

Project: 3JB Properties, LLC Mixed-Use Development
Address: 47 - 49 S. State Street, Concord, NH
Applicant: 3JB Properties, LLC
Date: June 17, 2026

Project Narrative

The project parcel at 47 - 49 S. State Street (Map 7413Z, Lot 9) is in the Urban Commercial (CU) zoning district. The parcel area is 0.66 acres (28,746 SF). The property was previously owned and operated by McLeod's Florist, with on-site parking provided for employees and customers. The site includes a brick paver entrance, 3 greenhouses and a garage / storage building. The greenhouses and garage will be removed, and the existing building will be renovated on the interior.

The project involves constructing a 2-story 3,500 SF commercial addition with a basement, then converting the addition into 3 residential townhouses. The 3-story portion of the existing building will be converted into 2 residential townhouses. The remaining commercial space will be renovated for continued occupancy by McLeod's as a tenant. Site improvements include updates to the paved parking areas, site lighting, landscaping, and stormwater controls. The 31 parking spaces will be comprised of 28 surface spaces (2 ADA accessible parking spaces, 7 compact spaces, and 22 standard spaces) and 3 garage spaces. Stormwater from rear of the building addition will be directed into a perimeter drip edge.

The property contains 3 existing easements: a 10' common passway that is shared access with the property to the south, addressed as 55 S. State Street; 1 10' passway through the center of the property; and an 8' common passway shared with the abutter to the east at 11-13 Concord Street.

The project requests a Conditional Use Permit for Driveway Separation Alternatives and Driveway Width. The project requests waivers related to off-street parking, landscaping and dumpster enclosure dimensions. Details are provided in a separate narrative.

On March 4, 2026, the Concord Zoning Board of Adjustment granted the following variances:

1. A variance to section 28-7-7(e), minimum aisle width, to permit the existing aisle width at the entrance to be 20 feet, with an expansion to 22 feet, where 24 feet is required and along the southern parking area to remain at the existing 13'-10" to 15', where 24 feet is required.
2. A variance to section 28-7-7(f), driveway width, to permit the existing driveway width at the entrance to remain at 20 feet, where 24 feet is required.
3. A variance to section 28-7-7(g)(2), setbacks from lot lines, to permit parking up to the property line, where a 5 foot setback is required, with the parking in the southern parking area to have a 4 foot setback, the parking area in the southeast area to have a 1.67 foot setback, and one parking spot in the northeast area to have a 1.1 foot setback.

WWW.WILCOXANDBARTON.COM

2 Home Avenue, Concord, NH 03301 • Ph: (603) 369-4190 | (888) 777-5805 • Fax: (603) 369-6639

Offices In: New Hampshire • Vermont • Massachusetts • Connecticut • Hawaii

4. A variance to section 28-7-10(a), parking lot perimeter landscaping required, to permit the existing parking lot along the southern parking and the additional parking areas on the property to have no landscaping area, where a five-foot landscape area is required.
5. A variance to section 28-7-10(c), use of required landscape areas restricted, to permit parking within the required landscaped area, where parking is not permitted under the ordinance.
6. A variance to section 28-7-13(b), location of loading spaces, to permit the existing loading space within the building to remain on the front of the building, with it backing into the street, where it would not be permitted under the ordinance.

June 16, 2026

City of Concord Planning Board
41 Green Street
Concord, New Hampshire 03301

RE: Response to Staff Report for Major Site Plan (2026-060)
3JB Properties, LLC
47-49 S. State Street (Tax Map 7413Z, Lot 9)

Dear Planning Board:

Wilcox & Barton, Inc. is pleased to submit this letter addressing the comments provided in the Staff Report for Planning Board dated May 20, 2026, and the Engineering Services Division's General Requirements Memorandum from Paul Gildersleeve, PE and Pete Kohalmi, PE dated May 6, 2026. These comments have been addressed in the revised site plan set dated April 15, 2026, latest revised June 16, 2026. They have been revised as follows:

Staff Report for Planning Board

1. Project Details and Zoning Ordinance Compliance

Compliance section of the City Staff report has been reviewed and is in accordance with the zoning ordinance.

Response: No response necessary.

2. General Comments

2.1 Per Section 6.01(4) of the Site Plan Regulations, staff was unaware of any nonconformities with the Zoning Ordinance at the time the abutter notifications were mailed.

Response: No response necessary.

2.2 Per Section 25.01 Nonmunicipal Utilities General Requirements of the Site Plan Regulations, Staff recommends that the applicant coordinate with all nonmunicipal utilities providing services to the site to ensure the existing services are adequate. Any changes to the utilities after the Board's conditional approval will require either administrative approval or an amendment to the conditional approval depending upon the changes proposed.

Response: The applicant is aware of the need to coordinate with all non-municipal utilities providing service to the site. In addition, the applicant is also aware that any changes to the utilities after the Board's conditional approval will require either administrative approval or an amendment to the conditional approval. A note to this effect has been added to Sheet C0.2 of the Plan Set (Note 1.18).

2.3 Per Section 15.03 Existing Condition Plan, whereas minimal changes are proposed to the site, the Planning Board Clerk has determined to reduce the amount or extent of information required as noted below:

- a. Section 15.03(7), to not require the applicant to provide exterior dimensions of existing buildings and structures.

Response: No response required.

2.4 Per Section Per Section 15.04 Proposed Site Plan, whereas minimal changes are proposed to the site, the Planning Board Clerk has determined to reduce the amount or extent of information required as noted below:

- a. Section 15.04(10) Buildings and Structures, to not require exterior dimensions of existing buildings on the site that are outside of the project area.
- b. Section 15.04(14) Drainage and Erosion Control, the applicant has provided a separate erosion control plan as part of the plan set.
- c. Section 15.04(15) Landscaping, the applicant has provided a separate landscaping sheet as part of the plan set.
- d. Section 15.04(26) Lighting, the applicant has provided a separate lighting sheet as part of the plan set.

Response: No response required.

2.5 Staff notes that building signage location has been shown on the site but does not provide a complete description including dimensioning and lighting in the architectural drawings of this application. The applicant may provide additional details required to review the site signage, including a master sign plan and receive that review as part of the site plans architectural design review approval, otherwise, a separate architectural design review application and approval will be required at the time of the sign permit submissions. If the existing freestanding sign is to be removed or relocated, that should be shown on the current site plan.

Response: McLeod's Florist remains as the commercial tenant therefore no sign changes are proposed.

2.6 Staff notes that that Planning Board has the authority to, and may require third party investigations or reviews, at the applicant's expense, in order for the Planning Board to satisfactorily complete its review in accordance with Section 13.01(8) Impact Studies and Section 13.01(9) Special Investigative Studies or Third-Party Reviews of the Site Plan Regulations

Response: No response required.

2.7 The Assessing Division, and the Fire Department reviewed the application and had no additional comments.

Response: No response required.

2.8 The Engineering Services Division general comments are noted in the attached 5-page memo to Kearsten O'Brien from Paul Gildersleeve and Pete Kohalmi, dated May 6, 2026.

Response: The Engineering Services Division review letter was reviewed and addressed in this letter, see below.

3. Site Plan Regulations Determination of Completeness:

- 3.1 Per Section 12.03(4) and Section 16.03(1) Preparation, the signature and seal are missing from the architectural plans and shall be provided.

Response: Updated architectural plans are enclosed. Following the June 30th ADR committee meetings, signed and sealed plans will be submitted.

- 3.2 Per Section 12.04 Location Plan the plot plan on the cover sheet shall be revised to provide the correct scale and required information from Section 12.04(1) through (10)

Response: An additional Location Plan which meets the requirements from the City of Concord Site Plan Regulations Has been added to Sheet C0.1, the Cover Sheet, with the exception of item 12.04(8). Item 12.04(8) requires abutter information on the Location Plan. Due to the relatively small size of the properties and the large display scale, the abutters and corresponding information are displayed on the adjacent map on the same sheet.

- 3.3 Per Section 12.05 Vicinity Plan the location map on the cover sheet shall be revised to provide the proper scale and required information of Section 12.05(2).

Response: The Vicinity Plan on Sheet C0.1 (Cover Sheet) has been revised to meet the requirements of the City of Concord Site Plan Regulations, Section 12.05.

- 3.4 Per Section 12.06(1) Certificate of Ownership, this note has been provided on the existing conditions plan, but is missing from the site plan and shall be added.

Response: Deed references have been added to the property labels.

- 3.5 Per Section 15.03(23)(f) Useable land area calculations for residential development and net land area calculations shall be provided on the plan.

Response: Usable land area has been added to the zoning notes table.

- 3.6 Per Section 15.03(24) Zoning Boundary lines shall be added to the plan.

Response: Zoning boundaries are delineated on the Site Plan C1.2.

- 3.7 Per Section 15.04(3) Parcel Information, requires that the most current deed reference noting book and page numbers shall be provided on the plan.

Response: Deed references have been added to the property labels.

- 3.8 Per Section 15.04(5) Addresses and 16.02(7) Addresses, the site plan shall be revised to include the address of each building on the property.

Response: Property addresses have been added to the property labels.

- 3.9 15.04(13) Municipal Sewer, the applicant shall show the municipal sanitary sewer on the site plan including manholes, catch basins, and culverts, including service connections.

Response: Sewer structures are now shown on the site plan. Underground utilities are shown on C1.4 Utility Plan.

- 3.10 15.04(17) Municipal Water Supply, the applicant shall show the municipal water on the site plan including existing and proposed water mains and service connections, including hydrants, gates, valves, and meters, and other appurtenances.

Response: Water structures are now shown on the site plan. Underground utilities are shown on C1.4 Utility Plan.

- 3.11 15.04(19) Other Utilities, the applicant shall show the non-municipal utilities, where applicable, on the site plan.

Response: Non-municipal utility structures are now shown on the site plan. Underground utilities are shown on C1.4 Utility Plan.

- 3.12 Per Section 16.03(5) Windows, Doors, and Roofs, the type and pitch of roof shall be noted on the elevation plan and the size and spacing of windows and doors shall be noted on the architectural elevations.

Response: Revised architectural plans are enclosed.

- 3.13 Per Section 16.03(7) Colors and Materials, the architectural elevation shall provide notes for the color and material to be used for all siding, roofs, trim, doors, windows, mechanical equipment, and all other appurtenant features. The elevations shall also clearly indicate which of these features, if any, are existing and remain unchanged. Lastly, the elevations shall not only show any mechanical equipment, but provide for the required screening required per Section 26.02 Mechanical Equipment of the Site Plan Regulations.

Response: Revised architectural plans are enclosed.

- 3.14 Per Section 16.03(8) Dimensions, Horizontal and vertical dimensions shall be provided on the architectural elevations including the maximum height to the top of the roof, any mansard, rooftop structure, mechanical equipment cupola, flag pole or other appurtenant structure. A vertical dimension from the average ground level on each side of the building to the top of each floor shall be provided.

Response: Revised architectural plans are enclosed.

- 3.15 Per Section 16.03(9) Colored Rendering: A colored rendering of each elevation shall be provided at a scale suitable for public display before the Architectural Design Review Committee and the Planning Board. The colored rendering shall accurately show the proposed colors and shall portray any proposed landscaping at the time of initial planting and as expected five (5) years after planting.

Response: Revised architectural plans are enclosed.

Site Plan Regulations Compliance

- 3.16 The General Services Department had the following compliance comment: Drainage in existing parking lot shows an 8" CMP running from CB#9061 to CB#781 unknown condition of pipe and would recommend replacement. Sewer - Per City Construction Standards we don't allow 90-degree bends and piggyback sewer services. Water curb valves are outside of the right of way and per City Standards need to be set at the right of way of city streets.

Response: Sewer has been revised to have no 90-degree bends. Proposed water curb stop has been relocated to the right-of-way. Engineer Department staff provided confirmation that piggyback sewer is allowed since the property will remain under common ownership.

- 3.17 Assessing Department, and Fire Department reviewed the application and had no compliance comments.

Response: No response necessary.

- 3.18 The Engineering Services Division compliance comments are noted in the attached 5-page memo to Kearsten O'Brien from Paul Gildersleeve and Pete Kohalmi, dated May 6, 2026.

Response: The Engineering Services Division review letter was reviewed and addressed in this letter, see below.

- 3.19 The Planning Board approval block shall be added to the Sheet C1.2 Overall Site Plan and Cover Sheet. Staff can provide a template as a .pdf, .dwg, or .jpg if requested. The Planning Board approval block also needs to be added to the architectural plan set. The applicant shall either provide an architectural cover sheet to include with the architectural plans that will require the approval block to be added to, added to each architectural plan sheet if allowed by the Clerk of the Planning Board, or the applicant may add the architectural elevation sheets to the Civil Plan set.

Response: The city signature block has been added to the architectural elevation sheets.

- 3.20 Other than the compliance comments listed above, the application submittal has only been reviewed for items specific to the determination of completeness for the Planning Board, which included Sections 12, 13, 15, and 16 of the Site Plan Regulations. Prior to the public hearing, a complete analysis and staff review of the application will be conducted and provided for the Planning Board.

Response: No response necessary.

4 Variances:

- 4.1 The applicant appeared before the Zoning Board on March 4, 2026 and received multiple variances (listed below) to be compliant with the current zoning regulations.
- Section 28-7-7, Parking Area Design Standards (e), Minimum Aisle Width, to permit the existing aisle width at the entrance to be 20 feet, with an expansion to 22 feet, where 24 feet is required and along the southern parking area to remain at the existing 13' 10" to 15', where 24 feet is required;
 - Section 28-7-7, Parking Area Design Standards (f), Minimum Aisle Width, to

permit the existing driveway width at the entrance to be 20 feet where 24 feet is required;

- c. Section 28-7-7, Parking Area Design Standards (g)(2), Setbacks from lot lines, to permit parking up to the property line, where a 5-foot setback is required, with the parking in the southern parking area to have a 4 foot setback, the parking area in the south east area to be have a 1.67 foot setback and one parking spot in the north east area to have a 1.1 foot setback;
- d. Section 28-7-7, Parking Area Design Standards (g)(2), Setbacks from lot lines, to permit the existing 4 parking spaces within the parking lot to be located in the front yard where parking is not permitted within 10 feet of the front lot line;
- e. Section 28-7-10, Parking Area Landscaping Standards (a) Parking Lot Perimeter Landscaping Required, to permit the existing parking lot along the southern parking and the additional parking areas on the property to have no landscaping area, where a 5-foot landscape area is required;
- f. Section 28-7-10, Parking Area Landscaping Standards (c) Use of Required Landscape Areas Restricted, to permit parking within the required landscaped area; and
- g. Section 28-7-13 Off-Street Loading Requirements (b) Location of Loading Spaces to permit the existing loading space within the building to remain on the front of the building, with it backing into the street, where it would not be permitted under the ordinance.

Response: No response necessary.

5 Waivers:

5.1 The following waivers have been requested for this application. Staff recommendations on the waivers will be provided prior to the public hearing..

- a. Section 18.12 Perimeter Landscaping to allow off-street parking within 5' of a lot line and to allow parking in a non-residential district to occur within 10' of the front lot line where it abuts the right-of-way of an arterial street; and
- b. Sections 16.02(22) and 20.07 Design of Solid Waste Disposal Area to allow a dumpster pad to be 10'x12' where the City of Concord Construction Detail requires 12'x12'. Section 28-7-7, Parking Area Design Standards (e), Minimum Aisle Width, to permit the existing aisle width at the entrance to be 20 feet, with an expansion to 22 feet, where 24 feet is required and along the southern parking area to remain at the existing 13' 10" to 15', where 24 feet is required;

Response: No response necessary.

6 Conditional Use Permits:

6.1 The applicant has applied for a conditional use permit application related to driveway separation alternatives. Evaluation of the Conditional Use Permit criteria will be provided prior to the public hearing.

Response: No response necessary.

7 Architectural Design Review:

- 7.1 If the Planning Board determines the application complete at their May 20, 2026 meeting, the applicant would be scheduled to appear before the Architectural Design Review Committee for a recommendation on architectural design review on Tuesday, June 2, 2026 at 8:30am.

Response: No response necessary.

8 Conservation Commission:

- 8.1 Appearances before the Conservation Commission are not required for this application.

Response: No response necessary.

9 Recommendation:

- 9.1 Staff reviewed the application for completeness based upon the criteria of the Site Plan Regulations, and concluded that all criteria for completeness have been met, or will be met with granting of waiver requests, and that the application contains sufficient information and detail for a full review and action by the Board.

Response: No response necessary.

Engineering Services Division's General Requirements Memorandum:

Conditional Use Permit (CUP):

1. The applicant is requesting a number of CUPs for driveway items. These are non-technical in nature therefore Engineering does not support or oppose them to confirm compliance with each performance standard depicted in Section 28-3-6(d)(1).

Response: No response necessary.

Waiver-City of Concord Site Plan Regulations (CSPR) 16.02(22) as it related to CSPR 20.07

1. The applicant requests a waiver of CSPR 16.02(22) as it relates to CSPR 20.07, Design of Solid Waste Disposal Areas. The applicant would like to reduce the size of the dumpster pad to 10'x12' from 12'x12'. Since this reduction fits an 8-cy dumpster without any other changes, Engineering supports this request.

Response: No response necessary.

Stormwater Management Report:

1. Section 1.2 of the report states there will be 3' of separation between groundwater and the bottom of the stormwater practice. However, CSPR 22.07(2) requires 4' of separation. Please revise Section 1.2 to state 4' of separation will be maintained or request a waiver.

Response: Section 1.2 of the Stormwater Report has been revised to include the 4' separation requirement specified in CSPR 22.07(2), as well as the estimated groundwater depth. The additional information confirms that the proposed building drip edge design does not require revisions or waivers, as it continues to meet the required separation.

2. The 10-year post development flows show 3 in/hr. of infiltration for Pond P1. Please show how this infiltration rate was calculated. Please also show how the 90'x0.5' broad-crested weir was measured and the location of it on the plans.

Response: The infiltration rate calculation has been included in Section 1.2 of the stormwater report. The broad-crested weir dimensions correspond to the outer boundary of the building drip edge that is adjacent to the grassed area, as indicated on sheet C5.1. If the drip edge were to overtop, runoff would spill over the top of the drip edge and discharge toward the adjacent grass area. The hydraulic analysis indicates that the overflow spillway is not utilized under any of the storm events, as the runoff is fully managed within the proposed system.

Boundary/Survey:

1. The owner/developer needs to reach out to the City Surveyor to discuss the address numbers that are presently being used on the property, for the purpose of assigning address numbers to the proposed townhouses.

Response: The addresses have been confirmed with the City Surveyor.

2. To better understand the project narrative, the site plan shall include the existing property addresses for the subject property and all abutting properties, in addition to each owner's mailing address. Upon meeting with the owner/developer to discuss the address numbers that are presently being used on the property, the proposed addresses for the townhouses will also be included on the site plan. See note below regarding confusing info related to the number of proposed townhouses.

Response: Existing and proposed addresses have been added to the site plan.

3. On the Cover Sheet, the project description states "... then converting the addition and the 3-story portion of the existing building into 5 residential townhouses." The Site Plan shows 3 townhouses. The CUP project narratives states "... construct a 2-story 3,500 SF addition for 3 residential townhouses." The site plan project narrative states "... construct a 2-story 3,500 SF commercial addition with a basement, then converting the addition and the 3-story portion of the existing building into 5 residential townhouses." Please clarify.

Response: The project is split into 2 phases. The scope of each phase has been added to the cover sheet and the site plan notes, and a Phase 1 Plan has been added to the plan set.

4. The Map and Lot designation needs to be revised on all of the sheets, including the Existing Conditions Plan. On the Existing Conditions Plan, Map 7413 Block Z Lot 9 needs to be changed to Map 7413Z Lot 9. On the Site Plan sheets, 7413/Z/9 needs to be changed to 7413Z/9. This needs to be corrected on all sheets, within the abutters list, within title blocks, etc.

Response: All references to maps and lots have been revised in the plans.

5. On the Utility Plan, the proposed water line, the proposed electric and telecommunication line, and the proposed trench are very close to the property line of Map 7413Z Lot 8. It appears that an easement will be necessary across the abutting property. The existing easement referenced on the Existing Conditions Plan, Book 505, Page 534, and Book 955, Page 232, describe a right to pass and repass, not utility construction. The developer may wish to consult a land use attorney for further clarification.

Response: The utility plan has been updated.

6. On the Site Plan, please include a description of all property corner monuments as shown on the Existing Conditions Plan. Provisions should be made to re-set any monuments removed or disturbed due to excavations, particularly the rebar at the southwest corner of Map 7413Z Lot 8.

Response: Property monument labels and a callout to re-set disturbed monuments have been added.

Sheet C1.3: Grading, Drainage, and Erosion Control Plan

1. Show a construction entrance on the site as well as a construction entrance detail on a detail sheet.

Response: A proposed construction entrance has been added to sheet C1.3 and a corresponding detail on sheet C5.3.

2. Plan Note (5) states there are finish walk and curb on the site. However, no callouts for curb or sidewalk are shown. Also, the note states the curb will be 6"; however, only granite curbing of 5" (sloped) or 7" (vertical) is allowed. Please revise this note accordingly.

Response: There is no proposed curbing. Note 5 has been removed accordingly.

3. Plan Note (6) states 3' of cover is allowed over a storm pipe. However, pursuant to City of Concord Construction Standards and Details (CCSD) Section 6(3)(F)(2), a minimum of 4' of cover is required over storm pipe. Please revise this note to state 4' instead of 3'.

Response: Plan note 5 (formerly 6) has been revised accordingly.

4. Label Concord and S. State Streets.

Response: Concord Street and S. State Street have been labeled on sheet C1.3.

5. Confirm Note 7 is necessary for this project.

Response: Plan note 6 (formerly 7) has been revised to specify that a test pit is needed within the drip edge footprint.

Sheet C1.4: Utility Plan:

1. In Plan Note (21), revise "Town" to "City."

Response: Plan note 21 has been revised accordingly.

2. On the Proposed Sewer Service profile, since there are three services connecting into this line, revise “Service” to “Main” on the title. Show the connection of the sewer services to Units 1 and 3 on the sewer main profile.
Response: The profile has been renamed and the additional service connections are shown on the profile.
3. Show the proposed 6” sewer main connecting to the existing 8” main on South State Street with a tee-wye using a call-out. Provide a detail of a tee-wye (such as detail SS-1) on a detail sheet.
Response: The proposed tee wye connection has been added to the profile and a detail has been added to sheet C5.2.
4. Confirm that the water main coming off Concord St has been designed or reviewed by a Fire Protection Engineer and will be in compliance with the Fire Code and Fire Marshal. The current design appears odd in size and configuration.
Response: The size and type of water lines for sprinkler services have been confirmed with a fire protection engineer.
5. The City of Concord GIS shows two ¾” CTS domestic pipes servicing the existing building from S. State Street. Please show these two existing ¾” water services and the existing 14” CLCI water main in S. State Street. Show the existing water main in Concord Street as an 8” CLDIPO pipe, as shown in the City of Concord GIS.
Response: Approximate locations of existing water lines have been added to the plan. Exact locations to be determined.
6. State how the proposed 4” water line will connect to the existing 8” water line in Concord Street (e.g. tapping sleeve?).
Response: A proposed tapping sleeve has been called out on the plan.
7. The proposed 6” sewer shall include two 45-degree bends with a cleanout in between in lieu of the 90 degree bend currently shown. Revise plan and profile as necessary.
Response: The proposed 90-degree bend has been eliminated.

Sheet C5.1: Construction Details:

1. On the Sign Summary, add the “No Parking” sign called out on Sheet C1.2.
Response: A “No Parking” sign has been added to the sign summary.

Sheet C5.2: Construction Details:

1. CCSD Details SM-1 and W-1 reference CCSD Detail R-15. Please show Detail R-15 on a detail sheet.
Response: Detail R-15 has been added.
2. Add a CCSD Construction Entrance Detail (E-1) to a detail sheet.
Response: Detail E-1 has been added.

State/Federal Permits:

The project will require the following state and/or federal permit(s) associated with the site design:

- NHDES Sewer Connection Permit

Response: NHDES Sewer Connection Permit application was submitted on June 15, 2026

We trust we have responded to all your comments. If you have any questions, please feel free to contact me at (603) 369-4190, ext. 527 or elambert@wilcoxandbarton.com.

Very truly yours,
WILCOX & BARTON, INC.



Erin R. Lambert, P.E, LEED AP
Senior Vice President

Attachments: Revised Project Narrative
Revised Conditional Use Permit Letter
Revised Civil Site Plan Set
Revised Architectural Elevations and Floor Plans
Revised Stormwater Management Plan

Project: 3JB Properties, LLC Mixed-Use Development
Address: 47 - 49 S. State Street, Concord, NH
Applicant: 3JB Properties, LLC

Conditional Use Permit Narrative

The project parcel at 47 - 49 S. State Street (Map 7413Z, Lot 9) is in the Urban Commercial (CU) zoning district. The parcel area is 0.66 acres (28,746 SF). The property was previously owned and operated by McLeod's Florist, with on-site parking provided for employees and customers. The project involves constructing a 2-story 3,500 SF commercial addition with a basement, then converting the addition into 3 residential townhouses. The 3-story portion of the existing building will be converted into 2 residential townhouses. The remaining commercial / retail space will be renovated for continued occupancy by McLeod's Florist. Site improvements include updates to the paved parking areas, site lighting, landscaping, and stormwater controls.

A Conditional Use Permit is requested for 28-7-11(f) *Driveway Separation Alternatives* to allow the existing driveway on South State Street to remain 174 feet from the intersection with Concord Street where 200 feet is required.

The site contains a single driveway which coincides with a 10' deeded passway. There is a 2nd shared 10' deeded passway along the southern property line which provides a 2nd means of egress. Both are located in their size and location by deeded easements. The project intends to leave the driveways unchanged.

The Conditional Use Permit meets the following criteria:

1. The use is specifically authorized in the ordinance as a conditional use.

Article 28-7-11(f) *Driveway Separation Alternatives* allows the Planning Board to permit a reduction in driveway separation through a Conditional Use Permit.

2. If completed as proposed by the applicant, the development in its proposed location will comply with all requirements for this Article, and with the specific conditions of standards established in this ordinance for the particular use.

The proposed redevelopment will continue to use the existing driveway, which is almost the required distance to the intersection with Concord Street. Due to the nature of the downtown area and length of frontage, many properties along South State Street have driveways closer to intersection than exists here.

3. The use will not materially endanger the public health or safety.

The proposed project maintains the existing condition which has existed for decades. The street parking along the South State Street frontage has been designed around the driveway location, including sidewalk ramps at the driveway.

4. The use will be compatible with the neighborhood and with adjoining or abutting uses in the area in which it is to be located.

This is an existing driveway and many driveways in the neighborhood are closer than 174' to intersections along South State Street.

5. The use will not have an adverse effect on highway or pedestrian safety.

The proposed project maintains the existing condition. There are sidewalks around the property and sidewalk ramps at the driveway which facilitate safe pedestrian access.

6. The use will not have an adverse effect on the natural, environmental, and historic resources of the City.

The use will maintain the existing driveway condition, including preserving the large, mature trees which flank the sides of the driveway.

7. The use will be adequately serviced by necessary public utilities and by community facilities and services of a sufficient capacity to ensure the proper operation of the proposed use and will not necessitate excessive public expenditures to provide facilities and services with sufficient additional capacity.

The proposed is served by water, sewer, natural gas, electricity and telecommunications. No public expenditure is required.



CIVIL • ENVIRONMENTAL • GEOTECHNICAL

**STORMWATER MANAGEMENT PLAN
for**

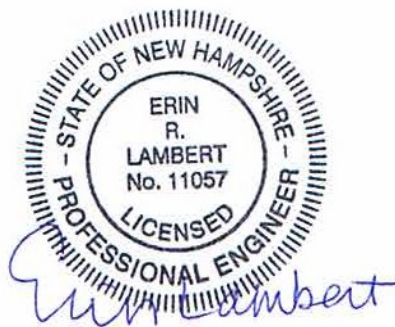
**3JB, LLC Mixed-Use Development
47-49 South State Street
Concord, NH 03301**

Prepared for:

3JB, LLC
12 Wilderness Lane
Bow, NH 03304

Prepared by:

Wilcox & Barton, Inc.
2 Home Ave.
Concord, New Hampshire 03301
Contact: Erin R. Lambert, PE, (603) 369-4190 x527



**Wilcox & Barton, Inc.
Project No.: RNBS0002**

April 15, 2026
Last Revised: June 16, 2026

TABLE OF CONTENTS

1.0 PROJECT NARRATIVE

- 1.1 Project Description
- 1.2 Site Soils
- 1.3 Pre-Development Watershed
- 1.4 Post-Development Watershed
- 1.5 Schedule
- 1.6 Points of Interest
- 1.7 Erosion Sediment Control/Site Stabilization
- 1.8 Water Quality
- 1.9 Summary of Results
- 1.10 Conclusions

2.0 NRCS SOIL INFORMATION

3.0 HYDRAULIC CALCULATIONS

- 3.1 Extreme Precipitations
- 3.2 Pre-Development Stormwater Plan – SW.1
- 3.3 Post-Development Stormwater Plan – SW.2
- 3.4 Pre-development Conditions
 - 3.4.1 Drainage Diagram
 - 3.4.2 Area Listing
 - 3.4.3 Soil Listing
 - 3.4.4 2-yr Node Listing and Full Summary
 - 3.4.5 10-yr Node Listing and Full Summary
 - 3.4.6 25-yr Node Listing and Full Summary
 - 3.4.7 50-yr Node Listing
 - 3.4.8 100-yr Node Listing and Full Summary
- 3.5 Post-Development Conditions
 - 3.5.1 Drainage Diagram
 - 3.5.2 Area Listing
 - 3.5.3 Soil Listing
 - 3.5.4 2-yr Node Listing and Full Summary
 - 3.5.5 10-yr Node Listing and Full Summary
 - 3.5.6 25-yr Node Listing and Full Summary
 - 3.5.7 50-yr Node Listing
 - 3.5.8 100-yr Node Listing and Full Summary

1.0 PROJECT NARRATIVE

1.1 Project Description

The project involves the redevelopment of the existing parcel (Map 7413Z, Lot 9) for three townhouses of 3,400 SF total and the repurposing of the existing shop and townhouse buildings. Proposed work includes the demolition of existing greenhouses, storage building, and portion of the paver area, followed by the construction of new paved areas, three townhouses, landscaping improvements, and the implementation of stormwater and erosion control measures. The project lot has a total area of 0.66 acres (28,746 SF) and approximately 0.57 acres (24,635 SF) of impervious area. The existing retail and housing building, along with the majority of the impervious and pervious areas located on the northern and western portions of the property, will remain unchanged. Construction activities associated with the redevelopment will result in an overall decrease in impervious area of approximately 0.05 acres (2,259 SF). The total area of disturbance is approximately 12,360 SF; therefore, an Alteration of Terrain Permit is not required. The proposed project also includes the installation of a building drip edge to provide additional stormwater management for part of the proposed townhouse's roof runoff. Erosion and sediment control during construction will be achieved through the installation of silt fencing and filter fabric inlet protection along downgradient areas of disturbance and catch basins to control sediment migration and protect stormwater quality at the limits of construction.

1.2 Site Soils

On-site soil consists of Windsor-Urban land complex, 0 to 8 percent slopes. The soil is classified as Hydrologic Soil Group (HSG) A. The Estimated Seasonal High Water Table (ESHWT) is relatively low, occurring at a depth greater than 80 inches below the ground surface. Refer to the NRCS Soil Information report (Section 2.0) for more soil information. The HSG A soil located on-site has an infiltration rate measured at 6.0-20 inches/hour. Accordingly, the infiltration rate for the building drip edge was modeled at 3 inches/hour, incorporating a safety factor of 2.

A confirmatory test pit shall be performed during construction within the footprint of the proposed stormwater management system to verify the ESHWT elevation. A minimum separation of 4 feet shall be maintained between the estimated seasonal high groundwater elevation and the bottom of the stormwater practice, as required by CSPR 22.07(2). Please refer to the civil plan set for the confirmatory test pit requirements.

1.3 Pre-Development Watershed

The pre-development watershed includes the entire project area, including the full parcel as well as portions of Concord Street, South State Street, the southern and eastern abutting properties. The existing lot is fully developed and consists of impervious surfaces such as pavement, concrete, and pavers, along with five existing buildings with landscaped areas.

The northern portion of the site slopes toward Concord Street, while part of the western side of the existing building and sidewalk drains toward South State Street. The remainder of the parcel, along with portions of the abutting properties to the south and east, slopes toward an existing

catch basin located in the southern portion of the site. Runoff from impervious areas is collected by catch basins located along Concord Street, South State Street, and within the parcel. The on-site catch basin directs runoff to the closed drainage system on South State Street. As a result, the pre-development watershed has been represented by three points of interest (POIs).

POI #1 includes the northern portion of the project area, consisting primarily of impervious surfaces such as pavement and building roof areas, along with some landscaped areas, which drain to an existing catch basin on Concord Street.

POI #2 includes a portion of South State Street runoff, the western portion of the existing building roof, and adjacent grassed and sidewalk areas, all of which direct runoff to an existing catch basin on South State Street.

POI #3 includes the majority of the project area, consisting of impervious surfaces including pavement and building roof areas, as well as some grassed areas, which direct runoff to an existing catch basin located within the on-site parking lot to the south.

1.4 Post-Development Watershed

The post-development watershed includes the same overall drainage area as the pre-development watershed. Post-development site cover will consist of existing and proposed pavement, paver patio areas, existing buildings and proposed townhouses, concrete pads, and landscaped areas. Construction of the project will not change the locations of the POIs.

The project proposes a decrease in impervious area on the site. A building drip edge has been incorporated as a stormwater management feature to capture a portion of the townhouse roof runoff and ensure that flow to POI #3 does not increase from pre-development runoff conditions. The system has been designed to accommodate the 100-year storm event without overtopping.

To the maximum extent possible, runoff from the site will sheet flow toward the existing on-site catch basin. The proposed parking area has been graded to promote sheet flow to this existing catch basin. The additional landscaped areas and the building drip edge will support groundwater recharge through infiltration.

POI #1 includes the same drainage area as pre-development conditions, consisting of the northern portion of the project area, primarily made up of existing pavement and building roof areas, along with some landscaped areas, which drain to an existing catch basin on Concord Street.

POI #2 includes the same drainage area as pre-development conditions, consisting of portion of South State Street runoff, the western portion of the existing building roof, and adjacent grassed and sidewalk areas, all of which direct runoff to an existing catch basin on South State Street.

POI #3 includes the majority of the project area, consisting of runoff from existing buildings, pavement, and concrete areas, as well as proposed townhouses, parking areas, and landscaped areas. Flow is directed to the existing catch basin located in the southern portion of the parcel

and to the building drip edge located in the northern portion of the parcel. The on-site catch basin ultimately directs stormwater runoff to the closed drainage system at South State Street.

1.5 Schedule

Construction is planned to commence upon Town approval in Fall 2026 with estimated completion by Spring 2027.

1.6 Points of Interest

There are three points of interest in the hydraulic model. Please see the pre-development and post-development watershed section for a description of the points of interest.

1.7 Erosion Sediment Control/Site Stabilization

The methods to be used to control sediment migration and erosion of the site include use of filter fabric inlet protection, silt fencing, and landscaping in accordance with best management practices. The contractor will be responsible for all temporary erosion and sediment control measures during construction, while the property owner will be ultimately responsible for maintaining all permanent erosion and sediment control measures as may be required.

1.8 Water Quality

During construction, filter fabric inlet protection and silt fencing will be installed to maintain the quality of stormwater leaving the site. Runoff from disturbed areas will be directed to the existing catch basins and landscaped areas to promote infiltration into the groundwater and allow sediments and pollutants to settle.

After construction is completed and the site is stabilized, stormwater quality will be maintained through infiltration provided by the building drip edge, promoting groundwater recharge. Landscaped areas and the maintenance of existing stormwater flow paths will also help support stormwater quality for site runoff.

1.9 Summary of Results

POI		Peak Discharge						
		2-yr		10-yr		25-yr	50-yr	
		Peak Q	Discharged Volume	Peak Q	Discharged Volume	Peak Q	Peak Q	
#1	Pre	0.17 cfs	0.01 ac-ft	0.26 cfs	0.02 ac-ft	0.32 cfs	0.38 cfs	0.46 cfs
	Post	0.17 cfs	0.01 ac-ft	0.26 cfs	0.02 ac-ft	0.32 cfs	0.38 cfs	0.46 cfs
#2	Pre	0.60 cfs	0.05 ac-ft	0.89 cfs	0.07 ac-ft	1.11 cfs	1.32 cfs	1.56 cfs
	Post	0.60 cfs	0.05 ac-ft	0.89 cfs	0.07 ac-ft	1.11 cfs	1.32 cfs	1.56 cfs
#3	Pre	1.42 cfs	0.13 ac-ft	2.12 cfs	0.20 ac-ft	2.65 cfs	3.15 cfs	3.75 cfs
	Post	1.03 cfs	0.11 ac-ft	1.54 cfs	0.17 ac-ft	1.92 cfs	2.28 cfs	2.74 cfs

1.10 Conclusions

The preceding table and following calculations indicate that the post-development peak flow rates of the property decrease or remain unchanged when compared to the pre-development peak flow in the 2-year, 10-year, 25-year, 50-year, and 100-year storm events for POI #1, POI #2, and POI #3. The post-development discharged volume decreases or remains unchanged when compared to the pre-development discharged volumes in the 2- and 10-year storm events.

Stormwater is conveyed through the development via sheet flow to the existing catch basins and to the proposed building drip edge. The proposed design meets the Env-Wq 1507.05 Channel Protection Requirement. The 2-year, 24-hour post-development peak flow rate at all points of interest is less or equal to the 2-year, 24-hour pre-development peak flow rate.

Calculations are included for the 2-year, 10-year, 25-year, 50-year, and 100-year events.

2.0 NRCS SOIL INFORMATION



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for Merrimack and Belknap Counties, New Hampshire



March 31, 2026

Preface

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

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

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

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

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

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

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

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	12
Map Unit Descriptions.....	12
Merrimack and Belknap Counties, New Hampshire.....	14
598B—Windsor-Urban land complex, 0 to 8 percent slopes.....	14
References	17

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

Custom Soil Resource Report

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

Soil Map

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

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Merrimack and Belknap Counties, New Hampshire
Survey Area Data: Version 31, Sep 10, 2025

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

Date(s) aerial images were photographed: Oct 6, 2022—Oct 22, 2022

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

MAP LEGEND

MAP INFORMATION

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
598B	Windsor-Urban land complex, 0 to 8 percent slopes	0.8	100.0%
Totals for Area of Interest		0.8	100.0%

Map Unit Descriptions

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

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

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Merrimack and Belknap Counties, New Hampshire

598B—Windsor-Urban land complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w2wq
Landscape: Valleys
Elevation: 0 to 920 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Windsor and similar soils: 45 percent
Urban land: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landscape: Valleys
Landform: Dunes, Deltas, Outwash terraces, Outwash plains
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

A - 0 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Description of Urban Land

Setting

Landscape: Glaciated uplands

Anthropogenic Feature: Urban land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D

Hydric soil rating: Unranked

Minor Components

Udorthents

Percent of map unit: 10 percent

Landscape: Valleys

Landform: Dunes, Deltas, Outwash terraces, Outwash plains

Landform position (three-dimensional): Tread, riser

Down-slope shape: Convex, linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Hinckley

Percent of map unit: 5 percent

Landscape: Outwash plains, valleys

Landform: Deltas, Kames, Eskers, Outwash plains

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Head slope, nose slope, side slope, crest, rise

Down-slope shape: Convex

Across-slope shape: Convex, linear

Hydric soil rating: No

Deerfield

Percent of map unit: 5 percent

Landscape: Outwash plains, valleys

Landform: Deltas, Kame terraces, Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

3.0 HYDRAULIC CALCULATIONS

- 3.1 Extreme Precipitations
- 3.2 Pre-Development Stormwater Plan – SW.1
- 3.3 Post-Development Stormwater Plan – SW.2
- 3.4 Pre-development Conditions
 - 3.4.1 Drainage Diagram
 - 3.4.2 Area Listing
 - 3.4.3 Soil Listing
 - 3.4.4 2-yr Node Listing and Full Summary
 - 3.4.5 10-yr Node Listing and Full Summary
 - 3.4.6 25-yr Node Listing and Full Summary
 - 3.4.7 50-yr Node Listing
 - 3.4.8 100-yr Node Listing and Full Summary
- 3.5 Post-Development Conditions
 - 3.5.1 Drainage Diagram
 - 3.5.2 Area Listing
 - 3.5.3 Soil Listing
 - 3.5.4 2-yr Node Listing and Full Summary
 - 3.5.5 10-yr Node Listing and Full Summary
 - 3.5.6 25-yr Node Listing and Full Summary
 - 3.5.7 50-yr Node Listing
 - 3.5.8 100-yr Node Listing and Full Summary

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point	
Smoothing	Yes
State	
Location	
Latitude	43.200 degrees North
Longitude	71.535 degrees West
Elevation	80 feet
Date/Time	Tue Mar 31 2026 09:37:49 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

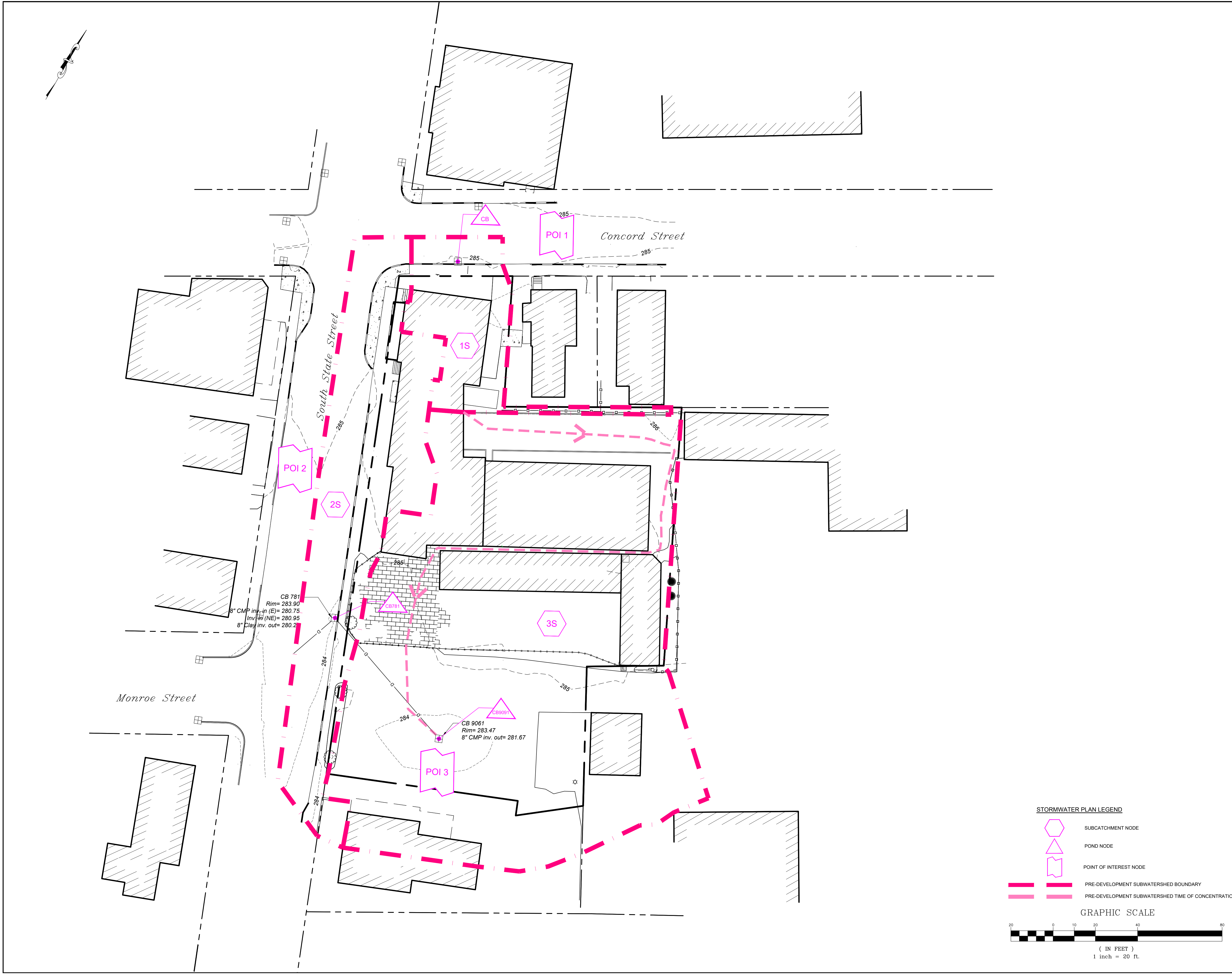
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.39	0.49	0.64	0.80	1.01	1yr	0.69	0.98	1.17	1.47	1.86	2.36	2.56	1yr	2.09	2.46	2.89	3.59	4.12	1yr
2yr	0.31	0.48	0.60	0.79	1.00	1.25	2yr	0.86	1.15	1.45	1.81	2.26	2.81	3.15	2yr	2.49	3.03	3.50	4.19	4.78	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.58	5yr	1.08	1.45	1.83	2.28	2.83	3.50	3.99	5yr	3.10	3.83	4.43	5.20	5.90	5yr
10yr	0.42	0.66	0.84	1.14	1.48	1.89	10yr	1.28	1.71	2.19	2.73	3.37	4.14	4.77	10yr	3.66	4.59	5.29	6.13	6.91	10yr
25yr	0.50	0.79	1.01	1.39	1.85	2.38	25yr	1.60	2.15	2.76	3.44	4.24	5.17	6.06	25yr	4.57	5.83	6.69	7.63	8.53	25yr
50yr	0.56	0.90	1.16	1.62	2.20	2.85	50yr	1.89	2.55	3.32	4.13	5.05	6.11	7.26	50yr	5.41	6.99	8.00	9.00	10.01	50yr
100yr	0.65	1.05	1.35	1.91	2.60	3.39	100yr	2.25	3.03	3.96	4.92	6.00	7.23	8.71	100yr	6.40	8.38	9.57	10.63	11.75	100yr
200yr	0.74	1.21	1.57	2.24	3.09	4.05	200yr	2.67	3.61	4.72	5.86	7.14	8.57	10.45	200yr	7.58	10.05	11.45	12.56	13.79	200yr
500yr	0.89	1.47	1.91	2.77	3.88	5.11	500yr	3.35	4.54	5.97	7.40	8.98	10.72	13.30	500yr	9.49	12.79	14.52	15.66	17.06	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.21	0.32	0.39	0.52	0.64	0.88	1yr	0.56	0.86	1.04	1.36	1.59	2.00	2.41	1yr	1.77	2.32	2.65	3.27	3.84	1yr
2yr	0.30	0.47	0.57	0.78	0.96	1.15	2yr	0.83	1.12	1.31	1.72	2.19	2.74	3.05	2yr	2.43	2.93	3.41	4.07	4.66	2yr
5yr	0.34	0.53	0.66	0.90	1.15	1.37	5yr	0.99	1.34	1.53	2.00	2.56	3.28	3.70	5yr	2.90	3.55	4.12	4.86	5.54	5yr
10yr	0.38	0.58	0.72	1.01	1.31	1.54	10yr	1.13	1.51	1.74	2.24	2.86	3.76	4.29	10yr	3.33	4.12	4.74	5.55	6.32	10yr
25yr	0.44	0.66	0.83	1.18	1.55	1.80	25yr	1.34	1.76	2.05	2.60	3.33	4.49	5.19	25yr	3.97	5.00	5.69	6.63	7.53	25yr
50yr	0.48	0.73	0.91	1.31	1.76	2.02	50yr	1.52	1.98	2.33	2.92	3.74	5.14	6.01	50yr	4.55	5.78	6.52	7.58	8.58	50yr
100yr	0.54	0.81	1.02	1.47	2.02	2.28	100yr	1.74	2.23	2.65	3.27	4.20	5.90	6.96	100yr	5.22	6.69	7.49	8.67	9.79	100yr
200yr	0.60	0.90	1.14	1.64	2.29	2.55	200yr	1.98	2.50	3.00	3.68	4.72	6.76	8.05	200yr	5.99	7.74	8.58	9.94	11.18	200yr
500yr	0.69	1.03	1.32	1.92	2.73	2.97	500yr	2.35	2.90	3.56	4.30	5.53	8.10	9.76	500yr	7.17	9.39	10.21	11.93	13.35	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.45	0.55	0.73	0.90	1.08	1yr	0.78	1.06	1.19	1.59	1.99	2.50	2.74	1yr	2.22	2.64	3.15	3.82	4.35	1yr
2yr	0.33	0.50	0.62	0.84	1.03	1.24	2yr	0.89	1.21	1.39	1.83	2.33	2.90	3.25	2yr	2.57	3.12	3.63	4.32	4.94	2yr
5yr	0.41	0.63	0.78	1.07	1.36	1.58	5yr	1.17	1.54	1.79	2.29	2.91	3.73	4.29	5yr	3.30	4.13	4.76	5.53	6.27	5yr
10yr	0.49	0.75	0.93	1.30	1.68	1.92	10yr	1.45	1.88	2.17	2.72	3.47	4.54	5.31	10yr	4.02	5.10	5.88	6.68	7.56	10yr
25yr	0.62	0.95	1.18	1.69	2.22	2.50	25yr	1.92	2.45	2.79	3.42	4.35	5.86	7.04	25yr	5.19	6.77	7.75	8.59	9.65	25yr
50yr	0.75	1.13	1.41	2.03	2.73	3.06	50yr	2.36	2.99	3.37	4.08	5.16	7.13	8.71	50yr	6.31	8.37	9.56	10.40	11.67	50yr
100yr	0.90	1.37	1.71	2.47	3.39	3.75	100yr	2.93	3.66	4.09	4.86	6.14	8.68	10.80	100yr	7.69	10.39	11.83	12.58	14.06	100yr
200yr	1.09	1.64	2.07	3.00	4.19	4.59	200yr	3.61	4.48	4.95	5.79	7.31	10.56	13.38	200yr	9.35	12.87	14.66	15.24	16.93	200yr
500yr	1.40	2.09	2.69	3.91	5.56	6.01	500yr	4.79	5.88	6.38	7.31	9.22	13.71	17.80	500yr	12.13	17.12	19.48	19.63	21.67	500yr



STORMWATER PLAN LEGEND

- SUBCATCHMENT NODE
- POND NODE
- POINT OF INTEREST NODE
- PRE-DEVELOPMENT SUBWATERSHED BOUNDARY
- PRE-DEVELOPMENT SUBWATERSHED TIME OF CONCENTRATION

GRAPHIC SCALE

(IN FEET)

1 inch = 20 ft.

Wilcox & Barton INC.
CIVIL • ENVIRONMENTAL • GEOTECHNICAL

2 HOME AVENUE
CONCORD, NH 03301
603-369-4190
www.wilcoxandbarton.com

REVISION HISTORY

1.	
----	--

ISSUED FOR

PERMITTING

ALL DOCUMENTS PREPARED BY WILCOX & BARTON, INC. ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY WILCOX & BARTON, INC. FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO WILCOX & BARTON, INC. OWNER SHALL INDEMNIFY AND HOLD HARMLESS WILCOX & BARTON, INC. FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

OWNER

3JB, LLC
12 WILDERNESS LANE
BOW, NH 03304

SITE

3JB, LLC
47-49 S. STATE ST
CONCORD, NH

MBLU: 7413/Z/9

DRAWING TITLE

PRE-DEVELOPMENT STORMWATER PLAN

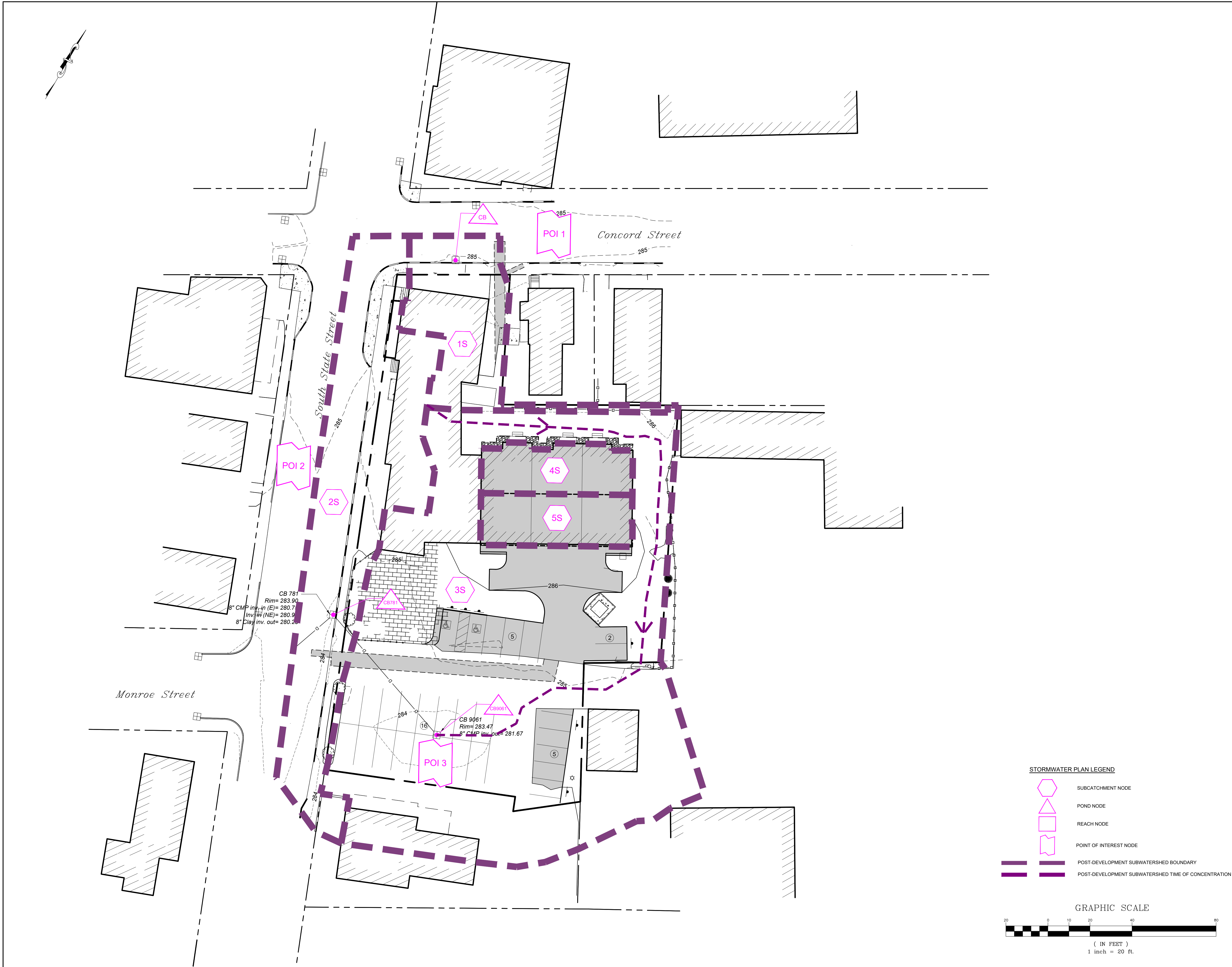
SCALE	1" = 20'	DATE	04/15/2026
DRAFTED BY	KAD	CHECKED BY	ERL
PROJECT MGR	ERL	PROJECT NO.	RNBS0002

ENGINEER: ERIN R. LAMBERT
NH P.E. #11057

SHEET NO.

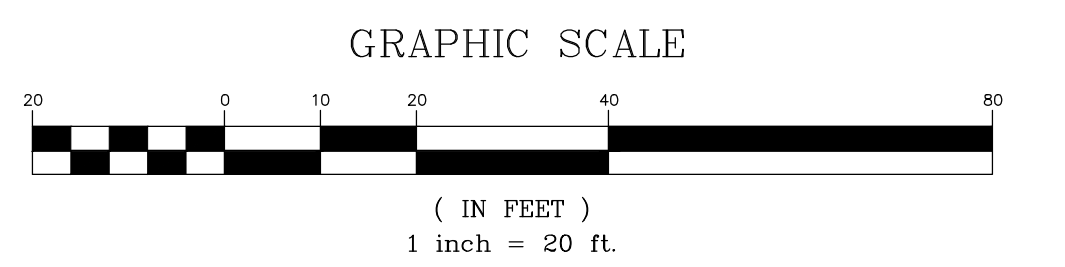
SW.1

01 OF 02



STORMWATER PLAN LEGEND

- SUBCATCHMENT NODE
- POND NODE
- REACH NODE
- POINT OF INTEREST NODE
- POST-DEVELOPMENT SUBWATERSHED BOUNDARY
- POST-DEVELOPMENT SUBWATERSHED TIME OF CONCENTRATION



Wilcox & Barton INC.
CIVIL • ENVIRONMENTAL • GEOTECHNICAL

2 HOME AVENUE
CONCORD, NH 03301
603-369-4190
www.wilcoxandbarton.com

REVISION HISTORY

1	
---	--

ISSUED FOR

PERMITTING

ALL DOCUMENTS PREPARED BY WILCOX & BARTON, INC. ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY WILCOX & BARTON, INC. FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO WILCOX & BARTON, INC. OWNER SHALL INDEMNIFY AND HOLD HARMLESS WILCOX & BARTON, INC. FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

OWNER

3JB, LLC
12 WILDERNESS LANE
BOW, NH 03304

SITE

3JB, LLC
47-49 S. STATE ST
CONCORD, NH

MBLU: 7413/Z/9

DRAWING TITLE

POST-DEVELOPMENT STORMWATER PLAN

SCALE	1" = 20'	DATE	04/15/2026
DRAFTED BY	KAD	CHECKED BY	ERL
PROJECT MGR	ERL	PROJECT NO.	RNBS0002

ENGINEER: ERIN R. LAMBERT
NH P.E. #11057

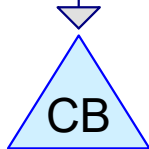
SHEET NO.

SW.2

02 OF 02



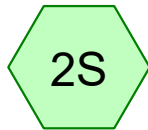
EDA 1



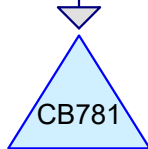
EXISTING CB



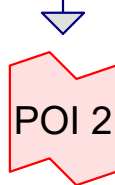
CONCORD ST



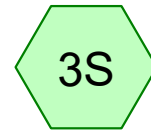
EDA 2



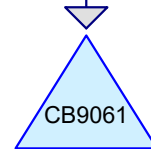
EXISTING CB 781



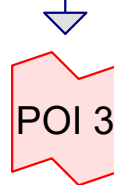
SOUTH STATE ST



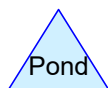
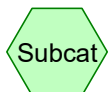
EDA 3



EXISTING CB-9061



ON-SITE SOUTHERN
PARKING LOT



Routing Diagram for PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc, Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Printed 4/15/2026

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
4,611	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
1,719	98	DILAPIDATED GREENHOUSE (3S)
1,485	98	EXISTING BLACK TARP (3S)
9,569	98	EXISTING BUILDING (3S)
3,017	98	EXISTING BUILDINGS (1S, 2S)
282	85	EXISTING COMPACTED SAND (3S)
339	98	EXISTING CONCRETE (1S, 2S)
183	98	EXISTING MISCELLANEOUS (1S, 2S)
18,563	98	EXISTING PAVEMENT (1S, 2S, 3S)
1,023	98	EXISTING PAVER PATIO (2S, 3S)
81	98	EXISTING RET. WALL (3S)
2,841	98	EXISTING SIDEWALK (1S, 2S)
43,713	92	TOTAL AREA

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
4,611	HSG A	1S, 2S, 3S
0	HSG B	
0	HSG C	
0	HSG D	
39,102	Other	1S, 2S, 3S
43,713		TOTAL AREA

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 4

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
4,611	0	0	0	0	4,611	>75% Grass cover, Good
0	0	0	0	1,719	1,719	DILAPIDATED GREENHOUSE
0	0	0	0	1,485	1,485	EXISTING BLACK TARP
0	0	0	0	9,569	9,569	EXISTING BUILDING
0	0	0	0	3,017	3,017	EXISTING BUILDINGS
0	0	0	0	282	282	EXISTING COMPACTED SAND
0	0	0	0	339	339	EXISTING CONCRETE
0	0	0	0	183	183	EXISTING MISCELLANEO US
0	0	0	0	18,563	18,563	EXISTING PAVEMENT
0	0	0	0	1,023	1,023	EXISTING PAVER PATIO
0	0	0	0	81	81	EXISTING RET. WALL
0	0	0	0	2,841	2,841	EXISTING SIDEWALK
4,611	0	0	0	39,102	43,713	TOTAL AREA

PRE-DEVELOPMENT_RNBS0002*Type III 24-hr 2-yr Rainfall=2.81"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: EDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=1.98"
Tc=5.0 min CN=WQ Runoff=0.17 cfs 593 cf

Subcatchment2S: EDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=2.51"
Tc=5.0 min CN=WQ Runoff=0.60 cfs 2,044 cf

Subcatchment3S: EDA 3 Runoff Area=30,347 sf 87.49% Impervious Runoff Depth=2.27"
Flow Length=354' Tc=10.6 min CN=WQ Runoff=1.42 cfs 5,740 cf

Pond CB: EXISTING CB Inflow=0.17 cfs 593 cf
Primary=0.17 cfs 593 cf

Pond CB781: EXISTING CB 781 Inflow=0.60 cfs 2,044 cf
Primary=0.60 cfs 2,044 cf

Pond CB9061: EXISTING CB-9061 Inflow=1.42 cfs 5,740 cf
Primary=1.42 cfs 5,740 cf

Link POI 1: CONCORD ST Inflow=0.17 cfs 593 cf
Primary=0.17 cfs 593 cf

Link POI 2: SOUTH STATE ST Inflow=0.60 cfs 2,044 cf
Primary=0.60 cfs 2,044 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=1.42 cfs 5,740 cf
Primary=1.42 cfs 5,740 cf

Total Runoff Area = 43,713 sf Runoff Volume = 8,377 cf Average Runoff Depth = 2.30"
11.19% Pervious = 4,893 sf 88.81% Impervious = 38,820 sf

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 2-yr Rainfall=2.81"

Printed 4/15/2026

Page 6

Summary for Subcatchment 1S: EDA 1

Runoff = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Depth= 1.98"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: EDA 2

Runoff = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Depth= 2.51"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 2-yr Rainfall=2.81"

Printed 4/15/2026

Page 7

Summary for Subcatchment 3S: EDA 3

Runoff = 1.42 cfs @ 12.14 hrs, Volume= 5,740 cf, Depth= 2.27"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 9,569	98	EXISTING BUILDING
* 12,975	98	EXISTING PAVEMENT
* 81	98	EXISTING RET. WALL
* 282	85	EXISTING COMPACTED SAND
* 723	98	EXISTING PAVER PATIO
* 1,485	98	EXISTING BLACK TARP
* 1,719	98	DILAPIDATED GREENHOUSE
3,513	39	>75% Grass cover, Good, HSG A
30,347		Weighted Average
3,795		12.51% Pervious Area
26,552		87.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0280	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
3.3	108	0.0060	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	196	0.0060	1.57		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.6	354	Total			

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 1.98" for 2-yr event
 Inflow = 0.17 cfs @ 12.07 hrs, Volume= 593 cf
 Primary = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 2.51" for 2-yr event
 Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf
 Primary = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 2.27" for 2-yr event
Inflow = 1.42 cfs @ 12.14 hrs, Volume= 5,740 cf
Primary = 1.42 cfs @ 12.14 hrs, Volume= 5,740 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 1.98" for 2-yr event
Inflow = 0.17 cfs @ 12.07 hrs, Volume= 593 cf
Primary = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 2.51" for 2-yr event
Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf
Primary = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 2.27" for 2-yr event
Inflow = 1.42 cfs @ 12.14 hrs, Volume= 5,740 cf
Primary = 1.42 cfs @ 12.14 hrs, Volume= 5,740 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

PRE-DEVELOPMENT_RNBS0002*Type III 24-hr 10-yr Rainfall=4.14"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: EDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=3.02"
Tc=5.0 min CN=WQ Runoff=0.26 cfs 902 cf

Subcatchment2S: EDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=3.80"
Tc=5.0 min CN=WQ Runoff=0.89 cfs 3,096 cf

Subcatchment3S: EDA 3 Runoff Area=30,347 sf 87.49% Impervious Runoff Depth=3.45"
Flow Length=354' Tc=10.6 min CN=WQ Runoff=2.12 cfs 8,719 cf

Pond CB: EXISTING CB Inflow=0.26 cfs 902 cf
Primary=0.26 cfs 902 cf

Pond CB781: EXISTING CB 781 Inflow=0.89 cfs 3,096 cf
Primary=0.89 cfs 3,096 cf

Pond CB9061: EXISTING CB-9061 Inflow=2.12 cfs 8,719 cf
Primary=2.12 cfs 8,719 cf

Link POI 1: CONCORD ST Inflow=0.26 cfs 902 cf
Primary=0.26 cfs 902 cf

Link POI 2: SOUTH STATE ST Inflow=0.89 cfs 3,096 cf
Primary=0.89 cfs 3,096 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=2.12 cfs 8,719 cf
Primary=2.12 cfs 8,719 cf

Total Runoff Area = 43,713 sf Runoff Volume = 12,716 cf Average Runoff Depth = 3.49"
11.19% Pervious = 4,893 sf 88.81% Impervious = 38,820 sf

PRE-DEVELOPMENT_RNBS0002

Type III 24-hr 10-yr Rainfall=4.14"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 2

Summary for Subcatchment 1S: EDA 1

Runoff = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Depth= 3.02"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: EDA 2

Runoff = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Depth= 3.80"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 10-yr Rainfall=4.14"

Printed 4/15/2026

Page 3

Summary for Subcatchment 3S: EDA 3

Runoff = 2.12 cfs @ 12.14 hrs, Volume= 8,719 cf, Depth= 3.45"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 9,569	98	EXISTING BUILDING
* 12,975	98	EXISTING PAVEMENT
* 81	98	EXISTING RET. WALL
* 282	85	EXISTING COMPACTED SAND
* 723	98	EXISTING PAVER PATIO
* 1,485	98	EXISTING BLACK TARP
* 1,719	98	DILAPIDATED GREENHOUSE
3,513	39	>75% Grass cover, Good, HSG A
30,347		Weighted Average
3,795		12.51% Pervious Area
26,552		87.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0280	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
3.3	108	0.0060	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	196	0.0060	1.57		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.6	354	Total			

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.02" for 10-yr event
 Inflow = 0.26 cfs @ 12.07 hrs, Volume= 902 cf
 Primary = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 3.80" for 10-yr event
 Inflow = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf
 Primary = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 3.45" for 10-yr event
Inflow = 2.12 cfs @ 12.14 hrs, Volume= 8,719 cf
Primary = 2.12 cfs @ 12.14 hrs, Volume= 8,719 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.02" for 10-yr event
Inflow = 0.26 cfs @ 12.07 hrs, Volume= 902 cf
Primary = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 3.80" for 10-yr event
Inflow = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf
Primary = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 3.45" for 10-yr event
Inflow = 2.12 cfs @ 12.14 hrs, Volume= 8,719 cf
Primary = 2.12 cfs @ 12.14 hrs, Volume= 8,719 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

PRE-DEVELOPMENT_RNBS0002*Type III 24-hr 25-yr Rainfall=5.17"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: EDA 1

Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=3.85"
Tc=5.0 min CN=WQ Runoff=0.32 cfs 1,150 cf

Subcatchment2S: EDA 2

Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=4.80"
Tc=5.0 min CN=WQ Runoff=1.11 cfs 3,914 cf

Subcatchment3S: EDA 3

Runoff Area=30,347 sf 87.49% Impervious Runoff Depth=4.38"
Flow Length=354' Tc=10.6 min CN=WQ Runoff=2.65 cfs 11,067 cf

Pond CB: EXISTING CB

Inflow=0.32 cfs 1,150 cf
Primary=0.32 cfs 1,150 cf

Pond CB781: EXISTING CB 781

Inflow=1.11 cfs 3,914 cf
Primary=1.11 cfs 3,914 cf

Pond CB9061: EXISTING CB-9061

Inflow=2.65 cfs 11,067 cf
Primary=2.65 cfs 11,067 cf

Link POI 1: CONCORD ST

Inflow=0.32 cfs 1,150 cf
Primary=0.32 cfs 1,150 cf

Link POI 2: SOUTH STATE ST

Inflow=1.11 cfs 3,914 cf
Primary=1.11 cfs 3,914 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow=2.65 cfs 11,067 cf
Primary=2.65 cfs 11,067 cf

Total Runoff Area = 43,713 sf Runoff Volume = 16,131 cf Average Runoff Depth = 4.43"
11.19% Pervious = 4,893 sf 88.81% Impervious = 38,820 sf

PRE-DEVELOPMENT_RNBS0002

Type III 24-hr 25-yr Rainfall=5.17"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 2

Summary for Subcatchment 1S: EDA 1

Runoff = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Depth= 3.85"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: EDA 2

Runoff = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Depth= 4.80"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

PRE-DEVELOPMENT_RNBS0002

Type III 24-hr 25-yr Rainfall=5.17"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 3

Summary for Subcatchment 3S: EDA 3

Runoff = 2.65 cfs @ 12.14 hrs, Volume= 11,067 cf, Depth= 4.38"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 9,569	98	EXISTING BUILDING
* 12,975	98	EXISTING PAVEMENT
* 81	98	EXISTING RET. WALL
* 282	85	EXISTING COMPACTED SAND
* 723	98	EXISTING PAVER PATIO
* 1,485	98	EXISTING BLACK TARP
* 1,719	98	DILAPIDATED GREENHOUSE
3,513	39	>75% Grass cover, Good, HSG A
30,347		Weighted Average
3,795		12.51% Pervious Area
26,552		87.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0280	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
3.3	108	0.0060	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	196	0.0060	1.57		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.6	354	Total			

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.85" for 25-yr event
 Inflow = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf
 Primary = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 4.80" for 25-yr event
 Inflow = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf
 Primary = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 4.38" for 25-yr event
Inflow = 2.65 cfs @ 12.14 hrs, Volume= 11,067 cf
Primary = 2.65 cfs @ 12.14 hrs, Volume= 11,067 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.85" for 25-yr event
Inflow = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf
Primary = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 4.80" for 25-yr event
Inflow = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf
Primary = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 4.38" for 25-yr event
Inflow = 2.65 cfs @ 12.14 hrs, Volume= 11,067 cf
Primary = 2.65 cfs @ 12.14 hrs, Volume= 11,067 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

PRE-DEVELOPMENT_RNBS0002*Type III 24-hr 50-yr Rainfall=6.11"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: EDA 1

Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=4.62"
Tc=5.0 min CN=WQ Runoff=0.38 cfs 1,383 cf

Subcatchment2S: EDA 2

Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=5.72"
Tc=5.0 min CN=WQ Runoff=1.32 cfs 4,664 cf

Subcatchment3S: EDA 3

Runoff Area=30,347 sf 87.49% Impervious Runoff Depth=5.23"
Flow Length=354' Tc=10.6 min CN=WQ Runoff=3.15 cfs 13,236 cf

Pond CB: EXISTING CB

Inflow=0.38 cfs 1,383 cf
Primary=0.38 cfs 1,383 cf

Pond CB781: EXISTING CB 781

Inflow=1.32 cfs 4,664 cf
Primary=1.32 cfs 4,664 cf

Pond CB9061: EXISTING CB-9061

Inflow=3.15 cfs 13,236 cf
Primary=3.15 cfs 13,236 cf

Link POI 1: CONCORD ST

Inflow=0.38 cfs 1,383 cf
Primary=0.38 cfs 1,383 cf

Link POI 2: SOUTH STATE ST

Inflow=1.32 cfs 4,664 cf
Primary=1.32 cfs 4,664 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow=3.15 cfs 13,236 cf
Primary=3.15 cfs 13,236 cf

Total Runoff Area = 43,713 sf Runoff Volume = 19,282 cf Average Runoff Depth = 5.29"
11.19% Pervious = 4,893 sf 88.81% Impervious = 38,820 sf

PRE-DEVELOPMENT_RNBS0002*Type III 24-hr 100-yr Rainfall=7.23"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: EDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=5.57"
Tc=5.0 min CN=WQ Runoff=0.46 cfs 1,666 cf

Subcatchment2S: EDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=6.82"
Tc=5.0 min CN=WQ Runoff=1.56 cfs 5,559 cf

Subcatchment3S: EDA 3 Runoff Area=30,347 sf 87.49% Impervious Runoff Depth=6.27"
Flow Length=354' Tc=10.6 min CN=WQ Runoff=3.75 cfs 15,846 cf

Pond CB: EXISTING CB Inflow=0.46 cfs 1,666 cf
Primary=0.46 cfs 1,666 cf

Pond CB781: EXISTING CB 781 Inflow=1.56 cfs 5,559 cf
Primary=1.56 cfs 5,559 cf

Pond CB9061: EXISTING CB-9061 Inflow=3.75 cfs 15,846 cf
Primary=3.75 cfs 15,846 cf

Link POI 1: CONCORD ST Inflow=0.46 cfs 1,666 cf
Primary=0.46 cfs 1,666 cf

Link POI 2: SOUTH STATE ST Inflow=1.56 cfs 5,559 cf
Primary=1.56 cfs 5,559 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=3.75 cfs 15,846 cf
Primary=3.75 cfs 15,846 cf

Total Runoff Area = 43,713 sf Runoff Volume = 23,071 cf Average Runoff Depth = 6.33"
11.19% Pervious = 4,893 sf 88.81% Impervious = 38,820 sf

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 100-yr Rainfall=7.23"

Printed 4/15/2026

Page 2

Summary for Subcatchment 1S: EDA 1

Runoff = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Depth= 5.57"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: EDA 2

Runoff = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Depth= 6.82"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

PRE-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 100-yr Rainfall=7.23"

Printed 4/15/2026

Page 3

Summary for Subcatchment 3S: EDA 3

Runoff = 3.75 cfs @ 12.14 hrs, Volume= 15,846 cf, Depth= 6.27"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 9,569	98	EXISTING BUILDING
* 12,975	98	EXISTING PAVEMENT
* 81	98	EXISTING RET. WALL
* 282	85	EXISTING COMPACTED SAND
* 723	98	EXISTING PAVER PATIO
* 1,485	98	EXISTING BLACK TARP
* 1,719	98	DILAPIDATED GREENHOUSE
3,513	39	>75% Grass cover, Good, HSG A
30,347		Weighted Average
3,795		12.51% Pervious Area
26,552		87.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	50	0.0280	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
3.3	108	0.0060	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	196	0.0060	1.57		Shallow Concentrated Flow, Paved Kv= 20.3 fps
10.6	354	Total			

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 5.57" for 100-yr event
 Inflow = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf
 Primary = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 6.82" for 100-yr event
 Inflow = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf
 Primary = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 6.27" for 100-yr event
Inflow = 3.75 cfs @ 12.14 hrs, Volume= 15,846 cf
Primary = 3.75 cfs @ 12.14 hrs, Volume= 15,846 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 5.57" for 100-yr event
Inflow = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf
Primary = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

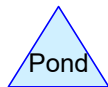
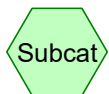
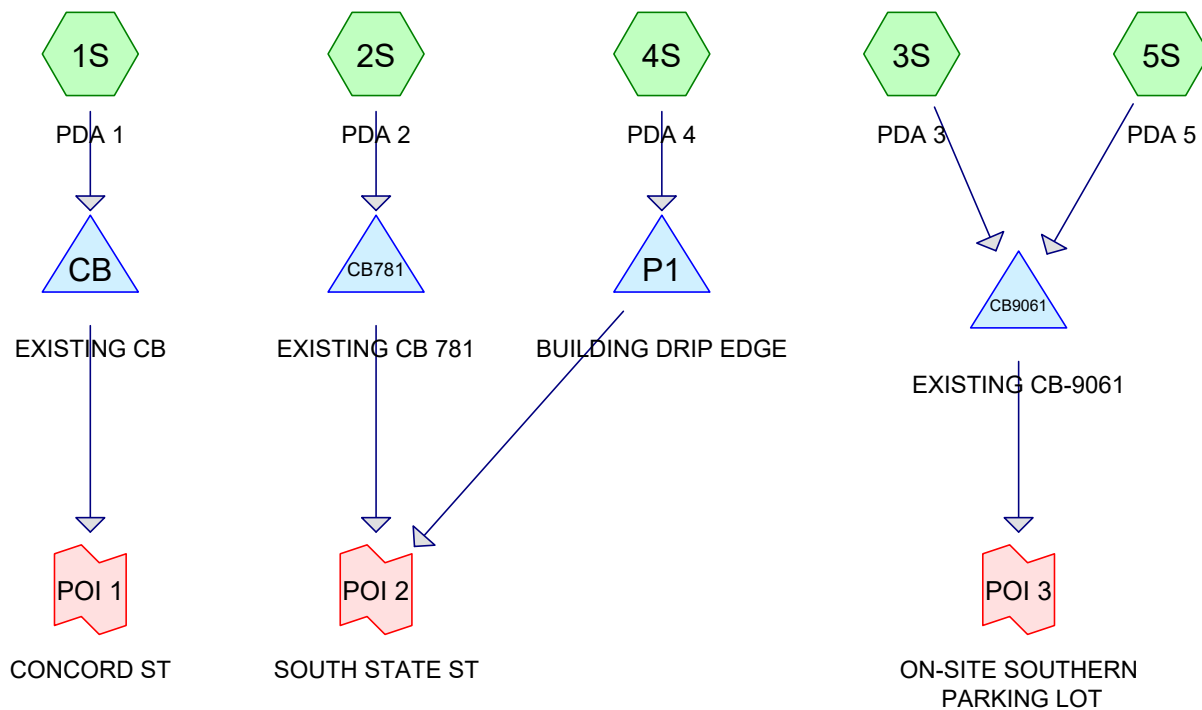
Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 6.82" for 100-yr event
Inflow = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf
Primary = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 30,347 sf, 87.49% Impervious, Inflow Depth = 6.27" for 100-yr event
Inflow = 3.75 cfs @ 12.14 hrs, Volume= 15,846 cf
Primary = 3.75 cfs @ 12.14 hrs, Volume= 15,846 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs



Routing Diagram for POST-DEVELOPMENT_RNBS0002
 Prepared by Wilcox & Barton, Inc, Printed 4/15/2026
 HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Printed 4/15/2026

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
6,728	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S)
3,837	98	EXISTING BUILDING (3S)
3,017	98	EXISTING BUILDINGS (1S, 2S)
339	98	EXISTING CONCRETE (1S, 2S)
183	98	EXISTING MISCELLANEOUS (1S, 2S)
17,288	98	EXISTING PAVEMENT (1S, 2S, 3S)
1,890	98	EXISTING PAVER PATIO (2S, 3S)
2,841	98	EXISTING SIDEWALK (1S, 2S)
3,428	98	PROPOSED BUILDING (4S, 5S)
120	98	PROPOSED CONCRETE (3S)
170	98	PROPOSED GRAVEL (3S)
130	98	PROPOSED MISCELLANEOUS (3S)
3,742	98	PROPOSED PAVEMENT (3S)
43,713	89	TOTAL AREA

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
6,728	HSG A	1S, 2S, 3S
0	HSG B	
0	HSG C	
0	HSG D	
36,985	Other	1S, 2S, 3S, 4S, 5S
43,713		TOTAL AREA

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 4

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover
6,728	0	0	0	0	6,728	>75% Grass cover, Good
0	0	0	0	3,837	3,837	EXISTING BUILDING
0	0	0	0	3,017	3,017	EXISTING BUILDINGS
0	0	0	0	339	339	EXISTING CONCRETE
0	0	0	0	183	183	EXISTING MISCELLANEO US
0	0	0	0	17,288	17,288	EXISTING PAVEMENT
0	0	0	0	1,890	1,890	EXISTING PAVER PATIO
0	0	0	0	2,841	2,841	EXISTING SIDEWALK
0	0	0	0	3,428	3,428	PROPOSED BUILDING
0	0	0	0	120	120	PROPOSED CONCRETE
0	0	0	0	170	170	PROPOSED GRAVEL
0	0	0	0	130	130	PROPOSED MISCELLANEO US
0	0	0	0	3,742	3,742	PROPOSED PAVEMENT
6,728	0	0	0	36,985	43,713	TOTAL AREA

POST-DEVELOPMENT_RNBS0002*Type III 24-hr 2-yr Rainfall=2.81"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: PDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=1.98"
Tc=5.0 min CN=WQ Runoff=0.17 cfs 593 cf

Subcatchment2S: PDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=2.51"
Tc=5.0 min CN=WQ Runoff=0.60 cfs 2,044 cf

Subcatchment3S: PDA 3 Runoff Area=26,919 sf 79.09% Impervious Runoff Depth=2.04"
Flow Length=333' Tc=16.3 min CN=WQ Runoff=0.98 cfs 4,576 cf

Subcatchment4S: PDA 4 Runoff Area=1,650 sf 100.00% Impervious Runoff Depth=2.58"
Tc=5.0 min CN=98 Runoff=0.10 cfs 355 cf

Subcatchment5S: PDA 5 Runoff Area=1,778 sf 100.00% Impervious Runoff Depth=2.58"
Tc=5.0 min CN=98 Runoff=0.11 cfs 382 cf

Pond CB: EXISTING CB Inflow=0.17 cfs 593 cf
Primary=0.17 cfs 593 cf

Pond CB781: EXISTING CB 781 Inflow=0.60 cfs 2,044 cf
Primary=0.60 cfs 2,044 cf

Pond CB9061: EXISTING CB-9061 Inflow=1.03 cfs 4,958 cf
Primary=1.03 cfs 4,958 cf

Pond P1: BUILDING DRIP EDGE Peak Elev=283.76' Storage=76 cf Inflow=0.10 cfs 355 cf
Discarded=0.03 cfs 355 cf Primary=0.00 cfs 0 cf Outflow=0.03 cfs 355 cf

Link POI 1: CONCORD ST Inflow=0.17 cfs 593 cf
Primary=0.17 cfs 593 cf

Link POI 2: SOUTH STATE ST Inflow=0.60 cfs 2,044 cf
Primary=0.60 cfs 2,044 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=1.03 cfs 4,958 cf
Primary=1.03 cfs 4,958 cf

Total Runoff Area = 43,713 sf Runoff Volume = 7,949 cf Average Runoff Depth = 2.18"
15.39% Pervious = 6,728 sf 84.61% Impervious = 36,985 sf

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 2-yr Rainfall=2.81"

Printed 4/15/2026

Page 6

Summary for Subcatchment 1S: PDA 1

Runoff = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Depth= 1.98"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: PDA 2

Runoff = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Depth= 2.51"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 2-yr Rainfall=2.81"

Printed 4/15/2026

Page 7

Summary for Subcatchment 3S: PDA 3

Runoff = 0.98 cfs @ 12.21 hrs, Volume= 4,576 cf, Depth= 2.04"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 3,837	98	EXISTING BUILDING
* 11,700	98	EXISTING PAVEMENT
* 1,590	98	EXISTING PAVER PATIO
* 3,742	98	PROPOSED PAVEMENT
* 170	98	PROPOSED GRAVEL
* 120	98	PROPOSED CONCRETE
* 130	98	PROPOSED MISCELLANEOUS
5,630	39	>75% Grass cover, Good, HSG A
26,919		Weighted Average
5,630		20.91% Pervious Area
21,289		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
7.6	174	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	109	0.0140	2.40		Shallow Concentrated Flow, Paved Kv= 20.3 fps
16.3	333	Total			

Summary for Subcatchment 4S: PDA 4

Runoff = 0.10 cfs @ 12.07 hrs, Volume= 355 cf, Depth= 2.58"
 Routed to Pond P1 : BUILDING DRIP EDGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)		CN	Description		
*	1,650	98	PROPOSED BUILDING		
	1,650		100.00% Impervious Area		
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 5S: PDA 5

Runoff = 0.11 cfs @ 12.07 hrs, Volume= 382 cf, Depth= 2.58"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-yr Rainfall=2.81"

Area (sf)	CN	Description
* 1,778	98	PROPOSED BUILDING
1,778		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 1.98" for 2-yr event
 Inflow = 0.17 cfs @ 12.07 hrs, Volume= 593 cf
 Primary = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 2.51" for 2-yr event
 Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf
 Primary = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 2.07" for 2-yr event
 Inflow = 1.03 cfs @ 12.21 hrs, Volume= 4,958 cf
 Primary = 1.03 cfs @ 12.21 hrs, Volume= 4,958 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond P1: BUILDING DRIP EDGE

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 2-yr Rainfall=2.81"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 9

Inflow Area = 1,650 sf, 100.00% Impervious, Inflow Depth = 2.58" for 2-yr event
 Inflow = 0.10 cfs @ 12.07 hrs, Volume= 355 cf
 Outflow = 0.03 cfs @ 12.43 hrs, Volume= 355 cf, Atten= 74%, Lag= 21.4 min
 Discarded = 0.03 cfs @ 12.43 hrs, Volume= 355 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 283.76' @ 12.43 hrs Surf.Area= 252 sf Storage= 76 cf
 Flood Elev= 286.00' Surf.Area= 252 sf Storage= 302 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 15.9 min (774.2 - 758.3)

Volume	Invert	Avail.Storage	Storage Description
#1	283.00'	302 cf	3.00'W x 84.00'L x 3.00'H DRIP EDGE 756 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	283.00'	3.000 in/hr Exfiltration over Wetted area
#2	Primary	286.00'	90.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.03 cfs @ 12.43 hrs HW=283.76' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=283.00' TW=0.00' (Dynamic Tailwater)
 ↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 1.98" for 2-yr event
 Inflow = 0.17 cfs @ 12.07 hrs, Volume= 593 cf
 Primary = 0.17 cfs @ 12.07 hrs, Volume= 593 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 11,427 sf, 97.65% Impervious, Inflow Depth = 2.15" for 2-yr event
 Inflow = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf
 Primary = 0.60 cfs @ 12.07 hrs, Volume= 2,044 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 2.07" for 2-yr event
Inflow = 1.03 cfs @ 12.21 hrs, Volume= 4,958 cf
Primary = 1.03 cfs @ 12.21 hrs, Volume= 4,958 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 10-yr Rainfall=4.14"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: PDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=3.02"
Tc=5.0 min CN=WQ Runoff=0.26 cfs 902 cf

Subcatchment2S: PDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=3.80"
Tc=5.0 min CN=WQ Runoff=0.89 cfs 3,096 cf

Subcatchment3S: PDA 3 Runoff Area=26,919 sf 79.09% Impervious Runoff Depth=3.10"
Flow Length=333' Tc=16.3 min CN=WQ Runoff=1.46 cfs 6,956 cf

Subcatchment4S: PDA 4 Runoff Area=1,650 sf 100.00% Impervious Runoff Depth=3.90"
Tc=5.0 min CN=98 Runoff=0.15 cfs 537 cf

Subcatchment5S: PDA 5 Runoff Area=1,778 sf 100.00% Impervious Runoff Depth=3.90"
Tc=5.0 min CN=98 Runoff=0.17 cfs 579 cf

Pond CB: EXISTING CB Inflow=0.26 cfs 902 cf
Primary=0.26 cfs 902 cf

Pond CB781: EXISTING CB 781 Inflow=0.89 cfs 3,096 cf
Primary=0.89 cfs 3,096 cf

Pond CB9061: EXISTING CB-9061 Inflow=1.54 cfs 7,535 cf
Primary=1.54 cfs 7,535 cf

Pond P1: BUILDING DRIP EDGE Peak Elev=284.35' Storage=136 cf Inflow=0.15 cfs 537 cf
Discarded=0.03 cfs 538 cf Primary=0.00 cfs 0 cf Outflow=0.03 cfs 538 cf

Link POI 1: CONCORD ST Inflow=0.26 cfs 902 cf
Primary=0.26 cfs 902 cf

Link POI 2: SOUTH STATE ST Inflow=0.89 cfs 3,096 cf
Primary=0.89 cfs 3,096 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=1.54 cfs 7,535 cf
Primary=1.54 cfs 7,535 cf

Total Runoff Area = 43,713 sf Runoff Volume = 12,069 cf Average Runoff Depth = 3.31"
15.39% Pervious = 6,728 sf 84.61% Impervious = 36,985 sf

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 10-yr Rainfall=4.14"

Printed 4/15/2026

Page 2

Summary for Subcatchment 1S: PDA 1

Runoff = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Depth= 3.02"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: PDA 2

Runoff = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Depth= 3.80"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 10-yr Rainfall=4.14"

Printed 4/15/2026

Page 3

Summary for Subcatchment 3S: PDA 3

Runoff = 1.46 cfs @ 12.21 hrs, Volume= 6,956 cf, Depth= 3.10"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 3,837	98	EXISTING BUILDING
* 11,700	98	EXISTING PAVEMENT
* 1,590	98	EXISTING PAVER PATIO
* 3,742	98	PROPOSED PAVEMENT
* 170	98	PROPOSED GRAVEL
* 120	98	PROPOSED CONCRETE
* 130	98	PROPOSED MISCELLANEOUS
5,630	39	>75% Grass cover, Good, HSG A
26,919		Weighted Average
5,630		20.91% Pervious Area
21,289		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
7.6	174	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	109	0.0140	2.40		Shallow Concentrated Flow, Paved Kv= 20.3 fps
16.3	333	Total			

Summary for Subcatchment 4S: PDA 4

Runoff = 0.15 cfs @ 12.07 hrs, Volume= 537 cf, Depth= 3.90"
 Routed to Pond P1 : BUILDING DRIP EDGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)		CN	Description		
*	1,650	98	PROPOSED BUILDING		
	1,650		100.00% Impervious Area		
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 10-yr Rainfall=4.14"

Printed 4/15/2026

Page 4

Summary for Subcatchment 5S: PDA 5

Runoff = 0.17 cfs @ 12.07 hrs, Volume= 579 cf, Depth= 3.90"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-yr Rainfall=4.14"

Area (sf)	CN	Description
* 1,778	98	PROPOSED BUILDING
1,778		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.02" for 10-yr event
 Inflow = 0.26 cfs @ 12.07 hrs, Volume= 902 cf
 Primary = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 3.80" for 10-yr event
 Inflow = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf
 Primary = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 3.15" for 10-yr event
 Inflow = 1.54 cfs @ 12.21 hrs, Volume= 7,535 cf
 Primary = 1.54 cfs @ 12.21 hrs, Volume= 7,535 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond P1: BUILDING DRIP EDGE

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 10-yr Rainfall=4.14"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 5

Inflow Area = 1,650 sf, 100.00% Impervious, Inflow Depth = 3.90" for 10-yr event
 Inflow = 0.15 cfs @ 12.07 hrs, Volume= 537 cf
 Outflow = 0.03 cfs @ 12.47 hrs, Volume= 538 cf, Atten= 78%, Lag= 23.9 min
 Discarded = 0.03 cfs @ 12.47 hrs, Volume= 538 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 284.35' @ 12.47 hrs Surf.Area= 252 sf Storage= 136 cf
 Flood Elev= 286.00' Surf.Area= 252 sf Storage= 302 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 25.5 min (775.9 - 750.4)

Volume	Invert	Avail.Storage	Storage Description
#1	283.00'	302 cf	3.00'W x 84.00'L x 3.00'H DRIP EDGE 756 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	283.00'	3.000 in/hr Exfiltration over Wetted area
#2	Primary	286.00'	90.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.03 cfs @ 12.47 hrs HW=284.35' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=283.00' TW=0.00' (Dynamic Tailwater)
 ↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.02" for 10-yr event
 Inflow = 0.26 cfs @ 12.07 hrs, Volume= 902 cf
 Primary = 0.26 cfs @ 12.07 hrs, Volume= 902 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 11,427 sf, 97.65% Impervious, Inflow Depth = 3.25" for 10-yr event
 Inflow = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf
 Primary = 0.89 cfs @ 12.07 hrs, Volume= 3,096 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 3.15" for 10-yr event

Inflow = 1.54 cfs @ 12.21 hrs, Volume= 7,535 cf

Primary = 1.54 cfs @ 12.21 hrs, Volume= 7,535 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

POST-DEVELOPMENT_RNBS0002*Type III 24-hr 25-yr Rainfall=5.17"*

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: PDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=3.85"
Tc=5.0 min CN=WQ Runoff=0.32 cfs 1,150 cf

Subcatchment2S: PDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=4.80"
Tc=5.0 min CN=WQ Runoff=1.11 cfs 3,914 cf

Subcatchment3S: PDA 3 Runoff Area=26,919 sf 79.09% Impervious Runoff Depth=3.95"
Flow Length=333' Tc=16.3 min CN=WQ Runoff=1.82 cfs 8,862 cf

Subcatchment4S: PDA 4 Runoff Area=1,650 sf 100.00% Impervious Runoff Depth=4.93"
Tc=5.0 min CN=98 Runoff=0.19 cfs 678 cf

Subcatchment5S: PDA 5 Runoff Area=1,778 sf 100.00% Impervious Runoff Depth=4.93"
Tc=5.0 min CN=98 Runoff=0.21 cfs 731 cf

Pond CB: EXISTING CB Inflow=0.32 cfs 1,150 cf
Primary=0.32 cfs 1,150 cf

Pond CB781: EXISTING CB 781 Inflow=1.11 cfs 3,914 cf
Primary=1.11 cfs 3,914 cf

Pond CB9061: EXISTING CB-9061 Inflow=1.92 cfs 9,593 cf
Primary=1.92 cfs 9,593 cf

Pond P1: BUILDING DRIP EDGE Peak Elev=284.82' Storage=184 cf Inflow=0.19 cfs 678 cf
Discarded=0.04 cfs 679 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 679 cf

Link POI 1: CONCORD ST Inflow=0.32 cfs 1,150 cf
Primary=0.32 cfs 1,150 cf

Link POI 2: SOUTH STATE ST Inflow=1.11 cfs 3,914 cf
Primary=1.11 cfs 3,914 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=1.92 cfs 9,593 cf
Primary=1.92 cfs 9,593 cf

Total Runoff Area = 43,713 sf Runoff Volume = 15,336 cf Average Runoff Depth = 4.21"
15.39% Pervious = 6,728 sf 84.61% Impervious = 36,985 sf

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 25-yr Rainfall=5.17"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 2

Summary for Subcatchment 1S: PDA 1

Runoff = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Depth= 3.85"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: PDA 2

Runoff = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Depth= 4.80"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 25-yr Rainfall=5.17"

Printed 4/15/2026

Page 3

Summary for Subcatchment 3S: PDA 3

Runoff = 1.82 cfs @ 12.21 hrs, Volume= 8,862 cf, Depth= 3.95"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 3,837	98	EXISTING BUILDING
* 11,700	98	EXISTING PAVEMENT
* 1,590	98	EXISTING PAVER PATIO
* 3,742	98	PROPOSED PAVEMENT
* 170	98	PROPOSED GRAVEL
* 120	98	PROPOSED CONCRETE
* 130	98	PROPOSED MISCELLANEOUS
5,630	39	>75% Grass cover, Good, HSG A
26,919		Weighted Average
5,630		20.91% Pervious Area
21,289		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
7.6	174	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	109	0.0140	2.40		Shallow Concentrated Flow, Paved Kv= 20.3 fps
16.3	333	Total			

Summary for Subcatchment 4S: PDA 4

Runoff = 0.19 cfs @ 12.07 hrs, Volume= 678 cf, Depth= 4.93"
 Routed to Pond P1 : BUILDING DRIP EDGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description			
* 1,650	98	PROPOSED BUILDING			
1,650		100.00% Impervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 25-yr Rainfall=5.17"

Printed 4/15/2026

Page 4

Summary for Subcatchment 5S: PDA 5

Runoff = 0.21 cfs @ 12.07 hrs, Volume= 731 cf, Depth= 4.93"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-yr Rainfall=5.17"

Area (sf)	CN	Description
* 1,778	98	PROPOSED BUILDING
1,778		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.85" for 25-yr event
 Inflow = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf
 Primary = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 4.80" for 25-yr event
 Inflow = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf
 Primary = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 4.01" for 25-yr event
 Inflow = 1.92 cfs @ 12.21 hrs, Volume= 9,593 cf
 Primary = 1.92 cfs @ 12.21 hrs, Volume= 9,593 cf, Atten= 0%, Lag= 0.0 min
 Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond P1: BUILDING DRIP EDGE

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 25-yr Rainfall=5.17"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 5

Inflow Area = 1,650 sf, 100.00% Impervious, Inflow Depth = 4.93" for 25-yr event
 Inflow = 0.19 cfs @ 12.07 hrs, Volume= 678 cf
 Outflow = 0.04 cfs @ 12.48 hrs, Volume= 679 cf, Atten= 79%, Lag= 24.9 min
 Discarded = 0.04 cfs @ 12.48 hrs, Volume= 679 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 284.82' @ 12.48 hrs Surf.Area= 252 sf Storage= 184 cf
 Flood Elev= 286.00' Surf.Area= 252 sf Storage= 302 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 31.9 min (778.4 - 746.5)

Volume	Invert	Avail.Storage	Storage Description
#1	283.00'	302 cf	3.00'W x 84.00'L x 3.00'H DRIP EDGE 756 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	283.00'	3.000 in/hr Exfiltration over Wetted area
#2	Primary	286.00'	90.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.04 cfs @ 12.48 hrs HW=284.82' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=283.00' TW=0.00' (Dynamic Tailwater)
 ↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 3.85" for 25-yr event
 Inflow = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf
 Primary = 0.32 cfs @ 12.07 hrs, Volume= 1,150 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 11,427 sf, 97.65% Impervious, Inflow Depth = 4.11" for 25-yr event
 Inflow = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf
 Primary = 1.11 cfs @ 12.07 hrs, Volume= 3,914 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 4.01" for 25-yr event

Inflow = 1.92 cfs @ 12.21 hrs, Volume= 9,593 cf

Primary = 1.92 cfs @ 12.21 hrs, Volume= 9,593 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 50-yr Rainfall=6.11"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: PDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=4.62"
Tc=5.0 min CN=WQ Runoff=0.38 cfs 1,383 cf

Subcatchment2S: PDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=5.72"
Tc=5.0 min CN=WQ Runoff=1.32 cfs 4,664 cf

Subcatchment3S: PDA 3 Runoff Area=26,919 sf 79.09% Impervious Runoff Depth=4.74"
Flow Length=333' Tc=16.3 min CN=WQ Runoff=2.17 cfs 10,641 cf

Subcatchment4S: PDA 4 Runoff Area=1,650 sf 100.00% Impervious Runoff Depth=5.87"
Tc=5.0 min CN=98 Runoff=0.23 cfs 807 cf

Subcatchment5S: PDA 5 Runoff Area=1,778 sf 100.00% Impervious Runoff Depth=5.87"
Tc=5.0 min CN=98 Runoff=0.25 cfs 870 cf

Pond CB: EXISTING CB Inflow=0.38 cfs 1,383 cf
Primary=0.38 cfs 1,383 cf

Pond CB781: EXISTING CB 781 Inflow=1.32 cfs 4,664 cf
Primary=1.32 cfs 4,664 cf

Pond CB9061: EXISTING CB-9061 Inflow=2.28 cfs 11,511 cf
Primary=2.28 cfs 11,511 cf

Pond P1: BUILDING DRIP EDGE Peak Elev=285.28' Storage=229 cf Inflow=0.23 cfs 807 cf
Discarded=0.04 cfs 808 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 808 cf

Link POI 1: CONCORD ST Inflow=0.38 cfs 1,383 cf
Primary=0.38 cfs 1,383 cf

Link POI 2: SOUTH STATE ST Inflow=1.32 cfs 4,664 cf
Primary=1.32 cfs 4,664 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=2.28 cfs 11,511 cf
Primary=2.28 cfs 11,511 cf

Total Runoff Area = 43,713 sf Runoff Volume = 18,365 cf Average Runoff Depth = 5.04"
15.39% Pervious = 6,728 sf 84.61% Impervious = 36,985 sf

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 100-yr Rainfall=7.23"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: PDA 1 Runoff Area=3,589 sf 76.87% Impervious Runoff Depth=5.57"
Tc=5.0 min CN=WQ Runoff=0.46 cfs 1,666 cf

Subcatchment2S: PDA 2 Runoff Area=9,777 sf 97.26% Impervious Runoff Depth=6.82"
Tc=5.0 min CN=WQ Runoff=1.56 cfs 5,559 cf

Subcatchment3S: PDA 3 Runoff Area=26,919 sf 79.09% Impervious Runoff Depth=5.71"
Flow Length=333' Tc=16.3 min CN=WQ Runoff=2.60 cfs 12,802 cf

Subcatchment4S: PDA 4 Runoff Area=1,650 sf 100.00% Impervious Runoff Depth=6.99"
Tc=5.0 min CN=98 Runoff=0.27 cfs 961 cf

Subcatchment5S: PDA 5 Runoff Area=1,778 sf 100.00% Impervious Runoff Depth=6.99"
Tc=5.0 min CN=98 Runoff=0.29 cfs 1,036 cf

Pond CB: EXISTING CB Inflow=0.46 cfs 1,666 cf
Primary=0.46 cfs 1,666 cf

Pond CB781: EXISTING CB 781 Inflow=1.56 cfs 5,559 cf
Primary=1.56 cfs 5,559 cf

Pond CB9061: EXISTING CB-9061 Inflow=2.74 cfs 13,838 cf
Primary=2.74 cfs 13,838 cf

Pond P1: BUILDING DRIP EDGE Peak Elev=285.83' Storage=285 cf Inflow=0.27 cfs 961 cf
Discarded=0.05 cfs 962 cf Primary=0.00 cfs 0 cf Outflow=0.05 cfs 962 cf

Link POI 1: CONCORD ST Inflow=0.46 cfs 1,666 cf
Primary=0.46 cfs 1,666 cf

Link POI 2: SOUTH STATE ST Inflow=1.56 cfs 5,559 cf
Primary=1.56 cfs 5,559 cf

Link POI 3: ON-SITE SOUTHERN PARKING LOT Inflow=2.74 cfs 13,838 cf
Primary=2.74 cfs 13,838 cf

Total Runoff Area = 43,713 sf Runoff Volume = 22,024 cf Average Runoff Depth = 6.05"
15.39% Pervious = 6,728 sf 84.61% Impervious = 36,985 sf

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 100-yr Rainfall=7.23"

Printed 4/15/2026

Page 2

Summary for Subcatchment 1S: PDA 1

Runoff = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Depth= 5.57"
 Routed to Pond CB : EXISTING CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 1,411	98	EXISTING BUILDINGS
* 939	98	EXISTING PAVEMENT
* 241	98	EXISTING SIDEWALK
* 27	98	EXISTING CONCRETE
* 141	98	EXISTING MISCELLANEOUS
830	39	>75% Grass cover, Good, HSG A
3,589		Weighted Average
830		23.13% Pervious Area
2,759		76.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 2S: PDA 2

Runoff = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Depth= 6.82"
 Routed to Pond CB781 : EXISTING CB 781

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 1,606	98	EXISTING BUILDINGS
* 4,649	98	EXISTING PAVEMENT
* 2,600	98	EXISTING SIDEWALK
* 312	98	EXISTING CONCRETE
* 42	98	EXISTING MISCELLANEOUS
* 300	98	EXISTING PAVER PATIO
268	39	>75% Grass cover, Good, HSG A
9,777		Weighted Average
268		2.74% Pervious Area
9,509		97.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

POST-DEVELOPMENT_RNBS0002

Prepared by Wilcox & Barton, Inc

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Type III 24-hr 100-yr Rainfall=7.23"

Printed 4/15/2026

Page 3

Summary for Subcatchment 3S: PDA 3

Runoff = 2.60 cfs @ 12.22 hrs, Volume= 12,802 cf, Depth= 5.71"
 Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 3,837	98	EXISTING BUILDING
* 11,700	98	EXISTING PAVEMENT
* 1,590	98	EXISTING PAVER PATIO
* 3,742	98	PROPOSED PAVEMENT
* 170	98	PROPOSED GRAVEL
* 120	98	PROPOSED CONCRETE
* 130	98	PROPOSED MISCELLANEOUS
5,630	39	>75% Grass cover, Good, HSG A
26,919		Weighted Average
5,630		20.91% Pervious Area
21,289		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	50	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.81"
7.6	174	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	109	0.0140	2.40		Shallow Concentrated Flow, Paved Kv= 20.3 fps
16.3	333	Total			

Summary for Subcatchment 4S: PDA 4

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 961 cf, Depth= 6.99"
 Routed to Pond P1 : BUILDING DRIP EDGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)		CN	Description		
*	1,650	98	PROPOSED BUILDING		
	1,650		100.00% Impervious Area		
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment 5S: PDA 5

Runoff = 0.29 cfs @ 12.07 hrs, Volume= 1,036 cf, Depth= 6.99"
Routed to Pond CB9061 : EXISTING CB-9061

Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-yr Rainfall=7.23"

Area (sf)	CN	Description
* 1,778	98	PROPOSED BUILDING
1,778		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Pond CB: EXISTING CB

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 5.57" for 100-yr event
Inflow = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf
Primary = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 1 : CONCORD ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB781: EXISTING CB 781

Inflow Area = 9,777 sf, 97.26% Impervious, Inflow Depth = 6.82" for 100-yr event
Inflow = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf
Primary = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond CB9061: EXISTING CB-9061

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 5.79" for 100-yr event
Inflow = 2.74 cfs @ 12.21 hrs, Volume= 13,838 cf
Primary = 2.74 cfs @ 12.21 hrs, Volume= 13,838 cf, Atten= 0%, Lag= 0.0 min
Routed to Link POI 3 : ON-SITE SOUTHERN PARKING LOT

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Pond P1: BUILDING DRIP EDGE

POST-DEVELOPMENT_RNBS0002

Type III 24-hr 100-yr Rainfall=7.23"

Prepared by Wilcox & Barton, Inc

Printed 4/15/2026

HydroCAD® 10.20-7a s/n 08777 © 2025 HydroCAD Software Solutions LLC

Page 5

Inflow Area = 1,650 sf, 100.00% Impervious, Inflow Depth = 6.99" for 100-yr event
 Inflow = 0.27 cfs @ 12.07 hrs, Volume= 961 cf
 Outflow = 0.05 cfs @ 12.50 hrs, Volume= 962 cf, Atten= 81%, Lag= 25.8 min
 Discarded = 0.05 cfs @ 12.50 hrs, Volume= 962 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Routed to Link POI 2 : SOUTH STATE ST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 285.83' @ 12.50 hrs Surf.Area= 252 sf Storage= 285 cf
 Flood Elev= 286.00' Surf.Area= 252 sf Storage= 302 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 42.5 min (784.1 - 741.6)

Volume	Invert	Avail.Storage	Storage Description
#1	283.00'	302 cf	3.00'W x 84.00'L x 3.00'H DRIP EDGE 756 cf Overall x 40.0% Voids

Device	Routing	Invert	Outlet Devices
#1	Discarded	283.00'	3.000 in/hr Exfiltration over Wetted area
#2	Primary	286.00'	90.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=0.05 cfs @ 12.50 hrs HW=285.83' (Free Discharge)
 ↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=283.00' TW=0.00' (Dynamic Tailwater)
 ↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link POI 1: CONCORD ST

Inflow Area = 3,589 sf, 76.87% Impervious, Inflow Depth = 5.57" for 100-yr event
 Inflow = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf
 Primary = 0.46 cfs @ 12.07 hrs, Volume= 1,666 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 2: SOUTH STATE ST

Inflow Area = 11,427 sf, 97.65% Impervious, Inflow Depth = 5.84" for 100-yr event
 Inflow = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf
 Primary = 1.56 cfs @ 12.07 hrs, Volume= 5,559 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Summary for Link POI 3: ON-SITE SOUTHERN PARKING LOT

Inflow Area = 28,697 sf, 80.38% Impervious, Inflow Depth = 5.79" for 100-yr event
Inflow = 2.74 cfs @ 12.21 hrs, Volume= 13,838 cf
Primary = 2.74 cfs @ 12.21 hrs, Volume= 13,838 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs