City of Biddeford
Planning Board

June 17, 2026 at 6:00 PM
City Hall Council Chambers & Teams
Planning Board Meeting, 3rd Wednesday of each month | Meeting-Join | Microsoft Teams
Teams Instructions

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
3. Adjustment(s) to Agenda
4. Planner's Business
5. Consent Agenda

   5.a Approval of Meeting Minutes from June 3, 2026

6. Unfinished Business
7. New Business

   7.a 2026.20 Review of a Conditional Use Permit request by Bakhita Saabino to open Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) in the R-2 Zone. Helping Hand Learning will provide childcare for children ages 6 weeks to 12 years of age; the maximum capacity will be 12 children.

   7.b 2025.24 Review of a Conditional Use Permit request by Amanda Keddy to open Mandi's Munchkins Daycare at 2 Hutchins Drive (Tax Map 4, Lot 61-1) in the RF Zone. Mandi's Munchkins Daycare will be a licensed daycare for up to 12 children.

   7.c 2026.22 Review of a Minor Site Plan Amendment for widening of the drive approaching the wash entrances for BAW Holdings (Biddeford Auto Wash) located at 547 Alfred Street (Tax Map 2, Lot 34-1) in the Business 2 zone.

   7.d **Case # 2026.01 Preliminary Plan Review for Golden Chicken of Biddeford, LLC for a proposed 2,536 SF Popeye's Fast-Food restaurant located at 584 Alfred Street (Tax Map 2, Lot 23) in the B-2 Zone.**

8. Open Public Hearing

   8.a The Planning Board will review and vote on the Natural Resources Chapter of the

Comprehensive Plan.

8.b The Planning Board will review and vote on the Natural Water Resources Chapter of the Comprehensive Plan.

8.c The Planning Board will review and vote on the Existing Land Use Chapter of the Comprehensive Plan.

8.d The Planning Board will review and vote on the Future Land Use Chapter of the Comprehensive Plan.

8.e The Planning Board will review and vote on the Historic Archeological Resources Chapter of the Comprehensive Plan.

8.f The Planning Board will review and vote on the Marine Resources Chapter of the Comprehensive Plan.

9. Close Public Hearing

10. Other Business

11. Adjourn

The Board reserves the right to halt official business at 9:30 p.m. Items not heard at tonight's meeting shall be rescheduled to the next meeting of the Board. All materials pertaining to items on the agenda are available for public review at the Biddeford Planning Department, second floor, Biddeford City Hall during normal business hours.

David C.M. Galbraith, City Planner, Deputy Director
of Planning &Economic Development
David.galbraith@biddefordmaine.org
205 Main Street / PO Box 586 • Biddeford, ME
(207) 571-0700 • www.biddefordmaine.org
City of Biddeford Government
@CityofBiddeford

PLANNING BOARD MEETING MINUTES
June 3, 2026
DRAFT

1. **Pledge of Allegiance**
2. **Declaration of Quorum**
   Planning Board: John McCurry, Matt Sargent-Dubois, Leah Schaffer, Chico Potvin (Alternate Member) & Rob Nicoll (Alternate Member)
   Staff: David Galbraith & Nan Whitten
   Chico Potvin & Rob Nicoll will vote this evening in place of Kayla Lewis & Roch Angers
3. **Adjustments to Agenda-none**
4. **Planner's Business**
   4.a. Meeting Minutes from Staff Review Committee for May 22. 2026
5. **Consent Agenda**
   5.a. Approval of Meeting Minutes from May 20, 2026, Regular Meeting & Workshop
   MOTIONS: 6:01 PM
   Motion-Sargent-Dubois-Motion to approve Meeting Minutes as presented
   Second-Potvin
   Vote: Motion passed unanimously
6. **Open Public Hearing**
7. **New Business**
   Galbraith opened this portion of the meeting by introducing the chapters, he reminded everyone that these chapters and maps are in draft format. He told the Board and public that the chapters would be reread at the next meeting and then onto Council on June 23, 2026. Galbraith thanked everyone who had participated with a special thank you to the Conservation Commission for all of the work they did with the Planning Board completing these chapters.
   Galbraith has been in constant contact with the State since taking over the Comp Plan and has received positive feedback from the State such as the Natural Resources Chapter looks great and all of the hard work paid off. The State deleted many items on our outstanding list and said they understand our challenges especially with the turnover.
   Galbraith then discussed letters from the public that he will put as part of the record. Several of the letters look the same as if they were copied or a form letter. Comments are at the back of these meeting minutes from the following residents:
   - **Kathy Griffin**
   - **Abigail Woods on behalf of Norm Labbe**
   - **Laura M. Siciliano**
   - **Emrys Berube**

DRAFT

- **Norm Labbe-mentioned an error with Town Landing**
- **Tricia Thibodeau**
- **Loren McCready**

7.a. The Planning Board will review and vote on the Natural Resources Chapter of the Comprehensive Plan
PUBLIC COMMENTS
Richard Rhames 10 West Loop Road, Biddeford
Loren McCready 222 Cleaves Street, Biddeford

MOTIONS: 6:26 PM
Motion-Schaffer-Motion to approve Natural Resources Chapter as presented
Second-Sargent-Dubois
Vote-Motion passed unanimously

7.b. The Planning Board will review and vote on the Natural Water Resources Chapter Of the Comprehensive Plan.
MOTIONS: 6:28 PM
Motion-Sargent-Dubois-Motion to pass Natural Water Resources Chapter as Presented
Second-Nicoll
Vote-Motion passed unanimously

7.c The Planning Board will review and vote on the Existing Land Use Chapter Of the Comprehensive Plan.
MOTIONS: 6:37 PM
Motion-Schaffer-Motion to approve the Existing Land Use Chapter as presented.
Second-Sargent-Dubois
Vote-Motion passed unanimously
Discussion-
Schaffer-Questions about the Ordinance and the footnotes on Table A, wants to Make sure we capture & reflect on the footnotes to make things clearer
Potvin-Questions about the Contract Zone and possibly taking empty buildings In the B-2 zone and making them into housing.

7.d. The Planning Board will review and vote on the Future Land Use Chapter of the Comprehensive Plan.
MOTIONS: 6:44 PM
Motion-Schaffer-Motion to pass the Future Land Use Chapter as presented
Second-Nicoll
Vote: Motion passed Unanimously
PUBLIC COMMENTS
Loren McCready-222 Cleaves Street, Biddeford

DRAFT

Richard Rhames-10 West Loops Road, Biddeford

Discussion-
McCurry reminded everyone that this is a draft, we have had multiple meetings With the Conservation Commission where everyone who was there participated. Not everyone was happy, but we did the best we could
Nicoll-wants to make sure that we are in a reasonable place and have made a good Start
Schaffer wants to know what the flexibility of this map. We can always go in and amend our comp plan. This is a guide and strategy to get us to where we are going. In a perfect world we should put money away annually to get help with the Comp Plan. Schaffer agrees that the staff is very pressed and understaffed. Staff has no time to do actual planning.
Schaffer-Unclear on the legalities on extensions, do we go back to when the project was originally approved or do we compare it to today's standards? Galbraith talked about the extensions on the Comp Plan, the state is working with us. Schaffer asked Galbraith to clarify how this pertains to the ongoing projects. If they have an approved project we have to with the applicant.
McCurry how many times do we extend a project? Galbraith: we do not have to grant an extension, the Planning Board has the right to deny the extension. We have to look into the reasoning, no cash, not a good reason, Federal, State or City issues, is out of control of the applicant.
Schaffer-area north of Main Street, and the South Street area are not open to consider this as a transitional zone? This would be modifying the Future Land Use Map? Yes, that area cuts across a natural resource area and she was wondering if other members of the Board would be open to changing.
Potvin asked how transitional zoning in a Growth Area would work, he would have a hard time voting this in and feels like they should let sleeping dogs lie.
McCurry agrees with Potvin
Nicoll feels that this vote would not change anything other than it gives the Planning Board more of a chance to ask more questions. This particular area is restricted by Thacher Brook anyway.
Schaffer feels that this would be more of a "TBD"
MOTIONS:
Motion-Nicoll-Motion to change 3 parcels in question, along Thacher Brook to Transitional Zoning
Second-Schaffer
Vote-Motion Failed 2-3 (Nicoll & Schaffer in Favor, Potvin, Sargent-Dubois & McCurry against)

7.e. The Planning Board will review and vote on the Historic Archeological Resources Chapter of the Comprehensive Plan.
Public Comments

DRAFT

Richard Rhames-10 West Loop Road, Biddeford, ME

Schaffer asked if the survey for Historic Preservation Commission had been completed yet. No still in progress.
Nicoll mentioned that when we amend this chapter, we should include more on the "Dirt People".

The Marine Resources Chapter will be voted on during the June 17th meeting.

8. Close Public Hearing 6:23 PM

9. Unfinished Business-none

10. Other Business

- **Potvin spoke on the importance of the Comprehensive Plan. He reminded the Board members that they need to keep the future in mind to include things coming up the pike such as frisbee golf, wedding barns, etc.**

11. Adjourn

MOTIONS: 7:43 PM
Motion-Sargent-Dubois-Motion to adjourn
Second-Nicoll
Vote-Motion passed unanimously

DRAFT

Signature-Planning Board Chair **Date**

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.

Whitten, Nan

From: kgriffin <griffin.spyglass@gmail.com>
Sent: Wednesday, June 3, 2026 11:35 AM
To: Planning Board
Subject: Future Land Use map

Caution: This is an external email. Please take care when clicking links or opening attachments. When in doubt, contact the IT Department

Dear Planning Board members,

I am writing to ask the Planning Board to revise the Future Land Use Map before moving the Comprehensive Plan forward to the City Council.

The updated plan makes important progress by removing much of the Biddeford-Kennebunkport Coastal Forest from designated growth areas. That is a meaningful step toward protecting one of Biddeford's most significant ecological resources.

However, the Future Land Use Map should go further to ensure consistency with Maine's Growth Management Act and the concerns raised in the Natural Resources and Water Resources chapters. Any remaining undeveloped parcels near Clifford Park and the Coastal Forest should be removed from growth areas, including the proposed Bedard Subdivision.

The Planning Board should also revisit the Thatcher Brook watershed. Thatcher Brook is an urban impaired watershed with an out-of-date management plan, yet parts of this watershed are still being treated as areas for significant growth. That is not consistent with responsible long-term planning. The Comprehensive Plan should not reinforce past development assumptions that may conflict with environmental protection, water resource protection, and responsible infrastructure planning.

Please revise the Future Land Use Map before sending the plan to the City Council so that it better protects the Coastal Forest, the Thatcher Brook watershed, and Biddeford's long-term public interests.
Thank you.
With best wishes,
Kathy Griffin

Whitten, Nan

From: lauramsiciliano@gmail.com
Sent: Wednesday, June 3, 2026 5:51 AM
To: Planning Board
Subject: URGENT- Protect Biddeford's Natural Resources

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Dear Planning Board members,

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Please revise the Future Land Use Map before sending the plan to the City Council so that it better protects the Coastal Forest, the Thatcher Brook watershed, and Biddeford's long-term public interests.

Thank you for your time and consideration.

Sincerely,

Laura Siciliano
Concerned Biddeford Resident

Sent from my iPhone

This email has been scanned for spam and viruses by Proofpoint Essentials. Click here to report this email as spam.

Whitten, Nan

From: Emrys Berube <breebe3711@gmail.com>
Sent: Tuesday, June 2, 2026 9:22 PM
To: Planning Board
Subject: Future Land Use Map

Caution: This is an external email. Please take care when clicking links or opening attachments. When in doubt, contact the IT Department

Dear Planning Board members,

I am writing to ask the Planning Board to revise the Future Land Use Map before moving the Comprehensive Plan forward to the City Council.

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Please revise the Future Land Use Map before sending the plan to the City Council so that it better protects the Coastal Forest, the Thatcher Brook watershed, and Biddeford's long-term public interests.

Thank you for your time and consideration.

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Whitten, Nan

From: Norm Labbe <norm.labbe@gmail.com>
Sent: Tuesday, June 2, 2026 5:22 PM
To: Planning Board
Subject: Biddeford's current Comprehensive Plan update
Attachments: A - Copy of Biddeford Town Meeting Minutes of 9-14-1829.pdf; B - Excerpts from Biddeford Town Meeting Minutes of September 14, 1829.pdf; Excerpt from 1817 Cleaves to Lassell Deed .pdf; Lassell settlement drawing from 1828 Deed YCRD Book 130 Page 182.pdf

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Dear City of Biddeford planning Board member,

Thank you for the opportunity to provide input toward Biddeford's Comprehensive Plan update. Upon reviewing the current draft Plan, I noticed a reference to Town Landing on Page 13 of the Marine Resources section. Town Landing is listed as being 15 feet wide. Please note that the Town Landing Road is actually 49.5 feet wide, as shown herein.

The attached deed excerpts clearly describe this public road, which was approved by the Town of Biddeford's Selectmen in 1829 (see Town Meeting Attachments A and B). The road approval was requested by Christopher Gilpatrick, who owned a 2/3 share of the 49-1/2 foot (three rod wide) road. Israel Lassell owned the remaining 1/3 of the road. Upon approval of the road, the Town awarded Israel Lassell damages. At that point the privately owned road became a public road. The width of the road had been previously established in a deed from Cleaves to Lassell in 1817 (see attached deed excerpt) and in a settlement deed between Gilpatrick and Lassell (see attached deed excerpt) which was recorded in 1828, one year prior to Gilpatrick's road request to the Town.

In summary, the Town Landing Road as described herein is a significant asset to the City of Biddeford as an important public water access point and as such should be accurately listed in its Comprehensive Plan as having a width of 49.5 feet.

If you have any questions or need additional information, feel free to contact me.

Sincerely,

Norm Labbe PE (Retired)

Biddeford Ward 2 Resident

207-229-6324

Whitten, Nan

From: Tricia Thibodeau <pthibode15@gmail.com>
Sent: Tuesday, June 2, 2026 4:10 PM
To: Planning Board; Whitten, Nan
Subject: Public comment: Please revise the Future Land Use Map

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Dear Planning Board members,

I am writing to ask the Planning Board to revise the Future Land Use Map before moving the Comprehensive Plan forward to the City Council.

The updated plan makes important progress by removing much of the Biddeford-Kennebunkport Coastal Forest from designated growth areas. That is a meaningful step toward protecting one of Biddeford's most significant ecological resources.

However, the Future Land Use Map should go further to ensure consistency with Maine's Growth Management Act and the concerns raised in the Natural Resources and Water Resources chapters. Any remaining undeveloped parcels near Clifford Park and the Coastal Forest should be removed from growth areas, including the proposed Bedard Subdivision.

The Planning Board should also revisit the Thatcher Brook watershed. Thatcher Brook is an urban impaired watershed with an out-of-date management plan, yet parts of this watershed are still being treated as areas for significant growth. That is not consistent with responsible long-term planning. The Comprehensive Plan should not reinforce past development assumptions that may conflict with environmental protection, water resource protection, and responsible infrastructure planning.

Please revise the Future Land Use Map before sending the plan to the City Council so that it better protects the Coastal Forest, the Thatcher Brook watershed, and Biddeford's long-term public interests.

Thank you for your time and consideration.

Sincerely,
Tricia Thibodeau

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Galbraith, David

From: Loren McCready <loren.mccready@gmail.com>
Sent: Wednesday, June 3, 2026 11:43 AM
To: Dever, Truc; Galbraith, David; LaFountain, Liam; Beaupre, Rogerp; Pierson, Jacob; Kurtz, David; Doughty, Dylan; Woods, Abigail; Boston, Patricia; Schaffer, Leah; Dubois, Matthew; McCurry, John; Lessard, Marc; Cote, Brad; Chico Potvin; Rob Nicoll; Lewis, Kayla; Vadnais, Lisa; Conservation Commission
Subject: Comprehensive Plan and Future Land Use Map Comments
Attachments: Biddeford_Future_Land_Use_Revisions.png

Caution: This is an external email. Please take care when clicking links or opening attachments. When in doubt, contact the IT Department

Dear Planning Board members and City Councilors,

I am writing to urge the Planning Board and City Council to revise the Future Land Use Map before Biddeford's Comprehensive Plan is finalized and sent back to the state.

The purpose of the Comprehensive Plan is to protect the public's long-term interests. It should not be used to validate past development assumptions or protect projects that moved forward under an outdated planning framework. Developers enter projects knowing there is risk involved, and it is not the city's responsibility to shield them from those risks when doing so may conflict with environmental protection, responsible infrastructure planning, or the long-term needs of residents.

The task before the city is to ensure consistency with Maine's Growth Management Act. That means the Future Land Use Map should reflect the goals and findings of the Comprehensive Plan, especially the Natural Resources and Water Resources chapters, which were specifically flagged by the state.

I recently wrote more about these concerns here: Biddeford's Future Growth Plan Still Needs Work

The Future Land Use Map is not a zoning map in the traditional sense, but it still carries real weight. Growth area designations influence where the city directs future development, where infrastructure may be extended, and how certain local and state land use rules may apply, including rules related to environmental review and housing density allowances. Developers and landowners understand the importance of these designations, especially when projects are proposed along the forested edges of the city.

If the map continues to designate environmentally sensitive or water-resource-constrained areas for significant growth, the plan may once again fail to address the concerns the state has already identified.

This is especially important for the Biddeford-Kennebunkport Coastal Forest and the Thatcher Brook watershed. The updated map appears to make meaningful progress by removing much of the Coastal Forest from designated growth areas, but substantial parcels near Clifford Park remain areas of concern. Thatcher Brook is also an urban impaired watershed with an out-of-date management plan, yet portions of it are still being treated as areas for significant residential growth.

The Thatcher Brook area should not be identified as an area of major residential growth. This does not necessarily prevent current proposals from moving through the applicable review process, but it should shift the city's long-term planning toward more sustainable outcomes. The Comprehensive Plan should not reinforce a pattern of pushing growth into environmentally sensitive, infrastructure-challenged, car-dependent areas simply because those areas have already attracted development interest.

Biddeford needs housing, but growth should be focused where it can be supported by existing infrastructure, walkable neighborhoods, downtown redevelopment, adaptive reuse, ADUs, and smaller-scale infill. If the Future Land Use Map continues to direct major growth into environmentally sensitive, infrastructure-challenged areas, it will undermine the plan's own goals for housing, environmental protection, and smart growth.

I ask the Planning Board and City Council to revise the Future Land Use Map before final adoption so that it better protects the Coastal Forest, removes undeveloped portions of the Thatcher Brook watershed from designated growth areas, and reflects the public's long-term interests.

These decisions will shape Biddeford for the next decade or more. **Please do not treat the Future Land Use Map as a technical formality. It is one of the most important parts of the Comprehensive Plan.**

Thank you for your time and consideration.

Sincerely,
Loren McCready

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COMP PLAN

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k Watershed in
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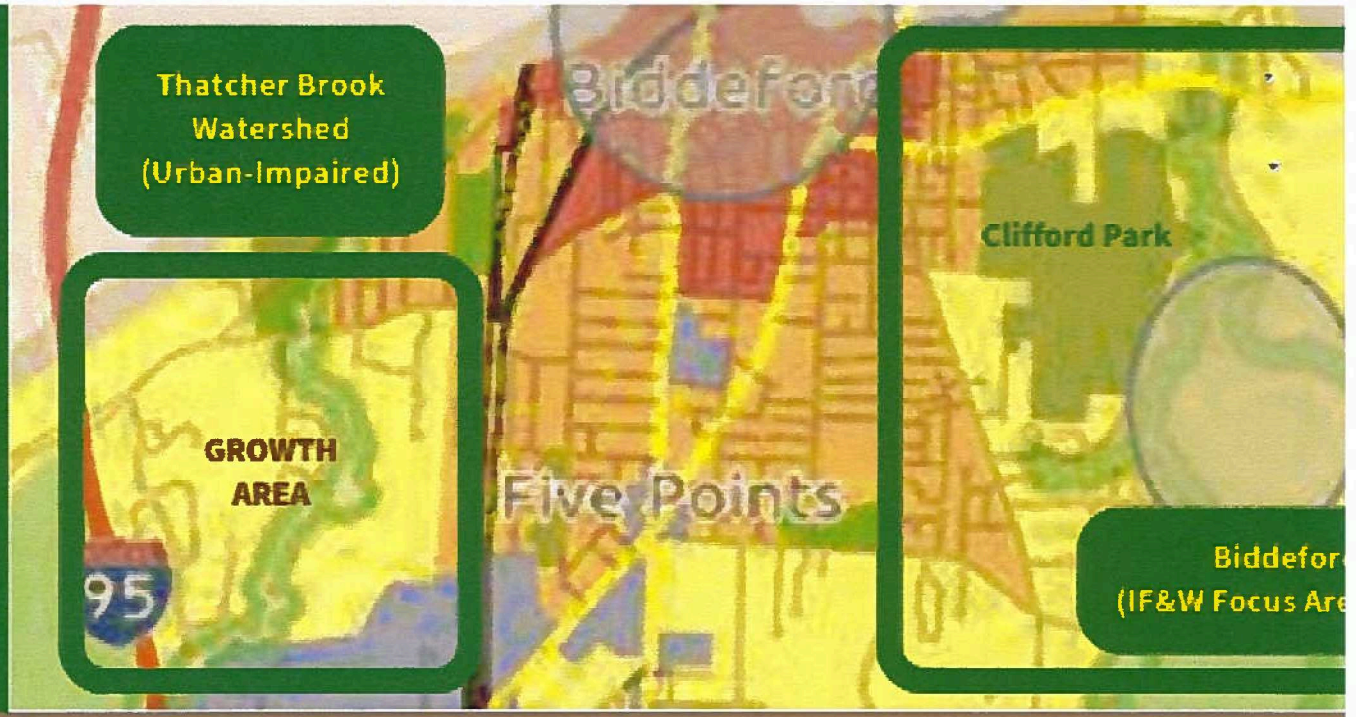

COMP PLAN

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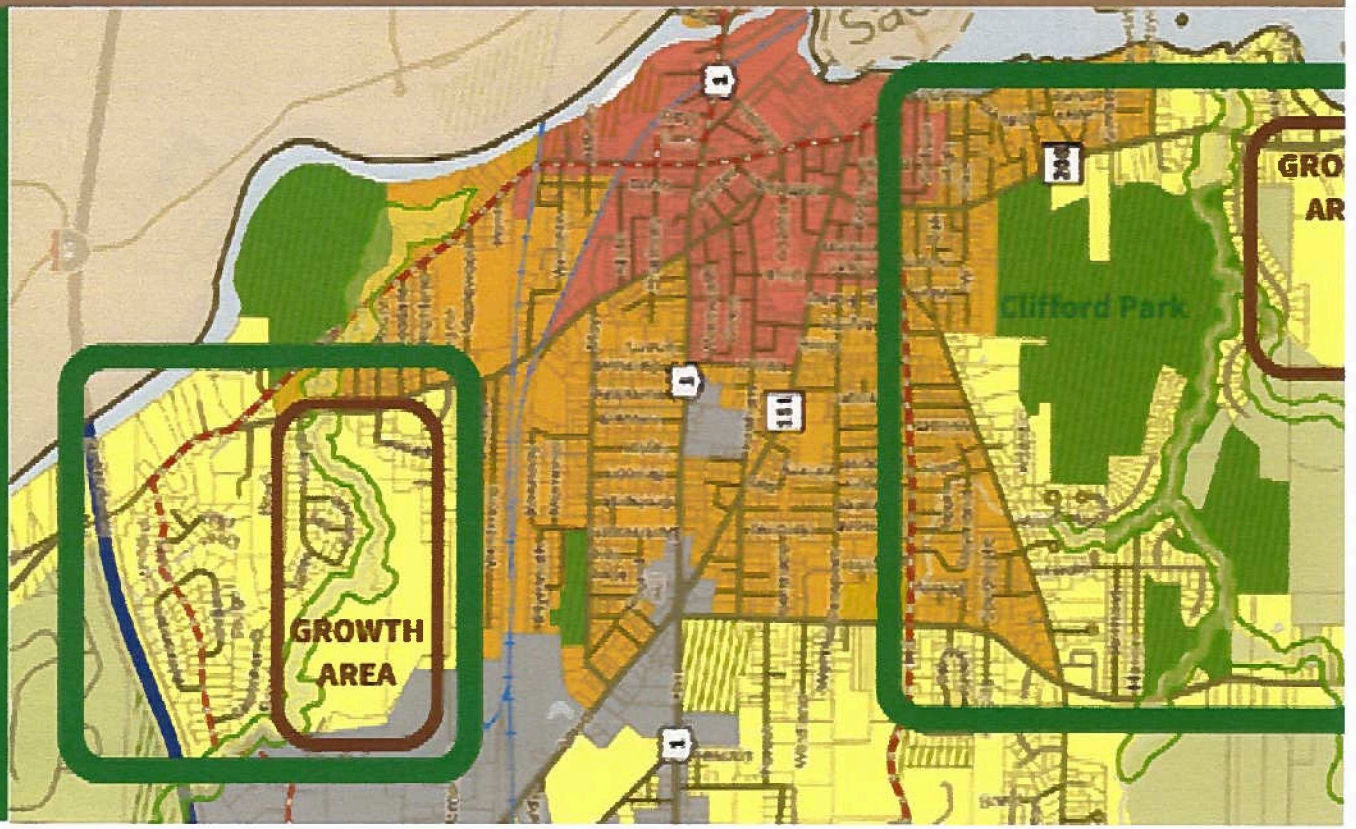

Whitten, Nan

From: Woods, Abigail
Sent: Wednesday, June 3, 2026 10:50 AM
To: Dever, Truc; Galbraith, David; Whitten, Nan; Favreau, Brad
Subject: Fw: Biddeford's current Comprehensive Plan update
Attachments: A - Copy of Biddeford Town Meeting Minutes of 9-14-1829.pdf; B - Excerpts from Biddeford Town Meeting Minutes of September 14, 1829.pdf; Excerpt from 1817 Cleaves to Lassell Deed .pdf; Lassell settlement drawing from 1828 Deed YCRD Book 130 Page 182.pdf

Hi there, wanted to forward the request below, let me know any questions or if things like this should be going to someone else.

Best,
Abigail

Abigail Woods (she/her)
Biddeford City Council
Ward 2
Community - Creativity - Compassion

NOTICE: Under Maine's Freedom of Access (Right to Know) Law, documents, including emails, in the possession of public officials about City business are classified as public records. This means if anyone asks to see them, we are required to provide them. There are very few exceptions. We welcome citizens' comments and want to hear from our constituents, but please keep in mind that what you write in an email is not private and could show up in the media.

From: Norm Labbe <norm.labbe@gmail.com>
Sent: Tuesday, June 2, 2026 5:22:22 PM
To: Contact all Councilors <ContactallCouncilors@Biddefordmaine.org>
Subject: Biddeford's current Comprehensive Plan update

Caution: This is an external email. Please take care when clicking links or opening attachments. When in doubt, contact the IT Department

Dear Biddeford City Council member,

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If you have any questions or need additional information, feel free to contact me.

Sincerely,

Norm Labbe PE (Retired)

Biddeford Ward 2 Resident

207-229-6324

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76

Town Meeting Sept 14th 1829

To Edmund Coffin one of the Constables of the Town of Biddeford

You are hereby required in the name of the State of Maine to Notify and warn the Legal Inhabitants of said Town of Biddeford qualified to vote in Town affairs to assemble at the School house in the 4th School District in said Town on Monday the fourteenth Day of Sept. Instant at three O Clock in the afternoon to act on the following Articles Viz

1 to Choose a Moderator to regulate said Meeting

2 to see if the Town will authorise the Selectmen Treasurer and Town Clerk to grant Licences to Suitable persons Inhabitants of said Town being Victuallers or retailers to Sell by retail wines or Spirituous liquors or part of which is Spiritous in their Houses Stores or Shops by request of Samuel White & Others

(3) To See if the Town will exept a road Layd out by the Selectmen by request of Christopher Gilpatrick and Others near the old Burying Ground

4th to See if the town will Subscribe for a Number of Books to be published as a history of the Town of Biddeford & Saco to be paid for out of their School Money and divided in proportion among the School districts in said town by request of Edm. Coffin and others — Given under our hands this fourth day of September 1829

Samuel Emery, Saml Merrill, Harrison Lowell } Selectmen of Biddeford

True Entry Attest Edmund Coffin Town Clerk

Biddeford Sept 14th 1829

Then agreable to the foregoing warrant I acted on the same as follows

1 Made Choice of Samuel Emery for Moderator

(2) Voted to accept the road Laid out by the Selectmen near the old burying Ground provided the Selectmen make the road without Expence to the town and and keep it in Repair five years

Excerpt from Deed of Cleaves to Lassell, recorded 9/8/1817 at YCRD, Book 99, Page 48

(Describes location and 3 rod (49.5 ft.) road width)

Know all men by these presents, that I Daniel Cleaves of Biddeford in the County of York and State of Massachusetts, Merchant, in consideration of Four hundred and fifty dollars paid by Israel Lassell of said town, Esquire, the Receipt whereof I do hereby acknowledge, do hereby give, grant, sell, and convey unto the said Israel Lassell, his heirs and assigns, forever, one third part of the following property, being

being in common and undivided with Christopher Gillpatrick, and situated in Biddeford, at the lower ferry, so called, containing a Wharf, store and water privilege, and a three rod road leading to the same, situated and bounded as follows, viz, The said road begins at the highway leading from Saco falls to Winter harbor,

Excerpts from Biddeford Town Meeting September 14, 1829*

From the list of articles to act upon:

3 "To see if the Town will except (sp) a road layed (sp) out by the Selectmen by request of Christopher Gilpatrick and others near the old Burying Ground"

From the list of items acted upon:

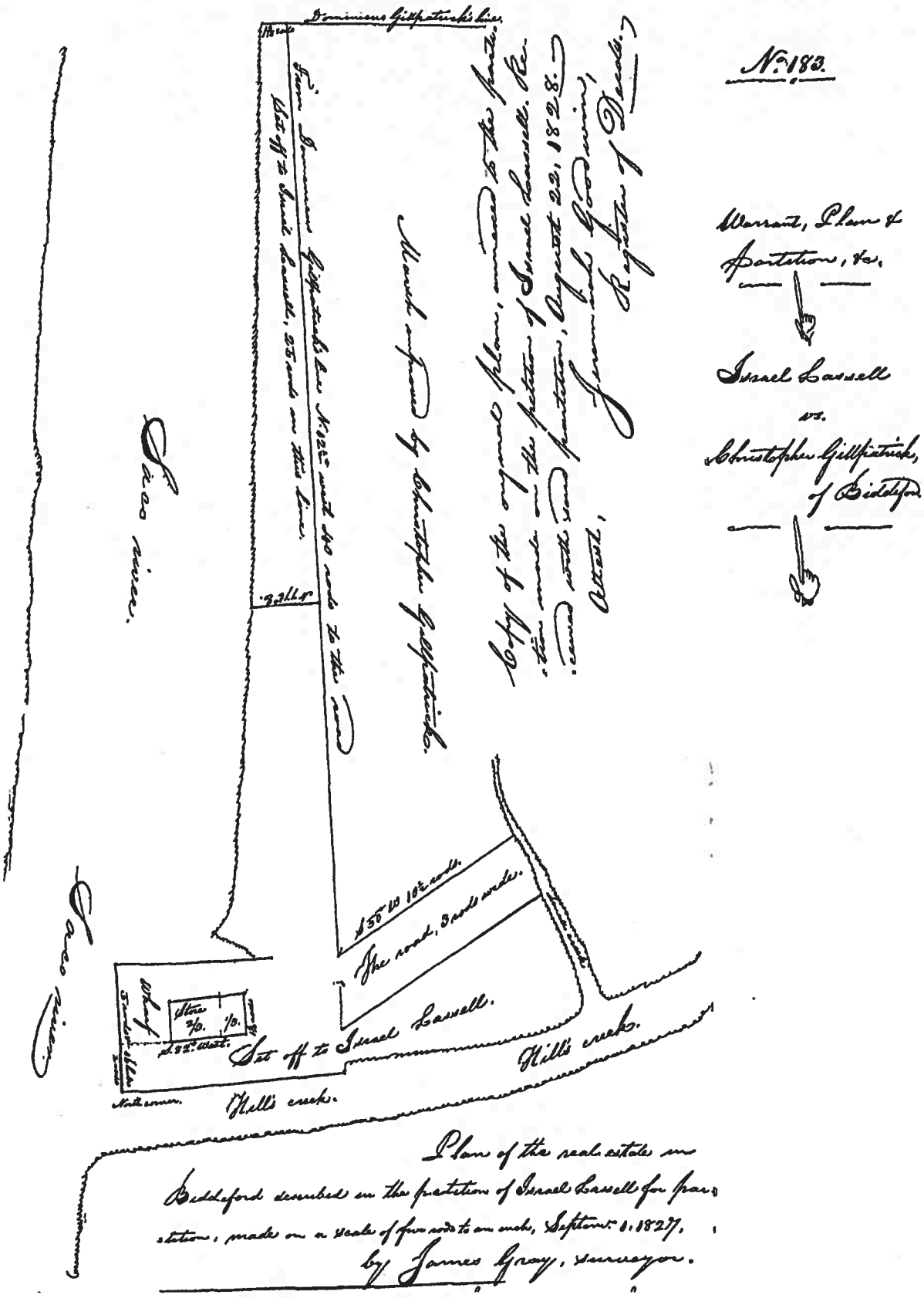
2 "Voted to accept the road laid out by the Selectmen near the oald (sp) old burying ground provided the petitioner make the road without expense to the Town and (and) keep it in repair five years"

3 "Voted the Selectmen assess damages for said road to be awarded Israel Lassell Esq for said road passing through his land"

*Note: Interpreted from the written minutes of the meeting.

Excerpt from Gilpatrick and Lassell Settlement Deed Recorded 8/22/1828 at YCRD, Book 130, Pages 182, 183

(Note the road is described below as "The road, 3 rods wide".)



David C.M. Galbraith, Director of Planning
David.Galbraith@biddefordmaine.org
205 Main Street / PO Box 586 • Biddeford, ME
(207) 571-0700 • www.biddefordmaine.org
City of Biddeford Government
@CityofBiddeford

PLANNING BOARD STAFF REPORT

TO: Chair McCurry and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, City Planner / Director of the Planning & Development Dept.

DATE: June 2, 2026

RE: 2026.20 Review of a Conditional Use Permit request by Bakhita Saabino to open Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) in the R-2 Zone. Helping Hand Learning will provide childcare for children ages 6 weeks to 12 years of age; the maximum capacity will be 12 children.

MEETING DATE: June 17, 2026, 6:00 PM

1. **INTRODUCTION:**

This Conditional Use Permit request is being presented by Bakhita Saabino, the applicant, to open a childcare center at 123 Summer Street (Tax Map 35, Lot 48) located within the R-2 Zone. The proposal is for a home day care center called Helping Hand Learning which will take care of children aged from 6 weeks to 12 years. The maximum capacity of the daycare is 12 children.

2026.20 Review of a Conditional Use Permit request by Bakhita Saabino to open Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) in the R-2 Zone. Helping Hand Learning will provide childcare for children ages 6 weeks to 12 years of age; the maximum capacity will be 12 children.

The City's Land Use Ordinance defines children's home day cares as:

DAY-CARE HOME, CHILDREN'S
A home in which a person receives some type of payment to maintain or otherwise carry out a regular program of providing care for three to 12 children under 13 years of age who are not the provider's own children.

Ms. Saabino's home day care is required to be licensed by the Maine Department of Health and Human Services (DHHS). Ms. Saabino is the owner and operator of the center and will be residing at the proposed location. She has applied for her home day care license with DHHS, but they will not approve the license until local authority/approval has been granted. It is likely that Ms. Saabino will be required to provide an on-site outside play area at this location which she would accommodate in the rear of the property, which is fairly narrow, or more likely in front of the existing garage. DHHS will determine the location and size requirements prior to their issuing the required license. Per City Ordinance Ms. Saabino will need to comply with the following:

A. Upon certification by the DHHS, the applicant shall submit a copy of the certificate to the City Planner's office within 30 days of receipt. The home day care may not commence operation until the City has received a copy of the certification.

B. Ms. Saabino's home was constructed in 1880, according to City Assessor's records, As the residence was constructed prior to 1978, the applicant shall submit evidence that a lead inspection has been conducted and that health threats, that may be present due to existing lead-contaminated dust, soil or water, or lead-based paint, have been addressed to the satisfaction of either a State of Maine licensed lead inspector or the Department of Health and Human Services.

C. The subject property is serviced by public water and sewer and shall pay any applicable impact fees for increased flows.

D. All outside play equipment shall be located inside or rear yards and shall meet the required side and rear setback requirements. The location of the required outdoor play areas shall be buffered from adjoining uses by fencing and plantings. The Planning Board shall consider the unique circumstances of each application in determining the type of buffering that may be required. If buffering is required by the Board as a condition of approval, said buffering shall be installed prior to the children's home day-care center opening for business, or at such time as is acceptable to the Board.

E. An off-street parking area shall be provided and utilized by vehicles engaged in the picking up and discharge of children. No fewer than two parking spaces shall be provided, exclusive of space used by the day-care provider and/or staff. The Code Enforcement Officer shall be responsible for ensuring that said off-street parking area is utilized. The subject property has a large driveway that can accommodate two (2) parking stalls for pick-up and drop-off.

F. The home day care shall be inspected and approved by DHHS prior to opening.

2. **PROJECT DATA/INFORMATION:**

1.		Applicant:	Bakhita Saabino 123 Summer Street Biddeford, ME 04005
2.		Owner of Property:	Same as applicant
3.		Agent:	Same as applicant
4.		Surveyor:	N/A
5.		Project Location:	123 Summer Street
6.		Project Tax Map #/Lot #:	Tax Map 35, Lot 48
7.		Lot Size:	4,356 SF
8.		Base Zoning:	Residential 2 zone
9.		Overlay Zoning:	N/A
10.		Existing Use:	Residential
11.		Proposed Use:	Live in Child Care
12.		Approvals Required:	Article VI Performance Standards, Section 22 Article VII Conditional Uses
13.		Uses in the Vicinity:	Residential
14.		Waivers Needed:	a. None
15.		Waivers Granted:	a. None
16.		Other Non-City Permits Required:	DHHS Licensing
17.		LDR Attachment A: Fees Paid	All fees have been paid
18.		Planning Board Review History: CUP 6-17-26	

3. **REVIEW PROCESS:**

Per City ordinance, this application is subject to Article VI (Performance Standards) Section 22 for Day Care Facilities and Article VII for Conditional Uses which require approval by the Planning Board.

4. **APPLICATION COMPLETENESS:** This application has been determined to be “complete”’ so the purpose of this memorandum introduces the project/s to the Board, with the desire to identify items the Board believes are important and necessary to decide on this project.

5. ZONING: The subject property is zoned Residential 2 Zone (R-2) .

6. **WAIVERS**: None requested

2026.20 Review of a Conditional Use Permit request by Bakhita Saabino to open Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) in the R-2 Zone. Helping Hand Learning will provide childcare for children ages 6 weeks to 12 years of age; the maximum capacity will be 12 children.

7. **STAFF RECOMMENDATION:**

The Application is for a Conditional Use Permit; the staff recommends approval for this project with the below Conditions of Approval (COA):

A. Upon certification by the DHHS, the applicant shall submit a copy of the certificate to the City Planner's office within 30 days of receipt. The home day care may not commence operation until the City has received a copy of the certification.

B. Ms. Saabino's home was constructed in 1880, according to City Assessor's records, As the residence was constructed prior to 1978, the applicant shall submit evidence that a lead inspection has been conducted and that health threats, that may be present due to existing lead-contaminated dust, soil or water, or lead-based paint, have been addressed to the satisfaction of either a State of Maine licensed lead inspector or the Department of Health and Human Services.

C. The subject property is serviced by public water and sewer and shall pay any applicable impact fees for increased flows.

D. All outside play equipment shall be located inside or rear yards and shall meet the required side and rear setback requirements. The location of the required outdoor play areas shall be buffered from adjoining uses by fencing and plantings. The Planning Board shall consider the unique circumstances of each application in determining the type of buffering that may be required. If buffering is required by the Board as a condition of approval, said buffering shall be installed prior to the children's home day-care center opening for business, or at such time as is acceptable to the Board.

E. An off-street parking area shall be provided and utilized by vehicles engaged in the picking up and discharge of children. No fewer than two parking spaces shall be provided, exclusive of space used by the day-care provider and/or staff. The Code Enforcement Officer shall be responsible for ensuring that said off-street parking area is utilized. The subject property has a large driveway that can accommodate two (2) parking stalls for pick-up and drop-off.

F. The home day care shall be inspected and approved by DHHS prior to opening.

8. Sample Motions

A. Motion to Approve project #2026.20 a Conditional Use Permit for Bakhita Saabino to open a home day care called Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) within the Residential 2 zone, with the above recommended Conditions of Approval (COA).

B. Motion to Deny project #2026.20 a Conditional Use Permit for Bakhita Saabino to open a day care called Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) within the Residential 2 zone for the following reasons:
   1. _____
   2. _____

2026.20 Review of a Conditional Use Permit request by Bakhita Saabino to open Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) in the R-2 Zone. Helping Hand Learning will provide childcare for children ages 6 weeks to 12 years of age; the maximum capacity will be 12 children.

3. _____

C. Motion to Table project #2026.20 a Conditional Use Permit for Bakhita Saabino to open a day care called Helping Hand Learning at 123 Summer Street (Tax Map 35, Lot 48) within the Residential 2 zone.
   1. _____
   2. _____
   3. _____

Planning Board Application Narrative

Project Title: *Helping Hand Early Learning*
Applicant: Bakhita Saabino
Project Location: *123 Summer st, Biddeford me*

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1. Project Description

This application is submitted to request approval to operate a small child care program at the above location. The program will provide care for children ages *6 weeks to 12 years* in a safe, structured, and nurturing environment.

The child care will operate as a Home Childcare facility program with a maximum capacity of *12* children at one time. The goal is to support working families by offering reliable and high-quality early childhood care.

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2. Purpose and Need

There is a strong need for accessible and affordable child care within the community. Many families face challenges finding care that meets their schedules and supports their children's development.

This program will:

- Increase available child care slots in the area
- Support working parents and families
- Provide early learning opportunities for young children

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3. Site Description

The property is located at *123 Summer st , Biddeford me* and is currently used as a *residential* space. The site includes:

- Indoor space suitable for child care activities
- Bathroom facilities that meet health and safety requirements
- Outdoor space for supervised play

No major structural changes are proposed, *[or describe any minor renovations if needed]*.

4. Traffic and Parking

The program is expected to generate limited traffic, primarily during drop-off and pick-up times.

- Drop-off: *7: am*
- Pick-up: *5:30 pm*

Parents/guardians will use designated parking areas, and efforts will be made to stagger arrival times to reduce congestion.

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5. Hours of Operation

The child care program will operate:

- Monday through Friday
- Hours: *7:30 AM – 5:30 PM]*

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6. Health, Safety, and Licensing

The program will comply with all state and local regulations for child care facilities, including:

- Licensing through the State of Maine
- Fire safety and emergency preparedness plans
- Health and sanitation standards

All staff will meet required background checks and training qualifications.

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7. Neighborhood Impact

The program is designed to have minimal impact on the surrounding neighborhood.

- Noise levels will be typical of a small child care setting
- Outdoor play will be supervised and scheduled during appropriate hours
- The property will be well-maintained

The program aims to be a positive addition to the community by supporting local families.

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8. Utilities and Services

Existing utilities (water, sewer, electricity) are sufficient to support the program. No additional public service demands are expected beyond normal residential use.

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9. Conclusion

This child care program will provide a valuable service to the community by offering safe, reliable, and developmentally appropriate care for young children. Approval of this application will help address the growing need for child care while maintaining the character and safety of the neighborhood.

Revised: May 17, 2022

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit __ Site Plan Review __ Extraction
✓ Conditional Use Permit __ Subdivision __ Private Way
__ Other: _____

Applicant Information:
Name: Bakhita Saabino
Mailing Address: 123 Summer st, Biddeford ME
Telephone: [redacted]
Email: [redacted]
What is your legal interest in the property?
✓ Owner __ Potential Buyer with Contract __ Lease/Rental Agreement

Owner's Information:
Name: Bakhita Saabino
Mailing Address: 51 Tucker ave, Portland ME 04103
Telephone: [redacted]
Email:

Agent's Information:
Name:
Mailing Address:
Telephone:
Email:

Engineer/Surveyor's Information:
Name:
Mailing Address:
Telephone:
Email:

Project Location and Lot Information:
Street Address: 123 summer st, Drainage Watershed:
Tax Map: 39 Lot: 4,356 Square feet.
Current Zoning: R-2 Shoreland Zoning:
Size of Lot: 4,356 ( )acres ( )s.f. Lot Frontage:
Existing Use of Property: 1,850 sqft 5-bedroom, 2 bath, single family

Property currently serviced by:

✓ City Road ✓ Public Sewer ✓ Public Water ✓ Public Trash
__ Private Road __ Septic System __ Private Well __ Private Hauler

Slope Conditions in Area of Construction (if applicable):
__ Flat (0-3% slope) __ Rolling (3-8% slope) __ Hilly (8-15% slope) __ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? __ (Yes) ✓ (No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes) ✓ (No) if yes attach information
Do you plan to bring fill onto the lot? __ (Yes) ✓ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

The proposed use of property is to open a child care facility to provide a safe, nurturing, and educational environment where children can learn, grow, and develop while their parents or guardians are working, or going to school.

Property to be Serviced by:

✓ City Road ✓ Public Sewer ✓ Public Water ✓ Public Trash

__ Private Road __ Septic System __ Private Well __ Private Hauler

Limits of Disturbance: _____ ( )acres ( )s.f.

Net change in impervious cover: _____ ( )acres ( )s.f.

Is this project part of a larger project? __(Yes) ✓(No)

Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) ✓(No)

Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) __(Yes) __(No)

Is the project proposing any Stormwater facilities/BMPs? __(Yes) ✓(No)

Will a Traffic Movement Permit (TMP) be required?: __(Yes) ✓(No)

__ **If in a Shoreland Zone:**

Percent of residential lot coverage (Max 20%): _____

Percent of structure expansion (Max 30%): _____

__ **If Subdivision Review, number of lots proposed:** _____

__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval
   - __ Fire Department – Contact Chief or Deputy Chief – 282-9986
   - __ Ability to Serve for Water Service – Maine Water – 282-1543
   - __ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
   - __ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

C. Photographs of Site.

D. Architectural renderings/drawings of proposed buildings, as required.

E. Engineering Plans, as required.

F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __(Yes) ✓(No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: _____ **Date** 4/15/2026

Signature of Property Owner: _____ **Date** 4/15/2026

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED Bk 19505 PG 588
Instr # 2024029286
09/05/2024 02:52:02 PM
Pages 1 YORK CO

1002440286659 WARRANTY DEED

KNOW ALL MEN BY THESE PRESENT: That Casey Richardson of 24 Little River Drive, Gorham, ME 04038, for consideration paid grant(s) to Bakhita Saabino, 51 Tucker Avenue, Portland, ME 04103, with WARRANTY COVENANTS:

A certain lot or parcel of land, with the buildings thereon, situated in the City of Biddeford, County of York and State of Maine, on the southeasterly side of Summer Street, bounded and described as follows:

BEGINNING on the southeasterly side of said street at the westerly corner of land formerly of Lydia H. Clough, now of Roland Gagnon or owner unknown;

THENCE southwesterly by said street 54 feet nine inches to land of Walter Stebbins or owner unknown;

THENCE southeasterly by said Stebbins' land, parallel to said Gagnon line 78 feet, more or less, to land formerly of George Coburn, now of Raymond Lambert or Owner unknown;

THENCE northeasterly by said Lambert land 57 feet, more or less, to said Gagnon land;

THENCE northwesterly by said Gagnon land 78 feet, more or less, to the point of beginning.

These premises were conveyed to Grantor(s) Casey Richardson by virtue of a warranty deed from David J. Dionne and Cindy L. Dionne dated 08/02/2024 and recorded at the York County Registry of Deeds in Book 19483, Page 374.

Executed this 4th day of September, 2024.

Maine R.E. Transfer Tax Paid

Casey Richardson

State of Maine
County of Cumberland September 4, 2024

Then personally appeared before me on this 4th day of September, 2024, the said Casey Richardson and acknowledged the foregoing to be his/her/their voluntary act and deed.

Notary Public/Justice of the Peace
Commission expiration:

Patrick D. Thornton
Maine Attorney at Law
Maine Bar #4211

RE: 2024-79777

Subject:
Letter of Intent – Child Care Business Letter of Intent – Child Care Business
Bakhita Saabino
51 Tucker Ave,
Portland, ME 04103

Dear Sir or Madam,

I am writing to formally express my intent to open a child care business at 123 Summer St, Biddeford Maine, 04005. The purpose of this business is to provide high-quality, safe, and nurturing child care services for young children while supporting families and the local community.

The child care program will operate as a licensed child care facility for 12 children ages 6 weeks–12 years of age. The program will focus on developmentally appropriate learning, social-emotional development, and strong family engagement. The planned hours of operation will be Monday through Friday, from **7:30 a.m. to 5:30 p.m.**, to support the needs of working families in the community.

Initially, the business will be operated by myself as the owner and primary caregiver. As enrollment grows, I plan to hire additional qualified staff as required to meet Maine child care licensing standards and maintain high-quality care. At this time, I anticipate employing approximately **2–3 staff members**, with the potential to add more staff in the future as the program expands.

I am working with the Child Care Business Lab, a program that helps providers in Maine open quality and sustainable child care businesses. I am committed to meeting all Maine child care licensing requirements and participating in ongoing training and technical assistance to ensure the program is safe, compliant, and sustainable.

Thank you for your time and consideration.

Sincerely,
Bakhita Saabino
Portland, ME
Saabinobakhita@yahoo.com
(207) 409-4649

Child Care Daily Program Schedule

Full-Day Program (Ages 6 weeks to 12 years)

7:00 AM – 8:30 AM | Arrival & Free Play
Children arrive, greet teachers, and choose from quiet activities such as books, puzzles, or drawing. This helps ease the transition from home to school.

8:30 AM – 9:00 AM | Breakfast / Morning Snack
Children eat together in a relaxed setting. Teachers encourage social interaction and independence.

9:00 AM – 9:30 AM | Circle Time
Group meeting to review the daily schedule, sing songs, read stories, and introduce the day's theme or learning focus.

9:30 AM – 10:30 AM | Learning Centers
Children rotate through different areas:

- Blocks and building
- Dramatic play
- Art and creativity
- Sensory play (water, sand, etc.)
  Teachers support learning through guided play and observation.

10:30 AM – 11:15 AM | Outdoor Play
Active play outside to support physical development, social skills, and exploration.

11:15 AM – 11:45 AM | Small Group Activities
Focused learning in small groups (literacy, math, fine motor skills, or hands-on activities).

11:45 AM – 12:15 PM | Lunch
Children eat together, practice self-help skills, and engage in conversation.

12:15 PM – 2:00 PM | Rest / Quiet Time
Children rest or nap. Quiet activities are available for those who do not sleep.

2:00 PM – 2:30 PM | Wake-Up & Snack
Children transition from rest time and have a light snack.

2:30 PM – 3:30 PM | Choice Time / Centers
Children return to centers or engage in teacher-guided activities.

3:30 PM – 4:15 PM | Outdoor or Gross Motor Play
Additional outdoor play or indoor movement activities depending on weather.

4:15 PM – 5:30 PM | Departure & Quiet Activities
Children prepare to go home. Quiet play, reading, or one-on-one interactions with teachers.

Key Features of the Program

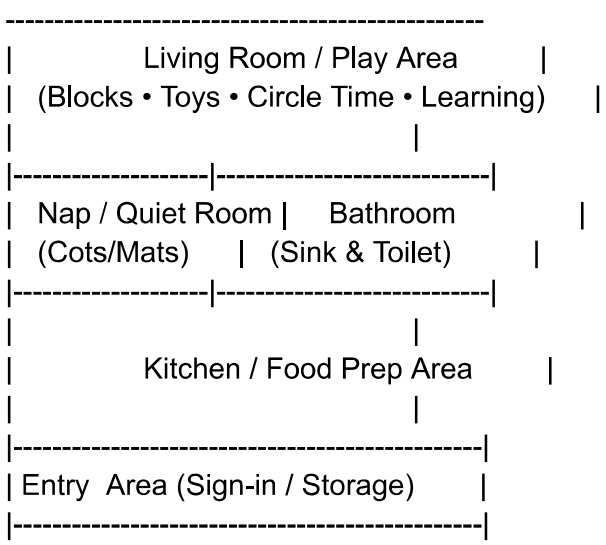
- Consistent routine to support children's sense of security
- Balance of structured and free-choice activities
- Focus on social, emotional, and academic development
- Opportunities for independence and decision-making

Child Care Floor Plan

Program Information

- **Program Name:** *Helping Hand Early Learning*
- **Location:** *123 Summer st, Biddeford Me*
- **Age Group:** 6 weeks **-** 12 years

Simple Floor Plan Layout



Key Areas to Label

1. Entry Area

- Parent sign-in/sign-out
- Storage for children’s belongings (cubbies/hooks)

2. Main Play / Learning Area

- Open space for:
    - Circle time
    - Learning centers (blocks, art, dramatic play, books)
- Clearly organized for supervision

3. Nap / Quiet Area

- Separate or quiet section
- Space for mats or cribs (depending on age group)

4. Bathroom

- Accessible to children
- Includes sink and toilet
- Meets health and safety requirements

5. Kitchen / Food Preparation Area

- Used for meals and snacks
- Follows sanitation guidelines

Safety Features to Include

- Clearly marked exits
- Smoke detectors and fire extinguisher locations
- Childproofed areas (gates, outlet covers, etc.)
- Clear pathways for emergency evacuation

Short Description to Attach

You can include this with your plan:

> The floor plan shows the layout of the child care space, including the main activity area, nap/rest area, bathroom, kitchen, and entry. The design allows for safe supervision of children at all times, with clear pathways and organized learning areas. Safety features and emergency exits are accessible and clearly identified.

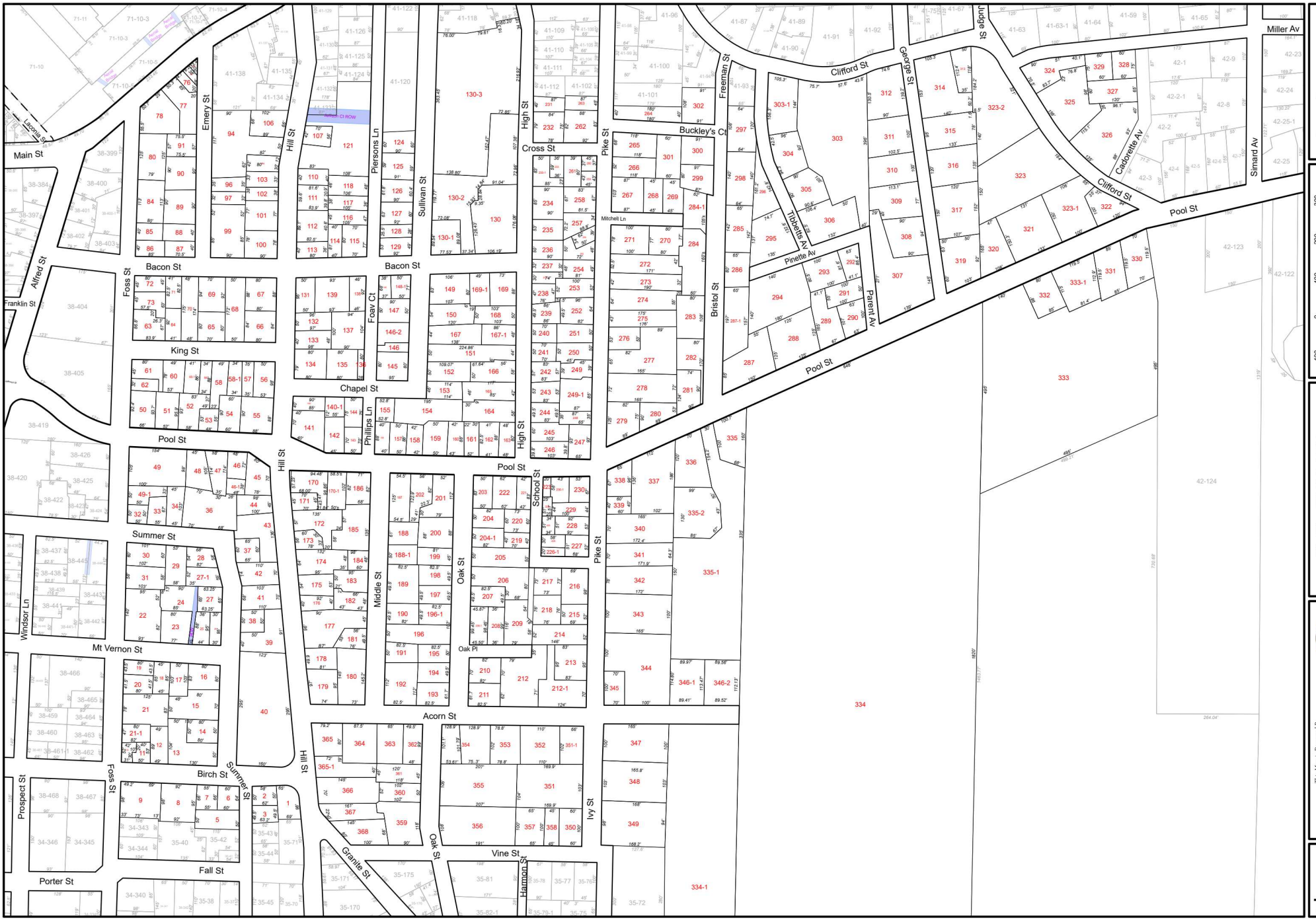
Tips for Your Application

- Keep the drawing **simple and easy to read**
- Label each room clearly
- Add **approximate measurements** if required
- Show **doors, windows, and exits**

Key Evacuation Procedures:

- Identify Exits: Know the primary and secondary exits (doors, windows) from your specific unit at 123 Summer St.
- Smoke Detectors: Test smoke detectors regularly and ensure all occupants recognize the alarm sound.
- Action During Fire: If the corridor is filled with smoke, crawl on hands and knees.
- Evacuation: Move swiftly and in an orderly manner, avoiding panic or bottlenecks.
- Safe Meeting Spot: Pre-designate a fixed assembly point outside, such as a neighbor's home or a street corner, far from the structure.
- Special Assistance: Assign personnel to help children, seniors, or disabled individuals.
- Emergency Services Contact:
- Fire/Emergency: 911
- Biddeford Fire Department (Non-emergency): 207-282-3244

For official fire safety guidance tailored to residential safety, we would refer to the Biddeford Fire Department and City of Biddeford planning resources.



North is based on the Maine State Coordinate System NAD 1983

North Rotation is 34°

100 0 100 200 300 Feet

UPDATED THROUGH APRIL 1, 2025

FOR ASSESSMENT PURPOSES ONLY
NOT TO BE USED FOR CONVEYANCES

The City of Biddeford, Maine

OFFICIAL TAX MAP

Office of The Tax Assessor

Deanne Vail, C.M.A.
Assessor

This Map is Prepared By:
The City of Biddeford, Maine
Technology Department
GIS Division
205 Main Street · P.O. Box 586 · Biddeford, Maine 04005
207-571-6000 · gis@biddefordmaine.org

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Tax Map

David C.M. Galbraith, City Planner / Deputy Director Planning and Development

David.Galbraith@biddefordmaine.org

205 Main Street / PO Box 586 • Biddeford, ME

City of Biddeford Government

(207) 571-0700 • www.biddefordmaine.org

@CityofBiddeford

PLANNING BOARD STAFF REPORT

TO: Chair McCurry and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, City Planner & Deputy Director of the Planning & Development Dept.

DATE: June 2, 2026

RE: 2025.24 Review of a Conditional Use Permit request by Amanda Keddy to open Mandi's Munchkins Child Care Center, LLC located at 2 Hutchins Drive (Tax Map 4, Lot 61-1) located within the Rural Farm (RF) Zone. Mandi's Munchkins Child Care Center, LLC, will be a licensed daycare center for up to 12 children.

MEETING DATE: June 17, 2026, 6:00 PM

1. INTRODUCTION:

This Conditional Use Permit request is being presented by Amanda Keddy, the applicant, to open a child day care center called Mandi's Munchkins Child Care Center, LLC to be located at 2 Hutchins Drive (Tax Map 4, Lot 61-1) within the R-F Zone. Mandi's Munchkins Child Care Center, LLC, will be a licensed daycare for up to 12 children. A children's Day-care Center is defined in the City's Land Use Ordinance as:

DAY-CARE CENTER, CHILDREN'S

A building in which a person receives some type of payment to maintain or otherwise carry out a regular program of providing care for three or more children under 13 years of age. "Day-care center" does not include any facility operated as a nursery school, a "home day-care," a summer camp established solely for recreational and educational purposes, or a formal public or private school in the nature of a kindergarten or elementary or secondary school.

Ms. Keddy is seeking Conditional Use approval to operate a Day Care Center at 2 Hutchins Drive which is located on a private roadway at the corner of Hutchins Drive and Oak Ridge Road. Being a Day Care Center there will be no residential component and as proposed the existing home will be converted to and utilized entirely by the proposed commercial use. Ms. Keddy is the owner and operator of Mandi's Munchkins Child Care Center, LLC and will not be residing at the proposed location. She has applied for her day care center license with Maine Department of Health and Human Services (DHHS), but they will not approve the license until local authority/approval has been granted. DHHS will require Ms. Keddy to provide an on-site outside play area at this location which she would accommodate in the rear of the property. The property has a fenced in yard which would be utilized for this use, although DHHS determines if the outside area meets the location and size requirements prior to their issuing the required license.

2026.20 Review of a Conditional Use Permit request by Amanda Keddy to open Mandi's Munchkins Child Care Center, LLC at 2 Hutchins Drive (Tax Map 4, Lot 61-1) in the R-F Zone. Mandi's Munchkins Child Care Center, LLC will be a licensed daycare for up to 12 children.
Planning Board Hearing Date: June 17, 2026

2 Hutchins Drive – Proposed Day Care Center

Per City Ordinance Ms. Keddy will need to comply with the following:

A. The day-care center may not commence operation within the City of Biddeford without first being reviewed and approved by the Planning Board pursuant to the procedures and standards applicable to conditional uses under Article VII of the City of Biddeford Zoning Ordinance.

B. The operation of the day care center may not commence until a certificate to operate has been issued by the Maine Department of Health and Human Services (DHHS).

C. Upon certification by the DHHS, the applicant shall submit a copy of the certificate to the City Planner and Code Enforcement Offices within 30 days of receipt / issuance.

D. If a children's day-care center or home day care is proposed in a residence constructed prior to 1978, the applicant shall submit evidence that a lead inspection has been conducted in the

building or home proposed for the children's day-care center or home day care, and that health threats that may be present due to existing lead-contaminated dust, soil or water, or lead-based paint, have been addressed to the satisfaction of either a State of Maine licensed lead inspector or the Department of Health and Human Services. Ms. Keddy's proposed location was constructed in 1993, so it is unlikely that lead paint exists at the proposed facility.

E. The subject property is served by private well and on-site septic system. As such, the applicant shall submit an HHE-200 Subsurface Wastewater Disposal System Application completed and sealed by a State of Maine Licensed Soil Evaluator or a written memo from the City of Biddeford Licensed Plumbing Inspector verifying either that the existing septic system is adequate to service the number of children proposed, or that the proposed expansion or replacement of the system is adequate to service the number of children proposed.

F. If the existing septic system is to be retained, an HHE-200 Application for a replacement system shall be recorded at the York County Registry of Deeds. A copy of the recorded HHE-200 Application and a copy of the receipt from recording shall be submitted to the Code Enforcement office within 30 days of approval by the Planning Board.

G. All outside play equipment shall be located in the side or rear yards and shall meet the required side and rear setback requirements.

H. The Board may require that outside play areas be buffered from adjoining uses by fencing and plantings. The Planning Board shall consider the unique circumstances of each application in determining the type of buffering that may be required. If buffering is required by the Board as a condition of approval, said buffering should be installed either prior to the children's day-care center opening for business, or at such time as is acceptable to the Board.

I. Off-street parking area should be provided and utilized by vehicles engaged in the picking up and discharge of children. No fewer than two parking spaces shall be provided, exclusive of space used by the day-care provider and/or staff. The Code Enforcement Officer shall be responsible for ensuring that said off-street parking area is utilized.

J. Operation of the children's day-care center and maintenance of that portion of the building or residence dedicated to the children's day-care center or home day care shall be as set forth in 10-148 CMR Chapter 32, Rules for the Licensing of Child Care Facilities, of the Maine Department of Health and Human Services.

K. That portion of the building dedicated to the children's day-care center shall have provisions for the secured storage of household chemicals, cleaning agents, and all other potentially harmful substances. The Code Enforcement Officer shall be responsible for ensuring that said secured storage is adequate prior to the children's day-care center opening for business.

2026.20 Review of a Conditional Use Permit request by Amanda Keddy to open Mandi's Munchkins Child Care Center, LLC at 2 Hutchins Drive (Tax Map 4, Lot 61-1) in the R-F Zone. Mandi's Munchkins Child Care Center, LLC will be a licensed daycare for up to 12 children.
Planning Board Hearing Date: June 17, 2026

2. **PROJECT DATA/INFORMATION:**

1.		Applicant:	Amanda Keddy 5 Hutchins Drive Biddeford, ME 04005
2.		Owner of Property:	Same as applicant
3.		Agent:	Same as applicant
4.		Surveyor:	N/A
5.		Project Location:	2 Hutchins Drive
6.		Project Tax Map #/Lot #:	Tax Map 4, Lot 61-1
7.		Lot Size:	80,150 SF
8.		Base Zoning:	Rural Farming
9.		Overlay Zoning:	N/A
10.		Existing Use:	Vacant Residential
11.		Proposed Use:	Childcare Center
12.		Approvals Required:	Article VI Performance Standards, Section 22 Article VII Conditional Uses
13.		Uses in the Vicinity:	Residential
14.		Waivers Needed:	a. None
15.		Waivers Granted:	a. None
16.		Other Non-City Permits Required:	
17.		LDR Attachment A: Fees Paid	All fees have been paid
18.		Planning Board Review History: CUP 6-17-26	

3. **REVIEW PROCESS:**

Per City ordinance, this application is subject to Article VI (Performance Standards) Section 22 for Day Care Facilities and Article VII for Conditional Uses which require approval by the Planning Board.

4. **APPLICATION COMPLETENESS:** This application has been determined to be "complete"' so the purpose of this memorandum introduces the project/s to the Board, with the desire to identify items the Board believes are important and necessary to decide on this project.

5. ZONING: The subject property is zoned Residential 2 Zone (R-2) .

6. **WAIVERS**: None requested

7. **STAFF RECOMMENDATION:**

The Application is for a Conditional Use Permit; the staff recommends approval for this project conditioned on the following:

2026.20 Review of a Conditional Use Permit request by Amanda Keddy to open Mandi's Munchkins Child Care Center, LLC at 2 Hutchins Drive (Tax Map 4, Lot 61-1) in the R-F Zone. Mandi's Munchkins Child Care Center, LLC will be a licensed daycare for up to 12 children.
Planning Board Hearing Date: June 17, 2026

A. The day-care center may not commence operation within the City of Biddeford without first being reviewed and approved by the Planning Board pursuant to the procedures and standards applicable to conditional uses under Article VII of the City of Biddeford Zoning Ordinance.

B. The operation of the day care center may not commence until a certificate to operate has been issued by the Maine Department of Health and Human Services (DHHS).

C. Upon certification by the DHHS, the applicant shall submit a copy of the certificate to the City Planner's and Code Enforcement Offices within 30 days of receipt / issuance.

D. If a children's day-care center or home day care is proposed in a residence constructed prior to 1978, the applicant shall submit evidence that a lead inspection has been conducted in the building or home proposed for the children's day-care center or home day care, and that health threats that may be present due to existing lead-contaminated dust, soil or water, or lead-based paint, have been addressed to the satisfaction of either a State of Maine licensed lead inspector or the Department of Health and Human Services. Ms. Keddy's proposed location was constructed in 1993, so it is unlikely that lead paint at the facility exists.

E. The subject property is served by private well and on-site septic system. As such, the applicant shall submit an HHE-200 Subsurface Wastewater Disposal System Application completed and sealed by a State of Maine Licensed Soil Evaluator or a written memo from the City of Biddeford Licensed Plumbing Inspector verifying either that the existing septic system is adequate to service the number of children proposed, or that the proposed expansion or replacement of the system is adequate to service the number of children proposed.

F. If the existing septic system is to be retained, an HHE-200 Application for a replacement system shall be recorded at the York County Registry of Deeds. A copy of the recorded HHE-200 Application and a copy of the receipt from recording shall be submitted to the Code Enforcement office within 30 days of approval by the Planning Board.

G. All outside play equipment shall be located inside or rear yards and shall meet the required side and rear setback requirements.

H. The Board may require that outside play areas be buffered from adjoining uses by fencing and plantings. The Planning Board shall consider the unique circumstances of each application in determining the type of buffering that may be required. If buffering is required by the Board as a condition of approval, said buffering should be installed either prior to the children's day-care center opening for business, or at such time as is acceptable to the Board.

I. Off-street parking area should be provided and utilized by vehicles engaged in the picking up and discharge of children. No fewer than two parking spaces shall be provided, exclusive of space used by the day-care provider and/or staff. The Code Enforcement Officer shall be responsible for ensuring that said off-street parking area is utilized.

J. Operation of the children's day-care center and maintenance of that portion of the building or residence dedicated to the children's day-care center or home day care shall be as set forth in

10-148 CMR Chapter 32, Rules for the Licensing of Child Care Facilities, of the Maine Department of Health and Human Services.

K. That portion of the building dedicated to the children's day-care center shall have provisions for the secured storage of household chemicals, cleaning agents, and all other potentially harmful substances. The Code Enforcement Officer shall be responsible for ensuring that said secured storage is adequate prior to the children's day-care center opening for business.

8. Sample Motions

A. Motion to Approve project #2025.24 a Conditional Use Permit for Amanda Keddy to open a day care center called Mandi's Munchkins Child Care Center, LLC located at 2 Hutchins Drive (Tax Map 4, Lot 61-1) within the Rural Farm (RF) zone, with the above listed Conditions of Approval (COA).

B. Motion to Deny project #2025.24 a Conditional Use Permit for Amanda Keddy to open a day care called Mandi's Munchkins Child Care Center, LLC at 2 Hutchins Drive (Tax Map 4, Lot 61-1) within the Rural Farm zone for the following reasons:

1. _____
2. _____
3. _____

C. Motion to Table project #2025.24 a Conditional Use Permit for Amanda Keddy to open a day care called Mandi's Munchkins Child Care Center, LLC at 2 Hutchins Drive (Tax Map 4, Lot 61-1) within the Rural Farm zone.

1. _____
2. _____
3. _____

Revised: 10/6/2025

City of Biddeford – Planning Department

Planning Board Application

P.O. Box 586, 205 Main Street Biddeford, Maine 04005

207-284-9115

Type of Application:

__ Shoreland Zoning Permit
__ Site Plan Review (Please include checklist)
__ Extraction
✓ Conditional Use Permit
__ Subdivision (Please include Checklist)
__ Private Way
__ Other: _____

Applicant Information:

Name: Amanda Keddy
Mailing Address: 5 Hutchins Drive Biddeford
Teleph [redacted]
Email:

What is your legal interest in the property?

✓ Owner __ Potential Buyer with Contract __ Lease/Rental Agreement

Owner's Information:

Name: SAME AS ABOVE
Mailing Address:
Telephone:
Email:

Agent's Information:

Name: Ø
Mailing Address:
Telephone:
Email:

Engineer/Surveyor's Information:

Name: Ø
Mailing Address:
Telephone:
Email:

Project Location and Lot Information:

Street Address: 2 Hutchins Drive Drainage Watershed: Little River
Tax Map: 4 Lot: 61-1
Current Zoning: RF Shoreland Zoning: Ø
Size of Lot: 1.84 (✓)acres ( )s.f. Lot Frontage: 0
Existing Use of Property: Currently not being used. Work is being done to get ready to open as a daycare. Will not be a residence.

Property currently serviced by:

__ City Road __ Public Sewer __ Public Water ✓ Public Trash
✓ Private Road ✓ Septic System ✓ Private Well __ Private Hauler

Slope Conditions in Area of Construction (if applicable): NA

__ Flat (0-3% slope) __ Rolling (3-8% slope) __ Hilly (8-15% slope) __ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? __ (Yes) ✓ (No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes) ✓ (No) if yes attach information
Do you plan to bring fill onto the lot? __ (Yes) ✓ (No) If yes attach information

✓

Description of proposed use of property:

Project/Proposed Use:

This property will be used as a licensed daycare for up to 12 children.

Property to be Serviced by:

__ City Road __ Public Sewer __ Public Water ✓ Public Trash
✓ Private Road ✓ Septic System ✓ Private Well __ Private Hauler

Limits of Disturbance: Ø ( )acres ( )s.f.
Net change in impervious cover: Ø ( )acres ( )s.f.
Is this project part of a larger project? __(Yes) ✓(No)
Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) ✓(No)
Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) __(Yes) ✓(No)
Is the project proposing any Stormwater facilities/BMPs? __(Yes) ✓(No)
Will a Traffic Movement Permit (TMP) be required?: __(Yes) ✓(No)

X **If in a Shoreland Zone:**
Percent of residential lot coverage (Max 20%): _____
X Percent of structure expansion (Max 30%): _____
X **If Subdivision Review, number of lots proposed:** _____
X **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: NA
Total new square feet paving/parking: NA

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval
X Fire Department – Contact Chief or Deputy Chief – 282-9986
X Ability to Serve for Water Service – Maine Water – 282-1543
X Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
__ ~~Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127~~
X Ability to Serve for Electrical Service-CMP-1-866-225-4200
X Letter to Planning Board describing project, ~~Waiver requests~~, ~~proposed improvements~~, ~~addressing permit requirements~~, etc.
✓ B. Photographs of Site.
C. Architectural renderings/drawings of proposed buildings, as required.
D. Engineering Plans, as required.
E. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance? __(Yes) ✓(No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: Amanda K Keddey **Date** 4/29/26

Signature of Property Owner: Amanda K Keddey **Date** 4/29/26

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

CITY OF BIDDEFORD
FIRE DEPARTMENT

152 Alfred Street
Biddeford, Maine 04005
Tel: 207-282-6632
Fax: 207-283-8243

Chief of Department Lawrence D. Best
Assistant Chief Kenneth J. Thorpe
Deputy Chief Steven Kiesman

04/27/2026

To; Amanda Keddy

Re: Biddeford Fire Department Ability to serve

Fr: Kenneth Thorpe – Assistant Chief, Biddeford Fire Department

Good afternoon:

It is the position of the Biddeford Fire Department that we will provide emergency services for the property located at 2 Hutchins Dr off Oak Ridge Rd in Biddeford as long as the department is available at the time of the request. It is of the understanding that the Biddeford Fire Department may request assistance from mutual aid departments in the event the fire department is not available due to other emergencies in the city.

Please contact the Biddeford Fire Department if you have any questions or concerns.

Respectfully,

Kenneth J. Thorpe

Assistant Fire Chief

CENTRAL MAINE POWER

April 27, 2026

AMANDA KEDDY
2 HUTCHINS DR
Biddeford, ME 04005

To Whom it concerns,

Thank you for contacting us. As requested, we are providing the following information for verification purposes:

Account Number: 30016868553

Customer Name: AMANDA KEDDY

Service Address: 2 HUTCHINS DR / BIDDEFORD ME 04005

Date Service Established: 6/25/2025 – **Current Customer with active services**.

If you need additional information or if you have questions regarding the above information, contact us at or write to: Central Maine Power, Customer Service Quality Dept., 83 Edison Drive, Augusta, ME 04336.

Sincerely,
Jerod

Representative, Customer Contact Center

CENTRAL MAINE POWER

Ltr 401

Internal Use

Maine Site Evaluations LLC

MAINESITEEVALUATIONS.COM
markatruman@MaineSiteEvaluations.com

800-244-2493 Toll Free
207-641-8656 Office
207-229-7482 Cell

P. O. Box 961
Kennebunk, Maine 04043

September 25, 2025

Amanda S. L. Keddy
Mandi's Munchkins Daycare
5 Hutchins Drive
Biddeford, Maine 04005

Septic Capacity 2 Hutchins Drive Biddeford

Dear Mrs. Keddy,

This letter is in regards to the change of use of property you purchased at 2 Hutchins Drive in Biddeford. Your plans are to use the dwelling exclusively as a child daycare facility with 12 children and 3 adults. This use would require a design wastewater flow of 216 gallons per day. The existing septic system was designed as a three bedroom home with a 270 gallon per day design. The disposal area was inspected and found to be installed as originally designed with no evidence of malfunction.

From all indications this system would be suitable for your use as a daycare facility.

Please contact me anytime if I may be of further help.

Best Regards,

Mark A. Truman

Mark A. Truman
Maine Site Evaluations, LLC

DESIGNING MAINE SEPTIC SOLUTIONS SINCE 1977

David C.M. Galbraith, City Planner / Deputy Director Planning and Development

David.Galbraith@biddefordmaine.org

205 Main Street / PO Box 586 • Biddeford, ME

City of Biddeford Government

(207) 571-0700 • www.biddefordmaine.org

@CityofBiddeford

PLANNING BOARD STAFF REPORT

TO: Chair McCurry and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, City Planner & Deputy Director of the Planning & Development Dept.

DATE: June 2, 2026

RE: Case # 2026.22 Preliminary Review of a Minor Site Plan Amendment for widening of the drive approaching the wash entrances for BAW Holdings (Biddeford Auto Wash) located at 547 Alfred Street (Tax Map 2, Lot 34-1) in the Business 2 zone.

MEETING DATE: June 17, 2026, 6:00 PM

1. INTRODUCTION:

This Minor Site Plan Amendment request is being presented by Tom Saucier, P.E. of Site Design Associates, the agent, to widen the drive approaching the entrances to the car wash at Biddeford Auto Wash, at 547 Alfred Street (Tax Map 2, Lot 34-1) which is located within the B-2 Zone. As outlined in the Applicant's cover letter *"The changes involve improving the functionality of the facility with some minor pavement widening, installation of curb, a minor relocation of two light poles, and removal of a portion of guard rail to accommodate the widening."* The car wash, a conditional use, was a previously approved site plan so the proposed amendment requires Planning Board review and approval.

Case # 2026.20 Preliminary Review of a Site Plan Amendment request by BAW Holdings, LLC to make minor amendments to improve the functionality of Biddeford Auto Wash (BAW) at 547 Alfred Street (Tax Map 2, Lot 34-1) within the Business 2 (B-2) zone. Planning Board Sketch Plan Review Date: June 17, 2026.

2. **PROJECT DATA/INFORMATION:**

1.		Applicant:	BAW Holdings, LLC 4 Scamman Street, Suite 19-311 Saco, ME 04072
2.		Owner of Property:	Same as applicant
3.		Agent:	Tom Saucier, P.E. Site Design Associates 23 Whitney Way Topsham, ME
4.		Surveyor:	Same as Agent
5.		Project Location:	547 Alfred Street
6.		Project Tax Map #/Lot #:	Tax Map 2, Lot 34-1
7.		Lot Size:	1 Acre
8.		Base Zoning:	Business 2
9.		Overlay Zoning:	N/A
10.		Existing Use:	Car Wash
11.		Proposed Use:	Car Wash
12.		Approvals Required:	Article VI Performance Standards, Section 14 Car Wash
13.		Uses in the Vicinity:	Commercial
14.		Waivers Needed:	a. Article XI.II.5.B.4.f.1 No paving, parking or storage within setback of rear property line. b. Article XI.II.5.B.1. Requirement for a written engineering report for stormwater
15.		Waivers Granted:	a. None
16.		Other Non-City Permits Required:	
17.		LDR Attachment A: Fees Paid	All fees have been paid
18.		Planning Board Review History: Site Plan Amendment 6-17-26	

3. REVIEW PROCESS:

Per City ordinance, this application is subject to Article VI (Performance Standards) Section 14 Car Wash which is a Site Plan Amendment which require approval by the Planning Board.

4. APPLICATION COMPLETENESS: This application is being presented for preliminary site plan amendment approval. A number of items have been identified by Staff as elements that should be provided prior to Planning Board action is taken.

5. ZONING: The subject property is zoned Business 2 Zone (B-2), and the car wash is a conditional use within the zone.

6. WAIVERS:

The applicant is seeking two (2) waivers related to this proposed project, namely:

A. Article XI.II.5.B.4.f.1 No paving, parking or storage within setback of rear property line.

The property is required to provide a ten foot (10') setback and the proposed amendment is requesting a four foot (4') encroachment leaving approximately six feet (6') from the property line. Article XI.II.5.B. allows the Planning Board to grant a waiver of that standard.

B. Article XI.II.5.B.1. Requirement for a written engineering report for stormwater.

1) From discussing the proposed amendment with Staff Review Committee (SRC) the Planning Office was informed that the previously approved site plan was already at its maximum stormwater threshold and that a Department of Environmental Protection (DEP) permit amendment would be required.

2) The Engineering Department has also indicated that a Stormwater Management Plan should be provided as it relates to item #1 listed above.

3) Staff are concerned about how construction of the proposal will be completed without negatively impacting the adjacent wetlands (wetlands protection). Prior to further Planning Board action information related to wetland protection shall be provided.

Staff recommend that the proposed waivers are not acted upon until the above concerns have been adequately addressed.

7. STAFF RECOMMENDATION:

Staff are in general supportive of the proposed expansion as it will aid in better circulation of the site, which will meet the needs of the property owner. We further review the setback waiver as fairly minor due to the minimal four-foot (4') encroachment and due to the abutter being the Maine Turnpike. The proposal is fairly minor in nature, but concerns remain about the items outlined in the waiver section of this report. The Planning Board could do one of the following options:

A. The Board could grant preliminary site plan amendment approval at this time, with the understanding that the concerns outlined above are adequately addressed prior to final plan review.

B. The Board could table the proposal until these concerns have been addressed, and once provided, grant preliminary approval at that time.

C. The Board could table the proposal until these concerns have been addressed, and once provided, could opt to grant both preliminary and final approval at the same time.

8. Sample Motions

A. Motion to Approve project #2026.22 a Site Plan Amendment for BAW Holdings, LLC to make minor amendments to improve the functionality of Biddeford Auto Wash (BAW) at 547 Alfred Street (Tax Map 2, Lot 34-1) within the Business 2 (B-2) zone.

B. Motion to Deny project #2026.22 a Site Plan Amendment for BAW Holdings, LLC to make minor amendments to improve the functionality of Biddeford Auto Wash (BAW) at 547 Alfred Street (Tax Map 2, Lot 34-1) within the Business 2 (B-2) zone for the following reasons:

1. _____
2. _____
3. _____

C. Motion to Table project #2026.22 a Site Plan Amendment for BAW Holdings, LLC to make minor amendments to improve the functionality of Biddeford Auto Wash (BAW) at 547 Alfred Street (Tax Map 2, Lot 34-1) within the Business 2 (B-2) zone for the following reasons:

1. _____
2. _____
3. _____

CITY OF BIDDEFORD - SITE PLAN & SUBDIVISION APPLICATION DRAWING CHECKLIST *LAST REVISED: 11/26/2024*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant and included on all preliminary and final Site Plan & Subdivision submittals. No checklist is required for sketch submittals.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing substantial submittal information with non-acceptable reasoning will be rejected and required to resubmit.
4. Items in **BLACK** are required for 'Preliminary' approval & 'Final' approval.
5. Items in **BLUE** are only required for 'Final' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Carwash Site Improvements
Planning Board # (if available):	
Applicant Name/Info:	Biddeford Auto Wash
Submittal #/Type (Prelim/Final):	
Submittal Date:	4/15/2026

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE			CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	LIST DRAWING SHEET NUMBER WHERE INFORMATION IS PROVIDED	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**					
A	Drawing specific legends (linetypes, hatches, etc.)	YES	C001			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	YES	ALL			
C	North arrows, standard engineering scale viewports, scale bars, dated revision blocks	YES	ALL			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	YES	ALL			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	YES	ALL			
2	**COVER SHEET**					
A	Project Name & Property Address	YES	C001			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	YES	C001			
C	Site Location Map	YES	C001			
D	Sheet Set List of Drawings	YES	C001			
E	Tax Map and Lot ID	YES	C001			
F	Zoning & Shoreland Zone Information	YES	C001			
G	Existing Use Description	YES	C001			
H	Proposed Use Description	YES	C001			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	YES	C001			
J	Name of Drainage Watershed	YES	C001			
K	Within the MS4 Urbanized Area (Yes/No)	YES	C001			
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	YES	C001			
M	Within the 100-year Flood Zone (Yes/No)	YES	C001			
N	Public Road Proposed (Yes/No)	YES	C001			
O	Private Road Proposed (Yes/No)	YES	C001			
P	Public Sewer Connection (Yes/No)	YES	C001			
Q	Public Storm Drain Connection (Yes/No)	YES	C001			
R	Limits of Disturbance in square feet and acres	YES	C001			
S	Pervious Land Cover square footage, existing and proposed	YES	C001			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	YES	C001			
U	Building Roof square footage, existing and proposed	YES	C001			
V	Assigned Planning Board Number	NO	-	Have not received a planning board number for the project.		
W	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES	C001			
3	**EXISTING CONDITIONS PLAN**					
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	YES	C002			
B	Property & Right-of-Way Lines	YES	C002			
C	Boundary line information (bearings, distances, etc.)					
D	Property pin and monumentation locations					
E	Existing easements with proper ownership identified	YES	C002			
F	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	YES	C002			
G	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C002			
H	100-year Flood Zone Limits & Elevation	YES	C002			
I	Existing contours with adequate contour labelling; minimum 1' contour interval	YES	C002			
J	Existing building FFEs annotated	YES	C002			
K	Spot elevations for all tie-in locations (curb cuts, property line)	YES	C002			
L	Existing buildings & structures	YES	C002			
M	Existing pavement areas & number of parking spaces	YES	C002			
N	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	YES	C002			
O	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	YES	C002			
P	Existing signage and striping	YES	C002			
Q	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	YES	C002			
R	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES	C002			
S	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	NO		NOT APPLICABLE, NOT TIEING INTO ANY STRUCTURES		
T	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	NO		NOT APPLICABLE, NO TREE CLEARING PROPOSED FOR THE PROJECT		
U	Location of any borings, drinking wells, and monitoring wells	NO				
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**					
A	Limits-of-disturbance outlined and acreage annotated	YES	C002			
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C002			

C	100-year Flood Zone Limits	YES	C002			
D	Callout existing site features to be demolished/removed/replaced	YES	C002			
E	Callout existing utilities to be demolished/removed/abandoned-in-place	YES	C002			
F	Hatch existing buildings and pavement to be removed	YES	C002			
G	Construction Entrance location(s)	NO		NOT APPLICABLE		
H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	YES	C002			
I	Stockpile and staging area(s) identified (with proper perimeter control)	NO		NO STOCKPILE AND STAGING AREAS ARE NECESSARY		
J	Inlet protection location(s)	NO		NO CB'S WITHIN LIMIT OF WORK		
K	Note requiring contractor to implement dust control measures throughout construction	YES	C002			
L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	NO		NO UTILITY TRENCHES WITHIN R-O-W ARE PROPOSED		
M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	NO		NOT APPLICABLE		
N	If large development is proposed with an extensive underground stormwater conveyance network, identify how SWM infrastructure and BMPs will be protected during construction and if sediment traps/basins are needed	NO		NOT APPLICABLE		
5	**SITE PLAN/SUBDIVISION PLAN**					
A	Partial Site Plans needed for any viewport scale greater than 1"=20'	NO		NOT APPLICABLE		
B	Existing property and right-of-way lines	YES	C101			
C	Proposed subdivision lot lines and labels	YES	C101			
D	Required Zoning Setbacks shown with dimensions and annotation	YES	C101			
E	Bulk requirement summary table (zoning/parking calculations)	YES	C101			
F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C101			
G	100-year Flood Zone Limits	YES	C101			
H	Proposed building outlines, door entrances and loading docks	YES	C101			
I	Proposed building labels	YES	C101			
J	Proposed road & sidewalk extents; provide clear annotation if roads will be public or private	YES	C101	ALL PROPOSED WORK IS CONSIDERED PRIVATE		
K	Proposed parking and accessible parking locations; annotate parking space counts	YES	C101			
L	Proposed signage, parking striping, and traffic striping	YES	C101			
M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	YES	C101			
N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	YES	C101			
O	Proposed landscaping; detailed landscaping design should be shown on separate plans	NO		NOT APPLICABLE		
P	Designated snow storage areas	NO		NA, EXISTING SNOW STORAGE LOCATIONS ARE NOT CHANGING		
Q	Proposed dumpster locations and trash removal access	NO		NA, NO PROPOSED DUMPSTERS		
R	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	YES	C101			
S	Radial dimensions for all curbs, landscaped islands, sidewalks	YES	C101			
T	Public/private road centerline stationing shown, labelled every 0+50' with curve data	YES	C101			
U	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	NO		NOT APPLCIABLE		
V	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	NO		NOT APPLCIABLE		
W	Planning Board signature block for final recording	YES	C101			
6	**GRADING PLAN**					
A	Partial Grading Plans needed for any viewport greater than 1"=20'					
B	Limits-of-disturbance outlined and acreage annotated	YES	C102			
C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	YES	C102			
D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	YES	C102			
E	Proposed contours with adequate contour labelling; minimum 1' contour interval	YES	C102			
F	Detailed grading for all ditches, swales, outfalls, and riprap	YES	C102			
G	All proposed contours tie-into existing contours at limits-of-disturbance outline	YES	C102			
H	Existing spot elevations for all asphalt, curb, and SWM BMP tie-in locations	YES	C102			
I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C102			
J	100-year Flood Zone Limits	YES	C102			
K	Proposed spot elevations for all important roadway geometric points (including but not limited to: parking/drive aisles, building corners/entrances, retaining walls, loading docks, EOP/curblines)	YES	C102			
L	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	NO		NOT PROPOSING CHANGE		
M	Proposed % slope arrows for all ADA parking spaces and sidewalks	NO		NOT PROPOSING CHANGE		
N	Proposed longitudinal % slope arrows for drainage ditch centerlines	NO		NOT PROPOSING CHANGE		
O	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	NO		NOT PROPOSING CHANGE		
P	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	NO		MININMAL CUT/FILL EXPECTED		
7	**ROAD PROFILES (if public/private road proposed)**	NO		PROPOSED WORK IS A MODIFICATION FROM EXISTING ACCESSWAY AND GEOMETRIC PROPERTIES OF ACCESSWAY ARE NOT CHANGING.		
A	Existing surface; dashed and screened	NO				
B	Proposed surface; continuous and bold	NO				
C	Road design speed must be clearly identified	NO				
D	Corresponding centerline stationing and curve data annotation	NO				
E	All vertical curves must identify the proposed 'K' values and confirm they meet the minimum design speed thresholds listed in AASHTO's Green Book Tables 3-35 & 3-37	NO				
F	Clear annotation if proposed road will be public or private	NO				
G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	NO				
H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	NO				
8	**UTILITY PLAN**					

A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	YES	C101			
B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	YES	C101			
C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	NO		NOT TIEING INTO ANY STRUCTURES		
D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	YES	C101			
E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES	C101			
F	Proposed storm culverts, outfalls, and riprap locations and sizes	NO		NOT APPLICABLE		
G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO		NOT APPLICABLE		
H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	NO		NOT APPLICABLE		
I	Flow directional arrows for storm & sewer pipes	NO		NOT APPLICABLE		
J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	YES	C101			
K	All storm drains must be sized to convey the 25-year storm	NO		NOT APPLICABLE		
L	Sewer force main sizes and invert elevations	NO		NOT APPLICABLE		
M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W); additional details and hydraulic calculations required for any Public pump station proposed.	NO		NOT APPLICABLE		
N	Locations, sizes, and elevations of any: grease traps, oil-water separators, septic systems, drinking wells	NO		NOT APPLICABLE		
O	Proposed water sizes labelled	NO		NOT APPLICABLE		
9	**UTILITY PROFILES**	NO		NO CHANGES TO EXISTING SD, SEWER, WATER, GAS		
A	Utility profiles required for **all** gravity storm drain and sewer pipes proposed: within the right-of-way, within private or public roads, for non-driveway culverts, and for any public infrastructure tie-ins					
B	Existing surface; dashed and screened					
C	Proposed surface; continuous and bold					
D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)					
E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope					
F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated					
G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated					
10	**DETAILS**					
A	Road section detail, including pavement/gravel depths & cross slopes	YES	C201			
B	Sidewalk, paver, crosswalk, and any other pavement section details	YES	C201			
C	Pavement sawcut & shiplap details	YES	C201			
D	Utility trench/backfill detail	NO		NOT APPLICABLE		
E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	YES	C201			
F	Signage, striping, and ADA details	NO		NOT APPLICABLE		
G	E&S notes and details	YES	C202			
H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	NO		NOT APPLICABLE		
I	Storm outfall & riprap details	NO		NOT APPLICABLE		
J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	NO		NOT APPLICABLE		
K	Pump station, grease trap, oil-water separator, septic, drinking well details	NO		NOT APPLICABLE		
L	Conduit section details	NO		NOT APPLICABLE		
11	**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**					
A	As required by ordinance; at a minimum: locations, counts, lighting models, and landscaping species must be identified	NO				
B	Landscaping & lighting details	NO				
12	**DOCUMENTS/REPORTS/CALCULATIONS**					
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction v. Site Punchlist/As-Built Inspections post-construction	YES				

B	Stormwater Management Report, including: 1. Predevelopment & Post-development Drainage Area Maps, including: a. Subdrainage areas delineated and labeled b. Points of Interest/Analysis shown and labeled c. Hatching for different land cover areas (impervious, pervious, gravel) within each applicable USDA soil boundary d. Time of concentration (Tc) paths & durations e. Four City-standardized stormwater summary tables 2. If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies 3. Sizing calculations for any SWM water quality BMP or detention facility 4. A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: a. Annual maintenance requirements b. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed c. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	NO		WAIVER REQUESTED		
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	NO		NOT APPLCIABLE		
D	A Performance Guarantee Cost Estimate utilizing Planning's template	NO		APPLICANT REQUESTS THAT A PERFORMANCE GUARANTEE SHALL BE PROVIDED AS A CONDITION OF APPROVAL		
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	NO		NOT APPLCIABLE		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches); starting tailwater conditions/documentation must be clearly identified	NO		NOT APPLCIABLE		
K	Public sewer pump station sizing calculations and maintenance plan	NO		NOT APPLCIABLE		
M	Grease trap sizing calculations	NO		NOT APPLCIABLE		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	NO		NOT APPLCIABLE		
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	NO		NOT APPLCIABLE		

CITY OF BIDDEFORD, MAINE

MINOR SITE PLAN AMENDMENT APPLICATION AND WAIVER REQUEST

Project:

BIDDEFORD AUTO WASH
LANE WIDENING
547 ALFRED ROAD

Applicant:

BAW HOLDINGS, LLC
4 SCAMMON STREET
SUITE 19-311
SACO, MAINE 04072

APRIL 15, 2026

Prepared by:

Site Design Associates

23 Whitney Way
Topsham, Maine 04086
Ph: 207-449-4275
Email: info@sitedesignassociates.biz

Site Design Associates
Consulting Engineering and Land Planning

April 14, 2026

David Galbraith, City Planner
City of Biddeford
P.O. Box 586
205 Main Street
Biddeford, ME 04005

RE: 547 Alfred Street
Biddeford Auto Wash
Proposed Lane Widening – Amended Site Plan

Dear David:

On behalf of BAW Holdings, LLC, Site Design Associates is pleased to submit the enclosed plans and documentation in support of an application for a minor Site Plan Amendment for widening of the drive approaching the wash entrances.

We have included the following information in support of this application:

- Formal Site Plan Review Application
- City Drawing Checklist
- Letter of Agent Authorization
- Deed
- Drawings
  - C001 – Cover Sheet
  - C002 – Existing Conditions, Demolition, and Erosion Control Plan
  - C101 – Site Plan
  - C204 – Details
  - C202 – Erosion and Sedimentation Control Notes

We understand that we will be advised of the application fee. The car wash is a conditional use in the B2 zone. We have developed a a drawing reflecting some minor revisions to the site plan for the car wash at this address. The changes involve improving the functionality of the facility with some minor pavement widening, installation of curb, a minor relocation of two light poles, and removal of a portion of guard rail to accommodate the widening. If not for the conditional use, the proposed paving of approximately 800 s.f. of gravel and stone would not exceed any threshold requiring site plan review. Section 4.B.1.E.of Article XI, Site Plan Review, indicates that development subject to a conditional use permit that results in the creation of less than 5,000 s.f. of new impervious surface qualifies for minor site plan review; however, the areas where the new paving is proposed consist of a gravel and stone surface, generally considered impervious surfaces under Chapter 500 Maine DEP Stormwater Rules.

As originally approved, the car wash had four touch free wash bays. The one lane access functioned adequately based on that use. The tunnel was added a few years ago. Since then, the owner has noted that the tunnel is not operating as efficiently as it should be due to the one lane access to the two remaining touch free bays and the tunnel.

If four cars are queuing in the drive for the Touch Free wash (at roughly 12 minutes per wash), the express tunnel wash customers must wait in the line behind them for the tunnel, which can process 100 plus cars an hour. The queue continues to grow and backs up with the coffee customers, eventually reaching the main access into the property. This congestion and associated traffic and safety hazard can be alleviated with an additional entrance lane providing separate access for the Touch Fee and tunnel customers, resulting in greater throughput efficiency and much improved site circulation.

It is our understanding that typically a project of this nature and size would be reviewed by the staff review committee. However, the widening of the pavement must extend into the 10 ft side setback. According to Article XI.II.5.B. a waiver of that standard is permitted. Therefore, a waiver of Article XI.II.5.B.4.f.1. which states no paving, parking, or storage shall be permitted within the required setback of any side or rear property line is required. In discussing the proposal with planning staff, they indicated the staff review committee could not approve a waiver, and the request must be made to the planning board.

In support of this waiver, in addition to the efficiency and access improvements to be gained; the purpose of buffering, and we assume the restriction on paving in the setback, is to protect neighboring properties from detrimental or unsightly features of the development. The neighbor in this case is the Maine Turnpike Authority (MTA). There will be no change in the view of this property from the turnpike if this waiver is granted.

Due to the constrained nature of the site and the location of existing buildings, circulation drives, and utilities, the proposed widening must occur along the existing frontage drive aisle adjacent to the property boundary. The improvements represent a continuation and minor expansion of an existing paved area rather than the introduction of new development or a change in site use.

The proposed encroachment is limited in extent and is necessary to achieve functional site circulation. The current single-lane configuration has been identified as operationally deficient, resulting in vehicle stacking and conflicts between users of the touch-free wash bays and the higher-throughput tunnel wash. The addition of a second entrance lane allows for separation of these traffic movements, improving efficiency and reducing the potential for on-site congestion and queue spillback.

The proposed improvements will not adversely impact abutting properties, as the work occurs within an already developed and previously disturbed portion of the site, no new structures are proposed within the setback, and the modification does not introduce new uses or intensify activity near the property boundary. The proposed design does not impact the existing retaining wall.

Given the physical constraints of the site, there are no reasonable alternative design configurations that would achieve the necessary circulation improvements while fully complying with setback requirements.

We believe the requested waiver is therefore justified as there is no actual increase in the encroachment into the setback by development, no adverse impacts to abutting properties are anticipated, and the proposed design represents the most practical solution given site constraints.

Given the use of the abutting property, and the fact that there will be no alteration of the visual appearance of the property due to the granting of the waiver, that the planning board will support this request.

We have reviewed the Site Design Criteria of Article XI.II.5. B. and find that none appear to be applicable or impacted by this proposal. A case could be made that a waiver of section 5.B.1., Drainage may be required, so we have included that waiver request on the application form. The proposed project consists of widening an existing access drive aisle to improve internal site circulation and includes minor utility adjustments necessary to accommodate the additional lane. The work represents a limited modification to an already developed and fully functioning site and does not involve redevelopment of the site or the construction of new drainage infrastructure, aside from the paving of a small existing lawn area located between the existing edge of pavement and retaining wall to accommodate the proposed access improvements.

The existing site is currently serviced by established drainage systems that convey runoff to existing discharge points. The proposed improvements will not alter drainage patterns, redirect flows, or introduce new points of discharge. No drainage easements, detention structures, or downstream improvements are proposed or required as part of this work. Given the limited scope of the project, the requirements outlined in this ordinance section including but not limited to the analysis of pre- and post-development runoff, preparation of a detailed drainage report, provision of drainage easements, and evaluation of downstream impacts are not applicable and would be disproportionate to the nature of the proposed improvements.

The intent of the ordinance is to ensure that development does not create adverse drainage impacts or burden downstream systems. As the proposed project does not meaningfully change runoff characteristics or site drainage behavior, that intent continues to be met.
We believe the requested waiver is therefore justified as the project represents a minor modification to an existing developed site, does not include new or modified drainage infrastructure, does not alter drainage patterns or discharge locations, and will not result in adverse downstream impacts.

Given that the project involves paving of currently gravel and stone areas, and impacts approximately 800 s.f. of area, there will be no impact on stormwater runoff.

In reviewing the conditional use standards of Article VII.6.B. of the land development regulations, it appears there will be no negative impact on these standards, and some improvements in regards to some of the standards.

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws.
2. The proposed use would not create fire safety hazards and actually would provide improved access to the site, and to the buildings on the site, for emergency vehicles.
3. No impact on exterior lighting.
4. No impact. The purpose of buffering is to protect neighboring properties from detrimental or unsightly features of the development. There would be no unsightly features associated with this proposal, and the neighbor in this case is the Maine Turnpike Authority (MTA).
5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes; again the abutter is the MTA.
6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion. Not applicable.
7. The proposed revision would result in safer and more efficient vehicle movement into and out of the site and alleviate congestion.
8. No impact on the value of adjacent properties which could be avoided by reasonable modification of the proposal.
9. No impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal.
10. The proposed revision would be in compliance with Biddeford's Comprehensive Plan.
11. The proposed revision would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and historical character, or visual integrity, which could be avoided by reasonable modification of the proposal.
12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements.
13. Adequate provision is made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination.
14. Adequate provision has been and will continue to be made to control erosion or sedimentation;
15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems. No impact.
16. The proposed water supply would meet the demands of the proposed use for fire protection purposes. No impact.

17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law. No impact.
18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal. No impact.

Please let me know if staff has any questions, comments, or suggestions relative to this proposal. We look forward to meeting with the staff review committee at the next available meeting to discuss this project.

Sincerely,
Site Design Associates

Tom Saucier, P.E.
President

Attachment 1
Formal Site Plan Review Application

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit x Site Plan Review (Please include checklist) __ Extraction
__ Conditional Use Permit __ Subdivision __ Private Way
__ Other: _____

Applicant Information:

Name: BAW Holdings, LLC
Mailing Address: 4 Scammon Street Suite 19-311 Saco, ME 04072
Telephone: [redacted]

What is your legal interest in the property?

x Owner __ Potential Buyer with Contract __ Lease/Rental Agreement

Owner's Information:

Name: Same as applicant
Mailing Address: _____
Telephone: _____
Email: _____

Agent's Information:

Name: Tom Saucier Site Design Associates
Mailing Address: 23 Whitney Way Topsham, ME 04086
Telephone: [redacted]

Engineer/Surveyor's Information:

Name: Agent
Mailing Address: _____
Telephone: _____
Email: _____

Project Location and Lot Information:

Street Address: 547 Alfred Road Drainage Watershed: Thacher Brook
Tax Map: 2 Lot: 34-1
Current Zoning: B2 Shoreland Zoning: _____
Size of Lot: 0.9 (x)acres ( )s.f. Lot Frontage: 275 ft +/-
Existing Use of Property: Car wash, drive through coffee

Property currently serviced by:

x City Road x Public Sewer x Public Water __ Public Trash
__ Private Road __ Septic System __ Private Well x Private Hauler

Slope Conditions in Area of Construction (if applicable):

x Flat (0-3% slope) __Rolling (3-8% slope) __Hilly (8-15% slope) __Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? x (Yes) __(No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes) x (No) if yes attach information
Do you plan to bring fill onto the lot? __(Yes) x (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:
No change from existing use

Property to be Serviced by:

X City Road X Public Sewer X Public Water __ Public Trash
__ Private Road __ Septic System __ Private Well X Private Hauler

Limits of Disturbance: 800 ( )acres (X)s.f.
Net change in impervious cover: 0 ( )acres (X)s.f.
Is this project part of a larger project? __(Yes) X (No)
Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) X (No)
Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) X (Yes) __(No)
Is the project proposing any Stormwater facilities/BMPs? __(Yes) X (No)
Will a Traffic Movement Permit (TMP) be required?: __(Yes) X (No)

__ **If in a Shoreland Zone:**
Percent of residential lot coverage (Max 20%): _____
Percent of structure expansion (Max 30%): _____
__ **If Subdivision Review, number of lots proposed:** _____
__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: 0
Total new square feet paving/parking: 800 sf +/- in areas currently gravel and stone

Waiver Requests (attach details):

1. Article XI.II.5.B.4.f.1. No paving, parking, or storage shall be permitted within the required
2. setback of any side or rear property line;
3. Article XI.II.5.B.1. - Requirement for a written engineering report for stormwater
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval
__ Fire Department – Contact Chief or Deputy Chief – 282-9986
__ Ability to Serve for Water Service – Maine Water – 282-1543
__ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
__ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
__ Ability to Serve for Electrical Service-CMP-1-866-225-4200
X Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

B. Photographs of Site.
C. Architectural renderings/drawings of proposed buildings, as required.
D. Engineering Plans, as required.
E. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance? __(Yes) __(No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: _____ **Date** _____

Signature of Property Owner: _____ **Date** _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

Attachment 2
Checklist

CITY OF BIDDEFORD - SITE PLAN & SUBDIVISION APPLICATION DRAWING CHECKLIST *LAST REVISED: 11/26/2024*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant and included on all preliminary and final Site Plan & Subdivision submittals. No checklist is required for sketch submittals.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing substantial submittal information with non-acceptable reasoning will be rejected and required to resubmit.
4. Items in **BLACK** are required for 'Preliminary' approval & 'Final' approval.
5. Items in **BLUE** are only required for 'Final' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	Carwash Site Improvements
Planning Board # (if available):	
Applicant Name/Info:	Biddeford Auto Wash
Submittal #/Type (Prelim/Final):	
Submittal Date:	4/15/2026

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE			CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	LIST DRAWING SHEET NUMBER WHERE INFORMATION IS PROVIDED	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**					
A	Drawing specific legends (linetypes, hatches, etc.)	YES	C001			
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	YES	ALL			
C	North arrows, standard engineering scale viewports, scale bars, dated revision blocks	YES	ALL			
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	YES	ALL			
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	YES	ALL			
2	**COVER SHEET**					
A	Project Name & Property Address	YES	C001			
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	YES	C001			
C	Site Location Map	YES	C001			
D	Sheet Set List of Drawings	YES	C001			
E	Tax Map and Lot ID	YES	C001			
F	Zoning & Shoreland Zone Information	YES	C001			
G	Existing Use Description	YES	C001			
H	Proposed Use Description	YES	C001			
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	YES	C001			
J	Name of Drainage Watershed	YES	C001			
K	Within the MS4 Urbanized Area (Yes/No)	YES	C001			
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	YES	C001			
M	Within the 100-year Flood Zone (Yes/No)	YES	C001			
N	Public Road Proposed (Yes/No)	YES	C001			
O	Private Road Proposed (Yes/No)	YES	C001			
P	Public Sewer Connection (Yes/No)	YES	C001			
Q	Public Storm Drain Connection (Yes/No)	YES	C001			
R	Limits of Disturbance in square feet and acres	YES	C001			
S	Pervious Land Cover square footage, existing and proposed	YES	C001			
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	YES	C001			
U	Building Roof square footage, existing and proposed	YES	C001			
V	Assigned Planning Board Number	NO	-	Have not received a planning board number for the project.		
W	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES	C001			
3	**EXISTING CONDITIONS PLAN**					
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	YES	C002			
B	Property & Right-of-Way Lines	YES	C002			
C	Boundary line information (bearings, distances, etc.)					
D	Property pin and monumentation locations					
E	Existing easements with proper ownership identified	YES	C002			
F	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	YES	C002			
G	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C002			
H	100-year Flood Zone Limits & Elevation	YES	C002			
I	Existing contours with adequate contour labelling; minimum 1' contour interval	YES	C002			
J	Existing building FFEs annotated	YES	C002			
K	Spot elevations for all tie-in locations (curb cuts, property line)	YES	C002			
L	Existing buildings & structures	YES	C002			
M	Existing pavement areas & number of parking spaces	YES	C002			
N	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	YES	C002			
O	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	YES	C002			
P	Existing signage and striping	YES	C002			
Q	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	YES	C002			
R	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES	C002			
S	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	NO		NOT APPLICABLE, NOT TIEING INTO ANY STRUCTURES		
T	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	NO		NOT APPLICABLE, NO TREE CLEARING PROPOSED FOR THE PROJECT		
U	Location of any borings, drinking wells, and monitoring wells	NO				
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**					
A	Limits-of-disturbance outlined and acreage annotated	YES	C002			
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C002			
C	100-year Flood Zone Limits	YES	C002			

D	Callout existing site features to be demolished/removed/replaced	YES	C002			
E	Callout existing utilities to be demolished/removed/abandoned-in-place	YES	C002			
F	Hatch existing buildings and pavement to be removed	YES	C002			
G	Construction Entrance location(s)	NO		NOT APPLICABLE		
H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	YES	C002			
I	Stockpile and staging area(s) identified (with proper perimeter control)	NO		NO STOCKPILE AND STAGING AREAS ARE NECESSARY		
J	Inlet protection location(s)	NO		NO CB'S WITHIN LIMIT OF WORK		
K	Note requiring contractor to implement dust control measures throughout construction	YES	C002			
L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	NO		NO UTILITY TRENCHES WITHIN R-O-W ARE PROPOSED		
M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	NO		NOT APPLICABLE		
N	If large development is proposed with an extensive underground stormwater conveyance network, identify how SWM infrastructure and BMPs will be protected during construction and if sediment traps/basins are needed	NO		NOT APPLICABLE		
5	**SITE PLAN/SUBDIVISION PLAN**					
A	Partial Site Plans needed for any viewport scale greater than 1"=20'	NO		NOT APPLICABLE		
B	Existing property and right-of-way lines	YES	C101			
C	Proposed subdivision lot lines and labels	YES	C101			
D	Required Zoning Setbacks shown with dimensions and annotation	YES	C101			
E	Bulk requirement summary table (zoning/parking calculations)	YES	C101			
F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C101			
G	100-year Flood Zone Limits	YES	C101			
H	Proposed building outlines, door entrances and loading docks	YES	C101			
I	Proposed building labels	YES	C101			
J	Proposed road & sidewalk extents; provide clear annotation if roads will be public or private	YES	C101	ALL PROPOSED WORK IS CONSIDERED PRIVATE		
K	Proposed parking and accessible parking locations; annotate parking space counts	YES	C101			
L	Proposed signage, parking striping, and traffic striping	YES	C101			
M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	YES	C101			
N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	YES	C101			
O	Proposed landscaping; detailed landscaping design should be shown on separate plans	NO		NOT APPLICABLE		
P	Designated snow storage areas	NO		NA, EXISTING SNOW STORAGE LOCATIONS ARE NOT CHANGING		
Q	Proposed dumpster locations and trash removal access	NO		NA, NO PROPOSED DUMPSTERS		
R	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	YES	C101			
S	Radial dimensions for all curbs, landscaped islands, sidewalks	YES	C101			
T	Public/private road centerline stationing shown, labelled every 0+50' with curve data	YES	C101			
U	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	NO		NOT APPLCIABLE		
V	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	NO		NOT APPLCIABLE		
W	Planning Board signature block for final recording	YES	C101			
6	**GRADING PLAN**					
A	Partial Grading Plans needed for any viewport greater than 1"=20'					
B	Limits-of-disturbance outlined and acreage annotated	YES	C102			
C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	YES	C102			
D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	YES	C102			
E	Proposed contours with adequate contour labelling; minimum 1' contour interval	YES	C102			
F	Detailed grading for all ditches, swales, outfalls, and riprap	YES	C102			
G	All proposed contours tie-into existing contours at limits-of-disturbance outline	YES	C102			
H	Existing spot elevations for all asphalt, curb, and SWM BMP tie-in locations	YES	C102			
I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES	C102			
J	100-year Flood Zone Limits	YES	C102			
K	Proposed spot elevations for all important roadway geometric points (including but not limited to: parking/drive aisles, building corners/entrances, retaining walls, loading docks, EOP/curblines)	YES	C102			
L	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	NO		NOT PROPOSING CHANGE		
M	Proposed % slope arrows for all ADA parking spaces and sidewalks	NO		NOT PROPOSING CHANGE		
N	Proposed longitudinal % slope arrows for drainage ditch centerlines	NO		NOT PROPOSING CHANGE		
O	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	NO		NOT PROPOSING CHANGE		
P	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	NO		MININMAL CUT/FILL EXPECTED		
7	**ROAD PROFILES (if public/private road proposed)**	NO		PROPOSED WORK IS A MODIFICATION FROM EXISTING ACCESSWAY AND GEOMETRIC PROPERTIES OF ACCESSWAY ARE NOT CHANGING.		
A	Existing surface; dashed and screened	NO				
B	Proposed surface; continuous and bold	NO				
C	Road design speed must be clearly identified	NO				
D	Corresponding centerline stationing and curve data annotation	NO				
E	All vertical curves must identify the proposed 'K' values and confirm they meet the minimum design speed thresholds listed in AASHTO's Green Book Tables 3-35 & 3-37	NO				
F	Clear annotation if proposed road will be public or private	NO				
G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	NO				
H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	NO				
8	**UTILITY PLAN**					
A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	YES	C101			

B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	YES	C101			
C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	NO		NOT TIEING INTO ANY STRUCTURES		
D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	YES	C101			
E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES	C101			
F	Proposed storm culverts, outfalls, and riprap locations and sizes	NO		NOT APPLICABLE		
G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO		NOT APPLICABLE		
H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	NO		NOT APPLICABLE		
I	Flow directional arrows for storm & sewer pipes	NO		NOT APPLICABLE		
J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	YES	C101			
K	All storm drains must be sized to convey the 25-year storm	NO		NOT APPLICABLE		
L	Sewer force main sizes and invert elevations	NO		NOT APPLICABLE		
M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W); additional details and hydraulic calculations required for any Public pump station proposed.	NO		NOT APPLICABLE		
N	Locations, sizes, and elevations of any: grease traps, oil-water separators, septic systems, drinking wells	NO		NOT APPLICABLE		
O	Proposed water sizes labelled	NO		NOT APPLICABLE		
9	**UTILITY PROFILES**	NO		NO CHANGES TO EXISTING SD, SEWER, WATER, GAS		
A	Utility profiles required for **all** gravity storm drain and sewer pipes proposed: within the right-of-way, within private or public roads, for non-driveway culverts, and for any public infrastructure tie-ins					
B	Existing surface; dashed and screened					
C	Proposed surface; continuous and bold					
D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)					
E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope					
F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated					
G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated					
10	**DETAILS**					
A	Road section detail, including pavement/gravel depths & cross slopes	YES	C201			
B	Sidewalk, paver, crosswalk, and any other pavement section details	YES	C201			
C	Pavement sawcut & shiplap details	YES	C201			
D	Utility trench/backfill detail	NO		NOT APPLICABLE		
E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	YES	C201			
F	Signage, striping, and ADA details	NO		NOT APPLICABLE		
G	E&S notes and details	YES	C202			
H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	NO		NOT APPLICABLE		
I	Storm outfall & riprap details	NO		NOT APPLICABLE		
J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	NO		NOT APPLICABLE		
K	Pump station, grease trap, oil-water separator, septic, drinking well details	NO		NOT APPLICABLE		
L	Conduit section details	NO		NOT APPLICABLE		
11	**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**					
A	As required by ordinance; at a minimum: locations, counts, lighting models, and landscaping species must be identified	NO				
B	Landscaping & lighting details	NO				
12	**DOCUMENTS/REPORTS/CALCULATIONS**					
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction	YES				

B	Stormwater Management Report, including: 1. Predevelopment & Post-development Drainage Area Maps, including: a. Subdrainage areas delineated and labeled b. Points of Interest/Analysis shown and labeled c. Hatching for different land cover areas (impervious, pervious, gravel) within each applicable USDA soil boundary d. Time of concentration (Tc) paths & durations e. Four City-standardized stormwater summary tables 2. If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies 3. Sizing calculations for any SWM water quality BMP or detention facility 4. A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: a. Annual maintenance requirements b. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed c. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	NO		WAIVER REQUESTED		
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	NO		NOT APPLCIABLE		
D	A Performance Guarantee Cost Estimate utilizing Planning's template	NO		APPLICANT REQUESTS THAT A PERFORMANCE GUARANTEE SHALL BE PROVIDED AS A CONDITION OF APPROVAL		
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	NO		NOT APPLCIABLE		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches); starting tailwater conditions/documentation must be clearly identified	NO		NOT APPLCIABLE		
K	Public sewer pump station sizing calculations and maintenance plan	NO		NOT APPLCIABLE		
M	Grease trap sizing calculations	NO		NOT APPLCIABLE		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	NO		NOT APPLCIABLE		
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	NO		NOT APPLCIABLE		

Attachment 3
Agent Authorization

April 13, 2026

Mr Tom Saucier
Site Design Associates
23 Whitney Way
Topsham, Maine 04086

TO WHOM IT MAY CONCERN:

This letter authorizes Tom Saucier, Site Design Associates, to serve as an agent for BAW Holdings, LLC for the purpose of submitting a site plan application and obtaining a waiver from the City of Biddeford to allow for increased site circulation at Biddeford Auto Wash at 547 Alfred Street Biddeford, Maine 04005.

Sincerely,

BAW HOLDINGS, LLC

Attachment 4
Deed

BK 17162 PGS 796 - 798 01/05/2016 09:16:26 AM
INSTR # 2016000296 DEBRA ANDERSON
RECEIVED YORK SS REGISTER OF DEEDS

SHORT FORM WARRANTY DEED

(Maine Statutory Short Form)

NEW LIFE CHRISTIAN FELLOWSHIP, a Maine religious, non-profit corporation having its principal offices in the City of Biddeford, County of York and State of Maine with a mailing address of 551 Alfred Road, Biddeford, Maine 04005, FOR CONSIDERATION PAID, grants to **BAW HOLDINGS LLC,** a Maine limited liability company, with a mailing address of 2 Antonini Court, Vaughan, ON Canada L6A 4R2 with WARRANTY COVENANTS, certain real property, located at Alfred Street, a/k/a Route 111, in the City of Biddeford, County of York and State of Maine and more particularly described on EXHIBIT A attached hereto and hereby made a part hereof.

Maine R.E. Transfer Tax Paid

Being a portion of the premises conveyed to New Life Christian Fellowship by virtue of a Warranty Deed from Jeffrey A. Tarbox dated March 29, 2002 and recorded in the York County Registry of Deeds in Book 11547, Page 222 and a Warranty Deed granted by Juliette H. Eon dated July 6, 1984 and recorded at said Registry of Deeds in Book 3331, Page 94.

IN WITNESS WHEREOF, New Life Christian Fellowship has caused this instrument to be signed and sealed by Jeffrey A. Tarbox , its duly appointed President , this 31st day of December, 2015.

WITNESSETH:

Alan H. Nelson

NEW LIFE CHRISTIAN FELLOWSHIP

By: _____
Name: Jeffrey A. Tarbox
Its: President

State of Maine
County of Cumberland, ss.

December 31, 2015

Then personally appeared the above-named Jeffrey A. Tarbox, in his capacity as President of New Life Christian Fellowship and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of New Life Christian Fellowship.

Before me,

Alan H. Nelson
Name: ALAN H. NELSON
~~Notary Public~~/ Attorney-at-Law

3P

Bernstein, Shur, Sawyer & Nelson
100 Middle St. P.O. Box 9729
Portland, ME 04104-5029
RS

EXHIBIT A

Parcel A:

A certain lot or parcel of land together with the buildings thereon, situated on the Southerly side of Alfred Road, so-called, also known as Route #111, in the City of Biddeford, County of York and State of Maine, and being more fully bounded and described as follows:

Beginning at an iron rod set in the ground in the Southerly sideline of said Alfred Road at remaining land of the New Life Advent Christian Church, now known as New Life Christian Fellowship, as more fully described in deed recorded in the York County Registry of Deeds in Book 3331, Page 94; thence South 27° 27' West, along said remaining land of said New Life Advent Christian Church 350 feet to an iron rod set in the ground; thence South 39° 05' East, still by land of said New Life Advent Christian Church, 79.71 feet to an oak stake set; thence North 50° 55' East by land of the Maine Turnpike, as set forth in Plan recorded in said Registry in Plan Book 13, Pages 48 and 49, 528.34 feet to a monument set in the ground in the Southerly sideline of said Alfred Road; thence North 77° 26' West along said sideline of said Alfred Road, 84.06 feet to a monument set in the ground; thence North 84° 27' West, still by said Alfred Road, 218 feet to point of beginning.

Excepting from the above-described parcel that portion, if any, described in the second parcel in deed from New Life Christian Fellowship to Biddeford Crossing LLC dated September 13, 2005 and recorded at the York County Registry of Deeds in Book 14602, Page 667.

Parcel B:

A certain lot or parcel of land located in the City of Biddeford, County of York and State of Maine, situated on the Southerly side of Alfred Road, so-called, also known as Route #111, and being more fully bounded and described as follows:

Beginning at a set iron rod with survey cap bearing #2104 located on the apparent Southerly sideline of the Alfred Road, also known as Route #111, in said City of Biddeford, said iron rod being also located South 76° 35' 04" East a distance of 483.69 feet from a found iron rod three-quarters inch and flush; and said set iron rod being also located North 79° 04' 35" West a distance of 183.45 feet along the apparent Southerly sideline of said Alfred Road from an iron rod found with survey cap; thence South 20° 30' 54" West a distance of 231.35 feet by remaining land of New Life Christian Fellowship to a set iron rod bearing survey cap #2104, said iron rod being located North 42° 34' 42" West a distance of 111.42 feet from a found iron rod with survey cap; thence South 42° 34' 42" East by remaining land of New Life Christian Fellowship to the Westerly sideline of land of New Life Christian Fellowship currently leased to Biddeford Auto Wash, LLC by a Ground Lease Agreement from New Life Christian Fellowship, as lessor, dated June 21, 2007, more specifically referred to in the Memorandum of Lease recorded in the York County Registry of Deeds in Book 15194, Page 219 (as amended the "Lease"); thence North by the Westerly sideline of the aforesaid premises leased to Biddeford Auto Wash, LLC to the apparent Southerly sideline of the Alfred Road, also known as Route #111; thence Northwesterly by the apparent Southerly sideline of the Alfred Road, a/k/a Route #111, to the iron rod set with survey cap bearing #2104 and the point of beginning.

The compass courses stated herein are Magnetic Meridian 2015.

SUBJECT TO the rights of Biddeford Auto Wash, LLC, its successors, assigns, business invitees and social invitees to pass and repass by foot and by vehicle and to install, maintain, repair and replace utility services to its leased premises in, under, but not over , the existing Access Road located at the Southerly end of the parcel herein conveyed and leading from the Westerly sideline of the Property now or formerly leased by Biddeford Auto Wash, LLC from New Life Christian Fellowship by the Lease, as Amended, as aforesaid, to the Easterly sideline of the Primary Access Road of New Life Christian Fellowship, which Primary Access Road extends Northerly to the Southerly sideline of the Alfred Road, also known as Route #111, said Primary Access Road being the north-south leg of the road labelled "Access Road" on a sketch entitled "Mortgage Inspection Survey BAW Holdings LLC" prepared by Paul P, Gadbois PLS, dated December 30, 2015.

New Life Christian Fellowship agrees for itself its successors and assigns that the Primary Access Road will not be relocated without the prior written consent of BAW Holdings LLC and Biddeford Auto Wash LLC, or their respective successors or assigns.

TOGETHER WITH a Right-of-Way and Utility Easement for BAW Holdings LLC, its successors and assigns, business invitees and social invitees to pass and repass by foot and by vehicle and to install, maintain, repair and replace utility services to the subject premises in, under, but not over, the existing Access Road of Biddeford Auto Wash, LLC which extends from the Westerly sideline of the subject premises of Biddeford Auto Wash, LLC, as aforesaid, to the Easterly sideline of the primary Access Road of New Life Christian Fellowship, which primary Access Road extends Northerly to the Southerly sideline of the said Alfred Road.; provided that BAW Holdings LLC, its successors and assigns shall be responsible for and shall pay a pro rata share of the costs, of maintaining and snowplowing this Right-of Way Access Road to its junction with the primary Access road of New Life Christian Fellowship.

TOGETHER WITH a Right-of-Way and Utility Easement for BAW Holdings LLC, its successors and assigns, business invitees and social invitees to pass and repass by foot and by vehicle and to install, maintain, repair and replace utility services to the subject premises in, under, but not over, the Primary Access Road of New Life Christian Fellowship, which primary Access Road extends Northerly to the Southerly sideline of the said Alfred Road; and further provided that BAW Holdings LLC, its successors and assigns shall be further responsible to pay a pro rata share of the costs of maintaining and snowplowing the primary Access Road of New Life Christian Fellowship to its junction with the Southerly sideline of the Alfred Road after a Building Permit to erect a structure upon the within conveyed Premises has issued.

TOGETHER WITH the right to install, maintain, repair and replace in, and under, but not over, such utilities upon the within conveyed premises as are necessary to support the business operations of BAW Holdings LLC, its successors and assigns.

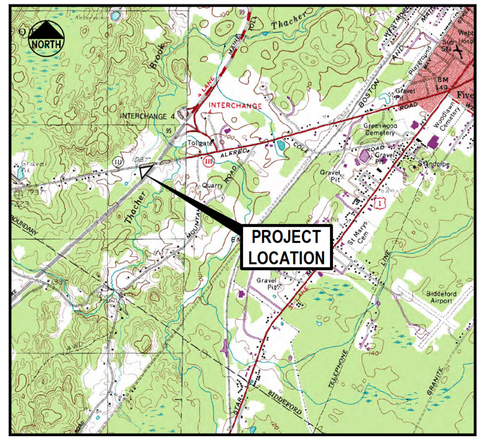
Attachment 5
Drawings

PROJECT PARCEL SITE
CITY OF BIDDEFORD
TAX ASSESSOR'S MAP AND LOT NUMBERS

MAP	LOT	CCRD
2	34–1	17162 / 0796

LAND OWNER/APPLICANT:
BAW HOLDINGS, LLC
4 SCAMMON ST STE 19–311,
SACO, ME 04072

SITE DEVELOPMENT PLANS FOR
ACCESS IMPROVEMENTS
547 ALFRED STREET
BIDDEFORD, MAINE
PERMITTING DOCUMENTS
APRIL 2026



LOCATION MAP
SCALE: 1" = 1000'

INDEX

C001	COVER SHEET, GENERAL NOTES & LEGEND
C002	EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN
C101	SITE, UTILITY, GRADING, AND DRAINAGE PLAN
C201	DETAILS
C202	EROSION & SEDIMENTATION CONTROL NOTES

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	RIGHT OF WAY	
	PROPERTY LINE	
	BUILDING SETBACK	
	ZONE LINE	
	WETLAND BOUNDARY	
	GUIDE RAIL	
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL DRIVE	
—100—	GRADING CONTOUR LINE	100
X 226.4	SPOT ELEVATION	100.31
	TREELINE	
	TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
OE	OVERHEAD ELECTRIC/TELEPHONE	OHE/T
UE	UNDERGROUND ELECTRIC/TELEPHONE	UGE/T
W	WATER LINE	8"W
D	STORM DRAIN LINE	18"SD
	CULVERT	18"CULVERT
	HYDRANT	
WV	WATER GATE VALVE	
	WATER SHUT OFF VALVE	
	MANHOLE	
	CATCH BASIN	
	TEST PIT	
	IRON ROD (SET)	
	IRON ROD (FOUND)	
	MONUMENT	
	RIPRAP	
	SILT FENCE – PERIMETER	
	STONE SEDIMENT BARRIER	
x x	FENCE	
W	WELL	

UTILITIES

WATER
ATTN: PATRICK GERE
MAINE WATER COMPANY
466 SOUTH STREET
BIDDEFORD, MAINE 04005

ELECTRIC
ATTN: JAY AGRESTE
CENTRAL MAINE POWER COMPANY
162 CANCO ROAD
P.O. BOX 1801
PORTLAND, MAINE 04104
207.242.4092 (OFFICE)
jay.agreste@cmpco.com

TELEPHONE
ATTN: KURT BOMBARDIER
FIBER FIDIUM
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.745.9363
kurt.bombardier@fiduim.com

CABLE
ATTN:
CHARTER COMMUNICATIONS
118 JOHNSON ROAD
PORTLAND, MAINE 04102
207.253.2291
dl–por–construction@charter.com

SEWER & STORM DRAIN
ATTN: CRAIG CHEKAN
CITY OF BIDDEFORD
205 MAIN STREET
BIDDEFORD, MAINE 04005
207.284.9118

DIG SAFE
1.800.225.4977

PERMITS / APPROVALS

LOCAL
SITE PLAN PERMIT — CITY OF BIDDEFORD, 205 MAIN STREET, BIDDEFORD, MAINE 04005, 207.571.0700, ATTN: DAVID GALBRAITH — SITE PLAN SUBMITTED 04.15.2026

STATE

PREPARED BY

CIVIL ENGINEER:
Gorrill Palmer Consulting Engineers
300 SOUTHBOROUGH DRIVE, SUITE 200
SOUTH PORTLAND, MAINE 04106
207.772.2515
ATTN: DOUG REYNOLDS, P.E.
dreynolds@gorrillpalmer.com

Site Design Associates
23 WHITNEY WAY
TOPSHAM, MAINE 04106
207.449.4275
TOM SAUCIER, P.E.
tsaucier@sitedesignassociates.biz

SITE DATA		
A	ZONING & SHORELAND ZONE INFORMATION	B2 – HIGHWAY BUSINESS ZONE
B	EXISTING USE DESCRIPTION	CAR WASH
C	PROPOSED USE DESCRIPTION	N/A
D	REQUIRED WAIVER/VARIANCES (YES/NO); IF YES, PLAN MUST CLEARLY LIST WAIVERS/VARIANCES REQUESTING	YES (3) – SECTION 5.B.4.E.1 – NO PAVING IN SETBACK, SECTION 5.B.1 – DRAINAGE
E	NAME OF DRAINAGE WATERSHED	THATCHER BROOK
F	WITHIN THE MS4 URBANIZED AREA (YES/NO)	YES
G	NATURAL RESOURCES (STREAMS, WETLANDS, ETC.) LOCATED ON–SITE OR ADJACENT TO THE PROPERTY (YES/NO)	NO
H	WITHIN THE 100–YEAR FLOOD ZONE (YES/NO)	NO
I	PUBLIC ROAD PROPOSED (YES/NO)	NO
J	PRIVATE ROAD PROPOSED (YES/NO)	NO
K	PUBLIC SEWER CONNECTION (YES/NO)	NO
L	PUBLIC STORM DRAIN CONNECTION (YES/NO)	NO
M	LIMITS OF DISTURBANCE IN ACRES	800 S.F.
N	PERVIOUS LAND COVER SQUARE FOOTAGE, EXISTING AND PROPOSED	N/A
O	IMPERVIOUS LAND COVER SQUARE FOOTAGE (PAVEMENT/GRAVEL), EXISTING AND PROPOSED	EXISTING = 3,724 SF PROPOSED = 4,505 SF
P	BUILDING ROOF SQUARE FOOTAGE, EXISTING AND PROPOSED	EXISTING = 3,954 SF PROPOSED = 3,954 SF
Q	ASSIGNED PLANNING BOARD NUMBER	TBD
R	ESTIMATED CUT/FILL EARTHWORK VOLUMES	N/A

ANTICIPATED DAILY FLOWS		
BUILDING	AVERAGE DAILY FLOW (GPD)	PEAK DAILY FLOW (GPD)
CARWASH	N/A	N/A

CITY OF BIDDEFORD PLANNING BOARD
SITE PLAN APPROVAL

CHAIRMAN _____

_____

_____ _____

_____ _____

_____ _____

DATE _____

STATE OF MAINE — DOUGLAS E. REYNOLDS — No. 9868 — 4.15.26 — LICENSED PROFESSIONAL ENGINEER

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

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Rev.	Date	Revision

Issued For	Date	By
SITE PLAN APPLICATION	4.15.26	DER

Design: EC | Draft: – | Date: APRIL 2026
Checked: DER | Scale: | Job No.: 0133236
File Name: 0133236–COVER.dwg

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: **Cover Sheet, General Notes, and Legend**
Project: **Access Improvements**, 547 Alfred, Biddeford, Maine 04005
Client: **BAW Holdings, LLC**, 4 Scammon Street, STE 19–311, Saco, ME 04072

Drawing No. C001

N/F
Baw Holdings, LLC
Book 17162 Page 0796
TM 2 Lot 34-1

N/F
New Life Christian Fellowship
Book 11547 Page 222
TM 2 Lot 34-1

N/F
Maine Turnpike Authority
Book 1080 Page 545

ROUTE 111 (ALFRED ROAD)

TO BIDDEFORD

EXIT

EXIT

COFFEE

COFFEE

CAR WASH

EXISTING PYLONS

EXISTING SIDEWALK TO BE REMOVED

BOLLARDS TO BE REMOVED AND RELOCATED

TRANSFORMER TO BE RELOCATED OR REPLACED

SAWCUT (TYP.)

LIMIT OF WORK

TOC – 92.90(E)
BOC – 92.40(E)

TOC – 92.80(E)
BOC – 92.30(E)

TOC – 92.55(E)
BOC – 92.05(E)

EXISTING WETLAND LIMITS

TOC – 94.00(E)
BOC – 93.50(E)

GUARDRAIL LIMIT (TYP.)

LIGHT POLE TO BE RELOCATED

SILT FENCE (TYP.)

REMOVE EXISTING GUARDRAIL BEAM AND CUT EXISTING GUARDRAIL POSTS TO BE 1 FT BELOW FINISH GRADE

GUARDRAIL LIMIT (TYP.)

LIGHT POLE TO BE RELOCATED

EXISTING BITUMINOUS CURBING TO BE REMOVED (SAWCUT PAVEMENT)

Inv. out: 87.4

18" CMP

NOTES:

1.) CONTRACTOR TO IMPLEMENT DUST CONTROL MEASURES THROUGHOUT CONSTRUCTION

20 0 10 20 40
1 inch = 20 ft.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
DOUGLAS E. REYNOLDS
No. 9866
4.15.26
LICENSED PROFESSIONAL ENGINEER

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Rev.	Date	Revision

Issued For	Date	By
SITE PLAN APPLICATION	4.15.26	DER

Design: EC	Draft: –	Date: APRIL 2026
Checked: DER	Scale: 1"=20'	Job No.: 0133236
File Name: 0133236-EXIST.dwg		

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An LJB Engineering Company

Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:
Existing Conditions, Demolition and Erosion Control Plan

Project:
Access Improvements
547 Alfred, Biddeford, Maine 04005

Client:
BAW Holdings, LLC
4 Scammon Street, STE 19-311, Saco, ME 04072

Drawing No.
C002

EXISTING CAR WASH
3,954 SF
FFE=92.75

EXIT

COFFEE

COFFEE

CAR WASH

LIMIT OF WORK

SAWCUT EXISTING PAVEMENT AND PROVIDE SHIPLAP JOINT (TYP.). SEE DETAIL SHEET C201

EXISTING SIDEWALK TO BE REMOVED

TOC – 92.90(E)
BOC – 92.40(E)

EXISTING TRANSFORMER TO BE RELOCATED & REPLACED

EXISTING TRANSFORMER LOCATION

TOC – 92.55(E)
BOC – 92.05(E)

EXISTING ELECTRIC SERVICE BOX
PROPOSED BOLLARDS

RESET BOLLARDS BETWEEN GAS REGULATOR AND CURB

EP: 2+97.47

BP: 1+00.00

1+00

50' TAPER

PP: 1+47.19

EXISTING EDGE OF PAVEMENT

2+00

PROPOSED EDGE OF PAVEMENT

4"SWLL

4"SWLL

4"SWLL

R10'

R10'

R10'

R30'

R30'

PC: 2+97.47

TOC – 92.80(E)
BOC – 92.30(E)

EXISTING VACUUMS

EXISTING WETLAND LIMITS

10' SETBACK

18" CMP

Inv. out: 88.4'

Inv. in: 87.7'

gravel parking

TOC – 94.00(E)
BOC – 93.50(E)

RELOCATE LIGHT POLE

REMOVE EXISTING GUARDRAIL BEAM AND CUT EXISTING GUARDRAIL POSTS TO BE 1 FOOT BELOW FINISH GRADE

GUARDRAIL LIMIT (TYP.)

VERTICAL BITUMINOUS CURB (TYP.)

EXISTING WALL TO REMAIN

SEE CROSS SECTION ON SHEET C201 FOR MORE INFORMATION

RELOCATE LIGHT POLE

CITY OF BIDDEFORD PLANNING BOARD
SITE PLAN APPROVAL

CHAIRMAN _____

_____

_____ _____

_____ _____

_____ _____

DATE _____

SPACE AND BULK STANDARDS

ZONE: B-2	REQUIRED	PROVIDED
MIN. LOT SIZE*	10,000 S.F.	62,254.94 S.F.
BUILDING SETBACKS		
FRONT	30'	98'
SIDE	10'	25'
REAR	10'	118'
PARKING SETBACKS		
FRONT	25'	41'
SIDE *	10'	6'
REAR	10'	27'

* = WAIVER REQUESTED

SITE DATA

ZONE: B-2 HIGHWAY-ORIENTED COMMERCIAL
SITE AREA 64,998.40 S.F.= 1.49 ACRES

BUILDING AREA
EXISTING CAR WASH 3,954 S.F.

PARKING	EXISTING	PROVIDED
EXISTING STRUCTURE	3	3
TOTAL	3	3

CURBING LEGEND

VERTICAL GRANITE CURB

STRIPING LEGEND

SIGNAGE, STRIPING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REGARDING SIZE, INSTALLATION, LOCATION & REFLECTIVITY.

12"SL – 12" WIDTH STOP LINE
4"SWLL – 4" WIDTH SOLID WHITE LANE LINE
4"DYCL – 4" WIDTH DOUBLE YELLOW CENTERLINE
4"DWLL – 4" WIDTH DASHED WHITE LANE LINE

10 0 5 10 20
1 inch = 10 ft.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
DOUGLAS E. REYNOLDS
No. 9886
4.15.26
LICENSED PROFESSIONAL ENGINEER

Rev.	Date	Revision

Issued For	Date	By
SITE PLAN APPLICATION	4.15.26	DER

Design: EC | Draft: – | Date: APRIL 2026
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File Name: 0133236–SITE.dwg

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GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: Site,Utility, Grading, and Drainage Plan
Project: Access Improvements
547 Alfred, Biddeford, Maine 04005
Client: BAW Holdings, LLC
4 Scammon Street, STE 19–311, Saco, ME 04072

Drawing No. C101

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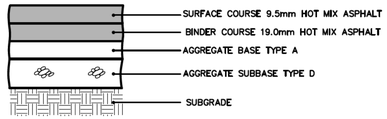
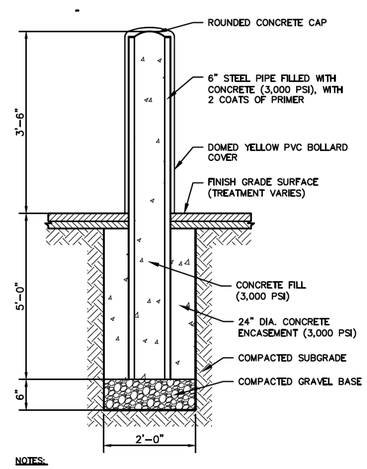


NOTE:
COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557

LAYERS	STANDARD DUTY PAVEMENT
SURFACE COURSE 9.5mm HMA	1.25"
BINDER COURSE 19.0mm HMA	2.25"
AGGREGATE BASE TYPE A	3"
AGGREGATE SUBBASE TYPE D	12"

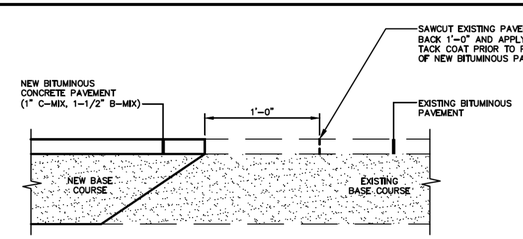
BITUMINOUS PAVEMENT SECTION
NOT TO SCALE

PAVEMENT SHIPLAP JOINT
NOT TO SCALE

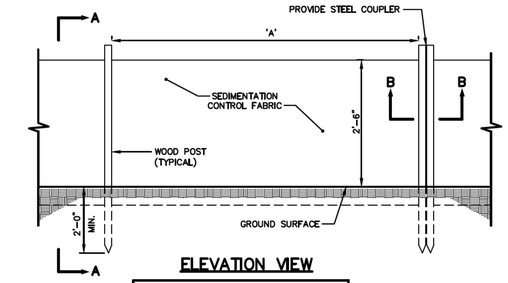


NOTES:
1. BOLLARDS SHALL BE PLACED IN ACCORDANCE WITH THE ADA ACCESSIBILITY GUIDELINES. A MINIMUM CLEAR WIDTH OF 36" SHALL BE PROVIDED TO MAINTAIN AN ACCESSIBLE PATH.
2. BOLLARDS SHALL BE INSTALLED TO PROTECT ALL SERVICE CONNECTIONS, STAIRS, METERS, AND REAR BUILDING CORNERS IN PAVEMENT AREAS.

BOLLARD (SERVICE AREAS)
NOT TO SCALE

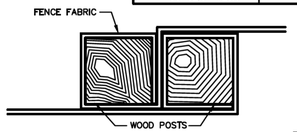


PAVEMENT SAWCUT
NOT TO SCALE

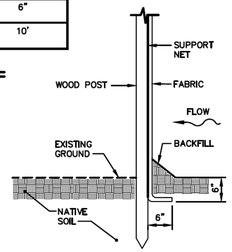


ELEVATION VIEW

SILT FENCE	
SILT FENCE REINFORCEMENT	MAXIMUM SPACING "A"
NONE	6"
WIRE REINFORCEMENT 14 GUAGE,6" MESH	10'



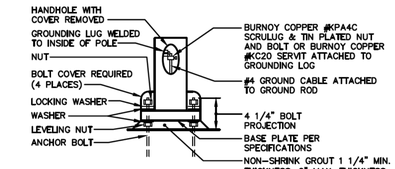
SECTION B–B



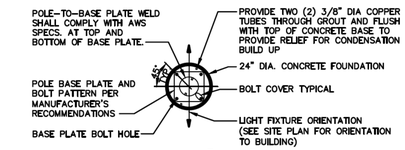
SECTION A–A

SILTATION FENCE
NOT TO SCALE

TYPICAL CROSS–SECTION
NOT TO SCALE



DETAIL "C"



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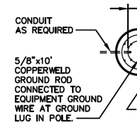

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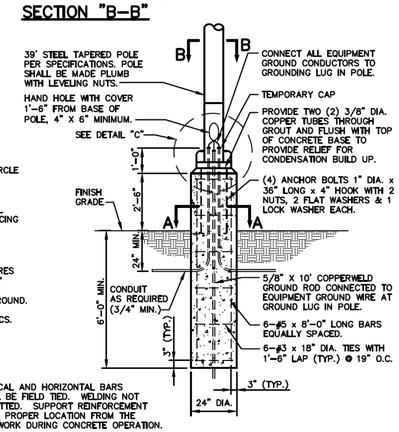

NOTES:
1. 3500 P.S.I. MIN. 28 DAY COMPRESSIVE STRENGTH CONC. WITH GRADE 60 REINF. STEEL.
2. IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
3. FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
4. FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
5. FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
6. FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF,
7. UTILIZING AASHTO FIGURE 1.8.2C(4) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS".
8. EXPOSED CONCRETE AND GROUT SHALL BE PAINTED TRAFFIC YELLOW.
9. DETAIL FOR 39' POLE WITH MAX. FIXTURE EPA 4.6 S.F.

PARKING LOT LIGHTING POLE FOUNDATION
NOT TO SCALE

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
DOUGLAS E. REYNOLDS
No. 9866
4.15.26
LICENSED PROFESSIONAL ENGINEER

Rev.	Date	Revision

SITE PLAN APPLICATION	4.15.26	DER
Issued For	Date	By

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File Name: 0133236–DETAILS.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: **Details**

Project: **Access Improvements**
547 Alfred, Biddeford, Maine 04005

Client: **BAW Holdings, LLC**
4 Scammon Street, STE 19–311, Saco, ME 04072

Drawing No. C201

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EROSION CONTROL MEASURES AND SITE STABILIZATION

THE PRIMARY EMPHASIS OF THE EROSION/SEDIMENTATION CONTROL PLAN, WHICH WILL BE IMPLEMENTED FOR THIS PROJECT, IS AS FOLLOWS:

- DEVELOPMENT OF A CAREFUL CONSTRUCTION SEQUENCE.
- RAPID REVEGETATION OF DENUDED AREAS TO MINIMIZE THE PERIOD OF SOIL EXPOSURE.
- RAPID STABILIZATION OF DRAINAGE PATHS TO AVOID RILL AND GULLY EROSION.
- THE USE OF ON-SITE MEASURES TO CAPTURE SEDIMENT (HAY BALES/STONE CHECK DAMS/SILT FENCE, ETC.)

THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVICES WILL BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT. THESE DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS DESCRIBED WITHIN THIS REPORT. FOR FURTHER REFERENCE, SEE THE LATEST EDITION OF THE MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS.

A. DEWATERING

WATER FROM CONSTRUCTION TRENCH DEWATERING SHALL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 50 FEET OF A PROTECTED NATURAL RESOURCE.

B. INSPECTION AND CONSTRUCTION MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. BEFORE AND WITHIN 24 HOURS AFTER EACH WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH OF RAINFALL IN A CONSECUTIVE 24-HOUR PERIOD, SNOWSTORM, OR PERIOD OF THAWING AND RUNOFF, THE QUALIFIED CONTRACTOR KNOWLEDGEABLE OF DEP STANDARDS SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. ADDITIONALLY, INSPECTIONS SHALL BE PERFORMED AT LEAST ONCE A WEEK. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

1. INSPECTION AND CORRECTIVE ACTION. AN ENGINEER OR SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER STANDARDS AS DESCRIBED IN THE CONDITIONS OF THE PERMIT SHALL INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES (INCLUDING CATCH BASIN INLET PROTECTION MEASURES, SEDIMENT FILTER MEASURES, AND STABILIZATION OF SLOPES), MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES.
2. MAINTENANCE. IF EROSION AND SEDIMENTATION CONTROL (ESC) MEASURES NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. THE CONTRACTOR IS RESPONSIBLE FOR ALL MAINTENANCE ASSOCIATED WITH THESE INSPECTIONS. IF ADDITIONAL ESC MEASURES OR SIGNIFICANT REPAIR OF ESC MEASURES ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (WET WEATHER EVENT THAT PRODUCES MORE THAN 0.5 INCH IN A CONSECUTIVE 24-HOUR PERIOD). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
3. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, DISTURBED AND IMPERVIOUS AREAS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE ESC MEASURES THAT NEED MAINTENANCE, THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL ESC MEASURES ARE NEEDED. FOR EACH ESC MEASURE REQUIRING MAINTENANCE, NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL ESC MEASURES, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

C. TEMPORARY EROSION CONTROL MEASURES

THE FOLLOWING MEASURES ARE PLANNED AS TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION:

1. A CRUSHED STONE-STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE APPROVED ACCESS DRIVE AS DEPICTED ON THE PLANS.
2. SILTATION FENCE OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF- BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE AND/OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THIS PACKAGE AND INSPECTED AT LEAST ONCE A WEEK AND BEFORE AND IMMEDIATELY AFTER A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE OR BERM LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM. WOOD WASTE/COMPOST BERMS MAY NOT BE PLACED ADJACENT TO WETLAND AREAS THAT ARE NOT TO BE DISTURBED.
3. STRAW OR HAY MULCH INCLUDING HYDROSEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND OCTOBER 15TH ON SLOPES OF LESS THEN 15 PERCENT SHALL BE ANCHORED BY APPLYING WATER; MULCH PLACED ON SLOPES OF EQUAL TO OR STEEPER THAN 15 PERCENT SHALL BE COVERED BY A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. FABRIC NETTING AND STAPLES SHALL BE USED ON DISTURBED AREAS WITHIN 50' OF LAKES, STREAMS, AND WETLANDS REGARDLESS OF THE UPSTREAM SLOPE. MULCH PLACED BETWEEN OCTOBER 15TH AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT SHALL BE COVERED WITH A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SLOPES STEEPER THAN 3:1 AND EQUAL TO OR FLATTER THAN 2:1, WHICH ARE TO BE REVEGETATED, SHALL RECEIVE EROSION BLANKETS BY NORTH AMERICAN EXCELSIOR OR EQUAL. SLOPES STEEPER THAN 2:1 SHALL RECEIVE RIPRAP AS NOTED ON THE PLANS. THE MULCH APPLICATION RATE FOR BOTH TEMPORARY AND PERMANENT SEEDING IS 75 LBS PER 1000 SF AS IDENTIFIED IN ATTACHMENT A OF THIS SECTION. MULCH SHALL NOT BE PLACED OVER SNOW.
4. TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION WILL BE PROTECTED AS FOLLOWS:

A.) TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN 50 FEET OF ANY WETLANDS WHICH WILL NOT BE DISTURBED AND SHALL BE LOCATED AWAY FROM DRAINAGE SWALES.

B.) STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS BY EITHER TEMPORARILY SEEDING THE STOCKPILE BY A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH, SUCH AS HAY, STRAW, OR EROSION CONTROL MIX.

C.) STOCKPILES SHALL BE SURROUNDED BY SEDIMENTATION BARRIER AT THE TIME OF STOCKPILE CREATION.

5. ALL DENUDED AREAS THAT ARE WITHIN 50 FEET OF AN UNDISTURBED WETLAND, WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN A BUILDING PAD, PARKING AREA, OR ACCESS DRIVE SUBBASE AREA, SHALL RECEIVE MULCH OR EROSION CONTROL MESH FABRIC WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL. ALL AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW. IN OTHER AREAS, THE TIME PERIOD MAY BE EXTENDED TO 7 DAYS.
6. FOR WORK, WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENUDED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 2 DAYS FOR ALL AREAS.
7. OSSIPEE TRAIL (ROUTE 25) SHALL BE SWEPT TO CONTROL MUD AND DUST AS NECESSARY.
8. DURING GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS AND AS DIRECTED ON THE EROSION CONTROL PLANS.
9. SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE ANCHORED.
10. WOOD WASTE COMPOST/BARK BERMS MAY BE USED IN LIEU OF SILTATION FENCING. BERMS SHALL BE REMOVED AND SPREAD IN A LAYER NOT TO EXCEED 3" THICK ONCE UPSTREAM AREAS ARE COMPLETED AND A 90% CATCH OF VEGETATION IS ATTAINED.
11. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MDOT SPECIFICATIONS – SECTION 637 – DUST CONTROL.
12. LOAM AND SEED IS INTENDED TO SERVE, AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DENUDED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP. APPLICATION RATES ARE PROVIDED IN ATTACHMENT A OF THIS SECTION. SEEDING SHALL NOT OCCUR OVER SNOW.

D. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES HAVE BEEN DESIGNED AS PART OF THE EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, GRAVEL SUBBASE, ETC.) WILL BE LOAMED, LIMED, FERTILIZED, MULCHED, AND SEEDED. FABRIC NETTING, ANCHORED WITH STAPLES, SHALL BE PLACED OVER THE MULCH IN AREAS AS NOTED IN TEMPORARY EROSION CONTROL MEASURES PARAGRAPH 4 OF THIS REPORT. ALL AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48-HOUR WINDOW. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
2. ALL STORM DRAIN PIPE OUTLETS SHALL HAVE RIPRAP APRONS AT THEIR OUTLET TO PROTECT THE OUTLET AND RECEIVING CHANNEL FROM SCOUR AND DETERIORATION. INSTALLATION DETAILS ARE PROVIDED IN THE PLAN SET. THE APRONS SHALL BE INSTALLED AND STABILIZED TO THE EXTENT PRACTICABLE PRIOR TO DIRECTING RUNOFF TO THE TRIBUTARY PIPE OR CULVERT.

IMPLEMENTATION SCHEDULE

THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE REQUIRED TO ENSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPTIMIZED:

NOTE: FOR ALL GRADING ACTIVITIES, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION NOT TO OVEREXPOSE THE SITE. THIS SHALL BE ACCOMPLISHED BY LIMITING THE DISTURBED AREA. AREA SHALL BE LIMITED TO NO MORE THAN THE CONTRACTOR CAN MULCH IN ONE DAY.

1. INSTALL PERIMETER SILT FENCE AND/OR WOOD WASTE BERMS.
2. INSTALL DIVERSION DIKES, OR CHECK DAMS (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL BMP'S)
3. CLEAR AND GRUB SITE. INSTALL STONE CHECK DAMS AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS
4. COMMENCE EARTHWORK AND GRADING TO SUBGRADE.
5. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.
6. COMPLETE INSTALLATION OF UNDERGROUND UTILITIES TO WITHIN 5' OF FUTURE BUILDINGS.
7. INSTALL LIGHT POLE FOUNDATIONS AND LIGHT POLES.
8. COMPLETE REMAINING EARTHWORK OPERATIONS.
9. COMPLETE INSTALLATION OF DRAINAGE APPURTENANCES.
10. INSTALL SUB-BASE AND BASE GRAVEL WITHIN PARKING AREAS, WALKWAYS, AND ALL DRIVEWAYS.
11. INSTALL CURBING IN PARKING AREAS AS NEEDED.
12. INSTALL BASE COURSE PAVING FOR DRIVES AND PARKING AREA AS WELL AS CONCRETE SURFACES.
13. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
14. INSTALL SURFACE COURSE PAVING FOR DRIVES AND PARKING AREAS. STRIPE PER PLAN.
15. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
16. TOUCH UP LOAM AND SEED.

PRIOR TO CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE FOR THE COMPLETION OF THE WORK, WHICH WILL SATISFY THE FOLLOWING CRITERIA:

1. THE ABOVE CONSTRUCTION SEQUENCE SHOULD GENERALLY BE COMPLETED IN THE SPECIFIED ORDER; HOWEVER, SEVERAL SEPARATE ITEMS MAY BE CONSTRUCTED SIMULTANEOUSLY. WORK MUST ALSO BE SCHEDULED OR PHASED TO REDUCE THE EXTENT OF THE EXPOSED AREAS AS SPECIFIED BELOW. THE INTENT OF THIS SEQUENCE IS TO PROVIDE FOR EROSION CONTROL AND TO HAVE STRUCTURAL MEASURES SUCH AS SILT FENCE AND CONSTRUCTION ENTRANCES IN PLACE BEFORE LARGE AREAS OF LAND ARE DENUDED.
2. THE WORK SHALL BE CONDUCTED IN SECTIONS WHICH SHALL:

- LIMIT THE AMOUNT OF EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 30 DAYS.
- REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT; OR TEMPORARILY STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL FOR AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND AND 7 DAYS FOR ALL OTHER AREAS. AREAS WITHIN 50 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW.
- INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEM AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE. THE DITCHES SHALL BE IMMEDIATELY LINED OR REVEGETATED AS SOON AS THEIR INSTALLATION IS COMPLETE.

EROSION, SEDIMENTATION AND STABILIZATION CONTROL PLAN

THE EROSION CONTROL INFORMATION IS INCLUDED IN THE PLAN SET.

DETAILS AND SPECIFICATIONS

THE EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

WINTER STABILIZATION PLAN

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO ONE ACRE OR AN AREA THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN PARKING AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 SQUARE-FEET (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

FOR WORK, WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENUDED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 2 DAYS FOR ALL AREAS.

THE CONTRACTOR SHALL INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 SQUARE-FEET (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL ANY SOIL STOCKPILE SHALL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 50 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 75 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 90% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 75 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

AN AREA SHALL BE CONSIDERED DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 SQUARE-FEET OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLYING HAY. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

5. MULCHING OF SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. ALL MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 SQUARE FEET ON ALL SLOPES GREATER THAN 8%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8% EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 8% EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AND MULCHED. IF THE SLOPE IS STEEPER THAN 8% FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS./1,000 SQUARE-FEET. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE GROWTH CATCH. ALL AREAS HIGHER THAN 90% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED, AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

7. WINTER CONSTRUCTION INSPECTION

AFTER EACH RAINFALL, SNOWSTORM OR PERIOD OF THAWING AND RUNOFF, THE QUALIFIED CONTRACTOR KNOWLEDGEABLE OF DEP STANDARDS SHALL PERFORM A VISUAL INSPECTION OF ALL EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. INSPECTIONS SHALL BE PERFORMED A MINIMUM OF ONCE PER WEEK AND SHALL BE CONDUCTED IN ACCORDANCE WITH THE EROSION CONTROL MEASURES AND SITE STABILIZATION WITHIN THE EROSION CONTROL REPORT.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

1. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS – THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 1. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

INSTALL A SOD LINING IN THE DITCH – THE APPLICANT SHALL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

INSTALL A STONE LINING IN THE DITCH – THE APPLICANT SHALL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE APPLICANT SHALL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES – THE APPLICANT SHALL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE APPLICANT SHALL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. THE DEPARTMENT SHALL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 1, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT SHALL MONITOR THE GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT SHALL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM III OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM IV OF THIS STANDARD.

STABILIZE THE SLOPE WITH SOD – THE APPLICANT SHALL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY SEPTEMBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT SHALL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SLOPE WITH WOOD WASTE COMPOST – THE APPLICANT SHALL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT SHALL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP – THE APPLICANT SHALL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER UNDERNEATH THE RIPRAP.

3. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS – BY SEPTEMBER 15 THE APPLICANT SHALL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% IF THE APPLICANT FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF

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PLANNING BOARD STAFF REPORT

TO: Chair McCurry and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, City Planner / Director of Planning & Development

DATE: June 3, 2026

RE: Case # 2026.01 Preliminary Plan Review for Golden Chicken of Biddeford, LLC for a proposed 2,536 SF Popeye's Fast-Food restaurant located at 584 Alfred Street (Tax Map 2, Lot 23) in the B-2 Zone.

MEETING DATE: June 17, 2026, 6:00 PM

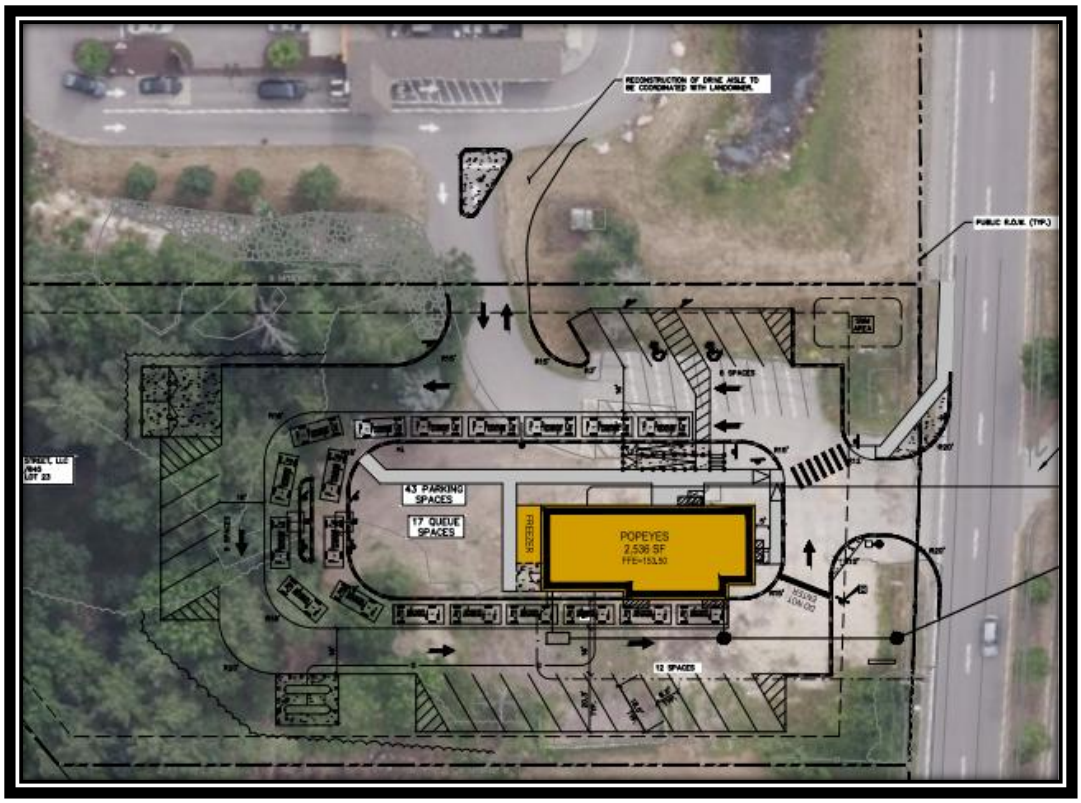
1. INTRODUCTION

This "Preliminary Plan" application is being presented by Kaleb Bourassa, P.E. of Gorrill Palmer, the Project Engineer and Agent for Golden Chicken of Biddeford, LLC, for a site plan review located at 584 Alfred Street (Tax Map 2, and Lot 23) located within the B2 (Highway Business) Zoning District. As proposed, the project is a Popeye's fast-food restaurant which will be 2,536 SF and will have 24 indoor seats for sit-down dining, along with a drive-thru window. The restaurant would be open every day from 10:30AM to 1AM. There are two public access doors into the dining area and one employee-only door to the kitchen/prep area.

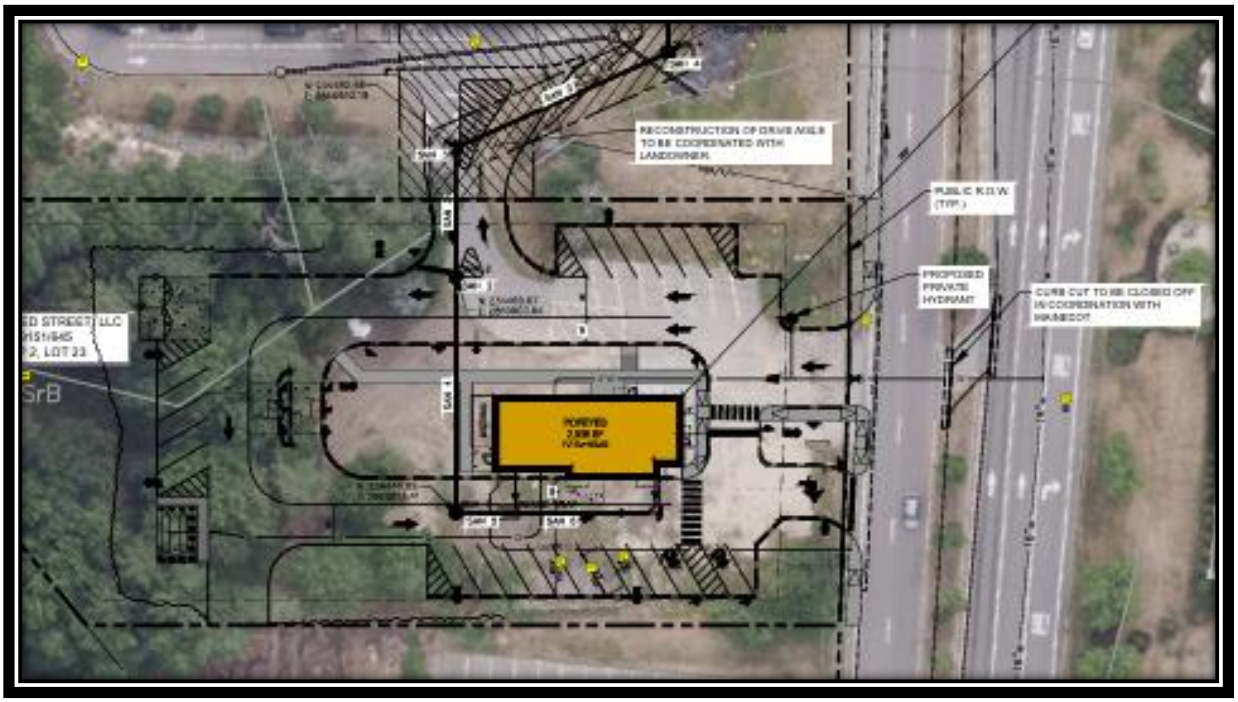
The Planning Board conducted a Site Walk at the property on April 15, 2026, which took place immediately prior to the scheduled public hearing for the Sketch Plan review of the Popeyes proposal.

The property is currently vacant but has an existing full access curb-cut. This entrance was proposed to be converted to a right-in-right-out (RIRO) configuration in accordance with the MaineDOT permitting process which is described in the submitted application. Since the sketch Plan review the driveway has been redesigned as a single driveway into the site, and a separated right-out only exit curb-cut. Popeye's design also includes an existing 30-foot wide access cross-access easement agreement to Biddeford Shoppes so that vehicles seeking to turn east from the proposed Popeye's will need to enter the Biddeford Shoppes property to access Old Dogs Lane, a traffic-controlled intersection with Alfred Street. This secondary entrance is proposed from the existing access drive that connects the site to the adjacent commercial plaza (580 Alfred St). This access would be two-way and would allow vehicles traveling eastbound on Alfred St to turn left into the commercial plaza at the Old Dogs Lane signalized intersection and navigate to the restaurant through the site's internal drive aisles.

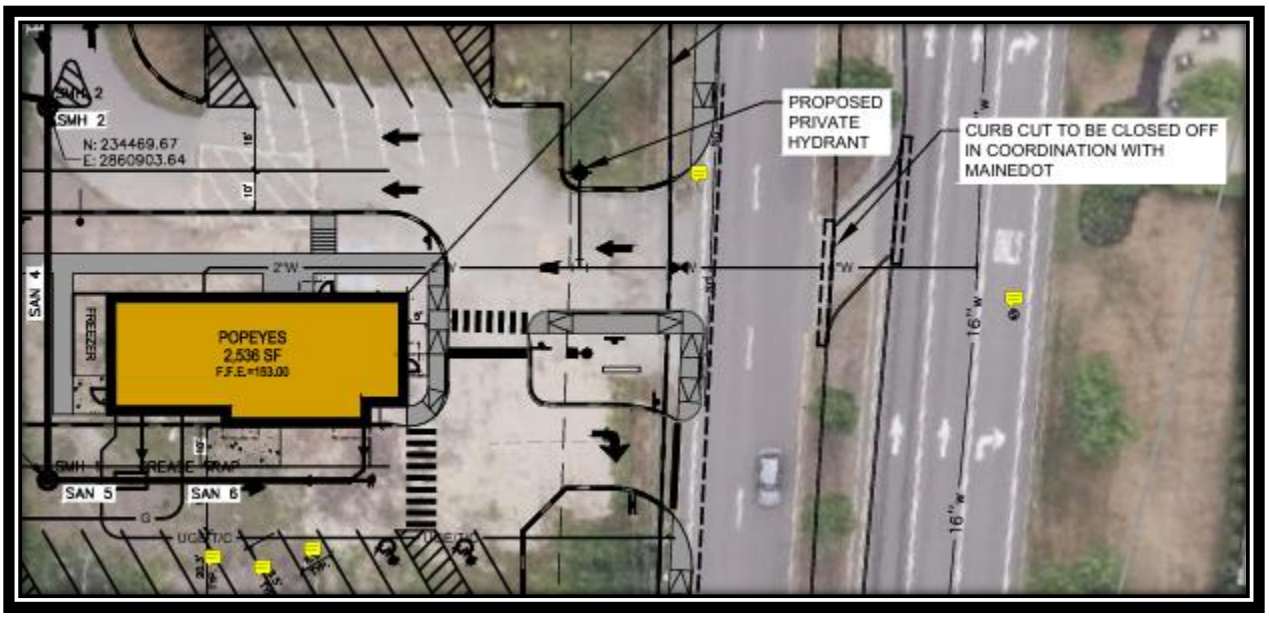
Additionally, vehicles desiring to depart the site and travel eastbound would be able to navigate to Old Dogs Lane from the connecting access drive and continue on to the signal.



Popeyes Chicken -584 Alfred Street – Original Sketch Plan Design



Popeyes Chicken -584 Alfred Street – Modified Plan Design – Note Driveway Redesign



Alfred Street Landscaped Median to be Closed as a requirement of their required TMP

The property has an existing full-access site driveway on Alfred Street which is proposed to be Modified, as discussed above and will include the closing of the access driveway through the Alfred Street landscaped median.

It should be noted, that on the east side of the Biddeford Shoppes Shopping Center, Staff is reviewing a proposal for "Biddeford Commons" which includes two (2) additional drive-thru restaurants, whose exiting eastbound traffic would also utilize Old Dogs Lane. Staff are concerned with the traffic impacts of four (4) drive-thru restaurants all utilizing Old Dogs Lane for all eastbound traffic. The traffic studies shall include both on-site and off-site traffic. Further, Staff has concerns with any proposed traffic signal timing modifications which would impact the traffic flow of the thru traffic on Alfred Street. The study shall also provide vehicle stacking requirements based upon the actual proposed restaurants and shall evaluate vehicle movements and stacking at Old Dogs Lane. Traffic impacts will be one of the more significant hurtles to overcome before City Staff support either of these proposed developments. However, Staff has fewer concerns of the Popeyes proposal than the Biddeford Commons proposal.

2. PROJECT DATA/INFORMATION

1.		Applicant:	Golden Chicken of Biddeford, LLC 10 Bittersweet Court Newington, CT 06111
2.		Owner of Property:	584 Alfred Street, LLC 355 Main Street

			Suite 25 Woburn, MA 01801
3.		Agent:	Kaleb Bourassa P.E. Gorrill Palmer 300 Southborough Drive Suite 200 South Portland, ME 04106
4.		Surveyor:	Same as Agent
5.		Project Location:	584 Alfred Street Biddeford, ME 04005
6.		Project Tax Map #/Lot #:	Tax Map 2, and Lot 23
7.		Lot Size:	3.0 Acres
8.		Base Zoning:	B2 (Highway Business)
9.		Overlay Zoning:	N/A
10.		Existing Use:	Vacant Lot
11.		Proposed Use:	Popeyes restaurant will be 2,536 SF and will have 24 indoor seats for sit-down dining, along with a drive-thru window.
12.		Approvals Required:	A. Site Plan Review – Article XI
13.		Uses in the Vicinity:	Commercial
14.		Waivers Requested:	Section 5.B.(i)(3) of the Site Design Criteria
15.		Waivers Granted:	a. None
16.		Other Non-City Permits Required:	a. Traffic Movement Permit
17.		LDR Attachment A: Fees Paid	Application Fees Paid Thatcher Brook Fees to be paid prior to building permit issued
18.		Planning Board Review History: Sketch Plan- April 15. 2026 Site Walk April 15, 2026	

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan Review. This process, at minimum, involves Sketch Plan review, followed by Preliminary Plan Review, and ultimately Final Plan review / approval. This proposal will require the issuance of a Traffic Movement Permit (TMP) to be issued by the Maine Department of Transportation (MDOT). A scoping meeting with the Applicant, City Staff and MDOT was held in May.

4. GENERAL REVIEW COMMENTS:

- **APPLICATION COMPLETENESS:** This application is for Preliminary Plan review. The design has been modified, primarily at the entrance and exit of the property and they have also included the requested private hydrant. Staff are generally supportive of the proposal and recommend the Board approve the Preliminary Plan. However, the Applicants need

to address Staff and Peer Reviewer comments (on plan and in writing) to the City's satisfaction and obtain the required Traffic Movement Permit (TMP) prior to this project being brought back to the Board for Final Plan Review.

5. **ZONING:** The subject property is zoned B2 (Highway Business) restaurant is permitted in this zone. The project is also required to comply with the City's Performance Standards (Article VI), Section 56 – Restaurants and Section 61 – Stormwater management, .

6. **WAIVERS:** Requesting waiver for Section 5.B.(i)(3) of the Site Design Criteria which requires paved parking, drive aisle, and walkway areas to occupy <30% of the proposed developed area. This project proposes approximately 64% paved area within the development footprint.

7. **Staff Review Committee (SRC) Preliminary Comments:**

A. Traffic Impact Study: One of the most important elements of the proposed development will be vehicle circulation / access. The proposal is seeking approval of 1 freestanding quick service food restaurants each with a drive-thru facility. This project will require a Traffic Movement Permit, to be issued by the Maine Department of Transportation (MDOT).

B. The submitted Landscape Plan (Sheet C-5.0) is underwhelming. The north (rear) and east sides have been almost ignored devoid of trees, bushes and understory plantings. The plans shall be revised for Final Plan Review to include additional planting over the entire developed areas of the site. All data box including name and size, at time of installation, and proposed species shall be included on revised plans. The parking areas proposed show pavement hatching which would easily be replaced by landscaping making the site more attractive while reducing impervious surface. These areas are circled in the below image.

C. Popeye's will be responsible for installing the sidewalk along their Alfred Street frontage. This shall be coordinated with the City's Engineering Department.

D. The applicant is proposing to connect to the public sewer and water systems as part of this project. Ability to Serve letters from the respective utilities shall be provided before Final Plan review meeting is scheduled.

E. Thatcher Brook Watershed: The property is located within the Thatcher Brook Watershed so is subject to the related impact fees which will be paid prior to the issuance of a building permit. This fee will be calculated prior to Final Site Plan review and approval.

F. Grease traps for the proposed restaurants shall be provided and illustrated on plans. A fats, oils and grease (FOG) permits will be required for each of the proposed restaurants. As outlined in the Preliminary Plan project narrative *"The wastewater effluent will be consistent with that of similar fast-food restaurants. A 2,000 gallon grease trap is proposed on site to filter kitchen waste prior to its discharge into the public system".*

G. Being a fast food restaurant, outside refuse containers (trash receptacles) should be included on revised plans.

H. How will refuse and recycling be handled? Please provide details of the proposed refuse and recycling enclosure including materials and dimensions. The enclosure shall be constructed of the same materials and colors as the proposed buildings.

I. The application includes a detailed signage program. These should be reviewed by the Board for illustrative purposes only. All signage shall conform to the City's sign ordinance and will be reviewed for conformity by the City's Code Office at the time of building and signage permit review and issuance.

J. Wright-Pierce: Article VI Performance Standards Section 29 Erosion Control 1. A 1.5:1 riprap slope is proposed to extend over the easterly property line. Section 29.F states the following: "The top of a cut or the bottom of a fill section shall not be closer than 10 feet to an adjoining property, nor shall said cut or fill exceed the three-to-one slope unless the Planning Board waives either or both requirements upon the applicant's demonstration, certified by a Maine licensed professional engineer (P.E.), that a steeper slope, whether or not closer than 10 feet to the adjoining property, is stable, will not result in excessive downstream erosion or sedimentation, nor cause any additional adverse impact on the adjoining property." We understand the subject parcel and the adjacent parcel are under the same ownership; however, we recommend requesting a waiver.

8. STAFF RECOMMENDATION

The Application is for Preliminary Site Plan Review. Staff are generally supportive of the proposal and recommend the Board approve the Preliminary Plan. However, the Applicants need to address Staff and Peer Reviewer comments (on plan and in writing) to the City's satisfaction and obtain the required Traffic Movement Permit (TMP) prior to this project being brought back to the Board for Final Plan Review.

9. SAMPLE MOTIONS

A. **Motion to Approve Case # 2026.01 Preliminary Plan Review for Golden Chicken of Biddeford, LLC for a proposed 2,536 SF Popeye's Fast-Food restaurant located at 584 Alfred Street (Tax Map 2, Lot 23) in the B-2 Zone.**

B. Motion to Deny Case # 2026.01 Preliminary Plan Review for Golden Chicken of Biddeford, LLC for a proposed 2,536 SF Popeye's Fast-Food restaurant located at 584 Alfred Street (Tax Map 2, Lot 23) in the B-2 Zone, for the following reasons:

1) _____

2) _____

3) _____

C. Motion to Table Case # 2026.01 Preliminary Plan Review for Golden Chicken of Biddeford, LLC for a proposed 2,536 SF Popeye's Fast-Food restaurant located at 584 Alfred Street (Tax Map 2, Lot 23) in the B-2 Zone, for the following reasons:

1) _____

2) _____

3) _____

CITY OF BIDDEFORD - SITE PLAN & SUBDIVISION APPLICATION DRAWING CHECKLIST *LAST REVISED: 11/26/2024*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant and included on all preliminary and final Site Plan & Subdivision submittals. No checklist is required for sketch submittals.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing substantial submittal information with non-acceptable reasoning will be rejected and required to resubmit.
4. Items in **BLACK** are required for 'Preliminary' approval & 'Final' approval.
5. Items in **BLUE** are only required for 'Final' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	POPEYES RESTAURANT
Planning Board # (if available):	
Applicant Name/Info:	GOLDEN CHICKEN OF BIDDEFORD, LLC
Submittal #/Type (Prelim/Final):	FINAL SITE PLAN
Submittal Date:	3/11/2026

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE			CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	LIST DRAWING SHEET NUMBER WHERE INFORMATION IS PROVIDED	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**					
A	Drawing specific legends (linetypes, hatches, etc.)	YES				
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	YES				
C	North arrows, standard engineering scale viewports, scale bars, dated revision blocks	YES				
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	YES				
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	YES				
2	**COVER SHEET**	YES				
A	Project Name & Property Address	YES				
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	YES				
C	Site Location Map	YES				
D	Sheet Set List of Drawings	YES				
E	Tax Map and Lot ID	YES				
F	Zoning & Shoreland Zone Information	YES				
G	Existing Use Description	YES				
H	Proposed Use Description	YES				
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	YES				
J	Name of Drainage Watershed	YES				
K	Within the MS4 Urbanized Area (Yes/No)	NO				
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	NO				
M	Within the 100-year Flood Zone (Yes/No)	NO				
N	Public Road Proposed (Yes/No)	NO				
O	Private Road Proposed (Yes/No)	NO				
P	Public Sewer Connection (Yes/No)	YES		THE SITE IS NOT CURRENTLY CONNECTED TO PUBLIC SEWER. THE APPLICANT IS PROPOSING A PUBLIC SEWER CONNECTION AS PART OF THIS PROJECT.		
Q	Public Storm Drain Connection (Yes/No)	NO				
R	Limits of Disturbance in square feet and acres	YES				
S	Pervious Land Cover square footage, existing and proposed	YES				
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	YES				
U	Building Roof square footage, existing and proposed	YES				
V	Assigned Planning Board Number	NO				
W	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES		THE SITE IS NOT LOCATED WITHIN THE FLOOD ZONE.		
3	**EXISTING CONDITIONS PLAN**	YES				
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	YES				
B	Property & Right-of-Way Lines	YES				
C	Boundary line information (bearings, distances, etc.)	YES				
D	Property pin and monumentation locations	YES				
E	Existing easements with proper ownership identified	YES				
F	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	YES				
G	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES				
H	100-year Flood Zone Limits & Elevation	YES				
I	Existing contours with adequate contour labelling; minimum 1' contour interval	YES				
J	Existing building FFEs annotated	YES				
K	Spot elevations for all tie-in locations (curb cuts, property line)	YES				
L	Existing buildings & structures	YES				
M	Existing pavement areas & number of parking spaces	YES				
N	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	YES				
O	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	YES				
P	Existing signage and striping	YES				
Q	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	YES		LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON RECORD INFORMATION		
R	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES				
S	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES				
T	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	YES				
U	Location of any borings, drinking wells, and monitoring wells	YES				
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**	YES				
A	Limits-of-disturbance outlined and acreage annotated	NO				
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
C	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
D	Callout existing site features to be demolished/removed/replaced	YES				
E	Callout existing utilities to be demolished/removed/abandoned-in-place	YES				
F	Hatch existing buildings and pavement to be removed	NO		BUILDING HAVE PREVIOUSLY BEEN DEMOLISHED.		
G	Construction Entrance location(s)	YES				
H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	YES				
I	Stockpile and staging area(s) identified (with proper perimeter control)	YES				
J	Inlet protection location(s)	YES				
K	Note requiring contractor to implement dust control measures throughout construction	YES				
L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	YES				
M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	NO				

N	If large development is proposed with an extensive underground stormwater conveyance network, identify how SWM infrastructure and BMPs will be protected during construction and if sediment traps/basins are needed	NO		DUE TO THE SMALL SITE AREA (~1 ACRE) WE DO NOT ANTICIPATE THE NEED FOR TEMPORARY SEDIMENT BASINS.		
5	**SITE PLAN/SUBDIVISION PLAN**	YES				
A	Partial Site Plans needed for any viewport scale greater than 1"=20'	YES				
B	Existing property and right-of-way lines	YES				
C	Proposed subdivision lot lines and labels	YES				
D	Required Zoning Setbacks shown with dimensions and annotation	YES				
E	Bulk requirement summary table (zoning/parking calculations)	YES				
F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
G	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
H	Proposed building outlines, door entrances and loading docks	YES				
I	Proposed building labels	YES				
J	Proposed road & sidewalk extents; provide clear annotation if roads will be public or private	YES				
K	Proposed parking and accessible parking locations; annotate parking space counts	YES				
L	Proposed signage, parking striping, and traffic striping	YES				
M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	YES				
N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	YES				
O	Proposed landscaping; detailed landscaping design should be shown on separate plans	YES				
P	Designated snow storage areas	YES				
Q	Proposed dumpster locations and trash removal access	YES				
R	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	YES				
S	Radial dimensions for all curbs, landscaped islands, sidewalks	YES				
T	Public/private road centerline stationing shown, labelled every 0+50' with curve data	N/A		THERE ARE NO PUBLIC OR PRIVATE ROADS PROPOSED AS PART OF THE PROJECT.		
U	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	N/A				
V	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	N/A				
W	Planning Board signature block for final recording	YES				
6	**GRADING PLAN**	YES				
A	Partial Grading Plans needed for any viewport greater than 1"=20'	NO		THERE ARE NO GRADING PLANS WITH VIEWS LARGER THAN 20 SCALE		
B	Limits-of-disturbance outlined and acreage annotated	YES				
C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	YES				
D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	YES				
E	Proposed contours with adequate contour labelling; minimum 1' contour interval	YES				
F	Detailed grading for all ditches, swales, outfalls, and riprap	YES				
G	All proposed contours tie-into existing contours at limits-of-disturbance outline	YES				
H	Existing spot elevations for all asphalt, curb, and SWM BMP tie-in locations	YES				
I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
J	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
K	Proposed spot elevations for all important roadway geometric points (including but not limited to: parking/drive aisles, building corners/entrances, retaining walls, loading docks, EOP/curblines)	YES				
L	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	YES				
M	Proposed % slope arrows for all ADA parking spaces and sidewalks	YES				
N	Proposed longitudinal % slope arrows for drainage ditch centerlines	YES				
O	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	YES				
P	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES		THE SITE IS NOT LOCATED WITHIN THE FLOOD ZONE. THE APPROXIMATE EARTHWORK VOLUMES ARE INCLUDED IN THE PERFORMANCE GUARANTEE ESTIMATE.		
7	**ROAD PROFILES (if public/private road proposed)**	N/A		NO PUBLIC/PRIVATE ROADS ARE PROPOSED AS PART OF THIS DEVELOPMENT.		
A	Existing surface; dashed and screened	N/A				
B	Proposed surface; continuous and bold	N/A				
C	Road design speed must be clearly identified	N/A				
D	Corresponding centerline stationing and curve data annotation	N/A				
E	All vertical curves must identify the proposed 'K' values and confirm they meet the minimum design speed thresholds listed in AASHTO's Green Book Tables 3-35 & 3-37	N/A				
F	Clear annotation if proposed road will be public or private	N/A				
G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	N/A				
H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	N/A				
8	**UTILITY PLAN**	YES				
A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	YES				
B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	YES				
C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES				
D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	YES				
E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES				
F	Proposed storm culverts, outfalls, and riprap locations and sizes	YES				
G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	YES				
H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	YES				
I	Flow directional arrows for storm & sewer pipes	YES				
J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	YES				
K	All storm drains must be sized to convey the 25-year storm	YES				
L	Sewer force main sizes and invert elevations	YES				
M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W); additional details and hydraulic calculations required for any Public pump station proposed.	NO		THERE ARE NO PUMP STATIONS PROPOSED ON SITE.		
N	Locations, sizes, and elevations of any: grease traps, oil-water separators, septic systems, drinking wells	YES				
O	Proposed water sizes labelled	YES				
9	**UTILITY PROFILES**					
A	Utility profiles required for **all** gravity storm drain and sewer pipes proposed: within the right-of-way, within private or public roads, for non-driveway culverts, and for any public infrastructure tie-ins	NO		DUE TO THE HIGH TRAFFIC VOLUME OF ALFRED STREET, THE APPLICANT IS WORKING WITH THE PUBLIC WORKS DEPARTMENT TO DETERMINE THE MOST FEASIBILE AND COST EFFECTIVE CONNECTION TO THE PUBLIC MAIN. IF PUBLIC WORKS AGREES WITH THE PROPOSED ALIGNMENT, WE WILL PROVIDE SUPPLEMENTARY PROFILE DESIGN PLANS.		

B	Existing surface; dashed and screened	NO				
C	Proposed surface; continuous and bold	NO				
D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO				
E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	NO				
F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated	NO				
G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated	NO				
10	**DETAILS**	YES				
A	Road section detail, including pavement/gravel depths & cross slopes	YES				
B	Sidewalk, paver, crosswalk, and any other pavement section details	YES				
C	Pavement sawcut & shiplap details	YES				
D	Utility trench/backfill detail	YES				
E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	YES				
F	Signage, striping, and ADA details	YES				
G	E&S notes and details	YES				
H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	YES				
I	Storm outfall & riprap details	YES				
J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	YES				
K	Pump station, grease trap, oil-water separator, septic, drinking well details	YES				
L	Conduit section details	YES				
11	**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**	YES				
A	As required by ordinance; at a minimum: locations, counts, lighting models, and landscaping species must be identified	YES				
B	Landscaping & lighting details	YES				
12	**DOCUMENTS/REPORTS/CALCULATIONS**					
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction v. Site Punchlist/As-Built Inspections post-construction	YES				
B	Stormwater Management Report, including: 1. Predevelopment & Post-development Drainage Area Maps, including: a. Subdrainage areas delineated and labeled b. Points of Interest/Analysis shown and labeled c. Hatching for different land cover areas (impervious, pervious, gravel) within each applicable USDA soil boundary d. Time of concentration (Tc) paths & durations e. Four City-standardized stormwater summary tables 2. If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies 3. Sizing calculations for any SWM water quality BMP or detention facility 4. A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: a. Annual maintenance requirements b. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed c. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	YES				
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	YES		A COPY OF THE ABILITY TO SERVE REQUEST LETTER IS PROVIDED WITH THE APPLICATION.		
D	A Performance Guarantee Cost Estimate utilizing Planning's template	YES		A PERFORMANCE GUARANTEE COST ESTIMATE WILL BE PROVIDED WITH THE SITE PLAN APPLICATION PACKAGE.		
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	NO		THIS PROJECT WILL NOT REQUIRE A SLODA PERMIT		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches); starting tailwater conditions/documentation must be clearly identified	YES				
K	Public sewer pump station sizing calculations and maintenance plan	NO		THERE IS NO PROPOSED PUMP STATION AT THIS TIME.		
M	Grease trap sizing calculations	NO		THE PROPOSED GREASE TRAP SIZE IS 2,000 GALLONS, CONSISTENT WITH OTHER POPEYES LOCATIONS AND SIMILAR RESTAURANT USES.		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	N/A				
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	YES		THE CITY HAS BEEN COPIED ON CORRESPONDENCE REGARDING THE MAINDOT TMP PERMIT APPLICATION		

GORRILL PALMER
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April 29, 2026

Mr. David Galbraith, City Planner
City of Biddeford
205 Main Street
Biddeford, ME 04005

Subject: Site Plan Review
Proposed Popeyes Drive-Thru Restaurant
584 Alfred St, Biddeford, ME

Dear David,

On behalf of **Golden Chicken of Biddeford, LLC (applicant)**, Gorrill Palmer is pleased to submit this Site Plan Review application for a proposed 2,536 SF Popeyes fast-food restaurant located at 584 Alfred Street. Gorrill Palmer has been authorized by the Applicant to perform all work necessary to submit this application. Our office previously submitted a Site Plan application on March 12th, 2026 which was taken up by the Planning Board as a Sketch Plan review at their April 15th Planning Board meeting. A Site Walk was also held by the Planning Board on April 15th. This submission remains generally unchanged from that same submission with some updates and responses to comments from Staff and Peer review comments received since the original submission. As required by the City of Biddeford's Land Use Code, we have included site-specific issues below for consideration by the Planning Board. We look forward to presenting this project for review at the next available Planning Board meeting.

Project Description

The project site is located at 584 Alfred Street and identified as Map 2 Lot 23 on the City of Biddeford's Assessor's Map. The parcel is located within the B-2 Highway Business Zone where restaurants are a permitted use. The previous use of the site was a residence and a small engine repair business. Those structures have since been demolished and the site is currently vacant although some amount of pavement and gravel areas from the prior use still remain on site. The applicant has executed a Ground Lease agreement for the property from the present owner, Winchendon, LLC, who also owns the abutting parcel to the east. The lease agreement includes easement rights for vehicles to access the site from the adjacent commercial plaza via an existing drive aisle that connects the two properties, and a copy is provided in Attachment 2.

City GIS Zoning Map

BUILDING, PARKING, AND DRIVE-THRU

The proposed Popeyes restaurant will be 2,536 SF and will have 24 indoor seats for sit-down dining, along with a drive-thru window. The restaurant would be open everyday from 10:30AM to 1AM. There are two public access doors into the dining area and one employee-only door to the kitchen/prep area.

Conceptual Exterior Rendering

The property has an existing full-access site driveway on Alfred Street which is proposed to be maintained as the primary vehicular access to the site. Though currently full access, this entrance is proposed to be reconstructed as a right-in-right-out (RIRO) configuration in accordance with the MaineDOT permitting process which is described further below. Since the initial submission of this project application, the driveway access has been revised to inlcude a center landscaped island separating the right-in and right-outs along the project frontage. A secondary entrance is proposed from the existing access drive that connects the site to the adjacent commercial plaza (580 Alfred St), also known as the Biddeford Shoppes. This access would be two-way, and would allow vehicles traveling eastbound on Alfred St to turn left into the commercial plaza at the Old Dogs Lane signalized intersection and navigate to the restaurant through the site's internal drive aisels. Additionally, vehicles desiring to depart the site and travel eastbound would be able to navigate to Old Dogs Lane from the connecting access drive and continue on to the signal.

As a result of the peak hour traffic that will be generated by this project, a Traffic Movement Permit (TMP) from MaineDOT will be required. Gorrill Palmer submitted the application and preliminary layout plans for initial review of the project and proposed access conditions. MaineDOT is supportive of the proposed access to the site, on the condition that the existing driveway be converted to a RIRO configuration and the curb cut in the median island front of the site driveway be closed off to eliminate left turns exiting the site. In the event of future redevelopment of the westerly parcel (586 Alfred St), we are also proposing a driveway apron connection to that parcel which would allow vehicles departing that site to have access to the signalized intersection at Old Dogs Lane. More information on the TMP permitting process is provided further in this letter.

The proposed parking lot provides parking for 22 vehicles, including 2 ADA spaces; a drive-thru lane that can accommodate 20 vehicles; and a bypass lane to allow navigation around the outside of the drive-thru queue. The site will have a counter-clockwise, one-way circulation to accommodate the drive-thru lane and building size. The drive aisles will be 16' wide, in accordance with the Ciy's Off-Street Parking standards.

The site has also been designed to accommodate a WB-67 truck for deliveries to the restaurant. The truck would enter through the RIRO driveway from Alfred St. The truck would follow the counterclockwise site circulation and depart through the access drive connecting to Old Dogs Lane, where it can then access the traffic signal. Alterations to the connection drive between the two properties, including lane widening, are proposed to accommodate the turning movement. The existing drive aisle on Old Dogs Lane is a two-lane, one-way, 24 FT wide roadway which can accommodate the departing truck while maintaining vehicular egress for the other uses on site. Truck deliveries to the existing uses at Biddeford Shoppes currently depart using the described drive aisle. The associated site work will be coordinated with Winchendon LLC to maintain existing egress during construction. Please see the attached plans for more information.

The City is constructing a new sidewalk extension in 2026 along the frontage of the project site to provide a pedestrian access connection from the existing sidewalk in front of 580 Alfred St to Andrews Road to the west. In coordination with the City Engineering Department, the applicant will modify the sidewalk alignment as part of the Popeyes site construction to accommodate the reconfigured entrance drive and to maintain public pedestrian access will be maintained across the frontage of the site. For coordination with the proposed work, the proposed sidewalk is shown in the project plans.

UTILITIES & STORMWATER

The site is not currently served by public water or sewer and previously utilized an on-site well and leach field. Please see the Site & Utility Plan provided with this letter for more information. The following utility connections are proposed to the development:

Water: There is an existing 16" water main in Alfred Street. The development proposes to tap into the existing main for domestic and fire services. Gorrill Palmer has requested an Ability to serve letter from Maine Water Company verifying the capacity and feasibility of the proposed connection which will be forward to the City upon receipt. A copy of the letter is provided in Attachment 6. Since submission of the ability to serve letter, we have received initial comments from Maine Water Company which are included on the project plans. However, we have just recently upsized the water service to a 6" to provide a private hydrant on site. This updated plan will be shared with Maine Water Company for their review and feedback.

Sewer: As required by the City Land Use Code, the development must connect to the public sewer system in Alfred St. Based on our review of record information, an 8" gravity sewer is located on the opposite (southerly) side of Alfred St and there are no existing service stubs to 584 Alfred St. During their initial review, the City Engineering Department requested that we review a possible connection to the upstream manhole at 586 Alfred St using an on-site pump station to avoid trenching across Alfred St. As an alternative, we have proposed a connection to the existing private sewer system serving the Biddeford Shoppes and located within the driveway of Old Dogs Lane, approximately 330± from the site. In reviewing the inverts on the

available record drawings, it appears a gravity connection may occur into this system. This preliminary design has been reviewed with the owner of the Biddeford Shoppes and will be further reviewed for impacts to the existing property. This approach would be more feasible and would minimize disruption to Alfred St. Gorrill Palmer has requested an Ability to serve letter from the Public Works Department verifying the feasibility of the proposed connection, a copy of which is provided in Attachment 6.We will continue close coordination with the Public Works Department throughout the permitting process.

Electricity: Three-phase overhead power is available along the site frontage in Alfred Street. The applicant is proposing an underground electric service connection from a riser on the existing utility pole on the southwest corner of the property. Gorrill Palmer has received confirmation of CMP's ability to serve this project. A copy of the letter is provided in Attachment 6.

Fuel: Natural gas is not available to the project site, therefore the proposed fuel source is propane stored in (2) 1,000 gallon above ground tanks. The tanks will be screened with a stockade fence and protected with bollards. The applicant has not yet identified a vendor but will likely coordinate directly with a vendor for installation. Please see the attached Utility Plan for more information.

STORMWATER AND EROSION CONTROL

The 1.43-acre property has been previously developed, and consists primarily of pavement, gravel, and grassed areas. Approximately 0.45 acres (31%) of the site remains as undeveloped wooded area. As previously mentioned, the former on-site buildings have been demolished. The project will create approximately 8,840 SF of net new impervious area on site. Therefore, the project will not be required to obtain a Stormwater Management Law permit from MaineDEP.

In accordance with the City of Biddeford Site Plan standards, stormwater management facilities will be included in the final project design to collect site runoff and ensure post-development peak runoff flows do not exceed the pre-development condition. Detention in the proposed development will be accomplished using subsurface Cultec chambers below the paved area on the easterly side of the site. A network of catch basins and closed stormdrains will convey runoff to the chamber system, and an outlet control structure will ensure peak flows during the three design storm events will be effectively mitigated. Please see the Stormwater Management Plan provided in Attachment 4 for further details on the hydrologic analysis and BMP design.

TRAFFIC

The proposed development will generate 129 trip ends during the PM peak hour, 140 trips during the Saturday peak hour, and 140 trips during the Sunday peak hour and will therefore require a Traffic Movement Permit (TMP) from MaineDOT. Gorrill Palmer submitted the TMP application in January 2026 and has received initial feedback from the DOT, which have been incorporated into the design plans. The Scoping Meeting was held on April 15th and at this time The City received a copy of the TMP application upon submission as well as responses to initial comments from DOT. This development is not anticipated to significantly impact traffic volume on Alfred Street, nor to overburden the signalized intersection at Old Dogs Lane and

Alfred Street.

WAIVERS

Based on our review of the Site Plan and Development Criteria, we respectfully request a waiver for Section 5.B.(i)(3). which requires parking, drive aisles, and pedestrian access ways to occupy less than 30% of the developed area. The overall impervious areas occupies less than 50% of the total lot area, but paved area represents about 64% of the proposed developed area. As this project represents is an infill development opportunity, we feel this would be an effective use of the waiver process.

Conformance with Site Plan Review Procedure

SECTION 5. SITE DESIGN AND DEVELOPMENT CRITERIA

A. Site Development Plan. In considering applications within the purview of these regulations, the Planning Board shall be guided by the standards and criteria contained herein. The site development plan shall embody or meet the following qualifications:

1) Be on sheet size of 24 by 36 inches
2) The scale of said plan shall be not less than one inch equals 50 feet and indicated on plat by use of a bar scale.
3) The original of said plan shall be on Mylar, and there shall also be submitted 10 paper prints of any such plan.
4) The plan shall bear the date, title, North point.
5) The plan shall contain the name and address of the developer and applicant.
6) The plan shall contain a location or vicinity sketch (suggested scale one inch equals 800 feet).
7) The following items are required on the site plan showing existing and proposed features as appropriate:
a) A sketch of the site showing existing natural and historic features including:
1. Watercourses and water bodies, seasonal wet areas;
2. Soil type, location of test borings;
3. Topographic contours (every five feet for 0% to 3% slope; or evert two feet for steeper areas);
4. Consideration shall include the preservation and supplementation of existing dominant vegetation. Such plan shall indicate which of such features are to be retained and which are to be removed or altered;
5. The location of stonewalls, graveyards, fences, stands of trees, and other important or unique natural areas and site features, including but not limited to floodplains, deer wintering areas, significant wildlife habitats, fisheries, scenic areas, habitat for rare and endangered plants and animals, unique natural communities and natural areas, sand and gravel aquifers, and historic and/or archaeological resources, together with a description of such features.
b) Plan view of all buildings with their use, size, location, and first-floor elevation in respect to grade.
c) A standard elevation view of existing and proposed buildings or structures on site.
d) Outline of any buildings located within 200 feet of such existing or proposed

buildings or structures, indicating their shape, size, location, heights, and volume.

e) *Existing use of abutting properties shall be identified with approximate location of any structures thereon including access roads.*
f) *The location width, curbing, and paving of accessways, egress ways, and streets within the site for both pedestrian and vehicular use.*
g) *The location of off-street parking and loading spaces with a layout of the parking indicated.*
h) *The size and proposed location of water mains and sanitary sewerage facilities will all necessary engineering data.*
i) *The size and location of all other existing and proposed public service connections including, without limitation, gas lines, power lines, telephone lines, and fire alarm connections and locations, indicating whether above or below ground.*
j) *The type, nature, and composition of all solid, liquid, and gaseous waste, industrial or otherwise, and the location, type, and design criteria of the storage and disposal facilities dealing with such waste.*
k) *The location, elevation, and layout of existing and proposed catch basins and other surface drainage features.*
l) *Existing and proposed contours and finished grade elevations as well as the type, extent, and location of existing and proposed landscaping and open space areas which will be retained.*
m) *The location, size, and design of proposed signs and other advertising or instructional devices.*
n) *The location and type of lighting for outdoor facilities.*
o) *Lines of existing and proposed abutting streets showing width.*
p) *Surveyed property lines showing their bearing and distances and monument locations.*
q) *If a subdivision is involved, the lines and names of all proposed streets, lanes, ways, or easements intended to be dedicated for public or private use.*
r) *A copy of any covenants or restrictions that are intended to cover all or a part of the land area to be developed.*
s) *Indicate the limits of wetland areas on the property.*
t) *Delineate existing zoning boundaries within 1,000 feet of the site.*
u) *Have affixed thereto the stamp and signature of either a Maine licensed land surveyor, professional engineer, or architect responsible for said plan.*
v) *Any other exhibits or data that the Planning Board may require in order to adequately evaluate the proposed development or project; this would include:*
    1. *Traffic study*
    2. *Community fiscal impact study*
    3. *Drainage study/calculations*
    4. *High-intensity soils study*
    5. *Photographs*

Enclosed within this application are a set of detailed civil design plans which include existing conditions; proposed site, utility, drainage, grading, and stormwater, landscaping, and lighting infrastructure in accordance with the requirements listed above. Additionally, proposed building elevations are provided in Attachment 13. Please see the completed Site

Plan Checklist enclosed with this submission for more detailed information on each plan.

B. *Site design criteria. The design standards presented here are minimum in nature; the applicant may provide further details to the presented plan. At the same time, some of these standards may not apply to a specific project; the applicant may request in writing waivers from any point following. All waivers must be added as notes to the approved plan, and shall be considered conditions of approval. Besides the following standards projects presented under this article shall be subject to the performance standards specified in Article VI of this ordinance.*

1) *Drainage.*
   a) *The rate of post-development runoff shall not exceed that of predevelopment. Details of catch basins, drainage pipes and retention/detention ponds shall be provided as needed with the application. All detail sheets shall bear the seal and signature of a professional engineer, licensed in the State of Maine.*
   b) *A written engineering report describing the impacted watershed area, projected runoff, and any projected downstream impact shall be required.*
   c) *Drainage easements shall be established for any concentrated off-site drainage. Such easement shall state who has the responsibility to maintain the easement. Easement documents shall be reviewed, at applicant expense, by the Director of Public Works, City Engineer, and the City Solicitor, as to exactness of content. Plans shall include the location of easements.*
   d) *Where it is determined by the City Engineer or consultant hired by the Board, that the additional runoff incident to the development of the projected site will overload an existing downstream drainage facility, the Board may require the provision of water-retarding facilities or other improvements to alleviate said problem.*

   A hydrologic model using TR-20 methodologies has been prepared to demonstrate that the rate of post-development runoff will not exceed the pre-development condition. The applicant currently has easement rights as part of their lease-agreement, and no additional drainage easements are proposed. The proposed stormwater management BMPs, watershed delineations, and peak runoff analyses are presented in a Stormwater Memorandum provided in Attachment 4.

   e) *Development in specific areas of concern shall provide detailed information and address specific issues in relation to drainage:*
      1. *Parcels situated within the federally designated flood hazard zone, as per Flood Hazard Boundary Map H01-18, dated May, 1984, as amended, shall comply with all applicable federal regulations relating thereto.*
      2. *One-hundred-year flood elevation line shall be included where applicable.*
      3. *No slope shall be created which results in a slope of more than two feet horizontal to one foot vertical unless proper retaining walls are proposed.*

   The project site is not located within the 100 year Flood Zone. The project includes a 1.5:1 slopes at the easterly edge of the parking which is proposed to

be stabilized with rip rap. A FEMA Firmette map is provided in Attachment 10 of this submission.

f) *Drainage improvements shall be scheduled to be constructed as part of the first portion of any project where drainage improvements are proposed.*

Drainage improvements will commence as part of the main construction sequence. A construction sequencing and implementation schedule is outlined in the Erosion & Sedimentation Control Report provided in Attachment 5.

g) *Special bonding of 1 1/2 times the anticipated cost of said improvements shall be incorporated by the developer to insure that improvements are placed and that they function as planned. No portion of this special bond may be released until the project, or that portion of the project for which the drainage improvement is proposed has been constructed, and until so released by the Planning Board, with the recommendation from the Director of Public Works and the City Engineer.*

The applicant understands this requirement and will coordinate further with the Director of Public Works and City Engineer.

2) *Utilities.*

a) *All utilities, including electric, gas, water/sewer, shall be shown on the plat, and separate detail sheets as needed.*

Proposed Utilities are shown on Sheet C-3.0 - Site and Utility Plan. Utility details are also provided in the project plans included with this submission.

b) *Accessways, storage, and parking areas shall be graded and improved with pavements, curbs, gutters, sidewalks, storm drainage facilities, outdoor lighting, etc.*

Newly proposed pavement, curbs, light bases, and sidewalks are shown on Sheet C-101. Proposed stormwater drainage facilities are depicted on Sheet C-102 – Grading, Drainage, and Erosion Control Plan.

c) *All accessways/drives and service ways shall be of sufficient width and configuration to accommodate the prospective traffic and to afford satisfactory access to police, firefighting and other such service.*

The proposed driveways and internal drive-aisle widths are in conformance with Article VI Section 49 – Off Street Parking.

d) *Any proposal within 200 feet of a public water or sewer line(s) must connect to system(s). Applicant must supply copies of letters from the environmental specialist of the City of Biddeford for sewer, and water company shall confirm details of connection and/or concerns.*

The applicant is proposing to connect to the public sewer and water systems as

part of this project. Ability to Serve letters have been sent to the respective utilities and are included in Attachment 6 of this application.

e) *Whether or not a municipal water system is proposed, the following items must be specified in application narrative and on plat:*
   1. *Rated normal capacity and gallons per minute at prime use time.*
   2. *Rated maximum capacity and gallons per minute at prime use time.*
   3. *Residual pressure of proposed tap line.*

   Gorrill Palmer has provided water demand calculations as part of the Ability to Serve inquiries, and has requested information from Maine Water Company relating to residual pressure in the watermain within Alfred Street.

f) *Where nondomestic sanitary discharge (any discharge into the public sewer system containing other than normal household wastes) is anticipated, such effluent shall be identified and comply with any and all federal, state, and local laws, ordinances, rules, and regulations. Where any such laws, ordinances, rules and regulations may overlap or may be inconsistent, the more stringent shall apply.*

   The wastewater effluent will be consistent with that of similar fast-food restaurants. A 2,000 gallon grease trap is proposed on site to filter kitchen waste prior to its discharge into the public system.

g) *Where public sanitary service is available, or where developers must extend such service, applicants must apply for and receive a discharge permit from the City Council of the City of Biddeford prior to approval by the Planning Board.*

   The applicant will further coordinate with the City regarding the required sanitary discharge permit.

h) *Where practicable, all electrical and telephone utilities shall be placed underground.*

   Electric and communication lines are proposed to be underground, as shown on the provided Utility Plan.

3) *Parking.*
   a) *A parking plan shall delineate the number of parking and delivery or loading spaces and the physical arrangement. Details of parking plan shall conform to the provisions of the off-street parking section of Article VI of this Zoning Ordinance.*

   Proposed parking is shown on the Site Plan and is in conformance with Article VI Section 49 – Off Street Parking.

b) *No on-street parking, delivery or loading is permitted, except where specifically allowed by the Planning Board.*

There is no on-street parking proposed as part of this development.

c) *Whenever a use existing on the effective date of these regulations is changed thereafter to a new use, parking facilities and access shall be provided as required herein for such new uses.*

The parking layout has been designed for the restaurant use as shown in Table 6-49B of Sect Article VI Section 49 – Off Street Parking.

d) *In the case of multifamily projects the number of required parking spaces should be increased 5% to allow for visitor parking.*

Not applicable.

e) *Parking lots shall be landscaped and/or screened to provide for a pleasing visual effect and blending in with the surrounding area.*

A 25-foot-wide landscaped buffer is provided along the site frontage which serves to screen the parking lot from Alfred St while providing an enhanced view of the building from the right-of-way. Please see Sheet C-5.0 – Landscape Plan for more information.

f) *Lots shall be illuminated for security purposes. The lighting shall be designed in such a way that off-site glare is minimized.*

A Photometric Plan with depicted foot-candle levels across the site is included in the attached plan set. The lighting design maximizes illumination of parking, walkway, and entrance areas while mitigating spillover into adjacent properties.

g) *Adequate space shall be allowed for the accumulation of snow during the winter plowing months.*

Snow storage areas are depicted on Sheet C-3.0 the Site and Utility Plan included with this submission.

4) *Structural Layout and Design. All proposed structures or additions to existing structures shall address the following items:*

a) *Design of buildings:*
   1. *Buildings shall be designed to blend harmoniously with the surrounding structures in the neighborhood. New structures should be designed so as to complement the style of the abutting older structures. A photograph, architectural rendering or other representation of the proposed structure*

must accompany the application for site review.

2. *In the I-3 Zone structures shall have a facade sheath in brick or other masonry finish. Other facade finishes may be used when it can be clearly shown to the board that such facing material will advance the City's intent to make the I-3 area a more attractive gateway to the City. Residual pressure of proposed tap line.*

   The proposed building design is consistent with the surrounding commercial plazas to the east and south. Architectural elevations are provided in Attachment 13.

b) *Setbacks. Proposed structures shall be set back from roadways, in conformance with requirements for the particular zone; and shall be set in such a way as to blend in harmoniously with buildings on abutting properties, and to allow for adequate landscaping of the front yard.*

   The building has been sited in conformance with the structural setbacks of the B-2 Highway Business Zone.

c) *Fire protection:*
   1. *All proposed structures and additions to existing buildings must be designed to meet existing fire protection standards.*

      The building design will conform with all existing fire protection standards. Specific fire suppression design information will be provided as part of the building construction drawings during the Building Permit process. The project proposes to install a private hydrant on site which will provide additional fire protection for the property.

d) *Landscaping:*
   1. *All sites must be landscaped with vegetation that will act to:*
      a. *Reduce the impact of lighting, vehicular and structural, on abutting properties;*
      b. *Reduce the impact of proposed structures on the privacy of abutters;*
      c. *Make the site more attractive to the average viewer.*
   2. *Landscaping measures will be indicated on the plat by drawings and narrative note. The use of trees and shrubs for fencing and shading is strongly encouraged. Care must be taken to ensure that tree, etc., are placed in such a fashion that in time they will cause minimum impact on abutting properties and public roadways and travelways, particularly as they grow:*
   3. *Whenever possible existing vegetation shall be preserved and incorporated into the landscaping scheme of the project.*
   4. *Each proposal will include a detailed landscaping plan. This plan will include the location, type and size of existing mature trees (those trees over eight inches in diameter).*
   5. *Particular attention should be paid to offsetting the visual impact of new*

structures in areas where there may be a stark contrast with the existing design trend of the neighborhood.

A Landscape Plan is included with the attached plan set which depicts new trees and shrubs to replace the existing on site vegetation which is in poor condition after years of vacancy on the property. The new vegetation will screen parking areas and enhance the curb appeal from Alfred Street. The Landscape Plan (Sheet C-5.0) includes a schedule of the size and species of the proposed plantings.

e) *Service, storage and utility areas.*
   1. *All service, storage, and utility areas shall be designed to the side or rear yard of a proposed or existing building or structure, and such areas shall be appropriately screened/buffered by walls, fences, earth berms, or vegetation.*
   2. *Proposed utility elements shall be adequately screened; and, if producing sound, baffled upon Planning Board request.*
   3. *Trash receptacles, dumpsters, storage sheds, etc., shall be shown on plat.*

There is a proposed dumpster pad and an above-ground LP gas tank farm located at the rear of the site. The dumpsters will be screened with fencing, and the tank farm will be screened by a fence. A detail is provided as part of the attached plan set.

f) *Paving, parking, and storage areas.*
   1. *No paving, parking, or storage shall be permitted within the required setback of any side or rear property line*
   2. *No paving, parking, or storage (except for entrances/exits) shall be permitted within 25 feet of any front property line. These unpaved nonparking or nonstorage areas shall be maintained as landscaped areas or open spaces.*

A 25-foot landscaped buffer is proposed along the front property line in conformance with this standard. Please see the Site Plan for more information.

g) *Handicapped accessibility.*
   1. *Pedestrian walkways, entrances and exits designed for use by the handicapped shall be provided as required by any and all federal, state, or local laws, ordinances, rules and regulations or as requested by the Planning Board.*
   2. *Handicapped parking spaces and accessways shall be indicated on plat whenever they are to be employed.*

Two barrier-free accessible parking spaces are proposed on site in accordance with the Americans with Disabilities Act. Please see the Site Plan for more information.

h) *Loading facilities.*

1. *Loading facilities for new structures shall be designed to the rear or side of any and all proposed or existing building or structure.*
2. *Loading facilities shall be designed in accordance with the applicable federal, state, or local laws, ordinances, codes, rules and regulations and shall be off-street or accessible via a public street.*

There are no proposed loading dock facilities as part of this project. Delivery vehicles will unload within the parking lot during non-business hours.

i) *Parking, loading, and protective buffers.*

1. *All parking, loading and protective buffers shall be situated on the same tract or parcel of land as the primary use building or structure.*
2. *The maximum nonvegetated area of the land area being developed and reviewed shall be 75%.*
3. *Any parking or paving, including all access ways, egress ways, entrances and exits on streets for both pedestrian and vehicular use, shall not cover or occupy more than 30% of the land area being developed and reviewed and shall be included with the maximum nonvegetated area.*
4. *In all applications, a minimum of 25% of the land area being developed and reviewed shall remain in its natural state or shall be maintained as appropriately landscaped area.*
5. *All buildings or structures shall be sited in conformance with established setbacks of the particular zone. No building or structure may be built within the required side yard setback. The Planning Board may require greater setbacks in areas such as turnpikes, water bodies, railroads, etc.*
6. *All buffered or screened areas shall be densely planted with shrubs or trees which are respectively at least two or three feet high at the time of planting and are of a type which may be expected to form a year-round dense screen of at least five feet high within three years, provided that such screening shall not obstruct the view of oncoming traffic when entering or exiting the site. An additional cash bond to cover the cost of replacement of these plantings maybe required. The term of the bond shall be equal to three years from the time of planting. At the end of the three years any unused portion of this security will be returned to the applicant along with accrued interest.*

Parking and landscaping associated with the development are proposed on the same parcel as the proposed Popeyes restaurant. The proposed building complies with the required setbacks, and the proposed landscaping will not hinder or obstruct visibility of oncoming traffic for vehicles entering or exiting the site.

Please refer to the Space and Bulk Table located on Sheet C-3.0 of the project plans for conformance with the Site Plan requirements of this section, as well as the dimensional requirements for projects located within the B-2 Highway Business Zone.

k. External lighting.

1. All existing/proposed external lighting must be included on plat. Lighting will be described as needed.
2. Lighting shall be designed to provide adequate illumination on-site, especially in parking areas, walkways and structural entrances, and site entrance from roadways. At the same time all illumination will be designed to mitigate adverse impact on abutting properties and structures, and traffic.

A photometric plan and associated fixture cut sheets prepared by Reflex Lighting have been included with this submission as Attachment 12.

l. Signs.

1. All proposed signs shall meet standards provided in Article VI of the Zoning Ordinance of the City of Biddeford.
2. Signs shall be indicated on plat.
3. A detail of sign design shall be submitted as part of the application for site review.

All proposed signage will comply with the standards provided in Article VI of the City of Biddeford Zoning Ordinance. The location of the proposed signage is shown on the site plan (Sheet C-3.0). A detailed sign design is included with this submission as Attachment 13.

m.

Historic and archaeological resources. If any portion of the site has been identified as containing historic or archaeological resources, the development shall include appropriate measures for protecting these resources, including but not limited to modification of the proposed design of the site, timing of construction, and limiting the extent of construction.

The Applicant has contacted the Maine Historic Preservation Commission to request information regarding the presence of any nearby structures or areas with historical, architectural, or archaeological significance, as defined by the National Historic Preservation Act of 1966. We are currently awaiting their response; however, proof of correspondence has been included in Attachment 7.

Staff Review Committee Preliminary Comments

The following comments were provided as part of the Planning Board Staff Report dated March 26, 2026 prior to the Planning Board meeting on April 15th. For ease of review, we have repeated those comments below with our responses in **bold.**

A. Traffic Impact Study: One of the most important elements of the proposed development will be vehicle circulation/access. The proposal is seeking approval of 1 freestanding quick service food restaurant each with a drive-thru facility. This project will require the submittal of a traffic impact study and will likely require a Traffic

Movement Permit, to be issued by the Maine Department of Transportation (MDOT).

A Traffic Movement Permit has been submitted and accepted, and a Scoping Meeting was held on April 15th, 2026. We understand the City of Biddeford is participating in this TMP review process and that the traffic analysis portions of the local application may be met as part of this traffic review. Additional traffic information can be provided to the City upon request.

B. Thatcher Brook Watershed: The property is located within the Thatcher Brook Watershed so is subject to the related impact fees which will be paid prior to the issuance of a building permit. This fee will be calculated prior to Final Site Plan review and approval.

We understand the property is located within the Thatcher Brook watershed and the Applicant is prepared to submit the applicable impact fee.

C. Site distances from the proposed Alfred Street curb-cut shall be provided on revised plans.

The project proposes a right-in/right-out driveway configuration and, therefore, only a sight distance in the easterly direction is provided on the Site Plan. The sight distance looking east is 360' to the intersection and greater than 500' beyond the intersection.

D. The proposed one-way, fifteen (15) foot wide drive aisle, located at the east of the property shall be a minimum of twenty (20) feet in width to accommodate the City's largest Fire Department apparatus.

The primary one-way drive lane is now 16' wide which would allow passage of a fire apparatus however, the drive aisle and drive-thru lane together is approximately 26' wide which provides sufficient width for a fire apparatus to stop and set up. We look forward to continued review by the Fire Department and will confirm this width is sufficient to meet their needs.

E. Fire hydrant locations within 250 feet of the property shall be illustrated on revised plans.

Distances to the nearest public hydrants are located on Sheet C-3.1. Understanding the nearest public hydrant is located across Rte. 111, we have now included a private hydrant on the project site.

F. Vehicle turning templates through the site shall be provided and shall accommodate the City's largest Fire Department apparatus.

Vehicle turning templates are provided now for a fire truck meeting the City's largest apparatus and a WB-62 which is the design vehicle serving the Popeye's deliveries.

These figures are provided in Attachment 14.

G. A five (5) foot wide concrete sidewalk, connecting to the Biddeford Shoppes shall be provided along the Alfred Street frontage of the property.

We have met with the City Engineer, Craig Chekan, to review the revised driveway access and sidewalk alignment as well as the sequence of construction. At this time, the Applicant will move forward with a 5' wide paved sidewalk along the entire project frontage. The City, as part of their sidewalk project in Summer 2026, will build the sidewalk up to the project frontage limits to avoid unnecessary sidewalk construct and demolition between projects.

H. Grease traps for the proposed restaurants shall be provided and illustrated on the plans. A fats, oils, and grease (FOG) permits will be required for each of the proposed restaurants.

The applicant understand a FOG permit will be necessary at the time of the Building Permit application. A 2,000 gallon grease trap is included in the project plans to support and treat the kitchen waste prior to connecting to the primary building sewer line.

I. The Preliminary Submittal/Plans shall include the following:
   1) Utility Plan including proposed sewer connections.
   2) Existing and proposed topography
   3) Existing stream and properly identified required setbacks from the resource.
   4) Stormwater Management / stormwater detention plans (Article VI p Performance Standards, Section 61).
   5) Colored building elevations for each building.
   6) A detailed landscape plan including a table of proposed plantings (Maine native species), numbers of each species and proposed sizes at installation.

The items identified above have been included in the project plans and application materials. We look forward to Staff's continued review of this application and materials.

J. Access easement areas, with Biddeford Shoppes Shopping Center (BSSC) shall be shown on the plans. This shall include an overall plan of the BSSC with the access agreements of Biddeford Commons and the proposed Popeye's restaurant proposal.

The potential access and utility easements are shown on Sheet C-3.1 and will continue to be reviewed with the Applicant and the property owner for 584 Alfred Street and the Biddeford Shoppes.

K. Turning template needed around the site using the Fire Department's apparatus.

A fire truck turning template is provided in Attachment 14 which has been provided to

the Fire Department directly for review.

L. Pedestrian trash receptacles shall be provided on-site and shall be illustrated on revised plans.

Due to scale of the plan, a note has been added to the Site Plan stating that trash cans shall be placed adjacent exterior entrances to the dining area.

M. If the proposed restaurant includes an outdoor patio area, please provide information on the proposed chairs, tables, and street furniture (benches, garbage cans, etc.) utilizing these spaces.

There are no outdoor seating or patio spaces proposed as part of the project at this time.

N. Formal application plans shall include dimensions of all drive aisles and parking stalls.

The Site Plan includes dimensioning for the parking stalls, drive aisles, and other relevant site and building elements.

O. Snow storage areas shall be illustrated on formal application plans, and the narrative shall be updated to include a snow removal description.

Snow storage areas are identified on the Site Plan, C-3.0. Snow storage areas are located in the north (rear), northwest, and southwest (front) of the perimeter parking areas around the site. We believe the site will offer ample snow storage capacity to serve the development.

P. How will refuse and recycling be handled? Please provide details of the proposed refuse and recycling enclosure including materials and dimensions. The enclosure shall be constructed of the same materials and colors as the proposed buildings.

A dumpster enclosure area is provided on the project plans in the northeast corner of the site. Trash will be collected with a private trash collection contractor. The Applicant has not yet identified if they will include a recycling service however, sufficient space is provided currently to accommodate separate trash and recycling dumpster should the Applicant elect to utilize those services.

Q. Stormwater Management Plans shall be included in the Preliminary Application submittal.

A Stormwater Management Memo is provided in Attachment 4 outlining the proposed stormwater management design which is also detailed on Sheets C-4.0 and C-4.1. The project proposes to construct a closed drainage system which will flow through a subsurface detention system before discharging to the east and into the adjacent wet pond on the Biddeford Shoppes site.

R. On site traffic signage shall be shown on revised plans including type, size and location. This is of particular importance where one-way traffic transitions into two-way traffic such as the northeast corner of the parking lot.

The signage design has been revised to include "One-Way" signs at the entrance off Alfred Street and the entrance from the Biddeford Shoppes site. Conversely, "Do Not Enter" signs are included in the opposite directions to appropriately direct vehicles entering the site in the correct, counterclockwise direction.

S. The application includes a detailed signage program. These should be reviewed by the Board for illustrative purposes only. All signage shall conform to the City's sign ordinance and will be reviewed for conformity by the City's Code Office at the time of building and signage permit review and issuance.

The Applicant understands that the final signage permit will be reviewed by the Code Office at the time of the Building Permit application.

Closure

One electronic copy of the application materials are submitted for your consideration and distribution to the Planning Board. A check was previously provided in the amount of $2,775 to cover the applications fees. The amount was determined by the following:

20,000 to 29,999 square feet footprint of structures and paving/parking.

Site Plan Review Fee: $2,700

Administrative Fee: $75

TOTAL: $2,775

If additional funds are required, we will coordinate to have those fees submitted accordingly. We look forward to reviewing this project with you and the Planning Board at the next available meeting. If you have any questions with the information being submitted, please contact our office at 772-2515 or mrabasco@gorrillpalmer.com.

Sincerely,

GORRILL-PALMER

Kaleb Bourassa, PE
Project Manager
Phone 207-772-2515 x297
KBourassa@GorrillPalmer.com

cc: Arsal Jaffery, Golden Chicken of Biddeford, LLC
Jamie Mabardy, 584 Alfred Street, LLC

ATTACHMENTS	
#	ATTACHMENT
1	Application Form, Checklist, Agent Authorization
2	Ground Lease Agreement
3	Technical Ability & Financial Capacity
4	Stormwater Management Memorandum
5	Erosion and Sedimentation Control Report
6	Utility Ability to Serve Letters & Correspondence
7	MHPC Correspondence
8	Performance Guarantee Worksheet
9	Project Location Map
10	FEMA Flood Plain Map
11	Site Photographs
12	Light Fixture Cut Sheets
13	Architectural Floor Plans & Elevations & Sign Details
14	Vehicle Turning Templates
Separate Enclosure	Plan Set

City of Biddeford – Planning Department
Planning Board Application
P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

__ Shoreland Zoning Permit _X_ Site Plan Review (Please include checklist) __ Extraction
__ Conditional Use Permit __ Subdivision (Please include Checklist) __ Private Way
__ Other: _____

Applicant Information:

Name: _Golden Chicken of Biddeford, LLC _____
Mailing Address: _10 Bittersweet Court, Newington, CT 06111_____
Telephone: _860-778-6179_____
Email: _arsal.jaffery@outlook.com_____
What is your legal interest in the property?
__ Owner __ Potential Buyer with Contract _X_ Lease/Rental Agreement

Owner's Information:

Name: _584 Alfred St, LLC_____
Mailing Address: _355 Main St, Ste 25, Woburn, MA 01801_____
Telephone: _781-910-5118_____
Email: _jamie@cjmabardy.com_____

Agent's Information:

Name: _Gorrill Palmer_____
Mailing Address: _300 Southborough Drive, Ste 200, South Portland, ME 04106_____
Telephone: _207-772-2515_____
Email: _kbourassa@gorrillpalmer.com_____

Engineer/Surveyor's Information:

Name: _Gorrill Palmer (engineer)_____
Mailing Address: _300 Southborough Drive, Ste 200, South Portland, ME 04106_____
Telephone: _207-772-2515_____
Email: _ kbourassa@gorrillpalmer.com_____

Project Location and Lot Information:

Street Address: _584 Alfred Street_____ Drainage Watershed: _Thatcher Brook_____
Tax Map: _2_____ Lot: _23_____
Current Zoning: _B-2_____ Shoreland Zoning: _N/A_____
Size of Lot: _1.43_____ (X)acres ( )s.f. Lot Frontage: _168 FT (+/-)_____
Existing Use of Property: _Vacant (formerly residential/commercial)_____

Property currently serviced by:

_X_ City Road __ Public Sewer __ Public Water __ Public Trash
_X_ Private Road _X_ Septic System_X_ Private Well __ Private Hauler

Slope Conditions in Area of Construction (if applicable):
__Flat (0-3% slope) _X_Rolling (3-8% slope) __Hilly (8-15% slope) __Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? __ (Yes)_X_(No) if yes attach information
Is the project within the 100-year floodplain? __ (Yes)_X_(No) if yes attach information
Do you plan to bring fill onto the lot? _X_(Yes) __(No) If yes attach information

Description of proposed use of property:

Project/Proposed Use: _Proposed Popeyes fast-food restaurant. See attached narrative for more information._____

_____

Property to be Serviced by:

_X_ City Road _X_ Public Sewer _X_ Public Water __ Public Trash
_X_ Private Road __ Septic System __ Private Well _X_ Private Hauler

Limits of Disturbance: _1.02±_____ (x)acres ( )s.f.
Net change in impervious cover: _8,840±_____ ( )acres (x)s.f.
Is this project part of a larger project? __(Yes) _X_(No)
Is the project proposing a new Private or Public Road? __(Yes, Private) __(Yes, Public) _X_(No)
Is this project within the Urbanized Area/MS4 (*see City Drainage Map*) __(Yes) _X_(No)
Is the project proposing any Stormwater facilities/BMPs? _X_(Yes) __(No)
Will a Traffic Movement Permit (TMP) be required?: _X_(Yes) __(No)

__ **If in a Shoreland Zone:**
Percent of residential lot coverage (Max 20%): _____
Percent of structure expansion (Max 30%): _____
__ **If Subdivision Review, number of lots proposed:** _____
__ **If a Private Way is proposed, number of lots served:** _____

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: _2,536 SF_____
Total new square feet paving/parking: _8,840 SF_____

Waiver Requests (attach details):

1. Requesting waiver for Section 5.B.(i)(3) of the Site Design Criteria which requires paved parking, drive aisle, and walkway areas to occupy <30% of the proposed developed area. This project proposes approximately 64% paved area within the development footprint. Please see attached plans for more details.
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval
__ Fire Department – Contact Chief or Deputy Chief – 282-9986
_X_ Ability to Serve for Water Service – Maine Water – 282-1543
_X_ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
__ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
_X_ Ability to Serve for Electrical Service-CMP-1-866-225-4200
_X_Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

B. Photographs of Site.
C. Architectural renderings/drawings of proposed buildings, as required.
D. Engineering Plans, as required.
E. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- $75 Nonrefundable Administration Fee is required for every application.

- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance? _X_(Yes) __(No)

- **If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.**

Signature of Applicant: _____ **Date 3/11/2026**

Signature of Property Owner: _____ **Date** _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

A) PDF OF SIGNED APPLICATION

B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)

- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVDUAL DRAWING NAME.pdf'

B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.

C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)

- All drawings & CAD reference files must be to-scale and within the following coordinate systems:

- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIUDAL DRAWINGS REQUIRING BOARD SIGNATURE

B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

The City of Biddeford's Planning Department will never ask for fees to be paid by wire transfer. All invoices from the City of Biddeford will come from email addresses ending in "@biddefordmaine.org".

CITY OF BIDDEFORD - SITE PLAN & SUBDIVISION APPLICATION DRAWING CHECKLIST *LAST REVISED: 11/26/2024*

CHECKLIST DIRECTIONS:

1. The following checklist must be completely filled out by the applicant and included on all preliminary and final Site Plan & Subdivision submittals. No checklist is required for sketch submittals.
2. Applicant to confirm all of the items listed are included within the submittal. Any missing items must have adequate reasoning to justify their absence.
3. City to review applicant's submittal and checklist responses. Projects missing substantial submittal information with non-acceptable reasoning will be rejected and required to resubmit.
4. Items in **BLACK** are required for 'Preliminary' approval & 'Final' approval.
5. Items in **BLUE** are only required for 'Final' approval.

SUBMITTAL INFORMATION - TO BE FILLED OUT BY APPLICANT	
Project Name:	POPEYES RESTAURANT
Planning Board # (if available):	
Applicant Name/Info:	GOLDEN CHICKEN OF BIDDEFORD, LLC
Submittal #/Type (Prelim/Final):	FINAL SITE PLAN
Submittal Date:	3/11/2026

SUBMITTAL REQUIREMENT		APPLICANT RESPONSE			CITY REVIEW RESPONSE	
ITEM NUMBER	DESCRIPTION	INFORMATION PROVIDED (YES/NO)	LIST DRAWING SHEET NUMBER WHERE INFORMATION IS PROVIDED	REASON NOT PROVIDED/COMMENT	ACCEPTABLE (YES/NO-REVISE & RESUBMIT)	COMMENT
1	**GENERAL PLAN REQUIREMENTS**					
A	Drawing specific legends (linetypes, hatches, etc.)	YES				
B	Individual drawing layer control should be utilized: freeze/thawing, changing lineweights, and screening (i.e. screen existing layers on a proposed plan, freeze topography and underground utilities on a proposed site plan)	YES				
C	North arrows, standard engineering scale viewports, scale bars, dated revision blocks	YES				
D	All drawings and surveys must be in the following coordinate systems: NAD83 Maine State Plane West (Horizontal) and NAVD88 (Vertical)	YES				
E	Drawings need to be designed, signed & sealed by a Maine licensed professional engineer (PE); all boundary survey data needs to be performed by a licensed professional land surveyor (PLS)	YES				
2	**COVER SHEET**	YES				
A	Project Name & Property Address	YES				
B	Project Team Contact Information (Owner, Engineer, Contractor, etc.)	YES				
C	Site Location Map	YES				
D	Sheet Set List of Drawings	YES				
E	Tax Map and Lot ID	YES				
F	Zoning & Shoreland Zone Information	YES				
G	Existing Use Description	YES				
H	Proposed Use Description	YES				
I	Required Waiver/Variances (Yes/No); if yes, plan must clearly list waivers/variances requesting	YES				
J	Name of Drainage Watershed	YES				
K	Within the MS4 Urbanized Area (Yes/No)	NO				
L	Natural resources (streams, wetlands, etc.) located on-site or adjacent to the property (Yes/No)	NO				
M	Within the 100-year Flood Zone (Yes/No)	NO				
N	Public Road Proposed (Yes/No)	NO				
O	Private Road Proposed (Yes/No)	NO				
P	Public Sewer Connection (Yes/No)	YES		THE SITE IS NOT CURRENTLY CONNECTED TO PUBLIC SEWER. THE APPLICANT IS PROPOSING A PUBLIC SEWER CONNECTION AS PART OF THIS PROJECT.		
Q	Public Storm Drain Connection (Yes/No)	NO				
R	Limits of Disturbance in square feet and acres	YES				
S	Pervious Land Cover square footage, existing and proposed	YES				
T	Impervious Land Cover square footage (Pavement/Gravel), existing and proposed	YES				
U	Building Roof square footage, existing and proposed	YES				
V	Assigned Planning Board Number	NO				
W	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES		THE SITE IS NOT LOCATED WITHIN THE FLOOD ZONE.		
3	**EXISTING CONDITIONS PLAN**	YES				
A	Horizontal & Vertical Datums annotated (NAD83 & NAVD88)	YES				
B	Property & Right-of-Way Lines	YES				
C	Boundary line information (bearings, distances, etc.)	YES				
D	Property pin and monumentation locations	YES				
E	Existing easements with proper ownership identified	YES				
F	Road Names & Individual Lot Labels (Map, Lot, Owner, Acreage)	YES				
G	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	YES				
H	100-year Flood Zone Limits & Elevation	YES				
I	Existing contours with adequate contour labelling; minimum 1' contour interval	YES				
J	Existing building FFEs annotated	YES				
K	Spot elevations for all tie-in locations (curb cuts, property line)	YES				
L	Existing buildings & structures	YES				
M	Existing pavement areas & number of parking spaces	YES				
N	Existing ADA ramp geometry, detectable warning plates, and ADA parking spaces	YES				
O	Existing site features (sidewalks, retaining walls, curbing, lightpoles, guide rails, dumpsters, fencing)	YES				
P	Existing signage and striping	YES				
Q	Existing underground utility locations (storm, sewer, force main, water, gas, elec, tele)	YES		LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE BASED ON RECORD INFORMATION		
R	Existing above-ground utility locations (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES				
S	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES				
T	Existing tree lines, street trees, free-standing trees (12" or larger diameter at breast height), and vegetation	YES				
U	Location of any borings, drinking wells, and monitoring wells	YES				
4	**SITE DEMOLITION & EROSION CONTROL (E&SC) PLAN**	YES				
A	Limits-of-disturbance outlined and acreage annotated	NO				
B	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
C	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
D	Callout existing site features to be demolished/removed/replaced	YES				
E	Callout existing utilities to be demolished/removed/abandoned-in-place	YES				
F	Hatch existing buildings and pavement to be removed	NO		BUILDING HAVE PREVIOUSLY BEEN DEMOLISHED.		
G	Construction Entrance location(s)	YES				
H	Perimeter E&SC control location(s) (i.e. silt fence, erosion berm mix)	YES				
I	Stockpile and staging area(s) identified (with proper perimeter control)	YES				
J	Inlet protection location(s)	YES				
K	Note requiring contractor to implement dust control measures throughout construction	YES				
L	Note requiring contractor to pave utility trenches within right-of-way within 3 days of excavation or prior to any rain event	YES				
M	If groundwater expected, show dewatering/silt bag location(s); show temporary pumping routing	NO				

N	If large development is proposed with an extensive underground stormwater conveyance network, identify how SWM infrastructure and BMPs will be protected during construction and if sediment traps/basins are needed	NO		DUE TO THE SMALL SITE AREA (~1 ACRE) WE DO NOT ANTICIPATE THE NEED FOR TEMPORARY SEDIMENT BASINS.		
5	**SITE PLAN/SUBDIVISION PLAN**	YES				
A	Partial Site Plans needed for any viewport scale greater than 1"=20'	YES				
B	Existing property and right-of-way lines	YES				
C	Proposed subdivision lot lines and labels	YES				
D	Required Zoning Setbacks shown with dimensions and annotation	YES				
E	Bulk requirement summary table (zoning/parking calculations)	YES				
F	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
G	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
H	Proposed building outlines, door entrances and loading docks	YES				
I	Proposed building labels	YES				
J	Proposed road & sidewalk extents; provide clear annotation if roads will be public or private	YES				
K	Proposed parking and accessible parking locations; annotate parking space counts	YES				
L	Proposed signage, parking striping, and traffic striping	YES				
M	Detailed ADA ramp geometry, detectable warning surfaces, and ADA parking striping/signage; existing & proposed	YES				
N	Proposed site features (i.e. curbing, walls, fencing, guiderail, fire hydrant, transformers, light pole locations)	YES				
O	Proposed landscaping; detailed landscaping design should be shown on separate plans	YES				
P	Designated snow storage areas	YES				
Q	Proposed dumpster locations and trash removal access	YES				
R	Linear dimensions of all drive aisles, sidewalk widths, parking spaces, loading docks	YES				
S	Radial dimensions for all curbs, landscaped islands, sidewalks	YES				
T	Public/private road centerline stationing shown, labelled every 0+50' with curve data	N/A		THERE ARE NO PUBLIC OR PRIVATE ROADS PROPOSED AS PART OF THE PROJECT.		
U	If Private Road is proposed, final recorded plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	N/A				
V	If Private Road is proposed, final recorded plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	N/A				
W	Planning Board signature block for final recording	YES				
6	**GRADING PLAN**	YES				
A	Partial Grading Plans needed for any viewport greater than 1"=20'	NO		THERE ARE NO GRADING PLANS WITH VIEWS LARGER THAN 20 SCALE		
B	Limits-of-disturbance outlined and acreage annotated	YES				
C	Proposed Building Labels with Individual Finished Floor Elevations (FFEs)	YES				
D	Existing contours with adequate contour labelling, screened; minimum 1' contour interval	YES				
E	Proposed contours with adequate contour labelling; minimum 1' contour interval	YES				
F	Detailed grading for all ditches, swales, outfalls, and riprap	YES				
G	All proposed contours tie-into existing contours at limits-of-disturbance outline	YES				
H	Existing spot elevations for all asphalt, curb, and SWM BMP tie-in locations	YES				
I	Location of any Natural Resources and their respective buffers (wetlands, streams, etc.)	NO		NO EXISTING NATURAL RESOURCES ON SITE.		
J	100-year Flood Zone Limits	NO		THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FLOODPLAIN		
K	Proposed spot elevations for all important roadway geometric points (including but not limited to: parking/drive aisles, building corners/entrances, retaining walls, loading docks, EOP/curblines)	YES				
L	Proposed spot elevations for all ADA ramp/landing/parking stall geometry points	YES				
M	Proposed % slope arrows for all ADA parking spaces and sidewalks	YES				
N	Proposed longitudinal % slope arrows for drainage ditch centerlines	YES				
O	Proposed % slope arrows for roads, parking areas, and landscape tie-in areas	YES				
P	Estimated cut/fill earthwork volumes. If disturbing within the Flood Zone, a separate set of earthwork volumes required (overall site vs. within flood zone)	YES		THE SITE IS NOT LOCATED WITHIN THE FLOOD ZONE. THE APPROXIMATE EARTHWORK VOLUMES ARE INCLUDED IN THE PERFORMANCE GUARANTEE ESTIMATE.		
7	**ROAD PROFILES (if public/private road proposed)**	N/A		NO PUBLIC/PRIVATE ROADS ARE PROPOSED AS PART OF THIS DEVELOPMENT.		
A	Existing surface; dashed and screened	N/A				
B	Proposed surface; continuous and bold	N/A				
C	Road design speed must be clearly identified	N/A				
D	Corresponding centerline stationing and curve data annotation	N/A				
E	All vertical curves must identify the proposed 'K' values and confirm they meet the minimum design speed thresholds listed in AASHTO's Green Book Tables 3-35 & 3-37	N/A				
F	Clear annotation if proposed road will be public or private	N/A				
G	If Private Road is proposed, plans must clearly note that proposed private roads will not be submitted in the future for public acceptance	N/A				
H	If Private Road is proposed, plans must clearly note that the City is not responsible for any maintenance, repair, plowing, or trash removal of proposed private roads	N/A				
8	**UTILITY PLAN**	YES				
A	Existing underground utility locations; screened (storm, sewer, force main, water, gas, electric, telecom)	YES				
B	Existing above-ground utility locations; screened (manholes, catch basins, utility poles, hydrants, riprap)	YES				
C	Rim, invert in, invert out, pipe size, cardinal direction (N, E, S, W) information for any existing utility infrastructure being tied into (upstream/downstream/outfalls)	YES				
D	Proposed underground utility locations; bold (storm, sewer, force main, water, gas, electric, telecom, lighting)	YES				
E	Proposed above-ground utility locations; bold (manholes, catch basins, utility poles, hydrants, transformers, riprap)	YES				
F	Proposed storm culverts, outfalls, and riprap locations and sizes	YES				
G	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	YES				
H	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	YES				
I	Flow directional arrows for storm & sewer pipes	YES				
J	Proposed & existing site features shown that could conflict with proposed utilities (trees, signs, lightpoles, bollards, foundations, guiderails)	YES				
K	All storm drains must be sized to convey the 25-year storm	YES				
L	Sewer force main sizes and invert elevations	YES				
M	Sewer pump station locations, model, rim, inverts, pipe sizes, cardinal directions (N,E,S,W); additional details and hydraulic calculations required for any Public pump station proposed.	NO		THERE ARE NO PUMP STATIONS PROPOSED ON SITE.		
N	Locations, sizes, and elevations of any: grease traps, oil-water separators, septic systems, drinking wells	YES				
O	Proposed water sizes labelled	YES				
9	**UTILITY PROFILES**					
A	Utility profiles required for **all** gravity storm drain and sewer pipes proposed: within the right-of-way, within private or public roads, for non-driveway culverts, and for any public infrastructure tie-ins	NO		DUE TO THE HIGH TRAFFIC VOLUME OF ALFRED STREET, THE APPLICANT IS WORKING WITH THE PUBLIC WORKS DEPARTMENT TO DETERMINE THE MOST FEASIBILE AND COST EFFECTIVE CONNECTION TO THE PUBLIC MAIN. IF PUBLIC WORKS AGREES WITH THE PROPOSED ALIGNMENT, WE WILL PROVIDE SUPPLEMENTARY PROFILE DESIGN PLANS.		

B	Existing surface; dashed and screened	NO				
C	Proposed surface; continuous and bold	NO				
D	Storm/sewer structure labels must include: rim, inverts in, inverts out, pipe sizes, cardinal directions (N, E, S, W)	NO				
E	Storm/sewer pipe labels must include: linear footage, pipe size, material, slope	NO				
F	Existing and proposed gravity pipe crossings shown; sizes labelled and depths/clearance annotated	NO				
G	Existing and proposed electric/water/telecom/gas crossings shown at approximate depths; sizes labelled and depths/clearance annotated	NO				
10	**DETAILS**	YES				
A	Road section detail, including pavement/gravel depths & cross slopes	YES				
B	Sidewalk, paver, crosswalk, and any other pavement section details	YES				
C	Pavement sawcut & shiplap details	YES				
D	Utility trench/backfill detail	YES				
E	All site feature details; curbing, retaining walls, fencing, guiderails, dumpsters, etc.	YES				
F	Signage, striping, and ADA details	YES				
G	E&S notes and details	YES				
H	Utility structure details (manholes, cleanouts, fittings, handholes, transformer pads, hydrants)	YES				
I	Storm outfall & riprap details	YES				
J	Drainage ditch cross section identifying minimum depth, minimum bed width, and maximum side slopes	YES				
K	Pump station, grease trap, oil-water separator, septic, drinking well details	YES				
L	Conduit section details	YES				
11	**LANDSCAPING, LIGHTING & PHOTOMETRIC PLANS**	YES				
A	As required by ordinance; at a minimum: locations, counts, lighting models, and landscaping species must be identified	YES				
B	Landscaping & lighting details	YES				
12	**DOCUMENTS/REPORTS/CALCULATIONS**					
A	On initial preliminary submittal applications, applicant must submit a development review and inspection fee. Applicant to coordinate fee amount with City Planner prior to submittal. This fee will be drawn against to cover the following type of services throughout the project life cycle (and may require replenishing): i. 3rd Party City Peer-Review ii. Site Inspections during the permitting process iii. Erosion & Sediment Control Inspections during construction iv. Right-of-Way Inspections during construction	YES				
B	Stormwater Management Report, including: 1. Predevelopment & Post-development Drainage Area Maps, including: a. Subdrainage areas delineated and labeled b. Points of Interest/Analysis shown and labeled c. Hatching for different land cover areas (impervious, pervious, gravel) within each applicable USDA soil boundary d. Time of concentration (Tc) paths & durations e. Four City-standardized stormwater summary tables 2. If any SWM water quality BMP or detention facility is proposed, hydrologic model exports/hydrographs must be submitted for the for the 2, 10, 25, & 100-year storm frequencies 3. Sizing calculations for any SWM water quality BMP or detention facility 4. A stormwater maintenance manual for any proposed SWM water quality BMP or detention facility, including: a. Annual maintenance requirements b. Annual inspection requirements by a licensed PE; noting that all inspection reports/logs need to be submitted to the Engineering Department by March 1st each following year, identifying what on-going maintenance has occurred and what remedial repairs are needed c. Signed Property Owner Agreement: including the current property owner's contact information and signature; it must be noted that all stormwater BMP maintenance requirements are linked to the property for perpetuity and transfer to any new ownership	YES				
C	An approved 'Sewer Ability-to-Serve Letter' from the Engineering Department: i. Applicant to submit proposed sewer flow calculations per Maine's Subsurface Wastewater Disposal Rules, Chapter 241, Section 4 (Tables 4A & 4C)	YES		A COPY OF THE ABILITY TO SERVE REQUEST LETTER IS PROVIDED WITH THE APPLICATION.		
D	A Performance Guarantee Cost Estimate utilizing Planning's template	YES		A PERFORMANCE GUARANTEE COST ESTIMATE WILL BE PROVIDED WITH THE SITE PLAN APPLICATION PACKAGE.		
E	For any Site Location of Development (SLODA) project, the applicant's submittal must mimic a formal submittal to DEP. Submit must abide to DEP's SLODA application and include DEP's SLODA Submittal Checklist (Form D)	NO		THIS PROJECT WILL NOT REQUIRE A SLODA PERMIT		
F	25-year hydraulic calculations for all storm conveyance infrastructure (pipes, culverts, drainage ditches); starting tailwater conditions/documentation must be clearly identified	YES				
K	Public sewer pump station sizing calculations and maintenance plan	NO		THERE IS NO PROPOSED PUMP STATION AT THIS TIME.		
M	Grease trap sizing calculations	NO		THE PROPOSED GREASE TRAP SIZE IS 2,000 GALLONS, CONSISTENT WITH OTHER POPEYES LOCATIONS AND SIMILAR RESTAURANT USES.		
N	Homeowner Association (HOA) agreement for any private road serving two (2) lots or more	N/A				
O	Summary list & copy of any required DOT/DEP/USACE permits & approvals	YES		THE CITY HAS BEEN COPIED ON CORRESPONDENCE REGARDING THE MAINDOT TMP PERMIT APPLICATION		

December 2, 2025

RE: Agent Authorization – Permitting Applications

To Whom It May Concern,

Golden Chicken of Biddeford, LLC with an address of 584 Alfred St, Biddeford, ME. hereby authorizes Gorrill Palmer Consulting Engineers to act as its agent for the purpose of obtaining all necessary state and local permits relating to the proposed Popeyes' Fast Food Restaurant at 584 Alfred St in Biddeford, Maine. This authorization is effective as of the date of this correspondence and will remain valid unless otherwise revoked in writing.

Sincerely,

<TITLE> CEO

GROUND LEASE AGREEMENT

Between

584 ALFRED STREET LLC
as Lessor

and

GOLDEN CHICKEN OF BIDDEFORD, LLC

as Lessee

SUMMARY OF BASIC LEASE PROVISIONS

1.	**PREMISES:**	Approximately 1.43 acres of land located at 584 Alfred Street in the City of Biddeford, York County, Maine, as shown on the site plan attached hereto as Exhibit "A"
2.	**LEASE TERM START DATE:**	Article I, Section 4.
3.	**LESSOR'S ADDRESS:**	c/o Mooney Street Management 355 Main St, Ste 25 Woburn, MA 01801 Attn: James Mabardy
4.	**LESSEE'S ADDRESS:**	10 Bittersweet Court Newington, CT 06111
5.	**INTENTIONALLY OMITTED**	
6.	**PRIMARY TERM:**	Twenty (20) Years
7.	**EXTENSION OPTIONS:**	Four (4) Five (5) Year Options
8.	**BASE RENT:**	Years 1-5: $90,000.00
		Years 6-10: $99,900.00
		Years 11-15: $108,900.00
		Years 16-20: $119,790.00
9.	**OPTION TERMS:**	Years 21-25: $131,769.00
		Years 26-30: $144,945.90
		Years 31-35: $159,440.49
		Years 36-40: $175,384.54
10.	**CAM, TAXES AND INSURANCE:**	Tennant shall pay the Real Estate Taxes, Lessor Insurance, and Lessee's pro rata share of Access Drive Costs ("**Additional Rent**")

LEASE AGREEMENT

This Lease Agreement (the "**Lease**") entered into by and between 584 Alfred Street LLC, a Massachusetts Limited Liability Company ("**Lessor**"), whose address is c/o Mooney Street Management, 355 Main St, Ste 25, Woburn, MA 01801, and GOLDEN CHICKEN OF BIDDEFORD, LLC, ("**Lessee**"), whose address is 10 Bittersweet Court, Newington, CT 06111, on this 28th day of May, 2025, (the "**Effective Date**") in accordance with the terms and conditions hereinafter set forth. Lessor and Lessee are sometimes referred to herein individually, as a "**Party**" and collectively, as the "**Parties**".

WITNESSETH:

ARTICLE I

SUMMARY OF BASIC LEASE PROVISIONS AND CERTAIN DEFINED TERMS

When used herein, the following terms shall have the indicated meanings:

1. "**Lessor's Notice Address**": c/o Mooney Street Management, 355 Main St, Ste 25, Woburn, MA 01801.

   "**Lessee**": Golden Chicken Of Biddeford, LLC
   "**Lessee's Trade Name**" (D/B/A): "Popeye's Louisiana Chicken"
   "**Lessee's Primary Notice Address**": 584 Alfred Street, Biddeford, Maine 04005

   So long as Lessee is occupying the Leased Premises, the Notice Address shall be deemed to be the Primary Address for notices. At any time when Lessee is not occupying the Leased Premises, the Secondary Address shall be deemed to be the address for notices.

2. "**Leased Premises**": Approximately 1.43 acres of land located at 584 Alfred Street in the City of Biddeford, York County, Maine, as shown on the site plan attached hereto as Exhibit "A" (also referred to herein as the "**Premises**" and the "**Property**").

3. "**Lease Term Start Date**": Ninety (90) days following the date that Lessee obtains at least one of the following: (i) a Certificate of Occupancy following Lessee's completion of the improvements to be built; and, (ii) possession of the Premises, subject to extensions for Lessor Delays or Force Majeure ("**Lease Term Start Date**"). In no event shall the Lease Term Start Date be later than eight (8) months from the Site Plan Approval Date (defined in Section 3.02). Lessor shall, promptly upon execution of the Lease, commence the site plan approval process pursuant to Section 3.02 below. The Lease Term will end on the Lease Term End Date. Notwithstanding the foregoing, the other terms and provisions of this Lease shall be effective on the date this Lease is fully executed.

4. "**Lease Term End Date**": Twenty years (20) from the Lease Term Start Date unless such term is sooner terminated or otherwise extended pursuant to any provision hereof.

5. "**Lease Contingencies**": Lessee's obligations to lease the Premises as provided in the Lease are subject to the satisfaction or waiver of each of the following conditions prior to the date ("**Condition Date**") which is sixty days (60) days after the later of (i) the Effective Date and (ii) the date of Lessor's approval of Lessee's full construction plans and signage plans in condition ready to be submitted to the appliable governmental authorities ("Lessee's Plans"), or such earlier date as may be specified below as to specific conditions:

   (a) receipt by Lessee of all necessary governmental approvals for a single Lessee building of +/- 2,500 rentable square feet with a drive-thru for the operation of a "Popeye's Louisiana Chicken" restaurant within one hundred twenty (120) days following the Clean Ph II Date (defined below).

   (b) approval of Lessee's leasehold improvement construction plans, signage and trade dress plans by Lessor, applicable government authorities and any other party with approval rights.

(c) the Premises shall have been zoned for the Permitted Use.

(d) Lessor shall have delivered the Property to Lessee in "pad ready" condition pursuant to Exhibit "B" Description of Lessor's Work and shall have executed an Access Easement providing non-exclusive access and egress over that certain property legally described and depicted in Exhibit "E" annexed hereto (the "Access Drive"), which shall be recorded prior to the Lease Term Start Date.

(e) Lessee shall have made diligent application, immediately following or prior to the Effective Date, and shall have obtained a commitment for, suitable financing for the construction of a freestanding "Popeye's Louisiana Chicken" building.

(f) Lessee shall have received a satisfactory Phase II report, which Lessee shall use diligent efforts to obtain as promptly as possible following the Effective Date, and promptly provide a copy of the same to Landlord. The date of receipt shall be the "Clean Ph II Date".

If one or more of the foregoing conditions have not been satisfied prior to the Condition Date, then Lessee shall give written notice of such failure and unless the Condition Date is extended by mutual agreement, this Lease shall terminate and neither Party shall have any further liability hereunder; provided that if Lessor has not received a notice of satisfaction or waiver, nor a termination of this Lease by the Condition Date, Lessor will send a written notice to Lessee and Lessee will have five (5) business days after receipt of such notice to notify Lessor of the satisfaction or waiver before the Lease is deemed terminated.

6. "**Primary Term**": Twenty (20) years from the Lease Term Start Date.

7. "**Base Rent**": Years 1-5: $90,000.00

Years 6-10: $99,900.00

Years 11-15: $108,900.00

Years 16-20: $119,790.00

The Base Rent shall be payable on the first day of each month that rent is due, commencing on the Lease Term Start Date.

8. "**Lease Term Extension Options**": Shall mean the four (4) five (5) year additional term(s) for which Lessee has an option to extend this Lease as provided in Article 4.03, if said option(s) are exercised by Lessee, unless such term is sooner terminated or otherwise extended pursuant to any provisions hereof.

9. "**Lease Term**": Shall mean the Primary Term and any Extension Term(s), if exercised by Lessee.

10. "**Permitted Use**": Lessee shall use the Premises during the Lease Term for the operation of a prototypical "Popeye's Louisiana Chicken" or for any lawful restaurant, retail, or financial institution use including use of a drive-thru ("**Permitted Use**") provided that in no event shall Lessee's use of the Premises violate existing exclusives attached hereto as Exhibit "D".

ARTICLE II

LEASED PREMISES

Article 2.01 Lessor covenants that for and in consideration of the rents hereinafter stipulated to be paid by Lessee and of the performance and observance by Lessee of the covenants, conditions, and stipulations herein given expressed and contained on the part and behalf of Lessee to be performed and observed, Lessor has leased, let and leased, and does by these presents lease, let and demise to Lessee, its successors and assigns, the following described parcel of

real estate: Approximately 1.43 acres of land located in the City of Biddeford, York County, Maine, as described on Exhibit "A" attached hereto and made a part hereof for all purposes.

Article 2.02 Lessor warrants and covenants that it is the sole owner in fee simple of the hereinabove described Property, that it has full right and authority to make this Lease of the hereinabove described Property and every part and parcel thereof and that the said Property is unencumbered by any mortgage or lien of whatsoever nature which will prejudice these presents except as hereinabove set forth and such zoning restrictions as may be provided by law and subject to such restrictions, Lessor further covenants that if Lessee shall fully observe and perform all of the covenants, conditions and stipulations of this Lease to be by it observed and performed, Lessee will be maintained by Lessor in the peaceful and undisturbed possession and enjoyment of the Leased Premises during the Term hereof as improved according to the terms of this Lease or as may otherwise be required by law.

Section 2.03. The exterior façade of the Premises will be the same as Lessee's specifications for the façade on a prototypical "Popeye's Louisiana Chicken" and as depicted on Exhibit "C". It is understood that the Lease is contingent upon applicable local government authorities' approval of Lessee's trade dress.

ARTICLE III

DELIVERY OF POSSESSION

Article 3.01 Subject to Lessor's right to terminate this Lease as provided below, Lessor covenants that it will deliver possession of the Leased Premises to Lessee no later than ten (10) business days after completion of Lessor's Work. In the event Lessor determines that the total cost of Lessor's Work exceeds Fifty Thousand Dollars ($50,000.00), Lessor shall have the right to terminate this Lease upon notice to Tenant and neither party shall have liability to the other.

Article 3.02 Lessee shall submit to Lessor completed Lessee's Plans within one hundred twenty (120) days from the Clean Ph II Date. Upon receipt of Lessee's Plans, Lessor shall submit the same to the municipality along with plans for Lessor's Work, for site plan approval (issuance of site plan approval, or the equivalent, beyond any appliable appeal periods shall be the "Site Plan Approval Date"). Once Lessor has obtained final, unappealable site plan approval, Lessor agrees, provided this Lease has not been terminated as provided in Section 3.01 above, to diligently proceed with Lessor's Work and shall deliver possession of the Premises to Lessee in "pad-ready" condition described in Exhibit "B" Description of Lessor's Work (the date of delivery being the "Possession Date"). Lessor shall endeavor to provide at least thirty (30) days' written notification of the anticipated Possession Date, to the attention of both Lessee's Legal Department and Architecture and Construction Department. Lessee shall take possession of the Premises on the Possession Date. Lessor represents that Lessor's Work shall be constructed in a good and workmanlike manner and in accordance with all applicable zoning, municipal, county, state and federal laws, ordinances and regulations and any covenants or restrictions of record including without limitation, Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("**CERCLA**") (collectively, "**Applicable Laws**"). Any order directed to Lessee concerning Lessee's use of the Leased Premises shall be Lessee's sole responsibility to cure, inclusive of any cost incurred by Lessor on account thereof with immediate notice to Lessor as to any such order. If Lessor fails to deliver possession of the Premises by the date which is ninety (90) days following Site Plan Approval, subject to force majeure delays, then, for each day of delay thereafter, Lessee shall be entitled to two (2) free days of Base Rent and Additional Rent. Upon completion of Lessor's Work, satisfaction or waiver of the Lessee's Conditions and occurrence of the Possession Date, Lessor and Lessee agree to execute a Lease Commencement Certification. Promptly following the Possession Date, Lessee agrees to construct the Building and fully equip the Premises with all trade fixtures, lighting fixtures, furniture, furnishings, fixtures, floor coverings, any special equipment, and other items of personal property as may be necessary for the completion of the Premises and the proper operation of Lessee's business therein (the "Initial Alterations"). In addition, Lessee shall be obligated, subject to a force majeure event, an eminent domain event, a casualty event, or the like, to continuously operate the Premises for the Permitted Use, with the exception of casualty and condemnation matters and temporary closures for active diligent remodeling by Lessee.

Article 3.03 Lessor is required to deliver possession of the Premises to Lessee with Lessor's Work, as described

in Exhibit "B", completed. In the event that Lessee has satisfied or waived the conditions set forth in the Lease Contingencies section hereof and Lessor's Work is not yet fully complete but is sufficiently completed so that Lessee can begin Lessee's Work without materially interfering with the completion of Lessor's Work, Lessee will be permitted early entry to the Premises for the purpose of beginning Lessee's Work. Notwithstanding Lessee's right to early entry to the Premises, the actual Possession Date shall not occur until Lessor's Work is fully complete, as evidenced by a Certificate of Substantial Completion from Lessor's contractor.

Article 3.04 Lessee hereby agrees that it will construct or cause to be constructed the Initial Alterations, all of which construction will be in full conformity with all Laws including the regulations and codes of the City of Biddeford, County of York, and the State of Maine, and subject to Lessor's approval of the plans and specifications, such approval not to be unreasonably withheld, conditioned, or delayed. Lessee further agrees that upon completion of such construction, it will be free of mechanics', contractors', subcontractors', materialmen's, laborers' and other liens or the possibility thereof, excepting mortgage liens upon the leasehold estate created as hereinafter provided in Article VII. Upon completion of the Initial Alterations, Lessee agrees to deliver to Lessor proof of payment, including paid invoices, complete lien waivers, and certificate of occupancy (or its equivalent) and "as-built" plans, or the equivalent, showing completion of all such Initial Alterations.

Article 3.05 Lessee covenants and agrees that Lessee will, throughout the term of this Lease or any extensions thereof, at Lessee's cost and expense, maintain business interruption insurance which would guaranty payment of the ground lease for a certain specified period of time in the event of interruption of the business.

ARTICLE IV

LEASE TERM, RENT, USE, COMMON EXPENSES, AND MAINTENANCE

Article 4.01 The Lease Term shall commence on the Lease Term Start Date and shall terminate on the Lease Term End Date, unless sooner terminated in accordance with the terms and conditions hereinafter set forth. The anticipated Possession Date for the Lessee is December 1, 2025, extended by the number of days between the Effective Date and the Clean Ph II Date. The Base Rent shall be payable on the first (1st) day of each month that rent is due after the Lease Term Start Date and shall be paid in the following amounts:

Years 1-5: $7,500.00

Years 6-10: $8,325.00

Years 11-15: $9,075.00

Years 16-20: $9,982.50

Article 4.02 Notwithstanding the fact that the Lease Term will commence on a date subsequent to the execution of this instrument by Lessor and Lessee, such parties intend that each shall have vested rights immediately upon the signing of this instrument and that this instrument shall be binding and valid from and after execution hereof by Lessor and Lessee. In the event that the Lease Term shall not have, in fact, commenced within one (1) year from the Effective Date (and if this Lease shall not have been canceled by Lessor or Lessee as herein permitted), then, in addition to all the other rights and remedies of the Parties set forth herein, this Lease shall thereupon automatically be null and void and of no further force and effect, and neither Party shall have any further obligation or liability hereunder.

Article 4.03 Lessee shall have the option to extend this Lease for four (4) additional period(s) of five (5) years each on the conditions and terms as provided herein; provided, however, that the Base Rent payable on the first (1st) day of each month during the Extension Term(s) shall be paid in the following amounts:

Years 21 – 25 $10,980.75

Years 26 – 30 $12,078.82

Years	31 – 35	$13,286.71
Years	36 – 40	$14,615.38

Article 4.04 Lessee shall have four (4) automatic five (5) year options to extend the Lease Term (each an "**Extension Term**"), each with a twelve (12) month prior written notice to Lessor that Lessee does not intend to extend the Lease Term. Each Extension Option is a personal right in favor of Lessee and will terminate upon any Transfer of the Premises other than a Permitted Transfer or Leasehold Mortgage.

Article 4.05 Lessee will at its own cost and expense pay for all water, sanitary sewer, gas, electricity, and other utilities ("**Utilities**") used in the Leased Premises and will save and hold Lessor harmless from any charge or liability for services for Utilities with the exception of any interruption in Utility service caused by Lessor's gross negligence or willful misconduct, wherein all Base Rent, Additional Rent, and other charges due hereunder shall abate in their entirety until such utility service is restored, and Lessee shall also have the right to exercise any other remedies available to it under this Lease, and otherwise at law and in equity. Such payments shall be made directly to the supplier of any Utility separately metered (or sub metered) to the Leased Premises. From and after the date of the installation of such meters, Lessee shall pay to the appropriate Utility companies all charges for such Utilities consumed in the Leased Premises as and when such charges become due and payable. Lessee shall also pay at its own cost and expense for services used in the Leased Premises including telephone, alarm, pest control, and janitorial.

Article 4.06 Lessee will use the Leased Premises solely for the Permitted Use defined in Article I Section 12. Lessee will not use or permit use of the Leased Premises for any other purpose without the written consent of Lessor. Lessee, at its own expense: (i) will comply with all Federal, State, municipal and other laws, codes, ordinances, rules and regulations applicable to the Leased Premises and the business conducted therein by Lessee; (ii) will install, remove, and alter such fixtures, equipment and facilities in, and make such alterations to, the Leased Premises as may be necessary to comply, provided that all such alterations shall become the sole property of Lessor upon the installation thereof, however notwithstanding the provisions of this Article 4.06 and any other provision of this Lease to the contrary, Lessee shall have the right to remove any furnishings, fixtures, equipment, personal property, franchise proprietary items, merchandise, inventory, and the like owned, made or installed by it, at any time during the Lease Term, whether the same are affixed to or attached to the Leased Premises, provided Lessee repairs any damage associated with its removal as quickly as possible and in a professional manner; and (iii) will comply with such regulations as Lessor may promulgate regarding sanitation, cleanliness and other matters for the Leased Premises, including without limitation removal of garbage, trash and other waste. Upon expiration or earlier termination of the Lease, Lessee shall be obligated at its sole cost and expense to remove all movable property from the Leased Premises, and Lessee shall forfeit the ownership of same in the event that such removal is not timely performed.

Article 4.07 Lessee, pursuant to its franchise agreement, contributes to a national and local advertising campaign. Lessee will not be required to pay the Lessor or contribute to a fund for a merchants association or any other form of marketing.

Article 4.08 Lessee shall be responsible, at its sole cost and expense, for the removal of its trash. In the event Lessor has established a common trash removal or disposal program at the Leased Premises, Lessee shall participate in such program. All trash dumpsters installed by Lessee must comply with any state or federal laws or ordinances and must be placed at a location approved by Lessor. Lessor, at Lessee's expense, shall have the right to remove from the Leased Premises and surrounding properties without notice any such receptacles that do not comply with state or federal laws and/or that have not been approved by Lessor.

Article 4.09 As a material inducement for Lessee to enter into this Lease, Lessor represents, warrants, and covenants to Lessee that no space, pad, or outparcel in, on, or about the Leased Premises will be (1) sold, leased, or licensed by Lessor to any party that is engaged in or proposes to engage in the business of the Restricted Use (hereinafter defined) as of the date of the Lease; (2) sold, leased, or licensed by Lessor to any party that is engaged in or proposes to engage in the business of the Restricted Use (hereinafter defined) as of the date Lessee opens for business; or, (3) be used or occupied at any time, no matter how short or long such period of time may be, for the Restricted Use. As used herein, "Restricted Use": means any quick-service restaurant, any fast-food restaurant, and any food user that derives ten percent (10%) or more of its annual gross sales from the sale of chicken or chicken-related products. In addition to any other remedies that may be available to Lessee at law or in equity, in the event of

a violation of the foregoing Restricted Use, Lessee may reduce Base Rent by one-half (1/2) until the violation has been corrected.

Article 4.10 The term "**Lease Year**," as used herein, shall, in the case of the first Lease Year, mean the period which commences with the Commencement Date and terminates on the last day of the twelfth (12th) full calendar month after the Commencement Date, and such first Lease Year shall, therefore, include twelve (12) full calendar months plus the partial month, if any, at the commencement of the Lease Term if the Lease Term does not commence on the first day of a calendar month.

Article 4.11 Each subsequent Lease Year shall mean a period of twelve (12) full calendar months commencing with the date following the last day of the first Lease Year, and commencing with each subsequent annual anniversary of such day.

Article 4.12 The last Lease Year of the Lease Term shall be the period which commences on the day immediately following the last day of the preceding Lease Year and terminates on the last day of the Lease Term, and the parties recognize that such last Lease Year may be less than twelve (12) full calendar months, depending upon the date of the Termination Date.

Article 4.13 All rent and other sums hereunder provided to be paid by Lessee, including without limitation Base Rent and Additional Rent (collectively, the "**Rent**") shall be due and payable by Lessee on the first (1st) day of each month without demand, deduction, abatement or off-set except as expressly provided herein. Past due Rent and other past due payments shall bear interest from maturity at the rate of eight percent (8%) per annum (or, at Lessor's option, the highest non-usurious rate permitted by law) from the date due until paid.

Article 4.14 The Lessee shall pay to the Lessor, as Additional Rent, (i) the Lessor Insurance Costs, and (ii) Lessee's pro rata share of all costs and expenses incurred by Lessor in connection with the maintenance and operation of the Access Drive, including, without limitation, plowing/salting, paving, repairing, directional signage, catch basins, taxes, landscaping, curb maintenance and other associated costs to keep the Access Drive in first class condition and shall pay the Real Estate Taxes per Article 4.17 below (referred to hereinafter collectively as "**Additional Rent**").

Article 4.15 "**Lessor Insurance Costs**" shall be those costs for insuring (i) the Access Drive and any common area of the adjacent property that Lessee may, from time to time, be granted access to, (ii) Umbrella or Excess Liability Insurance and (iii) commercial general liability coverage for the Premises.

Article 4.16 Intentionally Omitted.

Article 4.17 "**Real Estate Taxes**" shall be all 1) taxes, assessments, and fees assessed against both the Premises, and rent payable by Lessee to Lessor, and 2) those reasonable costs and expenses of contesting any such taxes, assessments, or fees (provided that Lessee approves of contesting such taxes, assessments, or fees). Lessee shall pay all Real Estate Taxes directly to the assessing agency prior to delinquency and shall indemnify Lessor from Lessee's failure to timely pay the same.

Article 4.18 Intentionally Omitted.

Article 4.19 The Additional Rent, other than Real Estate Taxes (which shall be paid directly by Lessee) shall be payable in equal monthly installments, due on the first day of each calendar month during the term of this Lease. Lessee's installments of Additional Rent shall be estimated by Lessor at the beginning of the Term of this Lease and at the beginning of each calendar year. Within ninety (90) days after the end of each calendar year, Lessor shall furnish to Lessee a statement setting forth the actual Additional Rent for such calendar year along with any amount, which Lessee has overpaid or underpaid. If Lessee has underpaid, Lessee shall pay to Lessor the amount of such underpayment within ten (10) days of receipt of Lessor's statement. If Lessee has overpaid, such overpayment shall be credited to Lessee's subsequently due installments of Additional Rent for the following year, or if in the last month of the Lease Term, refunded to Lessee.

Article 4.20 Lessee will purchase and maintain the following policies of insurance, the coverage, type, and amount to be agreed upon Lessor and Lessee: 1) commercial general liability insurance; 2) workers compensation insurance and employees liability insurance; 3) if any automobiles are used in connection with the Lease, automobile insurance; 4) property coverage at full replacement cost, naming Lessor as an additional insured, and 4) umbrella or excess liability insurance.

Article 4.21 To the maximum extent enforceable by Law, Lessee covenants and agrees to exonerate, indemnify, defend (with counsel reasonably acceptable to Lessor), protect and save Lessor, together with its members, officers, directors, employees, invitees and agents, from and against any and all third-party claims, demands, expenses, losses, suits and damages (including all reasonable legal fees and court costs) as may be occasioned by reason of (i) any accident, injury or damage from any activity, work, or anything done, permitted or suffered by Lessee occurring in, on or about the Premises and the surrounding area; (ii) the omission, fault, willful act, negligence or other misconduct of Lessee, together with its officers, directors, employees, invitees, and agents; or (iii) the breach or default by Lessee, together with its officers, directors, employees, and agents, of any representation, warranty, covenant, or other term contained in the Lease, including but not limited to, the breach of any Laws. To the maximum extent enforceable by Law, Lessor covenants and agrees to exonerate, indemnify, defend (with counsel reasonably acceptable to Lessee), protect and save Lessee, together with its members, officers, directors, employees, invitees and agents, from and against any and all third-party claims, demands, expenses, losses, suits and damages (including all reasonable legal fees and court costs) as may be occasioned by reason of (i) any accident, injury or damage from any activity, work, or anything done, permitted or suffered by Lessor occurring in, on or about the Leased Premises and the surrounding area; (ii) the omission, fault, willful act, negligence or other misconduct of Lessor, together with its officers, directors, employees, invitees, and agents; (iii) the breach or default by Lessor, together with its officers, directors, employees, and agents, of any representation, warranty, covenant, or other term contained in the Lease, including but not limited to, the breach of any Laws; or (iv) Lessor's failure to deliver the Leased Premises to Lessee, free of all Hazardous Materials. The provisions of this Article 4.21 shall survive the termination or expiration of this Lease.

Article 4.22 Lessee at its sole cost and expense will maintain, repair, and replace the Premises, including the: 1) foundation; 2) load-bearing structure; 3) floor; 4)exterior walls including a) glass, and b) doors; and 5) roof including a) deck, and b) membrane. Lessee will employ contractors designated or approved by Lessor (such approval not to be unreasonably withheld, conditioned, or delayed), to service or maintain (in accordance with manufacturer's specifications and warranty requirements) the following systems and equipment installed in the Premises: 1) HVAC; 2) fire protection; and 3) roof. Lessee shall not be required to repair or replace any defects in Lessor's Work. Other than Lessor's Work as defined in Exhibit "B", Lessor shall have no further obligation for any maintenance or repair of the Leased Premises. Except as may be expressly provided in this Lease, Lessor will not be required to furnish any services or facilities (including, without limitation, landscaping, paving, site lighting, and snow removal) or to make any improvements, repairs or alterations in or to the Land or improvements on the Land during the term of this Lease.

ARTICLE V

PARKING

Article 5.01 Lessee has exclusive use of the parking spaces as depicted on the Site Plan attached as Exhibit "A".

ARTICLE VI

PRIORITY OF LEASE

Lessor covenants that in case Lessor shall at any time hereafter alienate or encumber the Leased Premises or any part or parcel thereof, such sale or encumbrance shall be made expressly subject and subordinate to the provisions of this Lease and to the rights of Lessee hereunder. However, any alienation, encumbrance, or mortgage of the Leased Premises shall comply with Article VII of this Lease.

ARTICLE VII

RIGHT OF LESSEE TO MORTGAGE LEASEHOLD

Article 7.01 Lessee shall at all times and from time to time have the right to encumber all of Lessee's right, title and interest under this Lease and any improvements on the Leased Premises (the "**Improvements**") by mortgage, deed of trust, deed to secure debt or other security instrument, including, without limitation, an assignment of the rents, issues and profits from the Leased Premises, as security for any debt of Lessee (such mortgage, deed of trust, deed to secure debt or other instrument(s) being hereinafter referred to as a "**Leasehold Mortgage**", and the holder(s) from time to time of such Leasehold Mortgage being hereinafter referred to as a "**Leasehold Mortgagee**"). Provided, however, notwithstanding anything contained herein to the contrary, (a) in no event shall Lessee have the right to encumber any rights of Lessor in the Property, and (b) any Leasehold Mortgage shall be expressly inferior and subordinate to any of the following executed by Lessor at any time, whether one or more: mortgage, deed of trust, deed to secure debt or other security instrument, including, without limitation, an assignment of the rents, issues and profits from the Leased Premises, as security for any debt of Lessee.

Article 7.02 In the event that a Leasehold Mortgagee shall provide Lessor with written notice of its name and address and a copy of its Leasehold Mortgage, then, following receipt by Lessor of such written notice and for so long as such Leasehold Mortgage shall remain unsatisfied of record or until written notice of satisfaction of such Leasehold Mortgage is given by the Leasehold Mortgagee to Lessor, the provisions of this Article 7.02 shall apply to each such Leasehold Mortgagee. Lessor shall promptly upon receipt of a communication under this Article 7.02 acknowledge in writing receipt of said communication to Lessee and such Leasehold Mortgagee as satisfying the requirements of this Article 7.02. Upon the request of such Leasehold Mortgagee, Lessor shall acknowledge receipt of a satisfactory notice by an instrument in recordable form that is satisfactory to Lessor in its good-faith, commercially reasonable discretion. In the event of any assignment of a Leasehold Mortgage or in the event of a change of address of a Leasehold Mortgagee or of an assignee of such Leasehold Mortgagee written notice of such new name and/or address shall be provided to Lessor.

a. General. No cancellation, termination, rejection, surrender, amendment or modification (other than by expiration of the Term) of this Lease or release of Lessee hereunder shall be effective as to any Leasehold Mortgagee unless consented to in writing by such Leasehold Mortgagee. Without limiting the generality of the foregoing, no rejection of this Lease by Lessee or by a trustee in bankruptcy for Lessee shall be effective as to any Leasehold Mortgagee unless consented to in writing by such Leasehold Mortgagee.

b. Default Notice and Right to Cure. Lessor shall, on serving Lessee with any notice of any default under this Lease or a termination of this Lease, simultaneously serve a copy of such notice upon each Leasehold Mortgagee. No such notice by Lessor to Lessee shall be deemed to have been duly given unless and until a copy thereof has been so provided to every Leasehold Mortgagee in the manner specified herein. From and after the date such notice has been given to a Leasehold Mortgagee, each such Leasehold Mortgagee shall have the same period, after its receipt of such notice, for remedying any default or causing the same to be remedied, as is given to Lessee after the giving of such notice to Lessee, plus in each instance, those additional periods of time specified in subparagraph d, below, to remedy, commence remedying or cause to be remedied the defaults specified in any such notice, but Leasehold Mortgagee shall in no manner be obligated to do so. Lessor shall accept such performance by or at the instigation of the Leasehold Mortgagee as if the same had been performed by Lessee. Lessee hereby authorizes each Leasehold Mortgagee to take any such action that such Leasehold Mortgagee deems necessary to cure any such default and does hereby authorize entry upon the Premises by each such Leasehold Mortgagee for the purpose of curing such defaults.

c. Additional Notice to Leasehold Mortgagee.

(i) Notwithstanding anything contained herein to the contrary, if any default shall occur which entitles Lessor to terminate this Lease, Lessor shall have no right to terminate this Lease unless, following the expiration of the period of time given Lessee to cure such default, Lessor shall notify every Leasehold Mortgagee of Lessor's intent to so terminate at least thirty (30) days in advance of

the proposed effective date of such termination. The provisions of subparagraph d, below, shall apply if, during such thirty (30) day period, any Leasehold Mortgagee shall:

(A) Notify Lessor of such Leasehold Mortgagee's desire to nullify such notice, and

(B) Pay or cause to be paid all Base Rent, Additional Rent and other payments and charges due hereunder and in default as specified in the termination notice to such Leasehold Mortgagee and which become due during such thirty (30) day period, and

(C) Comply, or in good faith, with reasonable diligence and continuity, commence to comply, with all other obligations of Lessee under this Lease then in default and reasonably susceptible of being complied with by such Leasehold Mortgagee; provided, however, that such Leasehold Mortgagee shall not be required during such thirty (30) day period to cure or commence to cure any default consisting of Lessee's failure to satisfy and discharge any lien, charge or encumbrance against Lessee's interest in this Lease or the Leased Premises junior in priority to the lien of the mortgage held by such Leasehold Mortgagee.

d. Procedure on Default.

(i) In the event that Lessor shall elect to terminate this Lease by reason of any default of Lessee, and a Leasehold Mortgagee shall have proceeded in the manner provided for by subparagraph c, above, such Leasehold Mortgagee shall have the right to postpone and extend the specified date for the termination of this Lease as fixed by Lessor in its notice of termination for a period of not more than two (2) months, provided that such Leasehold Mortgagee shall, during such two (2) month period, (A) pay or cause to be paid any Base Rent, Additional Rent and other payments and charges as the same become due and continue its good faith efforts to perform all of Lessee's other obligations under this Lease, excepting (1) obligations of Lessee to satisfy or otherwise discharge any lien, charge or encumbrance against Lessee's interest in this Lease or the Leased Premises junior in priority to the lien of the mortgage held by such Leasehold Mortgagee, and (2) past obligations then in default and not reasonably susceptible of being cured by such Leasehold Mortgagee, and (B) if not enjoined or stayed, take steps to acquire or sell Lessee's interest in this Lease by foreclosure of the Leasehold Mortgage or other appropriate means and prosecute the same to completion with due diligence.

(ii) If at the end of such two (2) month period such Leasehold Mortgagee is complying with subparagraph (d) (i) and such Leasehold Mortgagee is prohibited by any process or injunction issued by any court of competent jurisdiction or by reason of any action in any court of competent jurisdiction from commencing or prosecuting foreclosure or other appropriate proceedings in the nature thereof, this Lease shall not then terminate, and the time for completion by such Leasehold Mortgagee of its proceedings shall continue so long as such Leasehold Mortgagee is enjoined or stayed and thereafter for so long as such Leasehold Mortgagee proceeds with due diligence to complete steps to acquire or sell Lessee's interest in this Lease by foreclosure of the Leasehold Mortgage or by other appropriate means. Nothing in this subparagraph (d) (ii), however, shall be construed to otherwise extend this Lease beyond the Primary Term hereof, or as extended by any options properly exercised by Lessee or a Leasehold Mortgagee in accordance with the terms of this Lease, nor to require a Leasehold Mortgagee to continue foreclosure proceedings after a default has been cured. In the event that such default shall be cured and the Leasehold Mortgagee shall discontinue such foreclosure proceedings, this Lease shall continue in full force and effect as if Lessee had not defaulted under this Lease.

(iii) In the event that a Leasehold Mortgagee complies with subparagraphs c and d above, then, upon the acquisition of Lessee's right, title and interest herein by such Leasehold Mortgagee or its

designee, or any other purchaser or assignee at a foreclosure sale or otherwise, this Lease shall continue in full force and effect as if Lessee had not defaulted under this Lease.

(iv) The granting of a Leasehold Mortgage shall not be deemed to constitute an assignment or transfer of this Lease or of the leasehold estate hereby created, and any conveyance of the leasehold estate created hereby from Lessee to a Leasehold Mortgagee by foreclosure or otherwise, shall not be deemed to constitute an assignment or transfer of this Lease or of the leasehold estate hereby created requiring the assumption of the obligations of Lessee hereunder, but such purchaser or assignee of this Lease and of the leasehold estate hereby created shall be deemed to have agreed to perform all of the terms, covenants and conditions on the part of the Lessee to be performed hereunder from and after the date of such purchase and assignment, but only for so long as such purchaser or assignee is the owner of such leasehold estate. Upon such conveyance, Lessor shall recognize such Leasehold Mortgagee, or any other purchaser or assignee, as Lessee hereunder. From and after the date of such sale or assignment, the holder of any Leasehold Mortgage then existing or thereafter placed on the leasehold estate hereby created shall be considered a Leasehold Mortgagee as contemplated by this Lease, and the Leasehold Mortgagee thereunder shall be entitled to receive the benefit of any and all provisions of this Lease intended for the benefit of a Leasehold Mortgagee.

e. New Lease.

(i) In the event that this Lease is terminated as a result of any default by Lessee hereunder or any other cause (including, without limitation, a rejection of this Lease by Lessee's trustee in bankruptcy pursuant to 11 U.S.C. 365 or any equivalent provision of law), Lessor shall provide each Leasehold Mortgagee with written notice that the Lease has been terminated, together with a statement of all sums which would at that time be due under this Lease but for such termination, and of all other defaults, if any, then known to Lessor. Lessor shall enter into a new lease (hereinafter referred to as the "New Lease") of the Leased Premises with any Leasehold Mortgagee or its designee for the remainder of the term of this Lease with the same covenants, conditions and agreements (including, without limitation, any and all options to extend or renew the term of this Lease, but excluding any requirements which have been satisfied by Lessee prior to termination) as are contained herein, subject only to the conditions of title as the Leased Premises are subject to on the date of the execution of the original Lease, and to the right, if any, of any Parties then in possession of any part of the Leased Premises, upon receipt by Lessor of a written request from such Leasehold Mortgagee on or before sixty (60) days after the date of Lessor's notice of termination given pursuant to this subparagraph e and thereafter, the Lessee under the New Lease shall have the same right, title and interest in and to the Leased Premises and the buildings and improvements thereon as Lessee had under this Lease. The obligations of Lessor to enter into a New Lease shall be subject to the following conditions:

(A) Such Leasehold Mortgagee or its designee shall pay or cause to be paid to Lessor at the time of the execution and delivery of such New Lease any and all sums which would at the time of execution and delivery thereof be due pursuant to this Lease but for such termination and, in addition thereto, all commercially reasonable expenses, including reasonable attorney's fees, which Lessor shall have incurred by reason of such termination and the execution and delivery of the New Lease and which have not otherwise been received by Lessor from Lessee or any other party in interest under Lessee. Upon the execution of such New Lease, Lessor shall allow the Lessee named therein as an offset against the sums otherwise due under this subparagraph e, an amount equal to the net income derived by Lessor from the Leased Premises during the period from the date of termination of this Lease to the date of beginning of the term of such New Lease. In the event of a controversy as to the amount to be paid to Lessor pursuant to this subparagraph (e) (i) (A), the payment obligation shall be satisfied in the event that Lessor shall be paid the amount not in controversy, and such Leasehold Mortgagee or its designee shall agree to pay any additional

sum ultimately determined to be due plus interest at the rate of eight percent (8%) per annum and such obligation shall be adequately secured;

(B) Such Leasehold Mortgagee or its designees shall agree to cure any defaults of Lessee under the terminated lease of which Lessor shall have notified Leasehold Mortgagee and which are reasonably susceptible of being so cured by such Leasehold Mortgagee or its designee; and

(C) The Lessee under any such New Lease shall be liable to perform the obligations imposed on the Lessee by such New Lease only during the period such Lessee has ownership of the leasehold estate created by such new Lease.

(ii) In the event that more than one Leasehold Mortgagee shall make written request upon Lessor for a New Lease, then the New Lease shall be entered into only pursuant to the request of the Leasehold Mortgagee whose Leasehold Mortgage shall be most senior in lien.

(iii) The new Lessee under such New Lease shall, upon entering into such New Lease, acquire all of the right, title and interest of Lessee in and to any and all subleases of all or any part of the Leased Premises and the Improvements and upon the request of such new Lessee, Lessor shall execute, acknowledge and deliver to such new Lessee an assignment in recordable form evidencing such conveyance.

(iv) The parties hereto acknowledge and agree that the provisions of this subparagraph (e) create an interest in Leasehold Mortgagee which does not terminate with the termination of the rights and interests of Lessee under this Lease unless and until Leasehold Mortgagee fails to exercise its right to obtain the New Lease pursuant to this subparagraph (e) for a period of sixty (60) days following termination of the rights of Lessee hereunder; and, accordingly, such New Lease shall have the same priority relative to other rights or interests to or in the Leased Premises as this Lease, and such priority shall date back to the date of this Lease. The provisions of this subparagraph (e) (iv) shall survive the termination of the rights and interests of Lessee under this Lease and shall continue in full force and effect thereafter to the same extent as if this subparagraph (e) (iv) were a separate and independent covenant and contract among Lessor, Lessee and each Leasehold Mortgagee.

f. Limited Liability. For so long as any Leasehold Mortgagee or its designee is the owner of the leasehold estate hereby created, Lessor shall look solely to the interest of such Leasehold Mortgagee or its designee in the Leased Premises and the Improvements in the event of the breach or default by such Leasehold Mortgagee or its designee under the terms of this Lease, and Lessor hereby agrees that any judgment or decree to enforce the obligations of such Leasehold Mortgagee or its designee shall be enforceable only to the extent of the interest of such Leasehold Mortgagee or its designee in the Leased Premises and the Improvements, and any such judgment shall not be subject to execution on nor be a lien on, any assets of such Leasehold Mortgagee or its designee other than the Leased Premises and the Improvements.

g. Future Amendments. Lessor and Lessee shall cooperate in, including in this Lease by suitable amendment from time to time, any provision which may be requested by any proposed Leasehold Mortgagee or may otherwise be reasonably necessary, to implement the provisions of this Article 7; provided, however, that any such amendment shall not in any way affect the term hereby Leased or affect adversely in any material respect any rights of Lessor under this Lease.

h. Right to Exercise Options. In the event that Lessee fails to exercise any options to renew or extend the term of this Lease within the time required or fails to exercise any option granted under this Lease to purchase the Leased Premises or any part thereof (including but not limited to any right of first refusal), within the time permitted for exercise of such option, Lessor shall give each Leasehold Mortgagee written notice of Lessee's failure to exercise any such option. Each Leasehold Mortgagee shall have thirty (30) days after receipt of Lessor's written notice within which to exercise the option which Lessee failed to exercise, and any exercise of such option by a Leasehold Mortgagee shall have the same force and effect as if the option had been exercised within the required time by Lessee, except that any time period calculated from the date that Lessee exercised or could have exercised such an option shall be calculated instead from the date when the Leasehold Mortgagee exercised the option.

i. Bankruptcy. Lessee shall not have the right to exercise any option granted under this Lease to purchase the Leased Premises or any part thereof (including but not limited to any right of first refusal) without the written consent of each Leasehold Mortgagee. In the event that Lessor should become subject to any bankruptcy proceedings, Lessee shall not accept any rejection by Lessor or Lessor's trustee in bankruptcy as terminating this Lease but, instead, shall remain in possession of the Leased Premises to the full extent permitted by law. Without limiting the foregoing, no such acceptance of any rejection of this Lease shall be effective as to any Leasehold Mortgagee unless consented to in writing by such Leasehold Mortgagee.

j. Estoppel Certificate. Lessor shall, without charge, at any time and from time to time hereafter, but not more frequently than once in any one-year period, within twenty (20) days after written request of Lessee to do so, certify by written instrument duly executed and acknowledged to any Leasehold Mortgagee or purchaser, or proposed Leasehold Mortgagee or proposed purchaser, or any other person, firm or corporation specified in such request: (i) as to whether this Lease has been supplemented or amended, and if so, the substance and manner of such supplement or amendment; (ii) as to the validity and force and effect of this Lease, in accordance with its tenor; (iii) as to the existence of any default hereunder; (iv) as to the existence of any offsets, counterclaims or defenses hereto on the part of the Lessee; (v) as to the commencement and expiration dates of the term of this Lease; and (vi) as to any other matters as may be reasonably so requested. Any such certificate may be relied upon by the Lessee and any other person, firm or corporation to whom the same may be exhibited or delivered, and the contents of such certificate shall be binding on the Lessor.

k. Subordination. Lessor does hereby subordinate any and all statutory lien or claim of lien against Lessee's trade fixtures and equipment to the liens created under any and all Leasehold Mortgages, whether now or hereafter existing.

ARTICLE VIII

NO WAIVER

No waiver of any condition or covenant in this instrument contained, or of any breach thereof, shall be taken to constitute a waiver of any subsequent breach. No payment by Lessor, in case of default on the part of Lessee in that respect, of any taxes, assessments, public charges, or premiums of insurance, or the payment of any amount herein provided to be paid other than rents, or in the procuring of insurance as hereinabove provided, shall constitute or be construed as a waiver of contract by Lessor of the default of Lessee in that respect.

ARTICLE IX

DAMAGE OR DESTRUCTION OF BUILDINGS

Article 9.01 Except as provided in elsewhere in this Lease to the contrary, no damage to or destruction of any building or buildings now or hereafter located on the Premises covered by this Lease by fire or other casualty shall be taken to entitle Lessee to surrender possession of the Premises covered by this Lease, or to terminate this Lease, or to have an abatement of any part of the Base Rent or Additional Rent, the laws of the State of Maine to the contrary notwithstanding; and neither Party hereto shall be released, by reason of the damage or destruction of any such building or buildings on the Premises covered by this Lease, from the obligations created or imposed by virtue of this Lease.

Article 9.02 Notwithstanding anything to the contrary hereinabove in this Lease, it is agreed that should the building or buildings to be erected upon the Premises covered by this Lease, or any subsequent building erected upon the Premises covered by this Lease in its place, be destroyed by fire, water, storm, cyclone or other casualty within five (5) years of the end of the Term of this Lease, or should such building be ordered demolished by the City of Biddeford, or any other constituted authority within such period as a result of damage by fire, water, storm, wind or other casualty, Lessee shall have the right within sixty (60) days after such occurrence to terminate this Lease by the service of a notice in writing upon Lessor of its intention so to do; and upon the service of said notice as aforesaid

within said period of sixty (60) days, this Lease shall thereupon be terminated, and the rights and obligations of Lessee in the Premises will cease as fully and completely as if the final date fixed for the termination thereof had been reached, but Lessee shall nevertheless remain liable to Lessor for the payment of any and all Base Rent, Additional Rent and other charges in arrears at the time of such termination of this Lease and for any damage suffered by Lessor for the breach of any of the covenants and agreements hereof by Lessee occurring prior to the date of such termination as aforesaid. In the event Lessee exercises its right to terminate the Lease pursuant to this Article 9.02, then in such an event, Lessee shall, at its sole costs and expense, remove all improvements on the Leased Premises and remit to Lessor the proceeds of the casualty policy.

ARTICLE X

ASSIGNMENT AND SUBLETTING

Lessee may not assign or sublet the whole or any part of the Premises without the prior consent of Lessor, which consent shall not be unreasonably withheld, delayed, or conditioned. Lessee shall, however, have the right to enter into an assignment of the Lease or a sublease of the Premises, without Lessor's consent (but with prior notice), to any affiliate, subsidiary, parent, successor, or bona-fide third-party purchaser of Lessee, or to a bona-fide third-party "Popeye's Louisiana Chicken" franchisee (a "**Permitted Transfer**") provided Lessee is not then in default under the Lease beyond any applicable notice and cure period, and the successor entity shall assume in writing Lessee's obligations hereunder. Upon any Transfer, 1) except in the case of a Permitted Transfer where Lessee shall be released of all liabilities and obligations hereunder provided that the assignee has equal or greater net worth as Lessee, Lessee will not be released from any liability under the Lease; and 2) except in the case of a Permitted Transfer, and only in the event of a sublease, pay Lessor 50% of all rent that Lessee receives as a result of such Transfer that is in excess of the Rent payable to Lessor for the portion of the Premises and Lease Term covered by such sub-lease, and 3) be responsible for all reasonable and customary expenses directly incurred by Lessee and attributable to such Transfer (other than Lessor's review fee) including brokerage fees, legal fees, and construction costs.

ARTICLE XI

NOTICE

All notices, demands and requests which may or are required to be given by either party to the other shall be in writing. All notices, demands and requests by Lessor to Lessee shall be deemed to have been properly given if served personally on an officer of Lessee or if sent by United States registered or certified mail, postage prepaid, addressed to Lessee at 10 Bittersweet Court, Newington, CT 06111 until the Lease Commencement Date, then at the Premises or such other place as Lessee may from time to time designate hereafter in a written notice to Lessor. All notices, demands and requests by Lessee to Lessor shall be deemed to have been properly given if served personally on an officer of Lessor or if sent by United States registered or certified mail, postage prepaid, addressed to Lessor at c/o Mooney Street Management, 355 Main St, Ste 25, Woburn, MA 01801, Attn: James Mabardy or at such other place as Lessor may from time to time hereafter designate in a written notice to Lessee.

ARTICLE XII

DEFAULT

Article 12.01 Each of the following acts or omissions of Lessee or occurrences shall constitute an "**Event of Default**":

1. Failure or refusal by Lessee to timely pay Base Rent, Additional Rent, or any other sum when due hereunder within five (5) days following written notice to Lessee of such failure; provided, however, that Lessor shall not be required to

provide written notice to Lessee more than two (2) times in any twelve (12) month period, following which the failure to pay Base Rent, Additional Rent, or any sum due hereunder from Lessee when due and payable shall constitute an Event of Default without notice of such non-payment (a "**Payment Default**"); or

2. Failure or refusal by Lessee to comply with the obligations of Lessee set forth in Article IV of this Lease;

3. Failure or refusal by Lessee to timely perform or observe any other covenant, duty or obligation of Lessee under this Lease;

4. Lessee shall be adjudged insolvent, make a transfer in fraud of creditors or make an assignment for the benefit of creditors;

5. Lessee shall file a petition under any section or chapter of the Bankruptcy Reform Act of 1978, as amended, or under any similar law or statute of the United States or any state thereof, or Lessee shall be adjudged bankrupt or insolvent in proceedings filed against Lessee thereunder; or

6. A receiver or trustee shall be appointed for all or substantially all of the assets of Lessee and Lessee shall not have had such appointment discharged within thirty (30) days after Lessee receives written notice of such appointment.

Article 12.02 Provided, however, notwithstanding the occurrence of an Event of Default that is not a Payment Default, Lessor shall not be entitled to exercise any of the remedies provided for in this Lease or by law unless such Event of Default continues beyond the expiration of thirty (30) days following notice to Lessee of the occurrence of such Event of Default, provided, however, that if the nature of Lessee's noncompliance is such that more than thirty (30) days are reasonably required for its cure, then Lessee shall not be deemed to be in default if Lessee commenced such cure, within said thirty (30) day period and thereafter diligently prosecutes such cure to completion; provided, further, that if Lessee shall default in the performance of any covenant, duty or obligation two (2) or more times in any twelve (12) month period, then notwithstanding that each such default shall have been cured by Lessee, any further default shall be deemed an Event of Default without Lessor's being obligated to provide notice to Lessee and grant Lessee the right to cure; or

Article 12.03 This Lease and the term and estate hereby granted and the demise hereby made are subject to the limitation that if and whenever any Event of Default shall occur, after such notice, if any, as is provided in Section XI, Lessor may, at its option, in addition to all other rights and remedies given hereunder or by law or equity, terminate this Lease, in which event, Lessee shall immediately surrender possession of the Leased Premises to Lessor. However, said termination shall be subject to the provisions of Article VII.

Article 12.04 In the event of any default by Lessor hereunder, Lessee's remedies shall include an action for damages and/or specific performance, or any other remedy available to it, both at law and in equity, but prior to any such action, Lessee will give Lessor written notice specifying such default with particularity and Lessor shall thereupon have a reasonable period, but in no event more than thirty (30) days, in which to cure any such default; provided, however, if the character of the default is such that more than thirty (30) days are reasonably necessary to cure same, Lessor shall be afforded as much time as reasonably necessary to cure the default as long as Lessor has commenced curative action within thirty (30) days of Lessee's notice and diligently pursues the cure thereafter.

ARTICLE XIII

LESSEE'S SIGNS

Lessee shall have the right, at Lessee's sole cost and expense, to install on all building elevations its standard sign package as depicted on Exhibit "C". Lessee shall also have the right to erect a monument sign on the Property. Lessee shall have the right to display opening soon, grand opening and promotional banners from time to time after

execution of the Lease. It is understood that the Lease is contingent upon applicable local government authorities' approval of Lessee's signage. Lessor shall also have the right to approve Lessee's signage, such approval not to be unreasonably withheld, conditioned, or delayed so long as such signage is consistent with the signage included at a typical "Popeye's Louisiana Chicken" restaurant.

ARTICLE XIV

LESSOR-LESSEE RELATION

The relation created by this Lease is that of Lessor and Lessee. Nothing herein contained shall be deemed or construed by the parties hereto, nor by a third party, to be a creation of the relationship of principal and agent, or of partnership, or of joint venture between the Parties. Neither computation of Rent, nor any other provision contained herein, nor any acts of the Parties hereto, shall be deemed to make Lessor liable for the debts of Lessee or create any relationship between the Parties hereto other than the relationship of Lessor and Lessee.

ARTICLE XV

EMINENT DOMAIN

If more than 25% of the Leased Premises should be taken by any authority having the power of eminent domain, then and in that event, the Lease Term shall cease and terminate, and the date of such termination shall be, at Lessor's election, either the date upon which possession shall be tendered to such authority by Lessor or the date upon which possession is taken by such authority.

ARTICLE XVI

INTENTIONALLY OMITTED

ARTICLE XVII

This Lease is a Maine contract and all the terms and conditions and provisions thereof shall be governed by the laws of the State of Maine.

ARTICLE XVIII

The covenants and agreements contained in this Lease shall bind and inure to the benefit of the Parties hereto and their respective successors and assigns.

ARTICLE XIX

TERMINOLOGY AND MISCELLANEOUS

Article 19.01 With respect to terminology in this Lease, each number (singular or plural) shall include all numbers, and each gender (male, female or neuter) shall include all genders. If any provision of this Lease shall ever be held to be invalid or unenforceable, such invalidity or unenforceability shall not affect any other provisions of this Lease, but such other provisions shall continue in full force and effect.

Article 19.02 The titles of the Articles in this Lease shall have no effect and shall neither limit nor amplify any provisions of this Lease itself. This Lease shall be binding upon and shall accrue to the benefit of Lessor, its successors and assigns.

Article 19.03 In all instances where Lessee is required hereunder to pay any sum or do any act at a particular indicated time or within any indicated period, it is understood that time is of the essence.

Article 19.04 The obligation of Lessee to pay all Rent (including Base Rent and Additional Rent) and other sums hereunder provided to be paid by Lessee and the obligation of Lessee to perform Lessee's other covenants and duties hereunder constitute independent, unconditional obligations to be performed at all times provided for hereunder. Lessee waives and relinquishes all rights which Lessee might have to claim any nature of lien against or withhold, or deduct from or offset against any Rent and other sums provided hereunder to be paid to Lessor by Lessee.

Article 19.05 If any term or provision of this Lease or the application thereof to any person or circumstance shall to any extent be invalid or unenforceable, the remainder of this Lease, or the application of such term or provision or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

Article 19.06 If Lessor or Lessee is a corporation or limited liability company, Lessor and Lessee each respectively, represent and warrant that this Lease and the undersigned's execution of this Lease has been duly authorized and approved by such entity. The undersigned officers, representatives, or members of the corporation or limited liability company, executing this Lease on behalf of said corporation or limited liability company each respectively, represent and warrant that they are officers, representatives, or members of said corporation or limited liability company, with authority to execute this Lease on behalf of said corporation or limited liability company.

Article 19.07 Lessee shall have a one-time right of first refusal to purchase the Property ("**Purchase ROFR**"). If Lessor issues, receives, or enters into a bona-fide offer, proposal, or letter of intent (each, a "**Purchase Offer**"), to, from, or with a third party, to purchase the Property, Lessor will give Lessee a written notice (the "**ROFR Notice**") setting forth the purchase price and terms. Lessee will have ten (10) days after the effective date of the ROFR Notice to exercise the Purchase ROFR by: 1) sending written notice to Lessor; and 2) delivering to Lessor or its designated escrow agent an earnest money deposit equal to 5% of the Purchase Price. Closing will occur no later than thirty (30) days after Lessee exercises the Purchase ROFR (subject to Lessor providing clean and marketable title and a title commitment and survey reasonably acceptable to Lessee). Lessor shall not be required to pay any commissions in connection with the Purchase ROFR.

Article 19.08 As part of Lessor's Work (pursuant to Exhibit "B"), Lessor will remediate or abate any Hazardous Materials identified prior to the Condition Date during Lessee's diligence affecting the Leased Premises in violation of appliable Environmental Laws (as defined below) provided that the cost shall not exceed $10,000. In the event the estimated cost to remediate is over $10,000, Lessor shall have the right to terminate this Lease and neither party shall have any further obligations hereunder or rights against the other party. Lessee shall have the right to nullify Lessor's termination if Lessee elects to pay any cost over the $10,000 threshold. Lessor shall indemnify and hold Lessee harmless from and against any and all environmental costs of any nature arising out of any Environmental Conditions caused by the negligent acts or omissions of Lessor. Lessee shall indemnify Lessor for all environmental costs of any nature caused by Lessee's use or occupancy of the Leased Premises or by the negligent acts or omissions of the Lessee. For purposes of this Lease, "**Environmental Conditions**" shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of Hazardous Materials other than in compliance with applicable Environmental Laws. Lessor represents to Lessor's actual knowledge, that as of the Effective Date, the Leased Premises are free of all Hazardous Materials, under any and all Environmental Laws and other laws controlling or governing the handling, manufacturing, treatment, storage, disposal, discharge, use and transportation of those Hazardous Materials, including any federal or State of Maine law, statute, regulation, rule, order, decree, judgment or direction concerning environmental protection or health and safety including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the Resource Conservation and Recovery Act, as amended, and the Toxic Substances Control Act, as amended ("**Environmental Laws**"). The provisions of this Article 19.08 shall survive the termination or expiration of this Lease.

Article 19.09 If either Party shall be delayed or prevented from the performance of any act required by this Lease by reason of strikes, utility failures, utility company delays, restrictive laws, riots, acts of terrorism, acts of God, governmental delays, inclement weather, or other similar reasons not the fault of the non-performing Party, then the performance time for such act shall be extended for a period equivalent to the period of such delay. Notwithstanding the foregoing, the provisions of this Article 19.09 shall not operate to excuse Lessee from the prompt payment of Base Rent, Additional Rent or other charges hereunder.

Article 19.10 Notwithstanding anything to the contrary provided in this Lease, it is specifically understood and agreed that there shall be absolutely no personal liability on the part of any Lessor with respect to any of the terms, covenants and conditions of this Lease (absent fraud) and Lessee shall look solely to the equity of Lessor or any successor in interest in the Premises or the leasehold estate of Lessor or such successor in the Premises for the satisfaction of each and every remedy of Lessee in the event of any breach by Lessor or by such successor in interest of any of the terms, covenants and conditions of this Lease to be performed by the Lessor, such exculpation of personal liability to be absolute and without any exception absent fraud.

Article 19.11 Lessee and Lessor each agrees to indemnify and hold one another harmless from any loss, liability, damage, cost or expense (including, without limitation, reasonable attorney's fees) paid or incurred by the other party, by reason of any claim to any broker's, finder's, or other fee in connection with this transaction by any party claiming by, through, or under Lessee and Lessor, respectively.

ARTICLE XX

ENTIRE AGREEMENT

This instrument (including all exhibits) constitutes the entire agreement between Lessor and Lessee and no prior written or prior or contemporaneous oral promises or representations, brochure, or rendering shall be binding on the Parties hereto or deemed a part of this Lease, unless specifically incorporated herein. This Lease shall not be amended, changed or extended except by written instrument signed by both Parties hereto.

[Signature Pages Follow]

EXECUTED AND EFFECTIVE AS OF THIS 22ND DAY OF MAY, 2025

LESSOR: 584 ALFRED STREET LLC
By:
Name: JAMES J MABARDY
Title: MANAGING PARTNER

LESSEE: GOLDEN CHICKEN OF BIDDEFORD, LLC
By:
Name: Arsal Jaffery
Title: CEO

□

□

~~**EXHIBIT "A"**~~
~~**SITE PLAN**~~

~~[See Attached]~~□

□

~~**EXHIBIT "B"**~~
~~**DESCRIPTION OF LESSOR'S WORK**~~

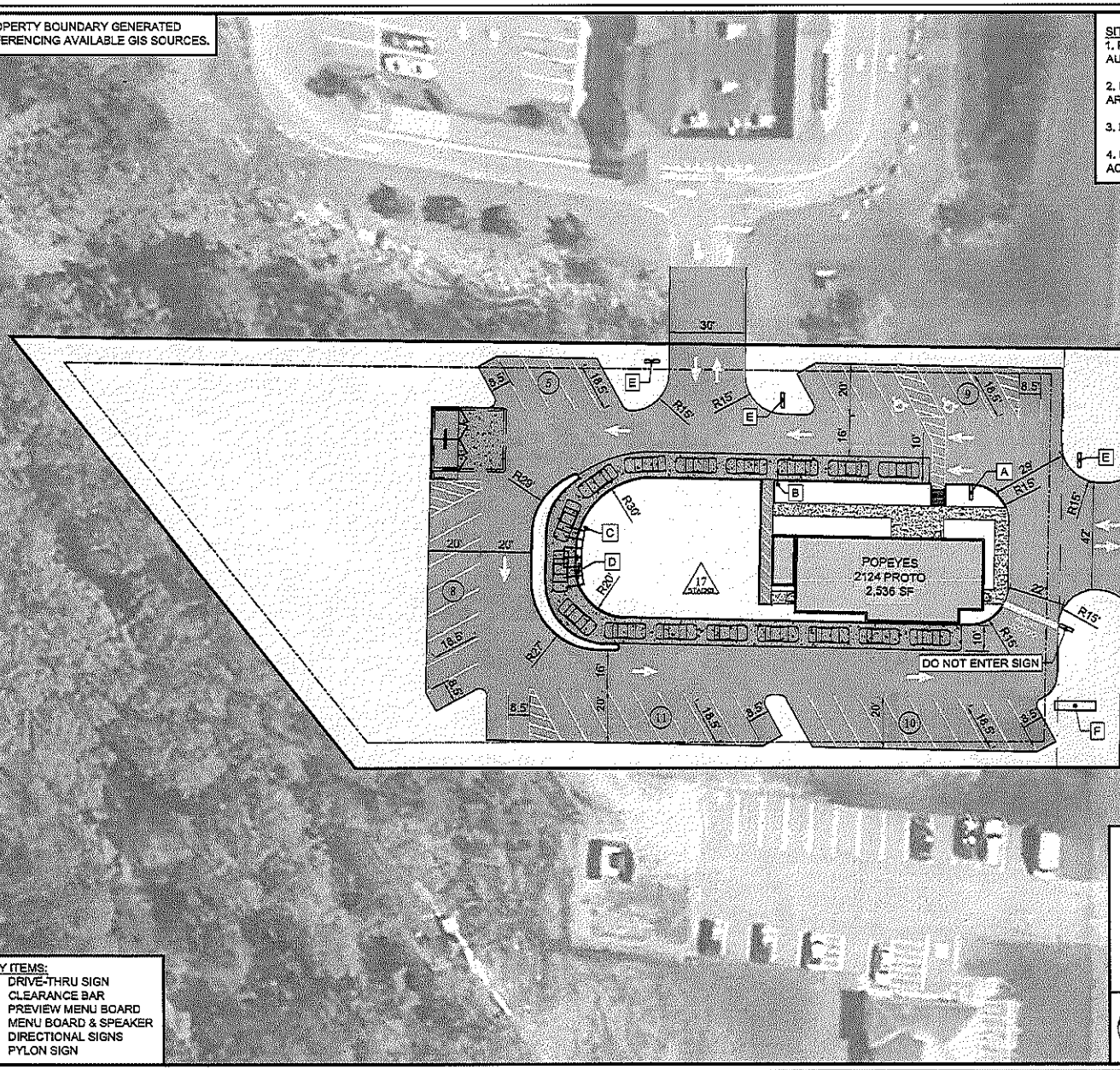
~~**[See Attached]**~~

□

EXHIBIT "A"
SITE PLAN

[See Attached]

PROPERTY BOUNDARY GENERATED REFERENCING AVAILABLE GIS SOURCES.



KEY ITEMS:
- A. DRIVE-THRU SIGN
- B. CLEARANCE BAR
- C. PREVIEW MENU BOARD
- D. MENU BOARD & SPEAKER
- E. DIRECTIONAL SIGNS
- F. PYLON SIGN

SITE GENERAL NOTES:
1. PYLON SIGN AT MAIN STREET. REFER TO LOCAL AUTHORITIES FOR PERMITS AND APPROVALS
2. DIGITAL MENU BOARDS AND PREVIEW BOARDS ARE REQUIRED FOR ALL SITES
3. LED LOT LIGHTING IS REQUIRED ON ALL SITES
4. DIRECTIONAL SIGNAGE TO BE PLACED AT SITE ACCORDINGLY

LEGEND
- BOUNDARY LINE
- EXISTING LOT LINE
- BUILDING SETBACK
- LANDSCAPE BUFFER
- PROPOSED PAVEMENT

40 0 40

SCALE : 1" = 40'

QUICK CONCEPTS GROUP

QCG

VISIT OUR WEBSITE AT
WWW.QUICKCONCEPTSGROUP.COM
SEND YOUR CONCEPT REQUESTS TO
REQUESTS@QUICKCONCEPTSGROUP.COM

PROJECT NAME:
POPEYES
IN BIDDEFORD, ME

ADDRESS: 580 ALFRED ST
BIDDEFORD, ME 04005

JURISDICTION:
CITY OF BIDDEFORD

PARCEL ID #:
3788

PARCEL AREA:
±1.42 AC (AS SHOWN)

ZONE: B-2
HIGHWAY-ORIENTED COMMERCIAL

EXISTING USE:
VACANT COMMERCIAL

PROPOSED USE:
RESTAURANT, FAST FOOD
(PERMITTED USE)

PARKING CALCULATION:
1 PER 3 SEATS
8 REQUIRED STALLS

PROVIDED PARKING:
2 ADA STALLS
41 STALLS (8.5' x 18.5')
43 STALLS TOTAL

DRIVE AISLE:
16' ONE-WAY / 24' TWO-WAY

SETBACKS
FRONT: 30'
SIDE: 10'
REAR: 10'
BUFFERS: 25' ROW GREENSTRIP

FLOOD ZONE: X
FEMA MAP: 23014500088
DATED: 5/15/1984

SITE SPECIFIC NOTES:
DESIGN SHOWN PROPOSES MODIFICATIONS TO THE EXISTING DRIVEWAY ONTO ALFRED RD.

CROSS-ACCESS SHOWN CONNECTS TO EXISTING DRIVEWAY.

DRAWING DATA
DATE: 7/17/2024
PROJECT NO.: 24.1266 / CONCEPT 3

DISCLAIMER: THE CONCEPT REPRESENTED HEREIN IS FOR CONCEPTUAL PURPOSES ONLY. INFORMATION SHOWN HEREIN WAS BASED ON PROVIDED INFORMATION BY THE CLIENT AND PRELIMINARY CODE RESEARCH WITH THE SUBJECT JURISDICTION. INFORMATION SHOWN HEREIN SHALL BE CONFIRMED BY SUBJECT JURISDICTION AND MAY BE SUBJECT TO CHANGE. A SURVEY IS RECOMMENDED TO DETERMINE THE PROPERTY BOUNDARIES AND RESTRICTIONS.

EXHIBIT "B"
DESCRIPTION OF LESSOR'S WORK

[See Attached]

DocuSign Envelope ID: FAD326DE-41AB-4600-977A-D06454D8566C

DESCRIPTION OF LANDLORD'S WORK

Landlord shall, at Landlord's expense, cause to be constructed and completed at the time and in the manner set forth in this Exhibit "C", the site preparation and improvements described below, all of which are referred to as "Landlord's Work":

1. Removal of Improvements; Grading and Compaction. Prior to the date Tenant obtains the Permits, Landlord shall remove all improvements on or below the surface of the Premises and deliver the Premises to Tenant graded to within one tenth (1/10) of one foot (1') of the finished grade elevation as established by Tenant, with the soil tests conducted by Tenant showing the soil on the Premises to be ninety-five percent (95%) compacted with a tolerance of 0.3%+/- up to the proposed building envelope. Landlord shall provide Tenant with any soil compaction reports and pad certification relating to the Premises. Any fill soil must be of structural quality with no debris or organic materials and must be placed in nine inch (9") lifts. The moisture content of the soil shall be within the range of 0-4% above the maximum moisture content in accordance with the Standard Proctor compaction procedure.

2. Utility Installation. Prior to the date Tenant obtains the Permits, Utilities shall be installed by Landlord. Such Utilities shall be installed at the exterior boundary of the Building pad on the Premises as designated by Tenant for tenant improvements. Landlord shall also provide Tenant with assurance satisfactory to Tenant that Utilities adequate to serve Tenant's use are available and include legal access across other properties if necessary to serve the Premises. "Utilities" include without limitation water, gas, electricity, telephone, sanitary sewers and storm drainage.

- Water. Two (2) pipes of one-inch (1") minimum diameter or one (1) pipe of two-inch (2") minimum diameter, with shutoff valve. Water pressure rate shall be between 45 to 60 pounds per square inch.
- Sewer. Four-inch (4") minimum diameter sewer line with a minimum one-quarter inch (¼") per foot slope from the furthest plumbing location.
- Electrical service. Two (2) two-inch (2") electrical service conduits. Electrical load requirement for standard kitchen and service area shall be 400 amps, 3 phase, 4 wire, and 120/208 volt service power.
- Gas Service. Size of gas pipes shall be sufficient for 1.6 million BTUs. For natural gas of 0.60 specific gravity based on pressure drop of 0.5 inch water column.
- Fire Sprinkler. If local authority requires a sprinkler system, Landlord shall provide an adequate main water pipe.
- Telephone. One-inch (1") telephone conduit and line.

3. Common Area Improvements. Before the rent commencement date, Landlord shall complete all Common Area Improvements in accordance with the Shopping Center site plan, and applicable conditions to governmental approval of the Shopping Center site plan. "Common Area Improvements" include without limitation all curbs, gutters, paving, striping, landscaping and irrigation systems, retaining walls, driveways, walkways, driveway aprons, trash area as required by applicable code and lighting facilities outside the Building.

4. Insurance. Landlord shall provide, or shall require that all contractors performing Landlord's Work provide public liability and property damage insurance with limits of liability of not less than a combined single limit of Two Million Dollars ($2,000,000.00) for bodily injury and property damage in connection with performance of Landlord's Work.

5. Coordination of Work. Landlord shall cooperate with Tenant in coordinating Landlord's Work with construction of Tenant's improvements to assure mutual access and to prevent interference with or damage to the work Landlord and Tenant are performing.

6. Landlord Failure to Perform. If Landlord fails to timely perform any of Landlord's Work, Tenant shall have the right, in addition to all other remedies, upon ten (10) days written notice to Landlord, to cause performance of the work described in the notice. Landlord shall reimburse Tenant for all amounts expended by Tenant performing Landlord's Work, upon receipt of verification by Tenant of the amount so expended, plus interest at the maximum lawful rate. Tenant may elect to receive reimbursement by a credit towards Rent.

GORRILL PALMER
An LJB Engineering Company

300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | GorrillPalmer.com

Technical Capacity

Reliance Hospitality Group, LLC

Reliance Hospitality Group, LLC has experience in the fast-food restaurant franchising business, with previous projects as follows:

Brand	Address	Completed
Taco John's	50 South Broadway, Lawrence, MA. 01843	2023
Taco John's	536 North Main Street, Leominster, MA. 01453	2023
Taco John's	77 Summer Street, Boston, MA. 02111	2024
Popeyes	841 Lisbon Street, Lewiston, ME. 04240	2025
Popeyes	48 Western Avenue, Augusta, ME 04330	Summer 2026*

**Under Construction*

For further information on these projects, contact:
Arsal Jaffery, CEO
Reliance Hospitality Group, LLC
(860) 778-6179
arsal.jaffery@outlook.com

GULF COAST BANK

Main Office
221 South State Street
Post Office Drawer 490
Abbeville, LA 70511-0490
Telephone: (337) 893-7733
Facsimile: (337) 893-7319

web site: www.gcbank.com
e-mail addresses:
loans@gcbank.com
customerservice@gcbank.com
netteller@gcbank.com

December 9, 2025

To Whom it May Concern:

Mr. Deven Jadav has been a faithful customer of our bank since 2007. Since then, he has been an exemplary customer, maintaining both deposits and loans with the bank. All his affairs have been handled as agreed. As of the date of this letter, here are the balances in his CDs:

- CD--$413,979.57
- CD--$450,000.00
- CD--$307,465.73

Should you have any questions please contact me at 337-988-0471.

Regards,

Carey Chopin
Vice President

GORRILL PALMER
An LJB Engineering Company

Stormwater Management Plan Rev. 1

To:	David Galbraith, City Planner	From:	Kaleb Bourassa, PE
Date:	April 29, 2026	Re:	Popeyes Drive-Thru Restaurant 584 Alfred St, Biddeford, ME Golden Chicken of Biddeford, LLC

Task:

Perform a stormwater management analysis for the proposed development of a 2,536 SF Popeyes Drive-Thru restautant located at 584 Alfred Street in Biddeford, ME.

References:

- Field reconnaissance by Gorrill Palmer
- LiDAR topography from the Maine Office of GIS
- "ALTA/ACSM Land Title Survey, 584 Alfred St, Biddeford, Maine" dated January 2016 made for Mooney Steet Management, LLC and prepared by Titcomb Associates.
- "Grading and Utility Plan – Retail & Drive Thru Facility" dated March 29, 2016 made for United Growth and prepared by Sebago Technics.
- "Post Development Watershed Map – Retail & Drive Thru Facility" dated September 10, 2015 for United Growth and prepared by Sebago Technics.
- Design plans titled "Popeyes Louisiana Kitchen" prepared by Gorrill Palmer.
- City of Biddeford, ME City Code Article IV – Section 61

Background:

Golden Chicken of Biddeford, LLC is currently seeking a Site Plan Permit from the City of Biddeford Planning for the construction of a 2,536 SF Popeyes Louisiana Kitchen Drive-Thru restaurant with associated parking, utility, and drainage infrastructure. The project site is 1.43 acres in size and had previously been operating as a small engine repair garage. The buildings serving the prior use have since been demolished, however areas of pavement and compacted gravel remain. Gorrill Palmer has prepared this memo to demonstrate the site has been designed to be compliant with the applicable City of Biddeford stormwater management performance standards.

The project will create approximately 8,840 SF of net new impervious area. As this is less than 1 acre, the project does not meet the threshold for a Maine DEP Stormwater Law permit under the Chapter 500 standards for water quality and quantity control. However, the project is subject to the City of Biddeford's stormwater management standards outlined in Article IV – Section 61.A of the City Code, which requires post-development peak discharges do not exceed pre-development conditions. The plans prepared by Gorrill Palmer include the infrastructure necessary to serve the project and to

comply with current local stormwater standards. Erosion and Sedimentation Controls (Basic Standards) will also be employed during the construction of this project and are summarized in the Erosion and Sedimentation Control Plans provided on Sheets C-1.1, C-6.3, and C-6.4 and as described in the Erosion and Sedimentation Control Report provided in a separate enclosure of the Site Plan Application package. An Operation and Maintenance Manual prepared by Gorrill Palmer outlines the inspection and maintenance requirements for the proposed stormwater facilities and is included in the E&S Report.

The purpose of this analysis and memorandum is to document what measures will be implemented to control the peak rate of discharge during large storm events to meet city standards. Based on our review of the City Ordinances, there is no standard for the treatment of stormwater runoff, therefore the proposed development is not proposing treatment of stormwater runoff.

Existing Conditions

The 1.43-acre property has been previously developed, and consists primarily of pavement, gravel, and grassed areas. Approximately 0.45 acres (31%) of the site remains as undeveloped wooded area. As previously mentioned, the former on-site buildings have been demolished. There is an existing driveway off Alfred Street and secondary access from the adjacent commercial plaza that remain in use.

The USDA NRCS Class D Intensity Soil Survey for York Country identifies the site soils to be comprised of:

Map Symbol	Soil Type	Hydrologic Soil Group
LyC	Lyman-Rock outcrop complex	D
Sc	Scantic Silt Loam	D
SrB	Skerry Fine Sandy Loam	C/D

The majority of the development is located on Skerry Fine Sandy Loam soils, which is considered to have very deep, moderately well drained soils with a moderately high or high saturdated hydraulic conductivity. The soils are also acceptable to support the installation of the proposed drainage infrastructure installation techniques and measures to prevent erosion.

Proposed Development

The proposed site improvements will include a 2,536 SF footprint single-story building, a 10-FT wide drive-thru lane that surrounds the full perimeter of the building, a 16-FT wide one way bypass lane around the outside of the drive-thru, 23 parking spaces, a right-in-right-out driveway off Alfred St and a paved access drive connection to the adjacent commercial plaza. In total, the proposed project is anticipated to create approximately 8,840± SF of new non-vegetated area, which includes new paved, gravel, and roof areas. The total development foorpting of the site is anticipated to be about 0.95 acres.

Analysis:

The proposed development was designed to meet the local requirements of Article IV – Section 61.A, which requires the reduction of peak discharge for the twenty-five-year storm to the greatest extent practicable. Runoff from the site is ultimately tributary to Lower Thatcher Brook which has a watershed area of about 2.5 square miles. The site runoff is currently tributary to the existing wet

pond located on the adjacent commercial parcel at 580 Alfred St known as Biddeford Shoppes. The re-developemnt of the subject parcel will not increase overall runoff volumes to the existing pond. However, the increased impervious area will result in higher runoff velocities which necessitates on-site detention to ensure the pond is not overburdened during large storm events, and to prevent erosion of the pond's embankments.

Using TR-20 methodology, the pre-development and post-development watershed conditions were evaluated to determine peak discharge rates to the pond inlet during the 2, 10, And 25 year storm events, and to determine the minimum detention necessary to maintain peak flows below the pre-development level. The proposed BMP was also evaluated during the 100 year storm event. Original design calculations and as-built plans prepared by Sebago Technics for the Biddeford Shoppes site plan were used to assist in building our watershed model.

Pre-Development Conditions

The Pre-Development conditions were modeled as four subcatchments and two Points of Interest (POI) as shown on Sheet WS1 and described below:

- 1A includes pavement, gravel, and grassed areas which are directly tributary to the pond forebay inlet (POI 1). Part of the pond's vegetated embankments are included in this subcatchment. Due to the short Time of Concentration (Tc) of this subcatchment, we have used a direct entry Tc of 5 minutes.
- 2A includes pavement, gravel, grassed, and wooded areas which are tributary to the wet pond via a stormdrain system on the adjacent Biddeford Shoppes parcel. We have modeled two (2) reaches to convey the runoff from this subcatchment to POI 1. Reach 2 (R2) represents the gutterline flow down the access drive that connects the two parcels. Reach 3 (R3) represents the catch basin and 24" stormdrain that discharges directly to the pond forebay.
- 3A consists of wooded, grassed, ledge, and riprap areas that are tributary to a culvert inlet on the Biddeford Shoppes parcel. Similarly to Subcatchment 2A, we have modeled a reach to convey this area to POI 1. Reach 1 (R1) represents an 18" stormdrain which conveys flow from the field inlet to Reach 1, and ultimately to the pond forebay.
- 4A consists of woodland and grassed area tributary to POI 2, which discharges to the rear parking area of the adjacent plaza.

Post-Development Conditions

The post-development condition was modeled as six subcatchments as shown on Sheet WS2 and which are described below:

- 1B consists of newly paved areas and lawn areas along the west side of the property. Runoff from this subcatchment is captured by new catch basins and conveyed to a subsurface chamber detention system, and ultimately tributary to POI 1.
- 2B consists of newly paved areas and lawn areas in the north of the site. Runoff from this subcatchment is captured by new catch basins and also conveyed to a subsurface chamber detention system, and ultimately tributary to POI 1.
- 3B consists of newly paved areas and lawn areas in the east side of the property. Runoff is conveyed down the connecting access drive where it is captured by an existing catch basin and ultimately tributary to POI 1.
- 4B consists of lawn areas and the existing vegetated embankments of the pond on the east side of the property. This subcatchment is directly tributary to POI 1.
- 5B consists of wooded, grassed, ledge, and riprap areas along the north edge of the development footprint. This subcatchment is tributary to Reach 1 and Reach 3 and ultimately to POI 1.

- 6B consists of woodland and grassed area tributary to POI 2 that will remain undeveloped as part of this project.

The following table shows the peak flows measured at the points-of-interest in the pre- and post-development conditions:

Comparison of Pre- and Post-Development Peak Flow Rates						
Point of Interest	Peak Flow (cfs)					
	2 Year		10 Year		25 Year	
	Pre	Post	Pre	Post	Pre	Post
POI #1	2.12	2.10	3.71	3.51	5.03	4.66
POI #2	0.22	0.22	0.44	0.44	0.63	0.63

As shown in the table above, the peak flow rate at POI #1 is reduced in the post-development condition, while POI #2 remains the same as the existing condition. The increase in impervious area on the parcel has been detained on site so as to prevent an increase in peak discharge above the predevelopment levels as it enters the existing wet pond.

Proposed BMPs

Detention in the proposed development will be accomplished using subsurface Cultec chambers below the paved area on the easterly side of the site. A network of catch basins and closed stormdrains will convey runoff to the chamber system, and an outlet control structure will ensure peak flows during the three design storm events will be effectively mitigated. A separator row will trap sediment collected by the upstream stormdrain system and prevent it from being discharged to the pond inlet. Please see Sheet C-4.0 and Sheet C-4.1 for more detailed information on the proposed subsurface detention chambers and outlet control structure.

Conclusion:

The proposed stormwater management plan for this project is anticipated to mitigate any impacts of stormwater runoff rates resulting from the proposed development and to maintain peak runoff rates at or below pre-development levels in accordance with Article IV – Section 61 of the City of Biddeford Land Use Code.

Erosion and sediment control measures will be employed during construction as outlined in the report included with this Site Plan submission. These measures include a stabilized construction entrance, silt sacks, silt fence and/or erosion control mix barriers and mulching to assure that the construction activity does not result in any sediment transport off the site.

Based on the proposed design, the runoff from the proposed development will be captured and conveyed in a manner that will not have an adverse impact to the surrounding stormwater systems or the environment.

Attachments:

1 Watershed Maps:
WS1 Predevelopment Watershed Map
WS2 Post Development Watershed Map
2 Storm Drain Sizing (Rational Method)
3 Pre and Post Development HydroCAD Models

ATTACHMENT 1

Watershed Maps

LEGEND

- 1S — SUBCATCHMENT AREA
- WATERSHED BOUNDARY
- SOIL BOUNDARY
- POI — POINT OF INTEREST
- SF — SHEET FLOW
- SCF — SHALLOW CONCENTRATED FLOW
- CF — CHANNEL FLOW
- A — TIME OF CONCENTRATION FLOW PATH
- 1 — REACH

PREDEVELOPMENT PEAK FLOW DISCHARGE SUMMARY (CFS)		
	POI 1	POI 2
2 YR	2.10	0.28
10 YR	3.67	0.55
25 YR	4.96	0.78

SOILS		
SYMBOL	NAME	HSG RATING
SrB	Skerry fine sandy loam	C/D
Sc	Scantic silt loam	D
LyC	Lyman–Rock outcrop complex	D

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

KALEB A. BOURASSA No. 17072 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE 3/11/26

1 inch = 20 ft.

Rev.	Date	Revision
2	3/11/26	SITE PLAN REVIEW
1	12/16/25	SKETCH PLAN REVIEW

Design: MYR	Draft: CG	Date: DEC 2025
Checked: SRB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD–WS–PRE_MYR.dwg		

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GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

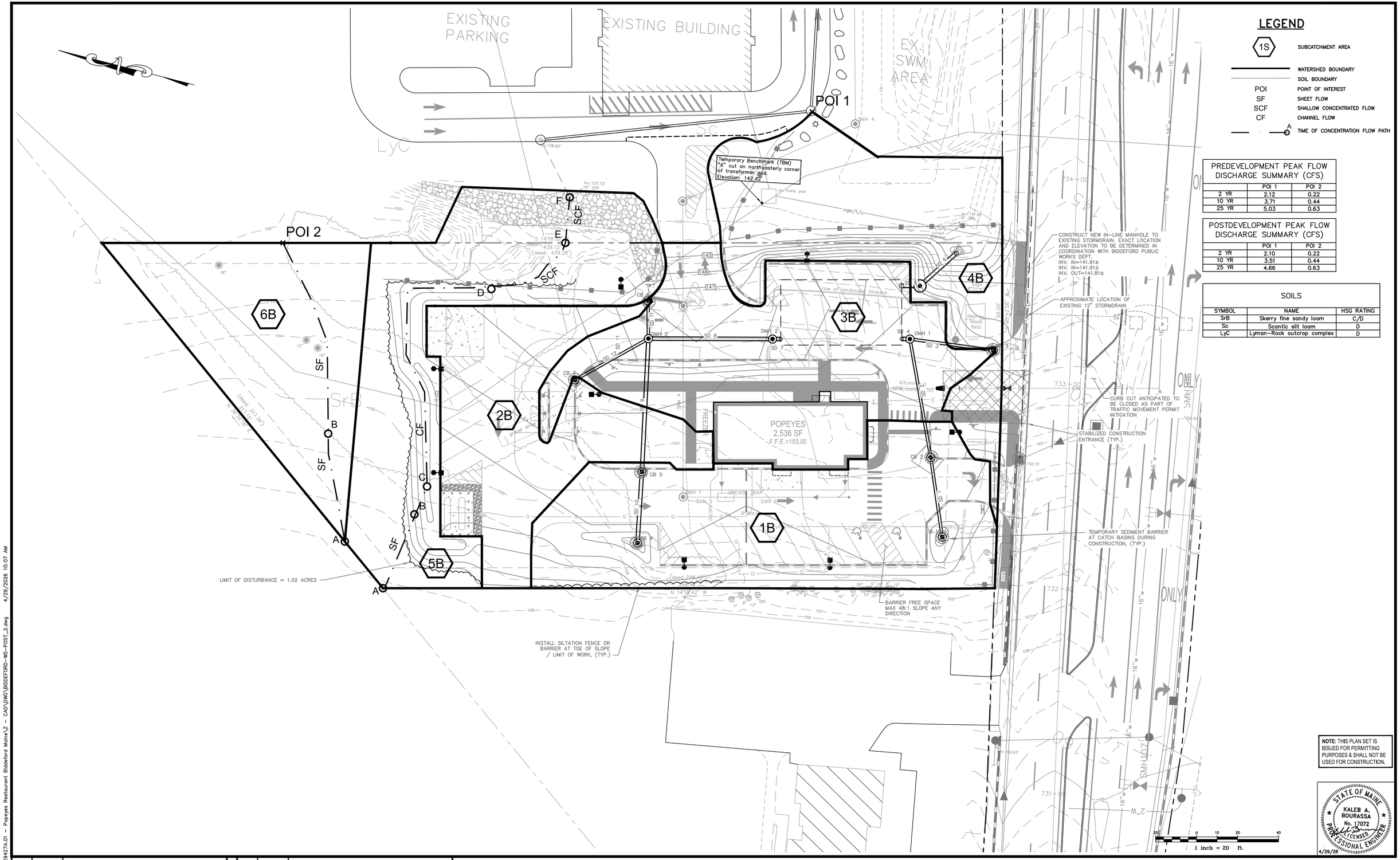
Drawing Name: PRE-DEVELOPMENT WATERSHED PLAN

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. WS-1

U:\Reliance Hospitality\0129427A.01 – Popeyes Restaurant Biddeford Maine\Z – CAD\DWG\BIDDEFORD–WS–PRE_MYR.dwg 3/6/2026 5:37 PM



LEGEND

1S	SUBCATCHMENT AREA
	WATERSHED BOUNDARY
	SOIL BOUNDARY
POI	POINT OF INTEREST
SF	SHEET FLOW
SCF	SHALLOW CONCENTRATED FLOW
CF	CHANNEL FLOW
A	TIME OF CONCENTRATION FLOW PATH

PREDEVELOPMENT PEAK FLOW DISCHARGE SUMMARY (CFS)

	POI 1	POI 2
2 YR	2.12	0.22
10 YR	3.71	0.44
25 YR	5.03	0.63

POSTDEVELOPMENT PEAK FLOW DISCHARGE SUMMARY (CFS)

	POI 1	POI 2
2 YR	2.10	0.22
10 YR	3.51	0.44
25 YR	4.66	0.63

SOILS

SYMBOL	NAME	HSG RATING
SrB	Skerry fine sandy loam	C/D
Sc	Scantic silt loam	D
LyC	Lyman–Rock outcrop complex	D

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision
4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD–WS–POST_2.dwg		

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South Portland, ME 04106

Drawing Name: POST DEVELOPMENT WATERSHED MAP

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. WS-2

K:\Reliance Hospitality\0129427A.01 – Popeyes Restaurant Biddeford Maine\Z – CAD\DWG\BIDDEFORD–WS–POST_2.dwg 4/29/2026 10:07 AM

ATTACHMENT 2

Stormdrain Sizing (Rational Method)

GORRILL PALMER

JOB	Biddeford Popeyes			
SHEET NO.	1	OF	4	
CALCULATED BY	MYR	DATE	3/9/2026	
CHECKED BY	MYR	DATE	3/9/2026	
SCALE	None			

Task: Determine pipe size required for Subcatchment 1B during the 25-year, 24 hour storm using the Rational Method and Mannings Equation

Assumptions:

i =	6.2	25 year
C paved =	0.95	
C lawn =	0.25	
n plastic =	0.011	

Calculations: See Below

Conclusion: Based on the rational method, the flow is **1.2** cfs

Based on Mannings Equation, the flow the specified pipe can handle is **6.0** cfs

RATIONAL METHOD Q=CiA

Area paved	7,525	SF
Area lawn	6,020	SF
Area paved	0.173	ac
Area lawn	0.138	ac
Area Total	0.311	ac
C paved	0.95	
C lawn	0.25	
C avg	0.639	
i	6.2	in/hr
Q	**1.232**	**CFS**

MANNINGS EQUATION
Q=(1.5/n)AR^(2/3)S^(1/2)

D	12	in
A	0.785	SF
R	0.250	FT
n	0.011	
S	0.02	ft/ft
Q	**6.008**	**CFS**

GORRILL PALMER

JOB	Biddeford Popeyes			
SHEET NO.	1	OF	4	
CALCULATED BY	MYR	DATE	3/9/2026	
CHECKED BY	MYR	DATE	3/9/2026	
SCALE	None			

Task: Determine pipe size required for Subcatchment 2B during the 25-year, 24 hour storm using the Rational Method and Mannings Equation

Assumptions:

i =	6.2	25 year
C paved =	0.95	
C lawn =	0.25	
n plastic =	0.011	

Calculations: See Below

Conclusion: Based on the rational method, the flow is **1.3** cfs

Based on Mannings Equation, the flow the specified pipe can handle is **6.0** cfs

RATIONAL METHOD Q=CiA

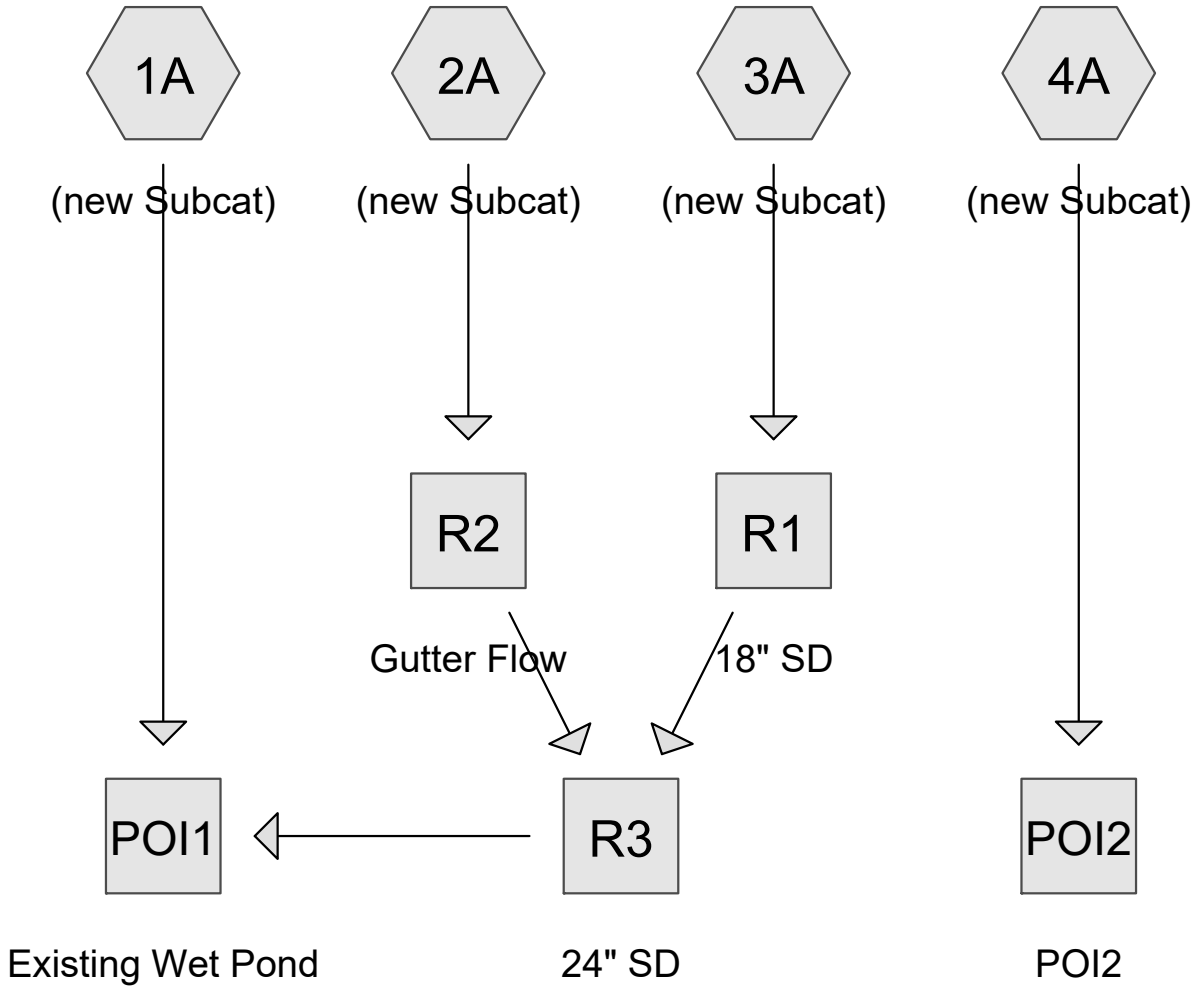
Area paved	9,241	SF
Area lawn	1,868	SF
Area paved	0.212	ac
Area lawn	0.043	ac
Area Total	0.255	ac
C paved	0.95	
C lawn	0.25	
C avg	0.832	
i	6.2	in/hr
Q	**1.316**	**CFS**

MANNINGS EQUATION
Q=(1.5/n)AR^(2/3)S^(1/2)

D	12	in
A	0.785	SF
R	0.250	FT
n	0.011	
S	0.02	ft/ft
Q	**6.008**	**CFS**

ATTACHMENT 3

Pre- and Post-Development HydroCAD Model



Subcat Reach Pond Link

Routing Diagram for Popeyes Stormwater - Pre
Prepared by LJB, Inc, Printed 3/10/2026
HydroCAD® 10.20-7a s/n 01265 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: (new Subcat) Runoff Area=26,964 sf 25.47% Impervious Runoff Depth=2.09"
Tc=5.0 min CN=88 Runoff=1.56 cfs 0.108 af

Subcatchment 2A: (new Subcat) Runoff Area=20,181 sf 10.71% Impervious Runoff Depth=1.84"
Flow Length=238' Tc=18.6 min CN=85 Runoff=0.70 cfs 0.071 af

Subcatchment 3A: (new Subcat) Runoff Area=14,966 sf 15.57% Impervious Runoff Depth=1.55"
Flow Length=217' Tc=17.7 min CN=81 Runoff=0.44 cfs 0.044 af

Subcatchment 4A: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=1.35"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.22 cfs 0.025 af

Reach POI1: Existing Wet Pond Inflow=2.12 cfs 0.223 af
Outflow=2.12 cfs 0.223 af

Reach POI2: POI2 Inflow=0.22 cfs 0.025 af
Outflow=0.22 cfs 0.025 af

Reach R1: 18" SD Avg. Flow Depth=0.15' Max Vel=4.70 fps Inflow=0.44 cfs 0.044 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=0.44 cfs 0.044 af

Reach R2: Gutter Flow Avg. Flow Depth=0.06' Max Vel=2.94 fps Inflow=0.70 cfs 0.071 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=0.70 cfs 0.071 af

Reach R3: 24" SD Avg. Flow Depth=0.35' Max Vel=3.01 fps Inflow=1.13 cfs 0.115 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=1.13 cfs 0.115 af

Total Runoff Area = 1.645 ac Runoff Volume = 0.248 af Average Runoff Depth = 1.81"
84.15% Pervious = 1.385 ac 15.85% Impervious = 0.261 ac

Summary for Subcatchment 1A: (new Subcat)

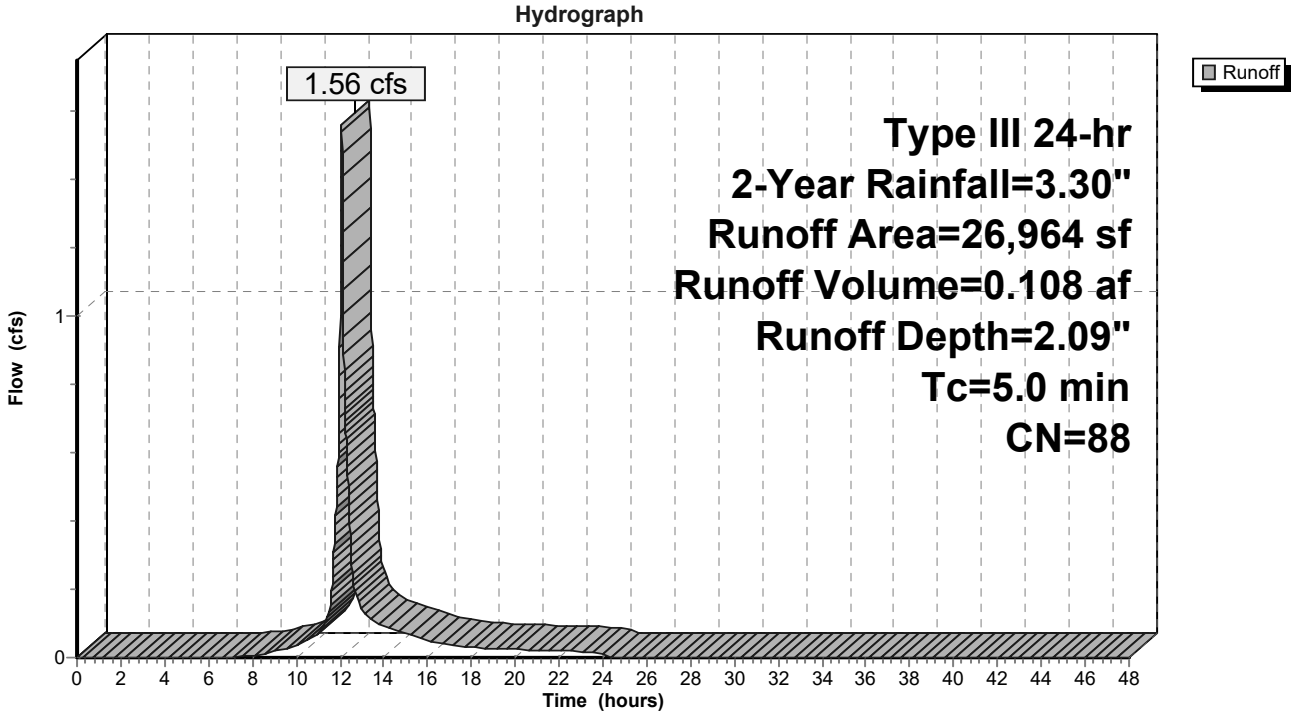
Runoff = 1.56 cfs @ 12.07 hrs, Volume= 0.108 af, Depth= 2.09"
Routed to Reach POI1 : Existing Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
6,868	98	Paved parking, HSG D
5,462	96	Gravel surface, HSG D
14,634	80	>75% Grass cover, Good, HSG D
26,964	88	Weighted Average
20,096		74.53% Pervious Area
6,868		25.47% Impervious Area

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

Subcatchment 1A: (new Subcat)



Summary for Subcatchment 2A: (new Subcat)

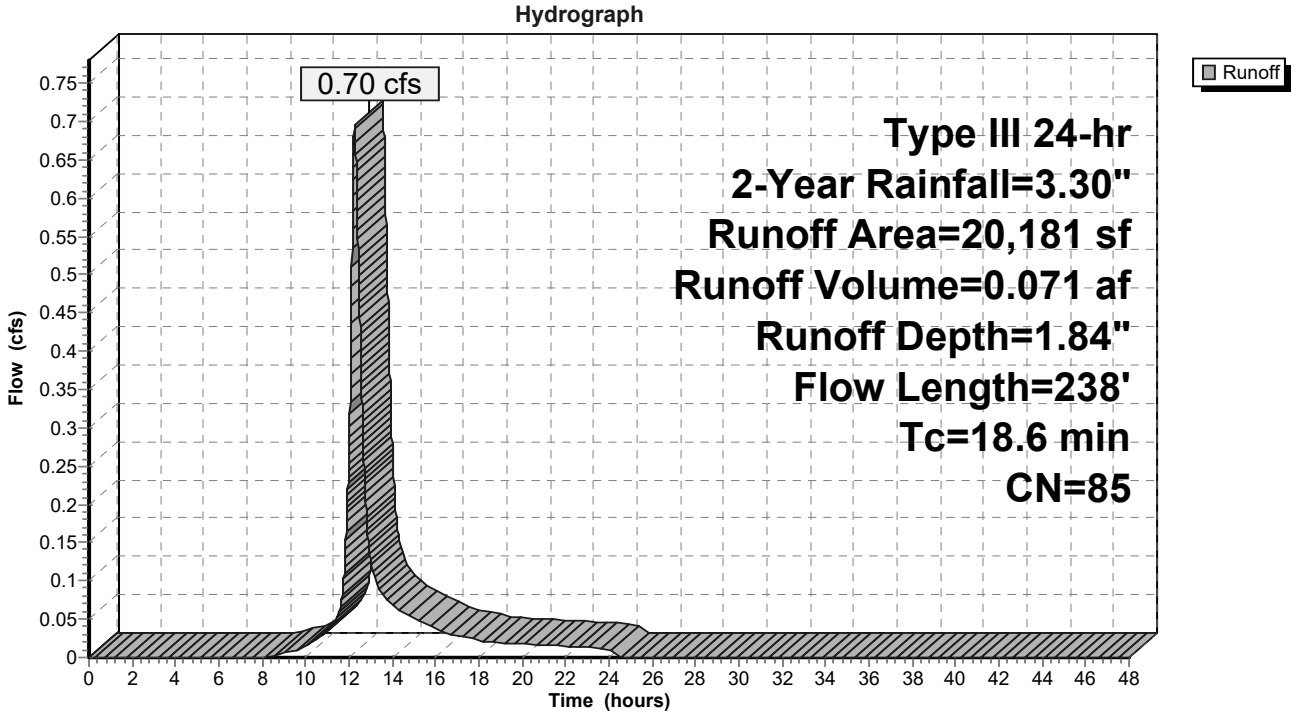
Runoff = 0.70 cfs @ 12.26 hrs, Volume= 0.071 af, Depth= 1.84"
Routed to Reach R2 : Gutter Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
2,162	98	Paved parking, HSG D
5,753	96	Gravel surface, HSG D
4,894	80	>75% Grass cover, Good, HSG D
7,372	77	Woods, Good, HSG D
20,181	85	Weighted Average
18,019		89.29% Pervious Area
2,162		10.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	110	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	89	0.0500	3.60		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
0.1	39	0.1280	7.26		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
18.6	238	Total			

Subcatchment 2A: (new Subcat)



Summary for Subcatchment 3A: (new Subcat)

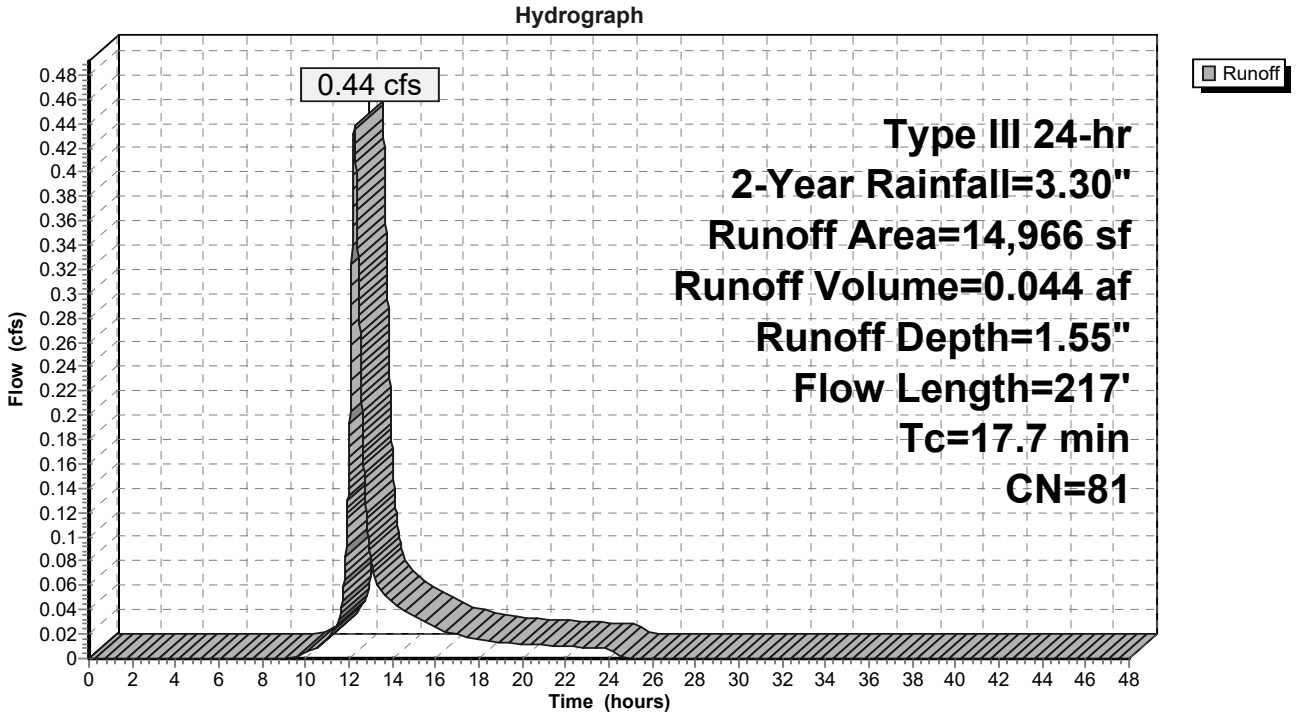
Runoff = 0.44 cfs @ 12.25 hrs, Volume= 0.044 af, Depth= 1.55"
Routed to Reach R1 : 18" SD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
	4,368	80	>75% Grass cover, Good, HSG D
	8,268	77	Woods, Good, HSG D
*	2,330	98	Ledge
	14,966	81	Weighted Average
	12,636		84.43% Pervious Area
	2,330		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	59	0.0420	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
5.8	46	0.0430	0.13		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
1.1	89	0.0780	1.40		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
0.0	23	0.5000	11.38		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
17.7	217	Total			

Subcatchment 3A: (new Subcat)



Summary for Subcatchment 4A: (new Subcat)

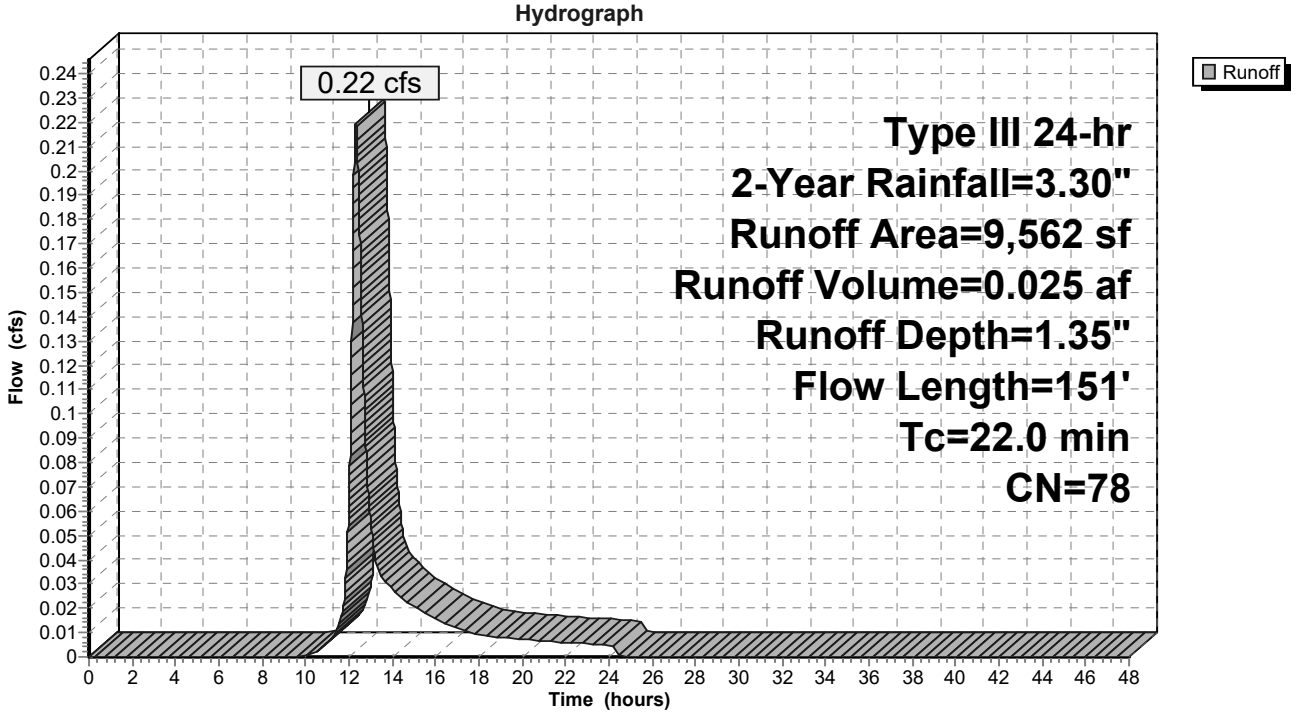
Runoff = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af, Depth= 1.35"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 4A: (new Subcat)

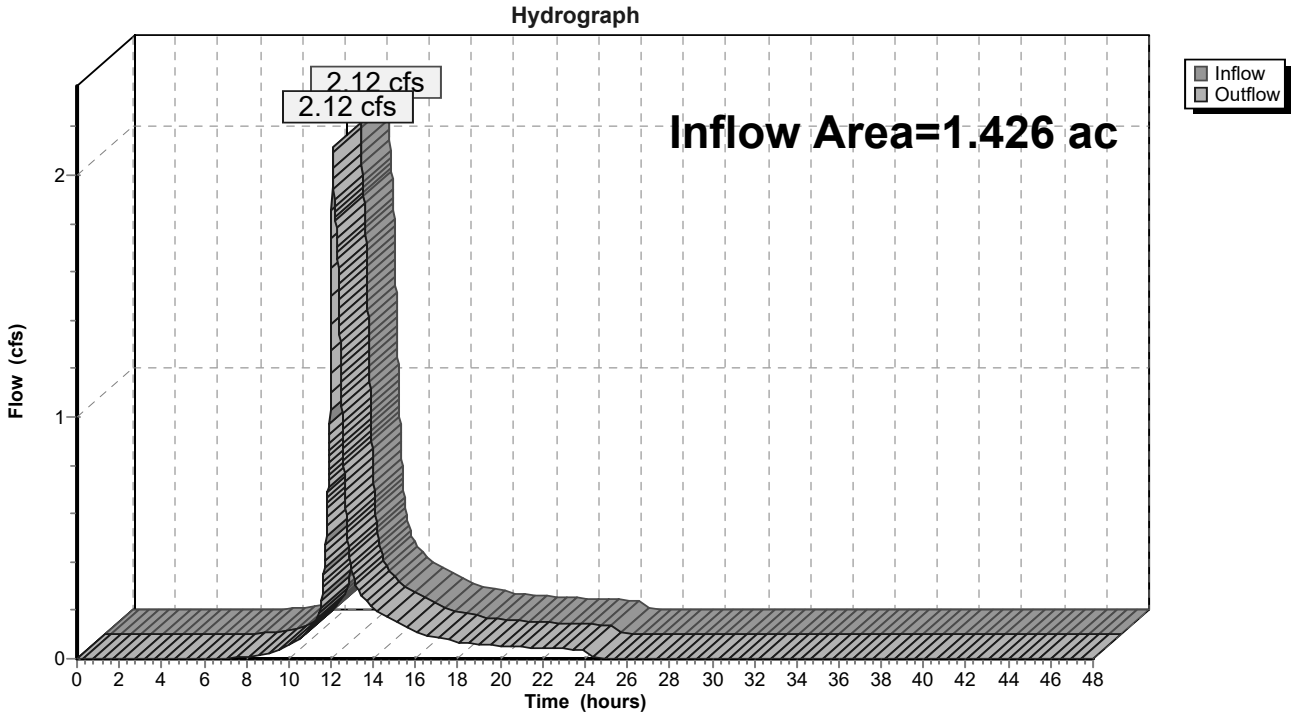


Summary for Reach POI1: Existing Wet Pond

Inflow Area = 1.426 ac, 18.29% Impervious, Inflow Depth = 1.88" for 2-Year event
Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.223 af
Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI1: Existing Wet Pond

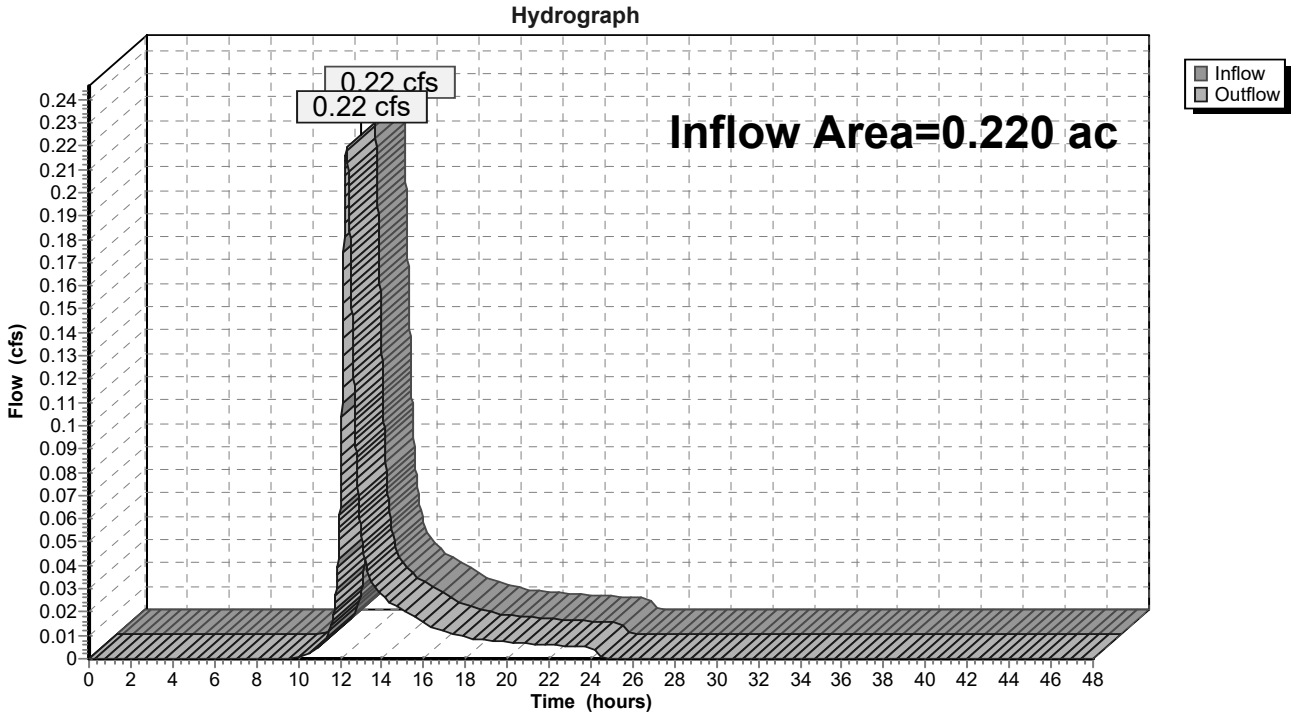


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 1.35" for 2-Year event
Inflow = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af
Outflow = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



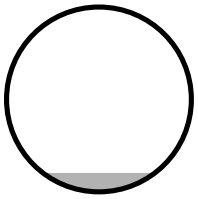
Summary for Reach R1: 18" SD

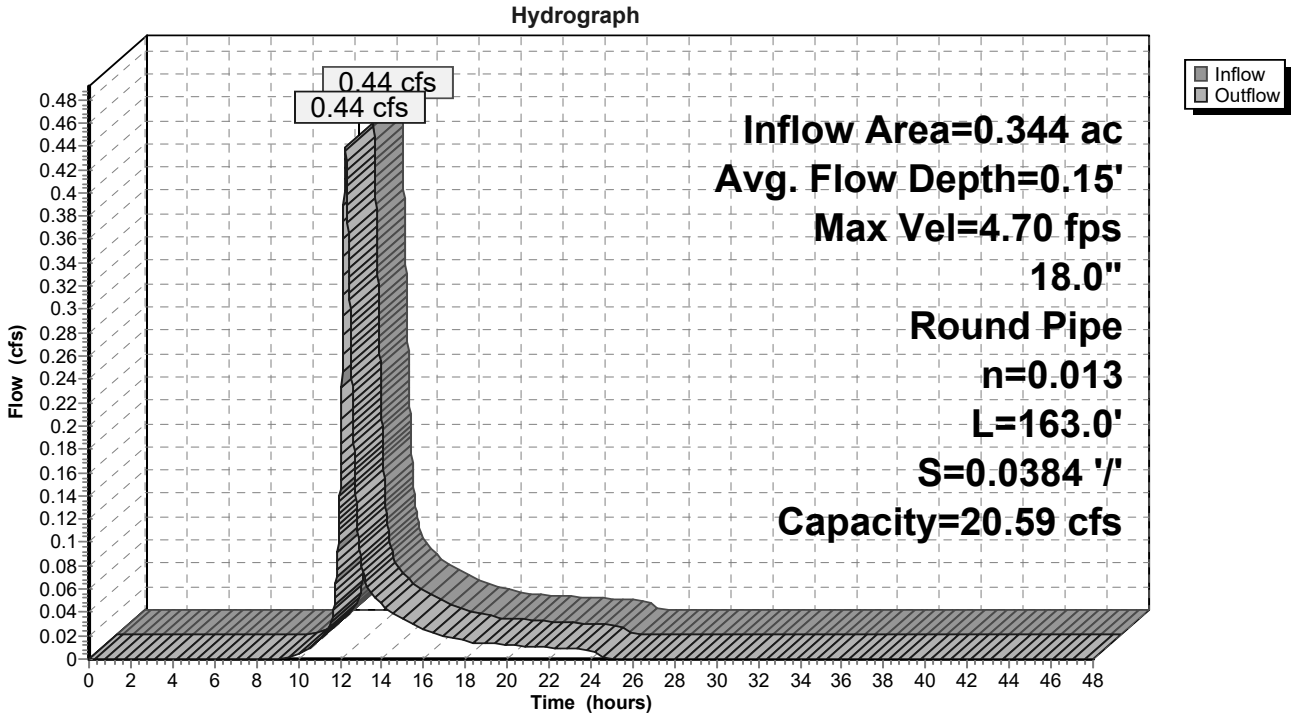
Inflow Area = 0.344 ac, 15.57% Impervious, Inflow Depth = 1.55" for 2-Year event
Inflow = 0.44 cfs @ 12.25 hrs, Volume= 0.044 af
Outflow = 0.44 cfs @ 12.27 hrs, Volume= 0.044 af, Atten= 0%, Lag= 1.0 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.70 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.89 fps, Avg. Travel Time= 1.4 min

Peak Storage= 15 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.15' , Surface Width= 0.90'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





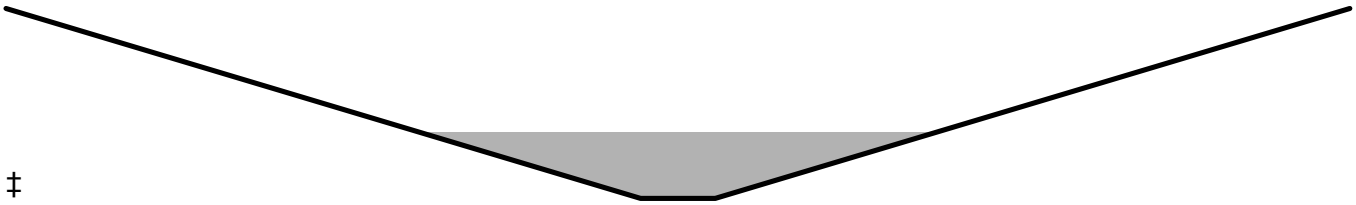
Summary for Reach R2: Gutter Flow

Inflow Area = 0.463 ac, 10.71% Impervious, Inflow Depth = 1.84" for 2-Year event
Inflow = 0.70 cfs @ 12.26 hrs, Volume= 0.071 af
Outflow = 0.70 cfs @ 12.27 hrs, Volume= 0.071 af, Atten= 0%, Lag= 1.0 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.94 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.24 fps, Avg. Travel Time= 1.3 min

Peak Storage= 24 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.06' , Surface Width= 6.95'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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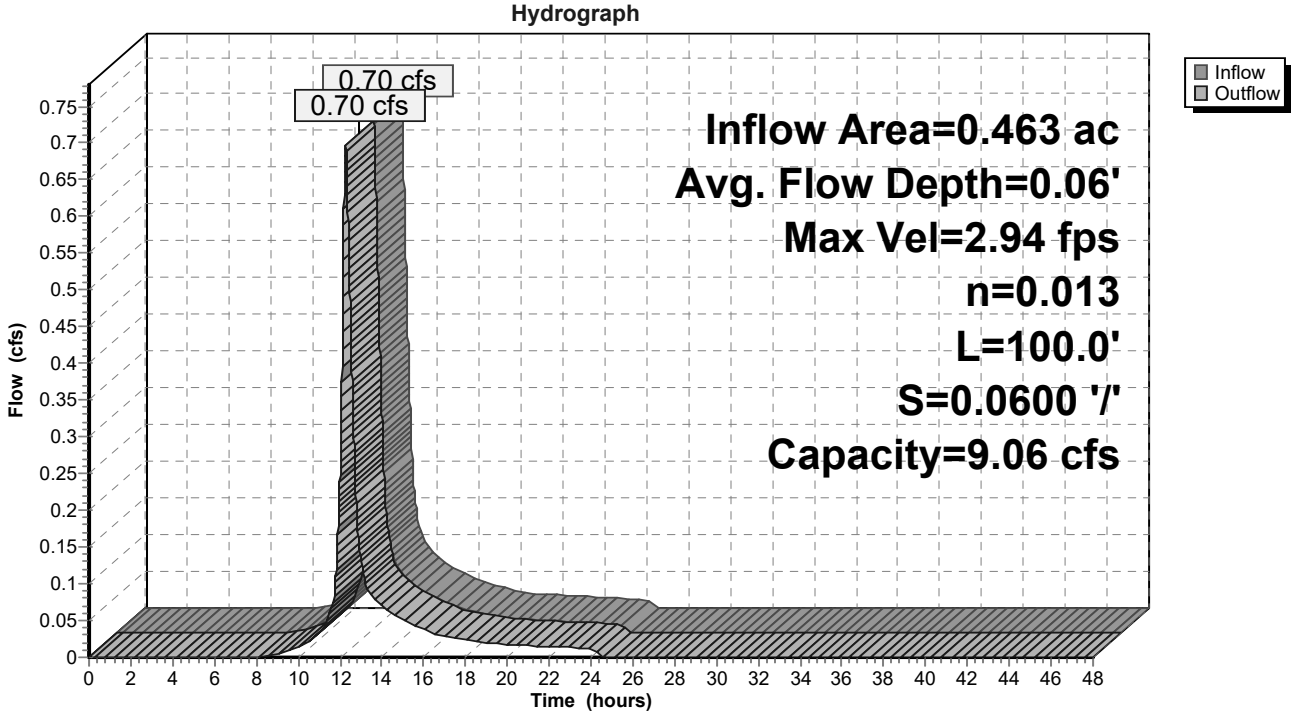
Reach R2: Gutter Flow



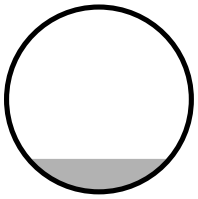
Summary for Reach R3: 24" SD

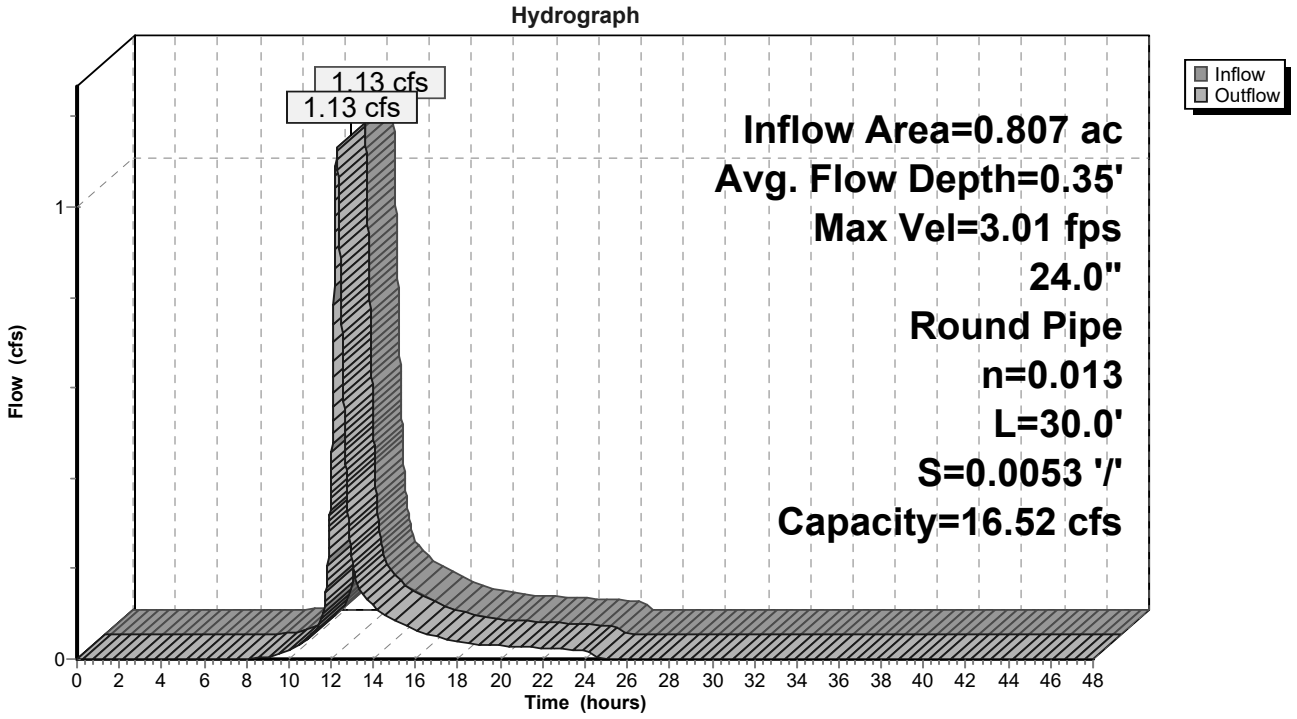
Inflow Area = 0.807 ac, 12.78% Impervious, Inflow Depth = 1.72" for 2-Year event
Inflow = 1.13 cfs @ 12.27 hrs, Volume= 0.115 af
Outflow = 1.13 cfs @ 12.27 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.3 min
Routed to Reach POI1 : Existing Wet Pond

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.01 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.15 fps, Avg. Travel Time= 0.4 min

Peak Storage= 11 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.35' , Surface Width= 1.53'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'





Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: (new Subcat) Runoff Area=26,964 sf 25.47% Impervious Runoff Depth=3.57"
Tc=5.0 min CN=88 Runoff=2.63 cfs 0.184 af

Subcatchment 2A: (new Subcat) Runoff Area=20,181 sf 10.71% Impervious Runoff Depth=3.28"
Flow Length=238' Tc=18.6 min CN=85 Runoff=1.23 cfs 0.126 af

Subcatchment 3A: (new Subcat) Runoff Area=14,966 sf 15.57% Impervious Runoff Depth=2.90"
Flow Length=217' Tc=17.7 min CN=81 Runoff=0.83 cfs 0.083 af

Subcatchment 4A: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=2.63"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.44 cfs 0.048 af

Reach POI1: Existing Wet Pond Inflow=3.71 cfs 0.394 af
Outflow=3.71 cfs 0.394 af

Reach POI2: POI2 Inflow=0.44 cfs 0.048 af
Outflow=0.44 cfs 0.048 af

Reach R1: 18" SD Avg. Flow Depth=0.21' Max Vel=5.69 fps Inflow=0.83 cfs 0.083 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=0.83 cfs 0.083 af

Reach R2: Gutter Flow Avg. Flow Depth=0.08' Max Vel=3.40 fps Inflow=1.23 cfs 0.126 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=1.23 cfs 0.126 af

Reach R3: 24" SD Avg. Flow Depth=0.48' Max Vel=3.58 fps Inflow=2.05 cfs 0.209 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=2.05 cfs 0.209 af

Total Runoff Area = 1.645 ac Runoff Volume = 0.442 af Average Runoff Depth = 3.22"
84.15% Pervious = 1.385 ac 15.85% Impervious = 0.261 ac

Summary for Subcatchment 1A: (new Subcat)

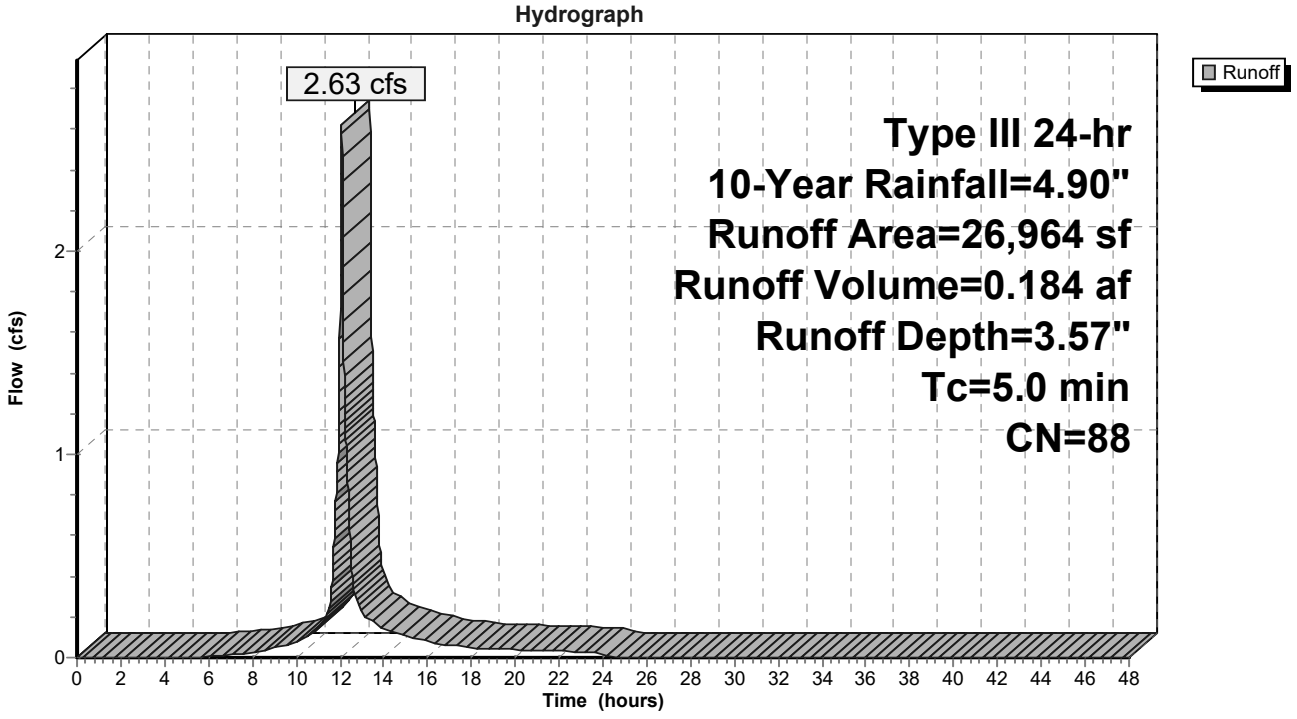
Runoff = 2.63 cfs @ 12.07 hrs, Volume= 0.184 af, Depth= 3.57"
Routed to Reach POI1 : Existing Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
6,868	98	Paved parking, HSG D
5,462	96	Gravel surface, HSG D
14,634	80	>75% Grass cover, Good, HSG D
26,964	88	Weighted Average
20,096		74.53% Pervious Area
6,868		25.47% Impervious Area

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

Subcatchment 1A: (new Subcat)



Summary for Subcatchment 2A: (new Subcat)

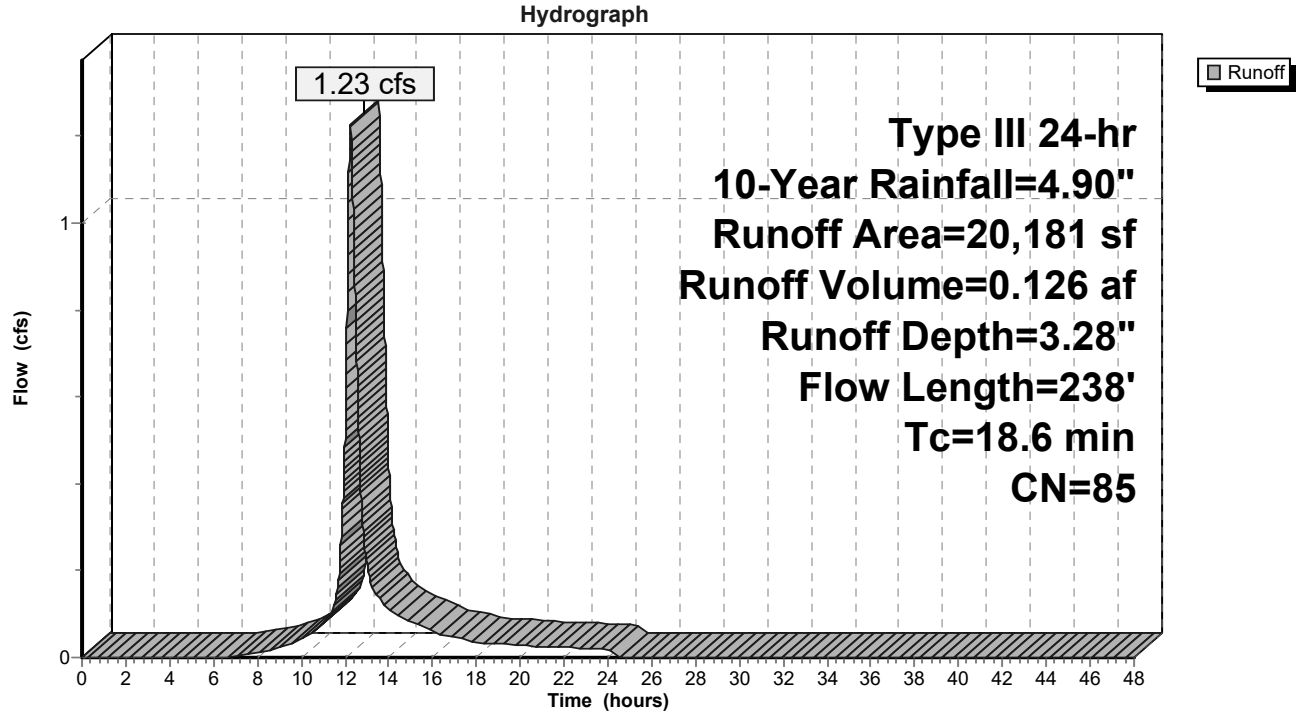
Runoff = 1.23 cfs @ 12.25 hrs, Volume= 0.126 af, Depth= 3.28"
Routed to Reach R2 : Gutter Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
2,162	98	Paved parking, HSG D
5,753	96	Gravel surface, HSG D
4,894	80	>75% Grass cover, Good, HSG D
7,372	77	Woods, Good, HSG D
20,181	85	Weighted Average
18,019		89.29% Pervious Area
2,162		10.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	110	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	89	0.0500	3.60		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
0.1	39	0.1280	7.26		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
18.6	238	Total			

Subcatchment 2A: (new Subcat)



Summary for Subcatchment 3A: (new Subcat)

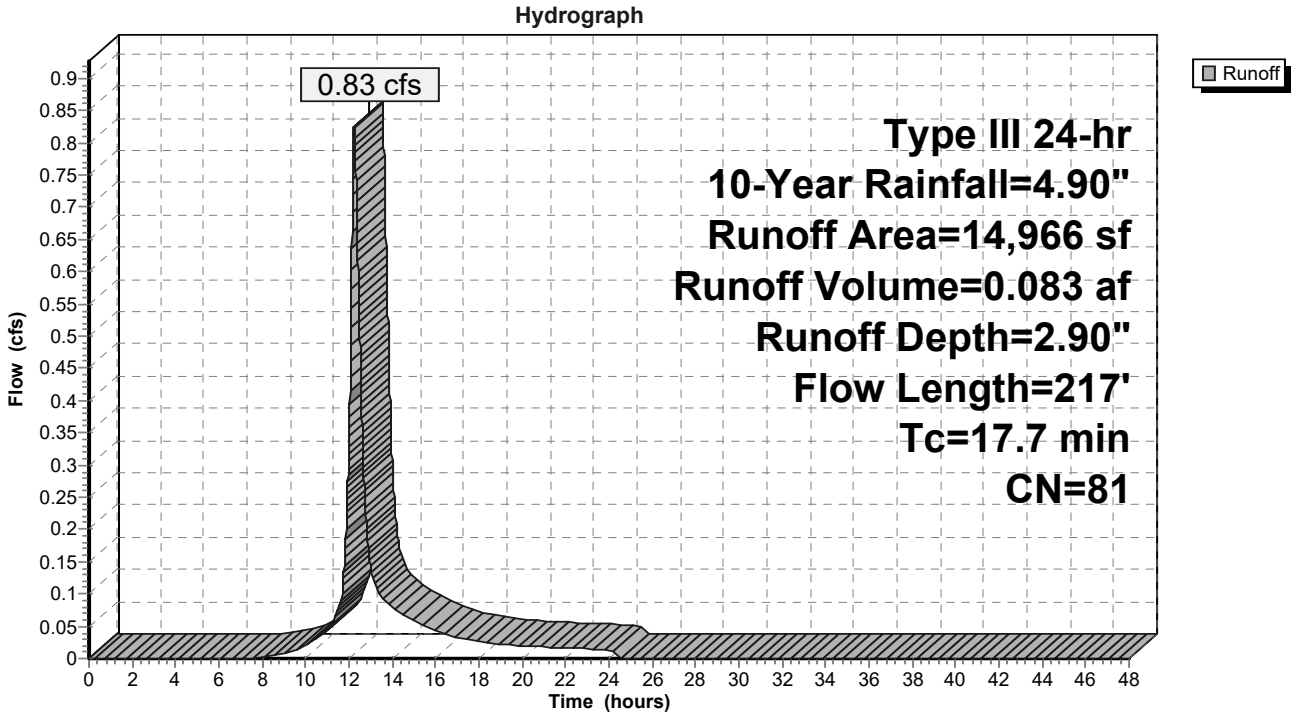
Runoff = 0.83 cfs @ 12.25 hrs, Volume= 0.083 af, Depth= 2.90"
Routed to Reach R1 : 18" SD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

	Area (sf)	CN	Description
	4,368	80	>75% Grass cover, Good, HSG D
	8,268	77	Woods, Good, HSG D
*	2,330	98	Ledge
	14,966	81	Weighted Average
	12,636		84.43% Pervious Area
	2,330		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	59	0.0420	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
5.8	46	0.0430	0.13		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
1.1	89	0.0780	1.40		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
0.0	23	0.5000	11.38		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
17.7	217	Total			

Subcatchment 3A: (new Subcat)



Summary for Subcatchment 4A: (new Subcat)

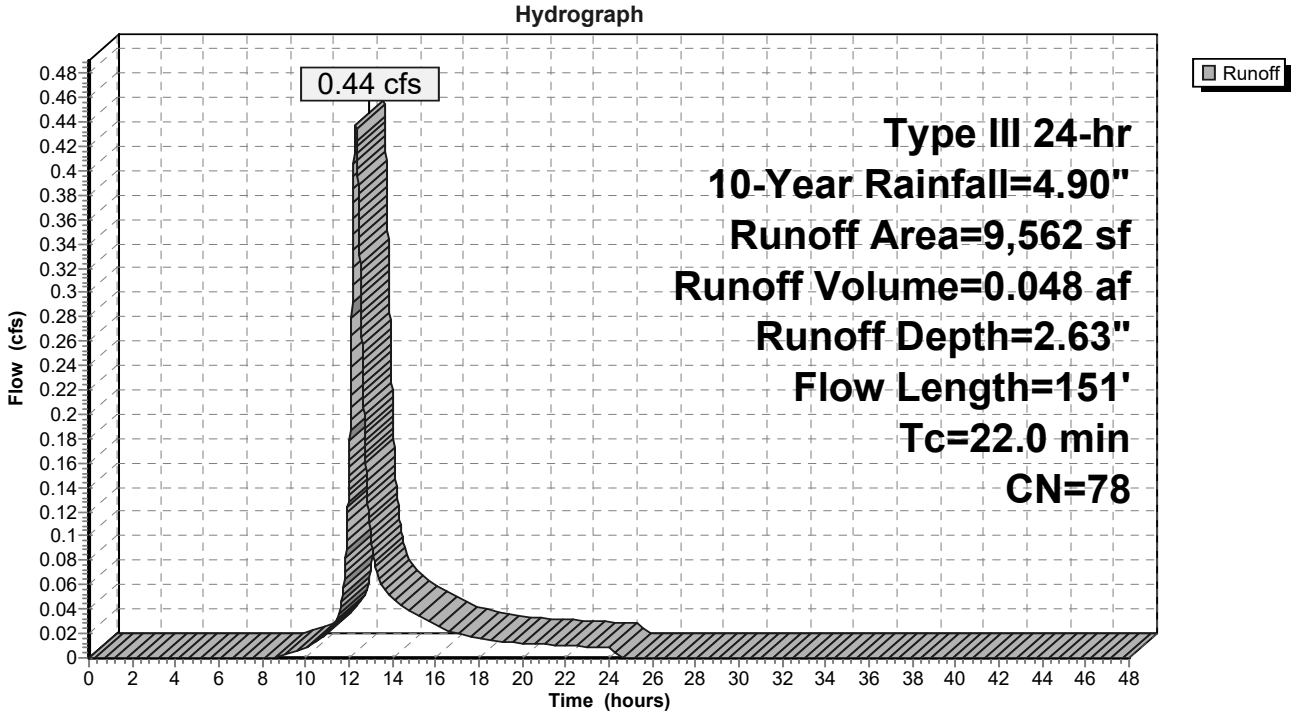
Runoff = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af, Depth= 2.63"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 4A: (new Subcat)

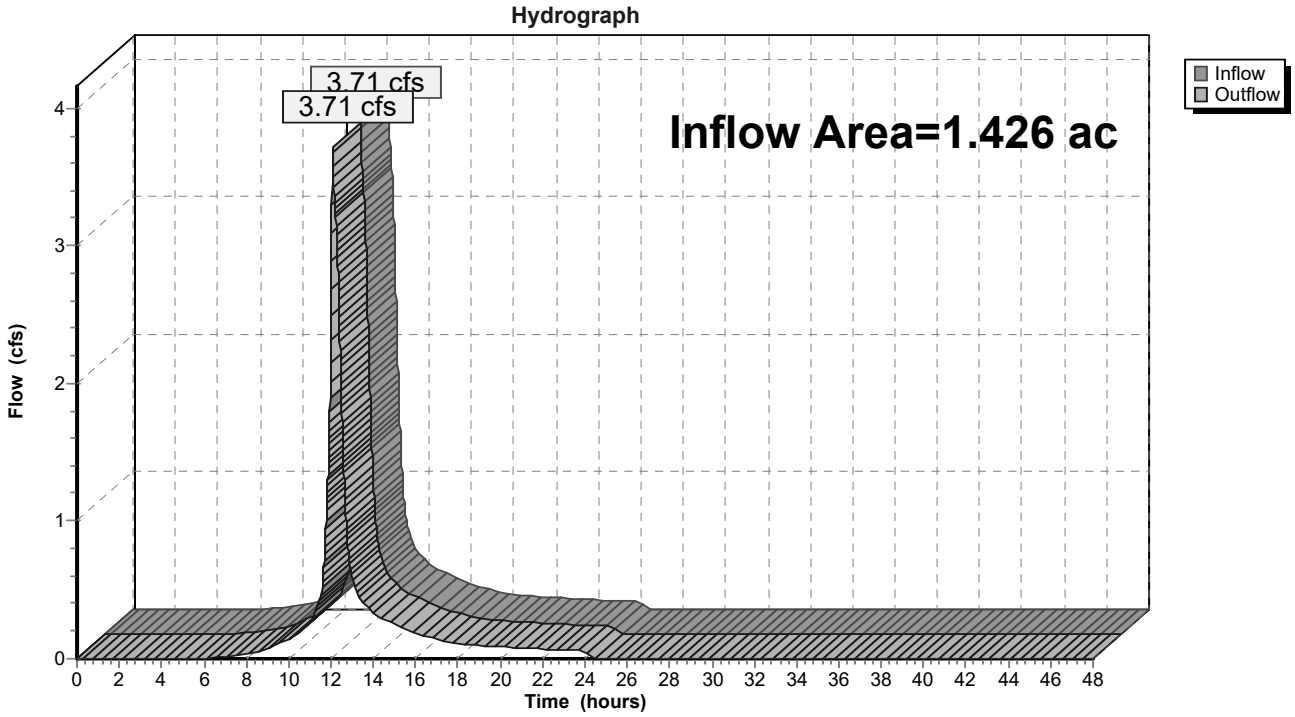


Summary for Reach POI1: Existing Wet Pond

Inflow Area = 1.426 ac, 18.29% Impervious, Inflow Depth = 3.31" for 10-Year event
Inflow = 3.71 cfs @ 12.09 hrs, Volume= 0.394 af
Outflow = 3.71 cfs @ 12.09 hrs, Volume= 0.394 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI1: Existing Wet Pond

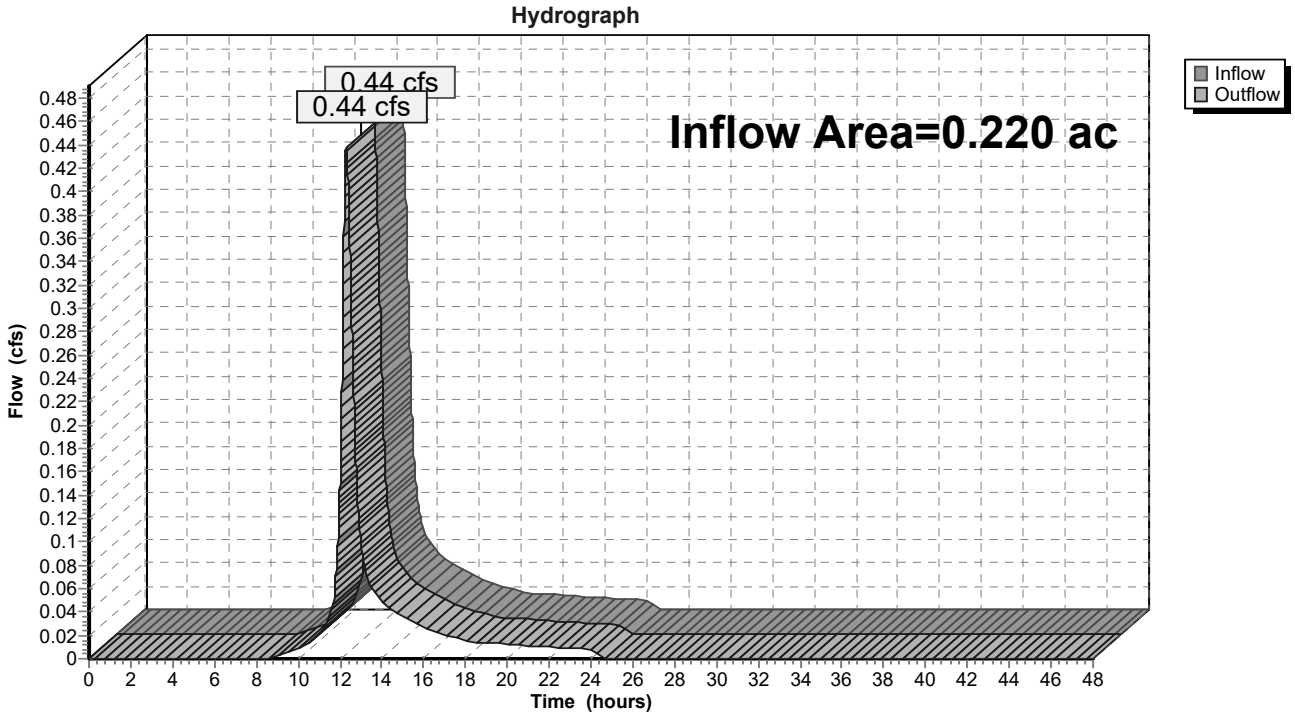


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 2.63" for 10-Year event
Inflow = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af
Outflow = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



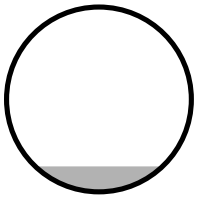
Summary for Reach R1: 18" SD

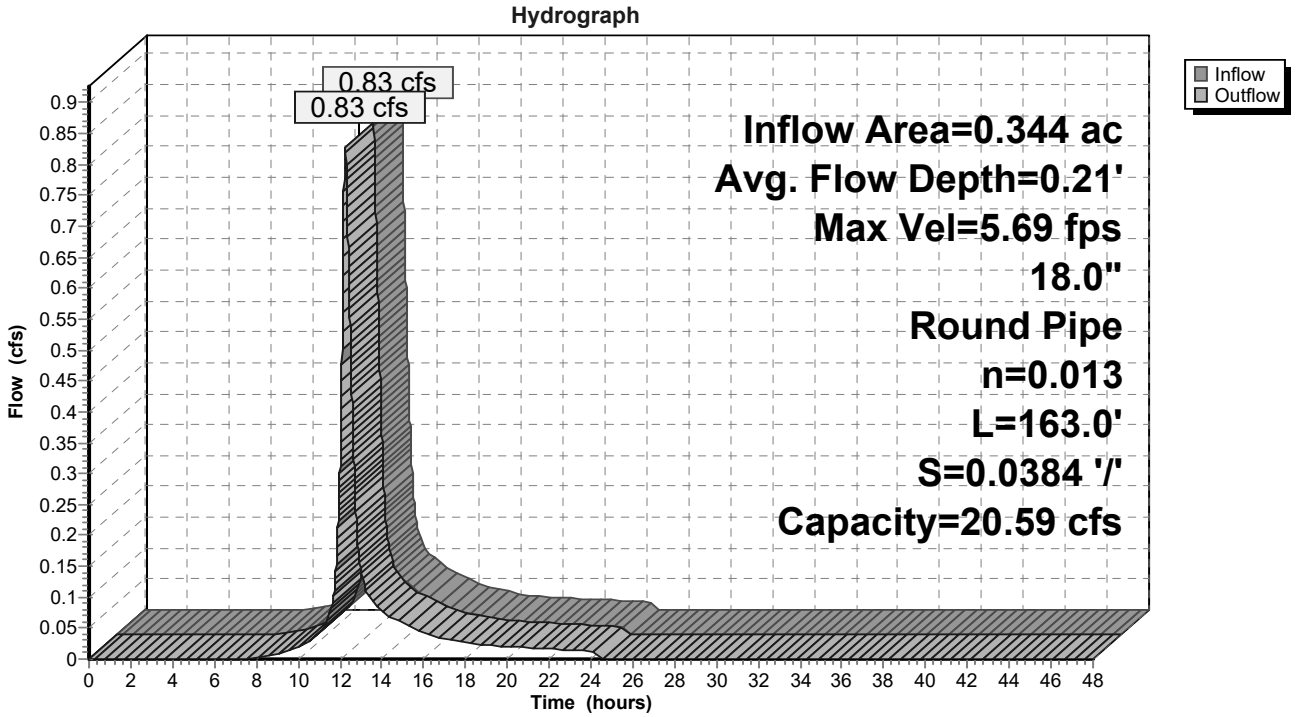
Inflow Area = 0.344 ac, 15.57% Impervious, Inflow Depth = 2.90" for 10-Year event
Inflow = 0.83 cfs @ 12.25 hrs, Volume= 0.083 af
Outflow = 0.83 cfs @ 12.26 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.7 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.69 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 2.16 fps, Avg. Travel Time= 1.3 min

Peak Storage= 24 cf @ 12.25 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 1.03'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





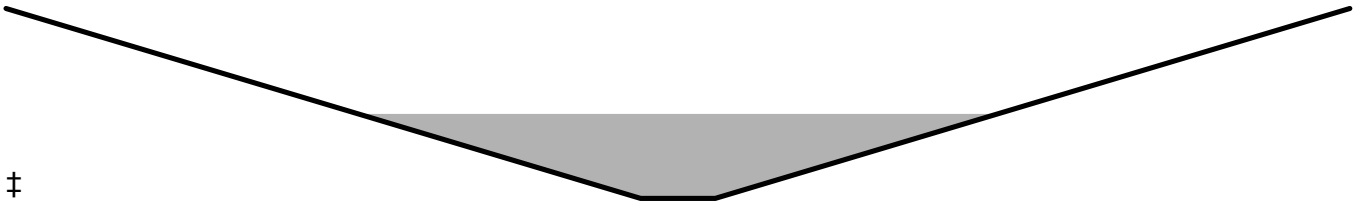
Summary for Reach R2: Gutter Flow

Inflow Area = 0.463 ac, 10.71% Impervious, Inflow Depth = 3.28" for 10-Year event
Inflow = 1.23 cfs @ 12.25 hrs, Volume= 0.126 af
Outflow = 1.23 cfs @ 12.27 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.8 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.40 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.39 fps, Avg. Travel Time= 1.2 min

Peak Storage= 36 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 8.56'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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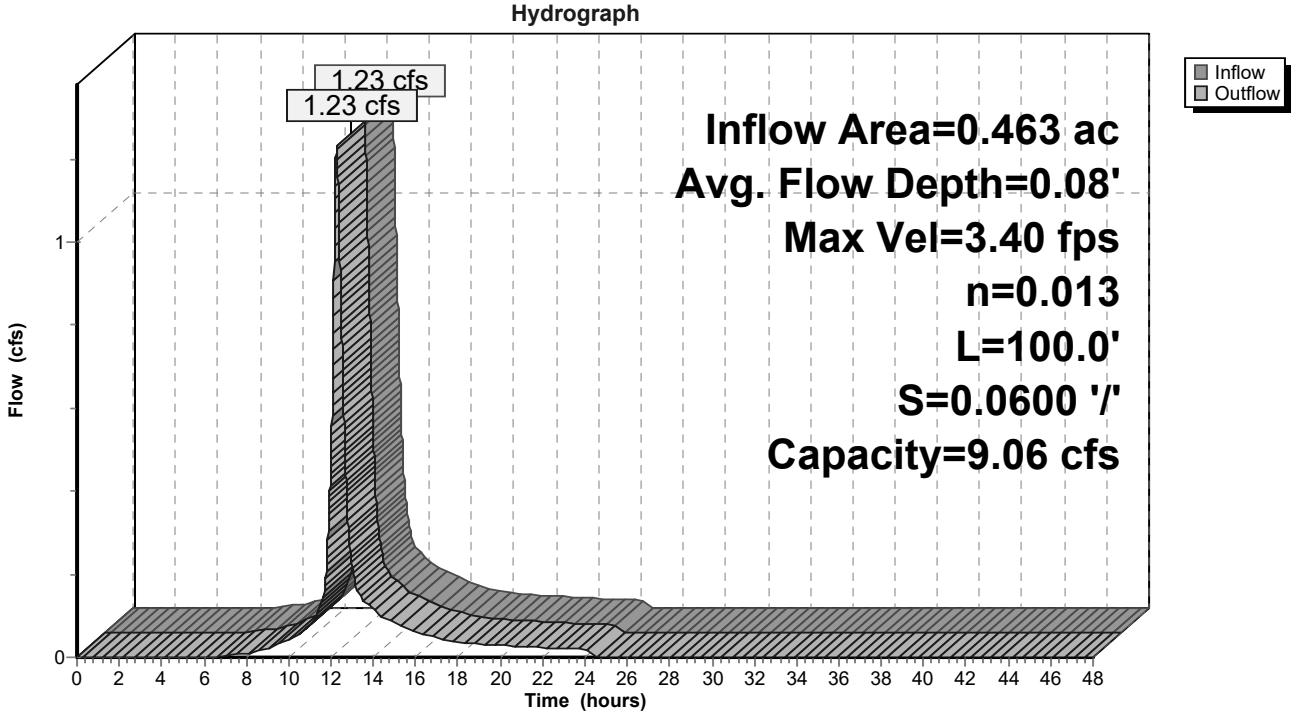
Reach R2: Gutter Flow



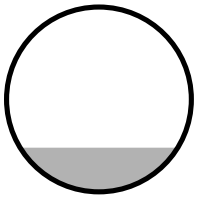
Summary for Reach R3: 24" SD

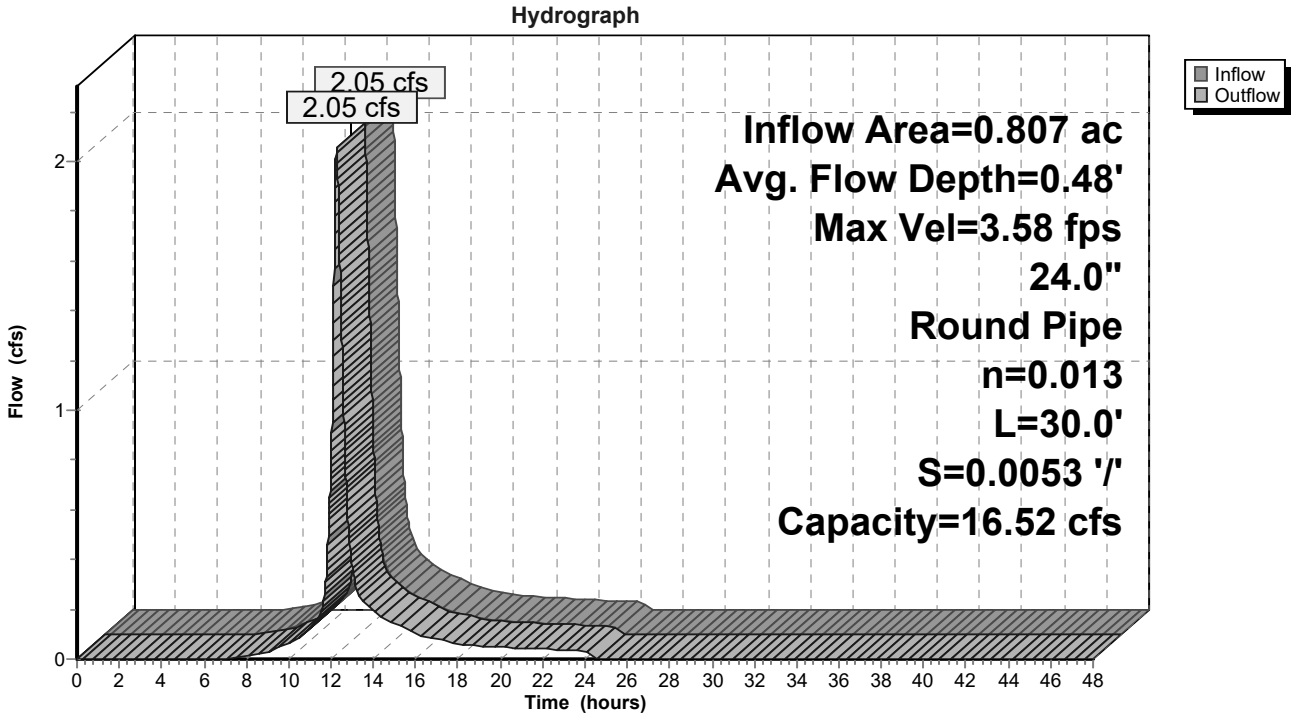
Inflow Area = 0.807 ac, 12.78% Impervious, Inflow Depth = 3.11" for 10-Year event
Inflow = 2.05 cfs @ 12.26 hrs, Volume= 0.209 af
Outflow = 2.05 cfs @ 12.27 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.2 min
Routed to Reach POI1 : Existing Wet Pond

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.58 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 1.31 fps, Avg. Travel Time= 0.4 min

Peak Storage= 17 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.48' , Surface Width= 1.70'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'





Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: (new Subcat) Runoff Area=26,964 sf 25.47% Impervious Runoff Depth=4.82"
Tc=5.0 min CN=88 Runoff=3.49 cfs 0.249 af

Subcatchment 2A: (new Subcat) Runoff Area=20,181 sf 10.71% Impervious Runoff Depth=4.49"
Flow Length=238' Tc=18.6 min CN=85 Runoff=1.67 cfs 0.173 af

Subcatchment 3A: (new Subcat) Runoff Area=14,966 sf 15.57% Impervious Runoff Depth=4.07"
Flow Length=217' Tc=17.7 min CN=81 Runoff=1.16 cfs 0.116 af

Subcatchment 4A: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=3.76"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.63 cfs 0.069 af

Reach POI1: Existing Wet Pond Inflow=5.03 cfs 0.538 af
Outflow=5.03 cfs 0.538 af

Reach POI2: POI2 Inflow=0.63 cfs 0.069 af
Outflow=0.63 cfs 0.069 af

Reach R1: 18" SD Avg. Flow Depth=0.24' Max Vel=6.28 fps Inflow=1.16 cfs 0.116 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=1.15 cfs 0.116 af

Reach R2: Gutter Flow Avg. Flow Depth=0.09' Max Vel=3.67 fps Inflow=1.67 cfs 0.173 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=1.67 cfs 0.173 af

Reach R3: 24" SD Avg. Flow Depth=0.56' Max Vel=3.93 fps Inflow=2.82 cfs 0.290 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=2.82 cfs 0.290 af

Total Runoff Area = 1.645 ac Runoff Volume = 0.607 af Average Runoff Depth = 4.43"
84.15% Pervious = 1.385 ac 15.85% Impervious = 0.261 ac

Summary for Subcatchment 1A: (new Subcat)

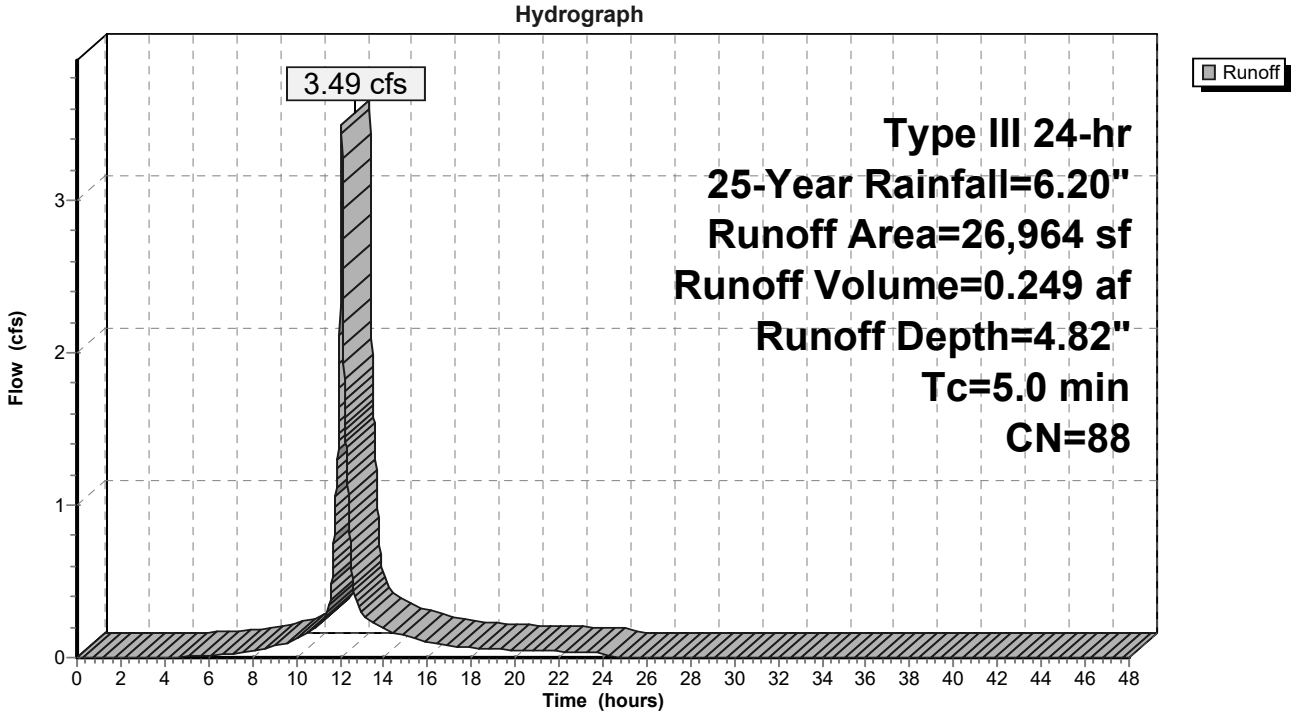
Runoff = 3.49 cfs @ 12.07 hrs, Volume= 0.249 af, Depth= 4.82"
Routed to Reach POI1 : Existing Wet Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
6,868	98	Paved parking, HSG D
5,462	96	Gravel surface, HSG D
14,634	80	>75% Grass cover, Good, HSG D
26,964	88	Weighted Average
20,096		74.53% Pervious Area
6,868		25.47% Impervious Area

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

Subcatchment 1A: (new Subcat)



Summary for Subcatchment 2A: (new Subcat)

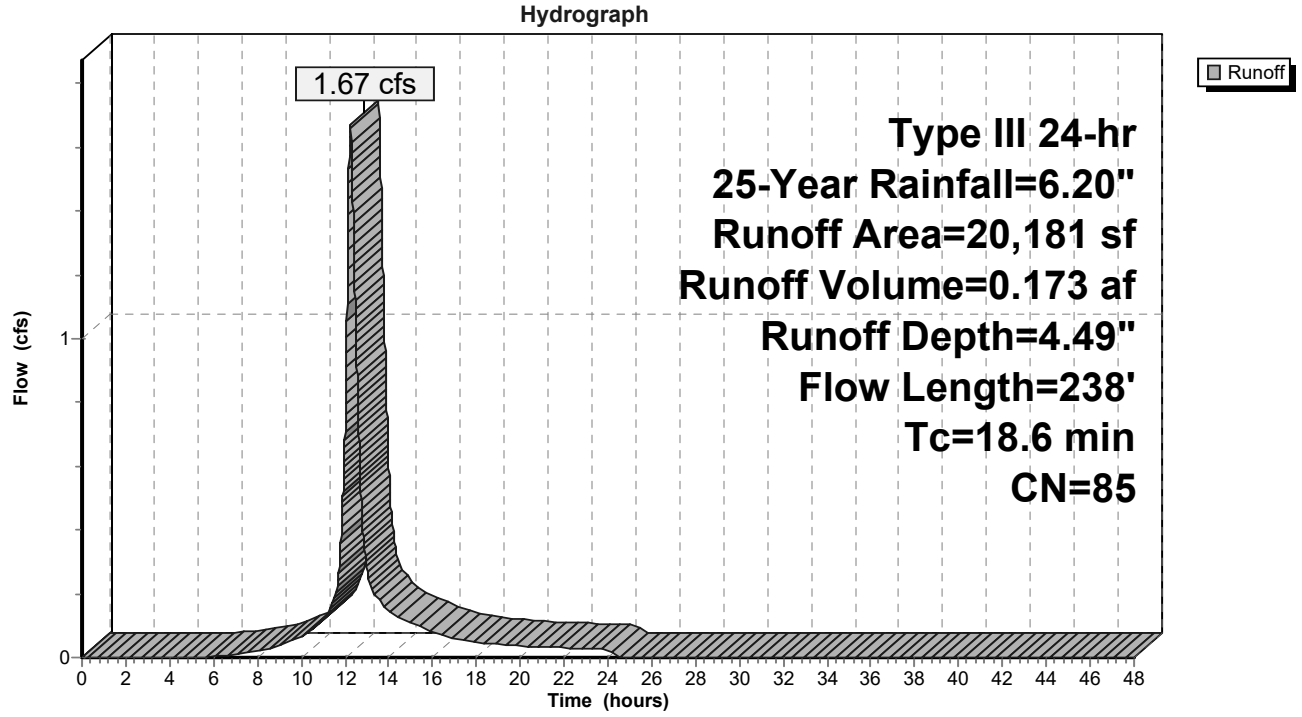
Runoff = 1.67 cfs @ 12.25 hrs, Volume= 0.173 af, Depth= 4.49"
Routed to Reach R2 : Gutter Flow

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
2,162	98	Paved parking, HSG D
5,753	96	Gravel surface, HSG D
4,894	80	>75% Grass cover, Good, HSG D
7,372	77	Woods, Good, HSG D
20,181	85	Weighted Average
18,019		89.29% Pervious Area
2,162		10.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	110	0.0400	0.10		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	89	0.0500	3.60		**Shallow Concentrated Flow, B-C** Unpaved Kv= 16.1 fps
0.1	39	0.1280	7.26		**Shallow Concentrated Flow, C-D** Paved Kv= 20.3 fps
18.6	238	Total			

Subcatchment 2A: (new Subcat)



Summary for Subcatchment 3A: (new Subcat)

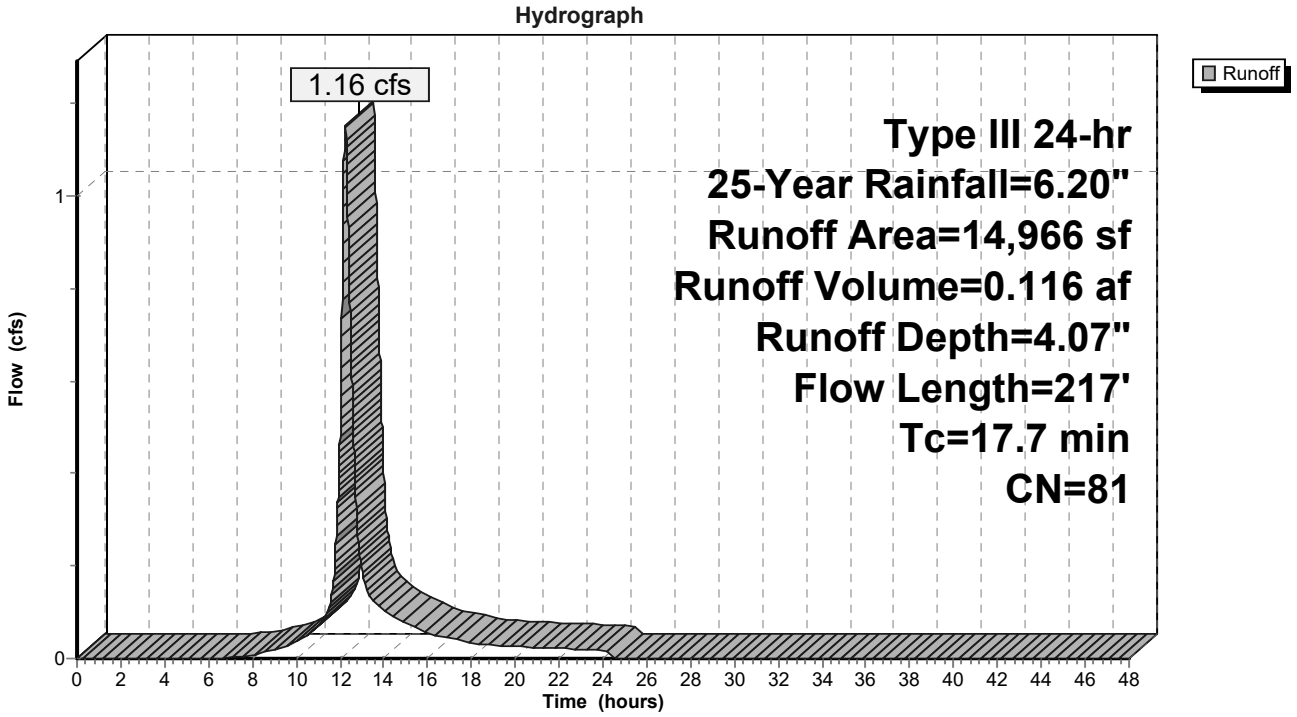
Runoff = 1.16 cfs @ 12.24 hrs, Volume= 0.116 af, Depth= 4.07"
Routed to Reach R1 : 18" SD

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

	Area (sf)	CN	Description
	4,368	80	>75% Grass cover, Good, HSG D
	8,268	77	Woods, Good, HSG D
*	2,330	98	Ledge
	14,966	81	Weighted Average
	12,636		84.43% Pervious Area
	2,330		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	59	0.0420	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
5.8	46	0.0430	0.13		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
1.1	89	0.0780	1.40		**Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps
0.0	23	0.5000	11.38		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
17.7	217	Total			

Subcatchment 3A: (new Subcat)



Summary for Subcatchment 4A: (new Subcat)

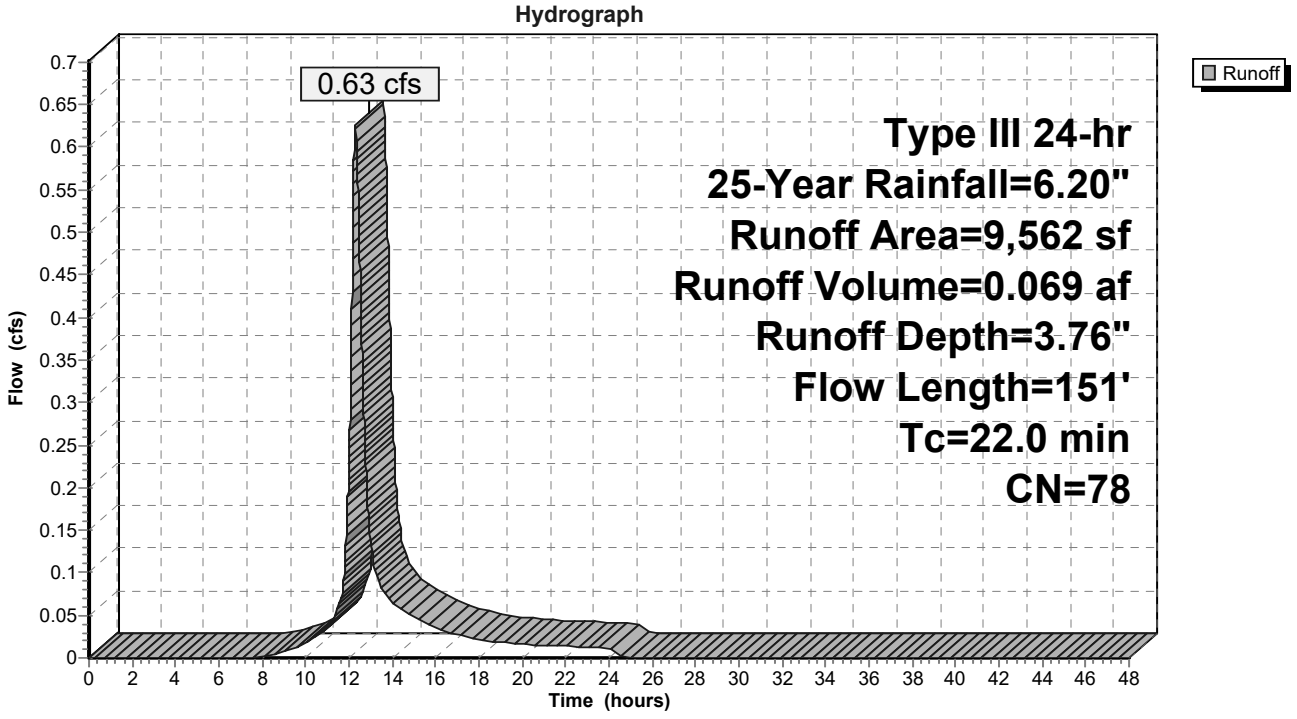
Runoff = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af, Depth= 3.76"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 4A: (new Subcat)

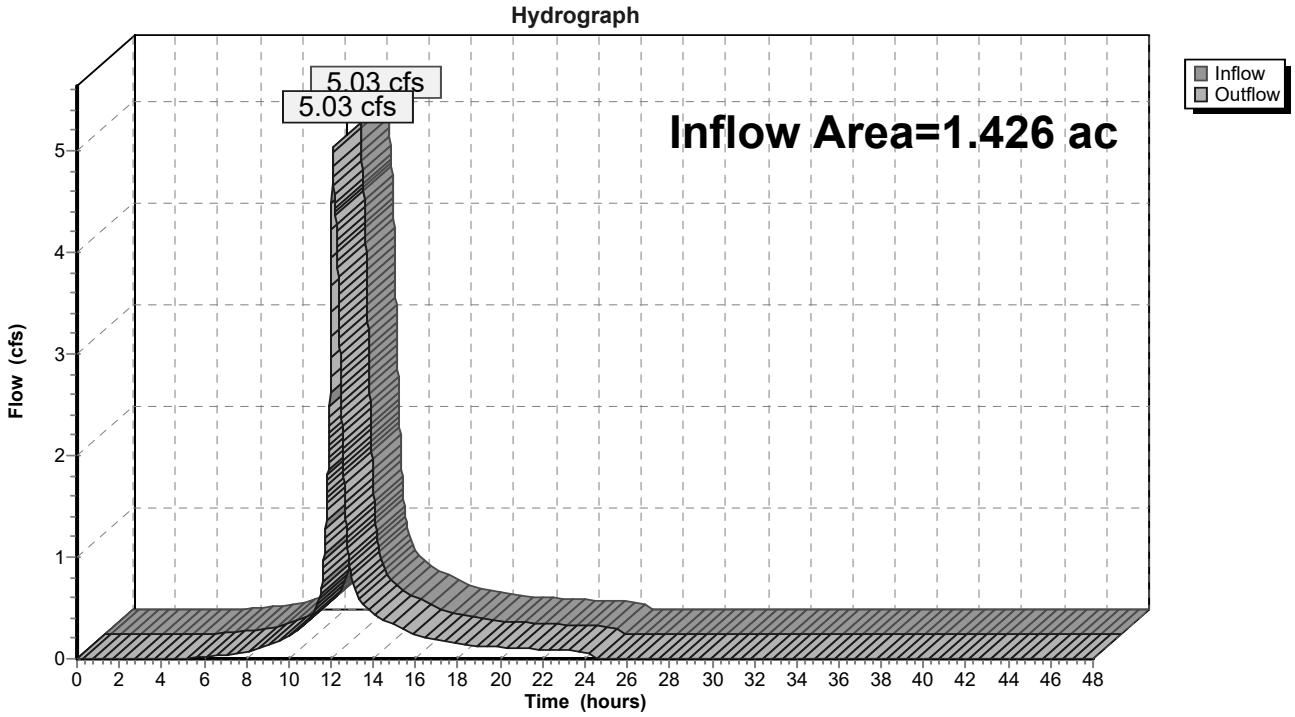


Summary for Reach POI1: Existing Wet Pond

Inflow Area = 1.426 ac, 18.29% Impervious, Inflow Depth = 4.53" for 25-Year event
Inflow = 5.03 cfs @ 12.09 hrs, Volume= 0.538 af
Outflow = 5.03 cfs @ 12.09 hrs, Volume= 0.538 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI1: Existing Wet Pond

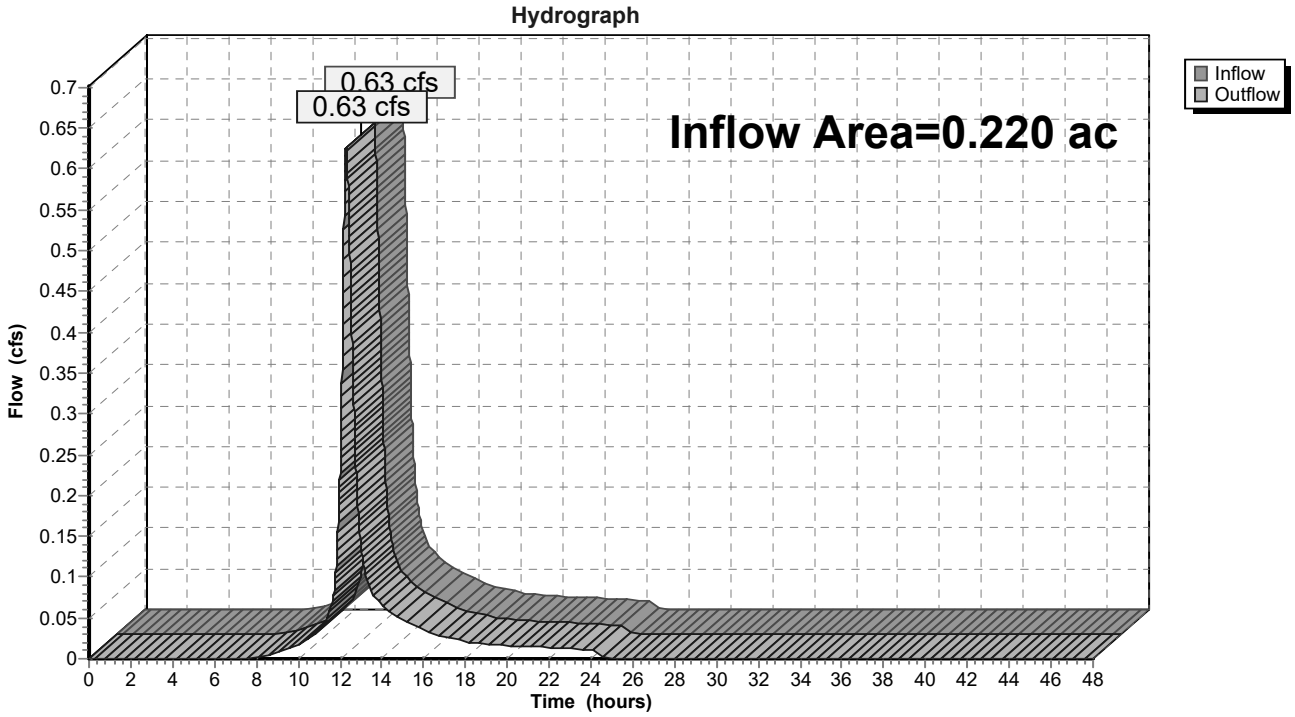


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 3.76" for 25-Year event
Inflow = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af
Outflow = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



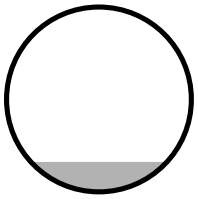
Summary for Reach R1: 18" SD

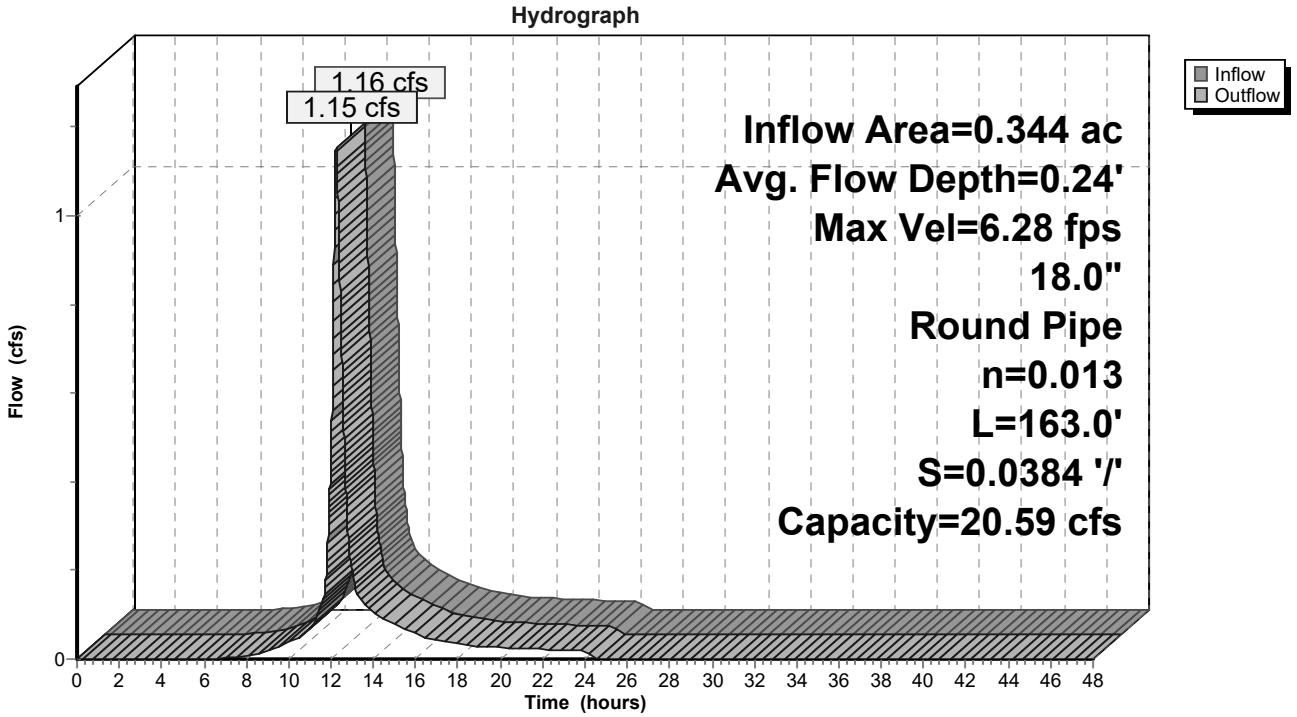
Inflow Area = 0.344 ac, 15.57% Impervious, Inflow Depth = 4.07" for 25-Year event
Inflow = 1.16 cfs @ 12.24 hrs, Volume= 0.116 af
Outflow = 1.15 cfs @ 12.25 hrs, Volume= 0.116 af, Atten= 0%, Lag= 0.6 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.28 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 2.33 fps, Avg. Travel Time= 1.2 min

Peak Storage= 30 cf @ 12.25 hrs
Average Depth at Peak Storage= 0.24' , Surface Width= 1.10'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





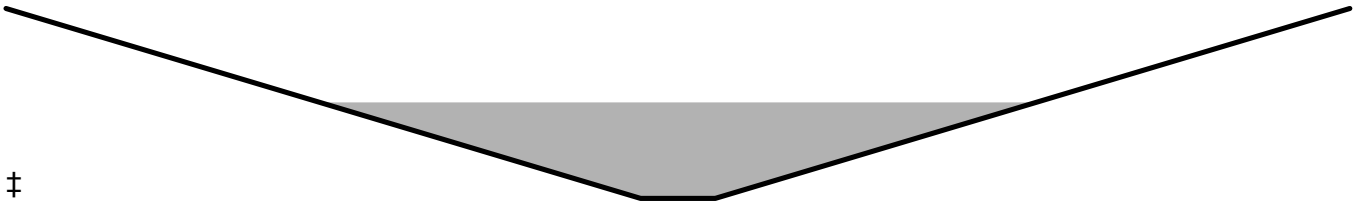
Summary for Reach R2: Gutter Flow

Inflow Area = 0.463 ac, 10.71% Impervious, Inflow Depth = 4.49" for 25-Year event
Inflow = 1.67 cfs @ 12.25 hrs, Volume= 0.173 af
Outflow = 1.67 cfs @ 12.26 hrs, Volume= 0.173 af, Atten= 0%, Lag= 0.8 min
Routed to Reach R3 : 24" SD

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.67 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.49 fps, Avg. Travel Time= 1.1 min

Peak Storage= 45 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 9.59'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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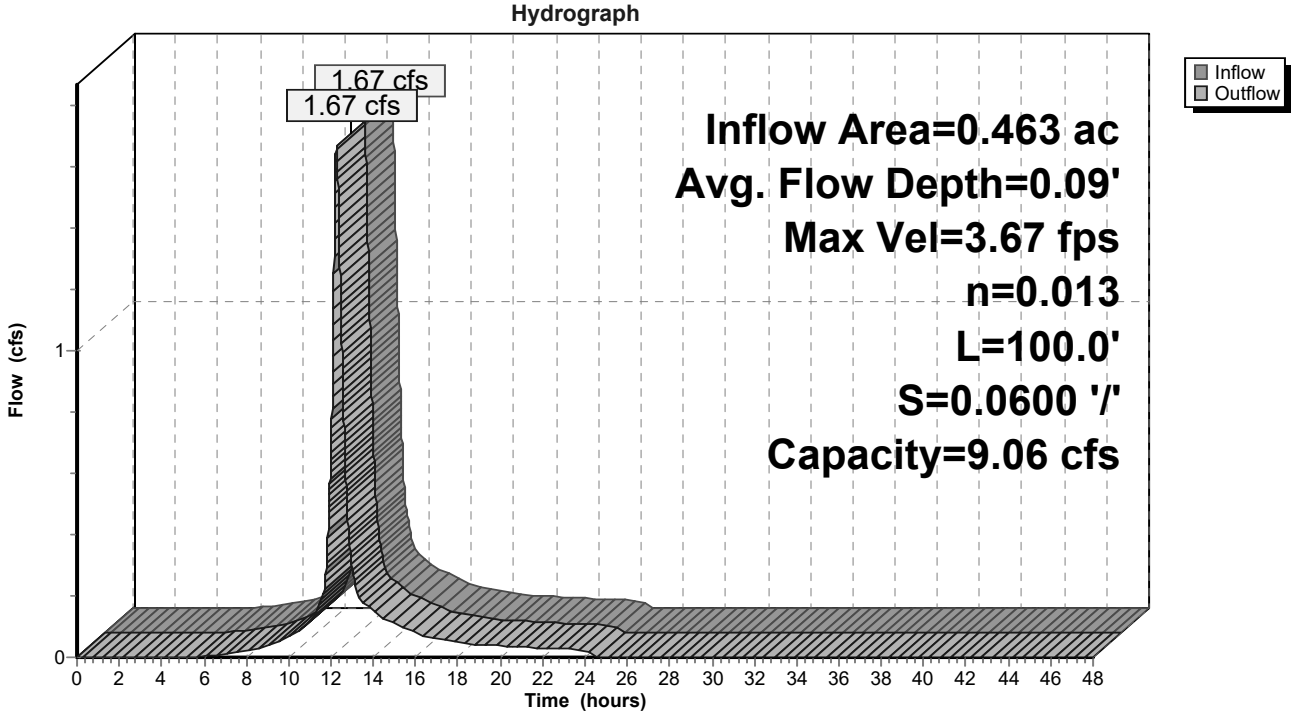
Reach R2: Gutter Flow



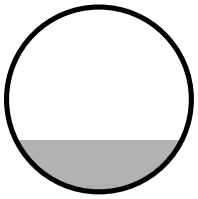
Summary for Reach R3: 24" SD

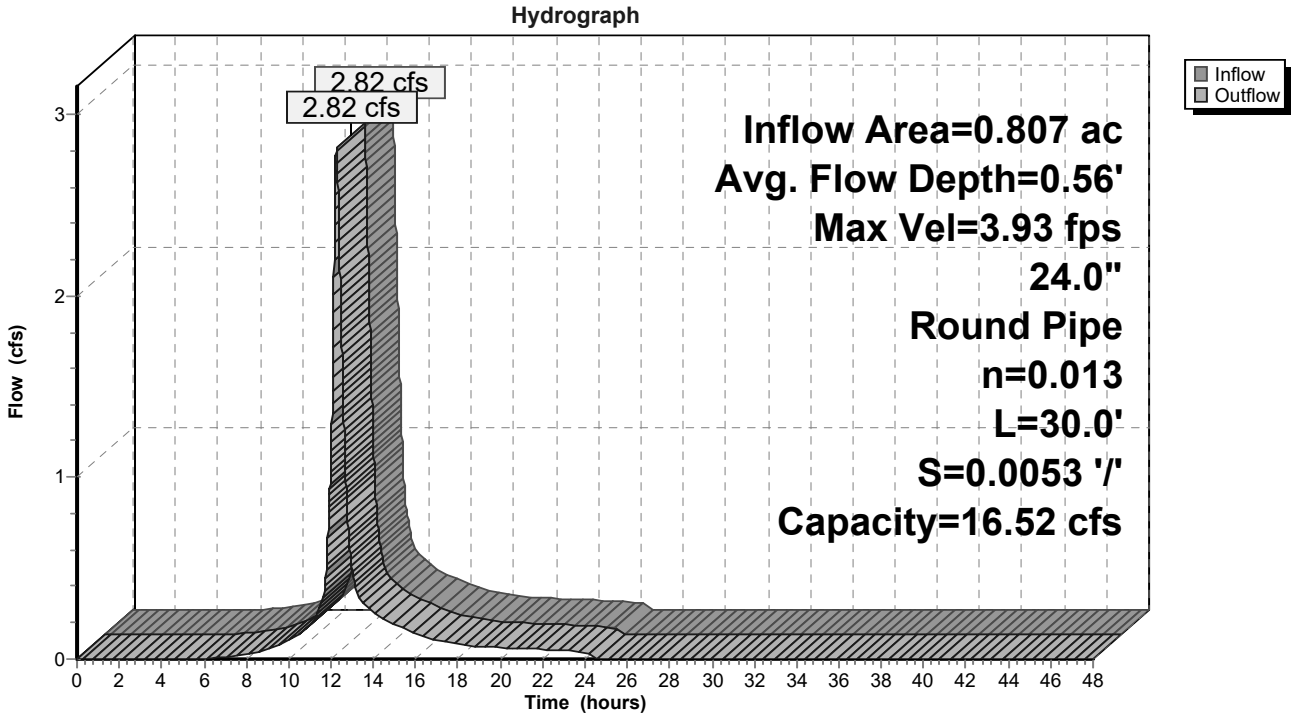
Inflow Area = 0.807 ac, 12.78% Impervious, Inflow Depth = 4.31" for 25-Year event
Inflow = 2.82 cfs @ 12.26 hrs, Volume= 0.290 af
Outflow = 2.82 cfs @ 12.26 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.2 min
Routed to Reach POI1 : Existing Wet Pond

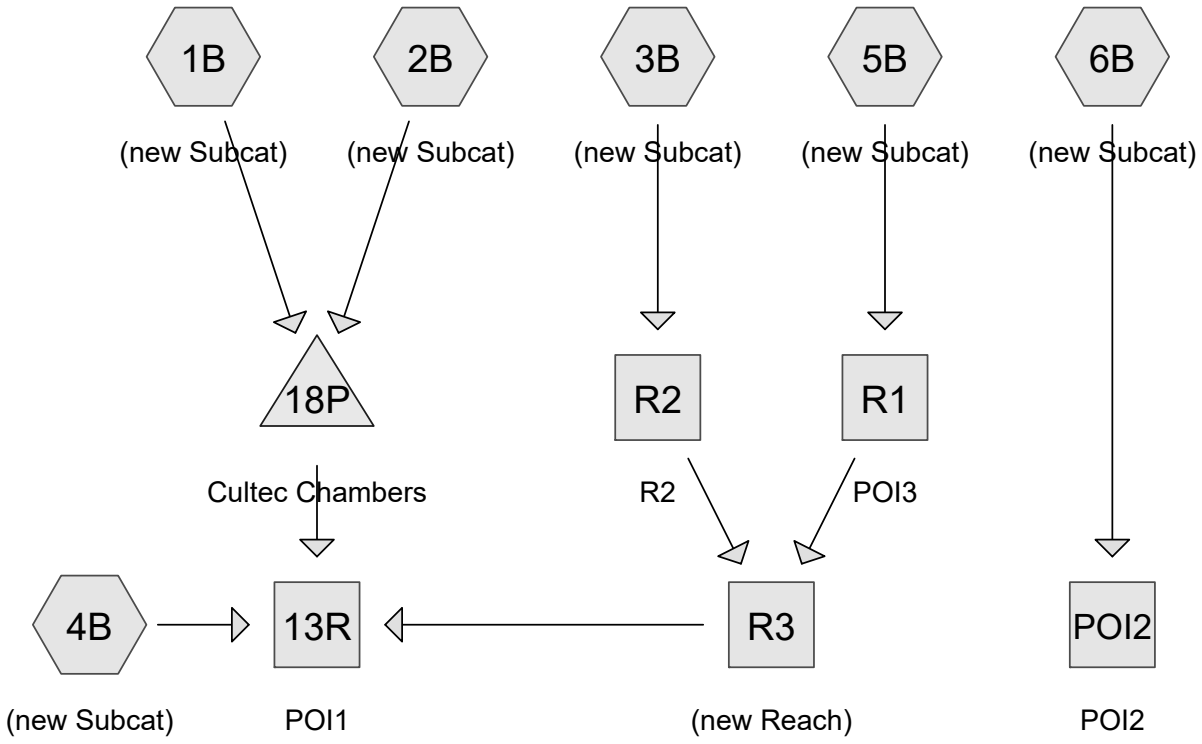
Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.93 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 1.41 fps, Avg. Travel Time= 0.4 min

Peak Storage= 22 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.56' , Surface Width= 1.80'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'







Subcat Reach Pond Link

Routing Diagram for Popeyes Stormwater - Post
Prepared by LJB, Inc, Printed 3/10/2026
HydroCAD® 10.20-7a s/n 01265 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1B: (new Subcat) Runoff Area=13,545 sf 55.56% Impervious Runoff Depth=2.26"
Tc=5.0 min CN=90 Runoff=0.84 cfs 0.059 af

Subcatchment 2B: (new Subcat) Runoff Area=11,109 sf 83.18% Impervious Runoff Depth=2.74"
Tc=5.0 min CN=95 Runoff=0.80 cfs 0.058 af

Subcatchment 3B: (new Subcat) Runoff Area=13,299 sf 67.95% Impervious Runoff Depth=2.45"
Tc=5.0 min CN=92 Runoff=0.88 cfs 0.062 af

Subcatchment 4B: (new Subcat) Runoff Area=9,874 sf 3.96% Impervious Runoff Depth=1.55"
Tc=5.0 min CN=81 Runoff=0.42 cfs 0.029 af

Subcatchment 5B: (new Subcat) Runoff Area=13,397 sf 18.37% Impervious Runoff Depth=1.62"
Flow Length=261' Tc=9.3 min CN=82 Runoff=0.52 cfs 0.041 af

Subcatchment 6B: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=1.35"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.22 cfs 0.025 af

Reach 13R: POI1 Inflow=2.10 cfs 0.240 af
Outflow=2.10 cfs 0.240 af

Reach POI2: POI2 Inflow=0.22 cfs 0.025 af
Outflow=0.22 cfs 0.025 af

Reach R1: POI3 Avg. Flow Depth=0.16' Max Vel=4.95 fps Inflow=0.52 cfs 0.041 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=0.52 cfs 0.041 af

Reach R2: R2 Avg. Flow Depth=0.07' Max Vel=3.12 fps Inflow=0.88 cfs 0.062 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=0.88 cfs 0.062 af

Reach R3: (new Reach) Avg. Flow Depth=0.38' Max Vel=3.15 fps Inflow=1.33 cfs 0.104 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=1.32 cfs 0.104 af

Pond 18P: Cultec Chambers Peak Elev=145.41' Storage=2,061 cf Inflow=1.65 cfs 0.117 af
Outflow=0.45 cfs 0.107 af

Total Runoff Area = 1.625 ac Runoff Volume = 0.274 af Average Runoff Depth = 2.03"
59.52% Pervious = 0.967 ac 40.48% Impervious = 0.658 ac

Summary for Subcatchment 1B: (new Subcat)

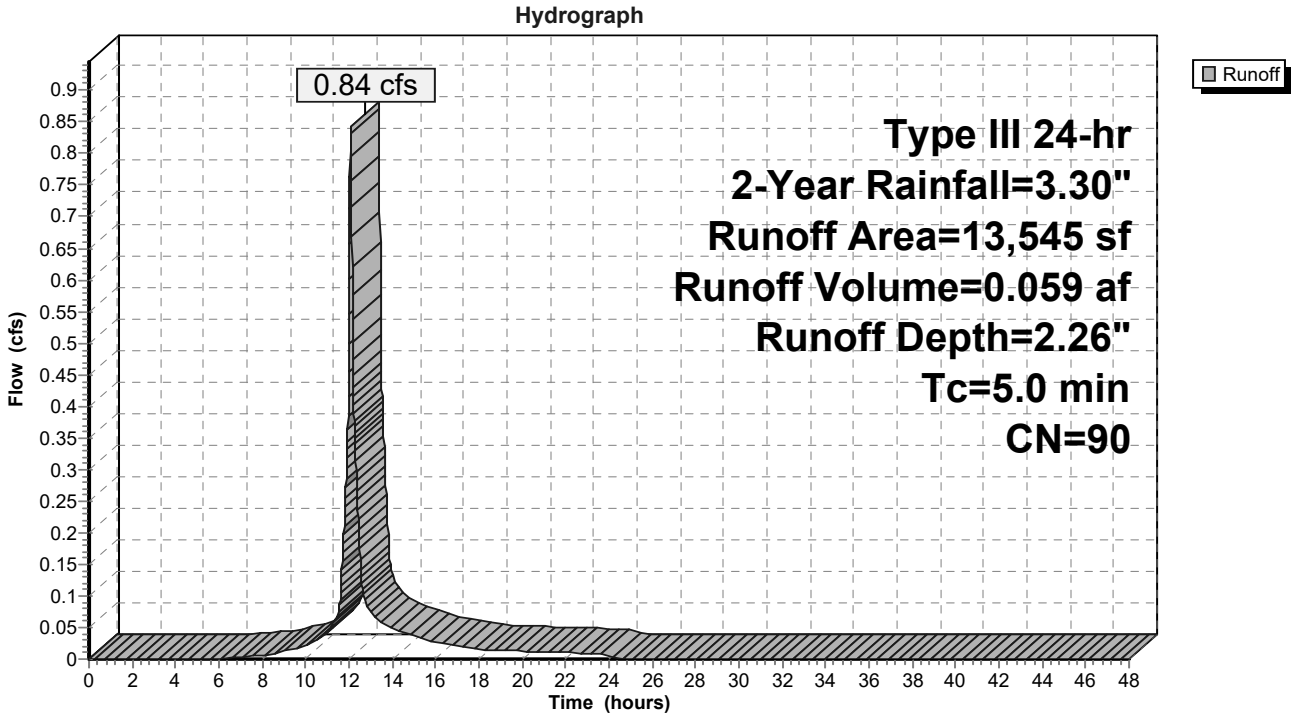
Runoff = 0.84 cfs @ 12.07 hrs, Volume= 0.059 af, Depth= 2.26"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
7,525	98	Paved parking, HSG D
6,020	80	>75% Grass cover, Good, HSG D
13,545	90	Weighted Average
6,020		44.44% Pervious Area
7,525		55.56% Impervious Area

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

Subcatchment 1B: (new Subcat)



Summary for Subcatchment 2B: (new Subcat)

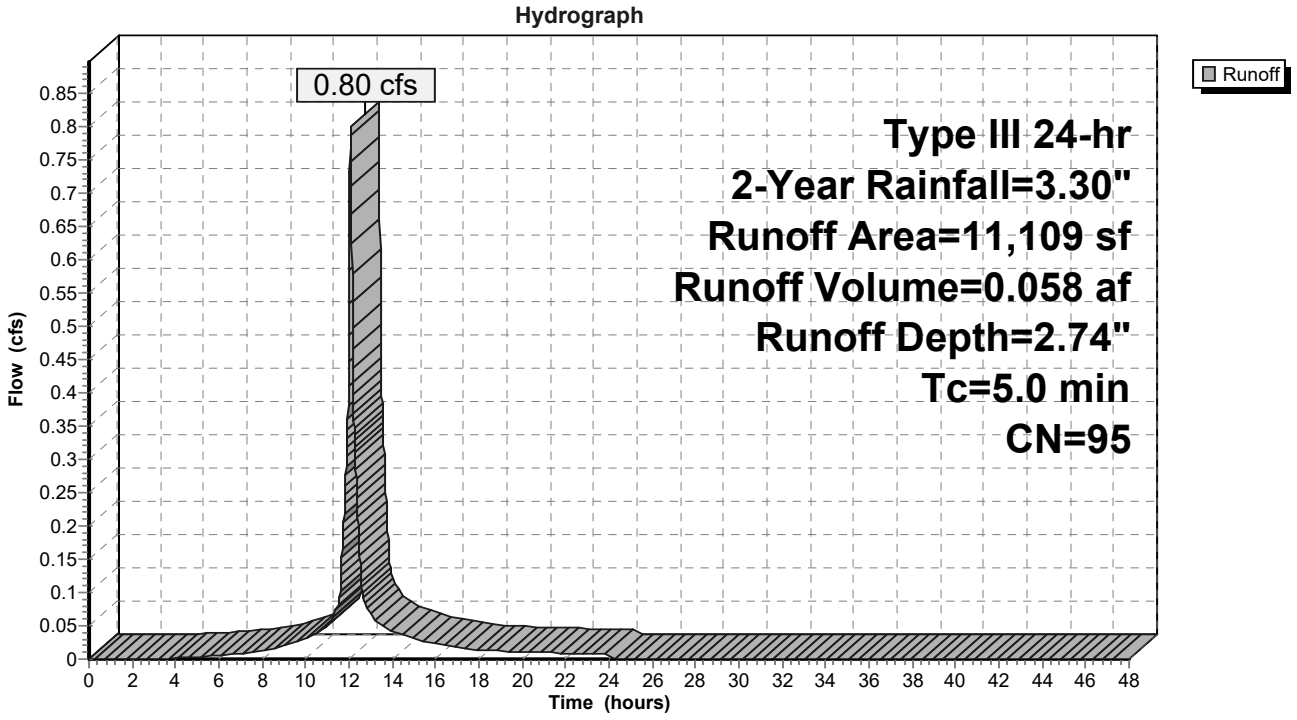
Runoff = 0.80 cfs @ 12.07 hrs, Volume= 0.058 af, Depth= 2.74"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
9,241	98	Paved parking, HSG D
1,868	80	>75% Grass cover, Good, HSG D
11,109	95	Weighted Average
1,868		16.82% Pervious Area
9,241		83.18% Impervious Area

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

Subcatchment 2B: (new Subcat)



Summary for Subcatchment 3B: (new Subcat)

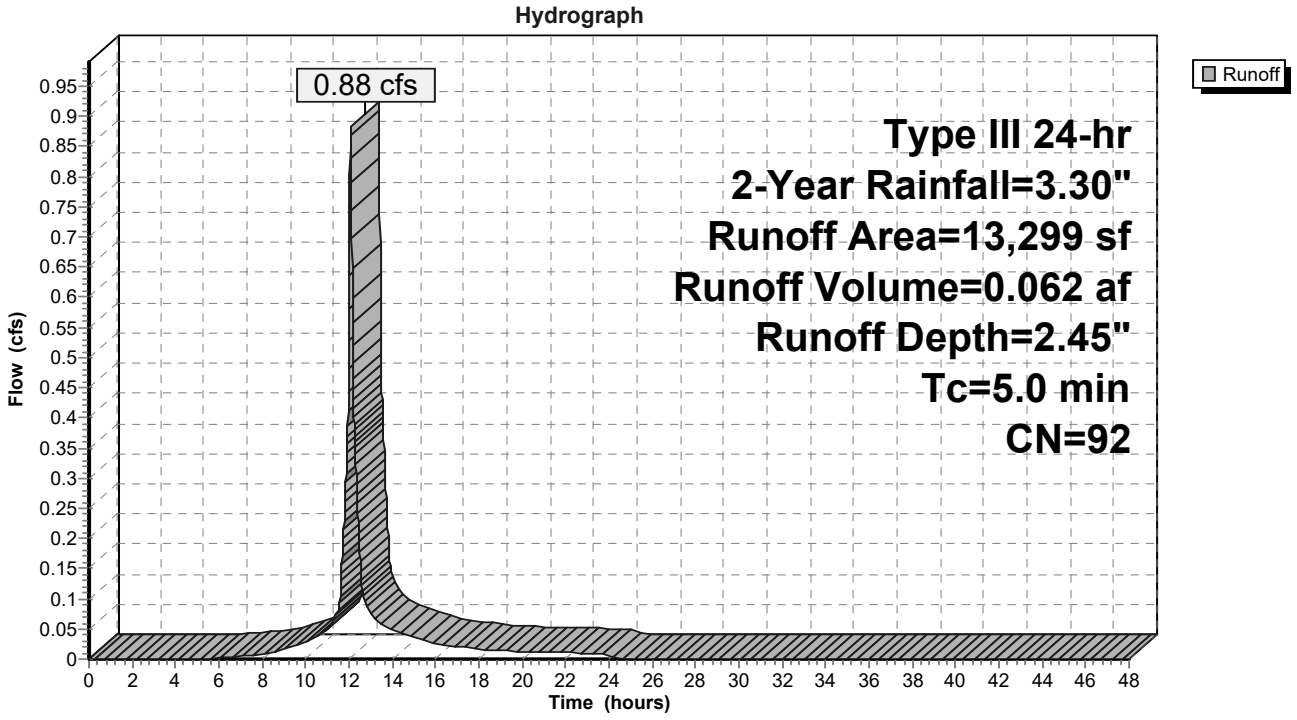
Runoff = 0.88 cfs @ 12.07 hrs, Volume= 0.062 af, Depth= 2.45"
Routed to Reach R2 : R2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
9,037	98	Paved parking, HSG D
4,262	80	>75% Grass cover, Good, HSG D
13,299	92	Weighted Average
4,262		32.05% Pervious Area
9,037		67.95% Impervious Area

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

Subcatchment 3B: (new Subcat)



Summary for Subcatchment 4B: (new Subcat)

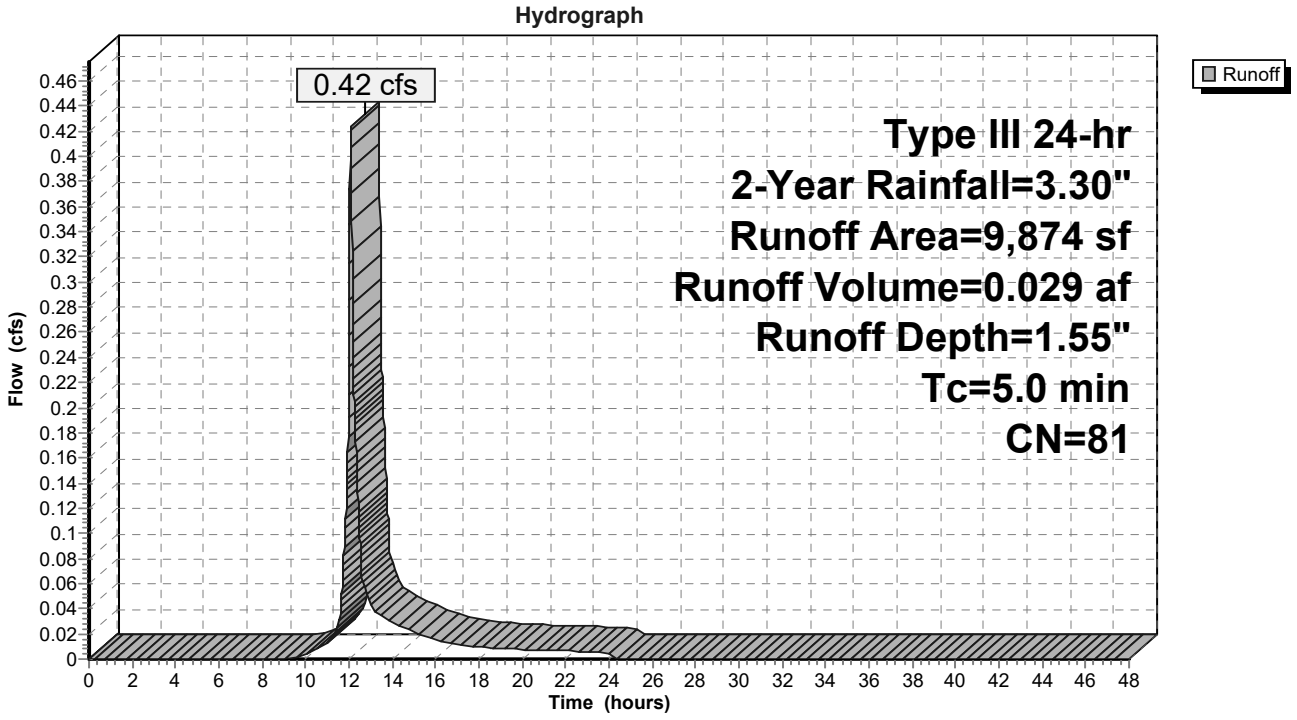
Runoff = 0.42 cfs @ 12.08 hrs, Volume= 0.029 af, Depth= 1.55"
Routed to Reach 13R : POI1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
9,483	80	>75% Grass cover, Good, HSG D
391	98	Paved parking, HSG D
9,874	81	Weighted Average
9,483		96.04% Pervious Area
391		3.96% Impervious Area

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

Subcatchment 4B: (new Subcat)



Summary for Subcatchment 5B: (new Subcat)

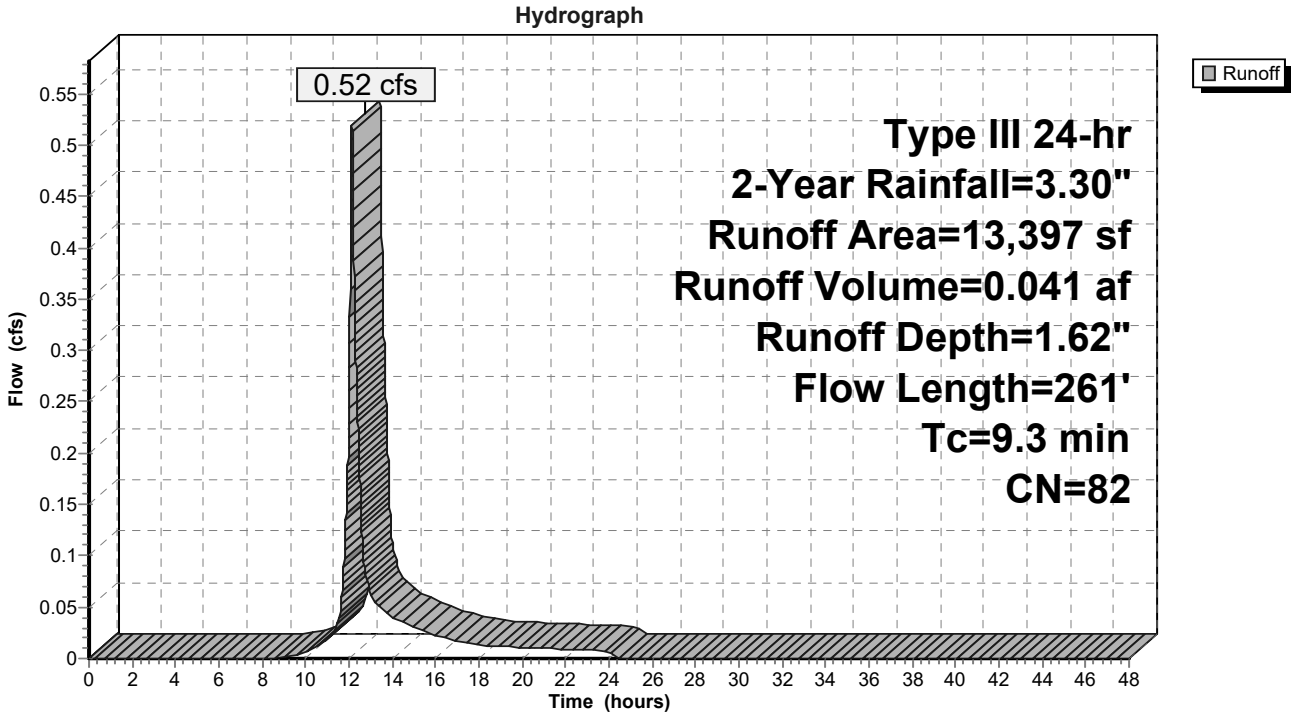
Runoff = 0.52 cfs @ 12.13 hrs, Volume= 0.041 af, Depth= 1.62"
Routed to Reach R1 : POI3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

	Area (sf)	CN	Description
	5,628	80	>75% Grass cover, Good, HSG D
	5,308	77	Woods, Good, HSG D
*	2,461	98	Ledge
	13,397	82	Weighted Average
	10,936		81.63% Pervious Area
	2,461		18.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	40	0.0500	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	15	0.3000	0.23		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
0.6	130	0.0200	3.58	8.05	**Trap/Vee/Rect Channel Flow, C-D** Bot.W=3.00' D=0.50' Z= 3.0 '/' Top.W=6.00' n= 0.030 Earth, grassed & winding
0.2	76	0.1800	6.83		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
9.3	261	Total			

Subcatchment 5B: (new Subcat)



Summary for Subcatchment 6B: (new Subcat)

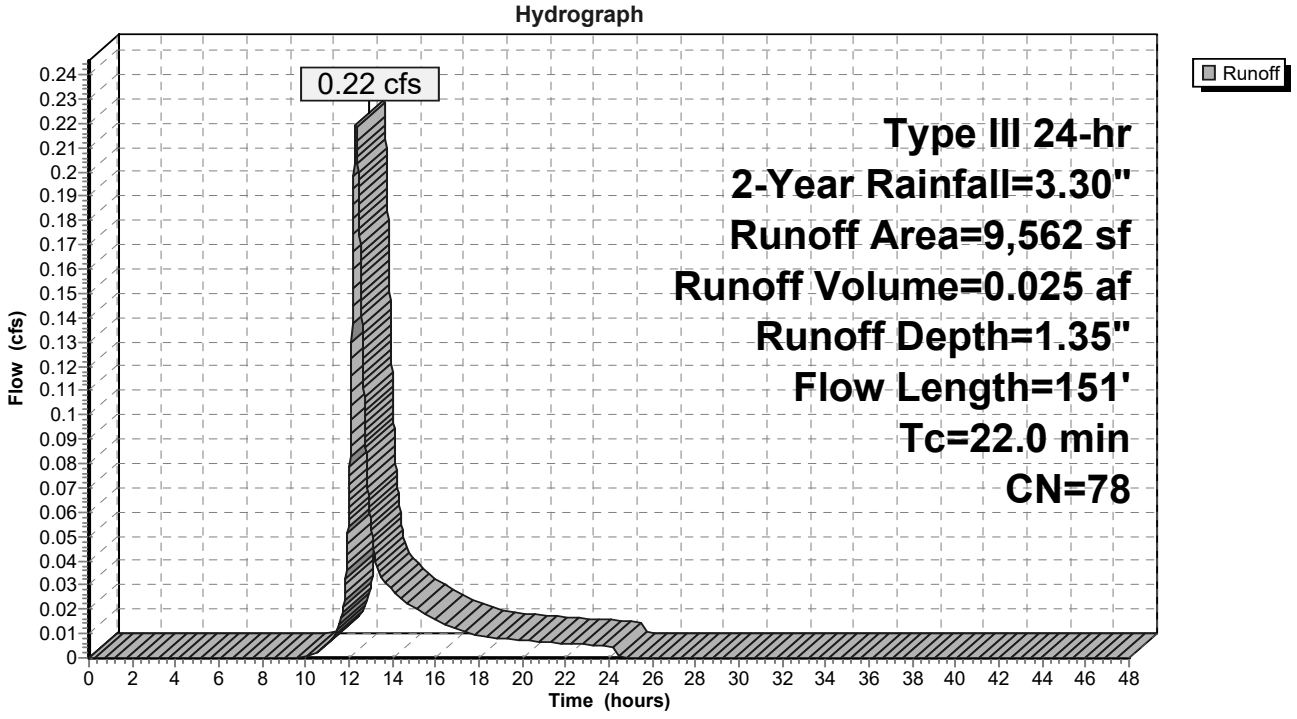
Runoff = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af, Depth= 1.35"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-Year Rainfall=3.30"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 6B: (new Subcat)

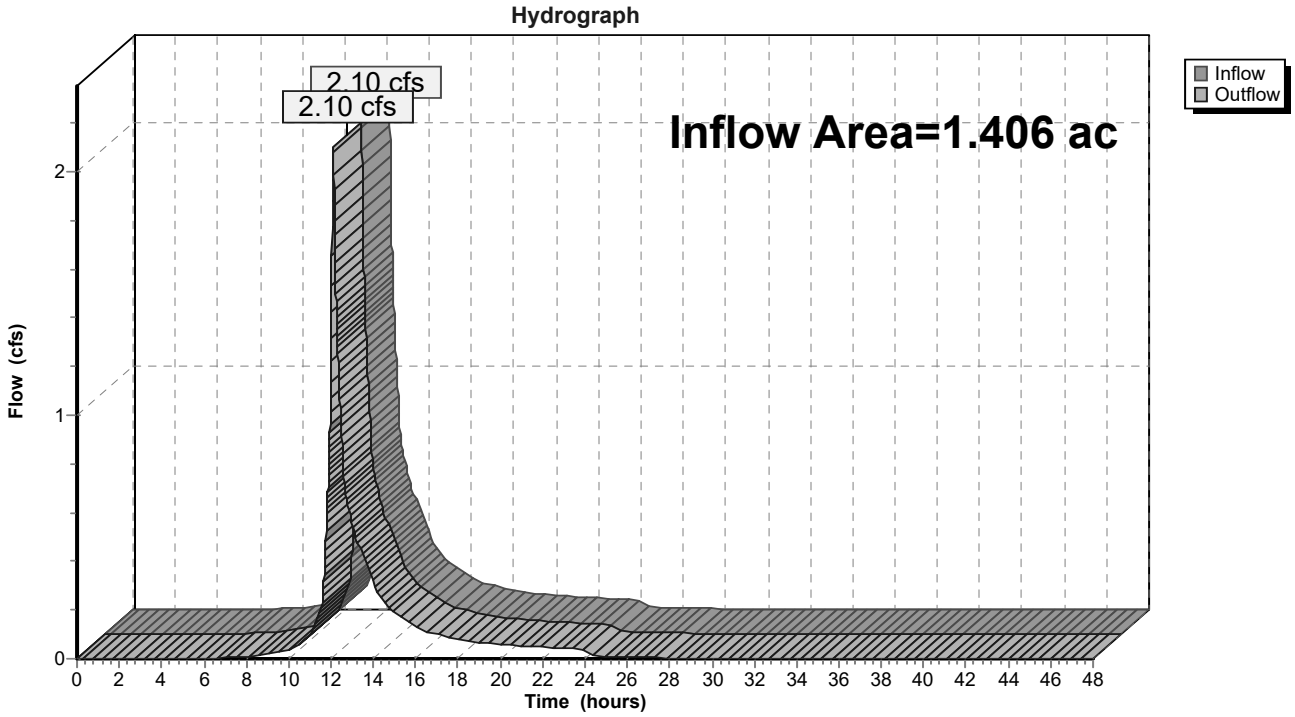


Summary for Reach 13R: POI1

Inflow Area = 1.406 ac, 46.80% Impervious, Inflow Depth = 2.05" for 2-Year event
Inflow = 2.10 cfs @ 12.10 hrs, Volume= 0.240 af
Outflow = 2.10 cfs @ 12.10 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 13R: POI1

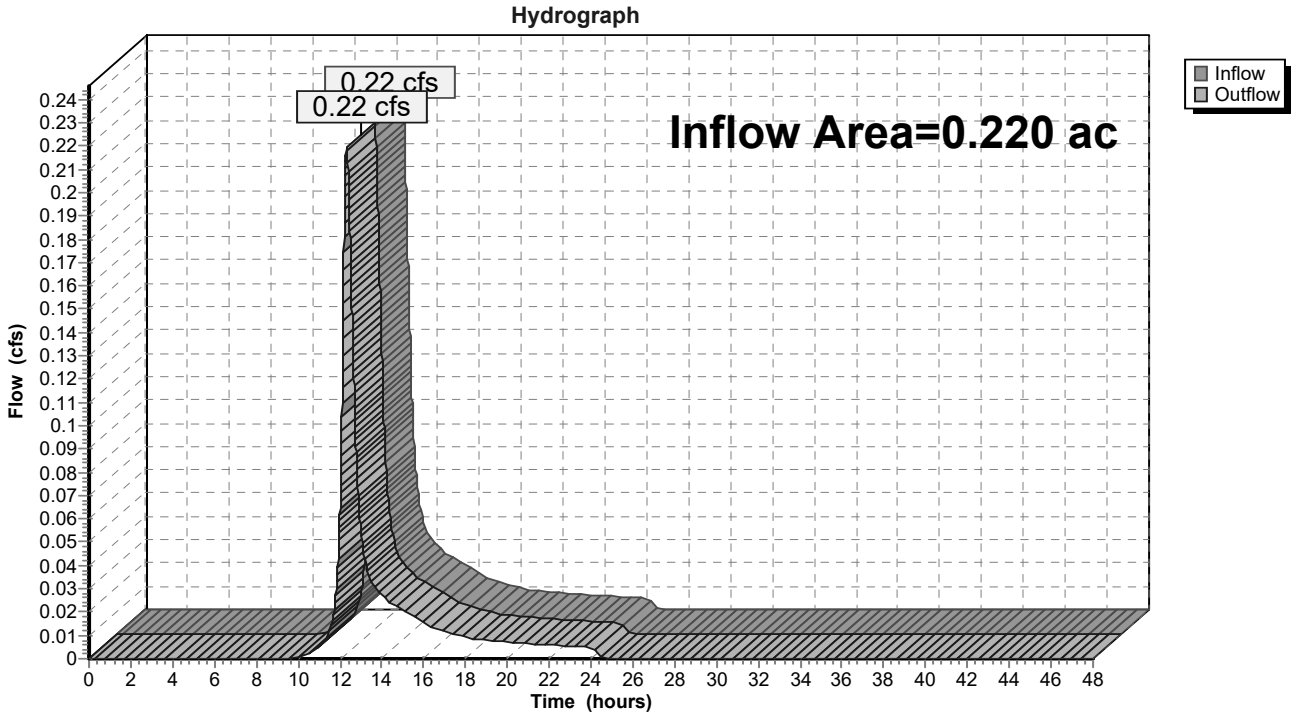


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 1.35" for 2-Year event
Inflow = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af
Outflow = 0.22 cfs @ 12.32 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



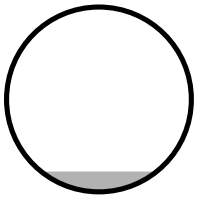
Summary for Reach R1: POI3

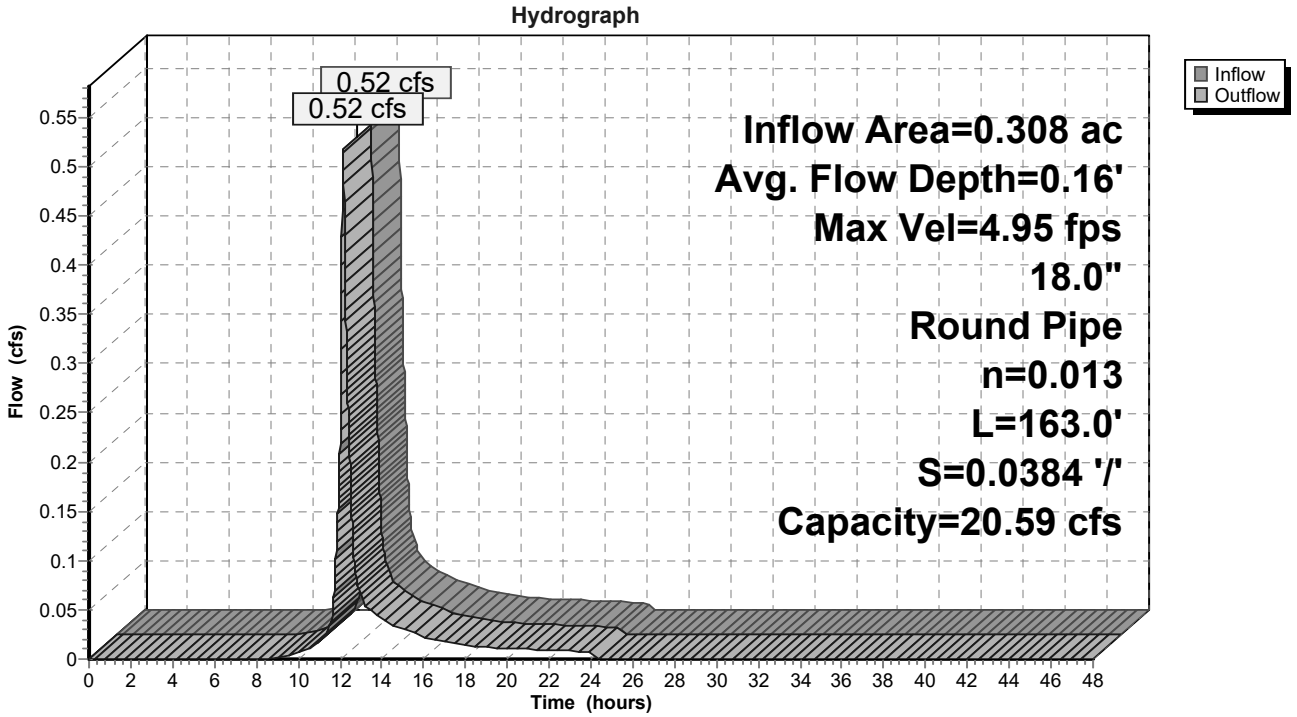
Inflow Area = 0.308 ac, 18.37% Impervious, Inflow Depth = 1.62" for 2-Year event
Inflow = 0.52 cfs @ 12.13 hrs, Volume= 0.041 af
Outflow = 0.52 cfs @ 12.15 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.9 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.95 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.85 fps, Avg. Travel Time= 1.5 min

Peak Storage= 17 cf @ 12.14 hrs
Average Depth at Peak Storage= 0.16' , Surface Width= 0.94'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





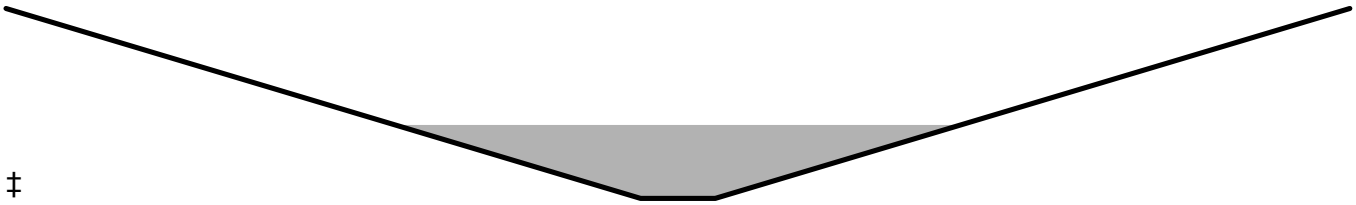
Summary for Reach R2: R2

Inflow Area = 0.305 ac, 67.95% Impervious, Inflow Depth = 2.45" for 2-Year event
Inflow = 0.88 cfs @ 12.07 hrs, Volume= 0.062 af
Outflow = 0.88 cfs @ 12.09 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.9 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.12 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.13 fps, Avg. Travel Time= 1.5 min

Peak Storage= 28 cf @ 12.08 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 7.58'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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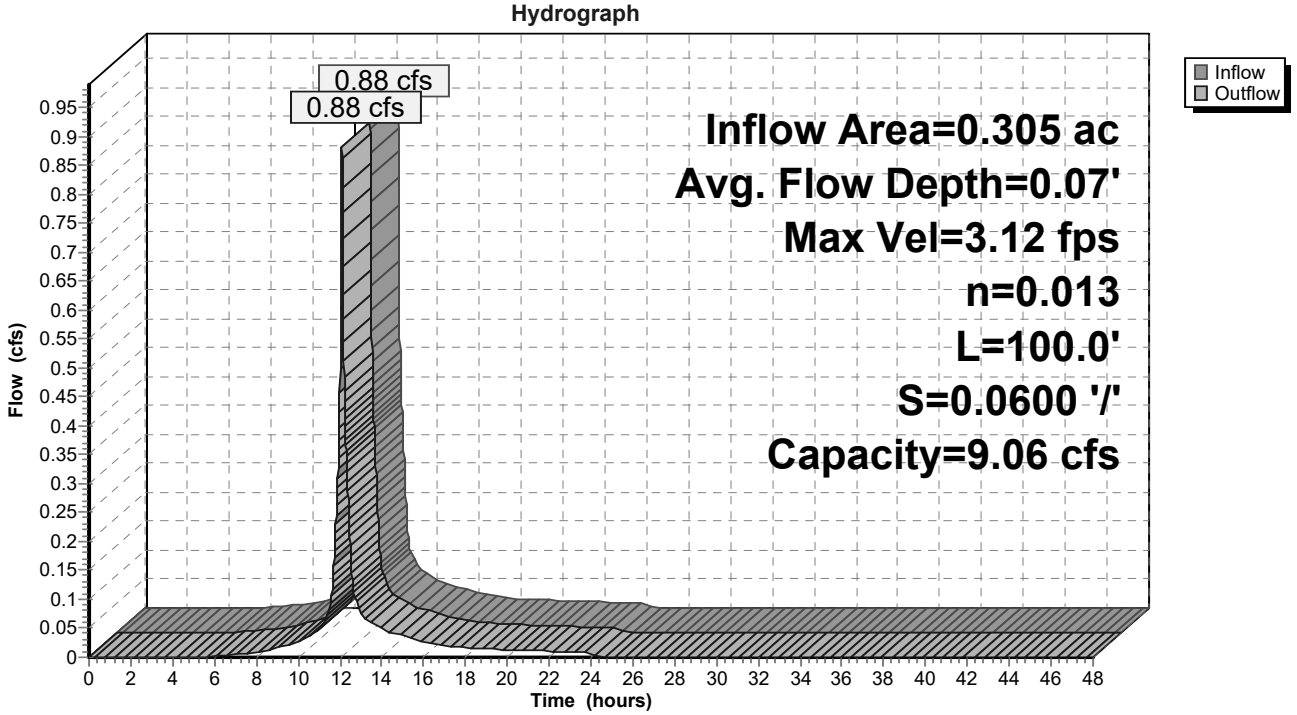
Reach R2: R2



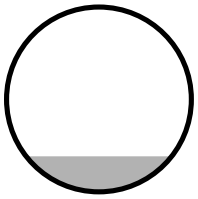
Summary for Reach R3: (new Reach)

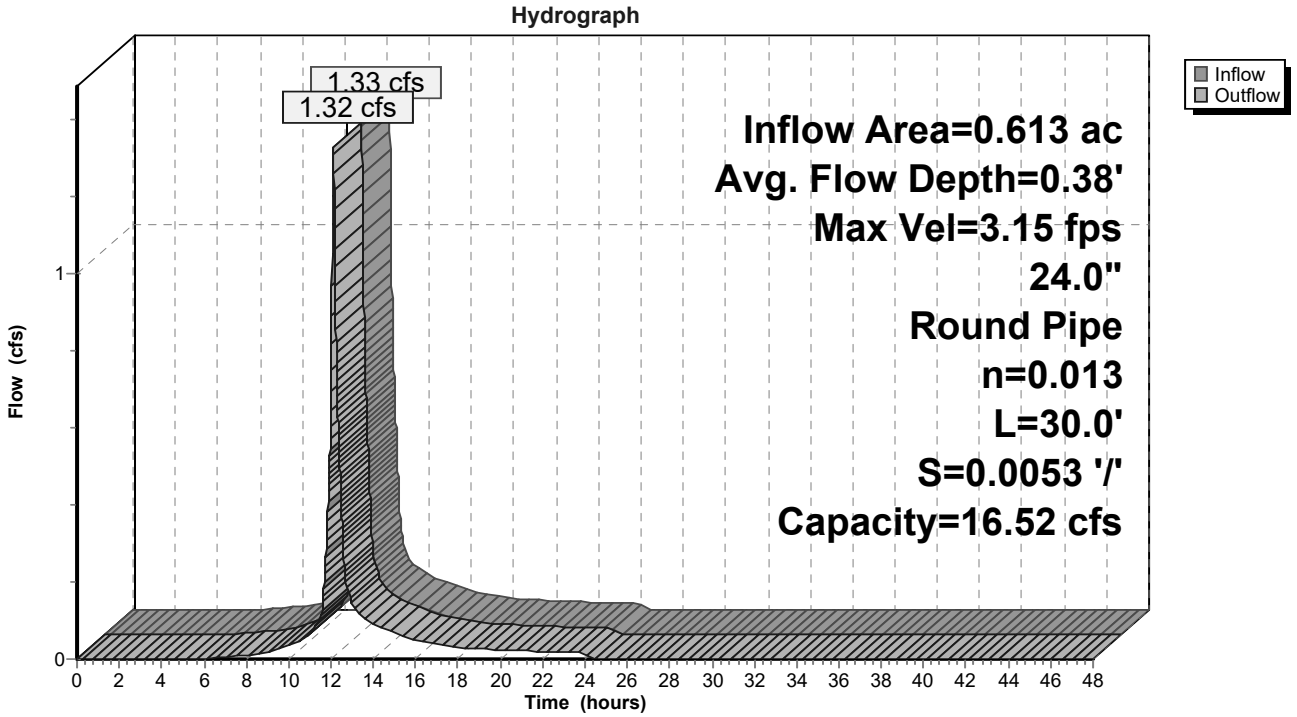
Inflow Area = 0.613 ac, 43.07% Impervious, Inflow Depth = 2.03" for 2-Year event
Inflow = 1.33 cfs @ 12.10 hrs, Volume= 0.104 af
Outflow = 1.32 cfs @ 12.11 hrs, Volume= 0.104 af, Atten= 0%, Lag= 0.3 min
Routed to Reach 13R : POI1

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.15 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.05 fps, Avg. Travel Time= 0.5 min

Peak Storage= 13 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.38' , Surface Width= 1.57'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'





Summary for Pond 18P: Cultec Chambers

Inflow Area = 0.566 ac, 68.01% Impervious, Inflow Depth = 2.48" for 2-Year event
Inflow = 1.65 cfs @ 12.07 hrs, Volume= 0.117 af
Outflow = 0.45 cfs @ 12.41 hrs, Volume= 0.107 af, Atten= 73%, Lag= 20.5 min
Primary = 0.45 cfs @ 12.41 hrs, Volume= 0.107 af
Routed to Reach 13R : POI1

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 145.41' @ 12.41 hrs Surf.Area= 2,106 sf Storage= 2,061 cf

Plug-Flow detention time= 139.9 min calculated for 0.107 af (92% of inflow)
Center-of-Mass det. time= 96.9 min (888.8 - 792.0)

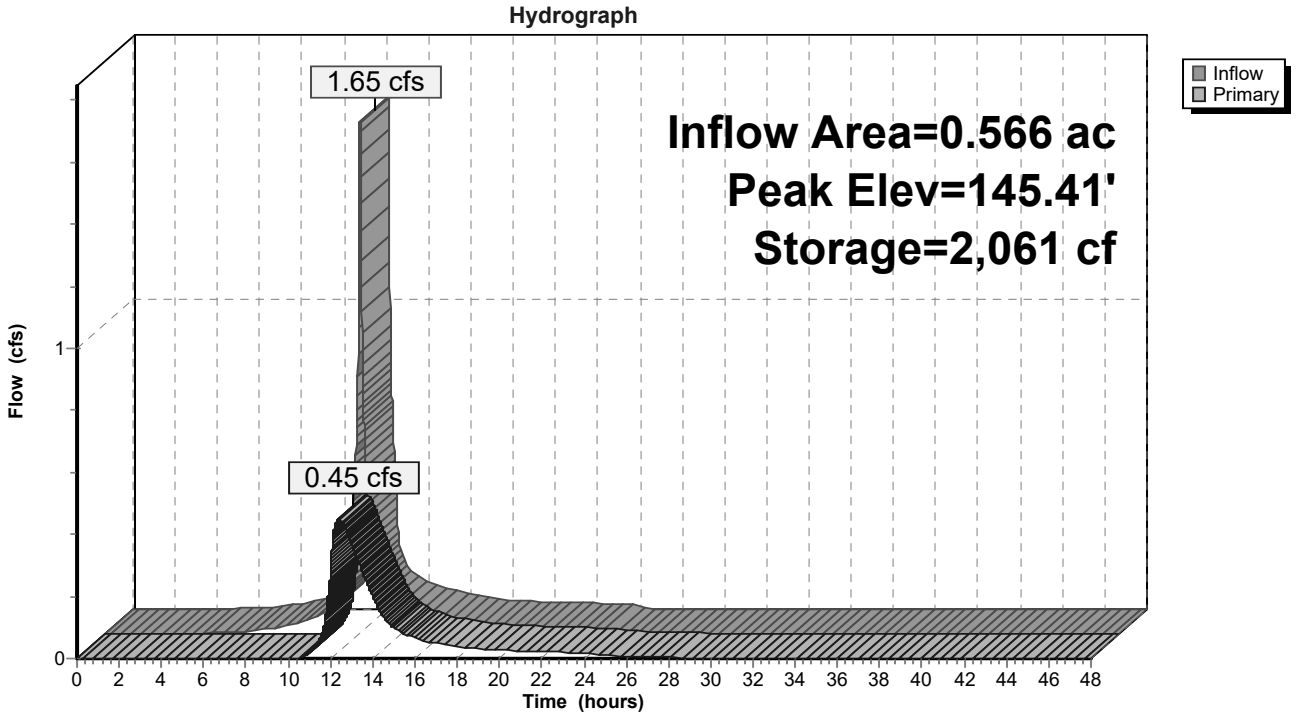
Volume	Invert	Avail.Storage	Storage Description
#1A	144.00'	1,615 cf	**31.92'W x 66.00'L x 3.21'H Field A** 6,758 cf Overall - 2,720 cf Embedded = 4,038 cf x 40.0% Voids
#2A	144.50'	2,720 cf	**Cultec R-280HD** x 63 Inside #1 Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap Row Length Adjustment= +1.00' x 6.07 sf x 7 rows
		4,335 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	144.00'	**18.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 144.00' / 143.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	144.50'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.07'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	146.70'	**6.0' 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

Primary OutFlow Max=0.45 cfs @ 12.41 hrs HW=145.41' (Free Discharge)
└**1=Culvert** (Passes 0.45 cfs of 6.95 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.45 cfs @ 4.08 fps)
├**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 18P: Cultec Chambers



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1B: (new Subcat) Runoff Area=13,545 sf 55.56% Impervious Runoff Depth=3.78"
Tc=5.0 min CN=90 Runoff=1.38 cfs 0.098 af

Subcatchment 2B: (new Subcat) Runoff Area=11,109 sf 83.18% Impervious Runoff Depth=4.32"
Tc=5.0 min CN=95 Runoff=1.23 cfs 0.092 af

Subcatchment 3B: (new Subcat) Runoff Area=13,299 sf 67.95% Impervious Runoff Depth=3.99"
Tc=5.0 min CN=92 Runoff=1.41 cfs 0.102 af

Subcatchment 4B: (new Subcat) Runoff Area=9,874 sf 3.96% Impervious Runoff Depth=2.90"
Tc=5.0 min CN=81 Runoff=0.80 cfs 0.055 af

Subcatchment 5B: (new Subcat) Runoff Area=13,397 sf 18.37% Impervious Runoff Depth=2.99"
Flow Length=261' Tc=9.3 min CN=82 Runoff=0.96 cfs 0.077 af

Subcatchment 6B: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=2.63"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.44 cfs 0.048 af

Reach 13R: POI1 Inflow=3.51 cfs 0.413 af
Outflow=3.51 cfs 0.413 af

Reach POI2: POI2 Inflow=0.44 cfs 0.048 af
Outflow=0.44 cfs 0.048 af

Reach R1: POI3 Avg. Flow Depth=0.22' Max Vel=5.95 fps Inflow=0.96 cfs 0.077 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=0.96 cfs 0.077 af

Reach R2: R2 Avg. Flow Depth=0.08' Max Vel=3.51 fps Inflow=1.41 cfs 0.102 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=1.40 cfs 0.102 af

Reach R3: (new Reach) Avg. Flow Depth=0.50' Max Vel=3.67 fps Inflow=2.24 cfs 0.178 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=2.24 cfs 0.178 af

Pond 18P: Cultec Chambers Peak Elev=146.08' Storage=3,167 cf Inflow=2.61 cfs 0.190 af
Outflow=0.63 cfs 0.180 af

Total Runoff Area = 1.625 ac Runoff Volume = 0.471 af Average Runoff Depth = 3.48"
59.52% Pervious = 0.967 ac 40.48% Impervious = 0.658 ac

Summary for Subcatchment 1B: (new Subcat)

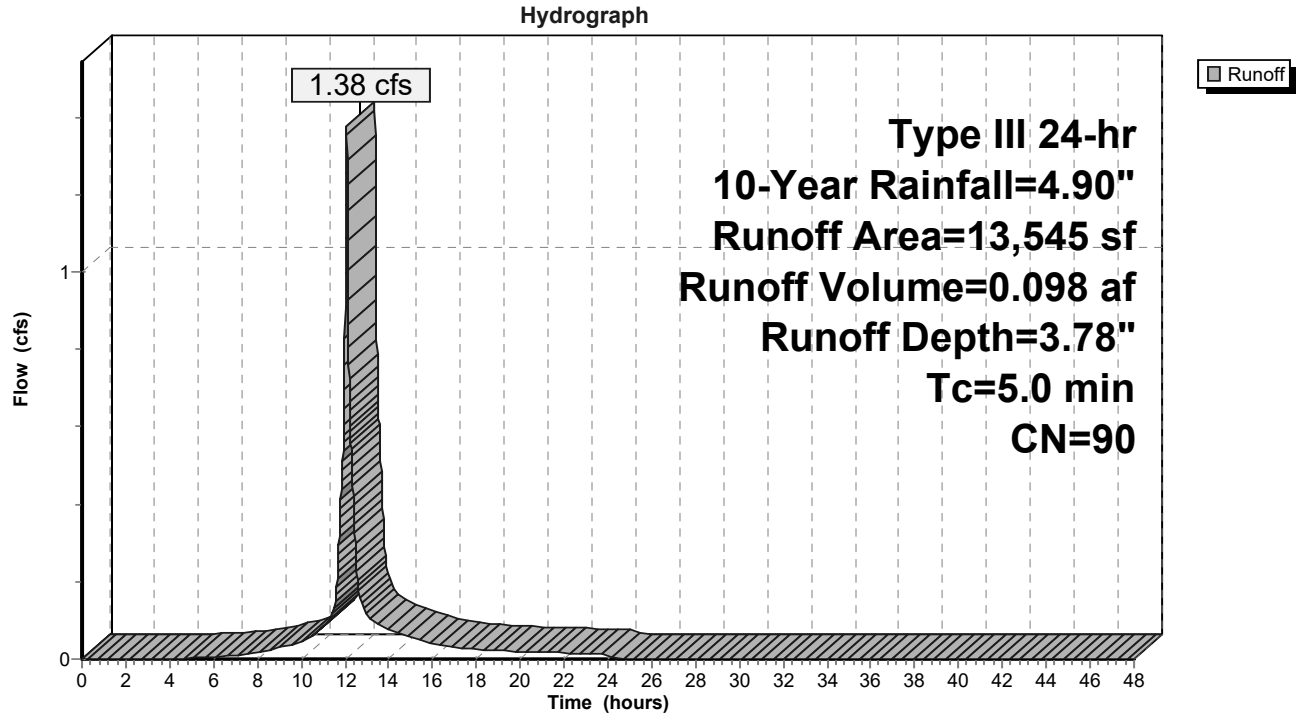
Runoff = 1.38 cfs @ 12.07 hrs, Volume= 0.098 af, Depth= 3.78"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
7,525	98	Paved parking, HSG D
6,020	80	>75% Grass cover, Good, HSG D
13,545	90	Weighted Average
6,020		44.44% Pervious Area
7,525		55.56% Impervious Area

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

Subcatchment 1B: (new Subcat)



Summary for Subcatchment 2B: (new Subcat)

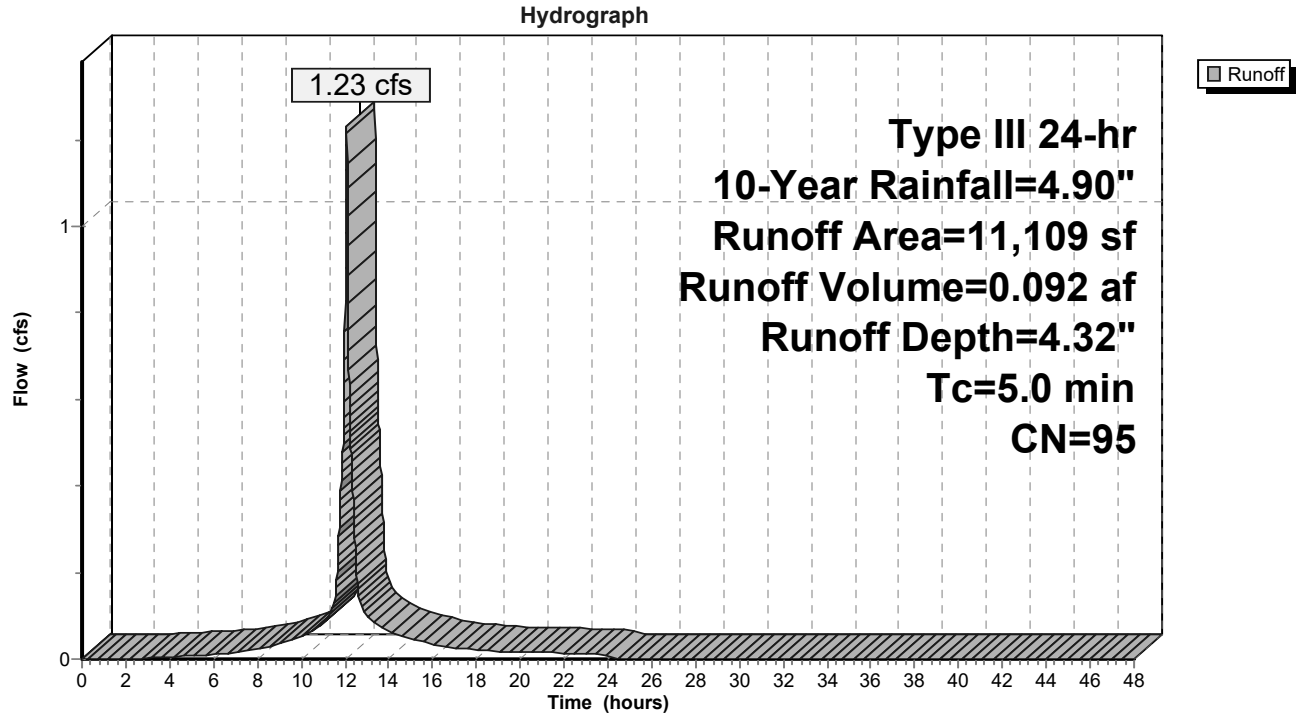
Runoff = 1.23 cfs @ 12.07 hrs, Volume= 0.092 af, Depth= 4.32"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
9,241	98	Paved parking, HSG D
1,868	80	>75% Grass cover, Good, HSG D
11,109	95	Weighted Average
1,868		16.82% Pervious Area
9,241		83.18% Impervious Area

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

Subcatchment 2B: (new Subcat)



Summary for Subcatchment 3B: (new Subcat)

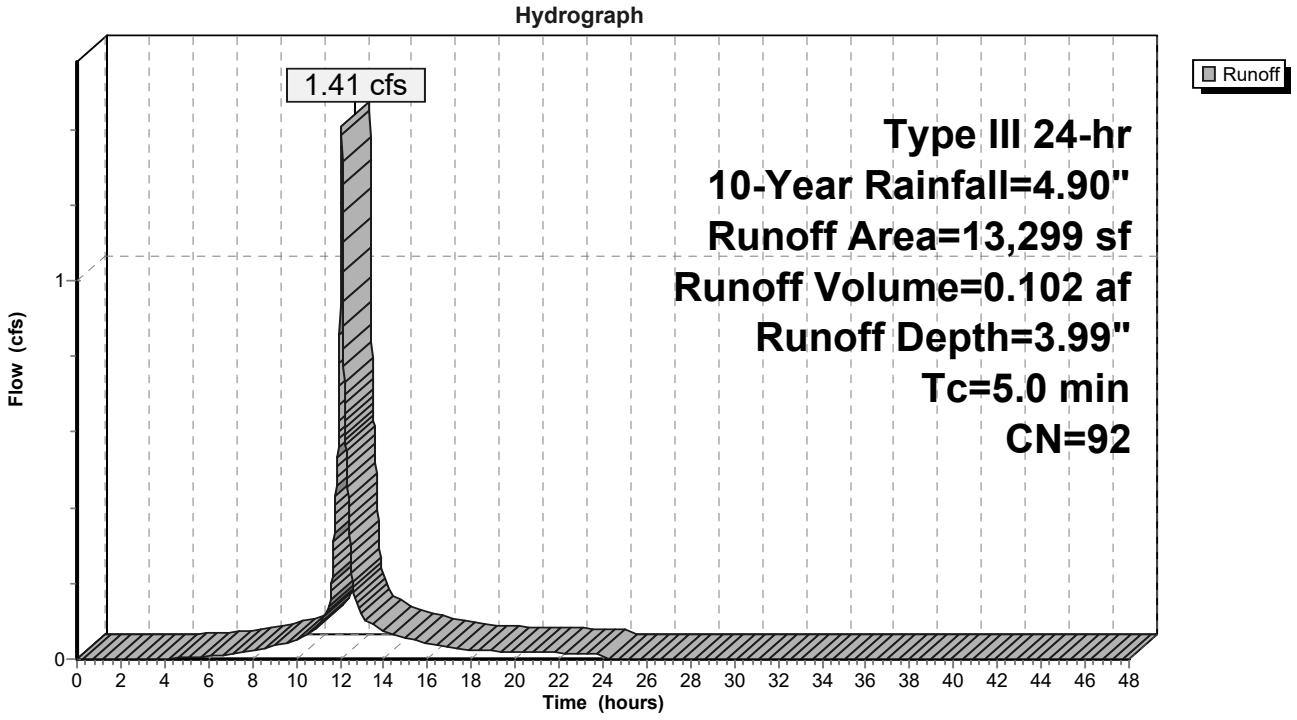
Runoff = 1.41 cfs @ 12.07 hrs, Volume= 0.102 af, Depth= 3.99"
Routed to Reach R2 : R2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
9,037	98	Paved parking, HSG D
4,262	80	>75% Grass cover, Good, HSG D
13,299	92	Weighted Average
4,262		32.05% Pervious Area
9,037		67.95% Impervious Area

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

Subcatchment 3B: (new Subcat)



Summary for Subcatchment 4B: (new Subcat)

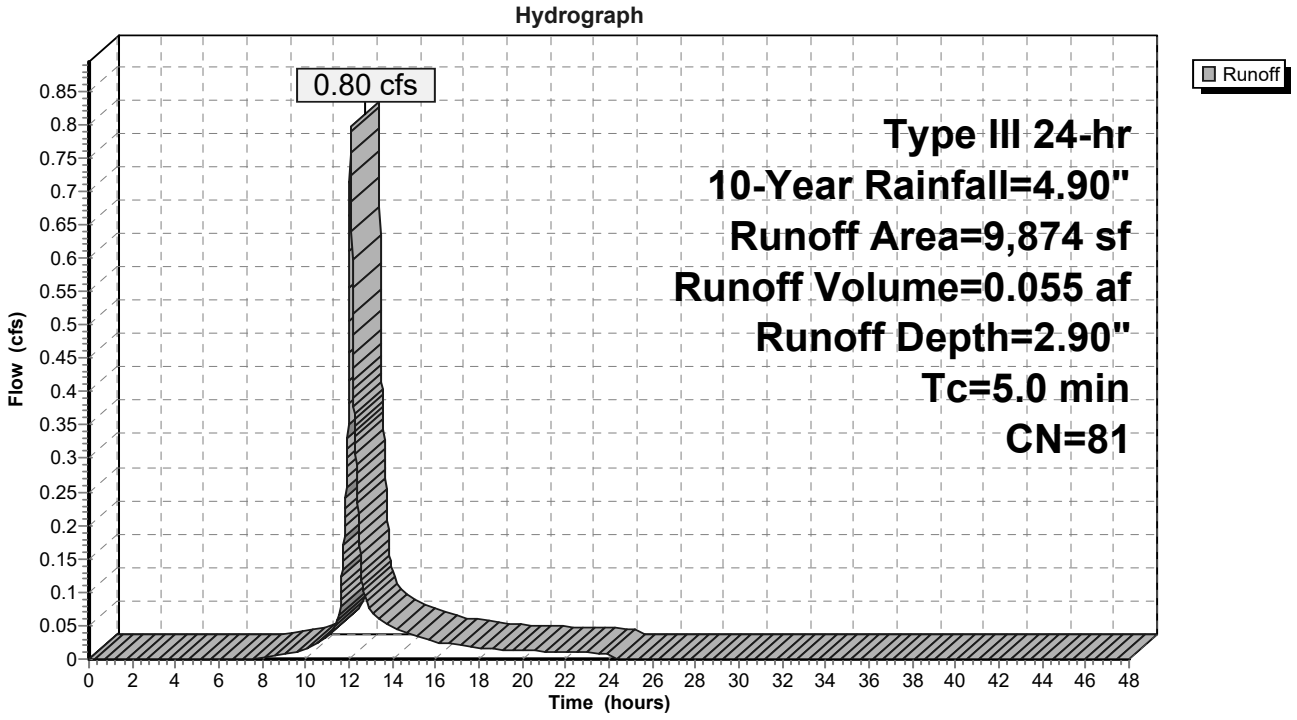
Runoff = 0.80 cfs @ 12.07 hrs, Volume= 0.055 af, Depth= 2.90"
Routed to Reach 13R : POI1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
9,483	80	>75% Grass cover, Good, HSG D
391	98	Paved parking, HSG D
9,874	81	Weighted Average
9,483		96.04% Pervious Area
391		3.96% Impervious Area

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

Subcatchment 4B: (new Subcat)



Summary for Subcatchment 5B: (new Subcat)

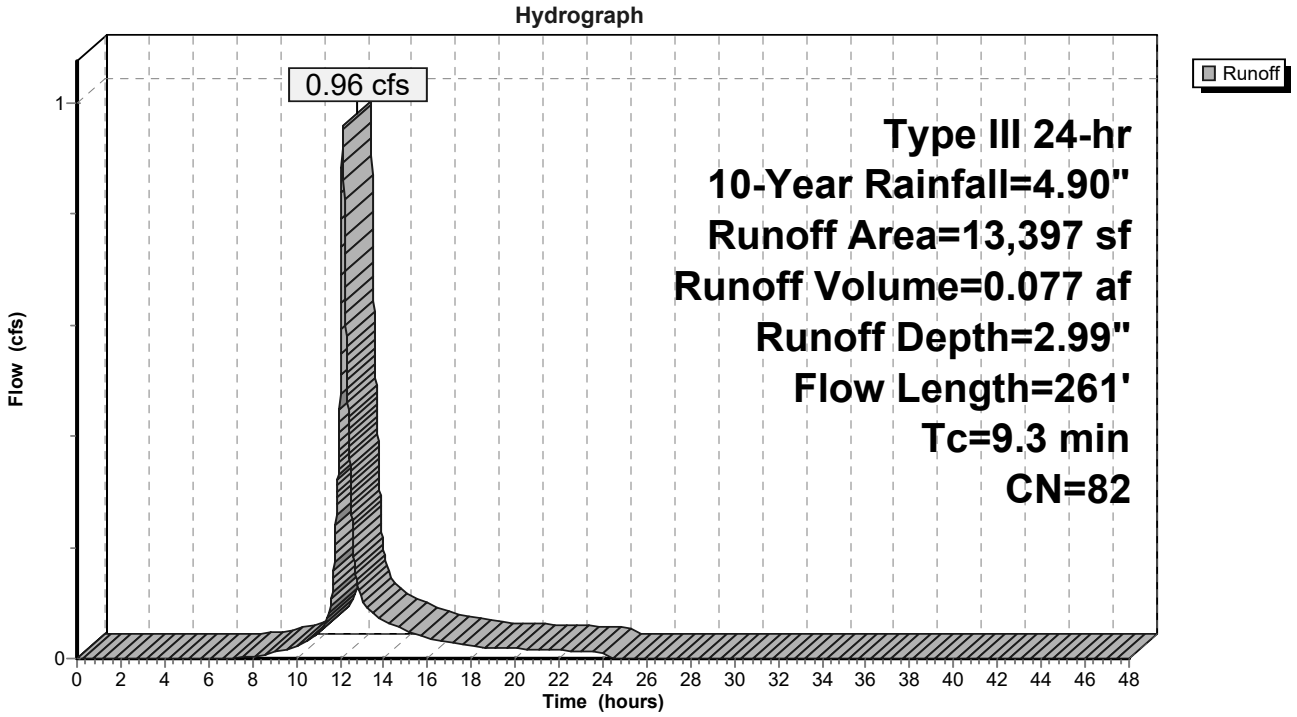
Runoff = 0.96 cfs @ 12.13 hrs, Volume= 0.077 af, Depth= 2.99"
Routed to Reach R1 : POI3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

	Area (sf)	CN	Description
	5,628	80	>75% Grass cover, Good, HSG D
	5,308	77	Woods, Good, HSG D
*	2,461	98	Ledge
	13,397	82	Weighted Average
	10,936		81.63% Pervious Area
	2,461		18.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	40	0.0500	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	15	0.3000	0.23		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
0.6	130	0.0200	3.58	8.05	**Trap/Vee/Rect Channel Flow, C-D** Bot.W=3.00' D=0.50' Z= 3.0 '/' Top.W=6.00' n= 0.030 Earth, grassed & winding
0.2	76	0.1800	6.83		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
9.3	261	Total			

Subcatchment 5B: (new Subcat)



Summary for Subcatchment 6B: (new Subcat)

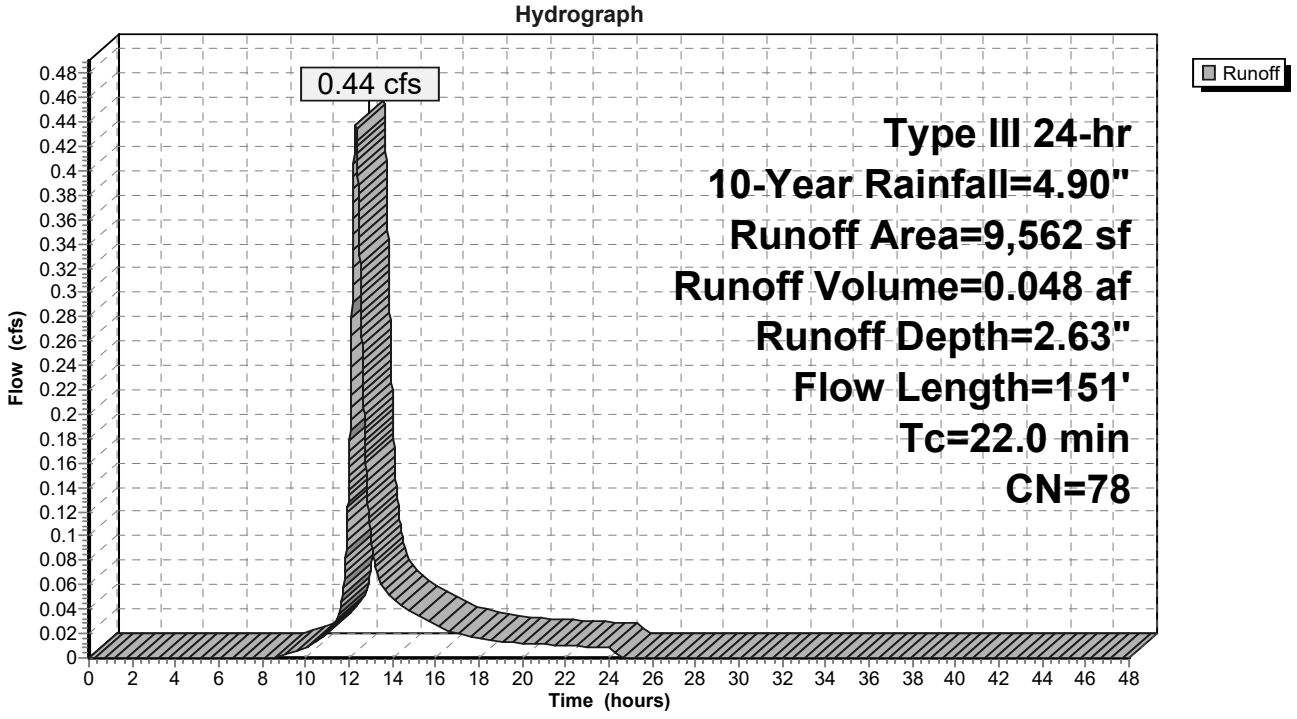
Runoff = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af, Depth= 2.63"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=4.90"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 6B: (new Subcat)

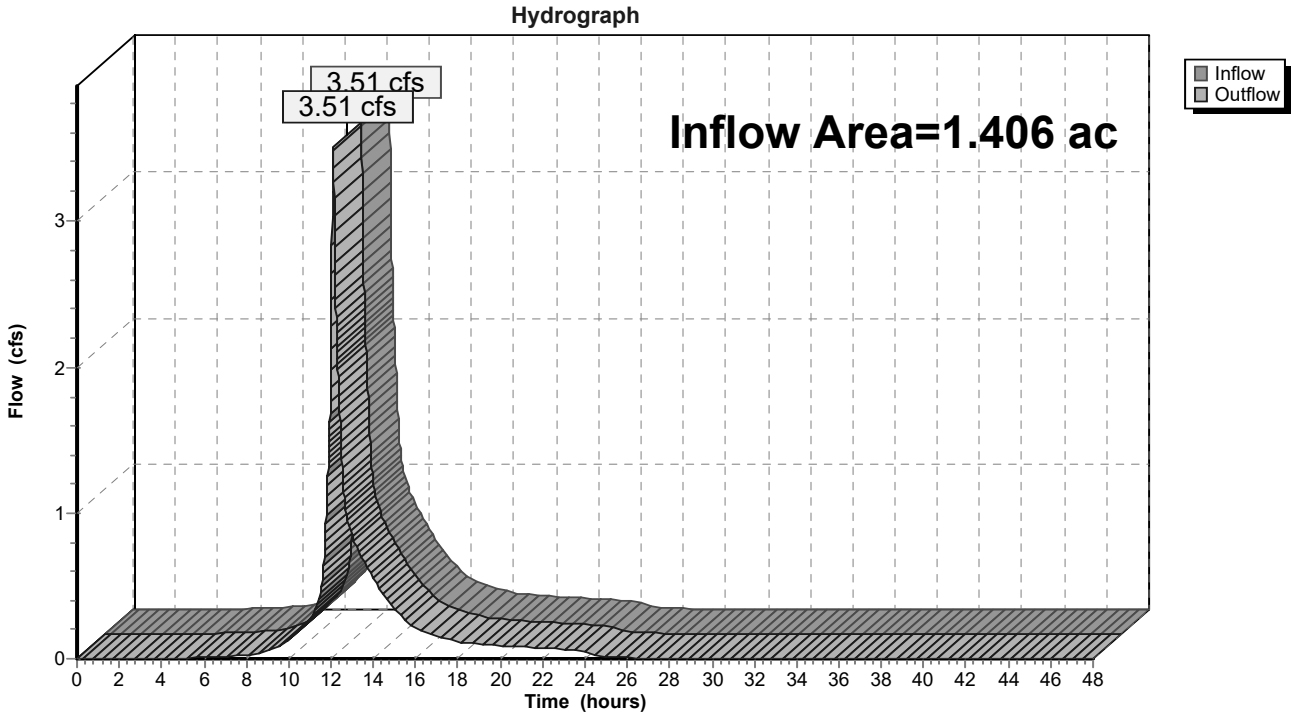


Summary for Reach 13R: POI1

Inflow Area = 1.406 ac, 46.80% Impervious, Inflow Depth = 3.52" for 10-Year event
Inflow = 3.51 cfs @ 12.10 hrs, Volume= 0.413 af
Outflow = 3.51 cfs @ 12.10 hrs, Volume= 0.413 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 13R: POI1

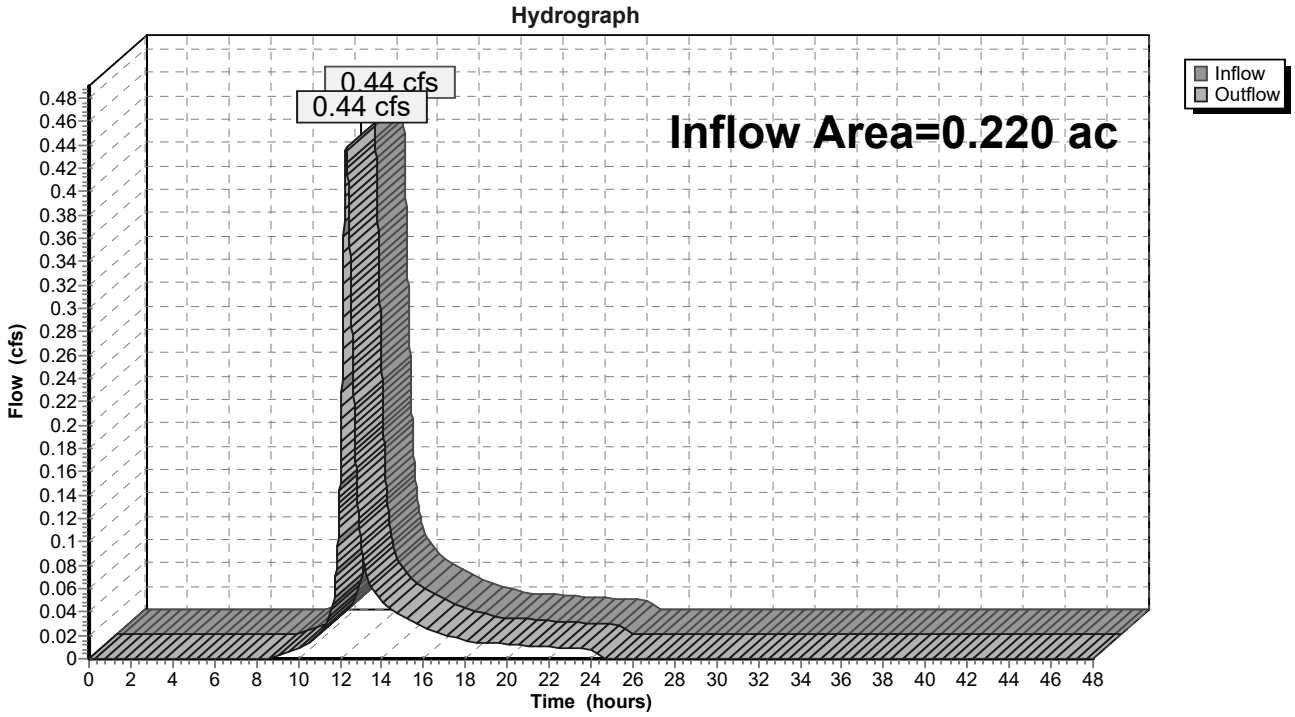


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 2.63" for 10-Year event
Inflow = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af
Outflow = 0.44 cfs @ 12.30 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



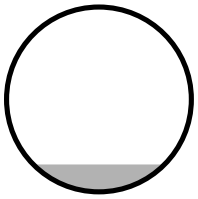
Summary for Reach R1: POI3

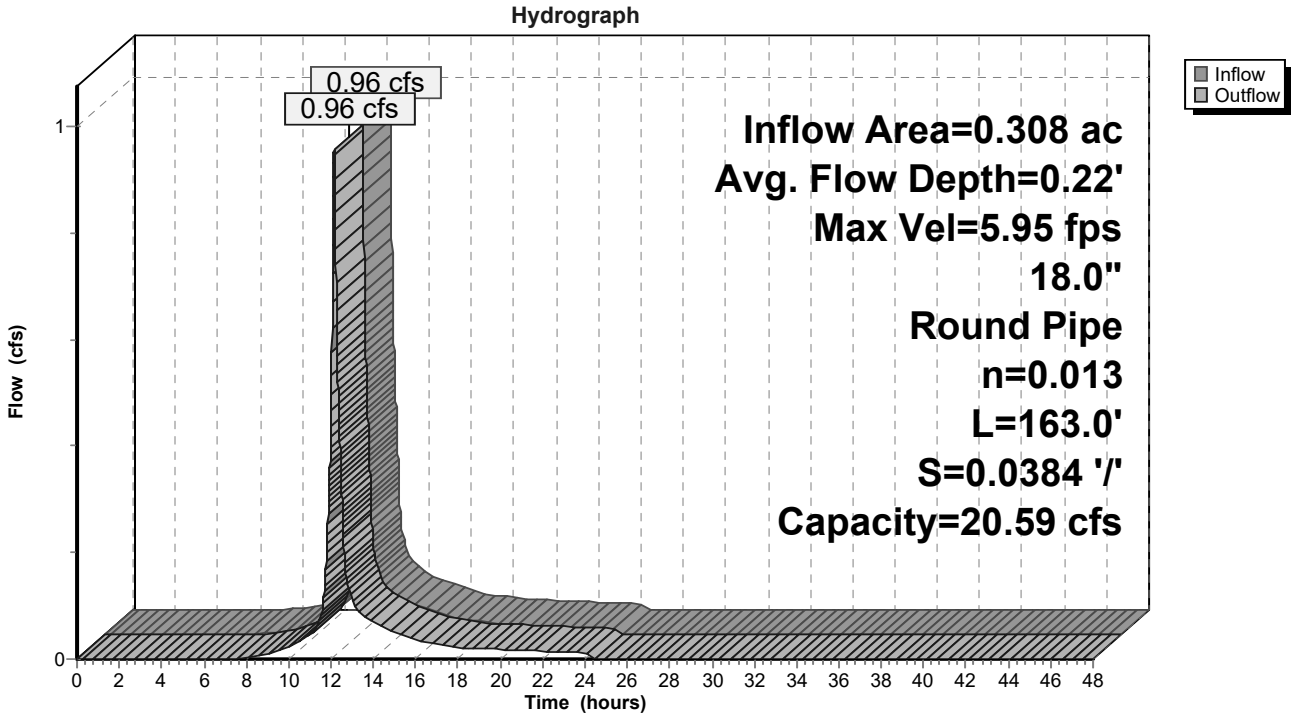
Inflow Area = 0.308 ac, 18.37% Impervious, Inflow Depth = 2.99" for 10-Year event
Inflow = 0.96 cfs @ 12.13 hrs, Volume= 0.077 af
Outflow = 0.96 cfs @ 12.14 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.8 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.95 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 2.11 fps, Avg. Travel Time= 1.3 min

Peak Storage= 26 cf @ 12.14 hrs
Average Depth at Peak Storage= 0.22' , Surface Width= 1.06'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





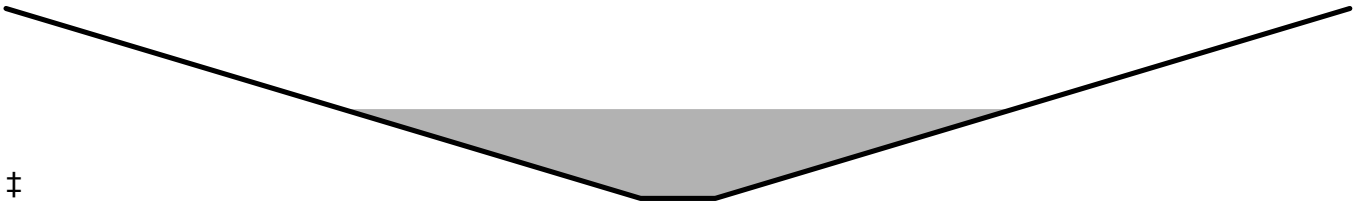
Summary for Reach R2: R2

Inflow Area = 0.305 ac, 67.95% Impervious, Inflow Depth = 3.99" for 10-Year event
Inflow = 1.41 cfs @ 12.07 hrs, Volume= 0.102 af
Outflow = 1.40 cfs @ 12.09 hrs, Volume= 0.102 af, Atten= 0%, Lag= 0.8 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.51 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.27 fps, Avg. Travel Time= 1.3 min

Peak Storage= 40 cf @ 12.08 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 8.99'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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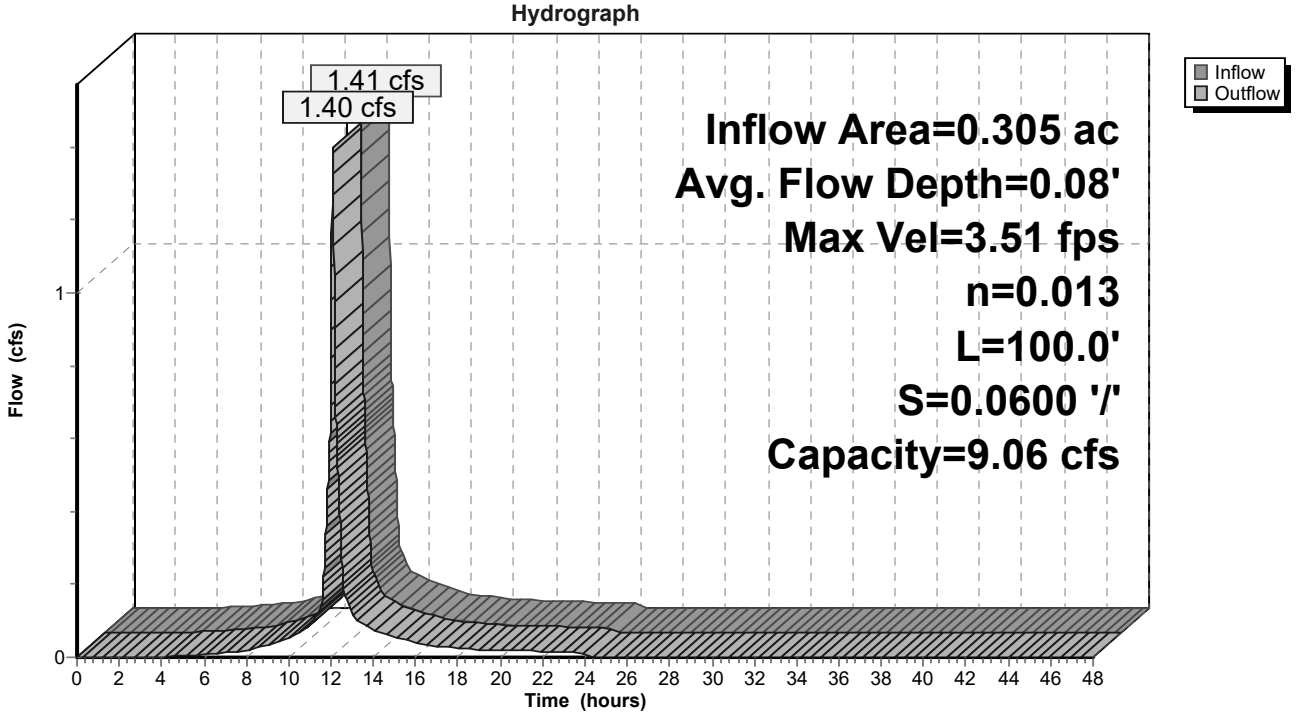
Reach R2: R2



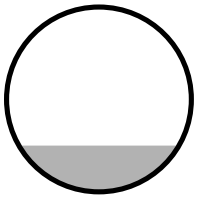
Summary for Reach R3: (new Reach)

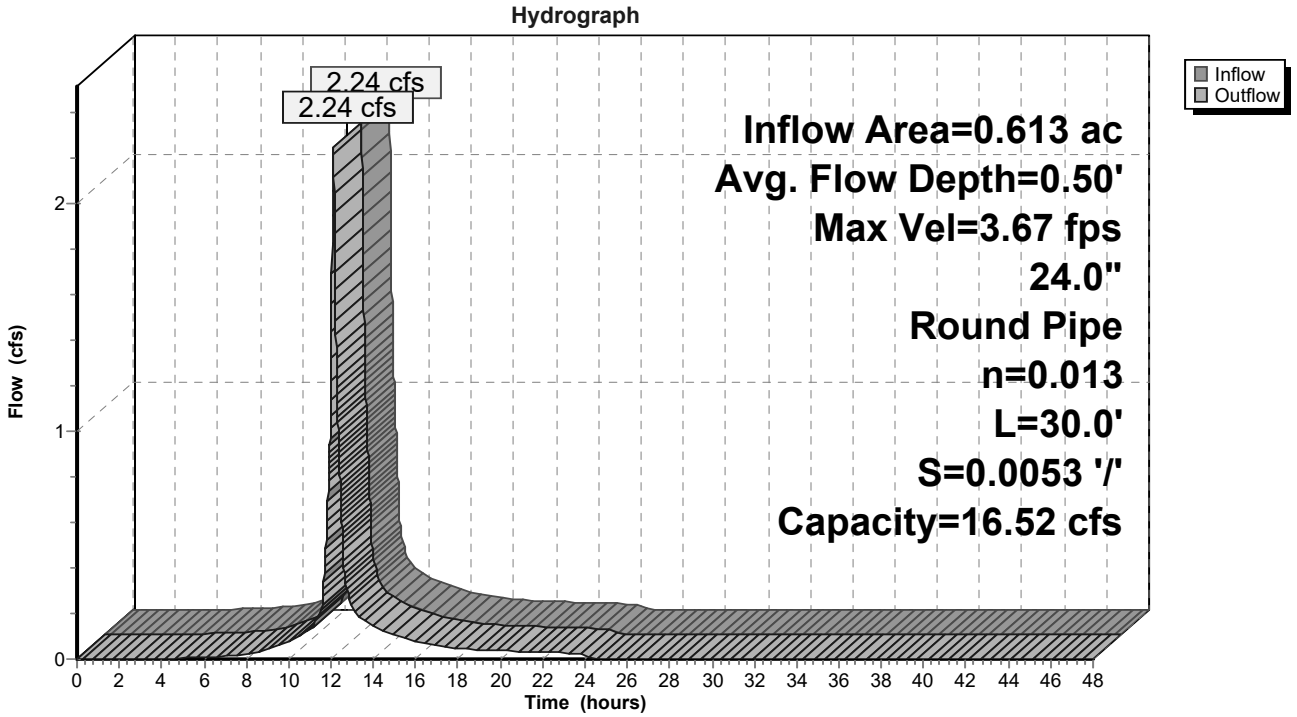
Inflow Area = 0.613 ac, 43.07% Impervious, Inflow Depth = 3.49" for 10-Year event
Inflow = 2.24 cfs @ 12.10 hrs, Volume= 0.178 af
Outflow = 2.24 cfs @ 12.11 hrs, Volume= 0.178 af, Atten= 0%, Lag= 0.2 min
Routed to Reach 13R : POI1

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.67 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 1.19 fps, Avg. Travel Time= 0.4 min

Peak Storage= 18 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.50' , Surface Width= 1.73'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'





Summary for Pond 18P: Cultec Chambers

Inflow Area = 0.566 ac, 68.01% Impervious, Inflow Depth = 4.02" for 10-Year event
Inflow = 2.61 cfs @ 12.07 hrs, Volume= 0.190 af
Outflow = 0.63 cfs @ 12.44 hrs, Volume= 0.180 af, Atten= 76%, Lag= 22.4 min
Primary = 0.63 cfs @ 12.44 hrs, Volume= 0.180 af
Routed to Reach 13R : POI1

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 146.08' @ 12.44 hrs Surf.Area= 2,106 sf Storage= 3,167 cf

Plug-Flow detention time= 118.3 min calculated for 0.180 af (95% of inflow)
Center-of-Mass det. time= 88.9 min (868.4 - 779.5)

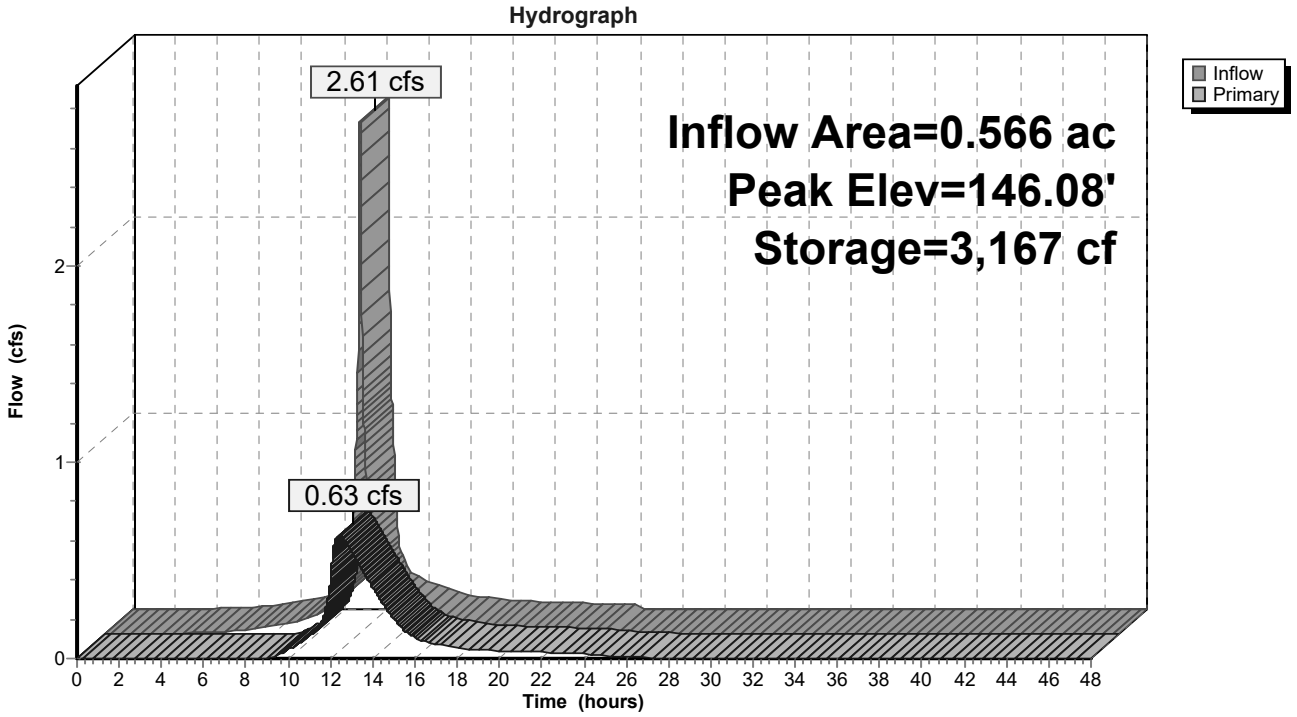
Volume	Invert	Avail.Storage	Storage Description
#1A	144.00'	1,615 cf	**31.92'W x 66.00'L x 3.21'H Field A** 6,758 cf Overall - 2,720 cf Embedded = 4,038 cf x 40.0% Voids
#2A	144.50'	2,720 cf	**Cultec R-280HD** x 63 Inside #1 Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap Row Length Adjustment= +1.00' x 6.07 sf x 7 rows
		4,335 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	144.00'	**18.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 144.00' / 143.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	144.50'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.07'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	146.70'	**6.0' 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

Primary OutFlow Max=0.63 cfs @ 12.44 hrs HW=146.08' (Free Discharge)
└**1=Culvert** (Passes 0.63 cfs of 9.83 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.63 cfs @ 5.69 fps)
  ├**3=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.41 fps)
  └**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 18P: Cultec Chambers



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1B: (new Subcat) Runoff Area=13,545 sf 55.56% Impervious Runoff Depth=5.04"
Tc=5.0 min CN=90 Runoff=1.81 cfs 0.131 af

Subcatchment 2B: (new Subcat) Runoff Area=11,109 sf 83.18% Impervious Runoff Depth=5.61"
Tc=5.0 min CN=95 Runoff=1.58 cfs 0.119 af

Subcatchment 3B: (new Subcat) Runoff Area=13,299 sf 67.95% Impervious Runoff Depth=5.27"
Tc=5.0 min CN=92 Runoff=1.83 cfs 0.134 af

Subcatchment 4B: (new Subcat) Runoff Area=9,874 sf 3.96% Impervious Runoff Depth=4.07"
Tc=5.0 min CN=81 Runoff=1.11 cfs 0.077 af

Subcatchment 5B: (new Subcat) Runoff Area=13,397 sf 18.37% Impervious Runoff Depth=4.17"
Flow Length=261' Tc=9.3 min CN=82 Runoff=1.33 cfs 0.107 af

Subcatchment 6B: (new Subcat) Runoff Area=9,562 sf 0.00% Impervious Runoff Depth=3.76"
Flow Length=151' Tc=22.0 min CN=78 Runoff=0.63 cfs 0.069 af

Reach 13R: POI1 Inflow=4.66 cfs 0.558 af
Outflow=4.66 cfs 0.558 af

Reach POI2: POI2 Inflow=0.63 cfs 0.069 af
Outflow=0.63 cfs 0.069 af

Reach R1: POI3 Avg. Flow Depth=0.26' Max Vel=6.55 fps Inflow=1.33 cfs 0.107 af
18.0" Round Pipe n=0.013 L=163.0' S=0.0384 '/' Capacity=20.59 cfs Outflow=1.33 cfs 0.107 af

Reach R2: R2 Avg. Flow Depth=0.09' Max Vel=3.75 fps Inflow=1.83 cfs 0.134 af
n=0.013 L=100.0' S=0.0600 '/' Capacity=9.06 cfs Outflow=1.82 cfs 0.134 af

Reach R3: (new Reach) Avg. Flow Depth=0.58' Max Vel=3.99 fps Inflow=3.00 cfs 0.241 af
24.0" Round Pipe n=0.013 L=30.0' S=0.0053 '/' Capacity=16.52 cfs Outflow=2.99 cfs 0.241 af

Pond 18P: Cultec Chambers Peak Elev=146.72' Storage=3,923 cf Inflow=3.39 cfs 0.250 af
Outflow=0.98 cfs 0.240 af

Total Runoff Area = 1.625 ac Runoff Volume = 0.636 af Average Runoff Depth = 4.70"
59.52% Pervious = 0.967 ac 40.48% Impervious = 0.658 ac

Summary for Subcatchment 1B: (new Subcat)

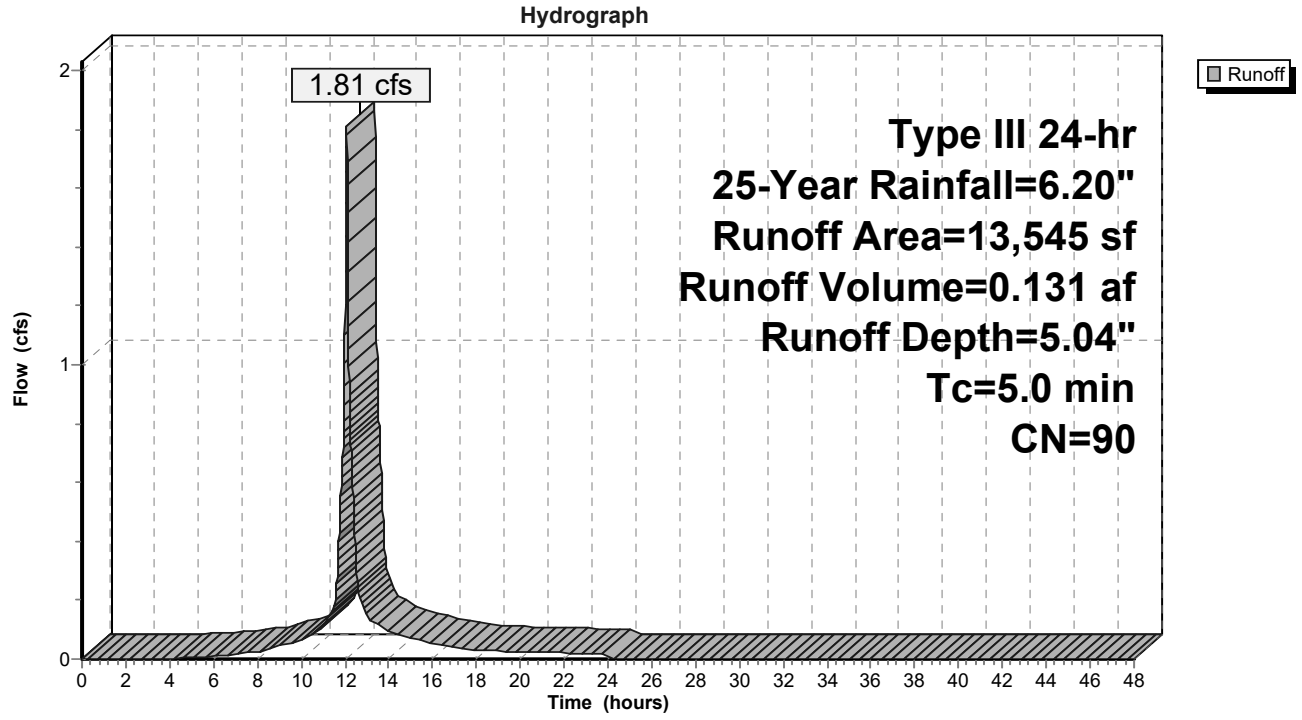
Runoff = 1.81 cfs @ 12.07 hrs, Volume= 0.131 af, Depth= 5.04"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
7,525	98	Paved parking, HSG D
6,020	80	>75% Grass cover, Good, HSG D
13,545	90	Weighted Average
6,020		44.44% Pervious Area
7,525		55.56% Impervious Area

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

Subcatchment 1B: (new Subcat)



Summary for Subcatchment 2B: (new Subcat)

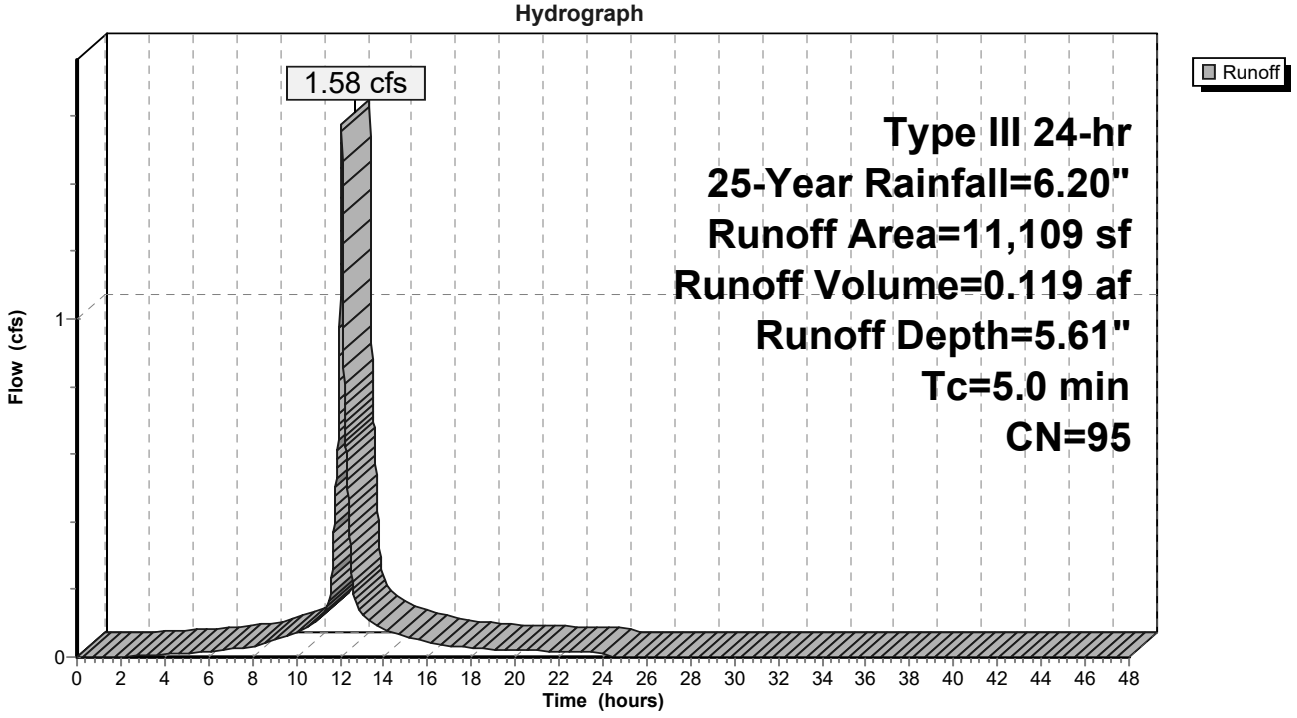
Runoff = 1.58 cfs @ 12.07 hrs, Volume= 0.119 af, Depth= 5.61"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
9,241	98	Paved parking, HSG D
1,868	80	>75% Grass cover, Good, HSG D
11,109	95	Weighted Average
1,868		16.82% Pervious Area
9,241		83.18% Impervious Area

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

Subcatchment 2B: (new Subcat)



Summary for Subcatchment 3B: (new Subcat)

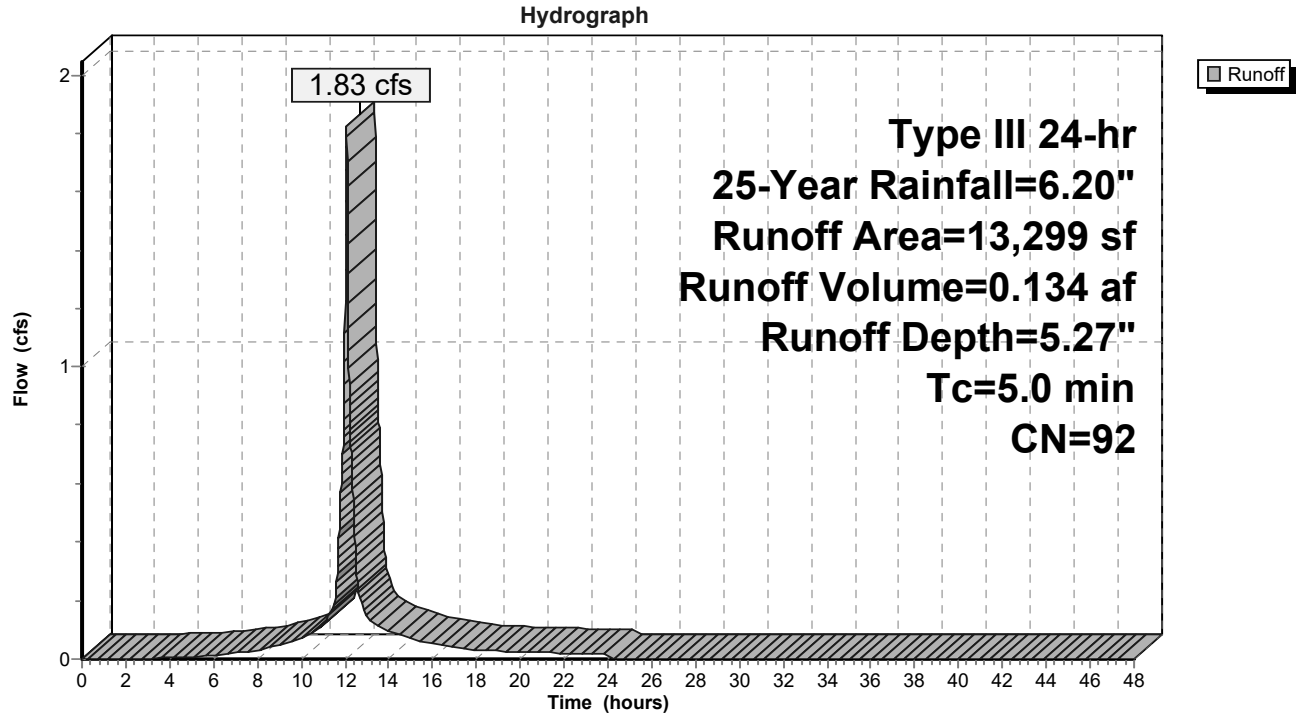
Runoff = 1.83 cfs @ 12.07 hrs, Volume= 0.134 af, Depth= 5.27"
Routed to Reach R2 : R2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
9,037	98	Paved parking, HSG D
4,262	80	>75% Grass cover, Good, HSG D
13,299	92	Weighted Average
4,262		32.05% Pervious Area
9,037		67.95% Impervious Area

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

Subcatchment 3B: (new Subcat)



Summary for Subcatchment 4B: (new Subcat)

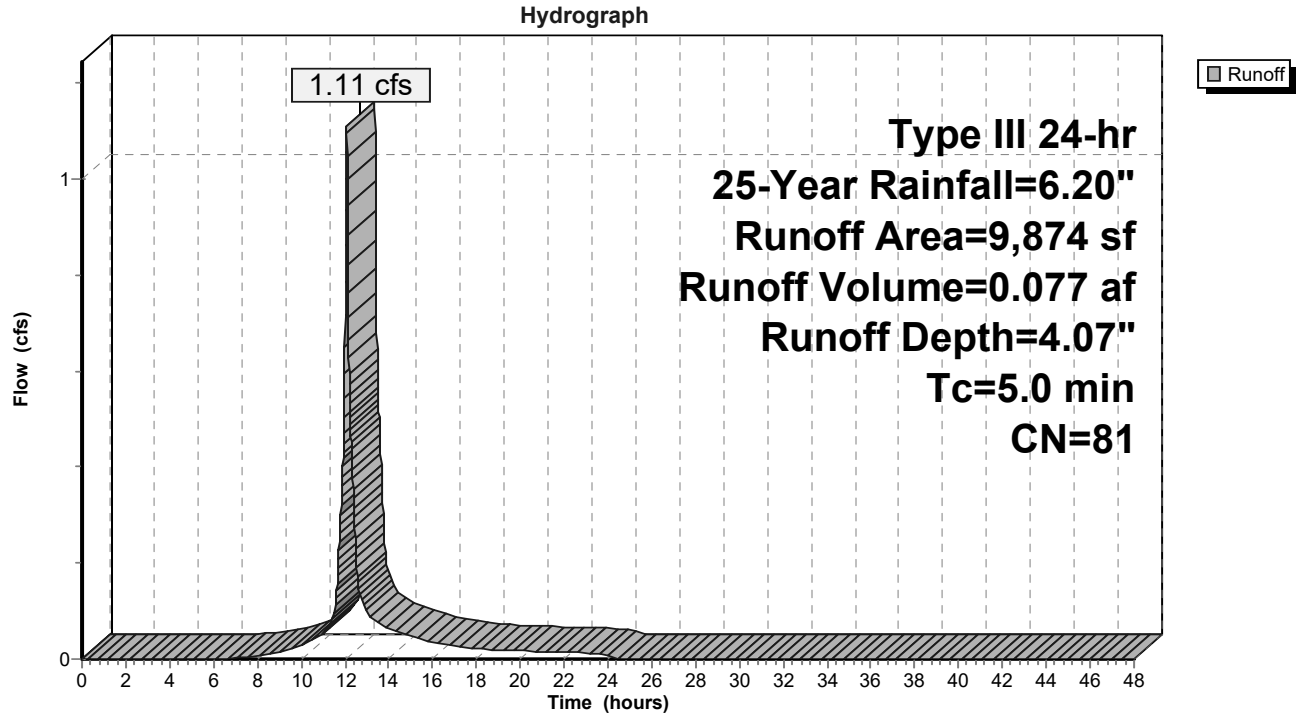
Runoff = 1.11 cfs @ 12.07 hrs, Volume= 0.077 af, Depth= 4.07"
Routed to Reach 13R : POI1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
9,483	80	>75% Grass cover, Good, HSG D
391	98	Paved parking, HSG D
9,874	81	Weighted Average
9,483		96.04% Pervious Area
391		3.96% Impervious Area

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

Subcatchment 4B: (new Subcat)



Summary for Subcatchment 5B: (new Subcat)

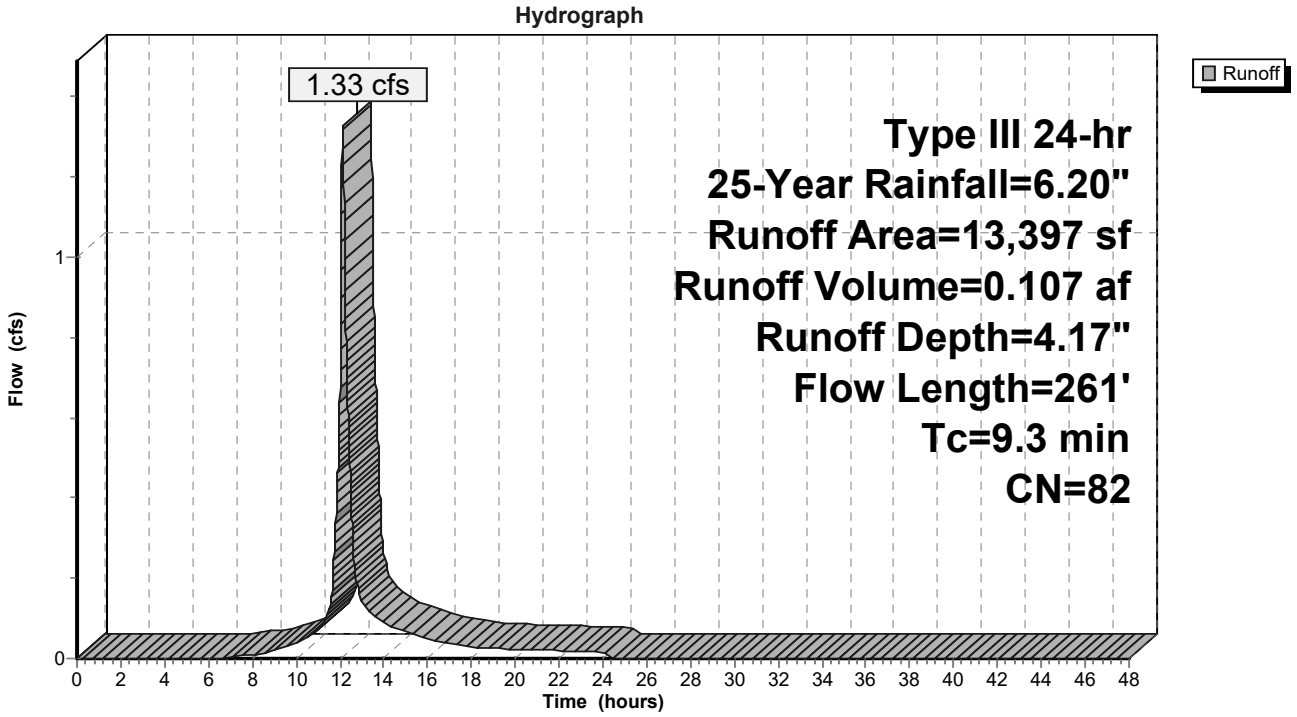
Runoff = 1.33 cfs @ 12.13 hrs, Volume= 0.107 af, Depth= 4.17"
Routed to Reach R1 : POI3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

	Area (sf)	CN	Description
	5,628	80	>75% Grass cover, Good, HSG D
	5,308	77	Woods, Good, HSG D
*	2,461	98	Ledge
	13,397	82	Weighted Average
	10,936		81.63% Pervious Area
	2,461		18.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	40	0.0500	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	15	0.3000	0.23		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
0.6	130	0.0200	3.58	8.05	**Trap/Vee/Rect Channel Flow, C-D** Bot.W=3.00' D=0.50' Z= 3.0 '/' Top.W=6.00' n= 0.030 Earth, grassed & winding
0.2	76	0.1800	6.83		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
9.3	261	Total			

Subcatchment 5B: (new Subcat)



Summary for Subcatchment 6B: (new Subcat)

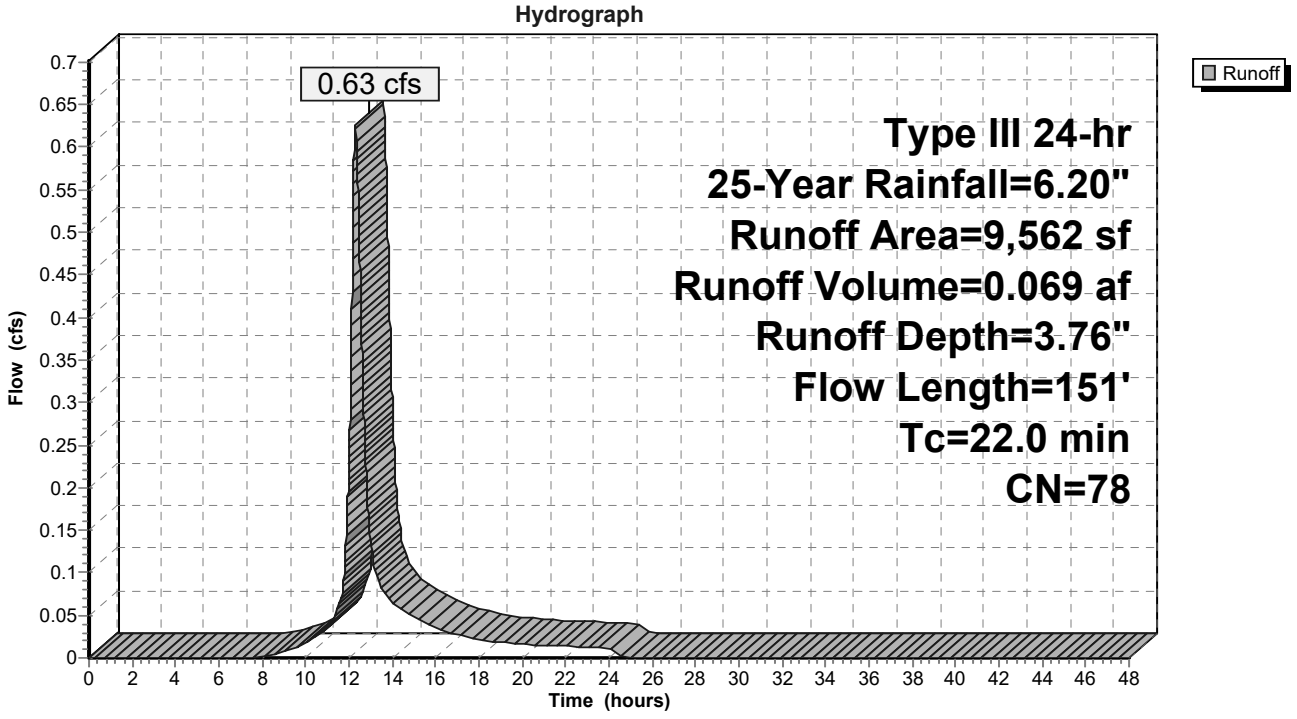
Runoff = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af, Depth= 3.76"
Routed to Reach POI2 : POI2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.20"

Area (sf)	CN	Description
4,746	80	>75% Grass cover, Good, HSG D
4,816	77	Woods, Good, HSG D
9,562	78	Weighted Average
9,562		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	54	0.0410	0.09		**Sheet Flow, A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
11.8	97	0.0330	0.14		**Sheet Flow, B-C** Grass: Dense n= 0.240 P2= 3.00"
22.0	151	Total			

Subcatchment 6B: (new Subcat)

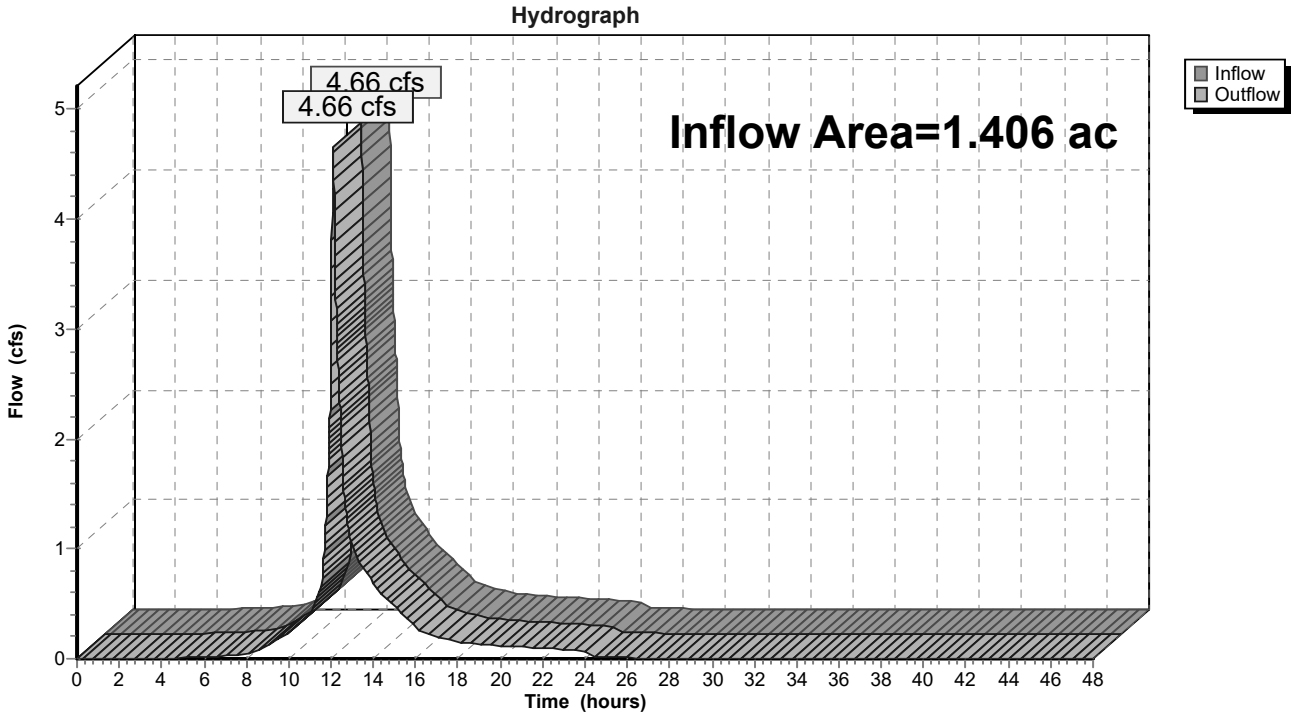


Summary for Reach 13R: POI1

Inflow Area = 1.406 ac, 46.80% Impervious, Inflow Depth = 4.76" for 25-Year event
Inflow = 4.66 cfs @ 12.10 hrs, Volume= 0.558 af
Outflow = 4.66 cfs @ 12.10 hrs, Volume= 0.558 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 13R: POI1

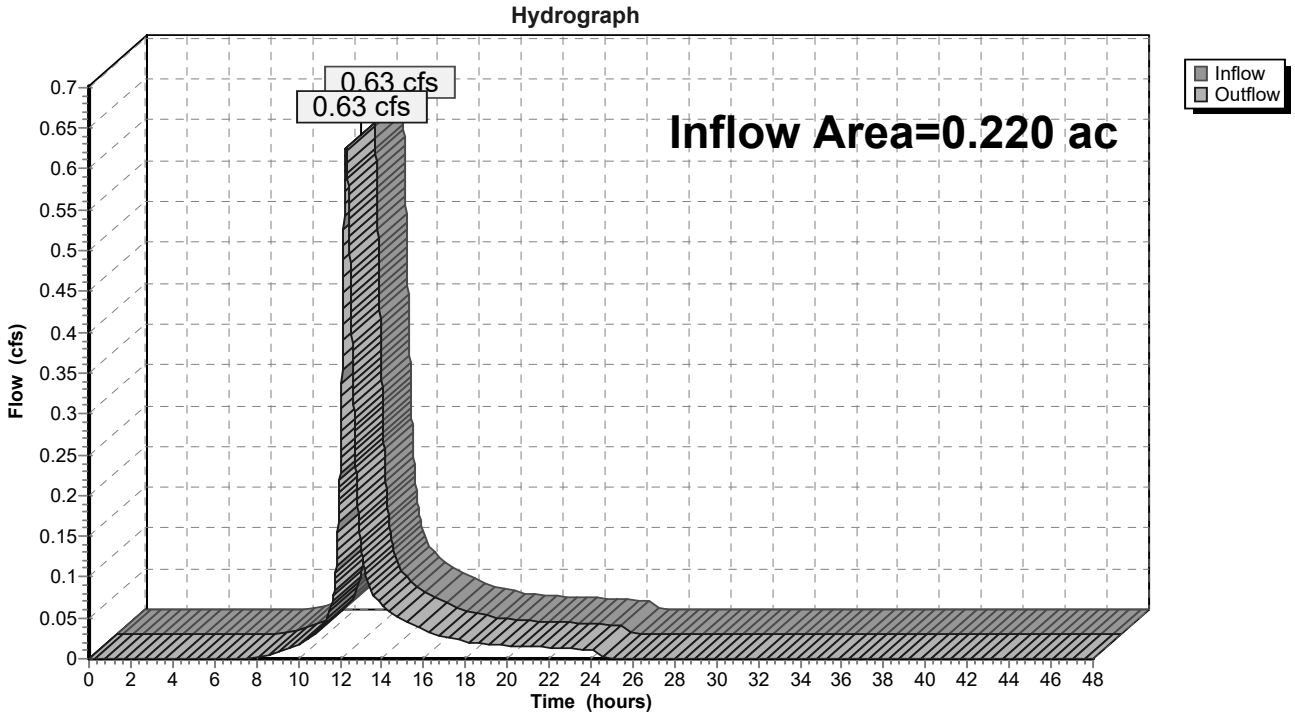


Summary for Reach POI2: POI2

Inflow Area = 0.220 ac, 0.00% Impervious, Inflow Depth = 3.76" for 25-Year event
Inflow = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af
Outflow = 0.63 cfs @ 12.30 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach POI2: POI2



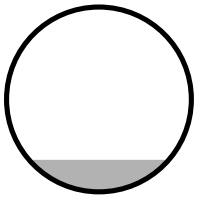
Summary for Reach R1: POI3

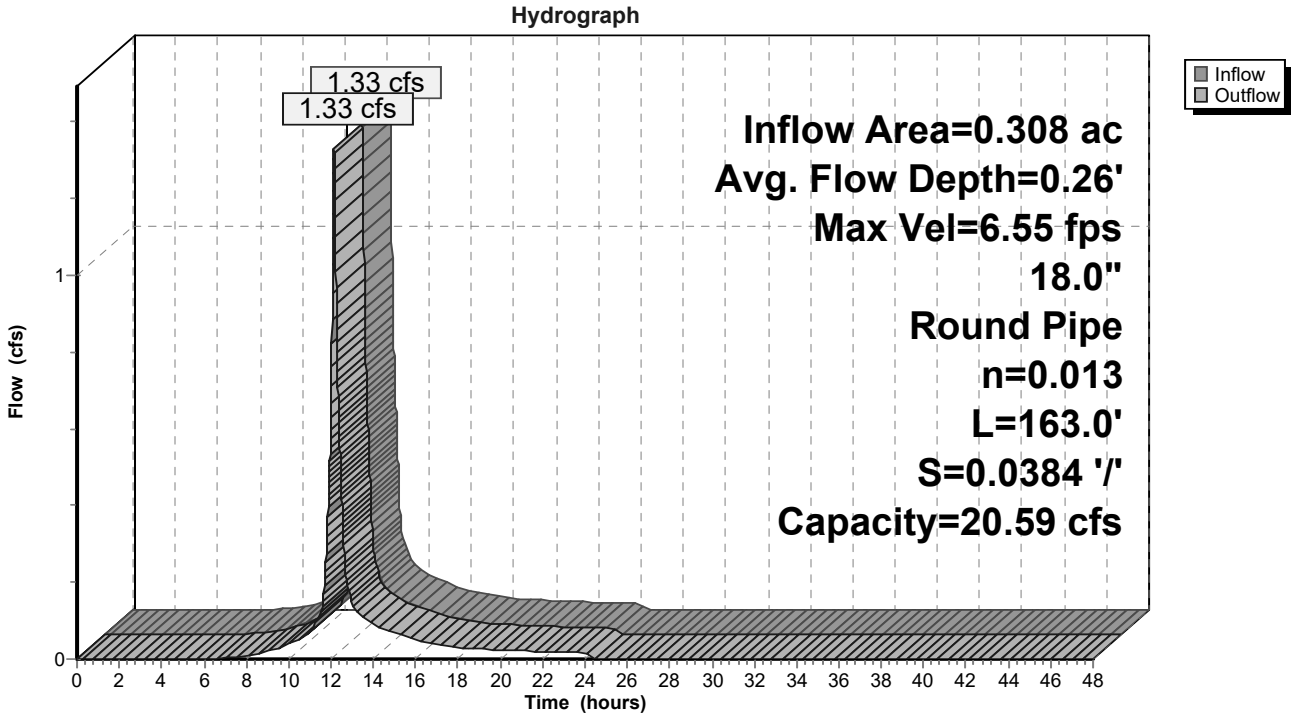
Inflow Area = 0.308 ac, 18.37% Impervious, Inflow Depth = 4.17" for 25-Year event
Inflow = 1.33 cfs @ 12.13 hrs, Volume= 0.107 af
Outflow = 1.33 cfs @ 12.14 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.7 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.55 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 2.27 fps, Avg. Travel Time= 1.2 min

Peak Storage= 33 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.26' , Surface Width= 1.13'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 20.59 cfs

18.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 163.0' Slope= 0.0384 '/'
Inlet Invert= 137.50', Outlet Invert= 131.24'





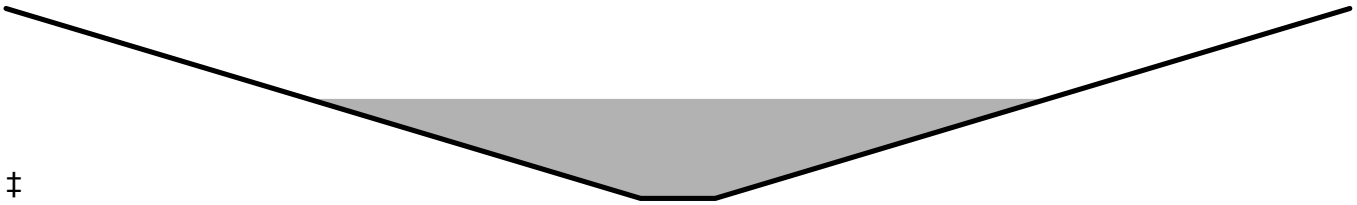
Summary for Reach R2: R2

Inflow Area = 0.305 ac, 67.95% Impervious, Inflow Depth = 5.27" for 25-Year event
Inflow = 1.83 cfs @ 12.07 hrs, Volume= 0.134 af
Outflow = 1.82 cfs @ 12.08 hrs, Volume= 0.134 af, Atten= 0%, Lag= 0.8 min
Routed to Reach R3 : (new Reach)

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.75 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.37 fps, Avg. Travel Time= 1.2 min

Peak Storage= 49 cf @ 12.08 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 9.91'
Bank-Full Depth= 0.17' Flow Area= 1.6 sf, Capacity= 9.06 cfs

1.00' x 0.17' deep channel, n= 0.013 Asphalt, smooth
Side Slope Z-value= 50.0 '/' Top Width= 18.00'
Length= 100.0' Slope= 0.0600 '/'
Inlet Invert= 144.00', Outlet Invert= 138.00'



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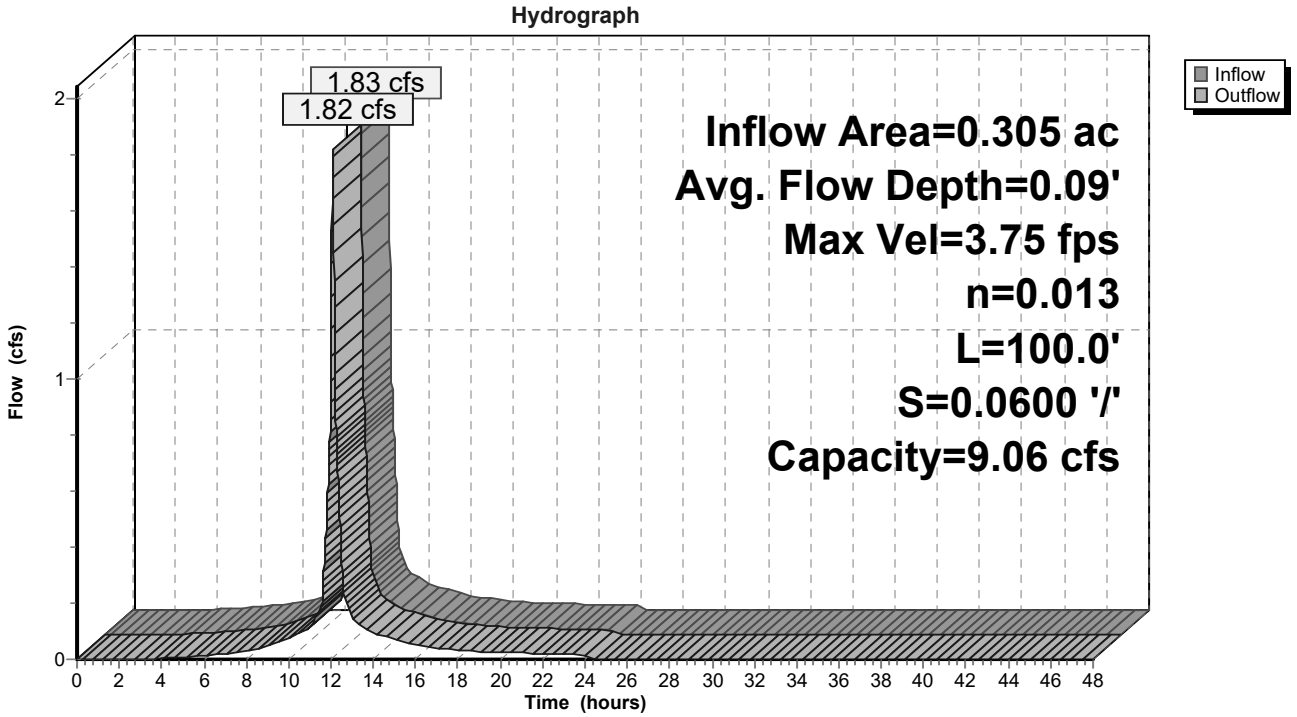


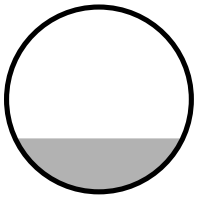
Summary for Reach R3: (new Reach)

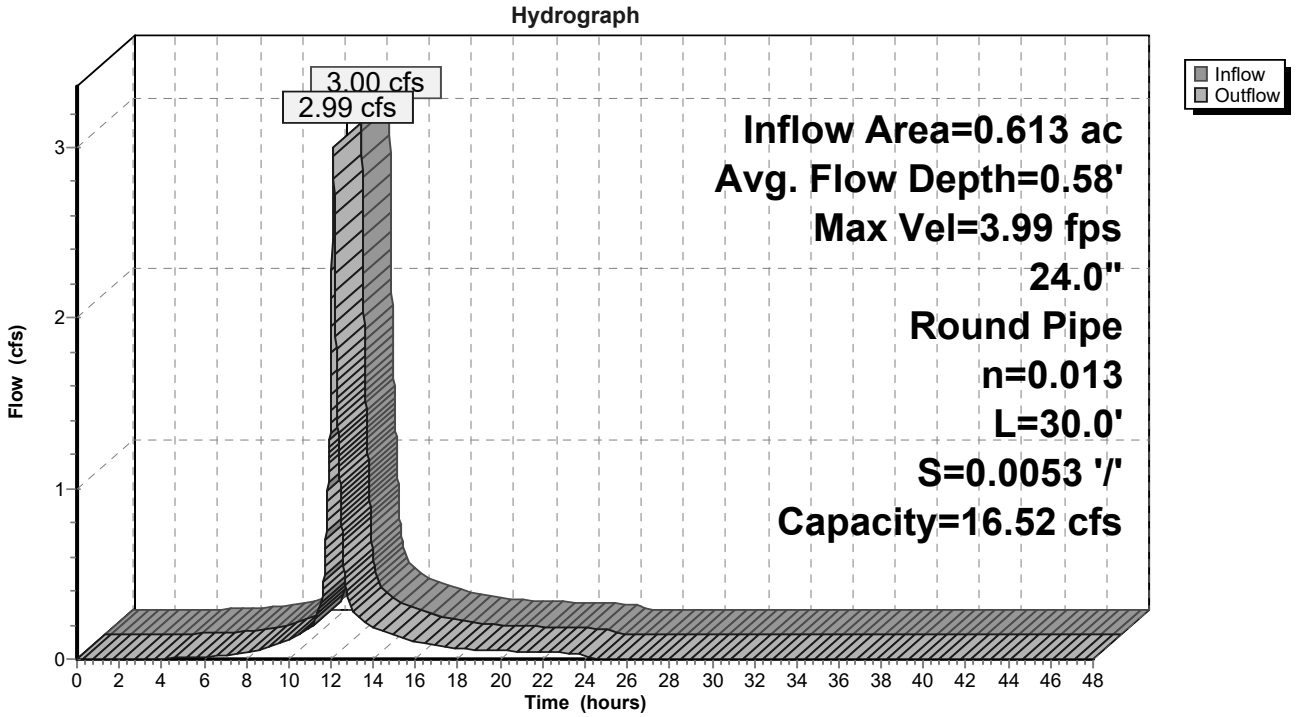
Inflow Area = 0.613 ac, 43.07% Impervious, Inflow Depth = 4.72" for 25-Year event
Inflow = 3.00 cfs @ 12.10 hrs, Volume= 0.241 af
Outflow = 2.99 cfs @ 12.11 hrs, Volume= 0.241 af, Atten= 0%, Lag= 0.2 min
Routed to Reach 13R : POI1

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.99 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 1.29 fps, Avg. Travel Time= 0.4 min

Peak Storage= 23 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.58' , Surface Width= 1.81'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.52 cfs

24.0" Round Pipe
n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0053 '/'
Inlet Invert= 131.40', Outlet Invert= 131.24'





Summary for Pond 18P: Cultec Chambers

Inflow Area = 0.566 ac, 68.01% Impervious, Inflow Depth = 5.30" for 25-Year event
Inflow = 3.39 cfs @ 12.07 hrs, Volume= 0.250 af
Outflow = 0.98 cfs @ 12.39 hrs, Volume= 0.240 af, Atten= 71%, Lag= 19.0 min
Primary = 0.98 cfs @ 12.39 hrs, Volume= 0.240 af
Routed to Reach 13R : POI1

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 146.72' @ 12.39 hrs Surf.Area= 2,106 sf Storage= 3,923 cf

Plug-Flow detention time= 106.9 min calculated for 0.240 af (96% of inflow)
Center-of-Mass det. time= 83.5 min (856.3 - 772.8)

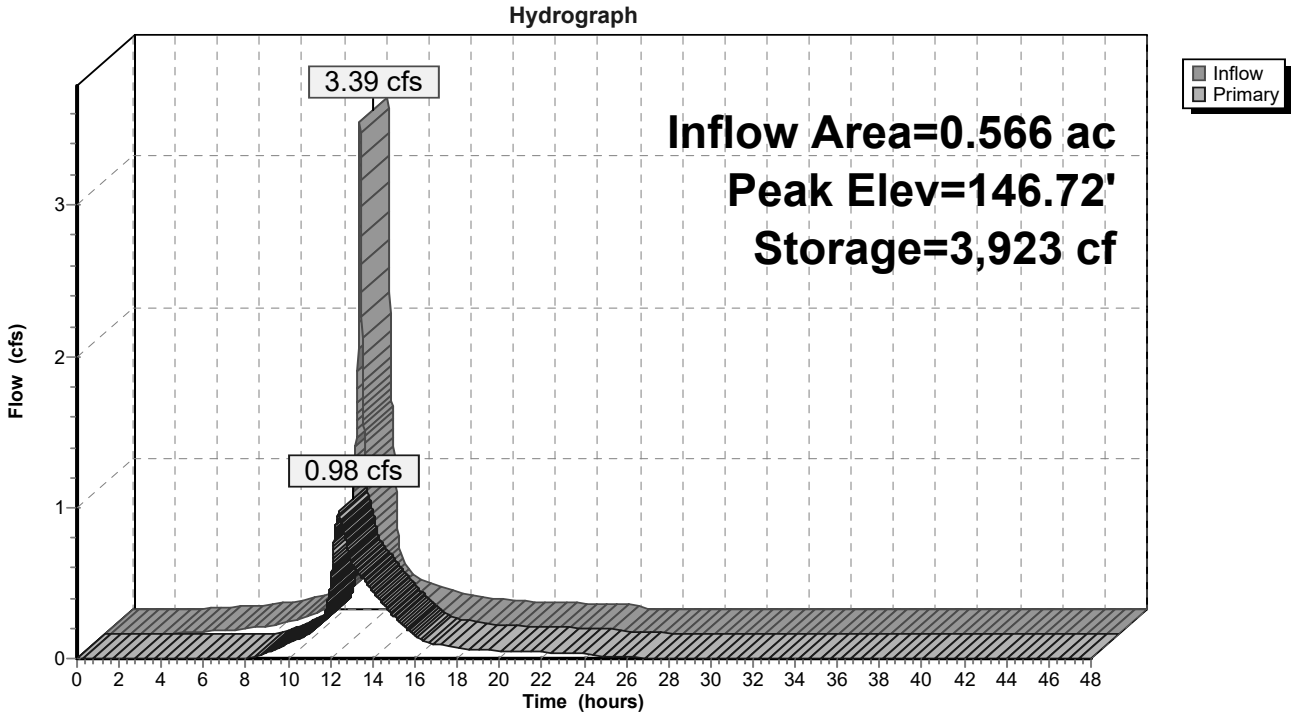
Volume	Invert	Avail.Storage	Storage Description
#1A	144.00'	1,615 cf	**31.92'W x 66.00'L x 3.21'H Field A** 6,758 cf Overall - 2,720 cf Embedded = 4,038 cf x 40.0% Voids
#2A	144.50'	2,720 cf	**Cultec R-280HD** x 63 Inside #1 Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap Row Length Adjustment= +1.00' x 6.07 sf x 7 rows
		4,335 cf	Total Available Storage

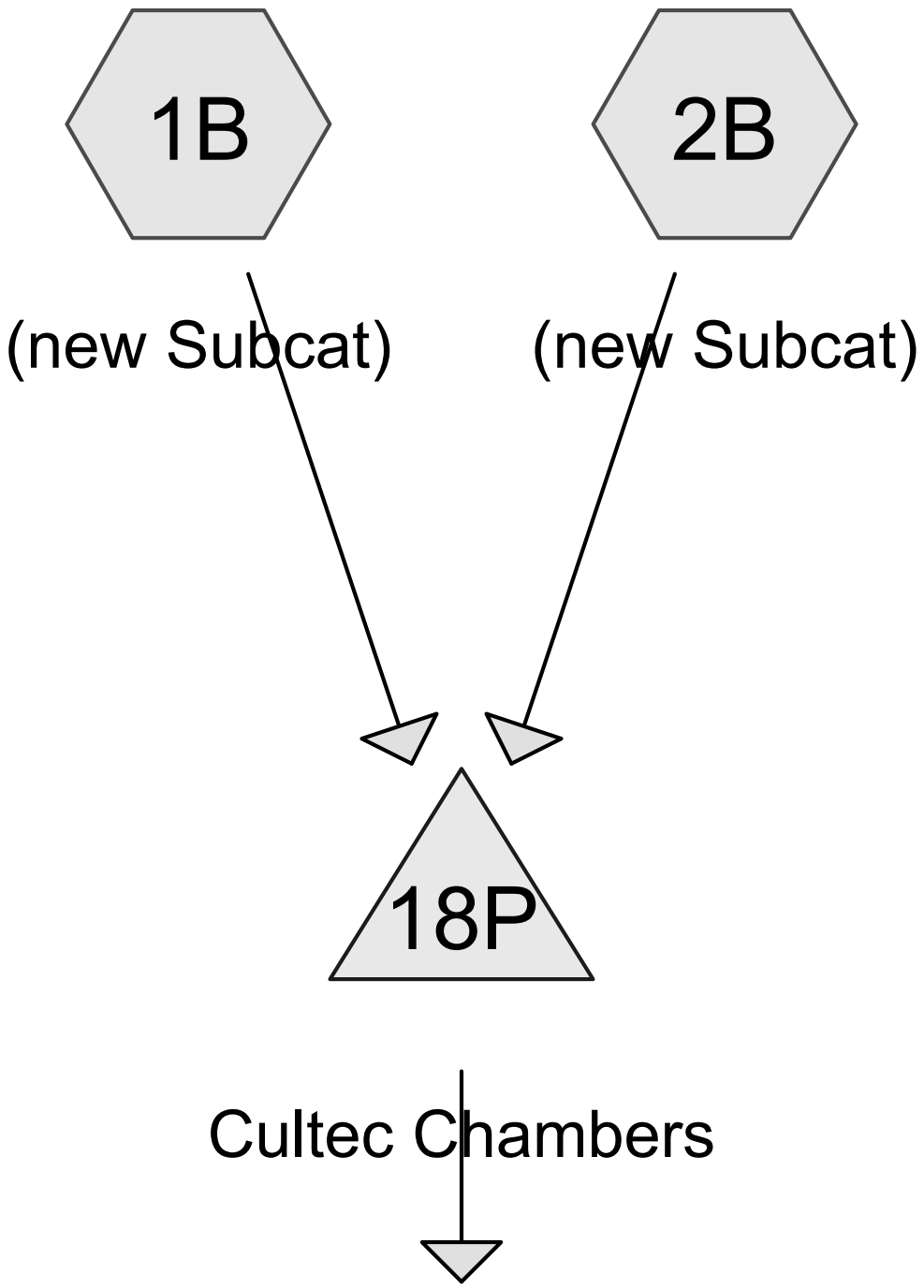
Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	144.00'	**18.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 144.00' / 143.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	144.50'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.07'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	146.70'	**6.0' 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

Primary OutFlow Max=0.97 cfs @ 12.39 hrs HW=146.72' (Free Discharge)
└**1=Culvert** (Passes 0.97 cfs of 11.94 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.76 cfs @ 6.86 fps)
├**3=Orifice/Grate** (Orifice Controls 0.17 cfs @ 3.48 fps)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 0.04 cfs @ 0.38 fps)

Pond 18P: Cultec Chambers





Subcat Reach Pond Link

Routing Diagram for Popeyes Stormwater - Post
Prepared by LJB, Inc, Printed 3/10/2026
HydroCAD® 10.20-7a s/n 01265 © 2025 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.181	80	>75% Grass cover, Good, HSG D (1B, 2B)
0.385	98	Paved parking, HSG D (1B, 2B)
0.566	**92**	**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1B: (new Subcat) Runoff Area=13,545 sf 55.56% Impervious Runoff Depth=7.50"
Tc=5.0 min CN=90 Runoff=2.63 cfs 0.194 af

Subcatchment 2B: (new Subcat) Runoff Area=11,109 sf 83.18% Impervious Runoff Depth=8.10"
Tc=5.0 min CN=95 Runoff=2.23 cfs 0.172 af

Pond 18P: Cultec Chambers Peak Elev=147.02' Storage=4,179 cf Inflow=4.87 cfs 0.366 af
Outflow=4.19 cfs 0.356 af

Total Runoff Area = 0.566 ac Runoff Volume = 0.366 af Average Runoff Depth = 7.77"
31.99% Pervious = 0.181 ac 68.01% Impervious = 0.385 ac

Summary for Subcatchment 1B: (new Subcat)

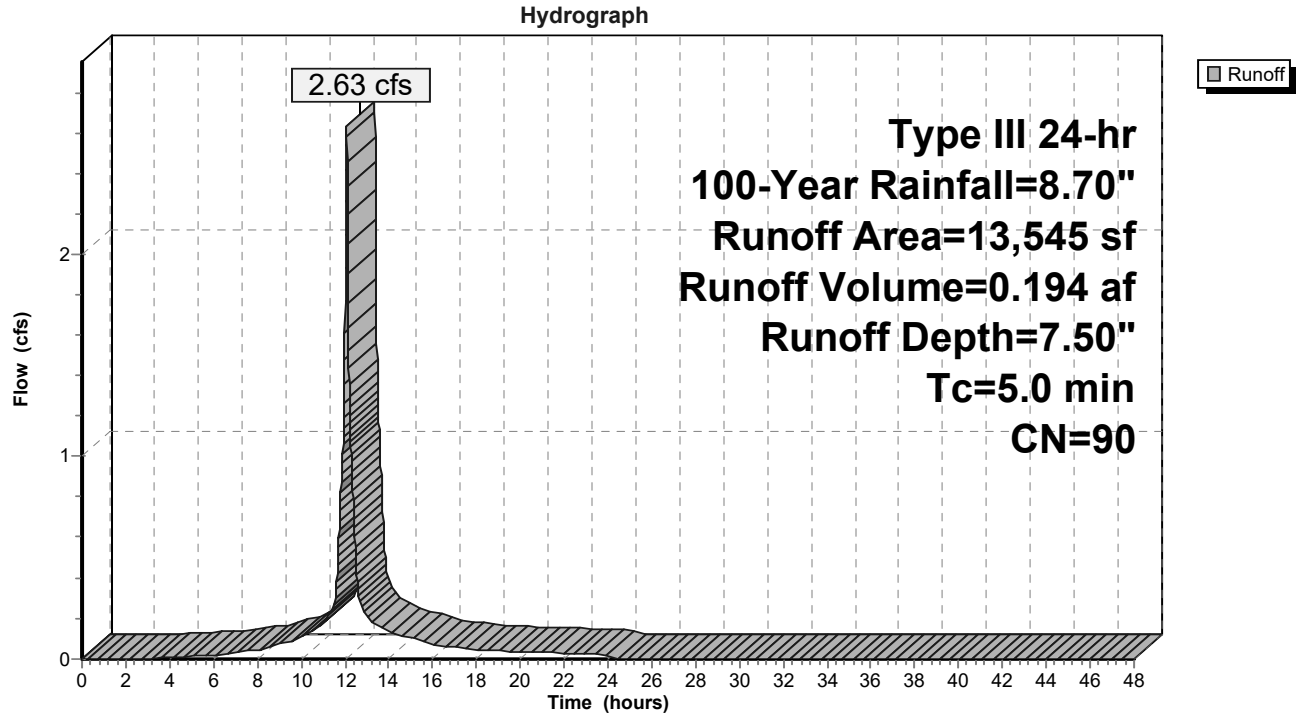
Runoff = 2.63 cfs @ 12.07 hrs, Volume= 0.194 af, Depth= 7.50"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.70"

Area (sf)	CN	Description
7,525	98	Paved parking, HSG D
6,020	80	>75% Grass cover, Good, HSG D
13,545	90	Weighted Average
6,020		44.44% Pervious Area
7,525		55.56% Impervious Area

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

Subcatchment 1B: (new Subcat)



Summary for Subcatchment 2B: (new Subcat)

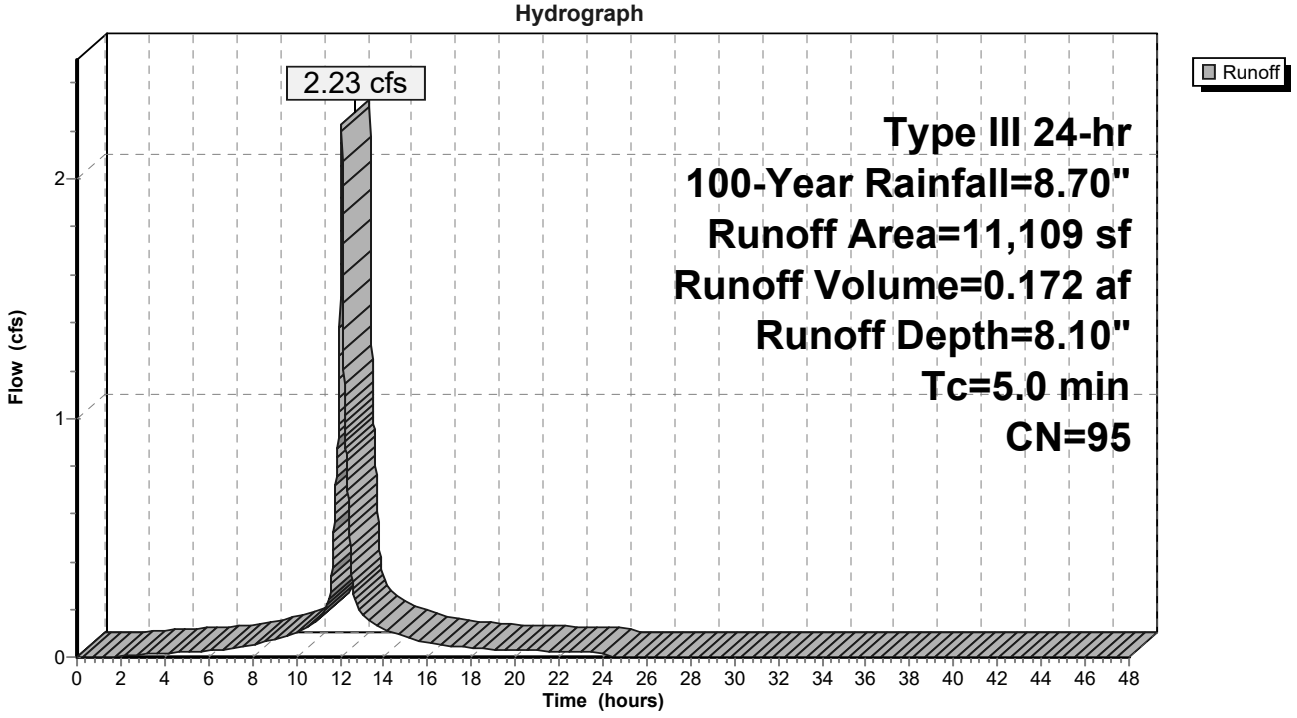
Runoff = 2.23 cfs @ 12.07 hrs, Volume= 0.172 af, Depth= 8.10"
Routed to Pond 18P : Cultec Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.70"

Area (sf)	CN	Description
9,241	98	Paved parking, HSG D
1,868	80	>75% Grass cover, Good, HSG D
11,109	95	Weighted Average
1,868		16.82% Pervious Area
9,241		83.18% Impervious Area

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

Subcatchment 2B: (new Subcat)



Summary for Pond 18P: Cultec Chambers

Inflow Area = 0.566 ac, 68.01% Impervious, Inflow Depth = 7.77" for 100-Year event
Inflow = 4.87 cfs @ 12.07 hrs, Volume= 0.366 af
Outflow = 4.19 cfs @ 12.12 hrs, Volume= 0.356 af, Atten= 14%, Lag= 2.7 min
Primary = 4.19 cfs @ 12.12 hrs, Volume= 0.356 af
Routed to Reach 13R : POI1

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 147.02' @ 12.12 hrs Surf.Area= 2,106 sf Storage= 4,179 cf

Plug-Flow detention time= 86.2 min calculated for 0.356 af (97% of inflow)
Center-of-Mass det. time= 69.7 min (833.7 - 764.0)

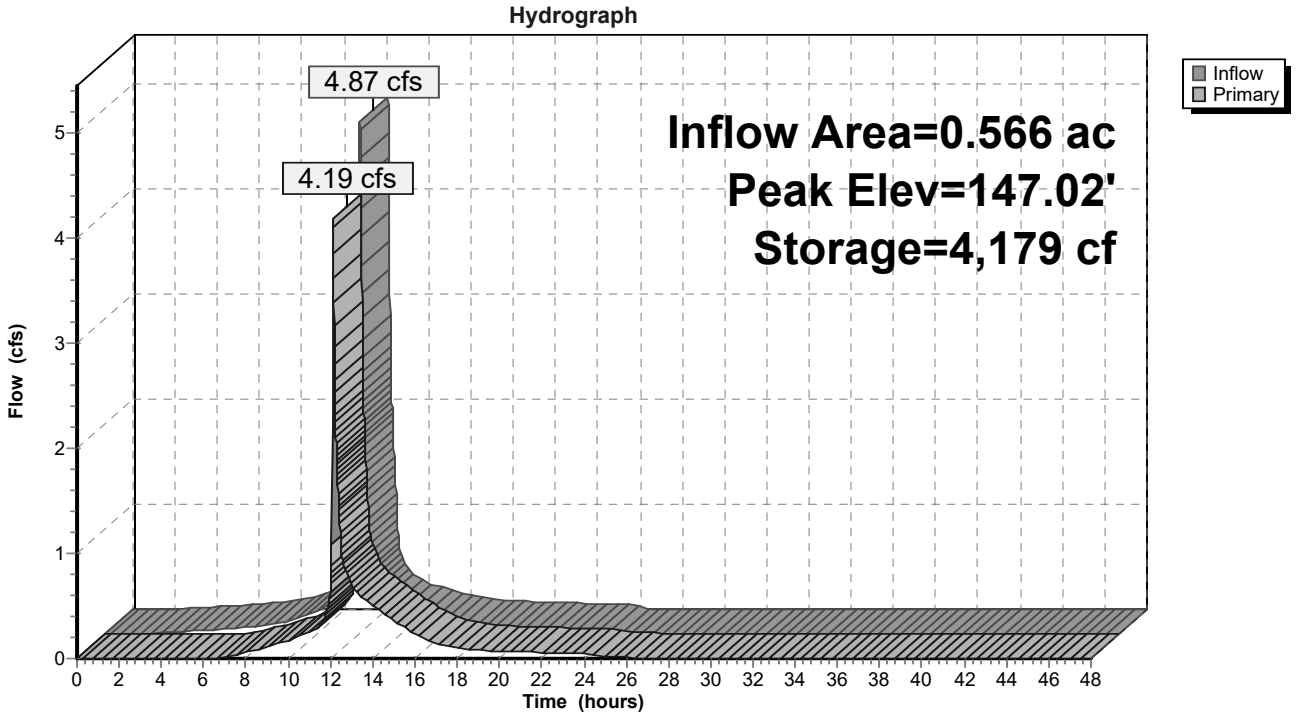
Volume	Invert	Avail.Storage	Storage Description
#1A	144.00'	1,615 cf	**31.92'W x 66.00'L x 3.21'H Field A** 6,758 cf Overall - 2,720 cf Embedded = 4,038 cf x 40.0% Voids
#2A	144.50'	2,720 cf	**Cultec R-280HD** x 63 Inside #1 Effective Size= 46.9"W x 26.0"H => 6.07 sf x 7.00'L = 42.5 cf Overall Size= 47.0"W x 26.5"H x 8.00'L with 1.00' Overlap Row Length Adjustment= +1.00' x 6.07 sf x 7 rows
		4,335 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	144.00'	**18.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 144.00' / 143.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	144.50'	**4.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	146.07'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	146.70'	**6.0' 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

Primary OutFlow Max=4.17 cfs @ 12.12 hrs HW=147.02' (Free Discharge)
└**1=Culvert** (Passes 4.17 cfs of 12.82 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.81 cfs @ 7.36 fps)
├**3=Orifice/Grate** (Orifice Controls 0.21 cfs @ 4.38 fps)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 3.14 cfs @ 1.63 fps)

Pond 18P: Cultec Chambers



BASIC STANDARDS

EROSION AND SEDIMENTATION CONTROL REPORT

COMMERCIAL DEVELOPMENT

BIDDEFORD , MAINE

Prepared for

GOLDEN CHICKEN OF BIDDEFORD, LLC.
10 BITTERSWEET COURT
NEWINGTON, ME 06111

Prepared by

Gorrill Palmer
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South Portland, Maine 04106
207.772.2515

MARCH 2026

Overview

This Exhibit demonstrates the developer has made adequate provision for controlling erosion and sedimentation.

Gorrill Palmer has been retained by Golden Chicken of Biddeford, LLC to prepare an Erosion and Sedimentation Control Report for a proposed 2,536 SF Popeyes fast-food restaurant located at 584 Alfred Street in Biddeford, Maine.

Figure 1 is a map showing the project location. This narrative contains the general erosion and sedimentation control measures, which are appropriate for the construction of the project.

This narrative contains the general erosion and sedimentation control measures, which are appropriate for the construction of the project. Erosion and sedimentation control plans and details have also been prepared by Gorrill Palmer to accompany this report.

Existing Conditions and Soil Types

The project site is located at 584 Alfred Street and identified as Map 2 Lot 23 on the City of Biddeford's Assessor's Map. The previous use of the site was a residence and a small engine repair business, however the buildings have since been demolished and the site is currently vacant. Pavement and gravel areas from the prior use still remain on site.

Topography in the area of the proposed construction slopes in a generally easterly direction eventually being tributary to Thatcher Brook.

Abutting land uses include:

- North – Undeveloped Woods
- West – Undeveloped Woods and Andrews Road
- South – Alfred Street and Biddeford Crossing
- East – Retail & Commercial Development Plaza

The Medium Intensity Soil Survey for York County as was prepared by the Natural Resources Conservation Service utilized in identifying the on-site soils. The soil report for this vicinity follows this page. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. The higher values are indicative of the more erodible soils. The following table

Map Symbol	Soil Type	K Value	Hydrologic Soil Group
SrB	Skerry Fine Sandy Loam	0.28	C/D
Sc	Scantic Silt Loam	0.32	D
LyC	Lyman-Rock	0.32	D

Based on the review of the K Values, the on-site soils have moderate susceptibility to erosion.

Existing Erosion Problems

Gorrill Palmer is not aware of any existing erosion problems at the project site.

Protected Natural Resources

Gorrill Palmer is not aware of any existing protected natural resources at the project site.

Critical Areas

Gorrill Palmer is not aware of any critical areas such as wetlands, vernal pools, or steams at the project site.

Erosion Control Measures and Site Stabilization

The primary emphasis of the erosion/sedimentation control plan, which will be implemented for this project, is as follows:

- Development of a careful construction sequence.
- Rapid revegetation of denuded areas to minimize the period of soil exposure.
- Rapid stabilization of drainage paths to avoid rill and gully erosion.
- The use of on-site measures to capture sediment (hay bales/stone check dams/silt fence, etc.)

The following temporary and permanent erosion and sediment control devices will be implemented as part of the site development. These devices shall be installed as indicated on the plans or as described within this report. For further reference, see the latest edition of the Maine Erosion and Sediment Control Practices Field Guide for Contractors.

A. Dewatering

Water from construction trench dewatering shall pass first through a filter bag or secondary containment structure (e.g. hay bale lined pool) prior to discharge. The discharge site shall be selected to avoid flooding, icing, and sediment discharges to a protected resource. In no case shall the filter bag or containment structure be located within 50 feet of a protected natural resource.

B. Inspection and Construction Monitoring

Maintenance measures shall be applied as needed during the entire construction season. Before and within 24 hours after each wet weather event that produces more than 0.5 inch of rainfall in a consecutive 24-hour period, snowstorm, or period of thawing and runoff, the qualified contractor knowledgeable of DEP standards shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function. Additionally, inspections shall be performed at least once a week. Following the temporary and/or final seeding and mulching, the contractor shall in the spring inspect and repair any damages and/or unestablished spots. Established vegetative cover means a minimum of 90% of areas vegetated with vigorous growth.

C. Temporary Erosion Control Measures

The following measures are planned as temporary erosion/sedimentation control measures during construction:

1. A crushed stone-stabilized construction entrance shall be placed at the approved access drive as depicted on the plans.

2. Siltation fence or wood waste compost berms shall be installed downstream of any disturbed areas to trap runoff- borne sediments until grass areas are revegetated. The silt fence and/or wood waste compost berms shall be installed per the details provided in this package and inspected at least once a week and before and immediately after a storm event of 0.5 inches or greater, and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence or berm line. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the

fence or berm, the barrier shall be replaced with a stone check dam. Wood waste compost berms are not to be used adjacent to wetland areas that are not to be disturbed.

3. Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15th and October 15th on slopes of less then 15 percent shall be anchored by applying water; mulch placed on slopes of equal to or steeper than 15 percent shall be covered by a fabric netting and anchored with staples in accordance with manufacturer's recommendation. Fabric netting and staples shall be used on disturbed areas within 50' of lakes, streams, and wetlands regardless of the upstream slope. Mulch placed between October 15th and April 15th on slopes equal to or steeper than 8 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1 and equal to or flatter than 2:1, which are to be revegetated, shall receive curlex blankets by American Excelsior or equal. Slopes steeper than 2:1 shall receive riprap as noted on the plans. The mulch application rate for both temporary and permanent seeding is 75 lbs per 1000 sf as identified in Appendix A of this section. Mulch shall not be placed over snow.

4. Temporary stockpiles of stumps, grubbings, or common excavation will be protected as follows:

   a.) Temporary stockpiles shall not be located within 50 feet of any wetlands which will not be disturbed and shall be located away from drainage swales.

   b.) Stockpiles shall be stabilized within 7 days by either temporarily seeding the stockpile by a hydroseed method containing an emulsified mulch tackifier or by covering the stockpile with mulch, such as hay, straw, or erosion control mix.

   c.) Stockpiles shall be surrounded by sedimentation barrier at the time of formation.

5. All denuded areas that are within 50 feet of an undisturbed wetland, which have been rough graded and are not located within a building pad, parking area, or access drive subbase area, shall receive mulch or erosion control mesh fabric within 48 hours of initial disturbance of soil. All areas within 100 feet of an undisturbed wetland shall be mulched prior to any predicted rain event regardless of the 48 hour window. In other areas, the time period may be extended to 7 days.

6. For work, which is conducted between October 15th and April 15th of any calendar year, all denuded areas, shall be covered with hay mulch or erosion control mix, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 2 days for all areas.

7. Alfred Street shall be swept to control mud and dust as necessary.

8. During grubbing operations stone check dams shall be installed at any evident concentrated flow discharge points and as directed on the Erosion Control Plans.

9. Silt fencing with a minimum stake spacing of 6 feet shall be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence shall be anchored.

10. Wood waste compost/bark berms may be used in lieu of siltation fencing. Berms shall be removed and spread in a layer not to exceed 3" thick once upstream areas are completed and a 90% catch of vegetation is attained.

11. Water and/or calcium chloride shall be furnished and applied in accordance with MDOT specifications – Section 637 – Dust Control.

12. Loam and seed is intended to serve, as the primary permanent revegetative measure for all denuded areas not provided with other erosion control measures, such as riprap. Application rates are provided in Appendix A of this section. Seeding shall not occur over snow.

D. Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion and Sedimentation Control Plan:

1. All areas disturbed during construction, but not subject to other restoration (paving, riprap, gravel subbase, etc.) will be loamed, limed, fertilized, mulched, and seeded. Fabric netting, anchored with staples, shall be placed over the mulch in areas as noted in Temporary Erosion Control Measures paragraph 4 of this report. Native topsoil shall be stockpiled and reused for final restoration when it is of sufficient quality.

2. All storm drain pipe outlets shall have riprap aprons at their outlet to protect the outlet and receiving channel from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized to the extent practicable prior to directing runoff to the tributary pipe or culvert.

E. Maintenance

If Best Management Practices (BMPs) need to be repaired, the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. The contractor is responsible for all maintenance associated with these inspections. If additional BMPs or significant repair of BMPs are necessary, implementation must be completed within 7 calendar days and prior to any storm event (wet weather event that produces more than 0.5 inch in a consecutive 24-hour period). All measures must be maintained in effective operating condition until areas are permanently stabilized.

F. Documentation

Keep a log (report) summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to Department and Town staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

Implementation Schedule

The following construction sequence shall be required to ensure the effectiveness of the erosion and sedimentation control measures are optimized:

It is anticipated that construction will begin in summer of 2026, with an anticipated opening in the

winter of 2026.

Note: For all grading activities, the contractor shall exercise extreme caution not to overexpose the site, this shall be accomplished by limiting the disturbed area. Area shall be limited to no more than the contractor can mulch in one day.

1. Install stabilized construction entrances at the approved location(s).
2. Install perimeter silt fence and/or wood waste berms.
3. Install diversion dikes, or check dams (clear only those areas necessary to install BMP's)
4. Clear and grub site. Install stone check dams at any evident concentrated flow discharge points.
5. Commence installation of drainage appurtenances.
6. Commence earthwork for stormwater facilities.
7. Commence earthwork and grading to subgrade.
8. Commence installation of retaining walls.
9. Commence installation of water and sewer lines.
10. Continue earthwork and grading to subgrade as necessary for construction.
11. Complete installation of underground utilities to within 5' of future buildings.
12. Install light pole foundations and light poles.
13. Complete remaining earthwork operations.
14. Complete installation of drainage appurtenances.
15. Install sub-base and base gravel within parking areas, walkways, and all driveways.
16. Install curbing in parking areas as needed.
17. Install base course paving for drives and parking area as well as concrete surfaces.
18. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
19. Install surface course paving for drives and parking areas. Stripe per plan.
20. Once the site is stabilized and a 90% catch of vegetation has been obtained, remove all temporary erosion control measures.
21. Touch up loam and seed.

Prior to construction of the project, the contractor shall submit to the owner a schedule for the completion of the work, which will satisfy the following criteria:

1. The above construction sequence should generally be completed in the specified order; however, several separate items may be constructed simultaneously. Work must also be scheduled or phased to reduce the extent of the exposed areas as specified below. The intent of this sequence is to provide for erosion control and to

have structural measures such as silt fence and construction entrances in place before large areas of land are denuded.

2. The work shall be conducted in sections which shall:

   - Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 30 days.

   - Revegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event; or temporarily stabilized within 48 hours of initial disturbance of soil for areas within 50 feet of an undisturbed wetland and 7 days for all other areas. Areas within 50 feet of an undisturbed wetland shall be mulched prior to any predicted rain event regardless of the 48 hour window.

   - Incorporate planned inlets and drainage system as early as possible into the construction phase. The ditches shall be immediately lined or revegetated as soon as their installation is complete.

Erosion, Sedimentation and Stabilization Control Plan

The Erosion Control information is included in the plan set.

Details and Specifications

The Erosion Control details and specifications are included in the plan set.

Winter Stabilization Plan

The winter construction period is from November 1 through April 15. If the construction site is not stabilized with pavement, a road gravel base, or riprap by November 15 then the site needs to be protected with over-winter stabilization. An area considered open is any area not stabilized with pavement, vegetation, mulching, erosion control mats, riprap or gravel base on a road.

Winter excavation and earthwork shall be completed such that any area left exposed can be controlled by the contractor. Limit the exposed area to one acre or an area that can be mulched in one day prior to any snow event.

All areas shall be considered to be denuded until the subbase gravel is installed in parking areas or the areas of future loam and seed have been loamed, seeded and mulched. Hay and straw mulch rate shall be a minimum of 150 lbs./1,000 square-feet (3 tons/acre) and shall be properly anchored.

For work, which is conducted between October 15th and April 15th of any calendar year, all denuded areas, shall be covered with hay mulch or erosion control mix, applied at twice the normal application rate and anchored with a fabric netting. The time period for applying mulch shall be limited to 2 days for all areas.

The contractor shall install any added measures which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions. Continuation of earthwork operations on additional areas shall not begin until the exposed soil surface on the area being worked has been stabilized, in order to minimize areas without erosion control protection.

1. Soil Stockpiles

   Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or

straw at twice the normal rate or at 150 lbs./1,000 square-feet (3 tons per acre) or with a four-inch layer of wood waste erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall. Any soil stockpile shall not be placed (even covered with hay or straw) within 50 feet from any natural resources.

2. Natural Resources Protection

Any areas within 75 feet from any natural resources, if not stabilized with a minimum of 90% mature vegetation catch, shall be mulched by December 1 and anchored with plastic netting or protected with erosion control mats. During winter construction, a double line of sediment barriers (i.e. silt fence backed with hay bales or erosion control mix) shall be placed between any natural resource and the disturbed area. Projects crossing the natural resource shall be protected a minimum distance of 75 feet on either side from the resource. Existing projects not stabilized by December 1 shall be protected with the second line of sediment barrier to ensure functionality during the spring thaw and rains.

3. Sediment Barriers

During frozen conditions, sediment barriers shall consist of wood waste filter berms as frozen soil prevents the proper installation of hay bales and sediment silt fences.

4. Mulching

An area shall be considered denuded until areas of future loam and seed have been loamed, seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 square-feet or 1.5 tons/acre) and shall be properly anchored. Mulch shall not be spread on top of snow. The snow shall be removed down to a one-inch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched with straw or hay at a rate of 150 lb. per 1,000 square feet (3 tons/acre) and adequately anchored that ground surface is not visible through the mulch.

Between the dates of November 1 and April 15, all mulch shall be anchored by peg line, mulch netting, asphalt emulsion chemical, or wood cellulose fiber. When ground surface is not visible through the mulch then cover is sufficient. After November 1st, mulch and anchoring of all bare soil shall occur at the end of each final grading workday.

5. Mulching of Slopes and Ditches

Slopes shall not be left exposed for any extended time of work suspension unless fully mulched and anchored with peg and netting or with erosion control blankets. Mulching shall be applied at a rate of 230 lbs./1,000 square feet on all slopes greater than 8%.

Mulch netting shall be used to anchor mulch in all drainage ways with a slope greater than 3% for slopes exposed to direct winds and for all other slopes greater than 8%. Erosion control blankets shall be used in lieu of mulch in all drainage ways with slopes greater than 8%. Erosion control mix can be used to substitute erosion control blankets on all slopes except ditches.

6. Seeding

   Between the dates of October 15 and April 1st, loam or seed will not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until such time as the final treatment can be applied. If the date is after November 1st and if the exposed area has been loamed, final graded with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched. Dormant seeding may be selected to be placed prior to the placement of mulch and fabric netting anchored with staples. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 square-feet. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 90% catch) shall be revegetated by replacing loam, seed, and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

7. Winter Construction Inspection

   After each rainfall, snowstorm or period of thawing and runoff, the qualified contractor knowledgeable of DEP standards shall perform a visual inspection of all installed erosion control measures and perform repairs as needed to insure their continuous function. Inspections shall be performed a minimum of once per week and shall be conducted in accordance with the Erosion Control Measures and Site Stabilization within the Erosion Control Report.

Standards for Timely Stabilization of Construction Sites During Winter

1. Standard for the timely stabilization of ditches and channels - The applicant shall construct and stabilize all stone-lined ditches and channels on the site by November 15. The applicant shall construct and stabilize all grass-lined ditches and channels on the site by September 1. If the applicant fails to stabilize a ditch or channel to be grass-lined by September 1, then the applicant will take one of the following actions to stabilize the ditch for late fall and winter.

   Install a sod lining in the ditch - The applicant shall line the ditch with properly installed sod by October 1. Proper installation includes the applicant pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, watering the sod to promote root growth into the disturbed soil, and anchoring the sod with jute or plastic mesh to prevent the sod strips from sloughing during flow conditions.

   Install a stone lining in the ditch - The applicant shall line the ditch with stone riprap by November 15. The applicant shall hire a registered professional engineer to determine the stone size and lining thickness needed to withstand the anticipated flow velocities and flow depths within the ditch. If necessary, the applicant shall regrade the ditch prior to placing the stone lining so to prevent the stone lining from reducing the ditch's cross-sectional area.

2. Standard for the timely stabilization of disturbed slopes - The applicant shall construct and stabilize stone-covered slopes by November 15. The applicant shall seed and mulch all slopes to be vegetated by September 1. The department shall consider any area having a grade greater than 15% to be a slope. If the applicant fails to stabilize any slope to be vegetated by September 1, then the applicant shall take one of the following actions to stabilize the slope for late fall and winter.

   Stabilize the soil with temporary vegetation and erosion control mats - By September 1 the applicant shall seed the disturbed slope with winter rye at a seeding rate of 3 pounds per 1,000 square feet and apply erosion control mats over the mulched slope. The applicant shall monitor the growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover

at least 75% of the disturbed slope by November 1, then the applicant shall cover the slope with a layer of wood waste compost as described in item iii of this standard or with stone riprap as described in item iv of this standard.

Stabilize the slope with sod - The applicant shall stabilize the disturbed slope with properly installed sod by September 1. Proper installation includes the applicant pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The applicant shall not use late-season sod installation to stabilize slopes having a grade greater than 33% (3H:1V).

Stabilize the slope with wood waste compost - The applicant shall place a six-inch layer of wood waste compost on the slope by November 15. Prior to placing the wood waste compost, the applicant shall remove any snow accumulation on the disturbed slope. The applicant shall not use wood waste compost to stabilize slopes having grades greater than 50% (2H:1V) or having groundwater seeps on the slope face.

Stabilize the slope with stone riprap - The applicant shall place a layer of stone riprap on the slope by November 15. The applicant shall hire a registered professional engineer to determine the stone size needed for stability and to design a filter layer underneath the riprap.

3. Standard for the timely stabilization of disturbed soils - By September 15 the applicant shall seed and mulch all disturbed soils on areas having a slope less than 15%. If the applicant fails to stabilize these soils by this date, then the applicant shall take one of the following actions to stabilize the soil for late fall and winter.

Stabilize the soil with temporary vegetation - By September 1 the applicant shall seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet and anchor the mulch with plastic netting. The applicant shall monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or cover at least 90% of the disturbed soil before November 1, then the applicant shall mulch the area for over-winter protection as described below.

Stabilize the soil with sod - The applicant shall stabilize the disturbed soil with properly installed sod by September 15. Proper installation includes the applicant pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

Stabilize the soil with mulch - By November 15 the applicant shall mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Prior to applying the mulch, the applicant shall remove any snow accumulation on the disturbed area. Immediately after applying the mulch, the applicant will anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

Chapter 500: Appendix C – Good Housekeeping

Authorized non-stormwater discharges. Identify and prevent contamination by non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:

1. Discharges from firefighting activity;

2. Discharges from firefighting activity;
3. Fire hydrant flushings;
4. Vehicle washwater if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited);
5. Dust control runoff in accordance with permit conditions and Appendix (C)(3);
6. Routine external building washdown, not including surface paint removal, that does not involve detergents;
7. Pavement washwater (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used;
8. Uncontaminated air conditioning or compressor condensate;
9. Uncontaminated groundwater or spring water;
10. Foundation or footer drain-water where flows are not contaminated;
11. Uncontaminated excavation dewatering (see requirements in Appendix C(5));
12. Potable water sources including waterline flushings; and
13. Landscape irrigation.

Unauthorized non-stormwater discharges. The Department's approval under this Chapter does not authorize a discharge that is mixed with a source of non stormwater, other than those discharges in compliance with Appendix C (6). Specifically, the Department's approval does not authorize discharges of the following:

1. Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials;
2. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
3. Soaps, solvents, or detergents used in vehicle and equipment washing; and
4. Toxic or hazardous substances from a spill or other release.

Conclusion

The Applicant has provided temporary and permanent erosion control measures as well as specifying a sequence of construction as measures to minimize erosion and sedimentation.

Attachments

Appendix A Seeding Plan
Appendix B Inspection Report
Appendix C Operation & Maintenance Plan

APPENDIX A

Seeding Plan

SEEDING PLAN

Project: Commercial Development – Biddeford ME

Site Location: 584 Alfred Street, Biddeford Maine

☐ Permanent Seeding ☒ Temporary Seeding

1. Instruction on preparation of soil: Prepare a good seed bed for planting method used.
2. Apply lime as follows: _____# / acres, OR 138 # /M Sq. Ft.
3. Fertilize with _____ pounds of _____ N-P-K/ac. OR 13.8 pounds of 10-10-10 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:

   50% Winter Rye

   50% Annual Rye

6. Mulching instructions: Apply at the rate of _____per acre, OR 75 pounds per M. Sq. Ft.

	Amount	Unit # Tons. Etc.
7. TOTAL LIME	138	#/1000 sq. ft.
8. TOTAL FERTILIZER	13.8	#/1000 sq. ft.
9. TOTAL SEED	1.03	#/1000 sq. ft.
10. TOTAL MULCH	75	#/1000 sq. ft.
11. TOTAL other materials, seeds, etc.		
12. REMARKS		

Spring seeding is recommended; however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to August 5 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

SEEDING PLAN

Project: Commercial Development – Biddeford ME

Site Location: 584 Alfred Street, Biddeford Maine

☒ Permanent Seeding ☐ Temporary Seeding

1. Instruction on preparation of soil: Prepare a good seed bed for planting method used.
2. Apply lime as follows: _____# / acres, OR 138 # /M Sq. Ft.
3. Fertilize with _____ pounds of _____ N-P-K/ac. OR 18.4 pounds of 10-20-20 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:

   40% Creeping Red Fescue

   30% Charger II Perennial Ryegrass

   20% KenBlue Kentucky Bluegrass

   10% Tiffany Chewings Fescue
6. Mulching instructions: Apply at the rate of _____per acre, OR 75 pounds per M. Sq. Ft.

	Amount	Unit # Tons. Etc.
7. TOTAL LIME	138	#/1000 sq. ft.
8. TOTAL FERTILIZER	18.4	#/1000 sq. ft.
9. TOTAL SEED	1.03	#/1000 sq. ft.
10. TOTAL MULCH	75	#/1000 sq. ft.
11. TOTAL other materials, seeds, etc.		
12. REMARKS		

Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to August 5 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

APPENDIX B

Inspection Report

STORMWATER POLLUTION PREVENTION PLAN

INSPECTION REPORT

PROJECT INFORMATION

Project Name: Popeyes - Biddeford

Address: 584 Alfred Street

CONTRACTOR/SUBCONTRACTOR INFORMATION

Inspector Name: _____

Firm: _____

Title: _____

Qualifications: _____

INSPECTION SUMMARY

Date of Inspection: _____

Major Observations: _____

_____

_____

_____

THE FACILITY IS IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN WITH THE FOLLOWING EXCEPTIONS:

_____

_____

_____

_____

_____

ACTIONS NECESSARY TO BRING FACILITY INTO COMPLIANCE:

_____

_____

REQUIRED MODIFICATIONS TO STORMWATER POLLUTION PREVENTION PLAN
(MUST BE IMPLEMENTED WITHIN 7 DAYS OF INSPECTION):

_____

_____

_____

_____

CERTIFICATION STATEMENT:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the systems, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

_____
Signature

_____
Typed Name

_____
Title

_____
Date

APPENDIX C

Operation & Maintenance Plan

COMMERCIAL DEVELOPMENT
BIDDEFORD, MAINE

STORMWATER MANAGEMENT SYSTEM OPERATION AND MAINTENANCE MANUAL FOR STORMWATER FACILITIES

Prepared for

GOLDEN CHICKEN OF BIDDEFORD, LLC.

10 BITTERSWEET COURT

NEWINGTON, CT 06111

Prepared by

Gorrill Palmer
300 Southborough Drive – Suite 200
South Portland, Maine 04106
207.772.2515

MARCH 2026

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APPENDICES

Appendix 1 – Summary Checklist for Inspection and Maintenance

Appendix 2 – Inspection Logs

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I. INTRODUCTION

Runoff from developed areas, may contain a number of contaminants especially when emanating from rooftops, paved or lawn areas. This runoff can contain a significant amount of non-point contaminants, which can have an adverse impact on the receiving waters. The installation of soil media filters can significantly reduce the non-point pollution discharge from the developed area.

The effectiveness of stormwater facilities and other components of the system are dependent on their upkeep and maintenance to assure they meet their design function over an extended period of years. It is critical that the stormwater management facilities are inspected on a regularly scheduled basis, and that maintenance is performed on an as needed basis. It must also be recognized that the effectiveness of these facilities, and their maintenance requirements, are related to the stormwater drainage facilities that transport the flow to the ponds or treatment measures. Thus, maintenance should be directed to the total system.

The purpose of this document is to define in detail the inspection and maintenance requirements deemed necessary to assure that the stormwater management facilities function as intended on a long-term basis for the project. This Operations and Maintenance Manual is specific to the existing and proposed stormwater measures utilized to execute a successful stormwater management plan. Subsequent sections identify individual maintenance items, give a brief commentary of the function and need of the item, a description of the work required, and a suggested frequency of accomplishment. While the suggested programs and schedules must be adapted to specific projects, the material presented should provide guidance for a successful long-term program.

A. Guidelines Overview

A summary of the individual components of stormwater management facilities for this project has been prepared. The format used in the summary is as follows:

Preface: A general description of what function/benefit the element is intended to provide. This is a short summary and not intended to provide the design basis, which can be found in other sources.

Inspection: This section provides the inspection requirements for the individual component.

Maintenance: The section provides general information on the routine maintenance requirements of this element.

Frequency: This section outlines the best judgment of the designer of the system to the frequency of maintenance.

Comments: This section provides any particular comment on the site-specific features of this element. This is a summary only. The owner/operator should

review the design drawings and documents carefully to understand the particular elements of the project. The end of this section should allow the owner/operator to make notes on the specific program. This may include the selected maintenance procedure, cross-references to applicable design drawings, etc.

A list of the individual inspection/maintenance elements is provided in the table of contents. The guidelines are proposed for initial use with adjustments made as appropriate based upon specific project experience.

This report includes the Operation and Maintenance requirements for any potential BMP identified in the Stormwater Management Report for this project.

B. Responsible Party

The responsible party for operation and maintenance of the stormwater and other site infrastructure will be the applicant or their agents or assigns. The applicant or their agents or assigns must adhere to Apart 3 Article VI Section 26 of the City of Biddeford Land Development Regulations.

II. PROJECT OVERVIEW

Key permits issued (or applied for) on the project include:

- City of Biddeford Site Plan Approval

A copy of the permits should be appended to this manual as Appendix 4. The Owner/Operator of the stormwater management system should review these permits for a general description and background of the project, as well as any specific permit conditions or requirements of the project.

The applicant has retained Gorrill Palmer for civil engineering for the development project. Gorrill Palmer has prepared the design for the stormwater management facilities and may be contacted at:

Gorrill Palmer
300 Southborough Drive, Suite 200
South Portland, Maine 04106
207.772.2515

The applicable plans and design documents which apply to the project are:

1. Civil Site Plans Prepared by Gorrill Palmer
2. The Erosion Control/Sedimentation Control Plan for the project
3. The Stormwater Management Plan for the project

A copy of these documents should be retained with this manual.

The proposed design includes inlets, stormwater conveyance lines.

The site is ultimately tributary to Thatcher Brook located to the east of the site.

The manual is intended for general guidance; however, any substituted deviations from the manual should be reviewed with respect to provisions of Appendix 3

III. STANDARD INSPECTION/MAINTENANCE DESCRIPTIONS

The following narratives describe the inspection/maintenance provisions for the Stormwater Management system. Proper O&M is necessary to make sure the system will provide its intended purpose of conveying runoff, removing a substantial amount of the suspended solids, and other contaminants in the stormwater runoff.

A. Stormwater Inlets

Preface: The success of any stormwater facility relies on the ability to intercept stormwater runoff at the design locations. Stormwater inlets include catch basins, open culverts, and field inlets. Inlets exist throughout the property.

Inspection: The inspection of inlet points will need to be coordinated with other maintenance items, these include:

- Building maintenance areas
- Grounds maintenance

The key elements of the inspection are to assure the inlet entry point is clear of debris and will allow the intended water entry.

Maintenance: The key maintenance is the removal of any blockage which restricts the entry of stormwater to the inlet. The removed material should be taken out of the area of the inlet and placed where it will not reenter the runoff collection system. Snow should be removed from inlets on parking lots. Grass clippings and leaves should be bagged and removed.

Frequency: All inlets should be inspected on a quarterly basis, and after/during significant storm events (i.e. >1" rainfall).

Maintenance Personnel: The maintenance personnel will perform the normal maintenance/ inspections of the inlets and tributary drainage system.

Comments: Maintenance of inlets is critical for this project.

B. Tributary Drainage System

Preface: Stormwater from most of the project will be directed through a conveyance (tributary) system which transports the flow to the proposed BMPs, and ultimately travels east draining to Thatcher Brook. This conveyance system will be principally overland flow discharging to piped drain systems. Most of the sediment carried by the drainage system is intended to be trapped in structures. Maintenance

of this system can play a major role in the long-term maintenance costs and the effectiveness of the onsite systems. The primary pretreatment measure for the site will be through deep sumped catch basins with hooded outlets.

Inspection: The tributary drainage system should be periodically inspected to assure that it is operating as intended, and that the carrying capacity has not been diminished by accumulations of debris and sediment or other hydraulic impediments. On piped systems, the inlets must be inspected to ensure the rims are set at the proper elevation to optimize flow entry and are not clogged with debris.

The level of sediment in the sumps should be checked to assure their effectiveness. Pipelines connecting the inlets should be checked to determine if siltation is occurring. This will be most critical on drain lines laid at minimal slopes. This can usually be accomplished by a light and mirror procedure.

Maintenance: Maintenance of the storm drainage system must assure that it continues to serve its design function on a long-term basis, and that its operation does not transport excessive sediments to any downstream treatment device or the receiving waters. Elevations on the rim of catch basins should be adjusted as needed to assure optimal water entry. Depending on the frost susceptibility of the soil, the rims may become elevated over time causing flow to circumvent the inlet. If a temporary filter bag has been designated for the inlet during construction, silt or other deleterious materials, can significantly reduce capacity and the bags should be removed with the sediment and replaced during construction. Catch basin cleaning would normally be accomplished with vacuum trucks contracted as a maintenance service for the Development. The removed material must be disposed of at an approved site for such materials.

If sediment in the pipeline is observed, it should be removed. This may be accomplished by hydraulic flushing, or by mechanical means. If hydraulic flushing is used the downstream conditions should be analyzed.

Frequency: The tributary drainage system should be inspected on an annual basis. Adjustment of inlet rim elevations should be on an as needed basis. Cleaning catch basin sumps and pipelines will depend on the rate of accumulation.

C. Outlet Control Devices

Preface: Outlet control devices of assorted sizes are commonly utilized to control discharge from stormwater management features. This project uses gate valves and orifices to control discharge from the bio-retention filters and subsurface sand filters.

Inspection: Inspection of gate valves should be performed after each major rainfall event to ensure that stormwater runoff is able to discharge through the gate valve and that it is not clogged or needs to be adjusted.

Maintenance: The gate valve should be opened, and all debris flushed from the pipe. Clogs may be checked with mirror and flashlight method.

Frequency: The outlet control devices should be inspected semi-annually and maintained as needed.

Comments: None

D. Ditches, Swales, and Other Open Stormwater Channels

Inspect 2 times per year (preferably in Spring and Fall) to ensure they are working in their intended fashion and that they are free of sediment and debris. Remove any obstructions to flow, including accumulated sediments and debris and vegetated growth. Repair any erosion of the ditch lining. Vegetated ditches will be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity. Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable. If the ditch has a riprap lining, replace riprap on areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged. Correct any erosion of the channel's bottom or sideslopes. The facilities shall be inspected after major storms and any identified deficiencies shall be corrected.

F Roadways and Parking Surfaces

Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader. Repair potholes and other roadway obstructions and hazards. Plowing and sanding of paved areas shall be performed as necessary to maintain vehicular traffic safety.

G. Litter

Litter should be removed as a matter of course by workers and as part of the ground's maintenance contract.

H. Subsurface Detention Chambers

Inspect chambers per manufacturer's recommendation. At a minimum inspect chambers 2 times per year (preferably in Spring and Fall) to ensure that the structures are working in their intended fashion and that they are free of debris. Remove sediment from Isolator row when depth of sediment reaches 3 inches.

IV. PROGRAM ADMINISTRATION

A. General

A reliable administrative structure must be established to assure implementation of the maintenance programs described in the foregoing section. Key factors that must be considered in establishing a responsive administrative structure include:

1. Administrative body must be responsible for long-term operation and maintenance of the facilities. (Maintenance continues for the lifespan of the development in accordance with this document)

2. Administrative body must have the financial resources to accomplish the inspection and maintenance program over the life of the facility.

3. The administrative body must have a responsible administrator to manage the inspection and maintenance programs.

4. The administrative body must have the staff to accomplish the inspection and maintenance programs or must have authority to contract for the required services.

5. The administrative body must have a management information system sufficient to file, retain, and retrieve all inspection and maintenance records associated with the inspection and maintenance programs.

6. A qualified post construction inspector shall be retained by the Owner. His/her duties shall include preparing schedules for the Owner's maintenance, summarizing the results of this maintenance and preparing an annual report on the operation, maintenance, and repair of the stormwater system which must be copied to the City of Biddeford. (The Owner shall be responsible for retaining a separate entity to perform maintenance which cannot be performed by the management of building and property grounds.) This person shall also participate in troubleshooting of the stormwater management system if a problem develops.

If any of the above criteria cannot be met by the entity assigned inspection and maintenance responsibilities, it is likely that the system will fail to meet its water quality objectives at some point during its life. While each of the above criteria may be met by a variety of formats, it is critical to clearly establish the assigned administrative body in a responsible and sustainable manner.

B. Record Keeping

Records of all inspections and maintenance work accomplished must be kept and maintained to document facility operations. These records should be filed and retained for a minimum 5-year time span. The filing system should be capable of ready retrieval of data for periodic reviews by appropriate regulatory bodies. Where possible, copies of such records should also be filed with the designated primary

regulatory agency for their review for compliance with permit conditions. Typical inspection and maintenance record forms are attached hereto as Appendix 2.

Beyond the initial 5-year time span of the original approval and maintenance plan, the stormwater management system will need to be recertified through the Maine Department of Environmental Protection every 5 years to confirm that there is conformance with the original permit documents. This process will ensure all systems function properly over time. This document will remain valid throughout any subsequent recertification processes.

On or by June 30 of each year, the qualified post construction inspector shall provide a completed and signed certification to the Department of Public Works certifying that the person has inspected, cleaned, and maintained the stormwater management facilities, describing any deficiencies found during inspection of the stormwater management facilities, and certifying that the person has repaired any deficiencies in the stormwater management facilities noted during the annual inspection.

C. Contract Services

In some instances, or at specific times, the Maintenance Personnel may not have the staff to conduct the required inspection and/or maintenance programs as outlined in this document. In such cases, the work should be accomplished on a contractual basis with a firm or organization that has the staff and equipment to accomplish the required work.

The service contract for inspection and maintenance should be formal, well written legal document which clearly defines the services to be provided, the contractual conditions that will apply, and detailed payment schedules. Liability insurance should be required in all contracts.

APPENDIX 1

Summary Checklist
Inspection and Maintenance

Stormwater Management System Maintenance Program Summary Checklist						
Item	Commentary	Frequency				
		Monthly	Quarterly	Semi-Annual	Annual	Long Term
Stormwater Inlets	Stormwater inlets allow flow entry from a surface swale to a piped system. Entry may or may not be equipped with a bar rack. Inspect entry for debris accumulation. Remove debris to allow unimpeded entry. Lawn clippings and leaves should be removed from yard areas.		X		X Clearing	
Tributary Drainage System	Inspect to assure that the carrying capacity has not been diminished by debris, sediment or other hydraulic impediments.				X	
Orifice Control Devices	Inspect after major storm events and clear debris from orifice. May require flushing of pipes.			X		
Ditches Swales and Other open Stormwater Channels	Inspect to ensure the ditch is not eroding or blocked by debris.			X		
Subsurface Detention Chambers	Inspect maintenance ports after rain events >1" and remove sediment. Check for signs of clogging and flush underdrains if necessary.			X		
Roadways and Parking Surfaces	Remove accumulated sand.				X	
Litter	Litter should be removed daily.					

APPENDIX 2

Sample Inspection Logs

GOLDEN CHICKEN OF BIDDEFORD, LLC
BIDDEFORD, MAINE

STORMWATER MANAGEMENT
SAMPLE STORMWATER INSPECTION & MAINTENANCE LOG

This log is intended to accompany the Operation and Maintenance Manual for Stormwater Management and Related Facilities. All stormwater BMPs shall be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions of the DEP Stormwater Permit, shall conduct inspections of the facilities as described in the O&M Manual and on this form, and identified deficiencies must be corrected. This log shall be kept on file for a minimum of five (5) years.

A. General Information			
Project Name:		Inspection Date:	
Parcel/Lot:		Current Weather:	
BMP Owner:		Date/Amount Last Precip.:	
Owner Mailing Address:		Inspection Company:	
Owner Phone #:		Inspection Co. Mailing Address:	
Owner Email:		Inspector Name:	
		Inspector Phone #:	
		Inspector Email:	

B. Stormwater Inlets (Catch Basins)	Observations
Frequency: Annually in the spring	
Accumulated sediments from inflow channels and pipes between basins have been removed and legally disposed of	☐ Yes ☐ No ☐ NA
Floating debris and large sediment particles have been removed from inlets.	☐ Yes ☐ No ☐ NA
Stormwater Inlet Notes:	

C. Outlet Control Devices	Observations
Frequency: Semi-annually	
Check for debris blocking orifice	☐ Yes ☐ No ☐ NA
If applicable, flush underdrain pipe	☐ Yes ☐ No ☐ NA
Roofline / Infiltration Drip Strip Notes:	
I. Outlet Control Devices	

D. Ditches, Swales, and Other Open Stormwater Channels	Observations
Frequency: Semi Annually spring and late fall and after heavy rains	
Remove and legally dispose of sediments	☐ Yes ☐ No ☐ NA
Remove floatables and other objects	☐ Yes ☐ No ☐ NA
Check for overgrown vegetation impeding flow.	☐ Yes ☐ No ☐ NA
Mow to control growth and maintain flow capacity.	☐ Yes ☐ No ☐ NA
Repair any slumping side slopes or erosion	☐ Yes ☐ No ☐ NA
Replace any riprap on areas where any underlying fabric or underlying gravel is exposed.	☐ Yes ☐ No ☐ NA
Ditches Swales and Other Channel Notes:	

E. Roadways and Parking Surfaces	Observations
Frequency: Annually preferably in spring	
Remove and legally dispose of accumulated winter sand	☐ Yes ☐ No ☐ NA
Repair potholes and other roadway obstructions and hazards.	☐ Yes ☐ No ☐ NA
Roadways and Parking Surfaces Notes	

H. Subsurface Detention Chambers	Observations
Frequency: Semi-annually	
Inspect for debris	☐ Yes ☐ No ☐ NA
Sediment greater than 3”	☐ Yes ☐ No ☐ NA
System working in their intended fasion	☐ Yes ☐ No ☐ NA
Subsurface Detention Chamber Notes:	

APPENDIX 3

Permits for Project

(To be Added at a Subsequent Time)

Ethan Chadwick

From: Ethan Chadwick
Sent: Tuesday, March 10, 2026 3:01 PM
To: Marcus Knipp
Cc: Matthew Y. Rabasco; Kaleb Bourassa
Subject: Ability to Serve - Request
Attachments: abs_MaineWater_2026.03.03.pdf

Good Afternoon, Mr. Knipp,

Attached is a request for a letter stating Maine Water's ability to serve the proposed fast-food development located at 584 Alfred Street in Biddeford. A description of the project is outlined in the letter as well as a site/utility plan to assist in your review.

Please do not hesitate to contact me with any questions or concerns. Thanks,

Ethan Chadwick | Design Engineer
GORRILL PALMER
An LJB Engineering Company
300 Southborough Drive, Suite 200 | South Portland, ME 04106
207.595.5195 (mobile) 207.888.2575 (work)
www.gorrillpalmer.com

GORRILL PALMER
An LJB Engineering Company

300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | GorrillPalmer.com

March 10, 2026

Marcus Knipp
Maine Water Company
93 Industrial Park Street
Saco, Maine 04072

Subject: **Proposed Popeyes Drive-Thru Restaurant**
584 Alfred Street, Biddeford, ME
Request for Ability to Serve

Dear Marcus,

Gorrill Palmer is working as a civil design and permitting consultant to **Golden Chicken of Biddeford, LLC** for the proposed development of a Popeyes fast-food restaurant at 584 Alfred Street in Biddeford. The project site is located on Map 2 Lot 23, according to the City of Biddeford's Tax Assessor's Maps. The parcel is approximately 1.43 acres in area. The parcel was formerly the location of a single-family residence and a mechanic's shop which have since been demolished. The development proposal consists of constructing a Popeyes fast-food restaurant along with associated drive-through lanes, sidewalks, parking areas; utility and stormwater infrastructure . And existing driveway off Alfred Street provides primary access to the site, with secondary access provided from the adjacent Biddeford Shoppes commercial plaza.

On behalf of our client, we are requesting a letter confirming that Maine Water can provide water supply for the project.

ANTICIPATED FLOWS

The applicant is proposing to construct a 2,536 SF building, with approximately 12 – 15 employees and serving approximately 500 – 700 meals per day. For the design flow of a typical day, we used a figure of 15 employees and 600 meals per day. An additional 180% peak factor is applied to determine peak flows. The projected water use using Table 5C of the Maine Subsurface Wastewater Disposal Rules is shown in the table below:

Use	Design Flow (GPD)	Peak Daily Design Flow
Eating place, takeout 100 gpd or 1 gpd per meal served plus 12 gpd per employee (whichever is larger)	15 employees * 12 gpd + 600 meals * 1 gpd =780	1,404

EXISTING AND PROPOSED SERVICE

There is no existing public water service to the site. The previous use utilized a private on-site well for water supply. A 16" public water main is present in Alfred St in front of the site. The main is located on the southerly side of the road and the project would therefore require a long-side service. The existing domestic water line and private well will be abandoned. At this time, we do not anticipate

the proposed building will include fire protection sprinkler systems. Please see the accompanying Site and Utility plan for more information on the proposed development layout.

We would also like to inquire about the possibility of using the existing 4" water service that supplies the Biddeford Shoppes on the adjacent commercial plaza. An extension of this service to the Popeye's project site would eliminate the challenges and costs associated with trenching through Alfred Street to connect to the 16" public main. Please let us know if Maine Water Company is open to discussing this option further.

ABILITY TO SERVE

In support of the Site Plan application review process, we are writing to request a letter indicating that Maine Water has the ability to serve the proposed project. In addition, we are interested in receiving:

- Existing water utility mapping or as-built information
- An estimate for any work the Maine Water would perform within the right-of-way
- Information as to any easement or maintenance agreements templates
- Any other information that you believe would be useful as this project proceeds

We look forward to reviewing this project further with Maine Water. Please contact our office if you have any questions.

Sincerely,

GORRILL PALMER

Ethan Chadwick
Project Manager
Phone 207-772-2515
echadwick@gorrillpalmer.com

Attachments:

Preliminary Site and Utility Plan

Ethan Chadwick

From: Ethan Chadwick
Sent: Tuesday, March 10, 2026 4:43 PM
To: Chekan, Craig
Cc: Matthew Y. Rabasco; Kaleb Bourassa
Subject: Ability to Serve - Request
Attachments: abs_sanitary_2026.03.03.pdf

Good Afternoon, Mr. Chekan,

Attached is a request for a letter stating the City of Biddeford's capacity to serve the proposed fast-food development located at 584 Alfred Street in Biddeford. A description of the project is outlined in the letter.

Please do not hesitate to contact me with any questions or concerns. Thanks,

Ethan Chadwick | Design Engineer

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An LJB Engineering Company

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300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | GorrillPalmer.com

March 10, 2026

Craig Chekan
City of Biddeford – Engineering Department
205 Main Street
Biddeford, Maine 04005

Subject: **Proposed Popeyes Drive-Thru Restaurant**
584 Alfred Street, Biddeford, ME
Request for Ability to Serve

Dear Craig,

Gorrill Palmer is working as a civil design and permitting consultant to **Golden Chicken of Biddeford, LLC** for the proposed development of a Popeyes fast-food restaurant at 584 Alfred Street in Biddeford. The project site is located on Map 2 Lot 23, according to the City of Biddeford's Tax Assessor's Maps. The parcel is approximately 1.43 acres in area. The parcel was formerly the location of a single-family residence and a mechanic's shop which have since been demolished. The development proposal consists of constructing a Popeyes fast-food restaurant along with associated drive-through lanes, sidewalks, parking areas; utility and stormwater infrastructure . And existing driveway off Alfred Street provides primary access to the site, with secondary access provided from the adjacent Biddeford Shoppes commercial plaza.

On behalf of our client, we are requesting a letter confirming that the City of Biddeford's public sewer system can provide wastewater services for the project.

ANTICIPATED FLOWS

The applicant is proposing to construct a 2,536 SF building, with approximately 12 – 15 employees and serving approximately 500 – 700 meals per day. For the design flow of a typical day, we used a figure of 15 employees and 600 meals per day. An additional 180% peak factor is applied to determine peak flows.

The projected water use using Table 5C of the Maine Subsurface Wastewater Disposal Rules is shown in the table below:

Use	Design Flow (GPD)	Peak Daily Design Flow
Eating place, takeout 100 gpd or 1 gpd per meal served plus 12 gpd per employee (whichever is larger)	15 employees * 12 gpd + 600 meals * 1 gpd =780	1,404

EXISTING AND PROPOSED SERVICE

There is no existing public sewer service to the project site. The previous use discharged wastewater to an onsite leach field which will be removed and disposed of in accordance with any applicable

requirements and guidelines. Per the City ordinance, the project will be required to connect to the public sewer system. Our office provided the City with a conceptual utility layout as part of a Sketch Plan application submitted in December 2025, which showed a gravity sewer service connection to the existing sewer manhole in Alfred Street across from the project site. As this approach would require trenching across multiple lanes of traffic, the City requested that we explore alternative options. The development proposes gravity connection that extends westerly along the frontage of 580 Alfred St, behind the existing public sidewalk, and connects to an existing sewer manhole in the driveway of Old Dogs Lane. This approach minimizes disturbance within the Alfred St travelway and avoids the costs and long-term maintenance requirements of a pump station. Additionally, a 1,000-gallon grease trap is proposed to prevent fats, oils, and grease (FOG) from entering the City's public sanitary system. As part of the Site Plan Application process upon completion, the design plans will be shared with the Sewer District for their review.

ABILITY TO SERVE

In support of the Site Plan application review process, we are writing to request a letter indicating the City of Biddeford's ability to serve the proposed project. In addition, we are interested in receiving:

- Information as to any easement or maintenance agreements templates.
- Any connection service or impact fees.
- Any other information that you believe would be useful as this project proceeds.

We look forward to working with the City on this project and coordinating with you and your team further. Please contact our office if you have any questions regarding the information in this letter.

Sincerely,

GORRILL PALMER

Ethan Chadwick, EI
Design Engineer
Phone 207-772-2515
echadwick@gorrillpalmer.com

Attachment:
Location Map

3/9/2026

Ethan Chadwick, EI
Design Engineer
Phone 207-772-2515
echadwick@gorrillpalmer.com

Sent via email
RE: Ability to Serve Letter for Proposed Popeyes Drive-Thru Restaurant
584 Alfred Street, Biddeford, Maine

SAP Notification: TBD

Dear Ethan: Echadwick@gorrillpalmer.com

CMP has the ability to serve your proposed project located on Map 2 Lot 23, according to the City of Biddeford's Tax Assessor's Maps. The parcel is approximately 1.43 acres in area. The parcel was formerly the location of a single-family residence and a mechanic's shop which have since been demolished. The development proposal consists of constructing a Popeyes fast-food restaurant along with associated drive-through lanes, sidewalks, parking areas; utility and stormwater infrastructure and existing driveway off Alfred Street provides primary access to the site, with secondary access provided from the adjacent Biddeford Shoppes commercial plaza. In accordance with our CMP Handbook (web link below). We can provide you with the desired pole mounted/ pad-mount transformer(s) per your request and city approval, in accordance with our CMP Standards Handbook. If you have any questions on the process, or need help in completing the documents, please contact CMP at 800-565-3181. A CMP Notification/job # will need to be created to move this project forward.

New Service Milestones

- Preliminary meeting with CMP Field Planner to determine details of job
- Job scheduled for completion after the electrical inspection has been received.

For your convenience, here is a link to the CMP Website which contains our Handbook with details on most service requirements:

CMP Handbook of Standard Requirements
(http://www.cmpco.com/MediaLibrary/3/6/Content%20Management/YourAccount/PDFs%20and%20Docs/handbook.pdf)

Regards,

Jay Agreste
Energy Services Advisor
Central Maine Power Company

Ethan Chadwick

From: Ethan Chadwick
Sent: Tuesday, March 3, 2026 11:42 AM
To: 'MHPC Project Review'; 'Rideout, Megan M'
Cc: Matthew Y. Rabasco
Subject: Historic Site Information Request
Attachments: MHPC-Mohney.pdf

Good Afternoon Mr. Mohney and Ms. Rideout,

Please see attached PDF for a letter regarding a property in Biddeford, Maine located at 584 Alfred Street. A location map is included for your reference. Physical copies of these documents will only be sent through the mail at your request.

Let me know if you have any questions or comments.

Ethan Chadwick | Design Engineer
GORRILL PALMER
An LJB Engineering Company
300 Southborough Drive, Suite 200 | South Portland, ME 04106
207.595.5195 (mobile) 207.888.2575 (work)
www.gorrillpalmer.com

GORRILL PALMER
An LJB Engineering Company

300 Southborough Drive, Suite 200, South Portland, ME 04106
(207) 772-2515 | GorrillPalmer.com

March 03, 2025

Attn: Mr. Kirk Mohney
State Historic Preservation Officer
Maine Historic Preservation Commission
55 Capitol Street, 65 State House Station
Augusta, ME 04333

Subject: **Presence of Historical Areas**
584 Alfred Street
Biddeford, Maine

Dear Mr. Mohney,

Gorrill Palmer has been retained to prepare the plans and permit applications for a proposed fast-food development on an approximately 1.43-acre lot located at 584 Alfred Street in Biddeford. The project is considered a redevelopment of a site currently occupied by two existing buildings and a small parking area. The project location is shown on the attached location map. The fast-food development is expected to include associated accessways, driveways, stormwater management facilities, and utility infrastructure.

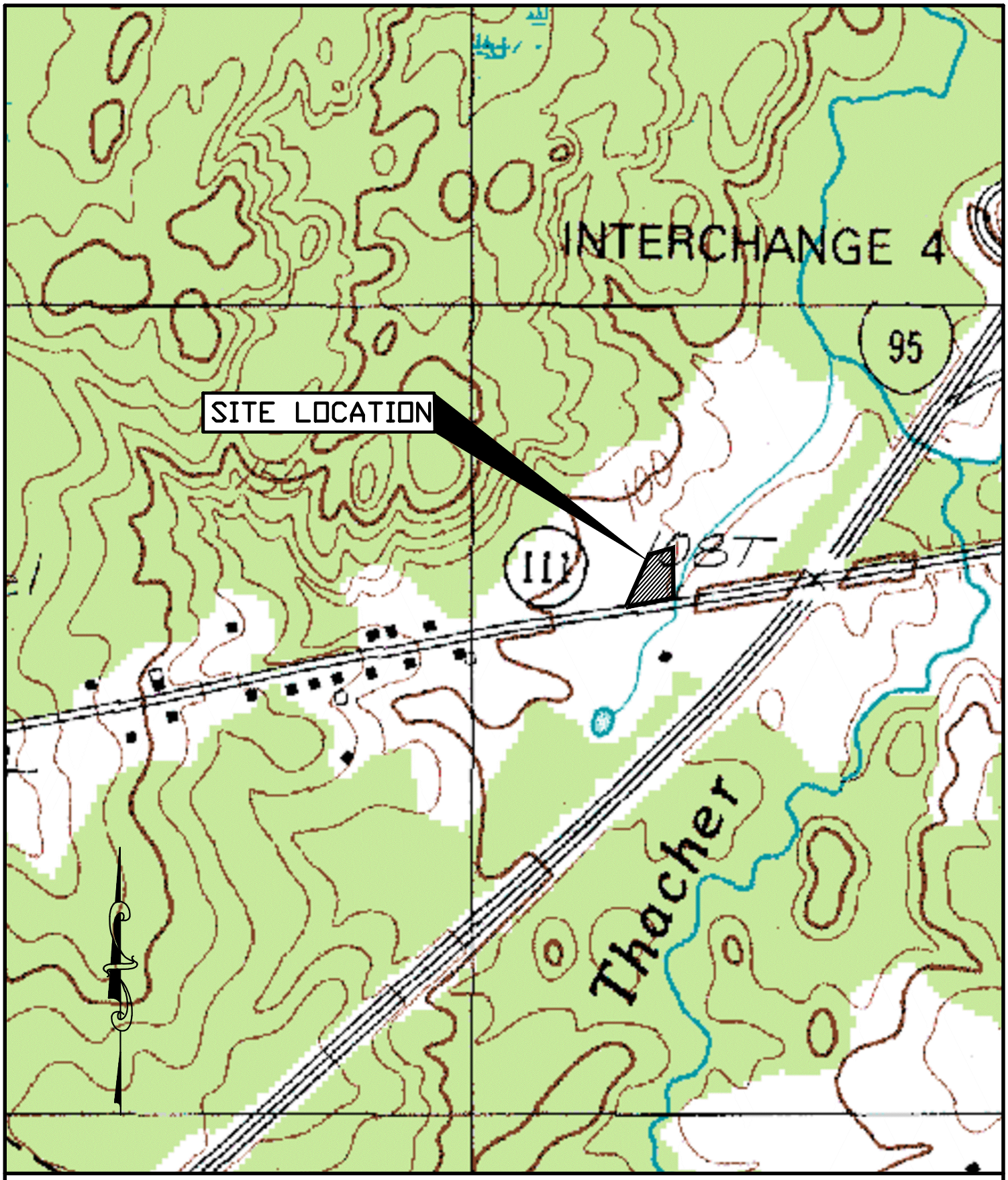
To aid in the development design, and as part of the permit applications, Gorrill Palmer requests information from your department relative to the presence of any nearby structure or area with historical, architectural, or archeological significance as defined by the National Historic Preservation Act of 1966.

Thank you for your consideration. If you have any questions regarding the proposed project, please contact our office.

Sincerely,

Gorrill Palmer

Ethan Chadwick, EI
Design Engineer
Phone: (207) 772-2515
echadwick@gorrillpalmer.com



U.S.G.S. Location Map

POPEYES RESTRAURANT - Biddeford, Maine

U.S.G.S. Kennebunk, State-7.5 Minute Series (Topographic)

Design: EJC	Date: NOV. 2024
Draft: EJC	Job No.: 4323
Checked: AJK	Scale: NTS
File Name: BIDDEFORD–LOCATION MAP.dwg	

GORRILL PALMER
An LJB Engineering Company

Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Figure 1

City of Biddeford, Maine

COST ESTIMATE WORKSHEET

OWNER/APPLICANT: Golden Chicken of Biddeford, LLC

PROJECT NAME: 584 Alfred Street - Popeyes

	ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1	Clearing and Grubbing	Acre	0.5	$10,000.00	$5,000.00
2	Erosion/Sediment Control	Lump Sum	1	$10,000.00	$10,000.00
3	Site Stabilization	Lump Sum	1	$5,000.00	$5,000.00
4	Sanitary Sewer				
	Manholes	Each	4	$6,000.00	$24,000.00
	Grease Trap	Each	1	$10,000.00	$10,000.00
	6" Main	Linear Foot	485	$200.00	$97,000.00
5	Water Main				
	1.5" Domestic Service	Linear Foot	200	$20.00	$4,000.00
	16" Service Saddle	Each	1	$500.00	$500.00
6	Electric				
	Conduit/Wiring (UGE)	Linear Foot	165	$30.00	$4,950.00
7	Storm Drainage				
	12" SD Pipe	Linear Foot	250	$120.00	$30,000.00
	Manholes	Each	1	$6,000.00	$6,000.00
	Catch Basin	Each	5	$6,000.00	$30,000.00
	Subsurface Detention Chambers	Lump Sum	1	$50,000.00	$50,000.00
8	Excavate and Grade Subgrade	Cubic Yard	2950	$30.00	$88,500.00
9	Roadways/ Parking Area				
	Subbase Gravel	Cubic Yard	100	$50.00	$5,000.00
	Base/Finish Gravel	Cubic Yard	25	$65.00	$1,625.00
	Base Paving	Ton	250	$130.00	$32,500.00
	Finish Paving	Ton	175	$150.00	$26,250.00
10	Sidewalks				
	Subbase Gravel	Cubic Yard	10	$30.00	$300.00
	Base/Finish Gravel	Cubic Yard	5	$40.00	$200.00
	Paving	Ton	25	$175.00	$4,375.00
11	Slipform Curbing	Linear Foot	710	$20.00	$14,200.00
12	Sloped Granite	Linear Foot	80	$50.00	$4,000.00
13	Pavement Striping	Linear Foot	1050	$1.50	$1,575.00
14	Pavement Striping	Square Foot	100	$10.00	$1,000.00
15	Fencing	Linear Foot	65	$20.00	$1,300.00
16	Silt Fence	Linear Foot	560	$2.50	$1,400.00
17	Loam and Seed	1,000 Square Feet	15	$500.00	$7,500.00
18	Concrete	Cubic Yard	60	$150.00	$9,000.00
19	Clean Up	Lump Sum	1	$5,000.00	$5,000.00
20	As Builts	Lump Sum	1	$2,000.00	$2,000.00

COST ESTIMATE TOTAL: **$482,175.00**
150% of TOTAL: **$723,262.50**

FOR OFFICE USE ONLY

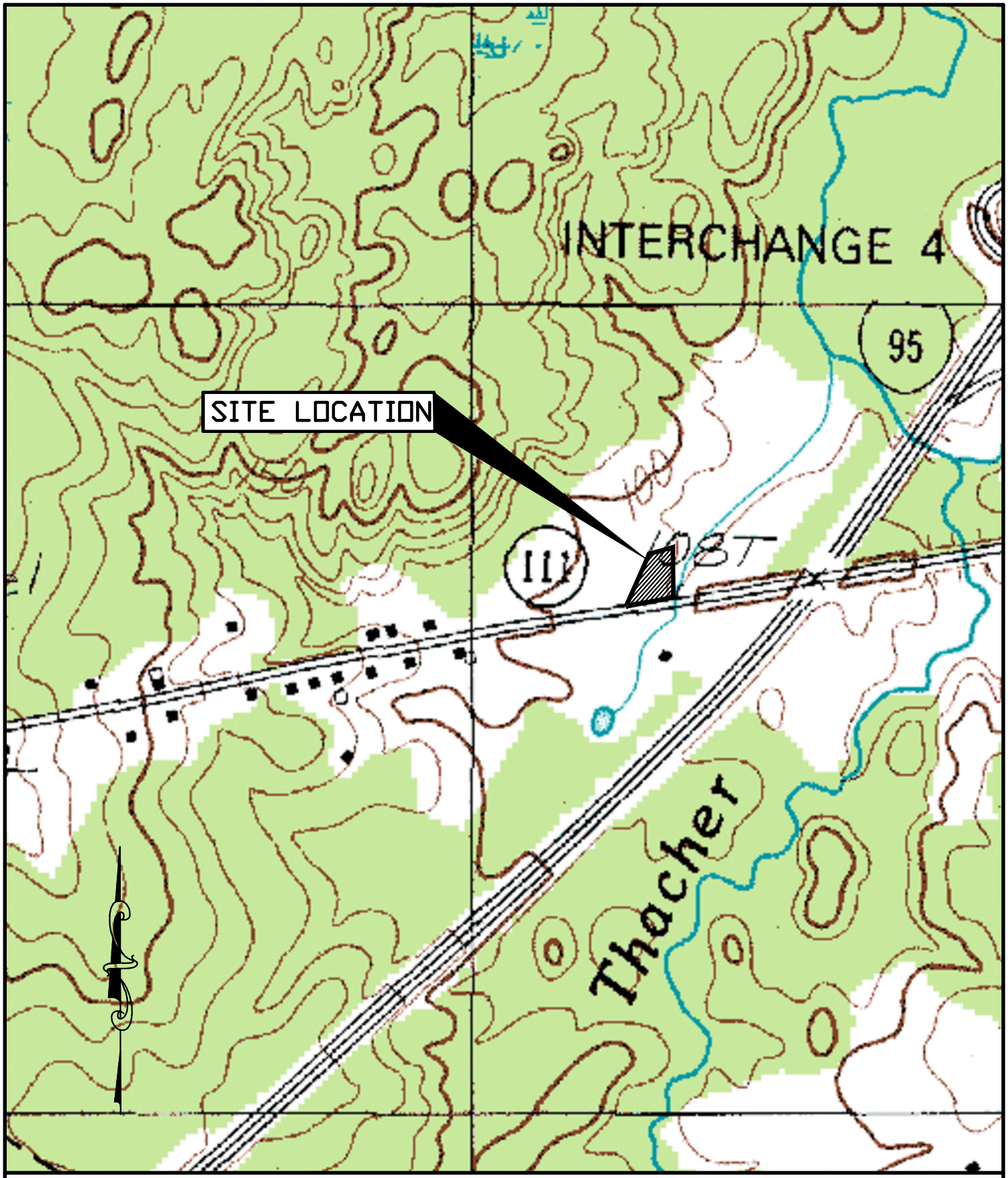
EROSION CONTROL/SITE STABILIZATION BOND (IF APPLICABLE): _____

PERFORMANCE GUARANTEE REQUIRED: _____

Name: _____

Signature: _____

Date:



U.S.G.S. Location Map

POPEYES RESTRAURANT - Biddeford, Maine

U.S.G.S. Kennebunk, State-7.5 Minute Series (Topographic)

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300 Southborough Drive - Suite 200
South Portland, ME 04106

Figure 1

70°31'52.5"
43°30'00"
377000mE
378000mE
City of Saco
230155
70°30'00"
43°30'00"
4817000mN
4816000mN
4815000mN
240000 FT
235000 FT
2860000 FT
43°28'07.5"
70°31'52.5"
43°28'07.5"
70°30'00"

SOUTH ST
COUNTRY DR
RIVER RD
BROWN FARM RD
HAYFIELD RD
SOUTH ST
FOX HOLLOW DR
GLENVIEW DR
Saco River
Swan Pond Brook
ANDREWS RD
FALCON RDG
WHITETAIL DR
BIDDEFORD GATEWAY CTR
TALL PINE DR
SHOPS WAY
MARINER WAY
JOURNEY WAIR
LEFEILLER LN
ALLEN AVE
KATHY AVE
LINDA AVE
LAFLAMME LN
NEW RD
HAMDEN PLACE RD
OLD ALFRED RD
JERES WAY
TAMROX DR
COTE DR
AUTUMN LN
JESSIE LN
EASY ST
RATCHET WAY
MOUNTAIN RD
HALLCZUK RD
Thatcher Brook

ZONE A
ZONE AE
61
60.7

City of Biddeford 230145
Town of Arundel 230192

95
111

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A,V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- E 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM provided in digital format by State of Maine, Maine office of GIS (MeGIS). This information was derived from MeGIS, dated 2012.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and FDTs may reflect stream channel distances that differ from what is shown on the map.

SCALE

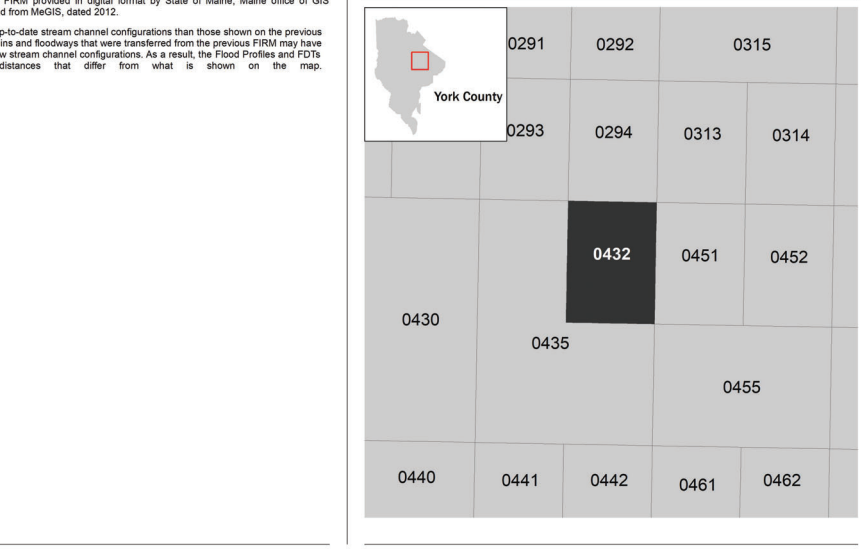
Map Projection:
NAD 1983 UTM Zone 19N;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR



FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

YORK COUNTY, MAINE
All Jurisdictions

PANEL 0432 OF 0800

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ARUNDEL, TOWN OF	230192	0432	G
BIDDEFORD, CITY OF	230145	0432	G
SACO, CITY OF	230155	0432	G

VERSION NUMBER
2.3.2.1

MAP NUMBER
23031C0432G

EFFECTIVE DATE
July 17, 2024

Photo 1: Existing Accessway on Eastern Property Boundary (Looking East)

Photo 2: Woodland Area on Northern Property Boundary

Photo 3: Western Property Boundary Looking South

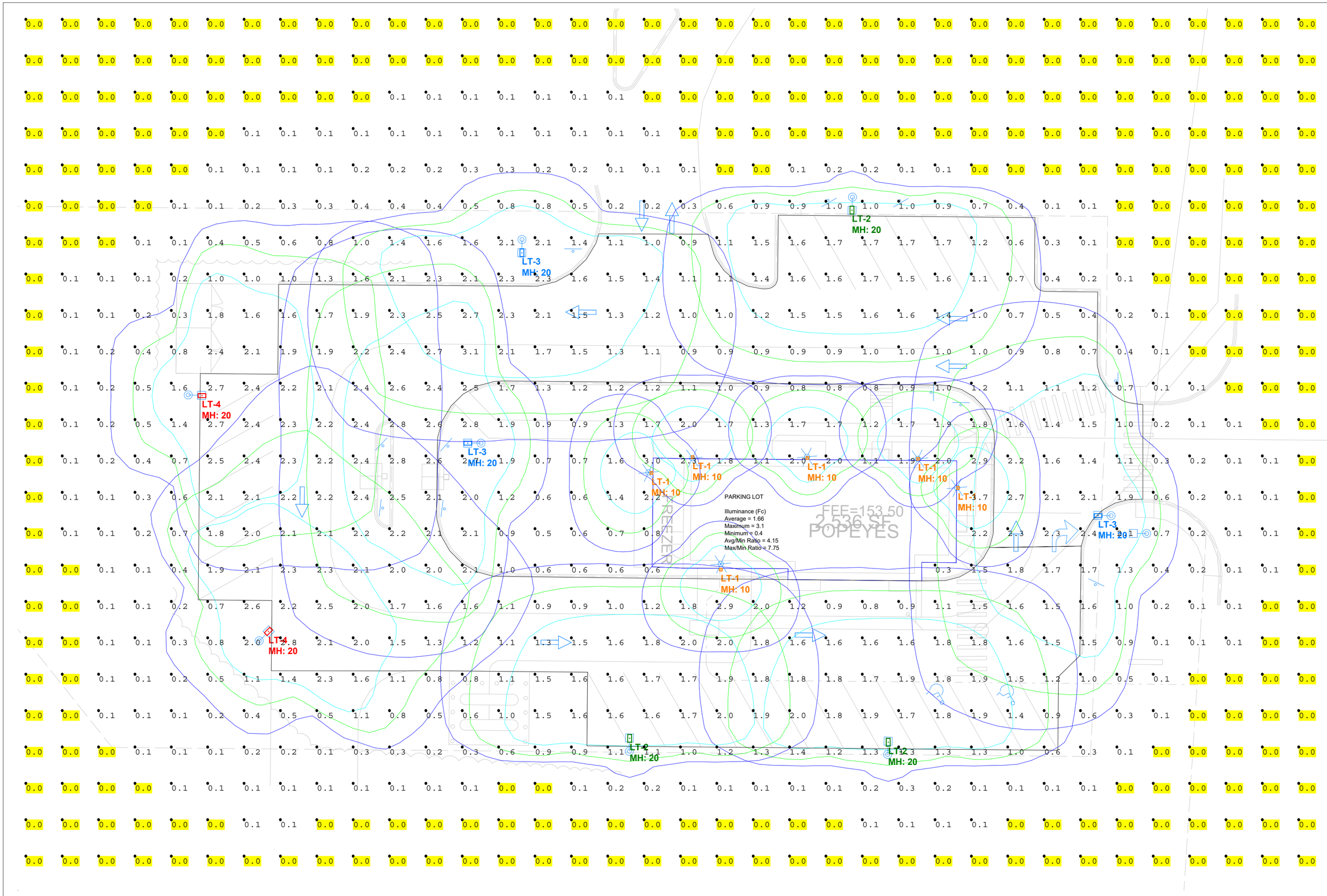
Photo 4: Along Existing Tree Line Looking South

Photo 5: Eastern Property Boundary (Looking South)

Photo 6: Eastern Property Boundary (Looking West)

Photo 7: Western Property Boundary (Looking South at Alfred Street)

Photo 8: Western Property Boundary (Looking East)



Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	6	LT-1	McGRAW-EDISON: GKO-PB1B-730-U-T4W-XX	0.900	1363	9.3	55.8
	3	LT-2	McGRAW-EDISON: GALN-SA2A-730-U-T4W-XX-XX-HSS	0.900	6059	63	189
	3	LT-3	McGRAW-EDISON: GALN-SA2A-730-U-T4WXX-XX	0.900	8381	63	189
	2	LT-4	McGRAW-EDISON: GALN-SA2A-730-U-T4FT-XX-XX	0.900	8357	63	126

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Illuminance	Fc	0.51	3.7	0.0	N.A.	N.A.
PARKING LOT	Illuminance	Fc	1.66	3.1	0.4	4.15	7.75

Boston, MA
Rocky Hill, CT
Hooksett, NH
REFLEX
www.reflexlighting.com
specifications@reflexlighting.com

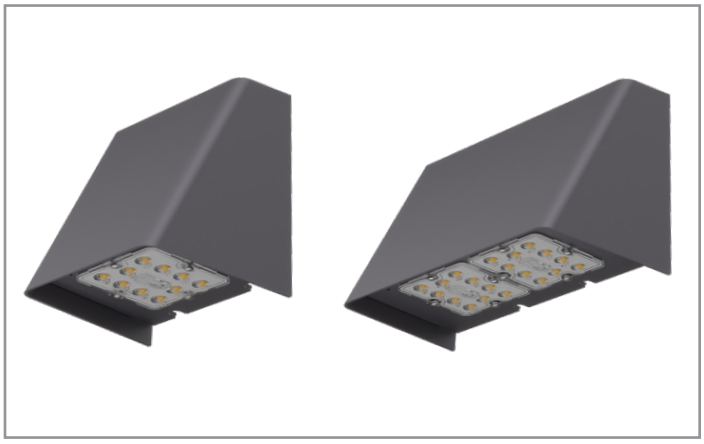
DISCLAIMER: CALCULATIONS SHOULD BE USED AS A GUIDE ONLY. LIGHT LEVELS ARE SUBJECT TO CONDITIONS IN THE FIELD.

Drawn By: Tamer
Date:3/9/2026
Specifier:
Salesperson:
Scale: Not to Scale

POPEYES BIDDEFORD

584 ALFRED STREET, BIDDEFORD, MAINE

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GKO Gekko

Wall Mount Luminaire

Product Features

Light ARchitect™ FADC

Product Certifications

DLC LISTED [1] DLC LISTED PREMIUM [1] ISTI CERTIFIED UL CERTIFIED FC CLASS A IP66

BAA BUY AMERICAN ACT AVAILABLE TAA TRADE AGREEMENTS ACT AVAILABLE BABA BUILD AMERICA BUY AMERICA AVAILABLE DARKSKY APPROVED [2] 5 YEAR LIMITED WARRANTY RoHS COMPLIANT

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 10

Quick Facts

- Available in small and medium housing sizes
- Choice of 5 optical distributions
- 11 lumen packages from 750 up to 13,500
- Efficacies up to 169 lumens per watt

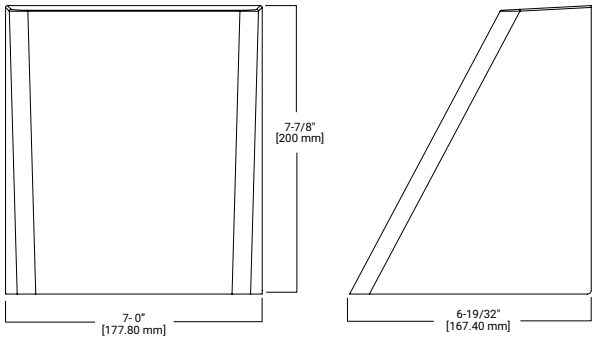
Connected Systems

- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

Dimensional Details

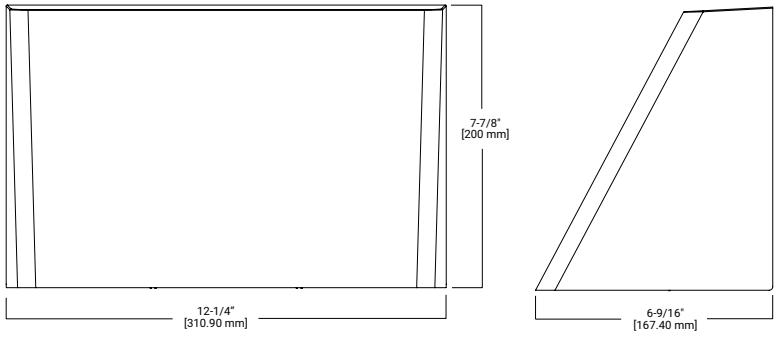
PB1

Net Weight: 6.0 lbs (2.7 kg)



PB2

Net Weight: 10.6 lbs (4.8 kg)



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **GKO-PB2A-740-U-T3-BK**

Product Family	Light Engine Configuration		Lumen Output	Color Temperature	Voltage	Distribution	Finish
	Light Engine	Size					
GKO=Gekko Wall Luminaire **BAA-GKO**=Gekko Buy American Act Compliant [13] **TAA-GKO**=Gekko Trade Agreements Act Compliant [13] **BABAF-GKO**=Gekko Build America Buy America Act Compliant for FHWA funded projects [14]	**PB**=Mini 10-LED Light Square	**1**=Small, 1 Square **2**=Medium, 2 Squares	**A**=Output Level 1 **B**=Output Level 2 **C**=Output Level 3 **D**=Output Level 4 **E**=Output Level 5 **F**=Output Level 6 [1]	**722**=70 CRI, 2200K CCT **727**=70 CRI, 2700K CCT **730**=70 CRI, 3000K CCT **735**=70 CRI, 3500K CCT **740**=70 CRI, 4000K CCT **750**=70 CRI, 5000K CCT **827**=80 CRI, 2700K CCT **830**=80 CRI, 3000K CCT **835**=80 CRI, 3500K CCT **840**=80 CRI, 4000K CCT **850**=80 CRI, 5000K CCT **AMB**=Amber 590nm [2]	**U**=120-277V **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [15, 17] **9**=347V [17]	**T1**=Type I **T2R**=Type II Round **T2U**=Type II Urban **T3**=Type III **T4W**=Type IV Wide	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **NW**=New White

Options (Add as Suffix)	Controls and Systems Options (Add as Suffix)	Accessories (Order Separately)
F=Single Fused (120, 277 or 347, Specify Voltage) **FF**=Double Fused (208, 240 or 480, Specify Voltage) **20MSP**=Parallel 20kV MOV Surge Protective Device **20K**=Series 20kV UL1449 Fused Surge Protective Device **2L**=Two Circuits [3] **EBP**=6W Battery Pack **CBP**=6W Battery Pack, Cold Weather Rated [4, 10] **CBP-CEC**=8W Battery Pack, Cold Weather Rated, CEC Compliant [4, 10] **HSS**=Factory Installed House Side Shield **HA**=50C° High Ambient [10] **CC**=Coastal Construction [5]	**BPC**=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **FADC**=Field Adjustable Dimming Controller [8] **SPB1**=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting [6, 7, 8, 11] **SPB2**=Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting [6,7,8,11] **MS/DIM-L08**=Motion Sensor for Dimming Operation, <8' Mounting [7, 8, 11, 12] **MS/DIM-L20**=Motion Sensor for Dimming Operation, 8'-20' Mounting [7, 8, 11, 12] **WPS2WH**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'-15' Mounting [7, 8, 11, 16] **WPS4WH**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'-40' Mounting [7, 8, 11, 16] **WLS2WH**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'-15' Mounting [7, 8, 11] **WLS4WH**=WaveLinx Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'-40' Mounting [7, 8, 11]	**PBHSS**=House Side Shield (Single) [9] **PBPFS**=Perimeter Fence Shield Kit (4 Pieces) **FSIR-100**= Wireless Configuration Tool for MS/DIM [12] **MA1252**=10kV Surge Module Replacement **BB/GKO-XX**=Surface mount backbox [19]

NOTES:
1. Output Level 6 not available with PB2
2. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose Output Level 1; supplied at 300mA for PB1, 600mA for PB2. Not available with HA option. Exact luminaire wattage available in IES files.
3. Not available with PB1. Not available with FF option, or controls options at 347V or 480V.
4. Operates at -20°C to +40°C. Not available with PB1 or HA option.
5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654.
6. Smart device with mobile application required to change system defaults. See controls section for details.
7. Includes integral photosensor.
8. Not available with PB1 at Output Level 1 or 2. Not available with other motion activated control options.
9. One required per PB light square.
10. Combination of CBP and HA not available with PB2 at output level 4 or 5.
11. When motion controls are selected, PB1 uses surface mount sensor in PB2 housing. PB2 uses side-mount motion sensor in PB2 housing.
12. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
13. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
14. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
15. 480V not to be used with ungrounded or impedance grounded systems.
16. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
17. Not available with PB1A and PB1B.
18. Operates at 0°C to +55°C.
19. Replace XX with color designation. Includes 5 gasketed 3/4" conduit entry points.

Product Specifications

Construction
- Available in small (1 square) and medium (2 square) sizes
- Die-cast aluminum housing
- IP66 rated housing
- IK10 impact rated

Optics
- 10-LED square light engine
- 5 optical distributions
- IDA Certified (3000K CCT and warmer only)
- 2 versions of field-installable shielding for superior spill light control
  - Single-piece snap-on square shields (HSS)
  - Multiple-piece configurable vertical perimeter shielding (PFS)

Electrical
- Standard with 0-10V dimming
- Standard with 10kV surge device
- 10kV or 20kV surge protective options with series or parallel configurations
- -40°C to 40°C ambient temperature operating range with optional high ambient (HA) 50°C

Controls
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Default setting is the highest position at the lumen output selected

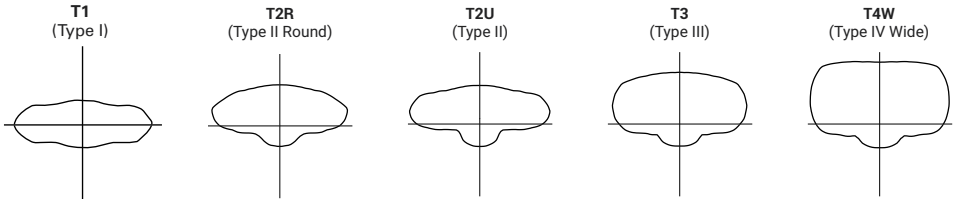
Finish
- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- 3,000-hours per ASTM B117, with a scribe rating of 7 per ASTM D1654 for standard color finish
- Coastal Construction (CC) option available

Typical Applications
- Exterior wall, walkway

Compliance
- BAA domestic preference option meets BAA requirements. See DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information
- FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams.
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Warranty
- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Optical Distributions



Energy and Performance Data

Lumen Maintenance

Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours*	L70*
25°C	98.1%	96.3%	95.6%	92.8%	>102,000
40°C	98.0%	96.1%	95.3%	92.3%	>102,000
50°C	97.8%	95.6%	94.8%	91.4%	>102,000

Note: * Calculations provided in accordance with IES TM-21-11 using the configuration resulting in highest LED temperature.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

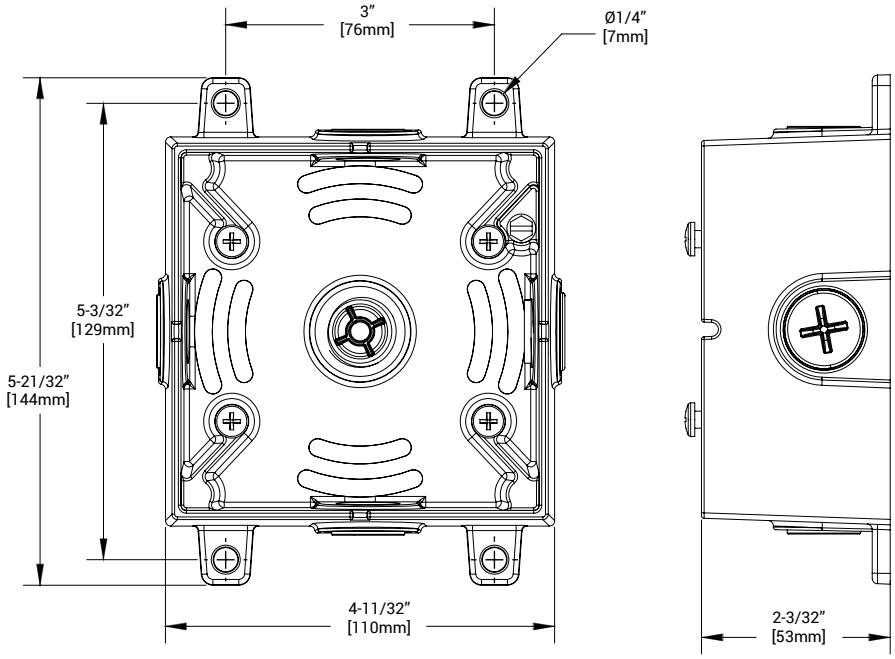
Note: +/-5% typical value

LED Color Multipliers

	CCT				
	2200	2700	3000	4000	5000
CRI	Lumen Multiplier*				
70	0.83	0.92	0.95	1.00	1.00

Note: * Estimates, refer to IES files for accuracy.

Accessories



Energy and Performance Data

View GKO Gekko IES files

Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
70 CRI 2200K CCT	T1	Lumens	671	1,307	2,244	3,184	4,504	5,814	3,658	5,547	7,241	9,059	11,179
		Lumens per Watt	140	141	132	124	116	107	138	133	124	119	107
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	T2R	Lumens	647	1,259	2,161	3,067	4,338	5,600	3,523	5,342	6,974	8,726	10,767
		Lumens per Watt	135	135	127	120	112	103	133	128	120	115	103
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	640	1,246	2,138	3,034	4,292	5,541	3,486	5,286	6,901	8,634	10,653
		Lumens per Watt	133	134	126	119	111	102	132	126	119	113	102
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T3	Lumens	637	1,241	2,130	3,023	4,276	5,520	3,473	5,266	6,875	8,601	10,613
		Lumens per Watt	133	133	125	118	110	101	131	126	118	113	101
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
	T4W	Lumens	618	1,203	2,066	2,932	4,147	5,353	3,368	5,107	6,667	8,341	10,293
		Lumens per Watt	129	129	122	115	107	98	127	122	115	109	98
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
70 CRI 2700K CCT	T1	Lumens	744	1,449	2,487	3,529	4,992	6,445	4,055	6,148	8,026	10,042	12,391
		Lumens per Watt	155	156	146	138	129	118	153	147	138	132	118
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	717	1,395	2,395	3,399	4,808	6,207	3,905	5,921	7,731	9,672	11,934
		Lumens per Watt	149	150	141	133	124	114	147	142	133	127	114
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	709	1,381	2,370	3,363	4,757	6,142	3,864	5,859	7,649	9,570	11,808
		Lumens per Watt	148	148	139	131	123	113	146	140	131	126	113
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	707	1,375	2,361	3,350	4,739	6,118	3,849	5,837	7,620	9,533	11,763
		Lumens per Watt	147	148	139	131	122	112	145	140	131	125	112
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	685	1,334	2,290	3,249	4,596	5,934	3,733	5,661	7,390	9,246	11,409
		Lumens per Watt	143	143	135	127	119	109	141	135	127	121	109
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2

Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
70 CRI 3000K CCT	T1	Lumens	760	1,480	2,541	3,606	5,100	6,585	4,143	6,282	8,201	10,260	12,660
		Lumens per Watt	158	159	149	141	132	121	156	150	141	135	121
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	732	1,426	2,447	3,473	4,912	6,342	3,990	6,050	7,899	9,882	12,194
		Lumens per Watt	153	153	144	136	127	116	151	145	136	130	116
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	725	1,411	2,422	3,436	4,861	6,275	3,948	5,986	7,815	9,778	12,065
		Lumens per Watt	151	152	142	134	126	115	149	143	134	128	115
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	722	1,405	2,412	3,423	4,842	6,251	3,933	5,964	7,786	9,741	12,019
		Lumens per Watt	150	151	142	134	125	115	148	143	134	128	115
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	700	1,363	2,340	3,320	4,696	6,063	3,814	5,784	7,551	9,447	11,657
		Lumens per Watt	146	147	138	130	121	111	144	138	130	124	111
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
70 CRI 3500K CCT	T1	Lumens	774	1,507	2,587	3,672	5,193	6,705	4,218	6,396	8,350	10,447	12,891
		Lumens per Watt	161	162	152	143	134	123	159	153	143	137	123
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	746	1,452	2,492	3,536	5,002	6,458	4,063	6,160	8,043	10,062	12,416
		Lumens per Watt	155	156	147	138	129	118	153	147	138	132	119
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	738	1,436	2,466	3,499	4,949	6,390	4,020	6,095	7,958	9,956	12,285
		Lumens per Watt	154	154	145	137	128	117	152	146	137	131	117
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	735	1,431	2,456	3,486	4,930	6,365	4,005	6,072	7,928	9,918	12,238
		Lumens per Watt	153	154	144	136	127	117	151	145	136	130	117
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	713	1,388	2,382	3,381	4,782	6,173	3,884	5,889	7,689	9,619	11,869
		Lumens per Watt	149	149	140	132	124	113	147	141	132	126	113
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2

Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
70 CRI 4000K 5000K CCT	T1	Lumens	809	1,575	2,703	3,836	5,426	7,005	4,407	6,683	8,724	10,915	13,468
		Lumens per Watt	169	169	159	150	140	129	166	160	150	143	129
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	779	1,517	2,604	3,695	5,226	6,747	4,245	6,436	8,403	10,513	12,972
		Lumens per Watt	162	163	153	144	135	124	160	154	144	138	124
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T2U	Lumens	771	1,501	2,576	3,656	5,171	6,676	4,200	6,368	8,314	10,402	12,835
		Lumens per Watt	161	161	152	143	134	122	158	152	143	137	123
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	768	1,495	2,566	3,642	5,151	6,650	4,184	6,344	8,283	10,362	12,786
		Lumens per Watt	160	161	151	142	133	122	158	152	142	136	122
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	745	1,450	2,489	3,532	4,996	6,450	4,058	6,153	8,033	10,050	12,401
		Lumens per Watt	155	156	146	138	129	118	153	147	138	132	118
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2

Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
80 CRI 2700K CCT	T1	Lumens	686	1,335	2,292	3,253	4,601	5,940	3,737	5,667	7,398	9,256	11,421
		Lumens per Watt	143	144	135	127	119	109	141	136	127	121	109
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	T2R	Lumens	661	1,286	2,208	3,133	4,432	5,721	3,600	5,458	7,126	8,915	11,000
		Lumens per Watt	138	138	130	122	115	105	136	131	122	117	105
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	654	1,273	2,185	3,100	4,385	5,661	3,562	5,400	7,050	8,821	10,884
		Lumens per Watt	136	137	129	121	113	104	134	129	121	116	104
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T3	Lumens	651	1,268	2,176	3,088	4,368	5,640	3,548	5,380	7,024	8,787	10,843
		Lumens per Watt	136	136	128	121	113	103	134	129	121	115	104
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	632	1,230	2,111	2,995	4,237	5,470	3,441	5,218	6,812	8,522	10,516
		Lumens per Watt	132	132	124	117	109	100	130	125	117	112	100
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
80 CRI 3000K CCT	T1	Lumens	713	1,387	2,382	3,380	4,780	6,172	3,883	5,887	7,686	9,616	11,866
		Lumens per Watt	148	149	140	132	124	113	147	141	132	126	113
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	T2R	Lumens	686	1,336	2,294	3,255	4,604	5,944	3,740	5,670	7,403	9,262	11,428
		Lumens per Watt	143	144	135	127	119	109	141	136	127	122	109
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	679	1,322	2,270	3,221	4,556	5,881	3,700	5,611	7,325	9,164	11,308
		Lumens per Watt	142	142	134	126	118	108	140	134	126	120	108
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T3	Lumens	677	1,317	2,261	3,208	4,538	5,859	3,686	5,589	7,297	9,129	11,265
		Lumens per Watt	141	142	133	125	117	108	139	134	125	120	108
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	656	1,277	2,193	3,112	4,401	5,682	3,575	5,421	7,077	8,854	10,925
		Lumens per Watt	137	137	129	122	114	104	135	130	122	116	104
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2

Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
80 CRI 3500K CCT	T1	Lumens	724	1,409	2,419	3,433	4,856	6,270	3,944	5,981	7,808	9,769	12,054
		Lumens per Watt	151	152	142	134	125	115	149	143	134	128	115
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	697	1,357	2,330	3,307	4,677	6,038	3,799	5,760	7,520	9,409	11,610
		Lumens per Watt	145	146	137	129	121	111	143	138	129	123	111
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	690	1,343	2,306	3,272	4,628	5,975	3,759	5,700	7,441	9,310	11,487
		Lumens per Watt	144	144	136	128	120	110	142	136	128	122	110
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	687	1,338	2,297	3,259	4,610	5,952	3,745	5,678	7,413	9,274	11,444
		Lumens per Watt	143	144	135	127	119	109	141	136	127	122	109
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	667	1,298	2,228	3,161	4,471	5,773	3,632	5,507	7,189	8,995	11,099
		Lumens per Watt	139	140	131	123	116	106	137	132	124	118	106
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
80 CRI 4000K CCT	T1	Lumens	748	1,455	2,498	3,544	5,014	6,473	4,072	6,175	8,061	10,085	12,445
		Lumens per Watt	156	156	147	138	130	119	154	148	139	132	119
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	720	1,401	2,406	3,414	4,829	6,234	3,922	5,947	7,764	9,714	11,986
		Lumens per Watt	150	151	142	133	125	114	148	142	133	127	114
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	712	1,387	2,380	3,378	4,778	6,168	3,881	5,884	7,682	9,611	11,860
		Lumens per Watt	148	149	140	132	123	113	146	141	132	126	113
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	710	1,381	2,371	3,365	4,760	6,145	3,866	5,862	7,653	9,575	11,815
		Lumens per Watt	148	149	139	131	123	113	146	140	131	126	113
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	688	1,340	2,300	3,264	4,616	5,960	3,750	5,685	7,422	9,286	11,458
		Lumens per Watt	143	144	135	127	119	109	141	136	128	122	109
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2

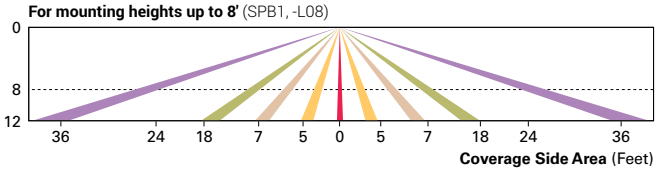
Number of Light Squares			1 Square (PB1)						2 Squares (PB2)				
Output Level			A	B	C	D	E	F	A	B	C	D	E
Drive Current			180mA	300mA	520mA	740mA	1100mA	1500mA	800mA	1250mA	1700mA	1130mA	1500mA
Nominal Power (Watts)			6	9	17	25	38	54	26	41	57	78	107
Input Current @ 120V (A)			0.040	0.079	0.145	0.218	0.328	0.465	0.224	0.353	0.494	0.640	0.875
Input Current @ 208V (A)			0.025	0.048	0.085	0.127	0.189	0.264	0.131	0.203	0.280	0.367	0.498
Input Current @ 240V (A)			0.023	0.044	0.075	0.112	0.165	0.230	0.115	0.176	0.243	0.320	0.432
Input Current @ 277V (A)			0.021	0.041	0.067	0.099	0.144	0.200	0.102	0.154	0.212	0.280	0.375
Input Current @ 347V (A)			n/a	n/a	0.056	0.076	0.112	0.156	0.079	0.121	0.166	0.219	0.300
Input Current @ 480V (A)			n/a	n/a	0.045	0.058	0.083	0.114	0.060	0.089	0.121	0.160	0.217
CCT/ CRI	Optics		PB1A	PB1B	PB1C	PB1D	PB1E	PB1F	PB2A	PB2B	PB2C	PB2D	PB2E
80 CRI 5000K CCT	T1	Lumens	748	1,455	2,498	3,544	5,014	6,473	4,072	6,175	8,061	10,085	12,445
		Lumens per Watt	156	156	147	138	130	119	154	148	139	132	119
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	T2R	Lumens	720	1,401	2,406	3,414	4,829	6,234	3,922	5,947	7,764	9,714	11,986
		Lumens per Watt	150	151	142	133	125	114	148	142	133	127	114
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	T2U	Lumens	712	1,387	2,380	3,378	4,778	6,168	3,881	5,884	7,682	9,611	11,860
		Lumens per Watt	148	149	140	132	123	113	146	141	132	126	113
		BUG Rating	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	T3	Lumens	710	1,381	2,371	3,365	4,760	6,145	3,866	5,862	7,653	9,575	11,815
		Lumens per Watt	148	149	139	131	123	113	146	140	131	126	113
		BUG Rating	B0-U0-G0	B0-U0-G0	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
	T4W	Lumens	688	1,340	2,300	3,264	4,616	5,960	3,750	5,685	7,422	9,286	11,458
		Lumens per Watt	143	144	135	127	119	109	141	136	128	122	109
		BUG Rating	B0-U0-G0	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2

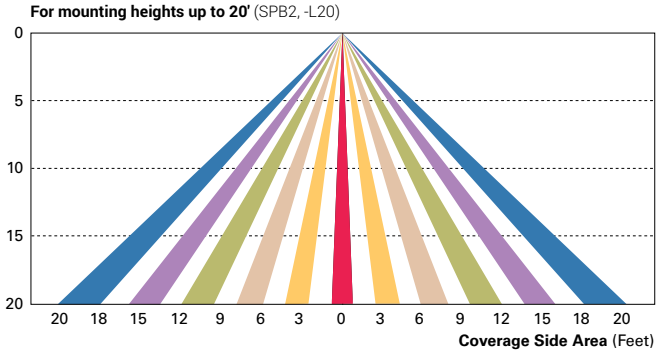
Control Options

0-10V This fixture is offered standard with 0-10V dimming driver(s). Standard with 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC) Optional button-type photocontrol (BPC) provides a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels.

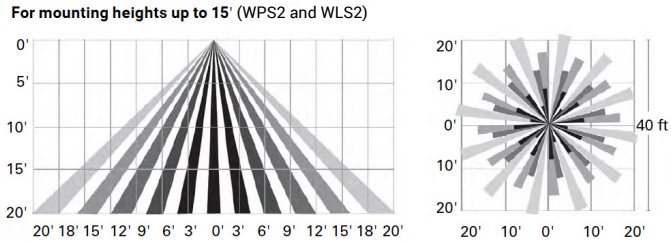
Dimming Occupancy Sensor (SPB, MS/DIM-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.

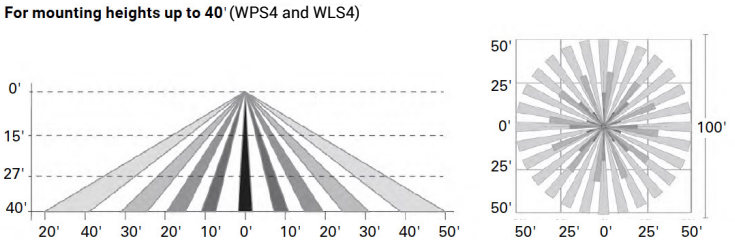




WaveLinx Wireless Control and Monitoring System

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mount[1]ing heights of 7′ to 40′. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7′ to 40′. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. The out-of-box functionality is ON at dusk and OFF at dawn.





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P. 770-486-4800
www.cooperlighting.com

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Specifications and dimensions
subject to change without notice.

Project		Catalog #		Type	
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features

Light ARchitect™

Product Certifications

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 17

Quick Facts

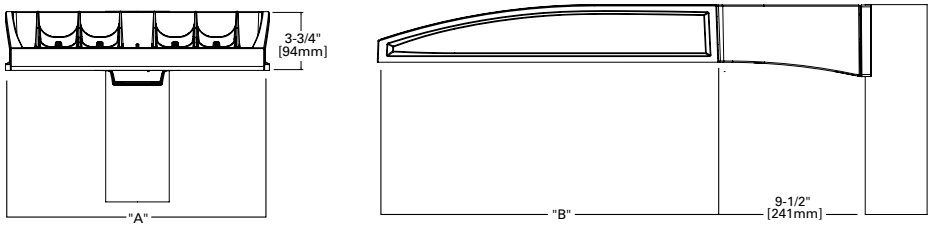
- Lumen packages range from 3,300 - 102,700 (33W - 658W)
- 22 optical distributions
- Efficacy up to 178 LPW

Connected Systems

- Wavelinx LITE Wireless
- Wavelinx PRO Wireless
- AirMesh Wireless

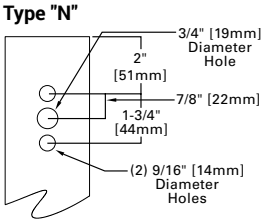
Dimensional Details

Standard Pole Mount Arm



Pole Drilling Pattern

Type "N"



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES: For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. IDA Certified (3000K CCT and warmer only, fixed mounting options)

Ordering Information

SAMPLE NUMBER: **GALN-SA4C-740-U-T4FT-GM**

Product Family [1, 2]	Light Engine Configuration			Color Temperature	Voltage	Distribution	Mounting	Finish
	Light Square	Square Count	Lumen Output					
GALN=Galleon II **BAA-GALN**=Galleon II Buy American Act Compliant [26] **TAA-GALN**=Galleon II Trade Agreements Act Compliant [26] **BABA-GALN**=Galleon II BABA/IIJA Compliant [38]	**SA**=16 LED Light Square **SB**=26 LED Light Square	**1**=1 Light Square **2**=2 Light Squares **3**=3 Light Squares **4**=4 Light Squares **5**=5 Light Squares **6**=6 Light Squares **7**=7 Light Squares **8**=8 Light Squares **9**=9 Light Squares	**A**=Output Level 1 **B**=Output Level 2 **C**=Output Level 3 **D**=Output Level 4 [4, 16] **Z**=Configured Output[32]	**722**=70CRI, 2200K **727**=70CRI, 2700K **730**=70CRI, 3000K **735**=70CRI, 3500K **740**=70CRI, 4000K **750**=70CRI, 5000K **760**=70CRI, 6000K **827**=80CRI, 2700K **830**=80CRI, 3000K **835**=80CRI, 3500K **840**=80CRI, 4000K **930**=90CRI, 3000K **935**=90CRI, 3500K **940**=90CRI, 4000K **950**=90CRI, 5000K **AMB**=Amber[14, 16]	**U**=120-277V **H**=347V-480V [7, 29] **1**=120V **2**=208V **3**=240V **4**=277V **8**=480V [7, 29] **9**=347V [7] **DV**=277V-480V DuraVolt Drivers [28, 29, 30]	**T1**=Type I **T2**=Type II **T2R**=Type II Roadway **T3**=Type III **T3R**=Type III Roadway **T4FT**=Type IV Forward Throw **T4W**=Type IV Wide **5NQ**=Type V Narrow **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **SL2**=Type II w/Spill Control **SL3**=Type III w/Spill Control **SL4**=Type IV w/Spill Control **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right **RW**=Rectangular Wide Type I **AFL**=Automotive Frontline **T2BC**=Type II w/ Backlight Control [39] **T3BC**=Type III w/ Backlight Control [39] **T4BC**=Type IV w/ Backlight Control [39] **LBC**=90° Left w/ Backlight Control [39] **RBC**=90° Right w/ Backlight Control [39]	**[Blank]**=Standard Pole Mount Arm **QU**=Quick Mount Universal Arm **QM**=Pole Mount Arm with Quick Mount Adaptor **PA**=Pole Mount, Adjustable **SP**=3" Slipfitter, Adjustable [8] **SP2**=2-3/8" Slipfitter, Adjustable [8] **QMA**=Quick Mount Mast Arm, Fixed **MA**=Mast Arm, Fixed **WM**=Wall Mount, Fixed **WA**=Wall Mount, Adjustable **UP**=Upswept Arm	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White **RALXX**=Custom Color

Options (Add as Suffix)

DIM=External 0-10V Dimming Leads [19]
F=Single Fuse (120, 277 or 347V Specify Voltage)
FF=Double Fuse (208, 240 or 480V Specify Voltage)
20K=20kV UL 1449 fused surge protective device [10]
2L=Two Circuits [10]
HA=50°C High Ambient [16]
HSS=Installed House Side Shield [17]
BCS=Backlight Control Shield [17, 37]
GRSBK=Glare Reducing Shield, Black [22]
GRSWH=Glare Reducing Shield, White [22]
LCF=Light Square Trim Painted to Match Housing [25]
TH=Tool-less Door Hardware [5]
CC=Coastal Construction finish [3]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
3SDCM=3 Standard Deviation Color Matching [36]
AHD145=After Hours Dim, 5 Hours [21]
AHD245=After Hours Dim, 6 Hours [21]
AHD255=After Hours Dim, 7 Hours [21]
AHD355=After Hours Dim, 8 Hours [21]
DALI=DALI Drivers
CDW=Non-programmable Drivers [41]

Controls and Systems Options (Add as Suffix)

BPC=Button Type Photocontrol. Must specify voltage 120V, 208V, 240V or 277V. [6]
PR=NEMA 3-PIN Photocontrol Receptacle
PR7=NEMA 7-PIN Photocontrol Receptacle [20]
FADC=Field Adjustable Dimming Controller [31]
PSC=Photocontrol Shorting Cap
SPB2=Dimming Motion Sensor, 9'-20' mounting [23]
SPB4=Dimming Motion Sensor, 21'-40' mounting [23]
SPB2/X=Dimming Motion Sensor, limited square count, 9'-20' mounting [23]
SPB4/X=Dimming Motion Sensor, limited square count, 21'-40' mounting [23]
MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting [33, 40]
MS/DIM-L40=Motion Sensor for Dimming Operation, 21'-40' Mounting [33, 40]
WLS2XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting [12, 18, 34]
WLS4XX=WaveLinx LITE, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting [12, 18, 34]
WPS2XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 13, 18, 34]
WPS4XX=WaveLinx PRO, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 13, 18, 34]
DIM10-L20=AirMesh Occupancy Sensor (9'-20' Mounting) [18, 35]
DIM10-L40=AirMesh Occupancy Sensor (21'-40' Mounting) [18, 35]

Accessories (Order Separately) [27]

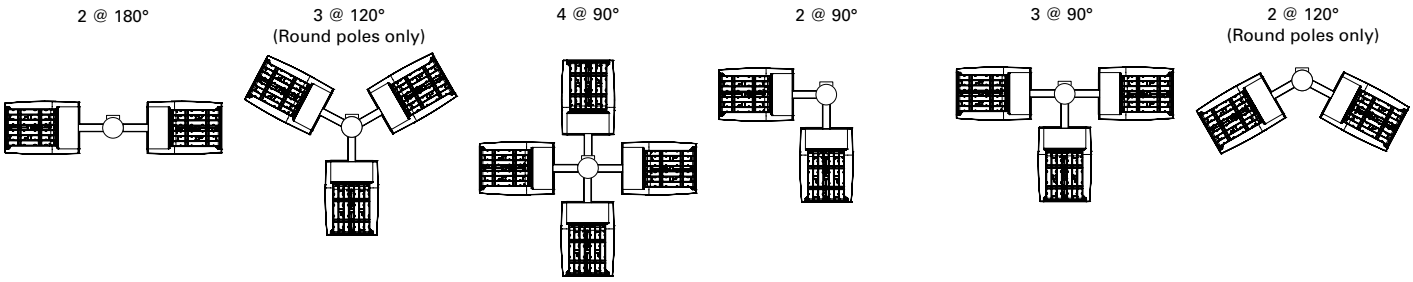
OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V
OA/RA1027=NEMA Photocontrol - 480V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=120V Photocontrol
MA1252=10kV Surge Module Replacement
MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1037-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
MA1197-XX=3@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1188-XX=4@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1189-XX=2@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1190-XX=3@90° Tenon Adapter for 2-3/8" O.D. Tenon
MA1191-XX=2@120° Tenon Adapter for 2-3/8" O.D. Tenon
MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1039-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1192-XX=3@120° Tenon Adapter for 3-1/2" O.D. Tenon
MA1193-XX=4@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1194-XX=2@90° Tenon Adapter for 3-1/2" O.D. Tenon
MA1195-XX=3@90° Tenon Adapter for 3-1/2" O.D. Tenon
SRA238=Adapter kit for mounting 3" SP arm to 2-3/8" O.D. vertical tenon
FSIR-100=Wireless Configuration Tool for MS/DIM [33]
LS/HSS=Field Installed House Side Shield for SA Light Squares [9, 17]
LS/HSS-SB=Field Installed House Side Shield for SB Light Squares [9, 17]
LS/BCS=Backlight Control Shield [9, 17, 37]
LS/GRSBK-2PK =Glare Reducing Shield, Black [9, 22]
LS/GRSWH-2PK =Glare Reducing Shield, White [9, 22]
LS/PFS=Perimeter Shield, Black [15]
WOLC-7P-10A=WaveLinx Outdoor Control Module [11, 18, 13]
TL7-G1-HV= AirMesh 7-PIN node, 110-480V [11, 18, 35]
CBSSW-450-002= AirMesh central base station with 5-button control [35]

NOTES:

1. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
2. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
3. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option.
4. When using SA light squares, Output Level 4 not available with color temperatures 722, 727, 827, 830 or 930 when HSS is used.
5. TH option not 3G rated. Not available with Coastal Construction (CC) option.
6. Not available with voltage options H, 8 or 9.
7. Not available with SB1A or SB2A configurations. Not available in combination with HA high ambient and sensor options at Output Level 3. H voltage not available with sensor options, choose voltage 8 or 9.
8. SP arm limited to 3" O.D. vertical tenon. SP2 limited to 2-3/8" O.D. vertical tenon.
9. One required for each Light Square.
10. 2L is not available with SB light squares. Not available with SPB at 347V or 480V. Not available with WaveLinx or 20kV surge option.
11. Requires PR7.
12. Replace XX with sensor color (WH, BZ or BK.).
13. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors.
14. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose Output Level 1; supplied at 500mA drive current only. Not available with SB light squares. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option.
15. Set of 4 pcs. One set required per Light Square.
16. HA option not available with Output Level 4 or AMB Amber.
17. Not for use with T1, 5NQ, 5MQ, 5WQ or RW optics.
18. Cannot be used with other control options.
19. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options.
20. Not available if any SPB, or WaveLinx sensor is selected. Motion sensor has an integral photocell.
21. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. Not available with SB light squares when using Output Level 4.
22. Not for use with T1, T4FT, T4W or SL optics. See IES files for details. Not available with SB light squares.
23. Sensor configuration mobile application required for configuration. See controls page for details.
24. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page.
25. Not available with HSS, GRSWH or GRSBK.
26. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
27. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
28. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
29. 480V not to be used with ungrounded or impedance grounded systems.
30. Not available with SA1A or SA1B. Not available with SB1, or any SB configuration using Output Level 1. Not available with any control option except SPB
31. Cannot be used with DALI, PR7, or other motion response control options. Not available with SB light squares when using Output Level 4.
32. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. Not available with SB light squares.
33. Uses the FSP-211 motion sensor. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
34. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx).
35. Requires AirMesh central base station CBSSW-450-002 and Synapse commissioning for operation.
36. 3-step MacAdam ellipse binning. Available in 740 CRI/CCT only. Longer lead times apply, consult your lighting representative at Cooper Lighting Solutions for more information.
37. Not available with SB light squares.
38. Only product configurations with these prefixes are built to be compliant with theBuy American Act of 1933 (BAA) or the Build America Buy America Act (BABA).BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment JobsAct (IIJA). Individual Government Agencies may have more stringent compliancestandards. Please refer to the DOMESTIC PREFERENCES website or consult the CLSDomestic Preferences team for more information. Components shipped separatelymay be separately analyzed under domestic preference requirements.
39. Select SA light square. Only available with Output Levels 1, 2 or 3. Not compatible with HSS, GRS, BCS or PFS shield options, or LCF.
40. Not compatible with DALI.
41. Uses non-NFC (Near Field Communication) drivers to eliminate field-programmability.

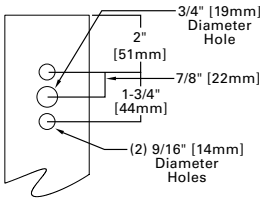
Mounting Details

Pole Configuration Options

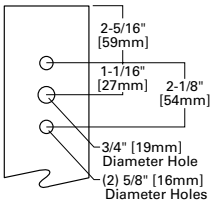


Pole Drilling Patterns

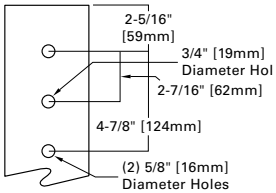
Type "N"



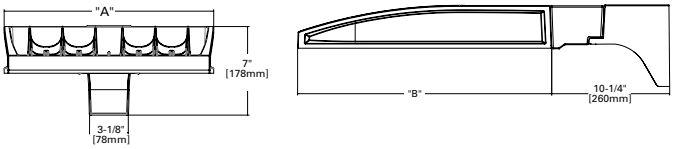
Type "R"



Type "M"

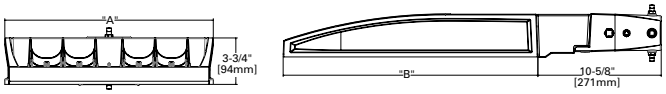


Quick Mount Universal Arm (QU)



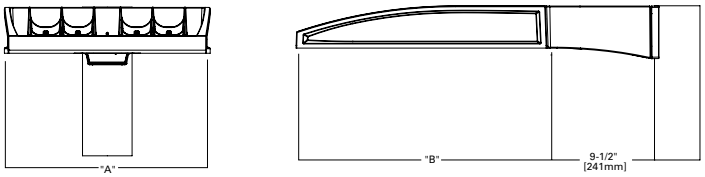
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Quick Mount Mast Arm (QMA)



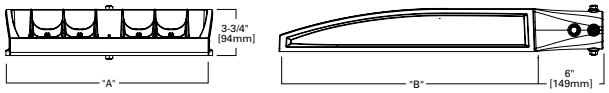
*NOTE: Fits 2-3/8" O.D. tenon

Pole Mount Arm with Quick Mount Adaptor (QM)



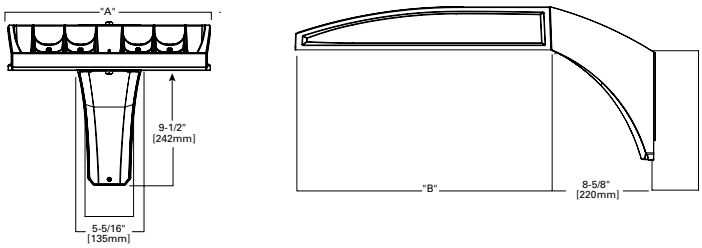
*NOTE: Use Type N drilling pattern

Mast Arm, Fixed (MA)



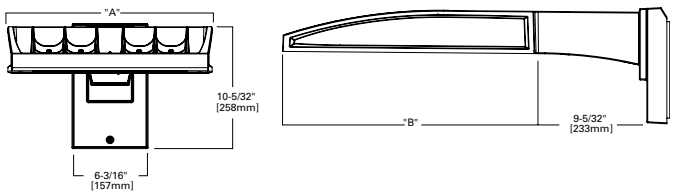
*NOTE: Fits 2-3/8" O.D. tenon

Upswept Arm (UP)



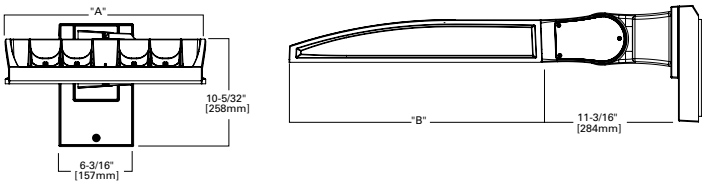
*NOTE: Universal bolt pattern compatible with Type N through Type M drilling patterns

Wall Mount, Fixed (WM)

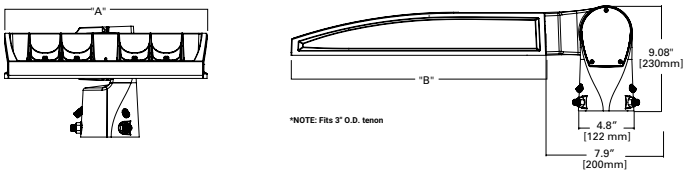


Mounting Details

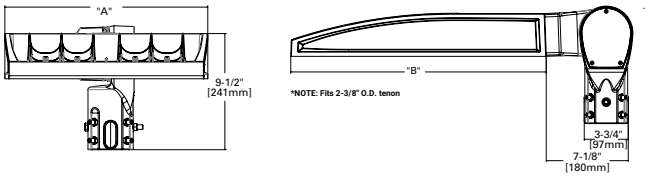
Wall Mount, Adjustable (WA)



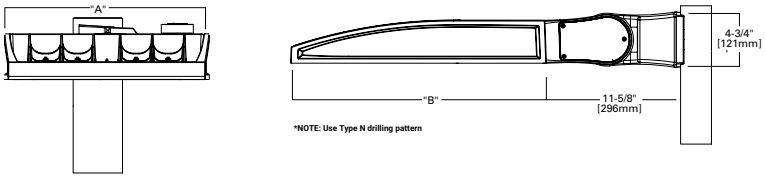
3" Slipfitter, Adjustable (SP)



2-3/8" Slipfitter, Adjustable (SP2)

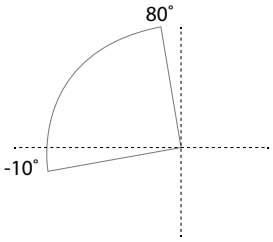


Pole Mount, Adjustable Arm (PA)



Adjustable Arm Range of Motion

- Includes WA, SP, SP2 and PA mounting options
- Adjustable in increments of 5°
- Must maintain downward facing orientation

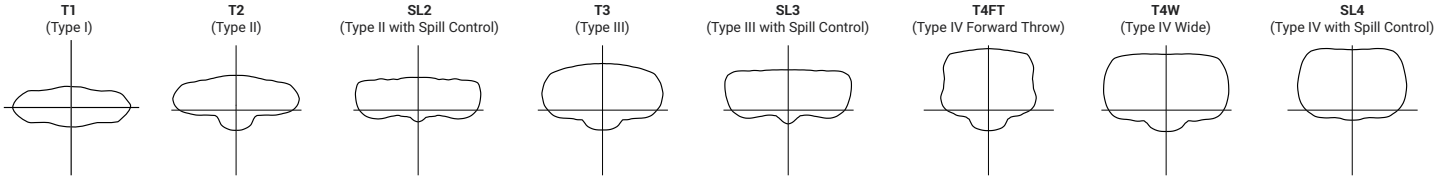


Fixture Weights and EPAs

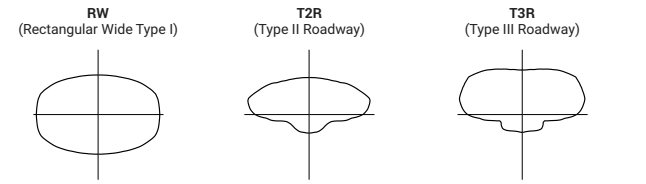
Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

Optical Distributions

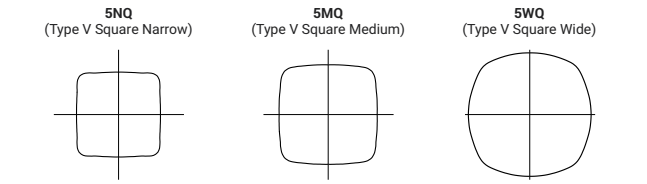
Asymmetric Area Distributions



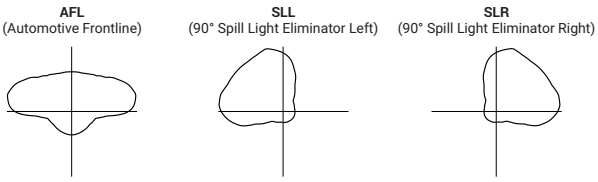
Asymmetric Roadway Distributions



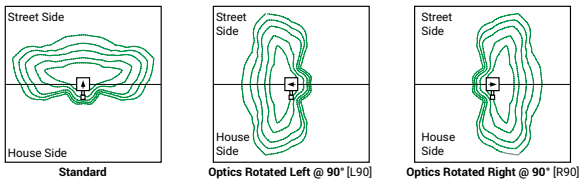
Symmetric Distributions



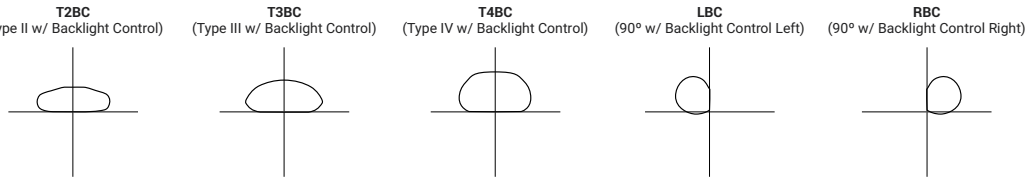
Specialized Distributions



Rotated Optics



Backlight Control Distributions



Product Specifications

Construction
- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics
- High-efficiency injection-molded AccuLED Optics technology
- 22 optical distributions for area site and roadway applications
- 4 shielding options include HSS, BCS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- 5 step MacAdam ellipse binning (5 SDCM) standard with 70CRI and 80CRI. 3SDCM option available with 740 CRI/CCT. 3 step MacAdam ellipse binning standard with 90CRI

Electrical
- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting
- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish
- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Compliance
- Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified
- IDA Certified (3000K CCT and warmer only, fixed mounting options)
- Declare compliant
- This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards.
- Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements

Typical Applications
- Outdoor, Parking Lots, Walkways, Roadways, Building Areas
- Sports lighting, including tennis, pickleball, basketball courts

Warranty
- Five-year limited warranty. Consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

Lumen Maintenance (TM-21)

Output Level	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Output Levels 1-3	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
Output Level 4	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

* Supported by IES TM-21 standards
** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0ºC	1.02
10ºC	1.01
25ºC	1.00
40ºC	0.99
50ºC	0.97

FADC Settings
SA1-SA3 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

FADC Settings
SA4-SA6 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

Note: +/-5% typical value

FADC Settings
SA7-SA9 (All Output Levels)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Note: +/-5% typical value

Drive Currents

Lumen Output	SA Light Squares	SB Light Squares
Output Level 1	615mA	350mA
Output Level 2	800mA	450mA
Output Level 3	1050mA	615mA
Output Level 4	1200mA	900mA

SA Light Squares, Output Level 1, 4000K CCT, 70 CRI

Galleon II IES Files | Supplemental Lumen Tables

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	215	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.089	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.078	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.738	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T1	Lumens	4,619	9,180	13,628	18,059	22,861	27,070	31,796	36,863	41,385
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	140	146	147	149	148	149	148	151	151
T2	Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,034	37,138	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,587	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	Lumens	4,735	9,411	13,970	18,513	23,436	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	146	149	148	149	148	151	151
T4W	Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,488
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	Lumens	4,586	9,115	13,531	17,931	22,699	26,879	31,571	36,602	41,091
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	Lumens	4,529	9,002	13,363	17,708	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
5NQ	Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
5MQ	Lumens	4,853	9,645	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
5WQ	Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	158	158
SLL/ SLR	Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,456	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

SA Light Squares, Output Level 2, 4000K CCT, 70 CRI

Galleon II IES Files | Supplemental Lumen Tables

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T1	Lumens	5,748	11,423	16,957	22,470	28,446	33,683	39,563	45,867	51,494
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T2	Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	145
T4FT	Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
5NQ	Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
5MQ	Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,103
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
5WQ	Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/ SLR	Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

SA Light Squares, Output Level 3, 4000K CCT, 70 CRI

Galleon II IES Files | Supplemental Lumen Tables

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	269	321	377	429	481
Input Current @ 120V		0.478	0.905	1.338	1.810	2.244	2.675	3.150	3.584	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T1	Lumens	7,101	14,113	20,950	27,763	35,146	41,616	48,882	56,671	63,623
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T2	Lumens	7,154	14,219	21,107	27,970	35,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	Lumens	7,250	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	Lumens	7,280	14,468	21,477	28,461	36,029	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	Lumens	7,098	14,107	20,941	27,751	35,130	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,386
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
5NQ	Lumens	7,424	14,755	21,903	29,025	36,743	43,508	51,104	59,247	66,515
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
5MQ	Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,359	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
5WQ	Lumens	7,445	14,797	21,966	29,108	36,849	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/ SLR	Lumens	6,132	12,187	18,091	23,973	30,348	35,936	42,210	48,935	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,757
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

SA Light Squares, Output Level 4, 4000K CCT, 70 CRI

Galleon II IES Files | Supplemental Lumen Tables

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.082	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T1	Lumens	7,814	15,529	23,053	30,549	38,672	45,793	53,787	62,358	70,007
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T2	Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,530
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
T3R	Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	Lumens	7,810	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	Lumens	7,833	15,568	23,110	30,625	38,769	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,354	70,003
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	Lumens	7,662	15,228	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
5NQ	Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
5MQ	Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
5WQ	Lumens	8,192	16,282	24,170	32,029	40,546	48,011	56,393	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/ SLR	Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

SB Light Squares, Output Level 1, 4000K, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		31	57	85	114	142	171	199	227	256
Input Current @ 120V		0.263	0.484	0.717	0.952	1.201	1.434	1.685	1.918	2.151
Input Current @ 208V		0.154	0.280	0.420	0.552	0.700	0.839	0.979	1.119	1.259
Input Current @ 240V		0.136	0.245	0.370	0.483	0.615	0.740	0.860	0.985	1.110
Input Current @ 277V		0.122	0.216	0.330	0.425	0.546	0.660	0.762	0.876	0.989
Input Current @ 347V		-	-	0.248	0.328	0.413	0.495	0.577	0.665	0.743
Input Current @ 480V		-	-	0.182	0.238	0.304	0.364	0.426	0.493	0.547
Optics										
T1	Lumens	4,696	9,389	14,086	18,816	23,716	28,470	33,388	37,964	42,763
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
	Lumens per Watt	152	164	166	165	167	167	168	167	167
T2	Lumens	4,704	9,404	14,109	18,846	23,754	28,515	33,442	38,024	42,831
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	152	164	167	165	168	167	168	167	168
T2R	Lumens	4,835	9,667	14,503	19,373	24,418	29,313	34,377	39,087	44,029
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	156	169	171	170	172	172	173	172	172
T3	Lumens	4,751	9,497	14,249	19,033	23,989	28,798	33,773	38,401	43,256
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	154	166	168	167	169	169	170	169	169
T3R	Lumens	4,874	9,743	14,618	19,526	24,611	29,544	34,648	39,396	44,376
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	158	170	173	171	174	173	174	173	174
T4FT	Lumens	4,692	9,380	14,074	18,799	23,694	28,444	33,358	37,929	42,724
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	152	164	166	165	167	166	168	167	167
T4W	Lumens	4,738	9,472	14,211	18,983	23,926	28,723	33,685	38,300	43,142
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	153	165	168	167	169	168	169	169	169
SL2	Lumens	4,719	9,433	14,153	18,905	23,828	28,605	33,546	38,143	42,965
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	153	165	167	166	168	167	168	168	168
SL3	Lumens	4,640	9,276	13,916	18,589	23,430	28,127	32,986	37,506	42,247
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	150	162	164	163	165	165	166	165	165
SL4	Lumens	4,706	9,408	14,115	18,854	23,764	28,527	33,456	38,040	42,849
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	152	164	167	165	168	167	168	168	168
5NQ	Lumens	4,975	9,945	14,921	19,931	25,121	30,157	35,367	40,213	45,297
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	161	174	176	175	177	176	178	177	177
5MQ	Lumens	4,972	9,939	14,912	19,919	25,106	30,139	35,346	40,189	45,269
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	161	173	176	175	177	176	178	177	177
5WQ	Lumens	4,802	9,600	14,403	19,239	24,249	29,110	34,139	38,817	43,724
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	155	168	170	169	171	170	171	171	171
SLL/SLR	Lumens	4,730	9,457	14,188	18,952	23,887	28,676	33,630	38,238	43,072
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	153	165	168	166	169	168	169	168	169
RW	Lumens	4,889	9,773	14,663	19,586	24,686	29,635	34,755	39,517	44,513
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4
	Lumens per Watt	158	171	173	172	174	173	175	174	174
AFL	Lumens	4,828	9,652	14,482	19,344	24,381	29,269	34,325	39,029	43,963
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	156	168	171	170	172	171	172	172	172

SB Light Squares, Output Level 2, 4000K, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		40	74	109	147	183	220	257	293	330
Input Current @ 120V		0.330	0.627	0.919	1.255	1.547	1.838	2.174	2.466	2.758
Input Current @ 208V		0.192	0.370	0.533	0.739	0.902	1.066	1.272	1.435	1.598
Input Current @ 240V		0.169	0.327	0.467	0.655	0.794	0.933	1.121	1.260	1.400
Input Current @ 277V		0.150	0.294	0.412	0.588	0.706	0.823	1.000	1.118	1.235
Input Current @ 347V		0.112	0.215	0.316	0.431	0.531	0.632	0.746	0.847	0.947
Input Current @ 480V		0.086	0.160	0.230	0.320	0.390	0.460	0.550	0.620	0.690
Optics										
T1	Lumens	5,895	11,786	17,683	23,620	29,771	35,739	41,913	47,656	53,681
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	148	159	162	161	163	162	163	163	163
T2	Lumens	5,905	11,805	17,711	23,658	29,818	35,796	41,980	47,732	53,766
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	148	160	162	161	163	162	164	163	163
T2R	Lumens	6,070	12,135	18,206	24,319	30,652	36,797	43,154	49,067	55,270
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	153	164	167	165	168	167	168	168	168
T3	Lumens	5,963	11,922	17,887	23,892	30,114	36,151	42,396	48,206	54,300
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	150	161	164	163	165	164	165	165	165
T3R	Lumens	6,118	12,231	18,350	24,511	30,894	37,087	43,494	49,454	55,706
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	154	166	168	167	169	168	169	169	169
T4FT	Lumens	5,890	11,775	17,667	23,599	29,744	35,706	41,875	47,613	53,632
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	148	159	162	161	163	162	163	163	163
T4W	Lumens	5,948	11,891	17,840	23,830	30,035	36,056	42,285	48,079	54,157
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	161	163	162	164	164	165	164	164
SL2	Lumens	5,923	11,842	17,766	23,732	29,912	35,908	42,111	47,882	53,935
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	160	163	161	164	163	164	164	164
SL3	Lumens	5,824	11,644	17,469	23,335	29,412	35,308	41,407	47,081	53,033
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	146	158	160	159	161	160	161	161	161
SL4	Lumens	5,907	11,810	17,718	23,668	29,831	35,811	41,998	47,752	53,789
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	148	160	162	161	163	162	164	163	163
5NQ	Lumens	6,245	12,484	18,731	25,020	31,535	37,857	44,397	50,480	56,862
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	157	169	172	170	173	172	173	172	173
5MQ	Lumens	6,241	12,477	18,719	25,005	31,516	37,834	44,370	50,450	56,827
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	157	169	171	170	173	172	173	172	172
5WQ	Lumens	6,028	12,051	18,080	24,151	30,440	36,542	42,855	48,728	54,887
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	151	163	166	164	167	166	167	166	167
SLL/SLR	Lumens	5,938	11,871	17,811	23,791	29,986	35,997	42,216	48,001	54,069
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	149	161	163	162	164	163	164	164	164
RW	Lumens	6,137	12,268	18,406	24,587	30,989	37,201	43,628	49,606	55,877
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	154	166	169	167	170	169	170	169	170
AFL	Lumens	6,061	12,117	18,179	24,283	30,606	36,742	43,089	48,993	55,187
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4
	Lumens per Watt	152	164	166	165	168	167	168	167	167

SB Light Squares, Output Level 3, 4000K, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		54	101	149	201	250	301	351	400	450
Input Current @ 120V		0.437	0.857	1.259	1.714	2.116	2.518	2.973	3.375	3.776
Input Current @ 208V		0.254	0.498	0.721	0.996	1.219	1.442	1.717	1.940	2.163
Input Current @ 240V		0.223	0.437	0.628	0.874	1.065	1.256	1.501	1.693	1.884
Input Current @ 277V		0.197	0.386	0.550	0.772	0.936	1.100	1.322	1.485	1.649
Input Current @ 347V		0.150	0.292	0.432	0.584	0.724	0.863	1.016	1.155	1.295
Input Current @ 480V		0.111	0.213	0.311	0.427	0.525	0.622	0.738	0.836	0.933
Optics										
T1	Lumens	7,841	15,675	23,517	31,414	39,594	47,531	55,743	63,381	71,393
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	144	155	158	157	159	158	159	159	159
T2	Lumens	7,853	15,700	23,555	31,464	39,657	47,607	55,832	63,482	71,507
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	144	156	158	157	159	158	159	159	159
T2R	Lumens	8,073	16,139	24,214	32,344	40,766	48,938	57,393	65,257	73,507
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	148	160	162	161	163	163	164	163	163
T3	Lumens	7,931	15,856	23,789	31,776	40,051	48,080	56,386	64,112	72,217
	BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	146	157	160	158	161	160	161	160	161
T3R	Lumens	8,137	16,267	24,405	32,599	41,088	49,325	57,846	65,773	74,087
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	150	161	164	162	165	164	165	165	165
T4FT	Lumens	7,834	15,661	23,496	31,385	39,558	47,488	55,692	63,324	71,329
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	144	155	158	156	159	158	159	158	159
T4W	Lumens	7,910	15,814	23,726	31,693	39,946	47,953	56,238	63,944	72,027
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	145	157	159	158	160	159	160	160	160
SL2	Lumens	7,878	15,749	23,629	31,562	39,781	47,756	56,006	63,681	71,731
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	145	156	158	157	159	159	160	159	159
SL3	Lumens	7,746	15,486	23,234	31,035	39,117	46,958	55,070	62,616	70,532
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	142	153	156	155	157	156	157	157	157
SL4	Lumens	7,857	15,707	23,565	31,477	39,674	47,627	55,855	63,509	71,538
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	144	156	158	157	159	158	159	159	159
5NQ	Lumens	8,305	16,604	24,911	33,275	41,940	50,348	59,046	67,137	75,624
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	153	165	167	166	168	167	168	168	168
5MQ	Lumens	8,300	16,594	24,896	33,255	41,915	50,318	59,010	67,097	75,578
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	153	164	167	166	168	167	168	168	168
5WQ	Lumens	8,017	16,027	24,046	32,120	40,484	48,600	56,996	64,806	72,998
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	147	159	161	160	162	162	163	162	162
SLL/SLR	Lumens	7,897	15,788	23,687	31,641	39,880	47,875	56,146	63,839	71,909
	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	145	156	159	158	160	159	160	160	160
RW	Lumens	8,162	16,317	24,480	32,699	41,215	49,476	58,024	65,975	74,315
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	150	162	164	163	165	164	166	165	165
AFL	Lumens	8,061	16,115	24,177	32,295	40,705	48,865	57,307	65,160	73,397
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	148	160	162	161	163	162	164	163	163

SB Light Squares, Output Level 4, 4000K, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		80	148	218	294	365	440	513	585	658
Input Current @ 120V		0.638	1.234	1.840	2.469	3.094	3.680	4.349	4.934	5.519
Input Current @ 208V		0.367	0.705	1.045	1.410	1.779	2.090	2.513	2.824	3.135
Input Current @ 240V		0.320	0.614	0.913	1.227	1.567	1.827	2.220	2.480	2.740
Input Current @ 277V		0.280	0.537	0.813	1.075	1.402	1.626	1.992	2.215	2.439
Input Current @ 347V		0.219	0.430	0.640	0.897	1.089	1.280	1.537	1.729	1.920
Input Current @ 480V		0.160	0.313	0.479	0.700	0.829	0.958	1.179	1.308	1.437
Optics										
T1	Lumens	10,654	21,299	31,955	42,684	53,800	64,585	75,742	86,121	97,008
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	144	147	145	147	147	148	147	147
T2	Lumens	10,671	21,333	32,006	42,752	53,886	64,688	75,863	86,258	97,162
	BUG Rating	B2-U0-G2	B3-U0-G3	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	147	148
T2R	Lumens	10,969	21,929	32,901	43,948	55,392	66,496	77,984	88,670	99,879
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	138	149	151	150	152	151	152	152	152
T3	Lumens	10,777	21,545	32,324	43,177	54,420	65,329	76,616	87,114	98,127
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	146	148	147	149	148	149	149	149
T3R	Lumens	11,056	22,103	33,161	44,295	55,830	67,022	78,600	89,371	100,668
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	139	150	152	151	153	152	153	153	153
T4FT	Lumens	10,644	21,280	31,926	42,646	53,751	64,526	75,674	86,043	96,920
	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	144	146	145	147	147	148	147	147
T4W	Lumens	10,748	21,488	32,239	43,063	54,277	65,158	76,414	86,885	97,869
	BUG Rating	B2-U0-G2	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	146	148	147	149	148	149	149	149
SL2	Lumens	10,704	21,400	32,106	42,886	54,054	64,890	76,100	86,528	97,467
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	148	148
SL3	Lumens	10,525	21,042	31,570	42,169	53,151	63,805	74,828	85,082	95,837
	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	132	143	145	144	146	145	146	145	146
SL4	Lumens	10,675	21,342	32,020	42,771	53,908	64,715	75,895	86,295	97,204
	BUG Rating	B2-U0-G3	B3-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	134	145	147	146	148	147	148	148	148
5NQ	Lumens	11,285	22,561	33,849	45,214	56,988	68,412	80,230	91,224	102,756
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	142	153	155	154	156	155	156	156	156
5MQ	Lumens	11,278	22,547	33,828	45,187	56,954	68,371	80,182	91,169	102,694
	BUG Rating	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	142	153	155	154	156	155	156	156	156
5WQ	Lumens	10,893	21,778	32,673	43,644	55,009	66,037	77,445	88,057	99,189
	BUG Rating	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	148	150	149	151	150	151	151	151
SLL/SLR	Lumens	10,731	21,453	32,186	42,993	54,189	65,051	76,290	86,743	97,709
	BUG Rating	B2-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	135	145	148	146	149	148	149	148	148
RW	Lumens	11,090	22,171	33,263	44,431	56,001	67,228	78,842	89,645	100,978
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	139	150	153	151	153	153	154	153	153
AFL	Lumens	10,953	21,897	32,852	43,882	55,309	66,397	77,868	88,538	99,730
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B5-U0-G5
	Lumens per Watt	138	148	151	149	152	151	152	151	152

Backlight Control Optics, Output Level 1, 4000K CCT, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		29	56	82	108	136	162	193	218	245
Input Current @ 120V		0.247	0.469	0.680	0.939	1.150	1.361	1.619	1.829	2.041
Input Current @ 208V		0.144	0.273	0.396	0.546	0.669	0.792	0.942	1.070	1.188
Input Current @ 240V		0.126	0.240	0.348	0.480	0.588	0.696	0.828	0.944	1.045
Input Current @ 277V		0.111	0.212	0.310	0.424	0.522	0.620	0.734	0.844	0.929
Input Current @ 347V		0.087	0.160	0.240	0.319	0.400	0.481	0.559	0.650	0.721
Input Current @ 480V		0.066	0.118	0.177	0.237	0.295	0.354	0.414	0.483	0.532
Optics		**SA1A**	**SA2A**	**SA3A**	**SA4A**	**SA5A**	**SA6A**	**SA7A**	**SA8A**	**SA9A**
T2BC	Lumens	3,639	7,299	10,947	14,537	17,743	21,263	24,840	28,510	32,106
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
	Lumens per Watt	125	131	134	135	130	131	129	131	131
T3BC	Lumens	3,824	7,670	11,504	15,276	18,645	22,344	26,103	29,960	33,739
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5
	Lumens per Watt	132	137	141	142	136	137	135	138	138
T4BC	Lumens	3,698	7,417	11,125	14,772	18,030	21,607	25,242	28,972	32,626
	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	128	133	137	138	132	133	131	133	133
RBC	Lumens	3,327	6,673	10,008	13,290	16,221	19,439	22,709	26,065	29,352
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
	Lumens per Watt	115	120	123	124	119	119	118	120	120
LBC	Lumens	3,327	6,673	10,008	13,290	16,221	19,439	22,709	26,064	29,352
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4
	Lumens per Watt	115	120	123	124	119	119	118	120	120

Backlight Control Optics, Output Level 2, 4000K CCT, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		39	73	106	144	179	213	249	283	314
Input Current @ 120V		0.320	0.610	0.890	1.220	1.500	1.781	2.110	2.385	2.671
Input Current @ 208V		0.185	0.352	0.513	0.704	0.865	1.027	1.217	1.380	1.540
Input Current @ 240V		0.161	0.307	0.449	0.615	0.756	0.898	1.064	1.210	1.347
Input Current @ 277V		0.141	0.270	0.395	0.539	0.665	0.790	0.934	1.069	1.185
Input Current @ 347V		0.111	0.207	0.314	0.414	0.522	0.629	0.729	0.847	0.943
Input Current @ 480V		0.083	0.152	0.229	0.303	0.380	0.457	0.532	0.620	0.686
Optics		**SA1B**	**SA2B**	**SA3B**	**SA4B**	**SA5B**	**SA6B**	**SA7B**	**SA8B**	**SA9B**
T2BC	Lumens	4,549	9,135	14,026	17,976	22,214	26,621	31,146	35,647	39,532
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5
	Lumens per Watt	118	125	132	125	124	125	125	126	126
T3BC	Lumens	4,780	9,599	14,739	18,890	23,344	27,975	32,730	37,460	41,542
	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	124	132	139	131	131	131	131	132	133
T4BC	Lumens	4,622	9,282	14,253	18,267	22,574	27,052	31,650	36,224	40,172
	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	119	128	134	127	126	127	127	128	128
RBC	Lumens	4,159	8,351	12,823	16,434	20,309	24,338	28,475	32,590	36,141
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5
	Lumens per Watt	107	115	121	114	114	114	114	115	116
LBC	Lumens	4,158	8,351	12,822	16,434	20,308	24,337	28,474	32,589	36,140
	BUG Rating	B0-U0-G1	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5
	Lumens per Watt	107	115	121	114	114	114	114	115	116

Backlight Control Optics, Output Level 3, 4000K CCT, 70 CRI

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		50	96	140	190	236	283	330	377	417
Input Current @ 120V		0.427	0.803	1.176	1.606	1.979	2.352	2.782	3.155	3.528
Input Current @ 208V		0.248	0.465	0.672	0.929	1.136	1.343	1.601	1.808	2.015
Input Current @ 240V		0.218	0.407	0.586	0.814	0.993	1.171	1.399	1.578	1.757
Input Current @ 277V		0.192	0.359	0.512	0.718	0.872	1.025	1.231	1.384	1.537
Input Current @ 347V		0.144	0.286	0.418	0.573	0.704	0.836	0.991	1.122	1.253
Input Current @ 480V		0.108	0.209	0.301	0.418	0.510	0.602	0.719	0.811	0.903
Optics		**SA1C**	**SA2C**	**SA3C**	**SA4C**	**SA5C**	**SA6C**	**SA7C**	**SA8C**	**SA9C**
T2BC	Lumens	5,676	11,326	16,920	22,428	27,616	33,094	38,563	43,758	49,195
	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	113	118	121	118	117	117	117	116	118
T3BC	Lumens	5,965	11,902	17,780	23,568	29,020	34,777	40,524	45,983	51,697
	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	119	124	127	124	123	123	123	121	124
T4BC	Lumens	5,768	11,509	17,194	22,791	28,063	33,630	39,187	44,466	49,992
	BUG Rating	B0-U0-G2	B0-U0-G3	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	115	120	122	120	119	119	119	117	120
RBC	Lumens	5,189	10,355	15,468	20,504	25,247	30,255	35,255	40,004	44,976
	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	103	108	110	108	107	107	107	106	108
LBC	Lumens	5,189	10,354	15,468	20,503	25,246	30,255	35,255	40,004	44,975
	BUG Rating	B0-U0-G2	B0-U0-G2	B0-U0-G3	B0-U0-G3	B0-U0-G4	B0-U0-G4	B0-U0-G5	B0-U0-G5	B0-U0-G5
	Lumens per Watt	103	108	110	108	107	107	107	106	108

Control Options

0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)
Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB and MS/DIM-LXX)
These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB (FSP-321 or FSP-311) or MS/DIM (FSP-211) sensor options are selected, the occupancy sensor is connected to a dimming driver and the luminaire dims when no motion is detected. After a set period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. Both sensors are factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM sensor requires the FSIR-100 programming tool to adjust factory defaults. The SPB sensor default parameters are listed in the table below and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares (See SPB/X Availability Table below.) An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish*
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

*SPB bezel color automatically selected based on luminaire finish

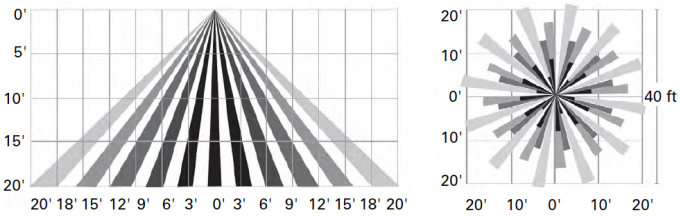
SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

Default Program Settings (Out of the Box Functionality)

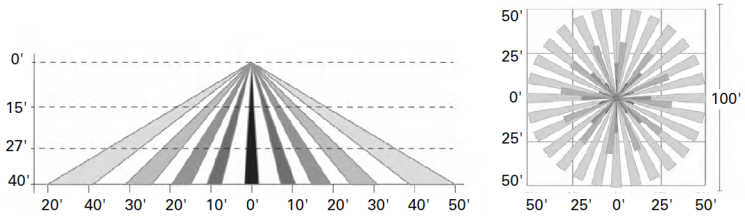
Occupancy Sensor				
Setting	MS/DIM	SPB	WaveLinx Lite (WLS4 / WLS2)	WaveLinx (WPS)
High Mode %	100%	100%	100%	100%
Low Mode %	10%	10%	50%	50%
Time Delay	5 min	5 min	15 min	15 min
Cut Off Delay	1 hr	1 hr	Disabled	Disabled
Photocell Enabled	No	No	Yes	Yes

WaveLinx Wireless Control and Monitoring System
Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx (WPS2 to WPS4) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WLS4 and WLS2) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (WPS2 and WLS2)



For mounting heights up to 40' (WPS4 and WLS4)



AirMesh (DIM10)
AirMesh integrated wireless controls system includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional AirMesh components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

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Peachtree City, GA 30269
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Specifications and dimensions subject to change without notice.

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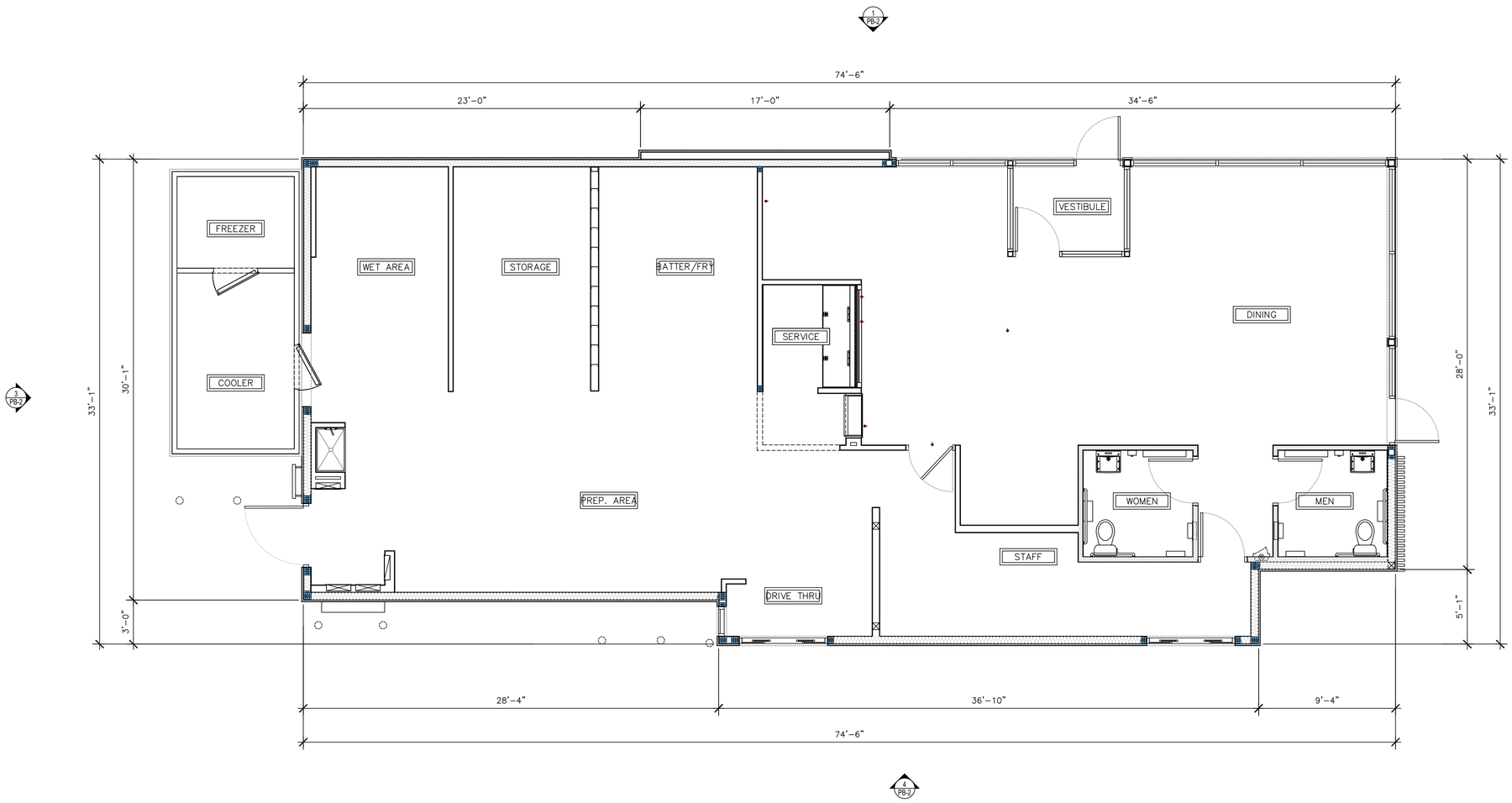

1 PB-1 PROPOSED FLOOR PLAN

1/4" = 1'-0"

BUILDING AREA CALCULATIONS

TOTAL BUILDING AREA + WALKIN COOLER / FREZER: 2,536 SF

BUILDING HEIGHT: 19'-00" PROVIDED

24 CUSTOMERS SEATS

Electrical Service: 600 Amps 100% Rated at 208/120 Volt, 3 Phase, 4 Wire
Actual Demand Load = 579 Amps.

Gas Service: 1,700 CFH at 7 - 14 inches of Water Column.
Actual Demand Load = 1,658 CFH

Baseline Case: change occupant values to reflect anticipated occupancy

Fixture Type	Consumption	Daily Uses	Duration	Occupants	Daily Water Use (gal)
1.6 gpf toilet - male (gallons per flush)	1.6	1	1	250	400
1.6 gpf toilet - female (gallons per flush)	1.6	3	1	250	1 ,200
1.0 gpf urinal - male (gallons per flush)	1	2	1	0	-
Commercial Lavatory Faucet - 1.0 gpm	1	3	0.25	500	375
Kitchen sink - 2.2 gpm	2.2	1	0.25	500	275
misc - 2.5 gpm	2.5	0.1	8	500	1 ,000
Total Daily Volume					3 ,250
Annual Work Days					364
Total Annual Usage					1,183,000

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NCARB 84690
AIA 38640695

LICENSED ARCHITECT ROBERT ANTHONY GRIMALDI No. 5492 STATE OF MAINE

CT	3585	NJ	AI 15475
DE	S5-0008497	NY	039330
IL	001.026466	OH	ARC.2018210
KY	8670	OK	A08331
MA	951751	PA	AR07639
MD	18745	RI	ARC.0005368
ME	ARC5492	SC	11215
MO	2022043991	VA	0401019058
NC	16985	DC	AEC103027
NH	04842	WV	5455

PROFESSIONAL OF RECORD PRACTICING AS AN INDIVIDUAL

LOUISIANA KITCHEN 19 72 — POPEYES LOUISIANA KITCHEN

POPEYES LOUISIANNA KITCHEN
584 ALFRED STREET
BIDDEFORD, MAINE

FLOOR PLAN

Revisions
1 :
2 :
3 :
4 :
5 :

Drawn By: STAFF	Checked By: RAG
Scale: 1/4"=1'-0"	Date: 2025-12-07

Job No. 26-0003

Sheet No. PB-1

Date Printed: Wednesday, December 10, 2025 3:28:59 PM

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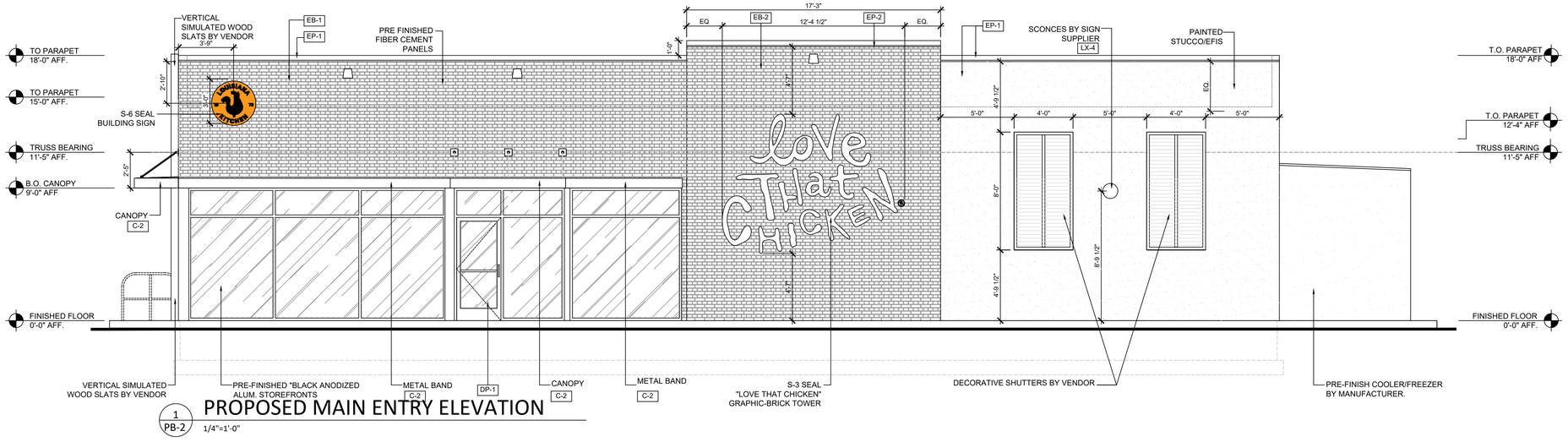
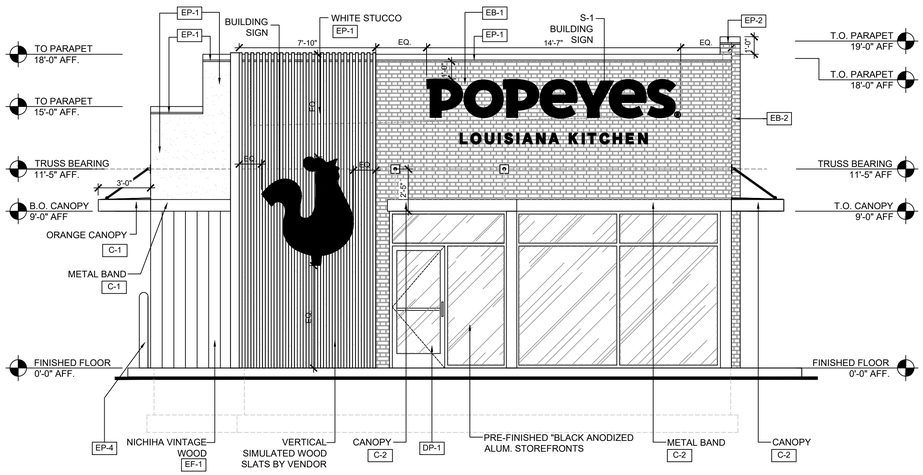


1 PB-2 **PROPOSED MAIN ENTRY ELEVATION**

1/4"=1'-0"



2 PB-2 **PROPOSED FRONT ELEVATION**

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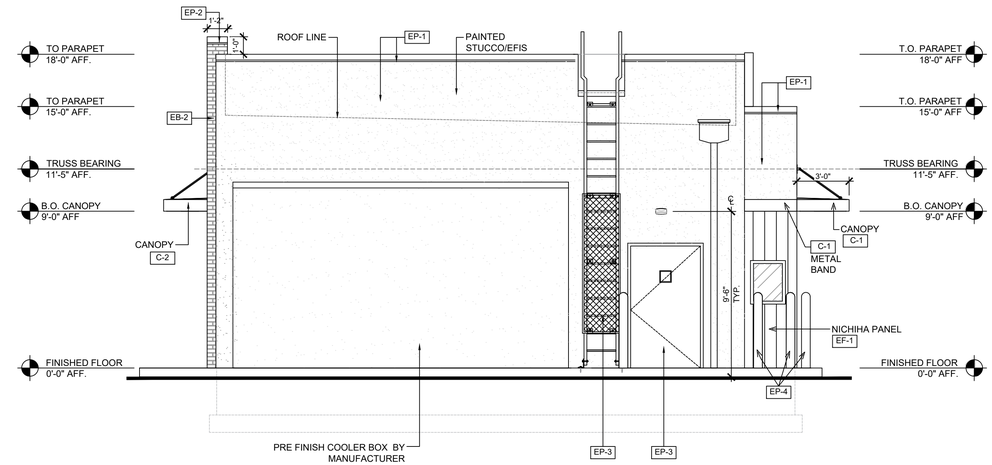
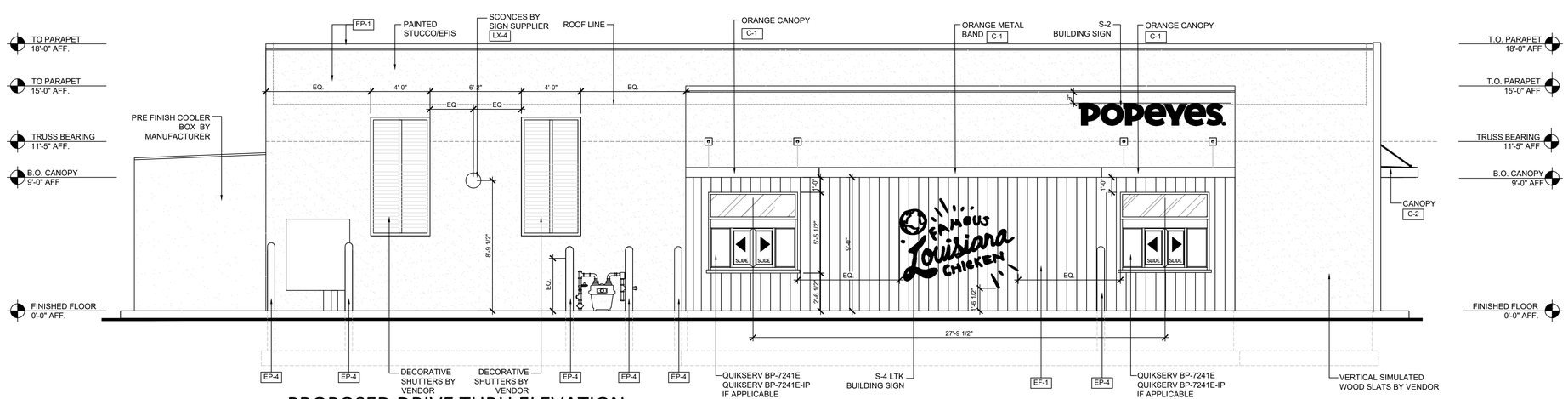


3 PB-2 **PROPOSED REAR ELEVATION**

1/4"=1'-0"



4 PB-2 **PROPOSED DRIVE THRU ELEVATION**

1/4"=1'-0"

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CT	3585	NJ	AI 15475
DE	S5-0008497	NY	039330
IL	001.026466	OH	ARC.2018210
KY	8670	OK	A08331
MA	951751	PA	AR07639
MD	18745	RI	ARC.0005368
ME	ARC5492	SC	11215
MO	2022043991	VA	0401019058
NC	16985	DC	AEC103027
NH	04842	WV	5455

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LOUISIANA KITCHEN 19 72 POPEYES LOUISIANA KITCHEN

POPEYES LOUISIANNA KITCHEN
584 ALFRED STREET
BIDDEFORD, MAINE

EXTERIOR ELEVATIONS

Revisions
1 :
2 :
3 :
4 :
5 :

Drawn By STAFF	Checked By RAG
Scale 1/4"=1'-0"	Date 2025-12-07

Job No. 26-0003

Sheet No. PB-2

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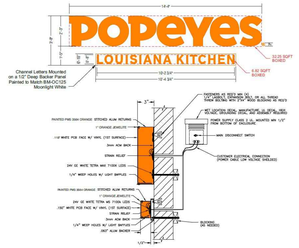
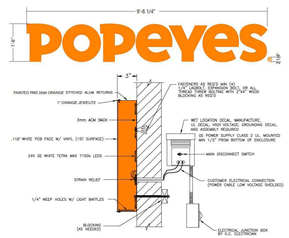
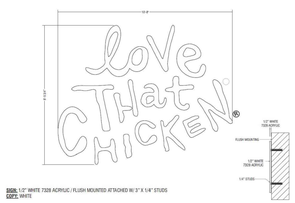


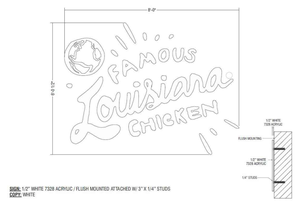
S-1 ILLUMINATED CHANNEL LETTERS
FRONT VIEW & SIDE VIEW



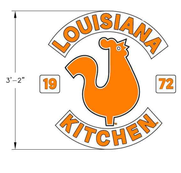
S-2 ILLUMINATED CHANNEL LETTERS
FRONT VIEW & SIDE VIEW



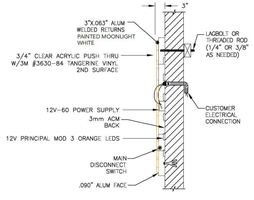
S-3 "LOVE THAT CHICKEN" GRAPHIC–BRICK TOWER

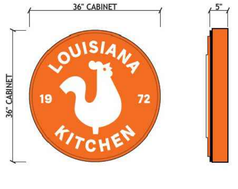


S-4 "FAMOUS LOUISIANA CHICKEN" GRAPHIC–DRIVE THRU WINDOW

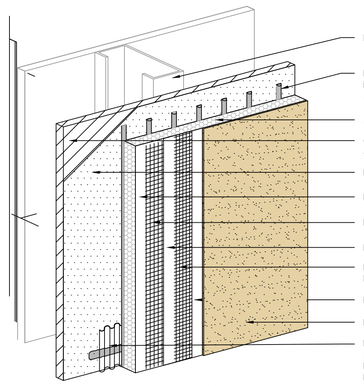


S-5 "POPEYES BRAND SEAL"





S-6 ILLUMINATED BUILDING SEAL
FRONT VIEW & SIDE VIEW



Outsulation® Plus MD System®

NOTE:

1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD OR STANDARD PLUS MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. AS AN OPTION DRYVIT DRAINAGE TRACK™ CAN BE USED AT SYSTEM TERMINATION AT GRADE, REFER TO OPMD 0.0.08 FOR CONFIGURATION.
3. DRYVIT DRAINAGE TRACK SHALL ONLY BE USED AT GRADE LEVEL TERMINATIONS.
4. 4GC TO BUDGET FOR "MANUFACTURE" DRYVIT TO REVIEW AND SIGN OFF ON THE INSTALLATION AND PROVIDE BOTH MATERIAL AND LABOR WARRANTY FOR THE INSTALLATIONS

A PB-3 TYP. EIFS DETAIL
NTS

B PB-3 TYP. NICHIHA PANEL DETAIL
NTS

EF-1

EB-1

EB-2

NOTE:

USE THE SAME ASSEMBLY AS ABOVE BUT REDUCE THE EPS INSULATION TO 1/2" IN THICKNESS AND FOLLOW NICHIHA RECOMMENDED INSTALLATION METHODS

PLK FINISH SCHEDULE 2024

TAG	MATERIAL	APPLICATION	SOURCE	PRODUCT	COLOR	DIMENSION	REF IMAGE	IMAGE TYPE
EXTERIOR	Rev. 10/18/2024	To be used with 21 series	(2112, 2124, 2136)	& 18 series (1849)				
EP-1	Exterior Wood Siding	Front Facade Exterior Walls	Nichiha Fiber Cement	Vintage Wood AWP 3030	Cedar	17-7/8" H x 119-5/16" L		Nola Makers
EP-2	Fiber cement wall panel	DTO Front Facade Exterior Walls	Nichiha Fiber Cement	Latura V Groove	White			Nola Makers
BRICK								
EB-1								
EB-1	Brick (Clip System)	Front of Building	Nichiha Fiber Cement	Vintage Brick	White Smoke	7 3/8" x 2 1/2" x 3/4"		Nola Makers
EB-2								
EB-2	Brick (Clip System)	Accent Tower Brick	Nichiha Fiber Cement	Vintage Brick	Alexandria Buff	7 3/8" x 2 1/2" x 3/4"		Nola Makers
PAINT								
EP-1								
EP-1	Exterior Paint	Main Wall Surface, Rear Door	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	OC-125 Moonlight White			Nola Makers
EP-2								
EP-2	Exterior Paint	Brick Tower Parapet	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	2105-20 Root Beer Candy			Nola Makers
EP-3								
EP-3	Exterior Paint	Dumpster Walls and Wainscot	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	HC-170 Stonington Grey			Nola Makers
EP-4								
EP-4	Metal Paint	Bollards	Benjamin Moore	Corotech High Solids Rapid Dry Enamel	Safety Yellow			Nola Makers
EP-5	Metal Paint	Dumpster Gates and Pylon Pole	Sherwin Williams	Industrial Enamel HS	SW-6991 Black Magic			Nola Makers
EP-6								
EP-6	Anti Graffiti Coat	Exterior Walls	Benjamin Moore	Aliphatic Acrylic Urethane - Gloss	V500-00 Clear			Nola Makers
EP-6	Anti Graffiti Coat	Exterior Walls	Sherwin Williams	2K Water Based Urethane - Gloss	B65-1300/B65V1300			Nola Makers
EP-7								
EP-7	Exterior Paint	Nichiha Vintage Wood Color Match	Benjamin Moore	Ultra Spec Ext Low Lustre (N455)	1084 Lake Shore Trail			Nola Makers
MISC								
C-1	Canopy - Metal	Drive Thru Window Canopy	Provided by Manufacturer	Provided by Manufacturer	Orange. Pantone #3564 C			Nola Makers
C-2	Canopy - Metal	Building Canopies	Provided by Manufacturer	Provided by Manufacturer	Teal. Pantone #326 C			Nola Makers
C-3	Canopy - Metal	Building Canopies	Provided by Manufacturer	Provided by Manufacturer	Black			Nola Makers
S-1	Shutters - Poppy	Exterior Walls Rear of Building	Provided by Manufacturer	Provided by Manufacturer	Provided by Manufacturer			Nola Makers
DP-1	Door	Main Entrance Doors	Provided by Manufacturer	Provided by Manufacturer	Orange. Pantone #3564 C			Nola Makers

ROBERT ANTHONY GRIMALDI
ARCHITECT
39 NORTH 11th STREET
KENILWORTH, NJ 07033
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908-347-7419
NCARB 84690
AIA 38640695

LICENSED ARCHITECT ROBERT ANTHONY GRIMALDI No. 5492 STATE OF MAINE

CT	3585	NJ	AI 15475
DE	S5-0008497	NY	039330
IL	001.026466	OH	ARC.2018210
KY	8670	OK	A08331
MA	951751	PA	AR07639
MD	18745	RI	ARC.0005368
ME	ARC5492	SC	11215
MO	2022043991	VA	0401019058
NC	16985	DC	AEC103027
NH	04842	WV	5455

PROFESSIONAL OF RECORD PRACTICING AS AN INDIVIDUAL

Popeyes LOUISIANA KITCHEN

POPEYES LOUISIANNA KITCHEN
584 ALFRED STREET
BIDDEFORD, MAINE

EXTERIOR SPECIFICATIONS

Revisions
1:
2:
3:
4:
5:

Drawn By	Checked By
STAFF	RAG
Scale	Date
1/4"=1'-0"	2025-12-07

Job No. 26-0003

Sheet No. PB-3

Date Printed: Wednesday, December 10, 2025 3:28:06 PM

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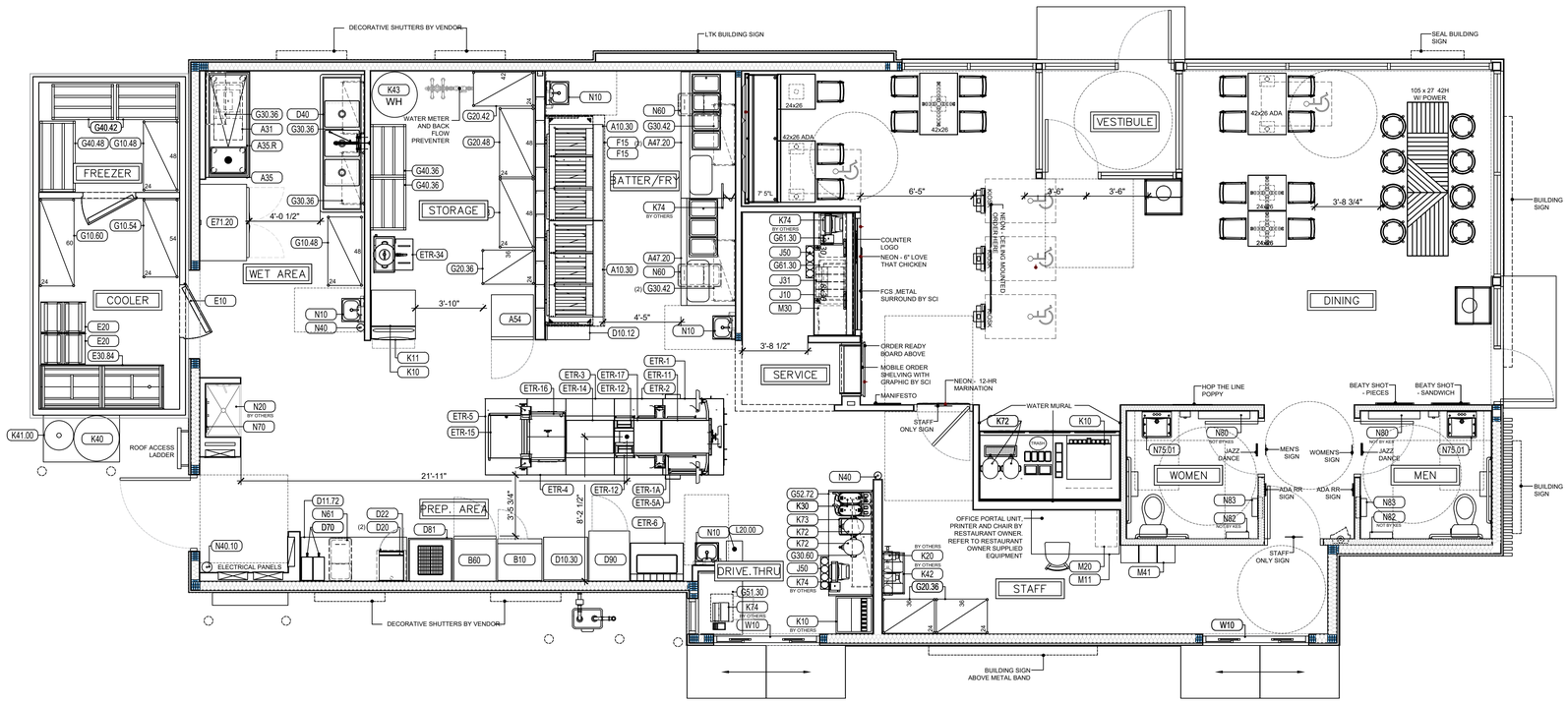

EQUIPMENT SCHEDULE

ITEM#	QTY	DESCRIPTION	MANUFACTURER	MODELNO.
A10.30	1	3 VAT NAT GAS FRYER 120LB 20IN	FRYMASTER	FRY-3FQG120TOQS-P
A10.30	1	3 VAT NAT GAS FRYER 120LB 20IN	FRYMASTER	FRY-3FQG120T-P
A31	1	MARINATOR - (REDUCED HEIGHT) 120V	ARYKING	M101-120
A35	1	SS SIDE SPLASH SHINK DIVIDER	H&K	POP163
A35.R	1	1 COMPARTMENT SINK 72" RIGHT HAND DRAIN BOARD	H&K	POP164X-3
A47.20	1	73IN 3 PAN BATTER STATION LH	AYRKING	AYR-BBSUL7335LH
A47.20	1	86" 4 PAN BATTER STATION RH	AYRKING	AYR-BBSUL8635RH-P
A49.00	1	DRUMROLL	AYRKING	DRUF120TPR
A54	1	FREEZER 1 DR REACH-IN, TURBO AIR	TURBO AIR	TUR-M3F24-1R-N
B10	1	HALF SIZE DOUBLE DECK ELECTRIC CONVECTION OVEN	BLODGETT	2-CTB
B60	1	REACH IN REFRIGERATOR 1 SOLID DOOR	TURBO AIR	TUR-M3R24-1R-N
B65		NOT USED	H&K	POP068-1
D10.12	1	WORK TABLE 12", W/UNDERSHELF W/ BACK SPLASH	H&K	POP102-3
D10.30	1	WORK TABLE 30", W/UNDERSHELF W/ BACK SPLASH	H&K	POP066-3
D11.72	1	72" WORKING TABLE	H&K	POP411
D20	2	MICROWAVE OVEN	PANASONIC	NE-17523
D22	1	MICROWAVE SHELF	H&K	POP188
D40	1	3 COMPARTMENT SINK 94"	H&K	POP178-3
D70	2	DISPENSER, HOT WATER W/WALL BRACKET	BUNN-O-MATIC	HS-X-EL
D81	1	RETHERMALIZER WATER TANK	H&K	POP144
D90	1	REACH IN HOLDING CABINET	WINSTON	HOV3-14UV
E10.00	1	WALK-IN COOLER/FREEZER	ICS	134509
E20	2	MOBILE PAN BUN RACK	KELMAX	4H1286
E30.84	1	CHICKEN CRATE VAT 84"	H&K	POP070-4
E71.20	1	TWO DOOR REACH-IN EVEN-THAW REF.	TRAULSEN	RE232N-1
ETR-1	1	EXPEDITER FRY MODULE FOR ETR DUAL LINE ASSY	H&K	POP497
ETR-11	1	HOT HOLDING CABINET 3X2	DUKE	RFHU-32F
ETR-12	2	VERTICAL TOASTER WITHOUT BELT WRAPS	ANTUNES	VCT-2 (9210955)
ETR-14	1	HOT HOLDING CABINET	DUKE	RFHU-52F
ETR-15	1	FRIED FOOD HOLDING CABINET	CARTER-HOFFMAN	FFS3V-25T1
ETR-16	1	EXTENDED HOLDING UNIT	DUKE	EHU-4
ETR-17	1	HOT HOLDING CABINET 3X1	DUKE	RFHU-31F
ETR-1A	1	OVERSHELF W-MONITORS SUPPORT	H&K	POP500
ETR-2	1	SANDWICH MODULE 33X52IN	H&K	POP495
ETR-3	1	BONELESS MODULE 33X52IN	H&K	POP491
ETR-34	1	WATER CHILLER	H&K	POP450-2
ETR-34	1	ROLLING BUCKET STAND	H&K	POP452
ETR-34	1	MIXSTIR	AYRKING	SMB8G360-PLK
ETR-4	1	BONE-IN MODULE 26X52IN	H&K	POP494
ETR-5	1	IN LINE EXTENDED HOLD MODULE	H&K	POP489
ETR-5A	1	COMPACT REFRIGERATOR W-CASTERS	H&K	POP484

EQUIPMENT SCHEDULE

ITEM#	QTY	DESCRIPTION	MANUFACTURER	MODELNO.
ETR-6	1	FLUSH WATERLESS WELL TABLE	DUKE	1141-2085
F15	1	EXHAUST HOOD 12FT (3347 FR-BD-2)	FRANKE	K558423
G10.48	1	STORAGE 4 TIER WIRE SHELVING 24WX48L	INTERMETRO	2448NK3
G10.48	1	E-SHELF 24X48 4 TIER 72"POST	CAMBRO	ESU244872V4
G10.54	1	E-SHELF 24X54 4 TIER 72" POST	CAMBRO	ESU245472V4
G10.60	1	E-SHELF 24X60 4 TIER 72" POST	CAMBRO	ESU246072V4
G20.36	2	STORAGE 4 TIER WIRE SHELVING 24WX36L	INTERMETRO	2436BR
G20.42	2	STORAGE 4 TIER WIRE SHELVING 24WX42L	INTERMETRO	2442BR
G20.54	2	STORAGE 4 TIER WIRE SHELVING 24WX54L	INTERMETRO	2454BR
G30.36	3	2 TIER WALL MOUNTED WITH BRACKET SHELVING, 14X36"	INTERMETRO	1436NK3
G30.60	1	1 TIER WALL MOUNTED WITH BRACKET SHELVING, 14X60"	INTERMETRO	INM-1460NK3
G40.36	2	DUNNAGE RACK 24X36x12	KELMAX	4H1957
G40.42	2	DUNNAGE RACK 42X24X12	KELMAX	4H1784-P
G40.48	1	DUNNAGE RACK 24X48	KELMAX	4H2008
G51.30	1	DT TABLE 30"	INTERMETRO	INM-DT TABLE30
G52.72	1	72" DT TABLE	H&K	POP393
G55.48	1	STAGING CART 48IN	H&K	POP434
G61.30	2	SHELVING, 2 TIER, UNDERCOUNTER W/ 34" POSTS, 18"X30"	INTERMETRO	1830BR
J10	1	FRONT COUNTER SUPPORT LEG	BY OWNER	-
J31	1	CONDIMENT ORGANIZER	CAMBRO	12RS12110
J50.00	2	CUP ORGANIZER	DISPENSE-RITE	WR-CC-22
K10	1	REMOTE CONDENSER	MANITOWOC	MAN-JCT1200-261
K10	1	ICE MACHINE REMOTE 900LBS	MANITOWOC	MANIYT0900N-261
K10	1	ICE MACHINE AIR COOLED 550LB	MANITOWOC	MAN-IYT0500A-161-P
K11	1	ICE BIN, 430 LB	MANITOWOC	D-570
K20	1	WATER FILTER	BY OWNER	-
K30	1	ULTRA-NX FROZEN DRINK MACHINE	BUNN	BUN-58000.0015
K72	4	TEA DISPENSER, URN, SOLID LID	BUNN-0-MATIC	TDO-4 (34100.0000)
K73	1	COFFEE BREWER	BUNN	BUN-52200
M11	1	WORK TABLE W/ BACKSPLASH WO/UNDERSHELF 60IN	H&K	POP097-3
M20	1	2 DRAWER FILING CABINET	HON	H512
M30	1	SAFE	NKL INDUSTRIES	CSS-BSD2920AAXRAM
M41	3	POWDER COATER STEEL LOCKER	ISS	4K0070
N10	4	16 IN HAND SINK	KROWNE	HS-68
N40	3	FIRE EXTINGUISER - CLASS ABC, 10LB	ULINE	S-9874
N40.10	1	FIRE EXTINGUISHER - CLASS K, 6L	ULINE	S-15617
N60	4	FLOUR BIN	RUBBERMAID	FG360288-WHT
N61	1	RICE BIN	RUBBERMAID	FG360288-WHT
N70	1	MOP AND BROOM HANGER	ADVANCE TABCO	ADV-K242
W10.00	2	WINDOW-WIDE OPEN, DRIVE-THRU, AUTOMATIC	BY OWNER	-

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908-347-7419
NCARB 84690
AIA 38640695

LICENSED ARCHITECT ROBERT ANTHONY GRIMALDI No. 5492 STATE OF MAINE

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MD	18745	RI	ARC.0005368
ME	ARC5492	SC	11215
MO	2022043991	VA	0401019058
NC	16985	DC	AEC103027
NH	04842	WV	5455

PROFESSIONAL OF RECORD PRACTICING AS AN INDIVIDUAL

LOUISIANA 19 72 KITCHEN
POPEYES LOUISIANA KITCHEN

POPEYES LOUISIANA KITCHEN
584 ALFRED STREET
BIDDEFORD, MAINE

EXTERIOR PLAN

Revisions
1 :
2 :
3 :
4 :
5 :

Drawn By	Checked By
STAFF	RAG
Scale	Date
1/4"=1'-0"	2025-12-07

Job No. 26-0003

Sheet No. PB-4

Date Printed: Wednesday, December 10, 2025 3:27:34 PM

Warranty Information:
1.) 10 Year Warranty on GE 7100K LED Lighting
2.) 5 Year Warranty on GE Power Supplies
3.) 9 Year Warranty on 3M Vinyl mounted Second Surface

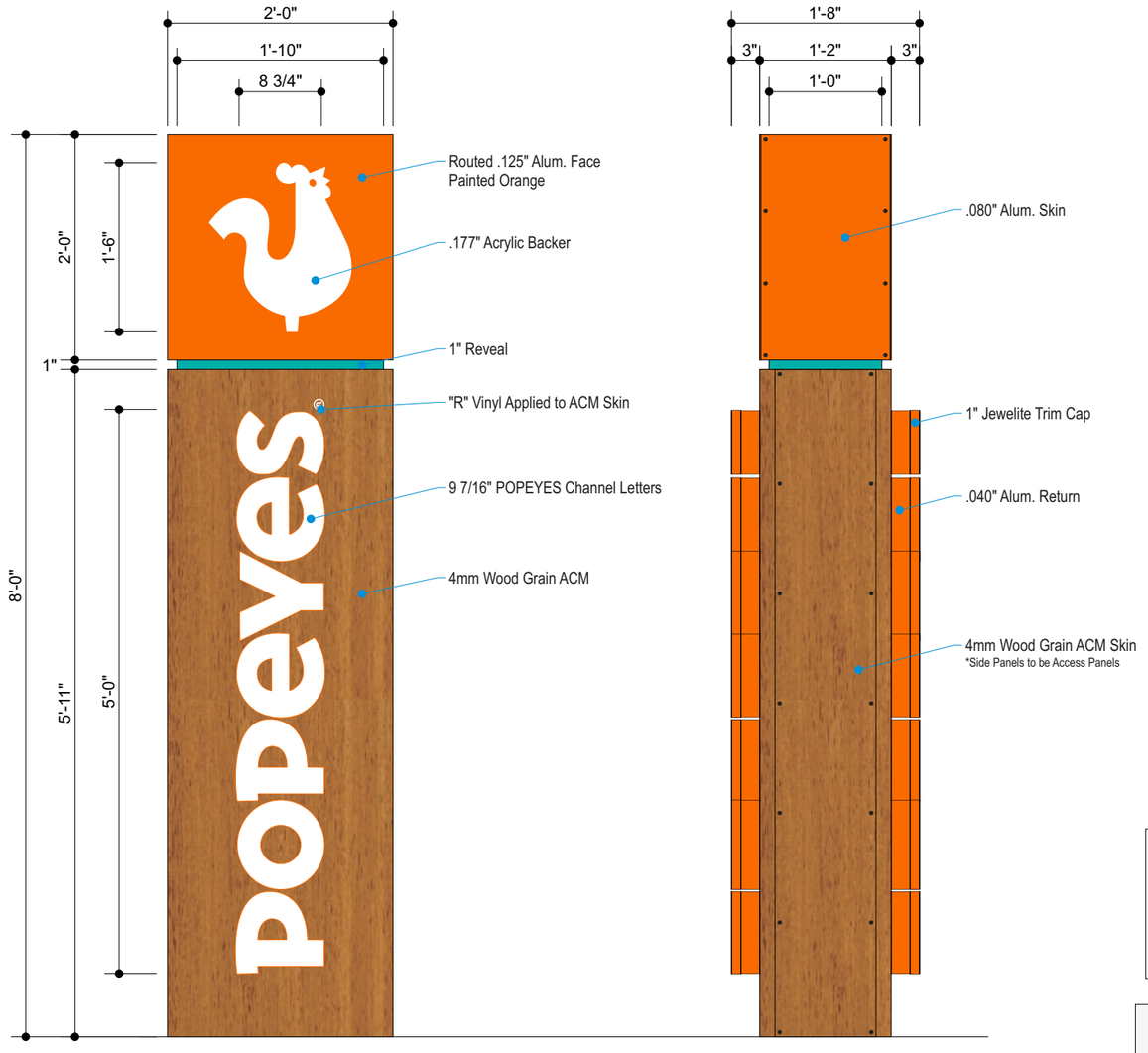
Notes:
Install toggle switch to operate (ON/OFF)
in the horizontal position

Popeyes - 8'-0" Monument Sign - Vertical

LED Internal Illumination

Insert Item Code

DESIGN INTENT ONLY
Engineering Required to Determine Actual Production & Installation Requirements



Front View
Scale: 3/4"=1'-0"

Side View
Scale: 3/4"=1'-0"

Color Specifications

- Orange Jewelite Trim Cap
- #7328 White Acrylic
- Reynobond Duragloss 5000 French Walnut

Paint Specifications

- Paint to Match Pantone 326C - Teal
- Paint to Match Pantone 3564C - Orange

All paint finishes to be Satin unless otherwise specified

General Specifications:

Cabinet:	Alum. Angle/Tube Construction w/ .080 Alum. & 4mm ACM Skin
Poppy:	.125" Routed Alum. w/ Acrylic Backer
POPEYES:	Face: .177" #7328 White Acrylic w/ 1" Jewelite Trim Cap Returns: .040" Alum. Coil Stock Painted Orange Backs: 3mm ACM - White
Illum:	White LEDs as Required per Manufacturer, Self Contained Power Supplies
Electrical:	Actual Number of Circuits to be Determined by Licensed Electrical Contractor (1) 20 AMP Circuit, 120 Volts - All Wiring Shall be 12 GA
Quantity:	(1) ONE

Allen Industries FILE NUMBER: E212503 | Listed MET E212503 | Electric Sign Complies with UL48 | THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF **ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE** AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN. | GROUNDED ELECTRICAL CONNECTIONS

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Client: **POPEYES #**
Address: ,,
Issue Date: **05/23/22**
Page #: **16 of 21**
File Name: **Popeyes_2100 Series Signage Reference Book**
Sales: **House** | Design: **ECW** | PM: **-**

#	Date	Description	Initial
1	-	-	-
2	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-
6	-	-	-

Client Review Status
Allen Industries, Inc. requires that an approved drawing be obtained from the client prior to any production release or production release revision.
Client Signature:
Approval Date:

Warranty Information:
1.) 10 Year Warranty on GE 7100K LED Lighting
2.) 5 Year Warranty on GE Power Supplies
3.) 6 Year Warranty on 3M Vinyl mounted First Surface

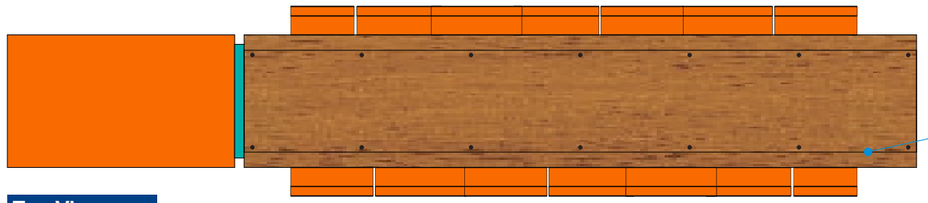
Notes:
Install toggle switch to operate (ON/OFF) in the horizontal position

Popeyes - 8'-0" Monument Sign - Horizontal

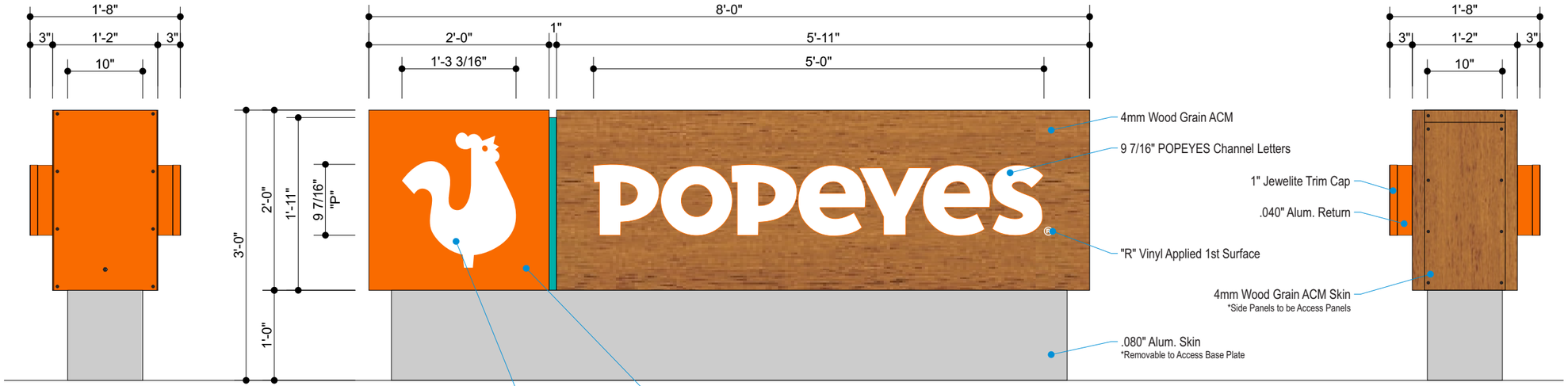
LED Internal Illumination

Insert Item Code

DESIGN INTENT ONLY
Engineering Required to Determine Actual Production & Installation Requirements



Top View
Scale: 3/4"=1'-0"



Side View - A
Scale: 3/4"=1'-0"

Front View - A
Scale: 3/4"=1'-0"

Side View - B
Scale: 3/4"=1'-0"

Front View - B
Scale: 3/8"=1'-0"

Color Specifications

- Orange Jewelite Trim Cap
- #7328 White Acrylic
- Reynobond Duragloss 5000 French Walnut

Paint Specifications

- Paint to Match Pantone 3564C - Orange
- Paint to Match Pantone 326C - Teal

All paint finishes to be Satin unless otherwise specified

General Specifications:

Cabinet:	Alum. Angle/Tube Construction w/ .080 Alum. & 4mm ACM Skin
Poppy:	.125" Routed Alum. w/ Acrylic Backer
POPEYES:	Face: .177" Acrylic Face w/ 1" Jewelite Trim Cap Returns: .040" Alum. Coil Stock Painted Orange Backs: 3mm ACM - White
Illum:	White LEDs as Required per Manufacturer, Self Contained Power Supplies
Electrical:	Actual Number of Circuits to be Determined by Licensed Electrical Contractor (1) 20 AMP Circuit, 120 Volts - All Wiring Shall be 12 GA
Quantity:	(1) ONE

Allen Industries FILE NUMBER: E212503 | Listed MET E212503 | Electric Sign Complies with UL48 | THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF **ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE** AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN. | GROUNDED ELECTRICAL CONNECTIONS

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Client: **POPEYES #**
Address: **,,**

Issue Date: **05/23/22**
Page #: **17 of 21**
File Name: **Popeyes_2100 Series Signage Reference Book**
Sales: **House** Design: **ECW** PM: **-**

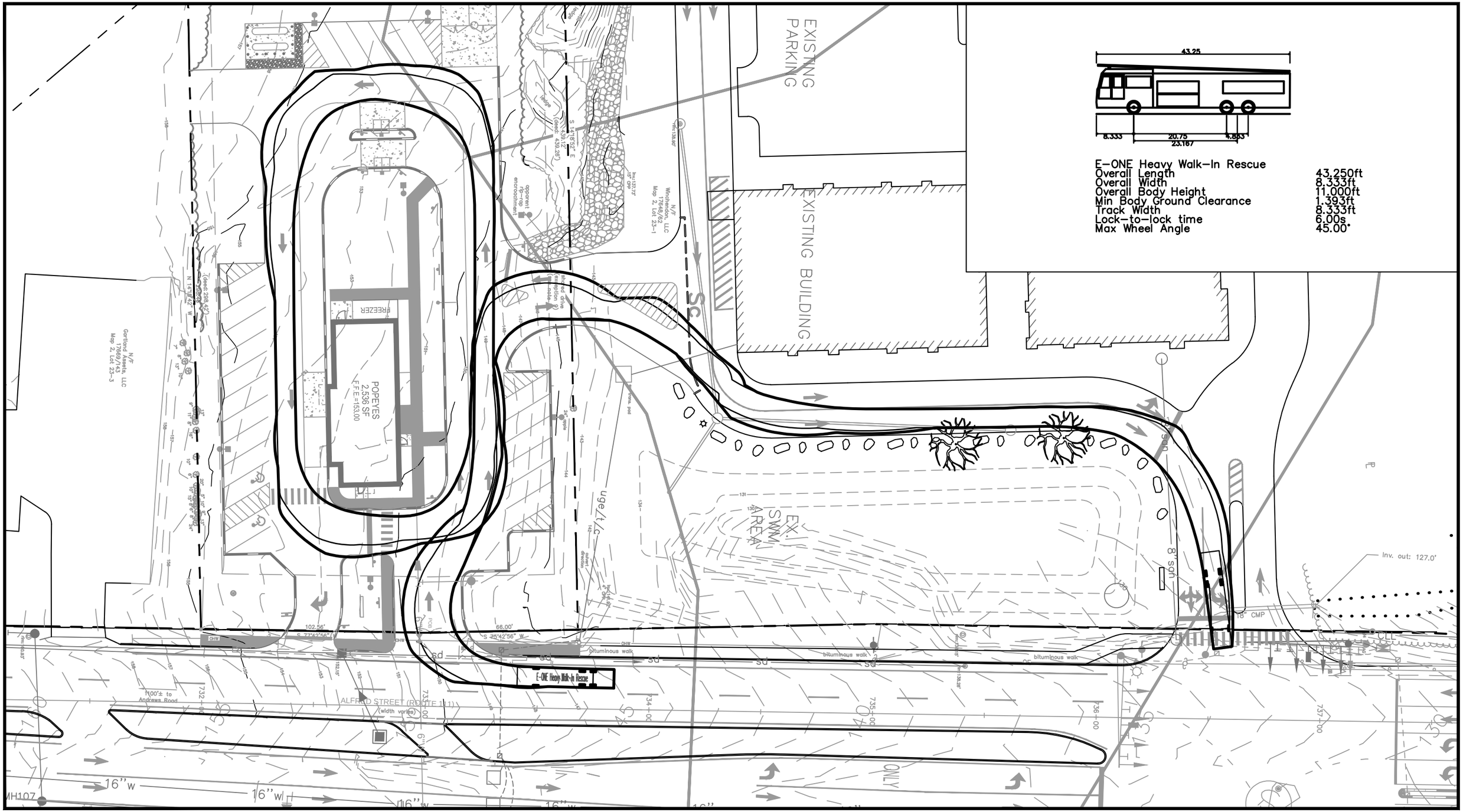
#	Date	Description	Initial
1	-	-	-
2	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-
6	-	-	-

Client Review Status
Allen Industries, Inc. requires that an approved drawing be obtained from the client prior to any production release or production release revision.

Client Signature: | Approval Date:

ATTACHMENT 14

VEHICLE TURNING TEMPLATES



K:\Reliance Hospitality\0129427A.01 - Popeyes Restaurant Biddeford Maine\Z - CAD\DWG\BIDDEFORD-PBASE.dwg kaleb.bourassa 4/28/2026 7:18 PM

GORRILL PALMER
An LJB Engineering Company

COMMERCIAL DEVELOPMENT - POPEYE'S RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

GOLDEN CHICKEN OF BIDDEFORD, LLC

File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title

FIRE TRUCK TURNING TEMPLATE

Figure No.

ATR-1

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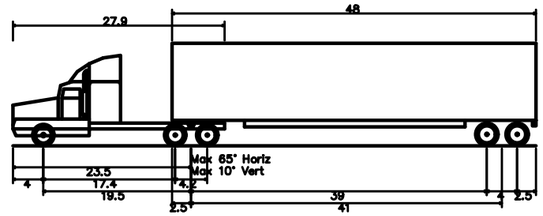


WB-62 - Interstate Semi-Trailer

Overall Length	69.000ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

EXISTING PARKING

EXISTING BUILDING

POPEYES
2,536 SF
F.F.E.=153.00

FREEZER

shared drive
(exception 3)

N/F
Winchester Realty, LLC
17648/82
Map 2, Lot 23-1

N/F
Gorrland Assets, LLC
17669/143
Map 2, Lot 23-3

apparent rip-rap encroachment

EX. SWM AREA

ONLY

ALFRED STREET (ROUTE 111)
(width varies)

100'± to Andrews Road

WB-62 - Interstate Semi-Trailer

bituminous walk

18" CMP

8" son

Inv. out: 127.0'

16" w

MH107

GORRILL PALMER
An LJB Engineering Company

File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title

WB-62 TURNING TEMPLATE

Figure No.

ATR-2

PROJECT PARCEL SITE
CITY OF BIDDEFORD
TAX ASSESSOR'S MAP AND LOT NUMBERS

MAP	LOT	CCRD
2	23	B / P

APPLICANT / DEVELOPER / LEASE TENANT:
GOLDEN CHICKEN OF BIDDEFORD, LLC
c / o RELIANCE HOSPITALITY GROUP LLC
10 BITTERSWEET CT
NEWINGTON, CT 06111-4243
ATTN: ARSAL JAFFERY

CURRENT PROPERTY OWNER:
584 ALFRED STREET, LLC
355 MAIN ST, SUITE 25
WOBURN, MA 01801
ATTN: JAMIE MABARDY
YCRD BOOK 19151 PG 645

SITE DEVELOPMENT PLANS FOR

POPEYES LOUISIANA KITCHEN

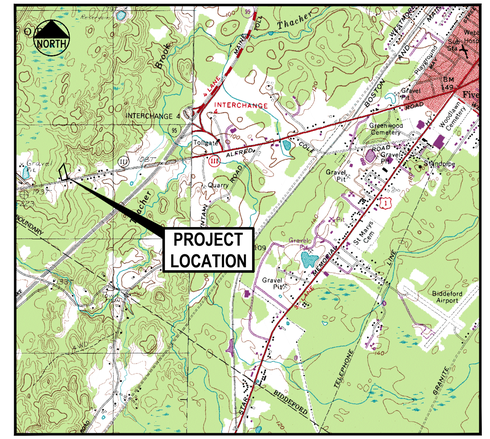
GOLDEN CHICKEN OF BIDDEFORD, LLC

584 ALFRED STREET

BIDDEFORD, MAINE

PERMITTING DOCUMENTS

APRIL 2026



LOCATION MAP
SCALE: 1" = 1000'

INDEX

C-1.0 COVER SHEET
C-1.1 GENERAL NOTES & LEGEND
C-1.2 ALTA SURVEY (BY SEBAGO TECHNICS)
C-2.0 EXISTING CONDITIONS & REMOVALS PLAN
C-3.0 SITE LAYOUT & UTILITY PLAN
C-3.1 OVERALL SITE LAYOUT & UTILITY PLAN
C-4.0 GRADING, DRAINAGE & EROSION CONTROL PLAN
C-4.1 CULTEC CHAMBER PLAN & DETAILS
C-5.0 LANDSCAPE PLAN
C-6.0 SITE & MISCELLANEOUS DETAILS
C-6.1 SITE & MISCELLANEOUS DETAILS
C-6.2 SITE, UTILITY & MISCELLANEOUS DETAILS
C-6.3 EROSION CONTROL & MISCELLANEOUS DETAILS
C-6.4 EROSION & SEDIMENT CONTROL NOTES
------ PHOTOMETRIC PLAN (REFLEX LIGHTING)

CITY OF BIDDEFORD PLANNING BOARD
SITE PLAN APPROVAL

CHAIRMAN _____

_____

_____ _____

_____ _____

_____ _____

DATE _____

I HEREBY ACKNOWLEDGE THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MAINE AND THAT I AM COMPETENT TO PREPARE THIS DOCUMENT.

UTILITIES

WATER
ATTN: PATRICK GERE
MAINE WATER COMPANY
466 SOUTH STREET
BIDDEFORD, MAINE 04005

ELECTRIC
ATTN: JAY AGRESTE
CENTRAL MAINE POWER COMPANY
162 CANCO ROAD
P.O. BOX 1801
PORTLAND, MAINE 04104
207.242.4092 (OFFICE)
jay.agreste@cmpco.com

TELEPHONE
ATTN: KURT BOMBARDIER
FIBER FIDIUM
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
207.745.9363
kurt.bombardier@fiduim.com

CABLE
ATTN:
CHARTER COMMUNICATIONS
118 JOHNSON ROAD
PORTLAND, MAINE 04102
207.253.2291
dl-por-construction@charter.com

SEWER & STORM DRAIN
ATTN: CRAIG CHEKAN
CITY OF BIDDEFORD
205 MAIN STREET
BIDDEFORD, MAINE 04005
207.284.9118

DIG SAFE
1.800.225.4977

PERMITS / APPROVALS

LOCAL

SITE PLAN PERMIT	CITY OF BIDDEFORD 205 MAIN STREET BIDDEFORD, MAINE 04005 207.571.0700 ATTN: DAVID GALBRAITH	SKETCH PLAN SUBMITTED 12.16.2025 SITE PLAN SUBMITTED 03.11.2026
BUILDING PERMIT	CITY OF BIDDEFORD 205 MAIN STREET BIDDEFORD, MAINE 04005 207.571.0700	TO BE SUBMITTED BY CONTRACTOR

STATE

TRAFFIC MOVEMENT PERMIT-100-200 LEVEL	MAINE DOT 51 PLEASANT HILL ROAD SCARBOROUGH, MAINE 04070 ATTN: RANDY ILLIAN	TMP SUBMITTED 01.08.2026

PREPARED BY

CIVIL ENGINEER / TRAFFIC:
Gorrill Palmer Consulting Engineers
300 SOUTHBOROUGH DRIVE, SUITE 200
SOUTH PORTLAND, MAINE 04106
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ATTN: KALEB BOURASSA, P.E.
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CONSTRUCTION MANAGER:
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ARCHITECT:
G141 ARCHITECTURE, LLC
39 N. 11TH STREET
KEHILWORTH, NJ 07033
908-347-7419

SITE DATA		
A	ZONING & SHORELAND ZONE INFORMATION	B2 – HIGHWAY BUSINESS ZONE
B	EXISTING USE DESCRIPTION	SINGLE–FAMILY RESIDENCE & SMALL ENGINE REPAIR BUSINESS
C	PROPOSED USE DESCRIPTION	COMMERCIAL
D	REQUIRED WAIVER/VARIANCES (YES/NO); IF YES, PLAN MUST CLEARLY LIST WAIVERS/VARIANCES REQUESTING	YES – SECTION 5.B.(I)(3) 30% PARKING AREA REQUIREMENT
E	NAME OF DRAINAGE WATERSHED	THATCHER BROOK
F	WITHIN THE MS4 URBANIZED AREA (YES/NO)	NO
G	NATURAL RESOURCES (STREAMS, WETLANDS, ETC.) LOCATED ON–SITE OR ADJACENT TO THE PROPERTY (YES/NO)	NO
H	WITHIN THE 100–YEAR FLOOD ZONE (YES/NO)	NO
I	PUBLIC ROAD PROPOSED (YES/NO)	NO
J	PRIVATE ROAD PROPOSED (YES/NO)	NO
K	PUBLIC SEWER CONNECTION (YES/NO)	YES, TABLE PROVIDED ON COVER SHEET
L	PUBLIC STORM DRAIN CONNECTION (YES/NO)	NO
M	LIMITS OF DISTURBANCE IN ACRES	1.02 ACRES
N	PERVIOUS LAND COVER SQUARE FOOTAGE, EXISTING AND PROPOSED	EXISTING = 20,981 SF PROPOSED = 15,157 SF
O	IMPERVIOUS LAND COVER SQUARE FOOTAGE (PAVEMENT/GRAVEL), EXISTING AND PROPOSED	EXISTING = 20,346 SF PROPOSED = 29,186 SF
P	BUILDING ROOF SQUARE FOOTAGE, EXISTING AND PROPOSED	EXISTING = 0 SF PROPOSED = 2,536 SF
Q	ASSIGNED PLANNING BOARD NUMBER	TBD
R	ESTIMATED CUT/FILL EARTHWORK VOLUMES	CUT =3,000 CY

ANTICIPATED DAILY FLOWS		
BUILDING	AVERAGE DAILY FLOW (GPD)	PEAK DAILY FLOW (GPD)
POPEYES	780 GPD	1,404 GPD

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision

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4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
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1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD–COVER.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: COVER SHEET
Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE
Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-1.0

U:\Reliance Hospitality\0129427A.01 – Popeyes Restaurant Biddeford Maine\Z – CAD\DWG\BIDDEFORD–COVER.dwg 4/28/2026 11:54 AM

1. IN ADDITION TO THESE PLANS AND NOTES, THE CONTRACTOR SHALL REFER TO PROJECT DOCUMENTS PREPARED BY G141 ARCHITECTURE, LLC FOR CONSTRUCTION SPECIFICATIONS AND BIDDING PROCEDURES.

2. THIS PROJECT WILL BE SUBJECT TO THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MAINE DEPARTMENT OF TRANSPORTATION, LOCAL UTILITY COMPANIES AND THE CITY OF BIDDEFORD.

3. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF THE ENTRANCE, PAVING, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE POINTS. ENTRANCES IN MOST LOCATIONS REQUIRE STRUCTURAL SLABS. REFER TO THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR INFORMATION ON THE STRUCTURAL SLAB ENTRANCES.

4. ALL REQUIRED AND NECESSARY INSPECTIONS AND OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSIONS AND THE FINAL SERVICE CONNECTIONS.

5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS, AT ITS SOLE COST.

6. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE APPLICANT AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTIONS OF THE OWNER, THEIR REPRESENTATIVES, OR THE CITY, AT NO ADDITIONAL COST TO THE OWNER.

7. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

8. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE PROJECT SPECIFICATIONS, THE CITY OF BIDDEFORD AND SERVICING UTILITY REQUIREMENTS, IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SHALL APPLY AT NO EXTRA COST TO THE OWNER.

9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS THROUGHOUT THE PROJECT AND PROVIDING THE OWNER WITH A SET OF ELECTRONIC FINAL RECORD DRAWINGS WHEN THE PROJECT IS COMPLETE.

10. THE CONTRACTOR WILL BE RESPONSIBLE FOR CREATING AND ADMINISTRATING A POLLUTION PREVENTION PLAN FOR THE PROJECT TO PREVENT CONTAMINATION OF ALL AUTHORIZED AND UNAUTHORIZED NON-STORMWATER DISCHARGES INTO THE STORMWATER SYSTEM. SEE BELOW FOR A LIST OF NON-STORMWATER DISCHARGES:

AUTHORIZED NON-STORMWATER DISCHARGES:

(a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
(b) FIRE HYDRANT FLUSHINGS;
(c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
(d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
(e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
(f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
(g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
(h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
(i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
(j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
(k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
(l) LANDSCAPE IRRIGATION.

UNAUTHORIZED NON-STORMWATER DISCHARGES:

(a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
(b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
(c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
(d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

SITE LAYOUT NOTES

1. ALL HANDICAP PARKING SPACES ARE TO RECEIVE HANDICAP SIGNS AND PAVEMENT MARKINGS AS ILLUSTRATED ON THE DETAIL SHEETS.

2. BITUMINOUS CONCRETE CURB, SLIPFORM CONCRETE CURB AND GRANITE CURB SHALL MEET THE REQUIREMENTS OF MDOT 702.001, 703.07 AND 609.04.

3. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR THE FACE OF THE BUILDING.

4. EXCEPT WHERE INDICATED OTHERWISE, THE PAVEMENT IS TO BE STANDARD DUTY PAVEMENT.

5. ALL TRAFFIC CONTROL SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE MAINE DEPARTMENT OF TRANSPORTATION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITIONS AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.

6. STRIPE PARKING AREAS, DRIVES AND ROADWAY AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, CROSSWALKS, HANDICAP SYMBOLS, PAINTED ISLANDS AND FIRE LANES. (ALL MARKINGS EXCEPT MEDIAN ISLANDS AND CENTERLINES TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT). ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F". MEDIAN ISLANDS AND CENTERLINES TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT.

7. SEE DETAILS FOR PARKING STALL DIMENSIONS, HANDICAP SYMBOLS, SIGNS AND SIGN POSTS.

8. STOP BARS SHALL BE 12" WIDE.

9. PAINTED ISLANDS SHALL BE 4" WIDE DIAGONAL LINES @ 3'-0" O.C. BORDERED BY 4" WIDE LINES.

GRADING & DRAINAGE NOTES:

1. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF N = 0.012 OR LESS.

2. PROVIDE TURF REINFORCEMENT IN AREAS INDICATED ON THE PLANS.

3. AN "AS-BUILT" CERTIFICATION AND PLANS OF THE STORMWATER DRAINAGE SYSTEM IS REQUIRED PRIOR TO THE OWNER ACCEPTING ANY BUILDINGS AND PROPERTY. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ANY DEVIATION FROM THE PLANS MAY DELAY THE ACCEPTANCE OF THE PROJECT, WITH CONTRACTOR RESPONSIBLE FOR ANY ASSOCIATED COSTS.

4. SEE EXISTING CONDITIONS FOR BENCHMARK INFORMATION.

5. SEE GRADING, DRAINAGE AND EROSION/SEDIMENT CONTROL FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.

6. ALL DISTURBED AREAS NOT TO BE PAVED, SODDED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.

7. COMPACTION REQUIREMENTS:

LOCATION	MINIMUM COMPACTION*
SUBBASE AND BASE GRAVEL BELOW PAVED OR CONCRETE AREAS	95%
SUBGRADE FILL BELOW PAVED AREAS	90%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREAS	90%
STRUCTURAL FILL WITHIN PROPOSED BUILDING AREA	95%
SELECT FILL ADJACENT BUILDING FOUNDATIONS, EXTERIOR FOUNDATIONS AND WITHIN 8 INCHES OF THE SLAB-ON-GRADE	95%

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM-D-1557.

8. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.

9. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND EXIT RAMPS ADJACENT TO THE BUILDING AND ALONG NEW CURBED AREAS.

10. PROVIDE STABILIZATION OR SEPARATION GEOTEXTILE FABRIC OVER UNSTABLE SOILS AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND IN ACCORDANCE WITH THE FINAL GEOTECHNICAL RECOMMENDATIONS.

LOCAL APPROVALS, WAIVERS AND VARIANCES

THE CONSTRUCTION PLANS ARE TO BE SUBMITTED TO THE CITY OF BIDDEFORD FOR THEIR REVIEW, APPROVAL AND RECORDS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

UTILITY NOTES

1. ALL REQUIRED UTILITIES SERVING THE PROJECT SHALL BE COORDINATED AND CONSTRUCTED BY THE DIVISION SITE CONTRACTOR TO WITHIN 5 FEET OF THE BUILDINGS, AT A LOCATION COORDINATED WITH THE MEP CONTRACTOR(S) AND THE BUILDING PLANS. SITE WORK WITHIN 5 FEET OF UNDERSLAB UTILITIES SHALL CONSIST OF TRENCHING AND BACKFILLING. ACTUAL UTILITY INSTALLATION SHALL BE BY THE MEP CONTRACTOR. ALL REQUIRED CONNECTION FEES SHALL BE PAID BY THE GENERAL CONTRACTOR.

2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF AND/OR RELOCATION OF OVERHEAD AND UNDERGROUND TELEPHONE WITH CONSOLIDATED COMMUNICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUITS, PULL WIRES, TRENCHING AND BACKFILLING NECESSARY TO COMPLETE THE WORK.

3. ALL SANITARY SEWER WORK SHALL MEET THE STANDARDS OF THE MAINE STATE PLUMBING CODE, CITY OF BIDDEFORD STANDARDS AND THE SUBSURFACE WASTEWATER DISPOSAL RULES.

4. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRIC SERVICE WITH CENTRAL MAINE POWER.

5. COORDINATE ALL UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY. ALL UTILITY WORK SHALL CONFORM TO THE STANDARDS OF THE UTILITY COMPANY AND PROJECT SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.

6. THE LOCATIONS OF THE NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE SERVING UTILITY COMPANY, CONTRACTOR AND MEP DESIGNERS.

7. UNDERGROUND ELECTRICAL, CONDUIT MATERIAL AND INSTALLATION SHALL CONFORM TO UTILITY COMPANY STANDARDS AND PROJECT SPECIFICATIONS, WHICH EVER IS MORE STRINGENT.

8. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.

9. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.

10. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.

11. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL, AT NO EXTRA EXPENSE TO THE OWNER.

12. A 5 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18 INCH OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS.

13. THE CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION AND PROVIDE TEMPORARY SERVICES AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO THE JOB SITE. TEMPORARY SERVICES SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. COORDINATE ALL TEMPORARY SERVICES WITH UTILITY COMPANY, OWNER AND AFFECTED BUSINESSES.

LANDSCAPE NOTES

(SUBJECT TO COORDINATION WITH LANDSCAPE DRAWINGS. IN CASE OF CONFLICT BETWEEN THIS SECTION AND THE LANDSCAPE DRAWINGS, THE LANDSCAPING DRAWINGS SHALL GOVERN)

1. ALL PLANTS SHALL BE NURSERY GROWN AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, STANDARDS AND SHALL BE SUBJECT TO THE APPROVAL OF THE OWNERS REPRESENTATIVE BEFORE AND AFTER PLANTING.

2. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER INSPECTION AND ACCEPTANCE, AND SHALL HAVE AT LEAST 80% HEALTHY GROWTH AT THE END OF THE GUARANTEED PERIOD.

3. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM AND SEED.

4. THREE (3) INCH BARK MULCH IS TO BE USED AROUND THE TREE AND SHRUB PLANTING AS SPECIFIED IN THE DETAILS. WHERE BARK MULCH IS USED IN A CURBED ISLAND, THE BARK SHALL MEET THE TOP INSIDE EDGE OF THE CURB. ALL OTHER AREAS SHALL RECEIVE 6" LOAM AND SEED.

5. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN.

6. PARKING AREA PLANTED ISLANDS TO HAVE A MINIMUM OF 6" TOPSOIL. REMOVE ALL CONSTRUCTION DEBRIS BEFORE TOPSOILING. TOPSOIL SHALL BE PLACED TO TOP OF CURB.

7. ALL PLANT MATERIAL SHALL BE APPROVED BY THE OWNER OR THE OWNERS REPRESENTATIVE PRIOR TO ARRIVAL ON THE SITE.

8. PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.

9. THE CONTRACTOR SHALL LOCATE, VERIFY, AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTINGS AND UTILITIES SHALL BE IMMEDIATELY REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.

10. NO SUBSTITUTION OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE PLANTINGS.

12. SEE PLANTING DETAILS FOR WEED BARRIER INFORMATION.

13. ALL PLANTING LOCATED AT THE ENTRANCE TO THE PROJECT OR AT INTERSECTIONS WITHIN THE SITE WILL BE MAINTAINED AND WILL NOT EXCEED 3 FEET IN HEIGHT WITHIN A TRIANGLE FORMED 25' INTO THE DRIVEWAY AND 25' ALONG THE TRAVEL WAY.

EROSION CONTROL NOTES:

1. PRIOR TO BEGINNING ANY LAND DISTURBING ACTIVITIES, CLEARING AND GRADING LIMITS SHALL BE STAKED BY THE CONTRACTOR BASED ON THE LIMITS OF GRADING SHOWN ON THE DRAWINGS AND ACCEPTED BY THE OWNER'S REPRESENTATIVE IN THE FIELD. AFTER THE CLEARING AND GRADING LIMITS HAVE BEEN ACCEPTED, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES, SEDIMENT BARRIERS AND THE CONSTRUCTION ENTRANCES ASSOCIATED WITH THE PROJECT.

2. ALL GROUND AREAS DISTURBED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE. TEMPRORARY/PERMANENT SEED MIXTURES SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL PROJECT PREPARED FOR THIS PROJECT.

3. PRIOR TO PAVING, THE CONTRACTOR SHALL REMOVE SILT FROM ALL STORM LINES AND APPURTENANCES.

4. ALL STORM DRAIN INLETS AND OUTLETS NOT IN PAVED AREAS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.

5. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL NOTES SHOWN ON THE EROSION CONTROL DETAIL SHEET.

6. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCE AS NECESSARY TO ENSURE THAT IT FUNCTIONS TO CAPTURE MUD FROM THE TIRES OF CONSTRUCTION VEHICLES DURING CONSTRUCTION. THE PURPOSE OF THE CONSTRUCTION ENTRANCE IS TO KEEP ADJACENT STREETS CLEAR OF DIRT AND MUD. SWEEPING OF THE ROADWAYS SHALL BE PERFORMED BY THE CONTRACTOR ON AN AS NEEDED BASIS, BUT AT A MINIMUM ONCE A WEEK.

7. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO TOPSOIL FOR USE IN LANDSCAPING OPERATIONS.

8. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE WHICH CAUSE THE LEAST PRACTICAL UNPROTECTED DENUDED AREAS ON THE SITE DURING CONSTRUCTION.

9. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS MAY RESULT IN MONETARY PENALTIES AS ENFORCED BY THE MEDEP OR LOCAL AGENCIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.

10. A FULL EROSION/SEDIMENTATION CONTROL PLAN ACCOMPANIES THIS DRAWING SET.

11. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS AS SHOWN AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED.

12. INSPECT EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAIN STORM OF 0.25 INCHES OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 OF THE STRUCTURE HEIGHT.

13. INSTALL CURLEX EROSION CONTROL MAT OR EQUAL ON ALL SLOPES STEEPER THAN 3:1.

14. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES, CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OCTOBER 2016".

15. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER, MDEP, THE CITY OF BIDDEFORD, OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

RECORD DRAWING NOTE:

1. THE CONTRACTOR SHALL PROVIDE RECORD INFORMATION OF WORK COMPLETED IN ORDER TO SATISFY THE RECORD DRAWING REQUIREMENTS OF THE CITY OF BIDDEFORD.

LEGEND

EXISTING

- BOUNDARY LINE/R.O.W.
- ABUTTER LINE/R.O.W.
- DEED LINE/ROW
- TIE LINE
- EASEMENT
- FLOODPLAIN
- CENTERLINE
- IRON PIPE/ROD
- BENCHMARK
- BUILDING
- SIGN
- EDGE PAVEMENT
- CONTOURS (---122--- ---120---)
- SPOT GRADE (×30.20)
- CHAIN LINK FENCE
- DECIDUOUS TREE
- CONIFEROUS TREE
- GUARDRAIL
- WATER GATE VALVE
- HYDRANT
- WATER MAIN (W)
- SANITARY SEWER (12" san)
- STORM DRAIN (12"RCP, 24"SD)
- MANHOLE (AS LABELLED)
- CATCH BASIN
- UNIDENTIFIED MH
- OVERHEAD UTILITY (OHW)
- ELECTRIC METER BOX (EM)
- LIGHT POLE
- UTILITY POLE
- GUY
- BOULDER
- BORING LOCATION BY SUMMIT GEOENGINEERING (BORING)
- ZONING DISTRICT BOUNDARY
- WETLANDS DELINEATED
- STREAM

PROPOSED

- BARRIER FREE SYMBOL
- SIGN
- SIGN LABEL (A)
- GUIDERAIL - METAL
- GUIDERAIL - TIMBER
- FENCE - CHAINLINK
- FENCE - WOOD
- BUILDING / BUILDING ACCESS
- PROPERTY LINE
- CONDOMINIUM LOT LINE
- RETAINING WALL
- PEDESTRIAN CROSSWALK
- TRAFFIC ARROWS
- BOLLARD
- SLIPFORM CONCRETE CURB
- BITUMINOUS CURB
- CATCH BASIN
- CONTOUR LABEL (100)
- DRAIN MANHOLE
- RIPRAP INLET APRON
- RIPRAP OUTLET APRON
- SLOPE DESIGNATION (2 1 2:1)
- SPOT GRADE (100.00)
- SPOT GRADE AT CURB (TC=TOP / BC=BOTTOM) (TC 99.0 BC 98.50)
- WATER MARK
- UNDERDRAIN (10"UD)
- STORM DRAIN (SD9)
- TREE LINE OR LIMIT OF CLEARING
- CURB STOP
- HYDRANT
- LIGHT POLE WITH FIXTURE(S)
- WALL MOUNT LIGHT
- SANITARY SEWER MANHOLE
- TEST PIT
- TRANSFORMER PAD (T)
- UTILITY POLE
- VALVE
- SANITARY SEWER
- WATER MAIN (6"W)
- GAS MAIN (2"G)
- UNDERGROUND ELECTRIC (UGE)
- OVERHEAD ELECTRIC (OHE)
- TRAIL
- SNOW STORAGE
- CLEARING LIMIT LINE (CLL)

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision

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3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD–COVER.dwg		

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GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

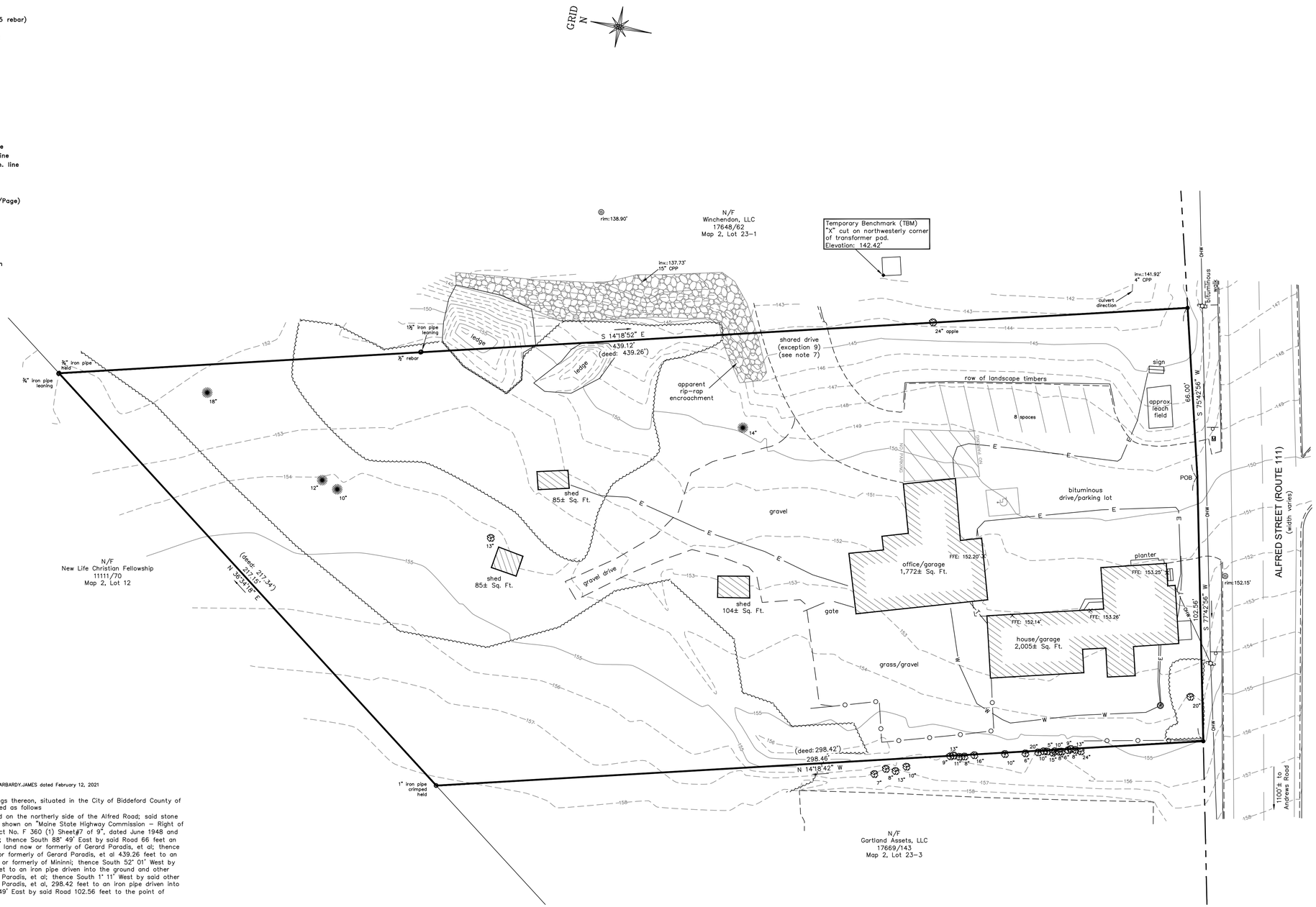
Drawing Name: GENERAL NOTES & LEGEND
Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE
Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

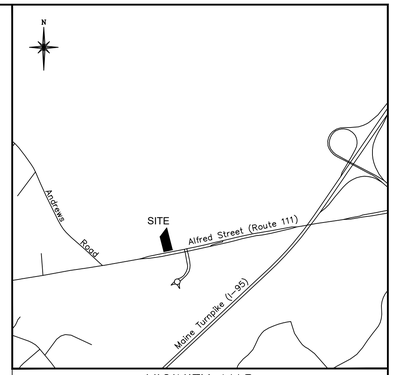
Drawing No. C-1.1

U:\Reliance Hospitality\0129427A.01 – Popeyes Restaurant Biddeford Maine\Z – CAD\DWG\BIDDEFORD–COVER.dwg 4/28/2026 11:23 AM

LEGEND

- Iron marker – found
- Iron marker – set (#5 rebar)
- Property line (locus)
- Property line (abutter)
- Right of way line
- Edge of pavement
- Edge of gravel
- Chain link fence
- Curb
- Sign
- Lamp or light pole
- Utility pole
- Catch basin (round)
- Well
- Mailbox
- W — Underground water line
- E — Underground electric line
- T — Underground telecomm. line
- Contours (1ft)
- Contours (5ft)
- N/F — Now or formerly of
- 1234/567 — Deed reference (Book/Page)
- Tree line
- Deciduous tree
- Coniferous tree
- Existing building
- Rip Rap
- X FFE — Finished floor elevation
- POB — Point of beginning





VICINITY MAP
No Scale

NOTES

1) Book and Page references are to the York County Registry of Deeds, unless otherwise noted.

2) Bearings are referenced to grid north, Maine State Plane Coordinate System, West Zone, NAD83.

3) Elevations are based on GNSS observations, NAVD88 datum. Benchmark is an "X" cut on northwesterly corner of transformer pad located northeasterly of the property. Elevation: 142.42'

4) Utility information on this plan is approximate, based on location of visible features and markings. DigSafe and/or the appropriate utilities should be contacted prior to any construction.

5) Property lies within Zone C based on FIRM Community #230145 Panel #0008-B, effective date May 15, 1984. It does not lie within a special flood hazard area.

6) Project area was covered by snow and ice at the time of the survey and some features may have been obscured and not shown on this plan.

7) No easement document was found in the public records relating to the rights associated with the shared driveway between the locus property and the Winchendon property. Prescriptive rights may exist. A title attorney should be consulted.

8) No evidence of recent earth moving work, building construction, or building additions were observed in the process of conducting the fieldwork.

9) No evidence of recent street or sidewalk construction was observed in the process of conducting the fieldwork.

10) 1 accessible and 8 regular parking spaces were observed on the property.

PLAN REFERENCES

1) Plan of Existing Conditions of Retail & Drive Thru Facility made for United Growth by Sebago Technics dated August 3, 2015 and revised through October 5, 2015.

2) Plan of Property made for New Life Christian Fellowship by Titcomb Associates dated February 1, 2002 and revised through March 22, 2004.

3) Maine State Highway Commission Right of Way Map – State Highway "U" – Federal Aid Project No. F 360(I) dated June 1948.

AREA

62,250 sq. ft. / 1.43 acres

OWNERS OF RECORD

Michael J. Thibault
584 Alfred Street
Biddeford, ME 04005

Book 7354, Page 206

SCALE IN FEET
20 0 20 40
1" = 20'

PARCEL DESCRIPTION - EXHIBIT A
Per Chicago Title Insurance Company Commitment Number: MARBARDY.JAMES dated February 12, 2021

A certain lot or parcel of land with the buildings thereon, situated in the City of Biddeford County of York and State of Maine, bounded and described as follows

Beginning at a granite stone set in the ground on the northerly side of the Alfred Road; said stone being 33 feet northerly of– Station 733–0 as shown on "Maine State Highway Commission – Right of Way Map– State Highway 'U' Federal Aid Project No. F 360 (1) Sheet#7 of 9", dated June 1948 and recorded in the York County Registry of Deeds; thence South 88° 49' East by said Road 66 feet an iron pipe driven into the ground and remaining land now or formerly of Gerard Paradis, et al; thence North 1° 11' East by said remaining land now or formerly of Gerard Paradis, et al 439.26 feet to an iron pipe driven into the ground and land now or formerly of Mininni; thence South 52° 01' West by said land now or formerly of Mininni 217.34 feet to an iron pipe driven into the ground and other remaining land now or formerly of said Gerard Paradis, et al; thence South 1° 11' West by said other remaining land now or formerly of said Gerard Paradis, et al, 298.42 feet to an iron pipe driven into the ground and said Alfred Road; thence 86° 49' East by said Road 102.56 feet to the point of beginning.

The above bearings refer to the 1948 Magnetic Meridian.

Being the same premises conveyed to Michael J. Thibault by Quitclaim Deed from Kathleen M. Thibault dated March 6th, 1995 and recorded in the York County Registry of Deeds in Book 7354, Page 206.

SCHEDULE B, PART II EXCEPTIONS
Per Chicago Title Insurance Company Commitment Number: MARBARDY.JAMES dated February 12, 2021

7) Title to and rights of the public and others entitled thereto in and to those portions of insured premises lying within the bounds of adjacent streets, roads, and ways.

8) Any exception, reservation, restriction, easement and/ or condition setout in the attached Exhibit A.

9) Rights of others and the insured to enter and exit the insured premises from and to the property abutting to the east over a paved access way located on the easterly boundary of the insured premises, said access way being shown on "Site Plan of: Retail & Drive Thru Facility, 580 Alfred Road, Biddeford, Maine for: United Growth" revised through September 16, 2015 and on file with the City of Biddeford, along with any easement rights, including prescriptive or otherwise, that may exist in or around the same area either benefiting or burdening the insured premises due to existing or prior use.

ZONING
B-2 Zone – *City of Biddeford Table B Dimensional Requirements Nov. 2019*

Minimum lot size (no public water/sewer):	40,000 Sq. Ft.
Frontage (no public water/sewer):	150 Feet
Front setback (from major R.O.W.):	30 Feet
Side setback:	10 Feet
Rear setback:	10 Feet
Maximum height:	35 Feet

CERTIFICATION

To Mooney Street Management, LLC and Chicago Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1–5, 6(a), 7(b)(1), 8, 9, 11, 13, 14, 16, 17 and 19 of Table A thereof. The field work was completed on January 27, 2021.

This survey conforms to the current standards of practice as defined by the Maine State Board of Licensure for Land Surveyors.

Date of Plat or Map: January 27, 2021

PRELIMINARY

Nicholas S. Elliston, P.L.S. #2518

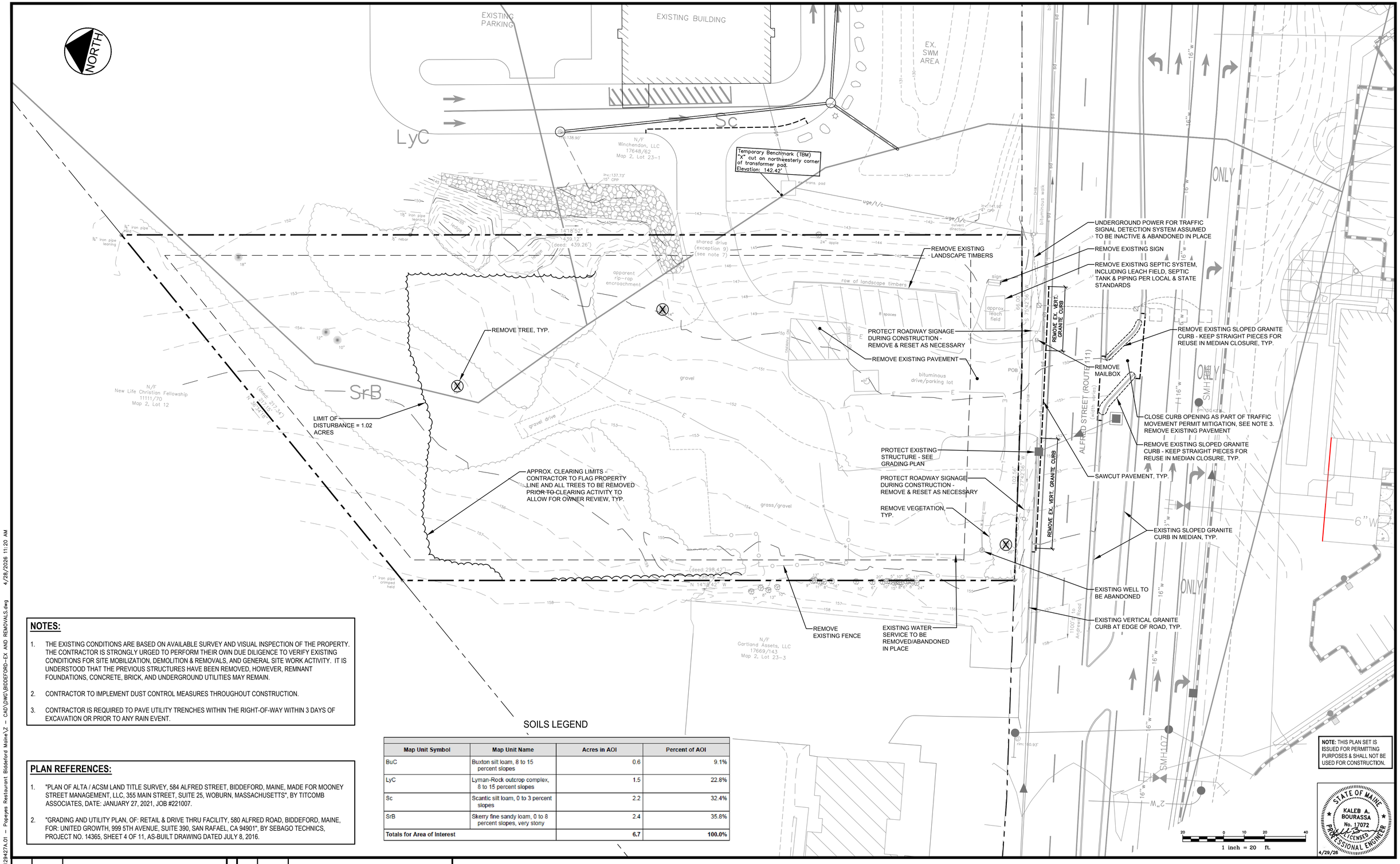
STATE OF MAINE · NICHOLAS S. ELLISTON #2518 · PROFESSIONAL LAND SURVEYOR

PLAN OF
ALTA/ACSM Land Title Survey
584 Alfred Street — Biddeford, Maine

MADE FOR
Mooney Street Management, LLC
355 Main Street, Suite 25 — Woburn, Massachusetts

JOB #221007	DATE: January 27, 2021	SCALE: 1" = 20'
BOOK #929		
221007.dwg		

Titcomb Associates
133 Gray Road, Falmouth, Maine 04105
(207)797-9199 www.titcombsurvey.com



NOTES:

1. THE EXISTING CONDITIONS ARE BASED ON AVAILABLE SURVEY AND VISUAL INSPECTION OF THE PROPERTY. THE CONTRACTOR IS STRONGLY URGED TO PERFORM THEIR OWN DUE DILIGENCE TO VERIFY EXISTING CONDITIONS FOR SITE MOBILIZATION, DEMOLITION & REMOVALS, AND GENERAL SITE WORK ACTIVITY. IT IS UNDERSTOOD THAT THE PREVIOUS STRUCTURES HAVE BEEN REMOVED, HOWEVER, REMNANT FOUNDATIONS, CONCRETE, BRICK, AND UNDERGROUND UTILITIES MAY REMAIN.
2. CONTRACTOR TO IMPLEMENT DUST CONTROL MEASURES THROUGHOUT CONSTRUCTION.
3. CONTRACTOR IS REQUIRED TO PAVE UTILITY TRENCHES WITHIN THE RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.

PLAN REFERENCES:

1. "PLAN OF ALTA / ACSM LAND TITLE SURVEY, 584 ALFRED STREET, BIDDEFORD, MAINE, MADE FOR MOONEY STREET MANAGEMENT, LLC, 355 MAIN STREET, SUITE 25, WOBURN, MASSACHUSETTS", BY TITCOMB ASSOCIATES, DATE: JANUARY 27, 2021, JOB #221007.
2. "GRADING AND UTILITY PLAN, OF: RETAIL & DRIVE THRU FACILITY, 580 ALFRED ROAD, BIDDEFORD, MAINE, FOR: UNITED GROWTH, 999 5TH AVENUE, SUITE 390, SAN RAFAEL, CA 94901", BY SEBAGO TECHNICS, PROJECT NO. 14365, SHEET 4 OF 11, AS-BUILT DRAWING DATED JULY 8, 2016.

SOILS LEGEND

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BuC	Buxton silt loam, 8 to 15 percent slopes	0.6	9.1%
LyC	Lyman-Rock outcrop complex, 8 to 15 percent slopes	1.5	22.8%
Sc	Scantic silt loam, 0 to 3 percent slopes	2.2	32.4%
SrB	Skerry fine sandy loam, 0 to 8 percent slopes, very stony	2.4	35.8%
Totals for Area of Interest		**6.7**	**100.0%**

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE · KALEB A. BOURASSA · No. 17072 · LICENSED PROFESSIONAL ENGINEER · 4/29/26

Rev.	Date	Revision

Rev.	Date	Revision
4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-EX AND REMOVALS.dwg		

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GorrillPalmer.com
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300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: EXISTING CONDITIONS & REMOVALS PLAN

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-2.0

U:\Reliance Hospitality\0129427A.01 - Popeyes Restaurant Biddeford Maine\Z - CAD\DWG\BIDDEFORD-EX AND REMOVALS.dwg 4/28/2026 11:20 AM

CITY OF BIDDEFORD PLANNING BOARD
SITE PLAN APPROVAL

CHAIRMAN _____

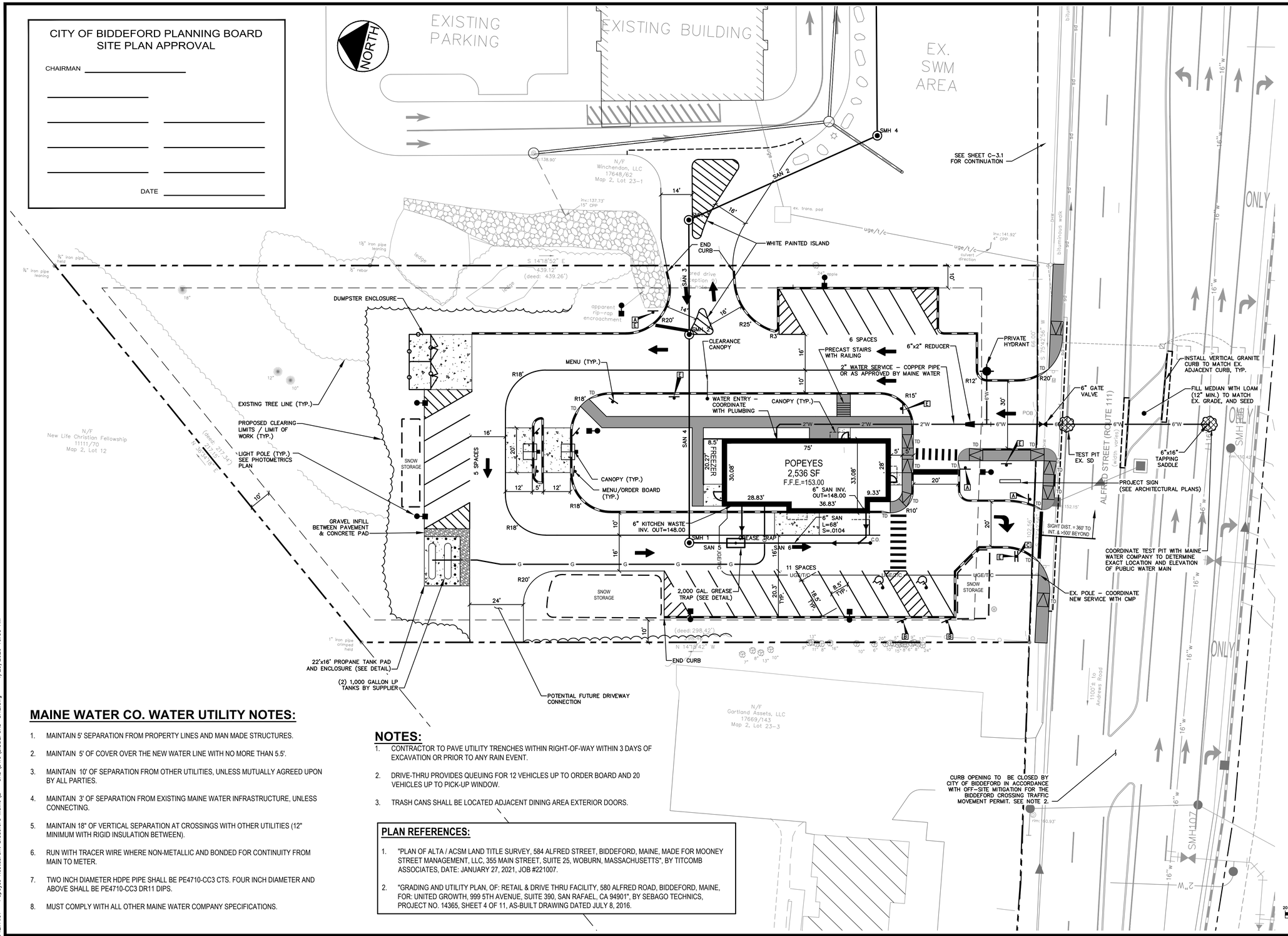
_____ _____

_____ _____

_____ _____

_____ _____

DATE _____



SITE DATA		
ZONE: B-2 HIGHWAY-ORIENTED COMMERCIAL		
SITE AREA 62,254.94 S.F.= 1.43 ACRES		
BUILDING AREA DRIVE-THRU RESTAURANT 2,536 S.F.		
PARKING	REQUIRED	PROVIDED
NEW STRUCTURE		
TOTAL PARKING DRIVE-THRU RESTAURANT (1 SP / 3 SEATS)	8	22
TOTAL	8	22
BARRIER FREE	1	2

IMPERVIOUS AREAS
EXISTING IMPERVIOUS AREA = 20,346 SF
PROPOSED IMPERVIOUS AREA = 29,186 SF
NET NEW IMPERVIOUS AREA = 8,840 SF

SPACE AND BULK STANDARDS		
ZONE: B-2	REQUIRED	PROVIDED
MIN. LOT SIZE*	10,000 S.F.	62,254.94 S.F.
BUILDING SETBACKS		
FRONT	30'	64'
SIDE	10'	58'
REAR	10'	172'
LOT FRONTAGE	150'	168.56'
MAXIMUM HEIGHT	35'	18'

PAVEMENT LEGEND

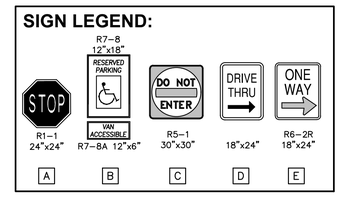
ALL PAVEMENT SHALL BE STANDARD DUTY EXCEPT AS FOLLOWS:

- STANDARD DUTY BITUMINOUS CONCRETE
- PORTLAND CEMENT CONCRETE

CURBING LEGEND

- SLIPFORM CONCRETE CURB
- VERTICAL GRANITE CURB
- SLOPED GRANITE CURB

SIGN LEGEND:



OWNER OF RECORD:

584 ALFRED STREET, LLC C/O MOONEY STREET MANAGEMENT, 355 MAIN ST, STE 25, WOBURN, MA 01801.

MAINE WATER CO. WATER UTILITY NOTES:

1. MAINTAIN 5' SEPARATION FROM PROPERTY LINES AND MAN MADE STRUCTURES.
2. MAINTAIN 5' OF COVER OVER THE NEW WATER LINE WITH NO MORE THAN 5.5'.
3. MAINTAIN 10' OF SEPARATION FROM OTHER UTILITIES, UNLESS MUTUALLY AGREED UPON BY ALL PARTIES.
4. MAINTAIN 3' OF SEPARATION FROM EXISTING MAINE WATER INFRASTRUCTURE, UNLESS CONNECTING.
5. MAINTAIN 18" OF VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES (12" MINIMUM WITH RIGID INSULATION BETWEEN).
6. RUN WITH TRACER WIRE WHERE NON-METALLIC AND BONDED FOR CONTINUITY FROM MAIN TO METER.
7. TWO INCH DIAMETER HDPE PIPE SHALL BE PE4710-CC3 CTS. FOUR INCH DIAMETER AND ABOVE SHALL BE PE4710-CC3 DR11 DIPS.
8. MUST COMPLY WITH ALL OTHER MAINE WATER COMPANY SPECIFICATIONS.

NOTES:

1. CONTRACTOR TO PAVE UTILITY TRENCHES WITHIN RIGHT-OF-WAY WITHIN 3 DAYS OF EXCAVATION OR PRIOR TO ANY RAIN EVENT.
2. DRIVE-THRU PROVIDES QUEUING FOR 12 VEHICLES UP TO ORDER BOARD AND 20 VEHICLES UP TO PICK-UP WINDOW.
3. TRASH CANS SHALL BE LOCATED ADJACENT DINING AREA EXTERIOR DOORS.

PLAN REFERENCES:

1. "PLAN OF ALTA / ACSM LAND TITLE SURVEY, 584 ALFRED STREET, BIDDEFORD, MAINE, MADE FOR MOONEY STREET MANAGEMENT, LLC, 355 MAIN STREET, SUITE 25, WOBURN, MASSACHUSETTS", BY TITCOMB ASSOCIATES, DATE: JANUARY 27, 2021, JOB #221007.
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NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision

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Design: MYR	Draft: CDD	Date: DEC 2025
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File Name: BIDDEFORD-SITE.dwg		

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(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:	SITE LAYOUT & UTILITY PLAN
Project:	POPEYES RESTAURANT 584 ALFRED STREET, BIDDEFORD, MAINE
Client:	Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC 10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No.
C-3.0

U:\Reliance Hospitality\0129427A.01 - Popeyes Restaurant Biddeford Maine\2 - CAD\DWG\BIDDEFORD-SITE.dwg 4/29/2026 10:35 AM

PLAN REFERENCES:

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OWNER OF RECORD:

584 ALFRED STREET, LLC C/O MOONEY STREET MANAGEMENT, 355 MAIN ST, STE 25, WOBURN, MA 01801.

EXISTING PRIVATE HYDRANT
EXISTING MANHOLE INV. OUT=133.11±
EXISTING MANHOLE INV. IN=122.80±
EX SAN 2
SMH 5
EX SAN 1
EX SMH
N: 234462.85
E: 2861210.45
PROPOSED UTILITY EASEMENT BENEFITING 584 ALFRED STREET LLC
POTENTIAL ACCESS EASEMENT FROM WINCHENDON LLC TO 584 ALFRED STREET LLC
SAN 1
N/F
WINCHENDON, LLC
17648/62
MAP 2, LOT 23-1
EXISTING PUBLIC HYDRANT
N: 234410.23
E: 2861010.58
SMH 4
N: 234482.48
E: 2860953.19
SAN 2
PROPERTY LINE (TYP.)
SMH 3
RECONSTRUCTION OF DRIVE AISLE TO BE COORDINATED WITH LANDOWNER.
PUBLIC R.O.W. (TYP.)
SAN 3
SMH 2
N: 234469.67
E: 2860903.64
PROPOSED PRIVATE HYDRANT
CURB CUT TO BE CLOSED OFF IN COORDINATION WITH MAINEDOT
584 ALFRED STREET, LLC
19151/645
MAP 2, LOT 23
SAN 4
FREEZER
POPEYES
2,536 SF
F.F.E.=153.00
N: 234446.62
E: 2860813.41
SMH 1
GREASE TRAP
SAN 5
SAN 6
UGST/C
GREASE TRAP
16"W

NORTH

30 0 15 30 60
1 inch = 30 ft.

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STATE OF MAINE
KALEB A. BOURASSA
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LICENSED PROFESSIONAL ENGINEER
4/29/26

SANITARY SEWER STRUCTURE SCHEDULE

STRUCTURE	SIZE	RIM	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)
SMH 1	4'ø	152.25	146.75/6"(GREASE TRAP)	146.65/8"(SMH 2)
SMH 2	4'ø	147.60	143.50/6"(SMH 1)	139.50/6"(SMH 3)
SMH 3	4'ø	140.50	136.00/6"(SMH 2)	135.90/6"(SMH 4)
SMH 4	4'ø	138.00	134.10/6"(SMH 3)	134.00/6"(SMH 5)
SMH 5	4'ø	135.35	132.00/6"(SMH 4) 129.90/8"(EX BLDG)	129.40/8"(EX SMH)

PIPE TABLE

PIPE LABEL	SIZE	LENGTH	SLOPE
SAN 1	6"	207'	0.0097
SAN 2	6"	92'	0.0195
SAN 3	6"	51'	0.0684
SAN 4	6"	93'	0.0338
SAN 5	6"	21'	−7.2713
SAN 6	6"	55'	0.0100

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File Name: BIDDEFORD–OVERALL SITE.dwg		

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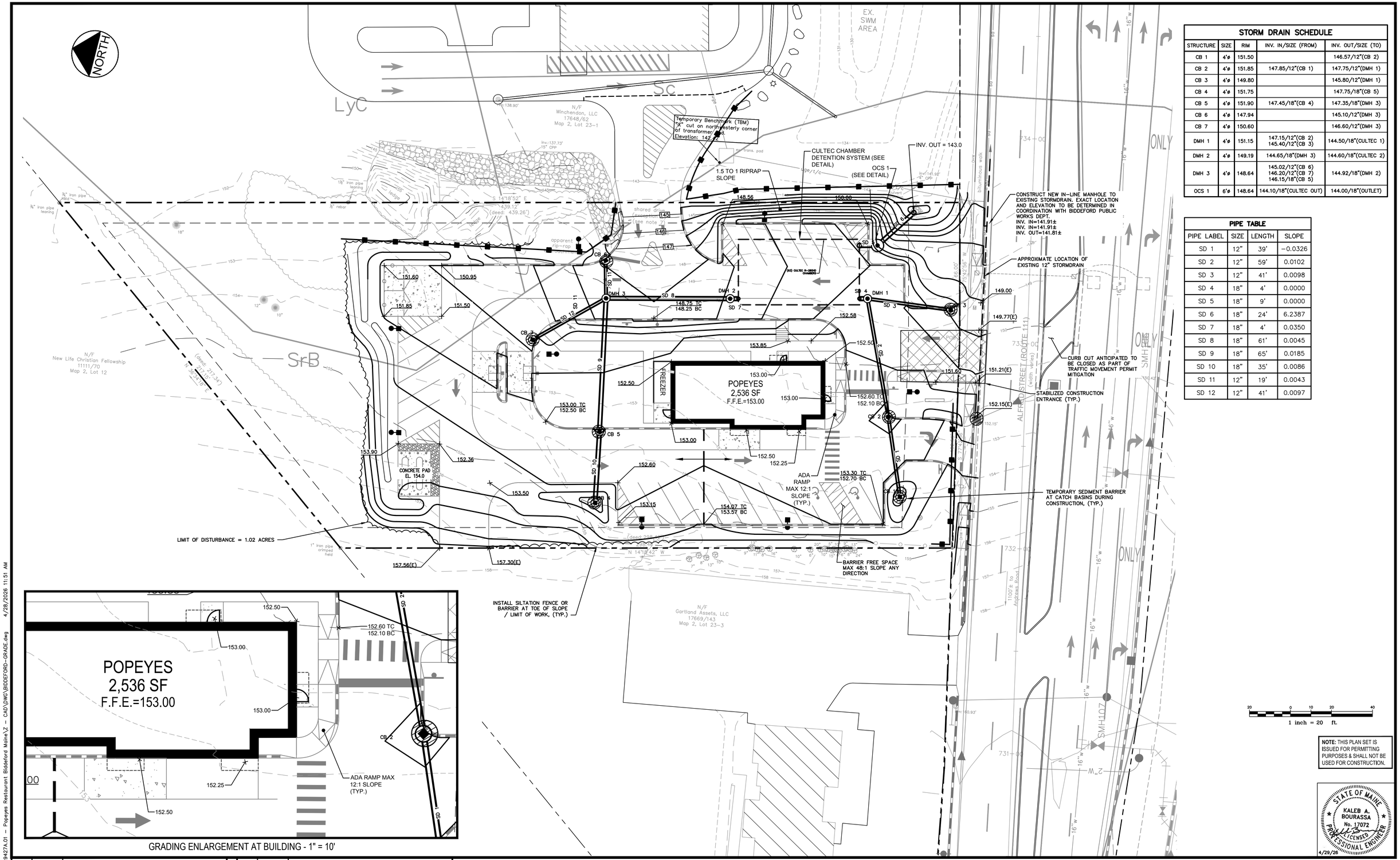

STORM DRAIN SCHEDULE				
STRUCTURE	SIZE	RIM	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)
CB 1	4'ø	151.50		146.57/12"(CB 2)
CB 2	4'ø	151.85	147.85/12"(CB 1)	147.75/12"(DMH 1)
CB 3	4'ø	149.80		145.80/12"(DMH 1)
CB 4	4'ø	151.75		147.75/18"(CB 5)
CB 5	4'ø	151.90	147.45/18"(CB 4)	147.35/18"(DMH 3)
CB 6	4'ø	147.94		145.10/12"(DMH 3)
CB 7	4'ø	150.60		146.60/12"(DMH 3)
DMH 1	4'ø	151.15	147.15/12"(CB 2) 145.40/12"(CB 3)	144.50/18"(CULTEC 1)
DMH 2	4'ø	149.19	144.65/18"(DMH 3)	144.60/18"(CULTEC 2)
DMH 3	4'ø	148.64	145.02/12"(CB 6) 146.20/12"(CB 7) 146.15/18"(CB 5)	144.92/18"(DMH 2)
OCS 1	6'ø	148.64	144.10/18"(CULTEC OUT)	144.00/18"(OUTLET)

PIPE TABLE			
PIPE LABEL	SIZE	LENGTH	SLOPE
SD 1	12"	39'	-0.0326
SD 2	12"	59'	0.0102
SD 3	12"	41'	0.0098
SD 4	18"	4'	0.0000
SD 5	18"	9'	0.0000
SD 6	18"	24'	6.2387
SD 7	18"	4'	0.0350
SD 8	18"	61'	0.0045
SD 9	18"	65'	0.0185
SD 10	18"	35'	0.0086
SD 11	12"	19'	0.0043
SD 12	12"	41'	0.0097

GRADING ENLARGEMENT AT BUILDING - 1" = 10'

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STATE OF MAINE
KALEB A. BOURASSA
No. 17072
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GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

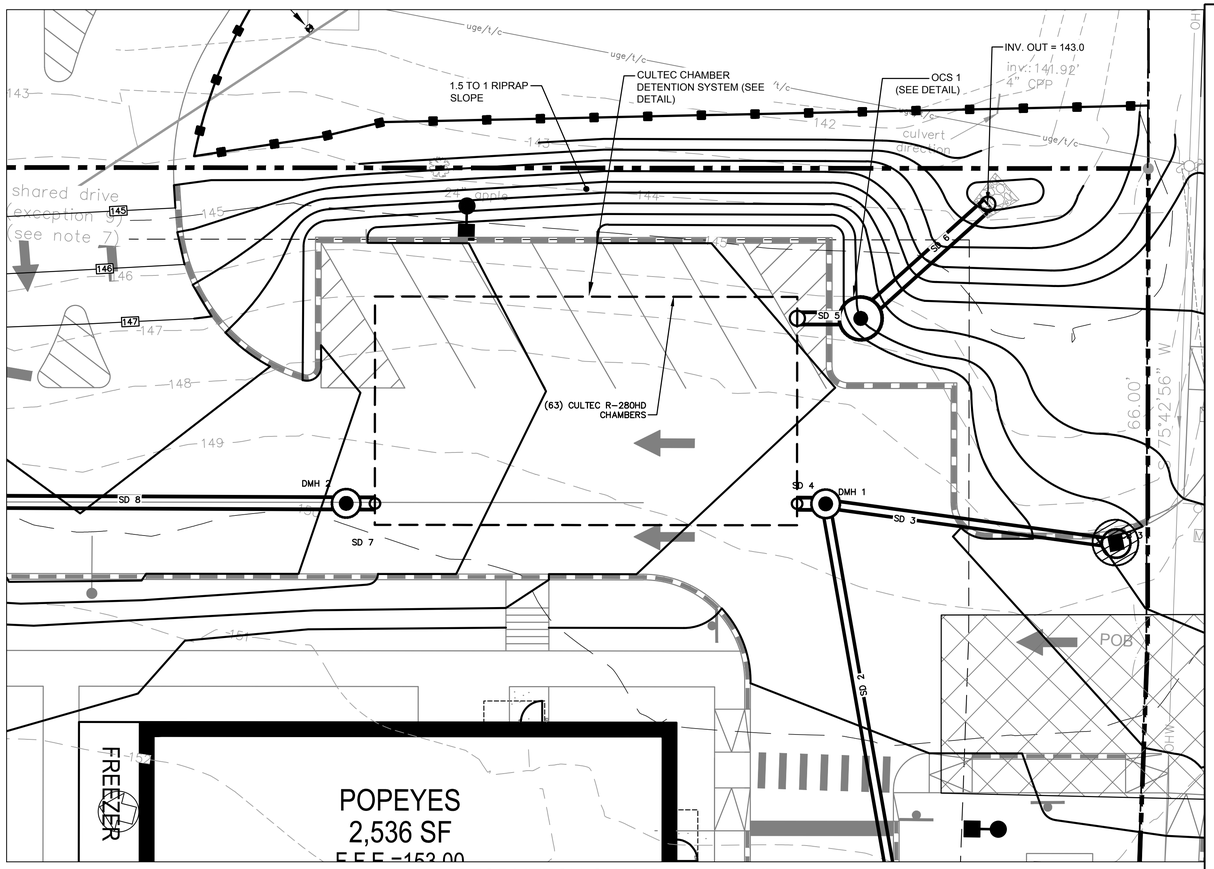
Drawing Name: GRADING, DRAINAGE & EROSION CONTROL PLAN

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-4.0

U:\Reliance Hospitality\0129427A.01 - Popeyes Restaurant Biddeford Maine\Z - CAD\DWG\BIDDEFORD-GRADE.dwg 4/28/2026 11:51 AM



STORMTECH CHAMBER LAYOUT

SCALE: 1" = 10'

SCHEDULE D

	ITEM DESCRIPTION	ELEVATION
		OCS 2
A	TOP OF STRUCTURE	149.00
B	UNDERSIDE TOP SLAB	148.33
C	TOP CONCRETE BULKHEAD	146.70
D	ORIFICE 1 INVERT	144.50
E	ORIFICE 1 DIAMETER	4.5"
F	ORIFICE 2 INVERT	146.07
G	ORIFICE 2 DIAMETER	3"
H	PIPE DIAMETER	18"
	INVERT IN	144.50
I	PIPE DIAMETER	18"
	INVERT OUT	144.00
J	BOTTOM OF STRUCTURE	143.33

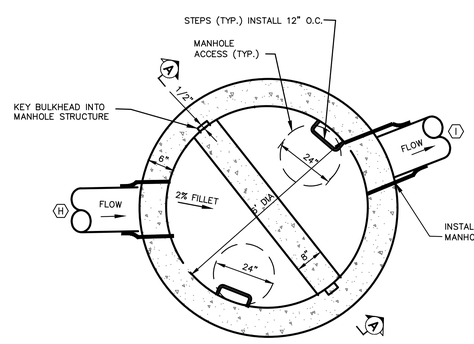
CULTEC PRODUCT SPECIFICATIONS

1.0 GENERAL

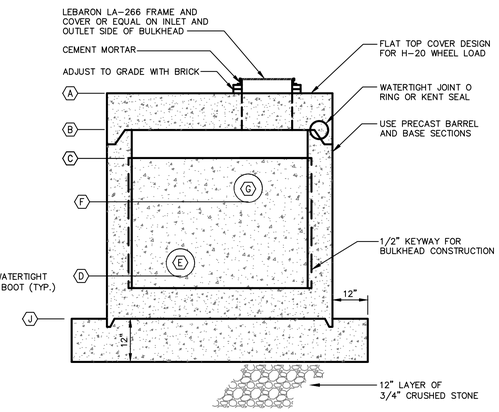
1.1 CULTEC RECHARGER®280HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

2.0 CHAMBER PARAMETERS

1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC OF BROOKFIELD, CT (CULTEC.COM, 203-775-4416).
2. THE CHAMBER SHALL BE VACUUM THERMOFORMED OF POLYETHYLENE WITH A BLACK INTERIOR AND BLUE EXTERIOR.
3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
4. THE CHAMBER SHALL BE OPEN-BOTTOMED.
5. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
6. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER®280HD SHALL BE 26.5 INCHES (673 MM) TALL, 47 INCHES (1194 MM) WIDE AND 8 FEET (2.44 M) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER®280HD SHALL BE 7 FEET (2.13 M).
7. MAXIMUM INLET OPENING ON THE CHAMBER END WALL IS 21 INCHES (525 MM) HDPE, PVC.
8. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV®FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE IN THE SIDE PORTAL IS 10 INCHES (250 MM) HDPE, 12 INCHES (300 MM) PVC.
9. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV®FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 24.2 INCHES (614 MM) LONG.
10. THE NOMINAL STORAGE VOLUME OF THE RECHARGER®280HD CHAMBER SHALL BE 6.079 FT3 / FT (0.565 M3 / M) – WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A SINGLE RECHARGER 280RHD STAND ALONE UNIT SHALL BE 48.63 FT3 (1.38 M3) – WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER®280IHD INTERMEDIATE UNIT SHALL BE 42.553 FT3 (1.205 M3) – WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF THE LENGTH ADJUSTMENT AMOUNT PER RUN SHALL BE 6.08 FT3 (0.56 M3) – WITHOUT STONE.
11. THE NOMINAL STORAGE VOLUME OF THE HVLV®FC-24 FEED CONNECTOR SHALL BE 0.913 FT3 / FT (0.085 M3 / M) – WITHOUT STONE.
12. THE RECHARGER®280HD CHAMBER SHALL HAVE SEVENTY-TWO DISCHARGE HOLES BORED INTO THE SIDEWALLS OF THE UNITS CORE TO PROMOTE LATERAL CONVEYANCE OF WATER.
13. THE RECHARGER®280HD CHAMBER SHALL HAVE 15 CORRUGATIONS.
14. THE END WALL OF THE CHAMBER, WHEN PRESENT, SHALL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT. SEPARATE END PLATES CANNOT BE USED WITH THIS UNIT.
15. THE RECHARGER®280RHD STAND ALONE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO FULLY FORMED INTEGRAL END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
16. THE RECHARGER®280SHD STARTER UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 MM) HIGH X 35 INCHES (889 MM) WIDE.
17. THE RECHARGER®280IHD INTERMEDIATE UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY OPEN END WALL AND ONE PARTIALLY FORMED INTEGRAL END WALL WITH A LOWER TRANSFER OPENING OF 9 INCHES (229 MM) HIGH X 35 INCHES (889 MM) WIDE.
18. THE RECHARGER®280EHD END UNIT MUST BE FORMED AS A WHOLE CHAMBER HAVING ONE FULLY FORMED INTEGRAL END WALL AND ONE FULLY OPEN END WALL AND HAVING NO SEPARATE END PLATES OR END WALLS.
19. THE HVLV®FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE RECHARGER®280HD AND ACT AS CROSS FEED CONNECTIONS.
20. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN THE RIBS.
21. THE CHAMBER SHALL HAVE A RAISED INTEGRAL CAP AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT TO BE USED AS AN OPTIONAL INSPECTION PORT OR CLEAN-OUT.
22. THE UNITS MAY BE TRIMMED TO CUSTOM LENGTHS BY CUTTING BACK TO ANY CORRUGATION ON THE LARGE RIB END.
23. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.
24. MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 12' (3.66 M).
25. THE INSTALLED CHAMBER SYSTEM SHALL BE STRUCTURALLY DESIGNED TO PROVIDE RESISTANCE TO LIVE LOAD



PLAN VIEW



SECTION A-A

6' OUTLET CONTROL STRUCTURE (OCS 2)

SEE SCHEDULE D

NOT TO SCALE

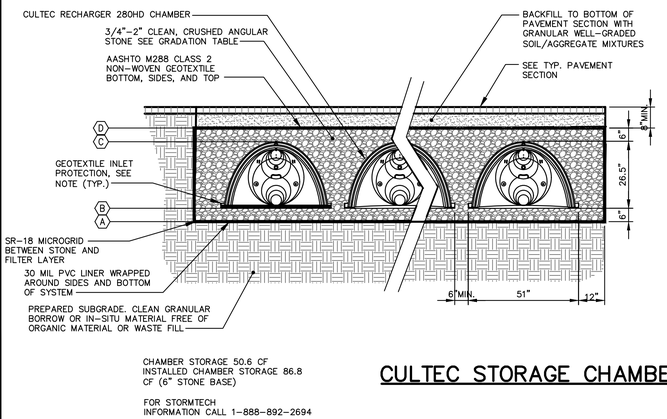
ELEVATION				
POND	A	B	C	D
	144.00	144.50	146.71	147.2

NOTES:

1. GEOTEXTILE INLET PROTECTION NOTE:
AT ALL PIPE INLETS TO CHAMBER PLACE WOVEN GEOTEXTILE THAT MEETS AASHTO M288 CLASS 1 REQUIREMENTS BETWEEN FOUNDATION STONE AND CHAMBER. PLACE A 5' – 6' WIDE STRIP CENTERED ON CHAMBER WIDTH WITH A LENGTH ALONG THE CHAMBERS EQUAL TO THE WIDTH OF THE FABRIC ROLL, BUT NOT LESS THAN 10'.

2. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH THE SPECIFICATIONS AND THE GEOTECHNICAL REPORT.

SUBSURFACE DETENTION SYSTEMS MAY BE SUBSTITUTED WITH AN ENGINEER APPROVED EQUAL WHICH PROVIDES EQUAL DETENTION STORAGE AND WATER QUALITY TREATMENT

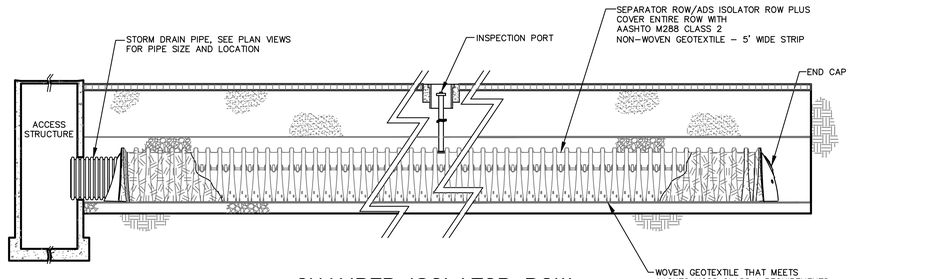


CHAMBER STORAGE 50.6 CF
INSTALLED CHAMBER STORAGE 86.8 CF (6" STONE BASE)

FOR STORMTECH
INFORMATION CALL 1-888-892-2694

CULTEC STORAGE CHAMBER SECTION

1 1/2" CRUSHED ANGULAR STONE GRADATION	
SIEVE DESIGNATION (US CUSTOMARY)	PERCENT BY WEIGHT PASSING
2"	100
1 1/2"	90-100
1"	20-55
3/4"	0-15
3/8"	0-5



CHAMBER ISOLATOR ROW

NOT TO SCALE

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision

Rev.	Date	Revision
4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-GRADE.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name:	CULTEC CHAMBER PLAN & DETAILS
Project:	POPEYES RESTAURANT 584 ALFRED STREET, BIDDEFORD, MAINE
Client:	Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC 10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No.
C-4.1

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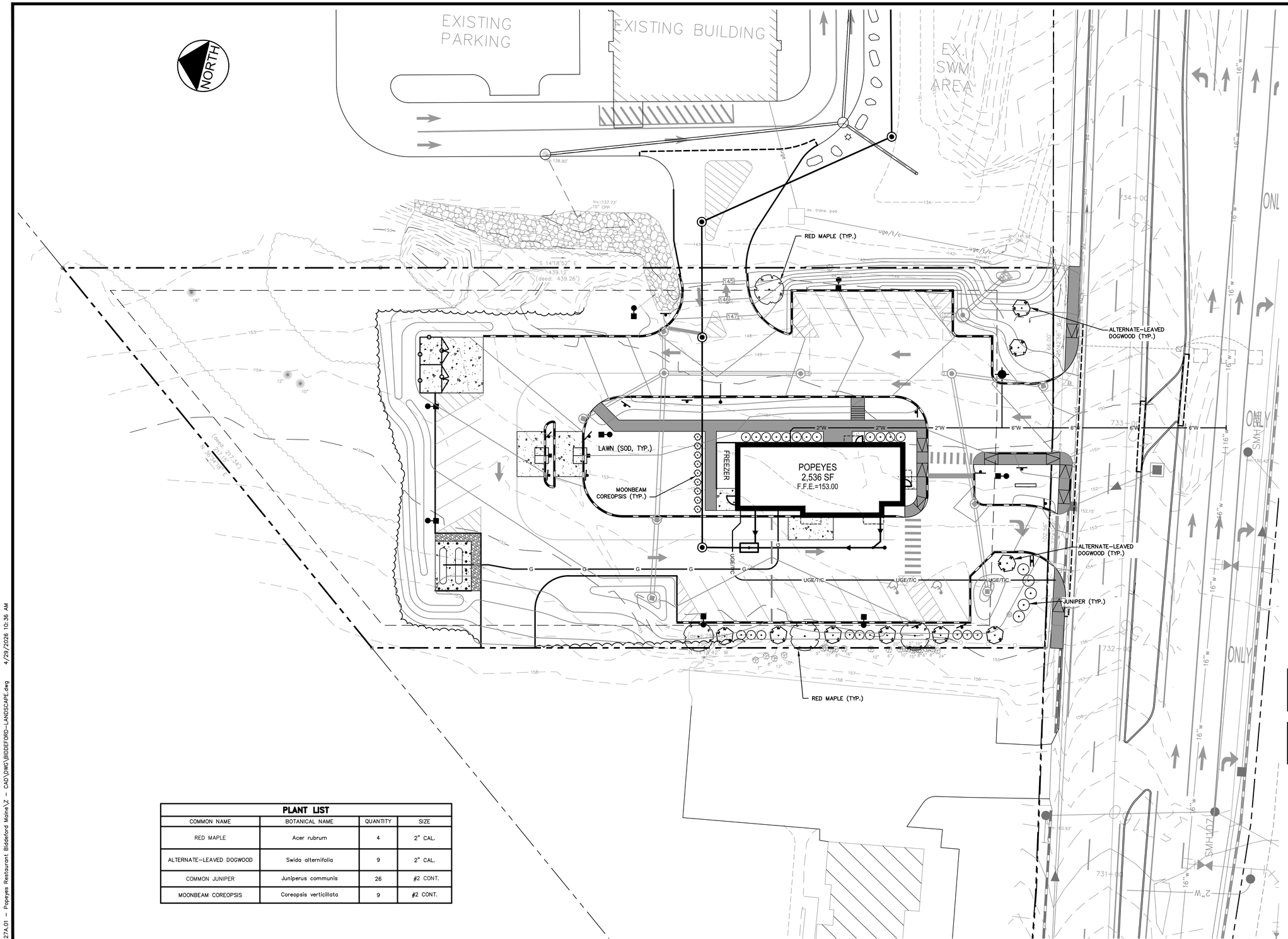

PLANT LIST

COMMON NAME	BOTANICAL NAME	QUANTITY	SIZE
RED MAPLE	Acer rubrum	4	2" CAL.
ALTERNATE-LEAVED DOGWOOD	Swida alternifolia	9	2" CAL.
COMMON JUNIPER	Juniperus communis	26	#2 CONT.
MOONBEAM COREOPSIS	Coreopsis verticillata	9	#2 CONT.

PLAN REFERENCES:

1. ALTA/ACSM LAND TITLE SURVEY MADE FOR MOONEY STREET MANAGEMENT, LLC BY TITCOMB ASSOCIATES, DATED 1/27/2022

OWNER OF RECORD:

584 ALFRED STREET, LLC C/O MOONEY STREET MANAGEMENT, 355 MAIN ST, STE 25, WOBURN, MA 01801.

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STATE OF MAINE
KALEB A BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

20 0 10 20 40
1 inch = 20 ft.

Rev.	Date	Revision

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Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-LANDSCAPE.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: LANDSCAPE PLAN

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-5.0

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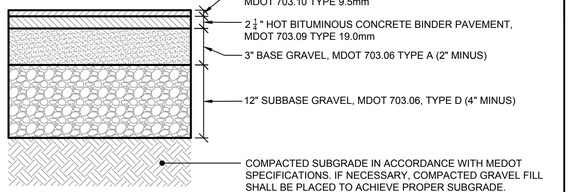
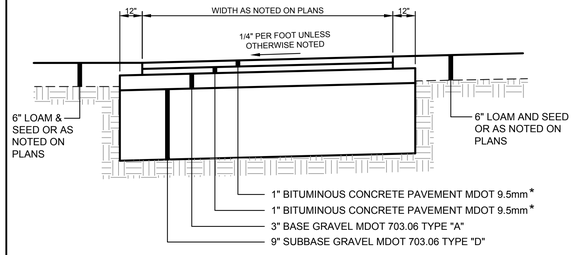


NOTES:

1. APPLY TACK COAT BETWEEN BINDER AND SURFACE COURSES.
2. ALL MATERIALS AND EXECUTION SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION.
3. COMPACTION OF ALL MATERIALS TO BE IN ACCORDANCE WITH MEDOT STANDARD SPECIFICATIONS.

ACCESS DRIVES / PARKING AREAS
BITUMINOUS CONCRETE PAVEMENT SECTION

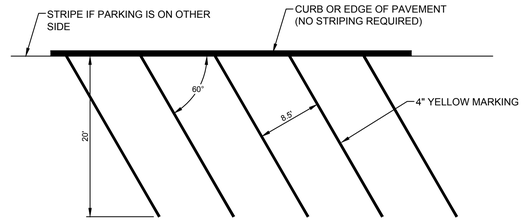
(A) N.T.S.



*PAVEMENT MAY BE PLACED IN A SINGLE LIFT IF NECESSARY

BITUMINOUS SIDEWALK DETAIL - NON-CURBED AREAS

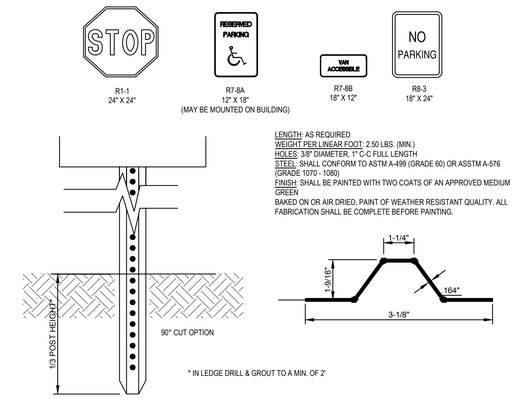
(D) N.T.S.



NOTE:
WHEN PARKING IS ON A CURVE THE NARROWEST PORTION OF THE PARKING STALL SHALL MEET THE WIDTH SHOWN.

DIAGONAL PARKING STALL STRIPING

(G) N.T.S.

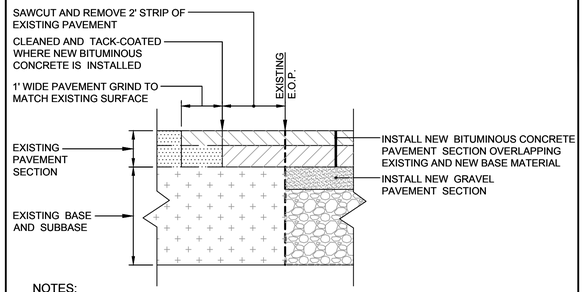


LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASSTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

* IN LEDGE DRILL & GROUT TO A MIN. OF 2'

SIGN LEGEND & SIGN POST

(J) N.T.S.



NOTES:

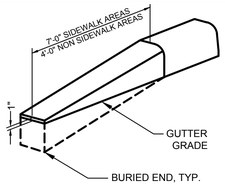
1. APPLY TACK COAT BETWEEN BINDER AND SURFACE COURSES.
2. ALL MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST REVISION.

TYPICAL PAVEMENT SECTION
NEW PAVEMENT ADJACENT TO EXISTING PAVEMENT

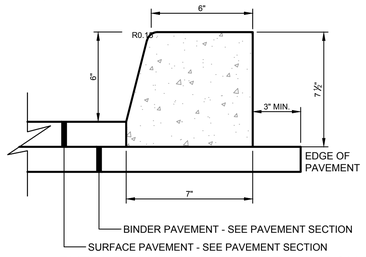
(B) N.T.S.

NOTES:

1. 4,000 PSI CONCRETE WITH FIBER REINFORCEMENT.
2. 4% TO 6% AIR ENTRAINMENT.
3. 1" TO 2" SLUMP.
4. APPLY EPOXY TO BINDER PAVEMENT PRIOR TO CURB PLACEMENT.
5. APPLY SALTGUARD ™ TREATMENT TO ALL CONCRETE CURB.

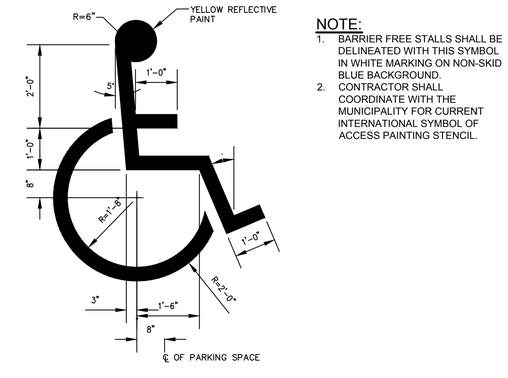


END TRANSITION CURB



EXTRUDED SLIPFORM VERTICAL CONCRETE CURB DETAIL

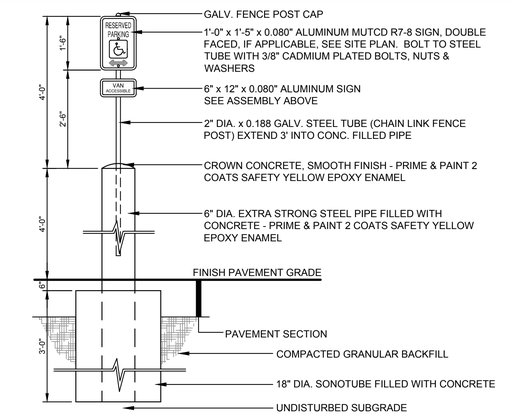
(E) N.T.S.



NOTE:
1. BARRIER FREE STALLS SHALL BE DELINEATED WITH THIS SYMBOL IN WHITE MARKING ON NON-SKID BLUE BACKGROUND.
2. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR CURRENT INTERNATIONAL SYMBOL OF ACCESS PAINTING STENCIL.

INTERNATIONAL BARRIER FREE SYMBOL

(H) N.T.S.

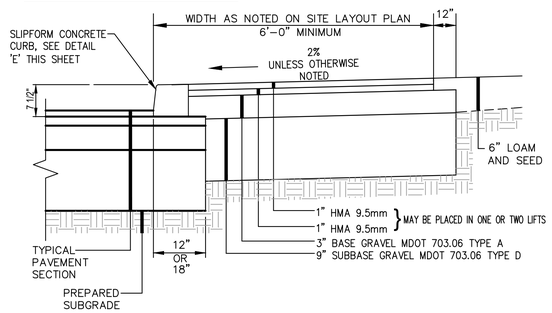


6" DIA. SIGN POST BOLLARD

(K) N.T.S.

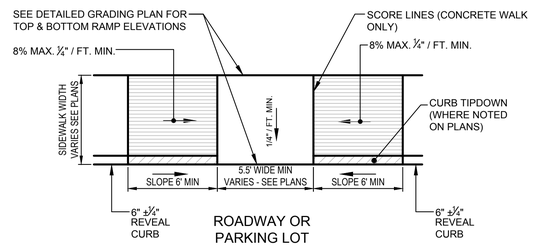
NOTE:

CURB AND SIDEWALK IN OXFORD STREET SHALL COMPLY WITH THE CITY OF AUGUSTA DESIGN REQUIREMENTS.



BITUMINOUS SIDEWALK DETAIL - CURBED AREAS

(C) N.T.S.



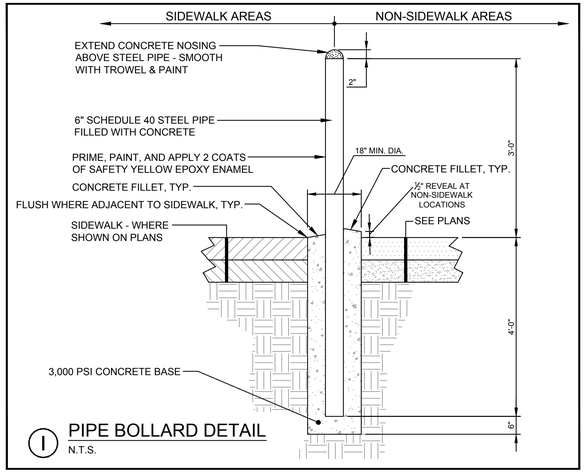
NOTES:
1. RAMP SHALL BE CONSTRUCTED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT (ADA).

2. SCORE LINES ARE NOT APPLICABLE TO BITUMINOUS CONCRETE SIDEWALKS.

3. SEE PLANS FOR LOCATION(S) AND TYPES OF CURB.

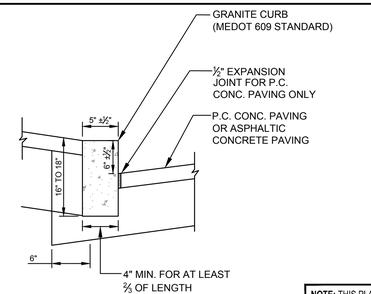
BARRIER FREE RAMP DETAIL

(F) N.T.S.



PIPE BOLLARD DETAIL

(I) N.T.S.



NOTES:
1. VERTICAL GRANITE CURB TO MEET MEDOT STANDARD SPECIFICATIONS
2. JOINTS SHALL BE MORTARED
3. JOINT SEPARATION SHALL BE ¼" AND ⅜"
4. MAX. LENGTH OF STRAIGHT CURB STONES = 8'; MIN. LENGTH = 4'
5. CIRCULAR CURB REQUIRED FOR RADIUS LESS THAN 50'

VERTICAL GRANITE CURB DETAIL

(L) N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

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Design: MYR	Draft: CDD	Date: DEC 2025
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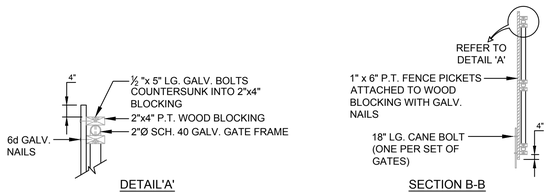
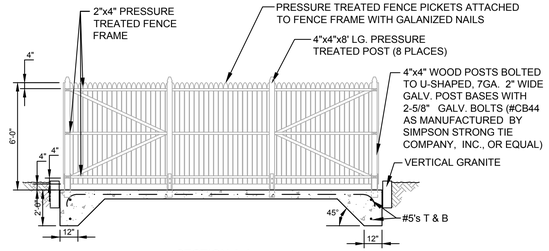
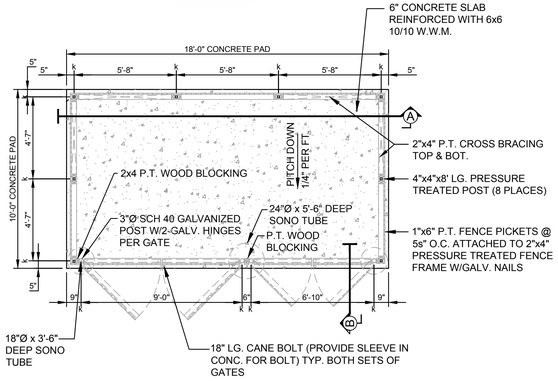


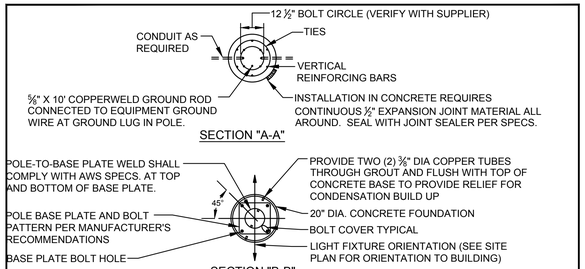
DETAIL'A' SECTION B-B



SECTION A-A



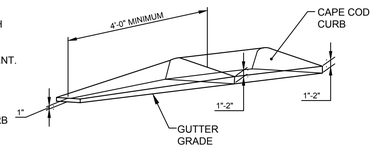
A DUMPSTER ENCLOSURE PLAN AND DETAILS
N.T.S.



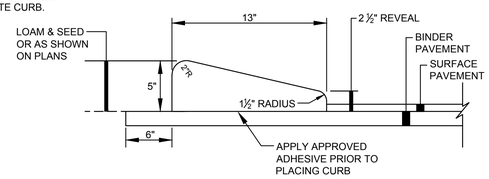
NOTES:
1. 3500 P.S.I. MIN. 28 DAY COMPRESSIVE STRENGTH CONC. WITH GRADE 60 REINF. STEEL.
2. IF WATER IS PRESENT IN HOLE, REMOVE BEFORE POURING CONCRETE.
3. FOUNDATION EXCAVATION SHALL BE BY 24" AUGER IN UNDISTURBED OR PROPERLY COMPACTED FILL PER SPECIFICATIONS.
4. FOUNDATION SHALL HAVE A MINIMUM ALLOWABLE END BEARING OF 2000 PSF.
5. FOUNDATION HAS BEEN DESIGNED FOR A COHESIVE SOIL BASED ON A MINIMUM COHESIVE VALUE OF 1000 PSF.
6. FOUNDATION HAS BEEN DESIGNED FOR A GRANULAR SOIL BASED ON A MINIMUM LATERAL SOIL PRESSURE OF 1000 PSF,
7. UTILIZING AASHTO FIGURE 1.8.2C(4) OF "EMBEDMENT OF POSTS WITH OVERTURNING LOADS".
8. DETAIL FOR MAX. 20' POLE WITH MAX. FIXTURE EPA 4.6 S.F.
9. CONFIRM ANCHOR BOLT PLACEMENT AND PATTERN WITH LIGHT POLE MANUFACTURER BEFORE PREPARING FOUNDATION.
10. EXCAVATION WILL LIKELY BE BELOW WATER TABLE - DO NOT LEAVE EXCAVATION OPEN FOR EXTENDED PERIODS.

C TYPICAL LIGHT POLE FOUNDATION
N.T.S.

NOTES:
1. 4,000 PSI CONCRETE WITH FIBER REINFORCEMENT.
2. 4% TO 6% AIR ENTRAINMENT.
3. 1" TO 2" SLUMP.
4. APPLY EPOXY TO BINDER PAVEMENT PRIOR TO CURB PLACEMENT.
5. APPLY SALTGUARD ™ TREATMENT TO ALL CONCRETE CURB.

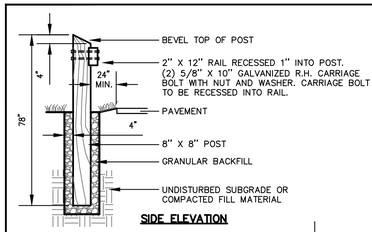


TERMINUS DETAIL

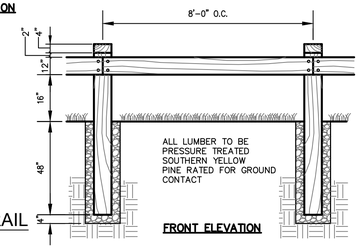


SECTION VIEW

D EXTRUDED SLIPFORM CAPE COD CONCRETE CURB DETAIL (AT SNOW STORAGE AREAS)
N.T.S.

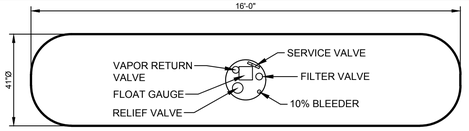


SIDE ELEVATION



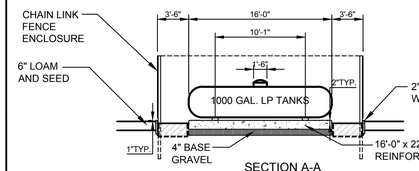
FRONT ELEVATION

E WOOD GUARD RAIL
N.T.S.

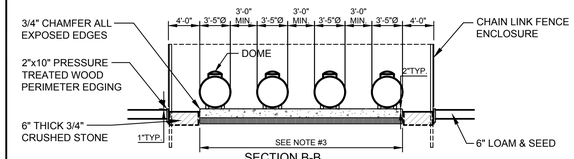


1,000 GALLON ABOVE GROUND PROPANE GAS STORAGE TANK

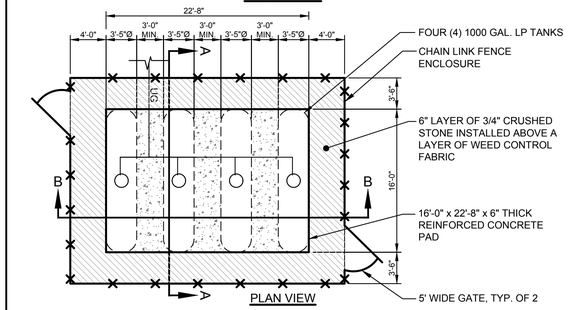
NOTES:
1.) USE AMERICAN WELDING & TANK ASME TANK OR APPROVED EQUAL. TANKS TO BE SUPPLIED AND INSTALLED BY OTHERS. CONTRACTOR SHALL PERFORM ALL NECESSARY EARTHWORK AND BACKFILL PROCEDURES.
2.) TANKS TO BE LOCATED A MINIMUM OF 25 FEET FROM BUILDINGS AND 25 FEET FROM PROPERTY LINES.
3.) CONCRETE PAD TO EXTEND BELOW FULL LENGTH AND WIDTH OF ALL TANKS. THE THICKNESS, REINFORCING AND TANK ANCHORS ARE TO BE SHOWN ON SHOP DRAWING SUBMITTALS



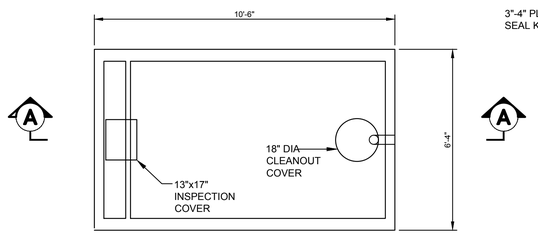
SECTION A-A



SECTION B-B



G ABOVE GROUND PROPANE GAS SUPPLY DETAIL
N.T.S.



NOTES:
1. CONCRETE: 4000 PSI AFTER 28 DAYS
2. REINFORCING: 6x6/10x10 W.W.M. & FIBERS
3. HEAVY DUTY SEPTIC TANK TOPS REINFORCED WITH 5/8" REBAR @ 12" O.C.E.W.
4. KEYED JOINT SEALED WITH BUTYL RUBBER.
5. EXCAVATION MUST BE AT LEAST 12" WIDER & LONGER THAN TANK SIZE
6. TOTAL STRUCTURE WEIGHT =12,500 LBS
7. INSTALL APPROPRIATE CONCRETE RISER SECTIONS OVER INSPECTION & CLEANOUT OPENINGS TO BRING COVERS TO GRADE.

B GREASE TRAP DETAIL
N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE — KALEB A. BOURASSA — No. 17072 — LICENSED PROFESSIONAL ENGINEER — 4/29/26

Rev.	Date	Revision

Rev.	Date	Revision
4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
3	2026.03.12	TMP RESPONSE TO COMMENTS
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1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-DETAILS.dwg		

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Gorrill Palmer, an LJB Engineering Company
GorrillPalmer.com
(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: SITE & MISCELLANEOUS DETAILS
Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE
Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-6.1

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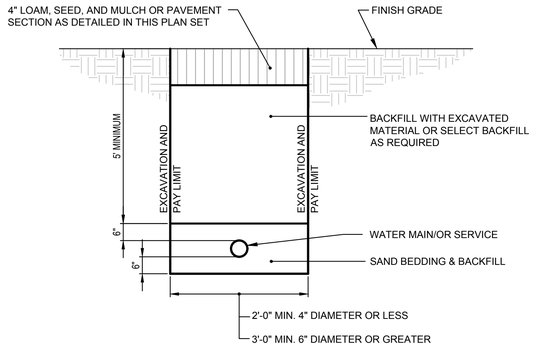
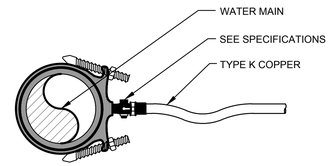


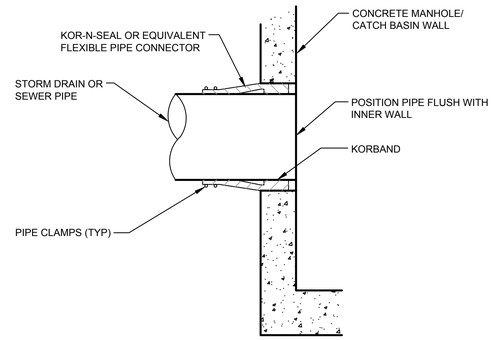
(D) WATER SERVICE TRENCH SECTION
N.T.S.



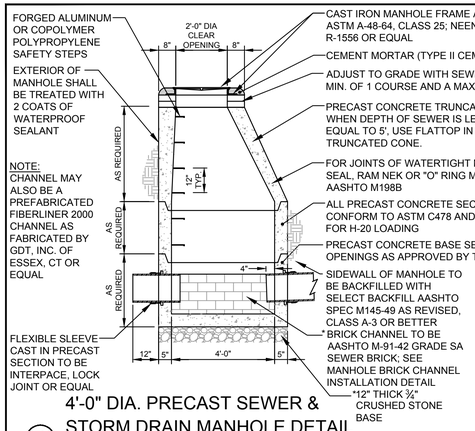
NOTE:
SERVICE CONNECTIONS (DIRECT TAPS AND SERVICE CLAMPS) WILL BE INSTALLED SO THAT THE OUTLET IS AT AN ANGLE OF NOT MORE THAN 45° ABOVE THE HORIZONTAL. ALWAYS PUT A BEND OR 'GOOSENECK' IN THE SERVICE LINE PRIOR TO CONNECTING TO PROVIDE FLEXIBILITY AND 'GIVE' TO COUNTERACT THE EFFECTS OF A LOAD DUE TO SETTLEMENT OR EXPANSION AND/OR CONTRACTION.

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL (B)

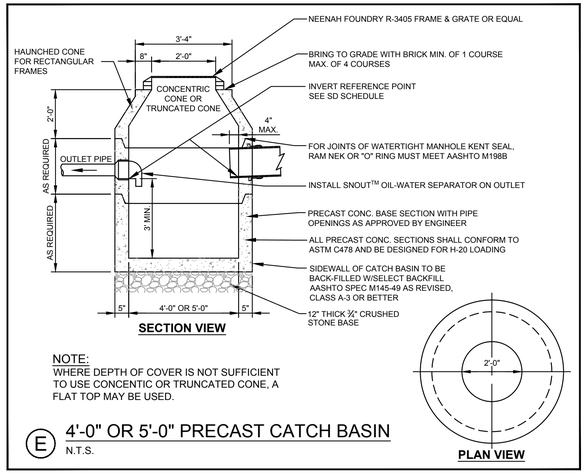
(G) WATER SERVICE DETAIL
N.T.S.



PIPE CONNECTION TO PRECAST CONCRETE SANITARY SEWER AND STORM DRAINAGE STRUCTURES (I)
N.T.S.

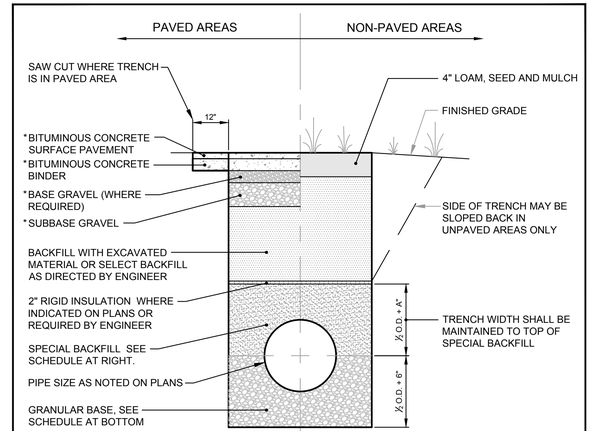


(B) 4'-0" DIA. PRECAST SEWER & STORM DRAIN MANHOLE DETAIL
N.T.S.



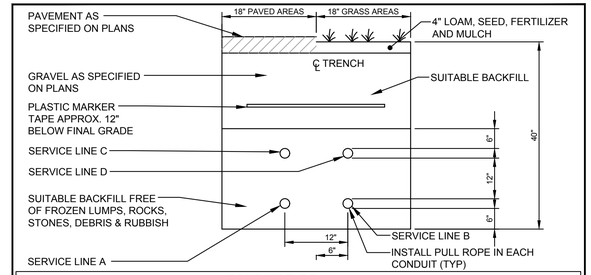
NOTE:
WHERE DEPTH OF COVER IS NOT SUFFICIENT TO USE CONCENTIC OR TRUNCATED CONE, A FLAT TOP MAY BE USED.

(E) 4'-0" OR 5'-0" PRECAST CATCH BASIN
N.T.S.



NOTE:
SERVICES TO BE SIMILAR EXCEPT MINIMUM PAY WIDTH IS 2 ½ FT. WHERE APPLICABLE

(H) TYPICAL TRENCH DETAIL
N.T.S.

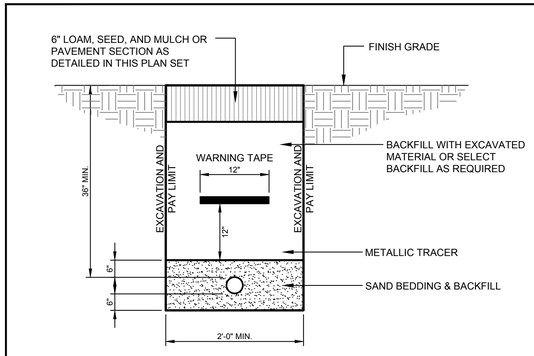


CONDUIT TYPE

SERVICE	CONDUIT SIZE	GRASS AREAS	PAVED AREAS	UTILITY	REMARKS
A	2-5"	SCHEDULE 40 PVC ELECTRICAL GRADE	RIGID GALVANIZED STEEL, ASTM A120	POWER	SEE NOTE
B	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120	TELEPHONE	SEE NOTE
C	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120	COMMUNICATION	SEE NOTE
D	2-4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120	SPARES	SEE NOTE

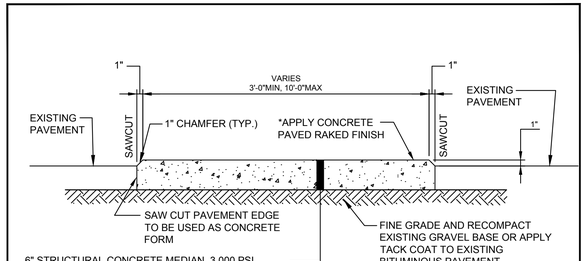
NOTE: ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10' ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS

UTILITY TRENCH - PRIMARY ELECTRIC, TELEPHONE & COMMUNICATIONS (J)
N.T.S.



NOTE:
GAS LINE TO BE INSTALLED BY OTHERS. SITE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION AND BACKFILL OF THE GAS LINE AND PLACEMENT OF THE WARNING TAPES AND TRACER.

(C) GAS MAIN TRENCH SECTION
N.T.S.



* IMMEDIATELY FOLLOWING A FLOAT FINISH (MDOT 502.14) THE SURFACE SHALL BE TEXTURED AT RIGHT ANGLES TO THE ROADWAY USING AN APPROVED OPEN PILE, STIFF BRISTLE BROOM.

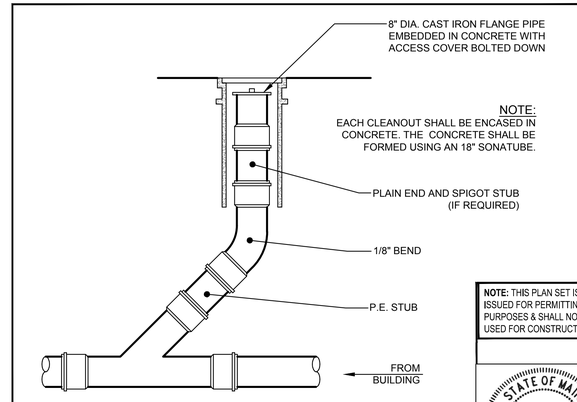
(F) CONCRETE MEDIAN STRIP TYPICAL SECTION
N.T.S.

SCHEDULE OF BASE BACKFILL

TYPE OF PIPE	BEDDING MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
CONCRETE	GRANULAR AASHTO M145 49-A-3 OR BETTER	GRANULAR AASHTO M145 49-A-3 OR BETTER	12	GRANULAR AASHTO M145 49-A-3 OR BETTER
PVC	¾" CRUSHED STONE	GRANULAR AASHTO M145 49-A-3 OR BETTER	6	GRANULAR AASHTO M145 49-A-3 OR BETTER
CMP	¾" CRUSHED STONE	GRANULAR AASHTO M145 49-A-3 OR BETTER	6	GRANULAR AASHTO M145 49-A-3 OR BETTER
D.I.	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145 49-A-3 OR BETTER	6	GRANULAR AASHTO M145 49-A-3 OR BETTER

NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

(H) TYPICAL TRENCH DETAIL
N.T.S.



(K) PVC CLEANOUT DETAIL
N.T.S.

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STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

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Design: MYR	Draft: CDD	Date: DEC 2025
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File Name: BIDDEFORD-DETAILS.dwg		

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(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: SITE, UTILITY & MISCELLANEOUS DETAILS
Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE
Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-6.2

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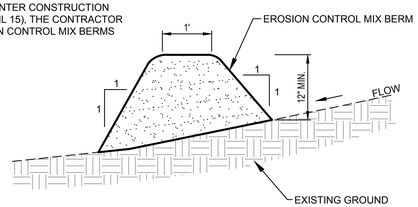
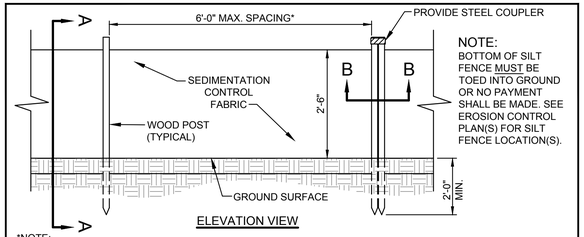
NOTE:
DURING PERIODS OF WINTER CONSTRUCTION (NOV. 15 THROUGH APRIL 15), THE CONTRACTOR SHALL INSTALL EROSION CONTROL MIX BERMS IN LIEU OF SILT FENCE.



EROSION CONTROL MIX:
EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES & MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm.
- PH SHALL FALL BETWEEN 5.0 AND 8.0.

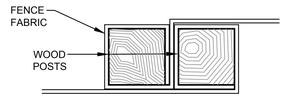
(A) EROSION CONTROL MIX BERM DETAIL
N.T.S.



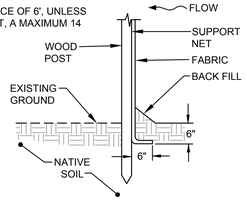
ELEVATION VIEW

NOTE:
BOTTOM OF SILT FENCE MUST BE TOED INTO GROUND OR NO PAYMENT SHALL BE MADE. SEE EROSION CONTROL PLAN(S) FOR SILT FENCE LOCATION(S).

*NOTE:
THE SILT FENCE SHOULD HAVE A MAXIMUM STAKING DISTANCE OF 6', UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT, A MAXIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".



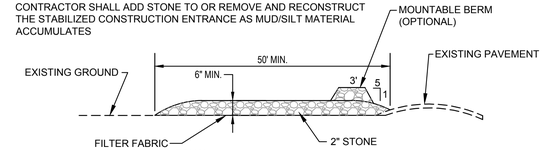
SECTION B-B



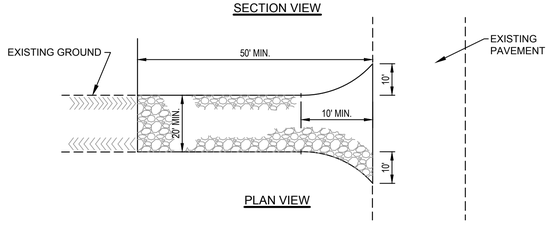
SECTION A-A

(D) SILTATION FENCE DETAIL
N.T.S.

NOTE:
CONTRACTOR SHALL ADD STONE TO OR REMOVE AND RECONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES

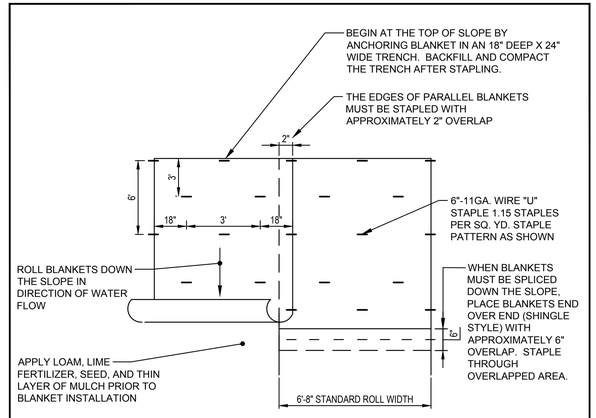


SECTION VIEW

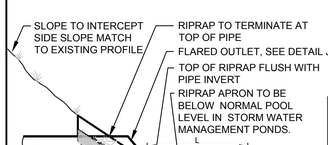


PLAN VIEW

(G) STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



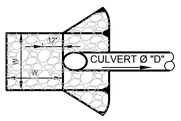
PLAN VIEW



SECTION VIEW

SCHEDULE

CULVERT DIAMETER (D)	WIDTH (W)	STONE D_{50}	RIPRAP THICKNESS
12"	2'	6"	14"
15"	4'	6"	14"
18"	4'	6"	14"
24"	6'	6"	14"
36"	8'	12"	27"
42"	10'	12"	27"
48"	12'	12"	27"



PLAN VIEW

NOTE:
RIPRAP GRADATION AND PLACEMENT - THE RIPRAP GRADATION SHALL BE A WELL-GRADED MIX FROM ABOUT 1.5 TIMES THE D SIZE TO ABOUT 25 PERCENT OF THE D SIZE. THE RIPRAP STONES SHALL BE CAREFULLY PLACED WORKING FROM THE TOE OF THE SLOPE UPWARD. THE STONES SHOULD BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12 INCHES ONTO THE GEOTEXTILE. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH UNIFORMLY SLOPED SURFACE.

(B) PIPE/CULVERT INLET APRON
N.T.S.

NOTE:
STAPLE SPACING AT 3' C/C ALONG MESH EXCEPT AT 4" OVERLAP WHICH SHALL BE AT 1½' C/C

WIRE STAPLE

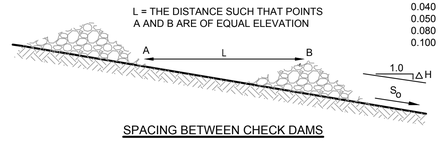
CIRCULAR DITCHES

(E) EROSION CONTROL MESH
N.T.S.

SECTION A-A

S_o (FT./FT.)	L (FT.)
0.020	75
0.030	50
0.040	40
0.050	30
0.080	20
0.100	10

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION



SPACING BETWEEN CHECK DAMS

(H) STONE CHECK DAM DETAIL
N.T.S.

SECTION VIEW

NOTE:
EROSION CONTROL BLANKET STAPLE SIZE AND DISTRIBUTION PER MANUFACTURER'S SPECIFICATIONS.

NOTES:
1. IF GRASS CATCH IS NOT 75% BY SEPTEMBER 1, ADD #4 REBARS @ 3'-0" ROWS @ 3' CENTERS. REMOVE OR DRIVE REBARS 3" BELOW GRADE IN SPRING FOLLOWING TURF ESTABLISHMENT.
2. MULCH RATE TO BE 1/2 THE RATE OTHERWISE SPECIFIED.

(J) EROSION CONTROL BLANKET SLOPE STABILIZATION DETAIL
N.T.S.

SECTION VIEW

SCHEDULE

CULVERT DIAMETER (D)	WIDTH (W)	LENGTH (L)	STONE D_{50}	RIPRAP THICKNESS
12"	8'	10'	6"	14"
15"	8'	10'	6"	14"
18"	10'	14'	6"	14"
24"	12'	16'	9"	21"
30"	12'	16'	12"	27"
36"	20'	24'	12"	27"
42"	24'	26'	12"	27"
48"	28'	32'	12"	27"

PLAN VIEW

NOTE:
RIPRAP GRADATION AND PLACEMENT - THE RIPRAP GRADATION SHALL BE A WELL-GRADED MIX FROM ABOUT 1.5 TIMES THE D SIZE TO ABOUT 25 PERCENT OF THE D SIZE. THE RIPRAP STONES SHALL BE CAREFULLY PLACED WORKING FROM THE TOE OF THE SLOPE UPWARD. THE STONES SHOULD BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12 INCHES ONTO THE GEOTEXTILE. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH UNIFORMLY SLOPED SURFACE.

(C) PIPE/CULVERT OUTLET APRON
N.T.S.

(F) STONE EDGE AGAINST BLDG. FACE DETAIL
N.T.S.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

STATE OF MAINE
KALEB A. BOURASSA
No. 17072
LICENSED PROFESSIONAL ENGINEER
4/29/26

Rev.	Date	Revision

Rev.	Date	Revision
4	2026.04.29	RESUBMITTED FOR SITE PLAN REVIEW
3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-DETAILS.dwg		

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South Portland, ME 04106

Drawing Name: EROSION CONTROL & MISCELLANEOUS DETAILS
Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE
Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-6.3

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1.3.5 EROSION CONTROL MEASURES AND SITE STABILIZATION

THE PRIMARY EMPHASIS OF THE EROSION/SEDIMENTATION CONTROL PLAN, WHICH WILL BE IMPLEMENTED FOR THIS PROJECT, IS AS FOLLOWS:

- DEVELOPMENT OF A CAREFUL CONSTRUCTION SEQUENCE.
- RAPID REVEGETATION OF DENUDED AREAS TO MINIMIZE THE PERIOD OF SOIL EXPOSURE.
- RAPID STABILIZATION OF DRAINAGE PATHS TO AVOID RILL AND GULLY EROSION.
- THE USE OF ON-SITE MEASURES TO CAPTURE SEDIMENT (HAY BALES/ STONE CHECK DAMS/SILT FENCE, ETC.)

THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVICES WILL BE IMPLEMENTED AS PART OF THE SITE DEVELOPMENT. THESE DEVICES SHALL BE INSTALLED AS INDICATED ON THE PLANS OR AS DESCRIBED WITHIN THIS REPORT. FOR FURTHER REFERENCE, SEE THE LATEST EDITION OF THE MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS.

A. DEWATERING

WATER FROM CONSTRUCTION TRENCH DEWATERING SHALL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 50 FEET OF A PROTECTED NATURAL RESOURCE. DEWATERING DISCHARGE SHALL NOT BE DIRECTED ACROSS ADJACENT PROPERTIES IN A CONCENTRATED MANNER.

B. INSPECTION AND MONITORING

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

(a) **INSPECTION AND CORRECTIVE ACTION**. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. THE THRESHOLD FOR RAINFALL REQUIRING INSPECTION SHALL BE 0.5" IN 24 HOURS.

(b) **MAINTENANCE**. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

(c) **DOCUMENTATION**. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO CITY STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

C. TEMPORARY EROSION CONTROL MEASURES

TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED BY THIS REPORT AND AS SHOWN ON THE PLAN SET FOR THE PROJECT. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER, THE CITY OF BIDDEFORD, OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

THE FOLLOWING MEASURES ARE PLANNED AS TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION:

1. CRUSHED STONE-STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO EACH CONSTRUCTION AREA.

2. SILTATION FENCE OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED DOWNSTREAM OF ANY DISTURBED AREAS TO TRAP RUNOFF- BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE AND/OR WOOD WASTE COMPOST BERMS SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THIS PACKAGE AND INSPECTED AT LEAST ONCE A WEEK AND BEFORE AND IMMEDIATELY AFTER A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE OR BERM LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE OR BERM, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM. WOOD WASTE COMPOST BERMS ARE NOT TO BE USED ADJACENT TO WETLAND AREAS THAT ARE NOT TO BE DISTURBED.

3. STRAW OR HAY MULCH INCLUDING HYDROSEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND OCTOBER 15TH ON SLOPES OF LESS THEN 15 PERCENT SHALL BE ANCHORED BY APPLYING WATER; MULCH PLACED ON SLOPES OF EQUAL TO OR STEEPER THAN 15 PERCENT SHALL BE COVERED BY A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. FABRIC NETTING AND STAPLES SHALL BE USED ON DISTURBED AREAS WITHIN 50' OF LAKES, STREAMS, AND WETLANDS REGARDLESS OF THE UPSTREAM SLOPE. MULCH PLACED BETWEEN OCTOBER 15TH AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT SHALL BE COVERED WITH A FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SLOPES STEEPER THAN 3:1 AND EQUAL TO OR FLATTER THAN 2:1, WHICH ARE TO BE REVEGETATED, SHALL RECEIVE CURLEX BLANKETS BY AMERICAN EXCELSIOR OR EQUAL. SLOPES STEEPER THAN 2:1 SHALL RECEIVE RIPRAP AS NOTED ON THE PLANS. THE MULCH APPLICATION RATE FOR BOTH TEMPORARY AND PERMANENT SEEDING IS 75 LBS PER 1000 SF AS IDENTIFIED IN ATTACHMENT A OF THIS SECTION. MULCH SHALL NOT BE PLACED OVER SNOW.

4. TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION WILL BE PROTECTED AS FOLLOWS:

a) TEMPORARY STOCKPILES SHALL NOT BE LOCATED WITHIN 100 FEET OF ANY WETLANDS WHICH WILL NOT BE DISTURBED AND SHALL BE LOCATED AWAY FROM DRAINAGE SWALES.

b) STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS BY EITHER TEMPORARILY SEEDING THE STOCKPILE BY A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH, SUCH AS HAY, STRAW, OR EROSION CONTROL MIX.

c) STOCKPILES SHALL BE SURROUNDED BY SEDIMENTATION BARRIER AT THE TIME OF FORMATION.

5. ALL DENUDED AREAS THAT ARE WITHIN 100 FEET OF AN UNDISTURBED WETLAND, WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN A BUILDING PAD, PARKING AREA, OR ACCESS DRIVE SUBBASE AREA, SHALL RECEIVE MULCH OR EROSION CONTROL MESH FABRIC WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL. ALL AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW. IN OTHER AREAS, THE TIME PERIOD MAY BE EXTENDED TO 7 DAYS.

6. FOR WORK, WHICH IS CONDUCTED BETWEEN OCTOBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DENUDED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 2 DAYS FOR ALL AREAS.

7. BARRA ROAD SHALL BE SWEPT TO CONTROL MUD AND DUST AS NECESSARY. ADDITIONAL STONE SHALL BE ADDED TO THE STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.

8. DURING GRUBBING OPERATIONS STONE CHECK DAMS SHALL BE INSTALLED AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS AND AS DIRECTED ON THE EROSION CONTROL PLANS.

9. SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE ANCHORED. A DOUBLE ROW OF SILT FENCE SHALL BE USED ADJACENT TO WETLANDS.

10. WOOD WASTE COMPOST/BARK BERMS MAY BE USED IN LIEU OF SILTATION FENCING. BERMS SHALL BE REMOVED AND SPREAD IN A LAYER NOT TO EXCEED 3" THICK ONCE UPSTREAM AREAS ARE COMPLETED AND A 90% CATCH OF VEGETATION IS ATTAINED.

11. STORM DRAIN CATCH BASIN INLET PROTECTION SHALL BE PROVIDED THROUGH THE USE OF STONE SEDIMENT BARRIERS OR APPROVED SEDIMENT BAGS (SUCH AS SILT SACK). INSTALLATION DETAILS ARE PROVIDED IN THE PLAN SET. THE BARRIERS SHALL BE INSPECTED AFTER EACH RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHALL BE REMOVED AND THE BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ½ THE DESIGN DEPTH OF THE BARRIER. THE BARRIER SHALL BE REMOVED WHEN THE TRIBUTARY DRAINAGE AREA HAS BEEN STABILIZED.

12. WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MDOT SPECIFICATIONS - SECTION 637 - DUST CONTROL.

13. LOAM AND SEED IS INTENDED TO SERVE, AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DENUDED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP. APPLICATION RATES ARE PROVIDED IN ATTACHMENT A OF THIS SECTION. SEEDING SHALL NOT OCCUR OVER SNOW.

D. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES HAVE BEEN DESIGNED AS PART OF THE EROSION/SEDIMENTATION CONTROL PLAN:

1. ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.) WILL BE LOAMED, LIMED, FERTILIZED, MULCHED, AND SEEDED. FABRIC NETTING, ANCHORED WITH STAPLES, SHALL BE PLACED OVER THE MULCH IN AREAS AS NOTED IN **TEMPORARY EROSION CONTROL MEASURES** PARAGRAPH 3 OF THIS REPORT. ALL AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

2. ALL STORM DRAIN PIPE OUTLETS SHALL HAVE RIPRAP APRONS AT THEIR OUTLET TO PROTECT THE OUTLET AND RECEIVING CHANNEL FROM SCOUR AND DETERIORATION. INSTALLATION DETAILS ARE PROVIDED IN THE PLAN SET. THE APRONS SHALL BE INSTALLED AND STABILIZED TO THE EXTENT PRACTICABLE PRIOR TO DIRECTING RUNOFF TO THE TRIBUTARY PIPE OR CULVERT.

1.4 IMPLEMENTATION SCHEDULE

THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE REQUIRED TO ENSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE OPTIMIZED:

IT IS ANTICIPATED THAT CONSTRUCTION WILL COMMENCE IN SPRING OF 2025 AND BE COMPLETED BY FALL OF 2026.

NOTE: FOR ALL GRADING ACTIVITIES, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION NOT TO OVEREXPOSE THE SITE, THIS SHALL BE ACCOMPLISHED BY LIMITING THE DISTURBED AREA.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ACCESS POINTS FROM PAVED ROADWAYS.

2. INSTALL CATCH BASIN INLET PROTECTION, AND PERIMETER SILT FENCE/WOOD WASTE BERMS PRIOR TO GRUBBING RESPECTIVE AREAS.

3. CLEAR AND GRUB AREA TO BE DEVELOPED. INSTALL STONE CHECK DAMS AT ANY EVIDENT CONCENTRATED FLOW DISCHARGE POINTS.

4. FOUNDATION PREPARATION AREA SHALL BE EXCAVATED FOR INSTALLATION OF THE BUILDING FOOTINGS. BUILDING WORK WILL BE ON GOING THROUGH THE REMAINDER OF THE PROJECT.

5. COMMENCE INSTALLATION OF DRAINAGE APPURTENANCES.

6. COMMENCE CONSTRUCTION OF PERVIOUS PAVER FILTER/RESERVOIR UP TO CHOKER COURSE, FOCAL POINT FILTERS AND / OR DETENTION PONDS.

7. COMMENCE EARTHWORK AND GRADING TO SUBGRADE.

8. COMMENCE INSTALLATION OF UTILITIES.

9. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.

10. COMPLETE INSTALLATION OF UNDERGROUND UTILITIES TO WITHIN 5' OF THE BUILDINGS.

11. INSTALL LIGHT POLE FOUNDATIONS AND LIGHT POLES.

12. COMPLETE REMAINING EARTHWORK OPERATIONS.

13. COMPLETE INSTALLATION OF CATCH BASINS AND APPURTENANCES.

14. INSTALL SUB-BASE AND BASE GRAVEL WITHIN PARKING FIELDS, WALKWAYS, AND ALL DRIVEWAYS.

15. INSTALL BASE COURSE PAVING FOR ACCESS DRIVE AND PARKING AREA AS WELL AS CONCRETE SURFACES.

16. INSTALL CURBING IN PARKING FIELDS, DRIVEWAYS, AND ALONG THE ACCESS DRIVES AS NEEDED.

17. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.

18. INSTALL PERVIOUS PAVERS AND INFILL STONE, SURFACE COURSE PAVING FOR ACCESS DRIVE AND PARKING AREAS. STRIPE PER PLAN.

19. ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

20. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP, OR GRAVEL SHALL BE REVEGETATED.

PRIOR TO CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE FOR THE COMPLETION OF THE WORK, WHICH WILL SATISFY THE FOLLOWING CRITERIA:

1. THE ABOVE CONSTRUCTION SEQUENCE SHOULD GENERALLY BE COMPLETED IN THE SPECIFIED ORDER; HOWEVER, SEVERAL SEPARATE ITEMS MAY BE CONSTRUCTED SIMULTANEOUSLY. WORK MUST ALSO BE SCHEDULED OR PHASED TO REDUCE THE EXTENT OF THE EXPOSED AREAS AS SPECIFIED BELOW. THE INTENT OF THIS SEQUENCE IS TO PROVIDE FOR EROSION CONTROL AND TO HAVE STRUCTURAL MEASURES SUCH AS SILT FENCE AND CONSTRUCTION ENTRANCES IN PLACE BEFORE LARGE AREAS OF LAND ARE DENUDED.

2. THE WORK SHALL BE CONDUCTED IN SECTIONS WHICH SHALL:

a) LIMIT THE AMOUNT OF EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 30 DAYS.

b) REVEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT; OR TEMPORARILY STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF SOIL FOR AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND AND 7 DAYS FOR ALL OTHER AREAS. AREAS WITHIN 100 FEET OF AN UNDISTURBED WETLAND SHALL BE MULCHED PRIOR TO ANY PREDICTED RAIN EVENT REGARDLESS OF THE 48 HOUR WINDOW.

c) INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEM AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE. THE DITCHES SHALL BE IMMEDIATELY LINED OR REVEGETATED AS SOON AS THEIR INSTALLATION IS COMPLETE.

1.5 EROSION, SEDIMENTATION AND STABILIZATION CONTROL PLAN

THE EROSION CONTROL PLAN IS INCLUDED IN THE PLAN SET.

1.6 DETAILS AND SPECIFICATIONS

THE EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

1.7 WINTER STABILIZATION PLAN

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT; VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT ANY AREA LEFT EXPOSED CAN BE CONTROLLED BY THE CONTRACTOR. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY/PARKING AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.

THE CONTRACTOR SHALL INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOODWASTE EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE SHALL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCE PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOODWASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

AN AREA SHALL BE CONSIDERED DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAT 8%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

1. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS -- THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT SHALL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 1. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

INSTALL A SOD LINING IN THE DITCH -- THE APPLICANT SHALL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.

INSTALL A STONE LINING IN THE DITCH --THE APPLICANT SHALL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 15. THE APPLICANT SHALL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE APPLICANT SHALL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

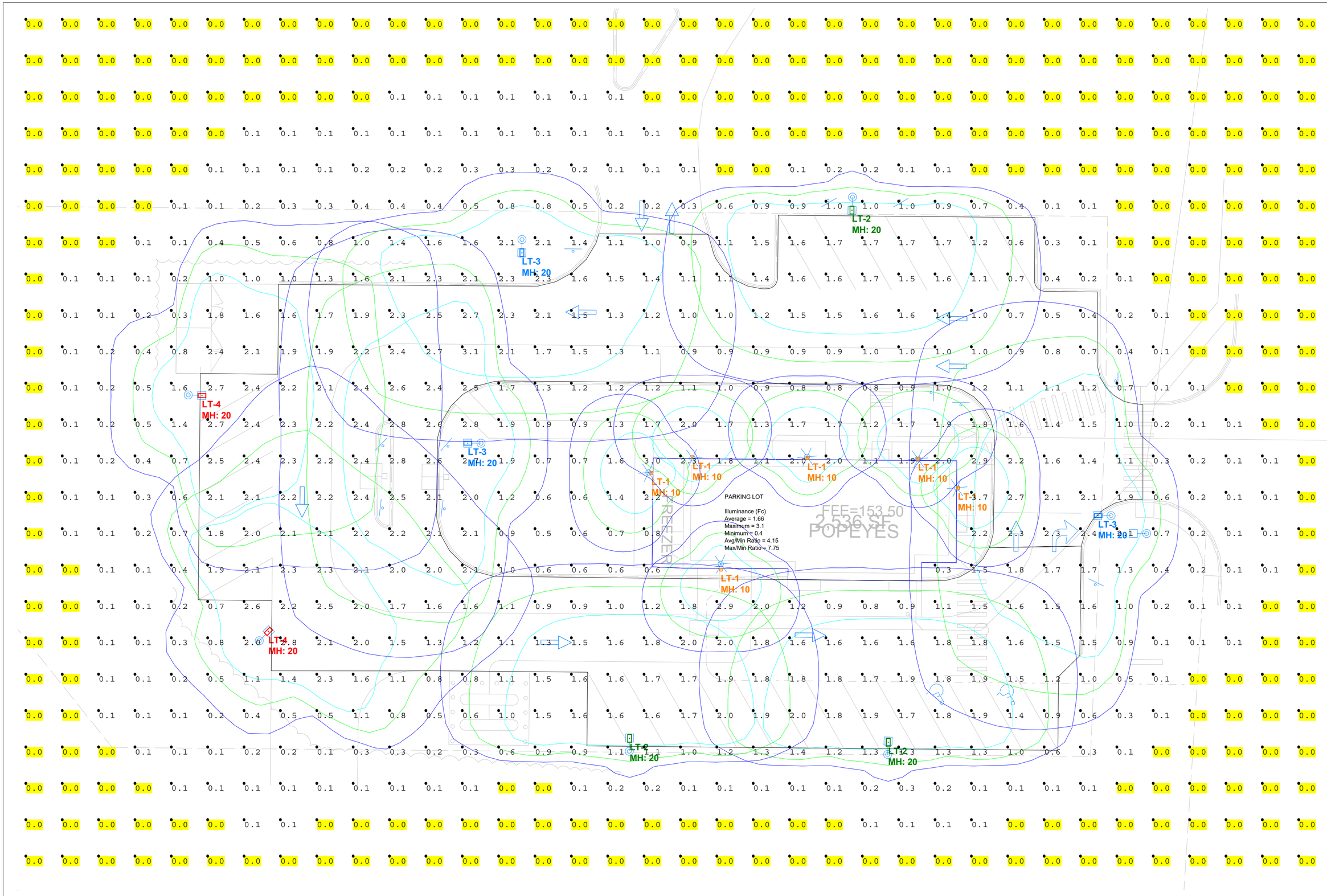
2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE APPLICANT SHALL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE APPLICANT SHALL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. THE DEPARTMENT SHALL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE APPLICANT FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 1, THEN THE APPLICANT SHALL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY SEPTEMBER 1 THE APPLICANT SHALL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE APPLICANT SHALL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT SHALL COVER THE SLOPE WITH A LAYER OF WOODWASTE COMPOST AS DESCRIBED IN ITEM III OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM IV OF THIS STANDARD.

STABILIZE THE SLOPE WITH SOD -- THE APPLICANT SHALL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY SEPTEMBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT SHALL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SLOPE WITH WOODWASTE COMPOST -- THE APPLICANT SHALL PLACE A SIX-INCH LAYER OF WOODWASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOODWASTE COMPOST, THE APPLICANT SHALL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT SHALL NOT USE WOODWASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STABILIZE THE SLOPE WITH STONE RIPRAP -- THE APPLICANT SHALL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT



Luminaire Schedule							
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	6	LT-1	McGRAW-EDISON: GKO-PB1B-730-U-T4W-XX	0.900	1363	9.3	55.8
	3	LT-2	McGRAW-EDISON: GALN-SA2A-730-U-T4W-XX-XX-HSS	0.900	6059	63	189
	3	LT-3	McGRAW-EDISON: GALN-SA2A-730-U-T4WXX-XX	0.900	8381	63	189
	2	LT-4	McGRAW-EDISON: GALN-SA2A-730-U-T4FT-XX-XX	0.900	8357	63	126

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Illuminance	Fc	0.51	3.7	0.0	N.A.	N.A.
PARKING LOT	Illuminance	Fc	1.66	3.1	0.4	4.15	7.75

Boston, MA
Rocky Hill, CT
Hooksett, NH
REFLEX
www.reflexlighting.com
specifications@reflexlighting.com

DISCLAIMER: CALCULATIONS SHOULD BE USED AS A GUIDE ONLY. LIGHT LEVELS ARE SUBJECT TO CONDITIONS IN THE FIELD.

Drawn By: Tamer
Date:3/9/2026
Specifier:
Salesperson:
Scale: Not to Scale

POPEYES BIDDEFORD

584 ALFRED STREET, BIDDEFORD, MAINE

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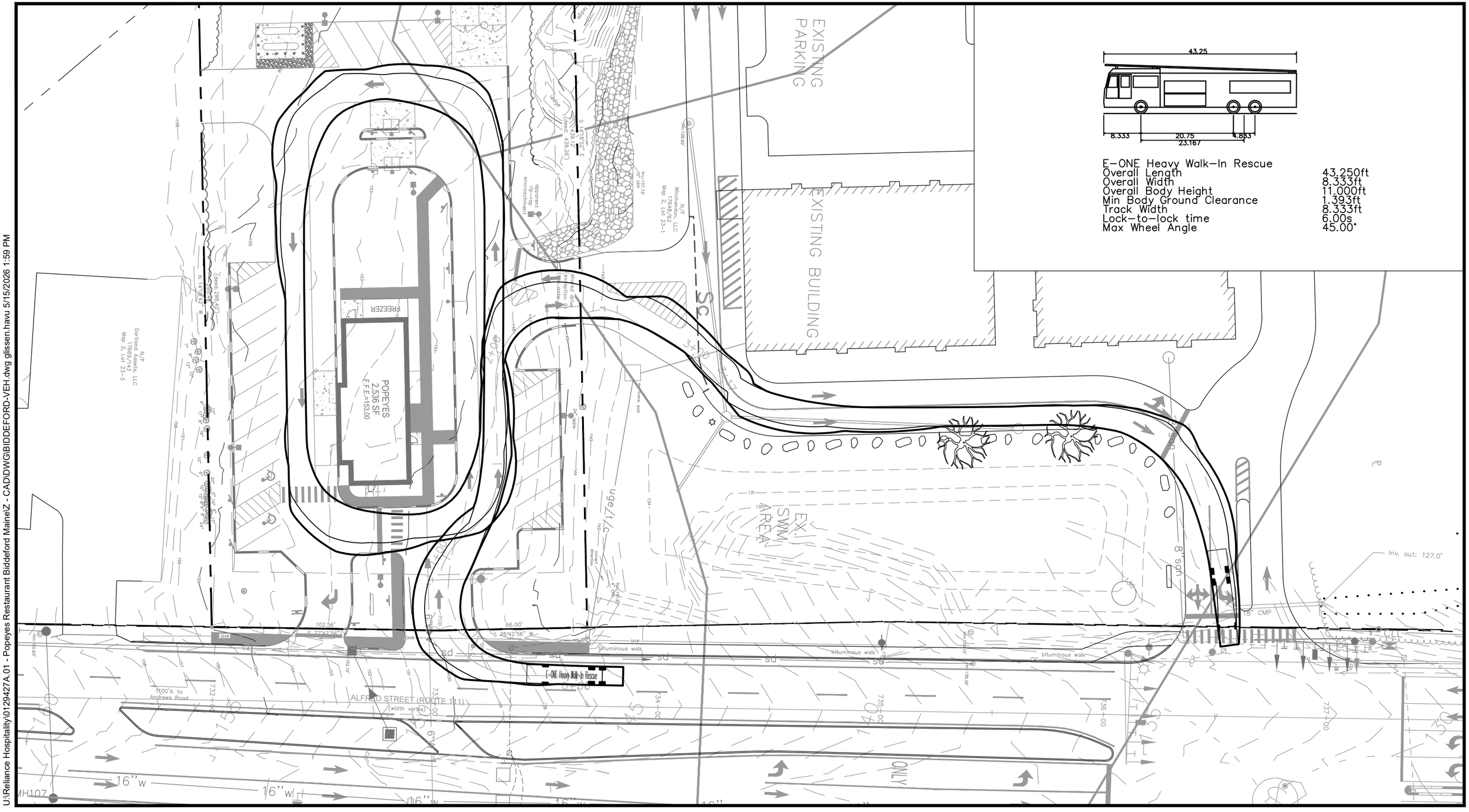


E-ONE Heavy Walk-In Rescue	
Overall Length	43.250ft
Overall Width	8.333ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°

GORRILL PALMER
An LJB Engineering Company

COMMERCIAL DEVELOPMENT - POPEYE'S RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

GOLDEN CHICKEN OF BIDDEFORD, LLC

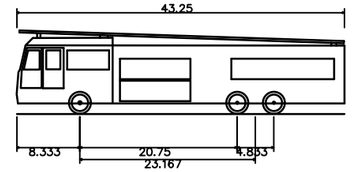
File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title

FIRE TRUCK TURNING TEMPLATE

Figure No.

ATR-1



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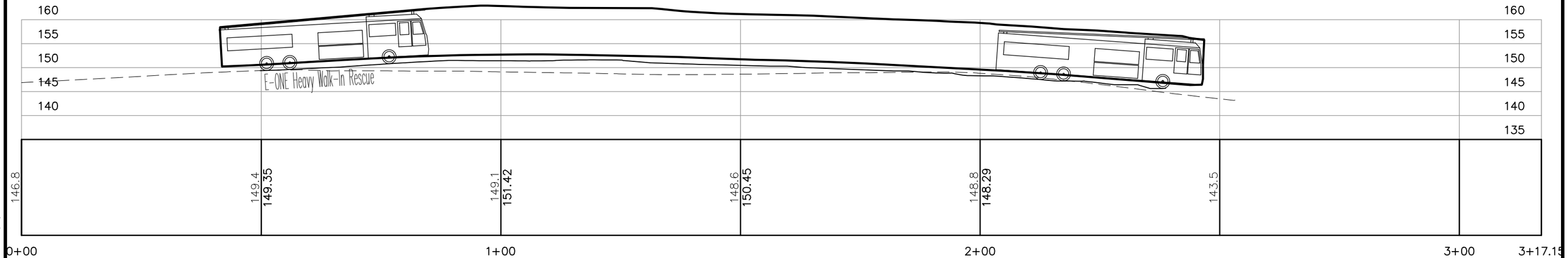

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584 ALFRED STREET, BIDDEFORD, MAINE

GOLDEN CHICKEN OF BIDDEFORD, LLC

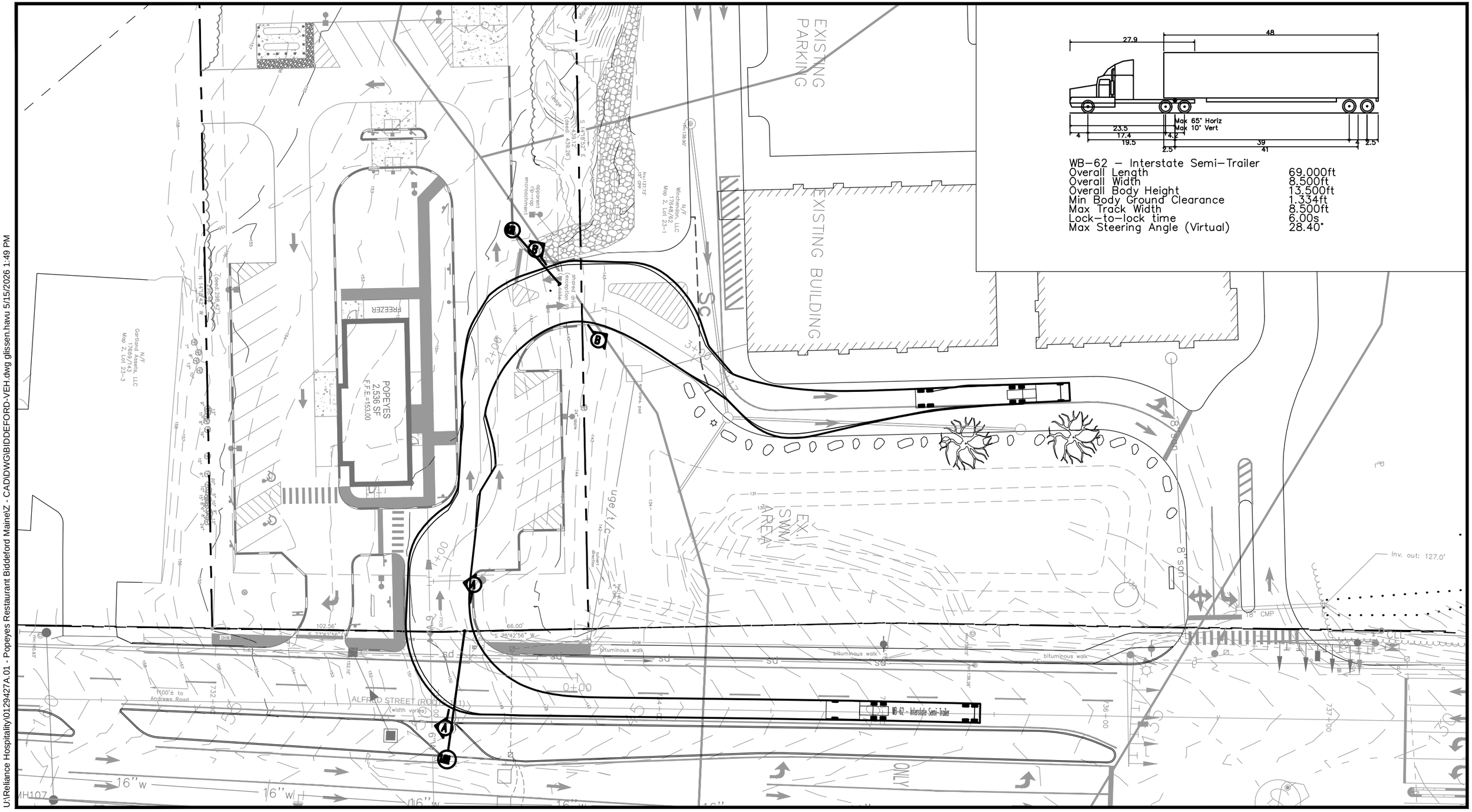
File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title

VERTICAL FIRE TRUCK MOVEMENT

Figure No.

ATR-1



WB-62 - Interstate Semi-Trailer

Overall Length	69.000ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

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GORRILL PALMER
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COMMERCIAL DEVELOPMENT - POPEYE'S RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

GOLDEN CHICKEN OF BIDDEFORD, LLC

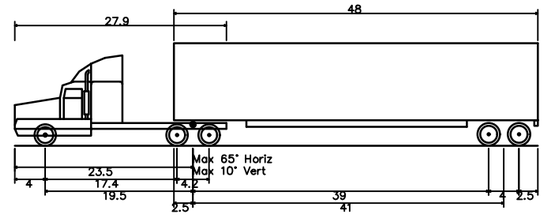
File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title

WB-62 TURNING TEMPLATE

Figure No.

ATR-2



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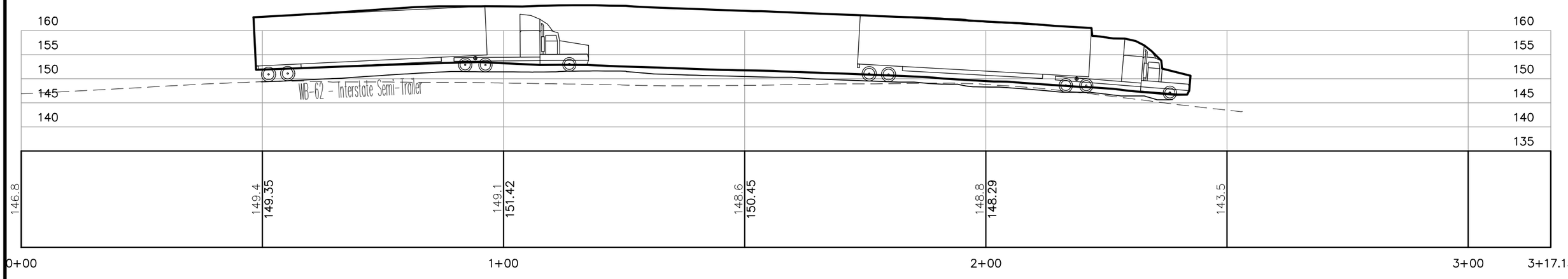

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GORRILL PALMER
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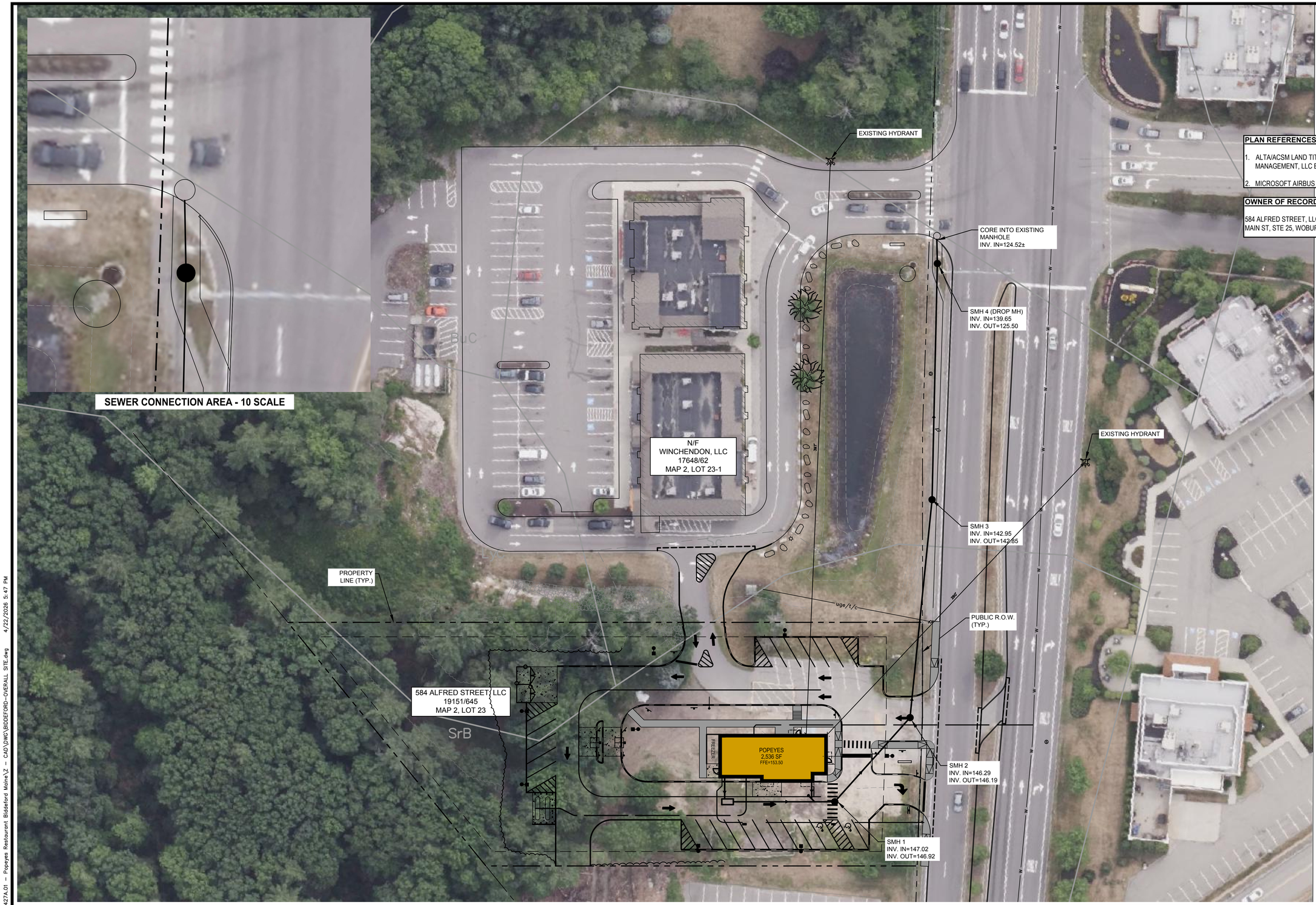
COMMERCIAL DEVELOPMENT - POPEYE'S RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

GOLDEN CHICKEN OF BIDDEFORD, LLC

File Name:			
CDD	KAB	KAB	26.04.28
DWN.	CHKD.	DSGN.	DATE

Title
VERTICAL WB-62 MOVEMENT

Figure No.
ATR-1



PLAN REFERENCES:

1. ALTA/ACSM LAND TITLE SURVEY MADE FOR MOONEY STREET MANAGEMENT, LLC BY TITCOMB ASSOCIATES, DATED 1/27/2022
2. MICROSOFT AIRBUS DS IMAGERY

OWNER OF RECORD:

584 ALFRED STREET, LLC C/O MOONEY STREET MANAGEMENT, 355 MAIN ST, STE 25, WOBURN, MA 01801.

30 0 15 30 60

1 inch = 30 ft.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES & SHALL NOT BE USED FOR CONSTRUCTION.

Rev.	Date	Revision

Rev.	Date	Revision
3	2026.03.12	TMP RESPONSE TO COMMENTS
2	2026.03.11	SITE PLAN REVIEW
1	2025.12.16	SKETCH PLAN REVIEW

Design: MYR	Draft: CDD	Date: DEC 2025
Checked: KAB	Scale: AS NOTED	JN.: 0129427A.01
File Name: BIDDEFORD-OVERALL SITE.dwg		

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GORRILL PALMER
An LJB Engineering Company
Gorrill Palmer, an LJB Engineering Company
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(207) 772-2515
300 Southborough Drive - Suite 200
South Portland, ME 04106

Drawing Name: OVERALL SITE LAYOUT & UTILITY PLAN

Project: POPEYES RESTAURANT
584 ALFRED STREET, BIDDEFORD, MAINE

Client: Golden Chicken of Biddeford, LLC C/O Reliance Hospitality Group, LLC
10 BITTERSWEET COURT, NEWINGTON, CT 06111

Drawing No. C-3.1

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11 Natural Resources

1. Overview of Natural Resources

Biddeford is diverse in its geological and ecological setting. With a mix of large, regionally important forested wetlands, agricultural soils, coastal regions, ten (10) separate watersheds, both rural homes and dense downtown areas, as well as industrial areas — there is a need to find balance in the environmental effects of our continued growth on natural resources throughout Biddeford.

2. Natural Resources at a Glance

Size & Characteristics

- 12.8 miles of riverfront*
- 16 miles of coastline*
- 19,475 acres of total land in Biddeford**
- 7,968 acres of undeveloped forested land** (~41% of total acreage)
    - 5,246 acres of this exist with State Focus Areas** (~27% of total acreage)
- 1,700 acres with permanent conservation protections*** (~8.7% of total acreage)
- 254 acres of municipal-owned land classified as Open Space*** (~1.3% of total acreage)

Working Landscapes

- 3,700 acres of combined commercial timber harvesting (1991-2023)****
- 463 acres enrolled in the farmland program (27 parcels)**
    - Most parcels include acreage of woodlands not registered as tree growth

Wildlife & Habitat Info**

- 31 special concern, threatened, or endangered plant and animal species
- 9 rare and exemplary Natural Communities
- 4 Significant Wildlife Habitats
- 2 Essential Wildlife Habitats
- A focus area of Statewide Ecological Significance
- Biddeford currently ranks 6th out of all of Maine municipalities for the total number of species listed as significant, threatened or endangered.

Sources:

* *Conservative estimates, using cover type analysis using satellite images*

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** *Data from Beginning with Habitat, MDIFW*
*** *Biddeford Assessing Department, 2025*
**** *Department of Agriculture, Conservation, and Forestry / Maine Forest Service*

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3. Habitats in Biddeford

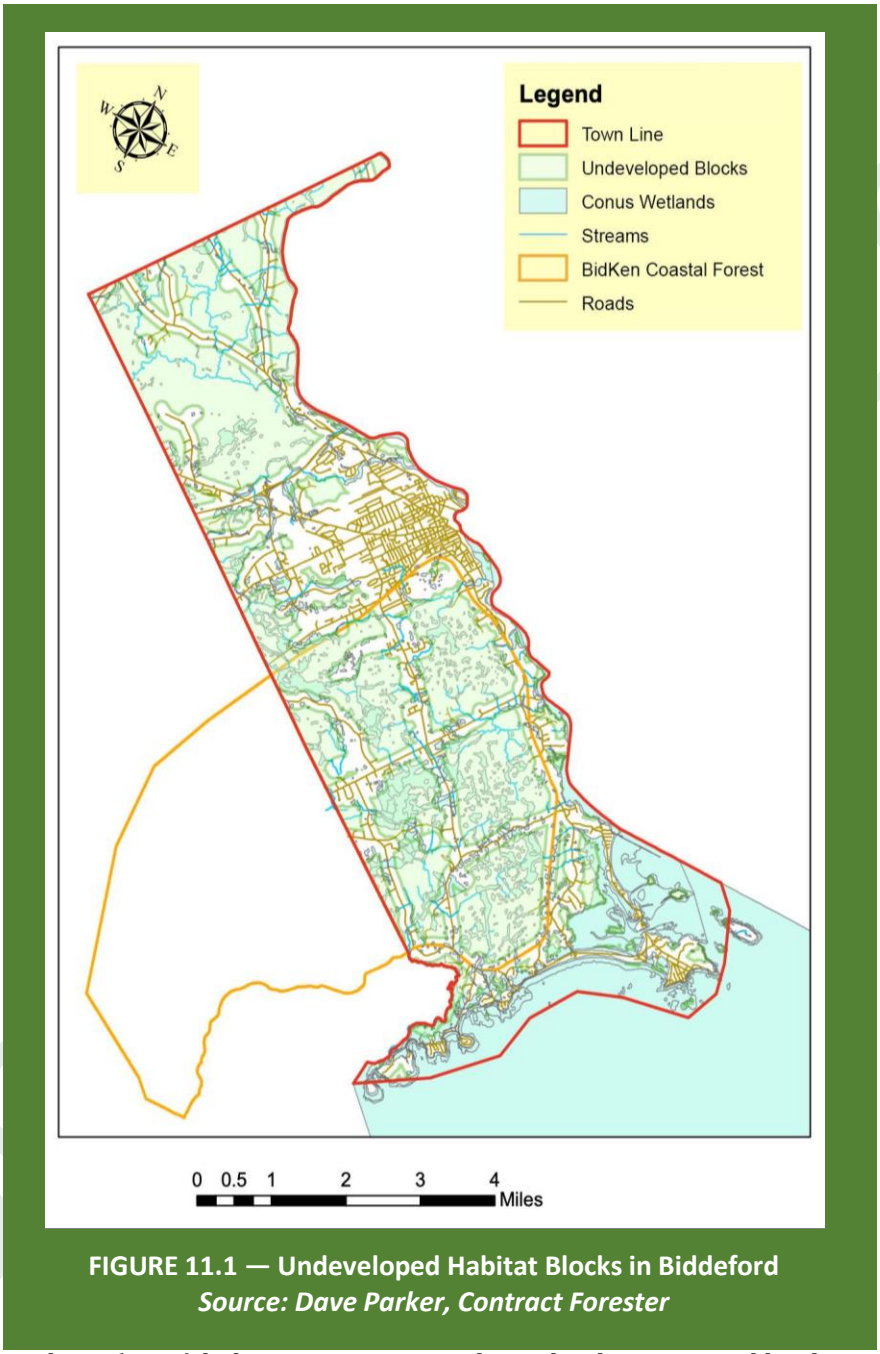

FIGURE 11.1 — Undeveloped Habitat Blocks in Biddeford
Source: Dave Parker, Contract Forester

Beginning with Habitat (BwH) helps Maine municipalities, landowners, and land trusts build habitat conservation into their long-term plans. Their data show that Biddeford is home to a wide range of wildlife and habitats.

Biddeford's unique location and availability of undeveloped forest form an important "stepping stone" for wildlife in a region of Maine that is densely developed. This allows wildlife to move between habitats throughout their seasonal migrations and provides areas to feed, reproduce, and seek shelter.

The habitats found throughout Biddeford, specifically in the Biddeford/Kennebunkport Coastal Forest (BKCF), are one of the largest habitat blocks remaining east of the I-95 highway in southern Maine. The BKCF is designated by BwH as a Focus Area of Statewide Ecological Significance.

FIGURE 11.2 — Large Forest Block in Western Biddeford (> 1500 acres)
Source: Cover-type analysis performed by contractor Mark Ward

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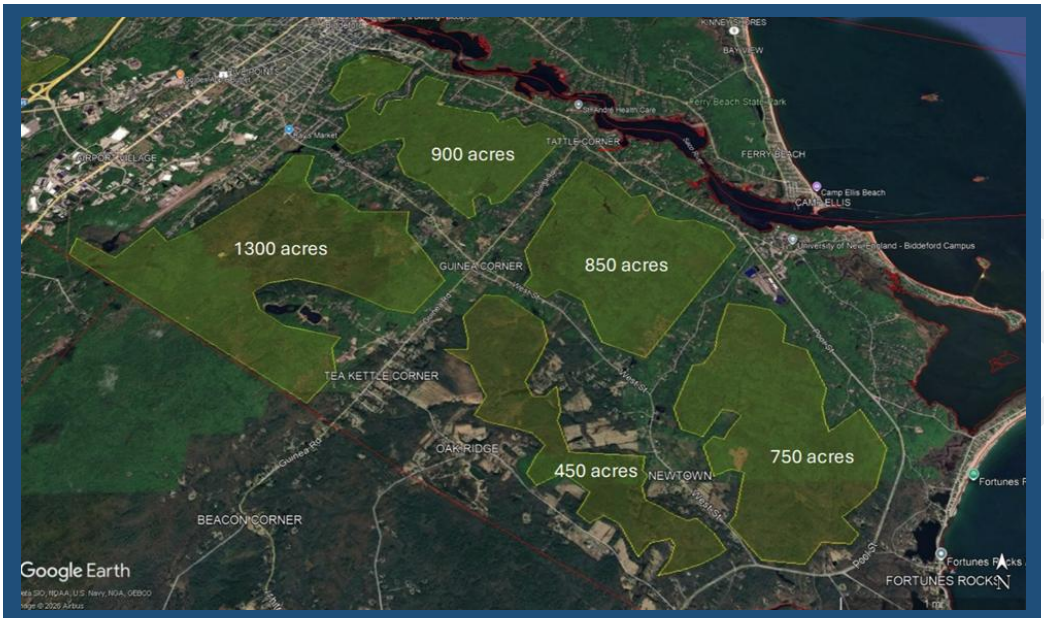

FIGURE 11.3 — Large Forest Block in Eastern Biddeford (> 3000 acres)
Source: Cover-type analysis performed by contractor Mark Ward

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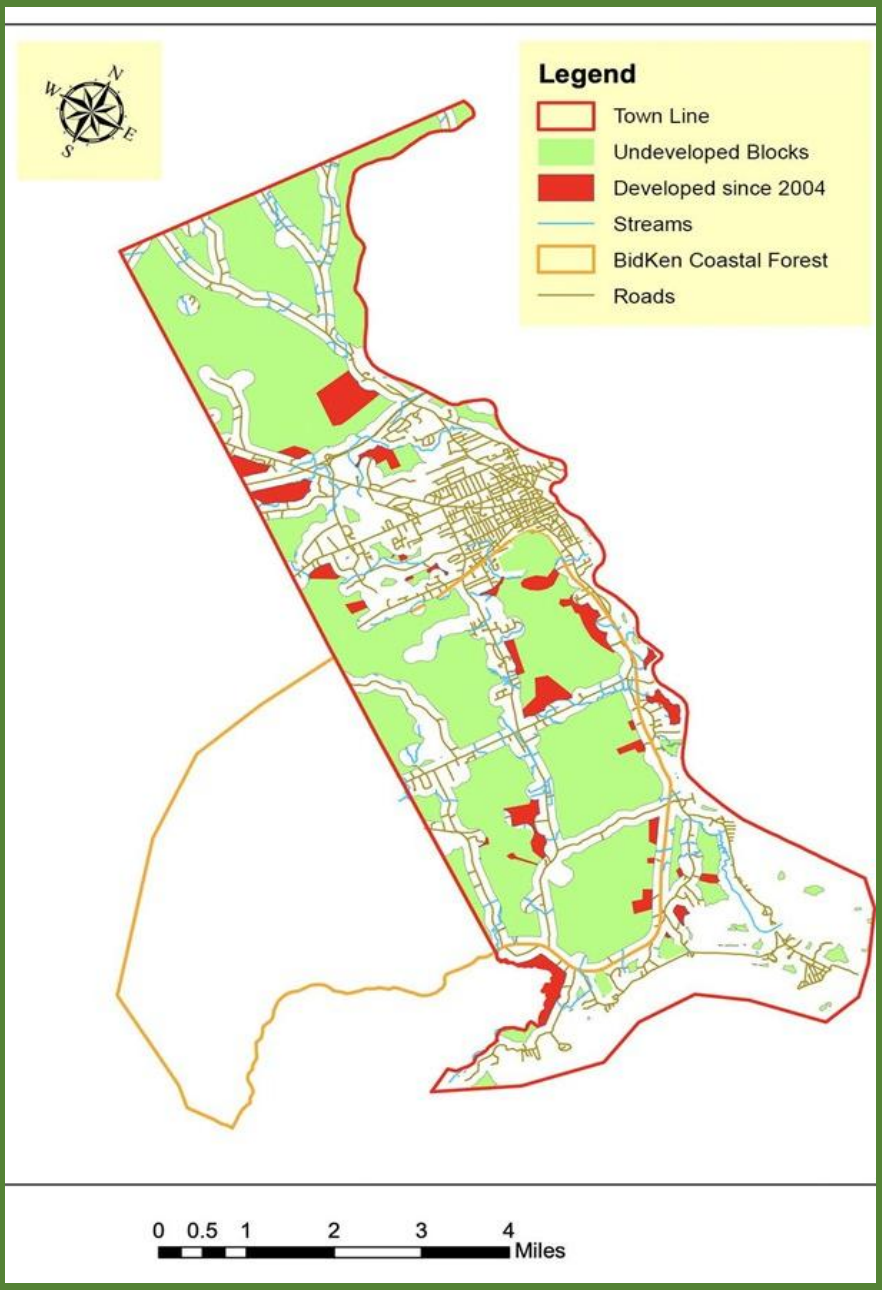

FIGURE 11.4 — Undeveloped Habitat Block Reductions (20-year period)
Source: Dave Parker, Contract Forester, with data from Wells Reserve

4. Focus Areas & Natural Communities

BwH Focus Areas of Statewide Ecological Significance contain several rare and/or endangered plants or animals as well as their habitats.

These focus areas are large enough to maintain a diverse population of species, and are identified by biologists from the Maine Department of Inland Fisheries and Wildlife (MDIFW), the Maine Natural Areas Program (MNAP), Maine Department of Marine Resources (DMR), U.S. Fish and Wildlife Service (USFWS), The Nature Conservancy (TNC), Maine Audubon, and Maine Coast Heritage Trust (MCHT).

4.1 Biddeford/Kennebunkport Coastal Forest

FIGURE 11.5 — Coastal Forest with Undeveloped Habitat Blocks
Source: Beginning with Habitat, Interactive Map Viewer

Biddeford/Kennebunkport Coastal Forest Focus Area (BKCF)

The following information regarding the BKCF is adapted from BwH resources.
Established around 2010, the Biddeford/Kennebunkport Coastal Forest (formerly known as the Biddeford/Kennebunkport Vernal Pool Complex) is a focus area of statewide ecological significance that covers roughly 16,000 acres. This focus area includes a significant portion of eastern Biddeford.

The biological significance of this area is due to a specific set of geological and soil features, and a high concentration of pocket swamps and vernal pools in undeveloped forested areas, which are becoming increasingly rare in Maine, and are seeing increased development pressure within Biddeford.

Protection Status

A number of individual parcels held by Maine Coast Heritage Trust, Saco Valley Land Trust, and the Blandings Wildlife Preserve provide some conservation protections within this critical habitat area, but this piecemeal approach does not prevent habitat fragmentation in the BKCF. The Biddeford Conservation Commission is actively pursuing conservation strategies to provide more holistic protection for this critical natural resource.

Conservation Considerations for the Focus Area

Preserving natural communities and other sensitive features can be best achieved by maintaining the integrity of the larger natural systems in which these features occur. Conserving the larger systems helps ensure both common and rare natural features will persist in this part of the state.

Some ways this can be achieved include:

- Minimizing habitat fragmentation through cluster mandates in zoning ordinances
- Reducing allowable net density in areas zoned Rural Farm or Conservation Overlay
- Increasing funding for permanent land conservation
- Creation of critical resource zoning overlay districts to prevent, minimize, mitigate, or compensate for disturbance to large unfragmented habitat blocks or wildlife corridors
- Re-evaluation of legacy Mobile Home Overlay Zoning in natural resource areas
- Using Best Management Practices for forestry and logging, especially near wetlands, headwaters, and vernal pools, to help prevent erosion and habitat loss

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- Enhancing landowners' and motorists' awareness of species habitat, such as "turtle crossing" signs, while also working to replace culverts and install wildlife crossings or barriers that keep at-risk species away from roadways

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4.2 Natural Communities & Wildlife Habitats

Biddeford is home to a diverse range of wildlife, birds, fish, and invertebrates. We are currently ranked 6th (out of all Maine municipalities) for the number of species listed as significant, threatened, or endangered.

STATE RANKING — KEY
S1 = Critically Imperiled
S2 = Imperiled
S3 = Vulnerable
S4 = Apparently Secure
S5 = Secure

Table 11-1: Habitat Types and Natural Communities

Name	Group	State Rank
Roseate Tern Nesting Area	Essential Wildlife Habitats	n/a
Piping Plover-Least Tern Nesting, Feeding, & Brood-Rearing Area	Essential Wildlife Habitats	n/a
Inland Waterfowl & Wading Bird	Significant Wildlife Habitats	n/a
Tidal Waterfowl & Wading Bird	Significant Wildlife Habitats	n/a
Significant Vernal Pools	Significant Wildlife Habitats	n/a
Seabird Nesting Islands	Significant Wildlife Habitats	n/a
Oak - Hickory Forest	Rare & Exemplary Natural Communities	S1
Pocket Swamp	Rare & Exemplary Natural Communities	S2

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Salt-Hay Saltmarsh	Rare & Exemplary Natural Communities	S3
Brackish Tidal Marsh	Rare & Exemplary Natural Communities	S3
Freshwater Tidal Marsh	Rare & Exemplary Natural Communities	S2
Pitch Pine Bog	Rare & Exemplary Natural Communities	S2
Pitch Pine Woodland	Rare & Exemplary Natural Communities	S3
Coastal Dune-Marsh Ecosystem	Rare & Exemplary Natural Communities	S3
Red Maple Swamp	Exemplary Common Natural Communities	S4S5

Source: Natural Resources Inventory, Beginning with Habitat, MDIFW (Sept. 2025)

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5. Wildlife

Table 11-2: Rare Animals, Plants, and Natural Communities in Biddeford			
Name	**SOURCE**	**State Rank**	**State Status**
Arrowhead Spiketail	ETSC Animals	S1	Special Concern
Dusted Skipper	ETSC Animals	S1S2	Special Concern
Eastern Ribbonsnake	ETSC Animals	S3	Special Concern
Great Blue Heron	ETSC Animals	S4B	Special Concern
Purple Sandpiper	ETSC Animals	S4S5N	Special Concern
Harlequin Duck	ETSC Animals	S2S3N	Threatened
Peregrine Falcon	ETSC Animals	S1S2N, S2B	Endangered
Piping Plover	ETSC Animals	S2B	Endangered
Saltmarsh Sparrow	ETSC Animals	S1B	Endangered
Spotted Turtle	ETSC Animals	S3	Threatened
Wood Turtle	ETSC Animals	S4	Special Concern
Blanding's Turtle	ETSC Animals	S2	Endangered
Southern Pygmy Clubtail	ETSC Animals	S1S2	Special Concern
Lilaeopsis	MNAP Plants	S2	Special Concern
Smooth Winterberry Holly	MNAP Plants	S3	Special Concern

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Beach Wormwood	MNAP Plants	S1S2	Special Concern
Estuary Bur-marigold	MNAP Plants	S3	Special Concern
Hollow Joe-pye Weed	MNAP Plants	S2	Special Concern
Dwarf Glasswort	MNAP Plants	S1	Threatened
American Sea-blite	MNAP Plants	S2	Threatened
Sweet Pepper-bush	MNAP Plants	S2	Special Concern
Pygmyweed	MNAP Plants	S2S3	Special Concern
Water Pimpernel	MNAP Plants	S3	Special Concern
Beach Plum	MNAP Plants	S1	Endgangered
Saltmarsh False-foxglove	MNAP Plants	S3	Special Concern
Mudwort	MNAP Plants	S3	Special Concern
Spongy-leaved Arrowhead	MNAP Plants	S3	Special Concern
Stiff Arrowhead	MNAP Plants	S2	Special Concern
Button Sedge	MNAP Plants	S2	Special Concern
Parker's Pipewort	MNAP Plants	S3	Special Concern
Horned Pondweed	MNAP Plants	S2	Special Concern

Source: Natural Resources Inventory, Beginning with Habitat, MDIFW (Sept. 2025)

Rare Plants in Maine, Maine Natural Areas Program (online)

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5.1 Wildlife & Habitat Cooccurrence

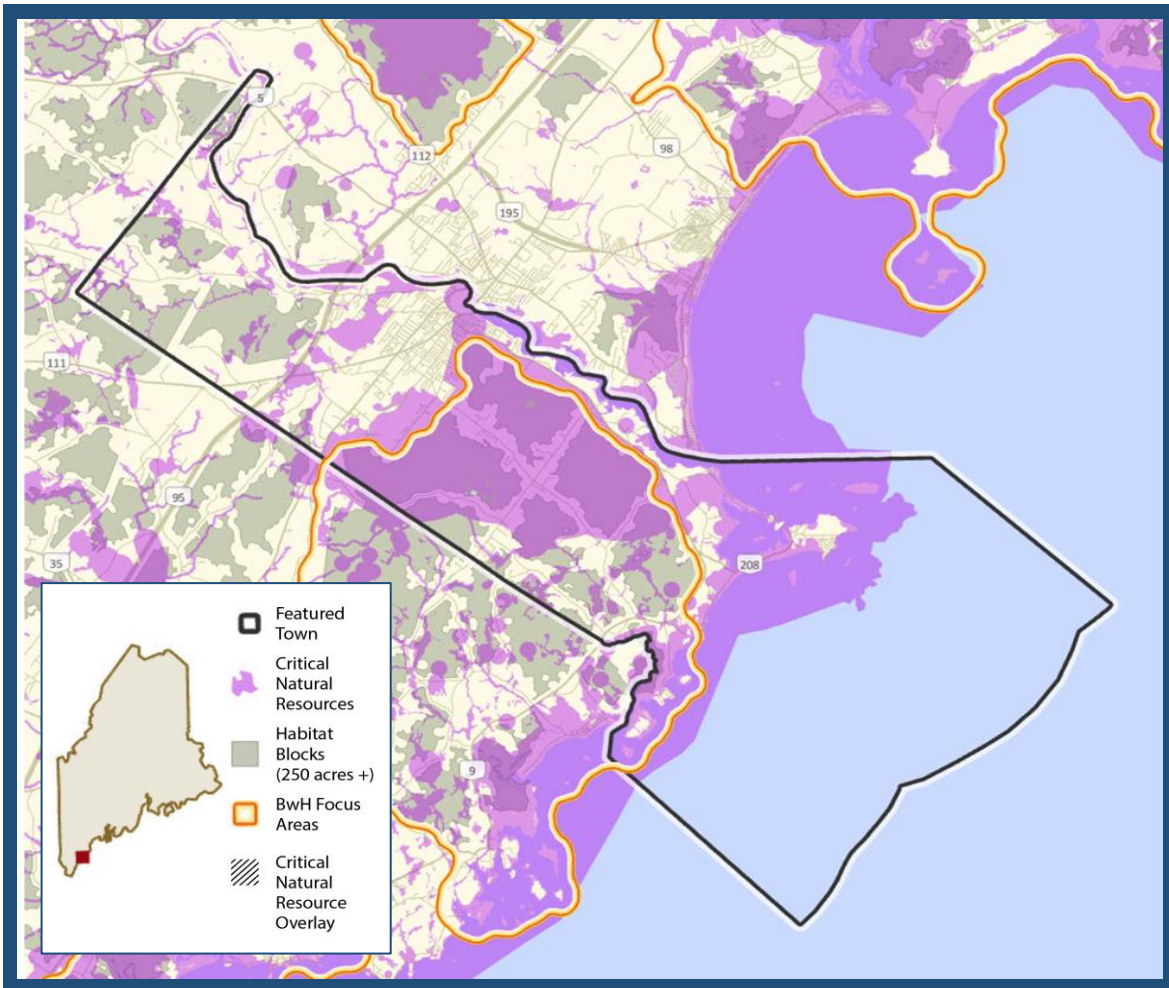

FIGURE 11.6 — Critical Natural Resources in Biddeford
Source: Beginning with Habitat, MDIFW

One method to aid cities in prioritizing conservation protections and areas where development may have greater environmental impacts is to identify areas where multiple species of concern and environmental assets are co-located.

The undeveloped habitat blocks that exist within the Biddeford/Kennebunkport Coastal Forest align with the highest concentration of natural resources and at-risk wildlife species in Biddeford.

These areas include rare plants, threatened/endangered species, wetlands, and rare/exemplary natural communities.

This supports the need for two (2) Critical Natural Resources overlay areas (FIG 11.7) to protect these natural resources as they continue to see increased development pressures based on outdated zoning ordinances that do not align with our City's natural resource protection goals.

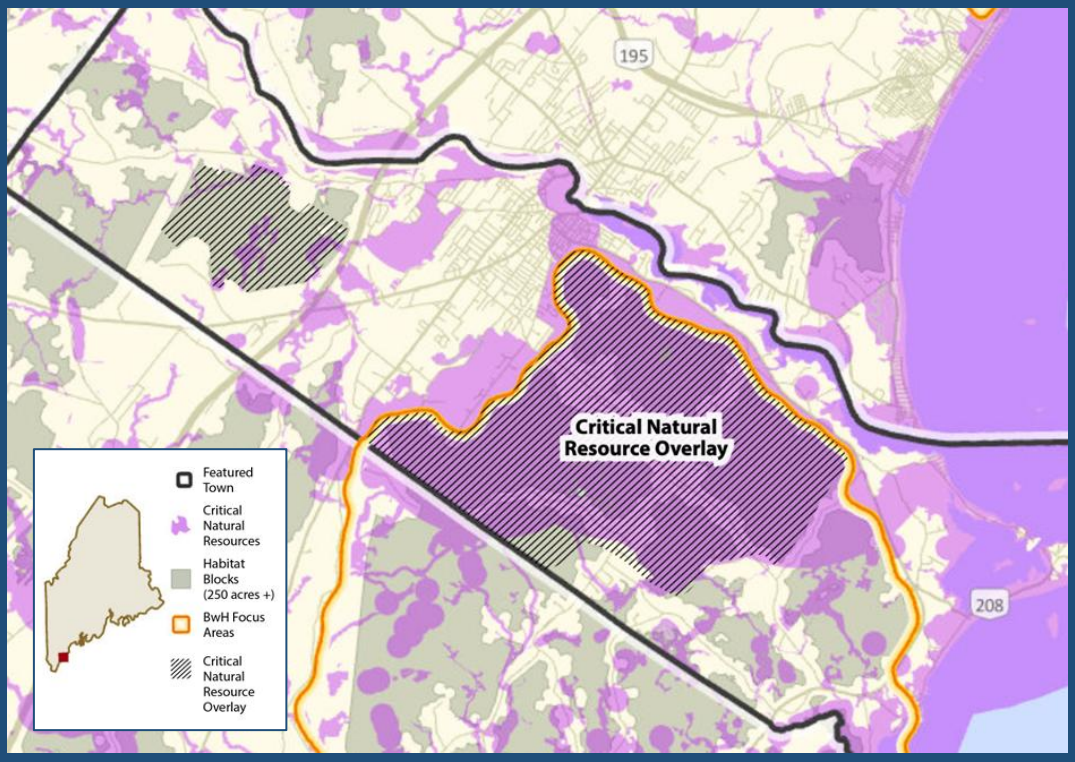

FIGURE 11.7 — Critical Natural Resources in Biddeford
Source: Beginning with Habitat, MDIFW

Represented within the Critical Natural Resource areas are:

- 2 or more acres of >20% slope (USGS)
- 2 or more acres wetland within SLZ (National Wetlands Inventory/NWI)
- Wetlands of Special Significance (NWI, USGS, MDIFW)

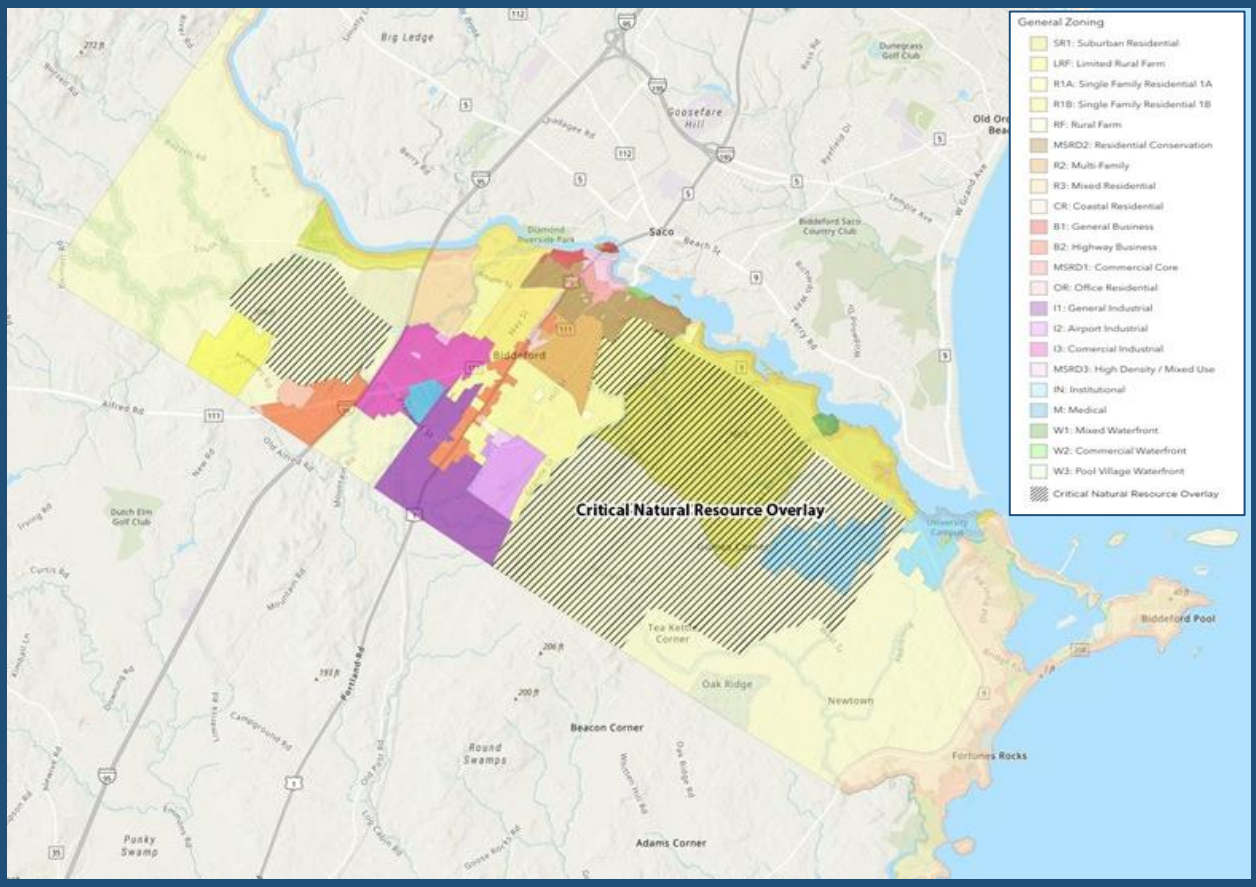

FIGURE 11.8 — Zoning Map with Critical Natural Resources Overlay
Source: Biddeford GIS Maps (Zoning Map w/ suggested overlay)

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6. Vernal Pools

FIGURE 11.9 — An egg mass in one of Clifford Park's vernal pools (circa 2023)
Photo: Erik Heumiller

While the State of Maine defines a vernal pool as "*Any natural water body that holds water long enough in a typical year to support breeding fairy shrimp, wood frogs, and/or spotted or blue-spotted salamanders*". — it also acknowledges that, "*while vernal pools are typically natural landscape features, occasionally anthropogenically created or modified water bodies such as abandoned gravel pits can function as important vernal pool breeding habitat as well.*"

Vernal Pools act as a "grocery store" within forested areas, serving as an important resource for wildlife communities. Pools provide services beyond habitat, including massive nutrient exchange (14% of our forest nitrogen comes from wood frogs alone*), groundwater recharge, and flood prevention.

As important as the vernal pools are, the upland areas surrounding them are equally important to seasonal habitat needs of the wildlife that rely on them. Connectivity of vernal pools, wetlands, and upland areas surrounding them needs to be considered in conservation planning.

Source: *Beginning with Habitat, MDIFW, 2025

7. Deer Wintering Areas

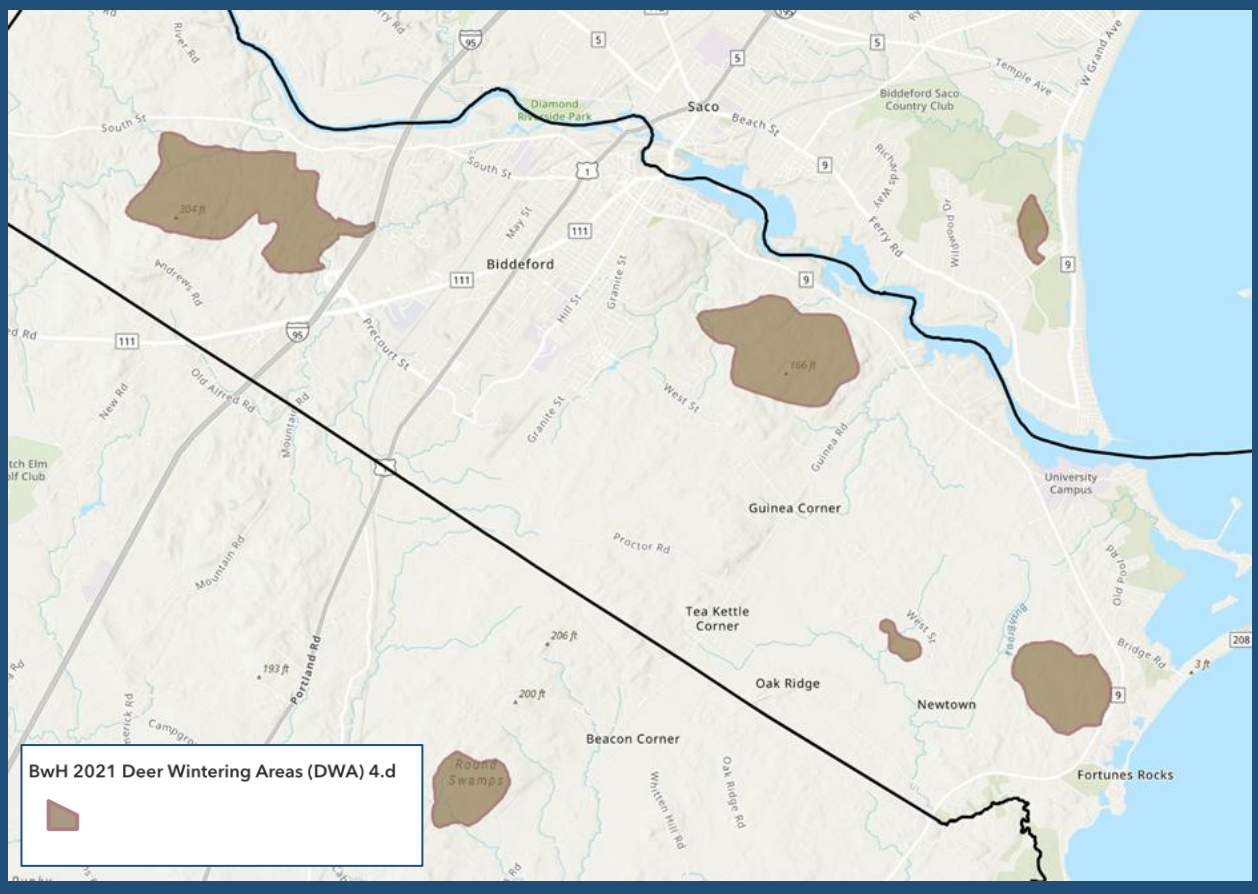

FIGURE 11.10 — Deer Wintering Areas
Source: Wildlife Habitats Map, Biddeford GIS Map Gallery

scarce Winter conditions. These are known as "deer wintering areas" or "deer yards," of which Biddeford has historically documented multiple locations.

To reduce roadway collisions and mortality during the winter, these areas should be prioritized when considering habitat conservation and other means of preserving open space within the development of private parcels. Wildlife-vehicle collisions cost Mainers $134 million annually.*

Shelter conditions typically include:

- **Conifer Forests** that contain hemlock, pine, and cedar. These provide thermal cover by blocking wind, preventing snow accumulation, and by absorbing heat from the sun.
- **Southern Slopes & Valleys** are often warmer due to the southern sun exposure and tend to see less snow accumulation.

Energy conservation and food sources typically include:

- Woody plants (twigs, stems), which are often readily available.
- Tree nuts (acorns, etc.) that remain accessible may also be forage opportunities.
- Deer are typically less active in the winter to conserve energy, often relying on reduced metabolism and fat reserves to survive on a limited diet. However, the availability or lack of food sources during the fall can drive them in search of food if their fat reserves are not sufficient to sustain them.

* Based on data from Maine DOT 2018-2022 "Collisions Between Wildlife Species and Motor Vehicles" Report

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8. Riparian Habitats, Watersheds, and Wetlands

Biddeford's water uses reflect the city's strong connection to the Saco River along with its coastal shoreline, groundwater resources, and network of vernal pools, wetlands, and estuaries. The City's rivers and streams include the Saco River Watershed, and ten (10) sub-watersheds.

It's important to recognize the interconnectedness of these habitats and how they support fish, waterfowl, and wildlife populations as well as other natural resources throughout Biddeford.

The Water Resources and Marine Resources chapters provide additional information.

8.1 Riparian Habitats

The areas adjacent to, and surrounding, wetlands and streams, known as Riparian Habitat, are inextricably linked to many significant wildlife species for feeding, nesting, denning, or as travel corridors in Biddeford.

- Over 85% of Maine's vertebrate wildlife use riparian habitats at some point in their annual life cycle.
- Riparian habitats are often used as travel corridors between forested areas.
- Forested riparian zones are known to store large amounts of carbon and add to landscape-scale climate resilience.
- Forested riparian zones also reduce runoff and erosion risks by stabilizing the banks of rivers and streams.

The State of Maine maintains minimums of 100-foot "no cut" buffers, but also acknowledges that if opportunities exist to extend the "no cut buffer" distance, or to protect entire riparian habitats, there is a preference for those protections.

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8.2 Watersheds and Fisheries

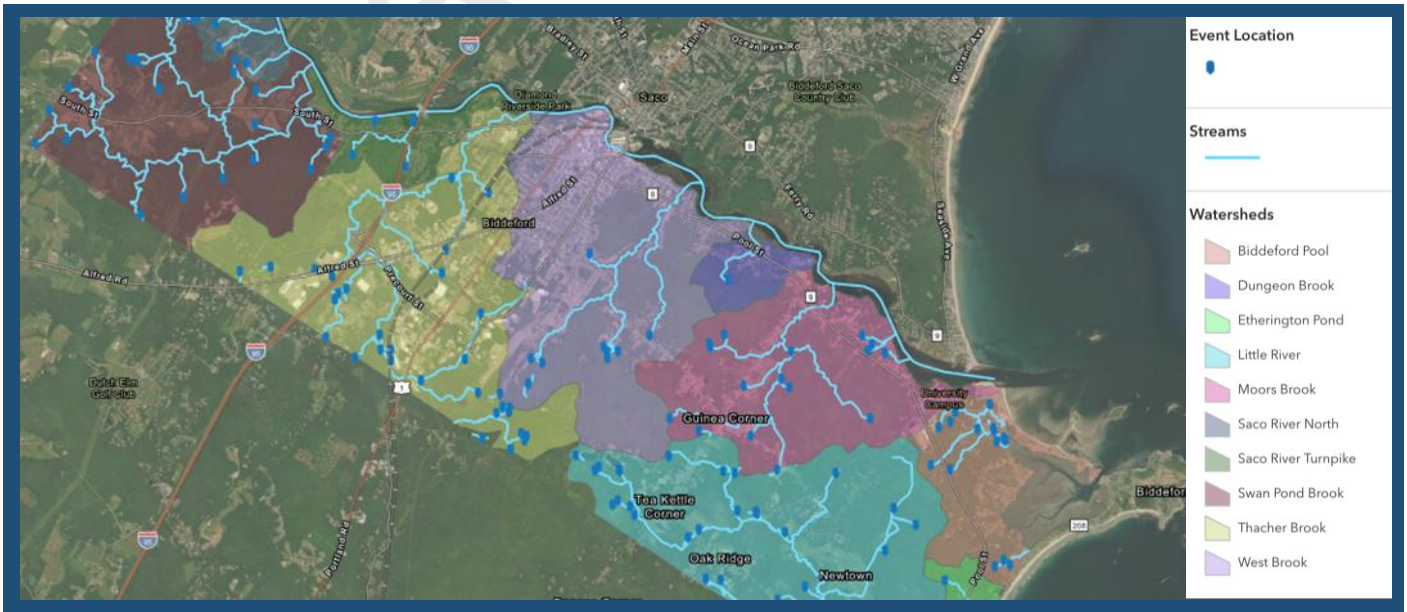

FIGURE 11.11 — Watersheds in Biddeford
Source: NEA Streams Data, Biddeford GIS Map Gallery

MDIFW has identified **Swan Pond Brook**, its tributaries, and two unnamed tributaries to the Saco River upstream from where Swan Pond Brook outlets into the Saco River as being likely brook trout and Atlantic salmon habitat. **The Little River** and its tributaries, including **Bush Brook**, are also identified as a likely brook trout habitat. These water bodies represent the characteristics conducive to brook trout: "clean, cool, well oxygenated water".

corridors that: conserve forest soils, provide shade to reduce stream warming, protect stream water quality, provide cover for fish, provide a source of woody debris and leaf litter from mature trees that maintain critical in-stream habitat for fish and the aquatic insects they feed upon (leaves provide the energy source that drives productivity in streams). Floodplain and fringe wetlands associated with streams are a significant source of springs and groundwater discharge that maintain stream flows and cool temperatures during warm, low-flow summer periods. Protection of these important riparian and wetland functions ensures that the overall health of stream habitat and watershed is maintained." —MDIFW Habitat Report; Swan Pond Brook

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8.3 Wetlands & Marshes

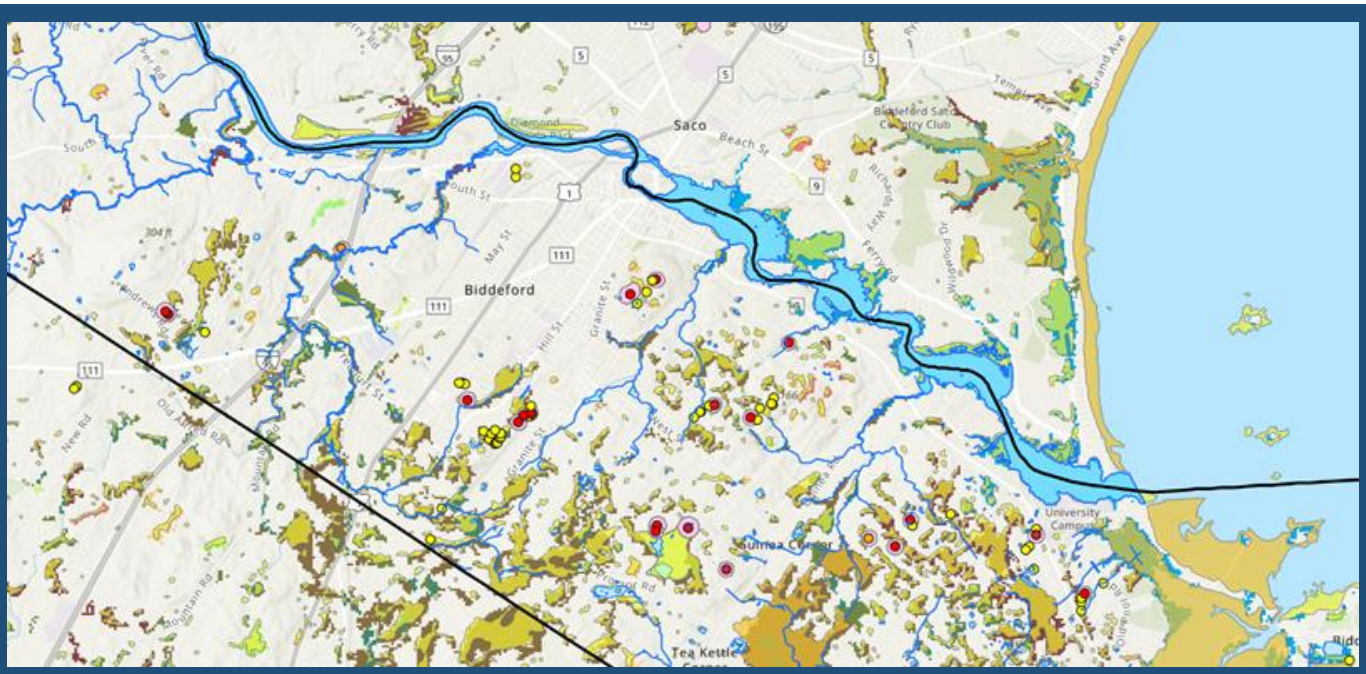

FIGURE 11.12 — Wetlands and Wading Bird Habitat Source: Wetlands and Waterbodies, Biddeford GIS Map Gallery

mud and sand flats, as well as salt and brackish marshes. These areas provide vital habitat for wildlife and natural flood protection.

The mud flats of Biddeford Pool are comprised of sediment finer than sand, which is teeming with shellfish, worms, and other species that support both recreational and commercial harvesting, as well as attracting a variety of bird species.

Biddeford also has several notable inland waterfowl and wading bird habitat locations as mapped by MDIFW. These areas are fairly spread out through the town and are comprised mainly of larger freshwater wetlands.

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9. Dunes and Shorelands

Sand dune systems are dynamic landforms of sand and gravel created by wind and water action. They include various features like beach berms, frontal dunes, and back dunes — and they serve as natural barriers against storms while providing vital habitat

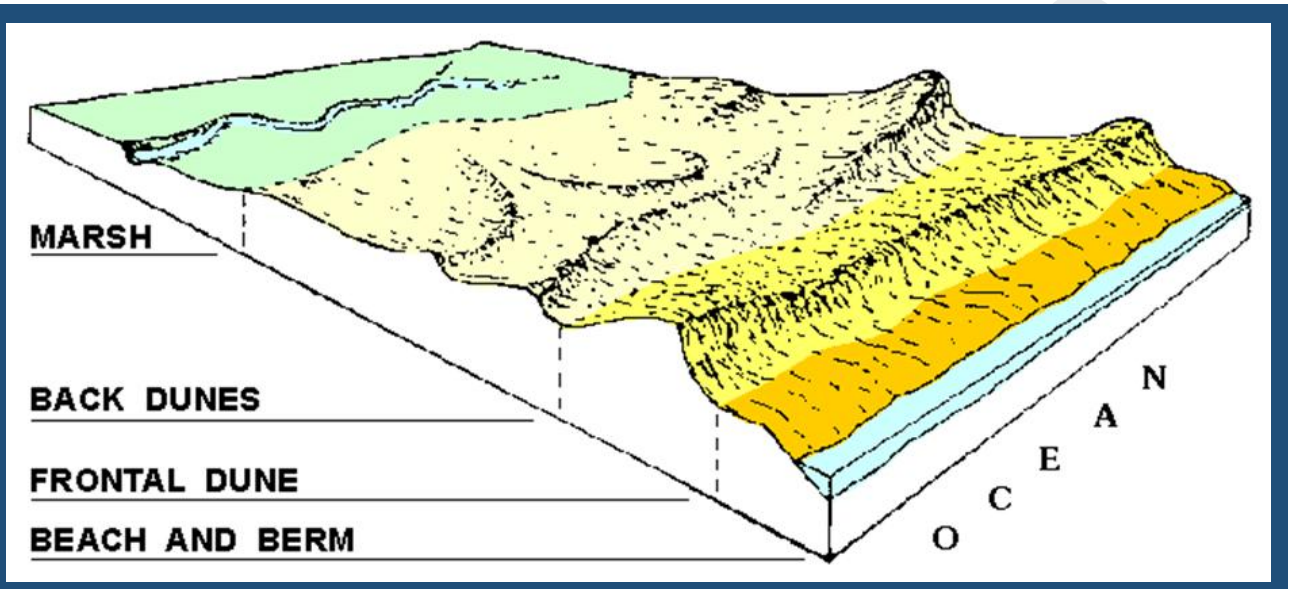


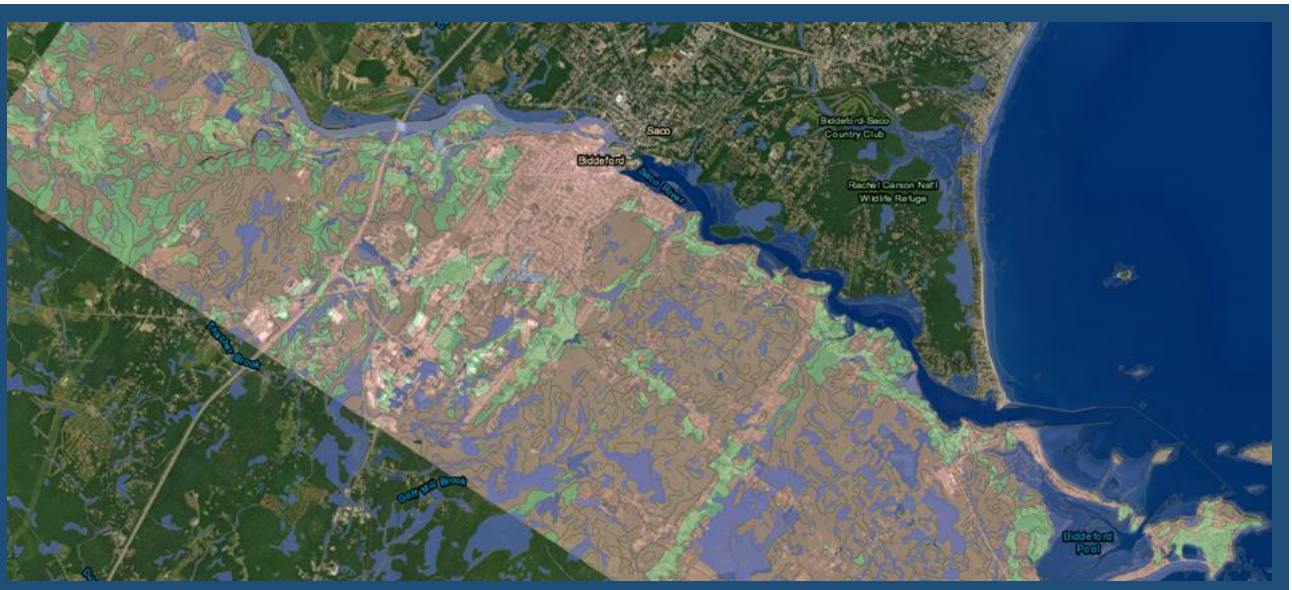
FIGURE 11.13
Source: Maine Department of Agriculture, Conservation, and Forestry; Maine Geological Survey

Dune formation and maintenance depend on a constant supply of sand and the stabilization provided by vegetation like dune grass.

According to the Maine Geological Society, there are generally seven (7) sand dune systems located within the City of Biddeford, as follows:

1. Hills Beach
2. Hills Beach – Fort Hill
3. Mile Stretch Beach
4. Fortunes Rocks Beach
5. Horseshoe Cove
6. New Barn Cove Beach
7. Curtis Cove Beach

10. Soils



Biddeford National Wetland Inventory

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Scrub Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- Other

Soils_at_a_glance - Biddeford Soils At-a-Glance - Farmland

- Farmland of statewide importance
- All areas are prime farmland
- Not prime farmland

FIGURE 11.14 — Soils Maps
Source: Biddeford Parcels and Soils, Biddeford GIS Map Gallery

Prime agricultural soils, whether forested or in active agricultural use, are a vital natural resource within Biddeford. Much of the prime soil acreage throughout Biddeford has already been developed; therefore, drastically reducing what was historically available.

The qualities of these soils are not something easily replicated, and as such, the City should prioritize protections for these soils to ensure local food availability, agricultural viability, and other resiliency measures.

The Agricultural & Forest Chapter provides additional information.

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11. Scenic Resources

Scenic resources within a community are attributes that give communities identity and make them appealing places to live. These resources may be specific, extraordinary views, or they may be vistas of segments of the community, such as traditional working rural landscapes, village centers, or historic districts.

The City of Biddeford is fortunate to have a diversity of geographical landscapes within the City's boundaries, including beaches, open areas, islands, harbors, tidal flats, wetlands, historical resources, and village centers.

Table 11-3: Biddeford's Scenic Resource Inventory

Area	Description	Usage
Clifford Park & Trail System	A forested trail network maintained by Public Works and the Recreation Department. Portions of the park contain a conservation easement held by MCHT.	Hiking, dog walking, mountain biking, wildlife photography. No motorized vehicles, camping, or fires permitted
Rotary Park	A riverfront park system with walking trails, sports fields, and a beach. The park contains a significant amount of Japanese Knotweed (invasive species) and visitors should take care not to transport it elsewhere.	Walking, dog walking, frisbee, sports fields, swimming, and other recreational opportunities
Biddeford Forest	Conservation land established on Maine Water company property to preserve forested habitat.	Nature preserve
Biddeford Pool	Tidal mud flats that include a boat launch and scenic salt marshes that provide habitat, rearing, and feeding areas for a variety of birds and waterfowl. The Pool also provides recreational and commercial clam harvests.	Sightseeing, commercial and recreational clamming, paddle sports
Maine Audubon East	Coastal habitat preserve with walking	Hiking, bird watching,

Point Sanctuary	trails and a few benches.	fishing
Rachel Carson Wildlife Refuge	Protected habitat areas along the coastal regions of Biddeford.	Nature preserve
Blandings Park Wildlife Sanctuary	A patchwork of parcels held in conservation to create a wildlife preserve.	Nature preserve, hiking
Wood Island Harbor and various neighboring islands	This area sees an array of migratory birds and waterfowl throughout the year, and is utilized by recreational and commercial fishing boats.	Nature preserve, boating
Wood Island Lighthouse	Wood Island Lighthouse sits on a 32-acre island that is currently uninhabited. The island is only reached by boat or paddle craft, with tours being offered during the summer months.	Nature preserve, sightseeing
Timber Point	This 97-acre peninsula and 13-acre island are a well-known landmark in the region. A 1.4-mile loop of walking trails exposes visitors to salt marshes, mixed forests, sandy coves, and coastal shores — all teeming with wildlife.	Nature preserve, walking, bird watching, fishing
Hills Beach	A roughly 1-mile, narrow stretch of sandy beach on the north side of Biddeford Pool. The beach runs from the Saco River jetty to the Biddeford Pool harbor entrance.	Beach
Fortunes Rocks	A 2-mile stretch of sandy beach bordered by salt marsh and fresh-water ponds and the ocean.	Public beach
Fortunes Rocks Cove, New Barn Cove, Curtis Cove, and Horseshoe Cove	A series of coves along Biddeford's southern coast. These provide critical coastal habitat for wildlife.	Private beach

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Saco River & Riverwalk	The Saco River is a core feature of downtown Biddeford, as well as a critical water resource and fisheries habitat. The Riverwalk provides access to areas of the river and points of connection to the City of Saco.	Walking, sightseeing
Farmlands and open areas	Working landscapes, fields, pastures, and orchards provide habitat that contrasts with developed areas. These areas not only support local food systems but also enhance quality of life and foster a sense of place.	Agriculture, habitat, commerce

Biddeford's scenic resources are highly valued not only for their aesthetic appeal, but for the natural character and connected ecosystems they preserve in our city.

These areas often sit at the junction of habitat, recreation, and tourism — requiring the City to balance the needs of each in protecting and maintaining these regions.

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12. Regional Cooperation on Natural Resource Protection

Wildlife and habitat do not exist within the lines drawn on maps and as such the need for regional cooperation and collaboration on land use, connectivity, and acquisition strategies between Biddeford and surrounding communities is critical to the protection of our natural resources. The City may work with governmental agencies, nonprofit organizations, and private landowners to pursue protections for wildlife habitat, soils, and other critical natural resources.

Some organizations and initiatives include:

- Saco Valley Land Trust
- Maine Coast Heritage Trust
- Maine Audubon
- Blandings Wildlife Preserve
- The Nature Conservancy (TNC)
- Maine Dept. of Environmental Protection
- Saco River Corridor Commission
- Saco Salmon Restoration Alliance
- Saco Watershed Collaborative

Land trusts are instrumental in permanently preserving land and water resources. These organizations act as monitors and managers of land to ensure development restrictions on conservation parcels are enforced, and they often maintain trails and other opportunities for public access, education, and other recreational opportunities — while ensuring our natural resources persist for future generations.

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13. Further Analysis

13.1 Threats to Natural Resources

- Human impact and disturbance through commercial, residential, or recreational uses
- Reduction and fragmentation of habitat by development, roads, parking lots, etc.
- Inappropriate zoning designations that conflict with natural resource protection goals
- Lack of habitat identification before development
- Deforestation or over-harvesting of resources
- Point and non-point source pollution (runoff)
- Degradation of water quality (increased temperatures, lack of canopy cover, etc.)
- Invasive species (insects, crabs, etc.)
- Invasive plants (knotweed, bittersweet, etc.)
- Increases in precipitation and climate events (flooding, erosion)
- State-wide policy changes from new administrations and legislators can upend long-term conservation and natural resource protections, and as such, the City of Biddeford should work to develop ordinances and zoning that don't rely on state-mandates and policies

13.2 Specific threats to identified resources:

Threats to Wetlands

Land use development and human impact can result in the loss or degradation of wetlands, which can lead to impacts such as increased flooding, extinction of species, and decline in water quality. Untreated runoff from agricultural lands, urban areas, and other sources into wetlands can result in changed species composition, increased pollutant loadings, and replacement of complex wetland systems with open water. Land use development projects should be managed carefully to avoid these threats.

Threats to Vernal Pools

Land use development and human impact can result in the loss or degradation of vernal pools, including the upland areas around vernal pools that are necessary for parts of the lifecycle of many rare, threatened, and endangered species that rely on vernal pools. Land use development projects should be evaluated carefully to avoid these threats.

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Threats to Thatcher Brook Watershed

The Thatcher Brook Watershed Management Plan (TBWMP) 2015-2025, has identified the following threats to the water quality of the brook:

Thatcher Brook is listed as an Urban Impaired Stream in MDEP's Chapter 502. A stream is considered "urban impaired" if it fails to meet state and federal water quality classifications due to the effects of stormwater runoff from impervious surfaces such as rooftops, parking lots, and roads.

During the development of this Plan, the following threats to water quality (a.k.a. stressors) were identified:

- Stream channel alteration and the resulting stream bank erosion and degraded habitat;
- Elevated phosphorus and decreased dissolved oxygen [DO] (in part due to naturally-occurring conditions in associated wetlands); and,
- Elevated bacteria and specific conductance.

Additional monitoring and updates to the TBWMP are necessary to continue efforts to reduce runoff impacts and improve water quality.

Threats to Deer Wintering Areas

New development and other modifications to the habitat within traditional deer wintering areas reduce the overall ability of an area to support deer during periods of severe winter weather. The more development that occurs within these areas, the greater the potential impact on local deer populations. The availability of high-quality winter range allows a higher winter population of deer, and enables them to more fully occupy their summer habitat.

However, one type of land use that is essential for deer wintering area management is timber harvesting. According to IFW, the general goal in managing deer wintering areas is to maintain approximately 50% of the area in mature conifer forest types. This allows each landowner in the deer wintering area to harvest as much as 20% of the total timber volume on his/her ownership in any 15-year period. Non-permanent, minimal disturbance (light or no bulldozing and no graveling of the travel surface) roads are recommended by IFW when a land management road must be located in a deer wintering area to allow access for timber harvesting.

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Threats to Sand Dune Systems

Coastal geological processes such as wind, waves, tides, currents, and coastal hazards such as storm surge, sea level rise, erosion, and inlet migration will all inevitably shift the locations and decrease the size of sand dune systems located within Biddeford. Coastal flooding and erosion can destroy improperly located structures on beaches and sand dunes. Winter northeaster storms striking during high tides cause the most serious beach and dune erosion.

Continuing natural movement of the beach and perhaps more abrupt shoreline changes caused by major coastal storms or an acceleration of sea level rise make some areas unsuitable for coastal development. Structures should be placed in locations that have minimal interference with natural geologic processes and are in areas with low risk from natural hazards.

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Natural Resources –

What Comes Next?

TIMELINE — KEY
1 = Immediate (0-1 yr)
2 = Near-term (1-3 yrs)
3 = Medium-term (3-6 yrs)
4 = Long-term (6-10 yrs)
Ongoing = Indicates a strategy will take many years or continuous work for implementation.

Many of Biddeford's goals align with goals the State of Maine is pursuing, and when applicable, the City can benefit from shared alignment and resources provided by the State.

State Goals			
Goal 1	Healthy Fish and Wildlife Habitats: Partner with the public to achieve shared goals for sustainability, and both maintaining and improving healthy fish and wildlife populations and habitats, despite environmental changes and shifts in land ownership.		
Policy 1	Collaborate with BwH, MDIFW, and other organizations to enact habitat protections.		
Strategy 1a	The City shall request state agency review for all developments in critical natural resource areas (FIG 11.8) to coordinate land-use decision-making with local and regional goals. Agencies include but are not limited to the Maine Department of Environmental Protection (DEP), Maine Department of Inland Fisheries and Wildlife (IFW), Maine Natural Areas Program (MNAP), and others.	Ongoing	Planning & Development Dept., Planning Board
Strategy 1b	Collaborate with IFW's Beginning with Habitat Program to aid in the development of conservation planning, the development of overlay zoning, natural resource inventories, and/or other habitat protection programs to prioritize wildlife corridors and vernal pools.	1	Conservation Commission, Planning Board

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TIMELINE — KEY
1 = Immediate (0-1 yr)
2 = Near-term (1-3 yrs)
3 = Medium-term (3-6 yrs)
4 = Long-term (6-10 yrs)
Ongoing = Indicates a strategy will take many years or continuous work for implementation.

Biddeford's Goals	
Goal 1	To protect, maintain, and, where possible, improve the quality of the City's natural environment and resources. This goal is in alignment with the State's goal: *To increase, by 2030, the total acreage of conserved lands in the state to 30% through voluntary, focused purchases of land, and working forest/farm conservation easements. Increasing carbon*

	storage in our natural and working lands to offset carbon emissions and impacts from climate change. Source: Maine Climate Action Plan, 2025		
Policy 1	To conserve critical natural resources in the community.		
Strategy 1A	Ensure that land use ordinances are consistent with applicable state law regarding important natural resources.	Ongoing	Planning & Development Dept., Planning Board
Strategy 1B	The City shall designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.	1	Planning & Development Dept., Planning Board
Strategy 1C	The City shall review and upgrade its enacted Zoning Ordinances, which were conceived to protect and preserve the quality of local surface water and wildlife habitats, to A) develop new ordinances, zoning updates, overlay zones, and incentive programs to reduce development pressures in critical natural resource areas, B) prioritize projects with greater-than-minimum buffers, increased open space preservation, and wildlife habitat connectivity, and C) ensure development proposals identify critical natural resources that may be on-site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.	2	Planning & Development Dept., Planning Board, Conservation Commission
Strategy 1D	Amend the Zoning Ordinance to ensure the Planning Board (or its designee) includes, as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.	1	Planning & Development Dept., Planning Board
Strategy 1E	Evaluate the Cluster Subdivision and Net Density Performance Standards in the Zoning Ordinance for their effectiveness and value with respect to protecting important natural resources, and exploring options/programs that include, but are not limited to: A) Reducing allowable net density in Rural Farm or Conservation Overlay zoned areas, B) Development Rights Transfer,	2	Planning & Development Dept., Planning Board, Conservation Commission

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	C) Development Transfer Fee, and D) Conservation & Limited Development Projects (CLDP)		
Strategy 1F	Revise the Wildlife Preservation Performance Standards to ensure that, through the review of development proposals, wildlife preservation requirements are clear and practical.	Ongoing	Planning & Development Dept., Planning Board, Conservation Commission
Strategy 1G	Explore other regulatory means to protect important natural resources to the greatest extent practicable.	Ongoing	Planning & Development Dept., Planning Board, Conservation Commission
Strategy 1H	Pursue public/private partnerships to protect critical and important natural resources, such as through the purchase of land or easements from willing landowners.	Ongoing	Planning & Development Dept., Conservation Commission
Strategy 1I	Distribute or make available information about current use tax programs and applicable local, state, or federal regulations to those living in or near critical and/or important natural resource areas.	1 Ongoing	Conservation Commission
Strategy 1J	The City may create a "no development, other than timber harvesting" ordinance that will protect all of the City's deer wintering areas (as designated by the Maine Department of Inland Fisheries & Wildlife).	2	Policy Committee, Planning Board, City Council, Conservation Commission
Strategy 1K	Conduct bi-annual reviews of development growth, evaluating impacts on natural resources, to be reviewed as part of a zoning ordinance review process. This includes, but is not limited to: A) increase/decrease of habitat, B) habitat fragmentation, and C) development "hot spots" where development is taking place to	Ongoing	Planning & Development Dept., Planning Board, Conservation Commission

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	identify proximity to natural resources.		
Strategy 1L	Conduct an annual review of parcels identified as conservation, open space, municipal land, and public access areas to identify; A) the percentage of open space vs. habitat preservation (to the needs of humans and wildlife in Biddeford), B) opportunities to increase unfragmented habitat blocks through the sale/donation of municipal lands, and C) identify trends and growth around/in natural resources areas	Ongoing	Conservation Commission, GIS Staff
Strategy 1M	Continue to monitor state agency GIS maps and data to integrate natural resource inventory information into Biddeford's own GIS maps and to inform municipal decision-making.	Ongoing	GIS Staff, Conservation Commission
Strategy 1N	Increase awareness of incentive programs to aid private landowners in investing in the long-term stewardship of their property.	Ongoing	Conservation Commission
Strategy 1O	Pursue more detailed surveys and documentation of vernal pools throughout Biddeford, with the State Focus Area of Ecological Significance being the priority. This work may be conducted in partnership with UNE, local land trusts, and/or consultants.	2	Conservation Commission, City Staff
Strategy 1P	Develop a pipeline for reduced processing time and permitting requirements for development applications that meet certain standards (e.g., habitat preserved, habitat connectivity, etc.) to encourage smart growth, habitat-friendly developments, and a focus on development in growth areas.	2	Planning & Development Dept., Planning Board
Strategy 1Q	Incentivize increased buffers, habitat conservation, and connectivity through voluntary programs that allow smaller lot sizes in exchange for more open space preserved.	2	Planning & Development Dept., Planning Board, Conservation Commission
Strategy 1R	The City shall develop a list of buffers specific to each natural resource, seeking to increase buffers beyond state minimums, and to align with recommendations from habitat experts to protect Biddeford's specific natural resources.	2	Planning & Development Dept., Planning Board, Conservation Commission

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Strategy 1S	The City shall select and hire a Consultant for all environmental reviews for development applications, to be paid for with funds from the developer, with the Consultant reporting directly to the City.	1	Planning & Development Dept., Planning Board
Policy 2	To coordinate with neighboring communities and both regional/state resource agencies to protect shared critical natural resources.		
Strategy 2A	Collaborate with IFW's Beginning with Habitat Program to aid in the development of conservation planning, the development of overlay zoning, natural resource inventories, and/or other habitat protection programs to prioritize wildlife corridors and vernal pools.	1	Conservation Commission, Planning Board
Strategy 2B	Continue to collaborate with local Land Trusts through conservation planning, title-in-fee donations, and easements to protect parcels that can be added to, or begin forming unfragmented blocks of habitat and natural resources.	Ongoing	Planning & Development Dept., Conservation Commission
Policy 3	Prioritize habitat connectivity in reviewing development proposals within critical natural resource areas, as a means of reducing habitat fragmentation and roadway mortality for all wildlife species.		
Strategy 3A	The City may work with IFW to identify areas where wildlife crossings can benefit listed species, developing a plan and timeline for installation of crossings in natural resource areas — with "turtle crossings" being a priority. Design and implementation resources are listed in the appendix. (bmp_herp_2016.pdf, pages 30-32)	3	Planning & Development Dept., Public Works, Conservation Commission
Strategy 3B	Monitor public works projects (road work, infrastructure updates, etc.) near stream crossings or other critical habitat to identify opportunities to proactively update stream crossings to Stream Smart designs that improve and restore stream function or reduce roadway mortality for at-risk species.	Ongoing	Public Works
Strategy 3C	Conduct an annual review of reported wildlife collisions and roadkill removal requests to identify areas of increased roadway mortality that can benefit from the following (in priority order); A) altering wildlife behavior (reducing forage plants along roadways, adding fencing, and/or wildlife crossings beneath roadways),	Ongoing	Conservation Commission, Police, Animal Control

	B) altering driver behavior (reduced speed limits, speed humps, etc.), and C) improved driver awareness (signage, lighting, roadway markings).		
Strategy 3D	Identify properties that may overlap with Saltmarsh Migration as sea levels rise, prioritizing the acquisition of these parcels to allow for habitat expansion and to reduce strains on municipal services in these areas.	3 / 4	Planning & Development Dept., Conservation Commission
END			

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SECTION 10: WATER RESOURCES

1. Background

Water resources such as lakes, rivers, streams, ponds and groundwater contribute significantly to a community's quality of life. They provide recreational and commercial opportunities, as well as supplying clean drinking water for residential, municipal, commercial, and industrial needs. The quantity and quality of Biddeford's water resources can be affected by factors such as land use including development, non-point source pollution (e.g., increased stormwater runoff), impervious surface expansion, septic system density and failures, agricultural activities, industrial discharges, road salt application, shoreline erosion, and climate-driven changes in precipitation and sea-level rise. How land is changed and used can in turn have effects (positive and negative) on the water resource itself and the people who utilize their benefits.

2. Water Resources at a Glance

Biddeford's water uses reflect the city's strong connection to the Saco River along with its coastal shoreline, groundwater resources, and network of wetlands and estuaries. These uses include public drinking water supply drawn from the Saco River and from groundwater aquifers, marina and working-waterfront activities, recreational boating and fishing, and beach-based recreation at Biddeford Pool, Fortunes Rocks, and Hills Beach. The City's coastal water resources support shellfish habitat, finfish nurseries, other essential ecological functions such as flood storage, and habitat for migratory birds and dune-dependent species. Because these activities rely on clean, resilient waterways and aquifers, protecting Biddeford's water resources is essential for public health, economic vitality, and long-term environmental sustainability.

- There are 3 Public Water Systems (PWS) in the City of Biddeford. This includes:
  a. One (2) Community Water Systems
  b. Two (2) Transient, Non-Community (NC) Water Systems.
- There are approximately 6,160 customers in Biddeford that are served by Public Water Supplies from either H2O America (formerly Maine Water) or by the Kennebunk, Kennebunkport and Wells (KKW) Water District.
- Four (4) million gallons of Saco River water filtered per day (on average). *
- No per- and polyfluoroalkyl substances (PFAS) detection in raw water source. (Saco River) *
- 274 homes are served by private wells.

*From H2O America 's 2024 Annual Water Quality Report (Biddeford/Saco Division)
**Maine Stream Habitat Viewer (IFW)

Water-Dependent Uses

- H2O America's Filtration Plant (Drinking Water Supply)
- Brookfield Renewables Hydroelectric Dams on the Saco River
- Shellfish harvesting (commercial and recreational)
- Commercial boat yards on the river
- Biddeford Pool Yacht Club
- University of New England's Dept. of Marine Sciences
- Other commercial and recreational fishing/processing

Public Access to Water Resources

- Overview of public access in Biddeford
- Boat launch details and images
- Riverwalk
- Map #2 - Public Access Points, Boat Launches, etc.

Threats to Water Resources

- Non-Point Source (NPS) pollution occurs when rainfall or snowmelt moves over and through the ground, picking up and carrying away natural and human-made pollutants before depositing them into lakes, rivers, wetlands, coastal rivers, and underground sources of drinking water, including:
    - Stormwater runoff from roads, parking lots, and rooftops carrying oil, metals, and sediment into streams and wetlands.
    - Fertilizer and pesticide runoff from lawns, athletic fields, and entering surface water and groundwater.
    - Erosion and sediment transport from construction sites impacting nearby rivers, streams, and estuaries.
    - Failing septic systems contributing nutrients, bacteria, and pathogens to groundwater and surface waters.
    - Pet waste left on the ground washing into storm drains and waterways during rainfall events.
    - Salt and sand application from winter road maintenance degrading freshwater quality.
    - Improper disposal of household chemicals, oils, and paints contaminating soils and groundwater.
    - Leachate generation from improperly managed solid waste or debris piles affecting groundwater quality.
    - Atmospheric deposition from vehicle emissions and industrial sources contributing pollutants to water bodies.
    - Runoff from marinas and boat maintenance areas introducing fuels, solvents, and metals into coastal waters.
    - Forestry and land clearing activities increasing sedimentation and altering natural drainage patterns.

Commented [AH1]: These are all great! Wondering if you can define non-point source pollution and then have all NPS sources be sub-bullets? As you'll get into NPS pollution impacting certain waterbodys/watersheds below so the definition and examples will tie into that.

- Inadequate or outdated stormwater infrastructure stressed by more intense and frequent precipitation events associated with climate change.
- Rising water temperatures affecting cold-water fisheries, increasing the likelihood of harmful algal blooms, and reducing overall aquatic ecosystem health.
- Increased groundwater withdrawals in areas without public water service, which can reduce aquifer levels, impact private wells, and diminish baseflow to nearby streams and wetlands.
- Erosion of streambanks, coastal bluffs, dunes, and other vulnerable shorelines, accelerated by land-clearing, storm events, and sea-level rise.
- Spread of invasive aquatic and wetland plant species that displace native vegetation, limit recreation, and impair water quality.
- Legacy contamination and emerging contaminants, such as PFAS, petroleum compounds, road salt, and historical industrial discharges, which continue to pose long-term water quality and public health challenges.
- Habitat fragmentation and loss of riparian buffers, reducing the natural capacity of forests, wetlands, and floodplains to filter pollutants and moderate stormflows.
- State mandated mobile home park overlay zones.
- Changes in State laws that weaken local zoning and land use regulations, particularly increased density requirements, ADU's, and requirements that allow for additional impervious areas.

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3. Surface Waters

The Maine Department of Environmental Protection classifies surface water bodies under State law to establish state-wide water quality goals. The DEP Water Quality Classification system is used to manage the state's surface waters. The system establishes water quality goals, assigns all waters a water quality classification, and sets uses and water quality criteria for each class. The classification system includes four classes for freshwater rivers and streams, three classes for marine waters, and one class for lakes and ponds. The Integrated Water Quality Monitoring and Assessment Report or "Integrated Report" (IR) summarizes water quality data collected by the DEP as well as numerous other state, federal and tribal government agencies, volunteer water monitoring organizations and other sources. The Clean Water Act requires states to submit an Integrated Report to EPA every even-numbered year. Monitoring information is analyzed by the DEP to assess the ability of Maine's water resources to meet uses such as drinking water, aquatic life use support, fishing or recreation as established by Maine's Water Classification Laws.

Fresh Surface Waters
The Maine Legislature enacted Standards for Classification of Fresh Surface Waters in Title 38 M.R.S. §465 to define designated uses, set minimum water-quality criteria, and guide the long-term protection and management of Maine's rivers, streams, and lakes. The standards for the classifications of fresh surface waters that are not classified as great ponds are described below.

- **Class AA** - highest classification; applied to waters considered outstanding natural resources, to be preserved because of ecological, scenic, recreational or social importance.
- **Class A** - second-highest classification; intended to support drinking water (after disinfection), recreation, fishing, industrial uses, hydropower, navigation, and habitat for aquatic life.
- **Class B** - third-level classification; suitable for drinking water supply (after treatment), recreation, fishing, industrial uses, hydropower, navigation; supports aquatic life under unimpaired conditions.
- **Class C** - the lowest classification for fresh surface waters; still supports drinking water supply (after treatment), recreation, fishing, industrial uses, hydropower, navigation, and aquatic life though with more modest water-quality criteria compared to higher classes.

Estuarine and Marine Waters
The Maine Legislature enacted Standards for Classification of Estuarine and Marine Waters in Title 38 M.R.S. §465-B, establishing designated uses, discharge limitations, and minimum water-quality criteria for the State's coastal, estuarine, and marine environments."

- **Class SA** – Highest quality estuarine and marine waters designated as the most pristine coastal waters. Must be free of direct wastewater discharges and support habitat for fish and other marine life along with being suitable for recreation in and on the water, shell fishing, aquaculture, fishing, and navigation. Class SA water habitat must be maintained in a natural, unimpaired condition.
- **Class SB** – High-quality estuarine and marine waters that allows restricted wastewater discharges, but water quality must remain good. Supports recreation, fishing, habitat for marine life, and commercial shell fishing, provided the waters meet criteria for bacterial contamination. Aquatic habitat must be of good quality, capable of supporting indigenous species and must meet numerical standards for dissolved oxygen and bacteria, protecting marine life and public health.
- **Class SC** – Lowest classification for estuarine and marine waters that allows treated wastewater discharges when licensed. Class SC waters are suitable for fishing, recreation, and navigation. The habitat must be maintained but is not required to meet the same strict conditions as SA or SB waters. Must still support aquatic life, with dissolved oxygen and bacteria standards appropriate for this class. This standard often applied to working waterfronts, harbors, and estuaries influenced by development.

While Biddeford's coastal waters are primarily classified under state law as Class SB, several localized segments fail to meet these standards and are heavily tracked by the Maine DEP Integrated Report for shellfish-related impairments. Nonpoint source pollution, including stormwater runoff from developed coastal zones, wildlife, and subsurface wastewater disposal, drives elevated bacterial loads in these areas.

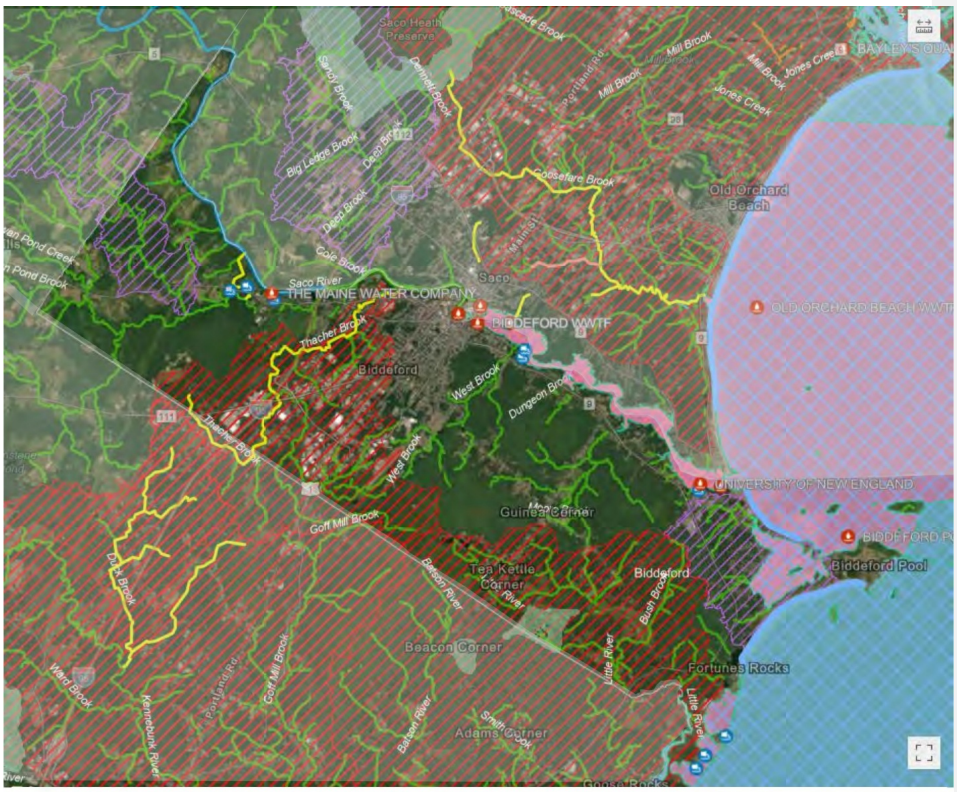
According to the Maine Department of Marine Resources (DMR), the city's intertidal zones fall within Shellfish Growing Areas WF and WG. Due to persistent fecal coliform risks, the state enforces the following harvesting restrictions:

- **Biddeford Pool & Back Bay** – These highly valued commercial and recreational shellfishing flats operate under a Conditionally Approved status. Back Bay features a recuring seasonal pollution closure from September 1st through October 31st, and the broader Biddeford Pool flat triggers an automatic emergency closure following any rainfall event meeting or exceeding 1 inch within a 24-hour period.
- **The Saco River Estuary** – The tidal mouth of the Saco River is subject to a permanent Prohibited classification for all Shellfish harvesting due to upstream point-source concentrations, historical runoff, and heavy marine traffic.

3.1. Lakes and Ponds

The Lakes of Maine organization maintains data pertaining to surface water bodies (Lakes and Ponds) within the State of Maine. According to Lakes of Maine's website, there are currently six (6) freshwater ponds within Biddeford. Information pertaining to water quality

within these ponds was not available. A description of the ponds based on the information available from Lakes of Maine is provided in the table below.



Parameter	*Etherington Pond*	Great Pond	Lilly Pond	Lords Pond	Reservoir	Wilcox Pond
Area (acres)	17	8	4	4	1	4
Perimeter (miles)	1	0.4	0.4	0.4	0.1	0.5
Mean Depth (feet)	—	—	—	—	—	4
Max Depth (feet)	—	3	—	—	—	7
DeLorme Page	3	3	3	3	3	3
Fishery Type	n/a	n/a	n/a	n/a	n/a	Coldwater
Invasive Aquatic Plant Infestation	None known	None known	None known	None known	None known	None known

Lake Characteristics Source: Lakes of Maine. (2025). *Lake overview and watershed information for [Lake Name]*. Retrieved from https://www.lakesofmaine.org/search-results.html?DoWhat=&l=&t=biddeford&c=&z=&m= (Accessed [December 2025}) — where the data are compiled from Maine DEP, Maine IF&W, and Maine Office of GIS.

3.2. Watersheds

Watersheds are the land areas that in which rain, snowmelt, and groundwater flow into shared water bodies such as rivers, streams, lakes, wetlands, and coastal estuaries. They function as natural systems that regulate water flow, filter pollutants, recharge aquifers, and support ecological health. Protecting watersheds is essential for maintaining clean drinking water, reducing flooding, safeguarding habitat, and ensuring the long-term resilience of Biddeford's water resources.

Biddeford boasts ten (10) separate watersheds across our geographical area. Some of the watersheds in the more developed areas have seen a degradation in water quality (ex. Thatcher Brook) due to increased land use, primarily the expansion of impervious surfaces and non-point source pollution. Many of the other watersheds lack the necessary data to accurately understand the changes Biddeford's growth has had on our water resources.

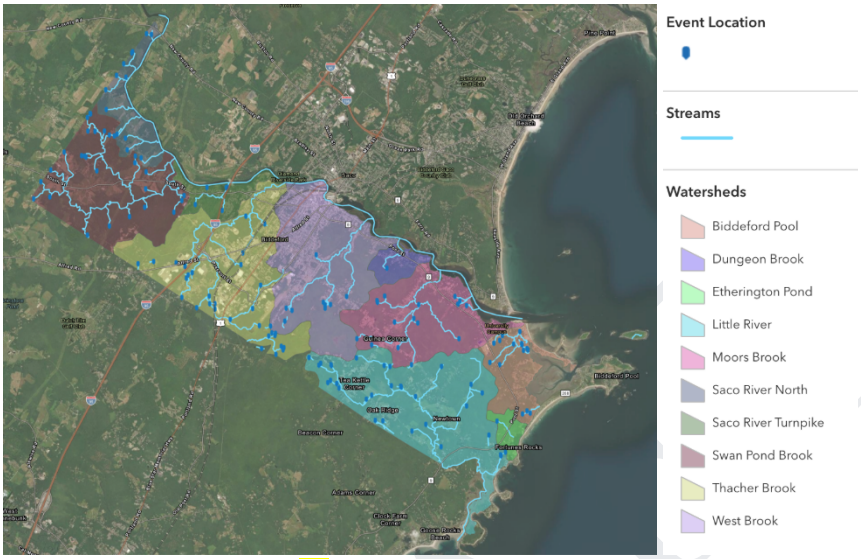


Figure XX: Overview of Biddeford's Watersheds

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Watershed	Water Body / Sub-Watershed	Section	Classification
Saco River	Saco River	Western boundary to the I-95 Bridge	A*
		I-95 Bridge to Tidewaters	B*
		Tidewaters to Camp Ellis Breakwater	SC
	Swan Pond Brook	---	B**
	Thatcher Brook	---	B*
	Richardson Brook	---	B
	West Brook	Origin to head of tide	B
	West Brook	Head of tide to mouth	SC
	Dungeon Brook	---	B
	Moores Brook	---	B
	Tributaries (Tidal)	---	SC
Little River	Little River	Origin to head of tide	B
	Little River	Head of tide to mouth	SB
	Bush Brook (Tributary)	---	B
	Other Tributaries	---	B
Biddeford Pool	Biddeford Pool	---	SB
	Tributaries (Tidal)	---	SB

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Watershed	Water Body / Sub-Watershed	Section	Classification
	Tributaries (Non-Tidal)	---	B
Etherington Pond	Etherington Pond (Tributaries)	---	B

Notes:
* Impaired Water Body – Does Not Meet Classification
** Swan Pond Brook from South Street to the Saco River is an Impaired Water Body – Does Not Meet Classification.
"---" = Section not listed
Sources:
Maine Department of Environmental Protection. (n.d.). *Maine Resource Explorer* [Interactive GIS mapping application]. ArcGIS Online. https://maine.maps.arcgis.com/apps/instant/portfolio/index.html?appid=7ad05604168b4264bb4a14dcb56f6eeb Maine Department of Environmental Protection. (n.d.). *Maine resource explorer* [Interactive map]. ArcGIS Online. Retrieved May 6, 2026, from https://maine.maps.arcgis.com/apps/instant/portfolio/index.html?appid=7ad05604168b4264bb4a14dcb56f6eeb

Maine DEP's Nonpoint Source (NPS) Priority Watershed List

Given Maine's extensive water resources, statewide watershed prioritization is an important part of the Maine DEP's Nonpoint Source Program. Therefore, Maine DEP's Watershed Management Unit maintains and updates biannually a NPS Priority Watersheds List (Maine DEP, 2023). The Purpose of the list is to encourage NPS abatement work and target funding in watersheds most vulnerable to NPS pollution. This list includes impaired and threatened lake, streams and marine waters. Impaired water bodies are those impacted by non-point source pollution that do not currently meet state water quality standards, while threatened water bodies are those that currently meet state water quality standards but are at risk of water quality decline due to non-point source pollution. There are four waterbodies that are within or have a portion of their watershed within the City of Biddeford that are included on the NPS Priority List, Thatcher Brook (impaired stream), Swan Pond Brook Tributary (threatened stream), Goosefare Bay (impaired marine) and Biddeford Pool (threatened marine). Most details about each listing reasoning is provided in the watershed descriptions below.

Saco River Watershed

The Saco River originates high in the White Mountains at the outlet of Saco River Lake near Crawford Notch in New Hampshire. The basin has a total area of 1,697 square miles and is 75 miles long and 45 miles wide at its widest point.

The Saco River forms the northern boundary of the City from the west limits of the City until its mouth at the Atlantic Ocean. More than two-thirds (2/3) of the City and all of Western Biddeford lie within the Saco River Watershed. Head of tide for the river is at Factory Island below Cataract East Dam in Saco and below Cataract West Dam, below the falls between Biddeford and Saco.

The Saco River is used for both commercial and recreational purposes as well as being the source of Biddeford's primary public water supplier, MaineWater. Several sections of the Saco River are used more heavily than others, depending on public access points. The Saco River and its watershed also provides wildlife habitat for various species.

All land within 500 feet of the riverbank on either side of the Saco River is within the Saco River Corridor. Development within the corridor is subject to the requirements of the Saco River Corridor Commission (SRCC).

Commented [AH2]: Good place to describe what this is.

The SRCC is a regional regulatory agency (or quasi-governmental agency) established by the State of Maine in 1973 to protect the water quality, natural resources, and scenic character of the Saco River corridor. The Commission administers the Saco River Corridor Act by overseeing land use and development activities within the corridor to help prevent adverse impacts to rivers, wetlands, groundwater, and public drinking water resources.

Four dams are located on the Saco River as it flows past Biddeford, three of which are partly or entirely within Biddeford. Bradbury Dam is located entirely in Biddeford in the south channel of the river as it rounds Springs Island. Springs Dam is in the north channel around Springs Island and spans to the City of Saco. Cataract West Dam span the Saco River in the west channel of the river around Factory Island. The fourth, Cataract East Dam, is located in the City of Saco within the channel east of Factory Island. These dams are part of the Cataract Hydroelectric Project and are all owned by Brookfield Renewable Power.

In 2006 Northern Ecological Associates, Inc. were contracted with the City of Biddeford to conduct a stream protection study throughout Biddeford. As part of that Study they identified and mapped watersheds and subwatersheds in Biddeford. Within the Saco River watershed, the following subwatersheds were identified, from west to east: Saco River North, Swan Pond Brook, Saco River Turnpike, Thatcher Brook, West Brook, Dungeon Brook and Moores Brook. Of these, Swan Pond Brook and Thatcher Brook, located in Western Biddeford, are the largest.

From a Water Quality perspective, as provided in the Maine Department of Environmental Protection (MDEP) 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, the Saco River from outside of Biddeford to the I-95 Bridge is classified as Class A. This segment of the Saco River is in Category 2 of the Integrated Report (2024) indicating it is attaining some designated uses, but insufficient information for other uses.

From the I-95 Bridge to where the river becomes tidal (below the East and West Cataract Dams) the Saco River is classified as Class B. This segment of the Saco River is also in Category 2 of the Integrated Report (2024) indicating it is attaining some designated uses, but insufficient information for other uses.

Below the dams the Saco River is tidal and is classified as Class SC. This segment of the Saco River is listed in Category 4-A: Rivers and Streams with Impaired Use Other than Mercury – TMDL completed due to bacteria from combined sewer overflows and 4-A: Estuarine and Marine Waters with Impaired Shellfish Harvesting Designated Use – TMDL completed (bacteria from Combine Sewer Overflows), and Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D – TMDL Required due to toxics and Copper.

Saco River North Subwatershed.

The Saco River North Subwatershed is located north of the Swan Pond Brook Subwatershed (see below) and includes eight unnamed streams (and tributaries) which have mouths on the Saco River. It is a relatively small subwatershed (844 acres or 1.32 square miles) that contains low density residential development along with agricultural land uses and some forested areas. There are relatively few wetlands in the subwatershed identified as National Wetland Inventory (NWI) wetlands which are wetlands which have been roughly located based on aerial photography. The relative absence of NWI wetlands in this subwatershed does not mean there are not more wetlands than identified as NWI wetlands.

The Saco River North Subwatershed contains identified riparian habitat according to the Maine Department of Inland Fisheries and Wildlife (MDIFW) surrounding the streams present here which feed the Saco River. A riparian habitat is an area where land and water come together. These areas support a greater diversity of wildlife than nearly all other habitats. Riparian habitats also are often related to Deer Wintering Areas.

According to MDIFW, there are two small areas within this subwatershed that represents inland waterfowl/wading bird habitat, both between River Road and Buzzell close to the border with Dayton that are associated with NWI wetlands.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, the unnamed streams in this watershed which feed the Saco River are classified as Class B.

Commented [AH3]: Up to you but I feel like this can be removed since you provided the general information for class A waterbodies above and I'm wary that just including this aspect of the classification definition omits some of the other key points about class A waters - like recreating in/on/over and what that means for e.coli levels, etc (just using that as one example). So it seems like keeping all the specific information about each classification above and then just including what the class is and if it's not meeting classification, then including the why in these watershed subsections makes sense

Commented [AH4]: Similar to above comment, could probably take out

Also of note is that there is one active “water supply system” in this subwatershed. Located at 610 New County Road, Homestead by the River Campground qualifies as a public water supply under the definitions established by the State.

Swan Pond Brook Subwatershed.

The Swan Pond Brook Subwatershed in western Biddeford and is relatively large subwatershed measuring 2,912 acres in size (4.55 square miles). It is characterized by quite a few unnamed streams which flow into Swan Pond Brook itself before flowing into the Saco River. Swan Pond Brook meets the Saco River upstream of the public water supply intake for MaineWater. The subwatershed is relatively undeveloped and contains some large areas which qualify as undeveloped habitat blocks according to MDIFW.

Swan Pond Brook and its watershed is a high-value riparian habitat according to the Maine Department of Inland Fisheries and Wildlife (MDIFW). The subwatershed area also contains deer wintering areas which will be discussed in more detail in Section 10). A large Deer Wintering Area is located between the boundaries of the Swan Pond Brook Subwatershed and the Thatcher Brook Subwatershed. Further, there are quite a few small NWI wetlands identified in the subwatershed, along with a large NWI wetland located north of Andrews Road on land owned by the City of Biddeford and MaineWater. This large NWI is identified as a Red Maple Swamp Natural Community by MDIFW and is located with the large Deer Wintering Area shared between the Swan Pond Brook Subwatershed and the Thatcher Brook Subwatershed. There is also a fairly large area identified as inland waterfowl/wading bird habitat north of the intersection of South Street and River Road in close proximity to the Saco River.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, Swan Pond Brook and its tributaries are classified as Class B. A segment of Swan Pond Brook (referred to as Swan Pond Brook at South Street) is listed in Category 4-A of the Integrated Report (2024) which applies to “rivers and streams with impaired use other than mercury – TMDL completed,” This segment is listed as impaired due to bacteria (*e.coli*).

A tributary of Swan Pond Brook, referred to as “Swan Pond Brook Tributary” is designated as a Class B waterbody, however, it is listed in Category 3 of the IR (2024) as “insufficient information to determine if designated uses are attained (one or more uses may be impaired).” This segment was listed originally in 2012 as not meeting the Aquatic Life Use criteria and additional data was needed to confirm whether impairment exists. Due to this listing, Swan Pond Brook Tributary was added to the NPS Priority List as the likely cause of not meeting it’s classification is due to nonpoint source pollution.

Thatcher Brook Subwatershed.

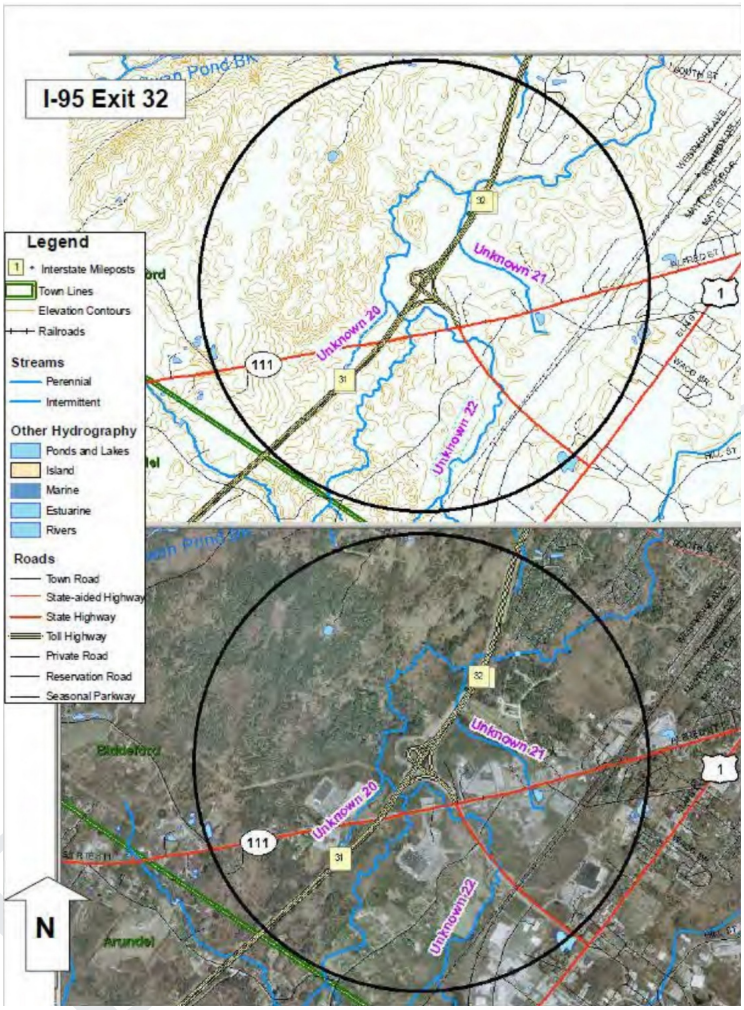
The Thatcher Brook Subwatershed in central Biddeford is relatively large subwatershed measuring 3,561 acres in size (5.59 square miles) and an additional 1.52 square miles in Arundel. It is characterized by an assortment of land uses and contains unnamed tributary streams which flow into Thatcher Brook as well as Richardson Brook which flows out of the Biddeford Airport Industrial Park, through the Biddeford Industrial Park, and ultimately into Thatcher Brook. Thatcher Brook itself begins in Arundel but is largely located within the built area of Biddeford. Thatcher Brook extends from the Arundel town line, parallel to the Maine Turnpike, north across South Street and into the Saco River. Thatcher Brook outlets into the Saco River east of I-95 along the east edge of Rotary Park. Thatcher Brook's watershed area consists of 14% impervious cover (IC) and contains densely developed commercial sections along Route 1 and Route 111. The designated growth area within the watershed includes retail and commercial development, most of the City's industrial/business parks, and low to moderate income housing. However, the watershed also contains much undeveloped forest, wetlands, and pasture lands.

There are some large National Wetland Inventory wetlands located particularly in close proximity to Richardson Brook and Thatcher Brook.

From a Water Quality perspective, as provided in the MDEP 2024 Integrated Water Quality Report, Thatcher Brook and its tributaries are classified as Class B. Thatcher Brook, however, is identified as not meeting its Classification (uses) and, as such, is considered "impaired". Thatcher Brook is listed in "Category 4-A: Rivers and Streams with Impaired Use Other than Mercury – TMDL completed" for aquatic life (benthic macroinvertebrates/biomonitoring), bacteria nonattainment, and degraded aquatic habitat, caused by urban nonpoint source pollution. Putting it also on the NPS Priority List. The Brook is also listed as an Urban Impaired Stream by Maine DEP in Chapter 502 of Stormwater Management Law. This designation was determined because it is a stream that fails to meet water quality standards because of effects of stormwater runoff from developed land. Additional stormwater treatment controls are necessary in urban watersheds of impaired streams because proposed stormwater sources in urban and urbanizing areas contribute to further degradation of stream water quality. This designation establishes criteria for regulatory oversight of proposed development in this watershed.

Commented [AH5]: Same as comments above

In addition to the impairment status of the Brook, a wetland within the Thatcher Brook Subwatershed is impaired. A 14.21-acre wetland located between I-95 and the Walmart on Boulder Way is listed in Category 4-A "Wetland Habitat with Impaired Use, TMDL Completed" for aquatic life use impairment.



The Maine DEP has identified Unnamed Tributaries 20, 21, and 22, small headwater streams feeding the Thatcher Brook watershed near the Maine Turnpike Exit 32 interchange, as waterbodies at acute risk of current and future impairment. The DEP warns that intense, exit-related commercial and retail development within these small catchments threatens to severely degrade habitat and water quality. Because these smaller, unnamed streams have low dilution capacity, they are highly sensitive to the initial shocks of land clearing, canopy removal, and increased stormwater velocities associated with highway-corridor expansion.

Further, according to the TBWMP, “In August 2009, Thatcher Brook was included in MDEP’s Statewide Bacteria Total Maximum Daily Load (TMDL) Report, which uses bacteria as an indicator for the presence of pathogens in water. This bacteria TMDL report provides documentation of impairment and information on pollutant sources that are intended to provide guidance for protection of the waterbody by watershed stakeholders. In September 2012, the United States Environmental Protection Agency (EPA) approved MDEP’s Statewide Impervious Cover (IC) TMDL Assessment, in which Thatcher Brook is included as an impaired stream. This assessment provides a framework for addressing aquatic life and habitat impairments by using impervious cover as a surrogate for a suite of pollutants commonly found in urban stormwater runoff. This TMDL establishes the target percentage of Impervious Cover (IC) for the watershed and provides guidance for efforts to improve water quality in Thatcher Brook.”

The TBWMP provides a framework for the City of Biddeford to utilize moving forward to address water quality issues regarding Thatcher Brook at a watershed level. Restoration of impaired waters can take several decades. As such, watershed plans all become outdated over time. The Plan should be periodically evaluated and updated so it remains relevant and useful. New issues may be identified, and alternative strategies may become available. In addition, as the plan is implemented the timeline, milestones and cost may need to be adjusted to be more realistic. Watershed plans in Maine are typically written to be implemented over a ten-year period. The TBWMP was written to be carried out through local and federal funding. The Maine DEP administers the Nonpoint Source Program which administers federal funding through Section 319 of the Clean Water Act to help communities make progress towards restoring or protecting waterbodies that are named on their NPS Priority List. To be eligible for funding a watershed-based plan must have been written or updated within the past ten years. The TBWMP expired in 2025 and therefore needs to be updated in order to be eligible for future funding. The Maine DEP’s “Guidance for Updating Maine Watershed-based Plans[1]” described this process in more detail.

Commented [AH6]: Suggest some language that explains that yes it can still serve as a framework, but in order to be eligible for implementation funding it has to be updated, and just generally a lot can change in a watershed in 10 years so updating will help the City to move forward more effectively.

West Brook Subwatershed.

West Brook is located near the eastern side of Downtown Biddeford. It extends from the Saco River, across Pool Road, south across West Street and then parallel along Granite Street. The West Brook watershed virtually splits the City with its southernmost reach close to the Kennebunkport townline to the Saco River. It outlets into the tidal portion of the Saco River. It is a relatively large subwatershed (3,228 acres or 5.04 square miles) that contains much medium and high density development, including Downtown Biddeford, lower density development and agricultural and forested lands to the south.

[1] Microsoft Word - Guidance for Updating Maine Watershed-based Plans_Final.docx

The eastern portion of the subwatershed just begins to get into the “Coastal Forest” (Formerly “Biddeford/Kennebunkport Vernal Pool Complex Focus Area”) which is characterized by a significant number of vernal pools and their associated wildlife habitat, although the majority of this focus area is located in the other subwatersheds discussed below.

Within the subwatershed, between Pool Street and West Street, many of the undeveloped areas are characterized by National Wetland Inventory (NWI) wetlands which are wetlands which have been roughly located based on aerial photography.

According to MDIFW, there are several small areas within this subwatershed that represents Significant Wildlife Habitat and animal Natural Heritage Network Occurrences (endangered, threatened, or rare species in Maine).

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, the unnamed streams in this watershed which feed into West Brook, as well as West Brook itself, are classified as Class B. West Brook its unnamed tributaries are unimpaired and meet classification goals.

Dungeon Brook Subwatershed.

Dungeon Brook is the smallest of the Saco River watershed areas (352 acres or 0.55 square miles). It extends from the Saco River south across Pool Road for several miles into a major deer wintering area. Inland Fisheries and Wildlife has rated the fisheries value as low for this waterbody.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, the unnamed streams in this watershed which feed into Dungeon Brook, as well as Dungeon Brook itself, are classified as Class B. Dungeon Brook and its unnamed tributaries are unimpaired and meet classification goals.

Commented [AH7]: Suggest removing

Moores Brook Subwatershed.
Moores Brook crosses Pool Street at the approximate midpoint between downtown Biddeford and the Hills Beach Road at the University of New England. The Moores Brook watershed extends inland along Guinea Road to West Street. As it enters the Saco River, the brook and river combine to create a diverse environment, including freshwater and saltwater wetland habitats. There are significant salt marshes along this section of the Saco River which is expressive of the estuarine environment.

The Moores Brook subwatershed is medium sized compared to the other watersheds/subwatersheds in Biddeford (2,277 acres or 3.56 square miles) that contains much medium and high density development, including Downtown Biddeford, lower density development and agricultural and forested lands to the south.

The eastern portion of the subwatershed just begins to get into the “Coastal Forest” (Formerly “Biddeford/Kennebunkport Vernal Pool Complex Focus Area”) which is characterized by a significant number of vernal pools and their associated wildlife habitat, although the majority of this focus area is located in the other subwatersheds discussed below.

Within the subwatershed, between Pool Street and West Street, many of the undeveloped areas are characterized by National Wetland Inventory (NWI) wetlands which are wetlands which have been roughly located based on aerial photography. According to the NWI, wetlands in this area are described below:

- Freshwater Forested/Shrub Wetland Habitat
- Freshwater Pond Habitat
- Freshwater Emergent Wetland Habitat; and
- Riverine Habitat

Commented [AH8]: Are these correct? Isn’t south st not in this watershed? Maybe Pool and West st?

Commented [AH9]: Should you specify the type of wetland? For example - freshwater forested/shrub wetland

According to MDIFW, there are several small areas within this subwatershed that represents Significant Wildlife Habitat and animal Natural Heritage Network Occurrences (endangered, threatened, or rare species in Maine).

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, the unnamed streams in this watershed which feed into Moores Brook, as well as Moores Brook itself, are classified as Class B. Moores Brook and its unnamed tributaries are unimpaired and meet classification goals.

Little River Watershed.
The Little River Watershed is a large watershed (3,685 acres or 5.76 square miles) that discharges into the Atlantic Ocean at Timber Point. The river is highly influenced by tidal action south of Pool Road. There are an expansive network of salt marshes in this area, as well as a host of wildlife and plant life. The Rachel Carson National Wildlife Refuge manages significant acres within the estuary. The supratidal, intertidal and subtidal natural resources within this area support a wealth and diversity of plant, marine and wildlife species. There are no public access points or public recreation facilities in this area.

Within the watershed there are scattered Inland Waterfowl/Wading Bird habitats according to Maine Department of Inland Fisheries and Wildlife (MDIF&W). These are freshwater areas for breeding, migration/staging, and wintering habitats for inland waterfowl or breeding, feeding, loafing, migration, or roosting habitats for inland wading birds.

Within the estuarine/marine portion of the watershed MDIFW have identified Natural Heritage Network Occurrences as well as Salt-hay Saltmarsh Natural Communities and Saltmarsh False-foxglove occurrences which are a species of special concern.

From a Water Quality perspective, as provided in the Maine Department of Environmental Protection (MDEP) 2018/2020/2022 Integrated Water Quality Report Maps, Bush Brook and the unnamed streams in this watershed which feed into Little River, as well as Little River itself, are classified as Class B. Little River, Bush Brook, and Little River's unnamed tributaries are unimpaired and meet classification goals. The estuarine portion of Little River is classified as SB.

The Little River watershed is part of the larger Goose Rocks Beach-Litter River watershed which outlets in Kennebunkport at Goose Rocks Beach. The 2024 Integrated Report lists Goose Rocks – Little River (Kennebunkport) in "Category 5B: Coastal Designated Beaches Impaired for Bacteria Only- TMDL Required" which is a new category. This listing is for recreation in the water based on 2016-2020 Enterococci bacteria monitoring data. Maine DEP also added this watershed to the NPS Priority List in 2023 as nonpoint source pollution is believed to be the likely cause of the impairment. While not in Biddeford, much of the watershed is within Biddeford and therefore working collaboratively with Kennebunkport to investigate the sources of bacteria is important.

Also of note is that there is one active "water supply system" in this watershed. Located at 391 West Street, Ocean Pines Campground (formerly Shamrock Campground) qualifies as a public water supply under the definitions established by the State.

Bush Brook Subwatershed.
Bush Brook, a major tributary of the Little River, extends North from the Little River, crosses Newton Road and then runs parallel to Newtown Road, ending before the junction of Pool Road. There are several wetland areas located along and/or near this waterbody. There is also a nearby deer wintering area to the east of the brook.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, Bush Brook is classified as Class B. Bush Brook is unimpaired and meets classification goals.

Commented [AH10]: remove

Etherington Pond Watershed.
The Etherington Pond Watershed is a small watershed (251 acres or 0.39 square miles) that is located north of the Little River Watershed but South of the Biddeford Pool Watershed. Drainage here leads to Lords Pond, Etherington Pond, Lily Pond, and the Atlantic Ocean. It is characterized by unnamed streams. It is an important migratory shorebird flat and salt marsh for feeding and nesting. It supports a number of marine invertebrate species.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, Etherington Pond is classified as a Class GPA[2] water and the unnamed streams in this watershed are classified as Class B. The unnamed tributaries in this watershed are unimpaired and meet classification goals.

Biddeford Pool Watershed.
The Biddeford Pool Watershed (BPW) is a relatively small watershed (1,152 acres or 1.8 square miles) that drains an area in the northeastern part of the City. The Pool is an estuary fed by a number of freshwater streams. Biddeford Pool is used for recreational, commercial and wildlife purposes. It is an important migratory shorebird flat and salt marsh for feeding and nesting. It supports a number of marine invertebrate species.

Commented [AH11]: We delineated this watershed in 2020 to be 1.8 square miles

The BPW is located 6 miles southeast of downtown Biddeford and is entirely in the City of Biddeford. The waterbody itself is a 90-acre tidal cove and is fed by five unnamed freshwater tributaries, draining from the headwaters. This tidal estuary is just south of the mouth (~1.5miles) of the Saco River. The tributaries flow from the west towards the pool and are influenced by tides. The northernmost tributary flows through an area of low development through the University of New England (UNE) campus before entering a tall grass tidal marsh where it converges with another tributary into the estuary and eventually the pool itself. The southern tributaries flow through a variety of land uses (forested, residential, and wetland) before discharging into the pool. Within the pool are clam flats (6 zones) that have active shellfish harvest operations. According to most recent land use data from ME DEP the BPW is primarily forested (45%) with developed areas accounting for 20% of the watershed, wetlands 29% and shrubland/grassland 4%. The remaining 2% is comprised of open space, pasture, and/or hay fields. The Pool forms a tidal estuary along the coast which exists in an area of higher density development and increased impervious surface areas.

From a Water Quality perspective, as provided in the MDEP 2018/2020/2022 Integrated Water Quality Report Maps, the unnamed streams in this watershed which feed into Biddeford Pool are classified as Class B. The unnamed tributaries in this watershed are unimpaired and meet classification goals.

Commented [AH12]: remove

The estuarine portion of Biddeford Pool, including the tidal Pool itself, is classified as SB. The tidal portion is listed in Category 2 in the *2024 Integrated Water Quality Monitoring and Assessment Report* for Estuarine and Marine Waters Attaining Some Designated Uses with insignificant data or information to determine if other uses are attained. This area is also listed under category 5-B-1(a) for elevated fecal indicators with shellfish harvesting conditionally approved.

[2] The Maine DEP has one standard for the classification both of great ponds and of natural lakes and ponds less than 10 acres in size, which is Class GPA waters.

3.3. Combined Sewer Overflow

There are currently seven (7) Combined Sewer Overflow (CSO) locations in Biddeford. A CSO is defined as:

- Discharges of untreated wastewater from municipal CSSs. CSOs can be considered hydraulic relief points in a CSS which discharge to a receiving water during wet weather to protect property and prevent sewer backups into people's basements. CSOs typically consist of two components; a CSO Regulator where the untreated wastewater exits the sewer system, and a CSO outfall where the wastewater is discharged to the receiving water. Maine Pollution Discharge Elimination System (MePDES) permits issued by the State License the CSO outfalls, not the CSO regulators. Although uncommon, there can be more than one regulator discharging to a given CSO outfall.

According to the MDEP's *Maine Combined Sewer Overflow 2024 Status Report*, total CSO discharged 20,631,322 gallons into the Saco River. Winter rainfall events combined with snowmelt and frozen ground conditions were responsible for nearly all of Biddeford's combined sewer overflow (CSO) discharge in 2024. The report notes that 99.0% of Biddeford's annual CSO discharge occurred during these winter conditions, as frozen ground increases runoff into the combined sewer system and reduces infiltration into soils.

3.4. Stream Crossings

The Maine Inland Fisheries and Wildlife (MIFW) maintains a database of all stream crossings statewide, with a ranking system.

49 Culverts & Stream Crossings in Biddeford: via Maine Stream Habitat Viewer (IFW)

- 9 designated as "barriers"
- 32 designated as "potential barriers"
- 8 designated as "no barrier"

3.5. Water Monitoring

Participation in Maine DEP's Volunteer River Monitoring Program (VRMP) has relied on volunteers to help collect data on three (3) of Biddeford's watersheds.

- Thatcher Brook
- Swan Pond Brook
- West Brook

The Maine VRMP is a statewide citizen science program coordinated by the Maine Department of Environmental Protection that trains volunteers to collect water quality data from rivers and streams throughout Maine. The program helps track long-term trends in river health by

Commented [AH13]: Perhaps you have this in a different section of your Plan about Public Works facilities and function but I could recommend either here or in a different section to discuss wastewater and regulated stormwater in Biddeford. The wastewater section should go into detail on the Wastewater Treatment Plant, who it services, what is the % of residential, commercial and industrial users, what percent have septic, etc. Where its located, what its daily capacity is, what policy's should be included regarding continuing to make investments to the City's wastewater infrastructure.

The Saco Plan could be a good reference as they also have a regulated stormwater system and a treatment plant, they cover stormwater, septic's beginning on page 101: Saco Comprehensive Plan Final

Another plan to reference would be the City of Bangors, another community with a WWTP and regulated stormwater, if you search "wastewater" in their plan, they have some great policy examples - CED---2022-Comprehensive-Plan-PDF

n

Commented [AH14]: Suggest a short explanation of what this program is here

Volunteer River Monitoring Program, Maine Department of Environmental Protection

monitoring conditions such as dissolved oxygen, temperature, conductivity, and nutrient levels. Data collected by volunteers supports watershed management, environmental planning, and public awareness of water quality issues across the state.

The data is used by both the City of Biddeford and Maine DEP to understand habitat suitability and other standards within these watersheds, with the following parameters being captured:

- Water Temperature
- Dissolved Oxygen (DO)
- Specific Conductance (SPC)

Thatcher Brook - Impaired Status

The Thatcher Brook Watershed has been labeled an “Urban Impaired Stream” by Maine DEP, resulting in a considerable effort to try to restore water quality in this watershed.

Historically, Thatcher Brook was a Brook Trout fishery and critical watershed habitat, but with development impacts around the airport, Route 1 commercial corridor, the industrial park, I-95 highway and a large amount of impervious surface from shopping center parking lots, water quality has steadily declined over time.

The Maine DEP publishes the integrated water quality monitoring and assessment report every two years. The report summarized available water quality information and assesses Maine’s water resources’ attainment of designated uses and standards.

The draft 2024 integrated water quality monitoring and assessment report is available through the Maine DEP’s website at the following link: https://www.maine.gov/dep/water/monitoring/305b/2024/2024_ME_IntegratedRpt-REPORT-DRAFT.pdf.

The City of Biddeford participates in the Maine Healthy Beaches (MHB) Program to monitoring water quality at local coastal beaches, including Hills Beach, Middle Beach, Fortunes Rocks Beach, and Biddeford Pool, and using the data to help protect public health through beach advisories and water quality management.

The integrated Water Quality Report includes data pertaining to Swimming Beach Advisories and Closures. Under Clean Water Act (CWA) guidelines, the designated use of swimming beaches is “recreation in and on the water” (i.e. Primary Contact Recreation). Maine has a Beach Action Value (BAV) for enterococci that is used as a single sample safety threshold (104 MPN/100 mL) for contamination advisories at designated coastal Maine beaches. For beaches participating in the MHB program, the local municipality may issue beach actions including advisories (Contamination or Precautionary Rainfall) and closures. These actions are then posted as notifications to warn of potential health risks. Beach actions are based on a risk analysis performed by the beach manager with assistance from MHB staff. Contamination

advisories represent those issued in response to elevated bacteria results, i.e. exceedances of the BAV of 104 enterococci MPN/100 mL, while precautionary rainfall advisories are issued pre-emptively based on local precipitation levels. Closures are rarely issued, and generally only based on the knowledge of a direct source, such as a sewage spill. These advisories/closures are recommendations to the public to avoid water contact activities at the beach until further analyses reveal safe conditions and/or conditions at the monitoring site change.

The table below depicts the beaches within the City of Biddeford and the number of days (as a percent (%)) that the beaches were under a recommended contamination advisory.

Percent of monitoring season a beach is under a recommended contamination advisory.

Beach Name	% Swim Days Under Recommended Contamination Advisory						
	2018	2019	2020	2021	2022	2023	2024
Gil Bouche Park – Biddeford Pool	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Middle Beach	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hills Beach	0.0%	0.0%	2.6%	0.0%	0.0%	4.2%	2.1%
Fortune Rocks Beach	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

As shown by the data compiled in the Maine DEP's Integrated Water Quality Report, only Hills Beach was under a recommended contamination advisory for a short period of time in 2020, 2023, and 2024 (approximately 2, 4, and 2 days respectively). The remaining beaches within Biddeford were not under a recommended contamination advisory spanning the years from 2018 to 2024.

While the City of Biddeford participates in the Maine DEP's Volunteer River Monitoring Program, there are rivers and streams with Insufficient data or information to determine if designated uses are attained (One or More Uses may be Impaired). Swan Pond Brook tributary is listed in the Integrated Water Quality Assessment report as having insufficient data and is further described in the table below.

Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired)

Assessment Unit ID	Segment Name	Location	Size (miles)	Class	Comments
ME0106000211_616R07	Swan Pond Brook Tributary	Tributary Dayton and Biddeford	7.1	Class B	5/22/12: New Category 3 listing for Aquatic Life Use in 2012 cycle: biomonitoring station S-786 showed algae (periphyton) non-attainment in 2005 and 2010. Resampling needed to confirm whether impairment exists

The 2024 DEP's Integrated Water Quality Report also describes rivers and streams with impaired uses other than mercury. Rivers and streams with impaired uses in the City of Biddeford are depicted in the table below.

Rivers and Streams with Impaired Use Other than Mercury - TMDL Completed

Assessment Unit ID	Segment Name	Location	Cause	Size (miles)	Class	TMDL Number	Comments
ME0106000211_616R05	Thatcher Brook	Tributary to Saco River	Benthic Macroinvertebrates Bioassessments	5.67	Class B	42478	6/1/23: Phase III Watershed Restoration Project completed in December 2022. 12/31/21: Macroinvertebrates did not meet Class B in 2015 and 2020 at S-451.
ME0106000211_616R05	Thatcher Brook	Tributary to Saco River	Escherichia coli	5.67	Class B	37777	4/1/21: Watershed restoration efforts to date include 319 grant projects: Phase I (2017), Phase II (2019) and Phase III (started 2021). Biddeford will complete 3 BMPs in the watershed as part of MS4 permit requirements (2022-2027). 8/14/14: Watershed Management Plan was completed in early 2015. Benthic macroinvertebrates only met Class C in 2012 (biomonitoring Station 746); sampling planned for 2015. 9/27/12: Aquatic life use impairment now

							Category 4-A due to approval of Statewide % Impervious Cover TMDL. TMDL uses the spelling 'Thatcher'. 9/28/09: Recreational use impairments now Category 4- A due to approval of statewide bacteria TMDL.
ME0106000211_616R06	Swan Pond Brook at South Street	Tributary to Saco River	Escherichia coli	1	Class B	37777	6/1/23: Phase III Watershed Restoration Project completed in December 2022. 9/28/09: Recreational use impairments now Category 4- A due to approval of statewide bacteria TMDL.
ME0106000211_619R01	Saco River at Biddeford-Saco	Variable, CSO affected	Escherichia coli	0*	Class B	37776	1/19/24: Biddeford reduced CSO discharge significantly between 2020 and 2022. City has proposed 10-year CSO abatement plan (in MEDEP review). The resulting level of control would vary from less than a year storm in some drainage areas to a five year storm in other drainage areas. City will invest $35M in the effort. Saco is beginning construction on WWTF which should

							reduce/eliminate CSO discharge in Saco. 10/1/21: CSO abatement efforts in Biddeford have become larger in scale based on DEP scrutiny of the existing plan. The level of investment must increase to a level commensurate with the scale of the problem. DEP has included the completion of a an updated systemwide CSO Master Plan in June of 2022 as a condition of recent enforcement actions. 11/25/14: CSO abatement ongoing. 9/28/09: Recreational use impairments now Category 4- A due to approval of statewide bacteria TMDL.
ME0106000211_616R05_W043	Thatcher Brook (Biddeford) wetland	Wetland station W043, upstream (south) of Rt 111, Biddeford	Benthic Macroinvertebrates Bioassessments	14	Class B	42478	10/7/2016: Biological monitoring done in 2001, 2005 and 2013 shows impairment of aquatic life use. Corrected AU size based on updated mapping, previously 9 acres. 9/27/2012: Aquatic life use impairment now Category 4-A due to approval of Statewide %

							Impervious Cover TMDL.

Estuarine and Marine Waters with Impaired Shellfish Harvesting Designated Use – TMDL Completed (Bacteria from Combined Sewer Overflows)

Assessment Unit ID	Segment Name	Location	Cause	Size (sq miles)	Class	Comments
ME010600021105_SC1_E	Biddeford Publicly Owned Treatment Works discharge vicinity (Biddeford)	Upper Saco River	Fecal Coliform	Undetermined	Class SC	**2/14/2024:** Seven remaining discharge points. Preparing revised CSO Master Plan update. Estimated elimination time of <30 years. **12/1/2021:** This assessment unit corresponds to 2016 ID ME811-6_na_na. Master Plan update submitted Feb. 2020 but unable to approve. NOV issued Jan. 2021 for lack of approved Plan. DEP requests supplemental Plan be submitted by

Assessment Unit ID	Segment Name	Location	Cause	Size (sq miles)	Class	Comments
						June 2022. Revised Phase II Master Plan submission.

4. Drinking Water

The City of Biddeford derives drinking water from two primary sources which include PWS surface water from the Saco River that is distributed by the H2O America and KKW, and from groundwater aquifers where wells extract groundwater from both the overburden aquifer and bedrock aquifer.

According to the Maine Geological Survey (MGS) Water Well Database, there are currently 293 wells in Biddeford which include the following:

- 274 domestic drinking water wells
- 5 commercial wells
- 7 geothermal wells
- 1 institutional well, and
- 6 wells described as “other”

Of the 293 wells in Biddeford, 288 are completed as bedrock wells (i.e. drilled into the bedrock aquifer) while the other five draw water from the overburden aquifer (e.g., sand and gravel dug wells).

Well depths in Biddeford range from 21 feet to 645 feet below ground surface (bgs) with the average well depth being 277 feet bgs. The water yield of the wells in gallons per minute (gpm) range between 0.13 gpm to 144 gpm with the average being approximately 12 gpm.

5. Groundwater Aquifers

Biddeford's groundwater occurs in two primary aquifer types: bedrock aquifers and overburden (unconsolidated) aquifers. Bedrock aquifers store and transmit water through fractures and joints in the underlying rock, producing generally lower but reliable yields that can vary significantly depending on fracture distribution. Overburden aquifers, composed of sand, gravel, and other unconsolidated materials, typically provide higher-yielding water supplies and play a key role in groundwater recharge and baseflow to streams and wetlands. Understanding the differences between these aquifer systems is essential for protecting private wells, managing groundwater withdrawals, and guiding development in areas not served by public water.

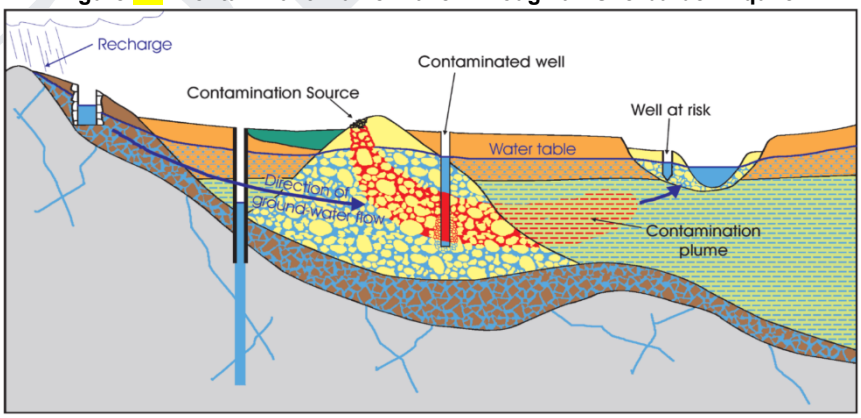
5.1. Bedrock Aquifers

According to the MGS bedrock in Biddeford is comprised of a variety of intrusive (i.e. igneous) and stratified (i.e. sedimentary) bedrock formations. The Bedrock Geology of the Kittery 1:100,000 Quadrangle, Maine and New Hampshire (Hussey, Bothner, & Thompson; edited by Berry; Maine Geological Survey, 2003) depicts the type and location of bedrock formations present in Biddeford. Bedrock formations in Biddeford where groundwater is extracted from bedrock include the following:

5.2. Overburden Aquifers

Overburden aquifers are especially important because their sand and gravel deposits store and transmit far greater quantities of groundwater than the underlying bedrock aquifers, making them critical sources of high-yield wells, groundwater recharge, and baseflow to streams and wetlands; however, their permeable materials also make them more susceptible to contamination from surface activities such as chemical spills, road-salt application, and other land-use impacts. The figure below prepared by the MGS depicts how a contaminant plume may travel through the overburden aquifer.

Figure XX: Contaminant Plume Travel Through an Overburden Aquifer



According to the 1999 Biddeford Comprehensive Plan the Maine Geological Survey *had* identified three areas within the Biddeford that *were* "favorable for the development of groundwater supplies from sand and gravel deposits". These aquifers were identified as being located in the following areas:

- South-central Biddeford between the railroad and the airport.
- Near the intersection of Guinea Road and West Street
- Near the intersection of Fox Farm Road and Oak Ridge Road.

According to the MGS Significant Sand and Gravel Aquifers of the Biddeford Maine Quadrangle (Open File Number 98-149 1998) only one of these locations is identified as a “significant sand and gravel aquifer”, being the Fox Farm Road/Oak Ridge Road location. This aquifer is identified as consisting of “Surficial deposits with moderate to good potential ground-water yield; yields generally greater than 10 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel but can include areas of sandy till and alluvium; yields may exceed 50 gallons per minute in deposits hydraulically connected with surface-water bodies, or in extensive deposits where subsurface data are available”.

5.3. Significant Threats to Aquifer Drinking Water Supplies

Commercial and Industrial Activities

The sand and gravel deposits located in south-central Biddeford sit in close proximity to the Biddeford Municipal Airport and nearby industrial/railroad corridors. The primary risks in this zone include the storage, handling, and potential accidental release of hazardous materials such as aviation fuels, solvents, automotive fluids, and industrial chemicals. Because sand and gravel deposits allow rapid downward infiltration, a surface spill in this zone can quickly compromise the local water table before natural filtration can occur.

Transportation Infrastructure

The aquifer materials near the intersection of Guinea Road and West Street, as well as the Fox Farm Road deposit, are heavily intersected by major local arterials and sit down-gradient from the Maine Turnpike (I-95) corridor. Road salting practices present a chronic, long-term threat to groundwater quality. Regular application of road salt (sodium chloride) during winter maintenance leads to elevated chloride plumes in the shallow overburden aquifer, which can travel through groundwater fractures and pollute nearby private drinking wells.

Subsurface Wastewater Disposal

The highest-yielding sand and gravel resource in Biddeford, the Fox Farm Road and Oak Ridge aquifer, is located in a portion of the city’s rural district that is entirely unserved by the public sewer system. Drinking water supplies in this zone rely exclusively on private wells operating alongside private, on-site subsurface wastewater disposal (septic) systems. The primary threats

include nitrate loading and potential bacterial or viral contamination from aging, unmaintained, or densely clustered septic systems. If a septic system fails or is overwhelmed in these coarse, high permeable glacial soils, effluent can rapidly bypass the soil's natural biological treatment layer and infiltrate the underlying drinking water supply.

Emerging Contaminants (PFS)

A systemic threat to both bedrock and overburden aquifers is the presence of Per- and Polyfluoroalkyl Substances (PFAS). These persistent forever chemicals, often associated with legacy firefighting foams or the historical land-application of certain biosolids, presents a highly mobile threat to private residential wells because they do not easily break down and migrate aggressively through groundwater plumes.

6. Existing Preservation and Protective Measures

Biddeford utilizes a combination of local zoning performance standards, state-mandated environmental ordinances, and regional watershed partnerships to preserve its lake, pond, river, stream, and drinking water resources.

6.1. Local Regulatory Mechanisms

Site Plan and Subdivision Review

Biddeford's Site Plan and Subdivision Review processes serve as the primary administrative mechanism where the Planning Board and Code Enforcement Office review and approve development applications for compliance with the city's Shoreland Zoning performance standards, Post-Construction Stormwater management rules, and Erosion and Sedimentation Control requirements.

Shoreland Zoning Ordinance

Biddeford enforces a strict, local Shoreland Zoning framework that meets or exceeds the Maine DEP Chapter 1000 guidelines. The ordinance establishes a protective uniform 100-foot structural setback across primary resource zones to minimize clearing and prevent runoff from entering coastal and freshwater bodies. Urban infill and historic revitalization along the Saco River are carefully managed through the DEP approved Waterfront Renaissance District, balancing dense development with modern public amenities and riverfront access.

Post Construction Stormwater Management

To protect surface water from nonpoint source pollution, the city mandates that developments requiring site plan review must implement a post-construction stormwater management plan. This ordinance (Chapter 34, Article VI) legally binds developers to the standards found in Maine DEP Chapters 500 and 502 rules.

Erosion and Sedimentation Control

In alignment with its MS4 General Permit, the city requires all soil-disturbing construction activities to implement strict erosion control practices matching DEP Chapter 500 appendices to protect downstream brooks like Thatcher Brook.

6.2. Regional and Watershed Protection Measures

The Saco River Corridor Commission (SRCC)

Because the Saco River serves as the primary source of public drinking water for the region and acts as a vital fishery, land use within 500 feet of the river (or within its 100-year floodplain) is subject to the co-jurisdiction of the SRCC under the Saco River Corridor Act (Title 38 MRSA §953). This provides a critical secondary tier of regional oversight for vegetative clearing, structural setbacks, and pollution prevention.

Saco Watershed Collaborative

The city actively participates in regional partnerships to monitor water quality trends, track invasive species, and implement large-scale restoration projects across municipal borders.

6.3. Public Drinking Water and Groundwater Safeguards

The city enforces blanket prohibitions in its Land Development Regulations to protect groundwater resources. The city's general zoning restricts high-risk industrial operations, chemical storage yards, and bulk petroleum facilities from setting up in rural or residential zones near public drinking wells. If a developer proposes a project utilizing or sitting near groundwater infrastructure, they are hit with strict performance standards requiring a hydrogeologic assessment. They must prove that the development will not result in the contamination of existing or potential domestic or public water supply wells.

Public Utilities Infrastructure

The majority of Biddeford's built environment is served by public water drawn directly from the Saco River and treated at the facility serving the Saco-Biddeford division.

Aquifer Protection Overlay (APO)

While the densely developed areas of Biddeford rely on water treated and distributed from the Saco River, rural and suburban households across the western portions of the community depend entirely on private domestic wells tapping into localized groundwater. To safeguard these critical subsurface assets from contamination and ensure long-term drinking water security, the City of Biddeford maintains an Aquifer Protection Overlay (APO) district within its Land Development Regulations (Part III, Chapter V, Section 1).

Mapped directly over high-yield sand and gravel aquifers identified by the Maine Geological Survey, the APO functions as a protective shield over highly permeable soils where surface spills can rapidly migrate into the water table. Because it is an overlay framework, its strict environmental performance standards automatically supersede the underlying base zones.

Key groundwater protections enforced within Biddeford's APO include:

- **Land Use Limitations:** Strict conditional use review or outright prohibitions on high-risk commercial operations, including commercial chemical storage, automotive repair garages, salvage yards, and bulk petroleum facilities.
- **Impervious Surface Caps:** Limitations on total lot coverage to maximize natural precipitation infiltration, ensuring the underlying aquifer can naturally recharge while minimizing concentrated toxic stormwater flows.
- **Best Management Practices (BMPs):** Engineered requirements for on-site stormwater management and nonpoint source pollution containment for any newly approved development footprints within the overlay boundaries.

Wellhead Protection Areas

For areas relying on localized groundwater infrastructure, the city tracks the Maine Drinking Water Program’s Wellhead Protection Areas mapping. For example, the Ocean Pines Campground area is located proximate to two mapped wellhead protection zones associated with the H2O America’s public water supply system. Those mapped areas safeguard groundwater by managing land-use activities within standard 300-foot inner and 1,000-foot outer buffer zones to reduce contamination risks from nearby residential, recreational, or commercial uses.

While the city tracks state-mapped Wellhead Protection Areas, Biddeford currently lacks a localized Wellhead Protection Overlay Ordinance. As a result, the city relies on generalized subdivision review criteria to safeguard groundwater. The city may want to consider developing

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a formal Wellhead Protection Ordinance to standardize land-use restrictions within the 300-foot and 1,000-foot public well buffers.

7. Municipal Operations

In addition to enforcing land-use regulations on private development, the City of Biddeford actively implements water quality protection and pollution prevention practices across its daily municipal operations and infrastructure maintenance programs.

7.1. Public Works Operations

Public works crews sweep all public streets and municipally owned parking lots at least once every spring to capture winter sand, debris, and heavy metals before they can wash into local waterways. Crews also regularly inspect, clean, and map the city's catch basins to prevent sediment blockages and stormwater backups.

Municipal maintenance facilities, including the Public Works garage, operate under Stormwater Pollution Prevention Plans. These plans mandate that vehicle maintenance and fueling occur indoors, and that bulk road salt is stored in fully enclosed, covered sheds to prevent rain and snowmelt from generating highly toxic chloride runoff.

The city utilizes modern, calibrated salt-spreading equipment on its plow trucks to monitor and optimize application rates. Training programs focus on minimizing salt usage while maintaining public safety, particularly within the sensitive and urban-impaired Thatcher Brook watershed.

7.2. Contractor Requirements

Biddeford holds its own public works crews and third-party municipal contractors to strict water quality protection benchmarks during active construction projects.

In compliance with the city's updated stormwater rules, any municipal road construction, utility repair, or public facility development that disturbs soil must deploy erosion and sedimentation control practices that meet or exceed the Maine DEP Chapter 500 Appendices standards.

Bidding documents and municipal contracts for capital improvement projects explicitly require third-party contractors to submit and adhere to rigorous erosion and sedimentation control plans. These sites are subject to inspection by the city's Code Enforcement staff or engineering inspectors to ensure that silt fences, catch basin sediment bags, and stabilized construction entrances are actively maintained until the site is fully revegetated.

8. Regional Coordination

Biddeford actively engages with several established local and regional advocacy groups, non-profits, and inter-municipal coalitions to advance water resource protection, pool monitoring resources, and secure watershed-level grant funding:

8.1. Saco Watershed Collaborative

This represents a major opportunity for the city to partner on regional drinking water protection. The collaborative brings together water utilities, conservation districts, land trusts, and municipal planners across the entire Saco River basin. Partnering here allows Biddeford to coordinate upstream pollution mitigation strategies, protect the regional drinking water supply, and access joint funding for water quality initiatives.

8.2. Saco River Corridor Commission (SRCC)

As a statutory compact of 20 municipalities along the river, Biddeford's partnership with the SRCC ensures coordinated land-use oversight within the 500-foot river corridor. This shared jurisdiction acts as a vital tool for enforcing consistent regional standards for vegetative buffers and shoreline protection.

8.3. Saco Valley Land Trust

The Saco Valley Land Trust (SVLT) is a non-profit organization dedicated to the preservation of open space, wildlife habitat, and water quality in Saco, Biddeford, and along the southern portion of the Saco River. The trust owns over 500 acres in Biddeford, Saco, and Buxton, as well as 200 acres of conservation easements.

8.4. University of New England

Located right at the mouth of the Saco River in Biddeford, UNE represents an exceptional local asset. The city has a direct opportunity to partner with UNE's Environmental Studies and Marine Sciences programs, utilizing students and faculty researchers to conduct freshwater monitoring, track invasive species, and support local habitat restoration projects.

8.5. Interlocal Stormwater Working Group (ISWG)

Facilitated by the Cumberland County Soil and Water Conservation District, this regional coalition of MS4-regulated communities allows Biddeford to collaborate with neighboring towns on regional stormwater public education campaigns, volunteer training, and the development of standardized low-impact development (LID) ordinances.

8.6. Thatcher Brook Watershed Committee

Because Thatcher Brook is an urban impaired stream, the city partners with local stakeholders, landowners, and regional conservation districts to implement the Thatcher Brook Watershed Management Plan. This ongoing partnership is critical for driving neighborhood-level outreach, rain garden installations, and stream-bank stabilization efforts.

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Water Resource Priority Areas
A ranking system for Environmental Priority Areas as High Value Riparian Habitat Corridor (RH), High Value Water Resources (WR) and High Value Plant and/or Animal Corridors (P/AHC), with 1 the highest priority. The summary emphasizes that “they are all priorities.”

Priority Area	RH	WR	P/AHC
Biddeford/Kennebunkport Vernal Pool Complex			1
Saco River Estuary	1	1	
Biddeford Pool and Clam Flats		1	1
Moores Brook Corridor	1		
Dungeon Brook Corridor	1		
West Brook Corridor	1		
Thatcher Brook Corridor	1		1
Swan Pond Brook Corridor	1	1	1
Saco River North Corridor		1	
Saco River Turnpike Corridor		1	
Little River Corridor		1	
Etherington Pond Corridor		1	

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Goals, Policies & Strategies

Goal
To protect and improve the quality and to manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers and coastal areas.

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Policies

1. Protect current and potential drinking water sources, with special emphasis on preventing chemical and septic contamination within the Saco River watershed and local aquifers.
2. Protect significant surface water resources from pollution and improve water quality where needed, specifically prioritizing the restoration of Thatcher Brook and other waterbodies impaired by nonpoint source pollution through the protection of riparian buffers and forested canopies.
3. Protect water resources in designated growth areas while promoting intensive development in those areas by utilizing low-impact development standards and responsive zoning updates.
4. Minimize pollution discharges through the continuous upgrade and maintenance of public sewer systems, wastewater treatment facilities, and private subsurface wastewater disposal oversight.
5. Cooperate with neighboring communities, regional agencies, and local advocacy groups to protect shared water resources, expand watershed monitoring programs, and restore watershed connectivity for fish and wildlife passage.
6. Continue collecting impact fees for developments within the Thatcher Brook Watershed to be utilized for improving the condition of the watershed.

Strategies

1. Ordinance & Regulatory Updates

1.1. **Stormwater and MS4:** Amend local ordinances to maintain consistent stormwater runoff performance standards that strictly align with Title 38 MRSA 420-D (Chapters 500/502) and MEPDES MS4 permit Requirements.

1.2. **Low-Impact Development:** Amend local zoning and site plan review ordinances to incorporate Low-Impact Development (LID) standards that minimize site clearing, encourage tree preservation, limit effective impervious area, and protect forested canopies in high-priority watersheds.

1.3. **Drinking Water Protection:** Maintain and periodically amend public wellhead and aquifer recharge area protection mechanisms within the zoning ordinance to safeguard municipal drinking water sources and private wells from septic or chemical contamination.

2. Public Infrastructure & Operations

2.1. Road Maintenance

2.1.1. Adopt and enforce water quality protection practices for the construction and maintenance of public/private roads and municipal properties.

2.1.2. Regularly evaluate Public Works snow removal procedures, designate secure snow dump locations, and deploy alternatives to traditional road salts to mitigate chloride introduction into freshwater resources.

2.2. Fish Passage & Connectivity

2.2.1. Update stream crossings identified as ecological barriers or potential barriers during scheduled roadwork and capital infrastructure projects.

2.2.2. Require all new or replacement municipal and contracted stream crossings to follow Maine Department of Inland Fisheries and Wildlife (IF&W) Stream Smart design principles.

2.3. **Community Rating System:** Explore the ability to join the National Flood Insurance Program (NFIP) Community Rating System (CRS).

3. Regional Cooperation & Environmental Monitoring

3.1. **Urban Impaired Streams:** Continue implementing and updating the Thatcher Brook Watershed Management Plan to guide targeted mitigation and restoration efforts, enabling continued compatible development or redevelopment without further stream degradation.

3.2. **Regional Partnerships:** Participate actively in local and regional water quality monitoring and restoration efforts.

3.2.1. Participate in the Saco Watershed Collaborative (SWC), as a means of staying informed about freshwater resources, water quality updates, partnerships, and opportunities to fund.

3.2.2. Continue to monitor streams/brooks in Biddeford as part of the DEP Volunteer River Monitoring Program, eventually expanding our data collection efforts to include all ten (10) watersheds in Biddeford.

3.2.3. Collaborate with educational programs, nonprofits, and other organizations to develop watershed monitoring programs to aid the City in capturing data to support watershed decision-making and improve our understanding of water quality, riparian habitat, and other water resource needs.

3.2.4. Collaborate with the University of New England to identify areas of opportunity for UNE students to support freshwater resources in Biddeford through study, monitoring, and restoration work.

3.2.5. Pursue grants and partnerships to install water quality monitoring equipment on waterbodies.

4. Education, Outreach & Landowner Support

4.1. Implement a public outreach campaign for water resources education and engagement.

4.2. Provide educational materials at appropriate locations regarding aquatic invasive species.

4.3. Provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.

Strategies

1 = Immediate (0-1 yr)
2 = Near-term (1-3 yrs)
3 = Medium-term (3-6 yrs)
4 = Long-term (6-10 yrs)
Ongoing = Indicates a strategy will take many years or continuous work for implementation.

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GOAL (#)	STRATGEY (#)	CHAPTER	STRATEGY/ACTION SUMMARY	LEAD IMPLEMENTER POSSIBLE COLLAB	TIMEFRAME	PRIORITY	GROWTH CAP INVEST	POSSIBLE FUNDING SOURCES	COST/STAFFING
	15.1	WATER RESOURCES	Amend local ordinances to maintain consistent stormwater runoff performance standards that strictly align with Title 38 MRSA 420-D (Chapters 500/502) and MEPDES MS4 permit Requirements.	Engineering Dept., Public Works, Planning Board, & Planning Dept.	2 - Ongoing	1			
	15.2		Amend local zoning and site plan review ordinances to incorporate Low-Impact Development (LID) standards that minimize site clearing, encourage tree preservation, limit effective impervious area, and protect forested canopies in high-priority watersheds.	Engineering Department, Public Works, Planning Board, and Planning & Development Dept.	2	2			
	15.3		Maintain and periodically amend public wellhead and aquifer recharge area protection mechanisms within the zoning ordinance to safeguard municipal drinking water sources and private wells from septic or chemical contamination.	Public Works, Code Enforcement, and Planning & Development Dept.	3 - Ongoing	3			
	15.4		Adopt and enforce water quality protection practices for the construction and maintenance of public/private roads and municipal properties.	Public Works, Engineering Department, Code Enforcement and Planning Department	2 - Ongoing	2			
	15.5		Regularly evaluate Public Works snow removal procedures, designate secure snow dump locations, and deploy alternatives to traditional road salts to mitigate chloride introduction into freshwater resources.	Public Works, Planning Dept., Engineering Dept. & Conservation Commission	2 - Ongoing	2			
	15.6		Update stream crossings identified as ecological barriers or potential barriers during scheduled roadwork and capital infrastructure projects.	Planning Department, Public Works, and Conservation Commission	2 - Ongoing	2			
	15.7		Require all new or replacement municipal and contracted stream crossings to follow Maine Department of Inland Fisheries and Wildlife (IF&W) Stream Smart design principles.	Public Woks, Engineering Dept., Public Works	1 - Ongoing	2			

	15.8		Explore the ability to join the National Flood Insurance Program (NFIP) Community Rating System (CRS).	Planning & Development Dept., Code Enforcement	Ongoing	1			
	15.9		Continue implementing and updating the Thatcher Brook Watershed Management Plan to guide targeted mitigation and restoration efforts, enabling continued compatible development or redevelopment without further stream degradation.	Planning Dept., Engineering Dept. & Conservation Commission	Ongoing	2			
	15.10		Participate actively in local and regional water quality monitoring and restoration efforts.	Conservation Commission & Planning Dept.	Outgoing	2			
	15.10.1		Participate in the Saco Watershed Collaborative (SWC), as a means of staying informed about freshwater resources, water quality updates, partnerships, and opportunities to fund.	Planning Dept., Engineering Dept. & Conservation Commission	2	1			
	15.10.2		Continue to monitor streams/brooks in Biddeford as part of the DEP Volunteer River Monitoring Program, eventually expanding our data collection efforts to include all ten (10) watersheds in Biddeford.	Conservation Commission, SMPDC, Planning Dept.	Ongoing	2			
	15.10.3		Collaborate with educational programs, nonprofits, and other organizations to develop watershed monitoring programs to aid the City in capturing data to support watershed decision-making and improve our understanding of water quality, riparian habitat, and other water resource needs.	Conservation Commission, Planning Dept., UNE, Engineering Dept. & Recreation Commission	3	2			
	15.10.4		Collaborate with the University of New England to identify areas of opportunity for UNE students to support freshwater resources in Biddeford through study, monitoring, and restoration work.	UNE, Planning Dept., Engineering Dept. & Conservation Commission	2 - Ongoing	3			
	15.10.5		Pursue grants and partnerships to install water quality monitoring equipment on waterbodies.	Conservation Commission, & Planning Dept.	2-Ongoing	3			

	15.11		Implement a targeted public outreach campaign regarding watershed health.	Conservation Commission, Recreation Dept., Planning Department & UNE	2 - Ongoing	3			
	15.12		Provide educational materials at appropriate locations regarding aquatic invasive species.	McCarthy Library, Conservation Commission & Planning Dept.	Ongoing	3			
	15.13		Provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.	Engineering Dept., Planning Dept., Recreation Dept, & Conservation Commission	Ongoing	1			

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Existing Land Use

Understanding Biddeford's current land-use patterns and zoning framework is essential to assessing existing conditions and determining whether adjustments are necessary to meet the City's goals. Because land use regulations influence all other components of the Comprehensive Plan, zoning serves as a key tool for shaping development and guiding growth. By actively directing change, these regulations help protect the qualities and resources that residents value.

This topic includes

- Current land use
- Town growth and rural areas
- Base Zoning Districts
- Zoning Overlay Districts
- Site Plan & Subdivision Regulations
- York Floodplain management
- Permitting and approvals processes
- Recent development patterns
- Climate change impacts
- Town capacity
- What the community said

Current Land Use

The City of Biddeford occupies approximately 30 square miles of land, comprising approximately 7,800 parcels, which support a varied mix of land uses. Of the land that is developed, a relatively high proportion is devoted to residential uses, open space, agriculture, forestry, and recreation. With continued growth, development patterns east of U.S. Route 1 have become increasingly intensive, characterized by a higher concentration of commercial and industrial uses along the U.S. Route 1 and I-95 corridors.

Biddeford's Land Use Distribution

Land area designated as "residential" is the largest land use category at approximately 40% of the city, and about 75% of the parcels (Fig. 1 and Table 1). Just under 7.8% of land is assessed as Open Space/Tree Growth, and 5.2% is assessed as Commercial uses. There is also a significant amount of land categorized as Industrial (4.6%) and Education, Literary and Scientific (3.5%).

Commercial and Industrial uses combined make up approximately 10% of the city's land. According to the City Assessment, a significant amount of land is considered Vacant or undeveloped (approximately 21%).

[Insert Images representing commercial, residential, farmland, and school]

[Insert Map: Figure 1. Biddeford Land Use by Tax Assessor Category]

Table 1. 2020 Biddeford Land Use in Acres and Parcels Count by Tax Assessment Land Category

Land Use Category	Number of Parcels	Total Area (Acres)
City of Biddeford	141	1,368
Commercial	273	945
Commercial Vacant	33	63
Education, Literary and Scientific	25	632
Industrial	106	838
Industrial Vacant	33	132
Institutional/Charities	145	1,239
Mixed Use	95	52
Non-Municipal Publicly Owned	64	511
Open Space/Tree Growth	37	1,404
Residential	5,870	7,174
Residential Apartment	372	149
Residential Condo	14	12
Residential Vacant	577	3,538
Utilities	3	1
Total Acreage	7,788	18,058

[Insert Map: Figure 2. Government and Publicly-Owned Lands]

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City Growth and Rural Areas

The State of Maine's Title 30-A, §4326: Growth management program elements, requires municipalities to develop a growth management program that includes defined Growth Areas, if applicable, as well as Rural Areas. These areas are defined as part of the State's Growth Management Program:

- **Growth Area:** …suitable for orderly residential, commercial, or industrial development…and into which most development projected over 10 years is directed
- **Rural Area:** …area deserving of some level of regulatory protection from unrestricted development…and from which most development projected over 10 years is diverted

The state requires municipalities to direct their infrastructure and facilities investments primarily toward Growth Areas. Biddeford's Growth Area Boundary was determined in the 2023 by the City Council and generally encompasses the area on both sides Route 1 with the **Saco River** being its northern boundary and the **town boundary with Arundel** bounding the area to the south (Fig. 3).

[Insert Figure 3 City of Biddeford Growth Area Boundary, 2006]

Biddeford's Zoning

The City of Biddeford's Zoning Ordinance states the following General Purpose: "The purpose of this ordinance is to promote the health, safety, and general welfare of the residents of the City. Specifically, this ordinance is intended to promote and protect quality of life factors that could be threatened by uncontrolled or unregulated growth or development." The City's Zoning Ordinance, originally enacted on 1964 with revisions generally adopted once or twice per year.

Although the Biddeford Zoning Ordinance is thorough and rooted in sound planning principles, it is often perceived by residents and City staff as "complex." In addition to base zoning districts with defined use and dimensional requirements, the Ordinance contains numerous supplemental standards, special provisions, overlay districts, regulatory policies, and procedural requirements. Over time, these cumulative layers have contributed to confusion about what is allowed and where. As a result, property owners and community members routinely seek guidance from the Planning and Code Enforcement Departments to navigate applicable standards and the necessary permitting and approval pathways.

Base Zoning Districts

The Zoning Ordinance includes **15** categories within its base zoning. The boundaries of those base zoning districts established pursuant to this Ordinance are delineated in detail on the Biddeford Zoning Ordinance: Base Zoning Districts map below (Fig. 4).

[Insert Figure. 4 Biddeford Zoning Map]

Zoning Districts Description

The base zones in the Zoning Ordinance are delineated below with summary descriptions. Tables with Dimensional Regulations by Zone are provided later in this section.

Classes of Zones:

a. Suburban Residential Zones to be known as SR Zones.
b. Coastal Residential Zones to be known as CR Zones.
c. Residential Zones to be known as R Zones.
d. Business Zones to be known as B Zones.
e. Industrial Zones to be known as I Zones.
f. Waterfront Zones to be known as W Zones.
g. Rural-Farm Zones to be known as R-F Zones.
h. Limited Rural-Farm Zones to be known as LR-F Zones.
i. Medical Zones to be known as M Zones.
j. Shoreland Zones to be known as RP-1, RP, LR, GD-1, GD-2, CFMA, and LC Zones.
k. Contract Zones to be known as CZ Zones.
l. Institutional Zones to be known as IN Zones.
m. Office Residential Zones to be known as OR Zones.
n. Main Street Revitalization District zones to be known as MSRD Zones.
o. Aquifer Protection Overlay Zones to be known as APO Zones.

General Description of Zones and Allowed Uses:

A. **Suburban Residential Zone (SR-1):** This district is primarily intended for single-family residential development, with limited allowances for home-based professional offices under specific conditions. The neighborhoods generally consist of single-family homes on larger lots, served by public sewer and water, or at a minimum, public water**.**

B. **Coastal Residential Zone (CR):** This district was established to recognize coastal areas with notable environmental or scenic value. Permitted uses are largely limited to single-family residences, with certain home offices allowed under specific conditions. Lot sizes within the zone vary based on underlying soil characteristics.

C. **Residential Zones:** There are four sub-residential zones based on density:

1. **R-1-A:** This district permits only single-family and two-family (duplex) homes. It is fully served by public water and sewer and is best described as an in-town neighborhood with predominantly single-family and duplex housing.

2. **R-1-B:** Similar to R-1-A, this district allows single-family and two-family residences and is also served by public water and sewer. It represents established in-town single-family and duplex/two-family neighborhoods.

3. **R-2:** This district supports higher-density residential development, allowing a range of multifamily housing options. Public water and sewer service are available throughout.

4. **R-3:** This district is designed to offer substantial flexibility in residential development, accommodating a broad mix of housing types on a variety of lot sizes.

D. **Business Zones:**

1. **B-1:** This district encompasses the in-town commercial core and permits a combination of commercial uses and multifamily residential development. Its purpose is to promote robust commercial activity while also encouraging the conversion of vacant factory structures and the use of upper floors in both existing and new structures for multifamily housing.

2. **B-2:** This district consists of highway-oriented commercial corridors where residential uses are not allowed.

E. **Industrial Zones:**

1. **I-1:** This district allows for general commercial and industrial uses.

2. **I-2:** This district is a more specialized industrial zone that permits a limited range of industrial activities. Proposals within this zone require review and recommendations from the Economic Improvement Commission.

3. **I-3:** Serving as a gateway into the City, this district places strong emphasis on the visual appearance of development. Projects must comply with enhanced design and landscaping standards, and new or renovated building facades are expected to feature brick or stone, with alternative materials considered on a case-by-case basis. Residential-style structures may also be permitted under similar discretionary review. The zone accommodates a mix of commercial and industrial uses; however, outdoor storage and display are prohibited except on parcels adjacent to Pomerleau Street that do not border Barra Road or Alfred Street (Route 111).

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F. **Waterfront Zones:**
   1. **W-1:** Allows for a mixture of water-dependent or oriented commercial uses, including residential uses.

   2. **W-2:** Allows for commercial water-dependent uses.

   3. **W-3:** The Biddeford Pool Village Waterfront Zone that allows both water and non-water-dependent or oriented commercial uses, including residential uses.

G. **Rural-Farm Zone (R-F):** This district allows residential and agricultural use and allows exceptions for commercial uses.

H. **Limited Rural-Farm Zone (LR-F):** This district only allows for nonresidential uses, such as extractive operations, recycling, agricultural uses and open space.

I. **Medical Zone (M):** Medical offices and hospitals are allowed or other uses of that nature.

J. **Shoreland Zones**: See the next section, *Zoning Overlay Districts.*

K. **Contract/Conditional Use Zones (CZ):** Zones established through a negotiated agreement between a developer and the City Council, following Planning Board review. These zones permit uses that wouldn't ordinarily be allowed in the underlying district, but are considered appropriate due to their unique public or community benefits.

L. **Institutional Zone (IN):** The Institutional Zone is intended to support college and university activities while reducing potential negative impacts on the surrounding predominantly residential neighborhoods. All university-related uses, or any activities carried out by a college or university, must comply with an institutional master plan approved by the Planning Board.

M. **Office Residential Zone (OR):** The OR Zone is designed to guide the gradual transition of older residential areas along major roadways into a blend of residential and low-intensity nonresidential uses. Its intent is to allow existing homes to be adapted for small-scale office and service uses, as long as the area's architectural character is preserved, exterior displays remain minimal, and any proposed nonresidential conversions undergo site plan review.

N. **Main Street Revitalization District Zones (MSRD):**
   1. **MSRD-1:** This district serves as the commercial center, aiming to support business and residential growth while maintaining Biddeford's historic character.

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2. **MSRD-2:** This district focuses on residential conservation, allowing medium-density housing while preserving the historic and residential character of existing structures, and supporting the upkeep and renovation of homes.

3. **MSRD-3:** This high-density, mixed-use district is intended to maintain the historic integrity of buildings while encouraging the transformation of vacant and underutilized mill properties into a lively blend of residential and commercial uses that strengthens the revitalization of the downtown.

O. **Aquifer Protection Overlay Zones (APO):** The APO Zone is intended to safeguard Biddeford's groundwater by limiting land uses and activities that occur over aquifers and recharge areas. Its purpose is to regulate the use and management of hazardous materials that could contaminate these resources, and to ensure that the city's aquifers are preserved as a reliable water supply for residents.

Dimensional Standards

Biddeford's Zoning Ordinance defines lot dimension standards by zoning classification, and these standards have been periodically amended as new conditions and regulatory requirements have emerged. The tables below provide the **dimensional and development requirements** for every zoning district within the City of Biddeford. These tables summarize the minimum lot sizes, frontage requirements, building setbacks, maximum building heights, and other development standards that apply to each district. Overall, the tables serve as a comprehensive reference for understanding the physical standards that govern land use and development across all zoning districts in the city.

These dimensional standards can be found in Article 5, as an attachment, *Table B: Dimensional Requirements* of the City of Biddeford Zoning Ordinance, and are summarized in Tables 4-6 below.

Functionally, these regulations establish a clear gradient across the city. In Biddeford's urban core and historic Main Street Redevelopment Districts (MSRD), dimensional requirements feature reduced setback distances, smaller lot sizes, and higher maximum lot coverages to accommodate walkable, compact development. As you move outward from the core, you transition into highway-oriented commercial zones, like the Highway Business (B2) Zone, or suburban residential areas, like the Suburban Residential (SR1) Zone. In these districts, the dimensional requirements scale upward, requiring more road frontage, deeper setbacks, and lower lot coverage thresholds to manage vehicle access and separate higher-intensity uses, before giving way to the Rural-Farm zones.

Table 2. Residential Dimensional Standards

Zoning District	Minimum Lot Size, Square Feet Per Unit A				Frontage			Minimum Setback, Feet**				Maximum Heights+	
	Water and Sewer	Water, No Sewer	Sewer, No Water	Neither Water Nor Sewer	Water and Sewer	Water or Sewer	Neither Water Nor Sewer	From Major R.O.W.	From Other R.O.W	Side	Rear	Stories	Feet
SR-1	15,000 C	20,000 C	20,000 C	40,000 C	100	100	200	40	25	10	10	3	35
CR	See Table C below				150	150	150	40	25	25	25	3	35
R-1-A	10,000 B	20,000	10,000	20,000	100	100	100	40	25	10	10	3	35
R-1-B	5,000 B	20,000	5,000	20,000	50	50	50	25	10	5	5	3	35
R-2	4,500 B	N/A	N/A	N/A	45	N/A	N/A	25	15	5	5	3	35
R-3, single-family	10,000	20,000	20,000	40,000	100	120	200	40	25	10	10	3	35
R-3, duplex	7,500 B	30,000	N/A	N/A	120	120	120	40	25	15	15	3	35
R-3, multifamily	15,000 1st 2 units, then 6,000/unit D	N/A	N/A	N/A	150	N/A	N/A	40	40	25	25	3	35

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Table 3. Zoning Dimensional Standards

Zoning District	Minimum Lot Size, Square Feet Per Unit A				Frontage			Minimum Setback, Feet**				Maximum Heights+	
	Water and Sewer	Water, No Sewer	Sewer, No Water	Neither Water Nor Sewer	Water and Sewer	Water or Sewer	Neither Water Nor Sewer	From Major R.O.W.	From Other R.O.W	Side	Rear	Stories	Feet
R-3, all other	10,000	N/A	N/A	N/A	100	120	200	40	25	10	10	3	35
B-1 O	1,000	N/A	N/A	N/A	None	N/A	N/A	10	10	10	10	6	60
B-2 O	10,000 J	20,000	20,000	40,000	150	150	150	30	25	10	10	3	35
I-1 O	None	None	None	N/A	50	50	N/A	40 S	30 S	25 E, S	25 E, S	6	60
I-2 O	None	None	None	N/A	50	50	N/A	40 S	30 S	25 E, S	25 E, S	6	60
I-3 O	None	None	None	N/A	50	50	N/A	40 S	30 S	25 E, S	25 E, S	6	60
W-1	15,000 C	20,000 C	20,000 C	40,000 C	100	100	100	40	25	25	25	3	35
W-2	7,000	N/A	N/A	N/A	50	50	50	0	0	10	10	3	35
R-F, single-family M	20,000	20,000	20,000	40,000	120	120	200	40 H	25 H	25	25	3	35
R-F, duplex M	20,000	20,000	20,000	40,000	120	120	200	40 H	25 H	25	25	3	35
R-F, all other	40,000	40,000	40,000	40,000	200	200	200	40 H	25 H	25	25	3	35
Medical	10,000	10,000	10,000	10,000	100	100	100	40	40	25	25	6	60 K
LR-F	80,000	80,000	80,000 *N	80,000 *N	100	100	100	40	30	25	25	6	60
Institutional	See Note P				See Note P			See Note P				See Note P	
OR Q	4,500 B	N/A	N/A	N/A	75	N/A	N/A	10	10	10	10	3	35

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Table 4. Main Street Revitalization District Dimensional Standards

Zoning District	Minimum Lot Size, Square Feet Per Unit A				Frontage			Minimum Setback, Feet**				Maximum Heights+	
	Water and Sewer	Water, No Sewer	Sewer, No Water	Neither Water Nor Sewer	Water and Sewer	Water or Sewer	Neither Water Nor Sewer	From Major R.O.W.	From Other R.O.W	Side	Rear	Stories	Feet
MSRD-1	None	N/A	N/A	N/A	None	None	None	None	None	None	None	Min. 2 stories or 26 feet; Max. 60 feet	
MSRD-2	2,000 B	N/A	N/A	N/A	50	N/A	N/A	15 R	15 R	None	None	3	35
MSRD-3	None	N/A	N/A	N/A	None	None	None	None	None	None	None	Min. 2 stories or 26 feet	

Please note that the PDF version of Table B also includes district-specific notes and exceptions that guide how structures may be constructed, expanded, or redeveloped. The notes are located under the “Notes for Table B” section.

Zoning Overlay Districts

In addition to the Base Zoning Districts, Biddeford’s Zoning Ordinance includes nine Overlay Districts:

Shoreland Overlay District (Article 14)

The Shoreland Overlay District (Fig. 4), despite its name, is not limited to coastal properties. Instead, it covers all land within 250 feet of water bodies and wetlands, and within 75 feet of protected streams.

Any property within these boundaries falls under the Shoreland Overlay Zone, which outlines specific dimensional requirements and identifies which land uses are allowed or prohibited in shoreland areas. Many activities within this zone require a permit from the Code Enforcement Officer (CEO).

a. Resource Protection (RP).
b. Resource Protection-1 (RP-1).
c. Limited Residential (LR).
d. Limited Commercial (LC).
e. General Development 1 (GD-1).
f. General Development 2 (GD-2).
g. Commercial Fisheries/Maritime Activities (CFMA).
h. Stream Protection (SP).
i. Waterfront Renaissance (WR)

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A. **Resource Protection (RP) District:** This district includes areas in which development would harm water quality, productive habitat, biological ecosystems, or natural and scenic values. Geographically, this district includes the following areas:

1. Areas located within 250 feet (measured horizontally) of the upland edge of freshwater wetlands–or wetlands connected to great ponds and rivers–that the Maine Department of Inland Fisheries & Wildlife (MDIF&W) has identified as “moderate” or “high” value waterfowl and wading bird habitat, including nesting and feeding areas. These habitats are shown on GIS maps maintained by either MDIF&W or the Maine Department of Environmental Protection as of December 31, 2008.

2. Floodplain areas along rivers and along artificially created great ponds associated with rivers, as defined by the one-hundred-year floodplain shown on FEMA Flood Insurance Rate Maps or Flood Hazard Boundary Maps, or by the flood of record. If such mapping is unavailable, these areas are identified using soil types classified as recent floodplain soils. This district also includes one-hundred-year floodplains adjacent to tidal waters, as mapped by FEMA on its Flood Insurance Rate Maps or Flood Hazard Boundary Maps.

3. Areas of two or more contiguous acres with sustained slopes of 20% or greater.

4. Areas of two or more connected acres that contain wetland vegetation and hydric soils, but are not classified as freshwater or coastal wetlands, and that do not have a surface connection to a water body during periods of normal high water.

5. Land along rivers that is vulnerable to significant bank erosion, undercutting, or shifts in the riverbed, as well as land next to tidal waters that experiences severe erosion or large-scale soil movement, such as steep coastal bluffs.

6. The land area located on the west side of Granite Point Road, as depicted on the Official Zoning Map. See additional clarification on Granite Point, Article 14, Section 13.

B. **Resource Protection-1 District (RP-1):** The RP-1 District applies specifically to the Swan Pond Brook corridor. Because this area lies near the intake pipe for the City’s public water supply, Biddeford places high importance on restricting development that could harm water quality, wildlife habitat, or ecological systems within the corridor. The RP-1 District includes all land within 250 feet (measured horizontally) of the normal high-water line of Swan Pond Brook and its tributaries, as mapped on the City’s Official Zoning Map.

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C. **General Development (GD-1) District:** This district includes the following types of existing, intensively developed areas:

1. Areas consisting of two or more adjoining acres that are used for commercial, industrial, or intensive recreational purposes–or a combination of these uses–including, but not limited to, the following:

   a. Areas devoted to manufacturing, fabricating, or other industrial activities;

   b. Areas devoted to wholesaling, warehousing, retail trade, and service activities, or other commercial activities; and

   c. Areas devoted to intensive recreational development and activities, such as, but not limited to, amusement parks, race tracks, and fairgrounds.

2. Areas that can be identified as having established patterns of intensive commercial, industrial, or recreational activity.

3. Some parts of the General Development 1 District may contain residential uses; however, an area cannot be designated as a General Development District if its only use is residential.

D. **General Development 2 (GD-2) District:** The General Development 2 District encompasses the same types of areas identified for the General Development 1 District. However, it is intended for newly designated General Development areas in which existing development is either limited or less intensive than that in the General Development 1 District. Some portions of the General Development 2 District may include residential uses, but an area cannot be classified as a General Development District solely based on residential development.

E. **Stream Protection (SP) District:** The Stream Protection District includes all land within 100 feet (measured horizontally) of the normal high-water line of a stream, as verified in the field. This does not include areas that fall within 250 feet of the normal high-water line of a great pond or river, or within 250 feet of the upland edge of a freshwater or coastal wetland. When a stream and its surrounding shoreland fall within those 250-foot areas, the land is regulated according to the Shoreland District associated with that particular water body or wetland.

   The upstream starting point of a stream is shown on the City of Biddeford's Official Zoning Map, unless the Zoning Board of Appeals determines otherwise under Article XIV, Section 10.

F. **Limited Residential (LR) District:** The Limited Residential District encompasses areas that are appropriate for residential and recreational development. It includes lands that do not fall within the Resource Protection District or Stream Protection Districts, and that are less intensively used than the Limited Commercial District, General Development Districts, or the Commercial Fisheries/Maritime Activities District. The Limited Residential District includes the following:

1. Land located within 250 feet (measured horizontally) of the normal high-water line of any great pond, river, or freshwater wetland, as well as land within 250 feet of the upland edge of coastal or freshwater wetlands shown on the Official Zoning Map and verified in the field, unless noted otherwise. Please refer to Article 14, Section 13 for additional information.

G. Limited Commercial (LC) District: The LC District encompasses areas with a combination of light commercial and residential uses, but excludes those within the Stream Protection District. Development in this zone is meant to be less intensive than in the General Development Districts, maintaining a maximum non-vegetated (impervious) surface limit of 20% per lot. It may also include commercial properties that existed prior to January 1, 1989. Industrial uses are prohibited.

For clarification, the LC District includes the following commercial **areas:**

1. The Shoreland Zone (as field-verified) that overlaps the W3 Zone located within Biddeford Pool Village.

H. **Commercial Fisheries/ Maritime Activities (CFMA) District:** The CFMA District includes areas where the prevailing pattern of development aligns with the permitted uses listed in the Table of Land Uses (Section 14), as well as other locations suitable for functionally water-dependent activities. Suitability is based on factors such as:

1. The depth of navigable water,
2. Shelter from adverse weather,
3. Proximity to established fishing grounds and marine infrastructure,
4. Availability of shorefront space for commercial docks and staging, and
5. Compatibility with surrounding maritime development.

[Insert Figure 5: Maps and Figures of the Overlays]

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Floodplain Management

The City adequately identifies and protects its vulnerable coastal and riverine floodplains through active participation in the National Flood Insurance Program (NFIP). To ensure continued compliance with federal and state safety benchmarks, Biddeford updated its local Floodplain Management Ordinance (Article XII) in 2024 to mirror the newly issued Federal Emergency management Agency (FEMA) Flood Insurance Study and updated Flood Insurance Rate Maps (FIRMs) for York County. This local ordinance is consistently enforced by the Code Enforcement Officer, acting as the local Floodplain Administrator, who oversees a mandatory Flood Hazard Development Permit system. By strictly maintaining these updated performance standards, such as enforcing freeboard requirements that elevate the lowest floors of new residential structures in AE zones at least one foot above base flood elevation, Biddeford effectively reduces local flood vulnerability while maintaining state and federal regulatory consistency.

Site Plan & Subdivision Regulations

The City of Biddeford governs local land development through a coordinated framework established under Article XI (Site Plan Review) of the Land Development Regulations and Chapter 66 (Subdivisions) of the Code of Ordinances. These ordinances scale review requirements based on project intensity, utilizing a multi-stage Planning Board process to guide major subdivisions and commercial development toward areas with compatible infrastructure. The city's performance standards actively enforce smart growth principles by requiring pedestrian-oriented circulation, architectural scale compatibility in historic and downtown zones, and strict buildable lot constrains that deduct unbuildable land, such as wetlands, steep slopes, and the 100-year floodplain, from gross density calculations.

These regulations embed rigorous environmental performance standards directly into the local approval process to protect critical natural resources from the cumulative impacts of development. Biddeford addresses non-point source pollution and watershed protection by mandating that post-development stormwater runoff rates do not exceed pre-development levels, utilizing low-impact development (LID) strategies. Furthermore, the land use rules reinforce the distinction between growth and rural sectors by tying final project signoffs to verified public utility capacities or certified state subsurface wastewater compliance. Together, these regulatory tools ensure that current development patterns conform to the land use districts, density targets, and resource protections established throughout this plan.

Permitting and Approvals Processes

Biddeford's local development review system involves clear, multi-tiered permitting and approvals process designed to enforce the spatial and environmental goals of the Comprehensive Plan. Major developments, subdivisions, conditional uses, and projects within the Shoreland Zoning or Historic Districts are subject to a structured, three-tiered Planning Board evaluation, advancing from a preliminary sketch plan review through detailed technical analysis and final plan approval. To streamline smaller-scale

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commercial infill and modifications that align with smart growth goals, the City utilizes a Staff Review Committee (SRC). This delegated administrative body provides a faster, coordinated technical review for minor site plans while ensuring strict adherence to municipal performance standards and avoiding unnecessary planning board backlogs.

Once land-use of subdivision approvals is granted, the implementation mechanism shifts to the Code Enforcement Office and Engineering Department to manage construction compliance. No structural development can occur without a building permit, which requires detailed architectural, mechanical, and site plans conforming to the International Building Code (IBC) and local zoning constraints. For projects impacting public infrastructure, the city mandates a pre-construction coordination process backed by dedicated inspection fees to fund third-party peer reviews and erosion control monitoring. The final regulatory step is the Certificate of Occupancy, which is strictly withheld until the Engineering Department verifies public sewer impact fee payments and physical connection compliance, and the Code Enforcement Officer certifies complete adherence to all Planning Board conditions and state internal plumbing and electrical rules.

Board of Appeals

Biddeford's Zoning Board of Appeals (ZBA) serves as the quasi-judicial safety valve of the land use framework, ensuring that the application of local regulations respects constitutional property rights while maintaining the integrity of the Comprehensive Plan. Appointed by the Mayor, this five-member citizen board holds the authority to hear administrative appeals challenging decisions or interpretations made by the Code Enforcement Officer or the Planning Board, alongside evaluating requests for dimensional variances. To safeguard local growth boundaries and prevent ad-hoc zoning erosions, the ZBA is strictly prohibited from granting use variances and must enforce the state's rigorous five-part undue hardship criteria, requiring proof that the property cannot yield a reasonable return due to unique physical constraints rather than personal or economic circumstances.

Operating under strict statutory timelines, aggrieved parties must file an appeal within 30 days of a contested decision, triggering a formal public hearing process that requires broad abutter notification within 200 feet. The board's review relies strictly on the formal record established through oral testimony and predefined documentary evidence, requiring a majority vote to reverse and administrative action or approve a relaxation of dimensional rules. Final approvals are tightly bound to execution deadlines, requiring the recipient to secure a building permit within one month of a variance being granted, while any further recourse for contested ZBA decisions must be brought directly to the Maine Superior Court.

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Planning Board

The Planning Board holds reviewing and acting authority over subdivisions, projects subject to Site Plan Review, and specialized environmental and land use requests, including certain Shoreland Permits and Conditional Use Permits. Additionally, the Board plays a critical role by periodically preparing and revising the City's Comprehensive Plan. Under Biddeford's regulatory framework, the Planning Board is responsible for reviewing applications for major residential, commercial, and institutional principal uses. These specifically include single-family-attached developments, two-family and multi-family residential complexes, elderly and senior housing facilities, mobile home parks, and large-scale commercial or industrial establishments that exceed local administrative review thresholds.

City Capacity

At the inception of the Biddeford Comprehensive Planning process, the City had one planner on staff in the Planning Department, who was responsible for managing the City's planning processes, zoning issues, proposed development, land-use policies, and staffing the Planning Board. A second planner was hired in late January 2022 and, naturally, spearheaded the Comp Plan.

During the planning process, specific administrative capacity comments were made by community members, including that the Planning and Code Enforcement Departments could use more staff to help the public understand the complexities of the Zoning Ordinance, other land use regulations, permitting, and development review processes, and other building, infrastructure, and land development requirements. The Code Enforcement Department has indicated a desire for additional staff to maintain the quality and timeliness of its land-use regulation and other municipal services.

In addition, the current capacity and permitting application processes in City Hall does not support data collection and analysis needed to understand the trends in land use development in Biddeford. There is no digital compilation of issued permits, including permit type and details, that would enable Biddeford to easily see development trends and use data to shape policies.

However, the City just recently switched to CivicPlus Community Development, an online permitting system that will streamline permitting processes, increase productivity, and enable self-service for efficient growth. The software includes a built-in tool for quantifying data, enabling an understanding of land-use development trends and ultimately, answering the question, "What percentage of development has occurred in Growth Areas versus Rural Areas of Biddeford?"

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Recent Development Patterns

The City has experienced substantial growth concentrated primarily in two distinct hubs: the historical Downtown/Pepperell Mill complex and western Biddeford along the Alfred Street corridor.

In the Downtown area, revitalization was catalyzed by the City's 2012 purchase and closure of the Maine Energy Recovery Company (MERC) waste-to-energy incinerator. This pivotal move spurred extensive mixed-use and residential redevelopment across over a million square feet of former textile mill buildings. Completed and approved downtown projects, including the Riverdam, Lincoln Mill, and the Fathom development, have introduced hundreds of market-rate and low-to-moderate-income housing units, alongside a new 644-space municipal parking garage, boutique hotel space, and the Pearl Point Park with a pedestrian bridge connecting residents to the Saco Transportation Center.

Table 5. Recent Developments in Downtown/Pepperell Mill

Project	Type	Housing Units
Fathom	Mixed-use	191
Westbrook Development Corporation	Senior Housing	90
Lincoln Mill	Mixed-use	140
Lincoln Mill	Hotel	35
Pepperell Building 11	Residential	76
Pepperell Building 19 & 20	Residential	64
Saco-Lowell	Residential	96
The Levee	Residential	83
Adam's Point	Residential	39
2 York	Residential	11
69 Elm Street	Residential	14
Riverdam	Residential	70

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Concurrently, western Biddeford has emerged as a major residential and commercial service area, with intense development localized between Andrews Road and Barra Road. This corridor has absorbed significant housing expansion through large-scale projects like The Eddy and Devine Capital, as well as essential affordable housing initiatives spearheaded by Avesta and Westbrook Development Corporation slated through 2027. Supplemented by robust commercial footprints such as the Biddeford Crossing Shopping Center and major big-box retailers, western Biddeford complements the downtown's urban density. Moving forward, the City anticipates continued, self-sustaining investment and redevelopment in both sectors, driven largely by the influx of new residents.

Table 6. Recent Developments in Western Biddeford

Project	Type	Housing Units
The Eddy	Residential	250
Devine Capital	Residential	216
Avesta Housing	Low/Moderate Income	46
Westbrook Developments Phase 1	Low/Moderate Income	40
Westbrook Developments Phase 2	Senior Housing	37

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Vision Alignment

Recent development in Biddeford is occurring primarily within large-scale, planned mixed-use developments and major master-planned residential complexes, rather than on an incremental, lot-by-lot basis. This is evidenced in the downtown core by the sweeping, multi-phased adaptive reuse of the million-square-foot Pepperell Mill Complex and the coordinated master plan of the former MERC site. Similarly, the growth in Western Biddeford consists of high-density, multi-family master planned developments like The Eddy (250 units) and Devine Capital (216 units), alongside coordinated phased affordable housing complexes by Avesta and Westbrook Development Corporation. By utilizing unified planned developments, the City has been able to secure critical public infrastructure, such as the 644-space municipal parking garage and the Saco River pedestrian bridge.

The recent development pattern is consistent with the community's vision, which prioritizes smart growth, transit-oriented development, and the prevention of low-density rural sprawl. By directing a vast majority of new residential units into the designated downtown urban growth area and the existing Alfread Street commercial service corridor, the city is actively fulfilling its Future Land Use Plan goals to build complete neighborhoods. This concentrated, high-density infill allows the city to efficiently utilize existing public water, sewer, and transit infrastructure. Furthermore, the deliberate integration of low-to-moderate-income family and senior housing within these planned developments directly matches Biddeford's stated commitment to addressing the housing crisis with diverse, equitable, and walkable housing choices.

Projected Development Needs

To accommodate anticipated residential and commercial growth over the next decade, Biddeford relies primarily on the redevelopment of underutilized urban parcels and master-planned infill rather than the consumption of raw, undeveloped acreage. The City anticipates continued growth pressures over the next 10 years to be concentrated within two designated areas, both of which possess more than enough land and structural capacity to absorb new development.

Downtown Core

The majority of downtown is already densely developed so much of the growth will continue to be redevelopment within and around the million-square-foot Pepperell Mill. However, within the downtown is also approximately 25-acre contiguous area which is predominantly vacant. Most of this property was formerly owned by the Diamond Match Company, which tragically burned to the ground in 1964 and has remained undeveloped. Located to the north of Elm Street, south of the Saco River and east of Main Street, this site is uniquely positioned to accommodate between 250 to 500 housing units within a mixed-use development featuring a pedestrian promenade along the Saco River and public open space.

Western Biddeford

The City also anticipates continued development activity within western Biddeford, utilizing currently vacant commercial lands and/or redeveloping commercial and industrial properties adjacent to the Alfred Street corridor to fulfill local housing and service demands.

Future Growth Management Framework

While the City's current regulatory framework relies on baseline zoning districts established to manage growth, achieving the forward-thinking goals of the 2023 Vision requires a modernized suite of tools. A comprehensive analysis of the specific regulatory and non-regulatory measures necessary to guide this growth is included in the Future Land Use Chapter. Aligning these tools directly with the Future Land Use Map ensures that Biddeford's implementation strategies are tied to the City's long-term vision for managing growth.

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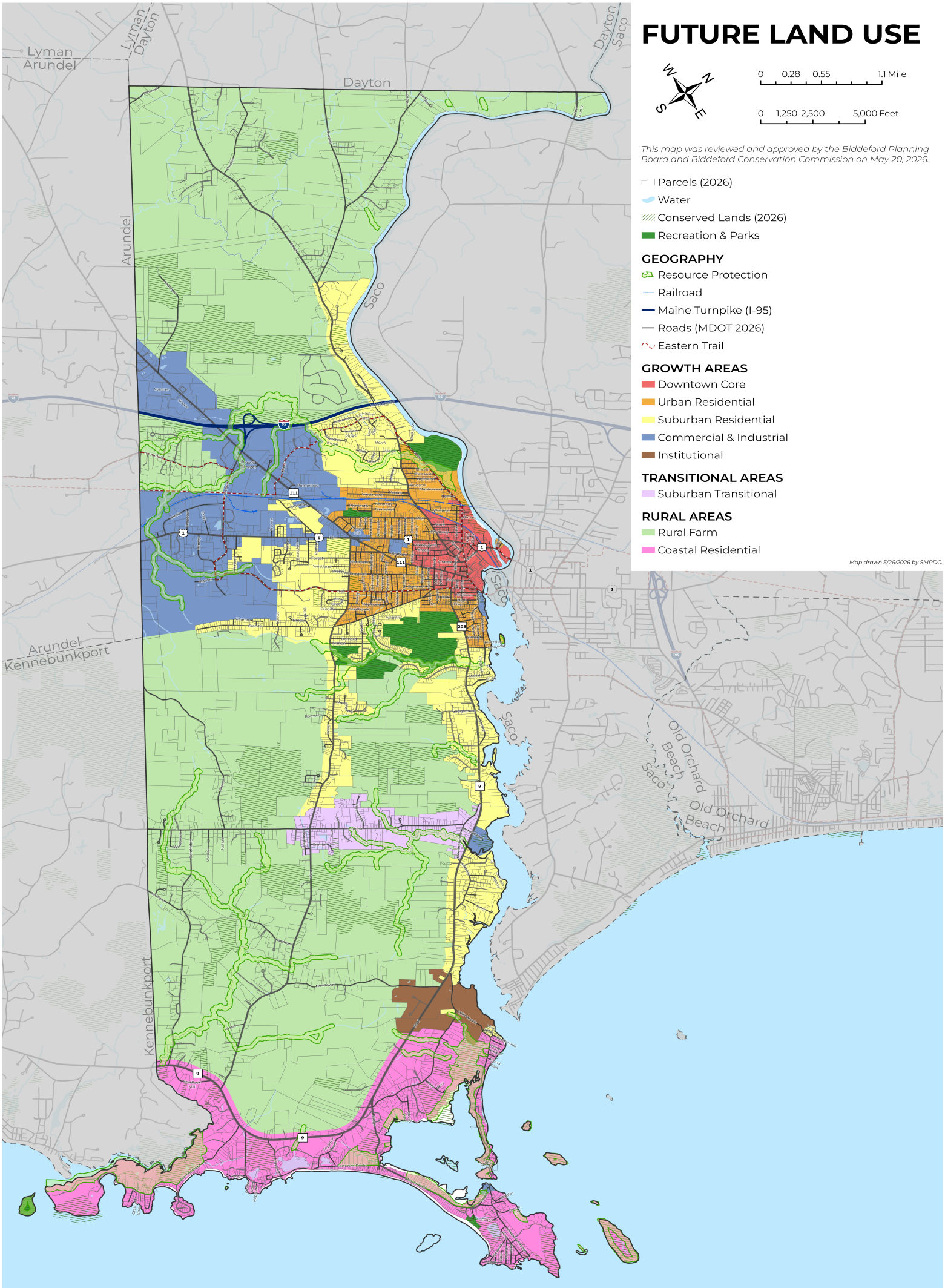


FUTURE LAND USE

0 0.28 0.55 1.1 Mile

0 1,250 2,500 5,000 Feet

This map was reviewed and approved by the Biddeford Planning Board and Biddeford Conservation Commission on May 20, 2026.

- Parcels (2026)
- Water
- Conserved Lands (2026)
- Recreation & Parks

GEOGRAPHY

- Resource Protection
- Railroad
- Maine Turnpike (I-95)
- Roads (MDOT 2026)
- Eastern Trail

GROWTH AREAS

- Downtown Core
- Urban Residential
- Suburban Residential
- Commercial & Industrial
- Institutional

TRANSITIONAL AREAS

- Suburban Transitional

RURAL AREAS

- Rural Farm
- Coastal Residential

Map drawn 5/26/2026 by SMPDC.

Patrick Johnson MaineDOT, Kevin Riley MaineDOT, Jeff Pitcher MaineDOT, Jon Prendergast MaineDOT, George Jackman MaineDOT, Nate Moulton MaineDOT, Bob Bistrias Maine Office of GIS, Jeff Beecher, MaineIT GIS, Maine GeoLibrary, MaineDOT, USGS, USDC, Census Bureau

Add Section 6. titled “Transitional Areas”

6. Transitional Areas

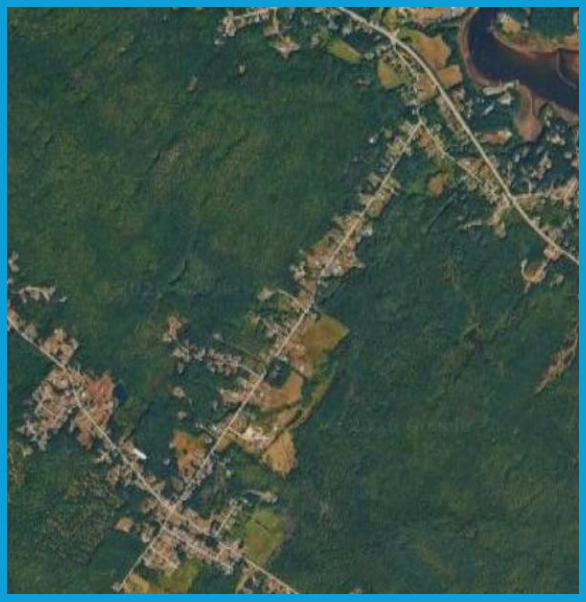
The area surrounding Guinea Road from the intersection of West Street (Guinea Corner) to the intersection of Meeting House Road (Tattle Corner) has been identified as a transitional area. This area was once designated as a growth area, but analyses in this Comprehensive Plan have identified significant natural resource assets in the undeveloped blocks to the northwest, bounded by this road and West Street. While the Guinea Road area has seen development in the last 10 years, it is primarily residential and single-family housing. Moors Brook and its tributaries also run along the Guinea Road corridor. This area bridges sections of the community identified as Growth Areas and Rural Areas. This means that development and future zoning along this corridor should be carefully considered to support West Street and Route 9 development while remaining undeveloped enough to connect areas of significant wildlife habitat.

GUINEA ROAD

Corridor bridging Suburban Residential and Rural Farm areas.

GOALS:

Consider future zoning to align with natural resource goals for the undeveloped areas to the northwest and growth areas at the intersections.



9 Historic, Cultural & Archaeological Resources

1. Biddeford's Story

Biddeford has a long and storied history dating back many centuries. Before Europeans first arrived in the early 17th century, native peoples lived along the Saco River, taking advantage of its abundant fishing and easy transportation.

European explorers arrived in what is now Biddeford in 1603, one of the earliest European settlements in North America followed soon after in 1611. The Biddeford pool area was permanently settled in 1626, followed soon after by additional settlements further up the Saco River. For the next 100 years, Biddeford grew slowly as an important stop on the "Kings Highway" linking Falmouth (Portland) and Boston. By the time of the American Revolution, Biddeford was a thriving small community of about 1,000 people with an economy based largely on farming and forestry.

Beginning in the mid-19th century, textile mills became the dominant force in the city's economy and began to dramatically reshape the community. Thanks to the city's advantageous position near major markets, railroads and abundant hydropower, Biddeford grew to become one of the largest textile manufacturing cities in the country by the end of the 19th century. The textile industry employed thousands of people and was an economic engine for the city and the region. Migrants from Canada and Europe flocked to Biddeford to find work in the mills and start a new life in the United States.

The growth of the mills also led to the growth of Biddeford's downtown, as a number of businesses and shops emerged to cater to the large workforce in the mills.

However, after World War II, the textile industry in New England began to decline as manufacturing moved to other states or overseas. Biddeford's once thriving mills began closing in the 1950's and the city's traditional urban core began to struggle as development and investment moved into the suburbs. In the 1980's, the community began to see a resurgence as new investment lead to redevelopment of the former textile mills.

2. Historic and Cultural Resources Today

17
Buildings & Structures
On the NRHP

1758
First Parish Meeting House
Oldest surviving building in Biddeford

Books and Media Items
Available at MacArthur Library

62
Historic Structures
In the Downtown Historic District

3. Biddeford's Historic and Archaeological Preservation

Historic Preservation

The Biddeford Historic Preservation Commission protects the historic and architectural heritage of our city and its historically significant areas, landmarks, and sites, while accepting compatible new construction as needed for the city to grow. Biddeford is home to dozens of historically significant buildings and structures, especially in the downtown. It is the duty of the HPC to protect and defend these structures, and to preserve the essential character of historic neighborhoods in such a way that enhances and improves the value of properties. Historic preservation can play a role in the economic development of Biddeford by making it a more desirable place to live and work, and by encouraging place-making and place-keeping that can help draw in new visitors to our city.

The Code of Ordinances of the City of Biddeford grants the Historic Preservation Commission the authority to review all construction projects in the three Main Street Revitalization District (MSRD) land use zones to ensure compliance with preservation practices. The HPC adheres to U.S. Department of the Interior's Standards of Rehabilitation while also taking into consideration the City's Code of Ordinances.

The HPC considers projects taking place within the MSRD-1, MSRD-2, and MSRD-3 Land Use Zones.

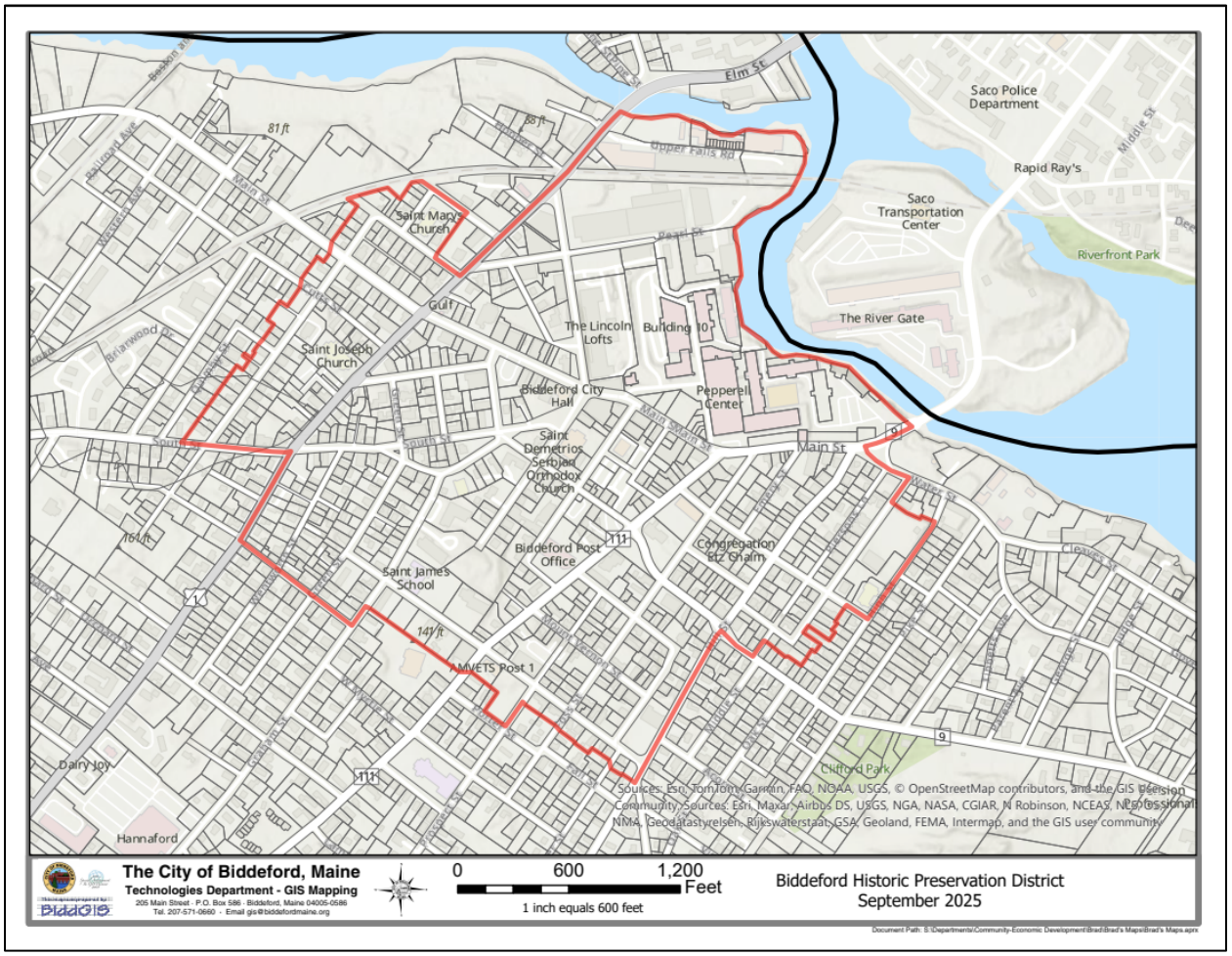


Table 9-1: Biddeford Historic Sites on the National Register of Historic Places, 2020			
Name	**Address**	**Approx. Year Built**	**Year Added to the National Register**
First Parish Meeting House	Old Pool Road	1758	**1972**
Biddeford City Hall, Including City Theater	205 Main Street	1895	**1973**
U.S. Post Office	35 Washington Street	1914	**1973**
Fletcher's Neck Lifesaving Station	Ocean Avenue	1874	**1974**
John Tarr House	29 Ferry Lane	c. 1730	**1980**
Dudley Block	28-34 Water Street	1848	**1982**
St. Joseph's School	Birch Street	1887	**1984**
Wood Island Light Station	Wood Island	1808	**1988**
Biddeford-Saco Mills Historic District	See Map	Various	**2008**
Biddeford Main Street Historic District	See Map	Various	**2009**
Emery School	116 Hill Street	1912	**2011**
St. Andre's Parish	41 Sullivan Street	1900	**2015**
Timber Point	1-2 Timber Point Road	1931-1954	**2016**

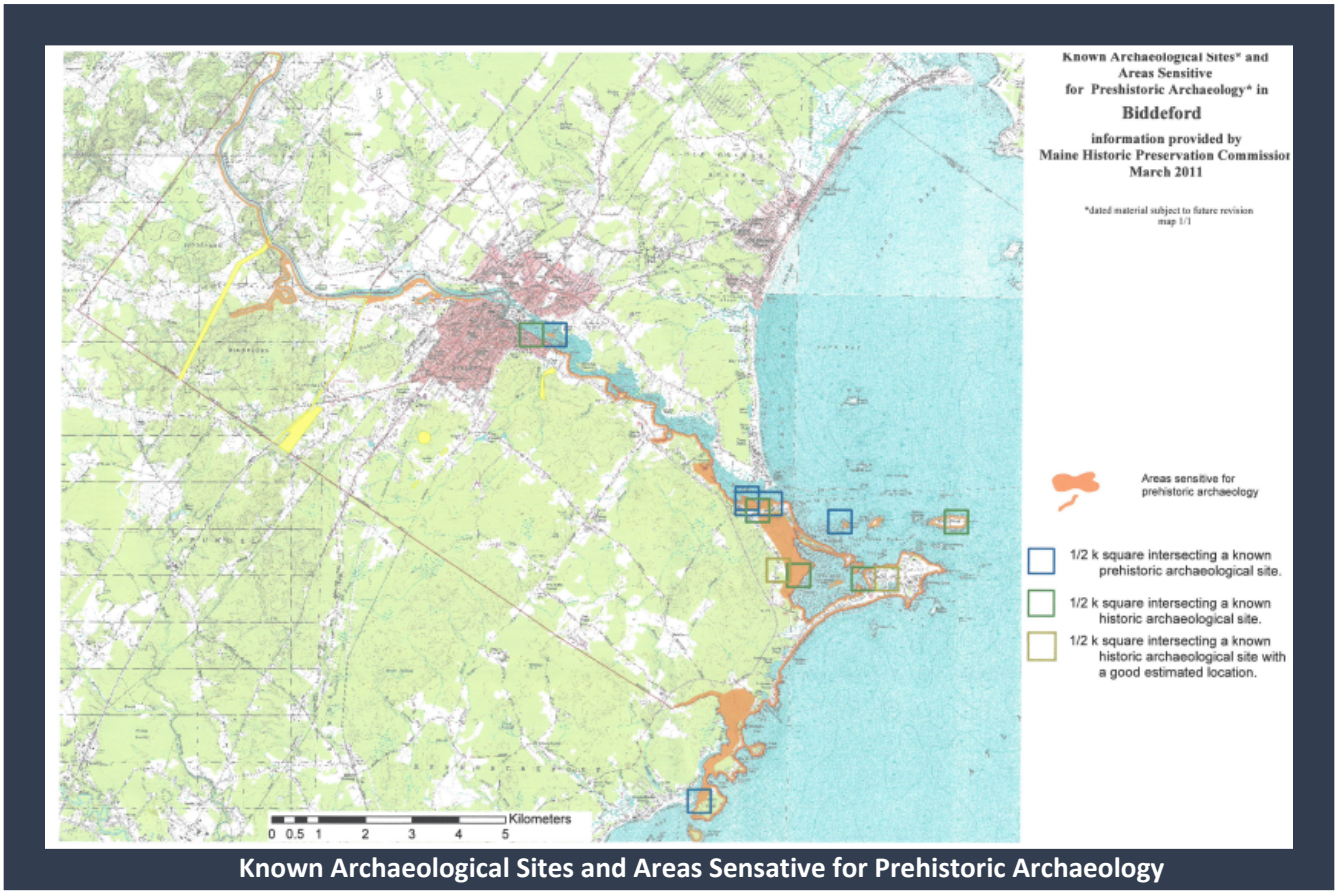
Source: *National Register of Historic Places.*

Archaeological Resources

Biddeford has a number of archaeological sites spanning centuries of human habitation. A large number of these sites can be found in the Biddeford Pool area, where both indigenous peoples and European settlers fished, farmed and lived for many hundreds of years. The coastal area of Biddeford is also home to a number of shipwreck sites.

There are nine prehistoric archaeological sites known in Biddeford. Eight of these may be significant or are known to be significant. Several of the sites known to be significant are located on the campus of the University of New England (UNE). These sites are

villages or farmsteads that were still present and inhabited when the area was visited by Samuel de Champlain in 1604.



Known Archaeological Sites and Areas Sensative for Prehistoric Archaeology

The Maine Archaeological Society, Inc. published an article of interest in Spring of 2006 that reviews the “Chouacoet Site” which is located on the site of the present UNE campus According to the article’s author, Richard J. Lore, Samuel de Champlain visited the Chouacoet Site near the mouth of the Saco River and found an Armouchiquois Indian village.

During construction of several buildings on the University of New England Campus, a number of archaeological sites were monitored and some artifacts were recovered. In future surveys related to development projects, it was noted in the University of New England Campus Master Plan that the majority of the rest of the site of proposed development on the campus had been “extensively disturbed” and no further significant archaeological resources have been discovered.

Table 9-2. Biddeford Archaeological Sites			
Site Name	**Site #**	**Site type**	**Periods of Significance**
Winter Harbour	ME 041-001	Settlement	1616-1617, 1630-1675, 1708-1775
Saco Fort	ME 041-002	Military, Fort	1676-1725 (1693-1708)
Fleetwing	ME 041-003	Wreck, Schooner	March 2, 1891
Anahuac	ME 041-004	Wreck, Screw	April 15, 1923.
George and Albert	ME 041-005	Wreck, Schooner	November 17, 1887
Marshall Perrin	ME 041-006	Wreck, Schooner	November 16, 1907
Fred Tyler	ME 041-007	Wreck, Schooner	October 27, 1920
Roger Drury	ME 041-008	Wreck, Schooner	January 12, 1918
Biddeford Pool Dugout Canoe	ME 041-009	Wreck, Canoe	c. 1630 to 1900
Biddeford Pool Wharf	ME 041-010	Wharf	c. 1750- c. 1800
Thomas Williams	ME 041-011	Domestic	c.1636 - c.1689
Richard Hitchcock	ME 041-012	Domestic	c.1636 - 1676 or 1689
Edward's Farm #1	ME 041-013	Domestic	c. 1636- c. 1689
Hitchcock's Point #1	ME 041-014	Structure, Unidentified	c. l770
Hitchcock's Point #2	ME 041-015	Structure, Unidentified	c. l850
Stackpole - Jordan	ME 041-016	Domestic	c. 1717 - present
'Hiawatha'	ME 041-017	Wreck, Schooner	November 1860
'William and Harris'	ME 041-018	Wreck, Schooner	November 1840
'Game Cock'	ME 041-019	Wreck, Schooner	1867
'Rara Avis'	ME 041-020	Wreck, Gas screw	1893-1918
'Washington'	ME 041-021	Wreck, Schooner	1856
'Nellie Grant'	ME 041-022	Wreck, Schooner	1869
'C.N. Gilmore'	ME 041-023	Wreck, Schooner	1876-1925
'Valetta'	ME 041-024	Wreck, Schooner	Wrecked on Wood Island on October 28, 1909.
'Queen of the West'	ME 041-025	Wreck, Schooner	1898
Wood Island Lighthouse	ME 041-026	Lighthouse	Original light house station built in 1808
'Livelihood'	ME 041-027	Wreck, Schooner	November 28, 1925
'Augusta'	ME 041-028	Wreck, Schooner	Information Not Provided
'Jessie Lena'	ME 041-029	Wreck, Schooner	March 13, 1912

4. Cultural Resources

McArthur Library

Founded in 1863, McArthur Library is one of the oldest publicly funded libraries in New England.

The mission of McArthur Library is to connect the Biddeford community with materials, programs, services, and informational and cultural resources needed to lead fuller, better, and richer lives. McArthur Library is also home to the Biddeford Historical Society and the Franco-American Genealogical Society collections

Today, the library offers over **59,000** books and over 7,000 e-books, audiobooks and magazines. The library also has an extensive collection of audio-visual media.

Library services are available for free to residents of Biddeford and students at the University of New England.

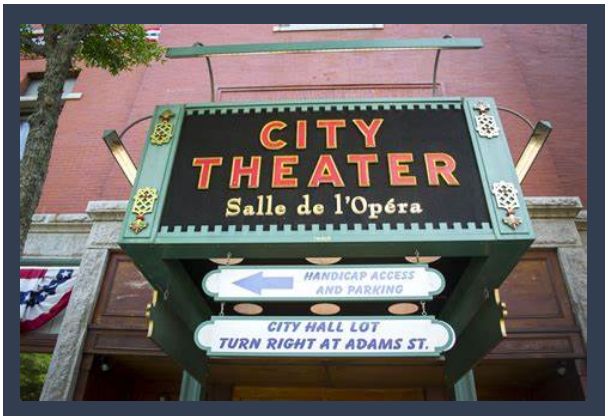
In 2019, McArthur Library welcomed 115,000 visitors and circulated more than 120,000 items.

McArthur Library hosts hundreds of programs and community events each year which are attended by over 10,000 people.

City Theater

Biddeford City Theater is located adjacent to Biddeford City Hall on Main Street. It is managed by City Theater Associates, Inc., which is a non-profit organization, housed within the Theater. Its mission is "to foster an appreciation for the performing arts by using creative avenues to increase community involvement."

The City Theater has been in continuous operation for 125 years. Today, it hosts concerts, films, plays and performing artists throughout the year. City Theater serves as a venue for Heart of Biddeford events and seasonal downtown festivals such as Winterfest.



Biddeford Mills Museum

The Biddeford Mills Museum (BMM) was established in 2011. It is overseen by a dynamic board of directors who established a permanent space in Pepperell Center where they can display and care for their collections and offer interactive exhibits, classes and walking tours that tell the history of the mills and the pivotal role they played in shaping Biddeford.

Art of Biddeford

Art of Biddeford is a growing initiative that builds upon the previous art related work of Engine, bringing the community together through the power of creativity. Rooted in Biddeford's rich cultural heritage, this program supports local artists, strengthens arts-based entreprenureship, and makes space for everyone to engage in the arts. From monthly Art Walks and performances at Frindge Fest and River Jam, to gallery exhibitions, a youth scholarship program, and artist vending opportunities. Art of Biddeford is building a more connected , imagininative, and inclusive city. With support from the City of Biddeford, grantors, local arts organizations, and everyday residents.

Biddeford Historical Society

The Biddeford Historical Society (BHS) works to preserve, promote and interpret Biddeford's long and rich history.

BHS works to preserve historic sites and artifacts and maintains an extensive archive of historic materials. BHS also hosts classes, workshops and walking tours of Biddeford's historic sites.

Biddeford Museum in the Streets

The Museum in the Streets is a walking tour of Downtown Biddeford and follows a series of signs highlighting important historical features in the heart of Biddeford. It was developed by the Biddeford Historical Society.

Heart of Biddeford

Heart of Biddeford (HoB) is a volunteer-driven organization that works in partnership with the City of Biddeford, the business community, property owners, and residents to foster economic development and improve quality of life in downtown Biddeford by supporting existing businesses, attracting new businesses, promoting the downtown through events, and working to beautify the urban core.

5. Challenges and Opportunities

Historic Preservation and Economic Development

A 2011 economic impact report for Maine Preservation titled ***The Economic and Fiscal Impact on Maine of Historic Preservation and The State Historic Preservation Tax Credit Planning Decisions*** examined the impact [illegible] between 2007 and 2011. The report notes that [illegible] which had a significant negative impact on the [illegible] example, unemployment in the construction se[illegible] starts fell by 50%, and commercial constructio[illegible]

The Main Street Historic District consists of over 50 structures built between 1846 and 1952.

These building form a cohesive

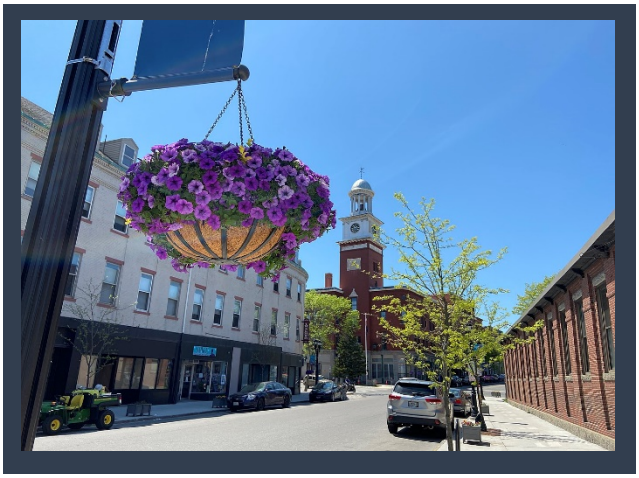
During the same period, however, the report n[illegible] rehabilitation activity increased from $7 million in 2007 to $40 million in 2011. In 2011 alone, tax credit sponsored Historic Rehabilitation projects were anticipated to support nearly 800 Maine jobs and produce $30 million of income.

In addition, according to this same report, 25 Historic Tax Credit rehabilitation projects were anticipated to have been completed between 2007 and the end of 2011, with an anticipated increase in Maine's property tax base by $135 million. Further, these projects, although resulting in an estimated $3.5 million loss to the State through the tax credit, would add $2.6 million in additional State income and sales tax revenues and an additional $1.9 million in municipal property tax revenues.

- **Maine workers benefit more from historic preservation than new construction. A higher proportion of every dollar spent on historic rehabilitation goes to Maine craftspeople than individuals out of State in comparison to every dollar spent on construction.**
- **The Maine tax credit is typically coupled with the 20% Federal Historic tax credit, which can attract out-of-state investors, thereby bringing money into Maine and promoting economic development.**

Biddeford Main Street Historic District

The Biddeford-Saco Mills Historic District was added to the National Register of Historic Places in December 2008. It is roughly bounded by Pearl Street, Lincoln Street, York Street, Laconia Street, Main Street (Biddeford), and Main Street and Gooch Street in Saco. The buildings are generally characterized as being in good condition and that they retain adequate integrity so as to represent their significance as components of a mid-nineteenth to mid-twentieth century downtown. The downtown historic district also includes three parks.



The Main Street Historic District consists of over 50 structures built between 1846 and 1952.

These building form a cohesive group that conveys the significance of the district as a social and commercial center of Biddeford.

Biddeford / Saco Mills Historic District

The Biddeford-Saco Mills Historic District was added to the National Register of Historic Places in December 2008. It is roughly bounded Pearl Street, Lincoln Street, York Street, Laconia Street, Main Street (Biddeford), and Main Street and Gooch Street in Saco. It is characterized by its significance in the industrial history of Biddeford and its architecture which is a mix of Mid-19th Century/Greek Revival, Late Victorian/Italianate, and Modern Movement/Tanate styles.

According to the National Register of Historic Places:

> ***"The Biddeford/Saco Mills Historic District is a cohesive collection of historic manufacturing buildings situated on roughly 38 acres of land flanking the Saco River. The district includes 13 properties in the city of Biddeford and the entirety of, or portions of six properties within the Saco city limits and is located adjacent to the downtown commercial areas of both cities. The river, which separates the two municipalities, runs through the district roughly north to south, with Biddeford on the west bank and Saco to the east…."***

Biddeford-Saco Mills Historic District

Historic Architectural Survey

In Fall of 2022, The Biddeford Historic Preservation Commission embarked on a project to document historic buildings in the downtown and surrounding areas of the city. This project is called an Architectural Survey, and was conducted by Kleinfelder, Northeast, Inc., a consultant the City hired through a competitive RFP process. Biddeford is fortunate to have a rich assortment of historic buildings, and this survey recorded the wide range of buildings its history reflects, dating from the 1700s through the early 1970s.

The Biddeford Architectural Survey is supported in part by a grant administered by the National Park Service, Department of the Interior and the Maine Historic Preservation Commission.

Historic, Cultural & Archaeological Resources

What Comes Next?

EDUCATE citizens and property owners about the value of historical, archaeological, and cultural preservation.

PROTECT Biddeford's historic, cultural and archaeological resources to the greatest extent possible

REDUCE The impact of climate change and sea level rise on Biddeford's historic, cultural and archaeological resources.

SUPPORT arts and culture facilities, events and the "creative economy" throughout Biddeford.

Goal 1

EDUCATE
Citizens and property owners about the value of historical, archaeological, and cultural preservation.

How We Get There:

- Promote and support Downtown Biddeford, including the Mill District, as the historic and cultural core of the City.
- Continue to support the efforts of the Biddeford Historical Society, the Biddeford Historic Preservation Commission, and other entities such as the Biddeford Mills Museum, in promoting Biddeford's history and historic resources
- Support the implementation of the Biddeford Cultural Plan, completed in November 2021.

Goal 2

PROTECT
Biddeford's historic, cultural and archaeological resources to the greatest extent possible.

How We Get There:

- Maintain Biddeford's accreditation as a Certified Local Government (CLG) community.
- Building on Biddeford's new CLG status, begin a comprehensive community survey of historic buildings and structures in Biddeford. Identify priority areas most at risk to loss. Secure potential match funds available as a CLG community through the State Historic Preservation Office (SHPO).
- Identify historic resources that are at risk of loss or damage due to climate change impacts.
- Amend the land development regulations to require that projects subject to Planning Board (or its designee) review incorporate maps, information, and comments available from the Maine State Historic Preservation Office (SHPO).
- Ensure the Land Development Regulations, including the subdivision review regulations, require known historic resources be identified and that developers take appropriate measures to protect those resources, including but not limited to modification of the proposed site design, construction timing, and/or extent of excavation.
- Incentivize methods to increase adaptation of historic resources to climate change that is consistent with National Park Service Standards and protects the long-term stability of these structures.
- Continue to support efforts of the Biddeford Cultural Coalition, which advocates a strong role of arts and heritage in the city's social and economic fabric.
- Continue to support McArthur Library and its contribution to the arts and culture realm in Biddeford.
- Support the mapping of private cemeteries throughout Biddeford to better protect them from land use change and development.

Goal 3

REDUCE
The impact of climate change and sea level rise on Biddeford's historic, cultural and archaeological resources.

How We Get There:

- Conduct an assessment of existing historic, cultural, and archaeological resources that may be vulnerable to sea level rise and other climate change related weather events.

Goal 4

SUPPORT
Biddeford's historic, cultural and archaeological resources to the greatest extent possible.

How We Get There:

- Continue to support and fund efforts that enhance the promotion and marketing of Downtown through festivals and events such as the Biddeford-Saco Art Walk and River Jam festival.
- Support the adoption and implementation of a Biddeford Public Art Policy which will establish a Biddeford Public Art Program and the development of a Public Art Master Plan.
- Work with community partners, including Heart of Biddeford, UNE, Art of Biddeford, Downtown Development Commission, and Southern Maine Planning and Development Commission to seek out financial and technical assistance opportunities to support the creative economy in Biddeford.
- Formally recognize the history and culture of Indigenous People who inhabited the area that is now Biddeford with the support of the Cultural Community.

13A. Marine Resources

Shellfishing, Water Quality, and Waterfront Uses

Shellfish Harvesting

In accordance with M.R.S.A Title 12 §6671, the City of Biddeford co-manages its intertidal shellfish resources with the Maine Department of Marine Resources (DMR) through a localized Conservation Ordinance. This program gives the municipality the authority to regulate harvesting pressure, establish seasonal limits, and issue local permits. All municipal shellfish licenses are managed and distributed annually through the Biddeford City Clerk's Office, with a licensing term running from May 1st to April 30.

Soft-shell clams (Mya arenaria) represent the primary commercially and recreationally targeted shellfish species within Biddeford's flats. To protect these wild populations from overharvesting and ensure sustainable yields, the city's Shellfish Conservation Committee dynamically manages a system of licensing caps based on ongoing resource assessments.

Prior to the 2010/2011 season, the City capped commercial harvesters at eight (8) total permits. To accommodate local industry demand while balancing sustainable harvest levels, the city expanded this limit to ten (10) commercial licenses (allocated as nine (9) resident commercial licenses and one (1) non-resident commercial license). To support demographic longevity within the local fishery, two (2) of the resident commercial slots are reserved for harvesters aged 62 and older. In compliance with state continuity guidelines, current commercial cardholders maintain a first right of refusal for renewal in subsequent seasons.

To preserve community access to the shore, the City offers an unlimited number of recreational shellfish licenses to residents of Biddeford. However, to mitigate total daily harvesting pressure on vulnerable flats, non-resident recreational permits have been strictly capped at sixty (60) per season since 2010. In strict alignment with Maine DMR state conservation guidelines, recreational harvesters are legally limited to a personal possession limit of one peck (approximately 2 gallons) per day.

As seen in Table 14-1, between 2006 and 2018, interest in local recreational shellfishing grew substantially, with resident licenses increasing from a low of 81 in the 2008/2009 season to a peak of 163 in 2016/2017. This expanded recreational presence interacts directly with the commercial sector by increasing overall harvesting pressure and physical foot traffic on the flats.

Recreation Resident Shellfish Licenses, 2006/2017 Season through 2017/2018 Season (At End of Season)

Season	# of Recreational Resident Shellfish Licenses
2006/2007	89
2007/2008	84
2008/2009	81
2009/2010	86
2010/2011	110
2011/2012	135
2012/2013	161
2013/2014	141
2014/2015	122
2015/2016	126
2016/2017	163
2017/2018	156

Marine Resource Licenses and Vessels

Marine resource harvesting remains a component of Biddeford's working waterfront, though activity occurs at a relatively small scale. In 2025, a total of 132 marine resource licenses were held by Biddeford residents, reflecting a mix of commercial, recreational, and specialty harvesting activities. These licenses include commercial fishing crew and single licenses; pelagic and anadromous fishing licenses; commercial shellfish harvesting licenses; lobster and crab licenses across multiple classes (including apprentice and non-commercial); and limited specialty licenses such as green crab and marine worm digging. Recreational saltwater fishing licenses are also held by city residents. While harvester license types are diverse, the overall number of license holders is modest when compared to the number in other coastal municipalities, like Harpswell, Jonesport, Portland, or Brunswick.

Harvester License	Number of Licenses	Harvester License	Number of Licenses	Harvester License	Number of Licenses	Harvester License	Number of Licenses
Commercial Fishing Crew (CFC)	4	Green Crab (GC)	1	Lobster/Crab Class 3 (LC3)	1	Recreational Saltwater Fishing Operator (SWRO)	16
Commercial Fishing Single (CFS)	3	Lobster/Crab +70 (LCO)	2	Lobster/Crab Non-Commercial (LNC)	33	Recreational Saltwater Registry (SWR)	47
Commercial Pelagic & Anadromous Single (CPS)	1	Lobster/Crab Apprentice (LA)	1	Lobster/Crab Student (LCS)	3		
Commercial Shellfish (CS)	7	Lobster/Crab Class 1 (LC1)	6	Marine Worm Digging (MWD)	1		
Commercial Shellfish +70 (CSO)	2	Lobster/Crab Class 2 (LC2)	1	Non-Federal Halibut Crew (NFHC)	1		
Elver Dip Net Crew (E0C)	1	Lobster/Crab Class 2 +70 (LC2O)	1				

In 2025 there were a total of 24 marine resource dealer licenses in Biddeford. Exactly half of these licenses are dedicated to Retail Seafood, while Lobster Meat Permits make up the second largest share with 4 licenses. Overall, the data shows a market geared toward retail seafood operations over niche or wholesale sectors.

Marine Resource Dealer Licenses	Number of Licenses
Lobster Meat Permit (LMP)	4
Retail Seafood (R)	12
Seaweed Buyer (SWB)	2
Shucker Packer (SP)	2
Wholesale with lobster (WL)	2
Wholesale with lobster supplemental (WLS)	2
Total	24

In 2025, 51 commercial fishing vessels were registered in the City of Biddeford, with vessel lengths ranging from 10-38 feet. The average length was 23.1 feet, and the median length was 22 feet. Collectively, these data reflect the continued, but limited, presence of water-dependent commercial fishing activity within the city.

Water Quality

Water quality is the primary determining factor affecting the viability of shellfishing activities in the community. Biddeford's shellfish harvesting areas are located within DMR Shellfish Growing Areas WF and WG. While Biddeford Pool and Back Bay maintain a Conditionally Approved status subject to emergency closures after 1 inch of rainfall, the Saco River Estuary is classified as Prohibited due to bacterial loading. See the Water Resources chapter for more discussion about these water quality impairments.

These periodic and seasonal closures of clam and worm flats restrict access to historically productive harvesting areas, disrupting income for local diggers and posing an ongoing economic threat to the industry if water quality issues are not actively remediated. To mitigate these threats and protect local flats from illegal harvesting, the City maintains a Shellfish Warden through the Biddeford Police Department who enforces conservation ordinances and monitors flat activity in close alignment with DMR regulations.

Water quality sampling and shoreline surveys conducted within Biddeford Pool and the Saco River estuary have identified multiple sources of contamination, including both human-related and natural contributors. These sources include a combination of point sources, such as direct discharges or infrastructure-related failures, and nonpoint sources, including stormwater runoff, wildlife, and diffuse watershed inputs. City staff, including the Code Enforcement department, have played an active role in identifying specific locations of concern and maintaining testing data to support management and remediation efforts.

Traditional Water-Dependent Uses and Trends

Traditional water-dependent uses in Biddeford have experienced a gradual, localized decline in recent years, particularly within the commercial sectors. While the financial value of landed catch has remained high due to strong dockside prices, the actual volume of commercial fishing activity based out of Biddeford has contracted in recent years. This localized shift is marked by a steady reduction in the active commercial fleet size and a corresponding drop in total local fishing effort, a trend mirrored statewide by a nearly 10% decline in annual lobster trips. Historically, the importance of Biddeford's marine resources was anchored in large-scale commercial harvesting, but the contemporary local industry has stabilized into a smaller, highly capital-intensive footprint. This contraction has intensified competition for remaining berthing and access spaces, elevating the importance of maintaining the city's remaining working waterfront properties against conversion pressures.

While the Biddeford Pool Fishermen's Association remains a vital anchor for the local lobstering fleet, the commercial fishing sector faces severe long-term headwinds. Key factors driving this decline include an aging workforce, high economic barriers to entry for younger generations, and intense regulatory shifts in the Gulf of Maine fisheries. In contrast, recreational boating and institutional marine research, bolstered by operations like the Biddeford Pool Yacht Club and the University of New England's Marine Science Center, have remained stable, though they fluctuate based on broader economic conditions, fuel costs, and seasonal tourism.

Looking ahead, the health and composition of Biddeford's commercial fisheries will undergo a significant transition over the next 10 years, shifting from a single-species reliance on lobster to a more diversified marine economy. According to preliminary data from the Maine DMR, statewide lobster landings dropped to 78.8 million pounds, a decline of more than 8 million pounds from the previous year[1]. While this drop is tied to a long-term geographic and biological migration of lobster biomass into cooler, deeper waters, the immediate contraction was driven by a reduction in localized fishing effort. Factoring in steep operation inflation, a late shedding molt, and market uncertainty,

[1] Source: 2025 Maine Commercial Fisheries Value Again Tops $600 Million

Maine harvesters altered their fishing behavior and took over 21,000 fewer trips than the previous season, a nearly ten percent decline in active fishing effort. While lobster will remain an economic baseline, the next decade will likely see local harvesters increasingly diversify into expanding fisheries like Atlantic menhaden and wild scallops, alongside a distinct pivot toward estuarine aquaculture, such as kelp and oyster farming within the protected waters of Biddeford Pool and the lower Saco River.

Without targeted municipal interventions, such as robust protective zoning within the Commercial Fisheries/Maritime Activities (CFMA) shoreland districts, there is a risk of further erosion of the working waterfront in favor of purely seasonal and recreational use over the next 10 years. Given the increasing frequency of catastrophic coastal storm surges and accelerated sea-level rise, the next decade may see infrastructure failures at both public and private landings if capital investments are not directed toward reinforcing and elevating Biddeford's remaining commercial access points.

Balance Between Uses

A reasonable balance between water-dependent commercial and recreational uses has historically been maintained in Biddeford, though this equilibrium looks different depending on the geographic zone. Along the tidal Saco River corridor, the balance shifts between recreational boating access and the industrial or urban mixed-use development. In contrast, within Biddeford Pool, a functional baseline is maintained between the active, year-round commercial lobstering fleet operating out of the Biddeford Pool Fishermen's Association and seasonal recreational traffic managed by the Biddeford Pool Yacht Club. Potential spatial conflicts on the water are mitigated through active mooring management by the Harbormaster and Harbor Commission.

While the city has not experienced major, high-profile conversions of active commercial working waterfront piers to private residential uses in recent years, the creeping pressure of residential real estate values in coastal neighborhoods remains an ongoing threat to the long-term balance. To prevent conversions that would worsen this equilibrium, the City relies heavily on its Commercial Fisheries/Maritime Activities (CFMA) shoreland zoning overlay districts, which strictly protect functionally water-dependent properties from being displaced by non-maritime commercial or multi-family residential developments. However, the recent back-to-back historic storms highlighted that the balance is increasingly threatened not just by regulatory conversions, but by physical displacement, where the high cost of rebuilding storm-damaged private and public marine infrastructure may inadvertently favor recreational conversions over traditional commercial fishing access if municipal capital investments are not sustained.

Harbor and Bay Management

There is currently no comprehensive local or regional harbor or bay management plan in effect for the City of Biddeford. While the city previously completed a 1991 Comprehensive Waterfront Plan funded by the Maine Coastal Program, that document has not been updated to address current constraints, modern mooring volumes, or climate vulnerabilities.

The City does maintain an active municipal shellfish conservation program. Administered by the Biddeford Shellfish Conservation Committee in partnership with the Maine Department of Marine Resources, the city operates under an approved Shellfish Management Plan. This specialized plan actively guides local shellfish conservation closures, regulates commercial and recreational licensing limits, and coordinates water quality monitoring across the mudflats of Biddeford Pool and the Saco River estuary.

While the existing shellfish framework manages harvesting resources, it is narrow in scope and does not regulate navigation, mooring grids, capital investment in infrastructure, or waterfront logistics. Reestablishing a broader, coordinated harbor planning effort would address this gap. An updated Harbor or River Corridor Management Plan would provide the necessary framework for interdepartmental coordination, mooring optimization, and waterfront climate resiliency strategies that the current single-resource shellfish plan cannot accommodate.

Waterfront Uses

1. Rumery's Boat Yard:

Rumery's Boat Yard. Rumery's Boat Yard is located on Cleaves Street in Biddeford. Its year-round primary activities are repair, service and electric boat rental. In 2022, Rumery's Boat Yard employed 10 people. The location is also home of Maine Electric Boat Company and Marine Solar Technologies.

Rumery's is a full-service facility that can support vessels up to 55 feet in length. There is a 25 ton travel lift and storage inside for about 50 boats and outside for another 40 boats. The facility cannot provide wet storage because the Saco River freezes over in this area. There is an earth-filled, stone bulkhead with access to the floats. There is a large brick building used as an office and repair shop. There is also a large metal building and two wooden boat sheds. There is about 900 feet of shore frontage on a Federal Turning Basin of the Saco River.

Plans: Rumery's is investing in electric propulsion and autonomous water monitoring buoys for near-shore research.

2. Biddeford Pool Yacht Club.

The Biddeford Pool Yacht Club (BPYC) is located at 17 Yates Street in Biddeford Pool Village. BPYC is privately owned, and according to its website (www.biddefordpoolyachtclub.org) has been in existence for over seventy-five (75) years (incorporated on August 13, 1934) and offers its members opportunities for sailing, fishing, and racing. Sailing lessons are available for both members and non-members and Biddeford youth can obtain free lessons through its Maryann Beaudry Memorial Scholarship. BPYC also works with the Fishermen's Association to promote fishing in Biddeford's waters. The BPYC also has five (5) transient moorings available to rent for $45 a night.

3. Biddeford Pool Fishermen's Association.

The Biddeford Pool Fishermen's Association operates a wooden pile, wooden-plank decked pier with float landings. There is electricity on the dock, mechanical handling equipment and night lighting. There is a small one-story, wood-frame building abutting the pier that is used as a bait shed. The facility is leased from the BPYC (see above) for use by the fishermen of the area.

4. University of New England.

   The University of New England (UNE) has nearly 4,000 feet of shore frontage on the Saco River. Aside from the scenic qualities of its riverfront environment, UNE also uses the Saco River for rowing and sailing activities.

   More importantly, UNE's Department of Marine Sciences and Center for Excellence in the Marine Sciences program utilizes the Saco River and coastal areas of Biddeford for academic and research purposes.

   UNE researchers completed the Saco River Estuary Project (2009-2014) which touted itself as "A unique collaboration between UNE scientists, students and community partners to study a biologically unique body of water and the rich assemblage of species adapted to its dynamic conditions". See below link for more information about this project. (http://www.une.edu/sacoriver)

5. Brookfield Renewable:

   Brookfield Renewable owns two hydroelectric dams on the Saco River from which they generate electricity. They were acquired from NextEra Power in 1999.

6. Commercial Wharves:

   There are no active commercial wharves in Biddeford.

Current Land Use Regulations on or Near the Shoreline:

1. Saco River Corridor Commission: The Saco River Corridor Commission, created by legislative action in 1973, is a regional level land use regulatory agency made up of a member and an alternate from each of the twenty Corridor communities. The Corridor includes all lands within 500 feet of the riverbank on each side. If the 100 year floodplain extends farther than 500 feet, the Corridor follows the flood line up to 1000 feet from the river bank. The purpose of the Saco River Corridor Act and the Commission is to protect and preserve land and water quality within the Corridor. In order to accomplish this purpose, the Act provided a permit procedure and established three land use districts: resource protection, general development and limited residential. In each of the three different districts, the Act specifies those types of uses which are allowed without a permit, allowed with a permit or prohibited altogether. All buildings, regardless of the district, must be setback at least 100 feet from the normal high water line of the Ossipee, Little Ossipee or Saco River. The permit procedure is the main stay of the Saco River Corridor Act. Through its system of permits and variances, the Commission is able to safeguard the Corridor lands and waters.

2. Maine DEP Site Law (Site Location of Development): Large development projects are required to obtain a permit through the Maine Department of Environmental Protection (Maine DEP) under this law. The purpose is to ensure that these larger projects are subject to an increased level of review regarding their potential to have an impact on the environment. There is an opportunity also that community can obtain “Delegated Authority” to review projects within a community’s own boundaries under this law instead of Maine DEP if they receive the authority to do so. Biddeford has been identified as having the “Capacity” to have Delegated Authority, but has not requested this designation from the Maine DEP.

3. Natural Resources Protection Act: Through the Maine DEP activities in, on, or adjacent to protected natural resources, including rivers, streams, brooks, great ponds, coastal wetlands, freshwater wetlands, and sand dunes require a permit. Standards within the Act spell out what is and is not permitted.

4. Biddeford’s Shoreland Zoning Ordinance: In an attempt to protect Biddeford's streams and waterways and the land abutting these areas, a Shoreland Zoning Ordinance was adopted by the City Council in December of 1990. It was updated in 2016. Shoreland zoning's goal seeks to preserve the quality of local surface waters, wildlife habitat areas, and general quality of life factors such as scenic vistas and open space. See Section 12: Water Resources for more information about Biddeford’s Shoreland Zoning Ordinance districts.

Marine Facilities (boat launches, piers, etc.)

Biddeford Pool Beach/Gilbert R. Boucher Memorial Park. Located off Beach House Lane this is a large sandy beach that offers opportunities for swimming and general beach activities. Small boats may also be launched at this location via hand-carry. There is a bathhouse for changing and restrooms. The City of Biddeford provides lifeguards in the summer months. There is a substantial amount of parking available (approximately 100 cars). Seasonal beach parking permits are required for the summer months.

Plans: None.

Biddeford Pool Yacht Club. The Biddeford Pool Yacht Club (BPYC) is located at 17 Yates Street in Biddeford Pool Village. BPYC is privately owned, and according to its website (www.biddefordpoolyachtclub.org) has been in existence for over seventy-five (75) years (incorporated on August 13, 1934) and offers its members opportunities for sailing, fishing, and racing. Sailing lessons are available for both members and non-members and Biddeford youth can obtain free lessons through its Maryann Beaudry Memorial Scholarship. BPYC also works with the Fishermen's Association to promote fishing in Biddeford's waters.

Plans: None.

Fortunes Rocks Beach. Located approximately 1 mile southwest of Biddeford Pool, this large two (2) mile long sandy beach offers opportunities for swimming and general beach activities. Small boats may be launched at this location via hand-carry. Many people also use this area for surfing. There are seasonal portable bathrooms and the City of Biddeford provides lifeguards in the summer months. There is some on-street parking available (approximately 50 cars). Seasonal beach parking permits are required for the summer months.

Plans: None

Marblehead Boat Launch. Marblehead Boat Launch is a State of Maine facility located off Pool Street. It is heavily used, particularly in the summer months. Portable restrooms are provided. There are two boat ramps and a pier at this location, which makes it an ideal location for boat launching into the Saco River. There is parking for approximately 60 vehicles including trailers.

Plans: None.

Mechanics Park. Mechanics Park is located at the corner of Main Street and Water Street.

Plans: Through a State grant, the City has a fully designed and ready for construction canoe/kayak launch for the eastern limit of Mechanics Park.

Middle Beach. Middle Beach is located opposite of Bridge Road at its intersection with Mile Stretch Road. It is a flat sandy beach. There are no restrooms at Middle Beach. There is a limited amount of parking available (approximately 25 cars) on Beach Avenue directly across from Bridge Road. Seasonal beach parking permits are required for the summer months.

Plans: None.

Moorings. A mooring is a means in which to secure a vessel to a particular location in Biddeford's waters.

Park in the Pines. Park in the Pines is a small passive park located at 194 Hills Beach Road. It offers tremendous views of Biddeford Pool and its wildlife. It also provides access to the pool for hand-carried boats such as canoes and kayaks. This park includes a bocce ball court. There are no parking or restroom facilities at this park.

Plans: None.

Rotary Park. Rotary Park is a popular park located at 550 Main Street on the Saco River. It is 72 acres in size and features walking trails, two playgrounds, the softball field with lights, youth football field, the teen center, a dog park, picnic tables and grills, a sand volleyball court, a disc golf course,and a beach for access to swimming in the Saco River. It also features a boat launch for access to this non-tidal portion of the Saco River. Further, Rotary Park is a popular location for winter sledding with its hilly terrain.

Plans: Although there are no current plans, the following should be implemented, including but not limited to:

- Bathhouse expansion to add a family restroom and changing area.
- Dog Park lights should be installed.
- Certain sections of the swimming area need to be addressed as the clay has become a hazard.
- Security cameras are needed.
- Martel Field backstop needs replacing.
- Minor fence repairs are also needed.
- Invasive species located throughout the park (2016 report) need to be dealt with.

Rumery's Boat Yard. Rumery's Boat Yard Inc. is located on Cleaves Street in Biddeford. It operates year-round and its primary activities are repair, service and dockage rental.

Rumery's is a full service marina that can build craft up to 55 feet in length. There is a 17-ton travel lift and storage inside for about 45 boats and outside for about 100 boats. The facility cannot provide wet storage because the Saco River freezes over in this area. There is an earth-filled, stone bulkhead with wooden pile, wooden-deck access piers to the float landings. There is a large brick building used as a marine supply store, office, repair shop, storage building. There is also a large metal building used as a boat shed. There is about 480 feet of shore frontage.

Plans: Rumery's is currently exploring the establishment of a pump-out station, but this may be 1-2 years out. It is also considering starting sailboat tours out of its facility in June 2018.

Town Landing. Town Landing is a laid out city street, approximately 15 feet wide, that provides access to the Saco River from Hills Beach Road within the UNE campus.

Plans: None.

Vines Landing. Vines Landing is located at the westerly end of Lester B. Orcutt Boulevard at what is locally referred to as "the gut". It is a passive park with a gravel boat launch and features great scenic views of Biddeford Pool, the Atlantic Ocean, and Wood Island Lighthouse. There is limited parking available at Vines Landing.

Plans: None.

Wood Island. Wood Island is home to a Maine Audubon Nature Preserve as well as the U.S. Coast Guard's Wood Island Lighthouse. The Nature Preserve is approximately 30 acres in size and offers opportunities for walking and nature viewing including wildlife. There is a small boat launch/ramp located at the west end of the Island. There are no public restroom facilities.

Plans: None.

Public access points to marine resources.

Biddeford Pool Beach/*Gilbert R. Boucher Memorial Park.* Located off Beach House Lane this is a large sandy beach that offers opportunities for swimming and general beach activities. Small boats may also be able to be launched at this location via hand-carry. There is a bathhouse for changing and restrooms. The City of Biddeford provides lifeguards in the summer months. There is a substantial amount of parking available (approximately 100 cars). Seasonal beach parking permits are required for the summer months.

Condition: Bathhouse - Good; Walkways - Good
Needs: Additional Parking is needed. Walkway improvements to reduce the grade from the seawall to the beach are needed.

Biddeford RiverWalk. The Biddeford RiverWalk is an evolving project intended to connect Mechanics Park on Water Street to the Diamond Match Park project (future) and points west including the Eastern Trail. To date the RiverWalk project connects Mechanics Park to the City of Saco via a concrete walkway 135-foot pedestrian bridge over the Saco River to Saco Island, thus connecting to Saco's RiverWalk. The RiverWalk also continues through the North Dam Mill complex to Laconia Plaza located on the Saco River. The City of Biddeford recently completed a master plan that conceptually lays out the future RiverWalk from Laconia Plaza to the Diamond Match site via alternate routes along the river, with potential further connections to the City of Saco via two additional pedestrian bridges. In 2016 the City completed, with the assistance of Wright-Pierce Engineers, a RiverWalk Master Plan Update.

Condition: Excellent. No boat access. No public restroom facilities.
Needs: Seating on the Overlook by Main Street. Implementation of the 2016 Master Plan Update.

Diamond Match Site. As part of a Joint Development Agreement between the City and One Diamond Street Development LLC, two acres of public open space are to be included with the buildout of the site. This public space may include athletic facilities, a playground or other public amenities. The Biddeford Riverwalk will be extended through the site as part of the open space agreement.

Condition: N/A.
Needs: To be Determined

East Point Sanctuary. East Point Sanctuary is owned by Maine Audubon and is located on the far eastern tip of Biddeford Pool. It is located directly northeast of the Abenaki Golf Club. There is virtually no parking here and no restrooms but it is very well known for wildlife viewing, particularly birds, and its visual access to the Atlantic Ocean.

Condition: N/A. No boat access. No public restroom facilities.

Needs: None known.

Fortunes Rocks Beach. Located approximately 1 mile southwest of Biddeford Pool, this large two (2) mile long sandy beach offers opportunities for swimming and general beach activities. Small boats may also be able to be launched at this location via hand-carry. Many people also use this area for surfing. There are seasonal portable bathrooms and the City of Biddeford provides lifeguards in the summer months. There is some on-street parking available (approximately 50 cars). Seasonal beach parking permits are required for the summer months.

Condition: Very Good
Needs: Additional Parking

Marblehead Boat Launch. Marblehead boat launch is a State of Maine facility located off Pool Street. It is heavily used particularly in the summer months. Portable restrooms are provided. There are two boat ramps and a pier at this location which make it an ideal location for boat launching into the Saco River. There is parking for approximately 60 vehicles including trailers.

Condition: N/A – State Owned
Needs: Unknown

Mechanics Park. Mechanics Park is located at the corner of Main Street and Water Street. It features a walking path down to a river overlook and great views of the Saco River. It also contains a gazebo where events such as weddings occasionally occur, picnic tables and seating, bicycle parking, and a fitness station. Parking is available on Water Street as well as in what is referred to as the Gas House parking lot adjacent to the Wastewater Treatment Plant. It is a fairly well used passive park with quite a bit of open green space. Future plans include additional walking trails along the river and a possible carry-in canoe and/or kayak launch.

Condition: Upper level - Very Good; Lower Level - Fair to Poor. No boat access. No public restroom facilities.
Needs: Lower Level is in need of major repairs to the wall between the park and river. A sink hole has developed making one section of the lower level hazardous. The remainder of the park needs a solution to overgrown vegetation creating potential unsafe areas for visitors. Purchase of a piece of property between the current park and former CMP piece is desirable to create a singular park along the river. Security cameras are needed.

Middle Beach. Middle Beach is located opposite of Bridge Road at its intersection with Mile Stretch Road. Is a flat sandy beach. There are no restrooms at Middle Beach. There is a limited amount of parking available

(approximately 25 cars) on Beach Avenue directly across from Bridge Road. Seasonal beach parking permits are required for the summer months.

Condition: Very Good. No boat access. No public restroom facilities.
Needs: Additional parking and the control of invasive species.

Park in the Pines. Park in the Pines is a small passive park located at 194 Hills Beach Road. It offers tremendous views of Biddeford Pool and its wildlife. It also provides access to the pool for hand-carried boats such as canoes and kayaks. This park includes a bocce ball court. There are no parking or restroom facilities at this park.

Condition: Very Good. No public restroom facilities.
Needs: Volunteers have requested a water source to maintain plants and flowers within the park.

Rachel Carson National Wildlife Refuge (U.S. Fish and Wildlife Service). In Maine the "Rachel Carson National Wildlife Refuge was established in 1966 in cooperation with the State of Maine to protect valuable salt marshes and estuaries for migratory birds. Located along 50 miles of coastline in York and Cumberland counties, the refuge consists of eleven divisions between Kittery and Cape Elizabeth. It will contain approximately 14,600 acres when land acquisition is complete. The proximity of the refuge to the coast and its location between the eastern deciduous forest and the boreal forest creates a composition of plants and animals not found elsewhere in Maine. Major habitat types present on the refuge include forested upland, barrier beach/dune, coastal meadows, tidal salt marsh, and the distinctive rocky coast."
Source: *https://www.fws.gov/refuge/rachel_carson/about.html*.

In Biddeford there are two divisions of the Rachel Carson National Wildlife Refuge: the Biddeford Pool Division and the Little River Division. The Biddeford Pool Division controls property on the west side of Biddeford Pool off Old Pool Road. The Little River Division controls several properties on the east side of Little River in Granite Point including Timber Point and Timber Island. At the southernmost extent of Granite Point Road there is a small parking area which leads to what is referred to as Timber Point Trail which runs along the west side of Timber Point. At low tide, Timber Island can be accessed from the southernmost tip of this trail.

Condition: N/A. No formal boat access. No public restroom facilities.
Needs: None Known

Rotary Park. Rotary Park is a popular park located at 550 Main Street on the Saco River. It is 72 acres in size and features walking trails, two playgrounds, the softball field with lights, youth football field, the teen center, a dog park,

picnic tables and grills, a sand volleyball court, a disc golf course,and a beach for access for swimming in the Saco River. It also features a boat launch for access to this non-tidal portion of the Saco River. Further, Rotary Park is a popular location for winter sledding with its hilly terrain.

Condition: Bathhouse - Good;
Needs: Bathhouse expansion would be helpful in order to add a family restroom and changing area. Dog Park lights should be installed. Certain sections of the swimming area need to be addressed as the clay has become a hazard. In general, the projects laid out in the 2009 Master Plan should be addressed. Invasive species located throughout the park (2016 report) need to be dealt with. Security Cameras are needed. Martel Field backstop needs replacing. Minor fence repairs are also needed.

South Point Sanctuary. South Point Sanctuary includes a pathway that runs from 7th Street southwest and ultimately to Biddeford Pool Beach. The land is owned and maintained by the Biddeford Pool Land Trust.

Condition: N/A. No boat access. No public restroom facilities.
Needs: None Known

Staples Street Beach. Staples Street Beach located at the end of Staples Street in Biddeford Pool, is a small rocky beach that is maintained by the Biddeford Pool Improvement Association. There is no parking available, so access is pedestrian only.

Condition: N/A. No formal boat access. No public restroom facilities.
Needs: None Known

Town Landing. Town Landing is a laid out city street, approximately 15 feet wide, that provides access to the Saco River from Hills Beach Road within the UNE campus.

Condition: Fair. Carry-in boat access only. No public restroom facilities.
Needs: For the public to be able to access this location signage/demarcation is needed.

Vines Landing. Vines Landing is located at the westerly end of Lester B. Orcutt Boulevard at what is locally referred to as “the gut”. It is a passive park with a gravel boat launch and features great scenic views of Biddeford Pool, the Atlantic Ocean, and Wood Island Lighthouse. There is limited parking available at Vines Landing.

Condition: Very Good. No public restroom facilities.
Needs: Boat ramp.

Wood Island. Wood Island is home to a Maine Audubon Nature Preserve as well as the U.S. Coast Guard's Wood Island Lighthouse. The Nature Preserve is approximately 30 acres in size and offers opportunities for walking and nature viewing including wildlife.

Condition: N/A. There is a small boat launch/ramp located at the west end of the Island. No public restroom facilities.
Needs: None Known

Yates Street Park. Yates Street Park is located next to Vines Landing in Biddeford Pool. This park was established by the Biddeford Pool Land Trust upon donation of the land by its former owner. It is a passive park with great views of Biddeford Pool and is suitable for picnicking and birdwatching. Parking is very limited in the area.

Condition: N/A. No boat access. No public restroom facilities.
Needs: None Known

G. Working Waterfront Current Use Lands:

"Working waterfront land" means a parcel or portion of a parcel of land abutting tidal waters or one that is located in the intertidal zone (located between the high and low water mark) the use of which is more than 50% related to providing access to or in support of the conduct of commercial fishing (including commercial aquaculture) activities. Working waterfront land used predominantly (more than 90%) as working waterfront is eligible for a 20% reduction from just value. Working waterfront land used primarily (more than 50%) as working waterfront is eligible for a 10% reduction from just value. Working waterfront land that is permanently protected from a change in use through deeded restriction is eligible for the aforementioned reduction plus an additional 30% reduction. If the property no longer qualifies as Working Waterfront, then a penalty would be assessed using the same methodology as is used for removal from Tree Growth classification.

Biddeford did not have any acreage in the Working Waterfront Current Use Program in 2006 and 2016.