SELECT YOUR BAG PART NUMBER				
FLEXSTORM FILTER BAGS	(22" depth) STD Bag P/N	(12" depth) Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S. (US Sieve)
FX: Standard Woven Bag	FX	FX-S	200	40
IL: IDOT Non-Woven Bag	IL	IL-S	145	70



NOTES:

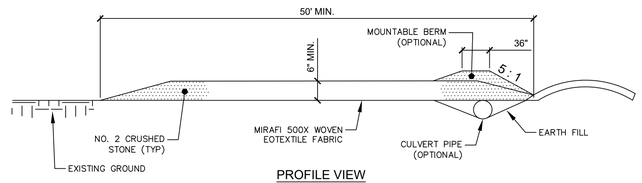
1. ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
2. UPON ORDERING CONFIRMATION OF THE DOT CALL OUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
3. INLET PROTECTION TO BE INSTALLED ON ALL CATCH BASINS AND TO REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES. REFER TO "SWPPP" FOR OPERATION AND MAINTENANCE INFORMATION.
4. CONTRACTOR TO CLEAN INLET PROTECTION PRIOR TO FINISHING CONSTRUCTION ACTIVITIES.
5. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION NOTES:

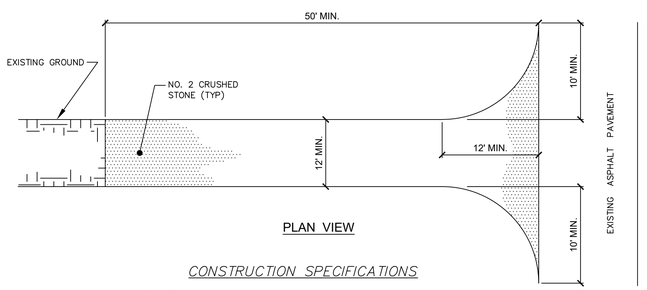
1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

DETAIL AND DESIGN INFORMATION SHOWN FOR "FLEXSTORM CATCH-IT FILTERS INLET PROTECTION" HAS BEEN PROVIDED BY ADVANCED DRAINAGE SYSTEMS, INC.

10	FLEXSTORM CATCH-IT FILTERS INLET PROTECTION DETAIL	
C502	NOT TO SCALE	D132–02



PROFILE VIEW



PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 1" – 4" STONE OR RECLAIMED / RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY)
3. THICKNESS – NOT LESS THAT 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. GEOTEXTILE – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AN WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPED DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

11	STABILIZED CONSTRUCTION ENTRANCE DETAIL	
C502	NOT TO SCALE	D132–02

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	N/A
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

SITE DETAILS

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

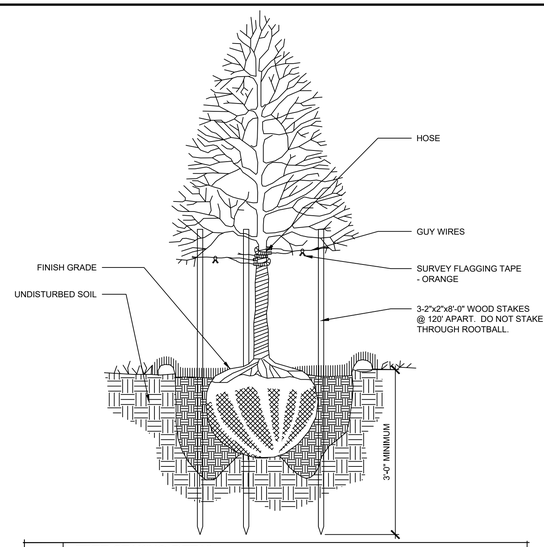
DRAWING NO.
C502

GENERAL TREE PLANTING NOTES:

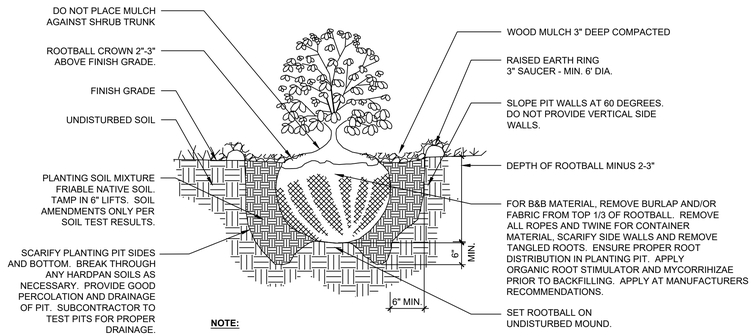
1. THESE NOTES ARE PRESENTED AS A "SUMMARY" OF THE WRITTEN SPECIFICATIONS ISSUED FOR THE PROJECT. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL DETAIL AND FULL PROJECT REQUIREMENTS.
2. ANY QUANTITIES INDICATED ON THE DRAWINGS OR ON THE TREE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE LANDSCAPE SUBCONTRACTOR BUT SHOULD NOT BE ASSUMED TO BE CORRECT. THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES INDICATED. ANY DISCREPANCIES NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION. IN THE EVENT OF A DISCREPANCY, THE GRAPHIC REPRESENTATIONS SHOWN ON THE DRAWINGS SHALL GOVERN.
3. NO SUBSTITUTIONS AS TO SIZE, TYPE, SPACING, QUANTITY OR QUALITY OF TREE MATERIAL SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CHANGES IN TREE MATERIAL MAY CONSTITUTE PLAN RE-APPROVAL.
4. TREES SHALL BE SUPPLIED AT THE SIZES SPECIFIED ON THE DRAWINGS. THE SIZES SHOWN ARE THE MINIMUMS FOR EACH CATEGORY (HEIGHT, SPREAD, CALIPER, CONTAINER SIZE, ETC.) WHEN A RANGE OF SIZE IS GIVEN, 75% OF THE PLANTS SUPPLIED MUST MEET THE MAXIMUM RANGE SIZE, AND 25% OF THE PLANTS SUPPLIED SHALL BE THE MINIMUM RANGE SIZE SPECIFIED. THE PLANTS SUPPLIED MUST CONFORM TO ALL OF THE MINIMUM DIMENSIONS INDICATED. PLANTS OF LARGER SIZE MAY BE USED IF ACCEPTABLE TO THE ENGINEER AT NO ADDITIONAL COST AND IF SIZES OF CONTAINER OR ROOT BALLS, HEIGHT, AND SPREAD ARE INCREASED PROPORTIONATELY IN ACCORDANCE WITH ANSI Z60.1. ALL OTHER QUALITY REQUIREMENTS OF THE TREE MATERIAL MUST ALSO BE ADHERED.
5. ALL TREES MUST BE NURSERY GROWN, BALL AND BURLAP (B&B) OR CONTAINER GROWN AS-SPECIFIED IN THE MATERIALS SCHEDULE. CONTAINER GROWN MATERIAL CAN BE SUBSTITUTED FOR B&B MATERIAL WITH WRITTEN APPROVAL BY THE D/B CONTRACTOR PRIOR TO INSTALLATION. ALL TREE MATERIALS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z-60.1, LATEST EDITION. ALL TREES SHALL COMPLY WITH ANSI Z-60.1 AND THE URBAN TREE FOUNDATION GUIDELINE FOR NURSERY TREE QUALITY, 2009 EDITION. ALL TREES SHALL BE HIGHEST QUALITY, FIRST CLASS REPRESENTATIVES OF THEIR SPECIES. SECONDS, CULLS, OR PARK GRADE MATERIAL WILL BE REJECTED.
6. CALIPER SIZE IS NOT TO BE REDUCED. CALIPER MEASUREMENTS SHALL BE TAKEN IN ACCORDANCE WITH ANSI STANDARDS.
7. ALL TREES MUST BE STRAIGHT TRUNK, HAVE A STRONG CENTRAL LEADER, FULL HEADED, AND MEET THE MINIMUM REQUIREMENTS. TREES WITH A "Y" SHAPE ARE NOT ACCEPTABLE. TREES THAT HAVE BEEN FRESHLY PRUNED TO MEET THESE SPECIFICATIONS SHALL BE REJECTED.
8. THE TREES VEGETATIVE CANOPY SHOULD BE MOSTLY SYMMETRICAL AND FREE OF LARGE VOIDS OR FLAT SURFACE AREAS ON ONE SIDE.
9. ALL STREET AND SHADE TREES SHALL HAVE A MINIMUM SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE NOTED ON PLANS OR PLANT LISTS.
10. TREES MOVED DURING PERIODS OF HIGH TRANSPIRATION SHALL BE SPRAYED WITH AN ANTI-DESSICANT PRIOR TO MOVING. APPLY AND REMOVE ANTI-DESSICANTS AT THE MANUFACTURER'S RECOMMENDATIONS.
11. TREES SHALL BE STAKED AND GUYED AS DETAILED AND SPECIFIED ONLY IF THE TREE CANNOT STAND ON ITS OWN AS DETERMINED BY THE PROJECT LANDSCAPE ARCHITECT. STAKE AND GUYED MATERIALS SHALL BE REMOVED BY THE LANDSCAPE SUBCONTRACTOR SIX (6) MONTHS AFTER FINAL ACCEPTANCE.
12. ALL TREES ARE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER AT ANY TIME PRIOR TO FINAL ACCEPTANCE. REJECTED PLANTS SHALL BE REPLACED IMMEDIATELY AT NO ADDITIONAL COST.
13. THE LANDSCAPE SUBCONTRACTOR SHALL FIELD STAKE ALL TREES PRIOR TO INSTALLATION. THE OWNER'S REPRESENTATIVE SHALL APPROVE ALL STAKED LOCATIONS PRIOR TO INSTALLATION. PLANTS INSTALLED PRIOR TO APPROVAL BY THE OWNER'S REPRESENTATIVE ARE SUBJECT TO REJECTION AND REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
14. PRIOR TO COMMENCEMENT OF INSTALLATION, THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND SHALL AVOID DAMAGING UTILITIES DURING INSTALLATION. ANY UTILITIES DAMAGED DURING INSTALLATION SHALL BE REPAIRED BY THE LANDSCAPE SUBCONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY AND THE ENGINEER. ALL REPAIRS SHALL BE AT NO COST TO THE OWNER.
15. NO TREES SHALL BE PLANTED WITHIN 10' OF SITE UTILITY LINES. TREE LOCATIONS PROPOSED WITHIN 10' SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO EXCAVATING. FIELD ADJUSTMENT OF TREE LOCATIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE ARCHITECT. PLANTS RELOCATED AND INSTALLED WITHOUT APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT WILL BE REMOVED, REPLACED, AND RELOCATED AT NO ADDITIONAL COST.
16. THE LANDSCAPE CONTRACTOR SHALL UTILIZE ON-SITE TOPSOIL AS AVAILABLE FROM THE EARTHWORK SUBCONTRACTOR. ALL TOPSOIL SHALL BE APPROVED BY THE ENGINEER.
17. NO TREES SHALL BE INSTALLED IN POOR DRAINAGE CONDITIONS. LANDSCAPE SUBCONTRACTOR IS RESPONSIBLE FOR TESTING SUSPECT TREE PITS PRIOR TO TREE INSTALLATION. REFER TO THE LANDSCAPE SPECIFICATIONS FOR TREE PIT TESTING PROCEDURES.
18. ALL TREES SHALL BE PLACED WITH THE BEST FACE FORWARD, TOWARDS THE STREET WHENEVER POSSIBLE.
19. ALL TREES SHOULD BE PRUNED AS NECESSARY PRIOR TO INSTALLATION.
20. PRE-EMERGENT HERBICIDES, TREFLAN, PREEN, OR APPROVED EQUAL, SHALL BE APPLIED TO ALL TREE PLANTING BEDS PRIOR TO MULCHING. APPLY AT MANUFACTURERS RECOMMENDATIONS. HERBICIDES SHALL BE INCORPORATED INTO THE SOIL AT THE RECOMMENDATION OF THE MANUFACTURER.
21. APPLY ORGANIC ROOT STIMULATOR, CONTINUING MYCORHIZZAE, TO ALL TREES PRIOR TO BACKFILLING. APPLY AT MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUBMIT SAMPLES OF ROOT STIMULATOR TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
22. THE LANDSCAPE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE PLANT INSTALLATIONS UNTIL ACCEPTED BY THE OWNER. MAINTENANCE SHALL INCLUDE RE-MULCHING, WATERING, APPLICATIONS OF HERBICIDES, FUNGICIDES, INSECTICIDES AND PESTICIDES AS NECESSARY. MAINTENANCE SHALL INCLUDE ALL TREES, SEEDED AREAS AND SOD.
23. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL TREES SHALL BE IN A HEALTHY AND THRIVING CONDITION ACCORDING TO THE NATURAL GROWTH HABITS OF THE INDIVIDUAL SPECIES AT THE TIME OF THE PROJECT COMPLETION.

GENERAL LANDSCAPE AND SEEDING NOTES:

1. SCARIFY, LOOSEN, FLOAT AND DRAG THE UPPER FOUR INCHES (4") OF SOIL TO BRING IT TO PROPER CONDITION AND GRADE PRIOR TO SEEDING / SODDING. REMOVE STONES LARGER THAN ONE INCH (1"), STICKS, ROOTS, RUBBISH, ETC. FINISHED GRADE SHALL BE LOOSE AND FREE DRAINING PRIOR TO SEEDING / SODDING.
2. STRIP EXISTING GRASS AND WEEDS, INCLUDING ROOTS, PRIOR TO SEEDING. APPLY HERBICIDES AS NECESSARY TO SPOT TREAT UNWANTED SPECIES.
3. INSTALL SEED PER THE WRITTEN SPECIFICATIONS. LANDSCAPE SUBCONTRACTOR MUST ADJUST APPLICATION RATES TO PURE LIVE SEED RATES AS INDICATED.
4. ALL SEEDED AREAS MUST BE MAINTAINED BY THE LANDSCAPE SUBCONTRACTOR UNTIL ACCEPTANCE BY THE DESIGN BUILD CONTRACTOR.



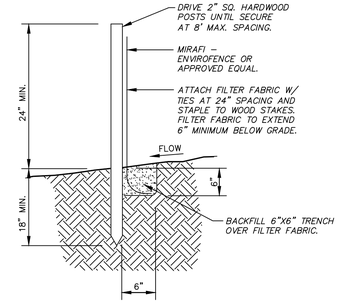
1	TREE STAKING DETAIL
C503	NOT TO SCALE



NOTE:

1. EARTH RINGS NOT REQUIRED WHEN LOCATED IN A PLANTING BED.

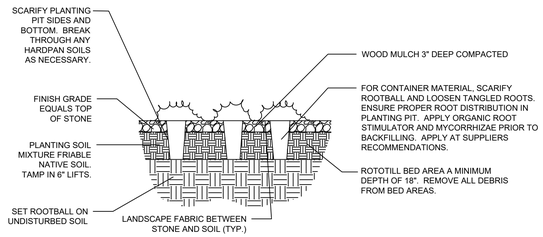
2	SHRUB PLANTING DETAIL
C503	NOT TO SCALE



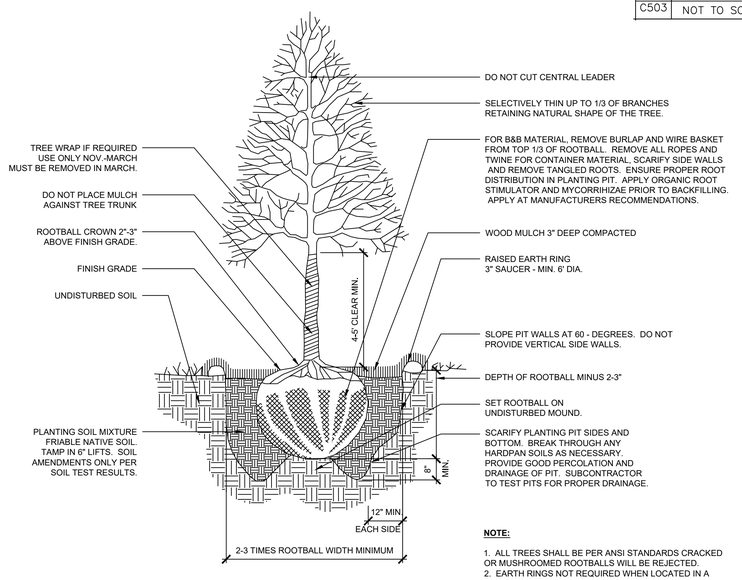
NOTES

1. SILTATION FENCE TO REMAIN IN PLACE UNTIL LAWNS HAVE BEEN ESTABLISHED AND/OR FINISH SURFACES HAVE BEEN INSTALLED.
2. SILTATION FENCE TO BE CHECKED AND MAINTAINED THROUGHOUT CONSTRUCTION. SILT ACCUMULATIONS SHALL BE REMOVED PERIODICALLY AS REQUIRED.
3. SECTIONS OF FILTER FABRIC TO HAVE 12" OVERLAP AT WOOD STAKES AND STAPLED IN PLACE.

3	TYPICAL SILTATION FENCE DETAIL
C503	NOT TO SCALE



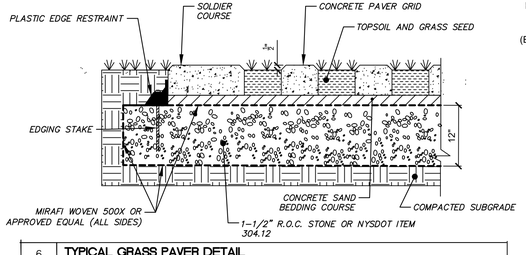
4	PLANTING BED DETAIL
C503	NOT TO SCALE



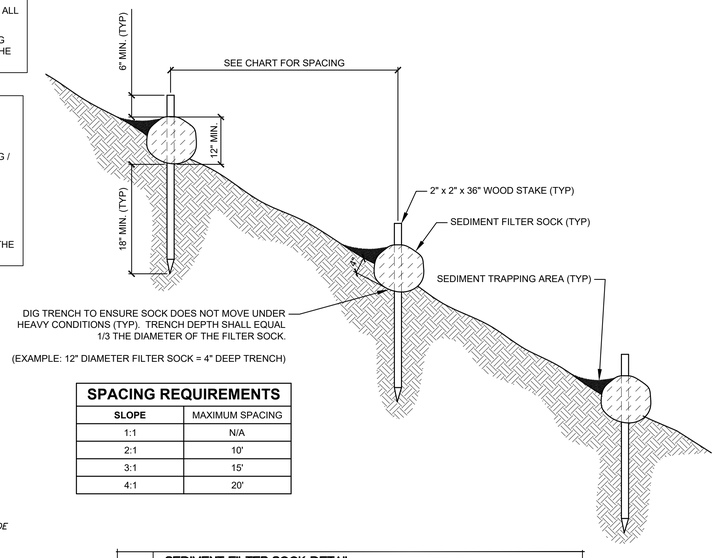
NOTE:

1. ALL TREES SHALL BE PER ANSI STANDARDS CRACKED OR MUSHROOMED ROOTBALLS WILL BE REJECTED.
2. EARTH RINGS NOT REQUIRED WHEN LOCATED IN A PLANTING BED.

5	TREE PLANTING DETAIL
C503	NOT TO SCALE



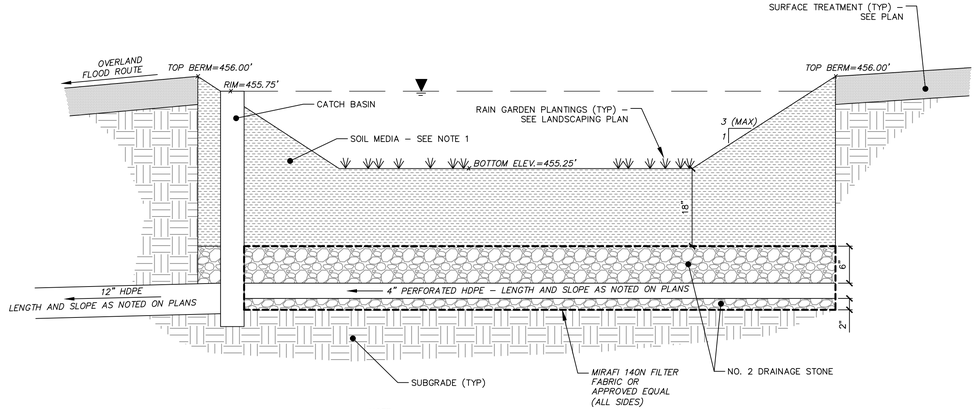
6	TYPICAL GRASS PAVER DETAIL
C503	NOT TO SCALE



SPACING REQUIREMENTS

SLOPE	MAXIMUM SPACING
1:1	N/A
2:1	10'
3:1	15'
4:1	20'

7	SEDIMENT FILTER SOCK DETAIL
C503	NOT TO SCALE



NOTE:
1. SOIL MEDIS TO CONSIST OF 50%–70% SAND (WITH LESS THAN 5% CLAY CONTENT),AND 50%–30% TOPSOIL (WITH LESS THAN 5% ORGANIC MATERIAL). POUROUSITY OF THE SOIL MEDIA SHALL BE GREATER THAN 20%

8	RAIN GARDEN DETAIL
C503	NOT TO SCALE

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	N/A
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

SITE DETAILS

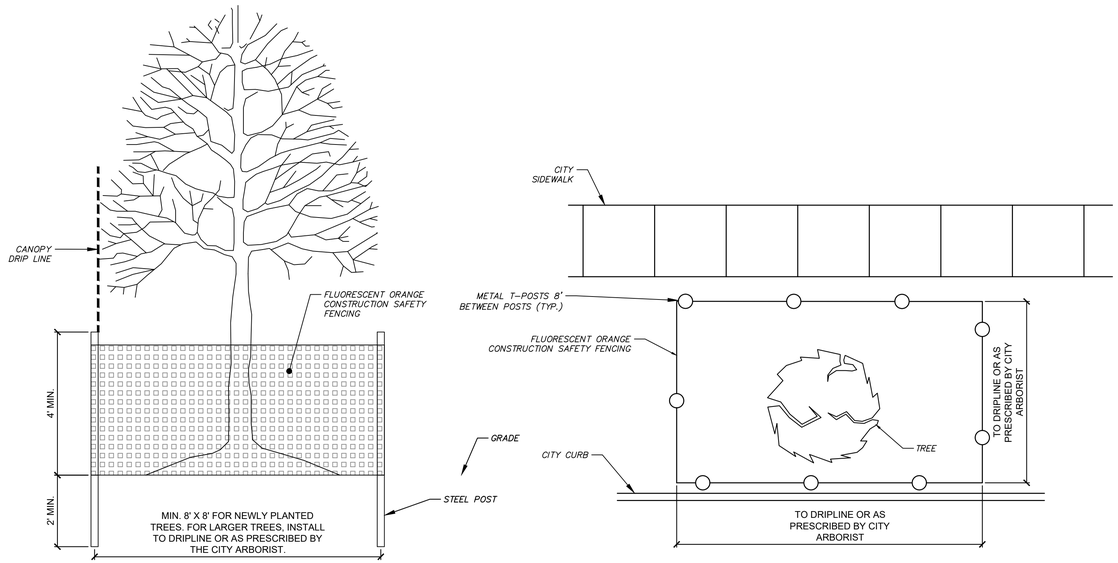
KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.
C503

RIAN GARDEN DETAIL



ELEVATION VIEW

PLAN VIEW

NOTES:

1. FOR TREES WITH A CROWN SPREAD OF EIGHT (8) FEET OR LESS, A SUBSTANTIAL FENCE, FRAME, OR BOX NOT LESS THAN FOUR (4) FEET HIGH AND EIGHT (8) FEET SQUARE SHALL BE INSTALLED AND MAINTAINED PRIOR TO THE COMMENCEMENT OF, AND FOR THE DURATIO OF, THE PROJECT EXTENDING TO THE DRIL LINE OR TO A DISTANCE PRESCRIBED BY THE CITY ARBORIST.
2. FOR TREES WITH A CROWN SPREAD OF EIGHT (8) FEET, A SUBSTANTIAL FENCE, FRAME, OR BOX NOT LESS THAN FOUR (4) FEET HIGH SHALL BE PLACED AT THE TREES DRIPLINE DISTANCE OR AT A DISTANCE PRESCRIBED BY THE CITY ARBORIST.
3. ALL BUILDING MATERIALS, GRAVEL, SOIL, OR DEBRIS SHALL BE KEPT OUTSIDE THESE BARRIERS.
4. NO PERSON OR CONTRACTED ENTITY SHALL DEPOSIT, PLACE, OR STORE OR MAINTAIN UPON ANY PUBLIC PLANCE OR THE CITY ANY STONE, BRICK, SAND, CONCRETE, OR OTHER MATERIALS, WHICH MAY IMPEDE THE FREE PASSE OF WATER, AIR AND FERTILIZER TO THE ROOTS OF ANY TREE GROWING THEREON.

1	TYPICAL TREE PROTECTION DETAIL
C504	NOT TO SCALE

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	N/A
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

SITE DETAILS

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.

C504

GYMO
Architecture ▪ Engineering ▪ Surveying

18969 US Route 11
Watertown, New York 13601

Tel: (315) 788-3900

E-mail:
web@gymodpc.com

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION

202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN
JEFFERSON COUNTY

ENGINEERING REPORT

Job # 2022-076
Date: 04-18-2023

KNOWLTON TECHNOLOGIES
PARKING LOT EXPANSION

PREPARED FOR:
KNOWLTON TECHNOLOGIES LLC
213 FACTORY STREET
WATERTOWN, NY 13601
CONTACT PERSON:
MR. FRED GOUTREMOUT
PH#: 315-782-7517

202 FACTORY STREET AND 176
POLK STREET
CITY OF WATERTOWN
JEFFERSON COUNTY

MATTHEW J CERVINI, P.E.
MANAGING ENGINEER

The above Engineer states that to the best of his knowledge, information and belief, the plans and specifications are in accordance with the applicable requirements of New York State. It is a violation of New York State Law for any person, unless acting under the direction of a licensed professional engineer to alter this document in any way. If altered, such licensee shall affix his or her seal and the notation "altered by " followed by his or her signature, date, and a specific description of alteration

ENGINEERING REPORT

Job # 2022-076
Date: 04-18-2023

GYMO
18969 US Route 11
Watertown, New York 13601
Tel: (315) 788-3900
E-mail: web@gymodpc.com

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION AND LOCATION

Knowlton Technologies, Inc ("Knowlton") is proposing to construct a new +/- 15,350 SF parking lot on 202 Factory Street and 176 Polk Street located in the City of Watertown. The parking lot will accommodate 40 parking spaces including two ADA accessible parking spaces and 4 Electric Vehicle Parking Spaces. This parking lot will be utilized to service employees and guests of Knowlton, located at 213 Factory Street, directly across the street from the parking lot.

The existing properties are located at tax parcel numbers #6-02-206.000 (202 Factory Street) and #6-02-205.000 (176 Polk Street). The two properties directly adjoin each other. Both properties are owned by Knowlton. The Factory Street property currently holds a +/- 10,300 SF building – the former Mick's Place Bar. This building is planned to be demolished to accommodate the new parking facility. The Polk Street property currently has an 18-space parking lot which is utilized by Knowlton staff and guests. This parking lot will be demolished and rebuilt to accommodate the new parking facility. Refer to Existing Conditions Plan C101 in Appendix A for further information on existing site features.

The two properties are located within the Downtown District of the City of Watertown Zoning. This parking lot is an allowed use for Downtown zoning.

Due to the change in use on the Factory Street property, no water or sanitary sewer usage is proposed as part of the new use. Due to this, the existing water service valving to the property will be closed and the existing sewer lateral will be capped at the property line. Note that the demolition of the existing building and disconnection of existing utilities will not be a part of this project.

2.0 EXISTING AND PROPOSED SANITARY SEWER FACILITIES

The Factory Street property currently has a sanitary sewer service lateral that serves the former Mick's place bar. This sewer lateral will be disconnected from the building and capped at the property line when the building is demolished. Note that this work is being performed outside of this project. No new sanitary sewer service facilities are proposed.

3.0 EXISTING AND PROPOSED WATER FACILTIES

The Factory Street property currently has a water service lateral that serves the former Mick's place bar. This water service lateral will be disconnected from the building and capped at the property line when the building is demolished. Note that this work is being performed outside of this project. No new water service facilities are proposed.

4.0 HYDROLOGIC AND HYDRAULIC ANALYSES

4.1 Existing Drainage

A majority of the 202 Factory Street property is covered by the former Mick's Place Bar building. The roof drains for the +/- 10,300 SF building are presumed to be connected to the City's municipal sanitary sewer system. Some lawn and impervious areas exist along the southern portion of the property, and a high point is located near the center of the south edge of the property. Stormwater from this portion of the property sheet flows from the aforementioned high point to the East and West edges of the property, where the water is eventually conveyed to catch basins that are connected to the municipal storm sewer system.

The existing asphalt parking lot covers a majority of the 176 Polk Street property. The site generally slopes from the southeastern corner of the property towards the existing catch basin located near the existing driveway entrance along the western edge of the property. A majority of the stormwater from this property sheet flows to the aforementioned catch basin where it enters the municipal storm sewer system. Portions of the property along the shared property line with the 202 Factory Street property sheet flow towards the East and West edges of the property, where the water is eventually conveyed to catch basins that are connected to the municipal Storm Sewer System. For additional information, refer to the Existing Drainage Areas Map in Appendix A.

4.2 Proposed Drainage

Because the proposed project will disturb less than 1 acre, a SWPPP is not required and will not be prepared. Consistent with City of Watertown requirements, the project will address stormwater quality and quantity requirements in accordance with NYSDEC SPDES Permit requirements.

Proposed drainage for the site consists of new catch basins, HDPE stormwater gravity piping, and a rain garden. The piping will be sized to carry, at a minimum, the peak runoff from the 10-year 24-hour storm event. Runoff generated from any storm events greater than the 10-year event will utilize an overland flood route to the Polk Street or Factory Street Storm System. A new catch basin is proposed near the northern portion of the project site to collect and convey stormwater to the municipal storm sewer system along Factory street. The existing catch basin near the existing parking lot entrance from Polk Street is proposed to continue to be used to collect stormwater from the southern portion of the site and convey it to the municipal storm sewer system along Polk Street. A new catch basin near the southwest corner of the project site is proposed to intercept offsite stormwater and convey it to the existing catch basin near the Polk Street entrance, and eventually the municipal storm sewer system. This offsite stormwater previously flowed on to the project site and was collected by the existing catch basin near Polk Street entrance, however there is now proposed curbing along this property line that will prevent the stormwater from entering the new parking lot. The catch basin will intercept the stormwater and convey it to the same location it is conveyed to under existing conditions. A rain garden is proposed to be installed in the buffer area between the Western edge of the proposed parking lot and Polk Street. The underdrain and overflow for the rain garden will be connected to the proposed catch basin on the northern side of the project site near Factory Street.

Erosion and sediment impacts on surrounding sites will be minimized through the proper implementation and maintenance of Best Management Practices (BMP’s) during and after construction.

For more information, see the Proposed Drainage Area Map in Appendix A.

4.3 Proposed Storm Water Quantity Management

In accordance with SPDES requirements, there will be no increase of the peak runoff from existing to proposed conditions of the 1, 10, and 100-year 24-hour storm events. Due to the decrease in impervious area, from ±17,000 SF to ±15,350 SF, no stormwater quantity mitigation measures are proposed. See below table for pre-existing and anticipated post-development 1, 10, and 100-year peak flow rates from the new development. For storm water calculations, refer to Appendix B.

Existing vs. Proposed Peak Flow Rates in Cubic Feet per Second (CFS)		
Storm Event	**Existing**	**Proposed**
1-yr	1.33	1.13
10-yr	2.32	2.12
100-yr	3.87	3.67

As discussed in Section 2.1, the roof leaders of the existing building on the 202 Factory Street property are presumed to be currently connected to the municipal sanitary sewer system. As part of this project, the sanitary sewer lateral(s) extending onto the project site will be disconnected and capped at the property lines. A new catch basin installed near the northern end of the project site will collect surface runoff from this portion of the site and convey it to the municipal storm sewer system. The point of connection to the municipal storm sewer system is proposed to be the existing catch basin located along the curb line of Factory Street adjacent to the project site. See the attached Civil Plans for more information.

4.4 Proposed Storm Water Quality Management

The project involves redevelopment of existing impervious areas only, therefore, the stormwater management objective is to provide water quality treatment or area reduction for 25% of the total disturbed existing impervious area. Per the NYS Stormwater Design manual, Runoff Reduction Volume (RRv) criteria do not apply for redevelopment projects. This 25% Water Quality Treatment goal will be accomplished through the combination of a rain garden and a reduction in the impervious coverage from the existing to proposed conditions. For storm water quality calculations, refer to Appendix B. A summary table of the provided WQv for the site is provided below.

WQV Providing Practice	Impervious Area (ac)	Provided WQv (ac-ft)
Impervious Area Reduction	0.04	0.003
Rain Garden	0.08	0.006
Total Provided WQv		0.009

5.0 TRAFFIC IMPACTS (TRANSPORTATION DEMAND MANAGEMENT PLAN)

5.1 Parking Demand

Knowlton Technologies operates with a day shift of approximately 90 personnel, and approximately 46 personnel on each of the second and third shifts. In order to accommodate shift turnover and visitors, Knowlton Technologies requires approximately 140 parking spaces.

Note that the proposed project is not anticipated to increase transportation demand or demand for public infrastructure. Rather, the project proposes to provide dedicated parking spaces for Knowlton employees who require parking when working their regular scheduled shifts. Note that no expansion or increase in workforce is currently proposed at Knowlton, and the parking lot expansion is intended to better meet Knowlton's current parking and transportation demand without creating an unreasonable burden on public infrastructure.

5.2 Existing Parking

Currently, Knowlton Technologies uses several private and public parking spaces to fulfill their parking needs. These spaces include approximately 66 spaces in private Knowlton parking lots behind the old Mick's Place, behind the NAPA building, behind the old Freeman Bus Garage, and on site at Knowlton Technologies. Knowlton also leases approximately 20 parking spaces in a parking lot behind Morrison's furniture and the former Micks Place property. On-Street public parking areas utilized by Knowlton include approximately 18 spaces in front of the main facility along Factory Street. This combined total of approximately 104 parking spaces does not adequately meet Knowlton's parking demand of 140 spaces. This causes some Knowlton employees to seek public parking spaces when they show up for their shift, and then relocate their vehicle during their shift into a Knowlton parking lot as spaces become available. See the attached Existing Parking Utilization Map attached in Appendix C.

Public parking areas are not used exclusively by Knowlton, which presents several issues to both Knowlton and the general public. Knowlton employees regularly require 18 - 54 public parking spaces to accommodate employee parking needs. If these public parking spaces are used by Knowlton employees, these spaces are not available for the general public to use when visiting the area. In contrast, if the general public is using all available public parking spaces, Knowlton employees are forced to locate alternative parking spaces elsewhere, taking up additional public parking spaces elsewhere in the City and creating a chain reaction of public parking disruptions and congestion.

The existing parking lot utilized by Knowlton on the project site contains 18 parking spaces and is used by employees and visitors of Knowlton.

Vehicular access to the existing Factory Street property is through an alleyway off of Factory Street, formerly called Burns Avenue. This 24' wide alleyway is a shared access alleyway with the neighboring Morrison Furniture property – 12' of the alleyway is on the 202 Factory Street property while the other 12' is on the Morrison's property. Each property has an access easement to the adjoining neighbor's 12-foot section. This alleyway is proposed to remain, however, access to the new parking facility will be closed off from this alleyway.

Vehicular access to the existing Knowlton parking lot on 176 Polk Street is from Polk Street. There is also existing access to this parking lot via the aforementioned alleyway, and also through another access point off of Polk Street from an adjoining property owned by Morrison's. With landscaped buffers planned around three of the sides of the property and curbing proposed along the fourth side of the property, the existing access point onto 176 Polk Street is proposed to be the only access point to the new parking lot. Refer to Site Development Plan located in Appendix A for further information.

5.3 Proposed Parking

The project proposes to increase the number of parking spaces available to Knowlton employees at this location from 18 to 40. This increase in private parking spaces would allow for 22 of the public parking spaces currently used by Knowlton on a regular basis to be turned back over to the general public, thereby reducing the impact and demand Knowlton places on public parking infrastructure. All proposed parking spaces will be off-street. In addition to increasing the parking capacity at this location, the proposed development includes two (2) ADA Accessible parking spaces located closest to the crosswalk going across Factory Street, and four (4) Electric Vehicle parking spaces. Please note that the EV parking spaces will not be for public use. The majority of the parking

spaces (35) within the facility are to be 9'x20' to accommodate pickup trucks. A small amount of parking (5) within the facility will be 9'x18'.

Existing sidewalk facilities are located adjoining the properties along Factory Street and Polk Street which accommodate pedestrian traffic. Additionally, four (4) bicycle parking spaces are currently utilized at the main Knowlton property on Factory Street, so additional bicycle parking spaces are not proposed as a part of this project.

The site has been designed to accommodate entry of emergency and fire vehicles to the new parking facilities in the case of an emergency to nearby buildings or properties. A 40' pumper truck has been modelled entering the proposed site. Because the property will contain no buildings or dumpsters, a refuse truck was not modeled entering the proposed site. Refer to Vehicular and Pedestrian Circulation Plan in Appendix A for further information.

5.4 Assessment of Alternatives to meet Transportation Demands

Public transportation is available in the vicinity of the Knowlton facility, however the nearest dedicated bus stops appears to be the CitiBus Transfer station, which is approximately 1,200' from Knowlton. The schedules of public transportation routes, as well as the feasibility of employees commuting to work from outside the City being able to use public transportation makes the CitiBus transfer station and other bus stops not a feasible option for most Knowlton employees.

As discussed in Section 5.3, four bicycle parking spaces are currently utilized at the main Knowlton property on Factory Street to encourage employees to ride bicycles to work. Due to the nature of the parking demand for Knowlton Technologies (daily employee parking), other methods of reducing single occupancy vehicle trips are not applicable.

Additionally, a "No Action" alternative was considered where Knowlton would continue to utilize the existing private and public parking spaces to serve their parking needs. Under this alternative, Knowlton would continue to utilize approximately up to 54 public parking spaces on a daily basis. This alternative was not considered further, as the unnecessary continued use of the public parking spaces by Knowlton employees would be an unreasonable burden on public parking infrastructure. Construction of the proposed parking lot would create an additional 22 dedicated parking spaces, and would thereby reduce Knowlton's burden on the public parking infrastructure by 22 spaces. This makes these spaces available for other local businesses, or the general public when visiting the area.

6.0 LIGHTING AND LANDSCAPING

6.1 Lighting

Lighting for the site will be generated by ground mounted LED fixtures along the perimeter of the proposed parking lot. Refer to Utility Plan and Photometrics Plan in Appendix A for additional information.

6.2 Landscaping

Any space along the project corridor that was not utilized as part of the parking lot was reclaimed as green space or landscaping areas. Landscaping is proposed along the property lines directly adjoining Factory Street and Polk Street, as well a landscaped area between the aforementioned 12' access easement with Morrison's and the eastern edge

of the proposed parking lot. A rain garden is proposed in the buffer area between Polk street and the proposed parking lot. Landscaping will be consistent with City of Watertown zoning requirements. Species selected for the proposed rain garden will need to meet NYSDEC requirements to achieve the necessary stormwater treatment capabilities. The two existing cherry trees located near the old parking lot entrance are proposed to remain. Refer to the Landscaping Plan in Appendix A for further information on planting species and locations.

7.0 SUMMARY

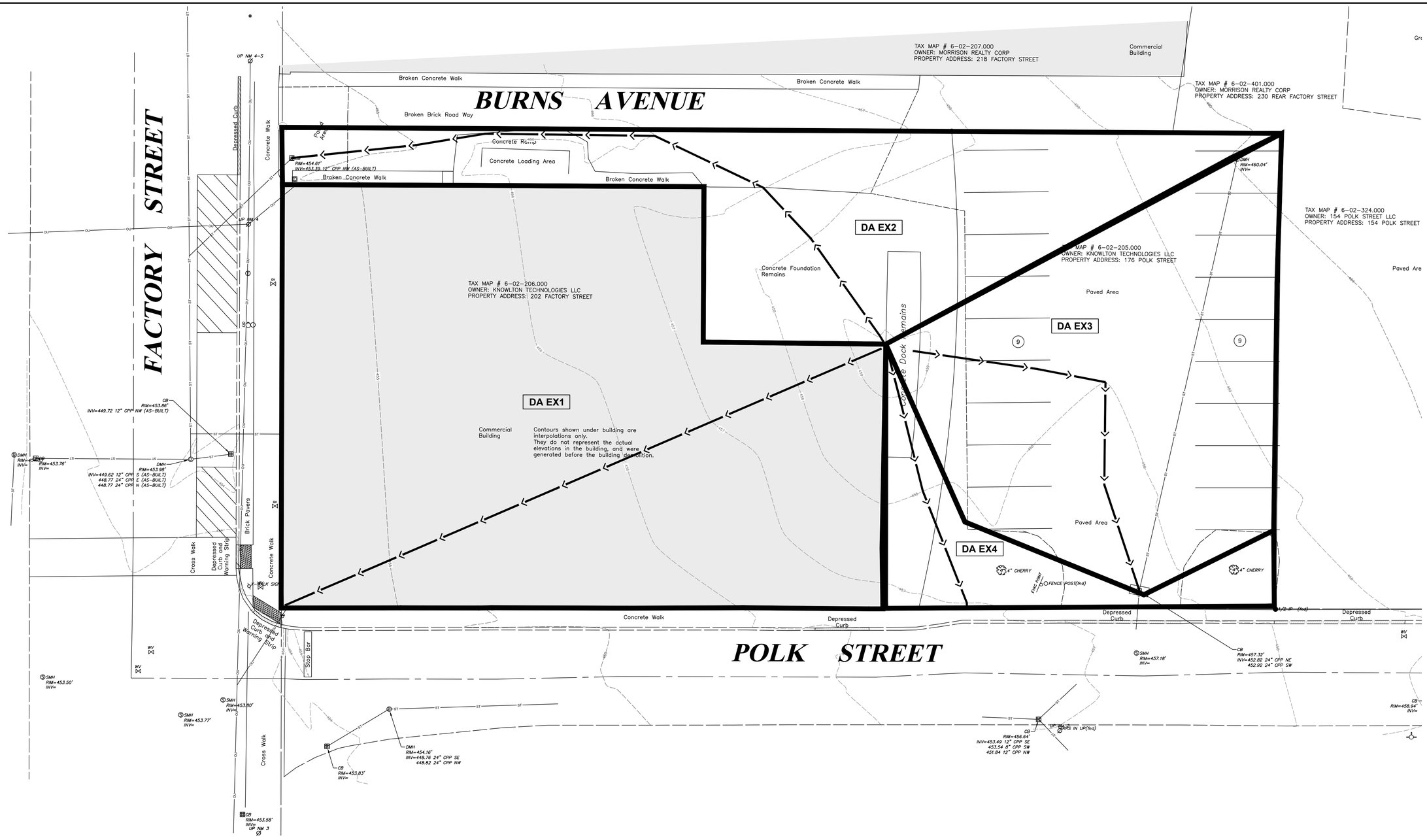
The proposed parking lot expansion is not anticipated to have an adverse effect on the environment. The overall impervious coverage of the two subject properties will be reduced, and storm water runoff generated from the new development will discharge at a rate less than existing levels. The proposed parking lot would create an additional 22 parking spaces for Knowlton employees to utilize, and thereby open up 22 public parking spaces for the general public to use when visiting the area, and reduce burden that Knowlton places on the public parking infrastructure by 22 spots.

Matthew J. Cervini, P.E.
Managing Engineer

Kevin Bamann, P.E.
Senior Project Engineer

APPENDIX A:
MAPPING

PLOT TIME: 4/5/2023 3:49:48 PM



PROPOSED LEGEND	
▬▬	EXISTING DRAINAGE AREA
——←	EXISTING TC PATH

NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	1" = 10'
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-05-2023

EXISTING DRAINAGE AREAS MAP

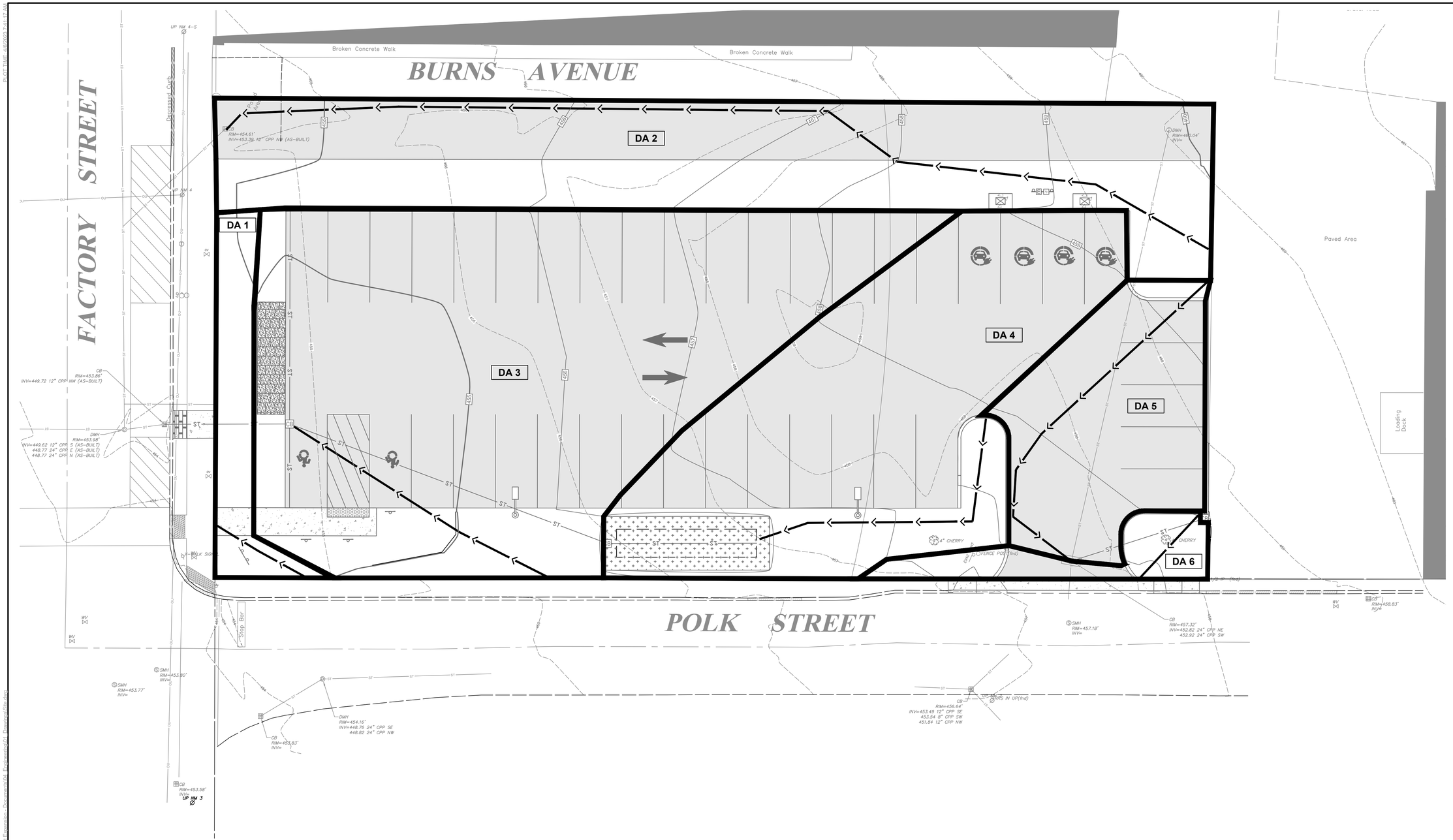
KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED:	N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.
DE1

PROJECT LOCATION: C:\Users\mmoreau\GYMO DPC\2022 076 Knowlton Technologies Parking Lot Expansion - Documents\04 - Engineering\01 - Drawings\Site.dwg



PROPOSED LEGEND	
	PROPOSED DRAINAGE AREA
←	PROPOSED TC PATH

NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 10 ft.
5 0 5 10 20

PROPOSED DRAINAGE AREAS MAP

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	1" = 10'
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023
LAST REVISED:	N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.
DP1

PLOT TIME: 4/6/2023 7:41:17 AM
PROJECT LOCATION: C:\Users\mtomkins\GYMO DPC\2022\076 Knowlton Technologies Parking Lot Expansion - Documents\04 - Engineering\01 - Drawings\Site.dwg

APPENDIX B:
STORM WATER CALCULATIONS

GYMO

Architecture ■ Construction Management
Engineering ■ Land Surveying

Equations and Constants			
WQv* =	P(Rv)(A)/12	P = 0.9	
Rv =	0.05 + 0.009(I)	1 ac-ft = 43560	ft³
RRv =	P(Rv*)(Ai)/12	Rv* = 0.95	
Ai =	S(Aic)		

Reduction Factor S	
HSG A	0.55
HSG B	0.4
HSG C	0.3
HSG D	0.2

Knowlton Water Quality Calcs

WQV & RRV Provided

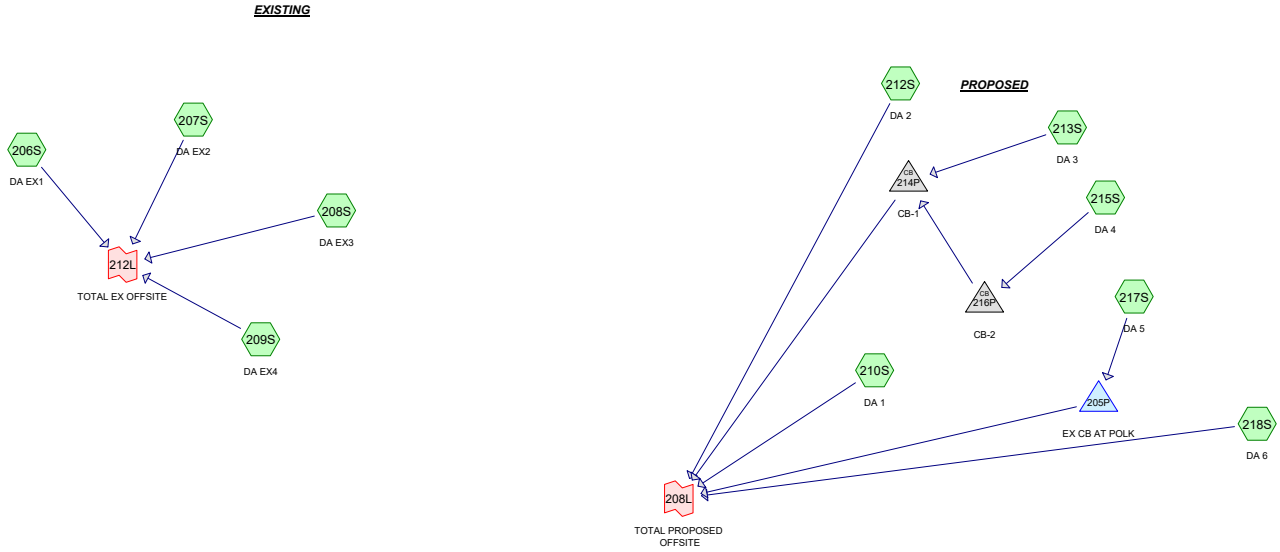
D.A. #	Group A Soils (%)	Group B Soils (%)	Group C Soils (%)	Group D Soils (%)	Impervious Area (ac)	S	I (%)	Rv	A (ac)	WQv (ft³)	Aic (ac)	Ai (ac)	RRv Provided	Description
All	0.00	0.00	0.00	100.00	0.04	0.20	100.0	0.9500	0.04	124	0.04	0.01	0	Impervious Area Reduction
	0.00	0.00	0.00	100.00	0.08	0.20	72.7	0.7045	0.11	253	0.08	0.02	0	Rain Garden

WQV & RRV Required (Redevelopment)

D.A. #	Group A Soils (%)	Group B Soils (%)	Group C Soils (%)	Group D Soils (%)	Impervious Area (ac)	S	I (%)	Rv	A (ac)	WQv (ft³)	Aic (ac)	Ai (ac)	Min RRv (ft³)	Notes
Redev.	0.00	0.00	0.00	100.00	0.39	0.20	88.6	0.8477	0.44	305	0.39	0.08	242	Required WQv = 25% calc. WQv No required RRv for Redevelopment

	*WQv (ac-ft)	RRv (ac-ft)
Required	0.007	0.000
Provided	0.009	0.000

*Project is redevelopment of existing impervious so goal is to treat 25% of original WQv. This will be achieved by reducing the impervious coverage of the site by .04 acres and utilizing a rain garden to provide the remaining require WQv.



Subcat Reach Pond Link

Routing Diagram for Knowlton Drianage Calcs

Prepared by GYMO Architecture, Engineering, & Land Surveying D.P.C., Printed 4/6/2023

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.195	80	>75% Grass cover, Good, HSG D (207S, 208S, 209S, 210S, 212S, 213S, 215S, 217S, 218S)
0.459	98	Paved parking, HSG D (207S, 208S, 209S, 210S, 212S, 213S, 215S, 218S)
0.046	98	Unconnected pavement, HSG D (217S)
0.237	98	Unconnected roofs, HSG D (206S)
0.937	**94**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.937	HSG D	206S, 207S, 208S, 209S, 210S, 212S, 213S, 215S, 217S, 218S
0.000	Other	
0.937		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.195	0.000	0.195	>75% Grass cover, Good	207S, 208S, 209S, 210S, 212S, 213S, 215S, 217S, 218S
0.000	0.000	0.000	0.459	0.000	0.459	Paved parking	207S, 208S, 209S, 210S, 212S, 213S, 215S, 218S
0.000	0.000	0.000	0.046	0.000	0.046	Unconnected pavement	217S
0.000	0.000	0.000	0.237	0.000	0.237	Unconnected roofs	206S
0.000	**0.000**	**0.000**	**0.937**	**0.000**	**0.937**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	214P	450.09	449.82	26.8	0.0101	0.012	12.0	0.0	0.0
2	216P	452.08	451.54	72.6	0.0074	0.012	12.0	0.0	0.0

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 206S: DA EX1 Runoff Area=10,326 sf 100.00% Impervious Runoff Depth>1.87"
Flow Length=139' Slope=0.0200 '/' Tc=1.6 min CN=98 Runoff=0.80 cfs 0.037 af

Subcatchment 207S: DA EX2 Runoff Area=2,203 sf 68.86% Impervious Runoff Depth>1.33"
Flow Length=43' Tc=3.2 min CN=92 Runoff=0.13 cfs 0.006 af

Subcatchment 208S: DA EX3 Runoff Area=5,273 sf 94.88% Impervious Runoff Depth>1.77"
Flow Length=87' Tc=2.4 min CN=97 Runoff=0.39 cfs 0.018 af

Subcatchment 209S: DA EX4 Runoff Area=1,298 sf 10.94% Impervious Runoff Depth>0.71"
Flow Length=57' Slope=0.0400 '/' Tc=5.4 min CN=82 Runoff=0.04 cfs 0.002 af

Subcatchment 210S: DA 1 Runoff Area=734 sf 6.81% Impervious Runoff Depth>0.67"
Flow Length=22' Tc=2.5 min CN=81 Runoff=0.02 cfs 0.001 af

Subcatchment 212S: DA 2 Runoff Area=5,240 sf 51.30% Impervious Runoff Depth>1.11"
Flow Length=219' Tc=9.6 min CN=89 Runoff=0.21 cfs 0.011 af

Subcatchment 213S: DA 3 Runoff Area=8,137 sf 84.20% Impervious Runoff Depth>1.58"
Flow Length=64' Tc=4.3 min CN=95 Runoff=0.52 cfs 0.025 af

Subcatchment 215S: DA 4 Runoff Area=5,009 sf 72.31% Impervious Runoff Depth>1.40"
Flow Length=68' Slope=0.0400 '/' Tc=6.2 min CN=93 Runoff=0.28 cfs 0.013 af

Subcatchment 217S: DA 5 Runoff Area=2,048 sf 97.56% Impervious Runoff Depth>1.87"
Flow Length=84' Tc=2.0 min CN=98 Runoff=0.16 cfs 0.007 af

Subcatchment 218S: DA 6 Runoff Area=532 sf 24.44% Impervious Runoff Depth>0.82"
Flow Length=19' Slope=0.0700 '/' Tc=1.8 min CN=84 Runoff=0.02 cfs 0.001 af

Pond 205P: EX CB AT POLK Inflow=0.16 cfs 0.007 af
Primary=0.16 cfs 0.007 af

Pond 214P: CB-1 Peak Elev=450.56' Inflow=0.79 cfs 0.038 af
12.0" Round Culvert n=0.012 L=26.8' S=0.0101 '/' Outflow=0.79 cfs 0.038 af

Pond 216P: CB-2 Peak Elev=452.35' Inflow=0.28 cfs 0.013 af
12.0" Round Culvert n=0.012 L=72.6' S=0.0074 '/' Outflow=0.28 cfs 0.013 af

Link 208L: TOTAL PROPOSED OFFSITE Inflow=1.13 cfs 0.058 af
Primary=1.13 cfs 0.058 af

Link 212L: TOTAL EX OFFSITE Inflow=1.33 cfs 0.062 af
Primary=1.33 cfs 0.062 af

Total Runoff Area = 0.937 ac Runoff Volume = 0.120 af Average Runoff Depth = 1.54"
20.77% Pervious = 0.195 ac 79.23% Impervious = 0.742 ac

Summary for Subcatchment 206S: DA EX1

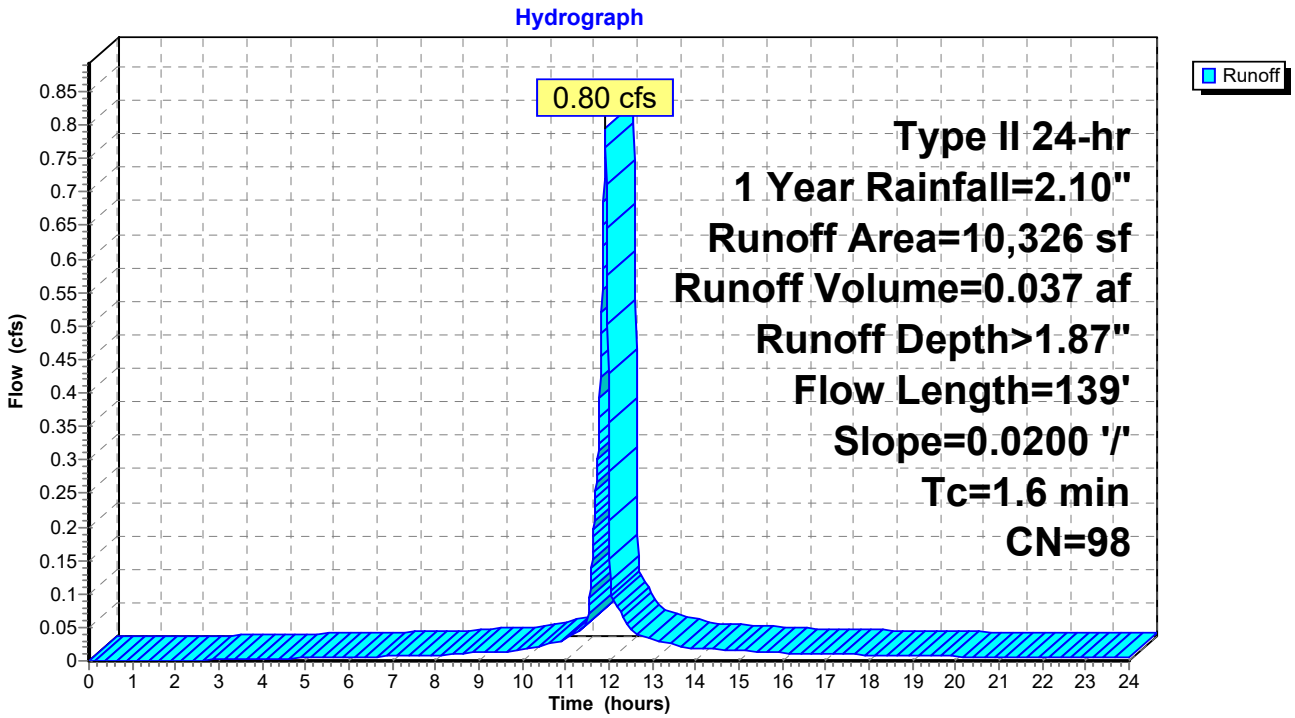
Runoff = 0.80 cfs @ 11.92 hrs, Volume= 0.037 af, Depth> 1.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
10,326	98	Unconnected roofs, HSG D
10,326		100.00% Impervious Area
10,326		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	100	0.0200	1.22		**Sheet Flow, Sheet (First 100')** Smooth surfaces n= 0.011 P2= 2.50"
0.2	39	0.0200	2.87		**Shallow Concentrated Flow, SC (remainder of TC)** Paved Kv= 20.3 fps
1.6	139	Total			

Subcatchment 206S: DA EX1



Summary for Subcatchment 207S: DA EX2

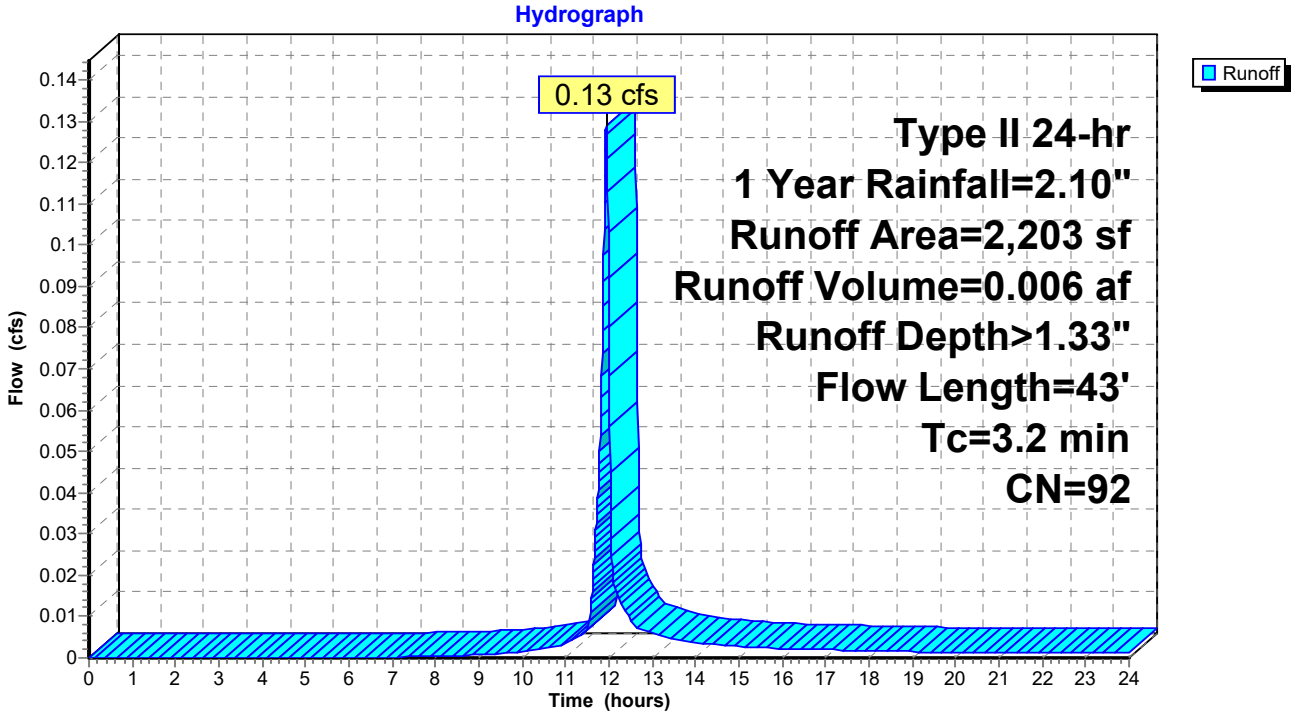
Runoff = 0.13 cfs @ 11.94 hrs, Volume= 0.006 af, Depth> 1.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
1,517	98	Paved parking, HSG D
686	80	>75% Grass cover, Good, HSG D
2,203	92	Weighted Average
686		31.14% Pervious Area
1,517		68.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	27	0.0380	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
0.2	16	0.0670	1.37		**Sheet Flow, Sheet to Burns Ave** Smooth surfaces n= 0.011 P2= 2.50"
3.2	43	Total			

Subcatchment 207S: DA EX2



Summary for Subcatchment 208S: DA EX3

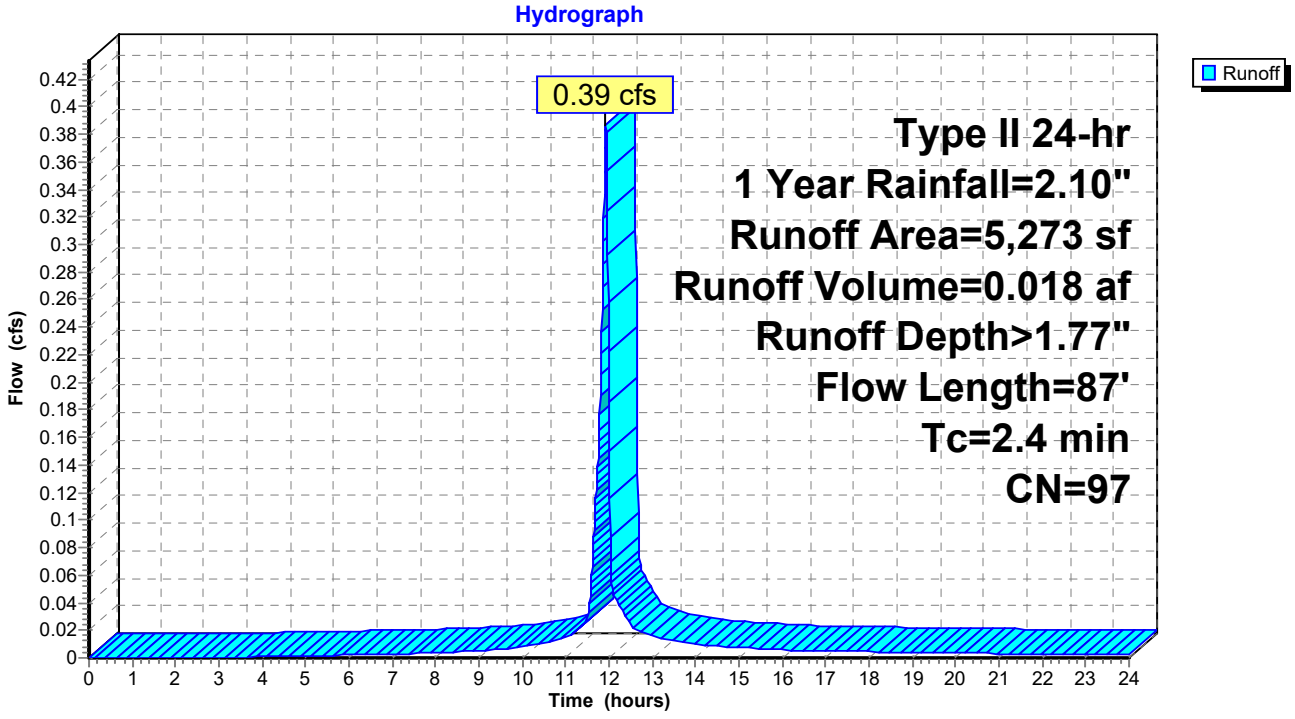
Runoff = 0.39 cfs @ 11.93 hrs, Volume= 0.018 af, Depth> 1.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
5,003	98	Paved parking, HSG D
270	80	>75% Grass cover, Good, HSG D
5,273	97	Weighted Average
270		5.12% Pervious Area
5,003		94.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	12	0.0560	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
1.1	75	0.0200	1.15		**Sheet Flow, sheet over pavement** Smooth surfaces n= 0.011 P2= 2.50"
2.4	87	Total			

Subcatchment 208S: DA EX3



Summary for Subcatchment 209S: DA EX4

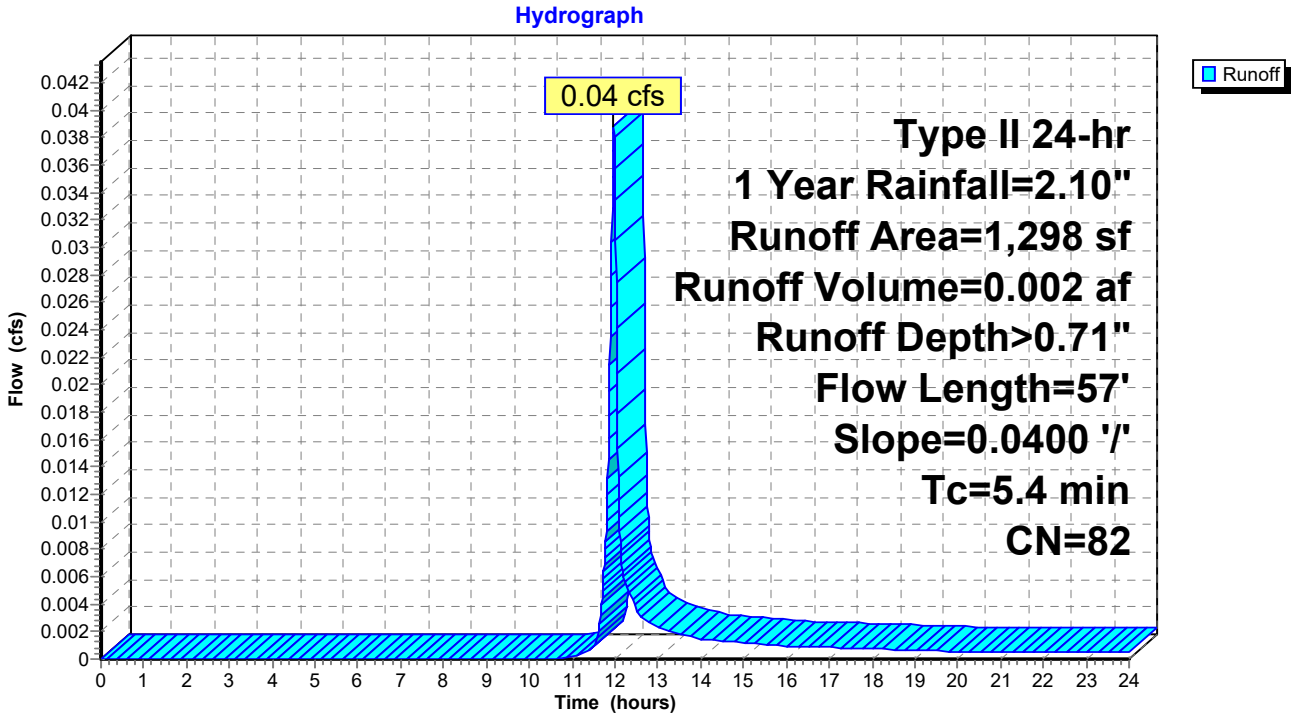
Runoff = 0.04 cfs @ 11.97 hrs, Volume= 0.002 af, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
142	98	Paved parking, HSG D
1,156	80	>75% Grass cover, Good, HSG D
1,298	82	Weighted Average
1,156		89.06% Pervious Area
142		10.94% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	57	0.0400	0.18		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 209S: DA EX4



Summary for Subcatchment 210S: DA 1

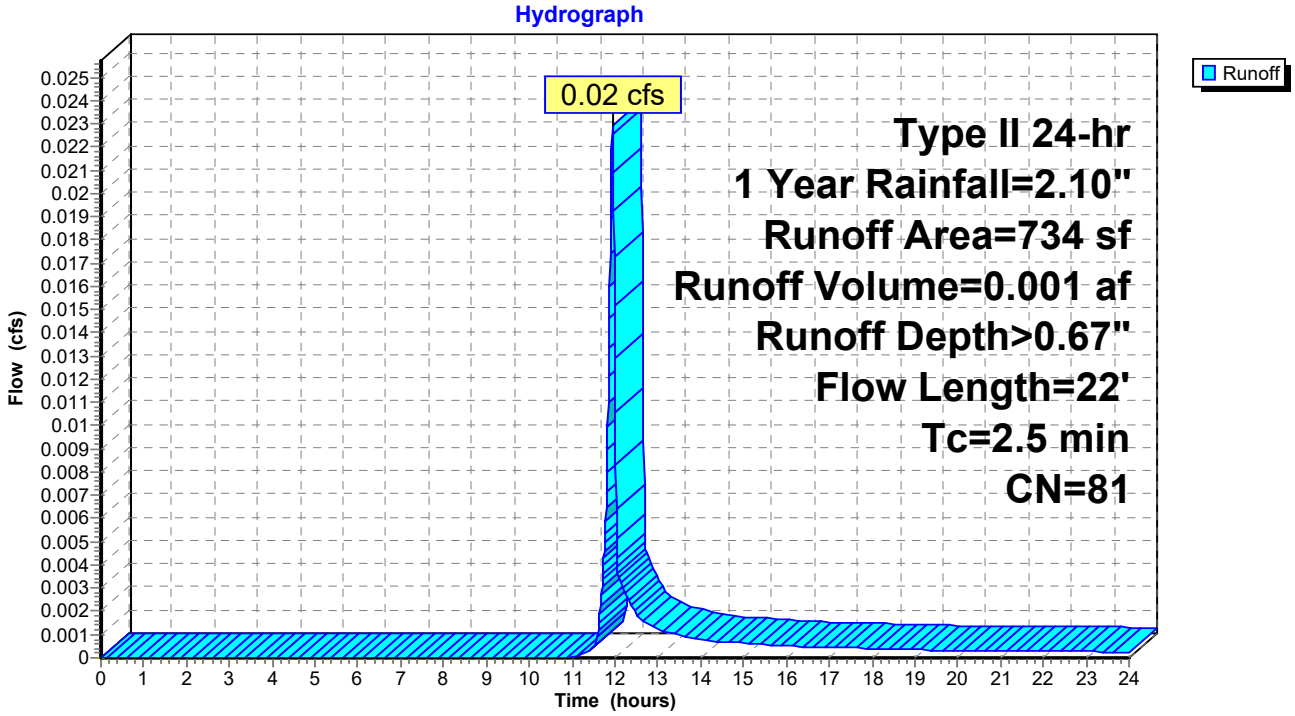
Runoff = 0.02 cfs @ 11.94 hrs, Volume= 0.001 af, Depth> 0.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
50	98	Paved parking, HSG D
684	80	>75% Grass cover, Good, HSG D
734	81	Weighted Average
684		93.19% Pervious Area
50		6.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	18	0.0300	0.13		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.1	4	0.0100	0.48		**Sheet Flow, SHEET OVER CONCRETE** Smooth surfaces n= 0.011 P2= 2.50"
2.5	22	Total			

Subcatchment 210S: DA 1



Summary for Subcatchment 212S: DA 2

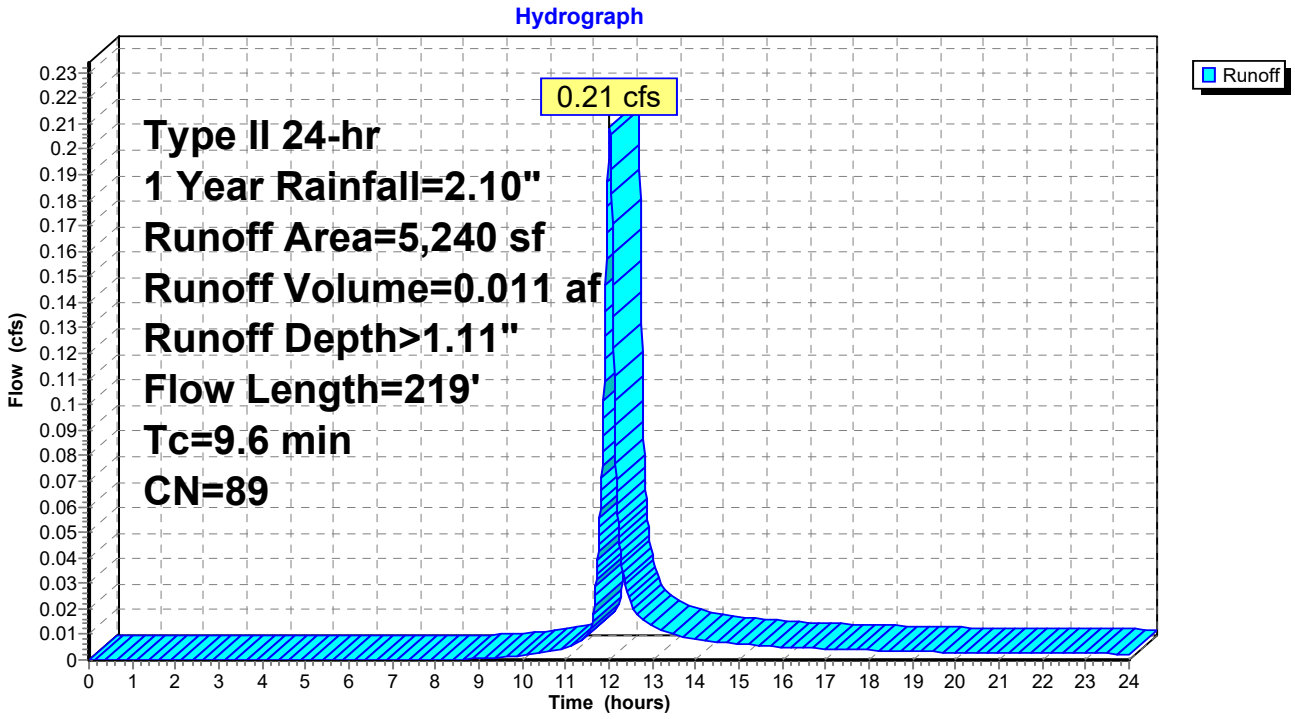
Runoff = 0.21 cfs @ 12.01 hrs, Volume= 0.011 af, Depth> 1.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
2,688	98	Paved parking, HSG D
2,552	80	>75% Grass cover, Good, HSG D
5,240	89	Weighted Average
2,552		48.70% Pervious Area
2,688		51.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	72	0.0200	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.4	28	0.0400	1.24		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
0.7	119	0.0200	2.87		**Shallow Concentrated Flow, SC OVER PAVEMENT** Paved Kv= 20.3 fps
9.6	219	Total			

Subcatchment 212S: DA 2



Summary for Subcatchment 213S: DA 3

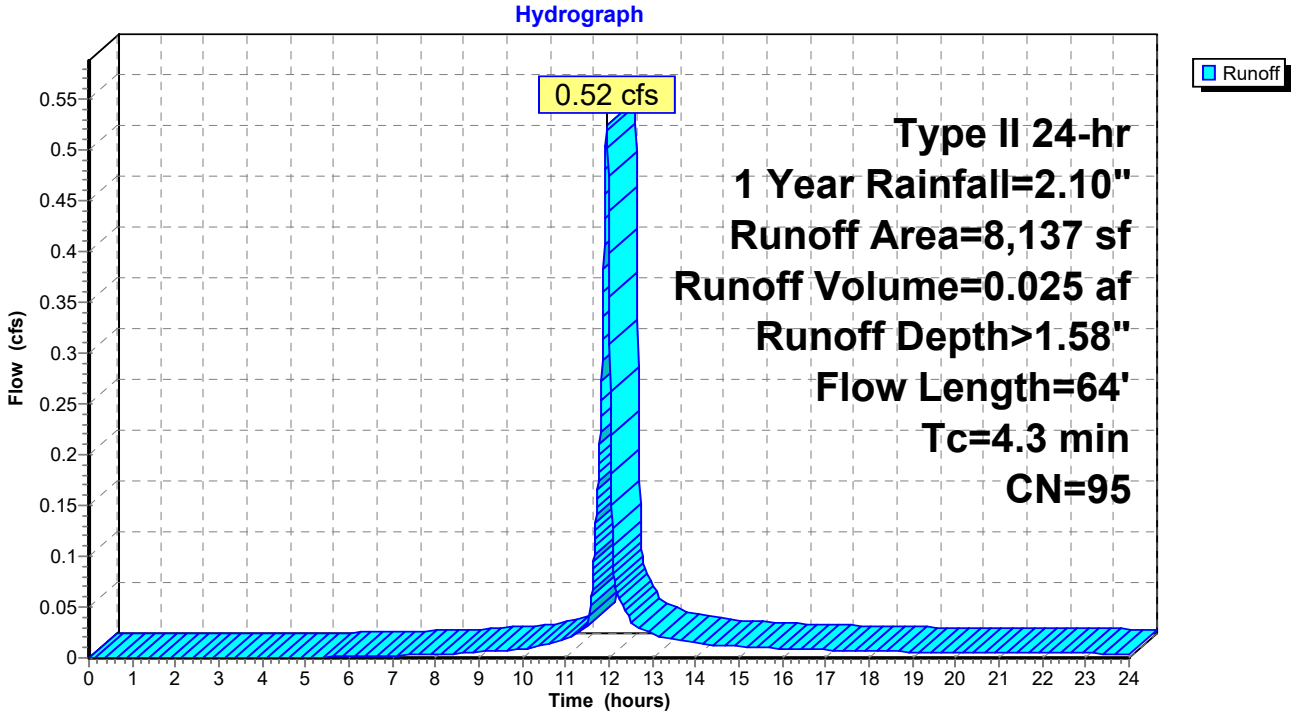
Runoff = 0.52 cfs @ 11.95 hrs, Volume= 0.025 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
6,851	98	Paved parking, HSG D
1,286	80	>75% Grass cover, Good, HSG D
8,137	95	Weighted Average
1,286		15.80% Pervious Area
6,851		84.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	31	0.0300	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.6	33	0.0200	0.97		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
4.3	64	Total			

Subcatchment 213S: DA 3



Summary for Subcatchment 215S: DA 4

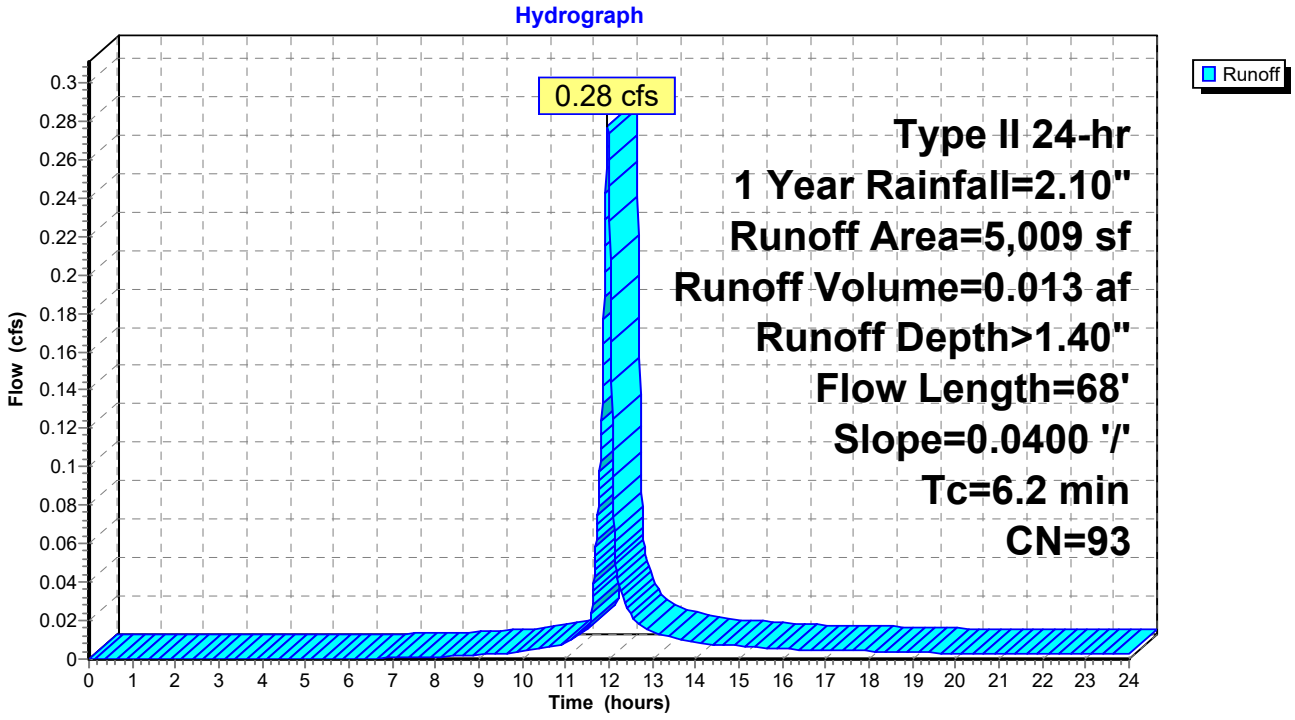
Runoff = 0.28 cfs @ 11.97 hrs, Volume= 0.013 af, Depth> 1.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
3,622	98	Paved parking, HSG D
1,387	80	>75% Grass cover, Good, HSG D
5,009	93	Weighted Average
1,387		27.69% Pervious Area
3,622		72.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	68	0.0400	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 215S: DA 4



Summary for Subcatchment 217S: DA 5

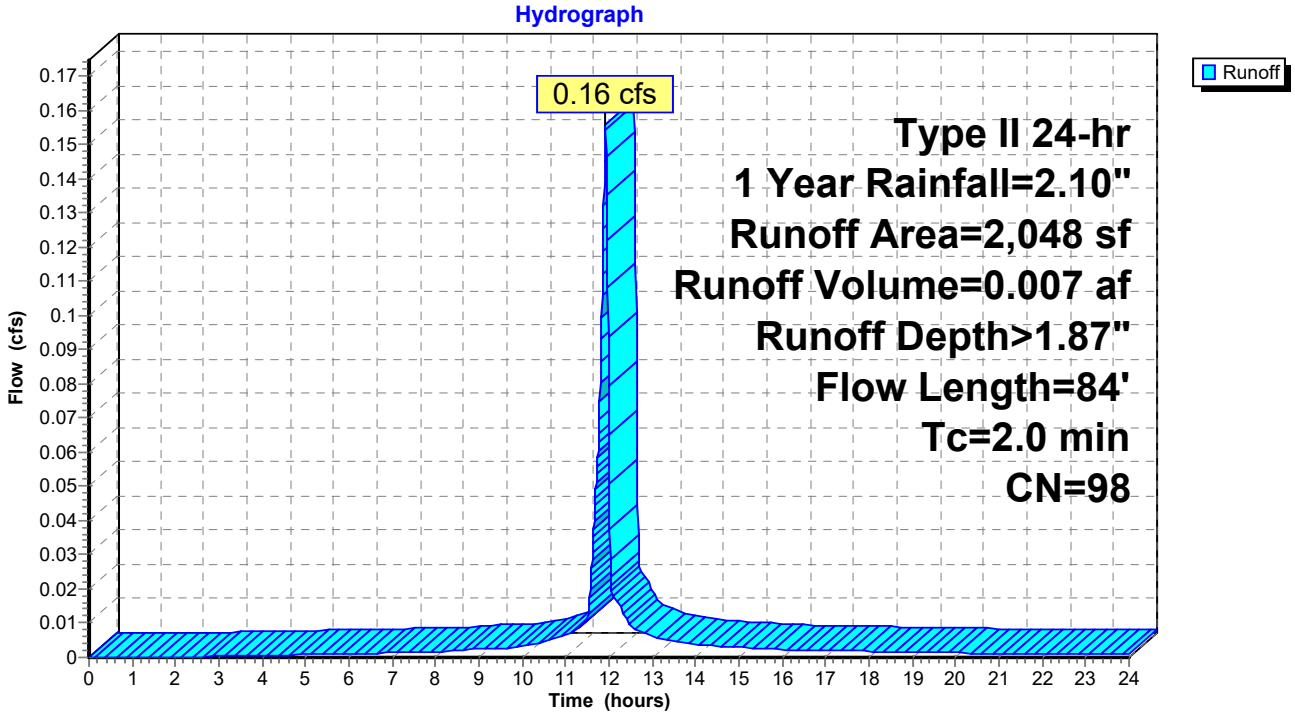
Runoff = 0.16 cfs @ 11.92 hrs, Volume= 0.007 af, Depth> 1.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
50	80	>75% Grass cover, Good, HSG D
1,998	98	Unconnected pavement, HSG D
2,048	98	Weighted Average
50		2.44% Pervious Area
1,998		97.56% Impervious Area
1,998		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	5	0.0200	0.08		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
1.0	79	0.0300	1.36		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
2.0	84	Total			

Subcatchment 217S: DA 5



Summary for Subcatchment 218S: DA 6

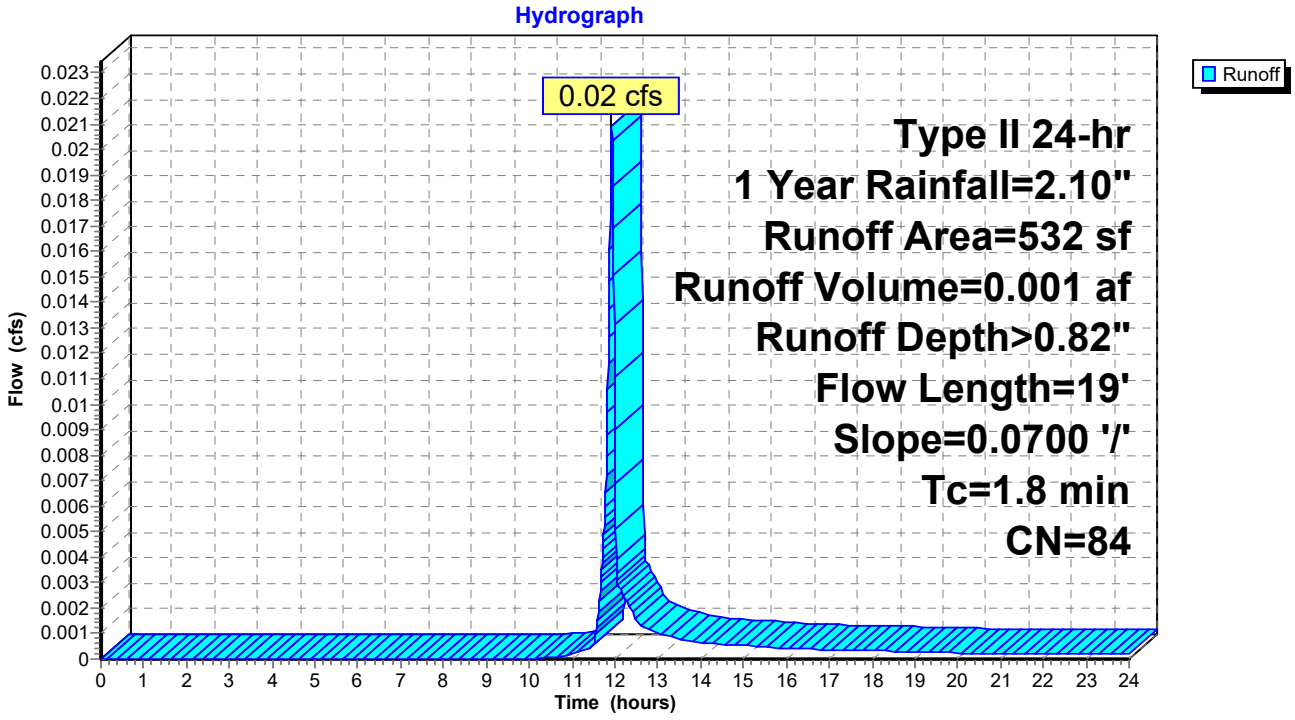
Runoff = 0.02 cfs @ 11.92 hrs, Volume= 0.001 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 1 Year Rainfall=2.10"

Area (sf)	CN	Description
130	98	Paved parking, HSG D
402	80	>75% Grass cover, Good, HSG D
532	84	Weighted Average
402		75.56% Pervious Area
130		24.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	19	0.0700	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 218S: DA 6



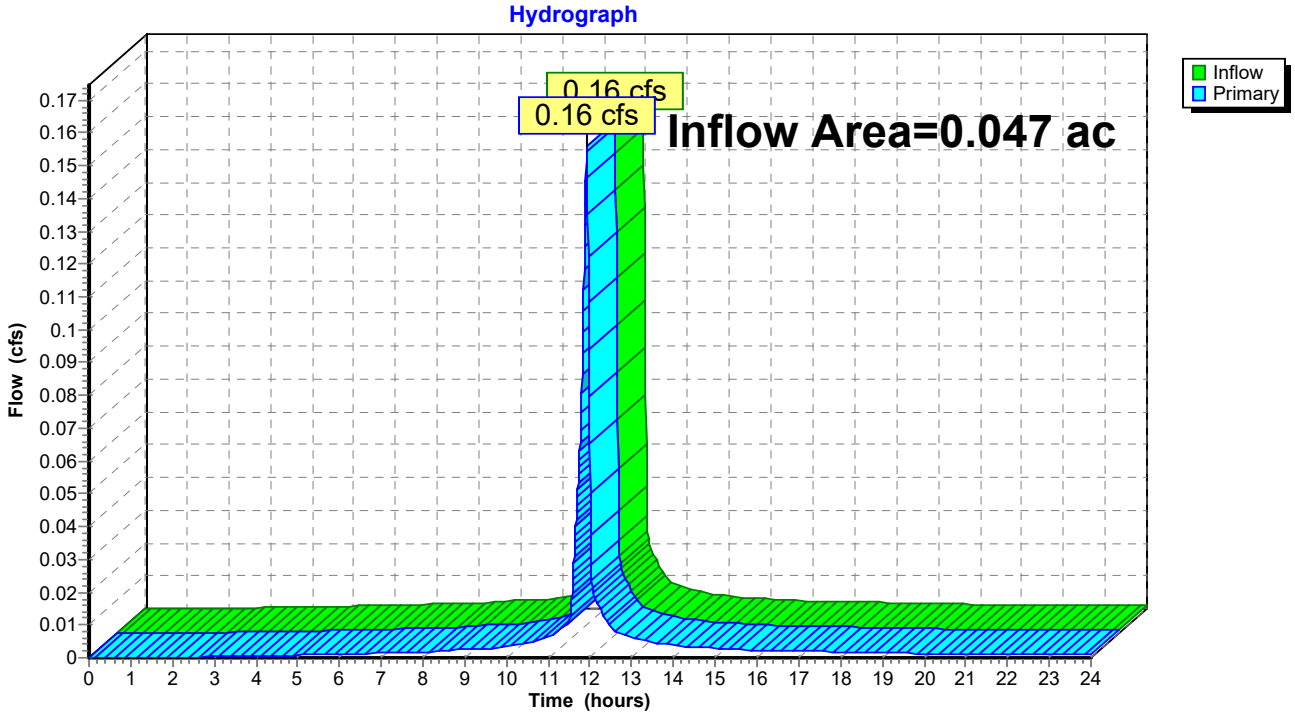
Summary for Pond 205P: EX CB AT POLK

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.047 ac, 97.56% Impervious, Inflow Depth > 1.87" for 1 Year event
Inflow = 0.16 cfs @ 11.92 hrs, Volume= 0.007 af
Primary = 0.16 cfs @ 11.92 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 205P: EX CB AT POLK



Summary for Pond 214P: CB-1

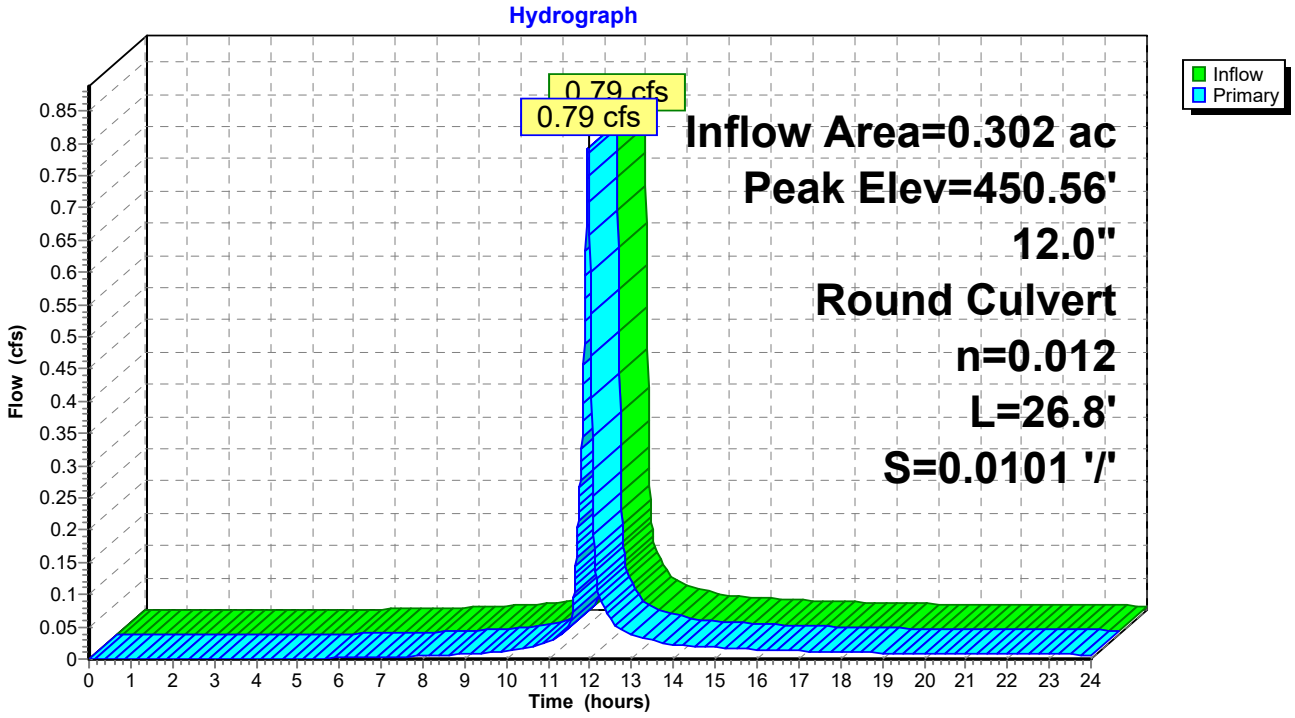
Inflow Area = 0.302 ac, 79.67% Impervious, Inflow Depth > 1.51" for 1 Year event
Inflow = 0.79 cfs @ 11.96 hrs, Volume= 0.038 af
Outflow = 0.79 cfs @ 11.96 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min
Primary = 0.79 cfs @ 11.96 hrs, Volume= 0.038 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 450.56' @ 11.96 hrs
Flood Elev= 454.03'

Device	Routing	Invert	Outlet Devices
#1	Primary	450.09'	**12.0" Round Culvert** L= 26.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 450.09' / 449.82' S= 0.0101 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 11.96 hrs HW=450.56' (Free Discharge)
1=Culvert (Barrel Controls 0.79 cfs @ 3.17 fps)

Pond 214P: CB-1



Summary for Pond 216P: CB-2

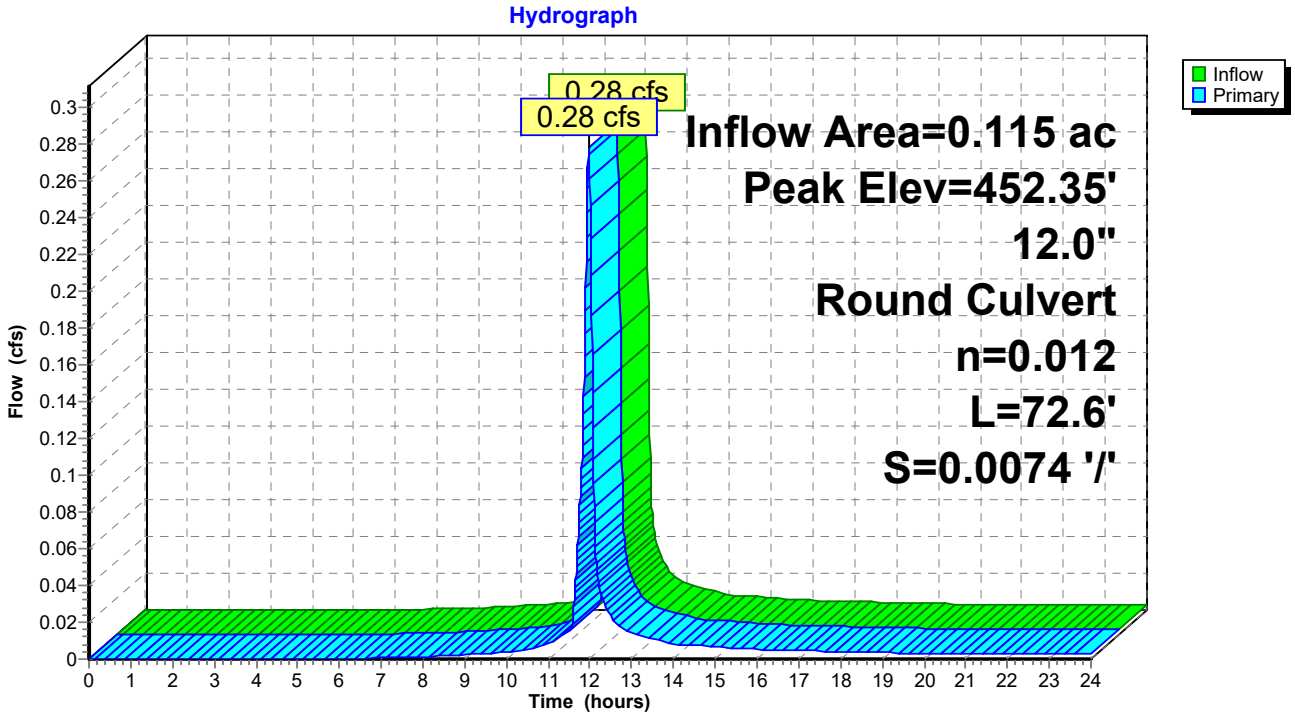
Inflow Area = 0.115 ac, 72.31% Impervious, Inflow Depth > 1.40" for 1 Year event
Inflow = 0.28 cfs @ 11.97 hrs, Volume= 0.013 af
Outflow = 0.28 cfs @ 11.97 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min
Primary = 0.28 cfs @ 11.97 hrs, Volume= 0.013 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 452.35' @ 11.97 hrs
Flood Elev= 455.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	452.08'	**12.0" Round Culvert** L= 72.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 452.08' / 451.54' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 11.97 hrs HW=452.35' (Free Discharge)
1=Culvert (Barrel Controls 0.28 cfs @ 2.44 fps)

Pond 216P: CB-2

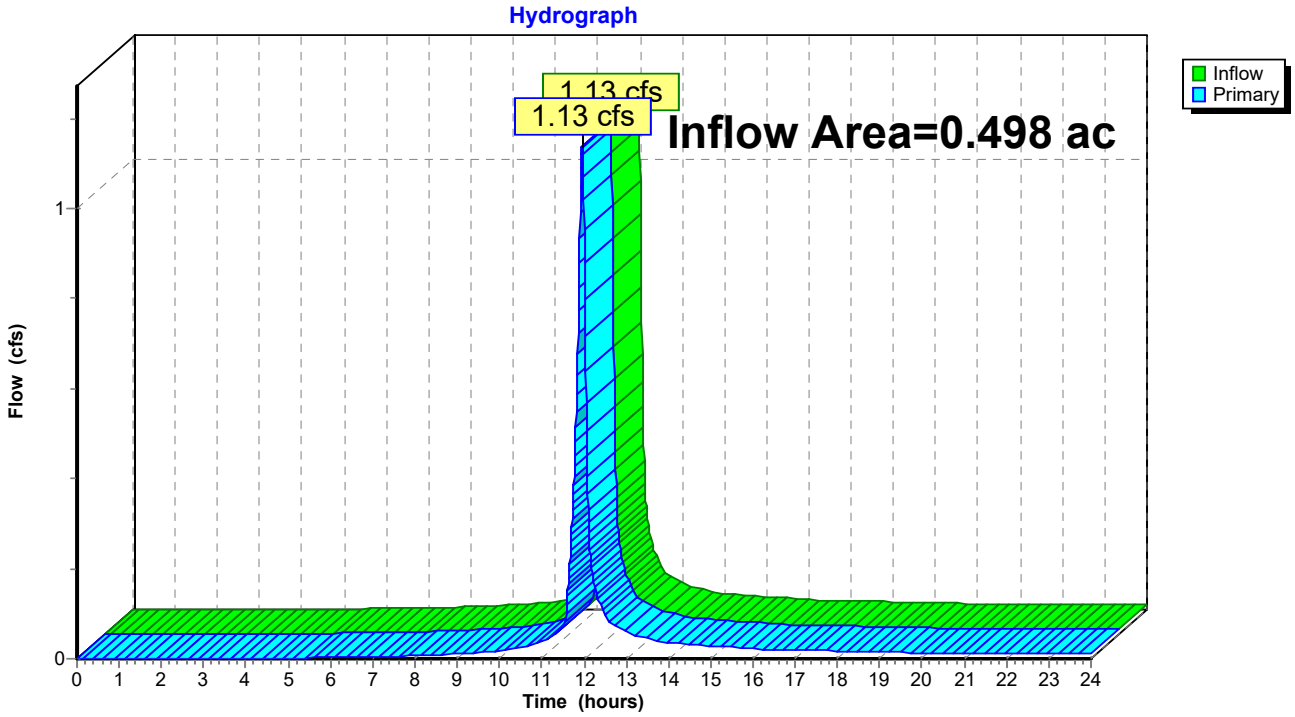


Summary for Link 208L: TOTAL PROPOSED OFFSITE

Inflow Area = 0.498 ac, 70.69% Impervious, Inflow Depth > 1.40" for 1 Year event
Inflow = 1.13 cfs @ 11.95 hrs, Volume= 0.058 af
Primary = 1.13 cfs @ 11.95 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 208L: TOTAL PROPOSED OFFSITE

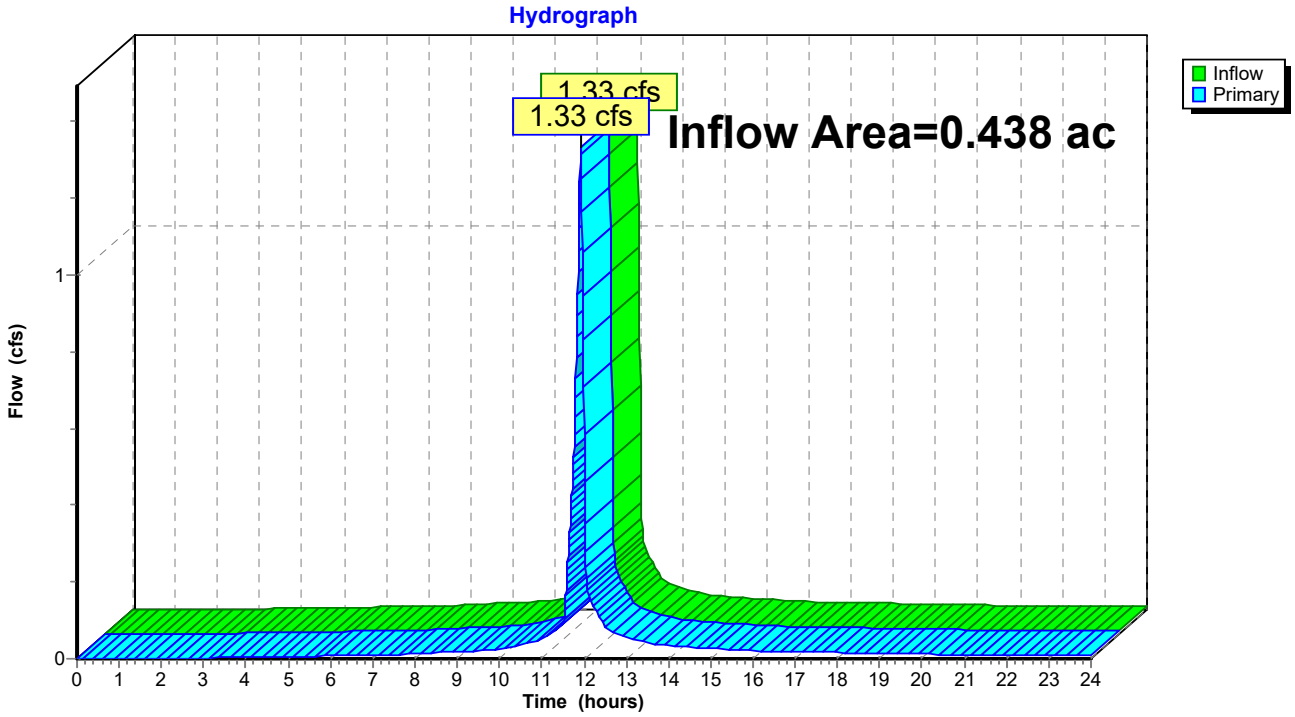


Summary for Link 212L: TOTAL EX OFFSITE

Inflow Area = 0.438 ac, 88.94% Impervious, Inflow Depth > 1.70" for 1 Year event
Inflow = 1.33 cfs @ 11.92 hrs, Volume= 0.062 af
Primary = 1.33 cfs @ 11.92 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 212L: TOTAL EX OFFSITE



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 206S: DA EX1 Runoff Area=10,326 sf 100.00% Impervious Runoff Depth>3.27"
Flow Length=139' Slope=0.0200 '/' Tc=1.6 min CN=98 Runoff=1.35 cfs 0.065 af

Subcatchment 207S: DA EX2 Runoff Area=2,203 sf 68.86% Impervious Runoff Depth>2.64"
Flow Length=43' Tc=3.2 min CN=92 Runoff=0.25 cfs 0.011 af

Subcatchment 208S: DA EX3 Runoff Area=5,273 sf 94.88% Impervious Runoff Depth>3.15"
Flow Length=87' Tc=2.4 min CN=97 Runoff=0.66 cfs 0.032 af

Subcatchment 209S: DA EX4 Runoff Area=1,298 sf 10.94% Impervious Runoff Depth>1.78"
Flow Length=57' Slope=0.0400 '/' Tc=5.4 min CN=82 Runoff=0.10 cfs 0.004 af

Subcatchment 210S: DA 1 Runoff Area=734 sf 6.81% Impervious Runoff Depth>1.71"
Flow Length=22' Tc=2.5 min CN=81 Runoff=0.06 cfs 0.002 af

Subcatchment 212S: DA 2 Runoff Area=5,240 sf 51.30% Impervious Runoff Depth>2.35"
Flow Length=219' Tc=9.6 min CN=89 Runoff=0.43 cfs 0.024 af

Subcatchment 213S: DA 3 Runoff Area=8,137 sf 84.20% Impervious Runoff Depth>2.94"
Flow Length=64' Tc=4.3 min CN=95 Runoff=0.94 cfs 0.046 af

Subcatchment 215S: DA 4 Runoff Area=5,009 sf 72.31% Impervious Runoff Depth>2.73"
Flow Length=68' Slope=0.0400 '/' Tc=6.2 min CN=93 Runoff=0.52 cfs 0.026 af

Subcatchment 217S: DA 5 Runoff Area=2,048 sf 97.56% Impervious Runoff Depth>3.27"
Flow Length=84' Tc=2.0 min CN=98 Runoff=0.26 cfs 0.013 af

Subcatchment 218S: DA 6 Runoff Area=532 sf 24.44% Impervious Runoff Depth>1.94"
Flow Length=19' Slope=0.0700 '/' Tc=1.8 min CN=84 Runoff=0.05 cfs 0.002 af

Pond 205P: EX CB AT POLK Inflow=0.26 cfs 0.013 af
Primary=0.26 cfs 0.013 af

Pond 214P: CB-1 Peak Elev=450.77' Inflow=1.44 cfs 0.072 af
12.0" Round Culvert n=0.012 L=26.8' S=0.0101 '/' Outflow=1.44 cfs 0.072 af

Pond 216P: CB-2 Peak Elev=452.45' Inflow=0.52 cfs 0.026 af
12.0" Round Culvert n=0.012 L=72.6' S=0.0074 '/' Outflow=0.52 cfs 0.026 af

Link 208L: TOTAL PROPOSED OFFSITE Inflow=2.12 cfs 0.113 af
Primary=2.12 cfs 0.113 af

Link 212L: TOTAL EX OFFSITE Inflow=2.32 cfs 0.112 af
Primary=2.32 cfs 0.112 af

Total Runoff Area = 0.937 ac Runoff Volume = 0.224 af Average Runoff Depth = 2.88"
20.77% Pervious = 0.195 ac 79.23% Impervious = 0.742 ac

Summary for Subcatchment 206S: DA EX1

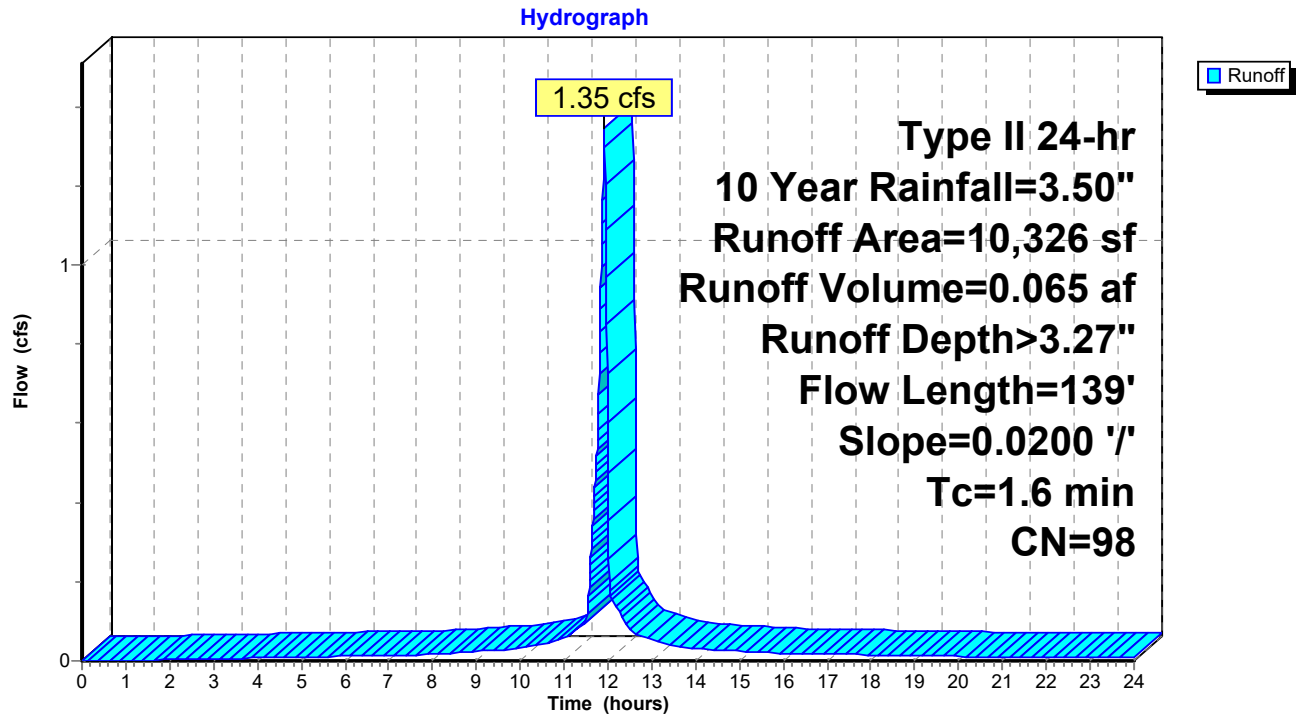
Runoff = 1.35 cfs @ 11.92 hrs, Volume= 0.065 af, Depth> 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
10,326	98	Unconnected roofs, HSG D
10,326		100.00% Impervious Area
10,326		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	100	0.0200	1.22		**Sheet Flow, Sheet (First 100')** Smooth surfaces n= 0.011 P2= 2.50"
0.2	39	0.0200	2.87		**Shallow Concentrated Flow, SC (remainder of TC)** Paved Kv= 20.3 fps
1.6	139	Total			

Subcatchment 206S: DA EX1



Summary for Subcatchment 207S: DA EX2

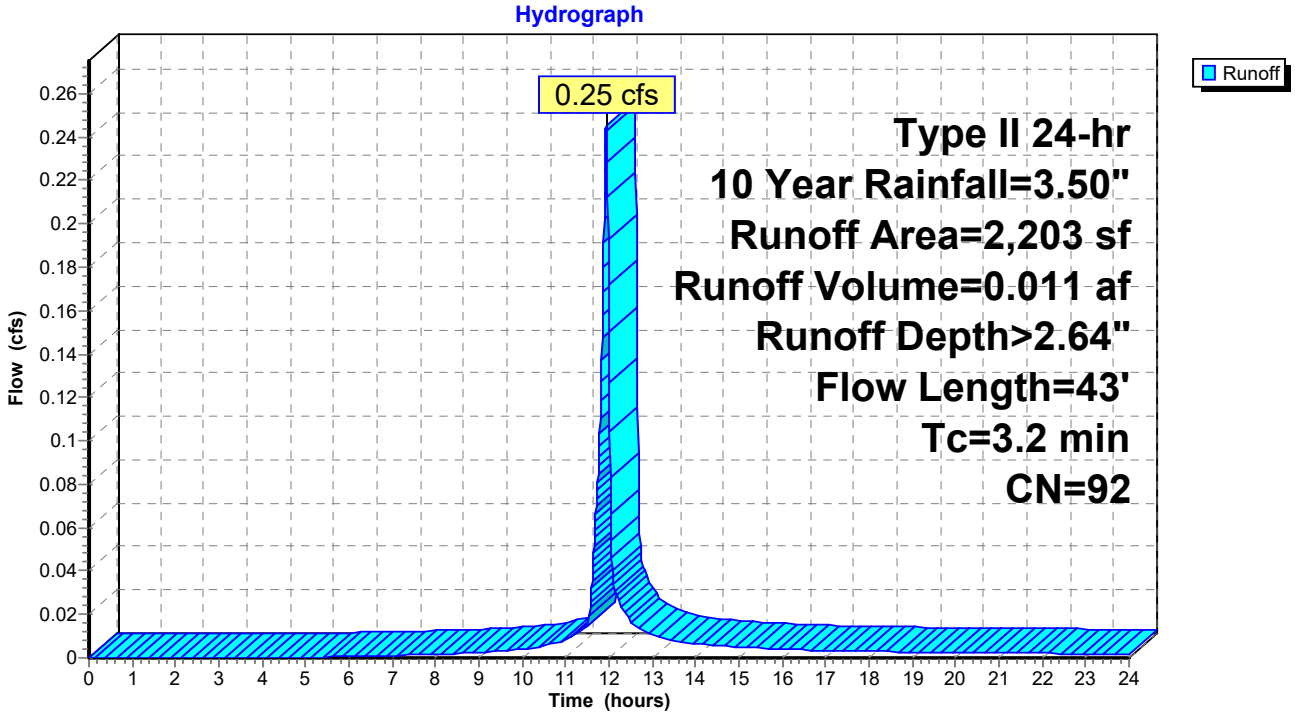
Runoff = 0.25 cfs @ 11.94 hrs, Volume= 0.011 af, Depth> 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
1,517	98	Paved parking, HSG D
686	80	>75% Grass cover, Good, HSG D
2,203	92	Weighted Average
686		31.14% Pervious Area
1,517		68.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	27	0.0380	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
0.2	16	0.0670	1.37		**Sheet Flow, Sheet to Burns Ave** Smooth surfaces n= 0.011 P2= 2.50"
3.2	43	Total			

Subcatchment 207S: DA EX2



Summary for Subcatchment 208S: DA EX3

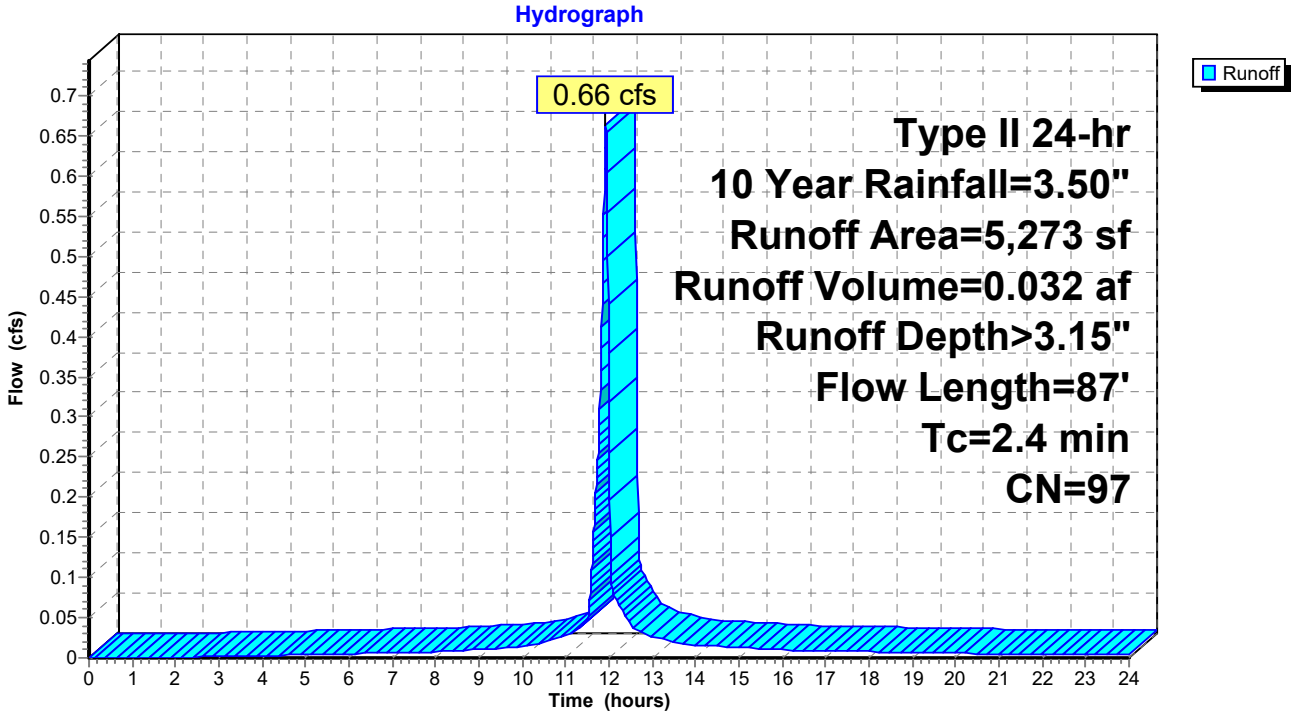
Runoff = 0.66 cfs @ 11.93 hrs, Volume= 0.032 af, Depth> 3.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
5,003	98	Paved parking, HSG D
270	80	>75% Grass cover, Good, HSG D
5,273	97	Weighted Average
270		5.12% Pervious Area
5,003		94.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	12	0.0560	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
1.1	75	0.0200	1.15		**Sheet Flow, sheet over pavement** Smooth surfaces n= 0.011 P2= 2.50"
2.4	87	Total			

Subcatchment 208S: DA EX3



Summary for Subcatchment 209S: DA EX4

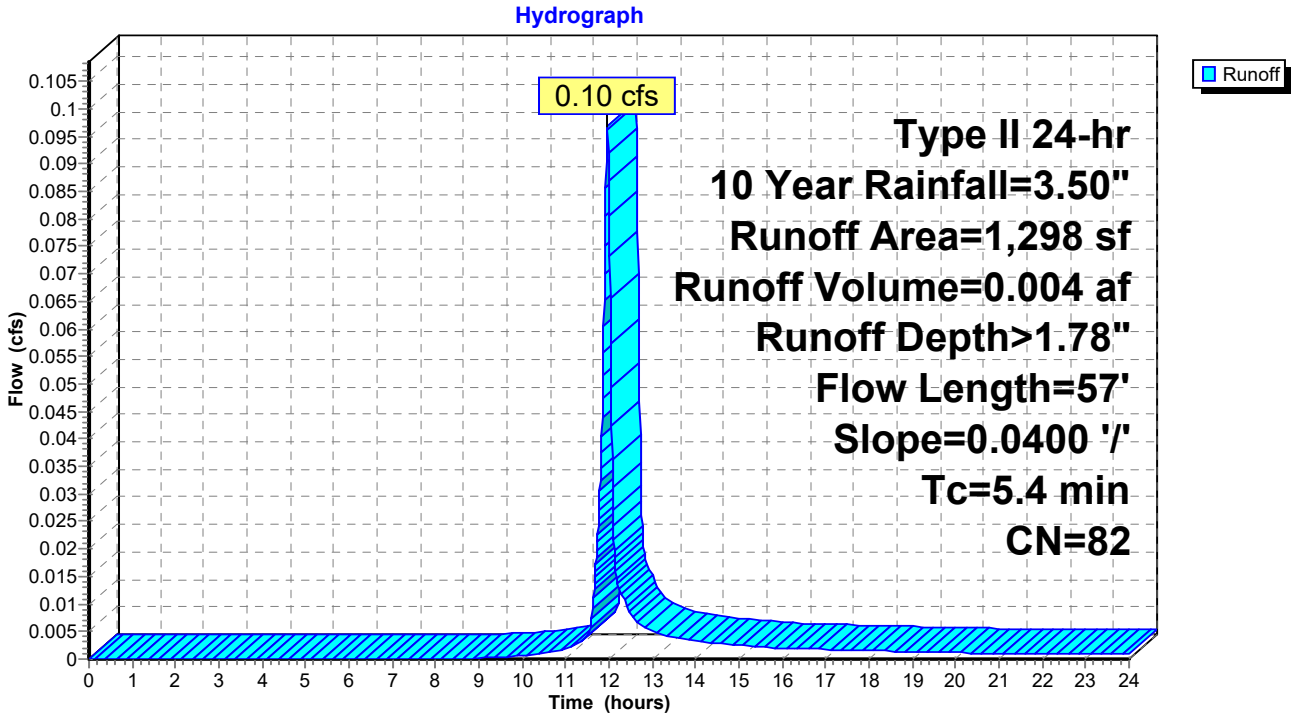
Runoff = 0.10 cfs @ 11.97 hrs, Volume= 0.004 af, Depth> 1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
142	98	Paved parking, HSG D
1,156	80	>75% Grass cover, Good, HSG D
1,298	82	Weighted Average
1,156		89.06% Pervious Area
142		10.94% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	57	0.0400	0.18		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 209S: DA EX4



Summary for Subcatchment 210S: DA 1

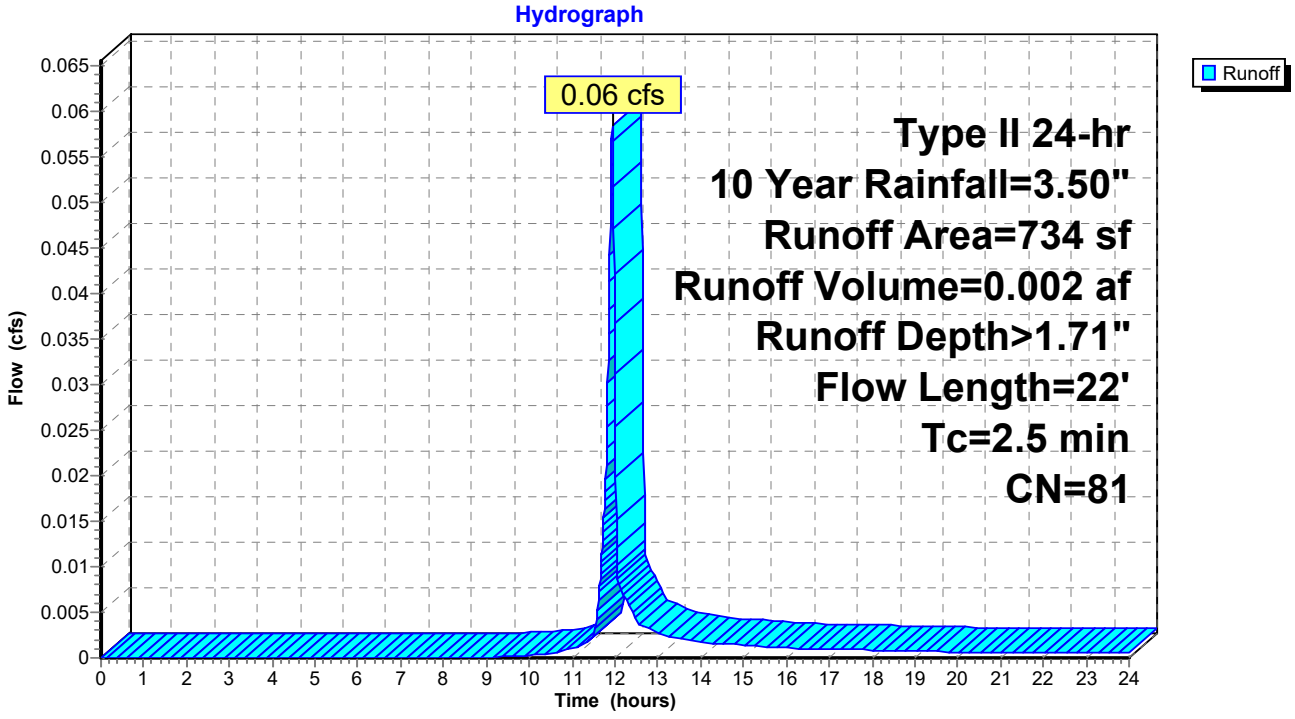
Runoff = 0.06 cfs @ 11.93 hrs, Volume= 0.002 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
50	98	Paved parking, HSG D
684	80	>75% Grass cover, Good, HSG D
734	81	Weighted Average
684		93.19% Pervious Area
50		6.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	18	0.0300	0.13		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.1	4	0.0100	0.48		**Sheet Flow, SHEET OVER CONCRETE** Smooth surfaces n= 0.011 P2= 2.50"
2.5	22	Total			

Subcatchment 210S: DA 1



Summary for Subcatchment 212S: DA 2

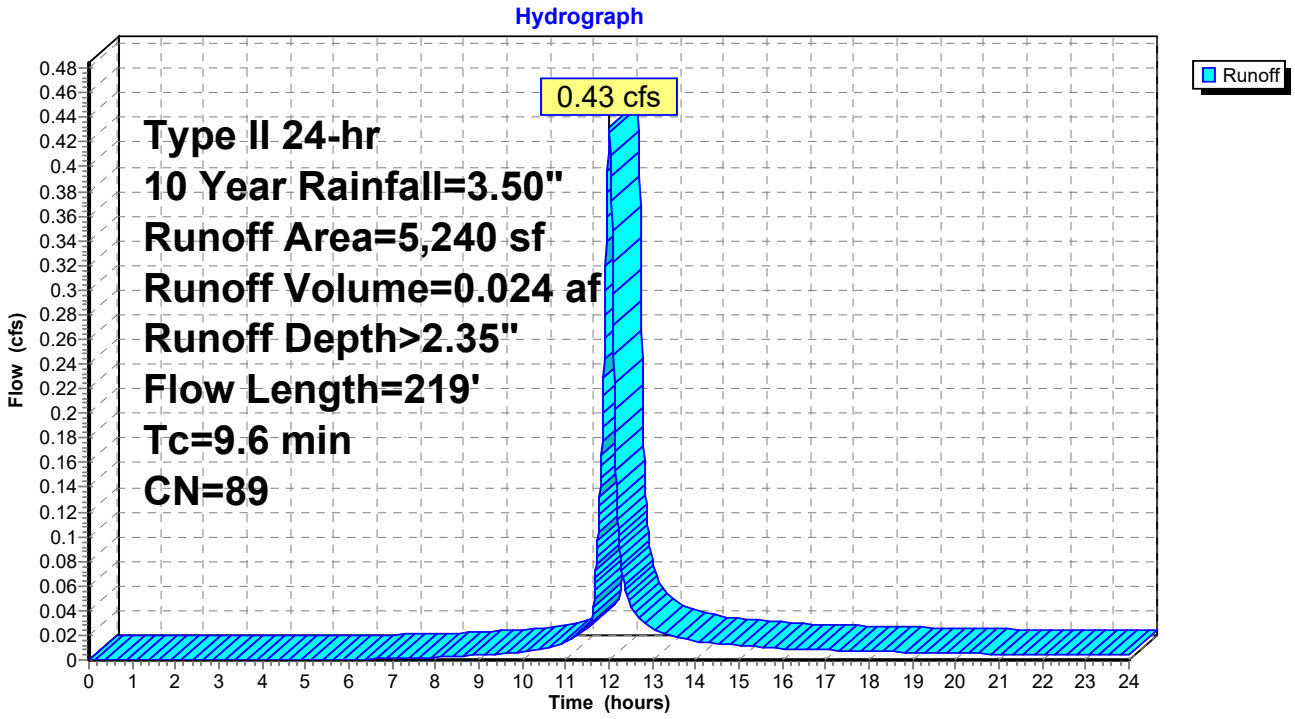
Runoff = 0.43 cfs @ 12.01 hrs, Volume= 0.024 af, Depth> 2.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
2,688	98	Paved parking, HSG D
2,552	80	>75% Grass cover, Good, HSG D
5,240	89	Weighted Average
2,552		48.70% Pervious Area
2,688		51.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	72	0.0200	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.4	28	0.0400	1.24		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
0.7	119	0.0200	2.87		**Shallow Concentrated Flow, SC OVER PAVEMENT** Paved Kv= 20.3 fps
9.6	219	Total			

Subcatchment 212S: DA 2



Summary for Subcatchment 213S: DA 3

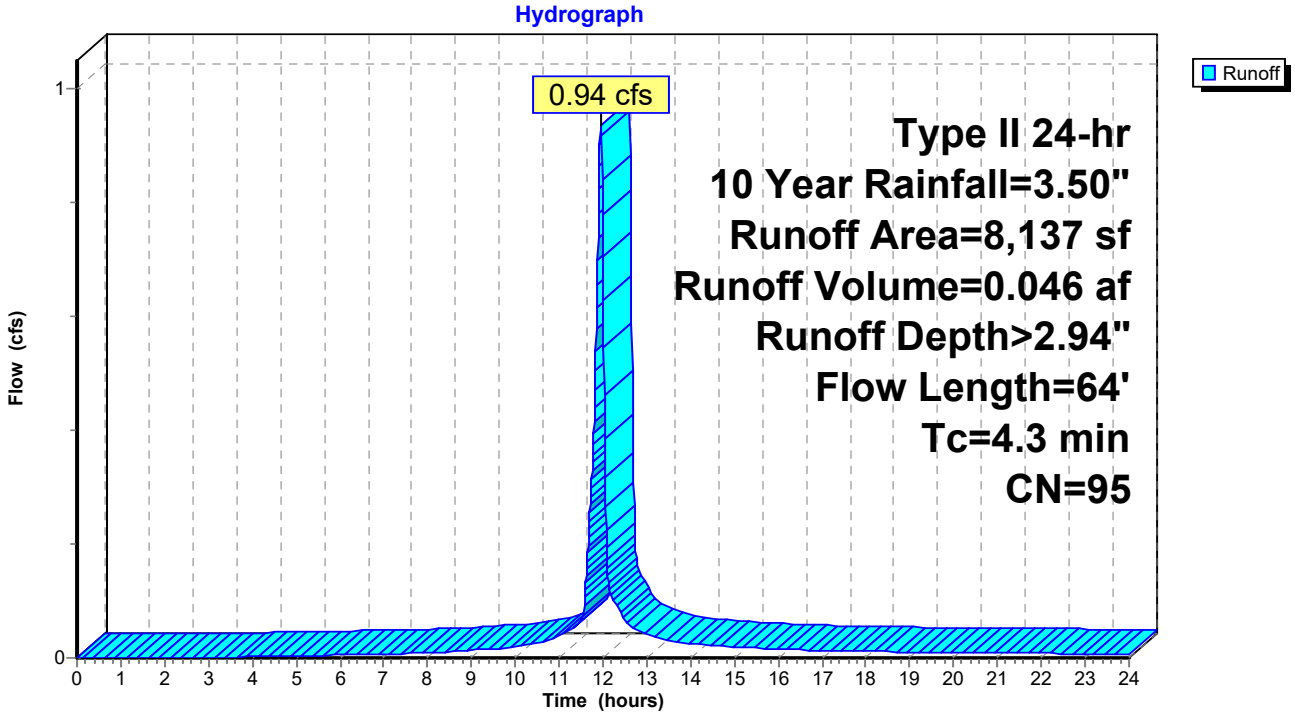
Runoff = 0.94 cfs @ 11.95 hrs, Volume= 0.046 af, Depth> 2.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
6,851	98	Paved parking, HSG D
1,286	80	>75% Grass cover, Good, HSG D
8,137	95	Weighted Average
1,286		15.80% Pervious Area
6,851		84.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	31	0.0300	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.6	33	0.0200	0.97		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
4.3	64	Total			

Subcatchment 213S: DA 3



Summary for Subcatchment 215S: DA 4

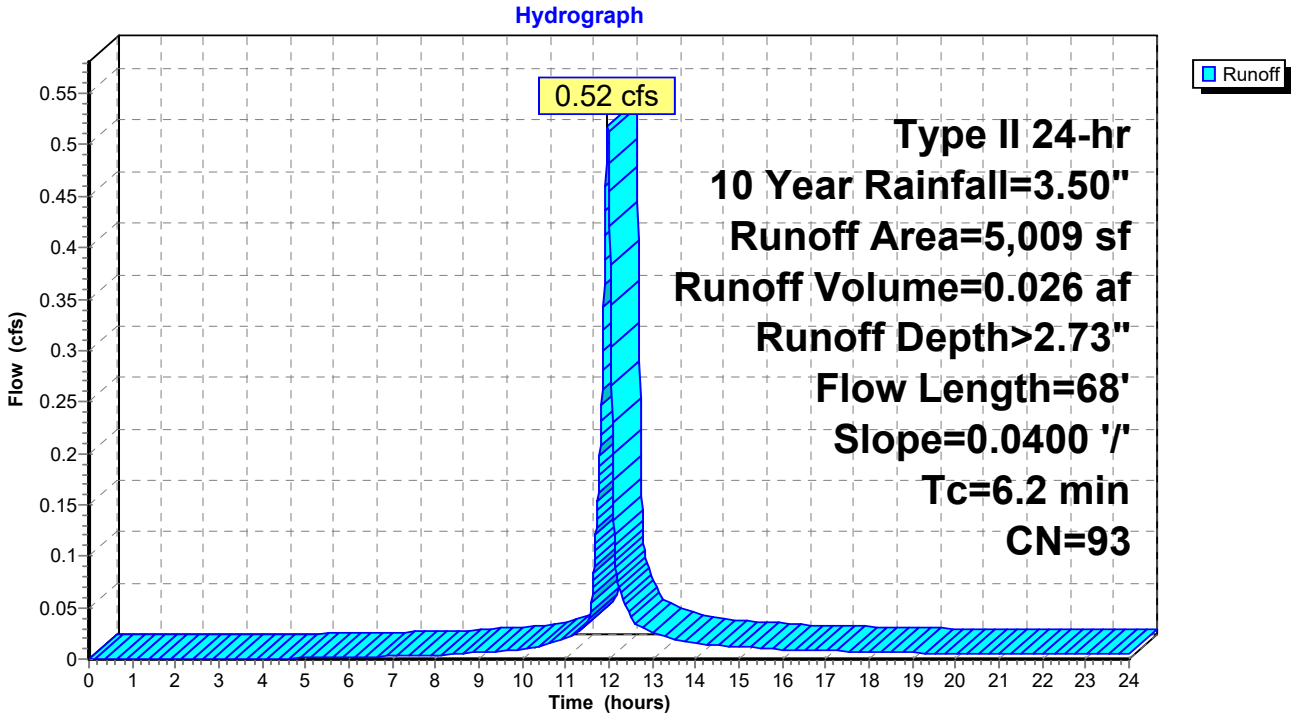
Runoff = 0.52 cfs @ 11.97 hrs, Volume= 0.026 af, Depth> 2.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
3,622	98	Paved parking, HSG D
1,387	80	>75% Grass cover, Good, HSG D
5,009	93	Weighted Average
1,387		27.69% Pervious Area
3,622		72.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	68	0.0400	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 215S: DA 4



Summary for Subcatchment 217S: DA 5

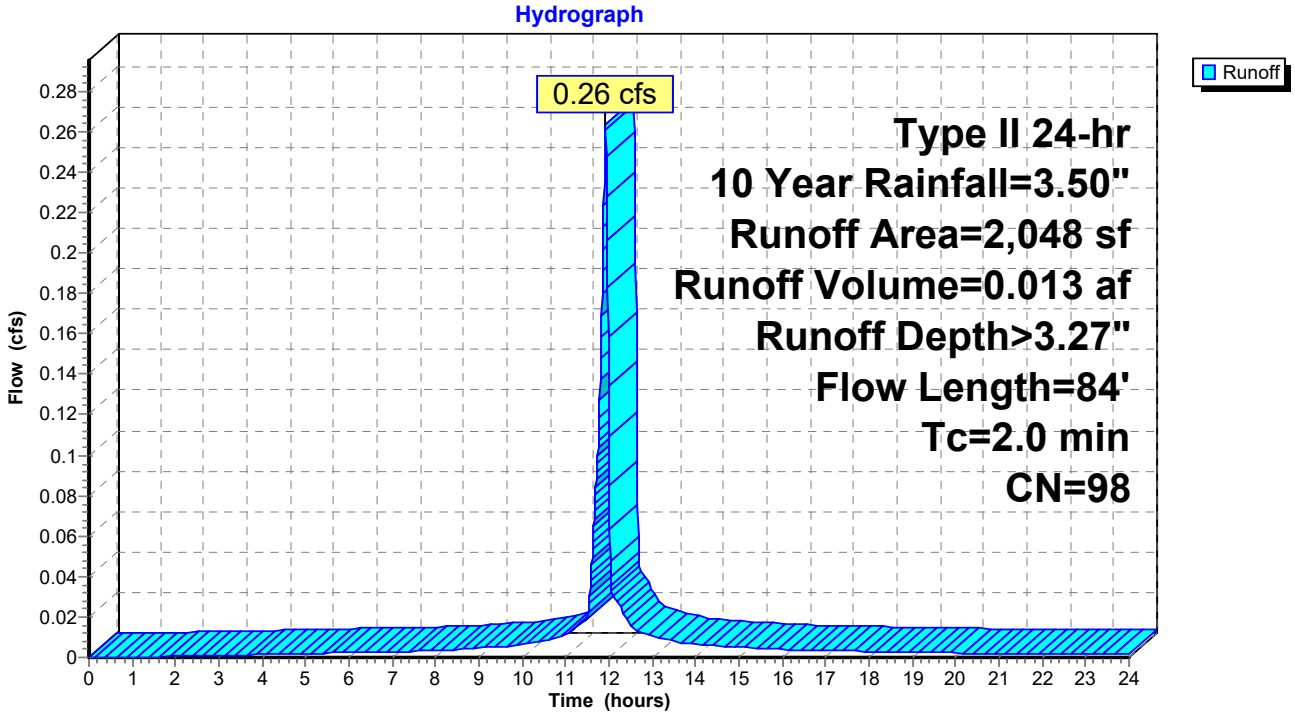
Runoff = 0.26 cfs @ 11.92 hrs, Volume= 0.013 af, Depth> 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
50	80	>75% Grass cover, Good, HSG D
1,998	98	Unconnected pavement, HSG D
2,048	98	Weighted Average
50		2.44% Pervious Area
1,998		97.56% Impervious Area
1,998		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	5	0.0200	0.08		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
1.0	79	0.0300	1.36		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
2.0	84	Total			

Subcatchment 217S: DA 5



Summary for Subcatchment 218S: DA 6

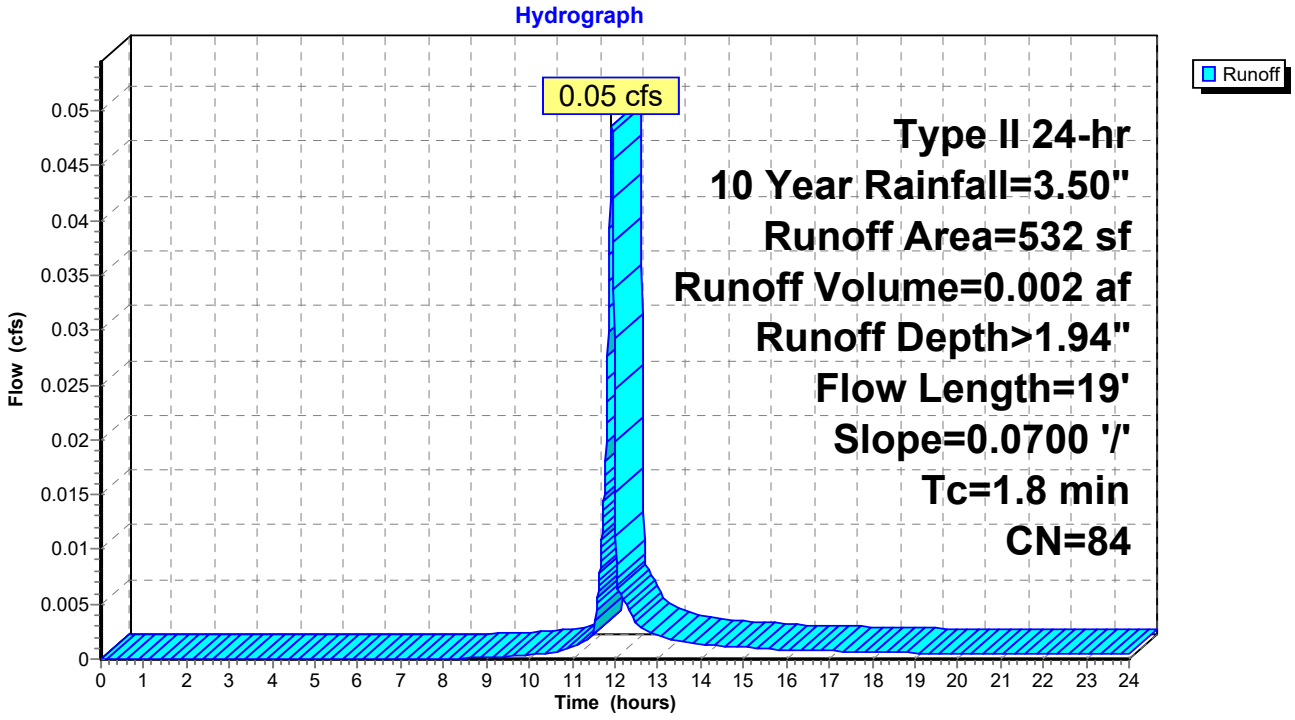
Runoff = 0.05 cfs @ 11.92 hrs, Volume= 0.002 af, Depth> 1.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 Year Rainfall=3.50"

Area (sf)	CN	Description
130	98	Paved parking, HSG D
402	80	>75% Grass cover, Good, HSG D
532	84	Weighted Average
402		75.56% Pervious Area
130		24.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	19	0.0700	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 218S: DA 6



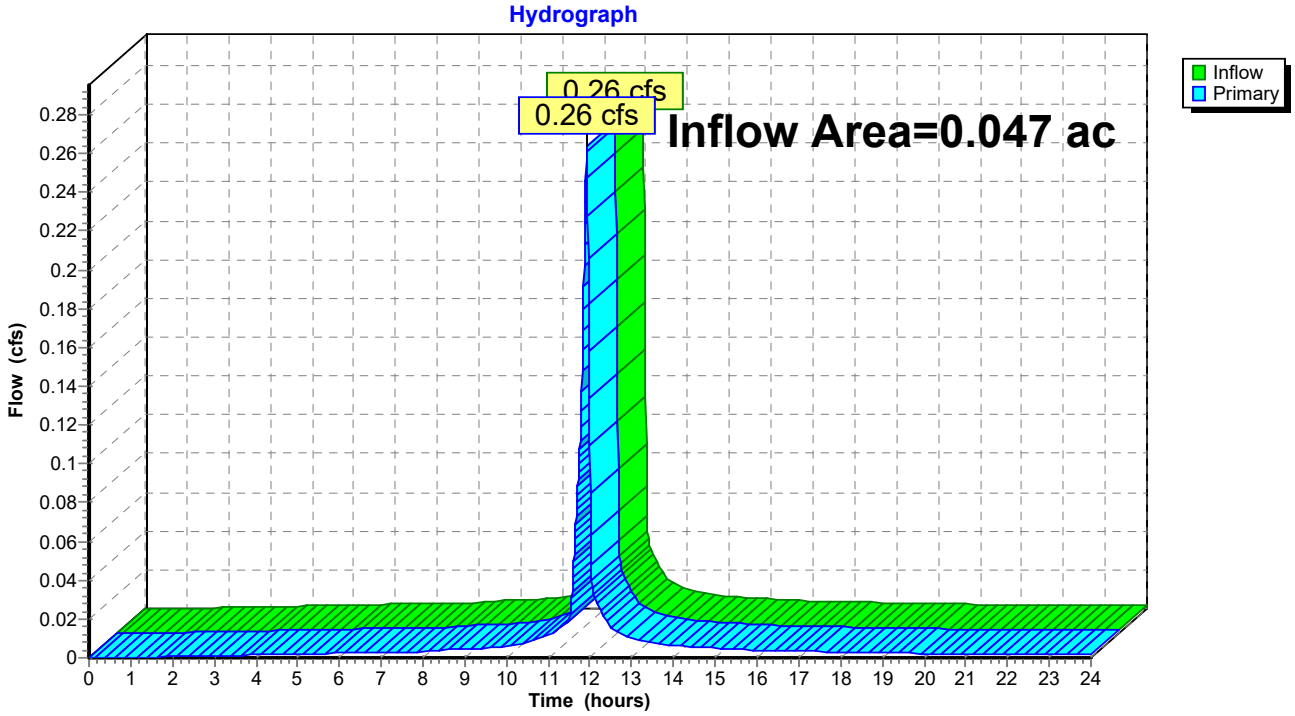
Summary for Pond 205P: EX CB AT POLK

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.047 ac, 97.56% Impervious, Inflow Depth > 3.27" for 10 Year event
Inflow = 0.26 cfs @ 11.92 hrs, Volume= 0.013 af
Primary = 0.26 cfs @ 11.92 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 205P: EX CB AT POLK



Summary for Pond 214P: CB-1

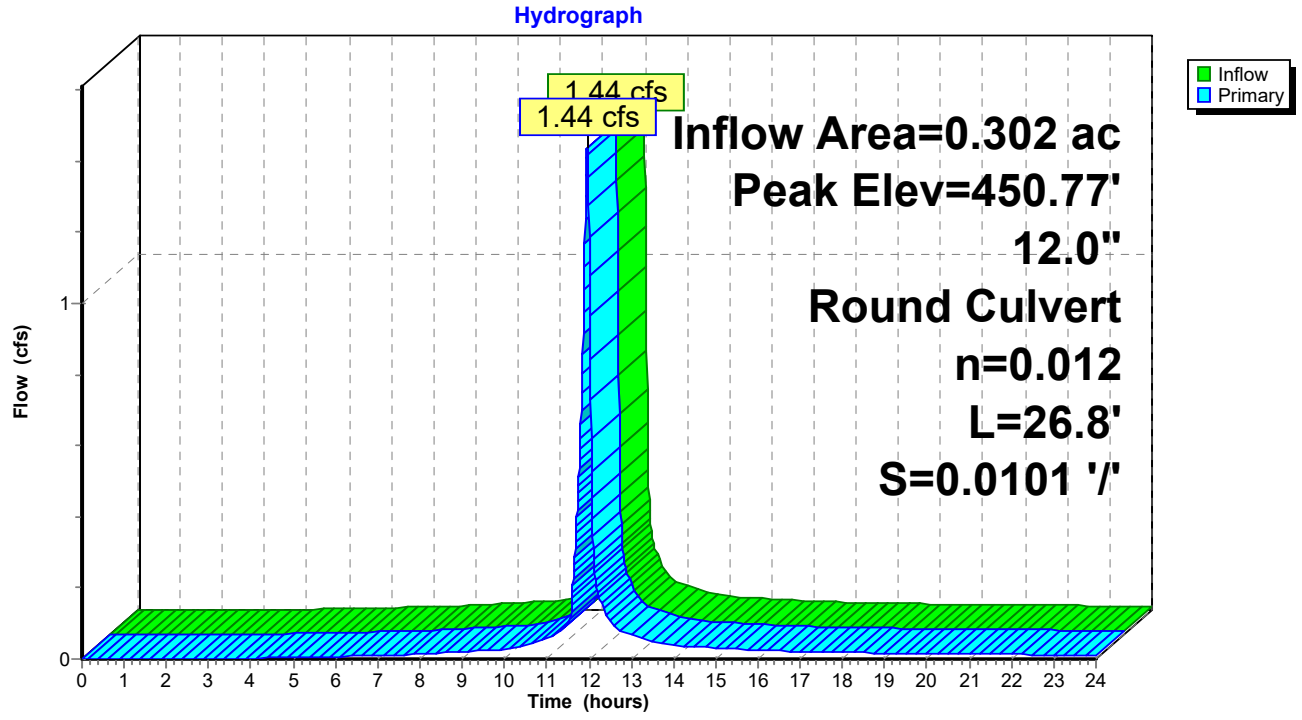
Inflow Area = 0.302 ac, 79.67% Impervious, Inflow Depth > 2.86" for 10 Year event
Inflow = 1.44 cfs @ 11.95 hrs, Volume= 0.072 af
Outflow = 1.44 cfs @ 11.95 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min
Primary = 1.44 cfs @ 11.95 hrs, Volume= 0.072 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 450.77' @ 11.95 hrs
Flood Elev= 454.03'

Device	Routing	Invert	Outlet Devices
#1	Primary	450.09'	**12.0" Round Culvert** L= 26.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 450.09' / 449.82' S= 0.0101 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.44 cfs @ 11.95 hrs HW=450.77' (Free Discharge)
1=Culvert (Barrel Controls 1.44 cfs @ 3.58 fps)

Pond 214P: CB-1



Summary for Pond 216P: CB-2

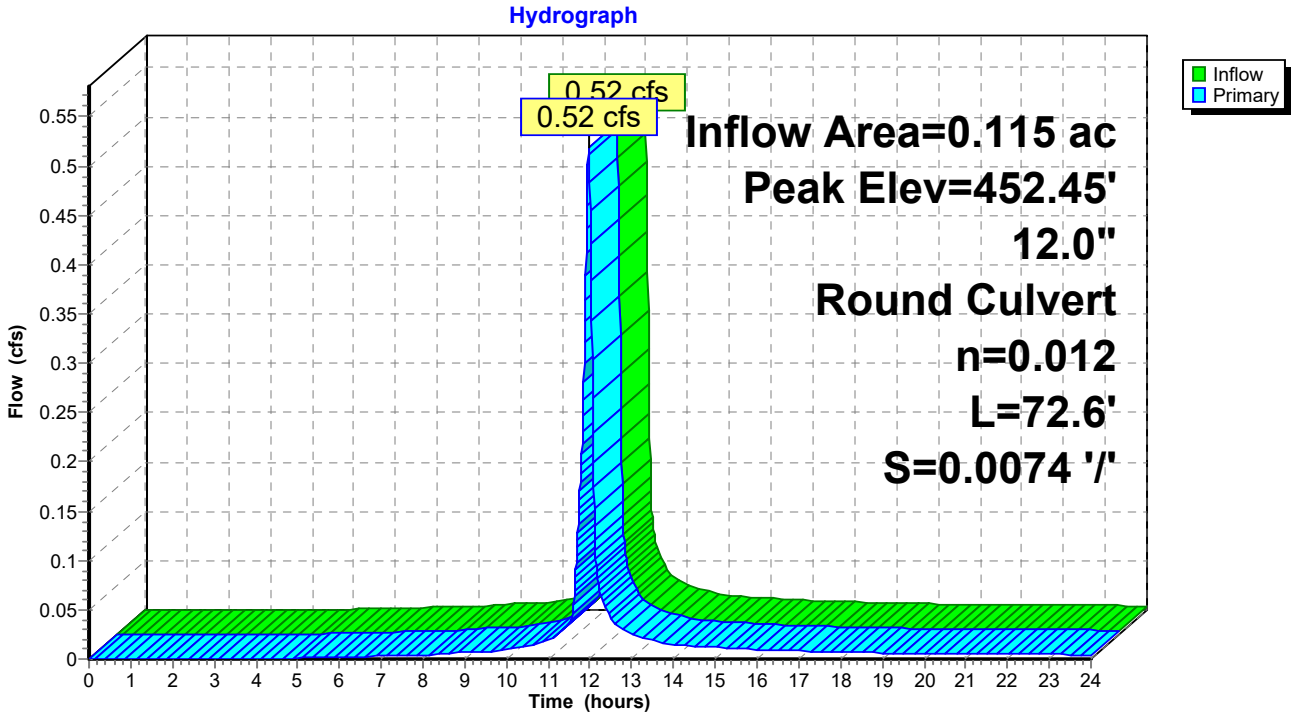
Inflow Area = 0.115 ac, 72.31% Impervious, Inflow Depth > 2.73" for 10 Year event
Inflow = 0.52 cfs @ 11.97 hrs, Volume= 0.026 af
Outflow = 0.52 cfs @ 11.97 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min
Primary = 0.52 cfs @ 11.97 hrs, Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 452.45' @ 11.97 hrs
Flood Elev= 455.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	452.08'	**12.0" Round Culvert** L= 72.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 452.08' / 451.54' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.52 cfs @ 11.97 hrs HW=452.45' (Free Discharge)
1=Culvert (Barrel Controls 0.52 cfs @ 2.87 fps)

Pond 216P: CB-2

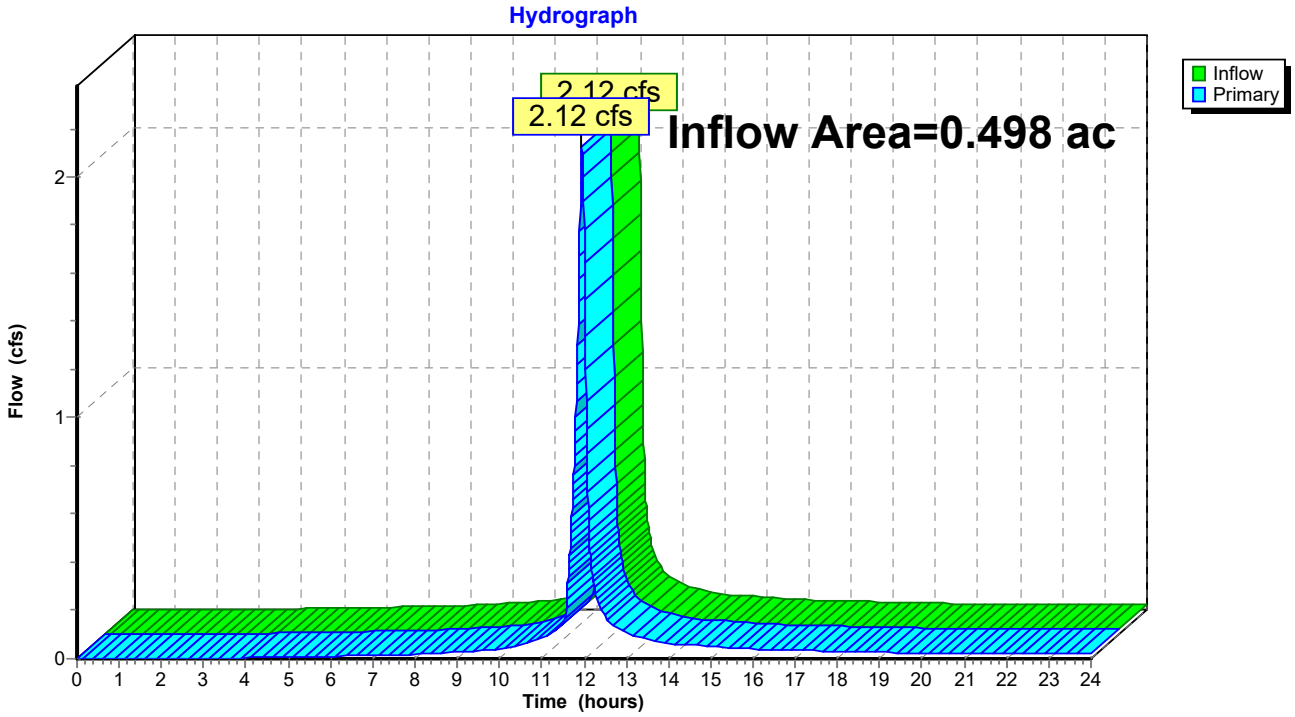


Summary for Link 208L: TOTAL PROPOSED OFFSITE

Inflow Area = 0.498 ac, 70.69% Impervious, Inflow Depth > 2.71" for 10 Year event
Inflow = 2.12 cfs @ 11.95 hrs, Volume= 0.113 af
Primary = 2.12 cfs @ 11.95 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 208L: TOTAL PROPOSED OFFSITE

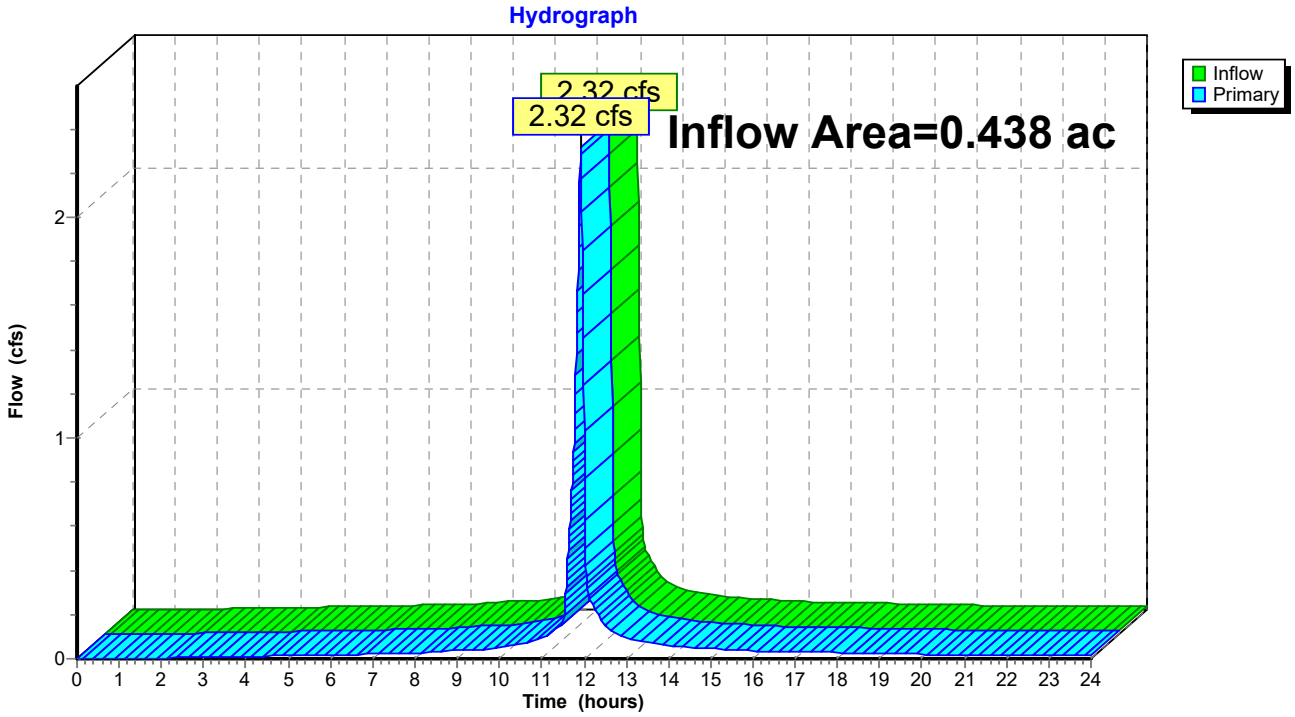


Summary for Link 212L: TOTAL EX OFFSITE

Inflow Area = 0.438 ac, 88.94% Impervious, Inflow Depth > 3.06" for 10 Year event
Inflow = 2.32 cfs @ 11.92 hrs, Volume= 0.112 af
Primary = 2.32 cfs @ 11.92 hrs, Volume= 0.112 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 212L: TOTAL EX OFFSITE



Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 206S: DA EX1 Runoff Area=10,326 sf 100.00% Impervious Runoff Depth>5.46"
Flow Length=139' Slope=0.0200 '/' Tc=1.6 min CN=98 Runoff=2.20 cfs 0.108 af

Subcatchment 207S: DA EX2 Runoff Area=2,203 sf 68.86% Impervious Runoff Depth>4.77"
Flow Length=43' Tc=3.2 min CN=92 Runoff=0.43 cfs 0.020 af

Subcatchment 208S: DA EX3 Runoff Area=5,273 sf 94.88% Impervious Runoff Depth>5.34"
Flow Length=87' Tc=2.4 min CN=97 Runoff=1.09 cfs 0.054 af

Subcatchment 209S: DA EX4 Runoff Area=1,298 sf 10.94% Impervious Runoff Depth>3.71"
Flow Length=57' Slope=0.0400 '/' Tc=5.4 min CN=82 Runoff=0.20 cfs 0.009 af

Subcatchment 210S: DA 1 Runoff Area=734 sf 6.81% Impervious Runoff Depth>3.61"
Flow Length=22' Tc=2.5 min CN=81 Runoff=0.12 cfs 0.005 af

Subcatchment 212S: DA 2 Runoff Area=5,240 sf 51.30% Impervious Runoff Depth>4.44"
Flow Length=219' Tc=9.6 min CN=89 Runoff=0.79 cfs 0.044 af

Subcatchment 213S: DA 3 Runoff Area=8,137 sf 84.20% Impervious Runoff Depth>5.11"
Flow Length=64' Tc=4.3 min CN=95 Runoff=1.57 cfs 0.080 af

Subcatchment 215S: DA 4 Runoff Area=5,009 sf 72.31% Impervious Runoff Depth>4.88"
Flow Length=68' Slope=0.0400 '/' Tc=6.2 min CN=93 Runoff=0.89 cfs 0.047 af

Subcatchment 217S: DA 5 Runoff Area=2,048 sf 97.56% Impervious Runoff Depth>5.46"
Flow Length=84' Tc=2.0 min CN=98 Runoff=0.43 cfs 0.021 af

Subcatchment 218S: DA 6 Runoff Area=532 sf 24.44% Impervious Runoff Depth>3.92"
Flow Length=19' Slope=0.0700 '/' Tc=1.8 min CN=84 Runoff=0.09 cfs 0.004 af

Pond 205P: EX CB AT POLK Inflow=0.43 cfs 0.021 af
Primary=0.43 cfs 0.021 af

Pond 214P: CB-1 Peak Elev=451.06' Inflow=2.44 cfs 0.126 af
12.0" Round Culvert n=0.012 L=26.8' S=0.0101 '/' Outflow=2.44 cfs 0.126 af

Pond 216P: CB-2 Peak Elev=452.59' Inflow=0.89 cfs 0.047 af
12.0" Round Culvert n=0.012 L=72.6' S=0.0074 '/' Outflow=0.89 cfs 0.047 af

Link 208L: TOTAL PROPOSED OFFSITE Inflow=3.67 cfs 0.201 af
Primary=3.67 cfs 0.201 af

Link 212L: TOTAL EX OFFSITE Inflow=3.87 cfs 0.191 af
Primary=3.87 cfs 0.191 af

Total Runoff Area = 0.937 ac Runoff Volume = 0.392 af Average Runoff Depth = 5.03"
20.77% Pervious = 0.195 ac 79.23% Impervious = 0.742 ac

Summary for Subcatchment 206S: DA EX1

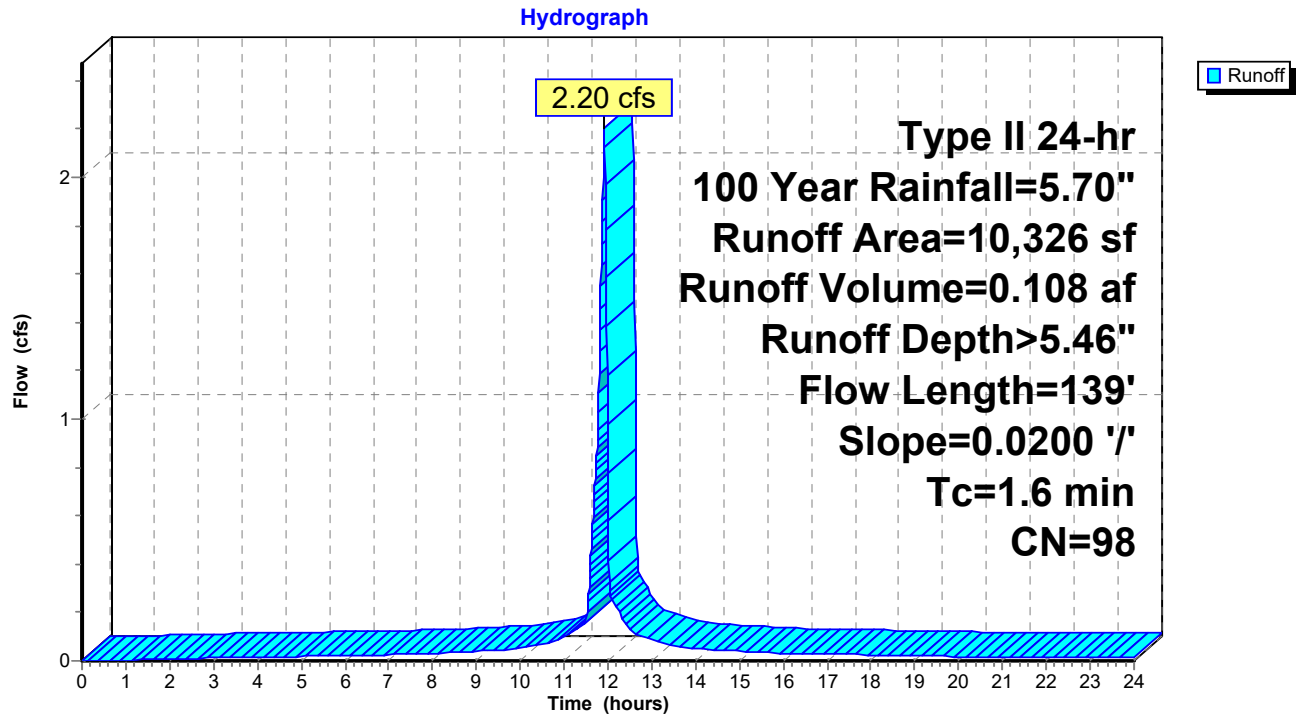
Runoff = 2.20 cfs @ 11.92 hrs, Volume= 0.108 af, Depth> 5.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
10,326	98	Unconnected roofs, HSG D
10,326		100.00% Impervious Area
10,326		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	100	0.0200	1.22		**Sheet Flow, Sheet (First 100')** Smooth surfaces n= 0.011 P2= 2.50"
0.2	39	0.0200	2.87		**Shallow Concentrated Flow, SC (remainder of TC)** Paved Kv= 20.3 fps
1.6	139	Total			

Subcatchment 206S: DA EX1



Summary for Subcatchment 207S: DA EX2

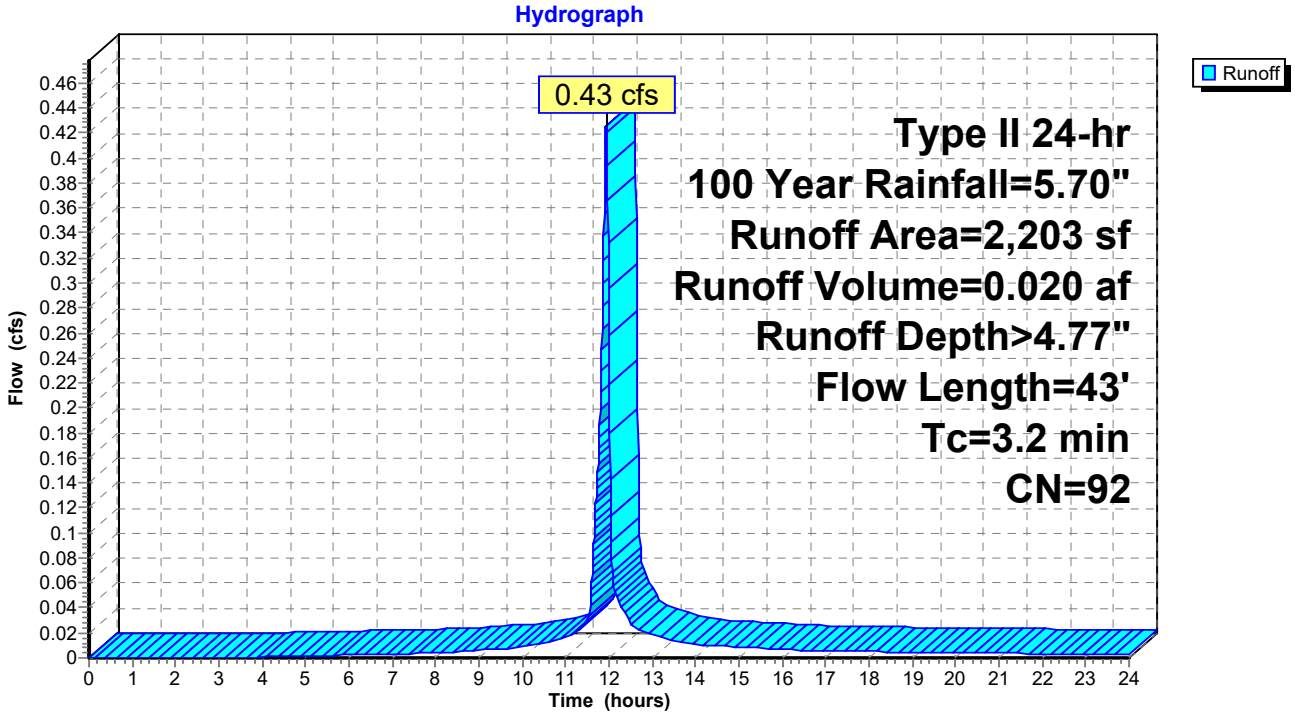
Runoff = 0.43 cfs @ 11.94 hrs, Volume= 0.020 af, Depth> 4.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
1,517	98	Paved parking, HSG D
686	80	>75% Grass cover, Good, HSG D
2,203	92	Weighted Average
686		31.14% Pervious Area
1,517		68.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	27	0.0380	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
0.2	16	0.0670	1.37		**Sheet Flow, Sheet to Burns Ave** Smooth surfaces n= 0.011 P2= 2.50"
3.2	43	Total			

Subcatchment 207S: DA EX2



Summary for Subcatchment 208S: DA EX3

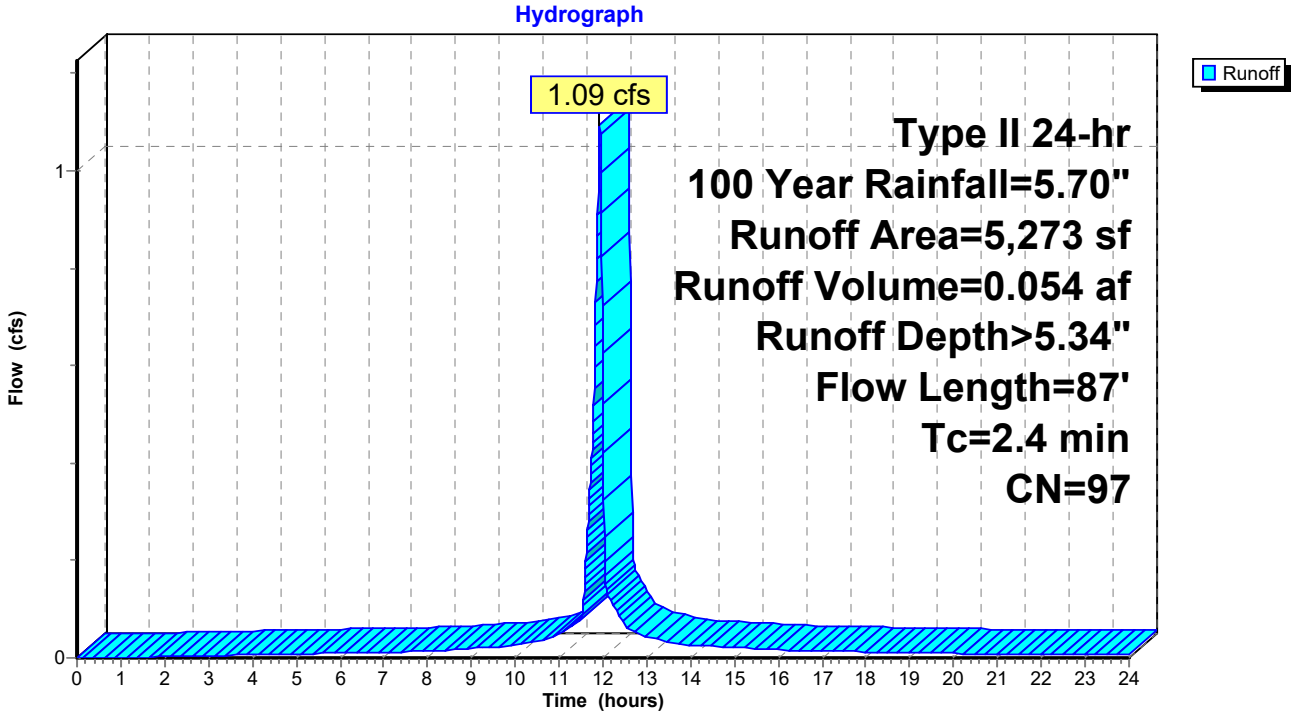
Runoff = 1.09 cfs @ 11.93 hrs, Volume= 0.054 af, Depth> 5.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
5,003	98	Paved parking, HSG D
270	80	>75% Grass cover, Good, HSG D
5,273	97	Weighted Average
270		5.12% Pervious Area
5,003		94.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	12	0.0560	0.15		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"
1.1	75	0.0200	1.15		**Sheet Flow, sheet over pavement** Smooth surfaces n= 0.011 P2= 2.50"
2.4	87	Total			

Subcatchment 208S: DA EX3



Summary for Subcatchment 209S: DA EX4

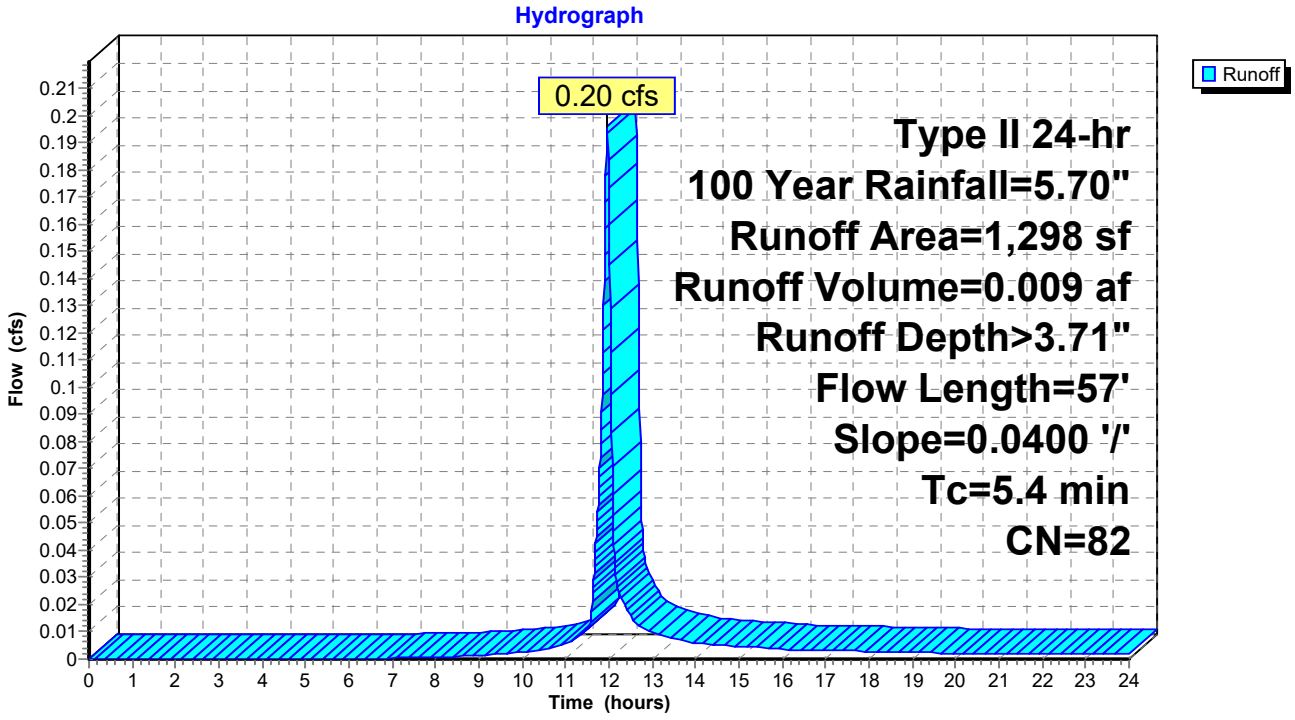
Runoff = 0.20 cfs @ 11.96 hrs, Volume= 0.009 af, Depth> 3.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
142	98	Paved parking, HSG D
1,156	80	>75% Grass cover, Good, HSG D
1,298	82	Weighted Average
1,156		89.06% Pervious Area
142		10.94% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	57	0.0400	0.18		**Sheet Flow, Sheet over Lawn** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 209S: DA EX4



Summary for Subcatchment 210S: DA 1

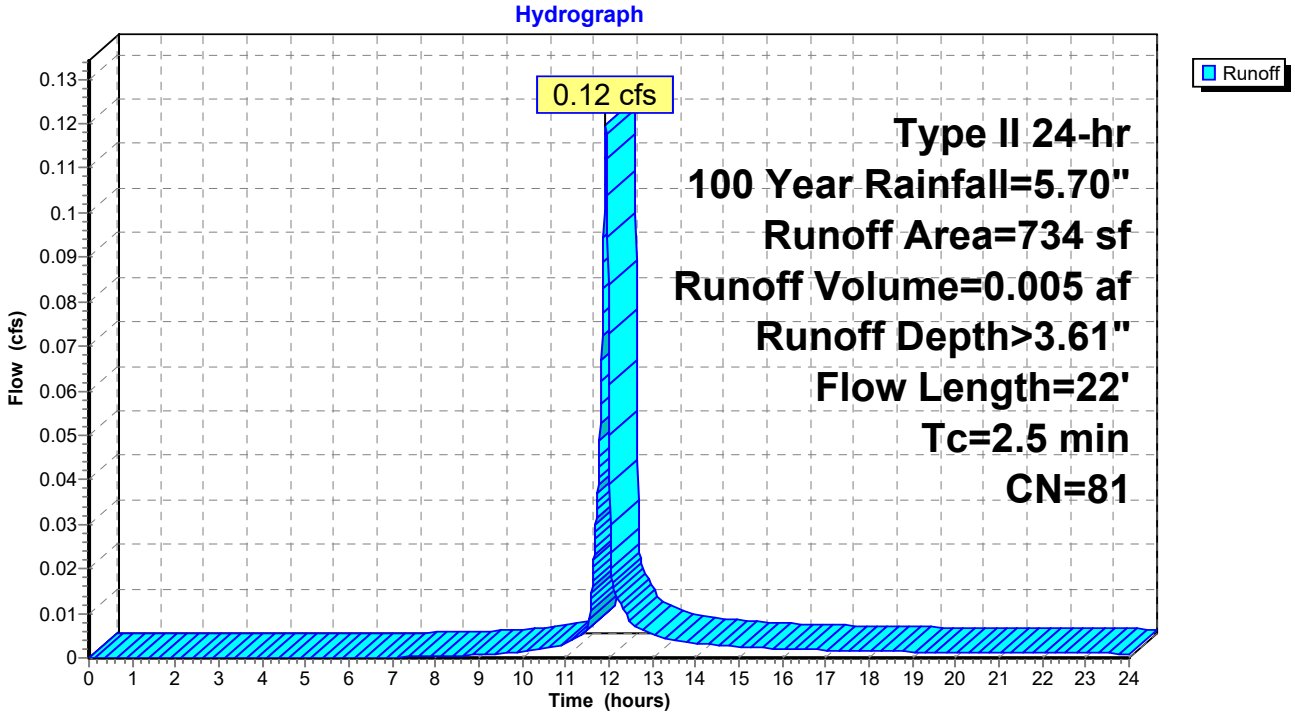
Runoff = 0.12 cfs @ 11.93 hrs, Volume= 0.005 af, Depth> 3.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
50	98	Paved parking, HSG D
684	80	>75% Grass cover, Good, HSG D
734	81	Weighted Average
684		93.19% Pervious Area
50		6.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	18	0.0300	0.13		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.1	4	0.0100	0.48		**Sheet Flow, SHEET OVER CONCRETE** Smooth surfaces n= 0.011 P2= 2.50"
2.5	22	Total			

Subcatchment 210S: DA 1



Summary for Subcatchment 212S: DA 2

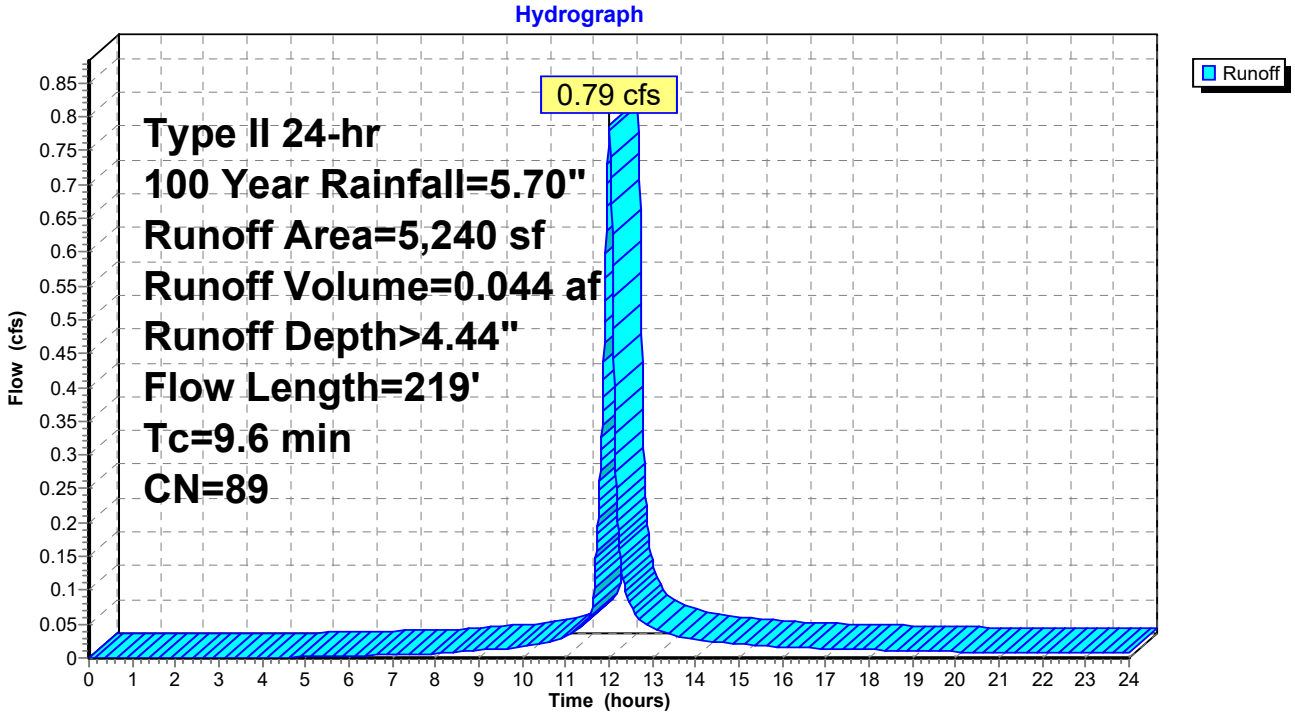
Runoff = 0.79 cfs @ 12.01 hrs, Volume= 0.044 af, Depth> 4.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
2,688	98	Paved parking, HSG D
2,552	80	>75% Grass cover, Good, HSG D
5,240	89	Weighted Average
2,552		48.70% Pervious Area
2,688		51.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	72	0.0200	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.4	28	0.0400	1.24		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
0.7	119	0.0200	2.87		**Shallow Concentrated Flow, SC OVER PAVEMENT** Paved Kv= 20.3 fps
9.6	219	Total			

Subcatchment 212S: DA 2



Summary for Subcatchment 213S: DA 3

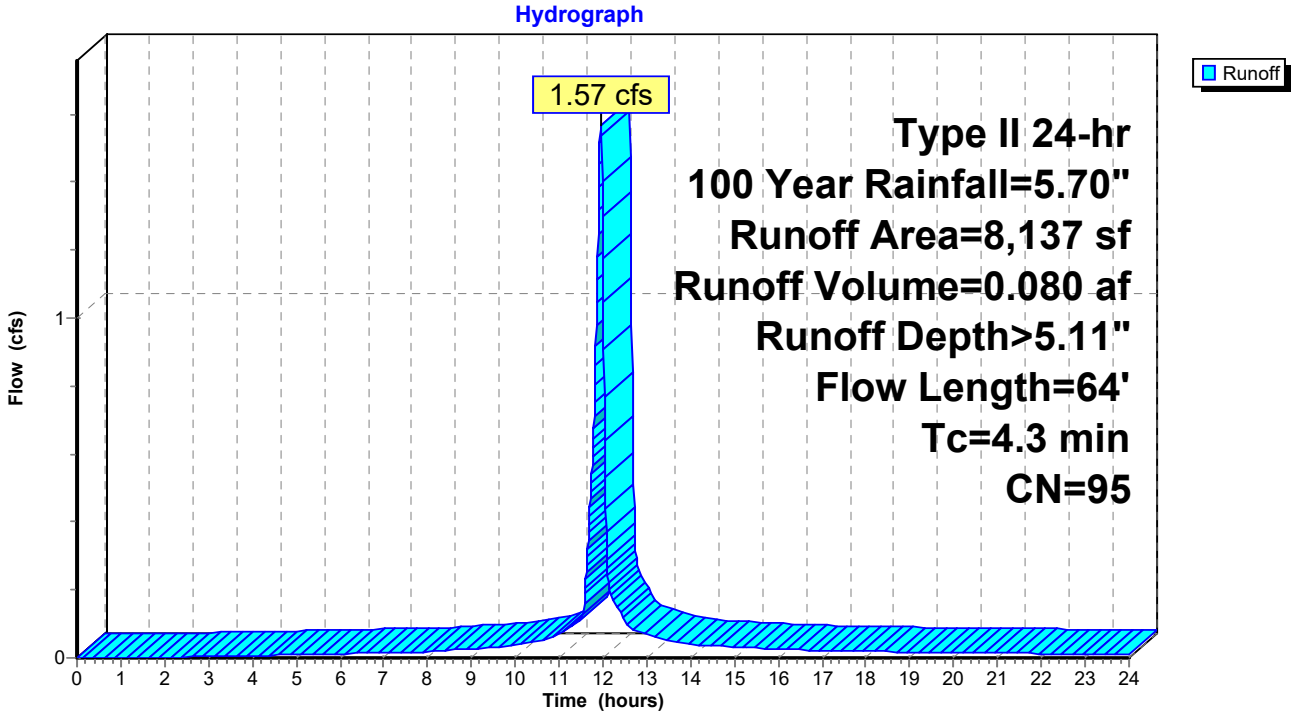
Runoff = 1.57 cfs @ 11.95 hrs, Volume= 0.080 af, Depth> 5.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
6,851	98	Paved parking, HSG D
1,286	80	>75% Grass cover, Good, HSG D
8,137	95	Weighted Average
1,286		15.80% Pervious Area
6,851		84.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.7	31	0.0300	0.14		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
0.6	33	0.0200	0.97		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
4.3	64	Total			

Subcatchment 213S: DA 3



Summary for Subcatchment 215S: DA 4

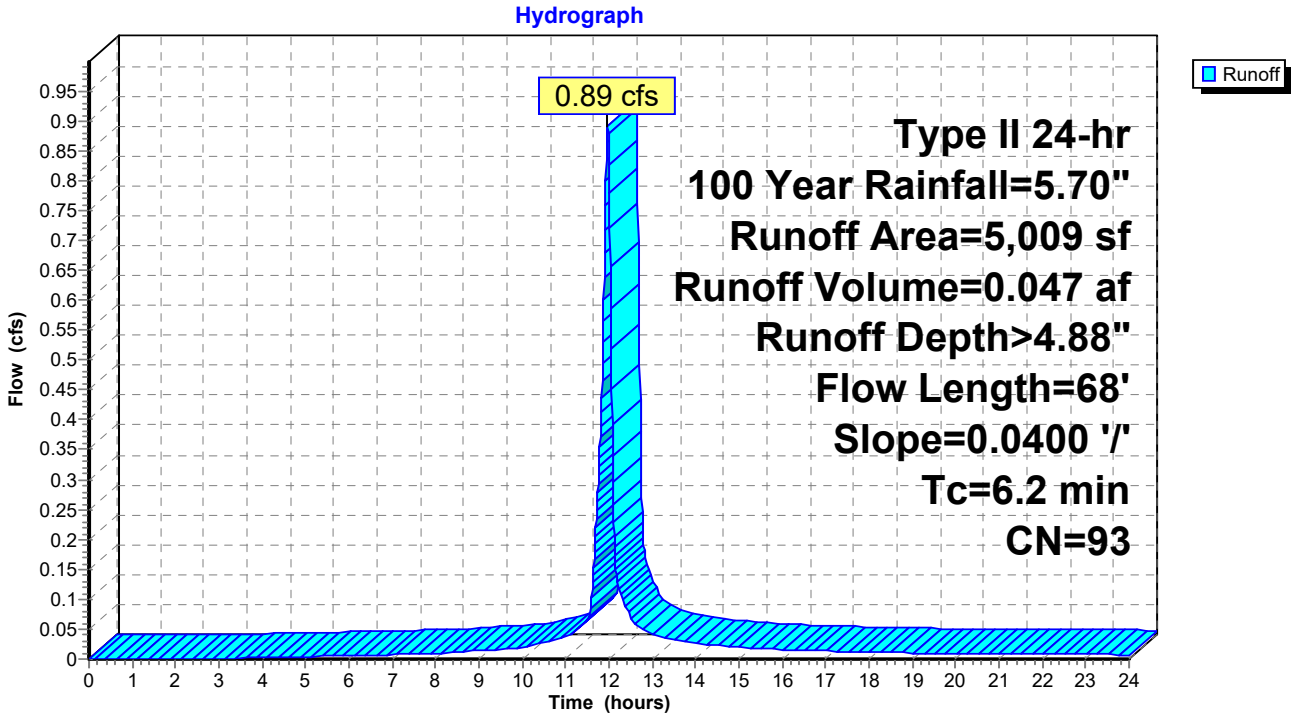
Runoff = 0.89 cfs @ 11.97 hrs, Volume= 0.047 af, Depth> 4.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
3,622	98	Paved parking, HSG D
1,387	80	>75% Grass cover, Good, HSG D
5,009	93	Weighted Average
1,387		27.69% Pervious Area
3,622		72.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	68	0.0400	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 215S: DA 4



Summary for Subcatchment 217S: DA 5

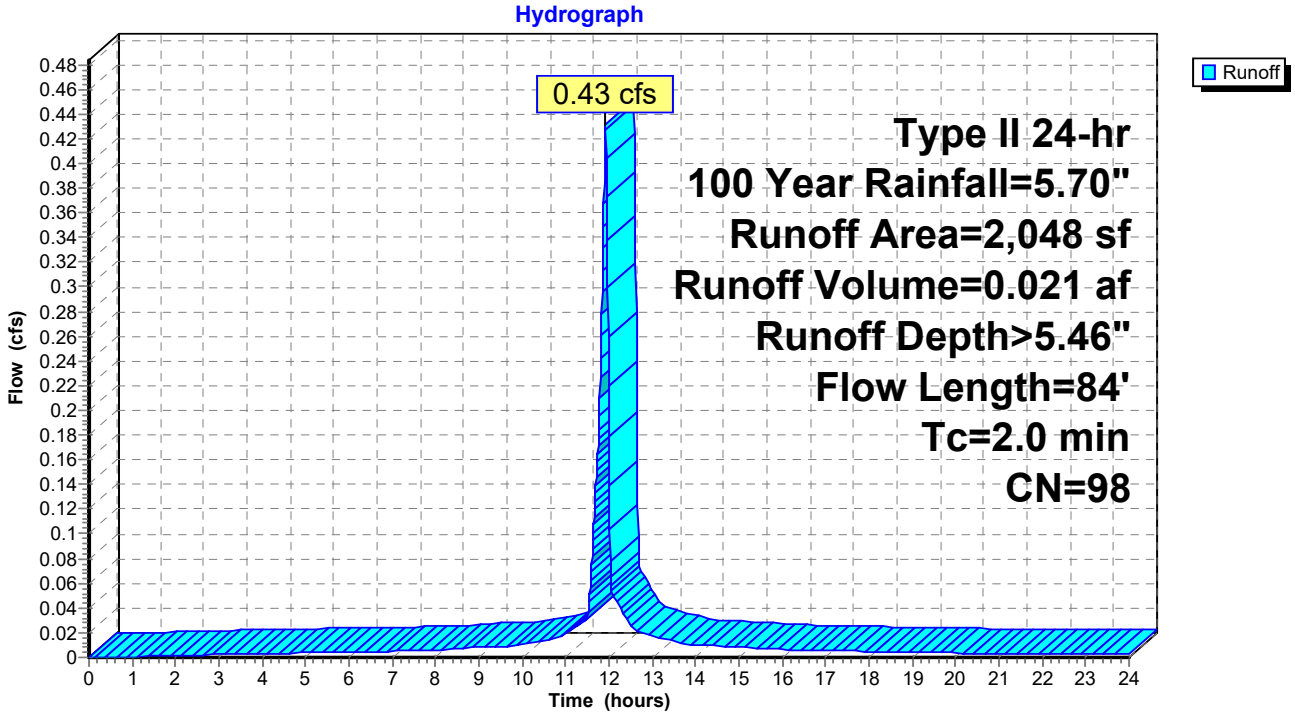
Runoff = 0.43 cfs @ 11.92 hrs, Volume= 0.021 af, Depth> 5.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
50	80	>75% Grass cover, Good, HSG D
1,998	98	Unconnected pavement, HSG D
2,048	98	Weighted Average
50		2.44% Pervious Area
1,998		97.56% Impervious Area
1,998		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	5	0.0200	0.08		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"
1.0	79	0.0300	1.36		**Sheet Flow, SHEET OVER PAVE** Smooth surfaces n= 0.011 P2= 2.50"
2.0	84	Total			

Subcatchment 217S: DA 5



Summary for Subcatchment 218S: DA 6

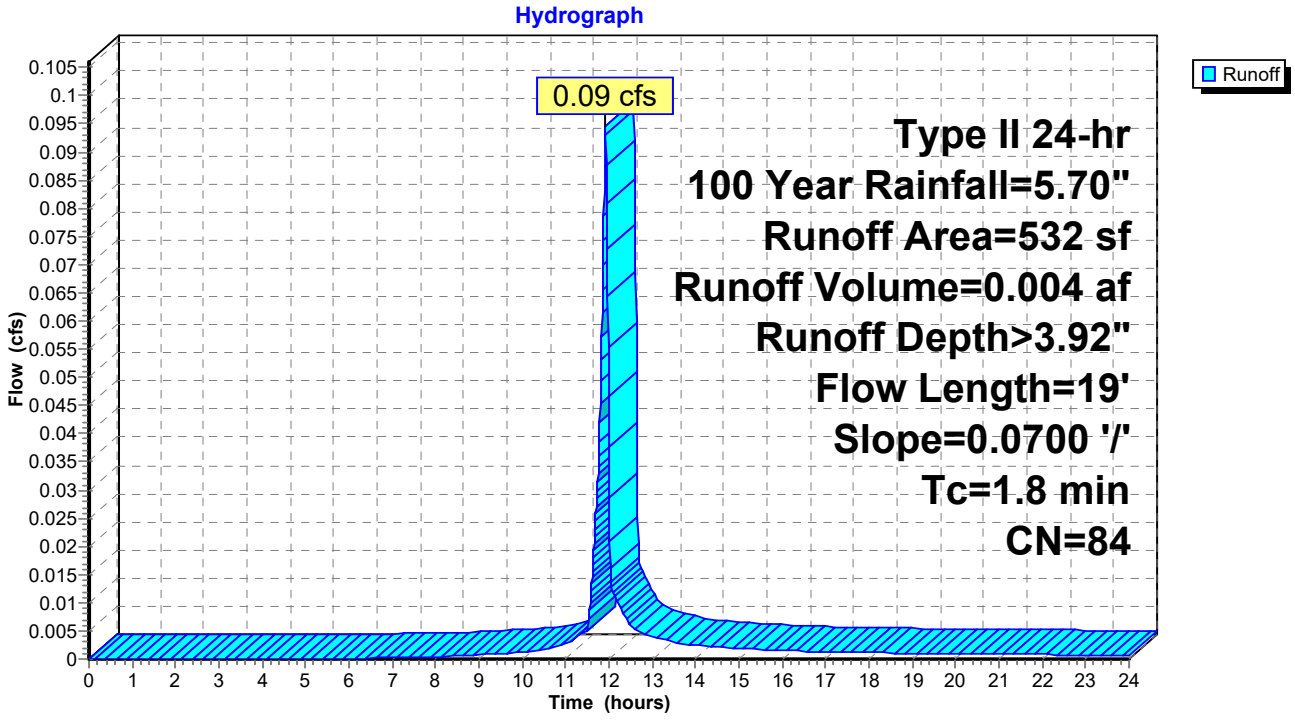
Runoff = 0.09 cfs @ 11.92 hrs, Volume= 0.004 af, Depth> 3.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 Year Rainfall=5.70"

Area (sf)	CN	Description
130	98	Paved parking, HSG D
402	80	>75% Grass cover, Good, HSG D
532	84	Weighted Average
402		75.56% Pervious Area
130		24.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	19	0.0700	0.18		**Sheet Flow, SHEET OVER LAWN** Grass: Short n= 0.150 P2= 2.50"

Subcatchment 218S: DA 6



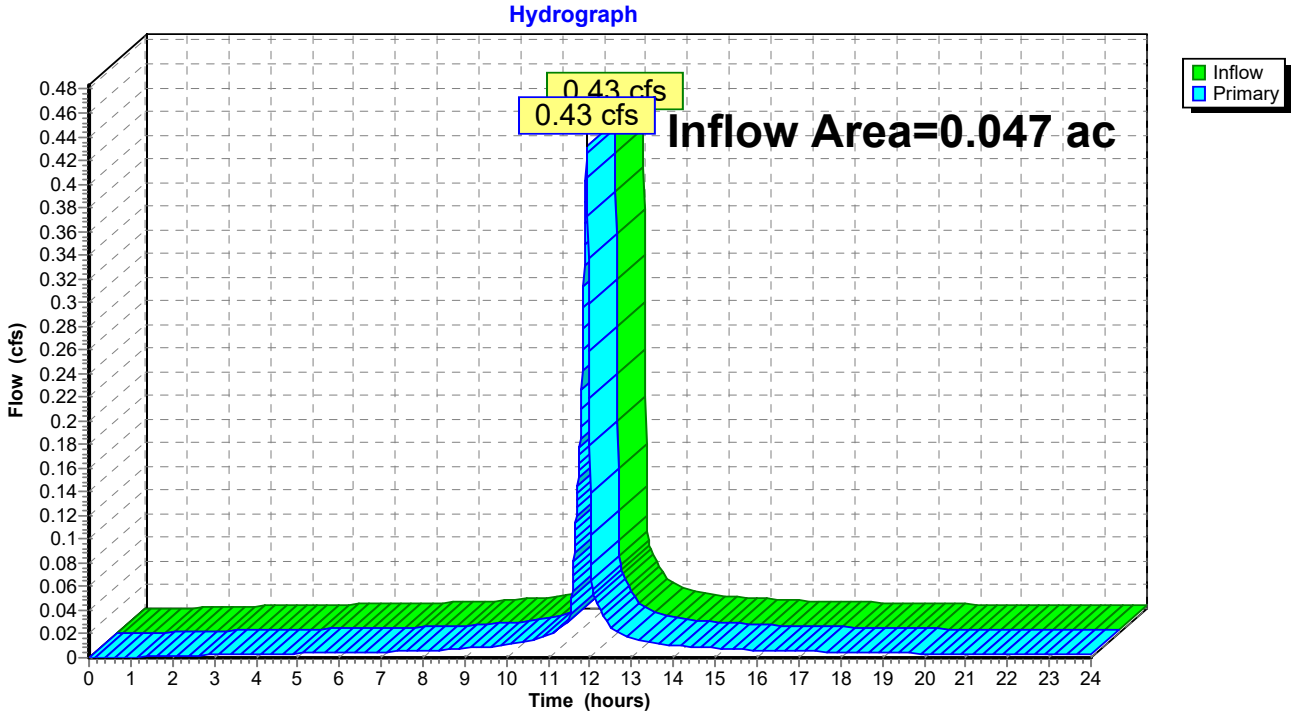
Summary for Pond 205P: EX CB AT POLK

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.047 ac, 97.56% Impervious, Inflow Depth > 5.46" for 100 Year event
Inflow = 0.43 cfs @ 11.92 hrs, Volume= 0.021 af
Primary = 0.43 cfs @ 11.92 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Pond 205P: EX CB AT POLK



Summary for Pond 214P: CB-1

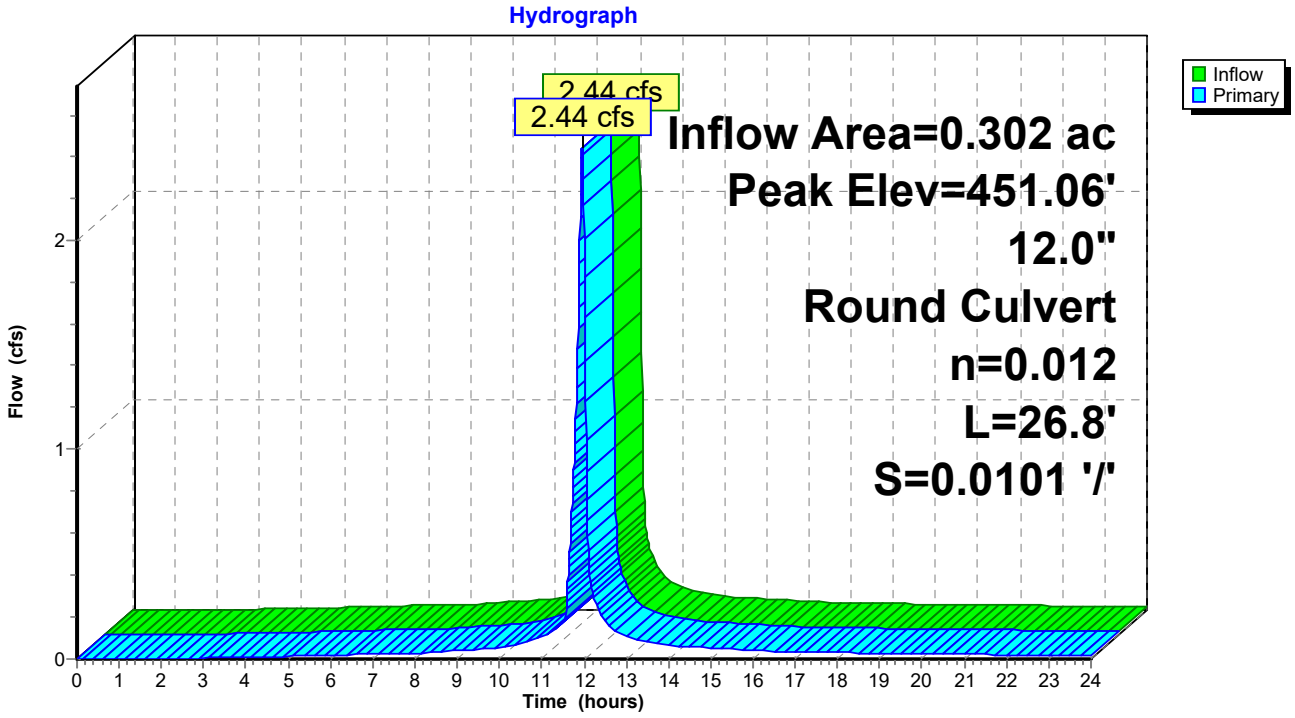
Inflow Area = 0.302 ac, 79.67% Impervious, Inflow Depth > 5.02" for 100 Year event
Inflow = 2.44 cfs @ 11.95 hrs, Volume= 0.126 af
Outflow = 2.44 cfs @ 11.95 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min
Primary = 2.44 cfs @ 11.95 hrs, Volume= 0.126 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 451.06' @ 11.95 hrs
Flood Elev= 454.03'

Device	Routing	Invert	Outlet Devices
#1	Primary	450.09'	**12.0" Round Culvert** L= 26.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 450.09' / 449.82' S= 0.0101 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.43 cfs @ 11.95 hrs HW=451.06' (Free Discharge)
1=Culvert (Barrel Controls 2.43 cfs @ 3.99 fps)

Pond 214P: CB-1



Summary for Pond 216P: CB-2

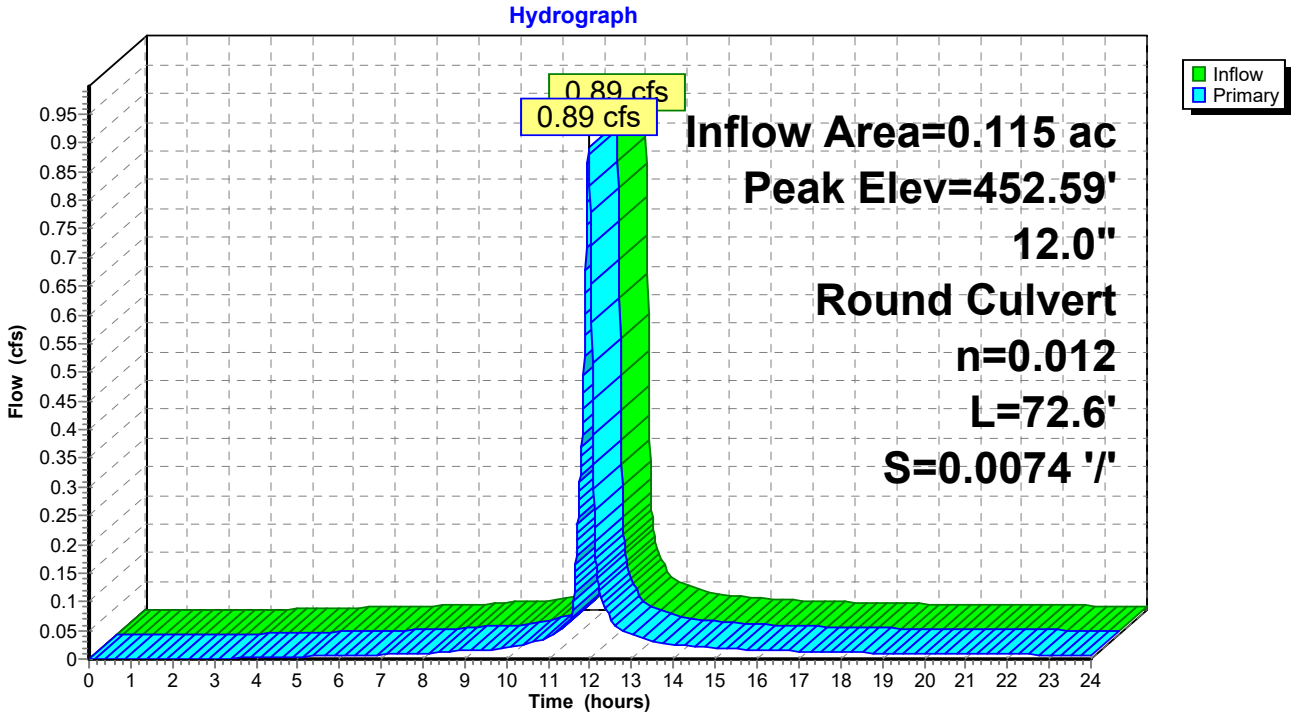
Inflow Area = 0.115 ac, 72.31% Impervious, Inflow Depth > 4.88" for 100 Year event
Inflow = 0.89 cfs @ 11.97 hrs, Volume= 0.047 af
Outflow = 0.89 cfs @ 11.97 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 11.97 hrs, Volume= 0.047 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 452.59' @ 11.97 hrs
Flood Elev= 455.75'

Device	Routing	Invert	Outlet Devices
#1	Primary	452.08'	**12.0" Round Culvert** L= 72.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 452.08' / 451.54' S= 0.0074 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 11.97 hrs HW=452.59' (Free Discharge)
1=Culvert (Barrel Controls 0.89 cfs @ 3.27 fps)

Pond 216P: CB-2

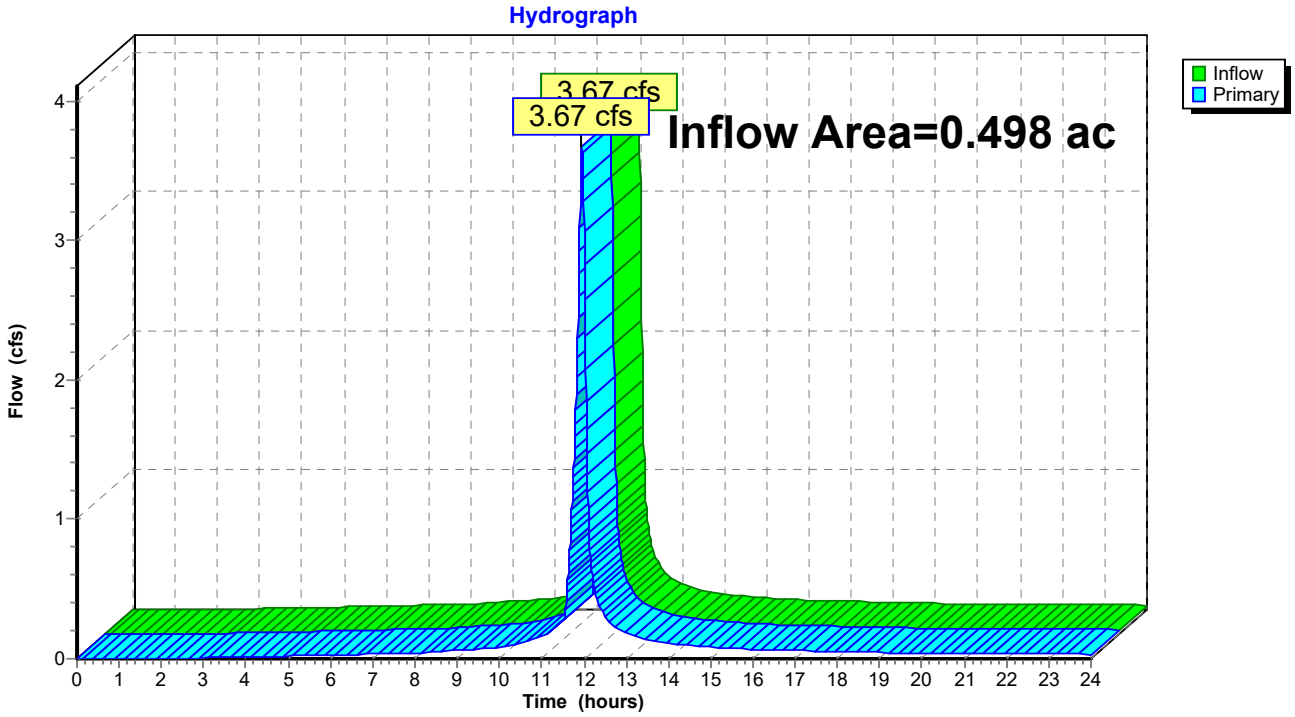


Summary for Link 208L: TOTAL PROPOSED OFFSITE

Inflow Area = 0.498 ac, 70.69% Impervious, Inflow Depth > 4.85" for 100 Year event
Inflow = 3.67 cfs @ 11.95 hrs, Volume= 0.201 af
Primary = 3.67 cfs @ 11.95 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 208L: TOTAL PROPOSED OFFSITE

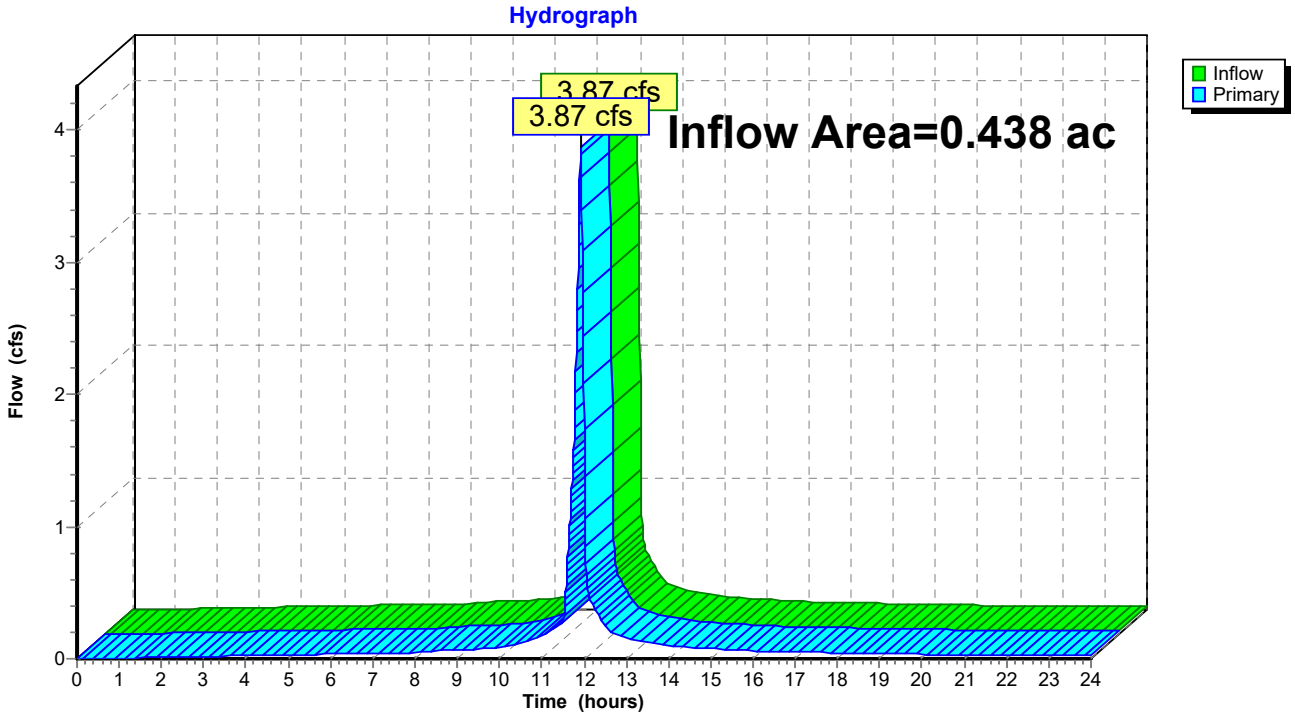


Summary for Link 212L: TOTAL EX OFFSITE

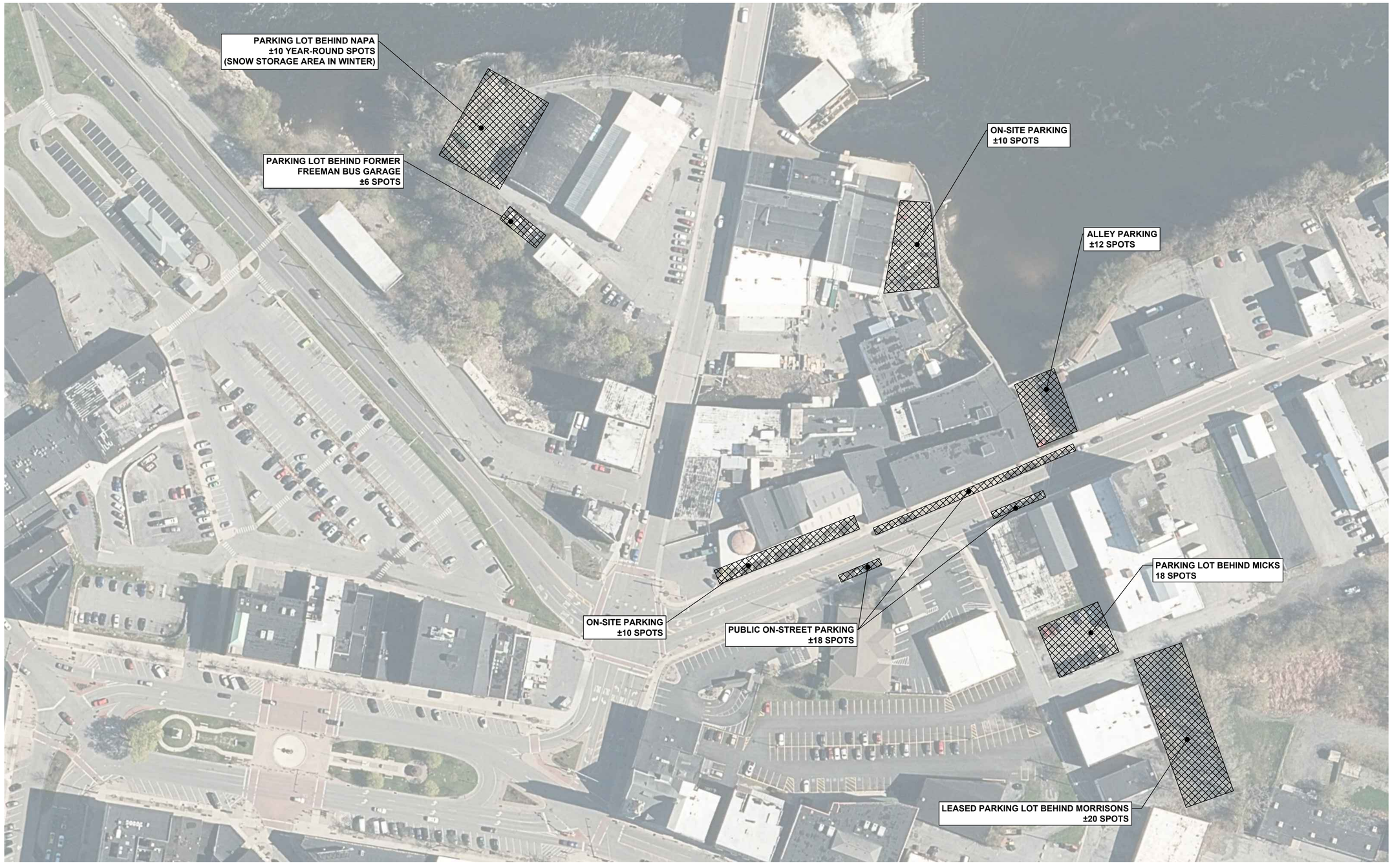
Inflow Area = 0.438 ac, 88.94% Impervious, Inflow Depth > 5.23" for 100 Year event
Inflow = 3.87 cfs @ 11.92 hrs, Volume= 0.191 af
Primary = 3.87 cfs @ 11.92 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 212L: TOTAL EX OFFSITE



APPENDIX C:
PARKING UTILIZATION MAP



EXISTING PARKING SUMMARY	
EXISTING EMPLOYEE PARKING IN KNOWLTON PARKING LOTS	±66 SPOTS
EXISTING EMPLOYEE PARKING IN LEASED PRIVATE LOTS	±20 SPOTS
EXISTING EMPLOYEE PARKING IN ON-STREET PUBLIC PARKING SPACES	±18 SPOTS
TOTAL EXISTING EMPLOYEE PARKING	**±104 SPOTS**
TOTAL EMPLOYEE PARKING DEMAND	±140 SPOTS
EMPLOYEE PARKING DEFICIT	**±36 SPOTS**

NORTH
BY DATUM

GRAPHIC SCALE
1 inch = 60 ft.
30 0 30 60 120

GYMO
Architecture
Engineering
Land Surveying
WWW.GYMODPC.COM
18969 US Route 11
Watertown, NY 13601
315.788.3900

SEAL:

PROJECT NO:	2022-076
SCALE:	1" = 60'
DRAWN BY:	KMB
DESIGNED BY:	KMB
CHECKED BY:	
DATE ISSUED:	04-18-2023

EXISTING PARKING UTILIZATION MAP

KNOWLTON TECHNOLOGIES PARKING LOT EXPANSION
202 FACTORY STREET AND 176 POLK STREET
CITY OF WATERTOWN, STATE OF NEW YORK, JEFFERSON COUNTY

LAST REVISED: N/A

FOR APPROVALS ONLY
NOT FOR CONSTRUCTION

DRAWING NO.
1