TOWN OF BRISTOL, RHODE ISLAND

PLANNING BOARD MEETING

Meeting Agenda
Thursday, September 11, 2025 at 7:00 PM
Bristol Town Hall, 10 Court Street, Bristol, RI 02809

A. Pledge of Allegiance

B. Approval of Minutes:

Regular Meeting **-** July 10, 2025

Special Meeting - August 7, 2025

C. Agenda Items

C1. ***Applicant has requested a continuance until October 9, 2025 Planning Board Meeting.****

Review of Master Plan phase for Major Land Development of the Comfort Inn and Suites – to build an 80 room hotel. Property on south side of Gooding Avenue approximately 50 feet east of the intersection of **Gooding Avenue and Broadcommon Road,** near utility pole #218. Owner: D & M Boca Development, LLC Zoned: GB. Assessor's Plat 111 Lot 1.

C2. **Public Hearing and Consider Action on Preliminary Application for Fair Winds Comprehensive Permit Application** – Proposal to construct 17 residential units with 5 of these designated as low-moderate income residential units and 1,859 square feet of commercial use within an existing garage/barn to be used as the property management office and property owner equipment storage building. Property has an existing 3-family building which will be retained for a total of 20 dwelling units on the property. Property located at **206 Bayview Avenue.** Assessor's Plat 47, Lot 3. Owners: Fair Wind Properties, LLC. Zoned: R-10

Variances requested from the Zoning Ordinance for the following:

Section 28-282 (d) Standards for Multi-family buildings: Subsection 2 – distance between multifamily buildings on the same lot. Minimum required 25 feet and 10 feet provided; Subsection 3 – Distance between multi-family buildings and property line Minimum 50 feet from side and rear property lines and 32.1 feet minimum is provided; Subsection 8 – not more than four contiguous townhouses built in a row. Section 28-111 Table B – 80' of frontage required and existing frontage is 72.50; Section 28-363 (2)(a)(1)Residential Density allows 15 residential units and 20 units are provided with 3 existing and 17 new units; Section 28-3 and Section 28-82 multi-family dwellings are not allowed and multi-family dwellings are proposed; Section 28-252 – non-conforming structures – the existing garage/barn on the property will be used for property management storage and office; Section 28-251 – size of parking spaces and aisle width -parking spaces are to be 10' x 18' and proposed parking spaces are 9' x 18' and aisle widths are to be 24' wide and proposal is 20' wide. Waivers requested from the Subdivision and Development Review Regulations for the following: Appendix F.2 (f)(1) Sidewalks required on one side of street in multi-family developments and no sidewalk is proposed.

C3. **Public Hearing and Consider Action on Minor Land Development – Preliminary Phase/Unified Development** – proposal for construction of a 3,500 square foot building for a contract construction use in a General Business Zoning District that also requires a Special Use Permit. Property located at 670-688 Metacom Avenue, Assessor's Plat 128, Lot 15 & 16, Zone: General Business and Metacom Overlay District. Owners/Applicants: David Ramos and Lionel Ramos.

Waiver requested for sidewalk requirement along Metacom Avenue in front of Lot 15 required per Section 2.8 of Appendix G in the Subdivision and Development Review Regulations.

C4. **Public Hearing and Consider Action on Minor Land Development/Adaptive Re-Use/Unified Development Application Preliminary Plan Phase** for John J. Marshall: to convert two historic manufacturing

buildings at **18 Burnside Street** & **1 Resolute Lane,** into seven (7) residential dwelling units. Variance required for residential density in the Manufacturing Zone which has an underlying residential density of 0 Assessor's Plat 16, Lot 48 & 39, Zone: Manufacturing and within the Historic District. Owner: Halsey C. Herreshoff Trustee/Applicant: John J. Marshall

D. Correspondence

D1. Roger Williams University Master Plan and Campus Update, Summer 2025

E. Adjournment

Date Posted: August 28, 2025

Posted By: mbw

From: Michael Kelly <mkelly@ksprlaw.com>
Sent: Thursday, August 28, 2025 2:26 PM
To: Diane Williamson <dwilliamson@bristolri.gov>; Amy Goins <amygoins@utrlaw.com>
Cc: Christopher Duhamel - DiPrete Engineering (chris@diprete-eng.com) <chris@diprete-eng.com>; Michael Resnick <mresnick@ksprlaw.com>
Subject: hotel

Caution: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. When in doubt, contact your IT Department

As we discussed, we are requesting a continuance of the hearing scheduled for 10/9 to allow us to respond to the trc's comments from yesterday's meeting. As a result we will extend the time frame for the board to act to 12/31. If you need anything else please let me know. Have a nice weekend and a great trip.

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Fair Wind Village Development
206 Bayview Avenue

Responses to Traffic Impact Study Comments
May 6, 2025

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1. Comment: Within the roadway geometrics description, revise the Bayview Avenue classification to minor arterial.

   Response: Bayview Ave. is now referred to as a minor arterial.

2. Comment: The existing conditions volumes in the table on Page 2 do not appear to match the existing conditions volumes in Figure 1 and the traffic counts attached in the appendix. Review and revise accordingly.

   Response: The existing conditions volumes in the table on Page 2 have been modified to match the volumes in Figure 1. The traffic volumes have been modified slightly from the original traffic counts to allow for the higher volumes at Almeida Apartments from the new traffic count.

3. Comment: The estimated trips for Almeida Apartments to not appear to be added to the figures and analyses of the Metacom Avenue and Baybiew Avenue intersection. Review and revise accordingly.

   Response: Almeida Apartments has been recounted and additional traffic has been added to the intersection of Metacom Avenue and Bayview Avenue.

4. Comment: There appears to be a discrepancy regarding the dates covered in the crash analysis between the text on Page 2 and the table on Page 3. Review and revise accordingly.

   Response: The dates in the Table have been modified.

5. Comment: The projected traffic analysis on Page 4 estimates the trips generated for 23 units. The site plan appears to show a total of 20 units, including the existing 3-unit residential building. Review and revise accordingly.

   Response: Originally, the development was to be 20 new units plus the 3 existing units. The projected traffic is now for a total of 20 units (17 new plus the existing 3).

6. Comment: Traffic Operations Analysis
   a. Future traffic volumes do not appear to have been projected to a future design year, typically five years from the study date. Ther also does not appear to have any approved developments nearby, or lack thereof, mentioned or included in the analysis.

b. Future no-build analysis does not appear to have been completed.
c. There appears to be discrepancies between volumes in the figures and traffic counts, and volumes used in the analysis.
d. It appears that adjustments to the peak hour factor and heavy vehicle percentages were not made to reflect count information.
e. The timing settings used for the existing and proposed conditions appear to be different. Confirm if there are timing changes proposed to the signal at Bayview Avenue and Metacom Avenue.
f. The appendix does not have a copy of the traffic signal plan. Provide the existing timing and phasing settings for review.

Response:

a. Future traffic volumes have been projected for the year 2030. Bristol Planning Department was contacted and they stated there have been no recently approved developments in the area.
b. Future No-Build analysis has been done.
c. Volumes have been adjusted.
d. Adjustments to the peak hour factor and heavy vehicle percentages have been made.
e. The timings for existing and proposad are now the same as received from RIDOT.
f. The appendix now includes a copy of the traffic signal plan existing timings.

7. Comment: Due to the issues raised in Comment 6 above, revisions to the analysis would be required for Pare to conclusively concur with the level of service conclusion stated in the study.

Response: The Existing Conditions, 2030 No-Build and 2030 Build analysis has been done and revisions have been made as noted above.

Principe Company

May 6, 2025

Mr. Danial Ferreira
Fair Wind Properties, LLC
PO Box 333
Bristol, RI 02809

RE: Wetlands Investigation
206 Bay View Avenue
Bristol, RI

Dear Mr. Ferriera:

Per your request, Principe Engineering investigated the above-referenced site for the presence of jurisdictional wetlands. Prior to any site inspections, several sources of information were reviewed, including mapping provided by the RI Department of Environmental Management (RIDEM), the Federal Emergency Management Agency (FEMA), and the Town of Bristol (Town).

The Town mapping for the property (AP 47, Lot 3) indicates that the site contains 2.17 acres and contains an existing historic residential structure and barn/garage (both circa 1885), shed, a well house, driveway and parking area. The lot has approximately 72 linear feet of frontage on Bay View Avenue, and is almost 500 feet deep. The site is serviced by both public water and sewer. According to the FEMA flood insurance rate map (firmette attached), the site does not contain any 100-year floodplain. Based on the on-site survey the site slopes from Bay View Avenue at approximately elevation 150' to the rear of the site at approximate elevation 122'. The majority of the site is cleared (i.e. non-woody).

Based on RIDEM mapping the soil at the front of the site is Canton-Urban Land Complex, very rocky (CC) and to the rear is Pittstown silt loam, 0-3% slope (PmA). However, on-site soil investigation indicates that the site contains only Canton soils ("B" hydrologic soil group). Ledge was present within the test holes excavated, anywhere from two feet to no ledge at 10 feet. Groundwater was not encountered (i.e. no observed water,

redox, etc.). Existing vegetation is predominantly field or lawn, with a perimeter of woody vegetation and some isolated trees. None of these species are wetland-indicative. Therefore, none of the require parameters for wetlands are present on the subject site (hydric soil, hydric vegetation, or hydrology).

Based on all of the information reviewed, it is my professional opinion that the site does NOT contain any jurisdictional wetland areas. Should you have any questions regarding this, please do not hesitate to contact me.

Sincerely yours,
PRINCIPE COMPANY

Karen A. Beck, RLA

Karen A. Beck, RLA, FASLA
Wetlands Biologist

File No.: 29753.10003

RECORDING ENDORSEMENT

BORROWER(S) NAME: Fair Wind Properties, LLC

STREET NAME: 206 Bay View Avenue

PLAT/MAP 47 ***BLOCK*** ____ ***LOT/CARD*** 3

CITY/TOWN: Bristol

RUN DATE: 10/6/2021

NAMES TO RUN: Mary Jane Matos

ONHOLD 12/3/2021 @ 9:00am

THE FOLLOWING RECORDING INFORMATION IS PROVIDED FOR THE ABOVE ENTITLED LOAN:

	DOCUMENT	*DATE*	*TIME*	*DOC. # or BK/PG*	
1.	MLC	12/3/2021	2:45pm	2147/343	$8
2.	Deed	↓	↓	2147/344	$85
3.	Mtg	↓	↓	2148/1	$87
4.					
5.					
6.					
7.					
8.					
9.					
10.					

OTHER INSTRUCTIONS AND NOTES:

RECORDING APPROVED BY: _____ **initials**

Item C2.

☐ Sale

☐ Refinance

REQUEST FOR CERTIFICATE
SECTION 44-7-11
GENERAL LAWS OF RHODE ISLAND

Document Number 00013877
BOOK 2147 PAGE 343

Date: **10/8/2021** Requested by: SAYER REGAN & THAYER, LLP

Address: 130 BELLEVUE AVE
NEWPORT, RI 02840

Taxpayer Name: **MATOS, MARY J TRUSTEES, MANUEL** Account #: **13-1233-00**

Address: **206 BAY VIEW AVE** Prev. Acct #

Plat: **047** **Lot:** **0003** **Unit:** MV Acct #

Year	Original Tax	Exemption (if any)	BALANCE OUTSTANDING Tax	Signature date Interest & Fees	Per Diem	Total Due (taxes, interest & fees)
2021	**$ 9,570.23**	**(350.00)**	**$6,915.15**			**6,915.15**
2020			**$0.00**			**Paid in full**
Motor Vehicle/Excise Tax						
2021						
2020						

Supplemental billing may occur after December 31st assessment date (ex. Construction or subdivision)

Motor Vehicle billed 1 year in arrears subject to receive a bill next year

Sewer use fee of **$ 1,713.00** are included in principal above. Current unit rate : **$ 571.00**

Sewer Assessment; Year assesed : **N/A** Remaining balance: **N/A**

****** Sewer Assessment may be be paid annually at $302.98 for 20 years ******

Prior year(s) deferred taxes (RIGL 44-3-20.2) are not included on this form. Refer to land evidence records.

Contact the Bristol County Water Authority (401) 245-2022 for water use and/or installation.

Tax Sale Information:

Tax sales are held annually. Any property with previous year's taxes due at that time is subject to effect from said action

Other Information:

Interest figures are valid as of the signature date below. The per diem rate is entered above.
PLEASE CALL TO GET CURRENT INTEREST & PENALTIES PRIOR TO CLOSING
Assessment information--An owner of property assessed December 31 would receive a bill in July representing taxes for the calendar year. The bill would be payable in installments in accordance with Rhode Island General Laws and the Town's Resolution to Levy.

THIS IS TO CERTIFY THAT THE ABOVE IS TRUE AND CORRECT, SAID CERTIFICATION IS GIVEN IN ACCORDANCE WITH SECTION 44-7-11 OF THE GENERAL LAWS OF RHODE ISLAND, 1956, AS OF THIS **08** DAY OF **October 2021**

Recorded Dec 03,2021 at 02:45PM
Melissa Cordeiro Town Clerk

Please Note: the information presented above is subject to provisions ro RIGL 44-5-13.

Fee $ 25.00

Town of Bristol
10 Court St
Bristol, RI 02809

Prepared By: Maria E. Amaral

Approved By: Dee-Ann Natto

Item C2.

Document Number 00013878
BOOK 2147 PAGE 344

THIS DOCUMENT PREPARED BY:
Warr & Warr, PC
47 Bullocks Point Avenue
East Providence, RI 02915
File No. 2021-RI-6655

Property Address:
206 Bayview Avenue
Bristol, RI 02809

-------Above This Line Reserved For Official Use Only-------

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS THAT:

FOR VALUABLE CONSIDERATION OF EIGHT HUNDRED FIVE THOUSAND AND 00/100 DOLLARS ($805,000.00), and other good and valuable consideration, cash in hand paid, the receipt and sufficiency of which is hereby acknowledged, **Mary Jane Matos**, of 206 Bayview Avenue Bristol, Rhode Island 02809 hereinafter referred to as "Grantor," does hereby give, grant, bargain, sell and confirm unto **Fair Wind Properties, LLC,** a Rhode Island Limited Liability Company hereinafter "Grantee," having an address of PO Box 333 Bristol, RI 02809, the following lands and property, together with all improvements located thereon, lying in the Town of Bristol, County of Bristol, State of Rhode Island, with all WARRANTY COVENANTS:

That certain lot or parcel of land with all the buildings and improvements thereon situated on the southerly side of Bay View Avenue in the Town and County of Bristol, and State of Rhode Island bounded and described as follows:

Beginning at a point in the southerly line of Bay View Avenue at the northwestern corner of land now or lately of Marion S. Bettencourt, et ux, said point of beginning being the northeasterly corner of the premises herein described; thence running southerly One Hundred Ten (110) feet, bounded easterly on said Bettencourt land; thence turning an interior right angle and running westerly Five (5) feet; thence turning an exterior right angle and running southerly Forty-Four (44) feet; thence turning another exterior right angle and running easterly Seventy (70) feet more or less to land now or lately of Francis E. King, said last three courses bounding southerly, easterly and northerly on said Bettencourt land; thence turning an interior right angle and running southerly Three Hundred Forty-Eight and 27/100 (348.27) feet more or less to land now or lately of C. J. Pearson Co., bounding easterly on said King land; thence turning an interior angle of 91 degrees 54' and running westerly Two Hundred Fifty and 83/100 (250.83) feet more or less to land now or lately of John F. and Beatrice N. Cirillo, bounding on the south by said C. J. Pearson Co. land; thence turning an interior angle of 83 degrees 29' and running northerly Three Hundred Thirty-Seven and 53/100 (337.53) feet more or less to land now or lately of Cecilio Ferreira et ux, bounding westerly in part by land of said Cirillo and in part by land now or lately of Matteo P. and Rita H. Castigliago, in part by land now or lately of Adeline C. Lawrence and in part by land now or lately of Edward Sardinha, et ux; then turning an interior angle of 98 degrees 59' and running easterly Seventy-Eight (78) feet more or less bounding northerly on said Ferreira land; and thence turning an exterior angle of 96 degrees 17' 30" and running northerly one hundred sixty (160) feet to the south line of Bay View Avenue bounding westerly by said Ferreira land; thence turning an interior angle of 98 degrees 8' 30" and running easterly along the said south line of Bay View Avenue Seventy-Two and 50/100 (72.50) feet to aforesaid Bettencourt land and forming an interior angle of 83 degrees 47' at the point and place of beginning.

Subject to taxes assessed as of December 31, 2021.

The Grantor do hereby covenant, by Affidavit, that he/she/they is/are a resident(s) of the State of Rhode Island in compliance with R.I.G.L. Section 44-30-71.3.

Meaning and intending to convey and hereby conveying the same premises as described in those Deeds recorded November 15, 2021 in Book 2144 at Page 11 and Book 2144 at Page 20 in the Bristol Town Clerk Land records Office.

WITNESS Grantor's hand this 1 day of December, 2021.

Mary Jane Matos {Seal}
Mary Jane Matos

STATE OF RHODE ISLAND

COUNTY OF PROVIDENCE

On this 1st day of December, 2021, before me, the undersigned notary public, personally appeared Mary Jane Matos, personally known to the notary or proved to the notary through satisfactory evidence of identification, which was RI License, to be the person whose name is signed on the preceding or attached document, and acknowledged to the notary that he (she) signed it voluntarily for its stated purpose.

Notary Public Signature

Seal:

RONALD R. WARR, JR. NOTARY PUBLIC COMMISSION EXPIRES 1/19/22 ID # 44045 RHODE ISLAND

SEND TAX STATEMENTS TO THE GRANTEE.

Grantee's Address:
Fair Wind Properties, LLC
P.O. Box 333
Bristol, RI 02809

Recorded Dec 03,2021 at 02:45PM
Melissa Cordeiro Town Clerk

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Item C2.

PLEASE RETURN TO:
Adam H. Thayer, Esq.
Sayer Regan & Thayer, LLP
130 Bellevue Avenue
Newport, RI 02840

THE PEOPLE'S CREDIT UNION

858 West Main Road
Middletown, RI 02842

OPEN-END MORTGAGE DEED, SECURITY AGREEMENT AND ASSIGNMENT OF LEASES AND RENTS

Open-End Mortgage To Secure Present
and Future Loans Under Chapter 25 of Title 34

THIS OPEN-END MORTGAGE, SECURITY AGREEMENT AND ASSIGNMENT OF LEASES AND RENTS (this "Mortgage"), dated as of the 2nd day of December, 2021, is made by **Fair Wind Properties, LLC**, a Rhode Island limited liability company with a mailing address of 204 Poppasquash Road, Bristol, Rhode Island 02809 (the "Mortgagor") in favor of **The People's Credit Union**, a Rhode Island credit union having a place of business at 858 West Main Road, Middletown, Rhode Island 02842 (the "Mortgagee").

KNOW ALL MEN AND WOMEN BY THESE PRESENTS:

That Mortgagor hereby irrevocably grants, mortgages, transfers and assigns to the Mortgagee with MORTGAGE COVENANTS, for breach of which covenants, and any other covenants contained herein Mortgagee shall have the STATUTORY POWER OF SALE, and upon the STATUTORY CONDITION, all of its right, title and interest in and to the following tract of land and other property:

I. LAND: That certain parcel of land situated at **206 Bay View Avenue, Bristol, Rhode Island 02809**, and more particularly described in Exhibit A annexed hereto and hereby made a part hereof (the "Premises");

II. IMPROVEMENTS: All the buildings and improvements now situated upon the Premises or which may hereafter be constructed on the Premises or added thereto, together with all fixtures now or hereafter owned by Mortgagor or in which Mortgagor has an interest (but only

to the extent of such interest) and placed in or upon the Premises or the buildings or improvements thereon (the "Improvements");

III. EASEMENTS, RIGHTS, AND LICENSES: Any easement, bridge, right of way, privileges, tenements, hereditaments, licenses, party wall agreements, rights, royalties, mineral, oil and gas rights, rents, issues and profits, water, water rights, water stock, and appurtenances, reversion or reversions and remainder or remainders belonging or in any way appertaining to the Premises;

IV. PERSONAL PROPERTY AND FIXTURES: All the personal property and fixtures of every kind and description now or hereafter owned by the Mortgagor or in which Mortgagor has an interest (but only to the extent of such interest) and situated or to be situated upon the Premises or in any of said buildings and improvements, together with any renewals, replacements or additions thereto or substitutions therefore, and now or hereafter located at, or used in connection with the operation of the Premises or the Improvements; and

All of which land, improvements and other property hereby granted, sold, and conveyed, or intended so to be, hereinafter generally referred to as the "Mortgaged Property", TOGETHER WITH:

(a) EQUIPMENT, ETC. All of Mortgagor's interest in and to all equipment, fixtures, inventory, goods, materials, supplies, furnishings, accounts, accounts receivables, contract rights, plans, specifications, permits, other rights, bank deposits, cash, and general intangibles whether hereafter existing for use on or in connection with Mortgaged Property;

(b) INSURANCE PREMIUMS AND PROCEEDS: All unearned premiums, accrued, accruing or to accrue under insurance policies now or hereafter obtained by Mortgagor and all proceeds of the conversion, voluntary or involuntary, of the Mortgaged Property, the improvements and/or any other property or rights encumbered or conveyed hereby, or any part thereof, into cash or liquidated claims, and all proceeds (including, without limitation, insurance and condemnation proceeds), including interest thereon, paid for any damage done to the Mortgaged Property, or any part thereof, or for any portion thereof appropriated for any character of public or quasi-public use in accordance with the provisions, terms and conditions hereinafter set forth;

(c) CONDEMNATION AWARDS: All awards or payments, including interest thereon, and the right to receive the same, which may be made with respect to eminent domain, the alteration of the grade of any street, or any other injury to or decrease in the value of the Mortgaged Property, to the extent of all amounts which may be secured by this Mortgage, at the date of receipt of any such award or payment by Mortgagee or Mortgagor, incurred by Mortgagee in connection with the collection of such award or payment, and Mortgagor agrees to execute and deliver, from time to time, such further instruments as may be requested by Mortgagee to confirm such assignment to Mortgagee of any such award or payment;

(d) UTILITY DEPOSITS: All right, title and interest of the Mortgagor in and to all monetary deposits which Mortgagor has been or will be required to give to any public or private utility with respect to utility services furnished or to be furnished to the Mortgaged Property;

(e) LEASES AND RENTS: All leases, rents, contract rights, licenses, issues, benefits, and profits of the Mortgaged Property;

(f) RECORDS: All records and books of account now or hereafter maintained by Mortgagor in connection with the operation of the Mortgaged Property;

(g) NAME AND GOODWILL: The right, in event of foreclosure hereunder of the Mortgaged Property, to take and use any name by which the Mortgage Property is then known or any variation of the words thereof, and the goodwill of Mortgagor with respect thereto;

(h) COLLATERAL: All the right, title, and interest of Mortgagor in and to the Collateral, hereinafter defined; and

(i) FURTHER RIGHT, TITLE, AND INTEREST: All further estate, right, title, interest, property, claim and demand whatsoever, either in law or in equity, of Mortgagor, in or to any of the above.

TO HAVE AND TO HOLD the above granted Mortgaged Property, with the privileges and appurtenances thereof, unto Mortgagee, its successors and assigns forever, to its and their own property use. Mortgagor, for itself, its successors and assigns, covenants with Mortgagee, its successors and assigns, that Mortgagor is well seized of the Mortgaged Property as a good indefeasible estate in FEE SIMPLE; and has good right to bargain and sell the same in manner and form as above written; and that the same is free from all encumbrances whatsoever, except those listed on Exhibit B attached hereto and incorporated herein and except for the first priority mortgage granted to Lender.

Mortgagor further warrants and covenants to defend the Mortgaged Property to Mortgagee, its successors and assigns, against all claims and demands made by any other party, except those listed on said Exhibit B.

This Mortgage is granted by Mortgagor to secure the payment and performance by Mortgagor of all of its obligations under:

(a) the Promissory Note dated of even date herewith made by Mortgagor in favor of Mortgagee in the stated principal amount of up to **Seven Hundred Thirty-one Thousand Two Hundred Fifty and 00/100 Dollars ($731,250.00)**, and all modifications, renewals, extensions, and substitutions of said Note (the "Note");

(b) the Loan Agreement dated of even date herewith by and between Mortgagor and Mortgagee (the "Loan Agreement"); and

(c) all other covenants, agreements and conditions referred to or contained herein (all of the obligations in subparagraphs (a), (b), and (c) above are herein collectively called the "Obligations").

In consideration of the foregoing, and in order to more fully protect the security of this Mortgage, Mortgagor represents, warrants, covenants and agrees as follows:

1. Lawfully Seized of the Mortgage Property. Mortgagor is lawfully seized of the Mortgaged Property and has the right to encumber it with the lien created by this instrument, which lien is subject only to the Permitted Encumbrances. Mortgagor will defend the title thereto in any action affecting the rights of the Mortgagee hereunder and pay all costs of any such action (including, but not limited to, attorneys' fees), whether or not such action (i) progresses to judgment, or (ii) is brought by or against the Mortgagee.

2. Competence to Execute Loan Documents. Mortgagor has full power and authority to execute and deliver the Note, the Loan Agreement, this Mortgage, and all other mortgage instruments, security agreements, and all other agreements and documents required of Mortgagor, to Mortgagee, and to the best of Mortgagor's knowledge the execution and delivery of the same is not in violation of and will not result in default of any agreements or understandings Mortgagor may have with any person or persons.

3. Mortgage Condition. This Mortgage is given on the express condition that, if all the Obligations of Mortgagor, and any additional indebtedness secured hereby, and any extensions or renewals thereof, shall be paid and satisfied according to their tenor, and if all agreements and provisions contained in the Loan Agreements are fully kept and performed, then this Mortgage shall, upon payment or performance of the last such obligation, become null and void; otherwise to remain in full force and effect.

4. Legal Tender and Application of Payments. Mortgagor shall pay and perform the Obligations, including, but not limited to, all sums due under the Note and the Loan Agreement in lawful money of the United States at the times and in the manner set forth therein. Any payments made in accordance with the terms of this Mortgage by any person at any time liable for the payment of the whole or any part of the sums now or hereafter secured by this Mortgage or by any subsequent owner of the Mortgaged Property, or by any other person whose interest in the Mortgaged Property might be prejudiced in the event of a failure to make such payment, shall be deemed, as between Mortgagee and all persons who at any time may be liable as aforesaid or may own the Mortgaged Property, to have been made on behalf of all such persons.

5. Taxes, Assessments, and Other Charges. Mortgagor shall pay promptly, before the same shall become delinquent, all taxes, assessments, sewer rents, water rates and other charges of any kind now or hereafter levied or assessed upon the Mortgaged Property or any part thereof, or upon the Obligations, or upon the interest of Mortgagee in the Mortgaged Property, and any governmental or municipal charges and impositions for which lien rights exist; and upon request of Mortgagee, Mortgagor shall exhibit to Mortgagee receipts for the payment of all items specified in this paragraph prior to the date when the same shall become delinquent. Mortgagor will, upon Mortgagee's request, deposit monthly with the Mortgagee or its duly authorized agent an amount which will create a fund sufficient to make each and every payment of taxes in the future as the same shall become due and payable. Such deposits shall be received and held by the Mortgagee or its agent, without interest, and applied to the payment of each installment of such taxes as it becomes due and payable and Mortgagor shall furnish to the Mortgagee or its agent, promptly upon receipt, the tax bills with respect thereto. If Mortgagor shall have deposited amounts in the aggregate more than sufficient to pay such taxes, the excess shall be applied by the Mortgagee toward the deposits next required to be made hereunder or at its election shall be repaid to the

Mortgagor, without interest. All the Mortgagor's interest in such deposits is hereby assigned by Mortgagor to the Mortgagee, and the Mortgagor hereby grants the Mortgagee a security interest in such deposits, as additional security for the payment of the indebtedness secured hereby in the event that an Event of Default shall occur hereunder. Upon payment in full of all indebtedness secured hereby, any monthly deposits then held by the Mortgagee or its agent shall be repaid to Mortgagor, without interest.

6. Insurance. Mortgagor shall comply with all the following provisions:

(a) Mortgagor shall obtain, carry, and maintain comprehensive general liability insurance covering the Mortgaged Property in an amount of not less than $2,000,000 for bodily injury (including death) and property damage, per occurrence. Such insurance shall be with companies reasonably approved by Mortgagee. Mortgagor shall provide Mortgagee with a certificate of insurance containing a provision designating Mortgagee as mortgagee and as an additional insured party.

(b) Mortgagor shall obtain, carry, and maintain insurance policies against loss by fire, with extended coverage, and by all other casualties and risks upon the improvements on the Mortgaged Property with such company or companies as Mortgagee shall approve in an amount not less than one hundred percent (100%) of the full insurable value of the Mortgaged Property. The policy or policies of such insurance shall in case of loss be made payable to Mortgagee as collateral security, and Mortgagee's rights shall be first and superior to the rights of any junior mortgage holder; and Mortgagor hereby agrees that Mortgagee may, upon failure of Mortgagor to maintain insurance as required hereunder or to obtain new coverage as required hereunder, at its option, but without obligation so to do, effect new insurance or at Mortgagee's option, insurance in favor of Mortgagee alone, and that the premium or premiums for all such insurance shall be paid by Mortgagor promptly when due.

(c) Mortgagor shall obtain, carry, and maintain flood hazard insurance if at any time the Premises are located in any federally designated special hazard area in an amount equal to the full replacement cost or the maximum amount then available under the National Flood Insurance Program.

(d) Mortgagor shall obtain, carry, and maintain workmen's compensation insurance for all employees of Mortgagor engaged on or with respect to the Mortgaged Property.

(e) Such other insurance in such form and in such amounts as may from time to time be required by Mortgagee against other insurable hazards and casualties which at the time are commonly insured against in the case of properties of similar character and location to the Mortgaged Property.

(f) Mortgagor shall give Mortgagee and the insurance carrier immediate written notice of any loss or damage to the Mortgaged Property. Mortgagor does hereby appoint Mortgagee to be the true and lawful attorney, irrevocable, of Mortgagor, in the name and stead of Mortgagor, and Mortgagor hereby agrees that Mortgagee may (except for claims of less than $10,000.00), at Mortgagee's option, but without obligation to do so, demand, adjust, sue for,

compromise and collect the proceeds of claims for losses which may occur under any such insurance, give discharging receipts for sums received in settlement of such losses, to reimburse Mortgagee therefrom for all expenses (including reasonable counsel fees) incurred in connection therewith, and apply the remainder thereof and any unearned premium of or dividend upon any canceled insurance, notwithstanding the claim of any intervening encumbrancer or lienor, at Mortgagee's election, in whole or in part, on account of the indebtedness secured by this Mortgage, whether or not then due, or to the cost of repair or restoration of the Mortgaged Property.

(g) Mortgagor agrees to furnish Mortgagee certificates of all renewals of the aforesaid insurance relating to Mortgagor or the Mortgaged Property not less than thirty (30) days prior to the expiration date of the expiring policies. All policies of insurance shall carry an endorsement unconditionally requiring at least thirty (30) days' (or such other maximum timeframe as the policy shall allow) written notice to Mortgagee from the insurer or insurers issuing the same prior to their changing, canceling or not renewing such policy, and Mortgagor hereby agrees to promptly deliver or cause the delivery of any certificate evidencing any such change or cancellation to Mortgagee. All policies of insurance required by this Mortgage shall contain clauses or endorsements to the effect that (i) no act or omission of either Mortgagor or anyone acting for Mortgagor (including, without limitation, any representations made by Mortgagor in the procurement of such insurance), which might otherwise result in a forfeiture of such insurance or any part thereof, no occupancy or use of the Mortgaged Property for purposes more hazardous than permitted by the terms of the policy, and no foreclosure or any other change in title to the Mortgaged Property or any part thereof, shall affect the validity or enforceability of such insurance insofar as Mortgagee is concerned, (ii) the insurer waives any right of set off, counterclaim, subrogation, or any deduction in respect of any liability of Mortgagor and Mortgagee, (iii) such insurance is primary and without right of contribution from any other insurance which may be available, and (iv) Mortgagee shall not be liable for any premiums thereon or subject to any assessments thereunder, and shall in all events be in amounts sufficient to avoid any coinsurance liability. Upon the occurrence of an Event of Default and within ten (10) days after written demand by the Mortgagee, Mortgagor will deposit monthly with the Mortgagee or its duly authorized agent an amount sufficient to create a fund to make each and every payment of insurance premiums as and when the same shall become due. Such deposits shall be received and held by the Mortgagee or its agent, without interest, and applied to the payment of the premium for each insurance policy required hereunder as it becomes due and payable and Mortgagor shall furnish to the Mortgagee or its agent, promptly upon receipt, the insurance bills with respect thereto. If Mortgagor shall have deposited amounts in the aggregate more than sufficient to pay premiums under all insurance policies required hereunder, the excess shall be applied by the Mortgagee toward the deposits next required to be made hereunder or at its election shall be repaid to the Mortgagor, without interest. All of Mortgagor's interest in such deposits is hereby assigned by Mortgagor to the Mortgagee, and the Mortgagor hereby grants the Mortgagee a security interest in such deposit, as additional security for the payment of the indebtedness secured hereby in the event that an Event of Default shall occur hereunder. Upon payment in full of all indebtedness secured hereby, any monthly deposits then held by the Mortgagee or its agent shall be repaid to Mortgagor, without interest.

(h) All policies of insurance required by this Mortgage shall be issued by companies licensed to do business in the state where the policy is issued and also in the State of

Rhode Island and having a rating in Best's Key Rating Guide of at least "A" and a financial size category of at least "VIII".

7. Hazardous Substances. Mortgagor shall give Mortgagee prompt written notice (a) of any threatened or actual notice of violation or similar notice from Rhode Island Department of Environmental Management or its successors or assigns, or any other municipal, state or federal governmental unit or agency related to oil, toxic waste or hazardous materials (i) on the Premises, or (ii) generated by Mortgagor, and (b) of the presence of oil or toxic waste or hazardous materials on or adjacent to the Premises upon Mortgagor becoming aware thereof; and in all cases Mortgagor shall take prompt action for the containment and, if required by the Rhode Island Department of Environmental Management, the United States Environmental Protection Agency or any other governmental agency having jurisdiction over the Mortgaged Property, removal of such oil or toxic waste or hazardous materials from the Premises and shall comply with all orders of such governmental units or agencies and all laws applicable to the Premises. Mortgagor represents and warrants to Mortgagee that Mortgagor has no knowledge or notice of any kind whatsoever of the existence or former existence of the dumping, storage, generation, or containment of any hazardous materials upon the Premises. No notice of violation or similar notice has been issued or threatened by any state or federal agency related to hazardous materials on the Premises or generated by Mortgagor. Mortgagor shall not dump, store, generate or contain any hazardous materials on or upon the Mortgaged Property or any portion thereof, or in any sewer, drain, stream, pond or lake running through, on, past or abutting the Mortgaged Property. Mortgagor has no knowledge of the existence of any underground storage tanks upon the Mortgaged Property.

8. Maintenance and Repair. Mortgagor shall take such action as may be necessary to prevent further deterioration of the Mortgaged Property, shall not commit or suffer any waste of the Mortgaged Property, and shall comply with, or cause to be complied with, all statutes, ordinances, and requirements of any federal, state, municipal, or other governmental authority relating to the Mortgaged Property. Mortgagor shall promptly repair, restore, replace, or rebuild any part of the Mortgaged Property which may be damaged or destroyed by any casualty whatsoever or which may be affected by any proceeding of the character referred to in the paragraph hereof entitled Eminent Domain. Mortgagor shall pay when due all claims for labor and materials thereof.

9. Alteration or Demolition. Mortgagor agrees that no improvements now or hereafter covered by the lien of this Mortgage shall be removed, demolished, or structurally altered, without the prior written consent of Mortgagee following submission of plans and specifications for such changes to and approval by Mortgagee, and provided that such changes do not require zoning or other approvals, and except for repair and replacement of fixtures and equipment in the ordinary course as necessary to maintain the Premises in the condition required by the Loan Documents.

10. Restrictions on Use of Property and Prohibition Against Sale. Mortgagor shall not sell, lease, encumber, suffer change in title or ownership of, or otherwise transfer, or vest title in anyone other than Mortgagor to all or any part of the Mortgaged Property while any part of the indebtedness secured hereby remains unpaid without the prior written approval of Mortgagee. Further, unless required by applicable law or unless Mortgagee has otherwise agreed in writing, Mortgagor shall not allow changes in the nature of the use for which the Premises were intended

on the date of this Mortgage, including, but not limited to, any change in any private restrictive covenant or private restrictions, if any, limiting or defining the uses which may be made of any part of the Premises.

11. Eminent Domain. In the event that the whole or any part of the Mortgaged Property shall be taken by eminent domain, or in the event of any alteration of the grade of any street or highway, or of any other injury to or decrease in value of the Mortgaged Property, or the reacquisition of the whole or any part of the Mortgaged Property pursuant to the terms of any redevelopment plan or agreement affecting the Mortgaged Property or if any agreement shall be made between Mortgagor and any entity vested with the power of eminent domain, any and all awards and payments on account thereof shall be deposited with Mortgagee. Mortgagor shall give Mortgagee immediate notice of the actual or threatened commencement of any of the foregoing proceedings and shall deliver to Mortgagee copies of all papers served in connection with any such proceedings. Mortgagee shall have the right to intervene and participate in any proceedings for and in connection with any such taking, unless such intervention shall be prohibited by the court having jurisdiction over such taking, in which event Mortgagor shall consult with Mortgagee in connection with such proceedings. Mortgagor shall not enter into any agreement with regard to the Mortgaged Property or any award or payment on account thereof unless Mortgagee shall have consented thereto in writing, such consent not to be unreasonably withheld or delayed. Mortgagor hereby appoints Mortgagee its attorney-in-fact, coupled with an interest, and authorizes, directs, and empowers such attorney, at its option, on behalf of Mortgagor, to adjust, compromise or settle the claim for any such award or payment, to collect, receive and retain the proceeds thereof, and to give proper receipts therefore, provided, however, Mortgagee shall not exercise such power unless an Event of Default has occurred or if Mortgagor is not diligently pursuing the award. Mortgagor further agrees, on request, to make, execute, and deliver to Mortgagee any and all assignments and other instruments, as Mortgagee may require, to confirm or assign all such awards and payments to Mortgagee free and clear of any and all encumbrances of any nature whatsoever.

Notwithstanding any such taking, alteration of grade, other injury to or decrease in value of the Mortgaged Property, or reacquisition of title, or agreement, Mortgagor shall make all payments required by the Note and the Loan Agreement. Any reduction in the principal sums resulting from the application by Mortgagee of such award or payment as hereinafter set forth shall be deemed to take effect only on the date of such application. The proceeds of any award or payment, after deducting the expenses of collection, including, but not limited to, the counsel fees, other costs and disbursements, incurred by Mortgagee, if not disbursed for repair and restoration as set forth above, may be applied by Mortgagee, at its sole option, toward payment of the indebtedness secured hereby whether or not same shall be then due or payable, or be paid over wholly or in part to Mortgagor for the purposes of altering or restoring any part of the Mortgaged Property which may have been damaged as a result of any such taking, alteration of grade, or other injury to the Mortgaged Property, or for any other purpose or object satisfactory to Mortgagee, but Mortgagee shall not be obligated to see to the proper application of any amount paid over to Mortgagor, nor shall the amount so paid over to Mortgagor be deemed a payment on any indebtedness secured hereby.

If prior to the receipt by Mortgagee of such award or payment, the Mortgaged Property shall have been sold on foreclosure of this Mortgage, Mortgagee shall have the right to receive

said award or payment to the extent of the debt secured by this Mortgage remaining unsatisfied after such sale of the Mortgaged Property, with interest thereon at the rate set forth in the Note, whether or not a deficiency judgment on this Mortgage shall have been sought or recovered or denied, and to the extent of the reasonable counsel fees, costs and disbursements incurred by Mortgagee in connection with the collection of such award or payment.

12. Right to Cure. At its option, Mortgagee may pay any expense or item (including, but not limited to, taxes, rates, assessments, other charges, insurance premiums, maintenance and repair expenses, expenses incurred in protection of the lien of this Mortgage, etc.) which Mortgagor herein agrees to pay in case Mortgagor shall fail to pay the same when due, and may perform any acts or covenants which Mortgagor herein agrees and shall fail to perform, and may make any payments under or secured by any other mortgage on the Mortgaged Property, and may add the same, and the expense thereof, including, but not limited to, counsel fees and other costs, charges and disbursements incurred by Mortgagee in connection therewith, to the indebtedness secured hereby or may at its option deduct the same from any part of money thereafter advanced; and Mortgagor agrees to repay immediately on demand, the same to Mortgagee, together with interest thereon at the rate set forth in the Note, from the date on which such payment or expense is made by Mortgagee, and the same shall be a lien upon the Mortgaged Property prior to any right, title, interest, lien or claim thereto or thereon attaching or accruing subsequent to the lien of this Mortgage and shall be secured by this Mortgage.

13. Protection of Lien. Mortgagor shall pay all reasonable costs, expenses and counsel fees incurred by Mortgagee in protecting or sustaining the lien of this Mortgage, including without limitation all expenses incurred by Mortgagee in connection with containment, monitoring, prevention or clean-up of hazardous substances upon or in connection with the Mortgaged Property. Mortgagor shall indemnify and save Mortgagee harmless from all such costs and expenses, including, but not limited to, reasonable counsel fees, recording fees and costs of a title search, continuation of abstract and preparation of survey, incurred by reason of any action, suit, proceeding, hearing, motion or application before any court or administrative body in which Mortgagee may be a party by reason hereof, including, but not limited to, condemnation, bankruptcy and administrative proceedings, as well as any other proceedings wherein proof of claim is required to be filed or in which it becomes necessary, in Mortgagee's sole opinion, to defend or uphold the terms and priority of this Mortgage. All money paid or expended by Mortgagee in that regard, together with interest thereon from date of such payment at the rate set forth in the Note shall be additional indebtedness secured hereby and shall be immediately and without notice due and payable to Mortgagee by Mortgagor.

14. Indemnification. Any and all expenses incurred in connection with the closing of the Loan shall be paid by Mortgagor, including, but not limited to, the cost of title insurance premiums and charges, recording fees, survey costs, taxes, appraisal fees, and Mortgagee's attorney's fees. Mortgagor agrees to pay all such fees and indemnify and save Mortgagee harmless against the claims of any person(s) claiming any fee(s), reimbursement(s), commission(s) and/or costs arising out of the Obligations.

15. Right to Enter Premises. Mortgagee and any persons authorized by Mortgagee shall have the right to enter and inspect the Mortgaged Property at all reasonable times and upon

reasonable notice, and to cause the Mortgaged Property to be inspected by Mortgagee's agents at all reasonable times. Upon and after the occurrence of an Event of Default if not cured, Mortgagee may conduct such environmental testings of the Mortgaged Property as Mortgagee desires, including without limitation the conducting of soil borings, installation and monitoring of groundwater monitoring wells and equipment, the use of ground penetrating radar, and the conducting of tests of underground storage tanks.

16. Security Agreement. Mortgagor agrees that this Mortgage shall constitute a security agreement within the meaning of the Uniform Commercial Code of the State of Rhode Island as the same may be amended from time to time (the "Uniform Commercial Code") with respect to all manner of machinery, fixtures, equipment, tools, construction materials, bricks, steel, wood, windows, window frames, glass, concrete, mortar, furnishings, furniture, carpets, appliances, cabinets, sinks, tubs, toilets, shower stalls, landscaping materials and improvements, now or at any time hereafter attached to, placed upon, or used in any way in connection with the use, enjoyment, operation, maintenance and occupancy of the Premises (all herein collectively called the "Collateral"). Mortgagor hereby grants to Mortgagee a first priority security interest in and to all of the Collateral for the purpose of securing the Obligations and all other sums and charges which may become due hereunder or thereunder. Mortgagee shall have all of the remedies of a secured party under the Uniform Commercial Code and such further remedies as may from time to time hereafter be provided by the State of Rhode Island or under the laws of the United States for a secured party with respect to the Collateral and any personal property that may hereafter be given as further security for the Obligations; provided, however, that nothing herein shall preclude Mortgagee from proceeding both as to personal property security and real estate security in accordance with Mortgagee's rights and remedies in respect of the real estate security. Mortgagor hereby authorizes Mortgagee to file financing and continuation statements with respect to the Collateral without the signature of Mortgagor whenever lawful. The parties agree that in the event Mortgagee elects to proceed with respect to the Collateral separately from the Premises, ten (10) days' notice of the sale of the Collateral shall be reasonable notice. Mortgagor shall, from time to time, on request of Mortgagee, deliver to Mortgagee an inventory of the Collateral in reasonable detail, including an itemization of all items leased to Mortgagor or subject to conditional bill of sale, security agreement or other title retention agreement.

Mortgagor hereby warrants and covenants that:

(a) the Collateral is and shall be used primarily for business purposes, and that the Collateral shall be kept on the Premises;

(b) Mortgagor is the owner of the Collateral free from any adverse lien, security interest or encumbrance; and Mortgagor shall defend the Collateral against all claims and demands of all persons at any time claiming the same or any interest therein;

(c) except financing statements filed in favor of Mortgagee, no financing statement covering any Collateral or any proceeds thereof is on file in any public office and, at the request of Mortgagee, Mortgagor shall join with Mortgagee in executing one or more financing statements pursuant to the Uniform Commercial Code in form satisfactory to Mortgagee and shall pay the

cost of filing the same or filing or recording this agreement in all public offices wherever filing or recording is deemed by Mortgagee to be necessary or desirable;

(d) Mortgagor shall not sell or offer to sell or otherwise transfer, or replace or remove the Collateral or any interest therein without the prior written consent of Mortgagee unless replaced immediately by unencumbered articles of personal property or fixtures, as the case may be, having equal or greater value thereto; and all such replacements, renewals and additions shall become and be immediately subject to the security interest of this Mortgage and be covered hereby;

(e) Mortgagor shall maintain insurance at all times with respect to the Collateral against risks of fire (including so-called extended coverage), theft and such other risks as Mortgagee may require, containing such terms, in such form, for such periods and written by such companies as shall be satisfactory to Mortgagee, such insurance to be payable to Mortgagee and Mortgagor as their interests may appear, all of which policies of insurance shall provide unconditionally for a minimum of thirty (30) days' prior written notice to Mortgagee before cancellation. Mortgagor shall furnish Mortgagee with certificates or other evidence satisfactory to Mortgagee of compliance with the foregoing insurance provisions, and agrees that Mortgagee may act as attorney for Mortgagor in obtaining, adjusting, settling, and canceling such insurance and endorsing any drafts;

(f) Mortgagor shall keep the Collateral free from any adverse lien, security interest or encumbrance and in good order and repair and shall not waste or destroy the Collateral or any part thereof, shall not use the Collateral in violation of any statute or ordinance, and agrees that Mortgagee may examine and inspect the Collateral at reasonable times, wherever located;

(g) Mortgagor shall pay promptly when due all taxes and assessments upon the Collateral or their use or operation; and

(h) at its option and upon 30 days' prior written notice to Mortgagor, Mortgagee may discharge taxes, liens, security interests or other encumbrances at any time levied or placed on the Collateral, may pay for insurance on the Collateral and may pay for the maintenance and preservation of the Collateral. Mortgagor agrees to reimburse Mortgagee on demand for any payment made, or any expense incurred by Mortgagee pursuant to the foregoing authorization.

Until the occurrence of an Event of Default hereunder, Mortgagor may have possession of the Collateral and use it in any lawful manner not inconsistent with this Mortgage and not inconsistent with any policy of insurance thereon.

17. Assignment of Leases and Rents. Mortgagor does hereby transfer, assign and deliver unto Mortgagee all of the right, title and interest of Mortgagor in and to all leases (the "Assigned Leases), all lease guaranty documents (the "Lease Guaranty Documents"), and all rents (the "Rents"), whether now existing or hereafter arising, to have and to hold, together with all the rights, privileges, and appurtenances, now or hereafter in any way belonging or pertaining thereto, unto Mortgagee, its successors or assigns, forever, subject, however, to the terms and conditions hereinafter provided.

(a) Mortgagor represents, warrants and covenants as follows:

(i) Each of the Assigned Leases and Lease Guaranty Documents is a valid and binding agreement and there presently are, to the extent ascertainable by Mortgagor, no defaults on the part of any of the parties thereto and there exists no condition which with the giving of notice or the passage of time or both would constitute a default on the part of any party thereto;

(ii) Mortgagor has not sold, assigned, transferred, mortgaged, or pledged any of the Assigned Leases, Rents or Lease Guaranty Documents, or any part thereof, to any party other than Mortgagee;

(iii) No Rents, or any part thereof, becoming due subsequent to the date hereof have been collected nor has payment of any of the same been anticipated, waived, released, discounted or otherwise discharged or compromised;

(iv) Mortgagor will not assign, pledge, or otherwise encumber any of the Assigned Leases, the Rents, or any Lease Guaranty Documents without the prior written consent of Mortgagee;

(v) Mortgagor will perform and observe, or cause to be performed and observed, all of the terms, covenants, and conditions on its part to be performed and observed with respect to each of the Assigned Leases and any Lease Guaranty Documents;

(b) Upon the occurrence and during the continuance of an Event of Default beyond any applicable grace periods, Mortgagor does hereby authorize and empower Mortgagee:

(i) To collect the Rents as the same shall become due, and Mortgagor does hereby irrevocably direct each and all of the lessees, sublessees, tenants or other occupants of the Premises to pay to Mortgagee, upon demand by Mortgagee, all Rents as may now be due or payable and/or shall hereafter become due or payable. No lessee, sublessee, tenant or other occupant of the Premises or any obligor under any Lease Guaranty Documents making any payment to Mortgagee pursuant to this Mortgage shall be under any obligation to inquire into or determine the actual existence of any Event of Default claimed by Mortgagee, or to make any other inquiry, Mortgagor's rights, if any, in this regard being expressly waived hereby;

(ii) To enter and take possession of the Premises by actual physical possession without the commencement of any action or any proceedings to foreclose the Mortgage or to exercise any power of sale Mortgagee may have hereunder;

(iii) To manage and operate the Premises or any part thereof;

(iv) To lease the Premises or any part thereof for such periods of time, and upon such terms and conditions as Mortgagee may, in its sole discretion, deem proper;

(v) To enforce, cancel or modify any of the Assigned Leases and any Lease Guaranty Documents;

(vi) To demand, collect, sue for, attach, levy, recover, receive, compromise and adjust, and make, execute, and deliver receipts, releases, discharges or other instruments for all

Rents and other amounts that may then be or may thereafter become due, owing or payable with respect to the Premises or any part thereof from any present or future lessees, tenants, subtenants, or occupants thereof;

(vii) To institute, prosecute to completion, or compromise and settle, all proceedings, actions for Rent or for removing any and all lessees, tenants, subtenants or occupants of the Premises or any part thereof;

(viii) To enforce, enjoin or restrain the violation of any of the terms, provisions and conditions of any lease or leases now or hereafter affecting the Premises or any part thereof;

(ix) To make such repairs and alterations to the Premises as Mortgagee may, in its reasonable discretion, deem proper;

(x) To pay, from and out of any Rents collected in respect of the Premises or any part thereof, or from or out of any other funds, any taxes, assessments, water rates, sewer rates, or other government charges levied, assessed, or imposed against the Premises, or any portion thereof, and also any and all other charges, costs and expenses which it may be necessary or advisable for Mortgagee to pay in the management or operation of the Premises, including (without limiting the generality of any of the rights, powers, privileges and authority hereinbefore or hereinafter conferred) the costs of such repairs and alterations; commissions for renting the Premises or any portions thereof; and legal expenses incurred in enforcing claims, drafting and negotiating documents or for any other services that may be required; and

(xi) To generally do, execute, and perform any other act, deed, matter, or thing whatsoever that ought to be done, executed, and performed in and about or with respect to the Premises, as fully as Mortgagor might do.

Notwithstanding the foregoing rights and obligations contained in this Sections 17, Mortgagee hereby agrees that it shall not exercise the rights granted to it under said Section until after the occurrence of an Event of Default.

18. No Waiver. Any failure by Mortgagee to insist upon the strict performance by Mortgagor of any of the terms and provisions hereof shall not be deemed to be a waiver of any of the terms and provisions hereof, and Mortgagee, notwithstanding any such failure, shall have the right thereafter to insist upon the strict performance by Mortgagor, of any and all of the terms and provisions of this Mortgage and the Obligations to be performed by Mortgagor. Neither Mortgagor nor any other person now or hereafter obligated for the payment of the whole or any part of the sums now or hereafter secured by this Mortgage shall be relieved of such obligation by reason of the failure of Mortgagee to comply with any request of Mortgagor or any other person so obligated to take action to foreclose this Mortgage or otherwise enforce any of the provisions of this Mortgage or of any obligation secured by this Mortgage, or by reason of the release, regardless of consideration, of the whole or any part of the security held for the indebtedness secured by this Mortgage. Regardless of consideration, and without the necessity for any notice to or consent by the holder of any subordinate lien on the Mortgaged Property, Mortgagee may release the obligation of anyone at any time liable for any of the indebtedness secured by this Mortgage or

any part of the security held for said indebtedness and may extend the time of payment or otherwise modify the terms of the Obligations and/or this Mortgage without, as to the security or the remainder thereof, in any way impairing or affecting the lien of this Mortgage, or the priority of such lien, as security for the payment of said indebtedness as it may be so extended or modified, over any subordinate lien; and the holder of any subordinate lien shall have no right to terminate any lease affecting the Premises whether or not such lease be subordinate to this Mortgage; and Mortgagee may resort for the payment of the indebtedness secured hereby to any other security therefore, held by Mortgagee in such order and manner as Mortgagee elects.

19. Compliance with Laws. Mortgagor shall comply with (a) all present and future laws, regulations and other requirements of every governmental body having jurisdiction over the Mortgaged Property or the use or occupation of the improvements thereon, and (b) all terms, covenants, and conditions of all instruments of record affecting the Mortgaged Property, noncompliance with which may affect the security of this Mortgage or impose any duty or obligation upon Mortgagor or Mortgagee.

20. Foreclosure. Mortgagee may, at its option upon the occurrence and during the continuance of an Event of Default beyond any applicable grace periods, foreclose this Mortgage for any portion of the debt or any other sums secured thereby which are then due and payable, subject to the continuing lien of this Mortgage for the balance not then due, but nothing in this paragraph contained shall impair or affect any right or remedy which Mortgagee might now or hereafter have, were it not for this paragraph, but the right given by this paragraph shall be in addition to any others which Mortgagee may have hereunder.

21. Marshaling. Except as hereinafter provided, Mortgagee shall not be compelled to release, or be prevented from foreclosing or enforcing this Mortgage upon all or any part of the Mortgaged Property, unless the entire indebtedness and all items hereby secured shall be paid in full as aforesaid; and shall not be required to accept any part or parts of the Mortgaged Property, as distinguished from the entire whole thereof, as payment of or upon the said indebtedness to the extent of the value of such part or parts; and shall not be compelled to accept or allow any apportionment of the said indebtedness to or among any separate parts of the Mortgaged Property. In case of a foreclosure sale, the Mortgaged Property may be sold in one parcel and as an entirety or in such parcels, manner, or order as Mortgagee in its sole discretion may elect.

22. Rights and Remedies Cumulative. To the extent permitted by law, the rights and remedies provided for in this Mortgage, or which Mortgagee may have otherwise, at law or in equity (including, but not limited to, the right to damages by reason of the failure of Mortgagor to keep, observe and perform any of the covenants or agreements contained in this Mortgage), shall be distinct, separate and cumulative, and shall not be deemed to be inconsistent with each other, and none of them, whether or not exercised by Mortgagee, shall be deemed to be in exclusion of any other, and any two or more of all such rights and remedies may be exercised at the same time. Further, Mortgagee may resort, for the payment of the indebtedness secured hereby, to its several securities therefore in such order or manner as it may think fit.

If Mortgagor has given Mortgagee one or more mortgages other than this Mortgage with respect to the Mortgaged Property or any portion thereof, then all such mortgages, and all rights

and remedies provided for in all such mortgages shall remain distinct and separate and none of them shall merge or be merged with this Mortgage or any other mortgages.

Without in any way limiting the generality of the foregoing, Mortgagee shall have the right from time to time to take action to recover any sums, whether interest, principal or any installment of either, or any other sums required to be paid under the terms of this Mortgage or the Note or the Loan Agreement, as the same become due, without regard to whether or not the principal sums secured or any other sums secured hereby shall be due, and without prejudice to the right of Mortgagee thereafter to bring an action of foreclosure, or any other action, for a default or defaults by Mortgagor existing at the time such earlier action was commenced.

23. Expenses. If this Mortgage shall be foreclosed, there shall be included, to the extent permitted by law, in the computation of the indebtedness secured hereby, the amount of a reasonable fee for the services of the attorneys retained by Mortgagee in the foreclosure action or proceeding, as well as any and all disbursements, costs and other expenses incurred by Mortgagee in connection with such foreclosure action or proceeding.

24. Future Laws Affecting Mortgagors. In the event of the passage, after the date of this Mortgage, of any law, federal, state or local, or in the event of the rendition of a decision of any court of competent jurisdiction, imposing upon Mortgagee the taxes, charges or assessments previously paid by Mortgagor, or changing in any way the laws for the taxation of mortgages or indebtedness secured by mortgages, or imposing a tax, directly or indirectly, on this Mortgage, or the Note or the Obligations, or changing the manner of the collection of any such taxes, charges or assessments, so as to affect this Mortgage or lessen the net income on the indebtedness secured by this Mortgage, or upon the rendition of any court of competent jurisdiction of a decision that any undertaking by Mortgagor as in this paragraph or elsewhere in this Mortgage provided is legally inoperative, then Mortgagee shall have the right, at its option, to give thirty (30) days' written notice to Mortgagor requiring the payment of the indebtedness secured hereby, and such indebtedness shall become due and payable and collectible at the expiration of said thirty (30) days; provided, however, said option shall be unavailing and the Obligations and this Mortgage shall remain in effect as though said law had not been enacted or decision rendered, if under such law or decision Mortgagor lawfully may pay any such tax, charge or assessment to or for Mortgagee and does in fact pay same when payable and any and all security and collateral granted by Mortgagor to Mortgagee under this Mortgage and the Loan Agreements, as that term is defined herein, is not impaired by said law or decision.

25. Reliance on Documents. Mortgagee, in making any payment herein authorized in the place and stead of Mortgagor which (i) relates to taxes, assessments, water rates, sewer use and rentals and other governmental or municipal charges, fines, impositions or liens asserted against the Mortgaged Property, may do so according to any bill, statement or estimate procured from the appropriate public office without inquiry into the accuracy thereof or into the validity of any tax, assessment, sale, forfeiture, tax lien or title or claim thereof; or (ii) relates to insurance premiums may do so according to any notice, bill, statement or estimate procured from the appropriate insurer without inquiry into the accuracy or validity thereof; or (iii) relates to any apparent or threatened adverse title, lien, statement of lien, encumbrance, claim or charge, shall be the sole judge of the legality or validity of same; or (iv) relates to the expense of repairs or replacement of any buildings'

improvements, Fixtures or any other Mortgaged Property shall be the sole judge of the state of repairs and the necessity for incurring the expense of any such repairs or replacement; or (v) otherwise relates to any other purpose not specifically enumerated in this paragraph, may do so whenever, in its judgment and discretion, such payment shall seem necessary or desirable to protect the full security intended to be created by this Mortgage, and provided further that in connection with any such payment, Mortgagee, at its option, may and is hereby authorized to obtain a continuation report of title prepared by a title insurance company, the costs and expenses of which shall be repayable by Mortgagor without demand and shall be secured hereby.

26. Event(s) of Default. The happening and continuance for the period, if any, hereinafter indicated, of any of the following events shall constitute an Event of Default hereunder (each such event is herein called an "Event of Default" and more than one such event is herein collectively called "Events of Default"):

(a) default (beyond any applicable grace period) in the payment of any installment of principal and/or interest under the Note and Obligations as the same become due; or

(b) the failure of the Mortgagor to perform, keep or observe any other obligation, term, provision, condition, covenant, warranty, or representation contained in this Mortgage; or

(c) default or the occurrence of an Event of Default under and as defined in any of the Loan Documents (which are incorporated herein by reference); or

(d) default in the payment of any tax, water, sewer or utility charges or assessment for fifteen (15) days after written notice and demand therefor; or

(e) default in keeping in force the insurance required herein; or

(f) if legal and/or equitable title to the Mortgaged Property or any part thereof shall vest in anyone other than the Mortgagor without the prior written consent of the Mortgagee or if Mortgagor is deprived of possession thereof by process or operation of law; or

(g) upon assignment by the Mortgagor of the whole or any part of the loan proceeds, or rents, income or profits arising from the Mortgaged Property, without the written consent of the Mortgagee.

27. Remedies Upon Default. Upon the occurrence and continuance beyond any applicable grace periods of any one or more of such Events of Default, (i) the Note shall, at the option of Mortgagee, become due and payable in full pursuant to the terms thereof; (ii) Mortgagee may, at its option, exercise its STATUTORY POWER OF SALE; and (iii) Mortgagee may, at its option, commence any action permitted under the laws of the State of Rhode Island or the United States of America including foreclosure of this Mortgage and/or sale of the Collateral. In the event of a sale of the Mortgaged Property or any portion thereof, Mortgagee shall receive the proceeds of such sale or sales, and from such proceeds shall retain all sums hereby secured, whether then due or to fall due thereafter, or the part thereof then remaining unpaid, and also the interest then due on the same, including, without limitation, all expenses incident to such sale or sales, for making deeds hereunder, for reasonable fees of counsel and attorneys, and, also without limitation, all

costs or expenses incurred in the exercise or defense of the rights and powers of Mortgagee hereunder and all taxes, water and sewer rates, assessments, premiums for insurance and expenses incurred in repairing or preserving the Mortgaged Property, either theretofore paid by Mortgagee or then remaining unpaid, rendering and paying the surplus of said proceeds of sale, if any there be, over and above the amounts so to be retained as aforesaid, together with a true and particular account of such sale or sales, expenses and charges to Mortgagor, which sale or sales shall forever be a perpetual bar, both in law and equity, against Mortgagor and all persons claiming or to claim the Mortgaged Property so sold by, from or under Mortgagor.

28. Miscellaneous Provisions.

(a) In the event of a foreclosure of this Mortgage, the purchaser of the Mortgaged Property, if Mortgagee so consents, shall succeed to all the rights of Mortgagor to the Mortgaged Property, including, without limitation, any right to unearned premiums, in and to all policies of insurance assigned and delivered to Mortgagee pursuant to the provisions hereof.

(b) Except as otherwise specified herein or by notice, all notices, communications and demands hereunder shall be in writing and sent by certified mail, return receipt requested, or by overnight delivery service, with all charges prepaid, to the applicable party or parties at the addresses set forth below, or by facsimile transmission (including, without limitation, computer generated facsimile), promptly confirmed in writing sent by first class mail, to the facsimile numbers and addresses set forth below:

If to Mortgagee:	The People's Credit Union 858 West Main Road Middletown, Rhode Island 02842 Attn: Cormac McCarthy, Chief Lending Officer
With a copy to:	Sayer, Regan & Thayer, LLP 130 Bellevue Avenue Newport, Rhode Island 02840 Attn: Adam H. Thayer, Esq.
If to the Mortgagor:	Fair Wind Properties, LLC 204 Poppasquash Road Bristol, Rhode Island 02809
With a copy to:	Sayer, Regan & Thayer, LLP 130 Bellevue Avenue Newport, Rhode Island 02840 Attn: Adam H. Thayer, Esq.

or, as to each party, at such other address as shall be designated by such party in a written notice to the other parties given in accordance with this Section at least ten (10) days in advance thereof. All such notices and correspondence shall be deemed given upon the earliest to occur of (i) actual receipt, (ii) if sent by certified mail, three (3) business days after being postmarked, (iii) if sent by

overnight delivery service, when received or when delivery is refused, or (iv) if sent by facsimile, when receipt of such transmission is acknowledged.

(c) Mortgagor is hereby notified that Mortgagor has the right of free choice in the selection of the agent and insurer through or by which insurance required in connection with the Obligations is to be placed.

(d) Notwithstanding anything in the documents evidencing the Obligations, this Mortgage, or any other instrument to the contrary, Mortgagor shall not be required to pay interest on the indebtedness secured by this Mortgage in excess of the maximum interest permissible under applicable law. In the event the Mortgagor shall pay or be charged in an amount in excess of said maximum permitted interest, such excess amount shall be applied to reduce the principal balance of the indebtedness secured by this Mortgage and not to payment of interest.

(e) Mortgagor shall observe, perform, or comply with all obligations, conditions and covenants contained herein and in the Loan Agreements, as that term is defined herein. Any and all provisions of the Loan Agreements are hereby made a part hereof to the same extent as if fully set forth herein. The term "Loan Agreements" as used herein shall mean and refer to any and all agreements evidencing, securing or relating in any way to the past, present or future indebtedness or obligations or liabilities of every kind, nature and description of Mortgagor owing to Mortgagee, and such other agreements as are executed by Mortgagor on this date or in the future, and any modification, supplementation or amendment thereof made from time to time.

(f) The security interests, liens and other rights and interests in and relative to any of the real or personal property of Mortgagor now or hereafter granted to Mortgagee by Mortgagor by or in any instrument or agreement, including but not limited to the Loan Agreements, shall serve as security for any and all liabilities of Mortgagor to Mortgagee, and, for the repayment thereof, Mortgagee may resort to any security held by it in such order and manner as it may elect.

(g) Mortgagor shall immediately give written notice to Mortgagee of the occurrence of any of the following events:

(i) a fire or other casualty causing more than $10,000.00 worth of damage to the Mortgaged Property;

(ii) receipt of notice of eminent domain proceedings or condemnation of any part of the Mortgaged Property;

(iii) receipt of notice from any governmental authority relating to the structure, use or occupancy of or release of hazardous substances upon the Mortgaged Property or any real property adjacent to the Mortgaged Property;

(iv) commencement of any litigation materially affecting the Mortgaged Property;

(v) any contract or agreement with respect to any sale or other transfer of any part of the Mortgaged Property; and

(vi) commencement of any foreclosure proceedings, including by the giving of notice thereof, affecting the Mortgaged Property.

(h) Wherever used in this Mortgage, unless the context clearly indicates a contrary intent or unless otherwise specifically provided herein, the word "Mortgagor" shall include "any subsequent owner or owners of the Mortgaged Property or any part thereof," the word "Mortgagee" shall include "any subsequent holder or holders of this Mortgage," the term "mortgage debt," shall mean "any and all indebtedness of Mortgagor to Mortgagee as evidenced by the Note and/or secured by this Mortgage" and the word "person" shall include "an individual, corporation, partnership or unincorporated association," and plural or singular shall include each other, and pronouns in any gender shall be construed as masculine, feminine or neuter as the context requires.

(i) "Hazardous substance" as used herein shall mean "solid waste" or "hazardous waste," "hazardous material," "hazardous substance," and "oil" as defined in the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Hazardous Material Transportation Act, the Federal Water Pollution Control Act and the Superfund Amendments and Reauthorization Act of 1986 and any similar or successor federal law or applicable statute and local statutes and ordinances and any rules, regulations and policies promulgated thereunder, as any of such federal, state and local statutes, ordinances and regulations may be amended from time to time.

(j) If any term or provision of this Mortgage or the application thereof to any person or circumstance, shall to any extent be invalid or unenforceable, the remainder of this Mortgage, or the application of such term or provision to persons 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 Mortgage shall be valid and enforceable to the fullest extent permitted by law.

(k) The captions or section headings used in this Mortgage are for convenience only and of no substance or significance, and shall not be used to interpret, modify, or affect in any way the covenants and agreements herein contained.

(l) This Mortgage shall be governed by and construed in accordance with the laws of the State of Rhode Island. All grants, covenants, agreements, and other provisions herein contained shall run with the land and shall be binding upon and inure to the benefit of the respective successors and assigns of Mortgagor and Mortgagee.

29. WAIVER OF JURY TRIAL. MORTGAGOR HEREBY WAIVES TRIAL BY JURY IN ANY LITIGATION IN ANY COURT WITH RESPECT TO, IN CONNECTION WITH, OR ARISING OUT OF THIS MORTGAGE OR ANY INSTRUMENT OR DOCUMENT DELIVERED IN CONNECTION HEREWITH, OR THE VALIDITY, PROTECTION, INTERPRETATION, COLLECTION, OR ENFORCEMENT THEREOF.

30. Open-End Mortgage Provisions. This Mortgage permits and secures any and all current and future advances to the Mortgagor evidenced by (or pursuant to) any one or more of the following: the Note, the Loan Agreement, such other note or notes as may be signed by the Mortgagor payable to Mortgagee and such other agreements as may be entered into by Mortgagor with Mortgagee and signed by Mortgagor. The unpaid principal balance of indebtedness outstanding under this Mortgage shall at no time exceed **Seven Hundred Thirty-one Thousand Two Hundred Fifty and 00/100 Dollars ($731,250.00)**. Mortgagee will accept notices at the address and in the manner specified in Section 28 hereof.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS, WHEREOF, Mortgagor has caused this instrument to be executed as of the date set forth above.

WITNESS:

MORTGAGOR:
Fair Wind Properties, LLC

By:
Danial A. Ferreira, Member

STATE OF RHODE ISLAND

COUNTY OF NEWPORT

In Newport, in said County, on this 2nd day of December, 2021 before me personally appeared **Daniel A. Ferreira,** Duly Authorized Member of **Fair Wind Properties, LLC**, to me known and known by me or proved to me through satisfactory evidence of identification, which was a driver's license, to be the party executing the foregoing instrument on behalf of said company, and acknowledged said instrument and the execution thereof, to be his free act and deed in said capacity and the free act and deed of said company.

Notary Public:
My Commission Expires:

ADAM H. THAYER
NOTARY PUBLIC - RHODE ISLAND
ID #754471
MY COMMISSION EXPIRES 9/11/24

Mortgagee caused its name to be subscribed hereto by its duly authorized officer for purposes of securing the benefits and rights of a secured party under the Uniform Commercial Code.

WITNESS:

MORTGAGEE
THE PEOPLE'S CREDIT UNION

By: _____
Cormac McCarthy, Chief Lending Officer

STATE OF RHODE ISLAND

COUNTY OF NEWPORT

In MIDDLETOWN, in said County, on the 29th day of NOVEMBER, 2021, before me personally appeared, **Cormac McCarthy** duly authorized Chief Lending Officer of THE PEOPLE'S CREDIT UNION, to me known and known to me to be the person executing the foregoing instrument for and on behalf of THE PEOPLE'S CREDIT UNION, and he acknowledged said instrument by him executed to be his free act and deed, individually and in his capacity as aforesaid, and the free act and deed of THE PEOPLE'S CREDIT UNION, before me.

JESSICA BIXBY
Notary Public
State of Rhode Island

_____
Notary Public
Commission expires: 12/14/2023

EXHIBIT A
Legal Description

That certain lot or parcel of land with all the buildings and improvements thereon situated on the southerly side of Bay View Avenue in the Town and County of Bristol, and State of Rhode Island bounded and described as follows:

Beginning at a point in the southerly line of Bay View Avenue at the northwestern corner of land now or lately of Marion S. Bettencourt, et ux, said point of beginning being the northeasterly corner of the premises herein described; thence running southerly One Hundred Ten (110) feet, bounded easterly on said Bettencourt land; thence turning an interior right angle and running westerly Five (5) feet; thence turning an exterior right angle and running southerly Forty-Four (44) feet; thence turning another exterior right angle and running easterly Seventy (70) feet more or less to land now or lately of Francis E. King, said last three courses bounding southerly, easterly and northerly on said Bettencourt land; thence turning an interior right angle and running southerly Three Hundred Forty-Eight and 27/100 (348.27) feet more or less to land now or lately of C. J. Pearson Co., bounding easterly on said King land; thence turning an interior angle of 91 degrees 54' and running westerly Two Hundred Fifty and 83/100 (250.83) feet more or less to land now or lately of John F. and Beatrice N. Cirillo, bounding on the south by said C. J. Pearson Co. land; thence turning an interior angle of 83 degrees 29' and running northerly Three Hundred Thirty-Seven and 53/100 (337.53) feet more or less to land now or lately of Cecilio Ferreira et ux, bounding westerly in part by land of said Cirillo and in part by land now or lately of Matteo P. and Rita H. Castigliago, in part by land now or lately of Adeline C. Lawrence and in part by land now or lately of Edward Sardinha, et ux; then turning an interior angle of 98 degrees 59' and running easterly Seventy-Eight (78) feet more or less bounding northerly on said Ferreira land; and thence turning an exterior angle of 96 degrees 17' 30" and running northerly one hundred sixty (160) feet to the south line of Bay View Avenue bounding westerly by said Ferreira land; thence turning an interior angle of 98 degrees 8' 30" and running easterly along the said south line of Bay View Avenue Seventy-Two and 50/100 (72.50) feet to aforesaid Bettencourt land and forming an interior angle of 83 degrees 47' at the point and place of beginning.

BE ALL SAID measurements more or less or however otherwise the same may be bounded or described.

BEING Lot 3 on Bristol Tax Assessor's Plat 47 as presently constituted, for reference purposes only.

For title see deed dated June 7, 2007, and recorded June 11, 2007, in Book 1378 at Page 247 in the Land Evidence Records of the Town of Bristol and deed recorded immediately prior hereto.

Property Address:

206 Bay View Avenue
Bristol, RI 02809 - AP 47, AL 3

EXHIBIT B
Permitted Encumbrances

1. None

Recorded Dec 03,2021 at 02:45PM
Melissa Cordeiro Town Clerk

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description **Application Number** _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 1 Horizon	Depth	Horizon Boundaries Dist	Horizon Boundaries Topo	Soil Colors Matrix	Soil Colors Re-Dox Features	Re-Dox Description Ab. S. Con.	Texture	Structure	Consistence	Soil Category
A	0-5"	a	s	10yr3/2			FSL	Granular	vfr	4
B	5-18"	a	w	10yr3/4			SL	SBK	vfr	3
C	18-60"	a	w	2.5y6/3			SL	0,MA	fr	6

TH 2 Horizon	Depth	Horizon Boundaries Dist	Horizon Boundaries Topo	Soil Colors Matrix	Soil Colors Re-Dox Features	Re-Dox Description Ab. S. Con.	Texture	Structure	Consistence	Soil Category
A	0-6"	a	s	10yr3/2			FSL	Granular	vfr	4
B	6-19"	a	w	10yr3/4			SL	SBK	vfr	3
C	19-72"	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Depth to Groundwater Seepage: N/A
Estimated Seasonal High Water Table: N/A
Total Depth of eachTest Hole: 1=60" ; 2=72"
Depth to Impervious or Limiting Layer: 1=60" ; 2=72"
Comments: _____

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description

Application Number _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 3 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-4"	a	s	10yr3/2			FSL	Granular	vfr	4
B	4-17"	a	w	10yr3/4			SL	SBK	vfr	3
C	17-24"	a	w	2.5y6/3			SL	0,MA	fr	6

TH 4 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-6"	a	s	10yr3/2			FSL	Granular	vfr	4
B	6-20"	a	w	10yr3/4			SL	SBK	vfr	3
C	20-96"	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Depth to Groundwater Seepage: N/A
Estimated Seasonal High Water Table: N/A
Total Depth of eachTest Hole: 3=24" ; 4=96"
Depth to Impervious or Limiting Layer: 3=24" ; 4=N/A
Comments: _____

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description

Application Number _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 5 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-7"	a	s	10yr3/2			FSL	Granular	vfr	4
B	7-18"	a	w	10yr3/4			SL	SBK	vfr	3
C	18-72"	a	w	2.5y6/3			SL	0,MA	fr	6

TH 6 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-5"	a	s	10yr3/2			FSL	Granular	vfr	4
B	5-18"	a	w	10yr3/4			SL	SBK	vfr	3
C	18-48"	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Depth to Groundwater Seepage: N/A
Estimated Seasonal High Water Table: N/A
Total Depth of eachTest Hole: 5=72" ; 6=48"
Depth to Impervious or Limiting Layer: 5=72" ; 6=48"
Comments: _____

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description

Application Number _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 7 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-6"	a	s	10yr3/2			FSL	Granular	vfr	4
B	6-21"	a	w	10yr3/4			SL	SBK	vfr	3
C	21-48"	a	w	2.5y6/3			SL	0,MA	fr	6

TH 8 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-6"	a	s	10yr3/2			FSL	Granular	vfr	4
B	6-20"	a	w	10yr3/4			SL	SBK	vfr	3
C	20-120	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Total Depth of eachTest Hole: 7=48" ; 8=120"
Depth to Groundwater Seepage: N/A
Depth to Impervious or Limiting Layer: 7=48" ; 8=N/A
Estimated Seasonal High Water Table: N/A
Comments: _____

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description

Application Number _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 9 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-6"	a	s	10yr3/2			FSL	Granular	vfr	4
B	6-19"	a	w	10yr3/4			SL	SBK	vfr	3
C	19-36"	a	w	2.5y6/3			SL	0,MA	fr	6
TH 10A Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-7"	a	s	10yr3/2			FSL	Granular	vfr	4
B	7-21"	a	w	10yr3/4			SL	SBK	vfr	3
C	21-102	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Depth to Groundwater Seepage: N/A
Estimated Seasonal High Water Table: N/A
Total Depth of eachTest Hole: 9=36" ; 10A=102"
Depth to Impervious or Limiting Layer: 9=36" ; 10A=N/A
Comments: _____

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources

Site Evaluation Form
Part A - Soil Profile Description

Application Number _____

Property Owner: Fair Wind Properties, LLC
Property Location: 206 Bay View Avenue - Bristol - AP 47 Lot 3
Date of Test Hole: 07/27/2022
Soil Evaluator: Thomas J. Principe, III, PE License Number: D-4075
Weather: Sunny, 80 Shaded: Yes ☐ No ☑ Time: 10:00am

TH 10B Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-4"	a	s	10yr3/2			FSL	Granular	vfr	4
B	4-18"	a	w	10yr3/4			SL	SBK	vfr	3
C	18-36"	a	w	2.5y6/3			SL	0,MA	fr	6

TH 11 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox Description	Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab. S. Con.				
A	0-8"	a	s	10yr3/2			FSL	Granular	vfr	4
B	8-22"	a	w	10yr3/4			SL	SBK	vfr	3
C	22-114	a	w	2.5y6/3			SL	0,MA	fr	6

Soil Class: B
Depth to Groundwater Seepage: N/A
Estimated Seasonal High Water Table: N/A
Total Depth of eachTest Hole: 10B=36" ; 11=114"
Depth to Impervious or Limiting Layer: 10B=36" ; 11=N/A
Comments: _____

Part B

Site Evaluation - to be completed by Class II or III Designer or Soil Evaluator

Please use the area below to locate:

1. Test holes
2. Approximate direction of due north
3. Offsets from test holes to fixed points such as street, utility pole, or other permanent, marked object

Key:
- Approximate location of test holes
- x% → Estimated gradient and direction of slope
- N ↑ Approximate direction of due north

See Attachment

1. Relief and Slope: 5%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes: YES☐ NO☑ If yes, locate on above sketch.
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES☐ NO☑ If yes, locate on above sketch.
4. Public drinking water wells within 500 feet of test holes: YES☐ NO☑ If yes, locate on above sketch.
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00? YES☐ NO☑
6. Has soil been excavated from or fill deposited on site? YES☐ NO☑ If yes, locate on above sketch.
7. Site's potential for flooding or ponding: NONE☐ SLIGHT☑ MODERATE☐ SEVERE☐
8. Landscape position: Backslope
9. Vegetation: Lawn
10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site:

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by: _____ D-4075
Signature License #

Part B prepared by: _____ D-4075
Signature License #

FOR OFFICE USE ONLY

Decision: Approved (SD 26.00(f)(1) ☐ Not in compliance, or more infomration required (SD 26.00(f)(2) Disclaimed (SD 27.00(f)(3) ☐

Comments:

Signature Authorized Agent Date

revised 5/8/01

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 Promenade Street, Providence, Rhode Island 02908-5767

June 5, 2025

Fair Wind Properties, LLC
co/ Danial Ferreira
PO Box 333
Bristol, RI 02809

RE: WQC/STW File No. 25-074; RIPDES File No. RIR102800; IA-0000007096
Fair Wind Village
Located South of Bay View Avenue (at 206 Bay View Avenue), approximately 875 feet SW of the intersection of Bay View Avenue and Hopeworth Avenue, Assessors Plat 47, Lot 3, Bristol, RI

Dear Mr. Ferreira:

The Rhode Island Department of Environmental Management Office of Water Resources (RIDEM OWR) has reviewed the above-referenced project for compliance with the Rhode Island Pollutant Discharge Elimination System Construction General Permit (CGP). As stated in the application materials, the purpose of the project is to construct 3 new multi-family townhome buildings, access drive, parking areas, and associated stormwater BMP, as further described in your application and detailed on site plans consisting of 12 sheets as prepared by Thomas J. Principe of Principe Company, Inc., received by RIDEM-OWR on April 15, 2025.

This letter serves as your permit/authorization to discharge for the above-referenced project, provided that, you comply with the application materials, the CGP and the following conditions:

1) This authorization is specific to the project, site alterations, and stormwater management system depicted on the site plans submitted with your application and received by RIDEM on April 15, 2025. Any alterations, additions or modifications to the project approved herein must be reviewed and approved by RIDEM OWR prior to implementation.

2) You must submit the Notice of Start of Construction Form prior to commencement of any permitted site alterations or construction activity. The Notice of Start of Construction form can be found on the OWR online portal at URL https://demri.my.site.com/owr. Once logged in to your portal user account, click on the 'Requests' tab to select this form.

3) Prior to construction, you must erect or post a sign resistant to the weather and at least twelve (12) inches wide and (eighteen) inches long, which identifies the initials "DEM" and the application number(s) assigned to this permit. The sign must be posted in a conspicuous location near the site access and maintained until the project is complete.

4) A copy of this permit, any inspection records, and a signed and updated SESC Plan, must be kept at the site at all times until the project is complete. Copies of this permit must be made available for review by any RIDEM or City/Town representative upon request. Electronic versions of required documents that are readily accessible from the construction site are acceptable.

5) All fill material shall be clean and free of matter that could cause pollution of the waters of the State.

6) The stormwater collection and treatment system approved herein is for the discharge of stormwater only. Any other discharge is prohibited.

7) You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales, and any other stormwater management practices have been constructed/installed in accordance with the site plans reviewed for this permit. This written certification is due upon completion of the project or within twenty (20) working days of the request of this Program.

8) You must submit the Notice of Termination Form upon completion of the project and final site stabilization. Notice of Termination form upon completion of the project and final site stabilization. The Notice of Termination form can be found on the online portal, under the 'Requests' tab.

9) You are responsible for the long-term inspection, cleaning and maintenance of the stormwater collection and treatment system to ensure proper performance of all components until documentation is provided to indicate that this responsibility has been assumed by another entity. Long-term operation and maintenance is to be as described on page 8 and Page 11 of the provided site plans, dated March 27, 2025, prepared by Principe Company, Inc., received by RIDEM-OWR on April 15, 2025.

10) This permit is not transferable to any person except after written notice to the Director, submitted as an Owner Transfer form, available online through the OWR permit application portal, under the 'Requests' tab.

RIDEM's Rules and Regulations Governing the Establishment of Various Fees require that RIPDES CGP permit holders pay an Annual Fee of $100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received.

Your authorization to discharge **expires at midnight, on September 25, 2025.** If construction has not been completed by that date, there will be measures in place for you to reauthorize.

You are required to adhere to all above terms and conditions and carry out this project in compliance with the CGP at all times. Issuance of this permit does not bar the Rhode Island Department of Environmental Management, or any of its various Divisions, from initiating any investigation and/or enforcement actions that it may deem necessary for violations this permit or of any and all applicable statutes, regulations and/or permits.

This permit has the full force and effect of a permit issued by the Director. This permit does not relieve your obligation to obtain any other applicable local, state and federal permits prior to commencing

construction and does not relieve you of any duties owed to adjacent landowners with respect to changes in drainage. RIDEM assumes no responsibilities for damages resulting from faulty design or construction.

If you have any questions regarding the contents of the permit, you may contact Michael Arguello at Michael.Arguello@dem.ri.gov or (401) 537-4199.

Sincerely,

Neal Personeus, Environmental Scientist III
Federal 401/State WQC Program; GWD/UIC Program
Office of Water Resources
neal.personeus@dem.ri.gov; (401) 537-4263

ec: Charles Horbert, Deputy Administrator, Groundwater & Freshwater Wetlands Protection
Thomas J. Principe, P.E., Principe Company, Inc.

EDR Environmental Risk Rating

Report Date: October 07, 2021 at 9:55 AM

Fairwind
206 Bay View Avenue
Bristol, RI 02809

Loan #: 100720213
Borrower: Fair Wind Properties LLC
Property Type:

EDR® Environmental Data Resources Inc

Environmental Screen Findings

ReportGUID: dd92279c-746c-429d-aeac-ca69cab1497a

Environmental Risk Level*

Powered by EDR's ToxiCheck®

LOW RISK

Based on the mapped records found in this search, the environmental risk level for this property is LOW.

Summary of mapped records found within 1/8 mile

0 Incident Records

1 Permitting Records

0 EDR Proprietary Records

* Results based on a search of mapped current government records and EDR proprietary records. Other information potentially indicative of prior environmental contamination is not searched in this report, such as Sanborn® fire insurance maps, city directory research, a site visit, and other sources.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources.
MORE INFORMATION IS CONTAINED AT THE END OF THIS REPORT.

Report Comments

Mapped Records

Mapped records found within immediate area of 206 Bay View Avenue, Bristol, RI 02809 (up to 1/8 mile)

Category	Risk Level	Distance to TP	Site Name	Address	Database	EDR ID#
■	Low	644 ft.	#1: CUMBERLAND FARMS 3867	390 METACOM AVE BRISTOL, RI	UST Tank Status: In Use	U002040226

UST

Permitting Records

UST

Name	CUMBERLAND FARMS #3867
Address	390 METACOM AVE
City	BRISTOL
Facility ID	UST-3701
Facility Class	Gasoline Station
Tank ID	1
Tank Status	In Use
Tank Capacity	10000
Tank Substance	Gasoline
Date Installed	09/01/1994
Tank ID	2
Tank Status	In Use
Tank Capacity	12000
Tank Substance	Gasoline
Date Installed	09/01/1994

Unmapped Records

Government records occasionally lack sufficient address information to be accurately plotted to an exact location. The following site(s) may or may not be in a close proximity to the target property. Records where EDR can identify the site status as "closed" or "no further action" are not included in the following list.

No unmapped records are available for this location.

Terms and Definitions

The following database records appear in this report.

UST Master List (UST)
The UST Master List is a summary of registered UST Facilities in RI, which includes information on abandoned, in use, permanently closed and temporarily closed USTs.

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DocuSign Envelope ID: 6224E2C1-F41D-421B-9970-D0F716DC0334

December 16, 2022

Mr. Danial Ferreira and Ms. Vanessa Ferreira
Fair Wind Properties, LLC
204 Poppasquash Road
Bristol, RI 02809

Letter of Eligibility (updated): Fair Wind Village, 206 Bayview Ave, Bristol, RI, Plat-47, Lot 3

Dear Mr. and Ms. Ferreira:

RIHousing has received your application for a letter of eligibility to pursue a Comprehensive Permit in the town of Bristol. You have represented that you propose to construct a twenty-four (24) unit rental Development comprised of:

a. Ten (10) three-bedroom units with 1.5 bathrooms of which three (3) of these units will be affordable; marketed and rented to households earning a maximum of 80% AMI.
b. 10 (10) two-bedroom units with 1.5 bathrooms of which three (3) of these units will be affordable; marketed and rented to households earning a maximum of 80% AMI.
c. One (1) four-bedroom unit with 1 bathroom which will be market rate.
d. Two (2) three-bedroom units with 2 bathrooms which will be market rate.
e. One (1) two-bedroom unit with 1 bathroom which will be market rate.

Under the requirements for affordability and monitoring R.I.G.L. 45-53-3, the construction or rehabilitation of qualifying low- and moderate-income housing units will remain affordable through a long-term land lease and/or deed restriction recorded with the Town of Bristol; or a federal, state, or municipal subsidy program that is not less than thirty (30) years from initial occupancy.

After preliminary review of the updated plans and financial assumptions for the proposed twenty-four-unit (24) rental Development with six (6) affordable units for households earning 80% of the AMI, all to be located at **Plat 47, Lot 6** in Bristol, RIHousing has determined that:

- This project appears to be eligible for a municipal subsidy under Part IV-Code, Chapter 28 – Zoning, Article IX – Land Development Projects and Special Zones, Division 6 – Low- and Moderate-Income Housing and Inclusionary Zoning, of the Town of Bristol.
- In conformance with R.I.G.L. 45-53-3(5), RIHousing performed an on-site inspection of the site and has reviewed pertinent information supplied by the applicant.
- The initial project proforma was reviewed and the project appears to be feasible based on projected overall development costs and potential sources.
- The applicant, **Fair Wind Properties, LLC,** has provided evidence of site control.

DocuSign Envelope ID: 6224E2C1-F41D-421B-9970-D0F716DC0334

Fair Wind Properties, LLC
December 16, 2022

Based upon the review of the submitted information and supporting materials and based on the representations in your request, ***Fair Wind Properties, LLC is eligible to pursue a Comprehensive Permit application in the town of Bristol to develop Plat 47, Lot 3.***

Modifications to the development proposal resulting from local review do not require a revised letter of eligibility.

Thank you for your commitment to providing affordable housing opportunities to low-and-moderate-income Rhode Island families.

Sincerely,

Anne Berman 12/16/2022
Anne Berman
Director of Real Estate Development

cc: Diane Williamson, AICP, CFM, Director of Community Development, Town of Bristol

MAXXIMUS™ WALL

PROJECT: Bay View Avenue
TYPE: D1
QUANTITY:

MXW11 — O (1) — 15LED (2) — 30K (3) — 120 (4) — WM (5) — BR (6) — DIML (7) — G11 (8,9)

1. APPLICATION	**I** INDOOR				**O** OUTDOOR
2. ILLUMINATION	**150IN** 150W INC				**15LED** 15W LED
LED (W)	150W				15W
LUMENS	2029				1430
3. LED CCT	**—** NONE	**30K** 3000K		**35K** 3500K	**40K** 4000K
4. VOLTAGE	**120** 120V		**277** 277V		**347** 347V
5. DRIVER	**—** NONE	**WM** WALL MOUNT (INTEGRAL)		**N1** REMOTE INDOOR MOUNT (NEMA 1)	**N4** REMOTE OUTDOOR MOUNT (NEMA 4)
6. FINISH	**F04** MATTE WHITE	**F05** GLOSS WHITE	**F15** MATTE BLACK	**F16** GLOSS BLACK	**F09** PEWTER
	F31 SILVER METALLIC	**F18** SATIN ALUMINUM	**F06** CLAY BROWN	**F07** ZEUS BROWN	**F08** MIDNIGHT BLUE
	F10 FIRE RED	**F11** CITRUS ORANGE	**F13** FOREST GREEN	**F14** SUNSHINE YELLOW	**F21** ARCH BRONZE
	F22 HARVEST GOLD	**F24** MELTED PLATINUM	**F25** MELTED GOLD	**F26** MELTED COPPER	**F28** DARK CAMPAGNE
	F32 BRONZE METALLIC	**F33** PYRITE BRONZE	**F38** MEADOW GREEN	**F39** AQUA BLUE	**F42** BUBBLE PINK
	F43 ELECTRIC PURPLE	**F44** FAUX CHROME	**F45** FAUX GOLD	**F46** FAUX COPPER	**F47** COPPER METALLIC
	RAL CUSTOM (SPECIFY RAL)	**BR** BRUSHED ALUMINUM	**AN** ANODIZED		
7. DIMMING	**—** NONE				**DIML** LED DIMMING (0 - 10V, CURRENT - SINKING)
8. EMERGENCY[1]	**—** NONE	**EM** INTEGRAL	**EMC** INTEGRAL COLD PACK	**EMR** REMOTE	**EMCR** REMOTE COLD PACK
9. GLOBE/LENS	**G11** CLEAR, ELONGATED GLOBE WITH CAST GUARD				

1. 10W AT 90 MINUTES. EMERGENCY OPTION IS ONLY AVAILABLE IN 120 - 277V SYSTEMS

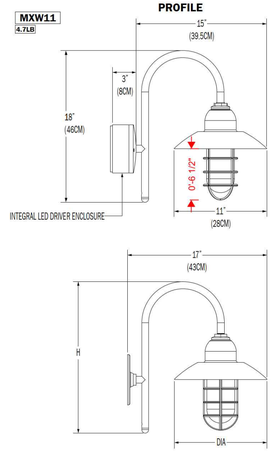
NOTE: SOME OPTIONS MAY NOT BE COMPATIBLE WITH OTHERS. **ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.** CONTACT TMS LIGHTING FOR UPDATED SPECIFICATIONS.

TMSLIGHTING — Intertek 2

MAXXIMUS™ WALL

MXW11 4.7LB

PROFILE



CUSTOM
YOUR DIALUX FILE CAN BE CUSTOMIZE, DIMENSION, LAMP TYPES, ENCLOSURE, AND COLOR CAN BE MODIFIED TO SUIT YOUR LIGHTING AND ARCHITECTURAL REQUIREMENTS. CONTACT YOUR LOCAL REPRESENTATIVE FOR MORE DETAILED INFORMATION.

TMSLIGHTING — Intertek 3

CALVIN™ WALL

PROJECT: Bay View Ave
TYPE: D2
QUANTITY:

2W — O (1) — 15LED (2) — 30K (3) — 120 (4) — WM (5) — F04 (6) — DIML (7,8,9,10)

1. APPLICATION	**I** INDOOR				**O** OUTDOOR
2. ILLUMINATION	**150IN**	**15LED**	**17LED** PHASE-CDE MED. BASE, 4000K, 60°	**19LED**	
LED (W)	150W	15W	17W	19W	
LUMENS	2158	1351	—	1803	
3. LED CCT	**—** NONE	**30K** 3000K	**35K** 3500K	**40K** 4000K	
4. VOLTAGE	**120** 120V		**277** 277V	**347** 347V	
5. DRIVER	**—** NONE	**WM** WALL MOUNT (INTEGRAL)	**N1** REMOTE INDOOR MOUNT (NEMA 1)	**N4** REMOTE OUTDOOR MOUNT (NEMA 4)	
6. FINISH	**F04** MATTE WHITE	**F05** GLOSS WHITE	**F15** MATTE BLACK	**F16** GLOSS BLACK	**F09** PEWTER
	F31 SILVER METALLIC	**F18** SATIN ALUMINUM	**F06** CLAY BROWN	**F07** ZEUS BROWN	**F08** MIDNIGHT BLUE
	F10 FIRE RED	**F11** CITRUS ORANGE	**F13** FOREST GREEN	**F14** SUNSHINE YELLOW	**F21** ARCH BRONZE
	F22 HARVEST GOLD	**F24** MELTED PLATINUM	**F25** MELTED GOLD	**F26** MELTED COPPER	**F28** DARK CAMPAGNE
	F32 BRONZE METALLIC	**F33** PYRITE BRONZE	**F38** MEADOW GREEN	**F39** AQUA BLUE	**F40** BUBBLE PINK
	F41 ELECTRIC PURPLE	**F42** FAUX CHROME	**F43** FAUX GOLD	**F44** FAUX COPPER	**F45** COPPER METALLIC
	RAL CUSTOM (SPECIFY RAL)	**BR** BRUSHED ALUMINUM	**AN** ANODIZED		
7. DIMMING	**—** NONE				**DIML** LED DIMMING (0 - 10V, CURRENT - SINKING)
8. EMERGENCY[1]	**—** NONE	**EM** INTEGRAL	**EMC** INTEGRAL COLD PACK	**EMR** REMOTE	**EMCR** REMOTE COLD PACK
9. GLOBE/LENS	**—** NONE	**G1** CLEAR, ELONGATED GLOBE	**G2** FROSTED GLOBE	**LNC** CLEAR LENS	
10. WIRE GUARD	**—** NONE		**W16** W16" WIRE GUARD		

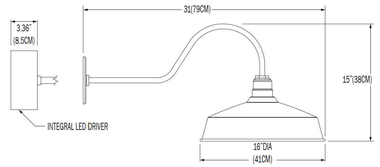
1. 10W AT 90 MINUTES. EMERGENCY OPTION IS ONLY AVAILABLE IN 120 - 277V SYSTEMS
NOTE: SOME OPTIONS MAY NOT BE COMPATIBLE WITH OTHERS. **ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.** CONTACT TMS LIGHTING FOR UPDATED SPECIFICATIONS.

TMSLIGHTING — Intertek 2

CALVIN™ WALL

2W

PROFILE



CUSTOM
YOUR DIALUX FILE CAN BE CUSTOMIZE, DIMENSION, LAMP TYPES, ENCLOSURE, AND COLOR CAN BE MODIFIED TO SUIT YOUR LIGHTING AND ARCHITECTURAL REQUIREMENTS. CONTACT YOUR LOCAL REPRESENTATIVE FOR MORE DETAILED INFORMATION.

TMSLIGHTING — Intertek 3

RENOVA — Innovative Lighting Ideas Energy Efficient Solutions

Category: LED

4" Field Selectable Commercial Recessed LED Downlight

Prefix: CLR4

Designed for both new construction and retrofit applications, the CLR Series is field selectable CCT and lumen output. It can be installed directly into drywall, a ceiling grid or an existing 4" CFL mounting frame with its spring loaded retention tabs and a J-box cable connection. Offering a full range of dimming from 0-10 volts, the base fixture is white or aged white. The versatility of this light source is perfect for commercial applications, such as educational and governmental facilities, retail and grocery lighting, offices or hospitality.

project:
fixture type:
catalog #:
quantity:

ORDERING GUIDE

CLR4 - **LFKS** - **UNV** - **DM** - [ ] - **9** - **WH** - [ ]

PREFIX/SERIES	LUMEN OUTPUT	DRIVER/VOLTAGE	CRI	COLOR TEMP	CRI	COLOR	FIXTURE OPTIONS
CLR4 - 4" Commercial Recessed LED Downlight	**12FKS** - Lumens 1200lm (12W) 900lm (9W) 600lm (6W) 2000lm (20W)	**UNV** - Universal 120V - 277V (Driver 0V-10V)	**DM** - 0-10v Low Voltage	**Blank** - CCT Selectable 2700k, 3000k, 3500k, 4000k, 5000k	**9** - 90 CRI	**WH** - White **BK** - Matt White	**EF** - Emergency Battery Pack 1[1] **SM** - Philips Wireless Bridge Daylisten[2] **SW** - Steel Wireless Relay

1 Standard "EM" option to be 3hGE Battery @ 5 watts constant power @ 90 min. duration (standard).
2 Philips Wireless Bridge Daylisten connectivity with the Philips sensor ready suite (including SW2A sensor). Energy Monitoring & Advanced Grouping control options.
3 3 Silvair wireless relay powerdin connectivity with the Silvair's Bluetooth NLC solutions (including SVP & SVM sensors). Task Tuning, Energy Monitoring & Advanced Grouping control options.

RENOVA Lighting Systems Inc. | 36 Bellair Avenue, Warwick, RI 02886 | 800.635.6682 | renova.com | ©2018 RENOVA Lighting Systems Inc. 1/2

RENOVA — Innovative Lighting Ideas Energy Efficient Solutions

Category: LED

4" Field Selectable Commercial Recessed LED Downlight

Prefix: CLR4

DIMENSIONS

Weight: 0.7 lbs.

CONSTRUCTION
- Aluminum housing
- Certified for direct contact with insulation Consult factory for all options or any modifications needed.

ELECTRICAL
- Universal input 120-277VAC (50-60Hz)
- Power factor > 0.90
- Driver delivers full-range dimming from 0 - 10VDC
- cETLus listed for wet locations not exceeding 45°C (113°F).
- Complies with FCC Part 15, class B.
- Complies with EN61000-4-5 surge protection (1.5kV).

FINISH
- Matte white baffle or Specular White

INSTALLATION
- Easy installation in new construction or retrofit applications.
- Compatible with 4.35" ceiling cut-outs and 4" mounting frames.
- Type IC, Access above ceiling required. Covered ceiling mount only.
- Suitable for wet locations
- Adjustable, spring loaded retention tabs ensure secure fixture retention.
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel.

WARRANTY
- 5-Year limited warranty. Please refer to RENOVA's website at www.renova.com/warranties for the latest warranty terms and conditions.
- Warranty does not cover product failure due to an over-voltage event (power surge)

NOTES:

LED Dimming Drivers have adjustable output capability. A wide range of input watts/lumen output can be adjusted up or down on all models to suit a particular application. Always consult factory for the latest information.

Photometric data, IES files and all other information is available on request.

RENOVA products are constantly being improved; therefore the information shown is subject to change without notice. Always consult your lighting representative or RENOVA Lighting Systems, Inc. for the latest information.

RENOVA Lighting Systems Inc. | 36 Bellair Avenue, Warwick, RI 02886 | 800.635.6682 | renova.com | ©2018 RENOVA Lighting Systems Inc. 2/2

Control Number: WALL_CEILING-PGAS-1-08_29_2022

PGAS-1 LED Specifications

Project Name: FAIR WIND VILLAGE - 206 BAY VIEW AVE
Catalog Number: PGAS-1-T4-32LC-3-3K-UNV-WM-COLOR-PC120
Type: W1

The **PGAS-1 LED** luminaire from Visionaire combines contemporary design with new LED technology while maintaining a traditional fixture image. The LED performance and Life are maximized by the unique integral aluminum heat sink. It is an ideal replacement for the high-maintenance fluorescent or HID fixtures of yesterday.

The LED housing is cast aluminum with internal heat sink for maximum heat dissipation with 18 or 32 LEDs. The cast aluminum driver compartment allows the driver to operate cooler for long life.

Three optical distribution patterns are available. Choose between 3000, 4000 or 5000 Kelvin temperature of the LED's.

A durable polyester powder coat finish is guaranteed for five years and is available in standard or custom colors.

The **PGAS-1 LED** series is an exceptional choice for parking garage lighting and other wall mount applications.

Ordering Information

MODEL	OPTICS	SOURCE	CURRENT	KELVIN	VOLTAGE	MOUNTING	FINISH	OPTIONS
PGAS-1	**T2** Type 2 **T3** Type 3 **T4** Type 4	**16LC** *W32 w 16LC Only **32LC**	**3** 350mA **5** 530mA **7** 700mA	**3K** 3000K **4K** 4000K **5K** 5000K	**UNV** 120-277V **8** 347V **5** 480V	**WM** Wall Mount **VCB** Conduit Box Mounting Plate With (3) 1/2" Threaded Conduit Holes	**BZ** Bronze **BK** Black **SBK** Smooth Black **WH** White **SWH** Smooth White **GP** Graphite **GY** Grey **SL** Silver Metallic **CC** Custom Color *WSC options will require (1) PSR-100 Programming remote (purchased separately) *WSC for 16LC Only **BP** Black Plate	**PC-120** Button Type Photocell **PC-208** Button Type Photocell **PC-240** Button Type Photocell **PC-277** Button Type Photocell **WSC-8** Motion Sensor 8' Mounting Height **WSC-20** Motion Sensor 8-20' Mounting Height **WSC-40** Motion Sensor 21-40' Mounting Height

VISIONAIRE LIGHTING

VL-PA-ING-001-F37 REV. 0 CRCABR22-03

Control Number: WALL_CEILING-PGAS-1-08_29_2022

Features & Specifications — PGAS-1

Housing
Heavy duty cast aluminum housing with internal heat sink for maximum heat dissipation. Silicone gasket is used for weather tight operation.

Mounting
A Wall Mount bracket can be secured directly to a 4"-5" recessed junction box.

Thermal Management
The PGAS-1 series provides excellent thermal management by mounting the LEDs to the substantial heat sink within the housing. This enables the Luminaire to withstand higher ambient temperatures and driver currents without degrading LED life.

Optical System
- The highest lumen output LEDs are utilized. High-performance acrylic optics feature industry leading Type II, III and IV optical distributions. Acrylic optics are impact-resistant and rated to 94 percent transluscence.
- L70 life of our LEDs is rated over 100,000 hours (for 700 mA). The optical system qualifies as IES full cutoff to restrict light trespass, glare and light pollution for neighborhood-friendly lighting.
- CRI values are 70.

Quali-Guard® Finish
The finish is a Quali-Guard® textured, chemically pretreated through a multiple-stage washer, electrostatically applied, thermoset polyester powder coat finish, with a minimum of 3-5 millimeter thickness. Finish is oven-baked at 400º F to promote maximum adherence and finish hardness.
- All finishes are available in standard and custom colors.
- Finish is guaranteed for five (5) years.

Electrical Assembly
The PGAS-1 LED series is supplied with a choice of 350, 530 or 700 high-performance LED drivers that accept 120v thru 480v, 50 Hz to 60 Hz, input.
- Power factor of 90%.
- Rated for -40°C operations.
- 10 kV surge protector supplied as standard.

Warranty
Five (5) year Limited Warranty on electrical components. Five (5) year on finish. For full warranty information, please visit visionairelighting.com.

Options
- Watt Stopper FSP-211
- Button Type Photocell
- Black Plate
- Visionaire Wireless Control
  - Enables high-end trim
  - Based on Zigbee wireless communication protocol

Listings
- PGAS-1 is cUL listed, suitable for wet locations.
- IP66 Rated
- Powder Coated Tough™

3000K must be selected for ICA certification.
Fixed mount must be selected for CA dark-sky certification.

PGAS-1 - Electrical Load (A)

Ordering Nomenclature	System Watts	120V	208V	240V	277V	347V	480V
PGAS-1-T3-16LC-350MA	18	0.14	0.08	0.07	0.06	0.05	0.04
PGAS-1-T3-16LC-530MA	26	0.22	0.12	0.11	0.09	0.07	0.05
PGAS-1-T3-16LC-700MA	37	0.28	0.16	0.14	0.12	0.10	0.07
PGAS-1-T3-32LC-350MA	34	0.28	0.16	0.14	0.12	0.10	0.07
PGAS-1-T3-32LC-530MA	53	0.43	0.25	0.22	0.19	0.15	0.11
PGAS-1-T3-32LC-700MA	70	0.58	0.33	0.29	0.25	0.20	0.14

Motion Sensor Default Setting

FSP - 211	High Mode	Low Mode	Time Delay	Cut Off Delay	Sensitivity	Hold Off Setpoint	Photocell On/Off	Ramp Up Time	Fade Down Time
WSC - Default	10V	1V	5 Minutes	1 Hour	Max	Disabled	Disabled	Disabled	Disabled
WSC Range	0-10V	0-9.8V	5-30 Minutes	1-5 Hours	Low, Med, Max	1-250FC	1-250FC	1-60 Dec	1-60 Dec

* Settings can be field modified with the FSIR-100 Programming remote

19645 Rancho Way - Rancho Dominguez, CA 90220 - Phone: 310.512.6400 Fax 310.512.6488
www.visionairelighting.com

VL-PA-ING-001-F37 REV. 0 CRCABR22-03

1 D1 Fixture Specification - TMS Lighting MXW11

2 D2 Fixture Specification - TMS Lighting 2W

3 R1 Fixture Specification - Renova CLR4

4 W1 & W2 Specification - Visionaire PGAS

NOTES:

A. A LIGHT LOSS FACTOR OF 0.950 HAS BEEN APPLIED TO FIXTURES UNLESS OTHERWISE NOTED. REFER TO LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR AND LUMEN INFORMATION.

B. MOUNTING HEIGHT (MH) ABOVE FINISHED GRADE INDICATED ON PLAN ADJACENT TO FIXTURE SYMBOL, UNDER FIXTURE IDENTIFICATION LABEL.

C. ALL CALCULATION POINTS ARE TAKEN AT GRADE.

D. CALCULATION RESULTS ARE BASED ON IES STANDARDS UNLESS OTHERWISE REQUESTED.

SK & Associates
Experience the light™
20/22 Carver Circle
Canton, MA 02021
T - 781-821-1700
www.skandassociates.com

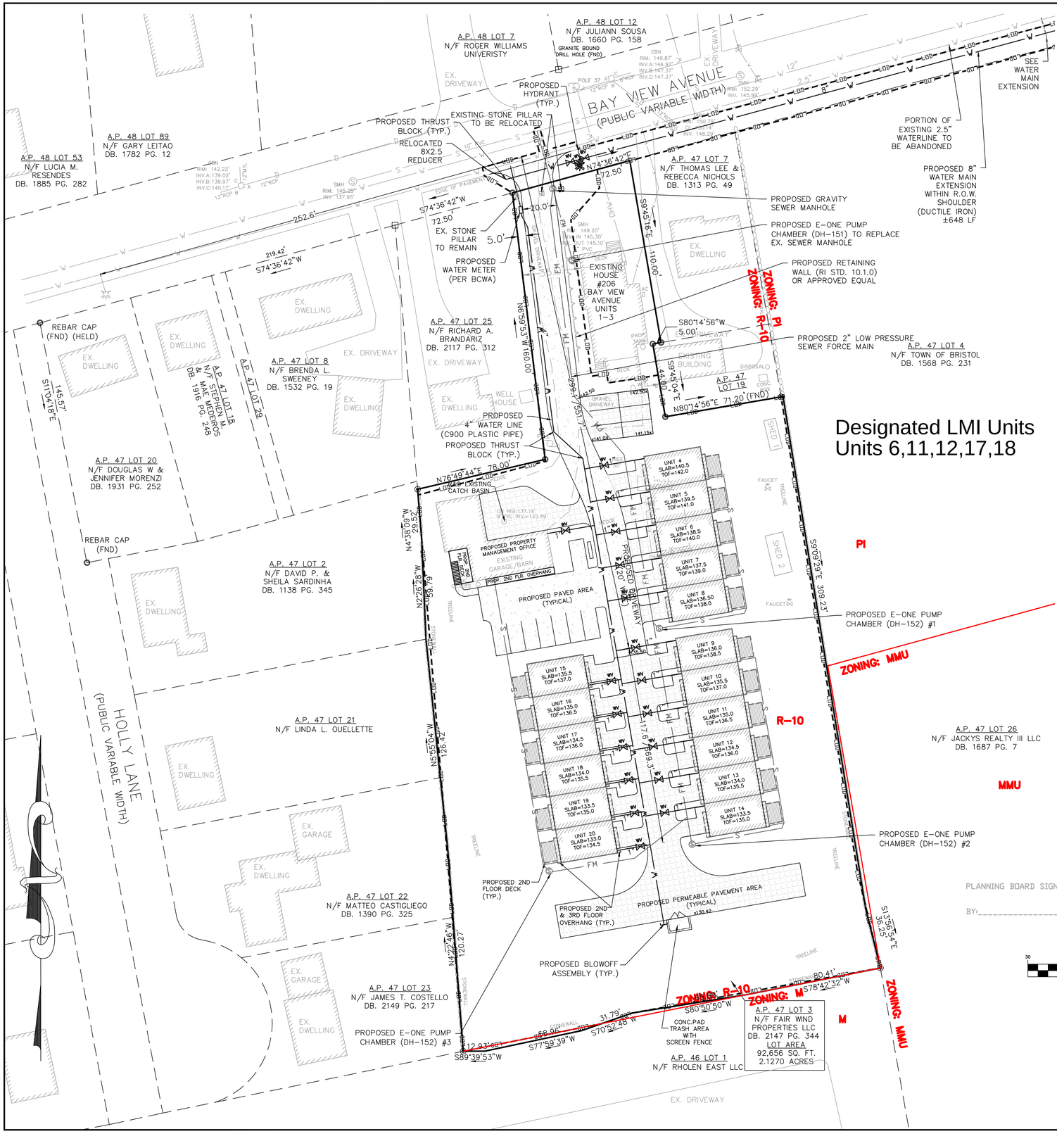
JACK 8 SKWATT APPROVED

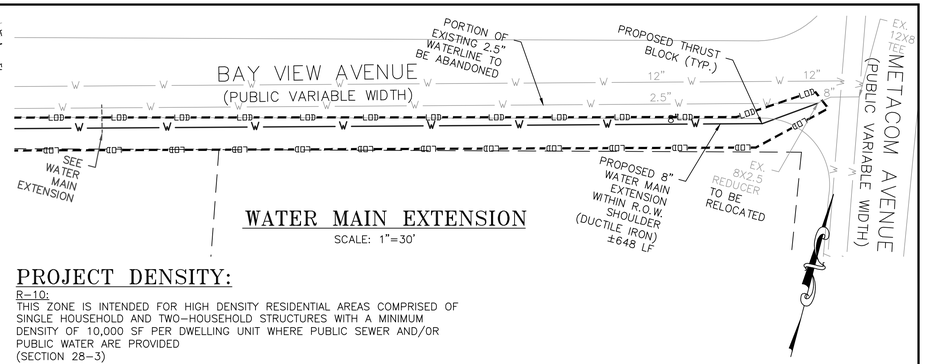
Fair Wind Village - 206 Bay View Ave

Site Lighting Photometrics, Schedules & Specifications

DATE: 5/7/25	REVISIONS	DESCRIPTION	DATE
PROJECT NUMBER:	1		
DRAWN BY: TJ	2		
CHECKED BY:TJ	3		
APPROVED BY:JR	4		
SCALE: AS NOTED	5		
	6		
	7		

SL2





WATER MAIN EXTENSION

SCALE: 1"=30'

PROJECT DENSITY:

R-10:
THIS ZONE IS INTENDED FOR HIGH DENSITY RESIDENTIAL AREAS COMPRISED OF SINGLE HOUSEHOLD AND TWO-HOUSEHOLD STRUCTURES WITH A MINIMUM DENSITY OF 10,000 SF PER DWELLING UNIT WHERE PUBLIC SEWER AND/OR PUBLIC WATER ARE PROVIDED
(SECTION 28-3)

TOTAL LOT AREA = 92,656 SF:
5 LOTS (PER YIELD PLAN)

25% LOW & MODERATE INCOME UNIT DENSITY BONUS
5 UNITS/ACRE= 96,656/43,560=2.22 x 5 = 10

UNITS ALLOWED: 5 + 10 = 15
UNITS PROVIDED: 20

ZONING CRITERIA

R10 ZONING	
ZONING DISTRICT	R10
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80'
MINIMUM LOT FRONTAGE	80'
MINIMUM FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

PROPOSED PARKING CALCULATIONS:

*PROVIDE 2 SPACES PER RESIDENTIAL UNIT:
EXISTING 3-FAMILY STRUCTURE (UNITS 1-3);6 SPACES REQ'D.
PROPOSED UNITS WITHIN TOWNHOUSE BUILDINGS (UNITS 4-20)
(17 UNITS x 2 SPCS/UNIT); 34 SPACES REQ'D.

TOTAL REQUIRED SPACES: 38
TOTAL PROVIDED SPACES: 46

DRAWING ISSUE:

- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS-BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

PLAN SET LEGEND

	EXISTING	PROPOSED
PERIMETER LINE		
ABUTTER LINE		
FENCE	X X X	X X X
CONTOUR	122	122
SURVEY BOUND		
UTILITY POLE		
SAWCUT		
OVERHEAD WIRE	OHW	
DRAINLINE	D D	D LOD
WATERLINE	W W	W
WATER GATE VALVEW	WV	
WELL	W	
SEWERLINE	S W S	S
GAS LINE	G G	G
SEWER MANHOLE	S	S
EROSION CONTROL		
CATCH BASIN		
EDGE OF PAVEMENT		
RETAINING WALL		
TREE		
STONEWALL		
SEWER FORCE MAIN		FM
SOIL BOUNDARY LINE		
STONE PILLAR		
HYDRANT		

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

SURVEY REFERENCE:

1. PLAN ENTITLED "EXISTING CONDITIONS PLAN" FOR FAIR WIND PROPERTIES LLC AP 47 LOT 3 206 BAY VIEW AVENUE BRISTOL, RI BY PRINCIPE COMPANY JOB NUMBER: LD-2021-35 04/05/23 SCALE 1"=30'

PROPOSED UTILITY PLAN

Thomas J. Principe, III
No. 9701
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
ESTABLISHED IN 1981
www.PrincipeEngineering.com

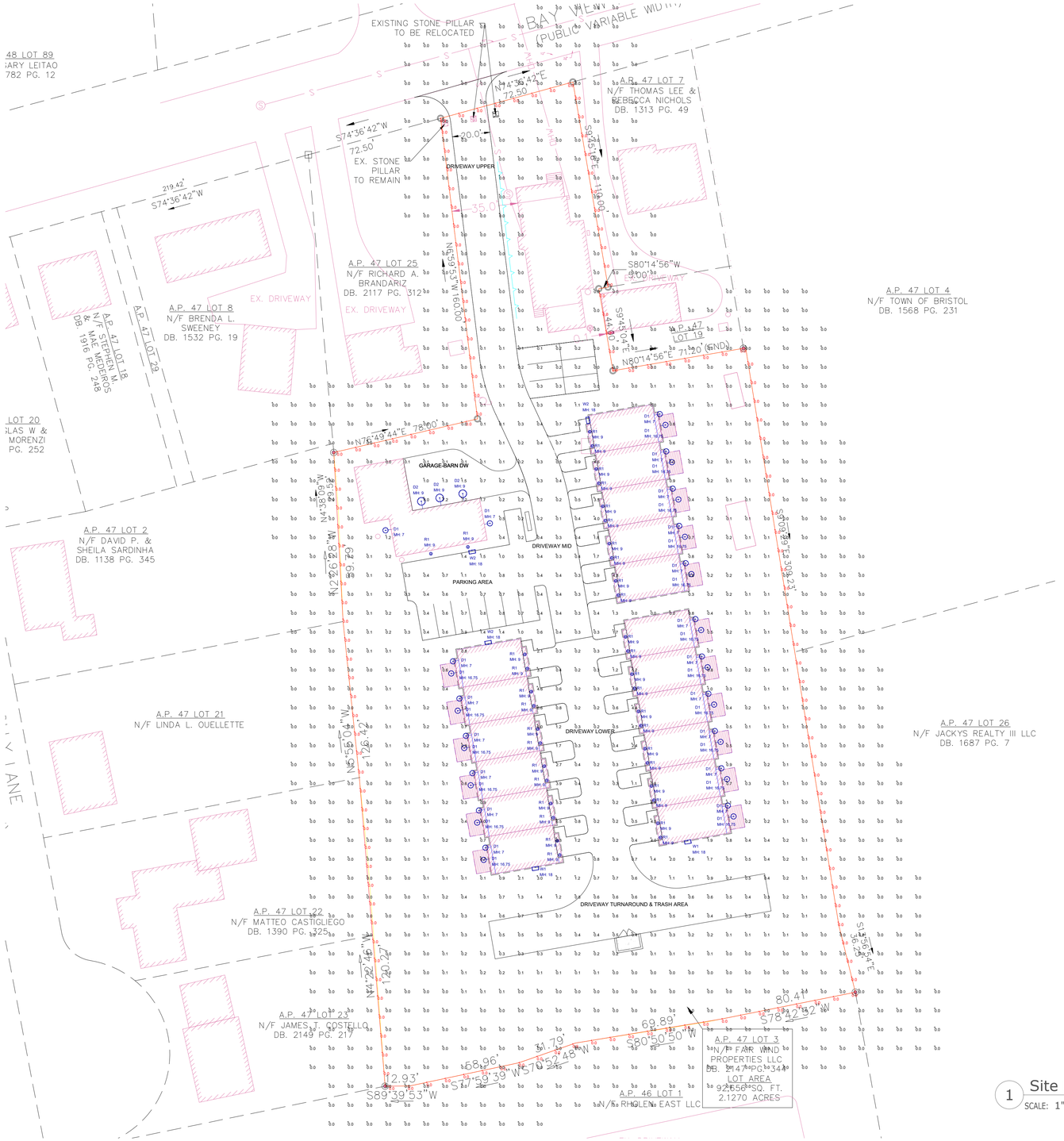
REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAY VIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 4 of 13
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

C:\Users\admin\Principe Engineering Dropbox_LAND~1\2021\LD780F~1\CURREN~1\LD_2021-35_206 Bay View Avenue_Bristol_PRELIM APRIL-25 rev (Karen Beck's conflicted copy 2025-06-02).dwg, DWG To PDF.pc3


EXISTING STONE PILLAR TO BE RELOCATED
BAY VIEW AVENUE (PUBLIC VARIABLE WIDTH)
A.P. 47 LOT 7
N/F THOMAS LEE & REBECCA NICHOLS
DB. 1313 PG. 49
N74°36'42"E 72.50'
S74°36'42"W 72.50'
EX. STONE PILLAR TO REMAIN
20.0'
DRIVEWAY UPPER
S80°51'E 119.00'
S80°14'56"W 300.00'
A.P. 47 LOT 25
N/F RICHARD A. BRANDARIZ
DB. 2117 PG. 312
EX. DRIVEWAY
EX. DRIVEWAY
A.P. 47 LOT 8
N/F BRENDA L. SWEENEY
DB. 1532 PG. 19
A.P. 47 LOT 18
N/F STEPHEN M. & MAE MEDEIROS
DB. 1916 PG. 248
A.P. 47 LOT 19
A.P. 47 LOT 4
N/F TOWN OF BRISTOL
DB. 1568 PG. 231
N80°14'56"E 71.20' (MEND)
S80°14'56"W 445.25'
N76°49'44"E 78.00'
GARAGE-BARN DW
DRIVEWAY MID
PARKING AREA
DRIVEWAY LOWER
DRIVEWAY TURNAROUND & TRASH AREA
A.P. 47 LOT 20
N/F DOUGLAS W & MORENZI
PG. 252
A.P. 47 LOT 2
N/F DAVID P. & SHEILA SARDINHA
DB. 1138 PG. 345
A.P. 47 LOT 21
N/F LINDA L. OUELLETTE
A.P. 47 LOT 22
N/F MATTEO CASTIGLEGO
DB. 1390 PG. 325
A.P. 47 LOT 23
N/F JAMES J. COSTELLO
DB. 2149 PG. 217
A.P. 47 LOT 26
N/F JACKYS REALTY III LLC
DB. 1687 PG. 7
A.P. 47 LOT 3
N/F FAIR WIND PROPERTIES LLC
DB. 2147 PG. 344
LOT AREA
92,556 SQ. FT.
2.1270 ACRES
A.P. 46 LOT 1
N/F RHOLEN EAST LLC
S89°39'53"W 12.93'
S78°42'32"W 80.41'
S80°50'50"W 69.89'
S78°42'32"W 31.79'
S78°42'32"W 58.96'
S80°50'50"W 52.28'
S89°39'53"W 12.93'
N15°51'26"W 126.27'
N14°28'46"W 120.17'
S15°51'26"E 126.27'
S14°28'46"E 120.17'
N15°51'26"W 126.27'
S15°51'26"E 126.27'
N15°51'26"W 126.27'
S15°51'26"E 126.27'
N15°51'26"W 126.27'
S15°51'26"E 126.27

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
206 BAYVIEW AVENUE
A.P. 47 LOT 3
IN
BRISTOL, RHODE ISLAND

OWNER/APPLICANT:
FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS-BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

Thomas J. Principe, III
9107
REGISTERED PROFESSIONAL ENGINEER

LOCUS MAP SCALE: 1"=100'

LIST OF DRAWINGS

1) TITLE SHEET
2) AERIAL OVERLAY RADIUS MAP
3) EXISTING CONDITIONS PLAN (PLS 3 OF 10)
4) PROPOSED UTILITY PLAN
5) PROPOSED WATER MAIN EXTENSION PLAN & PROFILE
6) PROPOSED GRADING & DRAINAGE PLAN
7) PROPOSED LAYOUT PLAN
8) PROPOSED LANDSCAPE & SERSC PLAN
9) DETAILS-1
10) DETAILS-2
11) DETAILS-3
12) DETAILS-4
13) DETAILS-5
14) DETAILS-6
SL-1) SITE LIGHTING (BY OTHERS)
SL-2) SITE LIGHTING DETAILS (BY OTHERS)

PRINCIPE COMPANY — ESTABLISHED IN 1981

PREPARED BY:

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RHODE ISLAND 02878
401.816.5385

MARCH 27, 2025
REVISED APRIL 21, 2025
REVISED AUGUST 8, 2025

STREET INDEX

BAY VIEW ROAD
(PUBLIC – TOWN)

ZONING DESIGNATION:

ZONING DISTRICT: R10

MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80' FOR 1 DWELLING UNIT, 120' FOR 2 DWELLING UNITS
MINIMUM LOT FRONTAGE	80'
FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

PROJECT DATA:

EXISTING:
PLAT: 47 LOT: 3
LOT AREA : 92,656 SF, 2.127 ACRES
THREE-UNIT DWELLING = 1,753.77 SF
GARAGE/BARN = 1,859.03 SF
SHEDS/WELL HOUSE = 320.1 SF
TOTAL EXISTING BUILDING COVERAGE = 3,932.9 SF, 4.24%

PROPOSED:
ONE (1) NEW FIVEPLEX BUILDING=3,705 SF
TWO (2) NEW SIXPLEX BUILDING=4,446 SF EACH x 2=8,892 SF
EX. THREE-UNIT DWELLING = 1,753.77 SF
EX. GARAGE/BARN (PROPOSED PROPERTY MANAGEMENT BUILDING) = 1,859.03 SF
TOTAL BUILDING COVERAGE (EXISTING + PROPOSED) = 3,612.8 + 8,892 + 3,705 = 16,209.85 SF
16,209.8 / 92,656 = 17.49%
NEW 20' WIDE PRIVATE DRIVEWAY = 460.5 LINEAR FEET
DRIVEWAY & PARKING AREA = 20,282 SQUARE FEET

REQUESTED RELIEF

WAIVERS REQUESTED

A waiver is requested from Land Development Projects Section 28-282 (d) Standards for Multifamily Buildings:
- Sub-Section (2)
Distance between multifamily buildings on same lot: Minimum 25 feet between multifamily buildings in the same row. 10 feet provided.
- Sub-Section (8)
Not more than four contiguous townhouses shall be built in a row with the same or approximately the same front line. Special architectural design offsets utilized.
- Appendix F.2(F)(1)
Sidewalks shall be required to be installed on one side of new streets in subdivisions and in multifamily developments. No sidewalks are proposed.

Variances are requested from the following Zoning Regulations:
- A variance is requested from Zoning Ordinance Article IV Dimensional Regulations Sec. 28-111 Table B requiring 80'of lot frontage. 72.50'of existing frontage provided. 64 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2).
- A Variance is requested from Zoning Ordinance Section 28-363 (2)(a1) Municipal subsidies, Density Bonus. For projects providing at least 25 percent low- and moderate-income housing the density bonus shall be five units per acre. The yield map created by Principe Engineering showed that the project site can support 5 dwelling lots without the density bonus. The lot size is 2.1270 acres. Therefore the given lot size multiplied by the density bonus is equal to 10.635 additional units. The total allowed units per the density bonus is 15.635 rounded up to 16 units. 20 units are provided with 17 units to be newly constructed.
- A variance is requested from Zoning Ordinance Section 28-363 (2)(a1)Municipal subsidies, Density Bonus. For projects providing at least 25 percent low- and moderate-income housing the density bonus shall be five units per acre. Per the calculations 15 units are permitted in total. 20 units are provided with 17 units to be newly constructed.
- A variance is requested from Zoning Ordinance Permitted Uses, Section 28-3 and Section 28-82. This R-10 zone is intended for high density residential areas comprised of single household and two-household structures within a minimum density of 10,000 square feet per dwelling unit where public sewer and/or public water are provided. Multi-household dwelling units are not allowed. The site has public sewer and public water. Multi-household dwelling units are proposed.
- Variances are requested from Zoning Ordinance Section 28-252

Article VIII. Nonconformance. The use of the Existing Garage/Barn will be used for property owner storage and for site maintenance equipment and supplies. A property management office will be added to the building above the garages and will be used for property management offices.

General Requirements for parking as follows: Parking spaces are required to be 10'x18'. The proposed spaces are 9'x18'. The required aisle width is 24'. The proposed aisle width is 20'.

Sub-Section (7)
Distance between multifamily buildings and property line:
Minimum 50 feet from side and rear property lines.
32.1 feet min. provided. 40 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2).

PLAN SET LEGEND

	EXISTING	PROPOSED
PERIMETER LINE	———	———
ABUTTER LINE	— — — — — — —	
FENCE	——X——X——X——	——X——X——X——
CONTOUR	- - - - 122 - - - - - - -	——— 122 ———
SURVEY BOUND	◎ □ ◉	◎ □ ◉
UTILITY POLE	○	
SAWCUT	//////////////////////	
OVERHEAD WIRE	——OHW——	
DRAINLINE	——D——D——	——— D ———
WATERLINE	——W——W——	——— W ———
WATER GATE VALVEW	WV ⋈	
WELL	Ⓦ	
SEWERLINE	——S——W——S——	——— S ———
GAS LINE	——G——G——	——— G ———
SEWER MANHOLE	Ⓢ	Ⓢ
EROSION CONTROL		——— LOD ———
CATCH BASIN	□	
EDGE OF PAVEMENT	———	———
RETAINING WALL		
TREE	●	
STONEWALL		
SEWER FORCE MAIN		——— FM ———
SOIL BOUNDARY LINE	— · — · — · — · —	
STONE PILLAR	▣	▣
HYDRANT		

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

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HALF MILE RADIUS LOCUS MAP
SCALE: 1"=500'

GRAPHIC SCALE

500 0 250 500 1000 2000

(IN FEET)
1 inch = 500 ft.

300 FOOT RADIUS MAP
SCALE: 1"=100'

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

AERIAL OVERLAY RADIUS MAP

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

Thomas J. Principe, III
No. 7107
REGISTERED
PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com

REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 2 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

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GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

	EXISTING
PERIMETER LINE	
ABUTTER LINE	
BUILDING	
DIRT(GRAVEL) DRIVE(ROAD)	
EDGE OF ROAD PAVEMENT	
TREELINE	
TREE	
STONEWALL	
BUILDING SETBACK	
CONTOUR	122
SURVEY BOUND	
SURVEY DRILL HOLE	
SURVEY IRON PIN	
UTILITY POLE	
OVERHEAD WIRE	OHW
CATCH BASIN	
WATERLINE	W
WELL	
WATER GATE VALVE	
SEWER MANHOLE	
SEWERLINE	S
SOILS	

GENERAL NOTES:

1. DEED REFERENCE: BK 2147, PAGE 344.
2. PLAN REFERENCE ENTITLED "DIVISION OF PROPERTY OWNED BY MR. JOHN SARDINHA, BRISTOL, R.I., SCALE 1" = 40', MAY 1960, J.A. MURGO, ENGINEER" WHICH IS LOCATED IN THE BRISTOL LAND EVIDENCE RECORDS IN DRAWER 3 FOLDER 5 ENVELOPE 171.
3. **A PLAN ENTITLED "ADMINISTRATIVE SUBDIVISION, PLAT 47 LOTS 4 & 26, BAY VIEW & METACOM AVENUE, BRISTOL, RHODE ISLAND, SCALE 1" = 50', STEPHEN M. MURGO PLS, DECEMBER 26, 2012." WHICH IS LOCATED IN THE BRISTOL LAND EVIDENCE RECORDS IN ENVELOPE 615.**
4. PLAN REFERENCE ENTITLED "EXISTING CONDITIONS PLAN, FOR DANIEL FERREIRA, A.P. 47 LOT 3, 206 BAY VIEW AVENUE, BRISTOL, R.I., SCALE 1"=30', DATED: MARCH 10, 2022, PREPARED BY PRINCIPE COMPANY"
5. THIS SUBJECT PARCEL IS NOT LOCATED WITHIN A FLOOD ZONE.
6. SOILS ON SITE ARE CLASSIFIED AS CANTON-UBRAN LAND COMPLEX, VERY ROCKY (CC) AND PITTSTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES (PmA) AS IDENTIFIED BY THE USDA RI SOIL SURVEY. THERE ARE NO AREAS OF PRIME AGRICULTURAL SOIL AND/OR FARMLAND SOILS ON THE PROPERTY.
7. THERE ARE NO AREAS OF EXISTING, ACTIVE AGRICULTURAL USE ON THE SUBJECT PROPERTY.
8. THERE ARE NO WETLANDS ON OR IN THE VICINITY OF THE PROJECT.
9. THERE ARE NO HISTORIC CEMETERIES PRESENT ON THE SUBJECT PARCEL. IT IS NOT LOCATED WITHIN A NATURAL HERITAGE AREA AS DEFINED BY THE TOWN OF BRISTOL WEB GIS MAPS.
10. THE SUBJECT PARCEL IS NOT LOCATED WITHIN ANY SPECIAL AREA MANAGEMENT PLAN OF THE RI CRMC.
11. THE SUBJECT PARCEL IS NOT LOCATED WITHIN AN OWTS CRITICAL RESOURCE AREA AS DEFINED BY RIDEM.
12. THE SUBJECT PARCEL IS NOT LOCATED WITHIN A DRINKING WATER SUPPLY WATERSHED AS DEFINED BY RIDEM.
13. THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE ROUTE 136 OVERLAY PER BRISTOL GIS.
14. THE SUBJECT PARCEL IS LOCATED WITHIN THE UPPER EAST PASSAGE WATERSHED.
15. THE DEVELOPMENT PARCEL IS NOT LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES.
16. THE SUBJECT PROPERTY IS NOT SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY A FULL EXAMINATION OF THE TITLE.
17. THE SUBJECT PARCEL IS NOT CONSIDERED TO BE WITHIN AN AQUIFER RECHARGE AREA, WELLHEAD PROTECTION OR GROUNDWATER PROTECTION AREA.
18. THERE ARE NO COASTAL FEATURES WITHIN 200 FEET OF THE SUBJECT PARCEL.
19. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
20. THE APPLICANT AND/OR THEIR REPRESENTATIVE AND THEIR ENGINEER HAVE WALKED THE SITE OF THE PROPOSED PROJECT.

ZONING CRITERIA

R10 ZONING	
ZONING DISTRICT	R10
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80'
MINIMUM LOT FRONTAGE	80'
MINIMUM FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

LEDGE TESTS:
DATE: 07/27/2022

TH 1
LEDGE @ 5FT

TH 2
LEDGE @ 6 FT

TH 3
LEDGE @ 2 FT

TH 4
NO LEDGE
8 FT DEEP

TH 5
LEDGE @ 6 FT

TH 6
LEDGE @ 4 FT

TH 7
LEDGE @ 4 FT

TH 8
NO LEDGE
10 FT DEEP

TH 9
LEDGE @ 3 FT

TH 10A
NO LEDGE
8.5 FT DEEP

TH 10B
LEDGE @ 3 FT

TH 11
NO LEDGE
9.5 FT DEEP

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: LIMITED CONTENT BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD/CLASS 3 TOPO

PURPOSE OF SURVEY: EXISTING CONDITIONS

BY: _____ DATE: 4-28-23
STEPHEN T. LONG, PLS NO. 1930

PLANNING BOARD SIGNATURE

BY: _____ DATE: _____

STEPHEN T. LONG
No. 1930
PROFESSIONAL LAND SURVEYOR

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

LEGEND

	EXISTING
PERIMETER LINE	
ABUTTER LINE	
BUILDING	
DIRT(GRAVEL) DRIVE(ROAD)	
EDGE OF ROAD PAVEMENT	
TREELINE	
TREE	
STONEWALL	
BUILDING SETBACK	
CONTOUR	122
SURVEY BOUND	
SURVEY DRILL HOLE	
SURVEY IRON PIN	
UTILITY POLE	
OVERHEAD WIRE	OHW
CATCH BASIN	
WATERLINE	W
WELL	
WATER GATE VALVE	
SEWER MANHOLE	
SEWERLINE	S

EXISTING CONDITIONS PLAN

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com
ESTABLISHED IN RI

MASTER PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAY VIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 3 of 10
DRAWN BY: NEC	DESIGN BY: NEC	CHECKED BY: TJP
DATE: 04/05/2023		PROJECT NO.: LD-2021-35

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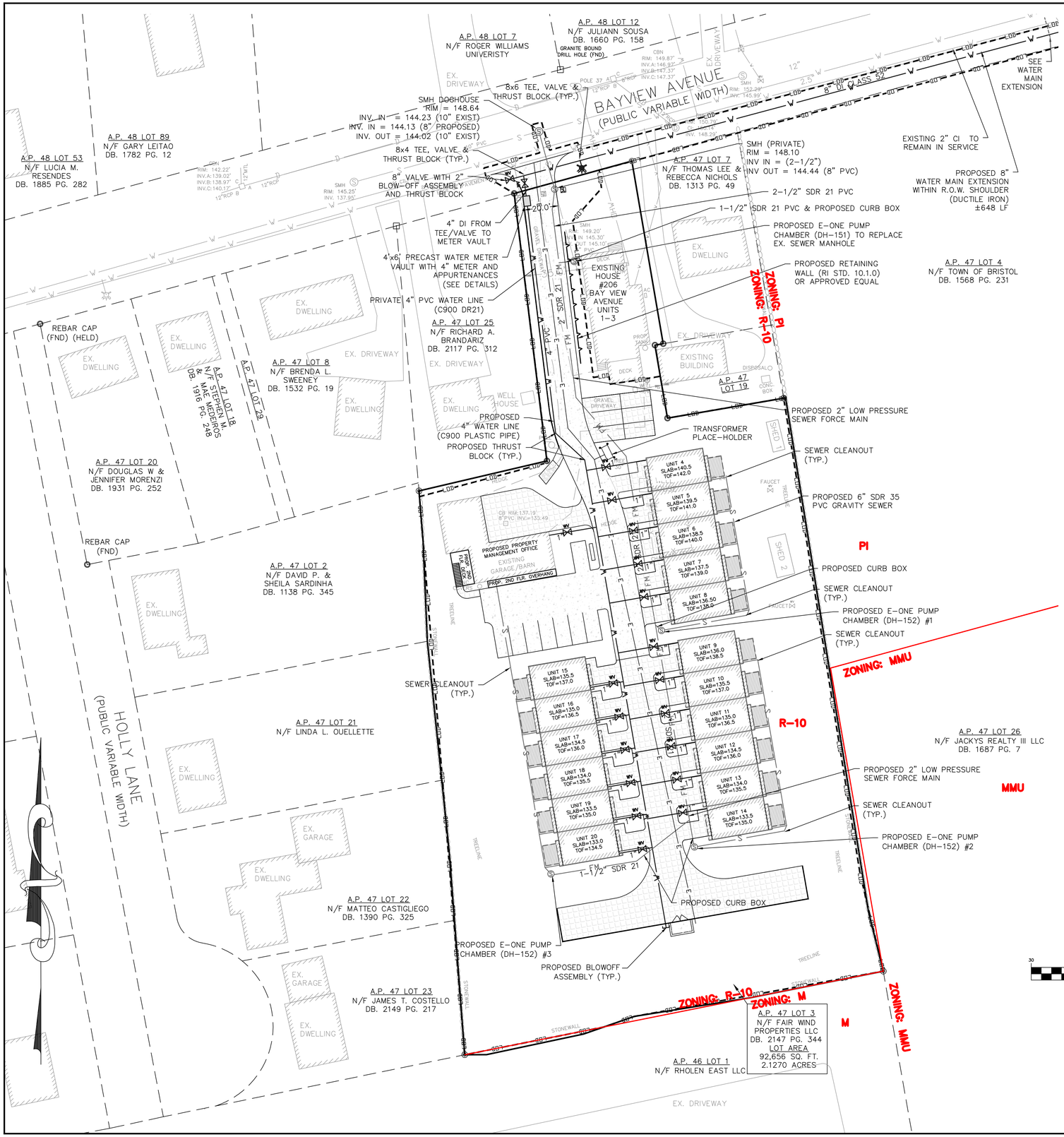


PROJECT DENSITY:

R-10:
THIS ZONE IS INTENDED FOR HIGH DENSITY RESIDENTIAL AREAS COMPRISED OF SINGLE HOUSEHOLD AND TWO-HOUSEHOLD STRUCTURES WITH A MINIMUM DENSITY OF 10,000 SF PER DWELLING UNIT WHERE PUBLIC SEWER AND/OR PUBLIC WATER ARE PROVIDED
(SECTION 28-3)

TOTAL LOT AREA = 92,656 SF:
5 LOTS (PER YIELD PLAN)

25% LOW & MODERATE INCOME UNIT DENSITY BONUS
5 UNITS/ACRE= 96,656/43,560=2.22 x 5 = 10

UNITS ALLOWED: 5 + 10 = 15
UNITS PROVIDED: 20

UTILITY NOTES

1. ALL ON-SITE UTILITIES TO BE UNDERGROUND.
2. ALL UTILITY LOCATIONS, INCLUDING TRANSFORMER, SUBJECT TO REVIEW AND APPROVAL OF APPLICABLE UTILITY COMPANY.
3. WATER LINES SHALL HAVE 4' COVER MIN.
4. SEWER LINES SHALL HAVE 4' COVER MIN.
5. WHERE SEWER LPFM LINES CROSS WATER LINES, INSTALL 18" MIN. BELOW THE WATER LINE.

ZONING CRITERIA

R10 ZONING	
ZONING DISTRICT	R10
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80'
MINIMUM LOT FRONTAGE	80'
MINIMUM FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

PLAN SET LEGEND

	EXISTING	PROPOSED
PERIMETER LINE		
ABUTTER LINE		
FENCE	X X X	X X X
CONTOUR	122	122
SURVEY BOUND		
UTILITY POLE		
SAWCUT		
OVERHEAD WIRE	OHW	
DRAINLINE	D D	D LOD
WATERLINE	W W	W
WATER GATE VALVEW	WV	
WELL	W	
SEWERLINE	S W S	S
GAS LINE	G G	G
SEWER MANHOLE	S	S
EROSION CONTROL		
CATCH BASIN		
EDGE OF PAVEMENT		
RETAINING WALL		
TREE		
STONEWALL		
SEWER FORCE MAIN		FM
SOIL BOUNDARY LINE		
STONE PILLAR		
HYDRANT		

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS-BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

SURVEY REFERENCE:

1. PLAN ENTITLED "EXISTING CONDITIONS PLAN" FOR FAIR WIND PROPERTIES LLC AP 47 LOT 3 206 BAY VIEW AVENUE BRISTOL, RI BY PRINCIPE COMPANY JOB NUMBER: LD-2021-35 04/05/23 SCALE 1"=30'

OWNER/APPLICANT
FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

PROPOSED UTILITY PLAN

Thomas J. Principe, III
No. 15107
REGISTERED PROFESSIONAL ENGINEER

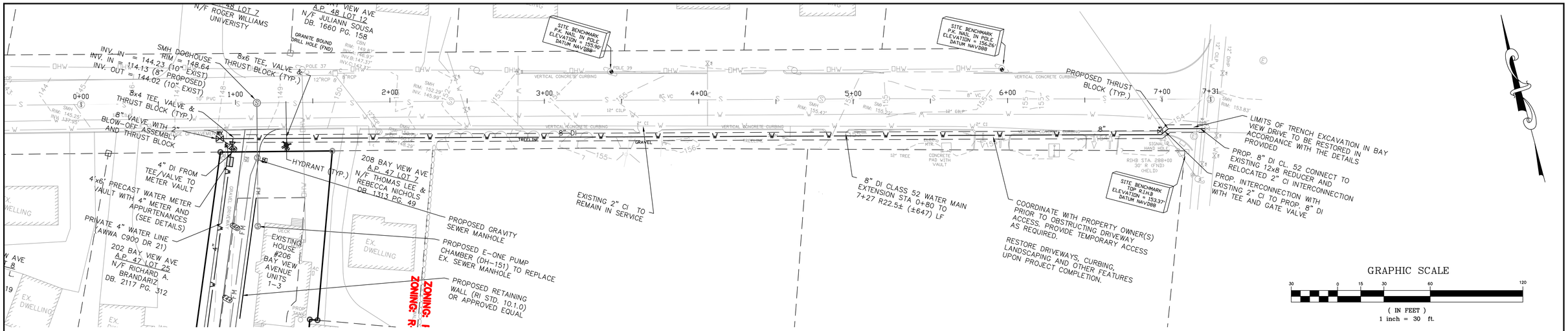
PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com

REVISIONS

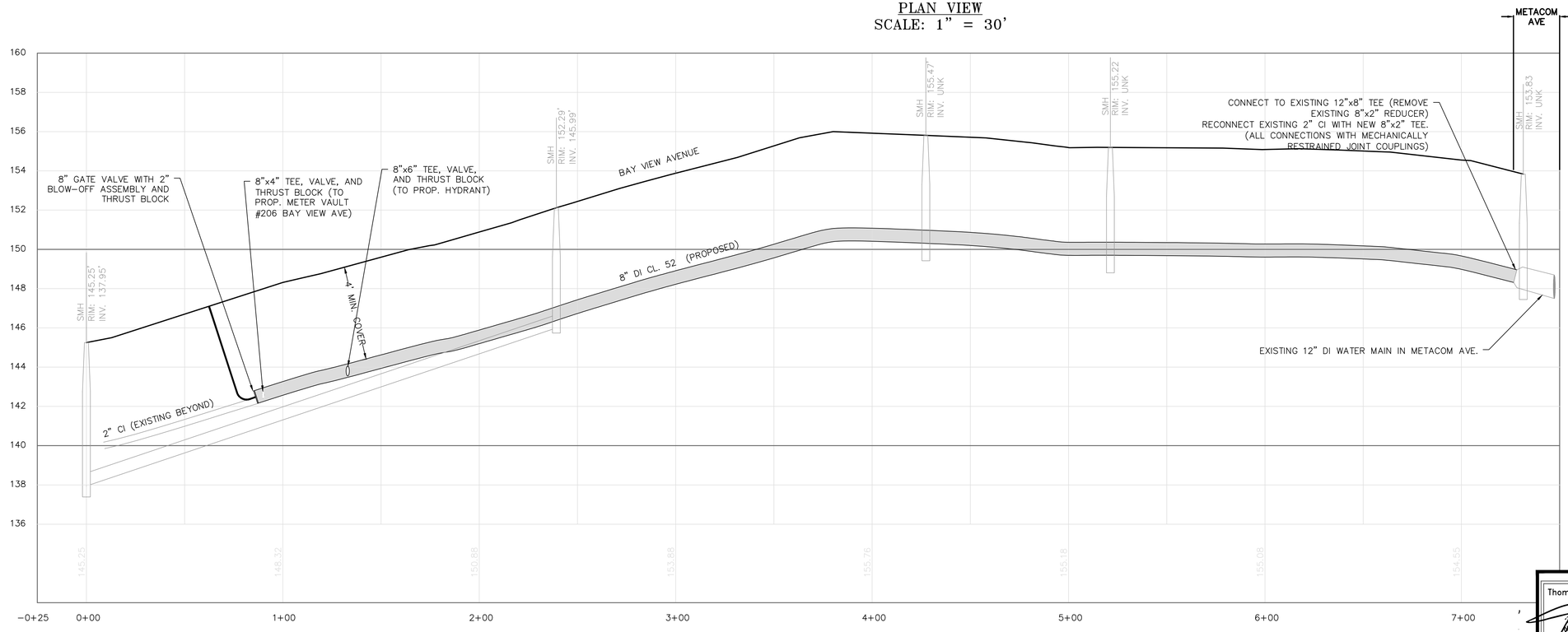
No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	06/23/25	KAB	TJP
3.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 4 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35



PLAN VIEW
SCALE: 1" = 30'



PROFILE VIEW
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

DRAWING ISSUE:

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- ☒ PERMITTING
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- ☐ OTHER:

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OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

PLAN & PROFILE –
WATER MAIN EXTENSION

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
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REVISIONS

No.	DATE	DRWN	CHKD

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 5 of 14
DRAWN BY: SJL	DESIGN BY: SJL	CHECKED BY: TJP
DATE: 08/08/25		PROJECT NO.: LD-2021-35

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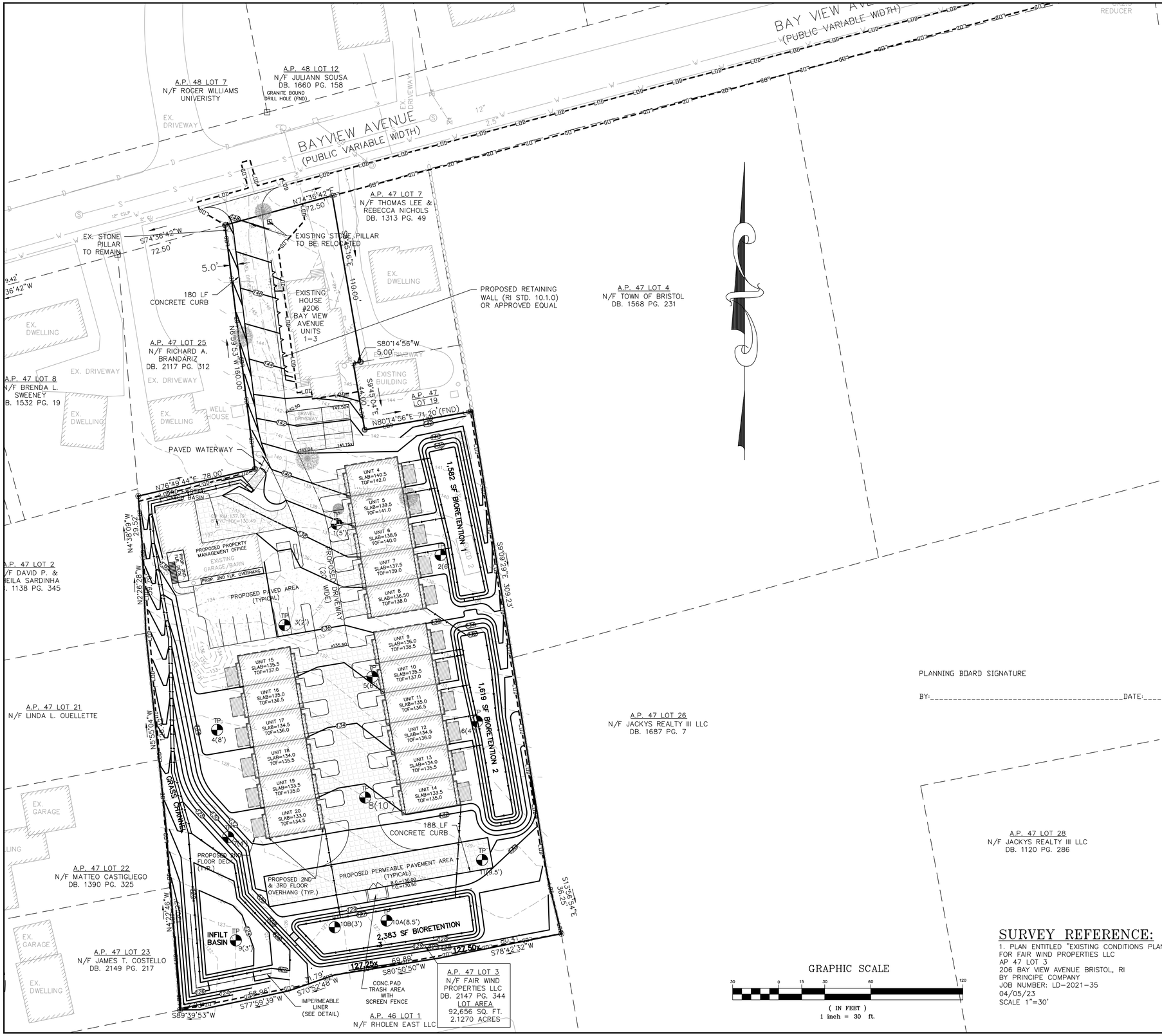

REDUCER

DRAWING ISSUE:

- ☐ CONCEPT
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MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

PLAN SET LEGEND

	EXISTING	PROPOSED
PERIMETER LINE		
ABUTTER LINE		
FENCE	X X X	X X X
CONTOUR	122	122
SURVEY BOUND		
UTILITY POLE		
SAWCUT		
OVERHEAD WIRE	OHW	
DRAINLINE	D D	D
WATERLINE	W W	W
WATER GATE VALVEW	WV	
WELL	W	
SEWERLINE	S W S	S
GAS LINE	G G	G
SEWER MANHOLE	S	S
EROSION CONTROL		LOD
CATCH BASIN		
EDGE OF PAVEMENT		
RETAINING WALL		
TREE		
STONEWALL		
SEWER FORCE MAIN		FM
SOIL BOUNDARY LINE		
STONE PILLAR		
HYDRANT		

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SURVEY REFERENCE:

1. PLAN ENTITLED "EXISTING CONDITIONS PLAN" FOR FAIR WIND PROPERTIES LLC AP 47 LOT 3 206 BAY VIEW AVENUE BRISTOL, RI BY PRINCIPE COMPANY JOB NUMBER: LD-2021-35 04/05/23 SCALE 1"=30'

PROPOSED GRADING & DRAINAGE PLAN

Thomas J. Principe, III
No. 9107
REGISTERED
PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com

REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
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OF
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A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 6 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

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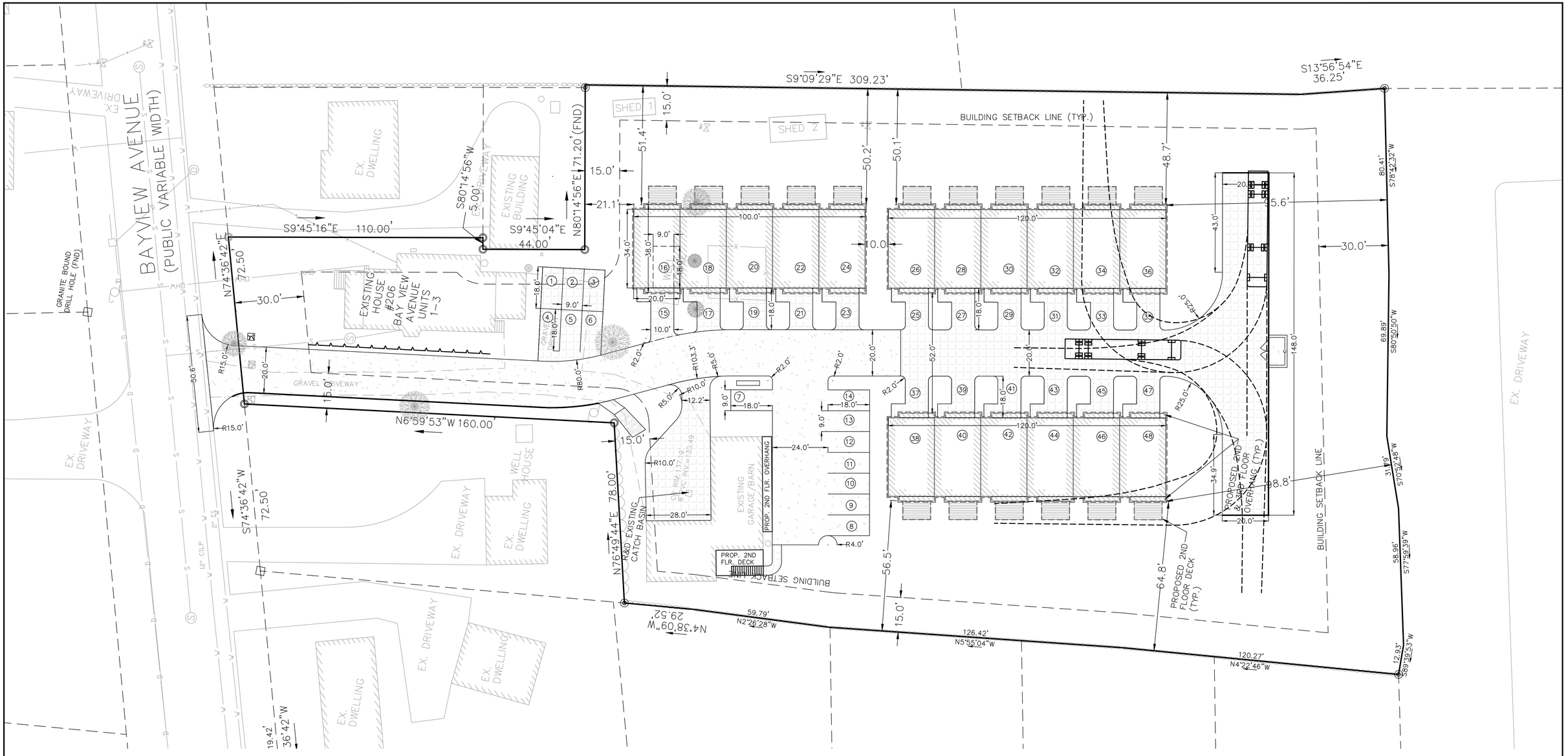

PROPOSED LAYOUT PLAN

OPEN SPACE NOTES:
REQUIRED=440 SF/UNIT=20X440=8,000 SF
PROVIDED=1,376+640+640+2,960+425+435+1,600=8,076 SF

TRASH PICKUP & SNOW REMOVAL SHALL BE PRIVATE

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

SURVEY REFERENCE:

1. PLAN ENTITLED "EXISTING CONDITIONS PLAN" FOR FAIR WIND PROPERTIES LLC AP 47 LOT 3 206 BAY VIEW AVENUE BRISTOL, RI BY PRINCIPE COMPANY JOB NUMBER: LD-2021-35 04/05/23 SCALE 1"=30'

DRAWING ISSUE:

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- ☒ PERMITTING
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- ☐ AS-BUILT
- ☐ OTHER:

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OWNER/APPLICANT
FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

Thomas J. Principe, III
No. 5107
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

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1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRINCIPE COMPANY, INC.
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PRELIMINARY PLAN SUBMISSION
FOR A
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"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 20'	SHEET NO: 7 of 14
DRAWN BY: KAB / DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025	PROJECT NO.: LD-2021-35

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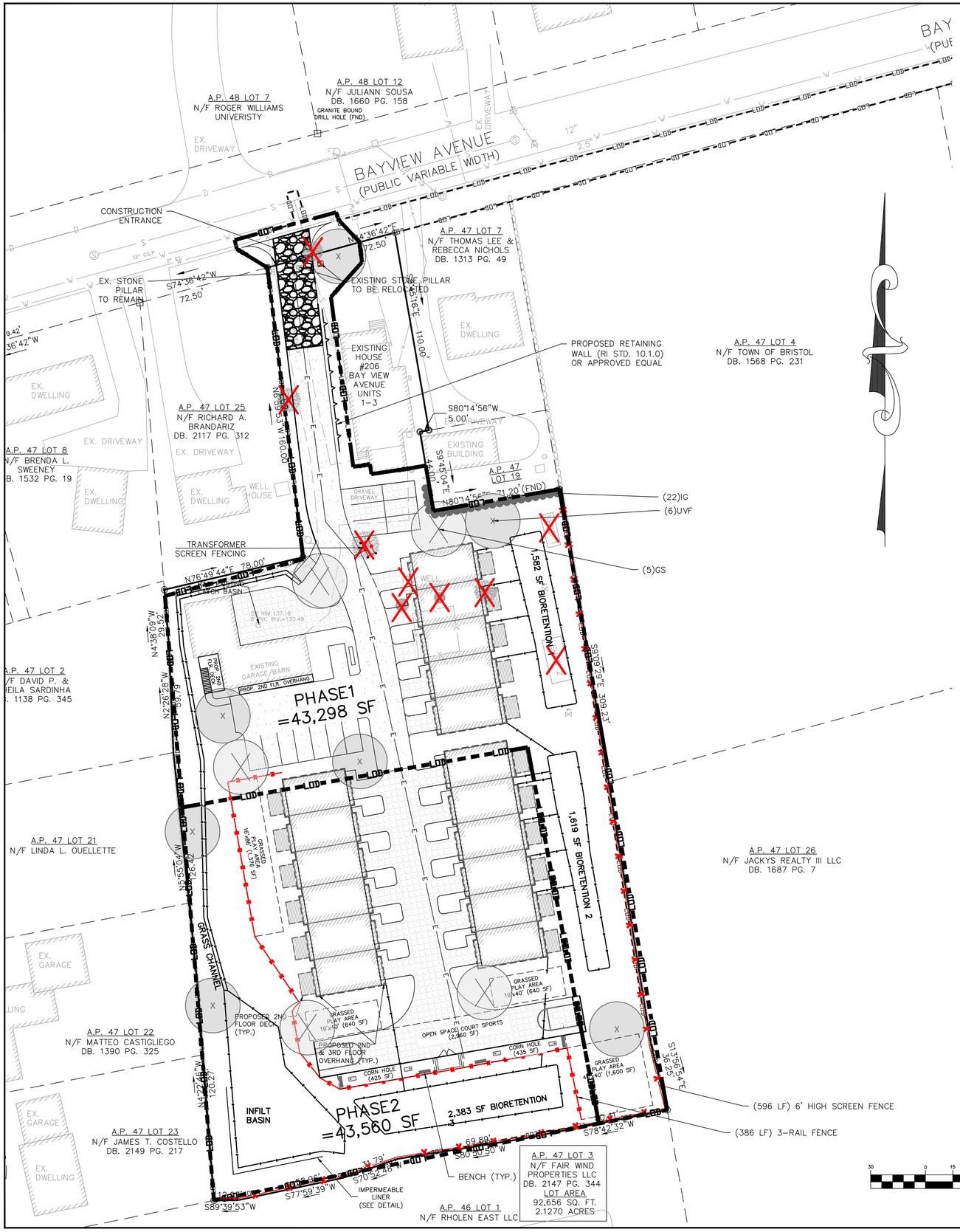

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DRAWING ISSUE:

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- ☐ OTHER:

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MASTER PLANT SCHEDULE

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
GS	5	Gleditsia triacanthos inermis Shademaster	Shademaster honeylocust	2-2.5" cal.	B&B	5' STD.
UVF	6	Ulmus americana Valley Forge	Valley Forge American elm	2-2.5" cal.	B&B	5' STD.
IG	22	Ilex glabra Shamrock	Shamrock inkberry	2.5'-3'	B&B	4' o.c.
RG-1	179	Aster divaricatus	White wood aster	#1	CAN	2' o.c.
RG-2	179	Iris versicolor	Blue flag iris	#1	CAN	2' o.c.
RG-3	179	Lobelia cardinalis	Cardinal flower	#1	CAN	2' o.c.
	179	Osmunda cinnamomea	Cinnamon fern	#1	CAN	2' o.c.

LANDSCAPE NOTES:

1) ALL PLANT MATERIAL TO CONFORM TO ANSI STANDARDS.
2) ALL PLANT MATERIAL TO RECEIVE THREE INCHES OF SHREDDED PINE BARK MULCH, EXCEPT WITHIN RAIN GARDENS, WHICH SHALL RECEIVE SHREDDED HARDWOOD MULCH.
3) ALL PLANT MATERIAL TO BE GUARANTEED TO SURVIVE AT LEAST ONE GROWING SEASON, OR THEY SHALL BE REPLACED AT THE LANDSCAPE CONTRACTOR'S EXPENSE.
4) ALL PLANT MATERIAL SUBJECT TO VERIFICATION AS TO LOCATION AND SPECIES.
5) THERE WILL BE NO PLANT MATERIAL SUBSTITUTIONS WITHOUT THE WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.
6) DISTURBED SOILS WITHIN THE PROJECT LIMITS ARE TO BE LOAMED AND SEEDED.

PLAN SET LEGEND

	EXISTING	PROPOSED
PERIMETER LINE		
ABUTTER LINE		
FENCE	X X X	X X X
CONTOUR	122	122
SURVEY BOUND		
UTILITY POLE		
SAWCUT		
OVERHEAD WIRE	OHW	
DRAINLINE	D D	D
WATERLINE	W W	W
WATER GATE VALVEW	WV	
WELL	W	
SEWERLINE	S W S	S
GAS LINE	G G	G
SEWER MANHOLE	S	S
EROSION CONTROL		LOD
CATCH BASIN		
EDGE OF PAVEMENT		
RETAINING WALL		
TREE		
STONEWALL		
SEWER FORCE MAIN		FM
SOIL BOUNDARY LINE		
STONE PILLAR		
HYDRANT		

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

OPEN SPACE NOTES:
REQUIRED=440 SF/UNIT=20X440=8,000 SF
PROVIDED=1,376+640+640+2,960+425+435+1,600=8,076 SF

TRASH PICKUP & SNOW REMOVAL SHALL BE PRIVATE

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

SURVEY REFERENCE:
1. PLAN ENTITLED "EXISTING CONDITIONS PLAN" FOR FAIR WIND PROPERTIES LLC AP 47 LOT 3 206 BAY VIEW AVENUE BRISTOL, RI BY PRINCIPE COMPANY JOB NUMBER: LD-2021-35 04/05/23 SCALE 1"=30'

PROPOSED LANDSCAPE PLAN & SERSC PLAN

REGISTERED LANDSCAPE ARCHITECT KAREN A. BECK No. 602

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com
ESTABLISHED IN 1981

REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
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OF
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A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 8 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

C:\Users\principe\Principe Engineering Dropbox_LAND\13_2021\LD742C-13\CURRENT\LD_2021-35_206 Bay View Avenue, Bristol_PRELIM AUGUST 2025 (Seth Lemoine's conflicted copy 2025-08-06).dwg, DWG To PDF.pc3

VEGETATIVE COVER AND PLANTING

1. THE NORMAL ACCEPTABLE SEASONABLE SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.

2. TOP SOIL FOR PERMANENT OR LONG TERM TEMPORARY SEEDING SHOULD HAVE A SANDY LOAM TEXTURE, RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS. TOP SOIL SHALL CONFORM WITH RHODE ISLAND SPECIFICATIONS.

3. THE DESIGN SEED MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT	SEEDING DATE
CREEPING RED FESCUE	70	
ASTORIA BENTGRASS	5	APRIL 1 – JUNE 15
BIRDFOOT TREFOIL	15	AUGUST 15 – OCTOBER 15
PERENNIAL RYE GRASS	10	

APPLICATION RATE – 100 LBS PER ACRE

SEED MIX SHALL BE INOCULATED WITHIN 24 – HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULATION FOR EACH SEED VARIETY. ALTERNATE SEED TYPES DUE TO SITE SPECIFIC CONDITIONS AND SOILS ARE ACCEPTABLE WITH THE ENGINEER'S APPROVAL.

4. IN TOPSOIL SEEDING AREAS, THE CONTRACTOR WILL LIME AND FERTILIZE AS REQUIRED TO COMPLIMENT OR UPGRADE SOIL CONDITIONS.

5. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY PERMANENT VEGETATIVE COVER AREAS THAT DO NOT DEVELOP OR WHICH ERODE WITHIN A ONE (1) YEAR PERIOD.

EROSION CONTROL, SOIL STABILIZATION AND SEDIMENT CONTROL PLAN

1. PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRUBBING, DEMOLITION OR EARTHWORK ACTIVITY, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLANS ARE TO BE INSTALLED BY THE CONTRACTOR.

2. CONSTRUCTION ACCESS STABILIZATION ENTRANCE PADS ARE TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE GRUBBING OR EARTHWORK ACTIVITY.

3. EXISTING CATCH BASINS ARE TO BE PROTECTED WITH STRAW BALES AND/OR SILT SACS PRIOR TO THE START OF SITE GRUBBING, EARTHWORK OR UNDERGROUND UTILITY AND DRAINAGE INFRASTRUCTURE INSTALLATION TO SERVE THE DEVELOPMENT SITE.

4. THE PROJECT CONSTRUCTION SEQUENCE, TO THE EXTENT PRACTICAL, SHOULD REQUIRE THE INSTALLATION OF DOWN GRADE AND OFF SITE STORM DRAINAGE SYSTEM IMPROVEMENTS BEFORE THE START OF SITE GRUBBING AND EARTHWORK ACTIVITY.

5. TEMPORARY SITE SLOPE TREATMENTS FOR SOIL STABILIZATION SHALL CONSIST OF STRAW, FIBER MULCH, RIP RAP OR PROTECTIVE COVERS SUCH AS MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, AND EXCELSIOR OR EQUAL PRODUCTS). THESE AND OTHER ACCEPTABLE MEASURES SHALL BE INCORPORATED INTO THE SITE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.

6. CONSTRUCTION SITES ARE DYNAMIC, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND OR MOVEMENT AND MAINTENANCE OF EROSION CONTROLS, SOIL STABILIZATION AND SEDIMENT CONTROL MEASURES AS NEEDED TO MAXIMIZE THE INTENT OF THE PLAN FOR ALL SITE CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION, MAINTENANCE, REPAIR, AND REPLACEMENT OF EROSION CONTROLS, SOIL STABILIZATION AND SEDIMENT CONTROL DEVICES UNTIL AN ACCEPTABLE PERMANENT VEGETATIVE GROWTH IS ESTABLISHED. THE CONTRACTOR SHALL MAINTAIN A DETAIL LOG OF ALL EROSION CONTROL INSPECTIONS, COMPLAINTS RELATED TO EROSION OR SEDIMENT, AND CORRECTIVE REMEDIAL MEASURES TAKEN THROUGHOUT THE COURSE OF THE PROJECT CONSTRUCTION.

8. SOIL EROSION AND SEDIMENT CONTROL IS NOT LIMITED TO DAMAGES CAUSED BY WATER BUT ALSO INCLUDES EROSION AND SEDIMENT RESULTING FROM WINDS. MEASURES, SUCH AS TEMPORARY GROUND COVERS, WATER AND CALCIUM APPLICATIONS ARE TO BE UNDERTAKEN AS NEEDED TO MINIMIZE WIND RELATED SOIL AND DUST CONTROL.

9. STOCK PILES OF EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS. STOCK PILES SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%). STOCK PILES SHALL BE SURROUNDED ON THE DOWN GRADIENT OF THE EXISTING GROUND SURFACE BY HAY BALES OR SILT FENCE. THE STOCK PILES SHALL ALSO BE SEEDED OR STABILIZED IN SOME MANOR TO PREVENT SOIL EROSION.

10. THE SMALLEST POSSIBLE SITE AREAS SHALL BE DISTURBED OR EXPOSED AT ONE TIME AND DENUDED SLOPES OR WORK AREAS SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS INACTIVE PERIODS OR SITE WORK SHUT DOWNS.

11. TO THE EXTENT POSSIBLE, ALL DISTURBED AREAS MUST BE SEEDED OR STABILIZED WITHIN THE CONSTRUCTION SEASON. STABILIZATION OF ONE FORM OR ANOTHER SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.

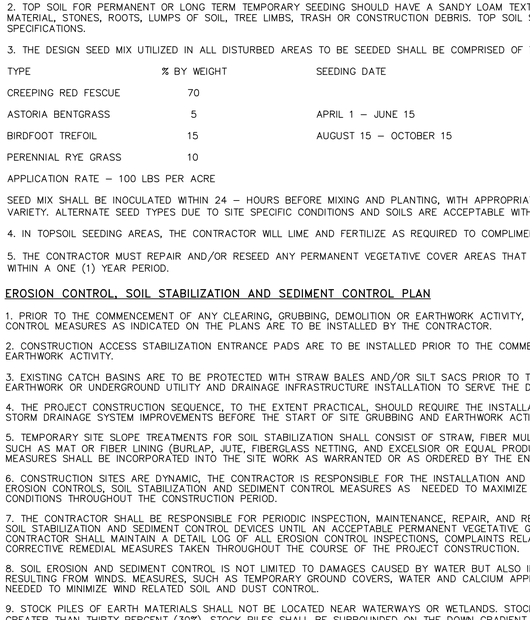
12. EXPOSED STEEP OR LONG SLOPES SHOULD BE TREATED WITH "CRIMPING" OR "TRACKING" TO REDUCE EROSION AND SEDIMENT AND TO TACK DOWN SEEDING OR MULCH APPLICATIONS.

13. IF CONCRETE IS TO BE USED ON SITE, THE CONTRACTOR MUST ESTABLISH AND MAINTAIN SPECIFIC WASHOUT AREAS FOR THE CONCRETE TRUCKS WITH APPROPRIATE PROTECTION CONTROLS.

14. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING COLLECTION AND STORAGE LOCATIONS ON–SITE FOR ALL CONSTRUCTION DEBRIS AND TRASH SO THAT THIS MATERIAL DOES NOT BECOME A NEIGHBORHOOD NUISANCE.

15. EXISTING TREES AND VEGETATION WILL BE RETAINED WHENEVER FEASIBLE.

16. SITE SOIL EROSION AND SOIL STABILIZATION AND SEDIMENT CONTROLS MUST CONFORM TO ALL REQUIREMENTS OF THE APPLICABLE LOCAL COMMUNITY ORDINANCES AND STATE REGULATIONS.



TRANSVERSE PAVEMENT CUT AND MATCH
DETAIL PER RIDEM 47.1.1

ORDER OF PROCEDURE:

PRIOR TO ANY CLEARING AND GRUBBING OR ANY ROUGH GRADING, TEMPORARY STRAW BALES AND SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF CONSTRUCTION AS PER THE PLANS (I.E. ALONG ROADWAYS, STREAM BANKS, CRITICAL AREAS, ETC.).

ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS FOR TEMPORARY CONTROL.

IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.

TEMPORARY STRAW BALES AND SANDBAGS ALONG AND AT THE ENDS OF ROADWAYS MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.

STRAW BALES LOCATED AT DRAINAGE OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

SEDIMENTATION CONTROL PROGRAM:

RIP RAP SPLASH PADS SHALL BE INSTALLED AT THE OUTLETS FOR ALL CULVERTS DISCHARGING INTO A WATERWAY.

EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL ENTERING THE WETLANDS.

ALL DISTURBED AREAS SUBJECT TO EROSIVE TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL BE SEEDED AND PROTECTED WITH A FIBER MULCH.

DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.

CARE SHOULD BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.

ADDITIONAL STRAW BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT.

ALL SEDIMENTS SHALL BE REMOVED FROM THE DRAINAGE AND DETENTION FACILITIES AS SCHEDULED FOR EACH FACILITY (SEE DETENTION BASIN MAINTENANCE, THIS SHEET).

GENERAL NOTES:

1. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ANY APPLICABLE LOCAL, STATE AND FEDERAL LAWS GOVERNING HIS INTENDED ACTIVITIES. OSHA REGULATIONS ARE APPLICABLE OF PROJECT SITE CONSTRUCTION ACTIVITIES.

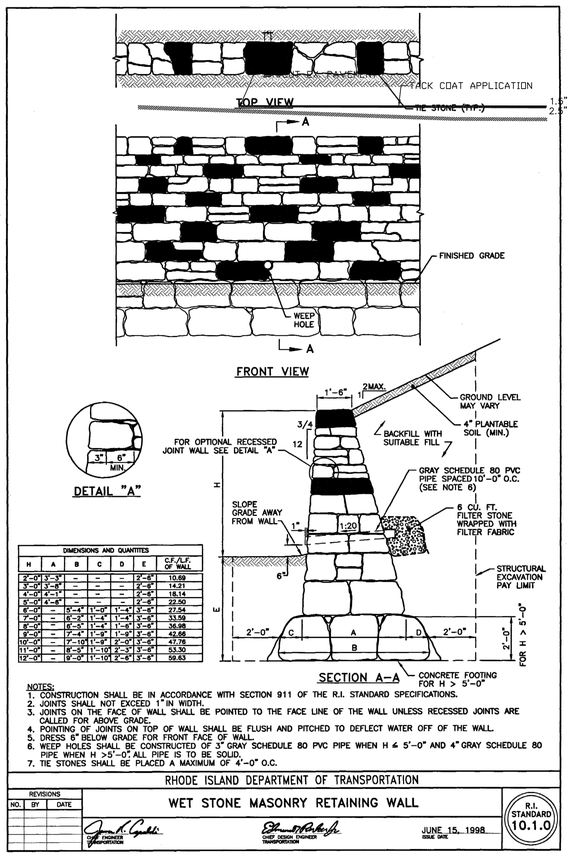
2. ALL CONSTRUCTION WILL BE UNDERTAKEN IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE TOWN OF BRISTOL.

3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.

4. IF THE MUNICIPALITY REQUIRES A PROJECT PRE–CONSTRUCTION CONFERENCE, THE PROJECT DEVELOPER AND THE PROJECT CONTRACTOR WILL ATTEND AND WILL PROVIDE ALL REQUESTED MATERIALS PRIOR TO COMMENCING ANY WORK.

5. IF CEMENT CONCRETE MIX TRUCKS ARE TO BE WASHED OUT ON SITE, THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING A WASH OUT AREA WITH APPROPRIATE PROTECTION CONTROLS.

6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING COLLECTION AND STORAGE LOCATIONS ON–SITE FOR ALL CONSTRUCTION DEBRIS AND TRASH SO THAT THIS MATERIAL DOES NOT BECOME A NEIGHBORHOOD NUISANCE.



DIMENSIONS AND QUANTITIES						
H	A	B	C	D	E	C.F./L.F. OF WALL
2'–0"	3'–3"	–	–	–	2'–6"	10.69
3'–0"	3'–6"	–	–	–	2'–6"	14.21
4'–0"	4'–1"	–	–	–	2'–6"	18.14
5'–0"	4'–4"	–	–	–	2'–6"	22.50
6'–0"	–	5'–4"	1'–0"	1'–4"	3'–6"	27.54
7'–0"	–	6'–2"	1'–4"	1'–4"	3'–6"	33.56
8'–0"	–	6'–5"	1'–4"	1'–4"	3'–6"	36.98
9'–0"	–	7'–4"	1'–6"	1'–6"	3'–6"	42.66
10'–0"	–	7'–10"	1'–8"	2'–0"	3'–6"	47.76
11'–0"	–	8'–5"	1'–10"	2'–2"	3'–6"	53.30
12'–0"	–	9'–0"	1'–10"	2'–2"	3'–6"	59.83

NOTES:
1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 911 OF THE R.I. STANDARD SPECIFICATIONS.
2. JOINTS SHALL NOT EXCEED 1" IN WIDTH.
3. JOINTS ON THE FACE OF WALL SHALL BE POINTED TO THE FACE LINE OF THE WALL UNLESS RECESSED JOINTS ARE CALLED FOR ABOVE GRADE.
4. POINTING OF JOINTS ON TOP OF WALL SHALL BE FLUSH AND PITCHED TO DEFLECT WATER OFF OF THE WALL.
5. DRESS 6" BELOW GRADE FOR FRONT FACE OF WALL.
6. WEEP HOLES SHALL BE CONSTRUCTED OF 3" GRAY SCHEDULE 80 PVC PIPE WHEN H ≤ 5'–0" AND 4" GRAY SCHEDULE 80 PIPE WHEN H >5'–0" ALL PIPE IS TO BE SOLID.
7. TIE STONES SHALL BE PLACED A MAXIMUM OF 4'–0" O.C.

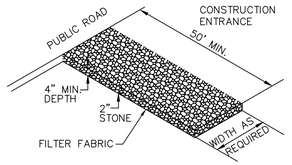
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

WET STONE MASONRY RETAINING WALL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 10.1.0

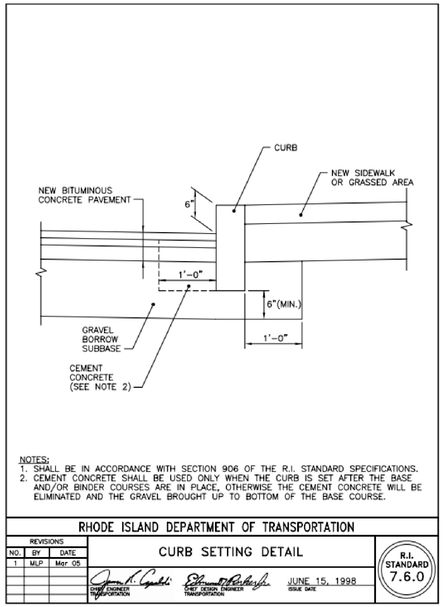


MATERIALS SIZE

SQUARE MESH SIEVES	2"CRUSHED STONE OR GRAVEL	ASTM C–33 NO. 2	ASTM C–33 NO. 3
	% FINER	% FINER	% FINER
2–1/2 INCHES	100	90–100	100
2 INCHES	95–100	35–70	90–100
1–1/2 INCHES	30–55	0–15	35–70
1–1/4 INCHES	0–25	–	–
1 INCH	0–5	–	0–15
3/4 INCH	–	0–5	–
1/2 INCH	–	–	0–5
3/8 INCH	–	–	–

NOTE:
STABILIZATION PAD TO BE IN COMFORMANCE WITH STANDARDS SET FORTH IN THE "RHODE ISLAND GUIDELINES FOR SOIL & SEDIMENT CONTROL".

RIP–RAP STABILIZATION PAD @ CONSTRUCTION ENTRANCE
NOT TO SCALE



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

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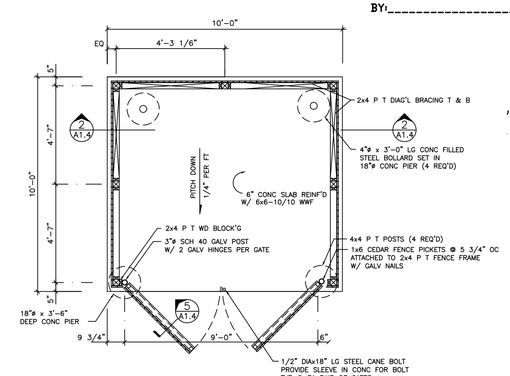
NO.	BY	DATE
1	MLP	Mar 05

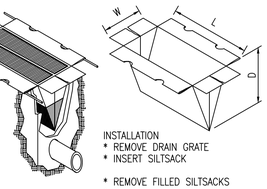
CURB SETTING DETAIL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

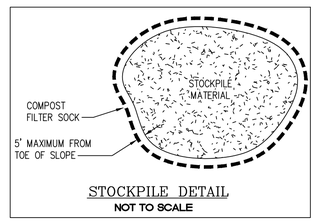
R.I. STANDARD 7.6.0



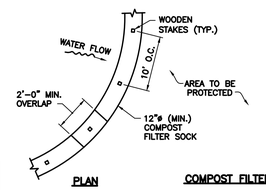
1 A1.2 TRASH ENCLOSURE PLAN



SILTSACK DETAIL
NOT TO SCALE



STOCKPILE DETAIL
NOT TO SCALE



NOTES:
1. ALL MATERIAL TO MEET REQUIREMENTS OF SECTION 206 OF RI STANDARD SPECIFICATIONS.
2. COMPOST MATERIAL MUST BE ACCEPTED BY THE ENGINEER PRIOR TO PLACEMENT.

PERIMETER EROSION CONTROLS
NOT TO SCALE

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS–BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

OWNER/APPLICANT
FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DETAILS–1

Thomas J. Principe, III — 9107 — REGISTERED PROFESSIONAL ENGINEER

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27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com
ESTABLISHED IN 1981

REVISIONS			
No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 9 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD–2021–35

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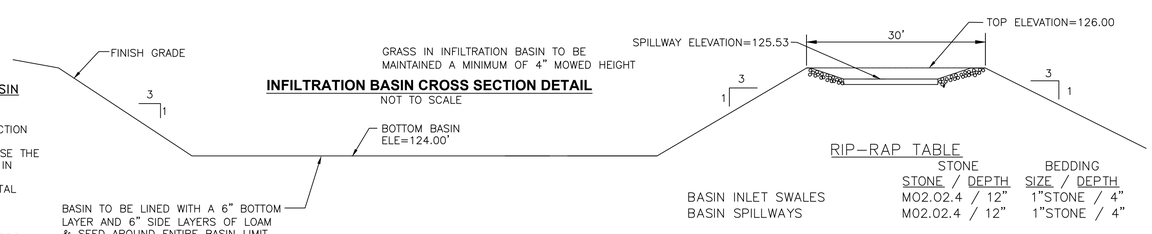


INFILTRATION BASIN CROSS SECTION DETAIL
NOT TO SCALE

INFILTRATION BASIN NOTES:

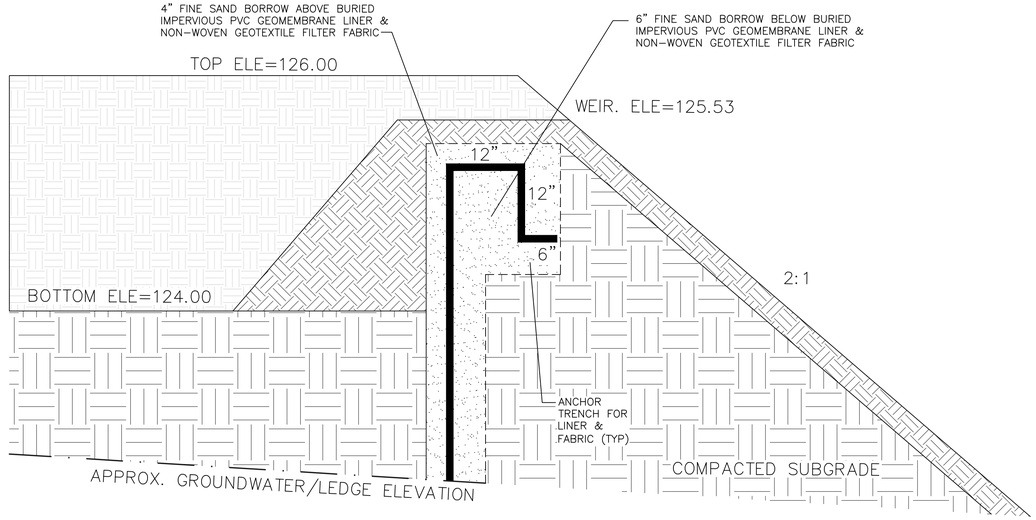
1)DURING CONSTRUCTION HEAVY EQUIPMENT SHALL NOT TRAVERSE THE INFILTRATION AREA IN ORDER TO PREVENT DETRIMENTAL COMPACTION.

2)SHOP DRAWING SUBMITTAL AND APPROVAL BY DESIGN ENGINEER REQUIRED FOR INFILTRATION BASIN PRIOR TO CONSTRUCTION.

RIP–RAP TABLE

	STONE	BEDDING
	STONE / DEPTH	SIZE / DEPTH
BASIN INLET SWALES	M02.02.4 / 12"	1"STONE / 4"
BASIN SPILLWAYS	M02.02.4 / 12"	1"STONE / 4"

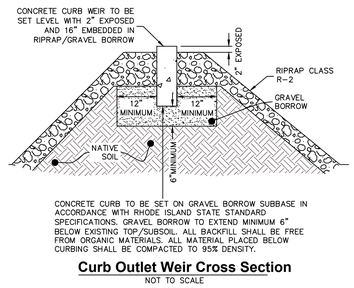
M02.02.4 = 8" – 95 / 100%,
4" – 0 / 25%
2½" – 0 / 5%



IMPERVIOUS LINER DETAIL
(DOWNSLOPE OF INFILTRATION BASIN ONLY)
NOT TO SCALE

INFILTRATION BASIN MAINTENANCE SCHEDULE:

1. Side–slopes, embankments, and the basin floor will be mowed at least once per growing season, to prevent unwanted woody growth. This storm water facility is to be managed for wildlife habitat, therefore, mowings will be conducted after mid August to prevent mortality to ground nesting birds and animals.
2. All trash and litter and other debris will be removed from the storm water facility including inlet and outlet structures. This will be accomplished at least twice per year, preferably spring and fall.
3. Sediments will be removed from the basin immediately following site stabilization and every year thereafter. Accumulated sediments may have to be removed more frequently if the sediment storage capacity of the forebays or sediment storage areas are within the last 10 percent of available capacity. Sediment removal within the basin will restore the original capacity and design depth.
4. If blockage of a basin outlet structure occurs it may be necessary to dewater the pond for access to the blockage. The dewatering flow must be adequately filtered prior to discharge into a receiving water body to remove suspended solids.
5. Pools of stagnant water in the infiltration basin indicates failure due to erosion and scouring of the basin bottom, particularly near an inlet device. This deficiency will be corrected immediately to prevent a nuisance habitat for insects, especially mosquitoes.
6. All outlet structures and outflow channels will be inspected annually. Inspections will be accomplished several times during the first six months of operation, especially after rainfall events to check for clogging or, conversely, too rapid of a release.
7. The grassed areas of the basin will be inspected at least twice per year to check for erosion problems. Problem areas must be reseeded immediately to stabilize exposed soils, thereby preventing erosion and potential clogging of outflow devices.
8. Repairs or replacement of inlet/outlet structures, rip–rap channels, fences, or other elements of the facility will be done within 30 days of deficiency reports. If an emergency situation is imminent then repair/replacement must be done immediately to avert failure or danger to nearby residents.
9. All sediment generated during construction and as a result of maintenance of the drainage system must be disposed of properly. Sediment shall not be disposed of in or near State or Federal regulated waters.
10. Records of the first two years of maintenance following construction shall be submitted to RIDEM Division of Water Resources. Maintenance records for subsequent years shall be kept on file and submitted to RIDEM, Division of Water Resources, upon request.
11. All drainage facilities will be maintained by a Homeowner's Association.



Curb Outlet Weir Cross Section
NOT TO SCALE

Rhode Island Stormwater Design and Installation Standards Manual *Amended March 2015*

Figure F-2 Typical Parking Area Cross-Section for Pervious Pavement System

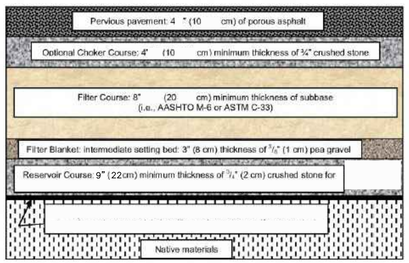


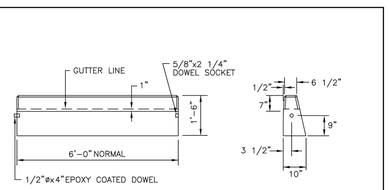
Table F-7 Gradations and compaction of choker, filter, and reservoir course materials.

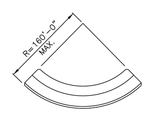
US Standard Sieve Size (inches/mm)	Percent Passing (%)			
	Choker Course (AASHTO No. 57)	Filter Course (AASHTO No. M-6)	Reservoir Course (AASHTO No.3)	Reservoir Course Alternative* (AASHTO No.5)
6/150	-		-	
2½/63	-		100	-
2 /50	-		90 – 100	-
1½/37.5	100		35 – 70	100
1/25	95 - 100		0 – 15	90 – 100
¾/19	-		-	20 - 55
½/12.5	25 - 60		0 - 5	0 - 10
3/8/9.5	-	100	-	0 - 5
#4/4.75	0 - 10	70-100	-	
#8/2.36	0 - 5		-	
#200/0.075		0 – 6**		
% Compaction ASTM D698 / AASHTO T99	95	95	95	95

* Alternate gradations (e.g. AASHTO No. 5) may be accepted upon Engineer's approval.
** Preferably less than 4% fines

APPENDIX F: GUIDANCE ON BMP CONSTRUCTION SPECIFICATIONS *F-42*

POROUS ASPHALT
STEPPED RESERVOIR DETAIL
NOT TO SCALE





CIRCULAR CURB

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'–0".
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'–0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'–0"RADIUS.
5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

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PRECAST CONCRETE CURB

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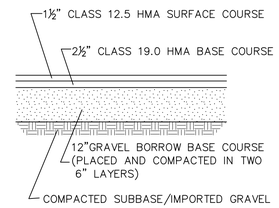
R.I. STANDARD 7.1.0



SITE PAVEMENT TYPICAL CROSS SECTION
NOT TO SCALE

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS–BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DETAILS–2

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

Thomas J. Principe, III — REGISTERED PROFESSIONAL ENGINEER

REVISIONS			
No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRINCIPE COMPANY, INC.
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PRELIMINARY PLAN SUBMISSION
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BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 10 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD–2021–35

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GENERAL NOTES – WATER:

1) CONTRACTOR SHALL OBTAIN A ROAD OPENING PERMIT FROM THE TOWN OF BRISTOL PRIOR TO THE START OF WORK WITHIN THE RIGHT OF WAY.

2) CONTRACTOR SHALL PROVIDE PRODUCT SUBMITTALS TO THE BCWA.

3) CONTRACTOR MUST MAINTAIN INSURANCE COVERAGE AS REQUIRED BY THE BCW FOR THE LIFE OF THE PROJECT AND PROVIDE THE BCWA WITH THE CERTIFICATE OF INSURANCE.

4) CONTRACTOR SHALL FURNISH THE BCWA WITH A SITE IMPROVEMENT BOND IN THE AMOUNT EQUAL TO THE COST OF THE WORK.

5) AT ALL POINTS OF CONNECTION OF NEW WATER MAINS TO EXISTING MAINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING AND VERIFYING LOCATION OF THE EXISTING LINES PRIOR TO ANY CONSTRUCTION.

6) A TEMPORARY BYPASS SYSTEM SHALL BE INSTALLED AND THE PROPERTIES CURRENTLY SERVICED BY THE EXISTING 2" WATER MAIN SHALL BE CONNECTED UNTIL THE NEW 8" WATER SYSTEM IS RELAYED.

7) EXCEPT IN CASE OF AN EMERGENCY, VALVES ON THE BRISTOL COUNTY WATER AUTHORITY (BCWA) WATER SYSTEM SHALL BE OPERATED BY OR UNDER THE DIRECTION OF THE APPROPRIATE PERSONNEL. THE CONTRACTOR SHALL GIVE THE BCWA STAFF 48 HOURS NOTICE TO ARRANGE FOR OPERATING VALVES. BOTH THE CONTRACTOR AND THE APPROPRIATE BCWA PERSONNEL SHALL BE PRESENT WHEN THE VALVES ARE OPERATED.

8) WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF TEN (10) FEET. WHEN A TEN (10) FOOT SEPARATION IS NOT PROVIDED OR WHEN SEWER LINES CROSS WATER LINES WITH LESS THAN 18 INCHES OF VERTICAL SEPARATION, SEWER LINE JOINTS SHALL BE CONCRETE ENCASED. FOR PERPENDICULAR CROSSINGS, ENCASED JOINTS SHALL EXTEND TEN (10) FEET, PERPENDICULAR TO THE WATER LINE IN BOTH DIRECTIONS.

9) ALL WATER LINES SHALL HAVE A MINIMUM OF FORTYEIGHT (48) INCHES OF COVER AND BE LOCATED A MINIMUM OF TEN (10) FEET FROM THE SANITARY SEWER.

10) CHANGES IN DIRECTION OF WATERLINE PIPE SHALL REQUIRE BENDS IN ALL INSTANCES. AXIAL DEFLECTION AT THE JOINTS SHALL NOT BE ALLOWED.

11) DISTANCES FOR WATER LINES ARE THE HORIZONTAL DISTANCE BETWEEN THE CENTERS OF THE FITTINGS. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND FITTING DIMENSIONS.

12) ALL WATER LINE VALVES SHALL BE SET ADJACENT TO THE TEE, EXCEPT FOR POINTS THAT FALL IN THE FLOW LINE OF A CONCRETE CROSS PAN. IN WHICH CASE, THE VALVE SHALL BE LOCATED SO THAT SURFACE DRAINAGE DOES NOT INFILTRATE THE VALVE BOX. VALVE BOXES SHALL BE SET AT AN ELEVATION IN ACCORDANCE WITH TOWN PAVING REQUIREMENTS.

13) FIRE HYDRANT ASSEMBLY INCLUDES THE FIRE HYDRANT, SIX (6) INCH VALVE, AND SIX (6) INCH PIPE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE BCWA STANDARDS AND SPECIFICATIONS.

14) ALL FITTINGS SHALL BE MADE FROM DUCTILE IRON, FURNISHED WITH MECHANICAL JOINT ENDS OR INTEGRAL RESTRAINED JOINTS, AND SHALL CONFORM TO BCWA APPROVED MATERIAL LIST.

15) MAGNETIC WARNING TAPE SHALL BE INSTALLED 12" MINIMUM AND 18" MAXIMUM ABOVE WATER PIPE.

16) BEDDING MATERIAL SHALL CONFORM TO BCWA STANDARDS AND SPECIFICATIONS.

17) VALVE BOXES IN NON-PAVED AREAS SHALL HAVE A CONCRETE COLLAR AROUND THE VALVE LID IN ACCORDANCE WITH THE DETAIL.

18) CONCRETE THRUST BLOCKS AND/OR "MEGA-LUG" MECHANICAL RESTRAINTS ARE REQUIRED AT ALL MECHANICAL FITTINGS. THRUST BLOCKS MAY NOT BE REQUIRED IF PIPE RESTRAINT IS PROVIDED IN ACCORDANCE WITH RESTRAINED PIPE DETAIL.

19) NO WORK SHALL BE BACKFILLED (INCLUDING BEDDING MATERIAL ABOVE THE SPRING LINE OF THE PIPE) UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY BCWA ENGINEERING STAFF.

20) ONLY ONE CONNECTION TO THE EXISTING WATER DISTRIBUTION SYSTEM SHALL BE MADE UNTIL ALL HYDROSTATIC TESTING, CHLORINATION AND FLUSHING HAS BEEN COMPLETED.

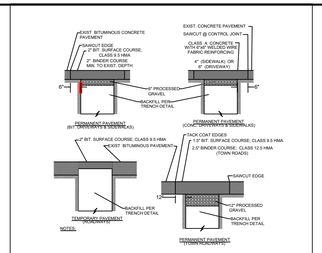
21) DISINFECTION AND HYDROSTATIC TESTING SHALL BE DONE IN THE PRESENCE OF A BCWA ENGINEERING STAFF. CONTACT THE BCWA ENGINEERING DIVISION FORTY-EIGHT (48) HOURS PRIOR TO DISINFECTING AND/OR TESTING.

22) DISINFECTION AND FLUSHING SHALL BE DONE IN ACCORDANCE SET FORTH IN AWWA B300 AND C651, "STANDARD FOR DISINFECTING WATER MAINS", LATEST REVISION. DISINFECTION PRODUCT SHALL BE NSF-61 APPROVED FOR CONTACT WITH DRINKING WATER. A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED TO THE BCWA ANDNSF-61 LABEL SHALL BE AFFIXED TO THE CONTAINER OF CHLORINE. THE CHLORINATION OF THE WATER LINE SHALL BE PERFORMED PRIOR TO THE HYDROSTATIC TESTING. ALL VALVES, FIRE HYDRANTS AND OTHER APPURTANCES SHALL BE OPERATED WHILE PIPELINE IS FILLED WITH THE CHLORINATING AGENT TO ENSURE THAT HIGH CHLORINE CONTACT IS MADE WITH ALL INTERNAL SURFACES.

23) TWO TWENTY-FOUR (24) HOUR BACTERIOLOGICAL TESTS, FROM MULTIPLE POINTS TO BE DETERMINED BY THE BCWA ENGINEER, FOR TOTAL COLI-FORM BACTERIA SHALL BE PERFORMED A MINIMUM OF 24 HOURS APART. IF EITHER OF THESE TESTS FAIL, THE LINE SHALL BE RE-CHLORINATED, RE-FLUSHED AND THEN RETESTED. THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR REIMBURSING THE BCWA FOR ALL COSTS ASSOCIATED WITH THE WATER QUALITY TESTING.

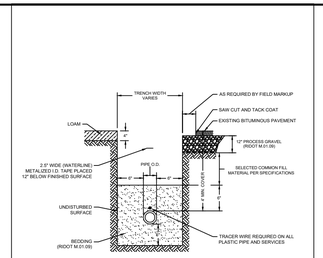
24) ALL WATER LINES SHALL BE HYDROSTATIC TESTED. PRESSURE AND LEAKAGE TESTS SHALL BE CONDUCTED ACCORDING TO THE APPLICABLE SECTIONS OF AWWA C600/605 TO A MINIMUM PRESSURE OF ONE HUNDRED AND FIFTY (150) POUNDS PER SQUARE (PSI) INCH AT THE LOW POINT OF THE SECTION BEING TESTED FOR THE DURATION OF TWO (2) HOURS. THE MAXIMUM LENGTH OF LINE TO BE TESTED SHALL BE ONE THOUSAND (1,000) FEET. ALL JOINTS IN CONNECTIONS ARE TO BE WATERTIGHT WITHIN TOLERANCES ALLOWED BY THE SPECIFICATIONS IN AWWA C600/605. ANY LEAKAGE THAT IS DISCOVERED BY OBSERVATION OR TESTS SHALL BE LOCATED AND MADE WATERTIGHT BY THE CONTRACTOR. PRESSURE AND LEAKAGE TESTS SHALL NOT BE CONDUCTED UNTIL THE LINE HAS PASSED ALL REQUIRED DISINFECTION TESTS.

25) ALL WATER VAULTS SHALL BE WATERTIGHT. CONTRACTOR SHALL SEAL VAULTS TO ENSURE SURFACE WATER DOES NOT INFILTRATE INTO THE VAULTS. VAULT LIDS SHALL BE PLACED TO ENSURE THAT SURFACE WATER DOES NOT FLOW INTO THE VAULTS.



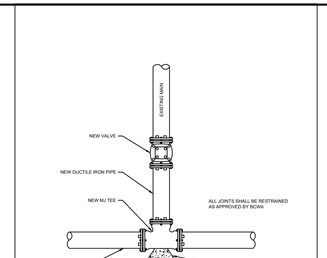
NOTES:
1. FOR TEMPORARY AND PERMANENT PATCHING STATE ROADS, THE CONTRACTOR SHALL MEET ALL PERMIT REQUIREMENTS OF THE RIDOT.
2. THE CONTRACTOR IS REQUIRED TO OBTAIN AND MEET THE REQUIREMENTS OF ANY AND ALL PERMITS FROM THE STATE,CITY OR TOWN THAT HAS JURISDICTION.
3. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
4. PERMANENT PAVEMENT TO BE PLACED BETWEEN 60 AND 90 DAYS AFTER TEMPORARY PAVEMENT.
5. BITUMINOUS ASPHALT PAVEMENT SHALL BE IN ACCORDANCE WITH THE RIDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST ADDITION.
6. ALL BACKFILL AND GRAVEL BASE MATERIAL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ACCORDANCE WITH ASTM D 1557.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
TRENCH DETAIL – HMA PAVING
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: TRENCH DETAIL – HMA PAVING | SHEET: HMA-1



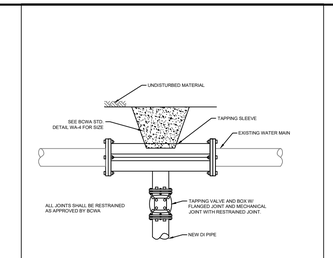
NOTES:
1. ALL MATERIALS, BEDDING AND BACKFILL PER BCWA SPECIFICATIONS AND SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
2. ROADWAY AND SIDEWALK RESTORATION SHALL BE PERFORMED IN ACCORDANCE WITH ALL MUNICIPAL OR RIDOT PERMIT REQUIREMENTS.
3. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
TRENCH DETAIL
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: TRENCH DETAIL | SHEET: W-1



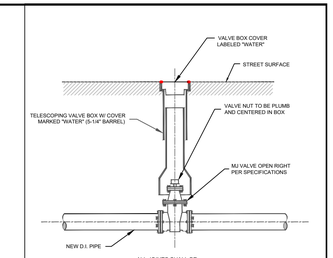
NOTES:
1. ALL MATERIALS, BEDDING AND BACKFILL PER BCWA SPECIFICATIONS.
2. ALL WORK AND MATERIALS SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
3. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
NEW TEE IN NEW WATER MAIN
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: NEW TEE IN NEW WATER MAIN | SHEET: W-2



NOTES:
1. TAPPING SLEEVE, VALVE AND PIPE TO BE DISINFECTED WITH CHLORINE SOLUTION PRIOR TO INSTALL.
2. TAPPING SLEEVE TO BE PRESSURE TESTED USING AIR PRIOR TO TAPPING PIPE.
3. ALL MATERIALS, BEDDING AND BACKFILL PER BCWA SPECIFICATIONS.
4. ALL WORK AND MATERIALS SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
5. ALL WORK AND MATERIALS SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
6. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
TAPPING SLEEVE AND VALVE
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: TAPPING SLEEVE AND VALVE | SHEET: W-4

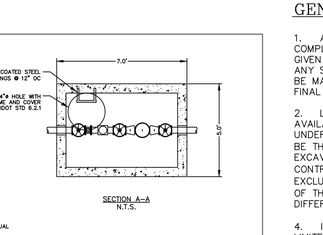


NOTE:
1.) ALL MATERIALS, BEDDING AND BACKFILL PER BCWA SPECIFICATIONS.
2.) ALL WORK AND MATERIALS SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
3.) WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
NEW MJ VALVE, INSTALLED IN NEW MAIN
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: NEW MJ VALVE, INSTALLED IN NEW MAIN | SHEET: W-6

IF THE 18 INCH MINIMUM VERTICAL SEPARATION CANNOT BE MAINTAINED, CONSTRUCT SEWER USING AWWA APPROVED WATER MAIN PIPE AND PRESSURE TEST TO 150psi. FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING, MEASURED PARALLEL TO THE WATER PIPE, ON ENCASE SEWER PIPE IN PVC SLEEVE.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
WATER/SEWER CROSSING
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: WATER/SEWER CROSSING | SHEET: W-8

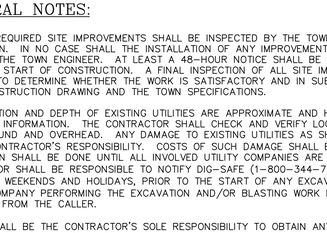


SEPARATE TRENCHES (PREFERRED)

SAME TRENCH WITH UNDISTURBED EARTH SHELF

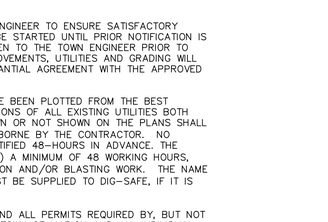
NOTES:
1. THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND THE PROPOSED UTILITY SHALL BE A MINIMUM OF 18 INCHES.
2. THE HORIZONTAL SEPARATION BETWEEN THE WATER MAIN AND THE PROPOSED UTILITY SHALL BE A MINIMUM OF 10 FEET.
3. IF 10 FT. CANNOT BE MAINTAINED THE PROPOSED UTILITY SHALL BE ENCASED WITHIN A CARRIER PIPE UPON WRITTEN APPROVAL BY THE BCWA.
4. SEWER MAIN AND SERVICES ARE NOT ALLOWED TO CROSS OVER THE TOP OF WATER MAIN.
5. CONCRETE ENCASEMENT IS NOT ALLOWED.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
UTILITY SEPARATION NEW CONSTRUCTION
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: UTILITY SEPARATION NEW CONSTRUCTION | SHEET: W-9



NOTES:
1. ALL MATERIALS, BEDDING AND BACKFILL PER BCWA SPECIFICATIONS.
2. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
3. HYDRANT MUST BE BURIED TO MANUFACTURERS PROPER DEPTH (BURY LINE) TO ALLOW SUFFICIENT CLEARANCE TO BOLTS/NUT THE UPPER BARREL AND SAFETY FLANGES AND FOR PROPER BREAK AWAY FUNCTION.
4. USE APPROVED JOINT RESTRAINT GLANDS AND THRUST BLOCKS. THRUST BLOCKING SHALL HAVE A MINIMUM OF 3 SQUARE FEET AGAINST UNDISTURBED EARTH.
5. BARRINGTON HYDRANTS TO BE OPEN LEFT), 4-1/2" PUMPER NOZZLE WITH CAP THREAD D.A.N.S. TWO 2-1/2" HOSE NOZZLES WITH CAPS, THREAD D.A.N.S.- 5" M.J. CONNECTION WITH ACCESSORIES, OPERATING AND CAP NUTS TO BE 1-3/8" POINT TO FLAT POINT PENTAGON.
6. BRISTOL HYDRANTS TO BE OPEN LEFT), 4" PUMPER NOZZLE WITH CAP THREAD D.A.T-65., TWO 2-1/2" HOSE NOZZLES WITH CAPS, THREAD D.A.N.S., 6" M.J. CONNECTION WITH ACCESSORIES, OPERATING AND CAP NUTS TO BE 1-3/8" POINT TO FLAT POINT PENTAGON.
7. FACTORY APPLIED PAINT: BARREL & HEAD - SAFETY YELLOW, BONNET AND CAPS - SILVER ALUMINUM
8. ALL HYDRANTS SHALL HAVE A 5 1/4" DIAMETER MAIN VALVE.
9. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
HYDRANT DETAIL
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: HYDRANT DETAIL | SHEET: WA-2



NOTE:
1.) ALL MATERIALS, BEDDING AND BACKFILL PER BCWA
2.) ALL WORK AND MATERIALS SHALL BE INSPECTED AND APPROVED BY THE BCWA PRIOR TO BEING BACKFILLED AND/OR ACTIVATED.
3.) WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
2-INCH BLOW OFF
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: 2-INCH BLOW OFF | SHEET: WA-3

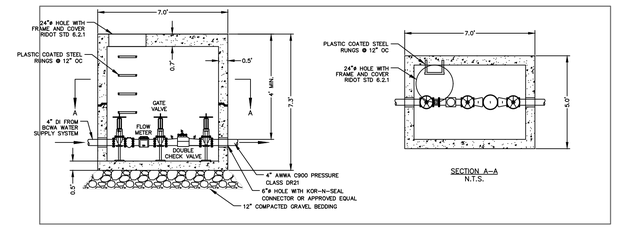
RESTRAINT AT FITTINGS

MINIMUM SURFACE AREA OF CONCRETE THRUST BLOCK AGAINST UNDISTURBED EARTH – IN S.F. (SQUARE FEET)
MINIMUM RESTRAINED LENGTH OF PIPE ON EITHER SIDE OF FITTING – IN L.F. (LINEAR FEET)

PIPE SIZE	90° BEND		45° BEND		22-1/2° BEND		11-1/4° BEND	
	SF	LF	SF	LF	SF	LF	SF	LF
6"	9	5	5	3	3	2	2	2
8"	16	5	9	3	5	2	3	2
12"	34	5	19	3	10	2	5	2

1. ALL CONCRETE TO BE CLASS B (4E).
2. THE "SF" VALUES IN THE ABOVE TABLE ARE BASED ON 3000 p.s.f. SOIL BEARING CAPACITY. 150 p.s.i. TEST PRESSURE AND A 1.5 FACTOR OF SAFETY.
3. THE "LF" VALUES IN THE ABOVE TABLE ARE FOR A TYPE 3 LAYING CONDITION, A SAND SILT SOIL DESIGNATION, A 1 FOOT RUN LENGTH, 150 P.S.I. TEST PRESSURE AND A 1.5 FACTOR OF SAFETY AS USED IN THE RESTRAINT JOINT RESTRAINT DESIGN FOR DUCTILE IRON PIPE" COMPUTER PROGRAM BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION.
4. IF SOIL CONDITIONS OR EXCAVATION LIMITS ENCOUNTERED DURING CONSTRUCTION MAKE IT UNFEASIBLE TO PLACE THRUST BLOCKS AGAINST UNDISTURBED EARTH OF THE PROPER BEARING CAPACITY, THE CONTRACTOR SHALL DESIGN AND PLACE SPECIAL REACTION BLOCKS OF SUFFICIENT WEIGHT TO RESIST FULL THRUST UNDER ALL CONDITIONS. THE DESIGN SHALL BE SUBJECT TO BCWA APPROVAL.
5. MINIMUM SURFACE AREAS SHALL BE INCREASED BY 50% IF DEEMED NECESSARY BY THE ENGINEER.
6. A MECHANICAL JOINT RESTRAINT SYSTEM MUST BE USED FOR VERTICAL BENDS.
7. AT THE DISCRETION OF THE ENGINEER, A JOINT RESTRAINT SYSTEM MAY BE SUBSTITUTED FOR OR USED IN COMBINATION WITH PROPER THRUST BLOCKING.
8. A 48-HR MIN. CURING PERIOD MUST BE GIVEN BEFORE FULL LINE PRESSURE CAN BE APPLIED TO NEW CONCRETE THRUST BLOCKS.
9. THRUST BLOCK DESIGN FOR PIPE LARGER THAN 24" SHALL BE REVIEWED ON AN INDIVIDUAL BASIS BY THE BCWA.
10. THE RESTRAINED LENGTH IS BASED ON DUCTILE IRON PIPE WITH 4 FOOT COVER. IF THE DEPTH VARIES, OR THE DUCTILE IRON PIPE IS POLY WRAPPED THE RESTRAINED LENGTH MUST BE RE-CALCULATED.
11. WHENEVER THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE WRITTEN SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

BRISTOL COUNTY WATER AUTHORITY
400 GALLOWS POINT, WARREN, RHODE ISLAND
THRUST BLOCK
NOT TO SCALE
SECTION: WATER MAIN INSTALLATION | DECEMBER 2019 | DETAIL: THRUST BLOCK | SHEET: WA-4



PRECAST CONCRETE METER VAULT DETAIL
N.T.S

NOTES:
1. PRECAST CONCRETE VAULT SHALL CONFORM TO OLD CASTLE PRECAST MP4X6X6 OR APPROVED EQUAL AND BE H-20 RATED.
2. APPURTENANCES SHALL CONFORM TO BCWA APPROVED MATERIALS LIST.

GENERAL NOTES:

1. ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN ENGINEER. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN ENGINEER PRIOR TO ANY SUCH START OF CONSTRUCTION. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWING AND THE TOWN SPECIFICATIONS.

2. LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 48-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-800-344-7233) A MINIMUM OF 48 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.

4. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY, BUT NOT LIMITED TO, THE STATE OF MASSACHUSETTS, THE FEDERAL GOVERNMENT, THE TOWN OF MARION AND ALL INDIVIDUAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.

7. ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.

9. FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DETAILS-3

PLANNING BOARD SIGNATURE

BY:_____DATE:_____

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS-BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

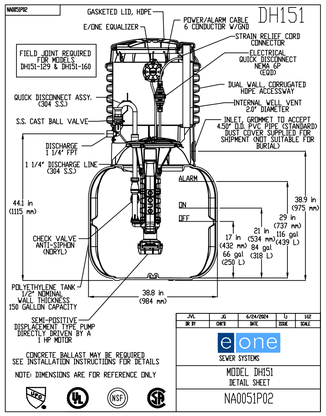
No.	DATE	DRWN	CHKD

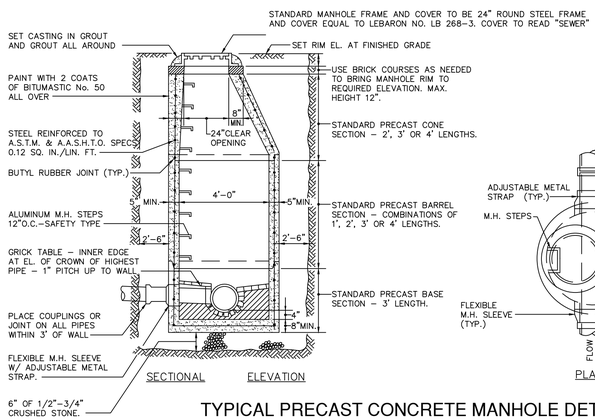
PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com
ESTABLISHED IN 1981

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 11 of 14
DRAWN BY: SJL	DESIGN BY: SJL	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: LD-2021-35

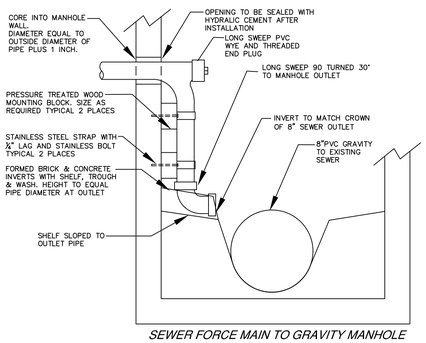
C:\Users\admin\Principe Engineering Dropbox\LANDD~1\2021\LD7A2C~1\CURREN~1\LD_2021-35_206 Bay View Avenue_Bristol_PRELIM_AUGUST 2025 (Seth Lemoine's conflicted copy 2025-08-06).dwg, DWG To PDF.pc3





TYPICAL PRECAST CONCRETE MANHOLE DETAILS

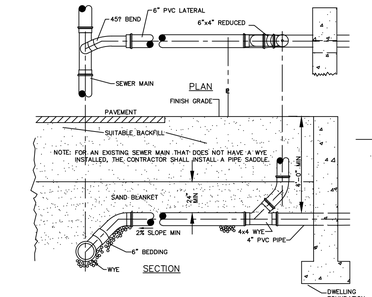
NOT TO SCALE



SEWER FORCE MAIN TO GRAVITY MANHOLE

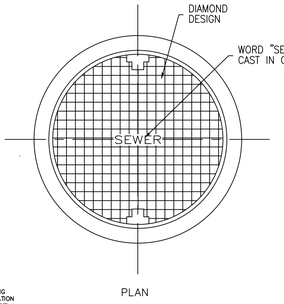
NOT TO SCALE

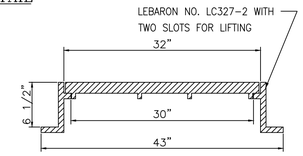
SHOP DRAWING SUBMITTAL REQUIRED



STANDARD BUILDING CONNECTION DETAIL

NOT TO SCALE



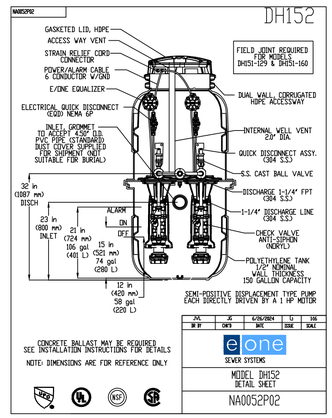


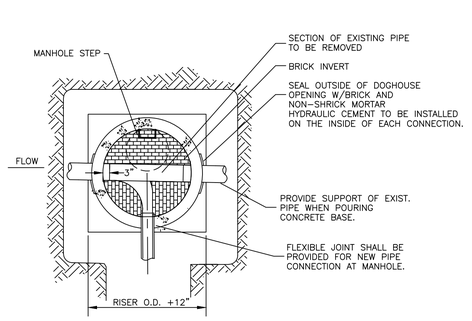
NOTE:

1. VENTILATION HOLES OF ANY SIZE ARE NOT ALLOWED.

SANITARY MANHOLE FRAME & COVER

NOT TO SCALE

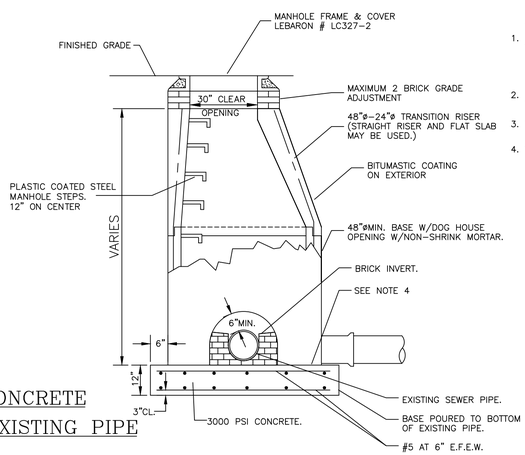




PLAN

TYPICAL PRECAST CONCRETE SEWER MANHOLE OVER EXISTING PIPE

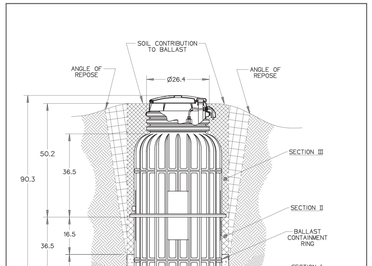
NOT TO SCALE



ELEVATION D–D

GENERAL NOTES:

1. MANHOLE SHALL HAVE SHELF & INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST POSSIBLE RADIUS TANGENT TO THE CENTERLINE OF THE SEWER PIPES.
2. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN.
3. THE JOINT BETWEEN POURED BASE AND BASE SECTION TO BE WATERTIGHT.
4. THE SEWER MANHOLE SHALL BE VACUUM TESTED AND APPROVED BY THE BRISTOL WPCD SEWER AUTHORITY PRIOR TO SYSTEM GOING ON–LINE.



E/One Grinder Pump Station Ballast Calculations

Sample Calculation, Continued

Section III: Used To Determine The Volume Of Dry Soil

Area = (Height)(Width) + (Top Area)
= (36.5")(3.1") + (17.5")(9.3")
= 275.9in²

Volume = (Area)(Average Perimeter of the cylinder)
= (275.9in²)(2π)(17.9")
= (31030.2 in³)(1/1728 ft³/in³)
= 18.0 ft³

2. Determine the combined ballast

Ballast (total) = Ballast (concrete) + Ballast (saturated soil) + Ballast (dry soil)

= ($V_{concrete}$)(density concrete in water) + (V_{wet})(density wet soil) + (V_{dry})(density dry soil)

= (6.2 cu ft)(87.6 lb/ft³) + (3.9 cu ft)(70 lb/ft³) + (18.0 cu ft)(110 lb/ft³)

= 543.12 lb + 273 lb + 1980 lb

= 2796.12 lb

C. Subtract the buoyant force from the ballast force to determine the final condition

Final Condition = Ballast Force – Buoyant Force
= 2796.12 lb – 902.8 lb
= 1893.3 lb

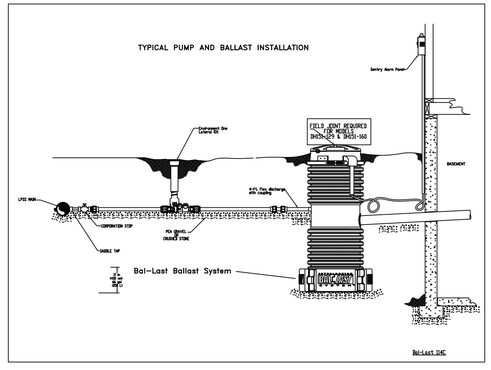
The approach outlined above may be used to calculate the ballast requirements listed below.

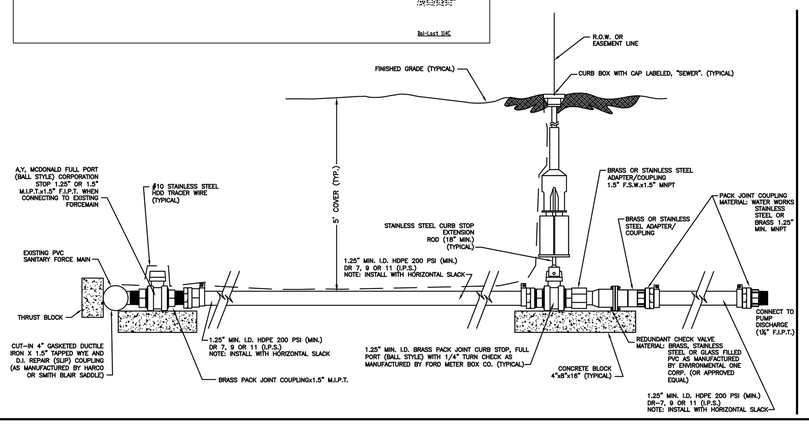
Chart 1

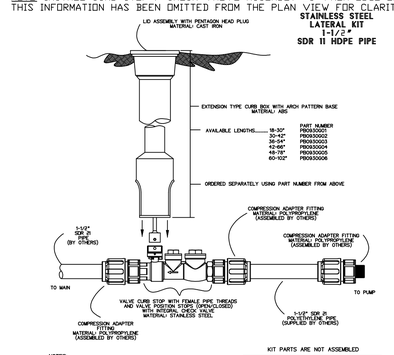
Station Height (in)	Wetwell Volume (cu ft)	FNet-Buoyant (lb)	Station Weight (lb)	Fballast (lb)	Volume Concrete (cu ft)	Weight Concrete in Air (lb)
93 inches	22	902.8	470	2787.4	6.1	915
129 inches	22	863.8	509	5174.4	6.1	915
160 inches	22	833.8	539	7253.4	6.1	915

BALLAST REQUIREMENT DETAILS FOR DH152 SEWER PUMP SYSTEM

NOT TO SCALE







NOTES:

1. SS CURB STOP/CHECK VALVE AND FITTINGS ARE PROVIDED SEPARATELY, TO BE ASSEMBLED BY OTHERS
2. TO ASSEMBLE, APPLY A DOUBLE LAYER OF TEFLON TAPE, AND A LAYER OF PIPE DOPE (SUPPLIED BY OTHERS) TO THE THREADS ON THE PLASTIC FITTINGS AND INSTALL PER THE MANUFACTURER'S INSTRUCTIONS
3. ASSEMBLY IS TO BE PRESSURE TESTED (BY OTHERS)
4. ASSEMBLY IS TO BE USED WITH SDR11 HDPE PIPE
5. TO ORDER SS LATERAL KIT, USE PART NUMBER NC0193001
6. CURB BOX IS TO BE ORDERED SEPARATELY, SEE ABOVE

KIT PARTS ARE NOT ASSEMBLED

SGS | DN 11/02/11 | A 3/16
DR BY | CHK'D | DATE | ISSUE | SCALE
e/one SEWER SYSTEMS
STAINLESS STEEL LATERAL KIT 1-1/4" SDR 11 HDPE PIPE
NA0330P02

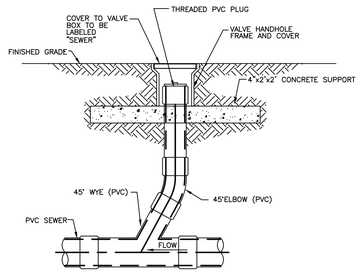
NOTE: INSTALL CURB STOP / CHECK VALVE ASSEMBLY ±8' FROM EDGE OF PAVEMENT. THIS INFORMATION HAS BEEN OMITTED FROM THE PLAN VIEW FOR CLARITY.

NOTE:

- GRINDER PUMP MUST BE AT LEAST 10 FEET FROM FOUNDATION.
- ALL COMPRESSION FITTINGS WILL BE BRASS OR STAINLESS STEEL.
- ALL CURB STOP EXTENSION RODS SHALL BE STAINLESS STEEL.
- HDPE/POLY PIPE REQUIRES THE USE OF STAINLESS STEEL INSERT PIPE STIFFENERS FOR ALL PACK JOINT/COMPRESSION CONNECTIONS.
- STAINLESS STEEL OR BRASS DRESSER COUPLINGS TO BE USED WHERE EXISTING LINE IS CUT FOR TEE.
- ALL FORCEMAIN SANITARY SEWER LINES SHALL BE AT A DEPTH OF 5' OR GREATER. IF LESS THAN 5' LINE SHALL BE INSULATED. (SEE SARATOGA COUNTY SEWER DISTRICT #1 TRENCH DETAIL)
- WHEN CONNECTING TO EXISTING FORCEMAIN, CURB STOP MUST BE PLACED AS CLOSE AS POSSIBLE TO EXISTING FORCEMAIN AND OUTSIDE OF PAVEMENT WITH VALVE BOX.

SEWER NOTES:

1. CONTRACTOR TO CONFIRM ALL CONNECTIONS ARE WATER TIGHT.
2. CONTRACTOR TO CONFIRM UNIMPEDED ACCESS FOR BRISTOL WPCD TO ALL DOG HOUSE STYLE MANHOLES INSTALLED FOR INSERTION OF PIPELINE CLEANING AND INSPECTION EQUIPMENT.
3. STONGBACK FERNO COUPLINGS TO BE INSTALLED AT CONNECTION OF NEW PVC SEWER TO EXISTING CLAY PIPE.



CLEANOUT DETAIL

NOT TO SCALE

OWNER/APPLICANT
FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DRAWING ISSUE:

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- ☐ CONSTRUCTION
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PLANNING BOARD SIGNATURE

BY:_____DATE:_____

DETAILS–4

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
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TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 12 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD–2021–35

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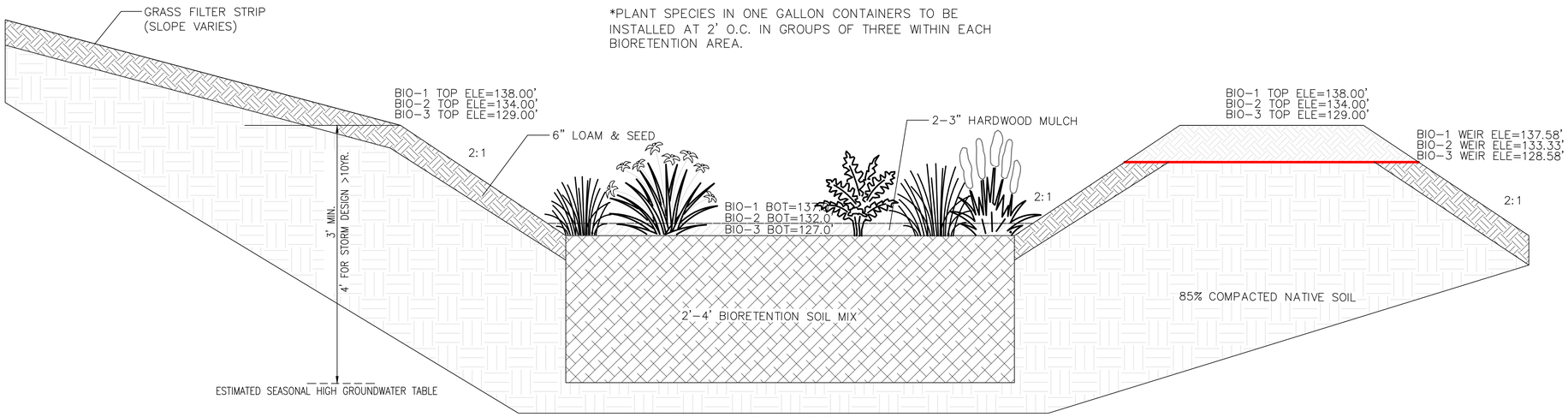
PLANT SPECIES TO BE USED

BOTANICAL NAME	COMMON NAME
ASTER DIVARICATUS	WHITE WOOD ASTER
IRIS VERSICOLOR	BLUE FLAG IRIS
LOBELIA CARDINALIS	CARDINAL FLOWER
OSMUNDA CINNAMOMEA	CINNAMON FERN

*PLANT SPECIES IN ONE GALLON CONTAINERS TO BE INSTALLED AT 2' O.C. IN GROUPS OF THREE WITHIN EACH BIORETENTION AREA.



BIORETENTION AREA DETAIL

NOT TO SCALE

BMP REQUIRED MAINTENANCE:

MONTHLY:

INSPECT AND REMOVE ANY TRASH
REMOVE ANY INVASIVE SPECIES PLANTS

ANNUALLY:

MULCH- SPRING, AS NEEDED
REPLACE ANY DEAD VEGETATION-SPRING
REMOVE DEAD VEGETATION-FALL OR SPRING
PRUNE-SPRING

AS NEEDED:

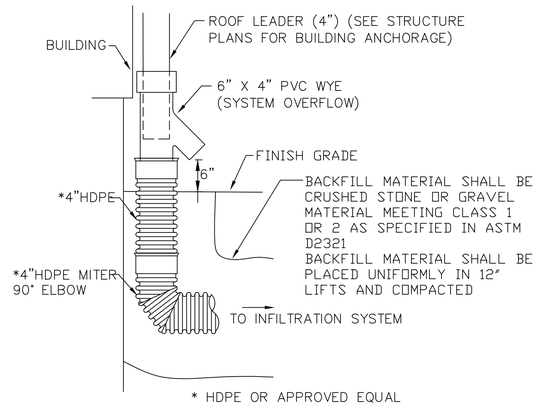
REPLACE SOIL MEDIA AND PLANTS WHEN PONDING DOES NOT SUBSIDE WITHIN 72 HRS
(CAREFUL MAINTENANCE SHOULD PROLONG THIS REQUIREMENT)

*ALL PLANT MATERIAL SHALL BE WATERED AND MAINTAINED BY THE OWNER TO ASSURE THAT SUITABLE GROWTH HAS BEEN ESTABLISHED.

F.5.2.3 Mulch Layer Specifications.
A finely shredded, well-aged organic hardwood mulch is the preferred accepted mulch; a finely shredded, well-aged organic dark pine mulch may be accepted on a case-by case basis. Bark dust mulches and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable.
Shredded mulch must be well aged (6-12 months) for acceptance.
Mix approximately ½ the specified mulch layer into the planting soil to a depth of approximately 4 inches to help foster a highly organic surface layer.

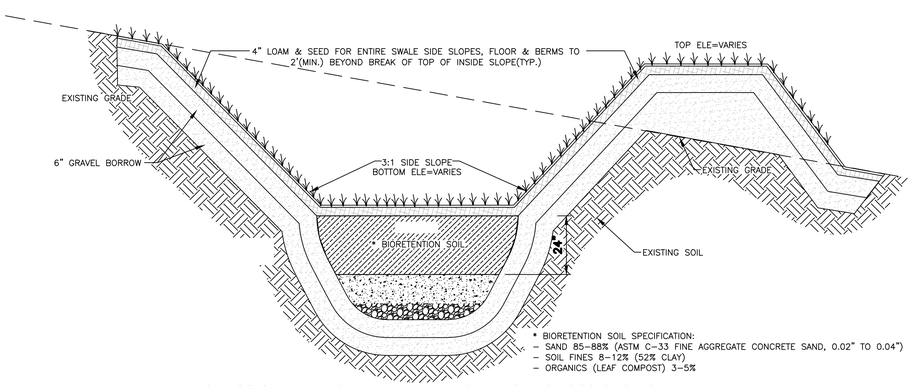
NOTES:
(1) BIORETENTION AREA TO BE PROTECTED FROM CONSTRUCTION TO PREVENT COMPACTION AND SURROUNDED BY COMPOST FILTER SOCK UNTIL UPSLOPE AREAS ARE STABILIZED.
(2) BIORETENTION DESIGN AND INSTALLATION SHALL CONFORM TO THE STATE OF RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL (LATEST REVISION).

F.5.2.2 Bioretention Soil
The soil should be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances should be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The bioretention soil should be free of noxious weeds.
The bioretention system shall utilize planting soil having a composition as follows:
Sand: 85-88%
Soil fines: 8 to 12% (no more than 2% clay)
Organic Matter*: 3 to 5%
*Note: For bioretention applications with a soil depth of less than 4 feet, add 20% (by volume) of well aged (3 months), well aerated, leaf compost (or approved equivalent) to the above planting soil mixture. Where soil fines content is less than 12%, add a corresponding % of leaf compost.
A textural analysis is required to ensure the bioretention soil meets the specification listed above. The bioretention soil should also be tested for the following criteria:
pH range 5.2 – 7.0
magnesium not to exceed 32 ppm
phosphorus P205 not to exceed 69 ppm
potassium K20 not to exceed 78 ppm
soluble salts not to exceed 500 ppm



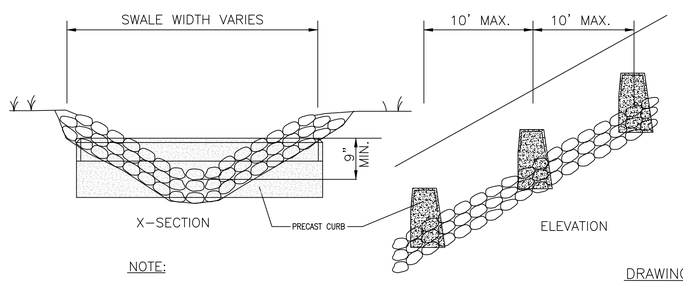
ROOF LEADER COLLECTOR DETAIL

NOT TO SCALE



GRASS CHANNEL (PRE-TREATMENT) TYPICAL CROSS SECTION

NOT TO SCALE



NOTE:

1. PRECAST CONCRETE CURB SHALL BE USED FOR CHECK DAMS WITHIN SWALES WITH SLOPES GREATER THAN 4%. MULTIPLE CURB SECTIONS MAY BE NECESSARY TO SPAN SWALE WIDTH.

CHECK DAM DETAIL

NOT TO SCALE

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BY:_____DATE:_____

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OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

DETAILS-5

Thomas J. Principe, III
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TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com
ESTABLISHED IN RI

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2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 13 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

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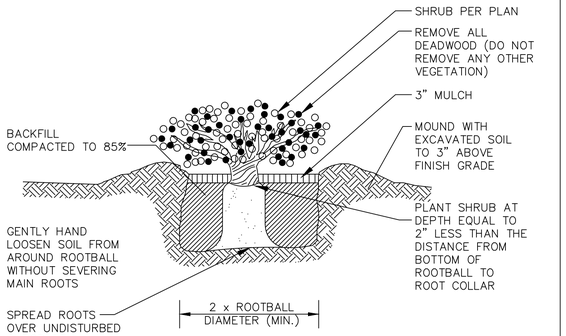
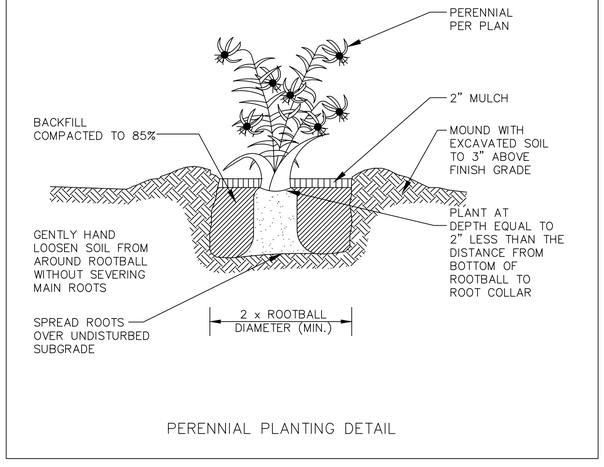
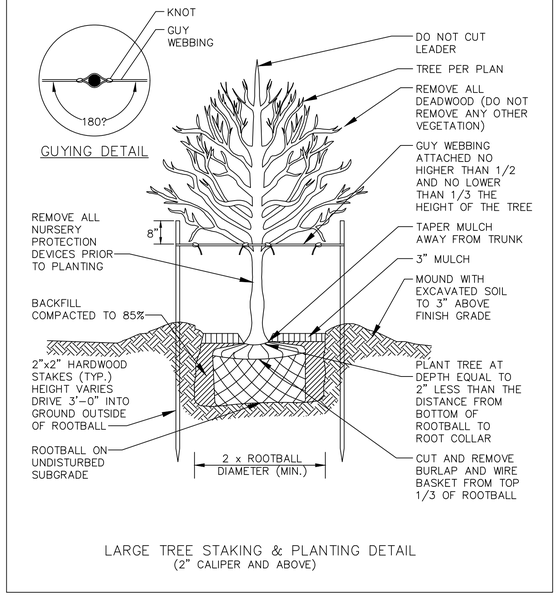


CONTAINER GROWN SHRUB DETAIL

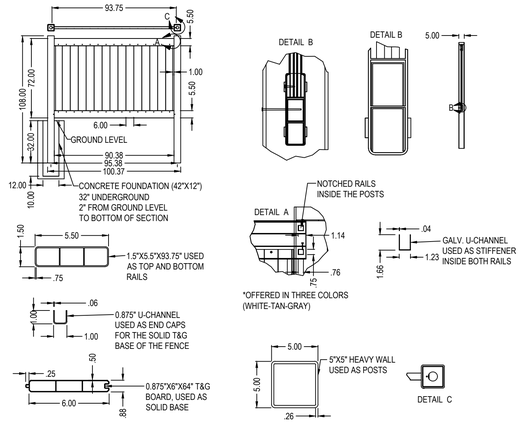


PERENNIAL PLANTING DETAIL



LARGE TREE STAKING & PLANTING DETAIL
(2" CALIPER AND ABOVE)

ILLUSIONS VINYL FENCE
274 MIDDLE ISLAND ROAD
MEDFORD, NY 11763
TOLL FREE: 1-800-339-3362
www.illusionsfence.com



*OFFERED IN THREE COLORS (WHITE-TAN-GRAY)

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.

ILLUSIONS 75MPH WIND KIT

V300-6 VINYL 6FT. HIGH TONGUE & GROOVE SOLID PANEL

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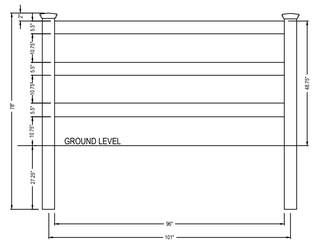
☑ SELECT DESIRED POST CAP MODEL

- ☐ FRENCH GOTHIC - V55FG
- ☐ TEARDROP - V55TD
- ☐ COACHMAN - V55CM
- ☐ BALL - V55BC
- ☐ SOLAR - V55P
- ☐ SOLAR - V55O
- ☐ NEW ENGLAND - V55NE
- ☐ FLAT - V55FO

☑ SELECT DESIRED POST OPTIONS:

- ☐ 5" X 5" - .140 WALL
- ☐ 5" X 5" H.D. - .250 WALL
- ☐ MAJESTIC ™ 8" X 8" - .250 WALL



FRONT ELEVATION

NOTES:
1. ALL ILLUSIONS VINYL FENCES ARE ASTM F964-09 COMPLIANT
2. AVAILABLE IN GRAND ILLUSIONS COLOR SPECTRUM (35 COLORS) AND GRAND ILLUSIONS VINYL WOODBOND (5 AUTHENTIC WOODGRAINS)

3-RAIL

8' W POST AND RAIL FENCE WITH 3 RAILS

3708-200 SEE ACCOMPANYING SPECIFICATIONS FOR MORE INFORMATION. REVISION DATE 08/03/2012

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PO BOX 333
BRISTOL, RI 02809

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BY:_____DATE:_____

DETAILS-6

Thomas J. Principe, III
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REGISTERED PROFESSIONAL ENGINEER

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27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
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ESTABLISHED IN 1981

REVISIONS

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PRELIMINARY PLAN SUBMISSION
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"FAIR WIND VILLAGE"
A.P. 47 LOT 3
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BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 14 of 14
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/2025		PROJECT NO.: LD-2021-35

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LONG TERM OPERATION AND MAINTENANCE PLAN

April 1, 2025
Revised August 8, 2025

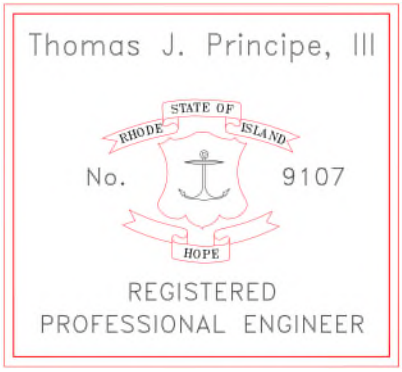
AP 47, LOT 3
206 Bayview Avenue
Bristol, RI 02809

Prepared For:

Fair Wind Properties, LLC
PO Box 333
Bristol, RI 02809

Prepared By:

Principe Engineering, Inc.
27 Sakonnet Ridge Drive
Tiverton, Rhode Island



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Bioretention	Page 3
De-icing and Salt Storage	Page 3
Snow Disposal	Page 3
Paving Sweeping	Page 3

APPENDIX

- Operation, Maintenance and Management Inspection Checklists
- Maintenance Agreement
- BMP Location Map

In order to minimize the stormwater management system deterioration, the owner shall adhere to the following Operation and Maintenance Plan as well as any additional requirements pertaining to inspection and maintenance measures for this site provided in Appendices E and G of the Rhode Island Stormwater Design and Installation Standards Manual.

Infiltration Basin

A legally binding and enforceable maintenance agreement shall be executed between the facility owner and the responsible authority to ensure the following: − Infiltration practices shall never serve as a sediment control device during site construction phase. Great care must be taken to prevent the infiltration area from compaction by marking off the location before the start of construction at the site and constructing the infiltration practice last, connecting upstream drainage areas only after construction is complete, and the contributing area is stabilized. In addition, the ESC plan for the site shall clearly indicate how sediment will be prevented from entering the site of an infiltration facility. − An observation well shall be installed in every infiltration trench or chamber system, consisting of an anchored 4- to 6-inch diameter perforated PVC pipe with a lockable cap installed flush with the ground surface. The approving agency may require multiple observation wells for large underground chamber systems. Infiltration practices shall be inspected annually and after storms equal to or greater than the 1-year, 24-hour Type III storm event. If sediment or organic debris build-up has limited the infiltration capabilities (infiltration basins) to below the design rate, the top 6 inches shall be removed and the surface roto-tilled to a depth of 12 inches. The basin bottom should be restored according to original design specifications.

Permeable Paving

A legally binding and enforceable maintenance agreement shall be executed between the facility owner and the responsible authority to ensure the following: Areas where infiltrating permeable pavement practices shall never serve as a sediment control device during site construction phase. Great care must be taken to prevent the permeable pavement area from compaction. Permeable paving surfaces require regular vacuum sweeping or hosing (minimum every three months or as recommended by manufacturer) to keep the surface from clogging. Maintenance frequency needs may be more or less depending on the traffic volume at the site. The use of sand and salt shall be minimized during the winter months. Permeable

pavement areas shall not be repaved or resealed with impermeable materials. The permeable pavement area shall be inspected annually for deterioration or spalling.

Snow shall not be stockpiled on permeable pavement. Contractors shall be notified to prevent unintentional stockpiling on permeable pavement.

Bioretention

A legally binding and enforceable maintenance agreement shall be executed between the facility owner and the responsible authority to ensure the following: - Sediment shall be cleaned out of the sediment forebay when it accumulates to a depth of more than ½ the design depth. Vegetation within the sediment forebay shall be limited to a height of 18 inches. The sediment chamber outlet devices shall be cleaned/repaired when drawdown times exceed 36 hours. Trash and debris shall be removed as necessary. - Silt/sediment shall be removed from the filter bed when the accumulation exceeds one inch. When the filtering capacity of the filter diminishes substantially (i.e., when water ponds on the surface of the filter bed for more than 48 hours), the top few inches of discolored material shall be removed and shall be replaced with fresh material. The removed sediments shall be disposed in an acceptable manner at an approved and permitted location.

For unique installations in extremely tight sites or redevelopment/infill projects where pretreatment strips have been downsized, enhanced maintenance shall be required through more frequent inspections, more frequent sediment removal, and enhanced landscape maintenance.

During the six months immediately after construction, filter practices shall be inspected following at least the first two precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, inspections shall be conducted on an annual basis and after storm events of greater than or equal the 1-year, 24-hour Type III precipitation event.

De-icing and Salt Storage

De-icing and sanding operations are often necessary for safety during winter storms; however, the materials used create water quality problems. Use deicing chemicals and sand judiciously. The information in Table G-1 from Appendix G of the RISDISM shall be utilized when selecting a deicer.

Snow Disposal

Improper snow disposal can be a threat to public health and the environment. Disposal shall consider site selection, site preparation and maintenance, and emergency snow disposal locations and procedures. Refer to DEM's Snow Disposal Policy for more details on these topics. Snow storage in the infiltration basins is not allowed.

Pavement Sweeping & Vacuuming

Pavement sweeping and vacuuming shall be conducted on a quarterly basis. Some debris collected from parking lots may be regulated as a hazardous waste. For these cases, debris must be disposed of in accordance with appropriate practice and applicable regulatory standards. Appendix A of the *Rules and Regulations for Composting Facilities and Solid Waste Management Facilities*, which is entitled "Management of Street Sweepings in Rhode Island," shall be reviewed. For further information, contact the DEM Office of Waste Management.

APPENDIX:

A. Operation, Maintenance and Management Inspection Checklist
B. BMP Location Plan
C. Maintenance Agreement

Table F-4 Infiltration Trench/Chamber Construction Inspection Checklist

Project:

Location:

Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Soil permeability tested		
Groundwater / bedrock sufficient at depth		
2. Excavation		
Size and location		
Side slopes stable		
Excavation does not compact subsoils		
3. Filter Fabric Placement		
Fabric specifications		
Placed on bottom, sides, and top		

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
4. Aggregate Material		
Size as specified		
Clean / washed material		
Placed properly		
5. Observation Well		
Pipe size		
Removable cap / footplate		
Initial depth =_____feet		
6. Final Inspection		
Pretreatment facility in place		
Contributing watershed stabilized prior to flow diversion		
Outlet		

Comments:

Actions to be Taken:

Permeable Pavement Operation, Maintenance, and Management Inspection Checklist

Project:

Location:

Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Sediment and Debris Cleanout (3 Months or Manufacturer's Recommendation)		
Contributing area free of sediment and debris		
Contributing area stabilized and mown, with grass clippings removed		
Surface free of sediment and debris (e.g., mulch, leaves, trash, etc.)		
No signs of clogging (e.g., standing water)		
Surface does not require vacuuming		
2. Dewatering (Monthly)		
Permeable pavement dewaters between storms		
3. Underdrain Outfall, if present (Annual)		
No evidence of erosion		

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
4. Surface Repairs (Annual)		
Surface has not been sealed		
No evidence of surface deterioration or spalling		
Surface (top and base course) does not need to be replaced		

Comments:

Actions to be Taken:

Bioretention Operation, Maintenance, and Management Inspection Checklist

Project:

Location:

Site Status:

Date:

Time:

Inspector:

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
1. Debris Cleanout (Annual, After Major Storms)		
Bioretention and contributing areas clean of debris		
No dumping of yard wastes into practice		
Litter (branches, etc.) have been removed		
2. Vegetation (Annual, After Major Storms)		
Plant height not less than design water depth		
Fertilized per specifications		
Plant composition according to approved plans		
No placement of inappropriate plants		
Grass height not greater than 10 inches		

MAINTENANCE ITEM	SATISFACTORY / UNSATISFACTORY	COMMENTS
No evidence of erosion		
3. Check Dams/Energy Dissipaters/Sumps (Annual, After Major Storms)		
No evidence of sediment buildup		
Sumps should not be more than 50% full of sediment		
No evidence of erosion at downstream toe of drop structure		
4. Dewatering (Semi-annually)		
Dewaters between storms		
No evidence of standing water		
5. Sediment Deposition (Annual, after Major Storms)		
Swale clean of sediments		
Sediments should not be > 20% of swale design depth		
6. Outlet/Overflow Spillway (Annual, After Major Storms)		
Good condition, no need for repair		
No evidence of erosion		
No evidence of any blockages		
7. Integrity of Filter Bed (Annual, After Major Storms)		
Filter bed has not been blocked or filled inappropriately		

Comments:

Actions to be Taken:

Sample Stormwater Facility Maintenance Agreement

THIS AGREEMENT, made and entered into this ___ day of _____, 20___, by and between (Insert Full Name of Owner) _____ hereinafter called the "Landowner", and the [Local Jurisdiction], hereinafter called the "[Town/City]". WITNESSETH, that WHEREAS, the Landowner is the owner of certain real property described as (Tax Map/Parcel Identification Number) _____ as recorded by deed in the land records of [Local Jurisdiction] Deed Book _____ Page _____, hereinafter called the "Property".

WHEREAS, the Landowner is proceeding to build on and develop the property; and WHEREAS, the Site Plan/Subdivision Plan known as _____, (Name of Plan/Development) hereinafter called the "Plan", which is expressly made a part hereof, as approved or to be approved by the [Town/City], provides for detention of stormwater within the confines of the property; and

WHEREAS, the [Town/City] and the Landowner, its successors and assigns, including any homeowners association, agree that the health, safety, and welfare of the residents of [Local Jurisdiction] require that on-site stormwater management facilities be constructed and maintained on the Property; and

WHEREAS, the [Town/City] requires that on-site stormwater management facilities as shown on the Plan be constructed and adequately maintained by the Landowner, its successors and assigns, including any homeowners association.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The on-site stormwater management facilities shall be constructed by the Landowner, its successors and assigns, in accordance with the plans and specifications identified in the Plan.
2. The Landowner, its successors and assigns, including any homeowners association, shall adequately maintain the stormwater management facilities in accordance with the required Operation and Maintenance Plan. This includes all pipes, channels or other conveyances built to convey stormwater to the facility, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the stormwater. Adequate maintenance is herein defined as good working condition so that these facilities are performing their design functions. The Stormwater Best Management Practices Operation, Maintenance and Management Checklists are to be used to establish what good working condition is acceptable to the [Town/City].

3. The Landowner, its successors and assigns, shall inspect the stormwater management facility and submit an inspection report annually. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire facilities, berms, outlet structure, basin areas, access roads, etc. Deficiencies shall be noted in the inspection report.
4. The Landowner, its successors and assigns, hereby grant permission to the [Town/City], its authorized agents and employees, to enter upon the Property and to inspect the stormwater management facilities whenever the [Town/City] deems necessary. The purpose of inspection is to follow-up on reported deficiencies and/or to respond to citizen complaints. The [Town/City] shall provide the Landowner, its successors and assigns, copies of the inspection findings and a directive to commence with the repairs if necessary.
5. In the event the Landowner, its successors and assigns, fails to maintain the stormwater management facilities in good working condition acceptable to the [Town/City], the [Town/City] may enter upon the Property and take whatever steps necessary to correct deficiencies identified in the inspection report and to charge the costs of such repairs to the Landowner, its successors and assigns. This provision shall not be construed to allow the [Town/City] to erect any structure of permanent nature on the land of the Landowner outside of the easement for the stormwater management facilities. It is expressly understood and agreed that the [Town/City] is under no obligation to routinely maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the [Town/City].
6. The Landowner, its successors and assigns, will perform the work necessary to keep these facilities in good working order as appropriate. In the event a maintenance schedule for the stormwater management facilities (including sediment removal) is outlined on the approved plans, the schedule will be followed.
7. In the event the [Town/City] pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner, its successors and assigns, shall reimburse the [Town/City] upon demand, within thirty (30) days of receipt thereof for all actual costs incurred by the [Town/City] hereunder.
8. This Agreement imposes no liability of any kind whatsoever on the [Town/City] and the Landowner agrees to hold the [Town/City] harmless from any liability in the event the stormwater management facilities fail to operate properly.
9. This Agreement shall be recorded among the land records of [Local Jurisdiction] and shall constitute a covenant running with the land, and shall be binding on the Landowner, its administrators, executors, assigns, heirs and any other successors in interests, including any homeowners association.

WITNESS the following signatures and seals:

_____
Company/Corporation/Partnership Name (Seal)

By: _____

_____
(Type Name and Title)

The foregoing Agreement was acknowledged before me this ____ day of _____, 20___, by _____ ___.

_____
NOTARY PUBLIC
My Commission Expires: _____

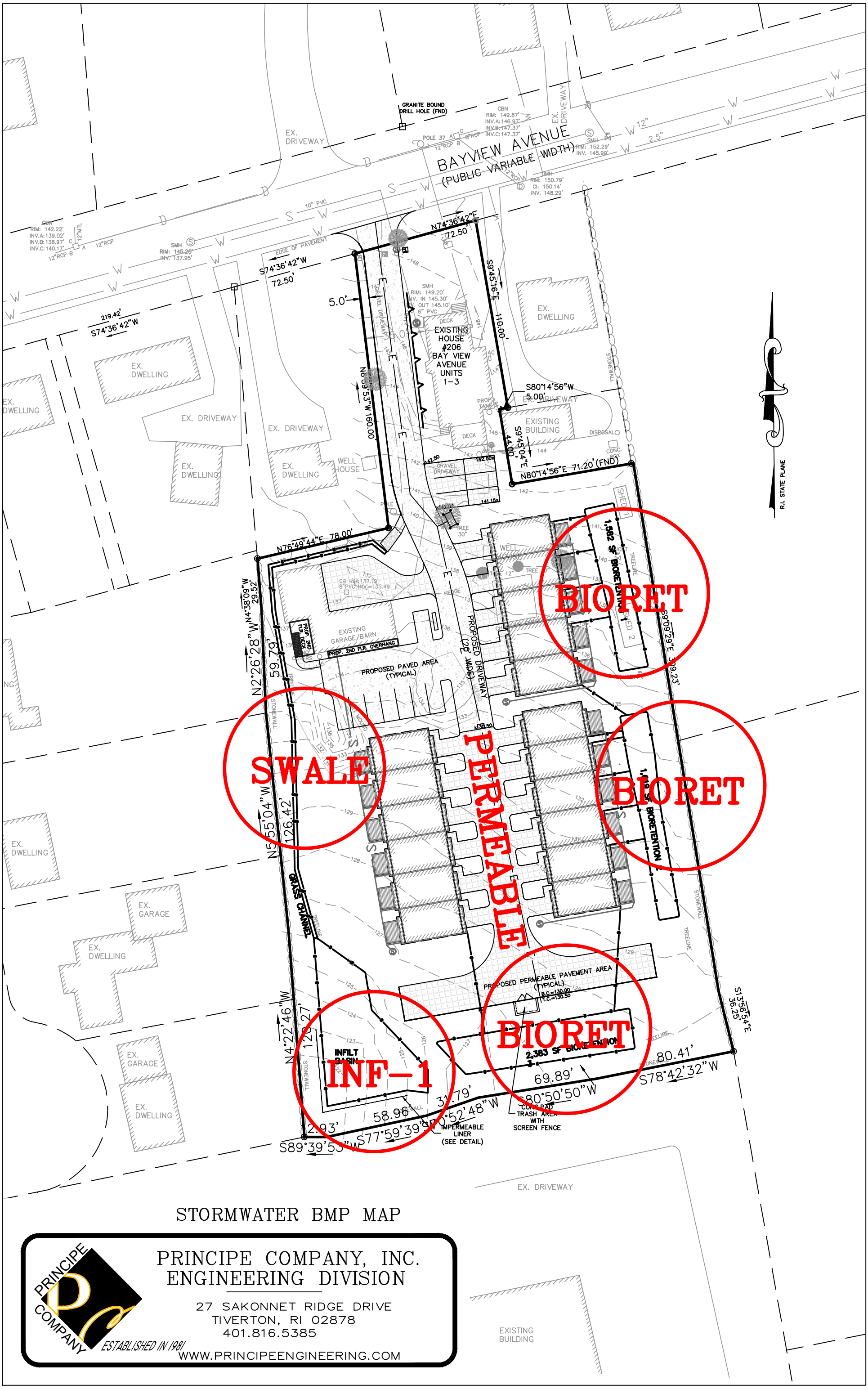
By: _____
_____
(Type Name and Title)

The foregoing Agreement was acknowledged before me this ____ day of _____, 20___, by _____ ___.

_____
NOTARY PUBLIC
My Commission Expires: _____

Approved as to Form:

_____ _____
[Town/City] Attorney Date



STORMWATER BMP MAP

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION

27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385

ESTABLISHED IN 1981
WWW.PRINCIPEENGINEERING.COM

Principe Company

DRAINAGE SUMMARY
April 14, 2025
Revised August 8, 2025

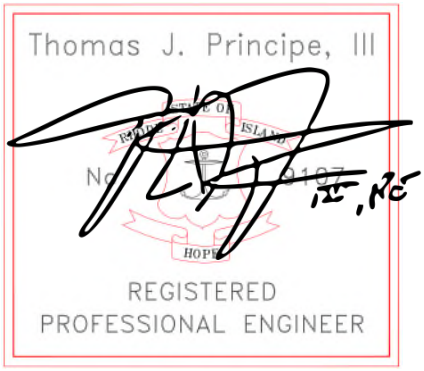
AP 47, LOT 3
206 Bayview Avenue
Bristol, RI 02809

Prepared For:

Fair Wind Properties, LLC
PO Box 333
Bristol, RI 02809

Prepared By:

Principe Engineering, Inc.
27 Sakonnet Ridge Drive
Tiverton, Rhode Island



This stormwater management analysis and accompanying HydroCAD design calculations were prepared in support of the redevelopment of AP 47, Lot 3 at 206 Bay View Avenue in Bristol, RI.

The site contains an existing single-family residential structure with gravel driveway and associated outbuildings (two sheds, and a barn). The mapped soil beneath the site includes both CC (Canton-Urban Land Complex) and PmA (Pittstown silt loam - hydrologic group C designation) according to the USDA Soil Survey. **However, on-site test pits indicate that the site is predominantly CC (hydrologic soil group B).** There are no jurisdictional wetland areas and no mapped100-year floodplain. Currently, stormwater flows from north-to-south, from Bay View Avenue to the southwest property corner without any stormwater treatment.

The proposed development will treat 100% of the new impervious areas by directing surface flows to the proposed stormwater best management practices (BMPs). The proposed drainage is comprised of pervious pavement areas, a dry swale, an infiltration basin, and three bioretention areas for the roof areas.

The stormwater design calculations focus on demonstrating the proposed site adequately handles the intensity from the 1-, 10-, 25- and 100-year storm events while providing water quality treatment and recharge for the impervious runoff within the sub-areas and at the overall design point. As a result, the post-development flow rates to the design point referenced above have been reduced to at or below the pre-development flows.

Below is a summary of the HydroCAD analysis comparing pre-development and post-development flow rates for the project at the project design point:

	DP-1 (SITE)		
	Pre (cfs)	**Post (cfs)**	**Difference (cfs)**
1-Year	**0.67**	**0.03**	**-0.64**
10-Year	**3.63**	**0.31**	**-3.32**
25-Year	**5.74**	**1.42**	**-4.32**
100-Year	**10.61**	**7.53**	**-3.08**

While incorporating the measures described above and taking advantage of the natural slopes and contours of the site, the project is able to achieve a decrease in stormwater runoff rate and volume toward the analyzed design points as well as provide adequate water quality treatment and recharge. Thus, typical post-development impacts to downstream properties and water resource areas have been effectively mitigated.

Due to the location of the site within the Tanyard Brook watershed, the stormwater treatment has been designed to infiltrate (i.e. retained and recharged) up to and including the 10-year storm event. The increase in the 10-year storm event volume is 0.128 af (POST 0.441 af – PRE 0.313=0.128 af), and 0.348 af has been retained/recharged/infiltrated on the subject site, meeting this requirement.

APPENDIX A: STORMWATER MANAGEMENT PLAN CHECKLIST AND LID PLANNING REPORT – STORMWATER DESIGN SUMMARY

PROJECT NAME **FAIR WIND VILLAGE**	**(RIDEM USE ONLY)** **STW/WQC File #:** **Date Received:**
TOWN **BRISTOL**	
BRIEF PROJECT DESCRIPTION: ONE FIVEPLEX AND TWO SIXPLEX BUILDINGS CONSTRUCTED WITH ASSOCIATED PARKING, GRADING, DRAINAGE, LANDSCAPING, AND UTILITES	

Stormwater Management Plan (SMP) Elements – Minimum Standards

When submitting a SMP,[1] submit four separately bound documents: Appendix A Checklist; Stormwater Site Planning, Analysis and Design Report with Plan Set/Drawings; Soil Erosion and Sediment Control (SESC) Plan, and Post Construction Operations and Maintenance (O&M) Plan. Please refer to Suggestions to Promote Brevity.

Note: **All stormwater construction projects must create a Stormwater Management Plan (SMP). However, not every element listed below is required per the RIDEM Stormwater Rules and the RIPDES Construction General Permit (CGP). This checklist will help identify the required elements to be submitted with an Application for Stormwater Construction Permit & Water Quality Certification.**

PART 1. PROJECT AND SITE INFORMATION

PROJECT TYPE (Check all that apply)

☒ Residential	☐ Commercial	☐ Federal	☐ Retrofit	☐ Restoration
☐ Road	☐ Utility	☐ Fill	☐ Dredge	☐ Mine
☐ Other (specify):				

SITE INFORMATION

☒ Vicinity Map

INITIAL DISCHARGE LOCATION(S): The WQv discharges to: (You may choose more than one answer if several discharge points are associated with the project.)

☒ **Groundwater**	☐ **Surface Water**	☐ **MS4**
☐ GAA	☐ Isolated Wetland	☐ RIDOT
☐ GA	☐ Named Waterbody	☐ RIDOT Alteration Permit is Approved
☒ GB	☐ Unnamed Waterbody Connected to Named Waterbody	☐ Town
		☐ Other (specify):

ULTIMATE RECEIVING WATERBODY LOCATION(S): Include pertinent information that applies to both WQ_v and flow from larger storm events including overflows. Choose all that apply, and repeat table for each waterbody.

☒ Groundwater or Disconnected Wetland	☐ SRWP		
☒ Waterbody Name: BRISTOL HARBOR	☐ Coldwater	☐ Warmwater	☐ Unassessed
☐ Waterbody ID: RI0007026E-01C	☐ 4th order stream of pond 50 acres or more		
☐ TMDL for:	☐ Watershed of flood prone river (e.g., Pocasset River)		
☐ Contributes to a priority outfall listed in the TMDL	☐ Contributes stormwater to a public beach		
☐ 303(d) list – Impairment(s) for:	☐ Contributes to shellfishing grounds		

[1] Applications for a Construction General Permit that do not require any other permits from RIDEM and will disturb less than 5 acres over the entire course of the project do not need to submit a SMP. The Appendix A checklist must still be submitted.

PROJECT HISTORY		
☐ RIDEM Pre- Application Meeting	Meeting Date:	☐ Minutes Attached
☐ Municipal Master Plan Approval	Approval Date:	☐ Minutes Attached
☐ Subdivision Suitability Required	Approval #:	
☐ Previous Enforcement Action has been taken on the property	Enforcement #:	

FLOODPLAIN & FLOODWAY See Guidance Pertaining to Floodplain and Floodways	
☐ Riverine 100-year floodplain: **FEMA FLOODPLAIN FIRMETTE** has been reviewed and the 100-year floodplain is on site	
☐ Delineated from FEMA Maps	
NOTE: Per Rule 250-RICR-150-10-8-1.1(B)(5)(d)(3), provide volumetric floodplain compensation calculations for cut and fill/displacement calculated by qualified professional	
☐ Calculated by Professional Engineer	
☐ Calculations are provided for cut vs. fill/displacement volumes proposed within the 100-year floodplain	Amount of Fill (CY):
	Amount of Cut (CY):
☐ Restrictions or modifications are proposed to the flow path or velocities in a floodway	
☐ Floodplain storage capacity is impacted	
☒ Project area is not within 100-year floodplain as defined by RIDEM	

CRMC JURISDICTION
☐ CRMC Assent required
☐ Property subject to a Special Area Management Plan (SAMP). If so, specify which SAMP:
☐ Sea level rise mitigation has been designed into this project

LUHPPL IDENTIFICATION - MINIMUM STANDARD 8:			
1. OFFICE OF Land Revitalization and Sustainable Materials Management (OLRSMM)			
	☐ Known or suspected releases of HAZARDOUS MATERIAL are present at the site (Hazardous Material is defined in Rule 1.4(A)(33) of 250-140-30-1 of the RIDEM Rules and Regulations for Investigation and Remediation of Hazardous Materials (the Remediation Regulations))		**RIDEM CONTACT:**
	☐ Known or suspected releases of PETROLEUM PRODUCT are present at the site (Petroleum Product as defined in Rule 1.5(A)(84) of 250-140-25-1 of the RIDEM Rules and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials)		
	☐ This site is identified on the RIDEM Environmental Resources Map as one of the following regulated facilities		**SITE ID#:**
		☐ CERCLIS/Superfund (NPL)	
		☐ State Hazardous Waste Site (SHWS)	
		☐ Environmental Land Usage Restriction (ELUR)	
		☐ Leaking Underground Storage Tank (LUST)	
		☐ Closed Landfill	
Note: If any boxes in 1 above are checked, the applicant must contact the RIDEM OLRSMM Project Manager associated with the Site to determine if subsurface infiltration of stormwater is allowable for the project. Indicate if the infiltration corresponds to "Red," "Yellow" or "Green" as described in Section 3.2.8 of the RISDISM Guidance (Subsurface Contamination Guidance). Also, note and reference approval in PART 3, Minimum Standard 2: Groundwater Recharge/Infiltration.			
2. PER MINIMUM STANDARD 8 of RICR 8.14.C.1-6 "LUHPPLS," THE SITE IS/HAS:			
	☐ Industrial Site with RIPDES MSGP, except where No Exposure Certification exists. http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/status.php		
	☐ Auto Fueling Facility (e.g., gas station)		
	☐ Exterior Vehicles Service, Maintenance, or Equipment Cleaning Area		

	☐ Road Salt Storage and Loading Areas (exposed to rainwater)	
	☐ Outdoor Storage and Loading/Unloading of Hazardous Substances	
3.	**STORMWATER INDUSTRIAL PERMITTING**	
	☐ The site is associated with existing or proposed activities that are considered Land Uses with Higher Potential Pollutant Loads (LUHPPLS) (see RICR 8.14.C)	Activities: Sector:
	☐ Construction is proposed on a site that is subject to THE MULTI-SECTOR GENERAL PERMIT (MSGP) UNDER RULE 31(B)15 OF THE RIPDES REGULATIONS.	MSGP permit #

REDEVELOPMENT STANDARD – MINIMUM STANDARD 6		
☒ Pre Construction Impervious Area		
	☒ Total Pre-Construction Impervious Area (**TIA**):0.18 Ac	
	☒ Total Site Area (**TSA**): 2.13 Ac	
	☐ Jurisdictional Wetlands (**JW**) N/A	
	☐ Conservation Land (**CL**) N/A	
☒ Calculate the Site Size (defined as contiguous properties under same ownership)		
	☒ Site Size (**SS**) = (**TSA**) – (**JW**) – (**CL**): 2.13-0=2.13	
	☒ (**TIA**) / (**SS**) = 0.18/2.13=0.085<0.4	☐ (**TIA**) / (**SS**) >**0.4**?
☐ YES, Redevelopment		

PART 2. LOW IMPACT DEVELOPMENT ASSESSMENT – MINIMUM STANDARD 1

(NOT REQUIRED FOR REDEVELOPMENT OR RETROFITS)

This section may be deleted if not required.

Note: A written description must be provided specifying why each method is not being used or is not applicable at the Site. Appropriate answers may include:

- Town requires … (state the specific local requirement)
- Meets Town's dimensional requirement of …
- Not practical for site because …
- Applying for waiver/variance to achieve this (pending/approved/denied)
- Applying for wavier/variance to seek relief from this (pending/approved/denied)

A) PRESERVATION OF UNDISTURBED AREAS, BUFFERS, AND FLOODPLAINS	**IF NOT IMPLEMENTED, EXPLAIN HERE**
☒ Sensitive resource areas and site constraints are identified (required) ☒ Local development regulations have been reviewed (required) ☒ All vegetated buffers and coastal and freshwater wetlands will be protected during and after construction ☐ Conservation Development or another site design technique has been incorporated to protect open space and pre-development hydrology. **Note:** If Conservation Development has been used, check box and skip to Subpart C ☒ As much natural vegetation and pre-development hydrology as possible has been maintained	

B) LOCATE DEVELOPMENT IN LESS SENSITIVE AREAS AND WORK WITH THE NATURAL LANDSCAPE CONDITIONS, HYDROLOGY, AND SOILS ☒ Development sites and building envelopes have been appropriately distanced from wetlands and waterbodies ☒ Development and stormwater systems have been located in areas with greatest infiltration capacity (e.g., soil groups A and B) ☐ Plans show measures to prevent soil compaction in areas designated as Qualified Pervious Areas (QPA's) ☒ Development sites and building envelopes have been positioned outside of floodplains ☒ Site design positions buildings, roadways and parking areas in a manner that avoids impacts to surface water features ☒ Development sites and building envelopes have been located to minimize impacts to steep slopes (≥15%) ☐ Other (describe):	
C) MINIMIZE CLEARING AND GRADING ☒ Site clearing has been restricted to <u>minimum area needed</u> for building footprints, development activities, construction access, and safety. ☒ Site has been designed to position buildings, roadways, and parking areas in a manner that minimizes grading (cut and fill quantities) ☐ Protection for stands of trees and individual trees and their root zones to be preserved has been specified, and such protection extends at least to the tree canopy drip line(s) ☐ Plan notes specify that public trees removed or damaged during construction shall be replaced with equivalent	
D) REDUCE IMPERVIOUS COVER ☐ Reduced roadway widths (≤22 feet for ADT ≤ 400; ≤ 26 feet for ADT 400 - 2,000) ☒ Reduced driveway areas (length minimized via reduced ROW width (≤ 45 ft.) and/or reduced (or absolute minimum) front yard setback; width minimized to ≤ 9 ft. wide one lane; ≤ 18 ft. wide two lanes; shared driveways; pervious surface) ☐ Reduced building footprint: Explain approach: FIVEPLEX & SIXPLEX TOWNHOUSES ☐ Reduced sidewalk area (≤ 4 ft. wide; one side of the street; unpaved path; pervious surface) ☒ Reduced cul-de-sacs (radius < 45 ft; vegetated island; alternative turn-around) ☒ Reduced parking lot area: Explain approach ☒ Use of pervious surfaces for driveways, sidewalks, parking areas/overflow parking areas, etc. ☒ Minimized impervious surfaces (project meets or is less than maximum specified by Zoning Ordinance) ☐ Other (describe):	
E) DISCONNECT IMPERVIOUS AREA ☐ Impervious surfaces have been disconnected, and runoff has been diverted to QPAs to the maximum extent possible ☐ Residential street edges allow side-of-the-road drainage into vegetated open swales ☐ Parking lot landscaping breaks up impervious expanse AND accepts runoff ☐ Other (describe):	
F) MITIGATE RUNOFF AT THE POINT OF GENERATION ☒ Small-scale BMPs have been designated to treat runoff as close as possible to the source	
G) PROVIDE LOW-MAINTENANCE NATIVE VEGETATION ☒ Low-maintenance landscaping has been proposed using native species and cultivars ☒ Plantings of native trees and shrubs in areas previously cleared of native vegetation are shown on site plan ☐ Lawn areas have been limited/minimized, and yards have been kept undisturbed to the maximum extent practicable on residential lots	

H) RESTORE STREAMS/WETLANDS ☐ Historic drainage patterns have been restored by removing closed drainage systems, daylighting buried streams, and/or restoring degraded stream channels and/or wetlands ☐ Removal of invasive species ☐ Other	

PART 3. SUMMARY OF REMAINING STANDARDS

GROUNDWATER RECHARGE – MINIMUM STANDARD 2		
YES	**NO**	
☒	☐	The project has been designed to meet the groundwater recharge standard.
☐	☐	If "No," the justification for groundwater recharge criterion waiver has been explained in the Narrative (e.g., threat of groundwater contamination or physical limitation), if applicable (see RICR 8.8.D);
☐	☐	Your waiver request has been explained in the Narrative, if applicable.
☐	☒	Is this site identified as a Regulated Facility in Part 1, Minimum Standard 8: LUHPPL Identification?
☐	☐	If "Yes," has approval for infiltration by the OLRSMM Site Project Manager, per Part 1, Minimum Standard 8, been requested?

TABLE 2-1: Summary of Recharge (see RISDISM Section 3.3.2)
(Add or Subtract Rows as Necessary)

Design Point	**Impervious Area Treated (sq ft)**	**Total Re_v Required (cu ft)**	**LID Stormwater Credits (see RISDISM Section 4.6.1)** **Portion of Re_v directed to a QPA (cu ft)**	**Recharge Required by Remaining BMPs (cu ft)**	**Recharge Provided by BMPs (cu ft)**
DP-1: UNITS 4-7	2,964	86		86	784
DP-2: UNITS 8-13	4,446	130		130	348
DP-3: UNITS 14-20	5,187	151		151	566
DP-4: IMPERVIOUS	7,168	209		209	871
DP-5: PERMEABLE	11,116	324		324	915
TOTALS:				900	3,484

Notes:
1. Only BMPs listed in RISDISM Table 3-5 "List of BMPs Acceptable for Recharge" may be used to meet the recharge requirement.
2. Recharge requirement must be satisfied for each waterbody ID.

☒ Indicate where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.): HYDROCAD WQV

Stormwater Management, Design, and Installation Rules (250-RICR-150-10-8)

WATER QUALITY – MINIMUM STANDARD 3		
YES	**NO**	
☒	☐	Does this project meet or exceed the required water quality volume WQv (see RICR 8.9.E-I)?
☒	☐	Is the proposed final impervious cover greater than 20% of the disturbed area (see RICR 8.9.E-I)?
☒	☐	If "Yes," either the Modified Curve Number Method or the Split Pervious/Impervious method in Hydro-CAD was used to calculate WQv; or,
☒	☐	If "Yes," either TR-55 or TR-20 was used to calculate WQv; and,
☐	☐	If "No," the project meets the minimum WQv of 0.2 watershed inches over the entire disturbed area.
☐	☐	Not Applicable
☒	☐	Does this project meet or exceed the ability to treat required water quality flow WQf (see RICR 8.9.I.1-3)?
☐	☒	Does this project propose an increase of impervious cover to a receiving water body with impairments? If "Yes," please indicate below the method that was used to address the water quality requirements of no further degradation to a low-quality water.
☐	☒	RICR 8.36. A Pollutant Loading Analysis is needed and has been completed.
☐	☐	The Water Quality Guidance Document (Water Quality Goals and Pollutant Loading Analysis Guidance for Discharges to Impaired Waters) has been followed as applicable.
☐	☐	BMPs are proposed that are on the approved technology list . If "Yes," please provide all required worksheets from the manufacturer.
☐	☐	Additional pollutant-specific requirements and/or pollutant removal efficiencies are applicable to the site as the result of a TMDL, SAMP, or other watershed-specific requirements. If "Yes," please describe:

TABLE 3-1: Summary of Water Quality (see RICR 8.9)

Design Point and WB ID	**Impervious area treated (sq ft)**	**Total WQ_v Required (cu ft)**	**LID Stormwater Credits** (see RICR 8.18) **WQv directed to a QPA (cu ft)**	**Water Quality Treatment Remaining (cu ft)**	**Water Quality Provided by BMPs (cu ft)**
DP-1: UNITS 4-7	2,964	247		247	784
DP-2: UNITS 8-13	4,446	370		370	348
DP-3: UNITS 14-20	5,187	432		432	566
DP-4: IMPERVIOUS	7,168	597		597	871
DP-5: PERMEABLE	11,116	926		926	915
TOTALS:				2,572	3,484

Notes:

☒ YES ☐ NO	This project has met the setback requirements for each BMP. If "No," please explain:

☒ Indicate where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.): HYDROCAD WQV

CONVEYANCE AND NATURAL CHANNEL PROTECTION (RICR 8.10) – MINIMUM STANDARD 4			
YES	**NO**		
☒	☐	Is this standard waived? If "Yes," please indicate one or more of the reasons below:	
		☐	The project directs discharge to a large river (i.e., 4th-order stream or larger. See RISDISM Appendix I for State-wide list and map of stream orders), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.
		☒	The project is a small facility with impervious cover of less than or equal to 1 acre.
		☐	The project has a post-development peak discharge rate from the facility that is less than 2 cfs for the 1-year, 24-hour Type III design storm event (prior to any attenuation). (Note: LID design strategies can greatly reduce the peak discharge rate).
☐	☐	Conveyance and natural channel protection for the site have been met. If "No,' explain why:	

OVERBANK FLOOD PROTECTION (RICR 8.11) AND OTHER POTENTIAL HIGH FLOWS – MINIMUM STANDARD 5			
YES	**NO**		
☐	☒	Is this standard waived? If yes, please indicate one or more of the reasons below:	
		☐	The project directs discharge to a large river (i.e., 4th-order stream or larger. See Appendix I for state-wide list and map of stream orders), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.
		☐	A Downstream Analysis (see RICR 8.11.D and E) indicates that peak discharge control would not be beneficial or would exacerbate peak flows in a downstream tributary of a particular site (e.g., through coincident peaks).
☐	☐	Does the project flow to an MS4 system or subject to other stormwater requirements? If "Yes," indicate as follows:	
		☐	RIDOT
		☐	Other (specify):
Note: The project could be approved by RIDEM but not meet RIDOT or Town standards. RIDOT's regulations indicate that post-volumes must be **less** than pre-volumes for the 10-yr storm at the design point entering the RIDOT system. If you have not already received approval for the discharge to an MS4, please explain below your strategy to comply with RIDEM and the MS4.			
		Indicate below which model was used for your analysis. ☐ TR-55 ☐ TR-20 ☒ HydroCAD ☐ Bentley/Haestad ☐ Intellisolve ☐ Other (Specify):	
YES	**NO**		
☒	☒	Does the drainage design demonstrate that flows from the 100-year storm event through a BMP will safely manage and convey the 100-year storm? If "No," please explain briefly below and reference where in the application further documentation can be found (i.e., name of report/document, page numbers, appendices, etc.): NO TO RIDOT	
☒	☐	Do off-site areas contribute to the sub-watersheds and design points? If "Yes,"	
☒	☐	Are the areas modeled as "present condition" for both pre- and post-development analysis?	
☒	☐	Are the off-site areas shown on the subwatershed maps?	
☒	☒	Does the drainage design confirm safe passage of the 100-year flow through the site for off-site runoff?	
☐	☒	Is a Downstream Analysis required (see RICR 8.11.E.1)?	
☐	☐	Calculate the following:	
		☒	Area of disturbance within the sub-watershed (areas): 1.99 Ac
		☐	Impervious cover (%): 38% (WHEN PERMEABLE PAVEMENT AREA IS INCLUDED)
☐	☒	Is a dam breach analysis required (earthen embankments over six (6) feet in height, or a capacity of 15 acre-feet or more, and contributes to a significant or high hazard dam)?	

Table 5-1 Hydraulic Analysis Summary								
Subwatershed (Design Point)	**1.2" Peak Flow** (cfs) **		**1-yr Peak Flow** (cfs)		**10-yr Peak Flow** (cfs)		**100-yr Peak Flow** (cfs)	
	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)
DP-1: SITE	0.17	-0-	0.67	0.03	3.63	0.31	10.61	7.53
DP-2:								
DP-3:								
DP-4:								
TOTALS:								

** Utilize modified curve number method or split pervious /impervious method in HydroCAD.

Note: The hydraulic analysis must demonstrate no impact to each individual subwatershed DP unless each DP discharges to the same wetland or water resource.

Indicate as follows where the pertinent calculations and/or information for the items above are provided	**Name of report/document, page numbers, appendices, etc.**
Existing conditions analysis for each subwatershed, including curve numbers, times of concentration, runoff rates, volumes, and water surface elevations showing methodologies used and supporting calculations.	
Proposed conditions analysis for each subwatershed, including curve numbers, times of concentration, runoff rates, volumes, water surface elevations, and routing showing the methodologies used and supporting calculations.	
Final sizing calculations for structural stormwater BMPs, including contributing drainage area, storage, and outlet configuration.	
Stage-storage, inflow and outflow hydrographs for storage facilities (e.g., detention, retention, or infiltration facilities).	

Table 5-2 Summary of Best Management Practices											
BMP ID	**DP #**	**BMP Type** (e.g., bioretention, tree filter)	**BMP Functions**					**Bypass Type**	**Horizontal Setback Criteria are met per RICR 8.21.B.10, 8.22.D.11, and 8.35.B.4**		
			Pre-Treatment (Y/N/NA)	Re_v	WQ_v	CP_v (Y/N/NA)	Overbank Flood Reduction (Y/N/NA)	External (E) Internal (I) or NA	Yes/No	Technical Justification (Design Report page number)	Distance Provided
BIO-1	SITE	BIORET		.018					Y		
BIO-2	SITE	BIORET		.008					Y		
BIO-3	SITE	BIORET		.013					Y		
INF	SITE	INFILT		.020					Y		
PERM	SITE	INFILT		.021					Y		
		TOTALS:									

Table 5.3 Summary of Soils to Evaluate Each BMP									
DP #	**BMP ID**	**BMP Type** (e.g., bioretention, tree filter)	**Soils Analysis for Each BMP**						
			Test Pit ID# and Ground Elevation		SHWT Elevation (ft)	Bottom of Practice Elevation* (ft)	Separation Distance Provided (ft)	Hydrologic Soil Group (A, B, C, D)	Exfiltration Rate Applied (in/hr)
			Primary	Secondary					
SITE	BIO-1	BIO	TP-2		135.50	137.00	1.5' MIN.	B	1.02
SITE	BIO-2	BIO	TP-6		132.00	132.00	-0- MIN.	B	1.02
SITE	BIO-3	BIO	TP-10A	TP-10B	119.50	127.00	7.5' MIN.	B	1.02
SITE	INF	INF	TP-9	TP-7	120.00	124.00	4' MIN.	B	1.02
SITE	PERM	INF	TP-5	TP-8	VARIES	VARIES	VARIES	B	1.02
		TOTALS:							

* For underground infiltration systems (UICs) bottom equals bottom of stone, for surface infiltration basins bottom equals bottom of basin, for filters bottom equals interface of storage and top of filter layer

LAND USES WITH HIGHER POTENTIAL POLLUTANTS LOADS (LUHPPLs) – MINIMUM STANDARD 8			
YES	**NO**	**N/A**	
☐	☐	☒	Describe any LUHPPLs identified in Part 1, Minimum Standard 8, Section 2. If not applicable, continue to Minimum Standard 9.
☐	☐	☒	Are these activities already covered under an MSGP? If "No," please explain if you have applied for an MSGP or intend to do so?
☐	☐	☒	List the specific BMPs that are proposed for this project that receive stormwater from LUHPPL drainage areas. These BMP types must be listed in RISDISM Table 3-3, "Acceptable BMPs for Use at LUHPPLs." Please list BMPs:
☐	☐	☒	Additional BMPs, or additional pretreatment BMP's if any, that meet RIPDES MSGP requirements; Please list BMPs:
			Indicate below where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.).

ILLICIT DISCHARGES – MINIMUM STANDARD 9			
Illicit discharges are defined as unpermitted discharges to Waters of the State that do not consist entirely of stormwater or uncontaminated groundwater, except for certain discharges identified in the RIPDES Phase II Stormwater General Permit.			
YES	**NO**	**N/A**	
☐	☒	☐	Have you checked for illicit discharges?
☐	☐	☐	Have any been found and/or corrected? If "Yes," please identify.
☐	☐	☐	Does your report explain preventative measures that keep non-stormwater discharges out of the Waters of the State (during and after construction)?

Stormwater Management, Design, and Installation Rules (250-RICR-150-10-8)

SOIL EROSION AND SEDIMENT CONTROL (SESC) – MINIMUM STANDARD 10				
YES	**NO**	**N/A**		
☒	☐	☐	Have you included a Soil Erosion and Sediment Control Plan Set and/or Complete Construction Plan Set?	
☒	☐	☐	Have you provided a **separately-bound** document based upon the SESC Template? If yes, proceed to Minimum Standard 11 (the following items can be assumed to be addressed).	
			If "No," include a document with your submittal that addresses the following elements of an SESC Plan:	
			☐	Soil Erosion and Sediment Control Plan Project Narrative, including a description of how the fifteen (15) Performance Criteria have been met:
			☐	Provide Natural Buffers and Maintain Existing Vegetation
			☐	Minimize Area of Disturbance
			☐	Minimize the Disturbance of Steep Slopes
			☐	Preserve Topsoil
			☐	Stabilize Soils
			☐	Protect Storm Drain Inlets
			☐	Protect Storm Drain Outlets
			☐	Establish Temporary Controls for the Protection of Post-Construction Stormwater Control Measures
			☐	Establish Perimeter Controls and Sediment Barriers
			☐	Divert or Manage Run-On from Up-Gradient Areas
			☐	Properly Design Constructed Stormwater Conveyance Channels
			☐	Retain Sediment On-Site
			☐	Control Temporary Increases in Stormwater Velocity, Volume, and Peak Flows
			☐	Apply Construction Activity Pollution Prevention Control Measures
			☐	Install, Inspect, and Maintain Control Measures and Take Corrective Actions
			☐	Qualified SESC Plan Preparer's Information and Certification
			☐	Operator's Information and Certification; if not known at the time of application, the Operator must certify the SESC Plan upon selection and prior to initiating site activities
			☐	Description of Control Measures, such as Temporary Sediment Trapping and Conveyance Practices, including design calculations and supporting documentation, as required

STORMWATER MANAGEMENT SYSTEM OPERATION, MAINTENANCE, AND POLLUTION PREVENTION PLAN – MINIMUM STANDARDS 7 AND 9		
Operation and Maintenance Section		
YES	**NO**	
☒	☐	Have you minimized all sources of pollutant contact with stormwater runoff, to the maximum extent practicable?
☒	☐	Have you provided a **separately-bound** Operation and Maintenance Plan for the site and for all of the BMPs, and does it address each element of RICR 8.17 and RISDISM Appendix C and E?
☒	☐	Lawn, Garden, and Landscape Management meet the requirements of RISDISM Section G.7? If "No," why not?
☒	☐	Is the property owner or homeowner's association responsible for the stormwater maintenance of all BMP's? If "No," you must provide a legally binding and enforceable maintenance agreement (see RISDISM Appendix E, page 26) that identifies the entity that will be responsible for maintenance of the stormwater. Indicate where this agreement can be found in your report (i.e., name of report/document, page numbers, appendices, etc.).
☒	☐	Do you anticipate that you will need legal agreements related to the stormwater structures? (e.g. off-site easements, deed restrictions, covenants, or ELUR per the Remediation Regulations). If "Yes," have you obtained them? Or please explain your plan to obtain them:
☐	☒	Is stormwater being directed from public areas to private property? If "Yes," note the following: Note: This is not allowed unless a funding mechanism is in place to provide the finances for the long-term maintenance of the BMP and drainage, or a funding mechanism is demonstrated that can guarantee the long-term maintenance of a stormwater BMP by an individual homeowner.
Pollution Prevention Section		

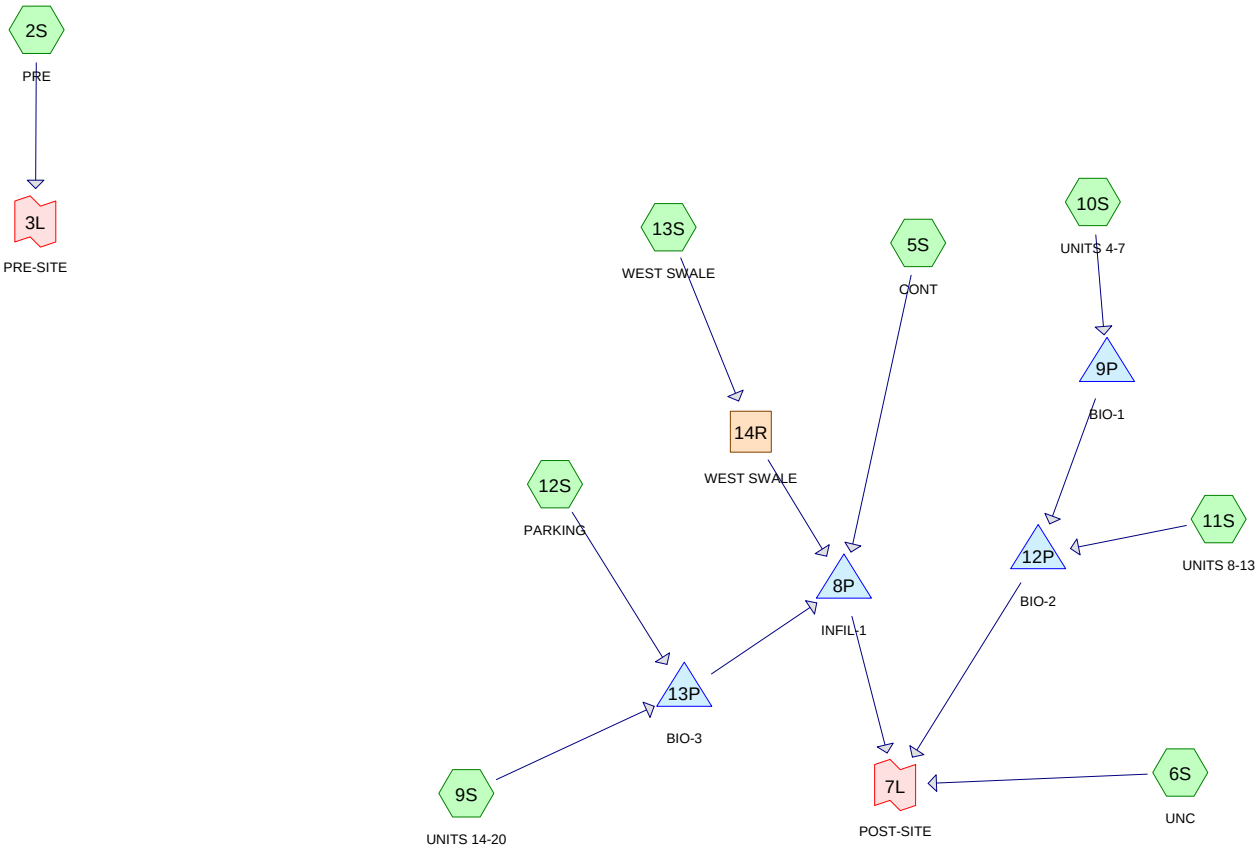
☐	☒	Designated snow stockpile locations? Snow will be hauled oof-site.
☐	☒	Trash racks to prevent floatables, trash, and debris from discharging to Waters of the State?
☒	☐	Asphalt-only based sealants?
☐	☒	Pet waste stations? (Note: If a receiving water has a bacterial impairment, and the project involves housing units, then this could be an important part of your pollution prevention plan).
☒	☐	Regular sweeping? Please describe:
☒	☐	De-icing specifications, in accordance with RISDISM Appendix G. (NOTE: If the groundwater is GAA, or this area contributes to a drinking water supply, then this could be an important part of your pollution prevention plan).
☐	☒	A prohibition of phosphate-based fertilizers? (Note: If the site discharges to a phosphorus impaired waterbody, then this could be an important part of your pollution prevention plan).

PART 4. SUBWATERSHED MAPPING AND SITE-PLAN DETAILS

Existing and Proposed Subwatershed Mapping (REQUIRED)			
YES	**NO**		
☒	☐		Existing and proposed drainage area delineations
☒	☐		Locations of all streams and drainage swales
☒	☐		Drainage flow paths, mapped according to the DEM *Guidance for Preparation of Drainage Area Maps* (included in RISDISM Appendix K)
☒	☐		Complete drainage area boundaries; include off-site areas in both mapping and analyses, as applicable
☒	☐		Logs of borings and/or test pit investigations along with supporting soils/geotechnical report
☒	☐		Mapped seasonal high-water-table test pit locations
☒	☐		Mapped locations of the site-specific borings and/or test pits and soils information from the test pits at the locations of the BMPs
☒	☐		Mapped locations of the BMPs, with the BMPs consistently identified on the Site Construction Plans
☒	☐		Mapped bedrock outcrops adjacent to any infiltration BMP
☒	☐		Soils were logged by a:
		☒	DEM-licensed Class IV soil evaluator Name: Thomas J. Principe, III
		☒	RI-registered P.E. Name: Thomas J. Principe, III

Subwatershed and Impervious Area Summary				
Subwatershed (area to each design point)	**First Receiving Water ID or MS4**	**Area Disturbed (units)**	**Existing Impervious (units)**	**Proposed Impervious (units)**
DP-1: SITE	GROUNDWATER	86,858 SF	7,898 SF	+24,585 SF
DP-2:				
DP-3:				
DP-4:				
TOTALS:				

Site Construction Plans (Indicate that the following applicable specifications are provided)		
YES	**NO**	
☒	☐	Existing and proposed plans (scale not greater than 1" = 40') with North arrow
☒	☐	Existing and proposed site topography (with 1 or 2-foot contours); 10-foot contours accepted for off-site areas
☒	☐	Boundaries of existing predominant vegetation and proposed limits of clearing
☒	☐	Site Location clarification
☐	☒	Location and field-verified boundaries of resource protection areas such as: ► freshwater and coastal wetlands, including lakes and ponds ► coastal shoreline features Perennial and intermittent streams, in addition to Areas Subject to Storm Flowage (ASSFs)
☒	☐	All required setbacks (e.g., buffers, water-supply wells, septic systems)
☒	☐	Representative cross-section and profile drawings, and notes and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, swales, etc.), which include: ► Location and size of the stormwater treatment practices (type of practice, depth, area). Stormwater treatment practices (BMPs) must have labels that correspond to RISDISM Table 5-2; ► Design water surface elevations (applicable storms); ► Structural details of outlet structures, embankments, spillways, stilling basins, grade-control structures, conveyance channels, etc.; ► Existing and proposed structural elevations (e.g., inverts of pipes, manholes, etc.); ► Location of floodplain and, if applicable, floodway limits and relationship of site to upstream and downstream properties or drainage that could be affected by work in the floodplain; ► Planting plans for structural stormwater BMPs, including species, size, planting methods, and maintenance requirements of proposed planting
☒	☐	Logs of borings and/or test pit investigations along with supporting soils/geotechnical report and corresponding water tables
☐	☒	Mapping of any OLRSMM-approved remedial actions/systems (including ELURs)
☒	☐	Location of existing and proposed roads, buildings, and other structures including limits of disturbance; ► Existing and proposed utilities (e.g., water, sewer, gas, electric) and easements; ► Location of existing and proposed conveyance systems, such as grass channels, swales, and storm drains, and location(s) of final discharge point(s) (wetland, waterbody, etc.); ► Cross sections of roadways, with edge details such as curbs and sidewalks; ► Location and dimensions of channel modifications, such as bridge or culvert crossings
☐	☒	Locations, cross sections, and profiles of all stream or wetland crossings and their method of stabilization



Subcat Reach Pond Link

Routing Diagram for BAYVIEW-REVISED FOR TOWN
Prepared by Principe Engineering, Inc, Printed 8/4/2025
HydroCAD® 10.20-7a s/n 08247 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.068	98	(4) New Roofs, HSG B (10S)
0.102	98	(6) nEW Roofs, HSG B (11S)
0.119	98	(7) New Roofs, HSG B (9S)
3.473	61	>75% Grass cover, Good, HSG B (2S, 5S, 6S, 9S, 10S, 11S, 13S)
0.181	98	Ex. House/Barn/Pavement, HSG B (2S)
0.147	98	Ex. Impervious, HSG B (10S)
0.083	98	Exist. Roofs, HSG B (13S)
0.165	98	New Paved parking, HSG B (13S)
0.110	85	Onsite Gravel Driveway, HSG B (2S)
0.037	98	Paved parking, HSG B (9S)
0.255	70	Pervious pavement, HSG B (12S)
4.740	**69**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
4.740	HSG B	2S, 5S, 6S, 9S, 10S, 11S, 12S, 13S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
4.740		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.068	0.000	0.000	0.000	0.068	(4) New Roofs	10S
0.000	0.102	0.000	0.000	0.000	0.102	(6) nEW Roofs	11S
0.000	0.119	0.000	0.000	0.000	0.119	(7) New Roofs	9S
0.000	3.473	0.000	0.000	0.000	3.473	>75% Grass cover, Good	2S, 5S, 6S, 9S, 10S, 11S, 13S
0.000	0.181	0.000	0.000	0.000	0.181	Ex. House/Barn/Pavement	2S
0.000	0.147	0.000	0.000	0.000	0.147	Ex. Impervious	10S
0.000	0.083	0.000	0.000	0.000	0.083	Exist. Roofs	13S
0.000	0.165	0.000	0.000	0.000	0.165	New Paved parking	13S
0.000	0.110	0.000	0.000	0.000	0.110	Onsite Gravel Driveway	2S
0.000	0.037	0.000	0.000	0.000	0.037	Paved parking	9S
0.000	0.255	0.000	0.000	0.000	0.255	Pervious pavement	12S
0.000	**4.740**	**0.000**	**0.000**	**0.000**	**4.740**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2S: PRE Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=0.08"
Flow Length=375' Tc=9.9 min CN=62/98 Runoff=0.17 cfs 0.015 af

Subcatchment 5S: CONT Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=0.00"
Tc=6.0 min CN=61/0 Runoff=0.00 cfs 0.000 af

Subcatchment 6S: UNC Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=0.00"
Tc=6.0 min CN=61/0 Runoff=0.00 cfs 0.000 af

Subcatchment 9S: UNITS 14-20 Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=0.41"
Tc=6.0 min CN=61/98 Runoff=0.17 cfs 0.013 af

Subcatchment 10S: UNITS 4-7 Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=0.54"
Tc=6.0 min CN=61/98 Runoff=0.23 cfs 0.018 af

Subcatchment 11S: UNITS 8-13 Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=0.37"
Tc=6.0 min CN=61/98 Runoff=0.11 cfs 0.008 af

Subcatchment 12S: PARKING Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=0.03"
Tc=6.0 min CN=70/0 Runoff=0.00 cfs 0.001 af

Subcatchment 13S: WEST SWALE Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=0.36"
Tc=6.0 min CN=61/98 Runoff=0.27 cfs 0.020 af

Reach 14R: WEST SWALE Avg. Flow Depth=0.07' Max Vel=1.62 fps Inflow=0.27 cfs 0.020 af
n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=0.25 cfs 0.020 af

Pond 8P: INFIL-1 Peak Elev=124.20' Storage=295 cf Inflow=0.25 cfs 0.020 af
Discarded=0.04 cfs 0.020 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.020 af

Pond 9P: BIO-1 Peak Elev=137.14' Storage=225 cf Inflow=0.23 cfs 0.018 af
Discarded=0.04 cfs 0.018 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.018 af

Pond 12P: BIO-2 Peak Elev=132.04' Storage=73 cf Inflow=0.11 cfs 0.008 af
Discarded=0.04 cfs 0.008 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.008 af

Pond 13P: BIO-3 Peak Elev=127.05' Storage=115 cf Inflow=0.17 cfs 0.013 af
Discarded=0.06 cfs 0.013 af Primary=0.00 cfs 0.000 af Outflow=0.06 cfs 0.013 af

Link 3L: PRE-SITE Inflow=0.17 cfs 0.015 af
Primary=0.17 cfs 0.015 af

Link 7L: POST-SITE Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 4.740 ac Runoff Volume = 0.075 af Average Runoff Depth = 0.19"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

Summary for Subcatchment 2S: PRE

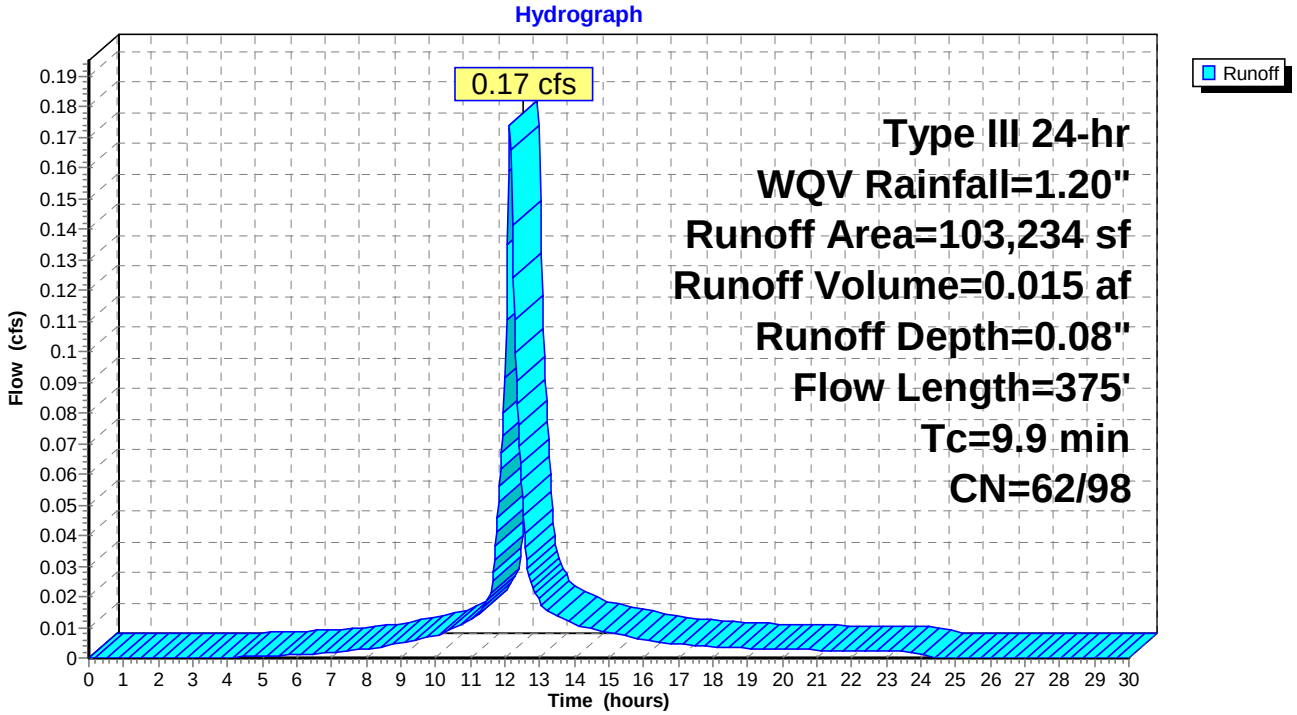
Runoff = 0.17 cfs @ 12.13 hrs, Volume= 0.015 af, Depth= 0.08"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE



Summary for Subcatchment 5S: CONT

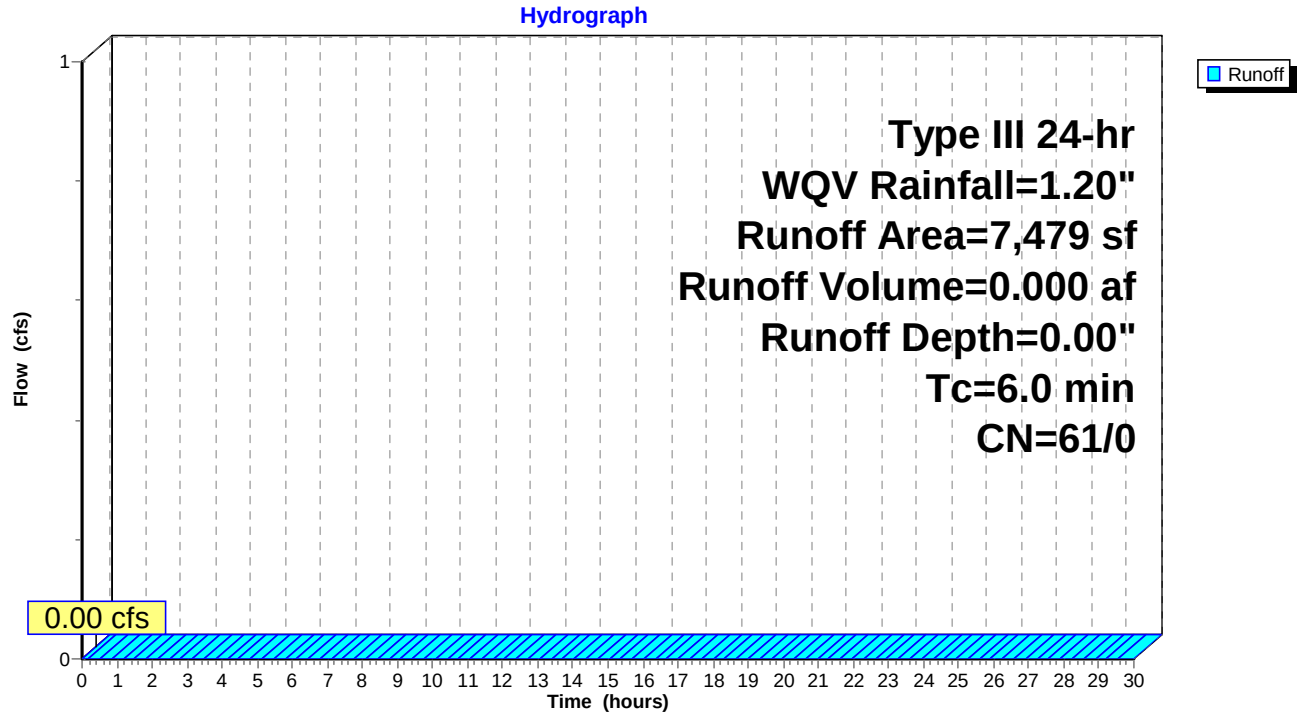
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



Summary for Subcatchment 6S: UNC

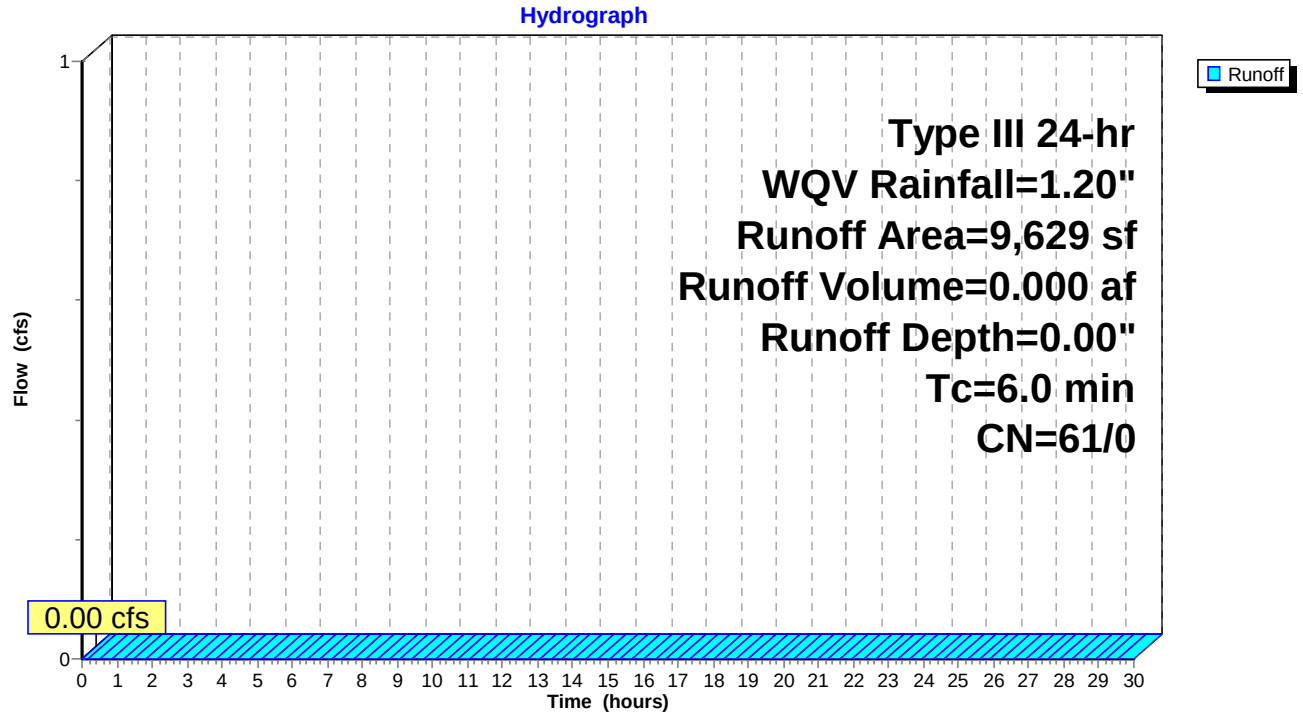
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC



Summary for Subcatchment 9S: UNITS 14-20

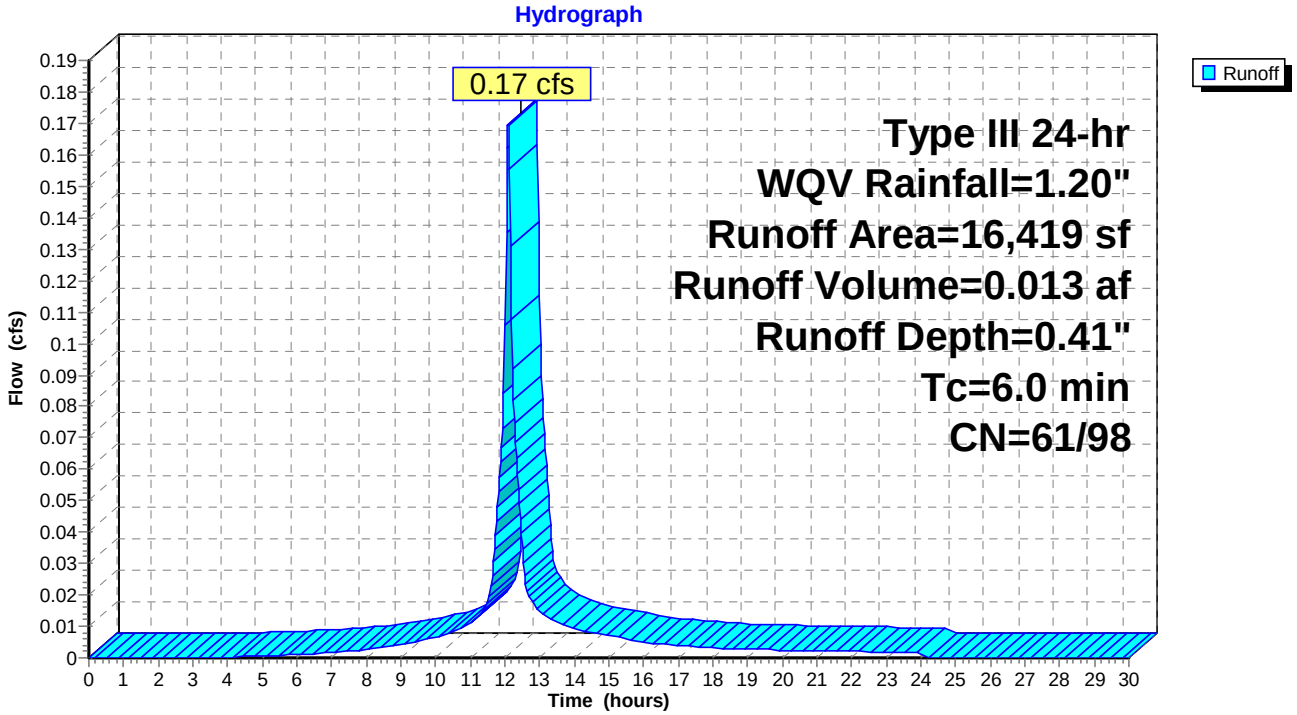
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.013 af, Depth= 0.41"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20



Summary for Subcatchment 10S: UNITS 4-7

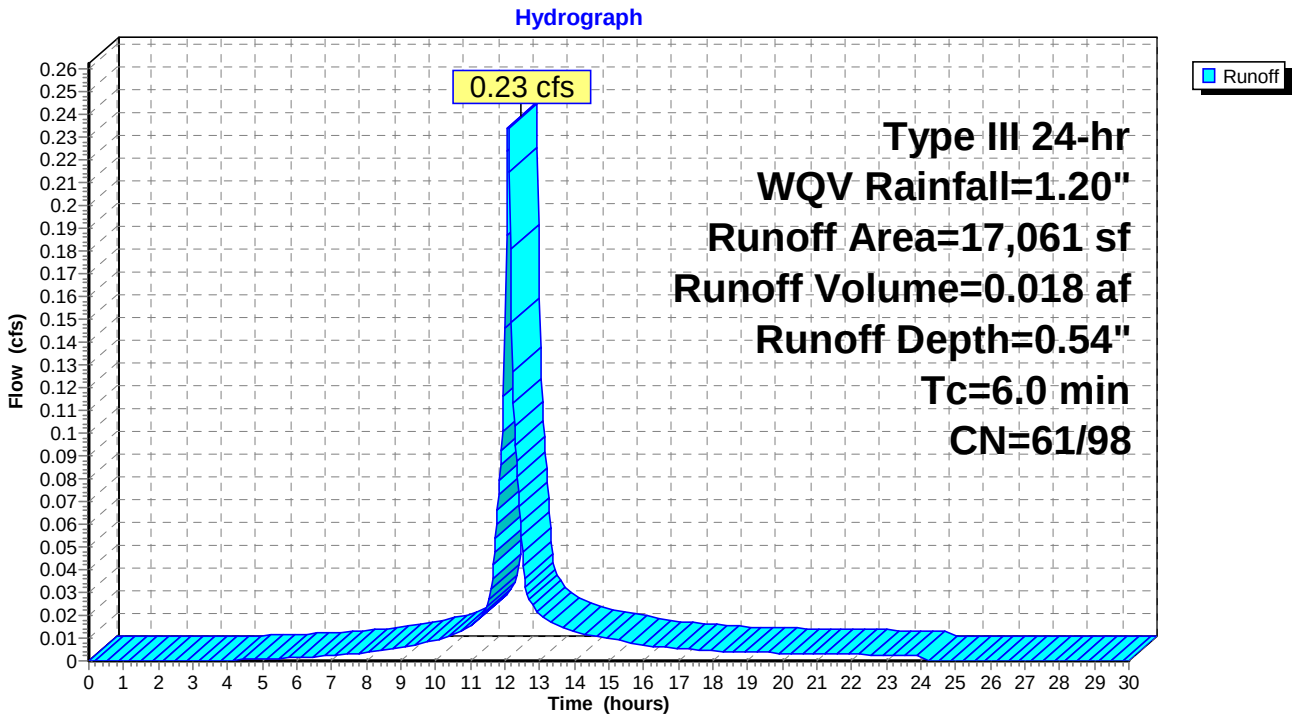
Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af, Depth= 0.54"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



Summary for Subcatchment 11S: UNITS 8-13

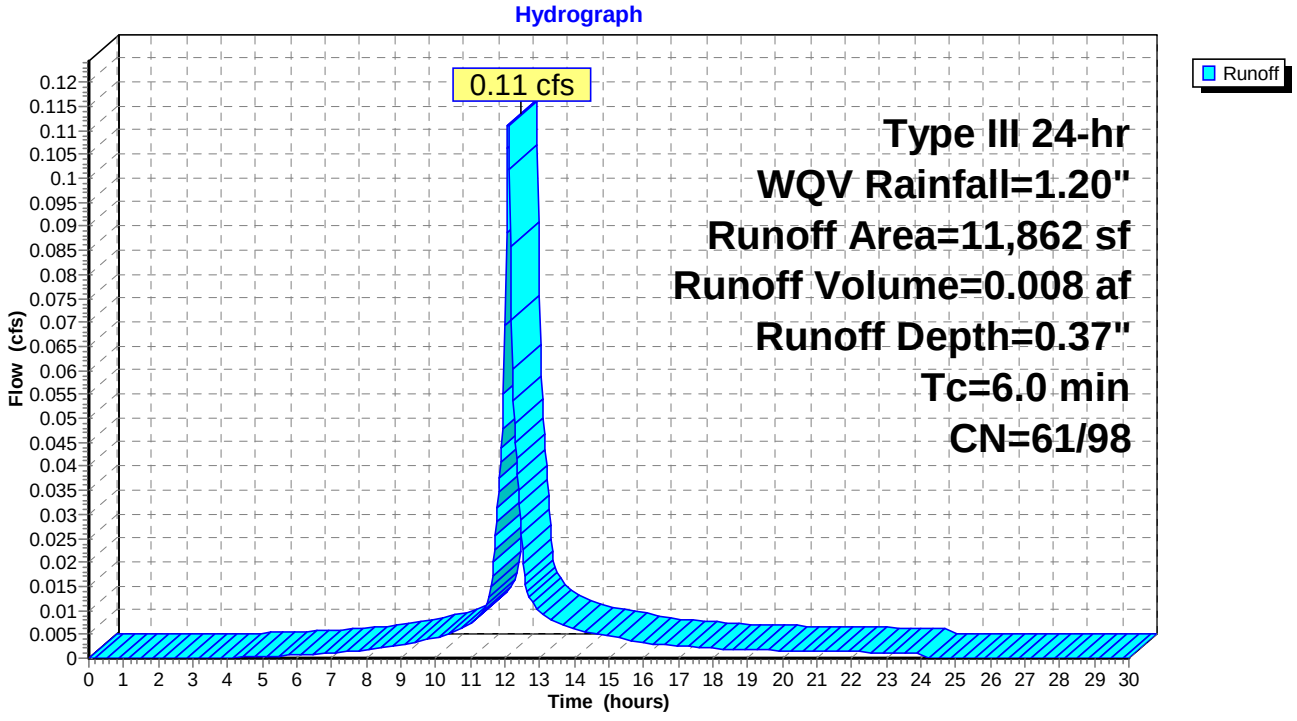
Runoff = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af, Depth= 0.37"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13



Summary for Subcatchment 12S: PARKING

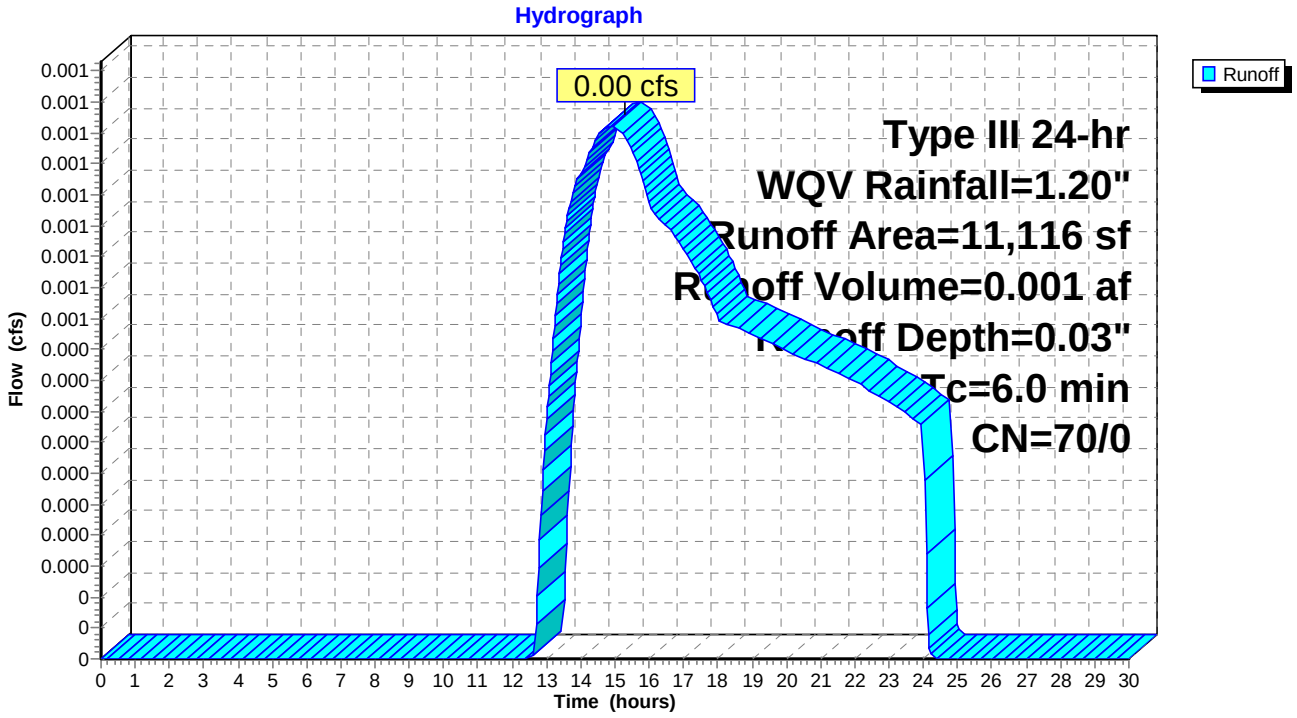
Runoff = 0.00 cfs @ 14.87 hrs, Volume= 0.001 af, Depth= 0.03"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



Summary for Subcatchment 13S: WEST SWALE

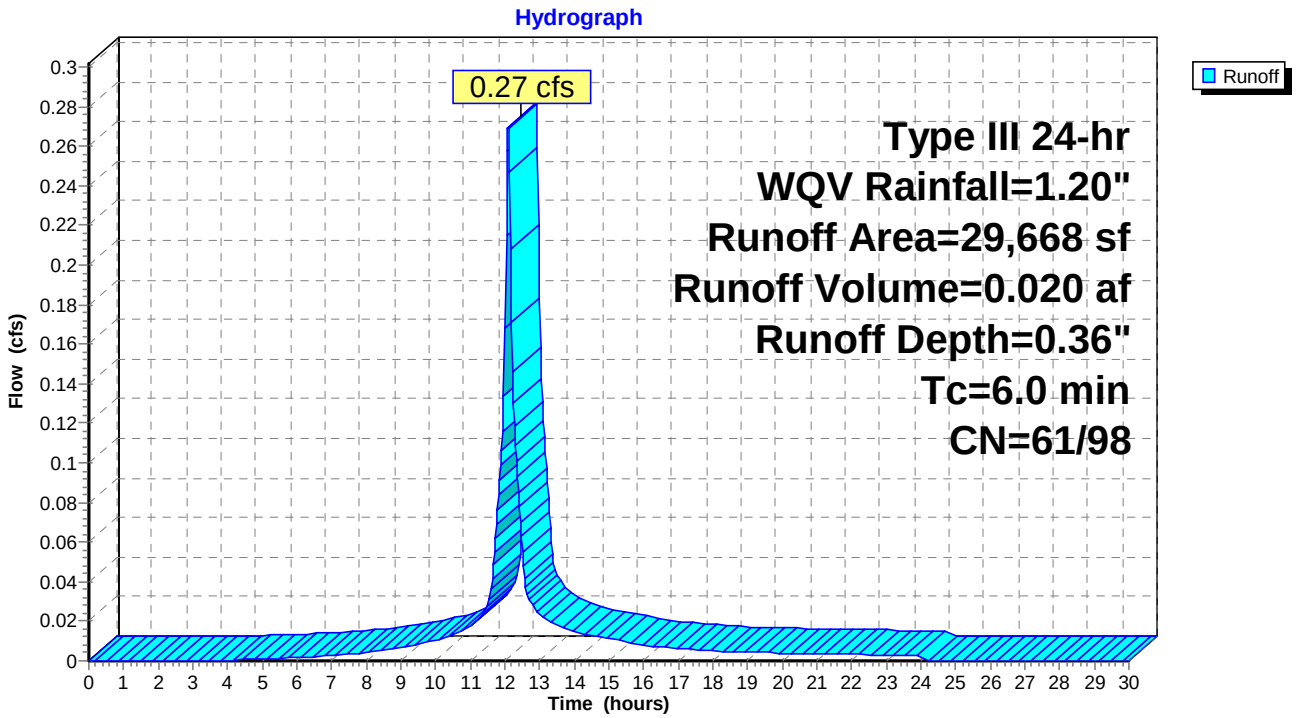
Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.020 af, Depth= 0.36"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.03 h
Type III 24-hr WQV Rainfall=1.20"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE



Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 0.36" for WQV event
Inflow = 0.27 cfs @ 12.09 hrs, Volume= 0.020 af
Outflow = 0.25 cfs @ 12.17 hrs, Volume= 0.020 af, Atten= 8%, Lag= 5.1 min
Routed to Pond 8P : INFIL-1

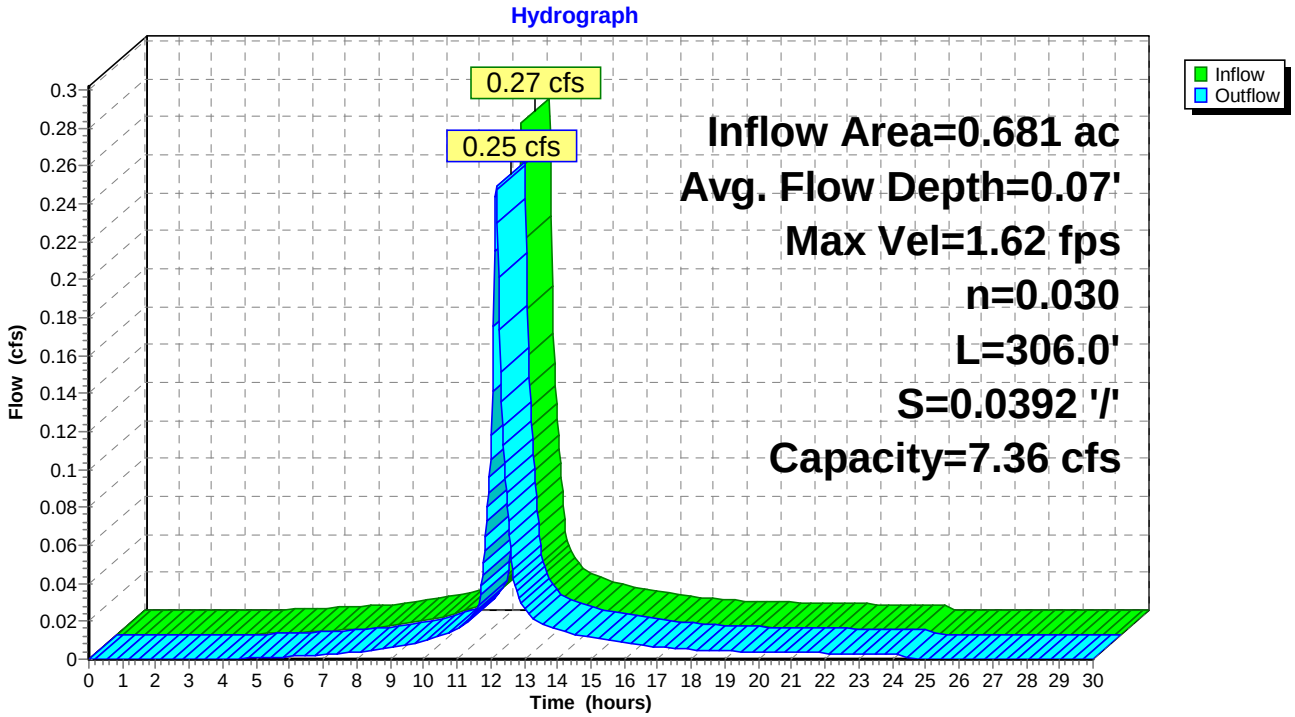
Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 1.62 fps, Min. Travel Time= 3.2 min
Avg. Velocity = 0.42 fps, Avg. Travel Time= 12.2 min

Peak Storage= 48 cf @ 12.12 hrs
Average Depth at Peak Storage= 0.07' , Surface Width= 2.29'
Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 2.0 '/' Top Width= 4.00'
Length= 306.0' Slope= 0.0392 '/'
Inlet Invert= 138.00', Outlet Invert= 126.00'

‡

Reach 14R: WEST SWALE



Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 0.16" for WQV event
Inflow = 0.25 cfs @ 12.17 hrs, Volume= 0.020 af
Outflow = 0.04 cfs @ 12.74 hrs, Volume= 0.020 af, Atten= 85%, Lag= 34.4 min
Discarded = 0.04 cfs @ 12.74 hrs, Volume= 0.020 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 124.20' @ 12.74 hrs Surf.Area= 1,573 sf Storage= 295 cf

Plug-Flow detention time= 60.6 min calculated for 0.020 af (100% of inflow)
Center-of-Mass det. time= 60.6 min (853.8 - 793.2)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

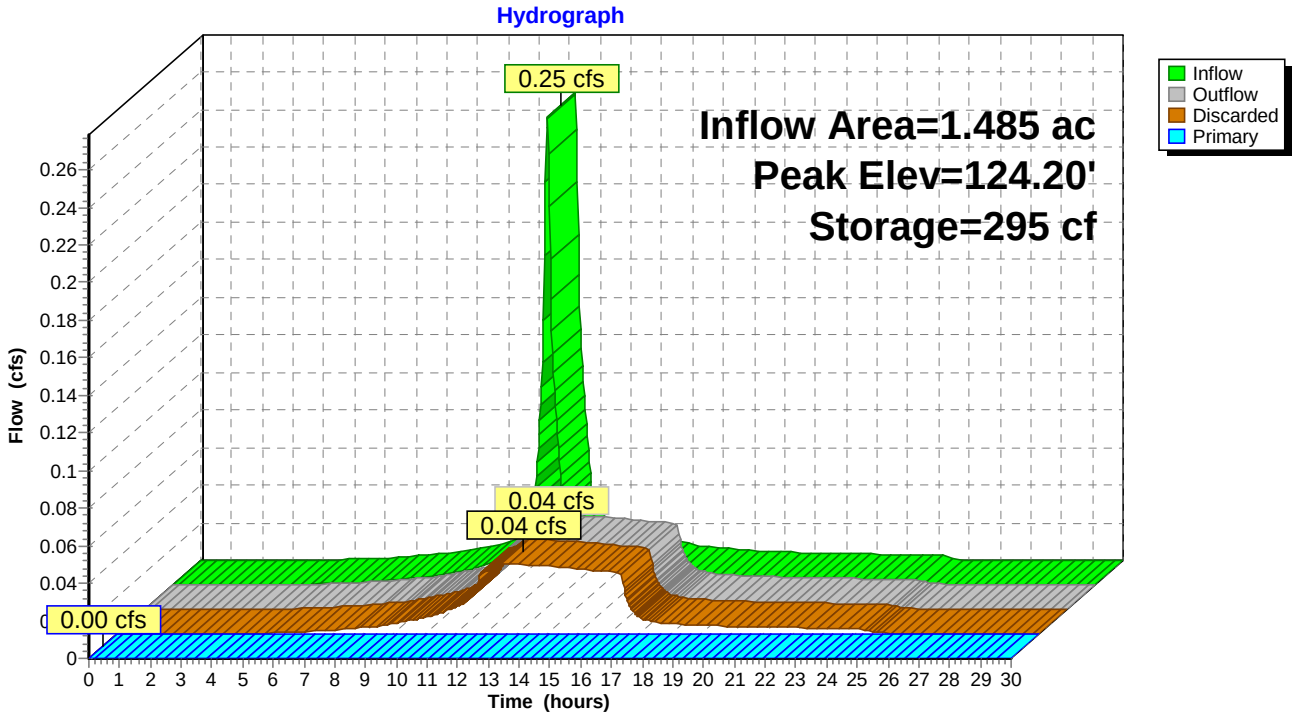
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	125.53'	**30.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.04 cfs @ 12.74 hrs HW=124.20' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=124.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 8P: INFIL-1



Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 0.54" for WQV event
Inflow = 0.23 cfs @ 12.09 hrs, Volume= 0.018 af
Outflow = 0.04 cfs @ 12.55 hrs, Volume= 0.018 af, Atten= 83%, Lag= 28.1 min
Discarded = 0.04 cfs @ 12.55 hrs, Volume= 0.018 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 137.14' @ 12.55 hrs Surf.Area= 1,649 sf Storage= 225 cf

Plug-Flow detention time= 37.7 min calculated for 0.018 af (100% of inflow)
Center-of-Mass det. time= 37.6 min (819.7 - 782.0)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

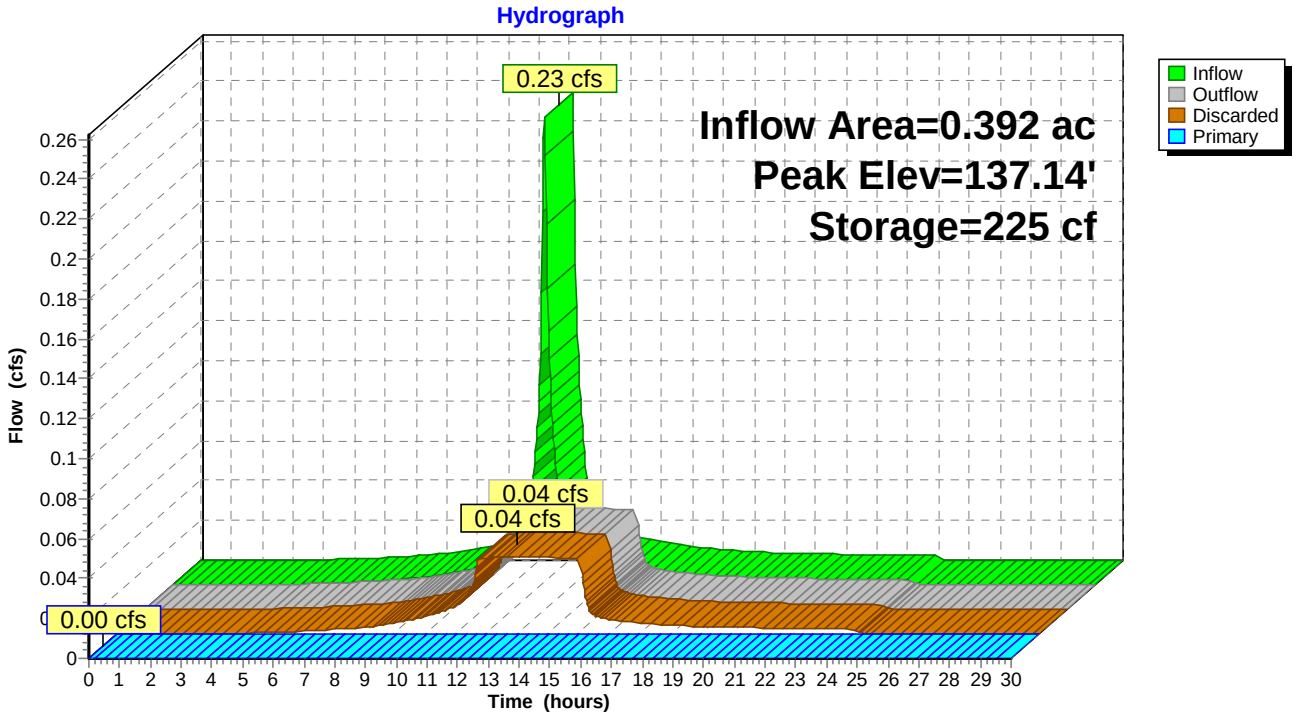
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	137.58'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 12.55 hrs HW=137.14' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=137.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: BIO-1


Hydrograph
Inflow
Outflow
Discarded
Primary
0.23 cfs
0.04 cfs
0.04 cfs
0.00 cfs
Inflow Area=0.392 ac
Peak Elev=137.14'
Storage=225 cf
Flow (cfs)
Time (hours)
0 0.02 0.04 0.06 0.08 0.1 0.12 0.14 0.16 0.18 0.2 0.22 0.24 0.26
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 0.15" for WQV event
Inflow = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af
Outflow = 0.04 cfs @ 12.35 hrs, Volume= 0.008 af, Atten= 65%, Lag= 16.1 min
Discarded = 0.04 cfs @ 12.35 hrs, Volume= 0.008 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 132.04' @ 12.35 hrs Surf.Area= 1,644 sf Storage= 73 cf

Plug-Flow detention time= 17.8 min calculated for 0.008 af (100% of inflow)
Center-of-Mass det. time= 17.9 min (799.9 - 782.0)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

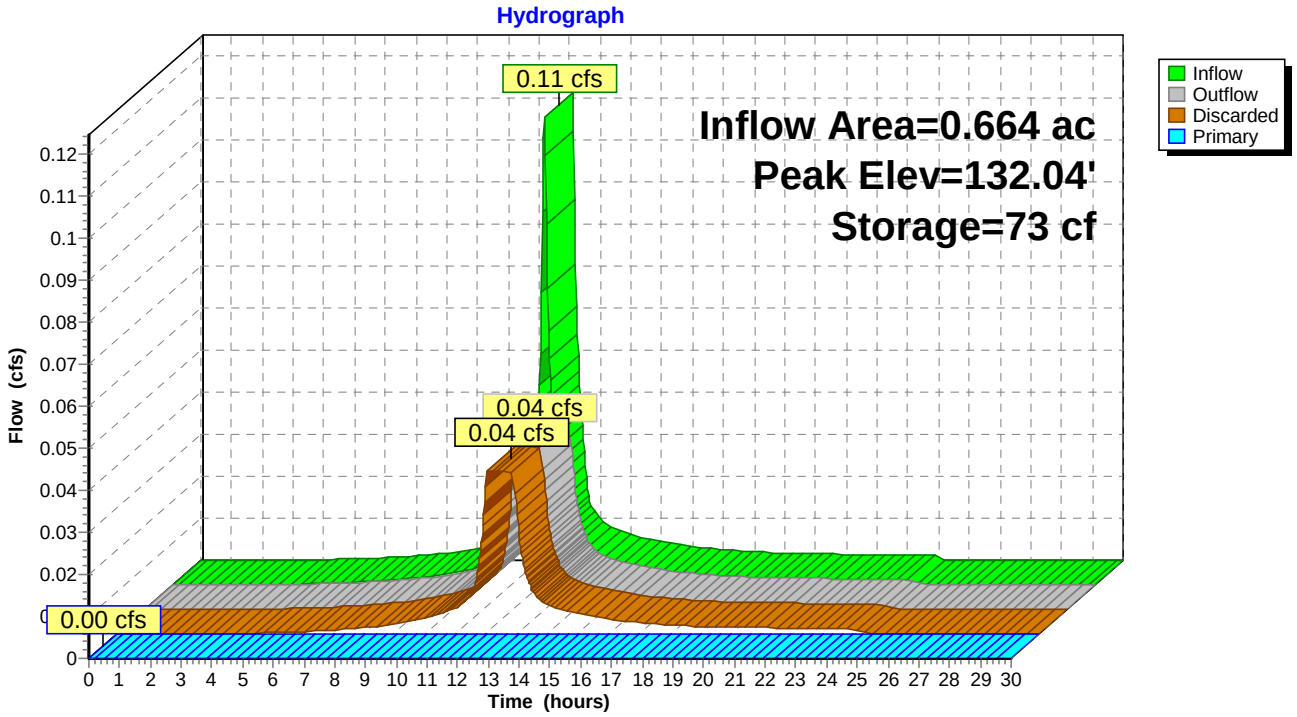
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	133.33'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 12.35 hrs HW=132.04' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 12P: BIO-2



Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 0.25" for WQV event
Inflow = 0.17 cfs @ 12.09 hrs, Volume= 0.013 af
Outflow = 0.06 cfs @ 12.37 hrs, Volume= 0.013 af, Atten= 66%, Lag= 17.0 min
Discarded = 0.06 cfs @ 12.37 hrs, Volume= 0.013 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 127.05' @ 12.37 hrs Surf.Area= 2,408 sf Storage= 115 cf

Plug-Flow detention time= 18.3 min calculated for 0.013 af (100% of inflow)
Center-of-Mass det. time= 18.3 min (811.9 - 793.6)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

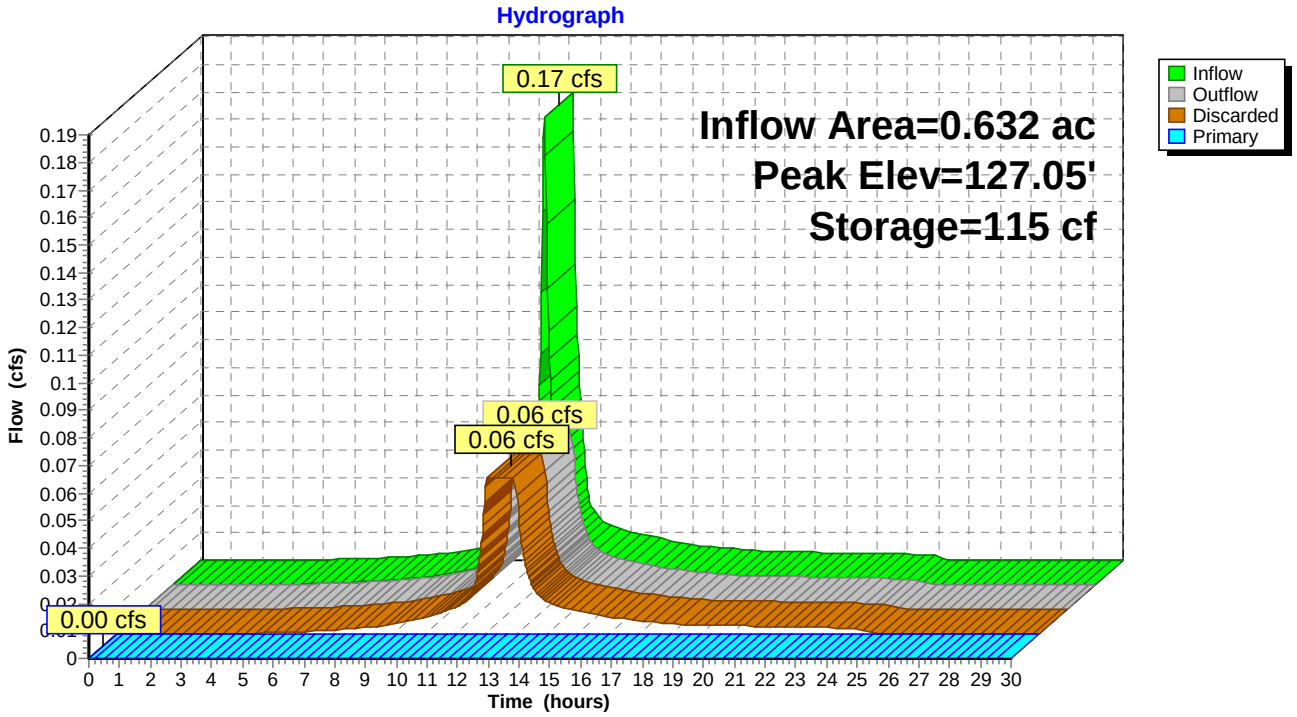
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	128.58'	**5.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.06 cfs @ 12.37 hrs HW=127.05' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 13P: BIO-3

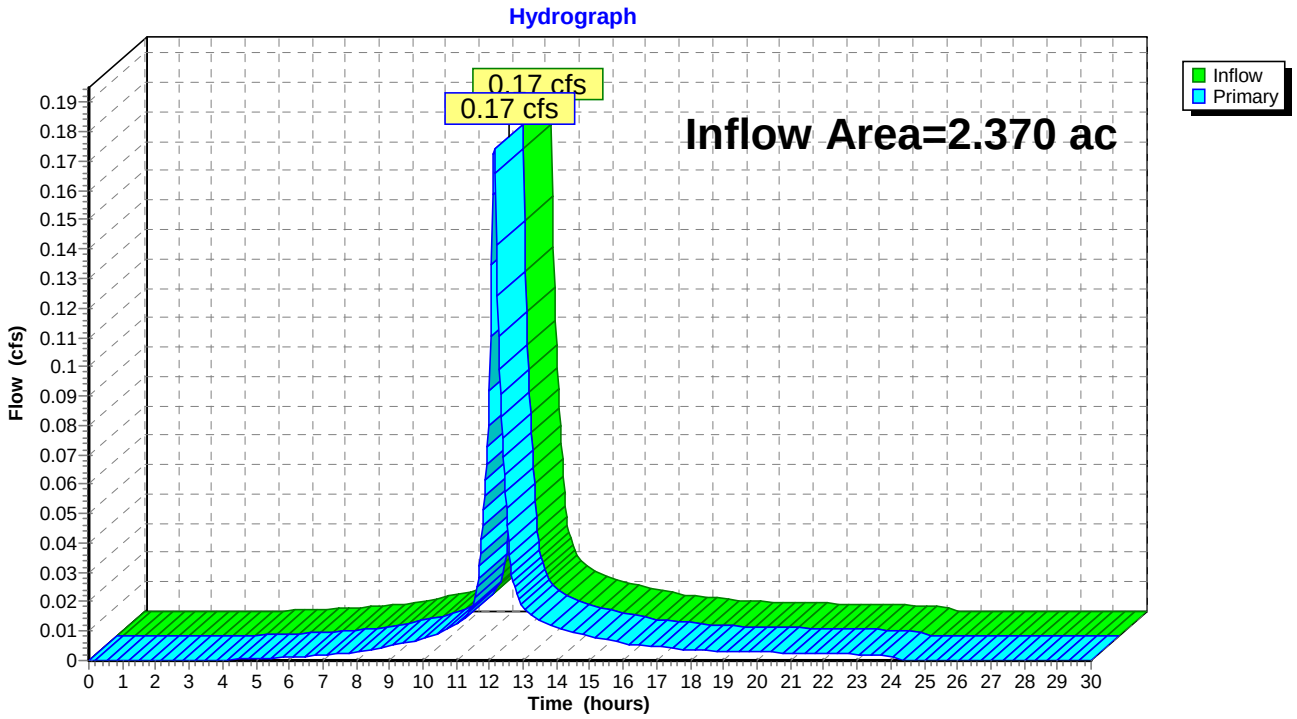


Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 0.08" for WQV event
Inflow = 0.17 cfs @ 12.13 hrs, Volume= 0.015 af
Primary = 0.17 cfs @ 12.13 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

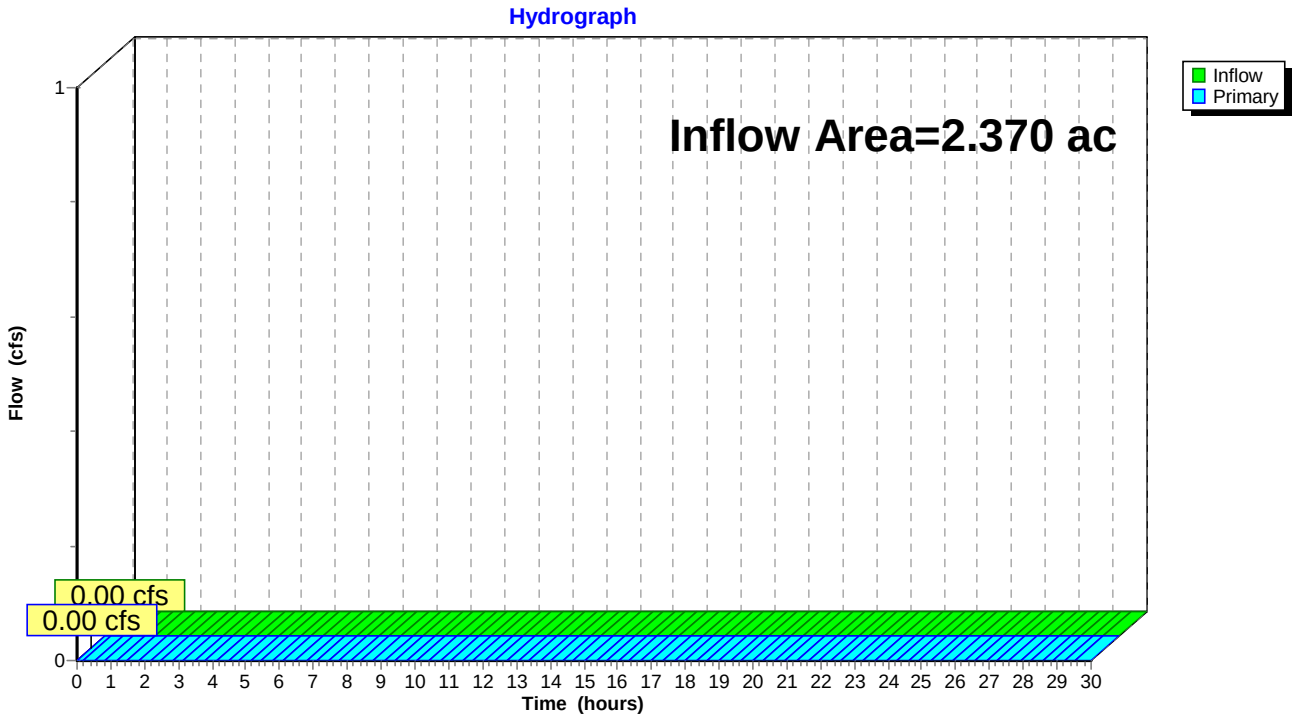


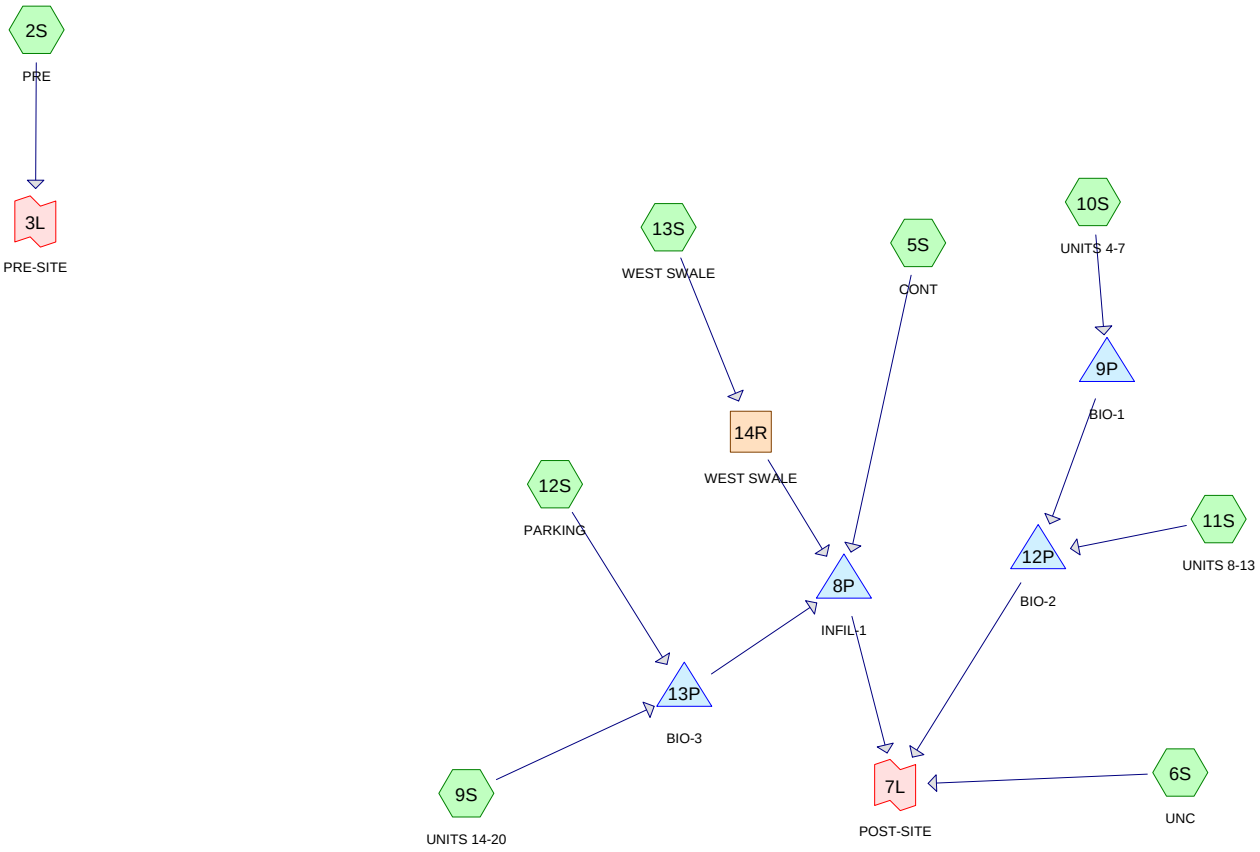
Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.00" for WQV event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE





Subcat Reach Pond Link

Routing Diagram for BAYVIEW-REVISED FOR TOWN
Prepared by Principe Engineering, Inc, Printed 8/4/2025
HydroCAD® 10.20-7a s/n 08247 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Type III 24-hr		Default	24.00	1	2.80	2
2	10-yr	Type III 24-hr		Default	24.00	1	4.90	2
3	25-yr	Type III 24-hr		Default	24.00	1	6.10	2
4	100-yr	Type III 24-hr		Default	24.00	1	8.60	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.068	98	(4) New Roofs, HSG B (10S)
0.102	98	(6) nEW Roofs, HSG B (11S)
0.119	98	(7) New Roofs, HSG B (9S)
3.473	61	>75% Grass cover, Good, HSG B (2S, 5S, 6S, 9S, 10S, 11S, 13S)
0.181	98	Ex. House/Barn/Pavement, HSG B (2S)
0.147	98	Ex. Impervious, HSG B (10S)
0.083	98	Exist. Roofs, HSG B (13S)
0.165	98	New Paved parking, HSG B (13S)
0.110	85	Onsite Gravel Driveway, HSG B (2S)
0.037	98	Paved parking, HSG B (9S)
0.255	70	Pervious pavement, HSG B (12S)
4.740	**69**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
4.740	HSG B	2S, 5S, 6S, 9S, 10S, 11S, 12S, 13S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
4.740		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.068	0.000	0.000	0.000	0.068	(4) New Roofs	10S
0.000	0.102	0.000	0.000	0.000	0.102	(6) nEW Roofs	11S
0.000	0.119	0.000	0.000	0.000	0.119	(7) New Roofs	9S
0.000	3.473	0.000	0.000	0.000	3.473	>75% Grass cover, Good	2S, 5S, 6S, 9S, 10S, 11S, 13S
0.000	0.181	0.000	0.000	0.000	0.181	Ex. House/Barn/Pavement	2S
0.000	0.147	0.000	0.000	0.000	0.147	Ex. Impervious	10S
0.000	0.083	0.000	0.000	0.000	0.083	Exist. Roofs	13S
0.000	0.165	0.000	0.000	0.000	0.165	New Paved parking	13S
0.000	0.110	0.000	0.000	0.000	0.110	Onsite Gravel Driveway	2S
0.000	0.037	0.000	0.000	0.000	0.037	Paved parking	9S
0.000	0.255	0.000	0.000	0.000	0.255	Pervious pavement	12S
0.000	**4.740**	**0.000**	**0.000**	**0.000**	**4.740**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=0.42"
Flow Length=375' Tc=9.9 min CN=65 Runoff=0.67 cfs 0.082 af

Subcatchment 5S: CONT Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=0.29"
Tc=6.0 min CN=61 Runoff=0.03 cfs 0.004 af

Subcatchment 6S: UNC Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=0.29"
Tc=6.0 min CN=61 Runoff=0.03 cfs 0.005 af

Subcatchment 9S: UNITS 14-20 Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=0.88"
Tc=6.0 min CN=76 Runoff=0.37 cfs 0.028 af

Subcatchment 10S: UNITS 4-7 Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=1.16"
Tc=6.0 min CN=81 Runoff=0.52 cfs 0.038 af

Subcatchment 11S: UNITS 8-13 Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=0.83"
Tc=6.0 min CN=75 Runoff=0.25 cfs 0.019 af

Subcatchment 12S: PARKING Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=0.61"
Tc=6.0 min CN=70 Runoff=0.15 cfs 0.013 af

Subcatchment 13S: WEST SWALE Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=0.78"
Tc=6.0 min CN=74 Runoff=0.57 cfs 0.044 af

Reach 14R: WEST SWALE Avg. Flow Depth=0.11' Max Vel=2.13 fps Inflow=0.57 cfs 0.044 af
n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=0.53 cfs 0.044 af

Pond 8P: INFIL-1 Peak Elev=124.56' Storage=920 cf Inflow=0.56 cfs 0.049 af
Discarded=0.05 cfs 0.049 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.049 af

Pond 9P: BIO-1 Peak Elev=137.41' Storage=690 cf Inflow=0.52 cfs 0.038 af
Discarded=0.04 cfs 0.038 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.038 af

Pond 12P: BIO-2 Peak Elev=132.15' Storage=246 cf Inflow=0.25 cfs 0.019 af
Discarded=0.04 cfs 0.019 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.019 af

Pond 13P: BIO-3 Peak Elev=127.25' Storage=611 cf Inflow=0.52 cfs 0.041 af
Discarded=0.06 cfs 0.041 af Primary=0.00 cfs 0.000 af Outflow=0.06 cfs 0.041 af

Link 3L: PRE-SITE Inflow=0.67 cfs 0.082 af
Primary=0.67 cfs 0.082 af

Link 7L: POST-SITE Inflow=0.03 cfs 0.005 af
Primary=0.03 cfs 0.005 af

Total Runoff Area = 4.740 ac Runoff Volume = 0.234 af Average Runoff Depth = 0.59"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

Summary for Subcatchment 2S: PRE

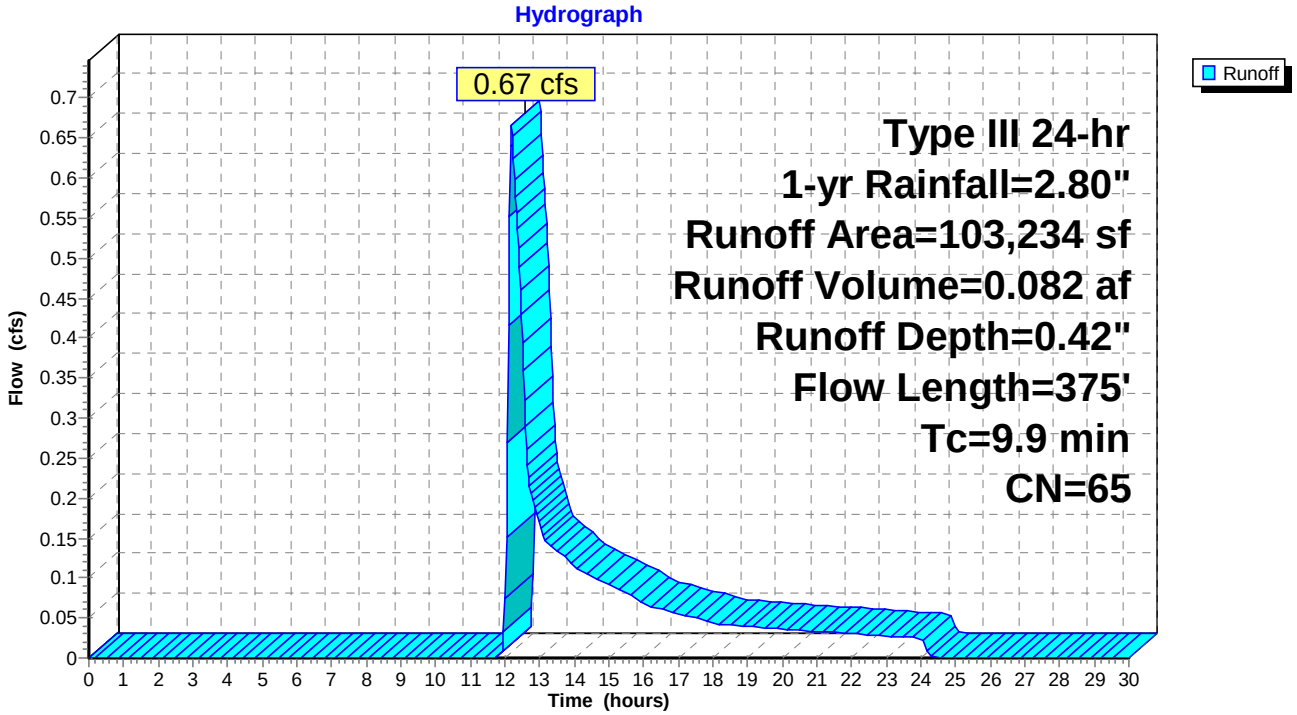
Runoff = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af, Depth= 0.42"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE



Summary for Subcatchment 5S: CONT

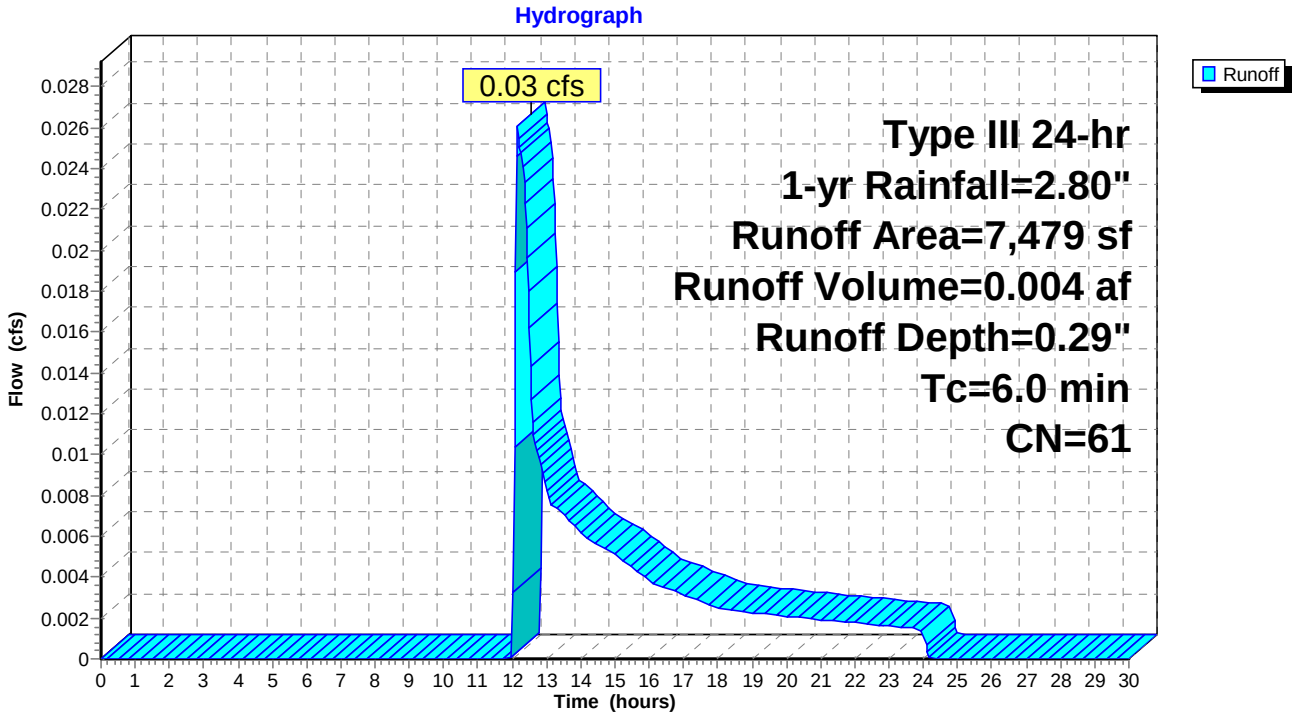
Runoff = 0.03 cfs @ 12.16 hrs, Volume= 0.004 af, Depth= 0.29"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



Summary for Subcatchment 6S: UNC

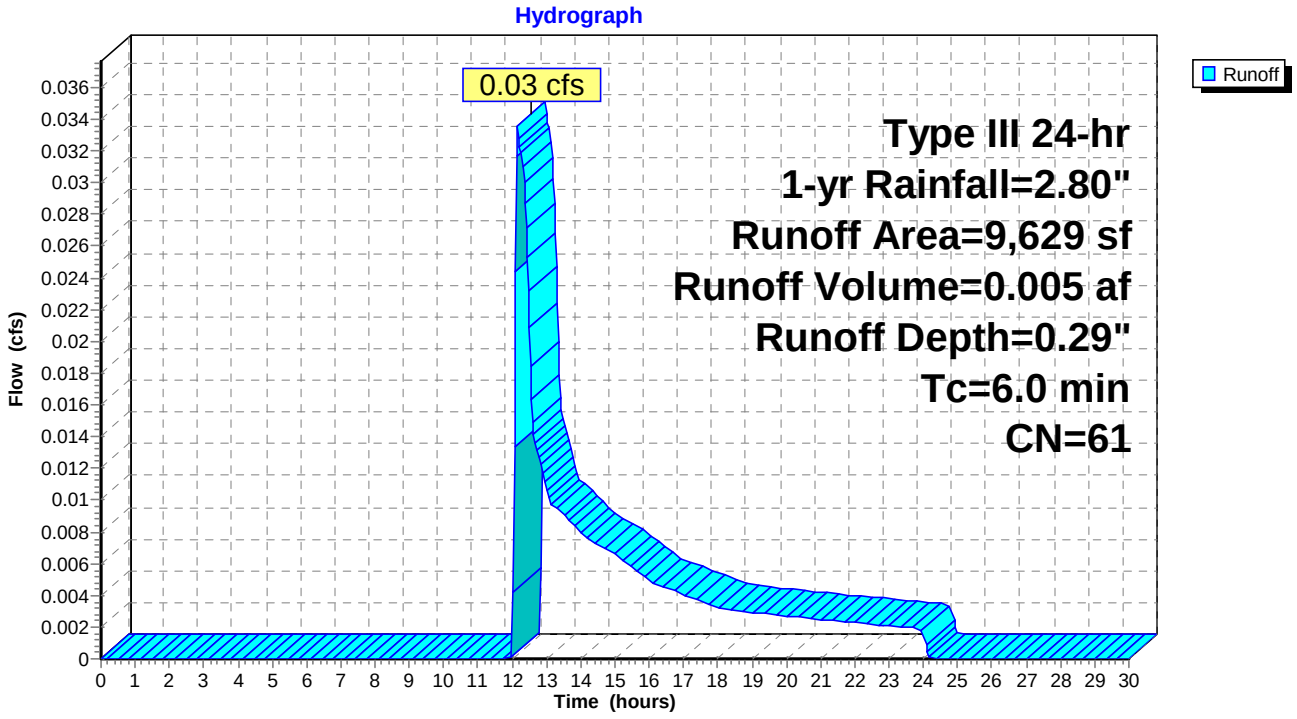
Runoff = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af, Depth= 0.29"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC



Summary for Subcatchment 9S: UNITS 14-20

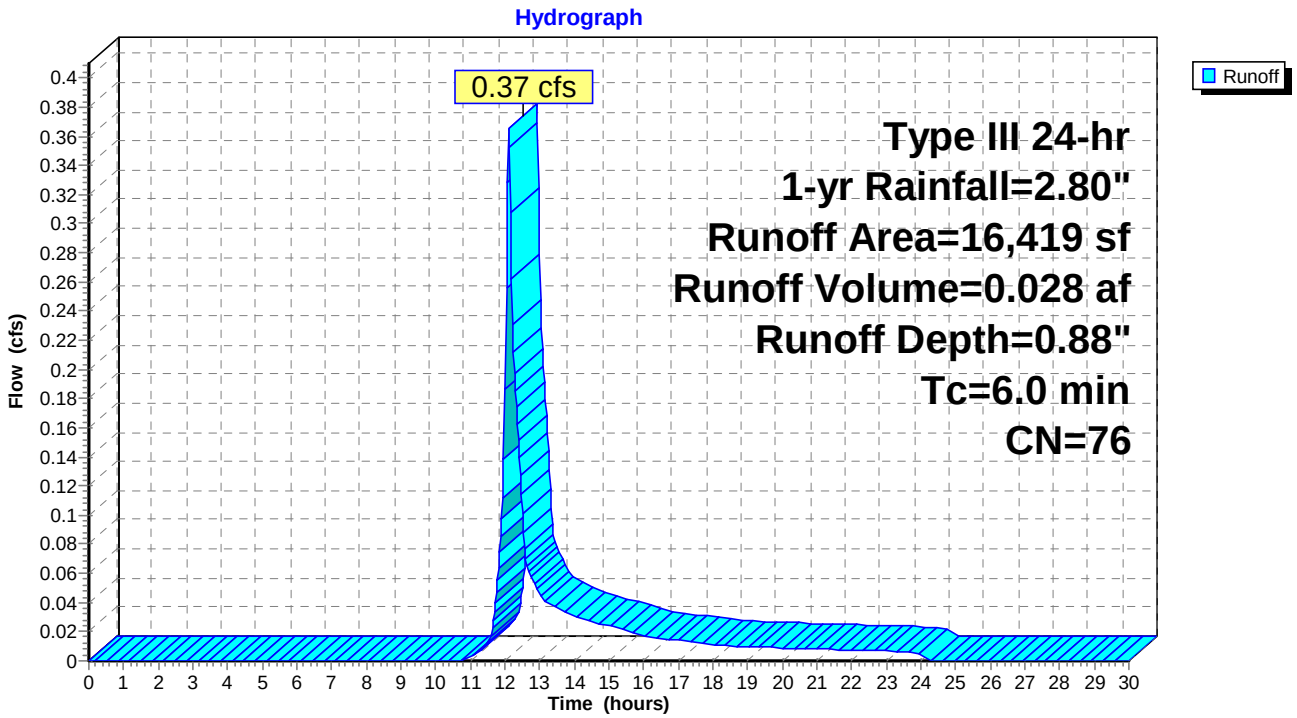
Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.028 af, Depth= 0.88"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20



Summary for Subcatchment 10S: UNITS 4-7

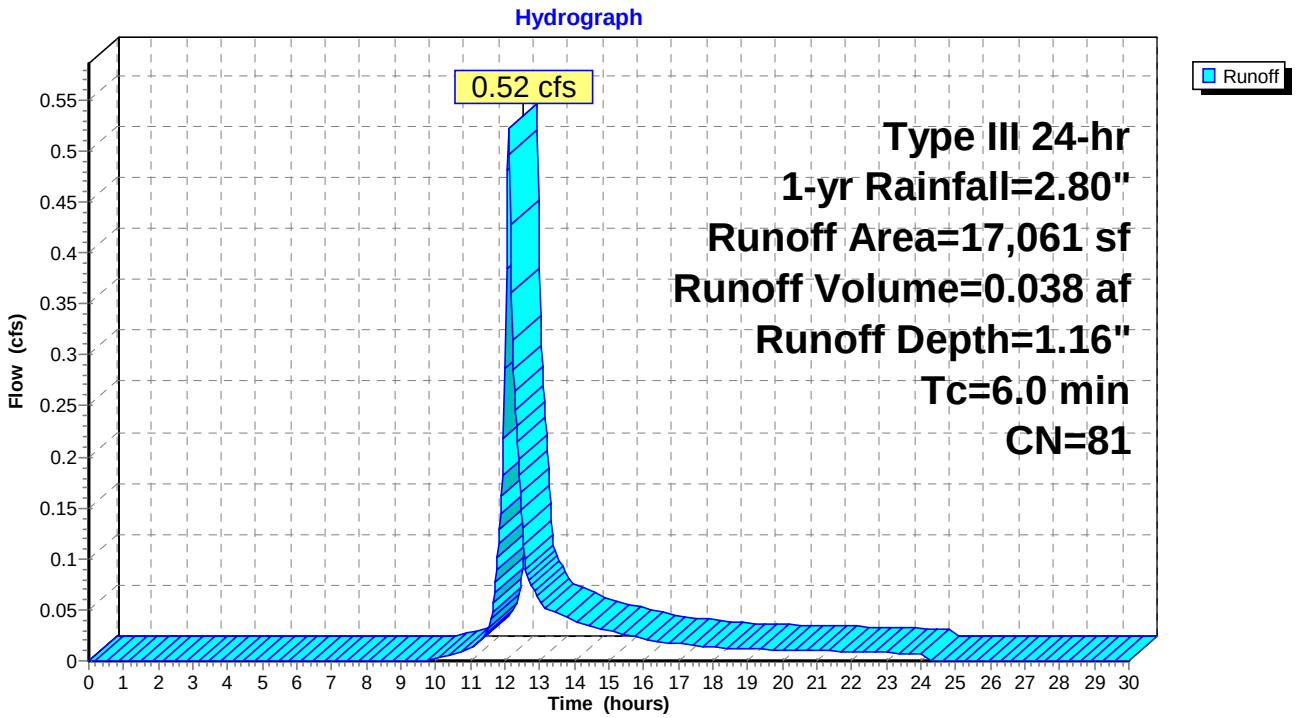
Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 1.16"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



Summary for Subcatchment 11S: UNITS 8-13

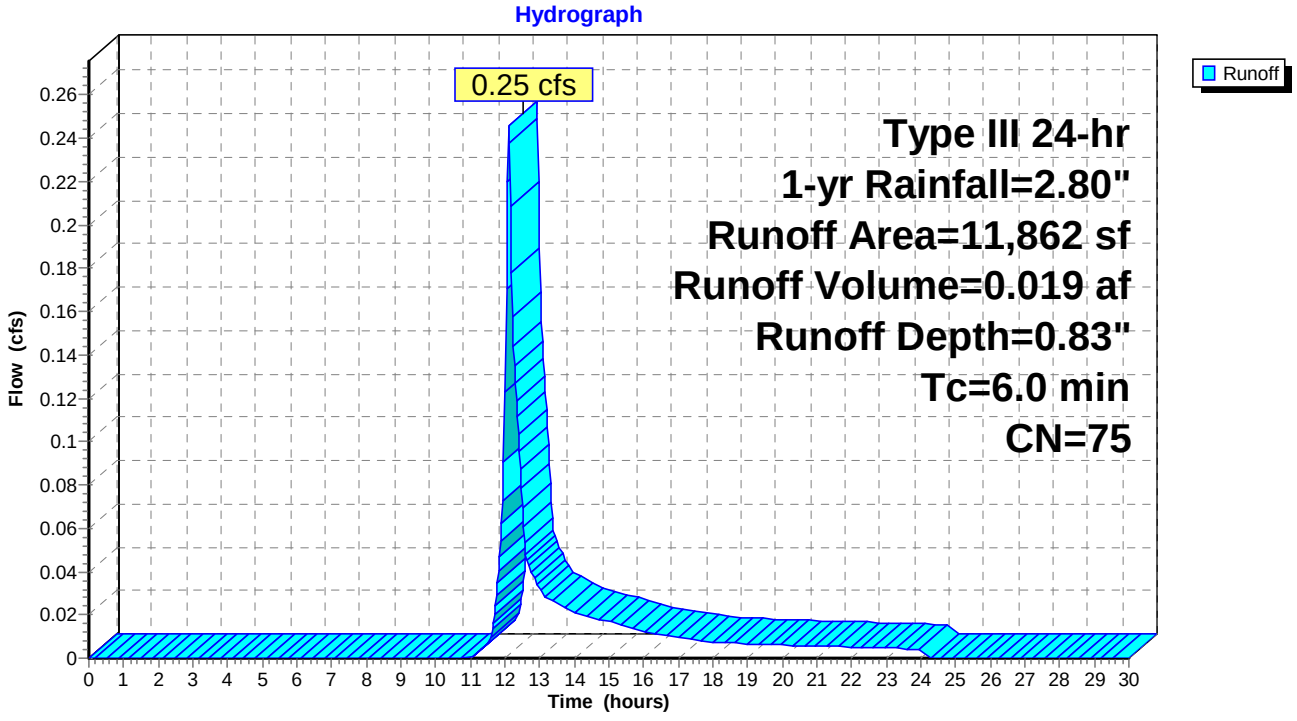
Runoff = 0.25 cfs @ 12.10 hrs, Volume= 0.019 af, Depth= 0.83"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13



Summary for Subcatchment 12S: PARKING

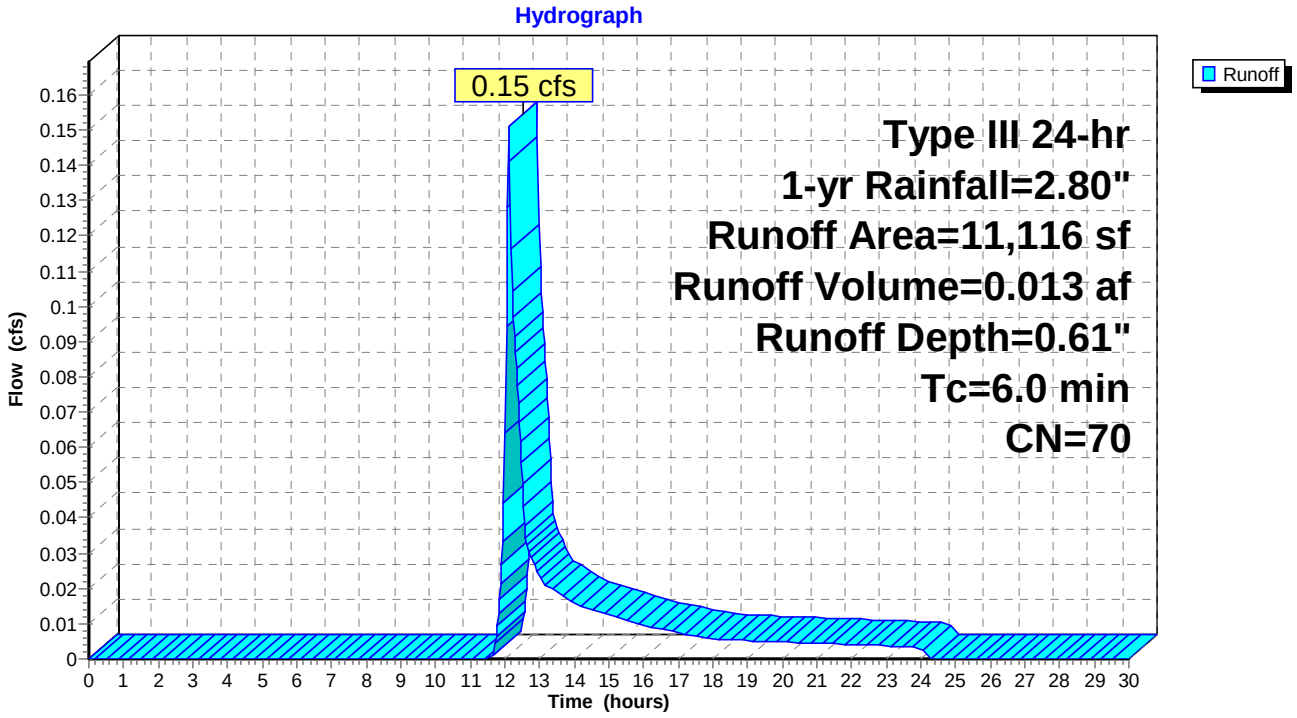
Runoff = 0.15 cfs @ 12.10 hrs, Volume= 0.013 af, Depth= 0.61"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



Summary for Subcatchment 13S: WEST SWALE

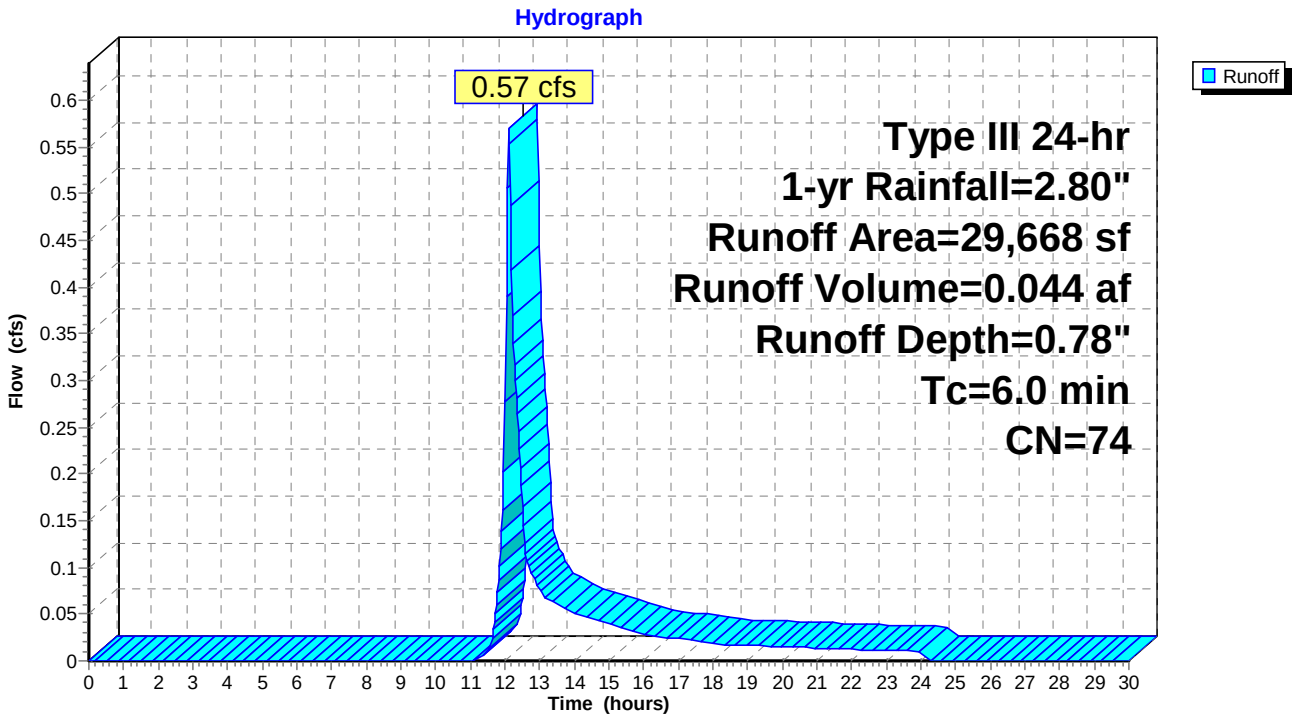
Runoff = 0.57 cfs @ 12.10 hrs, Volume= 0.044 af, Depth= 0.78"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE



Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 0.78" for 1-yr event
Inflow = 0.57 cfs @ 12.10 hrs, Volume= 0.044 af
Outflow = 0.53 cfs @ 12.17 hrs, Volume= 0.044 af, Atten= 6%, Lag= 4.1 min
Routed to Pond 8P : INFIL-1

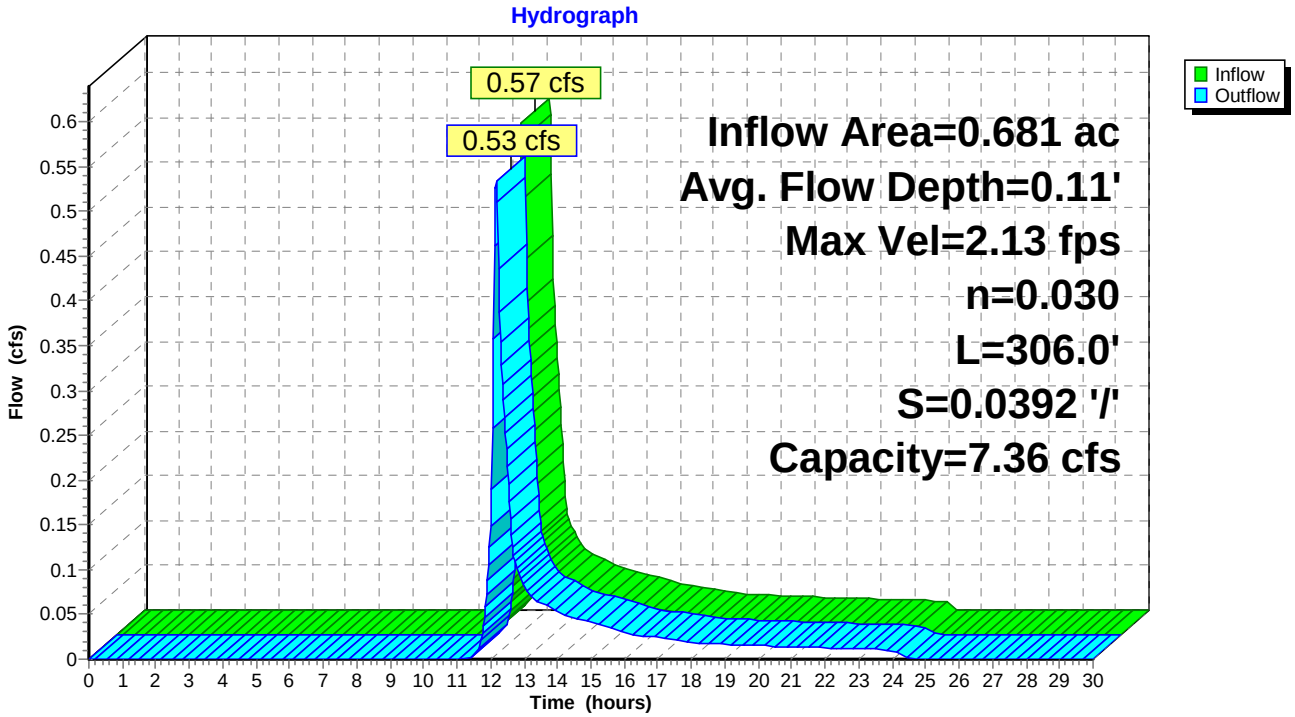
Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 2.13 fps, Min. Travel Time= 2.4 min
Avg. Velocity = 0.66 fps, Avg. Travel Time= 7.7 min

Peak Storage= 78 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.11' , Surface Width= 2.46'
Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 2.0 '/' Top Width= 4.00'
Length= 306.0' Slope= 0.0392 '/'
Inlet Invert= 138.00', Outlet Invert= 126.00'

‡

Reach 14R: WEST SWALE



Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 0.39" for 1-yr event
Inflow = 0.56 cfs @ 12.17 hrs, Volume= 0.049 af
Outflow = 0.05 cfs @ 15.02 hrs, Volume= 0.049 af, Atten= 92%, Lag= 171.4 min
Discarded = 0.05 cfs @ 15.02 hrs, Volume= 0.049 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 124.56' @ 15.02 hrs Surf.Area= 1,954 sf Storage= 920 cf

Plug-Flow detention time= 233.3 min calculated for 0.049 af (100% of inflow)
Center-of-Mass det. time= 233.2 min (1,116.7 - 883.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

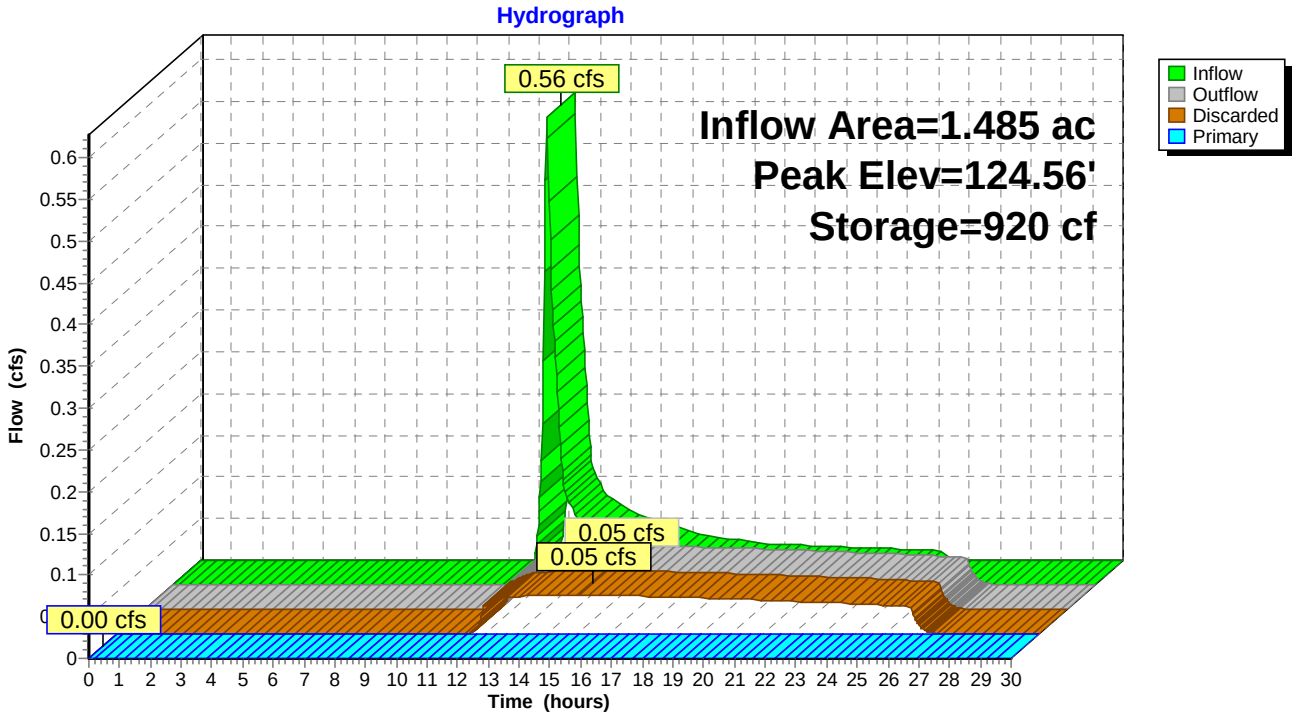
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	125.53'	**30.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.05 cfs @ 15.02 hrs HW=124.56' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=124.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: INFIL-1



Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 1.16" for 1-yr event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.038 af
Outflow = 0.04 cfs @ 13.78 hrs, Volume= 0.038 af, Atten= 92%, Lag= 101.2 min
Discarded = 0.04 cfs @ 13.78 hrs, Volume= 0.038 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 137.41' @ 13.78 hrs Surf.Area= 1,781 sf Storage= 690 cf

Plug-Flow detention time= 164.1 min calculated for 0.038 af (100% of inflow)
Center-of-Mass det. time= 164.0 min (1,010.4 - 846.4)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

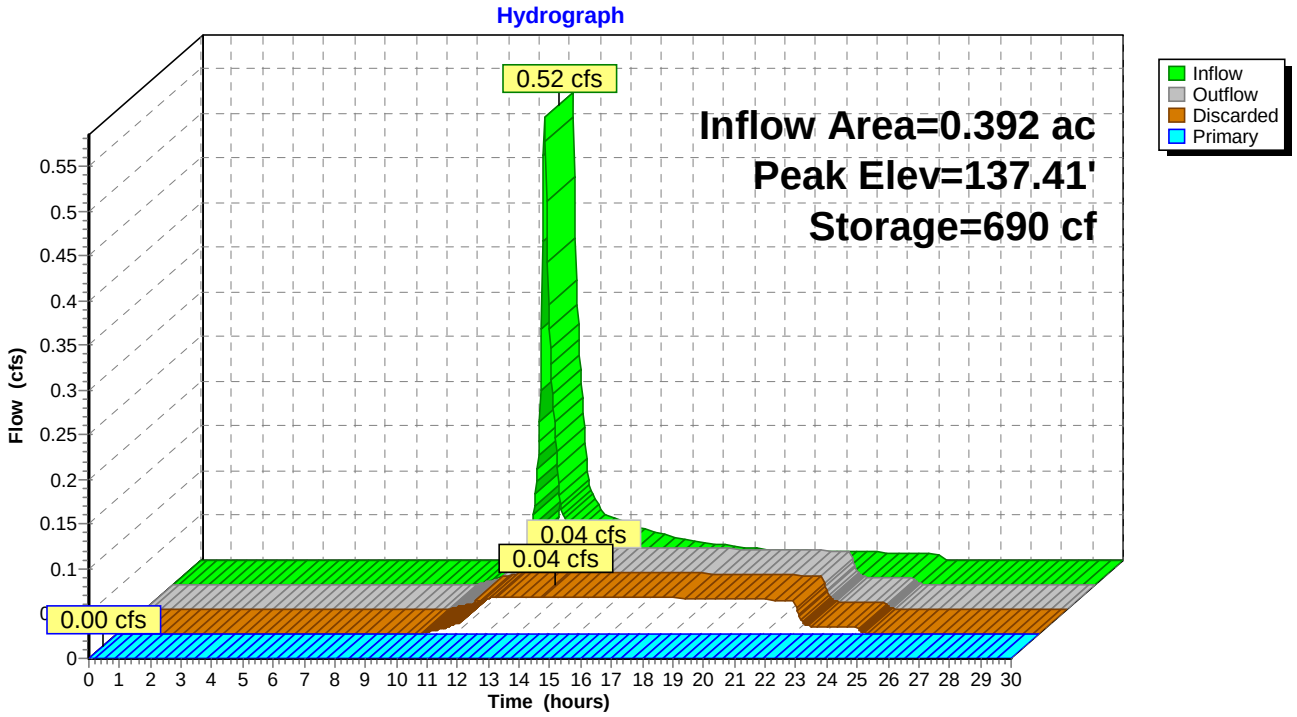
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	137.58'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 13.78 hrs HW=137.41' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=137.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: BIO-1


Hydrograph
Inflow
Outflow
Discarded
Primary
0.52 cfs
0.04 cfs
0.04 cfs
0.00 cfs
Inflow Area=0.392 ac
Peak Elev=137.41'
Storage=690 cf
Flow (cfs)
0 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55
Time (hours)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 0.34" for 1-yr event
Inflow = 0.25 cfs @ 12.10 hrs, Volume= 0.019 af
Outflow = 0.04 cfs @ 12.73 hrs, Volume= 0.019 af, Atten= 84%, Lag= 38.2 min
Discarded = 0.04 cfs @ 12.73 hrs, Volume= 0.019 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 132.15' @ 12.73 hrs Surf.Area= 1,703 sf Storage= 246 cf

Plug-Flow detention time= 51.7 min calculated for 0.019 af (100% of inflow)
Center-of-Mass det. time= 51.7 min (919.1 - 867.4)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

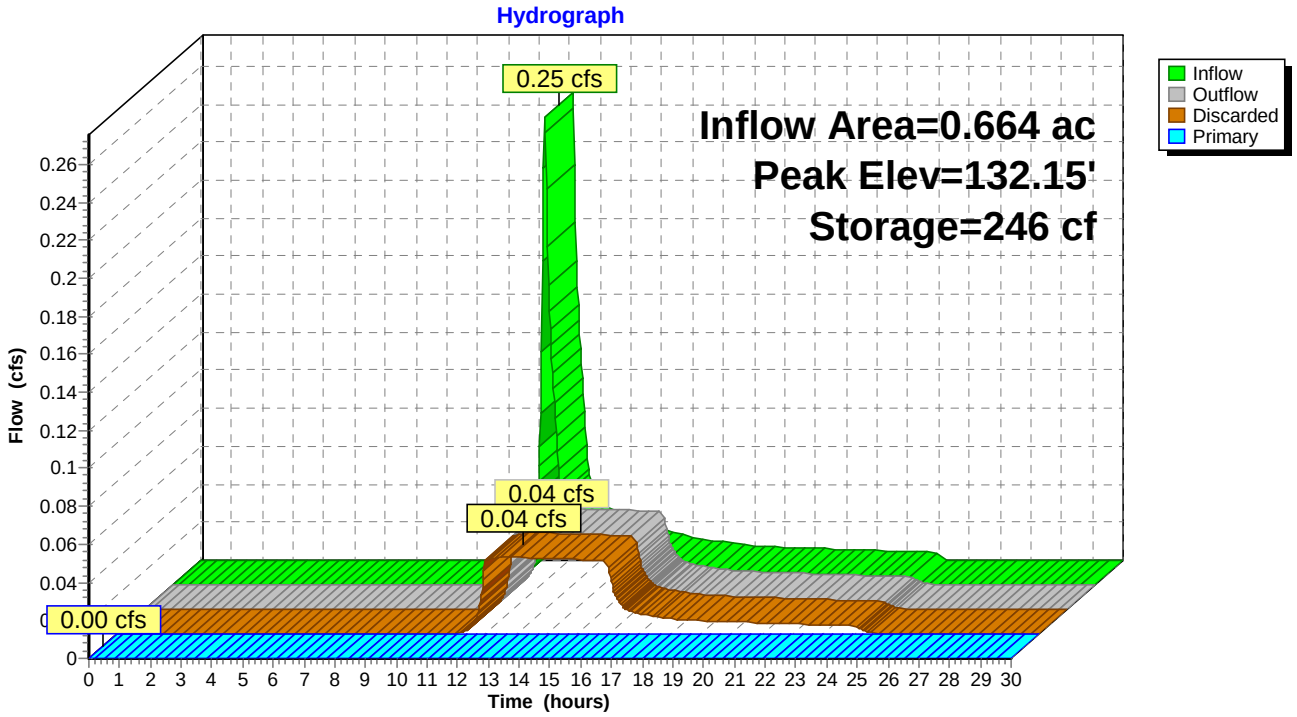
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	133.33'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 12.73 hrs HW=132.15' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 12P: BIO-2



Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 0.77" for 1-yr event
Inflow = 0.52 cfs @ 12.10 hrs, Volume= 0.041 af
Outflow = 0.06 cfs @ 13.29 hrs, Volume= 0.041 af, Atten= 89%, Lag= 71.4 min
Discarded = 0.06 cfs @ 13.29 hrs, Volume= 0.041 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 127.25' @ 13.29 hrs Surf.Area= 2,516 sf Storage= 611 cf

Plug-Flow detention time= 99.2 min calculated for 0.041 af (100% of inflow)
Center-of-Mass det. time= 99.0 min (970.0 - 871.0)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

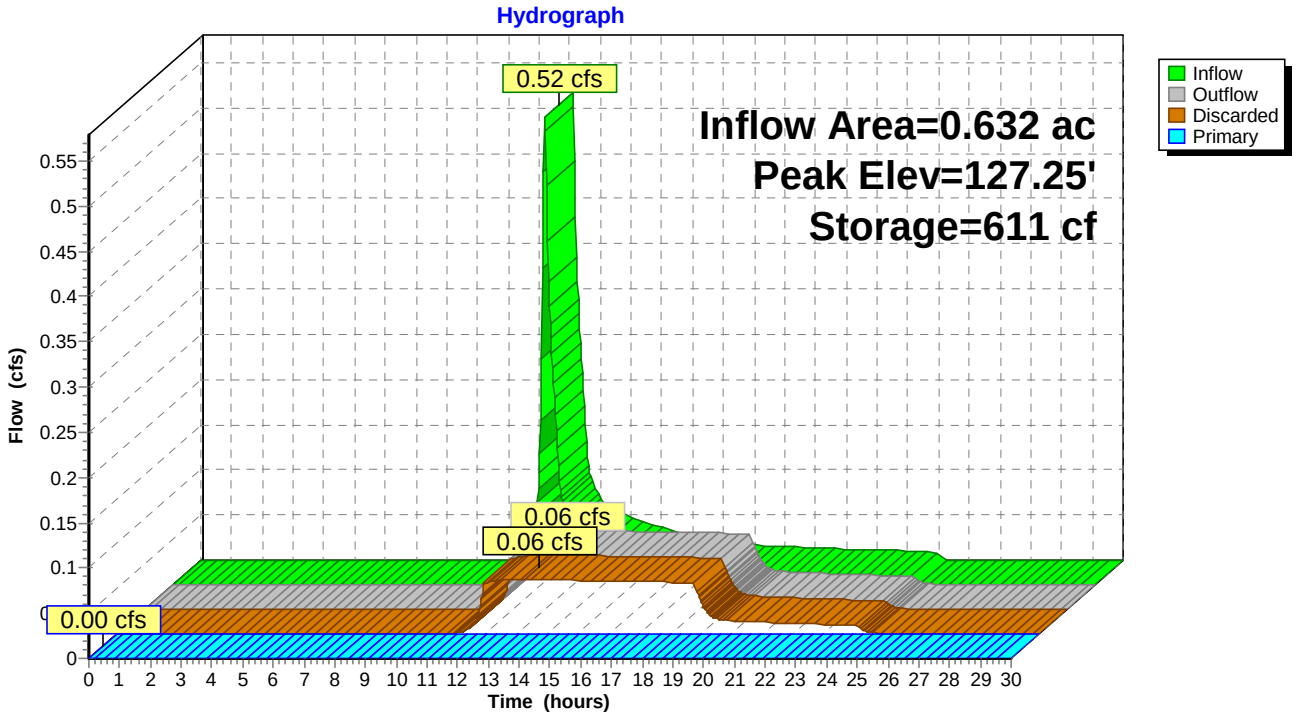
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	128.58'	**5.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.06 cfs @ 13.29 hrs HW=127.25' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 13P: BIO-3

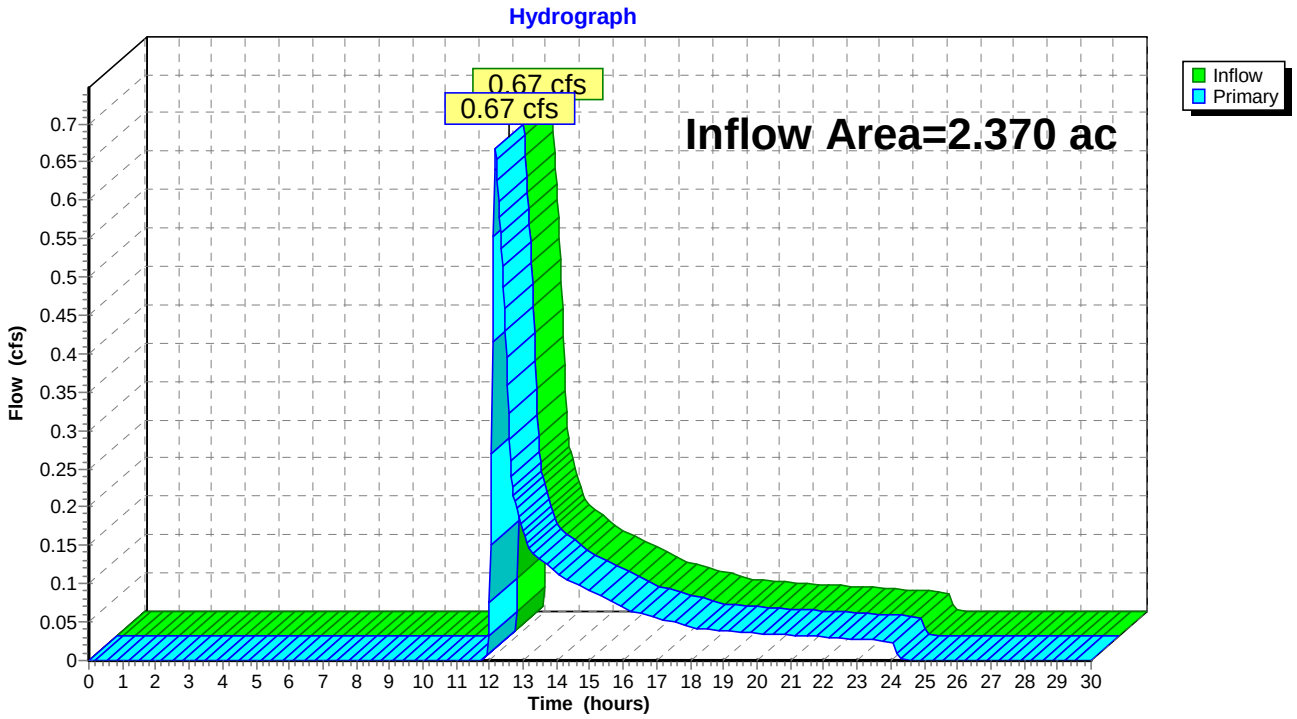


Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 0.42" for 1-yr event
Inflow = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af
Primary = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

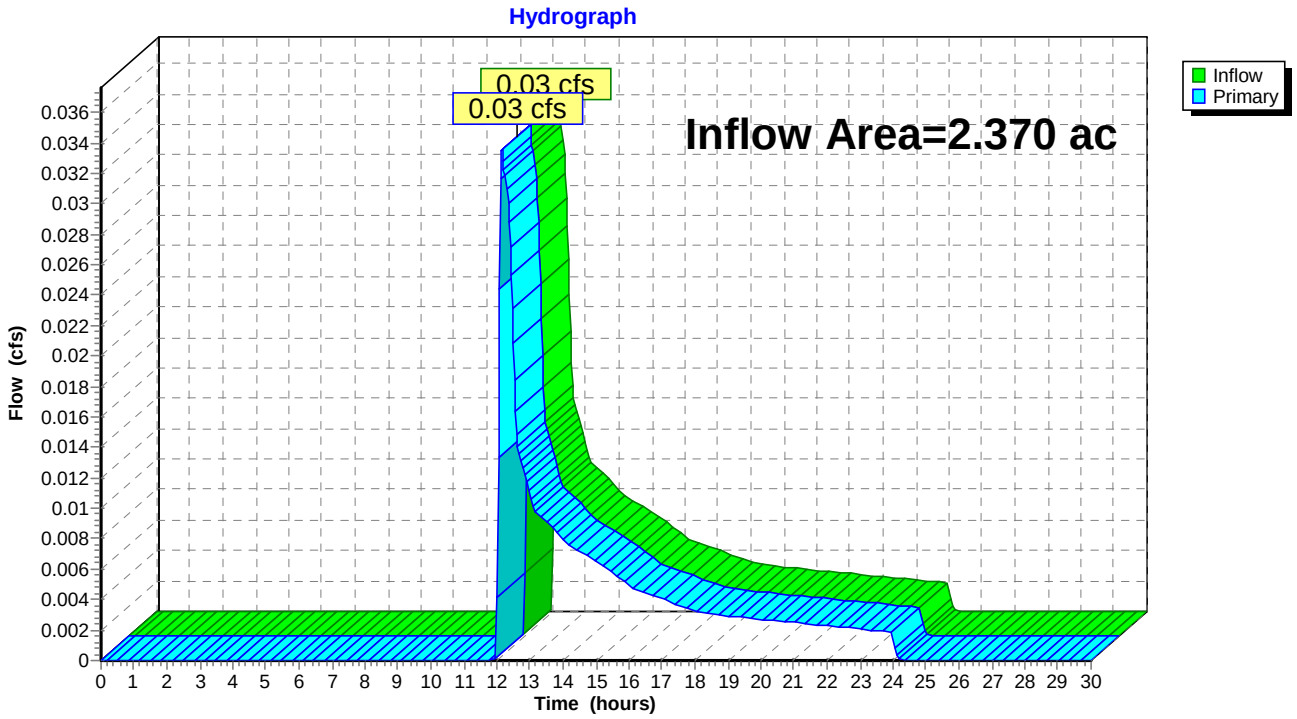


Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.03" for 1-yr event
Inflow = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af
Primary = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE



Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=1.59"
Flow Length=375' Tc=9.9 min CN=65 Runoff=3.63 cfs 0.313 af

Subcatchment 5S: CONT Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=1.31"
Tc=6.0 min CN=61 Runoff=0.24 cfs 0.019 af

Subcatchment 6S: UNC Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=1.31"
Tc=6.0 min CN=61 Runoff=0.31 cfs 0.024 af

Subcatchment 9S: UNITS 14-20 Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=2.45"
Tc=6.0 min CN=76 Runoff=1.08 cfs 0.077 af

Subcatchment 10S: UNITS 4-7 Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=2.90"
Tc=6.0 min CN=81 Runoff=1.32 cfs 0.095 af

Subcatchment 11S: UNITS 8-13 Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=2.37"
Tc=6.0 min CN=75 Runoff=0.75 cfs 0.054 af

Subcatchment 12S: PARKING Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=1.96"
Tc=6.0 min CN=70 Runoff=0.57 cfs 0.042 af

Subcatchment 13S: WEST SWALE Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=2.28"
Tc=6.0 min CN=74 Runoff=1.81 cfs 0.130 af

Reach 14R: WEST SWALE Avg. Flow Depth=0.23' Max Vel=3.17 fps Inflow=1.81 cfs 0.130 af
n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=1.75 cfs 0.130 af

Pond 8P: INFIL-1 Peak Elev=125.54' Storage=3,376 cf Inflow=1.97 cfs 0.148 af
Discarded=0.07 cfs 0.102 af Primary=0.11 cfs 0.014 af Outflow=0.18 cfs 0.116 af

Pond 9P: BIO-1 Peak Elev=137.70' Storage=1,227 cf Inflow=1.32 cfs 0.095 af
Discarded=0.05 cfs 0.062 af Primary=0.64 cfs 0.033 af Outflow=0.68 cfs 0.095 af

Pond 12P: BIO-2 Peak Elev=133.23' Storage=2,412 cf Inflow=1.06 cfs 0.087 af
Discarded=0.05 cfs 0.078 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.078 af

Pond 13P: BIO-3 Peak Elev=128.08' Storage=2,885 cf Inflow=1.65 cfs 0.119 af
Discarded=0.07 cfs 0.106 af Primary=0.00 cfs 0.000 af Outflow=0.07 cfs 0.106 af

Link 3L: PRE-SITE Inflow=3.63 cfs 0.313 af
Primary=3.63 cfs 0.313 af

Link 7L: POST-SITE Inflow=0.31 cfs 0.038 af
Primary=0.31 cfs 0.038 af

Total Runoff Area = 4.740 ac Runoff Volume = 0.753 af Average Runoff Depth = 1.91"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

Summary for Subcatchment 2S: PRE

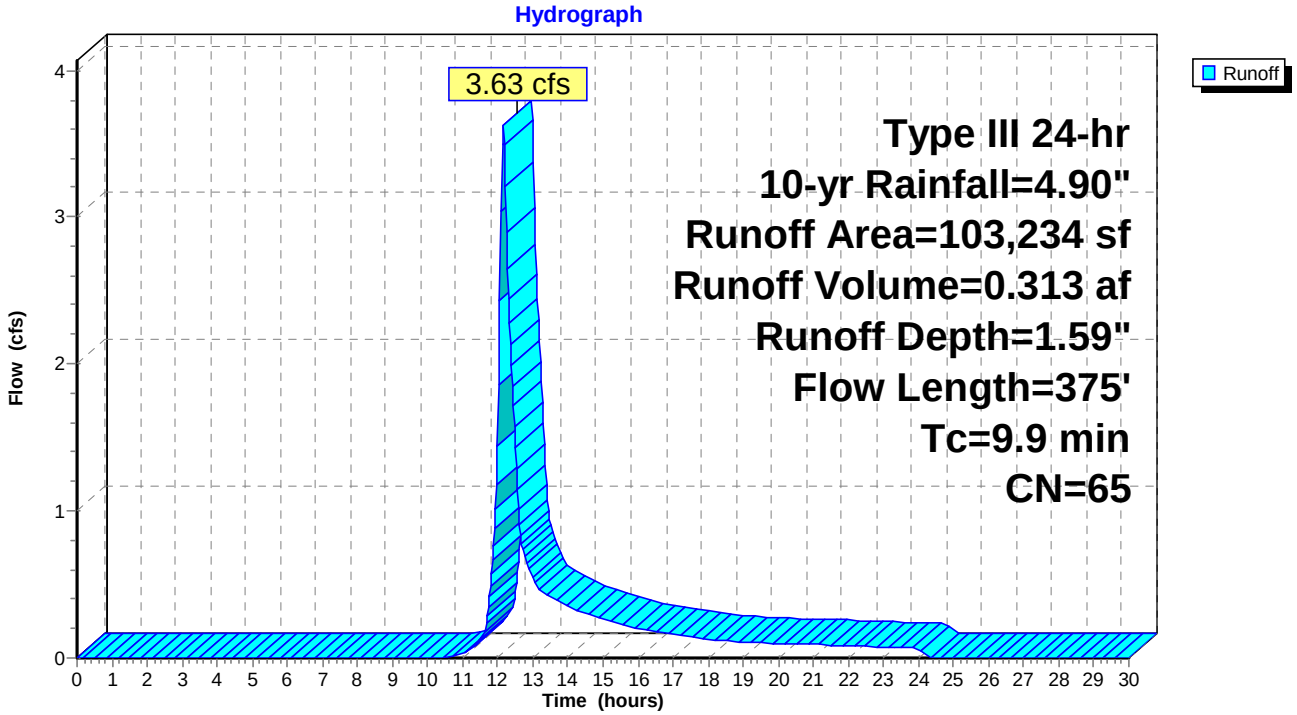
Runoff = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af, Depth= 1.59"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE



Summary for Subcatchment 5S: CONT

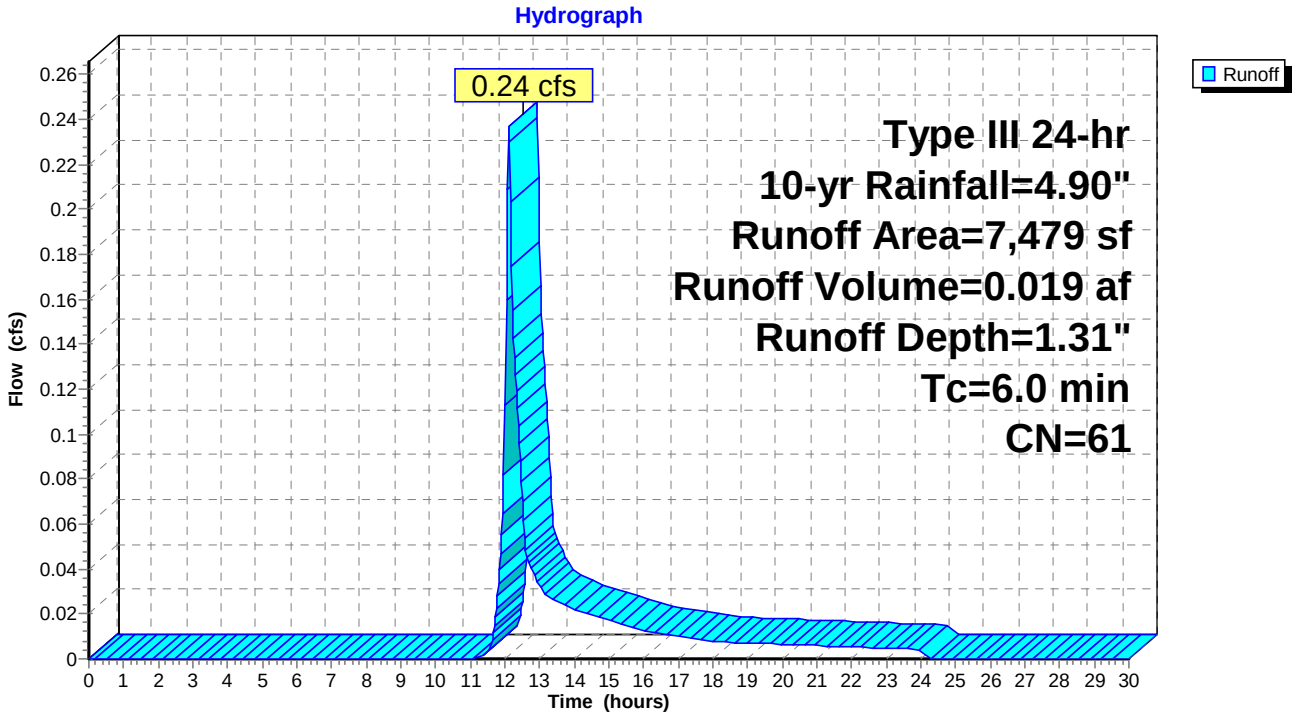
Runoff = 0.24 cfs @ 12.10 hrs, Volume= 0.019 af, Depth= 1.31"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



Summary for Subcatchment 6S: UNC

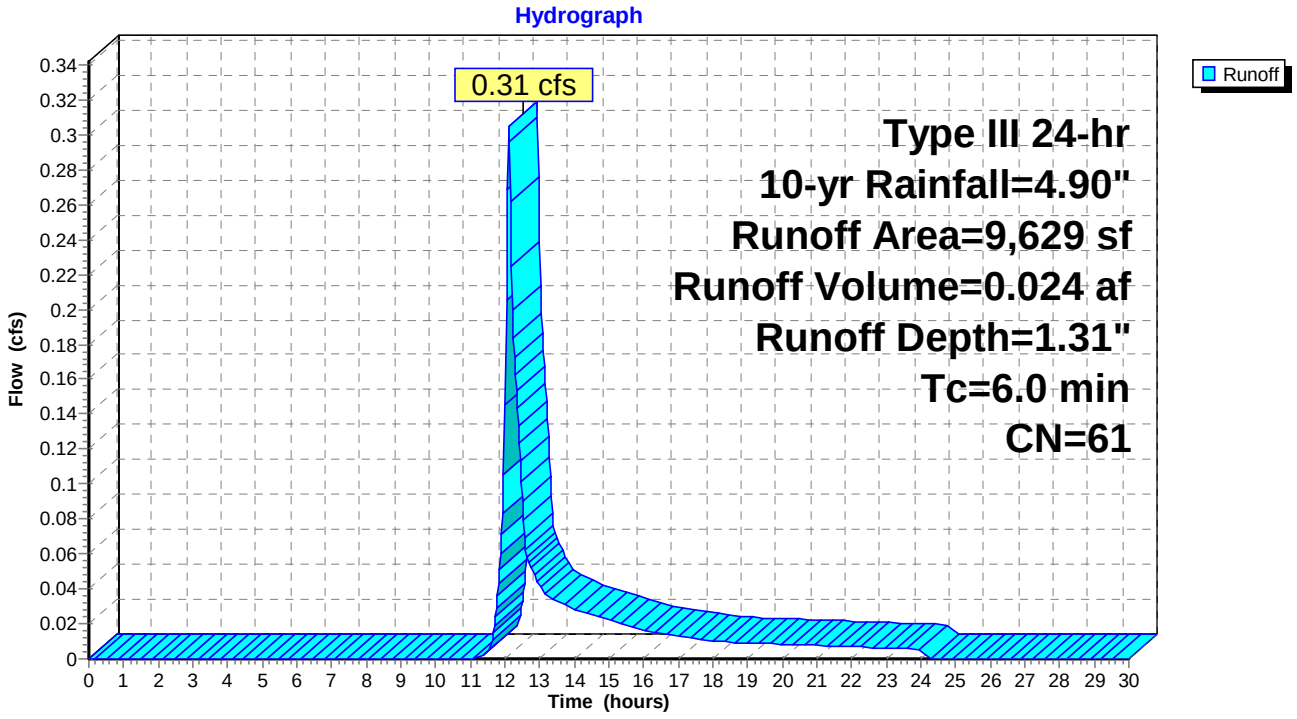
Runoff = 0.31 cfs @ 12.10 hrs, Volume= 0.024 af, Depth= 1.31"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC



Summary for Subcatchment 9S: UNITS 14-20

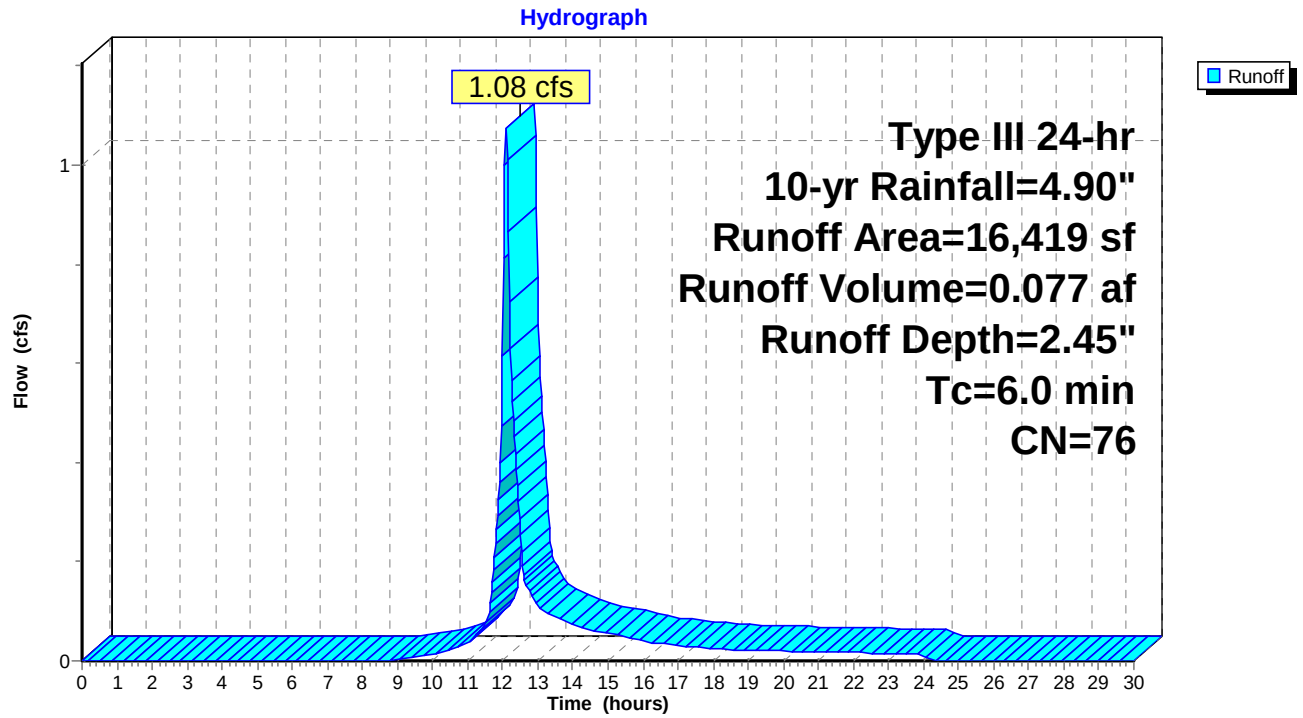
Runoff = 1.08 cfs @ 12.09 hrs, Volume= 0.077 af, Depth= 2.45"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20



Summary for Subcatchment 10S: UNITS 4-7

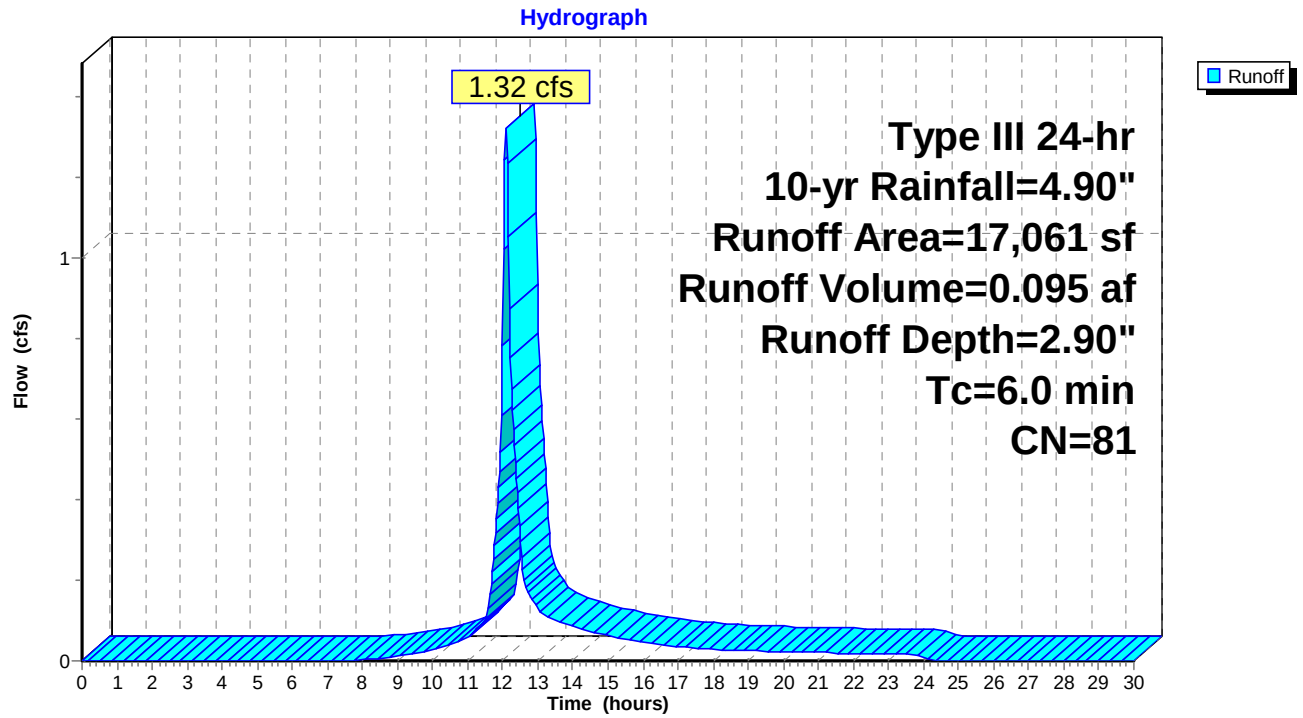
Runoff = 1.32 cfs @ 12.09 hrs, Volume= 0.095 af, Depth= 2.90"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



Summary for Subcatchment 11S: UNITS 8-13

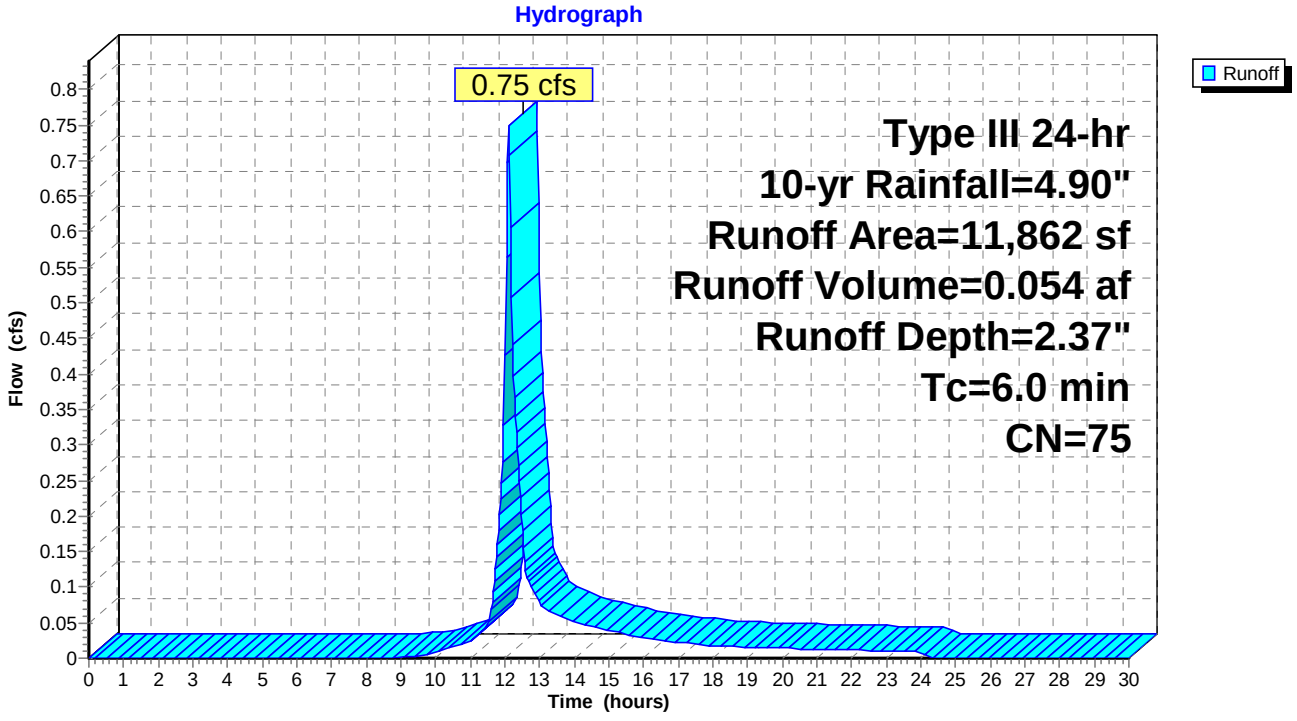
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 2.37"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13



Summary for Subcatchment 12S: PARKING

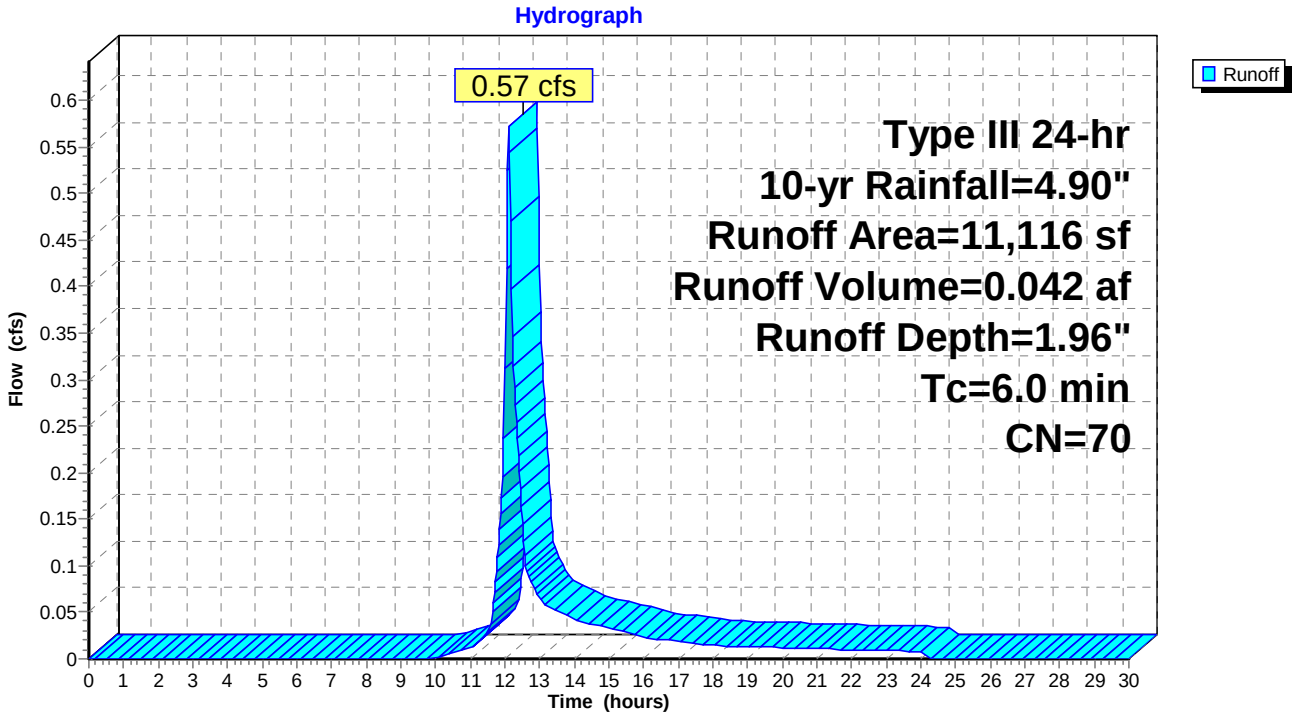
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Depth= 1.96"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



Summary for Subcatchment 13S: WEST SWALE

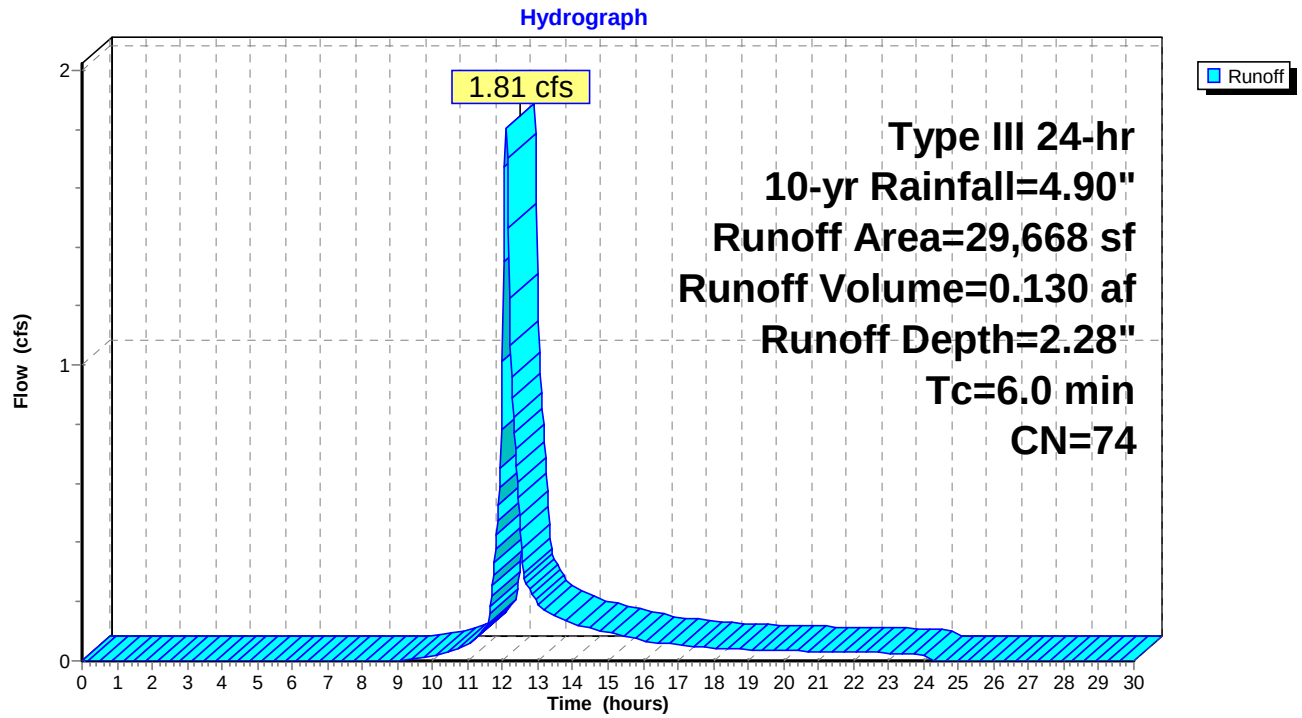
Runoff = 1.81 cfs @ 12.09 hrs, Volume= 0.130 af, Depth= 2.28"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE



Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 2.28" for 10-yr event
Inflow = 1.81 cfs @ 12.09 hrs, Volume= 0.130 af
Outflow = 1.75 cfs @ 12.14 hrs, Volume= 0.130 af, Atten= 3%, Lag= 2.8 min
Routed to Pond 8P : INFIL-1

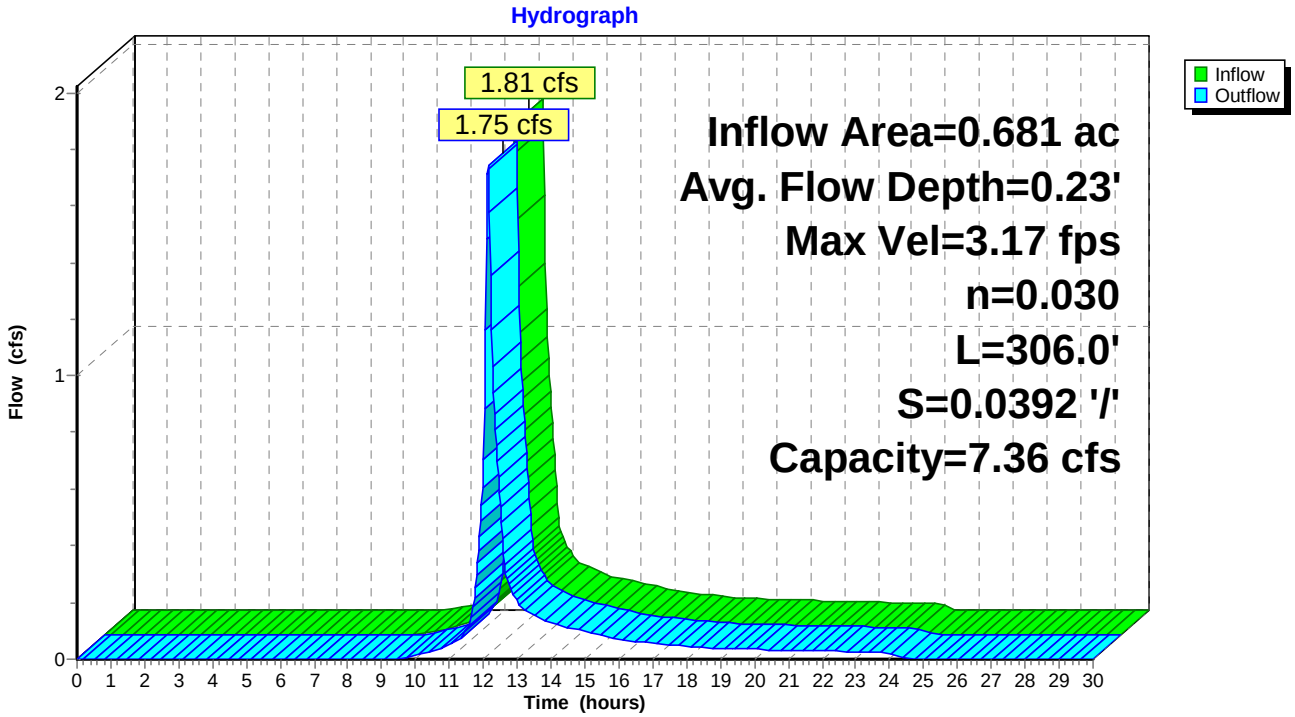
Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 3.17 fps, Min. Travel Time= 1.6 min
Avg. Velocity = 0.90 fps, Avg. Travel Time= 5.7 min

Peak Storage= 169 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.23' , Surface Width= 2.90'
Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 2.0 '/' Top Width= 4.00'
Length= 306.0' Slope= 0.0392 '/'
Inlet Invert= 138.00', Outlet Invert= 126.00'

‡

Reach 14R: WEST SWALE



Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 1.20" for 10-yr event
Inflow = 1.97 cfs @ 12.13 hrs, Volume= 0.148 af
Outflow = 0.18 cfs @ 13.52 hrs, Volume= 0.116 af, Atten= 91%, Lag= 83.4 min
Discarded = 0.07 cfs @ 13.52 hrs, Volume= 0.102 af
Primary = 0.11 cfs @ 13.52 hrs, Volume= 0.014 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 125.54' @ 13.52 hrs Surf.Area= 3,032 sf Storage= 3,376 cf

Plug-Flow detention time= 405.5 min calculated for 0.116 af (78% of inflow)
Center-of-Mass det. time= 321.6 min (1,169.1 - 847.5)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

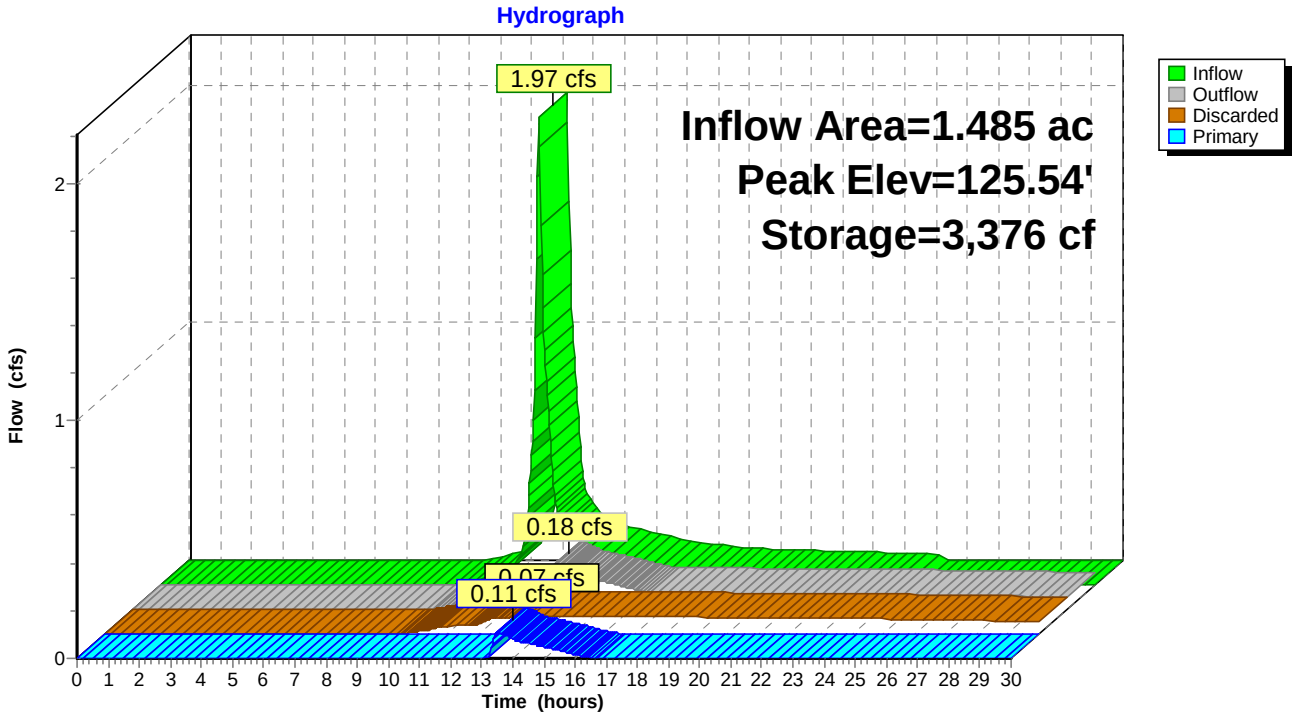
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	125.53'	**30.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.07 cfs @ 13.52 hrs HW=125.54' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.10 cfs @ 13.52 hrs HW=125.54' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 0.10 cfs @ 0.27 fps)

Pond 8P: INFIL-1



Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 2.90" for 10-yr event
Inflow = 1.32 cfs @ 12.09 hrs, Volume= 0.095 af
Outflow = 0.68 cfs @ 12.24 hrs, Volume= 0.095 af, Atten= 48%, Lag= 9.1 min
Discarded = 0.05 cfs @ 12.24 hrs, Volume= 0.062 af
Primary = 0.64 cfs @ 12.24 hrs, Volume= 0.033 af
Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 137.70' @ 12.24 hrs Surf.Area= 1,921 sf Storage= 1,227 cf

Plug-Flow detention time= 167.6 min calculated for 0.095 af (100% of inflow)
Center-of-Mass det. time= 167.5 min (987.5 - 819.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

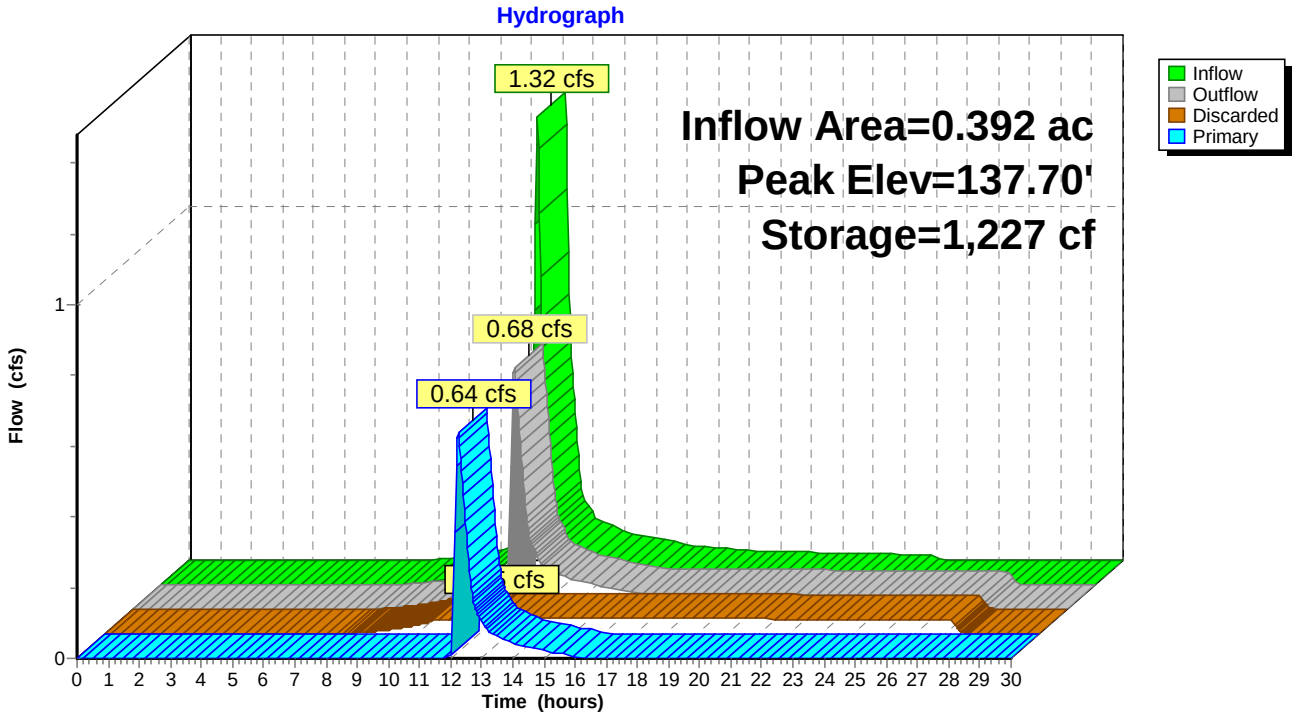
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	137.58'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.24 hrs HW=137.70' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.64 cfs @ 12.24 hrs HW=137.70' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 0.64 cfs @ 0.88 fps)

Pond 9P: BIO-1


Hydrograph
Inflow
Outflow
Discarded
Primary
1.32 cfs
0.68 cfs
0.64 cfs
Inflow Area=0.392 ac
Peak Elev=137.70'
Storage=1,227 cf
Flow (cfs)
0
1
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Time (hours)

Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 1.56" for 10-yr event
Inflow = 1.06 cfs @ 12.20 hrs, Volume= 0.087 af
Outflow = 0.05 cfs @ 15.25 hrs, Volume= 0.078 af, Atten= 95%, Lag= 182.9 min
Discarded = 0.05 cfs @ 15.25 hrs, Volume= 0.078 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 133.23' @ 15.25 hrs Surf.Area= 2,320 sf Storage= 2,412 cf

Plug-Flow detention time= 440.1 min calculated for 0.078 af (90% of inflow)
Center-of-Mass det. time= 397.5 min (1,209.6 - 812.1)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

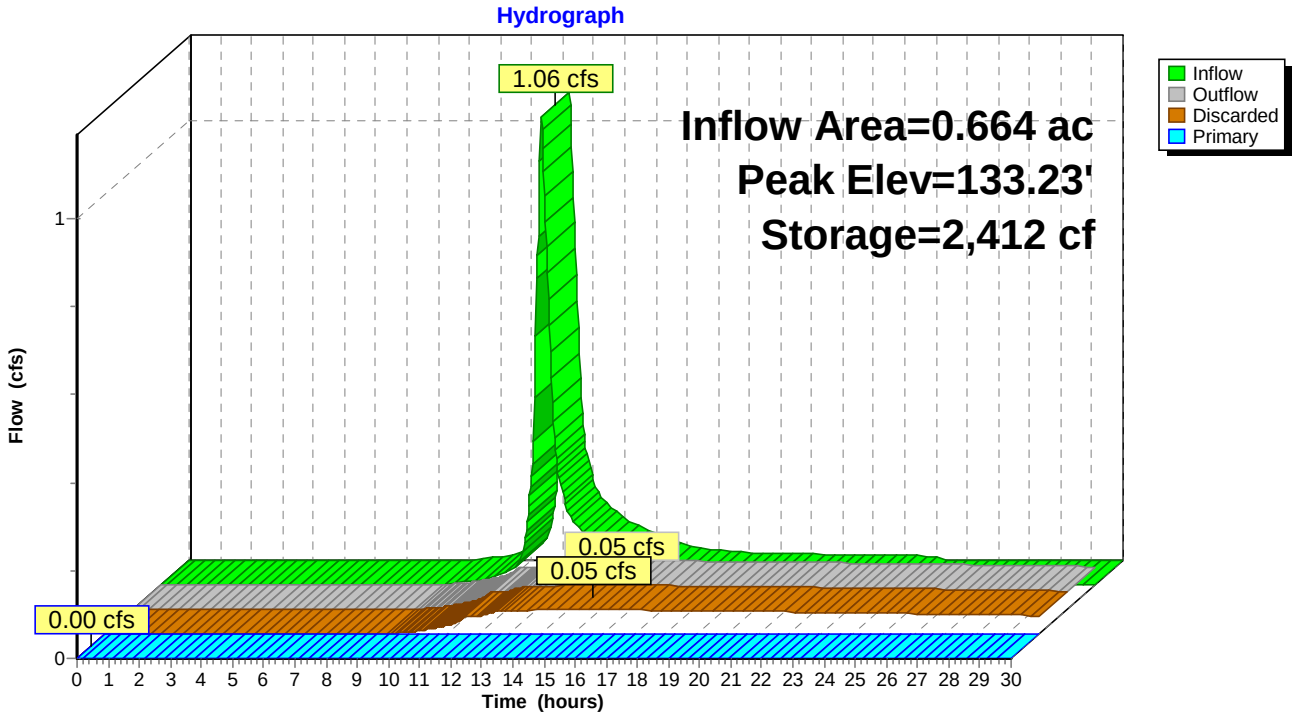
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	133.33'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 15.25 hrs HW=133.23' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 12P: BIO-2



Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 2.26" for 10-yr event
Inflow = 1.65 cfs @ 12.09 hrs, Volume= 0.119 af
Outflow = 0.07 cfs @ 15.75 hrs, Volume= 0.106 af, Atten= 96%, Lag= 219.6 min
Discarded = 0.07 cfs @ 15.75 hrs, Volume= 0.106 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 128.08' @ 15.75 hrs Surf.Area= 2,960 sf Storage= 2,885 cf

Plug-Flow detention time= 424.1 min calculated for 0.105 af (89% of inflow)
Center-of-Mass det. time= 371.4 min (1,210.1 - 838.7)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

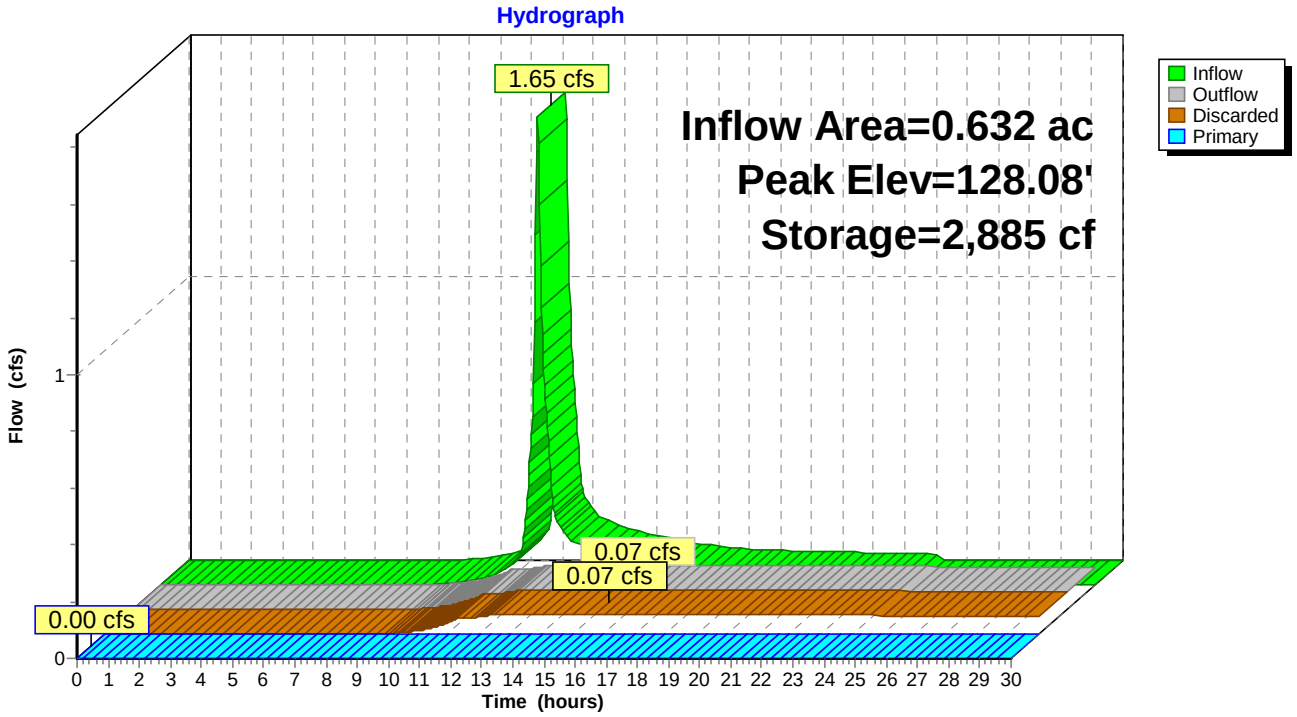
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	128.58'	**5.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.07 cfs @ 15.75 hrs HW=128.08' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)
2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 13P: BIO-3

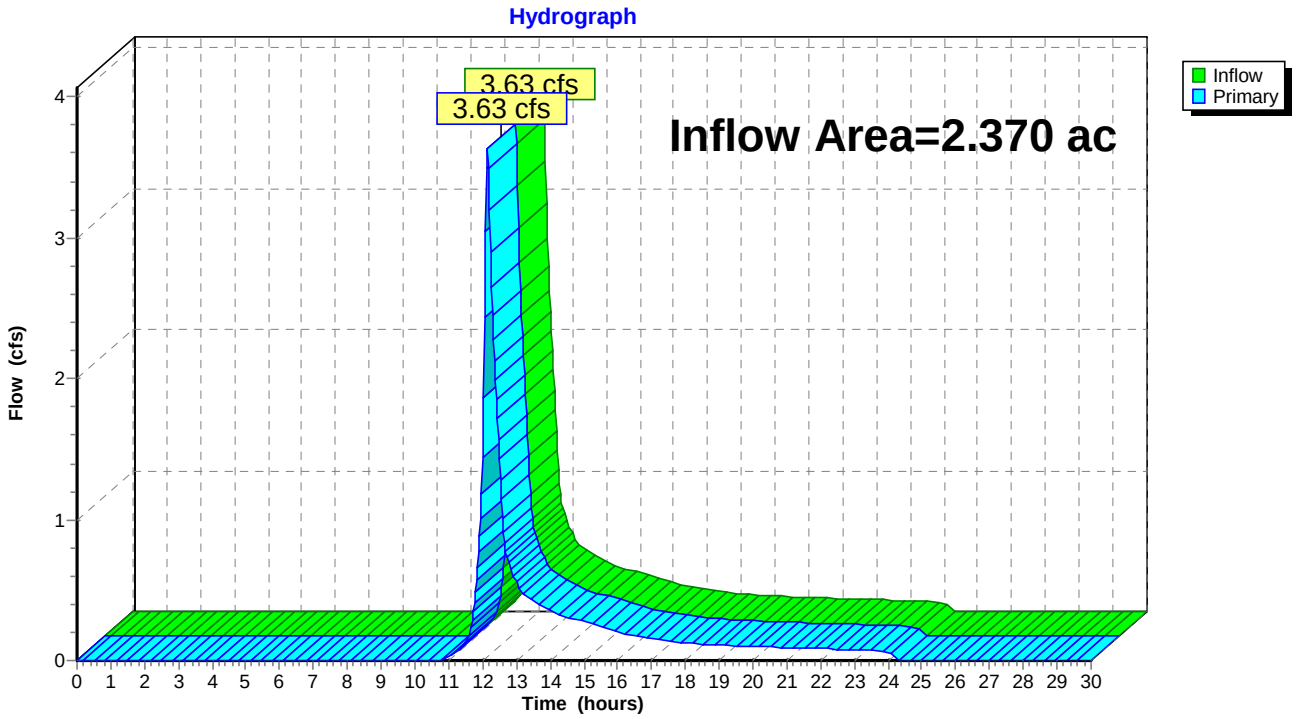


Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 1.59" for 10-yr event
Inflow = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af
Primary = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

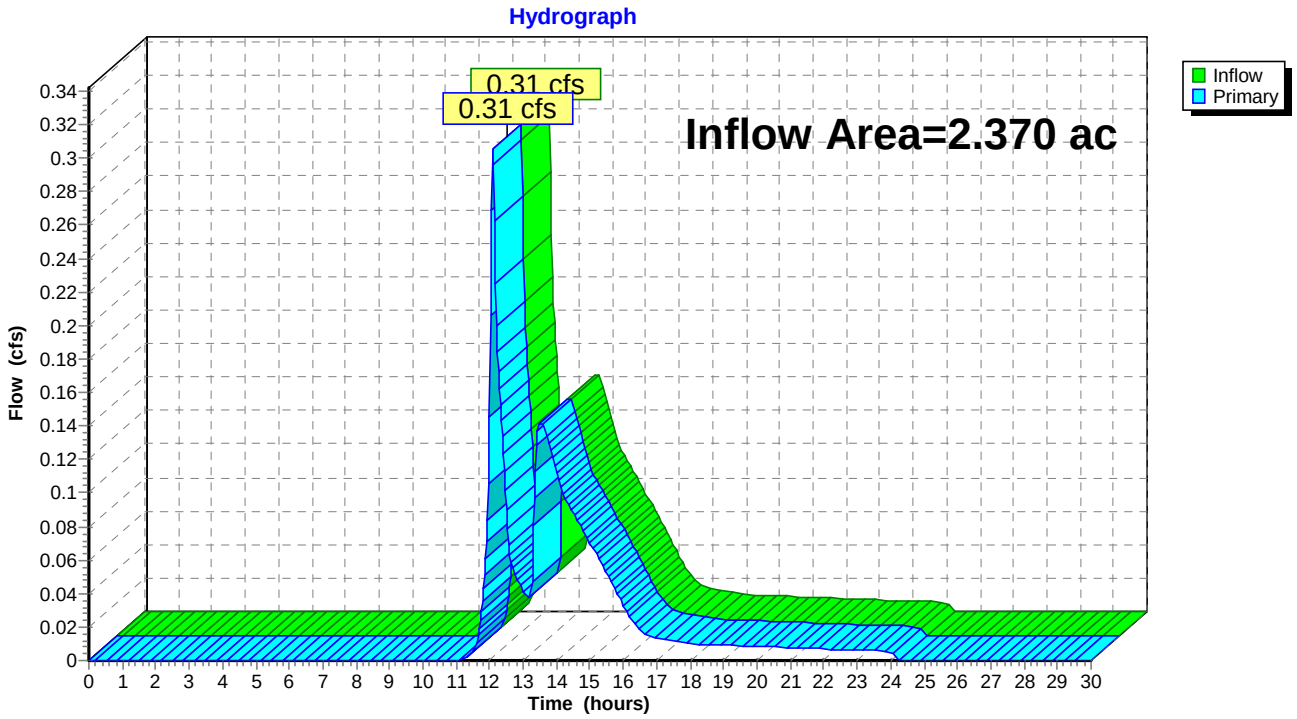


Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.19" for 10-yr event
Inflow = 0.31 cfs @ 12.10 hrs, Volume= 0.038 af
Primary = 0.31 cfs @ 12.10 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE



Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=2.42"
Flow Length=375' Tc=9.9 min CN=65 Runoff=5.74 cfs 0.479 af

Subcatchment 5S: CONT Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=2.07"
Tc=6.0 min CN=61 Runoff=0.40 cfs 0.030 af

Subcatchment 6S: UNC Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=2.07"
Tc=6.0 min CN=61 Runoff=0.51 cfs 0.038 af

Subcatchment 9S: UNITS 14-20 Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=3.47"
Tc=6.0 min CN=76 Runoff=1.52 cfs 0.109 af

Subcatchment 10S: UNITS 4-7 Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=3.97"
Tc=6.0 min CN=81 Runoff=1.80 cfs 0.130 af

Subcatchment 11S: UNITS 8-13 Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=3.37"
Tc=6.0 min CN=75 Runoff=1.07 cfs 0.076 af

Subcatchment 12S: PARKING Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=2.88"
Tc=6.0 min CN=70 Runoff=0.86 cfs 0.061 af

Subcatchment 13S: WEST SWALE Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=74 Runoff=2.60 cfs 0.186 af

Reach 14R: WEST SWALE Avg. Flow Depth=0.28' Max Vel=3.56 fps Inflow=2.60 cfs 0.186 af
n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=2.52 cfs 0.186 af

Pond 8P: INFIL-1 Peak Elev=125.59' Storage=3,534 cf Inflow=2.89 cfs 0.218 af
Discarded=0.07 cfs 0.108 af Primary=1.17 cfs 0.072 af Outflow=1.24 cfs 0.180 af

Pond 9P: BIO-1 Peak Elev=137.78' Storage=1,386 cf Inflow=1.80 cfs 0.130 af
Discarded=0.05 cfs 0.069 af Primary=1.39 cfs 0.061 af Outflow=1.43 cfs 0.130 af

Pond 12P: BIO-2 Peak Elev=133.43' Storage=2,899 cf Inflow=2.31 cfs 0.138 af
Discarded=0.06 cfs 0.084 af Primary=0.49 cfs 0.037 af Outflow=0.55 cfs 0.121 af

Pond 13P: BIO-3 Peak Elev=128.59' Storage=4,478 cf Inflow=2.38 cfs 0.170 af
Discarded=0.08 cfs 0.119 af Primary=0.02 cfs 0.002 af Outflow=0.10 cfs 0.122 af

Link 3L: PRE-SITE Inflow=5.74 cfs 0.479 af
Primary=5.74 cfs 0.479 af

Link 7L: POST-SITE Inflow=1.42 cfs 0.147 af
Primary=1.42 cfs 0.147 af

Total Runoff Area = 4.740 ac Runoff Volume = 1.109 af Average Runoff Depth = 2.81"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

Summary for Subcatchment 2S: PRE

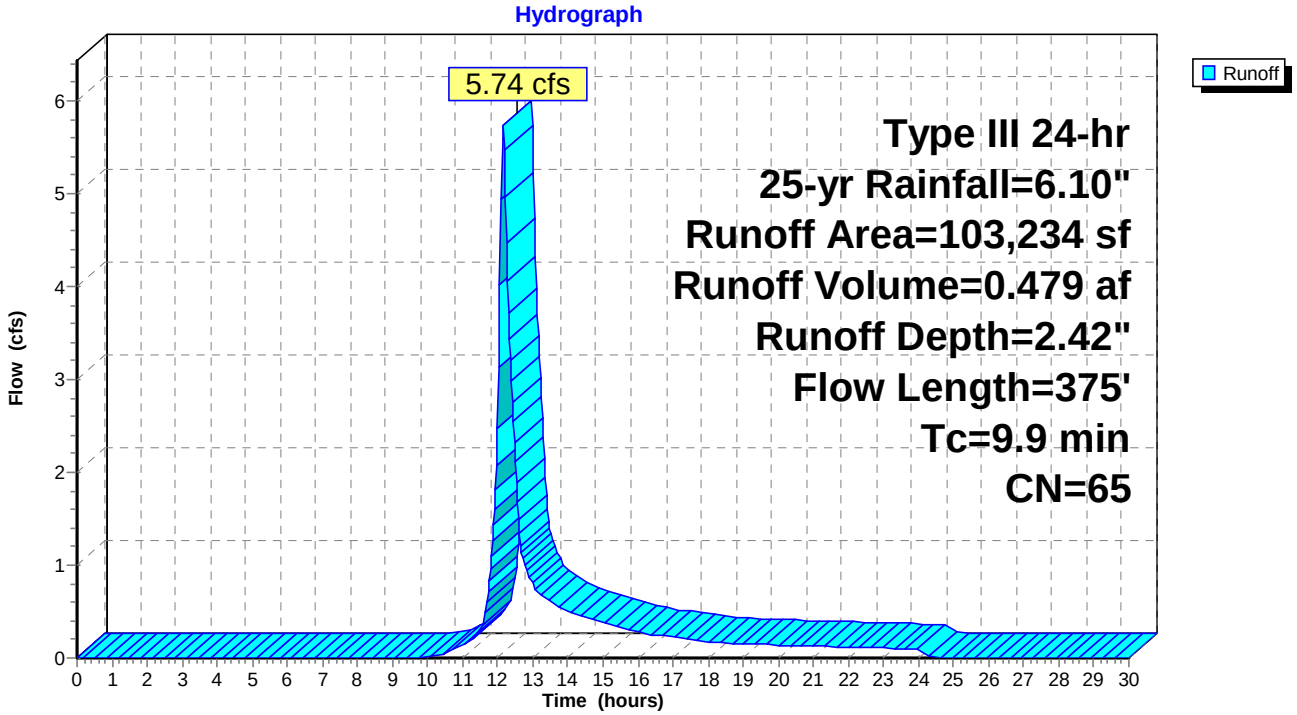
Runoff = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af, Depth= 2.42"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE



Summary for Subcatchment 5S: CONT

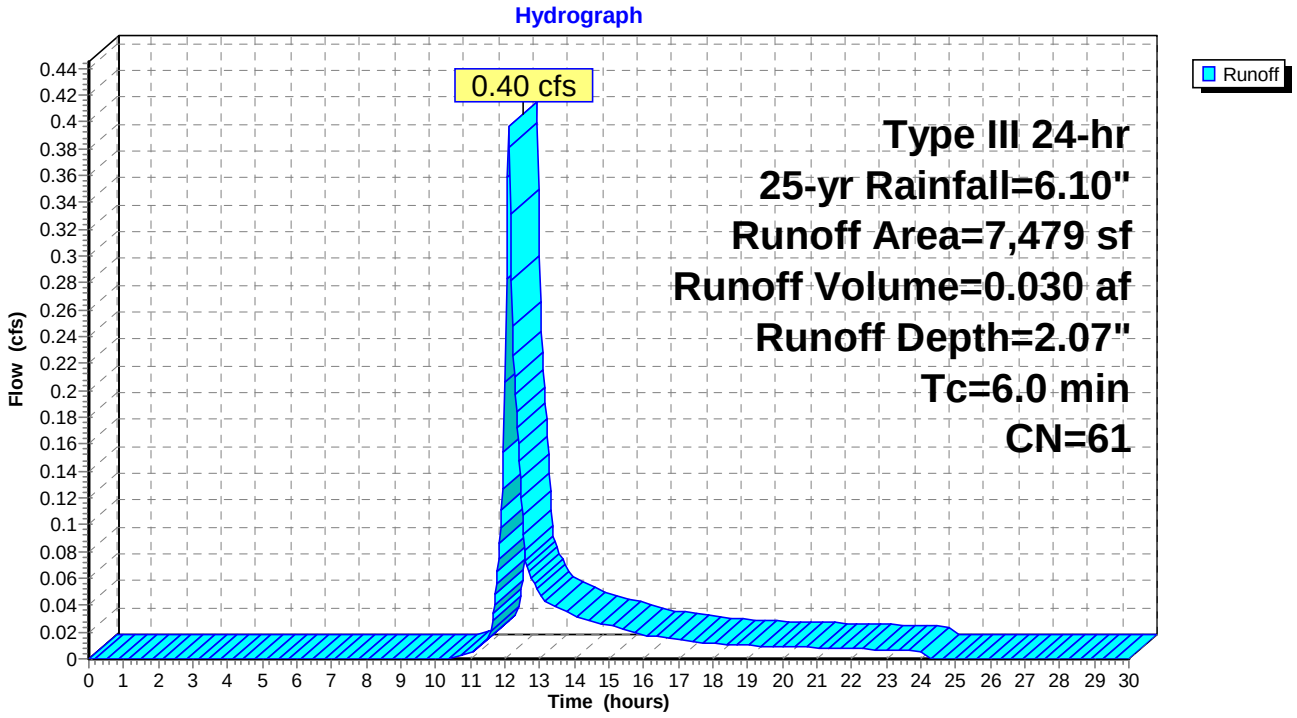
Runoff = 0.40 cfs @ 12.10 hrs, Volume= 0.030 af, Depth= 2.07"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



Summary for Subcatchment 6S: UNC

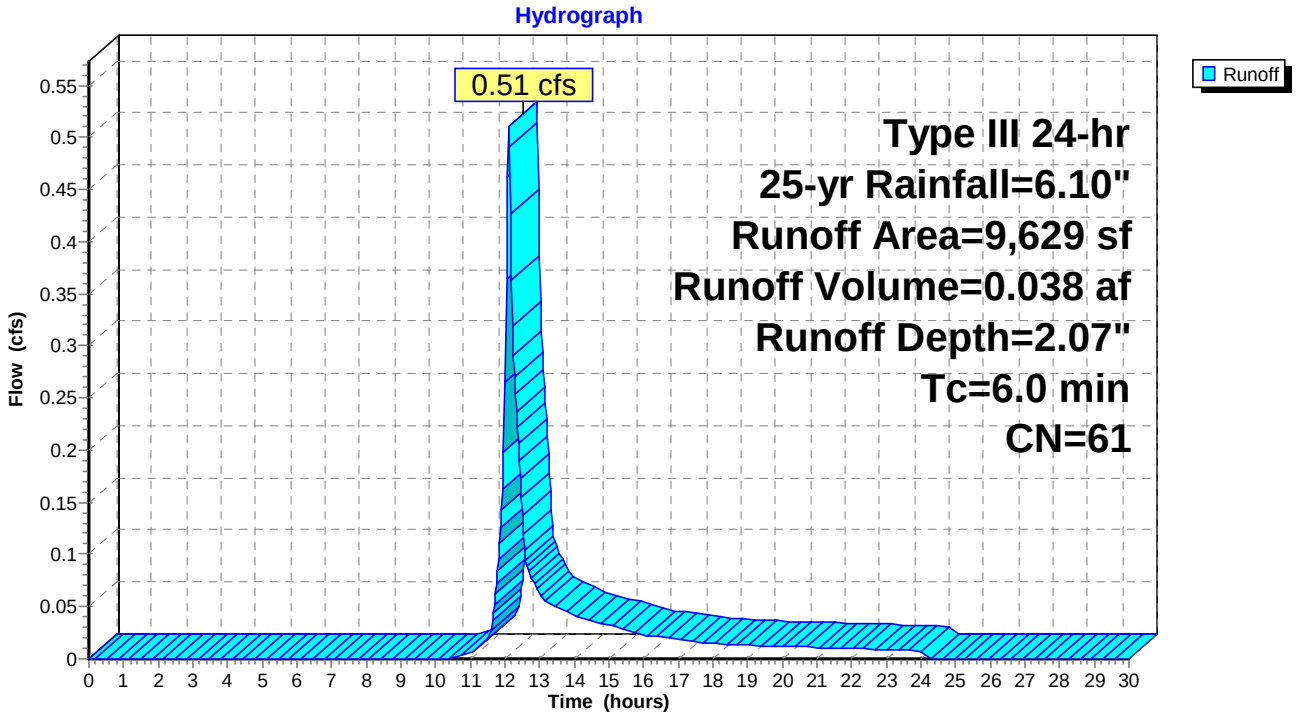
Runoff = 0.51 cfs @ 12.10 hrs, Volume= 0.038 af, Depth= 2.07"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC



Summary for Subcatchment 9S: UNITS 14-20

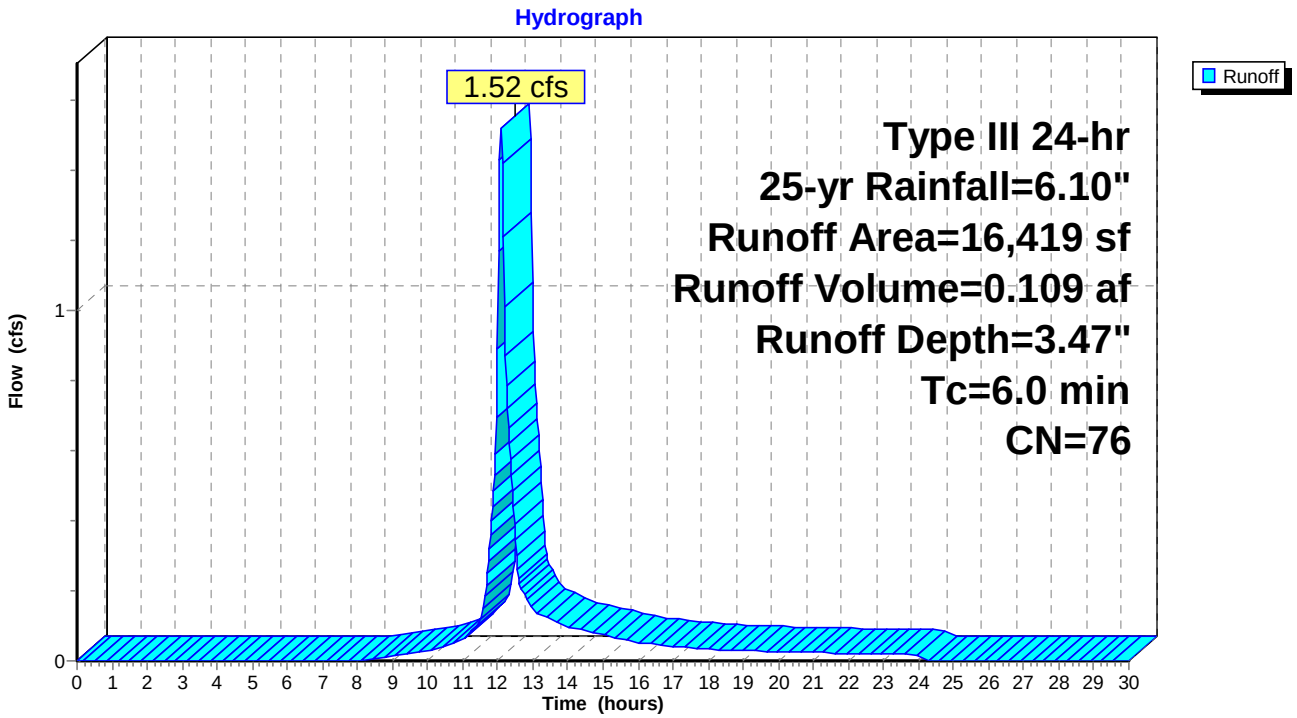
Runoff = 1.52 cfs @ 12.09 hrs, Volume= 0.109 af, Depth= 3.47"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20



Summary for Subcatchment 10S: UNITS 4-7

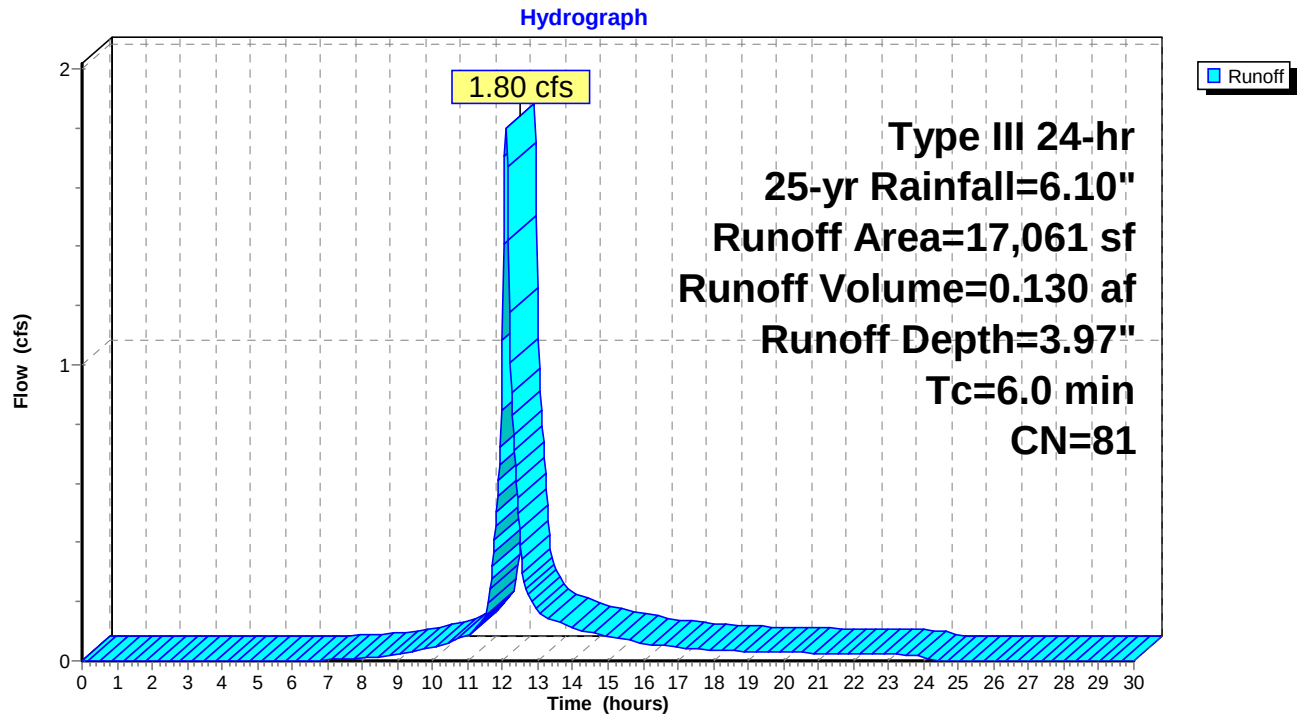
Runoff = 1.80 cfs @ 12.09 hrs, Volume= 0.130 af, Depth= 3.97"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



Summary for Subcatchment 11S: UNITS 8-13

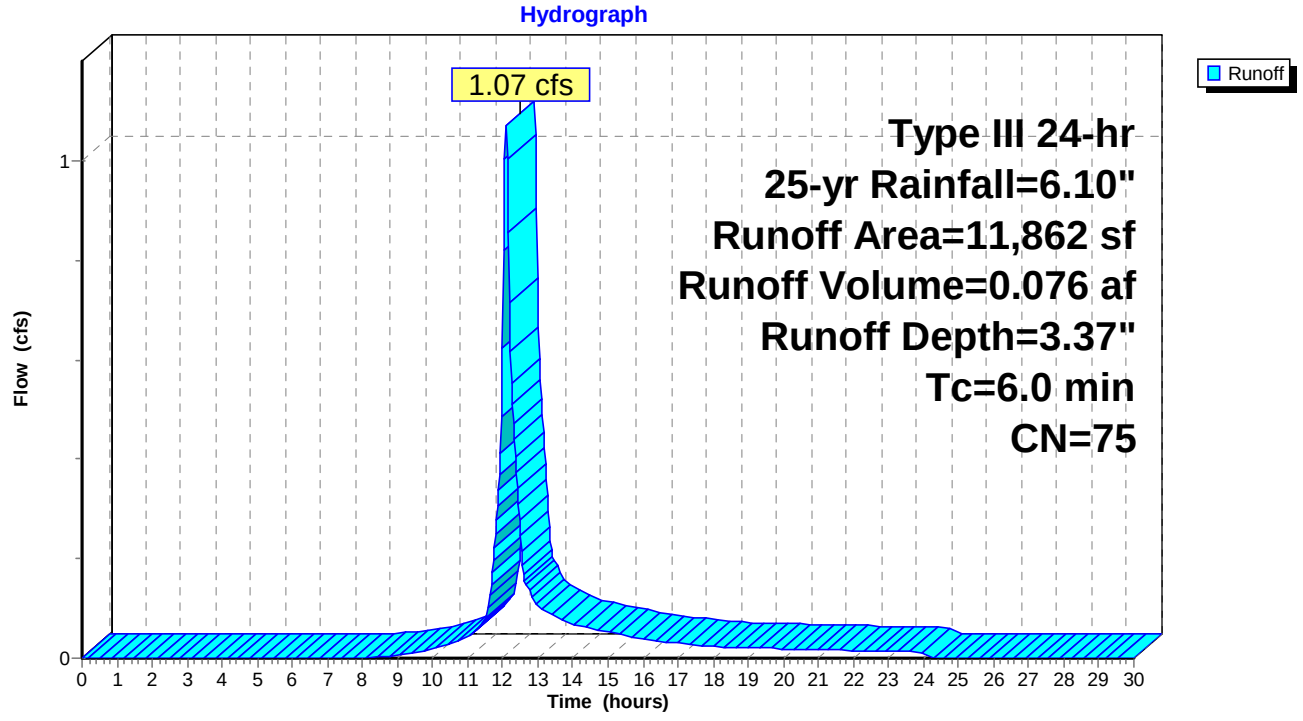
Runoff = 1.07 cfs @ 12.09 hrs, Volume= 0.076 af, Depth= 3.37"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13



Summary for Subcatchment 12S: PARKING

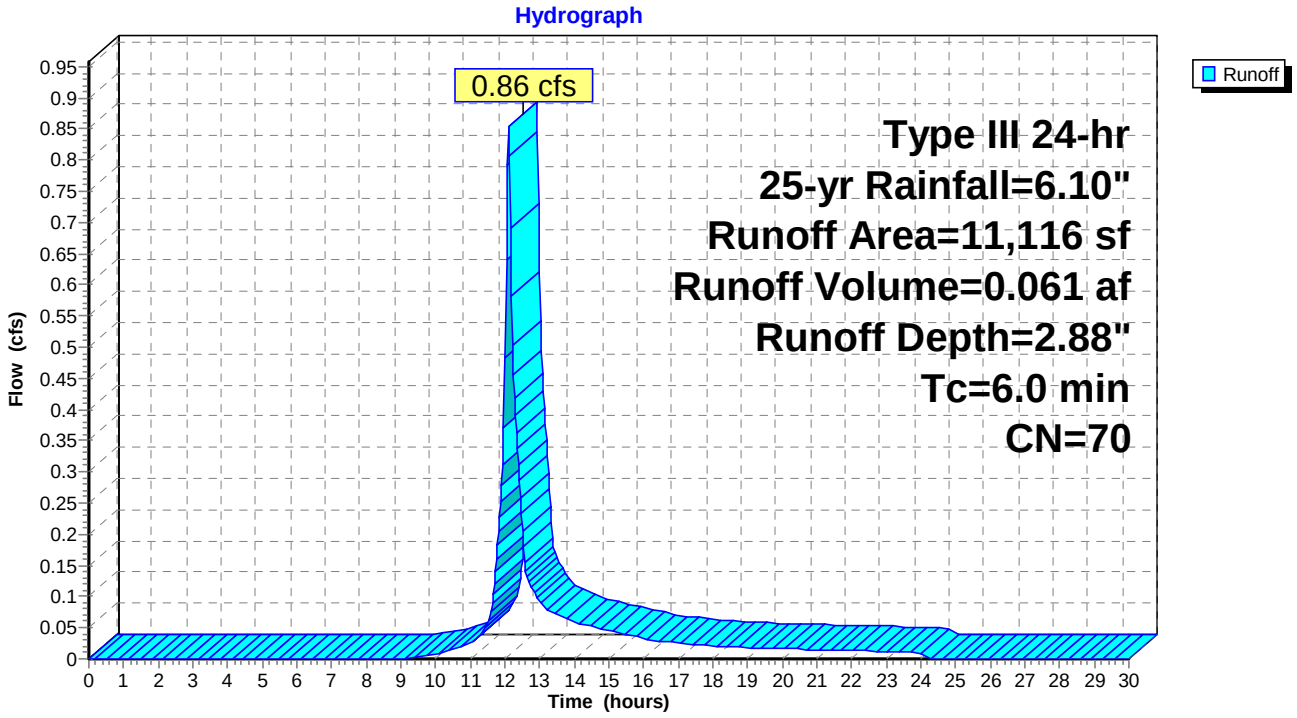
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af, Depth= 2.88"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



Summary for Subcatchment 13S: WEST SWALE

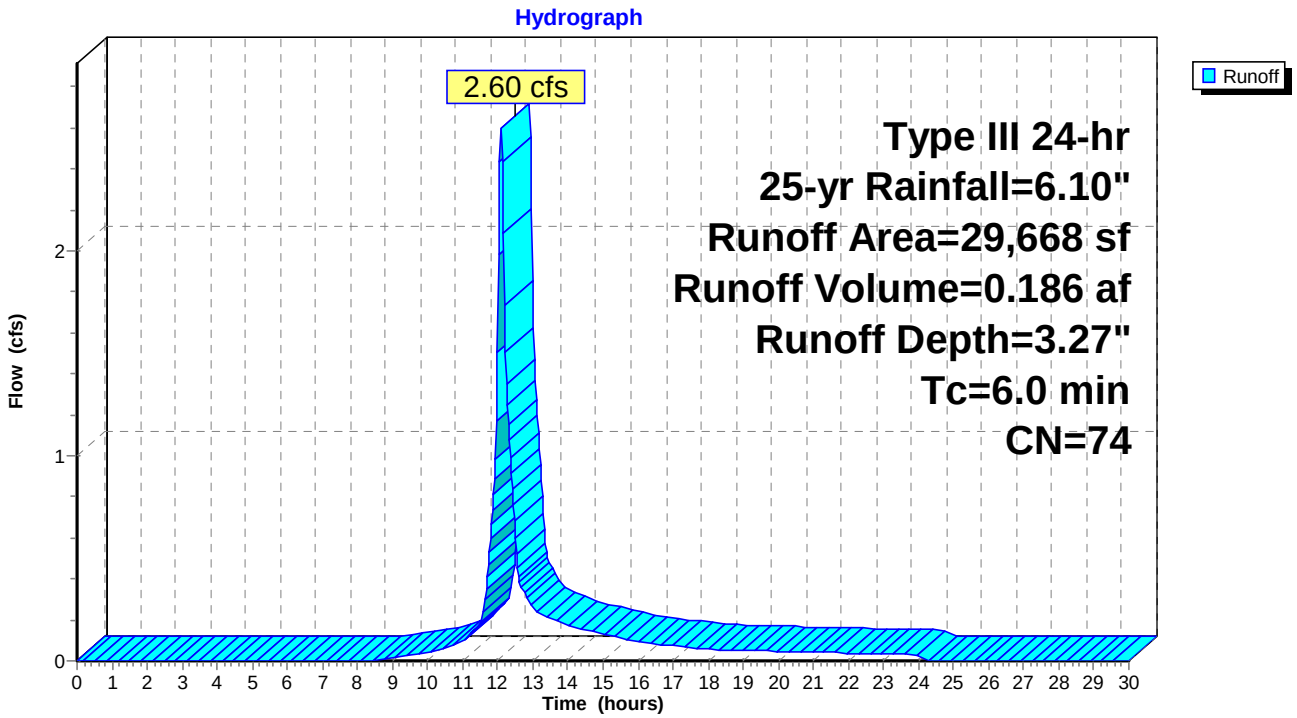
Runoff = 2.60 cfs @ 12.09 hrs, Volume= 0.186 af, Depth= 3.27"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE



Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 3.27" for 25-yr event
Inflow = 2.60 cfs @ 12.09 hrs, Volume= 0.186 af
Outflow = 2.52 cfs @ 12.13 hrs, Volume= 0.186 af, Atten= 3%, Lag= 2.5 min
Routed to Pond 8P : INFIL-1

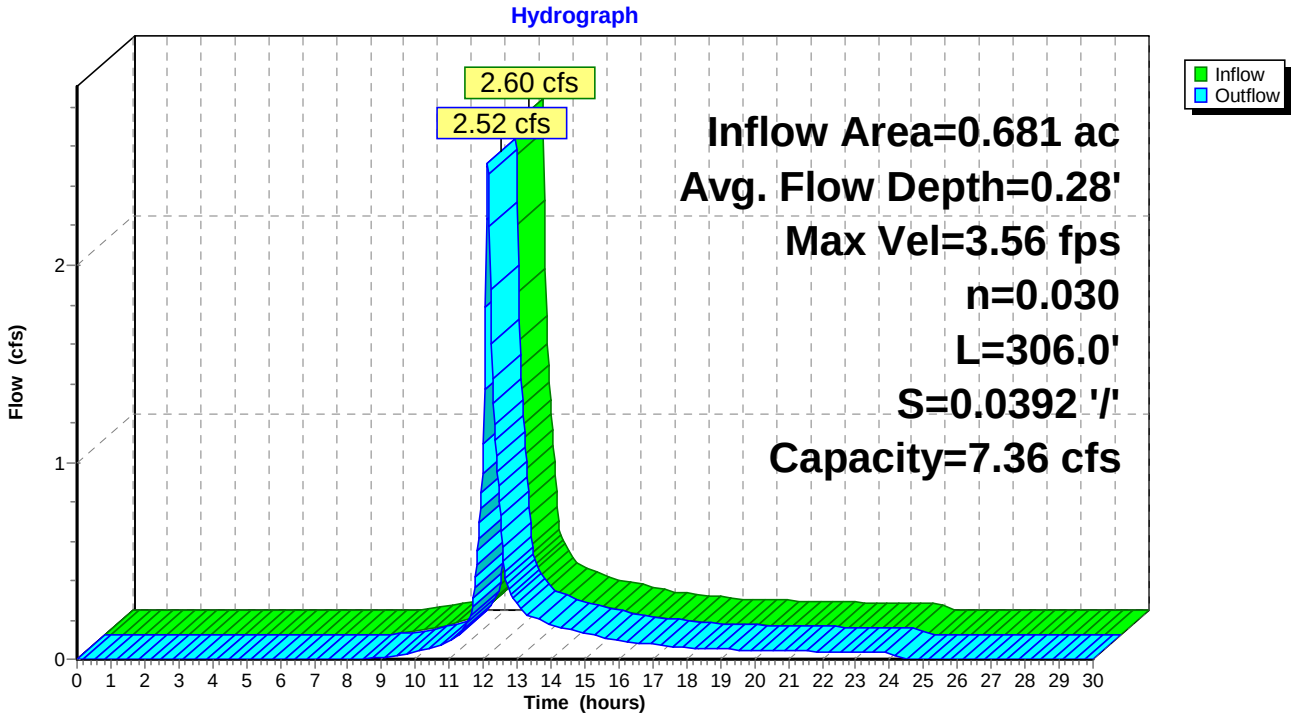
Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 3.56 fps, Min. Travel Time= 1.4 min
Avg. Velocity = 1.00 fps, Avg. Travel Time= 5.1 min

Peak Storage= 218 cf @ 12.11 hrs
Average Depth at Peak Storage= 0.28' , Surface Width= 3.11'
Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 2.0 '/' Top Width= 4.00'
Length= 306.0' Slope= 0.0392 '/'
Inlet Invert= 138.00', Outlet Invert= 126.00'

‡

Reach 14R: WEST SWALE



Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 1.76" for 25-yr event
Inflow = 2.89 cfs @ 12.13 hrs, Volume= 0.218 af
Outflow = 1.24 cfs @ 12.38 hrs, Volume= 0.180 af, Atten= 57%, Lag= 15.0 min
Discarded = 0.07 cfs @ 12.38 hrs, Volume= 0.108 af
Primary = 1.17 cfs @ 12.38 hrs, Volume= 0.072 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 125.59' @ 12.38 hrs Surf.Area= 3,089 sf Storage= 3,534 cf

Plug-Flow detention time= 278.0 min calculated for 0.180 af (83% of inflow)
Center-of-Mass det. time= 206.4 min (1,044.0 - 837.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

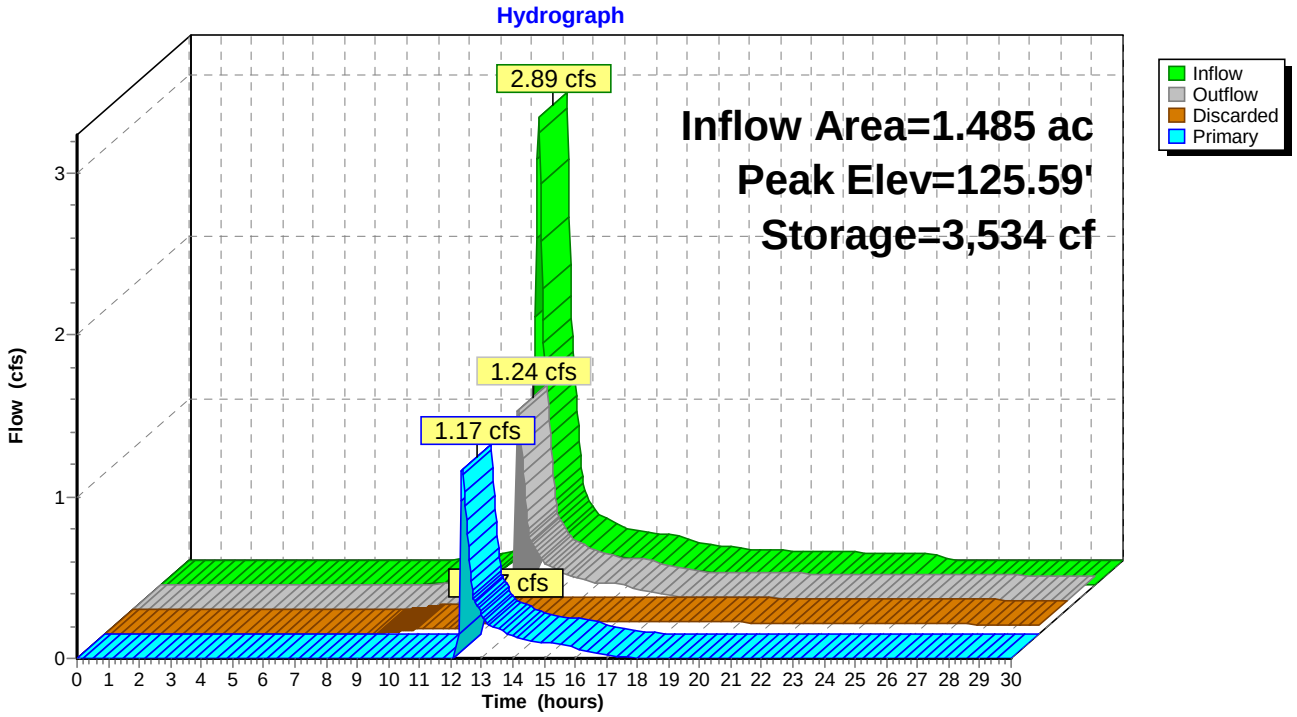
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	125.53'	**30.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.07 cfs @ 12.38 hrs HW=125.59' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=1.15 cfs @ 12.38 hrs HW=125.59' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 1.15 cfs @ 0.60 fps)

Pond 8P: INFIL-1



Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 3.97" for 25-yr event
Inflow = 1.80 cfs @ 12.09 hrs, Volume= 0.130 af
Outflow = 1.43 cfs @ 12.15 hrs, Volume= 0.130 af, Atten= 21%, Lag= 3.9 min
Discarded = 0.05 cfs @ 12.15 hrs, Volume= 0.069 af
Primary = 1.39 cfs @ 12.15 hrs, Volume= 0.061 af
Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 137.78' @ 12.15 hrs Surf.Area= 1,961 sf Storage= 1,386 cf

Plug-Flow detention time= 140.0 min calculated for 0.130 af (100% of inflow)
Center-of-Mass det. time= 140.0 min (950.9 - 810.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

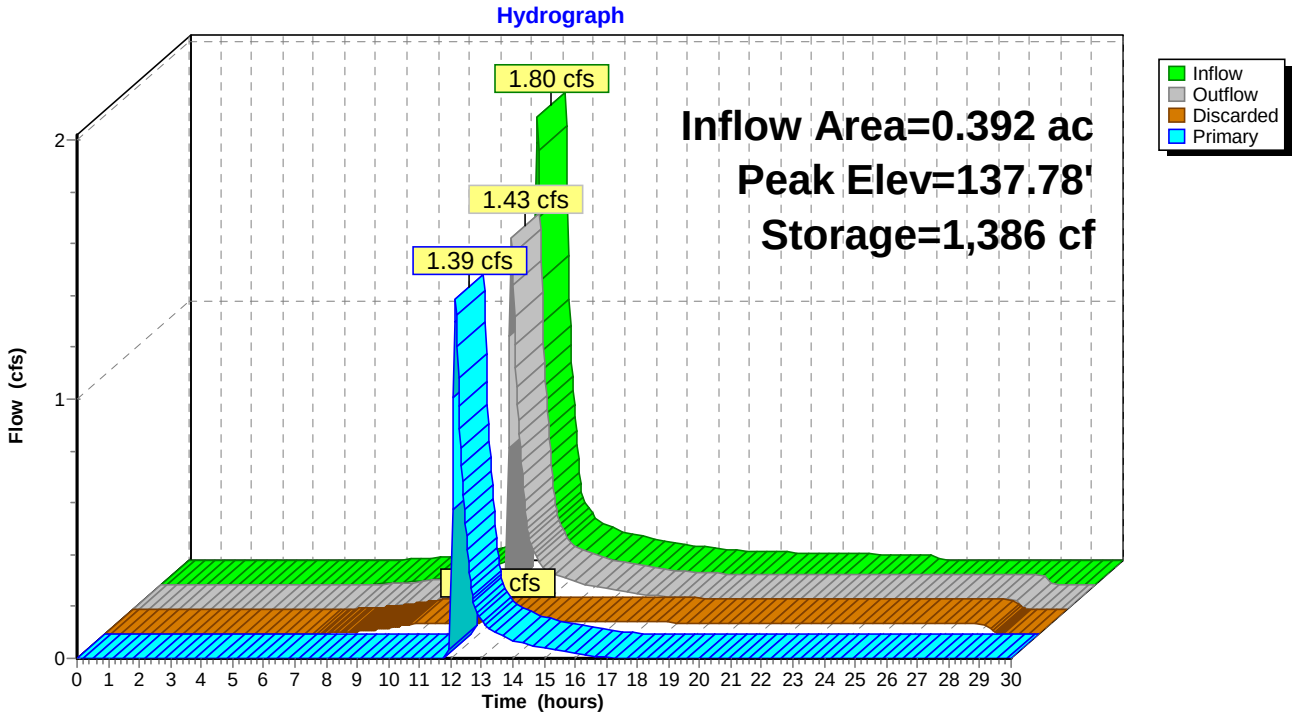
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	137.58'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.15 hrs HW=137.78' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=1.38 cfs @ 12.15 hrs HW=137.78' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 1.38 cfs @ 1.14 fps)

Pond 9P: BIO-1


Hydrograph
1.80 cfs
1.43 cfs
1.39 cfs
cfs
Inflow Area=0.392 ac
Peak Elev=137.78'
Storage=1,386 cf
Inflow
Outflow
Discarded
Primary
Flow (cfs)
0
1
2
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Time (hours)

Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 2.49" for 25-yr event
Inflow = 2.31 cfs @ 12.13 hrs, Volume= 0.138 af
Outflow = 0.55 cfs @ 12.58 hrs, Volume= 0.121 af, Atten= 76%, Lag= 27.0 min
Discarded = 0.06 cfs @ 12.58 hrs, Volume= 0.084 af
Primary = 0.49 cfs @ 12.58 hrs, Volume= 0.037 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 133.43' @ 12.58 hrs Surf.Area= 2,442 sf Storage= 2,899 cf

Plug-Flow detention time= 318.3 min calculated for 0.121 af (88% of inflow)
Center-of-Mass det. time= 273.6 min (1,075.1 - 801.5)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

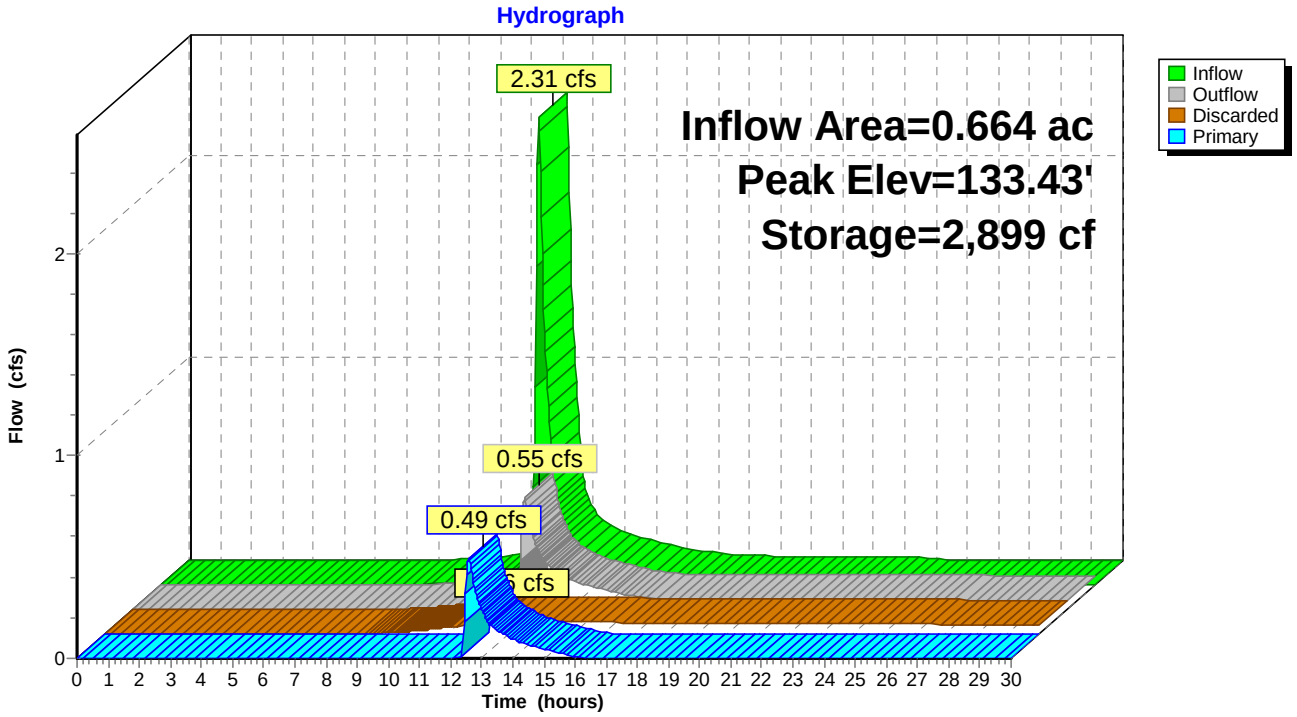
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	133.33'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.06 cfs @ 12.58 hrs HW=133.43' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.49 cfs @ 12.58 hrs HW=133.43' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 0.49 cfs @ 0.81 fps)

Pond 12P: BIO-2



Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 3.23" for 25-yr event
Inflow = 2.38 cfs @ 12.09 hrs, Volume= 0.170 af
Outflow = 0.10 cfs @ 15.59 hrs, Volume= 0.122 af, Atten= 96%, Lag= 209.7 min
Discarded = 0.08 cfs @ 15.59 hrs, Volume= 0.119 af
Primary = 0.02 cfs @ 15.59 hrs, Volume= 0.002 af
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 128.59' @ 15.59 hrs Surf.Area= 3,246 sf Storage= 4,478 cf

Plug-Flow detention time= 459.3 min calculated for 0.122 af (72% of inflow)
Center-of-Mass det. time= 364.7 min (1,193.1 - 828.4)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

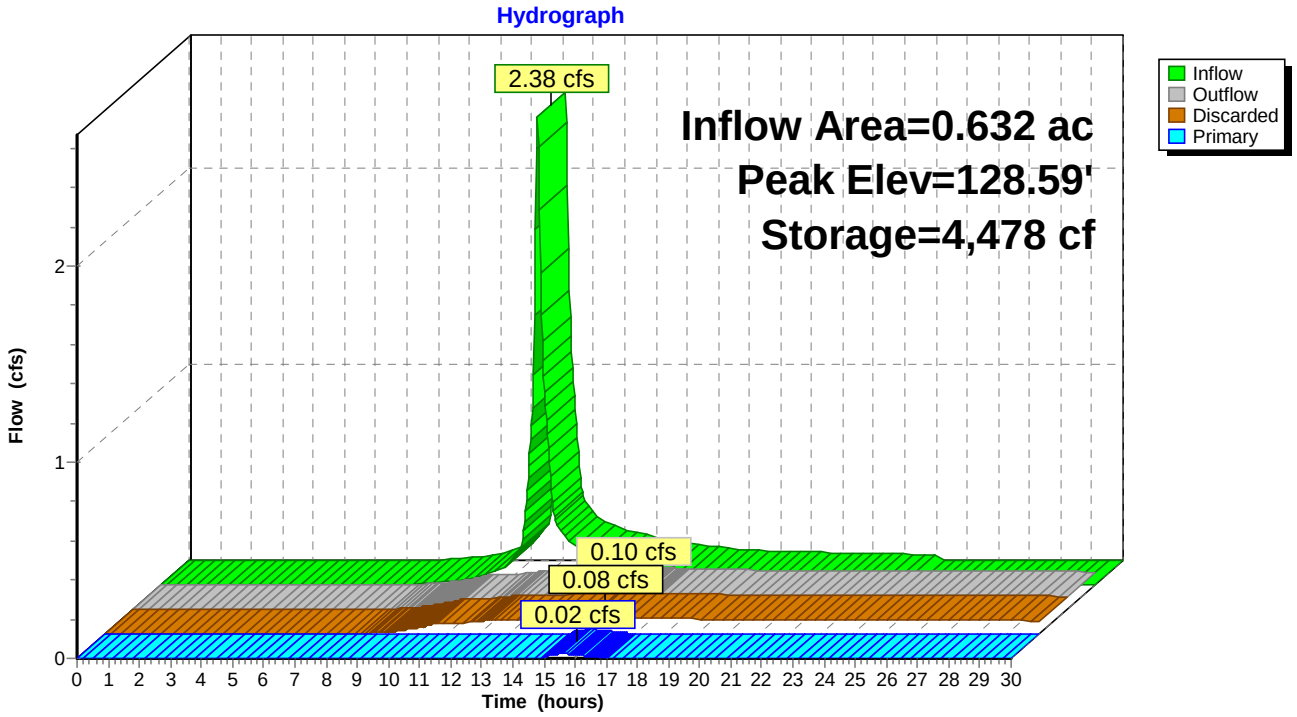
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	128.58'	**5.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.08 cfs @ 15.59 hrs HW=128.59' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.02 cfs @ 15.59 hrs HW=128.59' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 0.02 cfs @ 0.28 fps)

Pond 13P: BIO-3

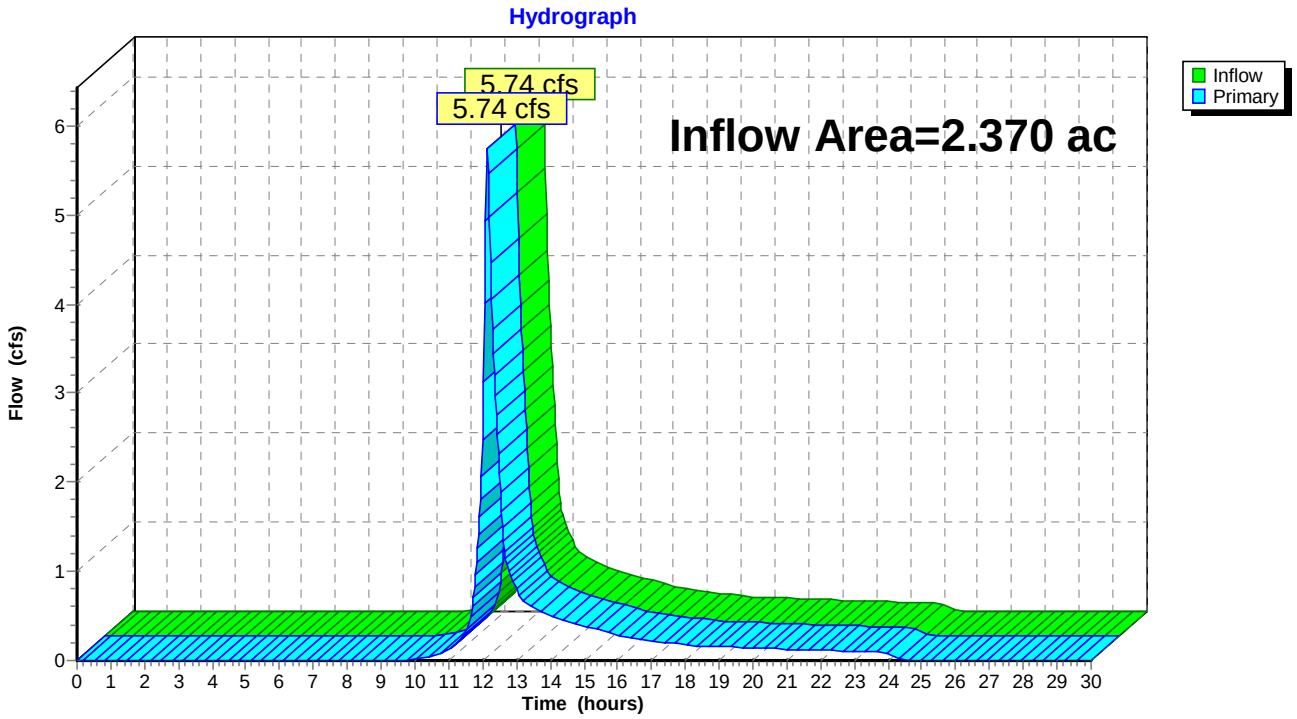


Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 2.42" for 25-yr event
Inflow = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af
Primary = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

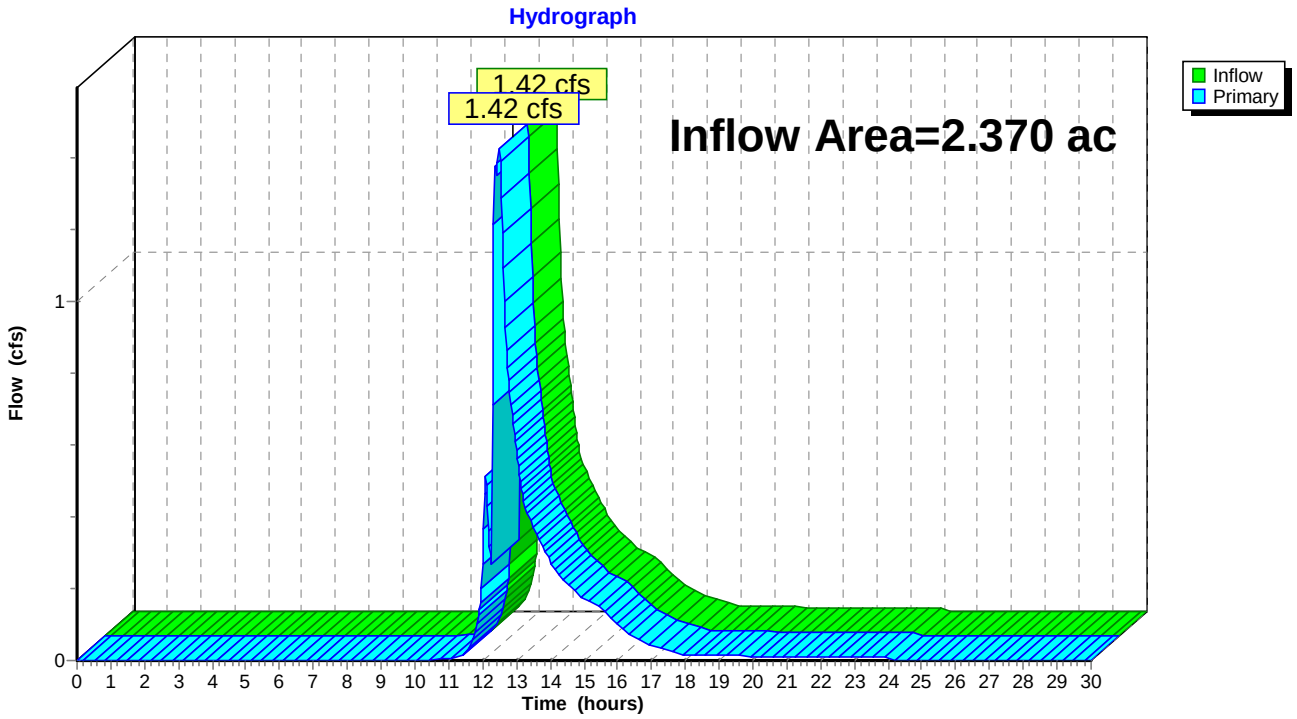


Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.75" for 25-yr event
Inflow = 1.42 cfs @ 12.49 hrs, Volume= 0.147 af
Primary = 1.42 cfs @ 12.49 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE



Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=4.38"
Flow Length=375' Tc=9.9 min CN=65 Runoff=10.61 cfs 0.866 af

Subcatchment 5S: CONT Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=3.91"
Tc=6.0 min CN=61 Runoff=0.78 cfs 0.056 af

Subcatchment 6S: UNC Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=3.91"
Tc=6.0 min CN=61 Runoff=1.00 cfs 0.072 af

Subcatchment 9S: UNITS 14-20 Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=5.71"
Tc=6.0 min CN=76 Runoff=2.49 cfs 0.179 af

Subcatchment 10S: UNITS 4-7 Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=6.31"
Tc=6.0 min CN=81 Runoff=2.81 cfs 0.206 af

Subcatchment 11S: UNITS 8-13 Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=5.59"
Tc=6.0 min CN=75 Runoff=1.76 cfs 0.127 af

Subcatchment 12S: PARKING Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=4.98"
Tc=6.0 min CN=70 Runoff=1.48 cfs 0.106 af

Subcatchment 13S: WEST SWALE Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=5.47"
Tc=6.0 min CN=74 Runoff=4.32 cfs 0.310 af

Reach 14R: WEST SWALE Avg. Flow Depth=0.37' Max Vel=4.17 fps Inflow=4.32 cfs 0.310 af
n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=4.20 cfs 0.310 af

Pond 8P: INFIL-1 Peak Elev=125.69' Storage=3,843 cf Inflow=4.93 cfs 0.465 af
Discarded=0.08 cfs 0.116 af Primary=4.66 cfs 0.305 af Outflow=4.74 cfs 0.420 af

Pond 9P: BIO-1 Peak Elev=137.88' Storage=1,573 cf Inflow=2.81 cfs 0.206 af
Discarded=0.05 cfs 0.079 af Primary=2.50 cfs 0.127 af Outflow=2.55 cfs 0.206 af

Pond 12P: BIO-2 Peak Elev=133.65' Storage=3,440 cf Inflow=4.16 cfs 0.253 af
Discarded=0.06 cfs 0.090 af Primary=2.77 cfs 0.140 af Outflow=2.83 cfs 0.230 af

Pond 13P: BIO-3 Peak Elev=128.80' Storage=5,156 cf Inflow=3.97 cfs 0.285 af
Discarded=0.08 cfs 0.128 af Primary=1.23 cfs 0.098 af Outflow=1.31 cfs 0.227 af

Link 3L: PRE-SITE Inflow=10.61 cfs 0.866 af
Primary=10.61 cfs 0.866 af

Link 7L: POST-SITE Inflow=7.53 cfs 0.517 af
Primary=7.53 cfs 0.517 af

Total Runoff Area = 4.740 ac Runoff Volume = 1.922 af Average Runoff Depth = 4.87"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

Summary for Subcatchment 2S: PRE

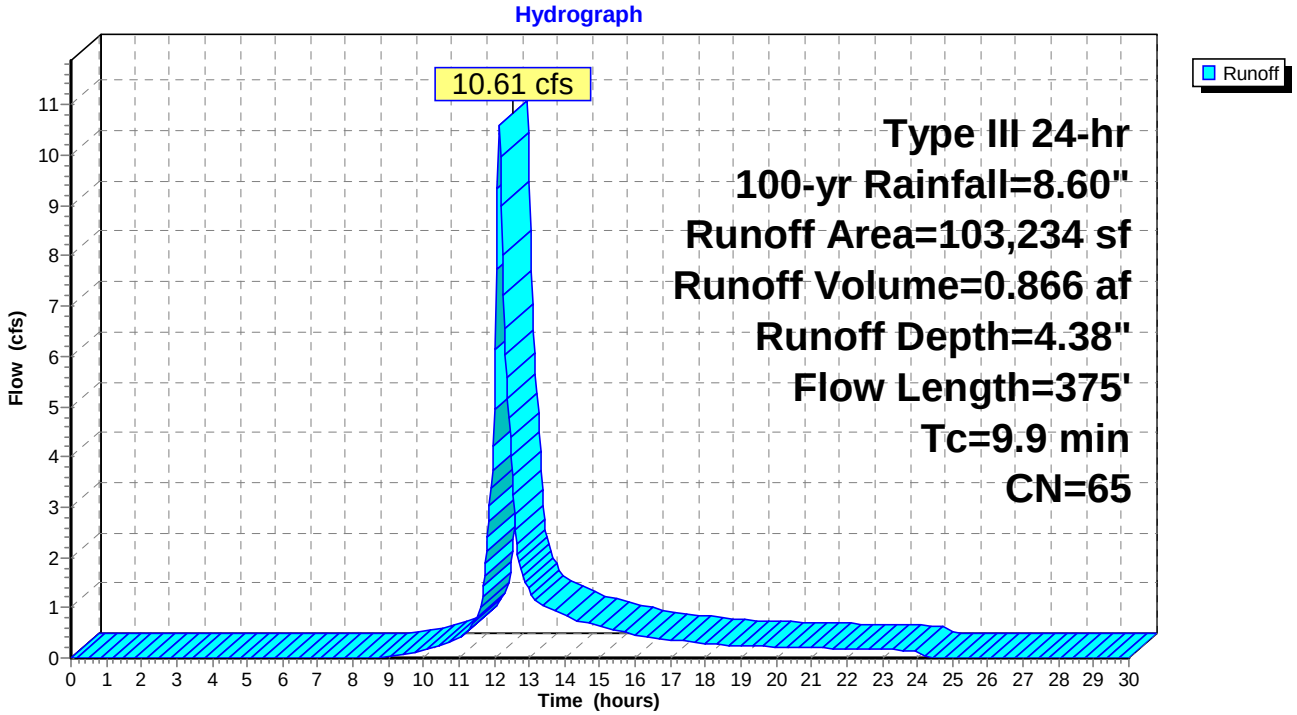
Runoff = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af, Depth= 4.38"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE



Summary for Subcatchment 5S: CONT

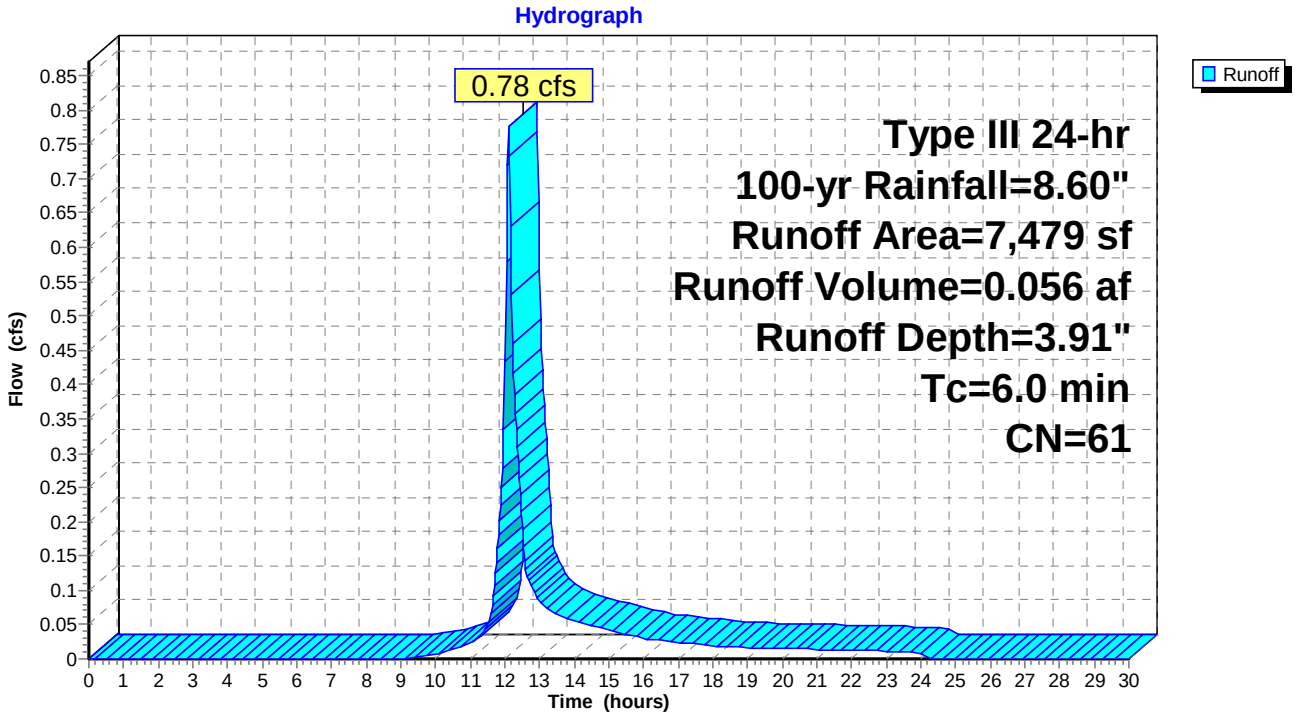
Runoff = 0.78 cfs @ 12.09 hrs, Volume= 0.056 af, Depth= 3.91"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



Summary for Subcatchment 6S: UNC

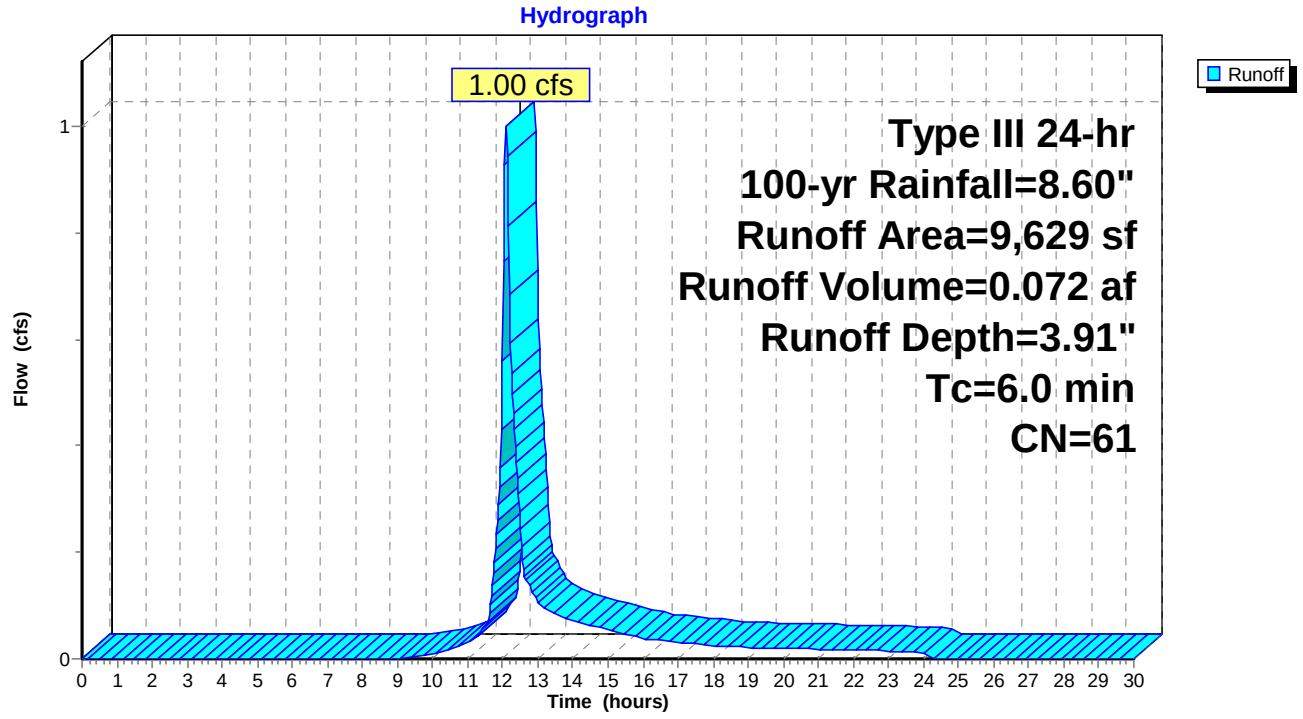
Runoff = 1.00 cfs @ 12.09 hrs, Volume= 0.072 af, Depth= 3.91"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC



Summary for Subcatchment 9S: UNITS 14-20

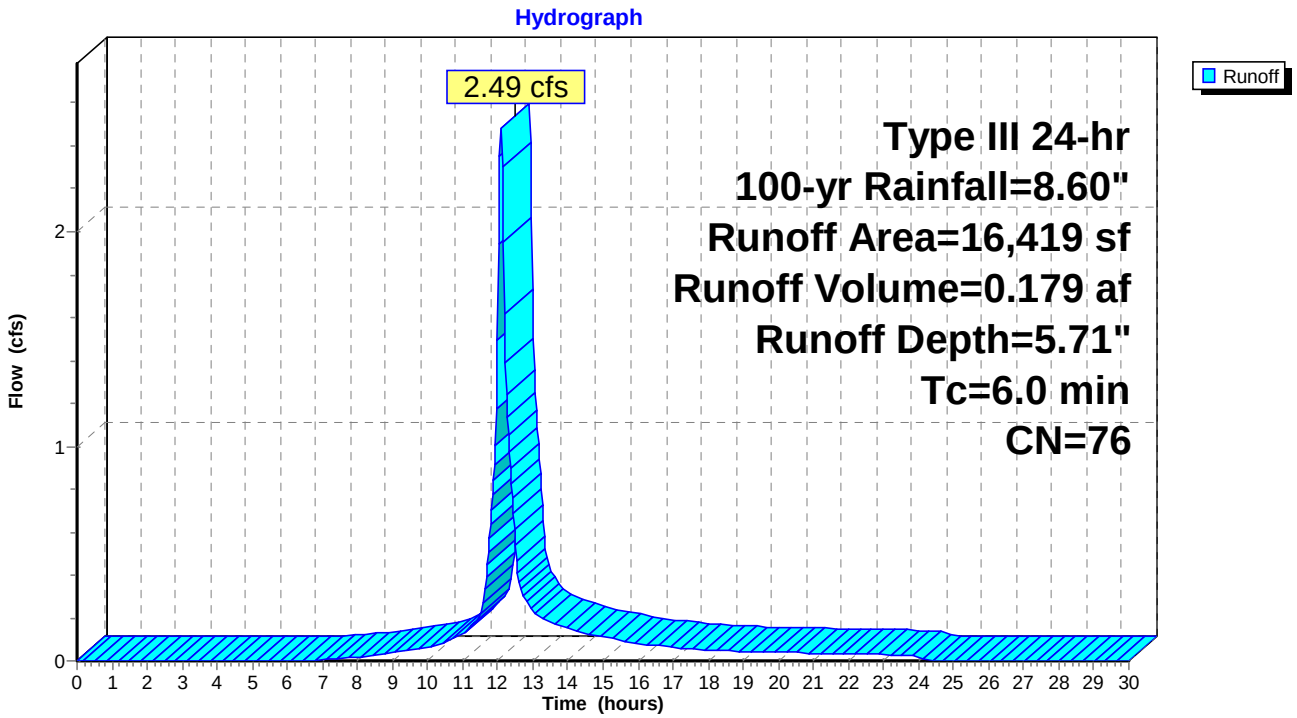
Runoff = 2.49 cfs @ 12.09 hrs, Volume= 0.179 af, Depth= 5.71"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20



Summary for Subcatchment 10S: UNITS 4-7

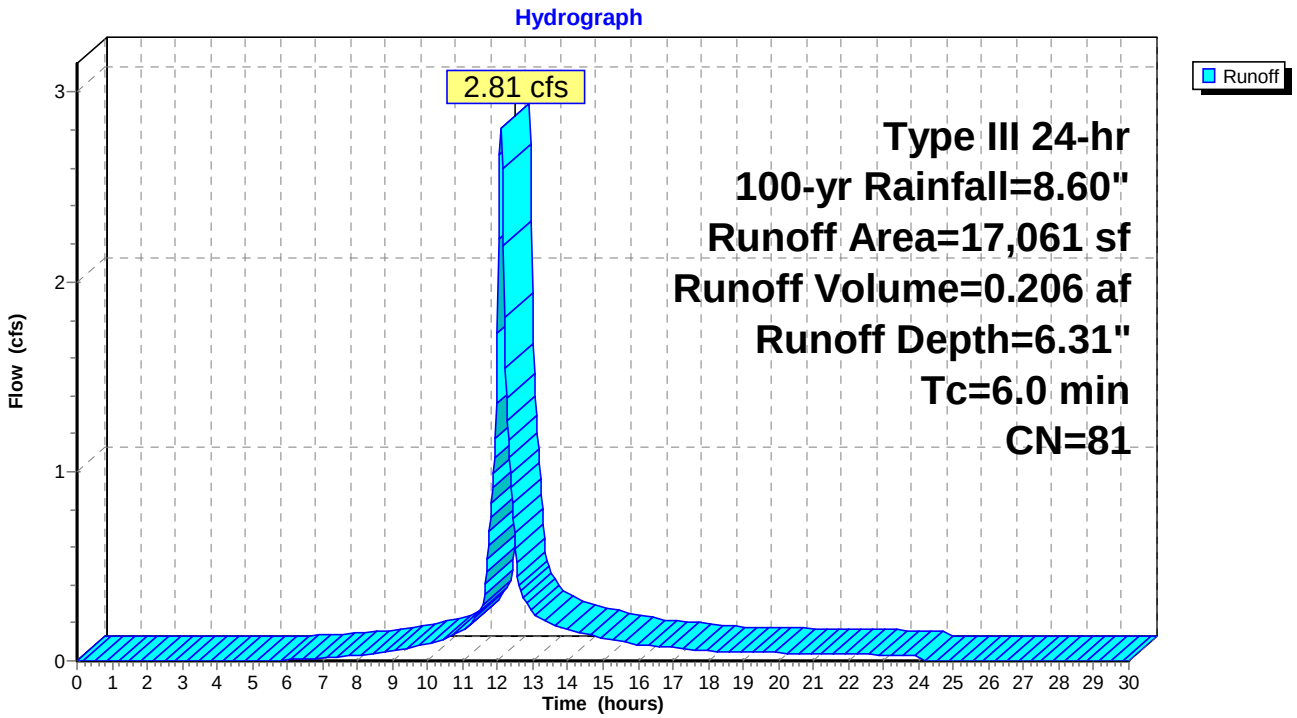
Runoff = 2.81 cfs @ 12.09 hrs, Volume= 0.206 af, Depth= 6.31"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



Summary for Subcatchment 11S: UNITS 8-13

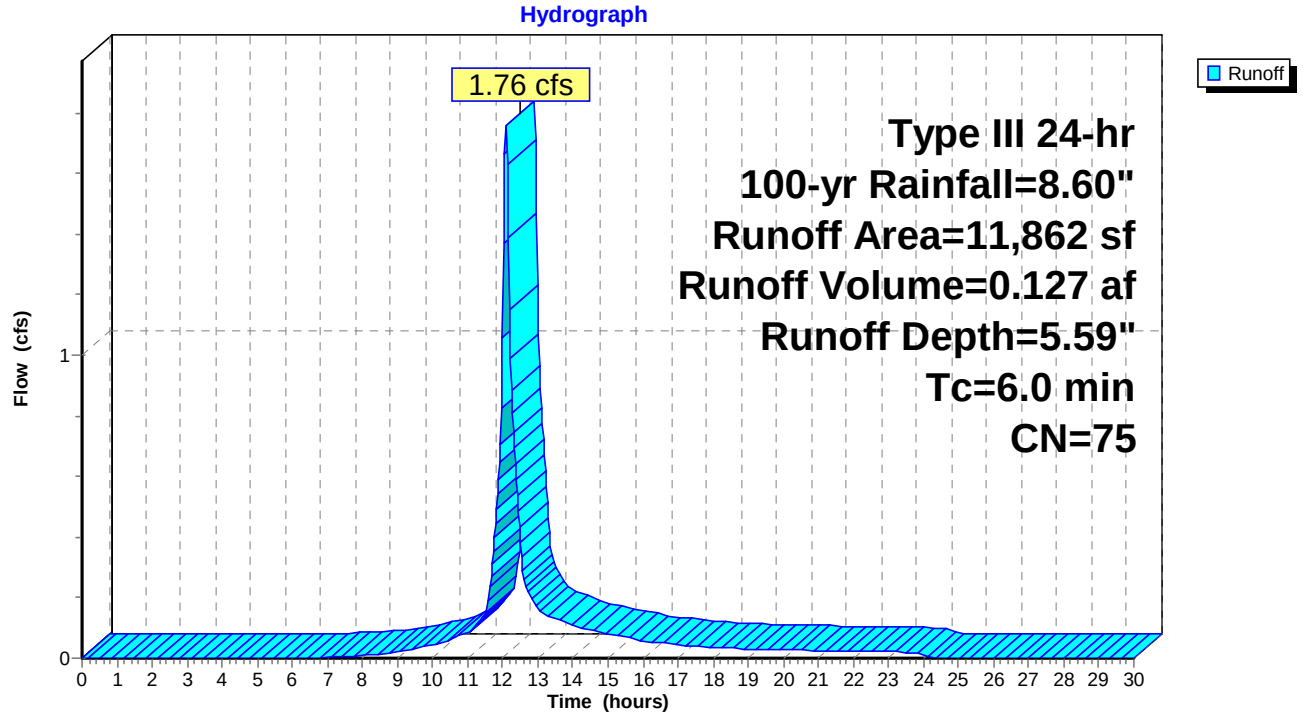
Runoff = 1.76 cfs @ 12.09 hrs, Volume= 0.127 af, Depth= 5.59"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13



Summary for Subcatchment 12S: PARKING

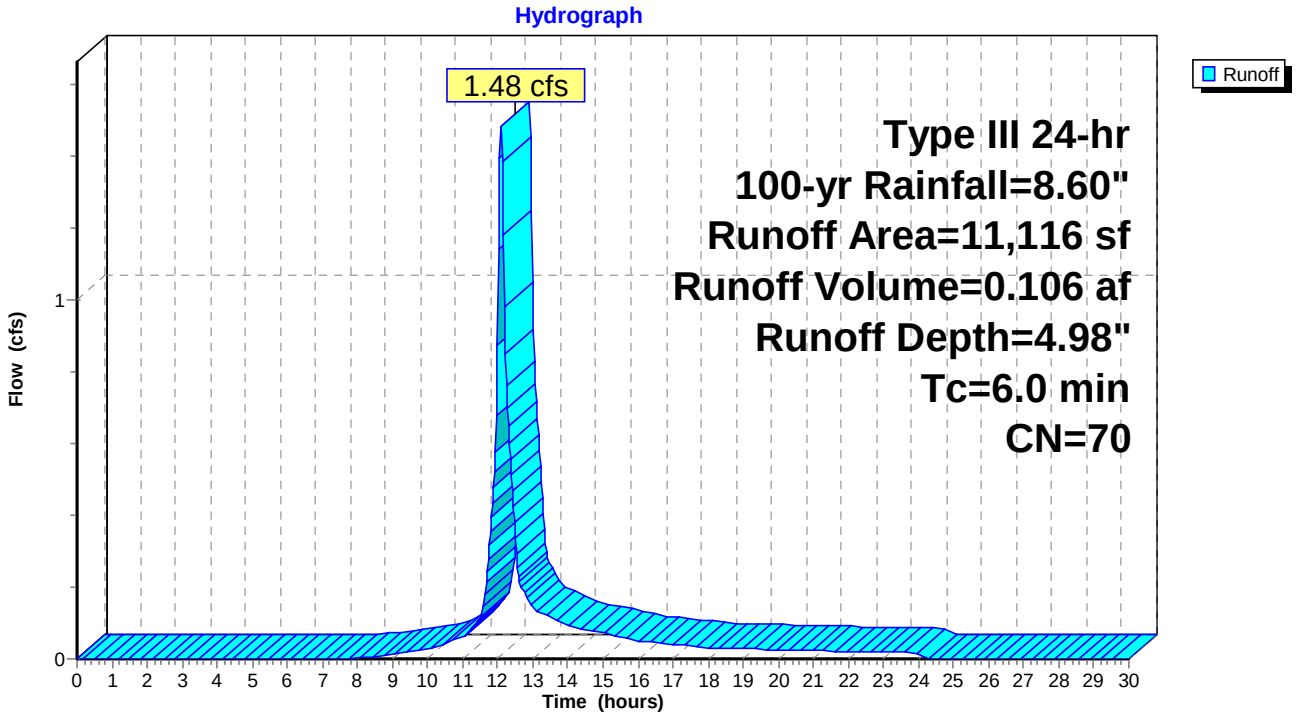
Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.106 af, Depth= 4.98"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



Summary for Subcatchment 13S: WEST SWALE

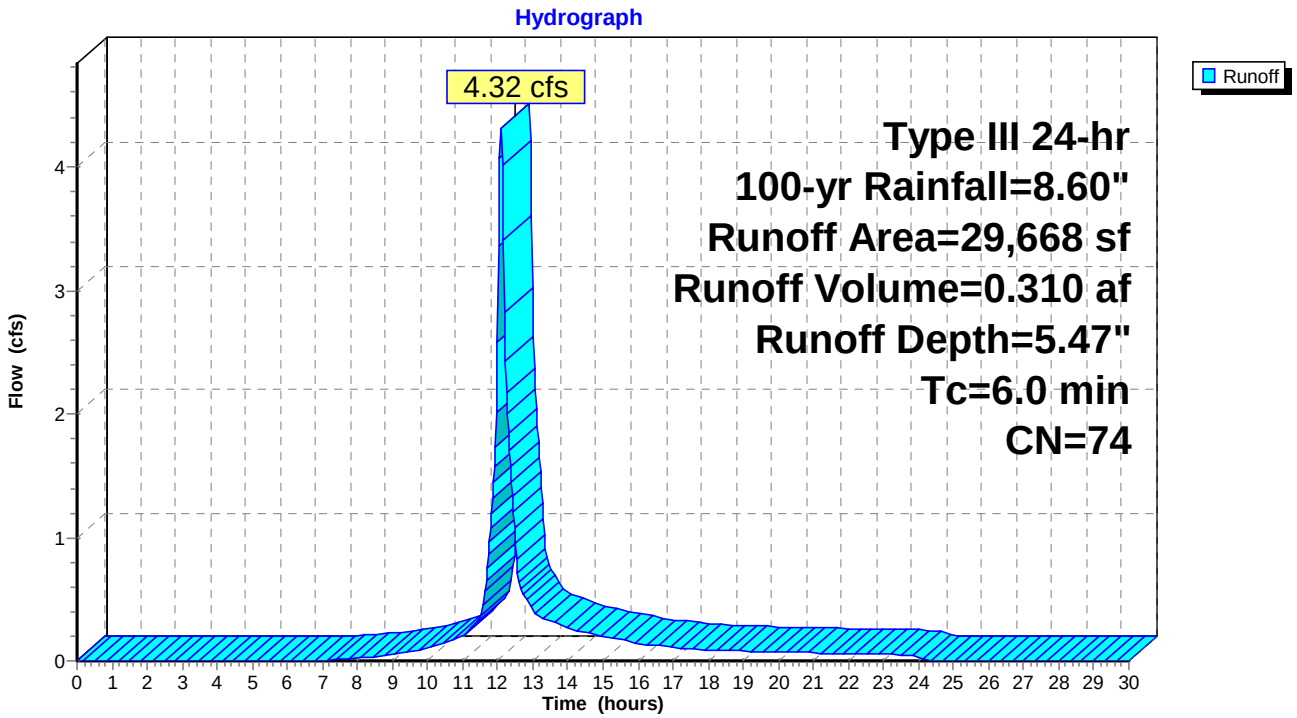
Runoff = 4.32 cfs @ 12.09 hrs, Volume= 0.310 af, Depth= 5.47"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE



Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 5.47" for 100-yr event
Inflow = 4.32 cfs @ 12.09 hrs, Volume= 0.310 af
Outflow = 4.20 cfs @ 12.12 hrs, Volume= 0.310 af, Atten= 3%, Lag= 2.2 min
Routed to Pond 8P : INFIL-1

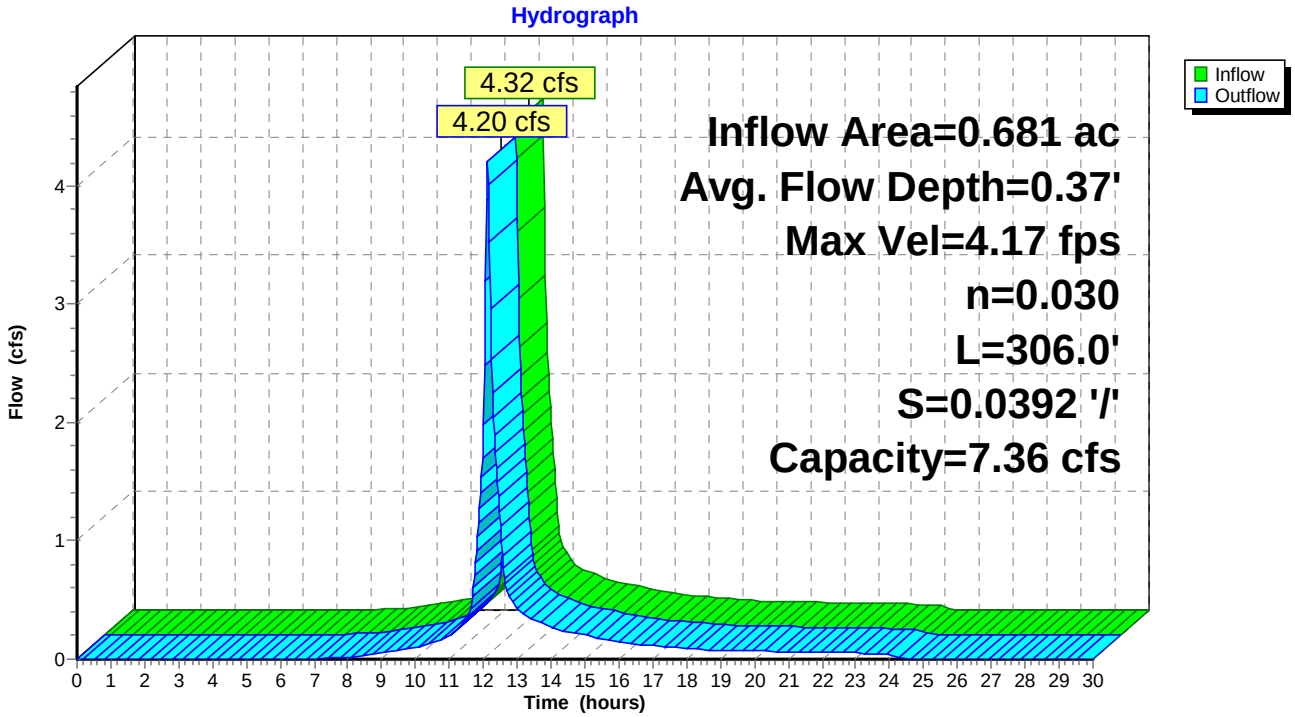
Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.17 fps, Min. Travel Time= 1.2 min
Avg. Velocity = 1.16 fps, Avg. Travel Time= 4.4 min

Peak Storage= 312 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.37' , Surface Width= 3.49'
Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 2.0 '/' Top Width= 4.00'
Length= 306.0' Slope= 0.0392 '/'
Inlet Invert= 138.00', Outlet Invert= 126.00'

‡

Reach 14R: WEST SWALE



Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 3.75" for 100-yr event
Inflow = 4.93 cfs @ 12.12 hrs, Volume= 0.465 af
Outflow = 4.74 cfs @ 12.15 hrs, Volume= 0.420 af, Atten= 4%, Lag= 1.7 min
Discarded = 0.08 cfs @ 12.15 hrs, Volume= 0.116 af
Primary = 4.66 cfs @ 12.15 hrs, Volume= 0.305 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 125.69' @ 12.15 hrs Surf.Area= 3,198 sf Storage= 3,843 cf

Plug-Flow detention time= 129.5 min calculated for 0.420 af (90% of inflow)
Center-of-Mass det. time= 86.8 min (905.4 - 818.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

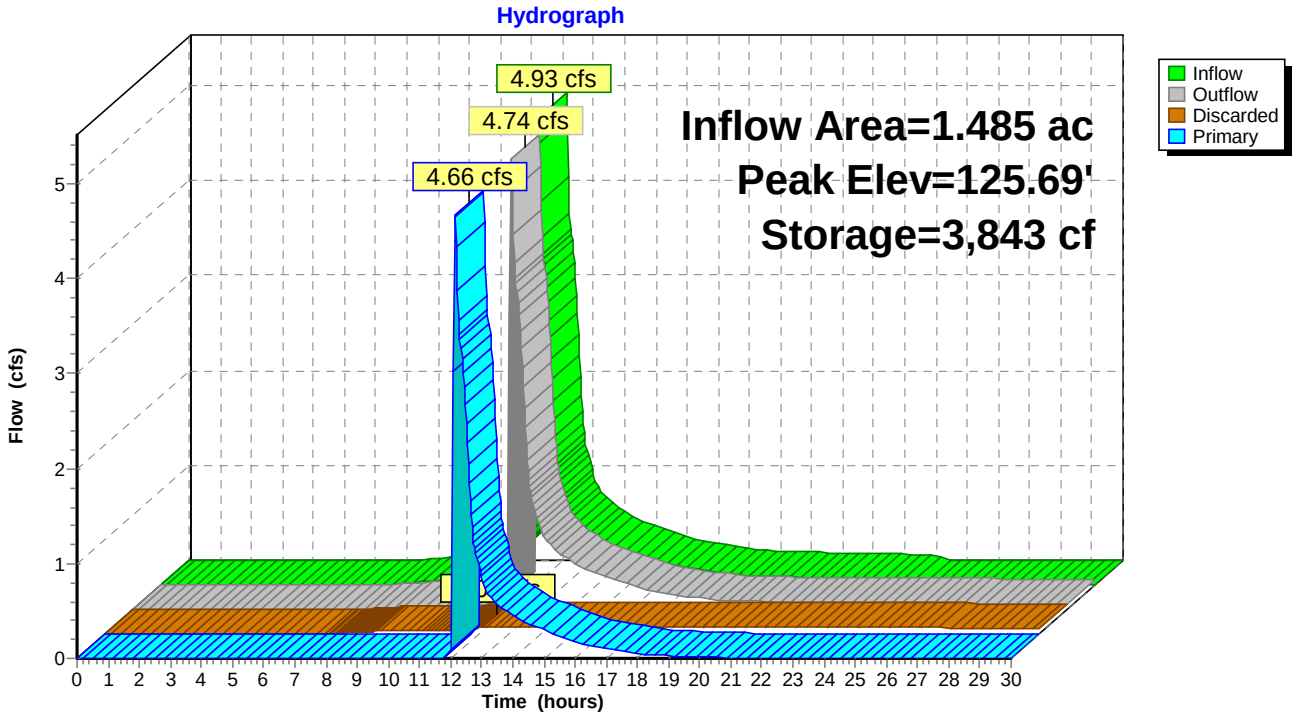
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	125.53'	**30.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.08 cfs @ 12.15 hrs HW=125.69' (Free Discharge)
↑└**1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=4.64 cfs @ 12.15 hrs HW=125.69' (Free Discharge)
↑└**2=Broad-Crested Rectangular Weir** (Weir Controls 4.64 cfs @ 0.95 fps)

Pond 8P: INFIL-1



Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 6.31" for 100-yr event
Inflow = 2.81 cfs @ 12.09 hrs, Volume= 0.206 af
Outflow = 2.55 cfs @ 12.13 hrs, Volume= 0.206 af, Atten= 10%, Lag= 2.4 min
Discarded = 0.05 cfs @ 12.13 hrs, Volume= 0.079 af
Primary = 2.50 cfs @ 12.13 hrs, Volume= 0.127 af
Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 137.88' @ 12.13 hrs Surf.Area= 2,006 sf Storage= 1,573 cf

Plug-Flow detention time= 107.5 min calculated for 0.206 af (100% of inflow)
Center-of-Mass det. time= 107.0 min (904.9 - 797.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

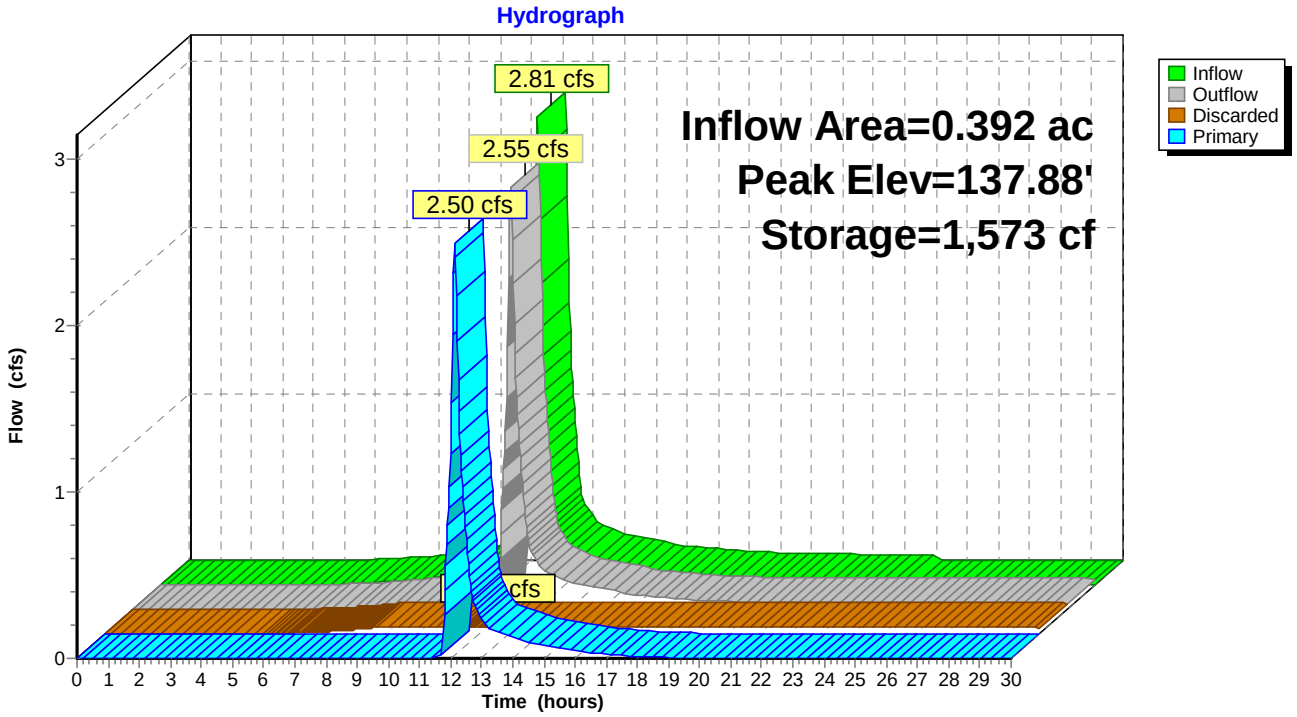
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	137.58'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.13 hrs HW=137.88' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=2.48 cfs @ 12.13 hrs HW=137.88' (Free Discharge)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 2.48 cfs @ 1.40 fps)

Pond 9P: BIO-1


Hydrograph
2.81 cfs
2.55 cfs
2.50 cfs
Inflow Area=0.392 ac
Peak Elev=137.88'
Storage=1,573 cf
Inflow
Outflow
Discarded
Primary
Flow (cfs)
Time (hours)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 4.58" for 100-yr event
Inflow = 4.16 cfs @ 12.11 hrs, Volume= 0.253 af
Outflow = 2.83 cfs @ 12.22 hrs, Volume= 0.230 af, Atten= 32%, Lag= 6.8 min
Discarded = 0.06 cfs @ 12.22 hrs, Volume= 0.090 af
Primary = 2.77 cfs @ 12.22 hrs, Volume= 0.140 af
Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 133.65' @ 12.22 hrs Surf.Area= 2,572 sf Storage= 3,440 cf

Plug-Flow detention time= 177.7 min calculated for 0.230 af (91% of inflow)
Center-of-Mass det. time= 142.1 min (933.8 - 791.8)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

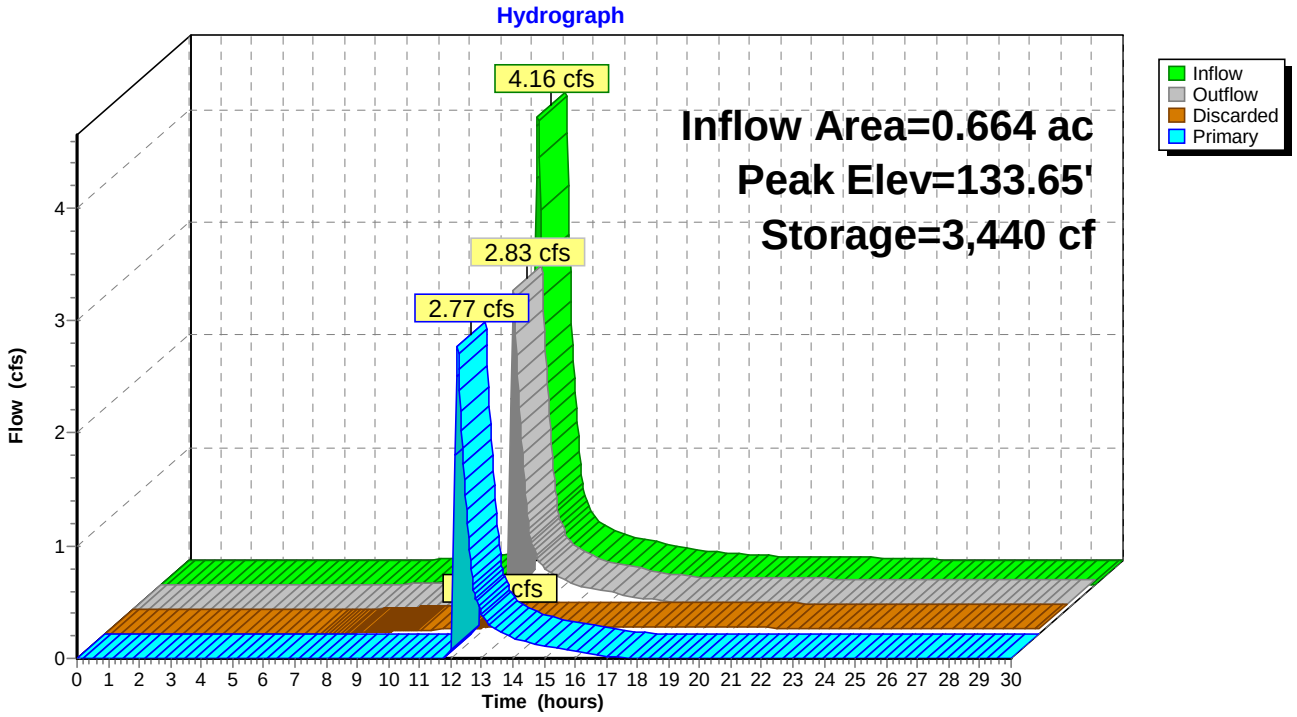
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	133.33'	**6.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.06 cfs @ 12.22 hrs HW=133.64' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=2.73 cfs @ 12.22 hrs HW=133.64' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Weir Controls 2.73 cfs @ 1.45 fps)

Pond 12P: BIO-2



Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 5.42" for 100-yr event
Inflow = 3.97 cfs @ 12.09 hrs, Volume= 0.285 af
Outflow = 1.31 cfs @ 12.40 hrs, Volume= 0.227 af, Atten= 67%, Lag= 18.7 min
Discarded = 0.08 cfs @ 12.40 hrs, Volume= 0.128 af
Primary = 1.23 cfs @ 12.40 hrs, Volume= 0.098 af
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 128.80' @ 12.40 hrs Surf.Area= 3,360 sf Storage= 5,156 cf

Plug-Flow detention time= 276.1 min calculated for 0.227 af (80% of inflow)
Center-of-Mass det. time= 198.3 min (1,012.1 - 813.7)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

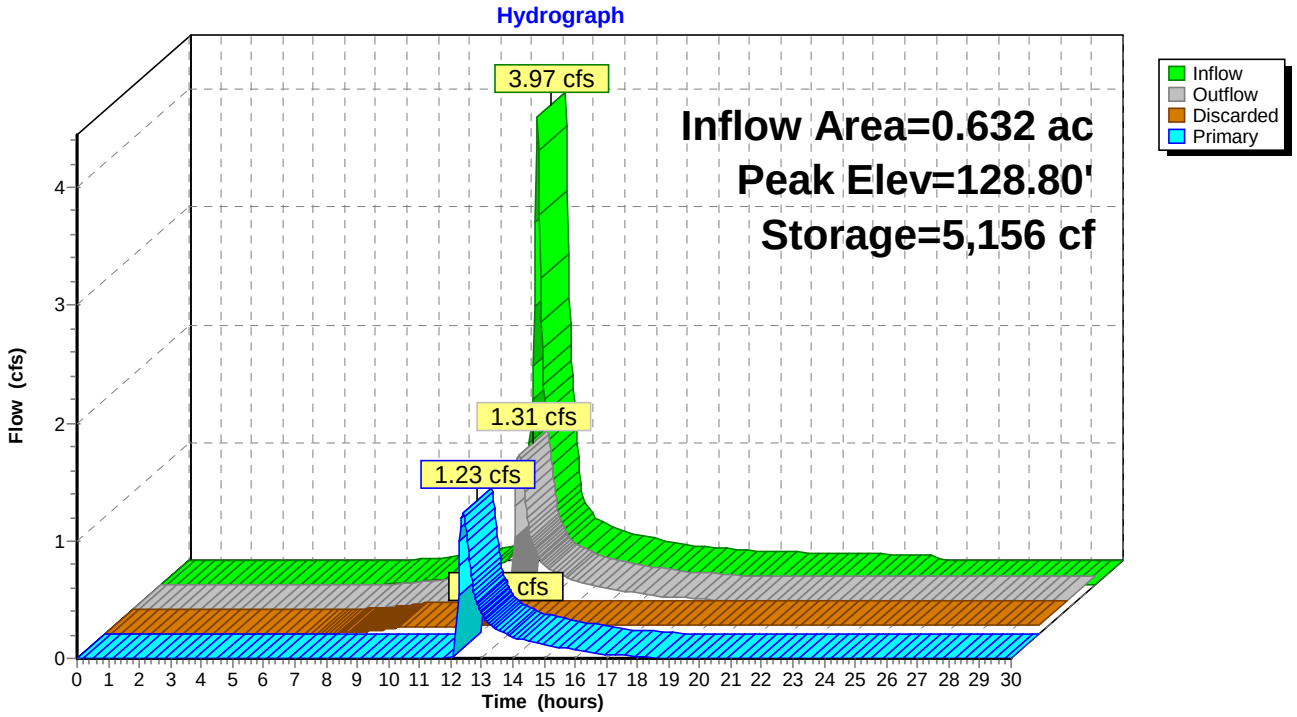
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	**1.020 in/hr Exfiltration over Surface area**
#2	Primary	128.58'	**5.0' long x 4.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.08 cfs @ 12.40 hrs HW=128.80' (Free Discharge)
1=Exfiltration (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=1.22 cfs @ 12.40 hrs HW=128.80' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 1.22 cfs @ 1.12 fps)

Pond 13P: BIO-3

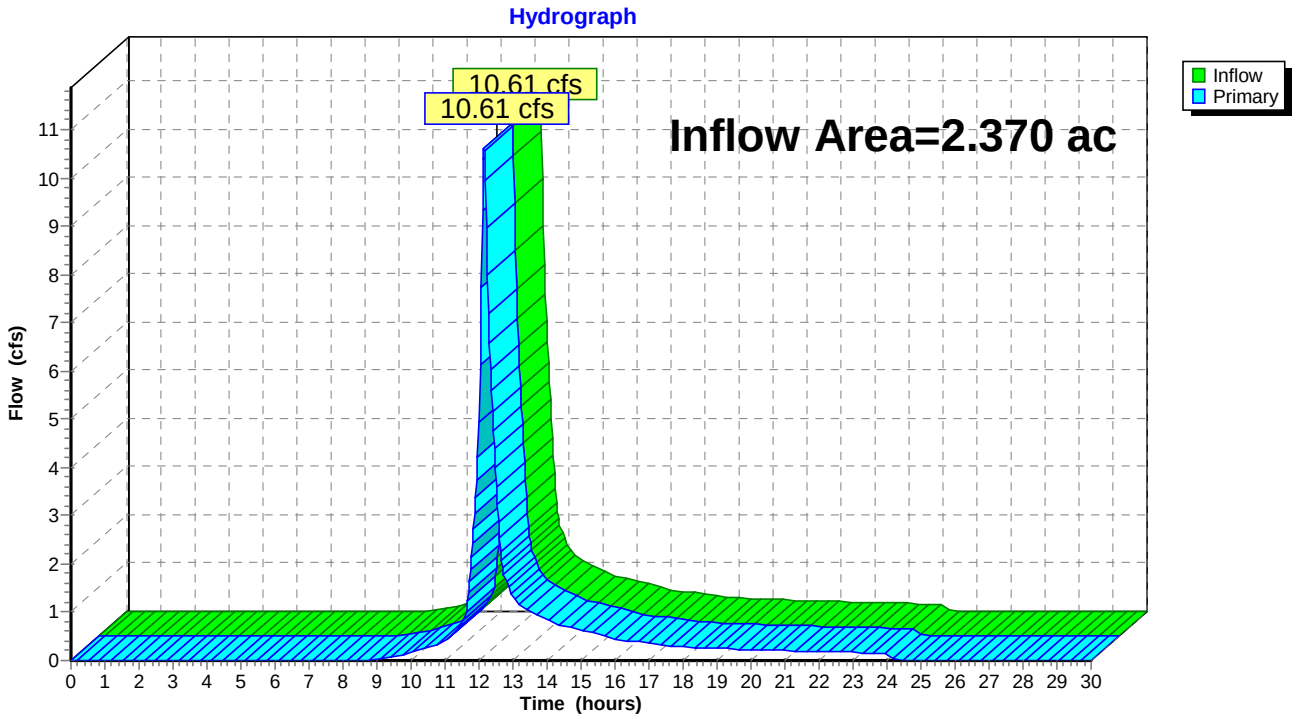


Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 4.38" for 100-yr event
Inflow = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af
Primary = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

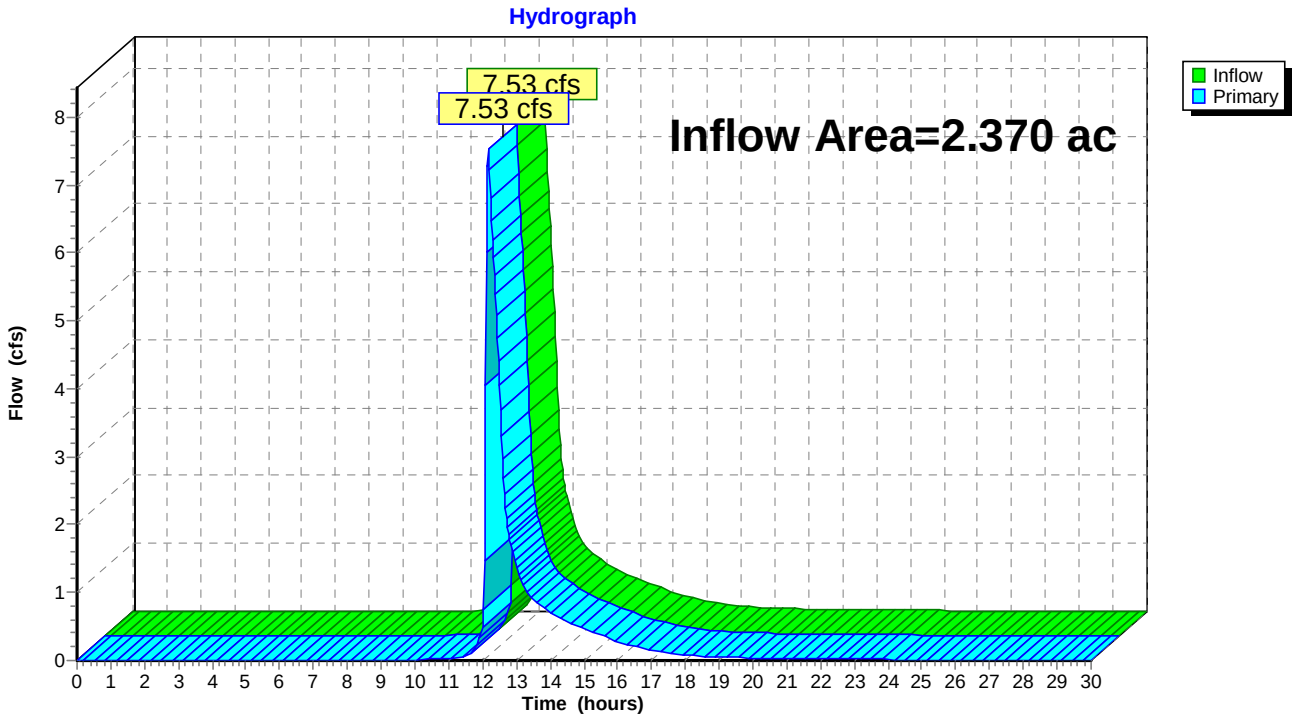


Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 2.62" for 100-yr event
Inflow = 7.53 cfs @ 12.18 hrs, Volume= 0.517 af
Primary = 7.53 cfs @ 12.18 hrs, Volume= 0.517 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE



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BAYVIEW AVENUE
(PUBLIC VARIABLE WIDTH)

HOLLY LANE
(PUBLIC VARIABLE WIDTH)

A.P. 48 LOT 7
N/F ROGER WILLIAMS UNIVERISTY

A.P. 48 LOT 12
N/F JULIANN SOUSA
DB. 1660 PG. 158

A.P. 48 LOT 89
N/F GARY LEITAO
DB. 1782 PG. 12

A.P. 48 LOT 53
N/F LUCIA M. RESENDES
DB. 1885 PG. 282

A.P. 47 LOT 7
N/F THOMAS LEE & REBECCA NICHOLS
DB. 1313 PG. 49

A.P. 47 LOT 25
N/F RICHARD A. BRANDARIZ
DB. 2117 PG. 312

A.P. 47 LOT 8
N/F BRENDA L. SWEENEY
DB. 1532 PG. 19

A.P. 47 LOT 18
N/F STEPHEN M. & MAE MEDEIROS
DB. 1916 PG. 248

A.P. 47 LOT 29

A.P. 47 LOT 20
N/F DOUGLAS W & JENNIFER MORENZI
DB. 1931 PG. 252

A.P. 47 LOT 2
N/F DAVID P. & SHEILA SARDINHA
DB. 1138 PG. 345

A.P. 47 LOT 21
N/F LINDA L. OUELLETTE

A.P. 47 LOT 22
N/F MATTEO CASTIGLIEGO
DB. 1390 PG. 325

A.P. 47 LOT 23
N/F JAMES T. COSTELLO
DB. 2149 PG. 217

A.P. 47 LOT 4
N/F TOWN OF BRISTOL
DB. 1568 PG. 231

A.P. 47 LOT 26
N/F JACKYS REALTY III LLC
DB. 1687 PG. 7

A.P. 46 LOT 1
N/F RHOLEN EAST LLC

A.P. 47 LOT 3
N/F FAIR WIND PROPERTIES LLC
DB. 2147 PG. 344
LOT AREA
92,656 SQ. FT.
2.1270 ACRES

EXISTING HOUSE #206 BAY VIEW AVENUE UNITS 1-3

EXISTING BUILDING

EXISTING GARAGE/BARN

EX. DWELLING

EX. GARAGE

EX. DRIVEWAY

WELL HOUSE

SHED 1

SHED 2

REBAR CAP (FND) (HELD)

REBAR CAP (FND)

GRANITE BOUND DRILL HOLE (FND)

A.P. 47 LOT 19 (FND)

PROPANE TANK

DISPOSALO

FAUCET

CONC.

CHAINLINK FENCE

STONEWALL

TREELINE

HEDGE

EDGE OF PAVEMENT

GRAVEL DRIVEWAY

SMH RIM: 149.20' INV. IN 145.30' INV. OUT 145.10' 8" PVC

CBN RIM: 149.87' INV.A:146.97' INV.B:147.31' INV.C:147.37'

SMH RIM: 152.29' INV. 145.99'

SMH RIM: 150.79' CI: 150.14' INV. 148.29'

SMH RIM: 145.25' INV: 137.95'

CBN RIM: 142.22' INV.A:139.02' INV.B:138.97' INV.C:140.17'

CB RIM:137.19' 8"PVC INV.=130.49

S74°36'42"W 72.50'

S74°36'42"W 219.42'

N74°36'42"E 72.50'

S8°45'16"E 110.00'

S80°14'56"W 5.00'

S9°45'04"E 44.00'

N80°14'56"E 71.20' (FND)

N6°39'53"W 160.00'

N76°49'44"E 78.00'

N4°38'09"W 29.52'

N2°26'58"W 59.79'

N5°55'04"W 126.42'

N2°26'58"W 120.22'

S1°04'18"E 145.57'

S9°09'29"E 309.23'

S1°56'54"E 36.25'

S78°42'32"W 80.41'

S80°50'50"W 69.89'

S70°52'45"W 31.79'

S77°59'39"W 58.96'

S89°39'53"W 12.93'

TP 1(5')
TP 2(6')
TP 3(2')
TP 4(8')
TP 5(6')
TP 6(4')
TP 7(4')
TP 8(10')
TP 9(3')
TP 10A(8.5')
TP 10B(3')
TP 11(9.5')

Tc

PRE-WATERSHED

PmA

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEDGE TESTS:
DATE: 07/27/2022

TH 1
LEDGE @ 5FT

TH 2
LEDGE @ 6 FT

TH 3
LEDGE @ 2 FT

TH 4
NO LEDGE
8 FT DEEP

TH 5
LEDGE @ 6 FT

TH 6
LEDGE @ 4 FT

TH 7
LEDGE @ 4 FT

TH 8
NO LEDGE
10 FT DEEP

TH 9
LEDGE @ 3 FT

TH 10A
NO LEDGE
8.5 FT DEEP

TH 10B
LEDGE @ 3 FT

TH 11
NO LEDGE
9.5 FT DEEP

ZONING CRITERIA

R10 ZONING	
ZONING DISTRICT	R10
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80'
MINIMUM LOT FRONTAGE	80'
MINIMUM FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

PRE-WATERSHED MAP

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

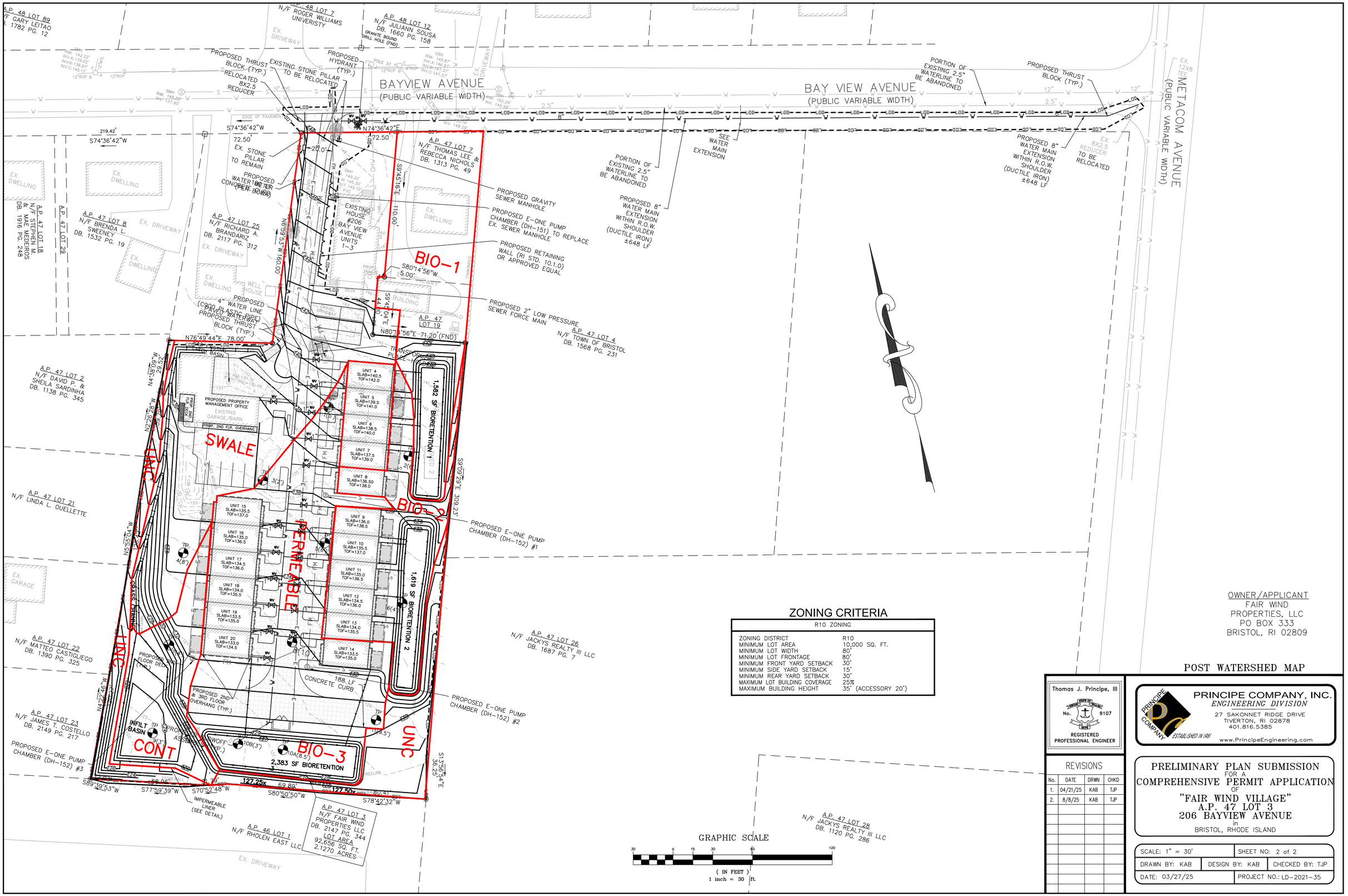
REVISIONS

No.	DATE	DRWN	CHKD
1.	8/8/25	KAB	TJP

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
www.PrincipeEngineering.com

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 1 of 2
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/25		PROJECT NO.: LD-2021-35



ZONING CRITERIA

R10 ZONING	
ZONING DISTRICT	R10
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT WIDTH	80'
MINIMUM LOT FRONTAGE	80'
MINIMUM FRONT YARD SETBACK	30'
MINIMUM SIDE YARD SETBACK	15'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM LOT BUILDING COVERAGE	25%
MAXIMUM BUILDING HEIGHT	35' (ACCESSORY 20')

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

OWNER/APPLICANT
FAIR WIND
PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809

POST WATERSHED MAP

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
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REVISIONS

No.	DATE	DRWN	CHKD
1.	04/21/25	KAB	TJP
2.	8/8/25	KAB	TJP

PRELIMINARY PLAN SUBMISSION
FOR A
COMPREHENSIVE PERMIT APPLICATION
OF
"FAIR WIND VILLAGE"
A.P. 47 LOT 3
206 BAYVIEW AVENUE
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 30'		SHEET NO: 2 of 2
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 03/27/25		PROJECT NO.: LD-2021-35

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C:\Users\admin\Principe Engineering Dropbox\Current Working Drawings and PDFs\LD_2021-35_206 Bay View Avenue_Bristol_Daniel Ferreira\Current

APPLICATION FOR COMPREHENSIVE PERMIT

206 BAYVIEW AVENUE
(A.P. 47, Lot 3)

INTRODUCTION	In accordance with the Rhode Island Low and Moderate Income Housing Act, R.I. General Laws §45-53-3, et seq., and in lieu of applications to separate Boards, councils or officers, the below named Applicant/Owner submits this application to the Planning Board of the Town of Bristol for a Comprehensive Permit with respect to "Fair Wind Village".
APPLICANT	Fair Wind Properties, LLC, a Rhode Island limited liability company, P.O. Box 333 Bristol, RI 02809
OWNER	Fair Wind Properties, LLC a Rhode Island limited liability company, P.O. Box 333 Bristol, RI 02809
SUBJECT PROPERTY	206 Bayview Avenue A.P. 47, Lot 3, consisting of 2.127 acres, 92,656 sq. ft. R-10 Zoning
SITE CONTROL	The Applicant and Owner Fair Wind Properties, LLC's Deed to the Subject Property is attached hereto as Attachment A.
DEVELOPMENT PROPOSAL AND SITE ANALYSIS AND IMPACTS NARRATIVES	Consistent with the Town of Bristol's Comprehensive Plan, a residential rental community is proposed. While the Comprehensive Plan contemplates a density of 15 units (inclusive of affordable housing incentive density bonus) the development proposal is for 17 newly constructed townhouse style units with open concept first floor plans to be combined with 3 existing units (for a total of 20 units) as follows: TYPE A: (1) - 4-bedroom unit located within an existing multi-family home. TYPE B: (2) – 3-bedroom units located within an existing multi-family home and (17) 3-bedroom units to be located in newly constructed buildings. The new units contain 1,589 sf of total living area and have 2.5 baths, in-unit laundry and 2 car garages. GARAGE/Property Management Office : The Subject Site is presently serviced by two garages built in 1885. Their combined square footage is 1807. The development proposal is to use the garages for the Property Owner's storage and for site maintenance equipment and supplies. A property management office will be constructed above the 3 car garage bay on the south side portion of the building. An existing 240 sf shed will be demolished.

	• Open space for children's activities is proposed. • Basketball and cornhole courts are proposed at the hammerhead turnaround location. • The newly constructed units will have private patios. • The site is proposed to be serviced by public water and sewer. • The new roadway is proposed to be private, the length of which is 460 linear feet. • Twenty-five percent (25%) of the 20 units (5 units) will be deed-restricted to low- or moderate-income households in accordance with the Act.
• SITE ANALYSIS	• Submitted herewith and incorporated herein by reference are the following materials prepared by Principe Company: • Drainage Summary. • Hydro CAD Report.
• TRAFFIC ANALYSIS AND REPORT	• Submitted herewith and incorporated herein by reference is a detailed Trip Generation & Traffic Impact Study for the development prepared by Crossman Engineering, Updated 5/6/2025. Key Notes: • No detrimental impact on the level of service at metacom ave and Bayview Ave intersection • The driveway of the development will operate at a good level of service • The proposed use is not a high traffic generator
• FISCAL IMPACT STUDY	• Submitted herewith and incorporated herein by reference is a Fiscal Impact Study prepared by JDL Enterprises – Joseph D. Lombardo, AICA March. 2025 .
• PRELIMINARY PLAN SUBMISSION CHECKLIST	• Submitted herewith are Five (5) copies of the Preliminary Plan Set prepared by Principe Company together with 1 reduced copies of all required Items.
• RHODE ISLAND HOUSING LETTER OF ELIGIBILITY UNDER LOW AND MODERATE INCOME HOUSING ACT	• Submitted herewith and incorporated herein by reference is the Application submission to Rhode Island Housing for the Letter of Eligibility. The Applicant's Letter of Eligibility is attached hereto as Attachment B. • Rhode Island Housing has deemed the Application eligible to pursue a Comprehensive Permit application in the Town of Bristol for the subject property.

PROJECT FINANCIAL PRO-FORMA	The Project Pro Forma is included in the Letter of Eligibility Request package described immediately above.
MONITORING AGENT	An entity suitable to both the Planning Board and the Applicant – certified by Rhode Island Housing as an approved Monitoring Agent – will be identified and selected during the Final Plan stage. If the Planning Board has no preference, East Bay Community Development Corp. Contact: Diane Mederos Bristol, RI 02809 Phone: 401-253-2080 Fax: 401-253-6997 Email: dmederos@ebcdc.org.
LOW/MODERATE INCOME HOUSING UNITS SAMPLE DEED RESTRICTION	Five (5) Rental Apartments: Occupancy shall be limited to households of low or moderate income as defined in the Low- and Moderate-Income Housing Act, R.I. Gen. Laws §45-53-1, et seq., with households earning Eighty Percent (80%) of Area Median Income ("AMI"), adjusted for family size, as certified by the Monitoring Agent. The Applicant proposes that the deed restriction on the moderate-income housing units substantially track the template utilized by Rhode Island Housing And Mortgage Finance Corporation, a copy of which is attached hereto as Attachment C.
CONSISTENCY WITH COMPREHENSIVE PLAN/AFFORDABLE HOUSING PLAN	Submitted herewith and incorporated herein by reference is Report Relating to the Petition for Comprehensive Permit Master Plan Approval prepared by James A. Houle, RI Certified General Appraiser dated April 4th, 2025. Attachment D. The report includes affirmative opinions with respect to the required findings for the approval of the Application including, but not limited to: Because Bristol lacks the necessary 10% minimum for affordable housing, the units which are to be reserved for this purpose within the proposed complex are, at the very least, important, if not critical. The proposal is very consistent with local needs, both in terms of market rate housing but certainly in terms of affordable housing. All data indicates shortages of all economic levels of housing. The proposal brings a degree of relief to a community in strong need of both market and affordable housing. The report addresses both conformity to the zoning and comprehensive land use plan throughout, targeting standards in the local code for the variances and waivers needed to complete the project. The low- and moderate-income units are fully integrated throughout the proposed complex. They are indistinguishable from market rate units in the complex, in terms of scale and architectural design. The schedule of construction for the entire complex is planned in such a manner that the affordable units would be constructed simultaneously with the market rate units. A major factor in the design has been avoiding significant environmental impacts. The applicant has satisfied the Town during the application process. There are no likely potential environmental impacts foreseen. The applicant has addressed the town's concerns and prepared a development proposal which will not have significant negative impacts on

	the health and safety of current or future residents of the community in the areas defined in the statute pertaining to Comprehensive Permits. As part of the preservation of cultural and historical features, the existing Victorian style house currently on the site will be retained and is incorporated into the plan. This works to preserve the streetscape familiar to area residents. All units will have direct, adequate, and permanent access to a public street. The project does not require the subdivision of land. Therefore, no individual lots with any physical constraints will be created.
Waivers and Variances	A waiver is requested from Land Development Projects Section 28-282 (d) Standards for Multifamily Buildings: Sub-Section (2) Distance between multifamily buildings on same lot: Minimum 25 feet between multifamily buildings in the same row. 10 feet provided. Sub-Section (8) Not more than four contiguous townhouses shall be built in a row with the same or approximately the same front line. Special architectural design offsets utilized. Appendix F.2(F)(1) Sidewalks shall be required to be installed on one side of new streets in subdivisions and in multifamily developments. No sidewalks are proposed. A variance is requested from Zoning Ordinance Article IV Dimensional Regulations Sec. 28-111 Table B requiring 80' of lot frontage. 72.50 ' of existing frontage provided. 64 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2). A Variance is requested from Zoning Ordinance Section 28-363 (2)(a1) Municipal subsidies, Density Bonus. For projects providing at least 25 percent low- and moderate-income housing the density bonus shall be five units per acre. The yield map created by Principe Engineering showed that the project site can support 5 dwelling lots without the density bonus. The lot size is 2.1270 acres. Therefore the given lot size multiplied by the density bonus is equal to 10.635 additional units. The total allowed units per the density bonus is 15.635 rounded up to 16 units. 20 units are provided with 17 units to be newly constructed. A variance is requested from Zoning Ordinance Section 28-363 (2)(a1)Municipal subsidies, Density Bonus. For projects providing at least 25 percent low- and moderate-income housing the density bonus shall be five units per acre. Per the calculations 15 units are permitted in total. 20 units are provided with 17 units to be newly constructed. A variance is requested from Zoning Ordinance Permitted Uses, Section 28-3 and Section 28-82. This R-10 zone is intended for high density residential areas comprised of single household and two-household structures within a minimum density of 10,000 square feet per dwelling unit where public sewer and/or public water are provided. Multi-household dwelling units are not allowed. The site has public sewer and public water. Multi-household dwelling units are proposed. Variances are requested from Zoning Ordinance Section 28-252 Article VIII. Non conformance. The use of the Existing Garage/Barn will be used for property owner storage and for site maintenance equipment and

	supplies. A property management office will be added to the building above the garages and will be used for property management offices. • General Requirements for parking as follows: Parking spaces are required to be 10'x18'. The proposed spaces are 9'x18'. The required aisle width is 24.' The proposed aisle width is 20.' • Sub-Section (3) Distance between multifamily buildings and property line: Minimum 50 feet from side and rear property lines. 32.1 feet min. provided. 40 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2)..

TIMETABLE FOR CONSTRUCTION AND COMPLETION; PHASING	At this time construction is expected to commence once all permits and approvals are received and all applicable appeal periods have expired, construction financing is in place and bid selections for contractor services are completed. The project may proceed in phases based on market trends and construction sequencing. The phasing will be further refined at the Preliminary Plan stage of the approval process, but the full buildout will likely be 24 months in two phases.

Respectfully submitted,

_____

Scott T. Spear
Blish & Cavanagh, LLP
30 Exchange Terrace
Providence, RI 02903
(401) 831-8900

Dated: April ___, 2025

Attorneys for Applicant,
Fair Wind Properties, LLC

Subdivision and Development Regulations

There are currently no waivers being requested for the Subdivision and Development Regulations.

Danial Ferreira
Managing Partner
Fair Wind Properties LLC

Attachment Schedule

A. ***Evidence of Site Control***

B. ***Application to RI Housing, Pro Forma, Letter of Eligibility***

C. ***Sample Deed Restriction***

D. ***Real Estate Expert Report***

E. ***Traffic Study***

F. ***Tax Certificate***

G. ***BCWA Approval***

H. ***Public Sewer Availability***

I. ***Phase 1 Environmental***

J. ***Exterior Building Renderings***

K. ***Fiscal Impact Study***

L. ***Responses from Pare review, Town review, and Traffic Study***

M. ***RIPDES***

N. ***Wetlands Investigation***

Attachment A

Evidence of Site Control

Attachment B

Application to RI Housing, Pro Forma, Letter of Eligibility

Attachment C

Sample Deed Restriction

Attachment D

Real Estate Expert Report

Attachment E

Traffic Study

Attachment F

Tax Certificate

Attachment G

BCWA Approval

Attachment H

Public Sewer Availability

Attachment I

Phase 1 Environmental

Attachment J

Exterior Building Renderings

Attachment K

Fiscal Impact Study

Attachment L

Responses from Pare review, Town review, and Traffic Study

Attachment M

RIPDES

Attachment N

Wetlands Investigation

RESPONSE TO COMMENTS (PARE PEER REVIEW, TRC MTG. NOTES, & SEWER COMMENTS)
206 BAYVIEW AVENUE, BRISTOL
AUGUST 8, 2025

PARE PEER REVIEW COMMENTS (JUNE 20, 2025)

General:

COMMENT #1: Update the revision date for the Preliminary Plan Submission for a Comprehensive Permit Application for "Fair Wind Village" prepared by Principe Company, Inc.
RESPONSE #1: Revision date has been updated.

COMMENT #2: Rhode Island Department of Environmental Management (RIDEM): Disturbance of greater than an acre shall require a RIDEM Stormwater Construction Permit.
Response: Yes. A RIPDES permit has been received.
Pare Response: Accepted.
RESPONSE #2: No response necessary.

COMMENT #3: Town of Bristol Subdivision and Development Review Regulations: Appendix F: Section I Drainage; Due to the project location within the Tanyard Brook Watershed, any increase in stormwater runoff volume, up to and including the 10-year storm event, shall be retained and recharged on site as close as feasible to its place of origin by means of detention ponds or basins, seepage areas, subsurface drains, porous paving, or similar low impact design techniques. Provide volume calculations for the pre- and post-construction conditions and Groundwater Recharge calculations.

a. Provide test pit logs to confirm soil textural class and proposed infiltration rates. National Resources Conservation Service (NRCS) Soil Survey data shows predominantly Pittstown silt loam within the footprints of the proposed Best Management Practices (BMPs).

Response: Yes, the location of the property within the Tanyard Brook watershed was known, and the project designed in accordance with the requirements of this regulation. Further, on-site test pits were excavated for both soil and ledge, and the information relative to the ledge was provided on the site plans, as the ledge was the greater constraint on the design of the stormwater controls. The site exhibits soil characteristics more in keeping with the Canton-Urban land complex, very rocky (CC) that is mapped for the northern portion of the site, rather than the Pittstown silt loam reference in the comment above and this hydrologic soil group was used in the HydroCAD modeling.
Pare Response: Provide test pit logs to confirm soil textural class, depth of soil horizons, and proposed infiltration rates.
RESPONSE #3: Additional test pit information provided in the drainage report.

Plans:

COMMENT #1: Proposed Conditions Plan: In accordance with Appendix F.2 Section F(1) of the Town of Bristol Subdivision & Development Review Regulations, sidewalks shall be required to be installed on one side of new streets in subdivisions and in multifamily developments. Review for the addition of sidewalk.
Response: Provision of a sidewalk on this common access drive does not appear to apply, especially given the fact that there isn't a sidewalk along Bay View Avenue that any sidewalk on this private property would connect to.
Pare Response: Noted.
RESPONSE #1: No response necessary.

COMMENT #2: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(3) of the Town of Bristol Subdivision & Development Review Regulations, gas service shall be provided in all subdivisions and land development projects where such service is available in accordance with the standards set forth by the Bristol and Warren Gas Company. Gas lines shall generally be located on the south or west side (opposite side from water service) of the street. Review and show gas lines on the plans.
Response: It is Principe's understanding that gas service is not available for this site.
Pare Response: Noted.
RESPONSE #2: No response necessary.

COMMENT #3: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(4) of the Town of Bristol Subdivision & Development Review Regulations, all new electric, communication (telephone, fire alarm, and cable TV) and street lighting lines shall be installed underground. Review and show electric and communication lines on the plans.

a. Plans shall show the location of any proposed electrical transformer, along with associated bollards and screening.

Response: The majority of these utilities are not developed until further along in the permitting process, and are developed by the utility companies themselves (in particular RI Energy). It is understood that they will be underground.
Pare Response: Show the planned locations for utilities to confirm the available space to support the anticipated above and below ground infrastructure.
RESPONSE #3: To the greatest extent possible (given the lack of jurisdiction for the placement of these utilities), these items have been shown.

COMMENT #4: Proposed Conditions Plan: Show anticipated limits of repaving on Bayview Avenue for utility installations, including gas, water, sewer, communications and electric.
Response: The limits of repaving of Bay View Avenue is shown on the plan to the extent that Principe is aware of.
Pare Response: The proposed watermain extension shows a new 8-inch watermain within the existing grassed shoulder and Town right-of-way.

- **Confirm the source and accuracy of the right-of-way information.**
- **The proposed watermain is shown 2 to 3 feet from the existing curb. Confirm location and anticipated restoration to the existing curb and roadway, within the limits of impacted curbline.**
- **Confirm type and limits for restoration of existing residential and police station driveways. Existing utility structures and signage within the police station property may be in conflict with the proposed watermain, which may result in additional trenching within the roadway. Review and confirm.**

RESPONSE #4: The Town right-of-way was surveyed for the limits of this project. Limits of disturbance within the right-of-way have been included, notes added regarding restoration of pavement, curb, signs, and landscaping.

COMMENT #5: Proposed Conditions Plan: In accordance with Appendix F.2 Section J(5) of the Town of Bristol Subdivision & Development Review Regulations, fire hydrants shall be installed in subdivisions and developments as specified by the Town of Bristol Fire Chief. Review and show fire hydrants on the plans.

a. Coordinate with Town of Bristol Fire Chief and Bristol County Water Authority relative to available fire flow.

Response: Coordination with the Town of Bristol Fire Chief and Bristol County Water Authority has been initiated, with the result that the Fire Department has indicated that a new fire hydrant is not required (an

existing fire hydrant is within approved distance to the site). However, coordination with BCWA has resulted in adding a new hydrant and upgrading the water line in Bay View.
Pare Response: Noted.
RESPONSE #5: No response necessary.

COMMENT #6: Proposed Conditions Plan: Provide revised plans including typical dimensions of drive aisles, parking spaces, curb cuts and vehicle turnaround.
Response: Dimensions have been added to a new plan "Proposed Layout Plan" for clarity purposes.
Pare Response: Accepted.
RESPONSE #6: No response necessary.

COMMENT #7: Proposed Conditions Plan: Provide turning template for required fire apparatus confirming turnaround dimensions are acceptable.
Response: Fire truck turning template provided.
Pare Response: Accepted.
RESPONSE #7: No response necessary.

COMMENT #8: Proposed Conditions Plan: In accordance with Section 8.22 Permeable Paving of the RIDEM Stormwater Management, Design and Installation Rules; permeable paving shall only be used on slopes less than 5%. Review northern parking adjacent to the existing house and units 4 & 5.
Response: Spot grades have been shown on the plan in order to document compliance with this.
Pare Response: Accepted.
RESPONSE #8: No response necessary.

COMMENT #9: Proposed Conditions Plan: Review grading and drainage of the area in front of the existing Garage/Barn. Areas of stormwater runoff may be directed to the existing catch basin. Show how the existing drainage structure ties into the proposed drainage.
Response: The existing catch basin will be removed and the parking area replaced with permeable pavement.
Pare Response: Accepted.
RESPONSE #9: No response necessary.

COMMENT #10: Proposed Conditions Plan: Grading of access roadway swale conveys stormwater to the adjacent property to the west (AP 47 Lot 25). Review grading and potential impacts to adjacent properties.
Response: Contours in this area have been adjusted to ensure that no increase in stormwater flows are directed to abutters.
Pare Response: The 1-foot-deep swale is not maintained adjacent to the abutting property and stormwater flows are conveyed to the abutter (AP 47 Lot 25). Review grading and potential impacts to adjacent properties.
RESPONSE #10: Principe respectfully disagrees with PARE's opinion on this. However, a concrete curb has been added to the western edge of the access drive to further ensure that no increase in flows are directed to abutters.

COMMENT #11: Proposed Conditions Plan: The project proposes an earthen berm along the eastern property line impacting the existing flow patterns. Review impacts to abutting properties and conveyance of flow.
Response: Principe respectfully disagrees with the PARE presumption that the provision of the berm along the eastern property line will change the existing flow patterns. A review of the LIDAR provided on the RIDEM

website indicates that there is already a dividing line between what flows onto the subject site and that which continues along the eastern side of the property line. Further, there is an existing stone wall present that also acts like an existing division. Therefore, no additional impacts to the abutting properties are anticipated.
Pare Response: Accepted.
RESPONSE #11: No response necessary.

COMMENT #12: Proposed Conditions Plan: Top of earthen berm widths for the Rain Gardens are approximately 2 feet wide. Review increasing top of berm widths.
Response: There is no need for increasing the width of the tops of the berms for these small-scale residential stormwater treatments. Maintenance will be done by hand.
Pare Response: The Application proposes narrow berms and minimal freeboard, and provided no soil textural classification justifying the proposed infiltration rates within the analysis.
RESPONSE #12: To the maximum extent practicable, all of the bioretention basins have been increased in size in order to increase the freeboard for all storm events, including the 100-year storm. Principe would reiterate our previous response and also reiterate that the state reviewing agency's (RIDEM) professional engineer reviewed and approved the project as previously designed.

COMMENT #13: Layout Plan: Denote removal or maintenance of significant trees impacted (10" or greater).
Response: The limit of disturbance required for the development of the property extends to all property lines. As a result, any trees that are on the property are proposed to be removed (i.e. none will be "maintained"). The majority of the site is already cleared, although there are some trees immediately adjacent to the existing structure that currently exist but will need to be removed due to the new access drive widening. These have been specifically indicated to be removed on the revised plan.
Pare Response: Accepted.
RESPONSE #13: No response necessary.

COMMENT #14: Layout Plan: Denote the removal of the sheds and well house.
Response: Existing structures to be removed have been noted on the revised plans.
Pare Response: Accepted.
RESPONSE #14: No response necessary.

COMMENT #15: Details-2: Dry Open Swale Typical Cross Section is not in conformance with RIDEM Standard 8.25 (D)(2) requiring a minimum of 30-inches of bioretention soil.
Response: The swale is being utilized for pre-treatment (i.e. 8.27(A) "grass channel") and therefore is not required to conform to RIDEM Standard 8.25 (D)(2). Bioretention soil mix was added to enhance treatment. Plan and detail have been relabeled to avoid confusion.
Pare Response: Accepted.
RESPONSE #15: No response necessary.

COMMENT #16: Details-5: Review top of berm and bottom of basin elevation for RG-1. Plans show top of berm elevation of 138.00 and bottom of basin of 137.00.
Response: Detail has been Corrected.
Pare Response: Accepted.
RESPONSE #16: No response necessary.

Drainage Report:

COMMENT #1: General: Provide test pit logs confirming soil textural class, depth and method for determining estimated seasonal high groundwater, and soil evaluator license information.

Response: Test pits were excavated on site by Thomas J. Principe, III, PE #9107 and also licensed soil evaluator #4075. Test pit logs are provided on the pre-watershed map provided and as indicated in the HydroCAD calculations.

Pare Response: The test pit logs provided on the pre-watershed map do not provide the soils textural class, depth of horizons, or method for determining estimated seasonal high groundwater.

RESPONSE #1: Additional test pit information has been provided in the drainage report.

COMMENT #2: General: The system is proposed over shallow bedrock and proposes a bottom elevation higher than the down gradient toe of slope. Review Infiltration Basin for groundwater mounding and seepage through adjacent slope.

Response: Out of an abundance of caution, an impermeable liner is now shown for the downslope limits of the infiltration basin to eliminate any concern with seepage.

Pare Response: Accepted.

RESPONSE #2: No response necessary.

COMMENT #3: General: The Drainage Report shall contain:

a. Site Locus Map
b. A graphic depicting the site soils based on NRCS Soil Survey data

Response: Site locus map is shown on the plan set and in the SESC. As indicated previously, soils per the NRCS mapping is not accurate, based upon on-site test hole excavation. Data on these test pits are included on the Pre-Watershed Map included in the Drainage Report.

Pare Response: Accepted.

RESPONSE #3: No response necessary.

COMMENT #4: Appendix A4 HydroCAD Report: Pond 10P "Permeable" assumes the permeable pavement as a flat area. The permeable pavement is sloped at 0.025 ft/ft. Update the hydrologic model accordingly.

a. Review Table 5-5 for guidance on accounting for reduction in runoff in hydrologic models.

Response: Principe utilizes a more conservative method for sizing permeable pavement (i.e. CN of 98) that has been accepted and approved by RIDEM in previous projects. This project is also currently being reviewed by RIDEM as part of a Stormwater and RIPDES application package. An additional detail has been added to the plans that documents that the bottom of the system will be "flat".

Pare Response: Pare does not consider Principe's approach to be more conservative than RIDEMs' guidance. Principes' modelling eliminates the porous pavement from the hydrologic model, while RIDEM suggests including the area but reducing the CN value based on the provided Table 5-5. Pare suggests that flow from the porous pavement be modelled as contributing to RG-3 and INFIL-1 using the CN values from the RIDEM Table 5-5.

Review Porous Asphalt Stepped Reservoir Detail.

- **Earth baffle maximum spacing should be based on the longitudinal slope of the driveway. At the now approximately 0.032 ft/ft slope, the spacing would need to be approximately 20 to 30 feet. Review and revise the 100 foot maximum requirement.**
- **Provide details on the dimensions of the earth baffle width.**
- **Review and revise the detail, and confirm constructability. Pare recommends drawing a profile to scale showing the number and height of proposed baffles to confirm that the porous pavement will be constructed to function as designed.**

RESPONSE #4: Detail has been reviewed and revised and constructability has been confirmed. Baffle spacing has been adjusted and additional dimensions have been provided.

COMMENT #5: Appendix A4 HydroCAD Report: NRCS Soil Survey data shows hydrologic soil group of "C" for most of the site. Update the hydrologic model accordingly.
Response: As indicated previously, the on-site test pits do not conform to a "C" hydrologic soil group, and therefore a "B" hydrologic soil group has been utilized, as per these on-site tests.
Pare Response: Provide test pit logs to confirm soil textural classification and depths of soil horizons encountered.
RESPONSE #5: Additional test pit information has been provided in the drainage report.

COMMENT #6: Appendix A4 HydroCAD Report: Review freeboard within Pond 8P (Infil-1), Pond 9P(RG-1), Pond 12P(RG-2), and Pond 13P(RG-3) for the 100-year rainfall event. A minimum of 1-foot of freeboard should be provided in each basin.
Response: For small-scale residential applications a one-foot freeboard for 100-year storm events is not a requirement and is not practicable. The goal for these types of systems is to provide for scattered, minimized treatment systems that blend into the landscape. While these buildings are not single-family, they are still small-scale residential and therefore increasing the size of these basins to provide storage for storm events that are exceedingly rare is not feasible or desirable. Therefore, no changes have been made to conform to this comment.
Pare Response: The Application proposes narrow berms and minimal freeboard, and provided no soil textural classification justifying the proposed infiltration rates within the analysis. The analysis also assumes that no runoff contributes from the porous pavement to the rain garden or infiltration system. Additionally, all systems are proposed as inline, with no diversions for larger rainfall events. Pare maintains the recommended 1-foot of freeboard be provided as indicated above.
RESPONSE #6: To the maximum extent practicable, all of the bioretention basins have been increased in size in order to increase the freeboard for all storm events, including the 100-year storm. Principe would reiterate our previous response and also reiterate that the state reviewing agency's (RIDEM) professional engineer reviewed and approved the project as previously designed.

COMMENT #7: Appendix B1 Operation and Maintenance Plan: The long-term operation and maintenance plan shall include maintenance guidance for the dry open swale that conforms to RIDEM Standard 8.25 (E).
Response: Again, the swale is being utilized for pre-treatment (i.e. 8.27(A) "grass channel") and therefore is not required to conform to RIDEM Standard 8.25 (D)(2).
Pare Response: Accepted.
RESPONSE #7: No response necessary.

COMMENT #8: Appendix B1 Operation and Maintenance Plan: Provide a copy of the required "legally binding and enforceable maintenance agreement" for review.
Response: The maintenance agreement was, and is, provided within the O&M. This sample has been provided as per RIDEM and does not get completed/signed until construction is completed.
Pare Response: Accepted.
RESPONSE #8: No response necessary.

JUNE 25, 2025 TRC MEETING NOTES

NOTE #1: Sewer Comments to be addressed (attached).
RESPONSE #1: See responses below.

NOTE #2: Fire Chief is OK.
RESPONSE #2: No response necessary.

NOTE #3: Water main in shoulder- restoration plans. Show driveway, utilities, etc. Delineate and survey existing ROW.
RESPONSE #3: Survey of the ROW was completed, and a new sheet has been added delineating driveways and existing utilities along with a profile. Detail sheet has been revised to include water main installation specific notes and details.

NOTE #4: Show benches adjacent to the corn hole area.
RESPONSE #4: Benches have been shown.

NOTE #5: Revision dates to be updated.
RESPONSE #5: All sheets that were revised have updated revision dates.

NOTE #6: Bayview is one word, and front page should be Bayview Ave (not road).
RESPONSE #6: Plans have been corrected as above.

NOTE #7: PARE ENGINEERING COMMENTS (soils logs, etc.).
RESPONSE #7: See above responses to PARE comments.

NOTE #8: Look at sidewalks, or ask for Waiver.
RESPONSE #8: A waiver from providing sidewalks is requested as there are no existing sidewalks on either side of Bayview Avenue to connect to and the site itself is not subject to high vehicular traffic volumes.

NOTE #9: Update landscape plan to accommodate new transformer pad location.
RESPONSE #9: Transformer will be enclosed by screen fencing as shown.

NOTE #10: Increase volume of basins.
RESPONSE #10: Volumes have been increased to the greatest extent feasible.

NOTE #11: Porous pavement- not a zero runoff.
RESPONSE #11: Principe would like to reiterate that the project was APPROVED BY RIDEM AS DESIGNED. However, in response to PARE/Town comments, the methodology for calculating the permeable pavement as not infiltrating in its entirety but “overflowing” into Bio-3 has been revised.

NOTE #12: Concrete curb at berm due to minimal freeboard.
RESPONSE #12: Concrete curb has been added.

NOTE #13: Increase capacity BIO-3. PARE not in agreement that the porous pavement doesn’t contribute to the runoff volume - Town was very adamant about this as well.
RESPONSE #13: Principe would like to reiterate that the project was APPROVED BY RIDEM AS DESIGNED. However, in response to PARE/Town comments, the methodology for calculating the permeable pavement as not infiltrating in its entirety but “overflowing” into Bio-3 has been revised.

NOTE #14: Porous Asphalt stepped detail- Profile to scale along section of permeable pavement - maybe use a concrete curb instead of earth baffle.

RESPONSE #14: Detail has been reviewed and revised and constructability has been confirmed. Baffle spacing has been adjusted and additional dimensions have been provided.

NOTE #15: Show stop sign and stop line at Bayview coming out of development.
RESPONSE #15: Stop sign and stop bar have been shown.

BRISTOL WPCF SEWER COMMENTS (APRIL 3, 2025)

COMMENT #1: Identify locations of pump systems and provide detail of pump systems, (flow estimates and head calculations, and service connection piping and valves curb stops, isolation valves, check valves).
RESPONSE #1: Locations and details of pump systems added along with piping, valves, cleanouts and manholes. Flow estimates and head calculations will be provided at Final Submission.

COMMENT #2: Identify proposed size of low-pressure sewer force main.
RESPONSE #2: Pipe sizing added to plans.

COMMENT #3: Replace existing sanitary service.

a. Cut into the existing sewer main in the street (Bayview Avenue) and construct a new manhole. Provide detail for connection from existing sewer main to new manhole. Provide information on piping and proposed couplings (Strong back fernco couplings are required. Pipe penetrations into manholes shall be sealed watertight to prevent groundwater infiltration into the manhole around each connection.
b. The existing service is only 6" and not appropriate for the multiple services. Provide 8" sewer between private property manhole and manhole in street. Provide sewer invert information.

RESPONSE #3: Doghouse manhole shown in same location as existing 6” service lateral connection at the main, with an 8” service line replacing the existing 6”. Details and elevations added to plans.

COMMENT #4: Provide details of sewer construction for review. (Depth of proposed sewer, gravity and low-pressure sewer pipe) and associated manhole.
RESPONSE #4: Details added to the plans.

COMMENT #5: Provide plan and detail for permanent abandonment and or removal of existing sewer service to/for the existing property.
RESPONSE #5: Plans updated (see Response #3)

COMMENT #6: Confirm system will be private.
RESPONSE #6: Confirmed system is private and noted on plans.

Town of Bristol, RI
WATER POLLUTION CONTROL DEPARTMENT
2 PLANT AVENUE
BRISTOL, RI 02809-3015
(401) 253-8877 fax: (401) 253-2910

Jose' J. Da Silva, Superintendent

TOWN HALL
10 COURT STREET
BRISTOL, RI 02809
(401) 253-7000

4/3/2025

To: Planning Board

Re: Sanitary Sewer Availability
206 Bay View Ave
Bristol RI 02809

Access to the Towns sanitary sewer system is available for the Fair Wind Village proposed development at the above location. There is a sanitary main on Bay View Avenue.

Respectfully,

Jose' Da Silva
Superintendent
Bristol WPCF

Cc: Diane Williamson – Director of Community Development

FAIR WIND PROPERTIES, LLC
PO BOX 333
BRISTOL, RI 02809-

TOWN OF BRISTOL
TAX COLLECTION DEPARTMENT
10 Court Street
Bristol, RI 02809
401-253-7000

Interest as of	Principal	Interest	Total
04/01/2025	$2,955.35	$0.00	$2,955.35

Receivable Name	Bill Amount	Balance	Interest	Total Due
2024 RP Tax Roll	$11,821.42	$2,955.35	$0.00	$2,955.35

Payments (6)

Date	Type	Batch	Transaction #	Principal	Interest	Total	Method	Comments
02/25/2025	Payment	CORELOGIC 3RD Q FEB 2025	1092019	$460.50	$0.00	$460.50	Check # <<None>>,	CORELOGIC 2025-02-11
02/25/2025	Payment	CORELOGIC 3RD Q FEB 2025	1092020	$2,494.85	$0.00	$2,494.85	Check # <<None>>,	CORELOGIC 2025-02-11
11/15/2024	Payment	CORELOGIC 2ND Q NOV 2024	1077041	$460.50	$0.00	$460.50	Check # <<None>>,	FIRST AMERICAN 2024-11-12
11/15/2024	Payment	CORELOGIC 2ND Q NOV 2024	1077042	$2,494.85	$0.00	$2,494.85	Check # <<None>>,	FIRST AMERICAN 2024-11-12
08/23/2024	Payment	CORELOGIC 1ST Q AUG 2024	1060133	$460.50	$0.00	$460.50	Check # <<None>>,	CORELOGIC 2024-09-09
08/23/2024	Payment	CORELOGIC 1ST Q AUG 2024	1060134	$2,494.87	$0.00	$2,494.87	Check # <<None>>,	CORELOGIC 2024-09-09

Tax Items (2)

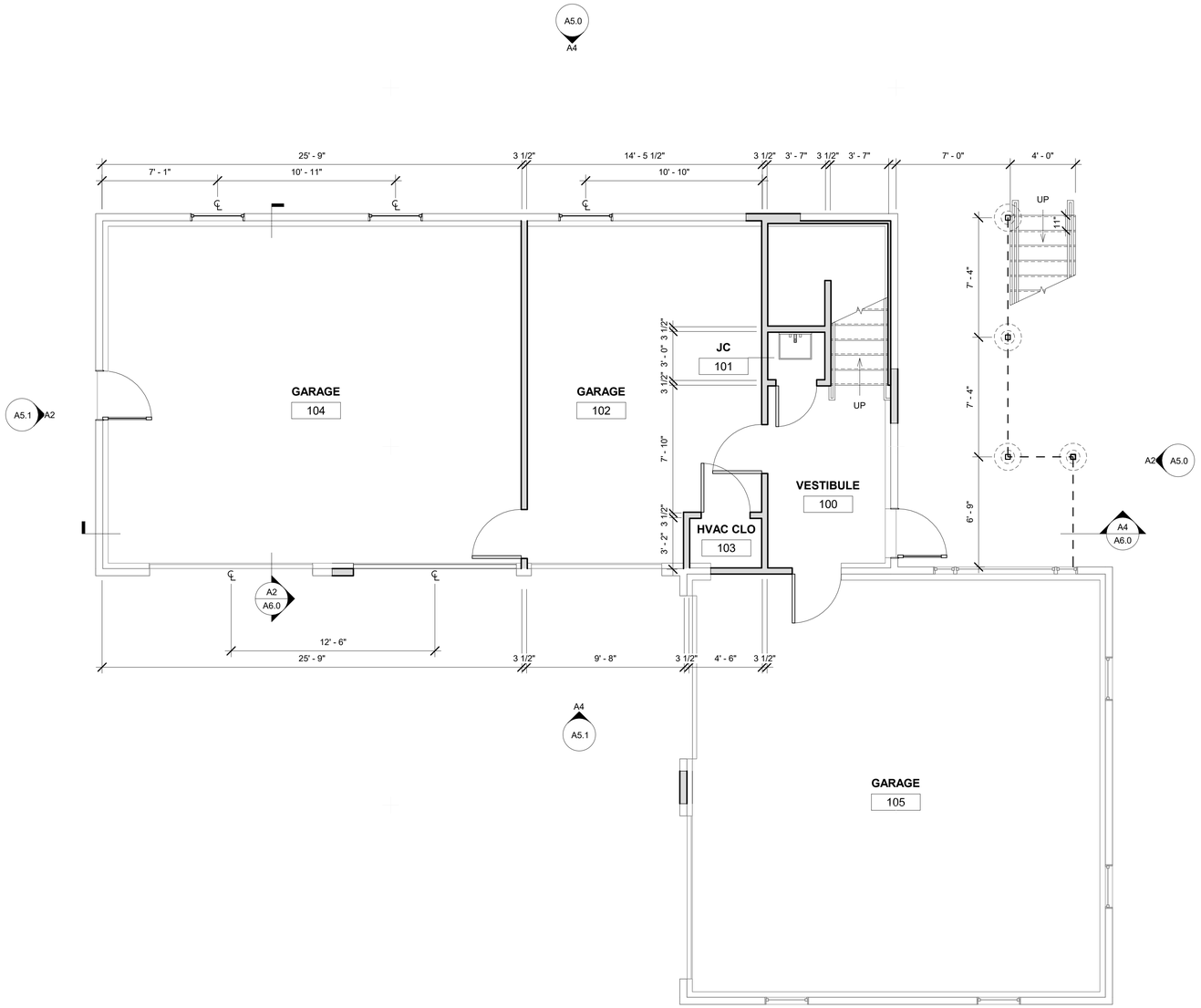
Exemption Items (0)

Installments (4)

Due Date	Total	Balance
08/15/2024	$2,955.37	$0.00
11/15/2024	$2,955.35	$0.00
02/18/2025	$2,955.35	$0.00
05/15/2025	$2,955.35	$2,955.35

2023 RP Tax Roll	$11,387.26	$0.00	$0.00	$0.00

Receivable Name	Bill Amount	Balance	Interest	Total Due
2022 RP Tax Roll	$11,077.90	$0.00	$0.00	



A2 FLOOR PLAN - 1ST FL
1/4" = 1'-0"

ELECTRICAL LEGEND	
DUPLEX OUTLET	
GFI OUTLET	G
REFRIGERATOR OUTLET	R
OUTLET LOW AND HIGH	*

PLAN LEGEND

- EXISTING DOOR
- EXISTING PARTITION
- NEW DOOR
- FULL HEIGHT PARTITION
- PARTIAL HEIGHT PARTITION
- BEAM OVERHEAD
- DIMENSION TO THE FACE OF FRAMING OR MASONRY AT NEW CONSTRUCTION, TYP.
  DIMENSION TO THE FACE OF FINISH AT EXISTING CONSTRUCTION
- DIMENSION TO THE FACE OF FINISH
- COLUMN LOCATION
- CO — CARBON MONOXIDE DETECTOR - HARDWIRED AND INTERCONNECTED
- SD — SMOKE DETECTOR - HARDWIRED AND INTERCONNECTED
- HD — HEAT DETECTOR - HARDWIRED AND INTERCONNECTED
- 60 — FIRE RATED DOOR 60 MIN W/ CLOSER

KEYED NOTES

GENERAL NOTES

1. VERIFY ALL DIMENSIONS IN THE FIELD. DO NOT SCALE DRAWINGS.

2. ALL INTERIOR WALLS 2X4 AT 16" O.C. UNLESS NOTED OTHERWISE. PROVIDE DOUBLE TOP PLATES. SEE B4/A0.0

3. ALL DOOR JAMBS 4" OFF WALL UNLESS NOTED OTHERWISE

4. CENTER DOORS IN WALL UNLESS NOTED OTHERWISE

5. PROVIDE HARDWIRED AND INTERCONNECTED SMOKE AND CO DETECTORS WITH BATTERY BACKUP PER CODE REQUIREMENTS & AS DIRECTED BY THE LOCAL BUILDING DEPT.

6. PROTECT IN PLACE ALL EXISTING FIXTURES AND SURFACES SCHEDULED TO REMAIN.

7. PATCH AND REPAIR EXISTING WALLS LOCATED IN UNALTERED AREAS AFFECTED BY ALL NEW WORK, WHETHER SHOWN ON THE DRAWINGS OR NOT.

8. PATCH, PAINT AND REFINISH ALL EXISTING WALLS, FLOORS, CEILINGS & TRIM THROUGHOUT REPLACE MATERIALS IN-KIND WHEN DAMAGED PAST POINT OF REPAIR.

9. PLANS DO NOT FULLY REPRESENT ALL NEW WORK. THE CONSTRUCTION DOCUMENTS ARE INTENDED TO TO SERVE AS GENERAL GUIDELINES.

10. DIMENSIONS SHOWN ARE FROM FACE OF STUD OR FACE OF EXISTING CONSTRUCTION UNLESS NOTED OTHERWISE.

11. PROVIDE ELECTRICAL PER STATE ELECTRICAL CODE REQUIREMENTS. PROVIDE POWER FOR ALL APPLIANCES. LOCATE NEW ELECTRICAL DEVICES PER NEC REQUIREMENTS & OWNER'S REQUIREMENTS.

12. PROVIDE PLUMBING PER STATE PLUMBING CODE REQUIREMENTS

13. HVAC SYSTEM TO BE DESIGN BUILD, PROVIDE PER STATE CODE REQUIREMENTS.

14. PROVIDE SOLID WOOD BLOCKING AS REQUIRED.

15. PROVIDE FIRE EXTINGUISHERS PER CODE AND PER REQUIREMENTS OF THE BUILDING OFFICIAL.

16. INSTALL BATT INSULATION FULL DEPTH AT ALL EXPOSED STUD CAVITIES (CLOSED CELL SPRAY FOAM AT ATTIC ROOF CAVITIES)

17. COVER ALL WALLS AND CEILINGS W/1/2" THICK GYPSUM BOARD UNLESS NOTED OTHERWISE.

18. PROVIDE MOISTURE AND MOLD RESISTANT GYPSUM BOARD AT BATHROOMS UNLESS NOTED OTHERWISE.

19. ALL APPLIANCES PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.

20. RECONNECT EXISTING FIXTURES TO NEW SWITCH LOCATIONS AS REQUIRED IN THE FIELD.

21. PROVIDE DIMMERS AS DIRECTED BY OWNER

22. A/V, CATV, TELEPHONE AND OTHER LOW VOLTAGE WIRING NOT SHOWN. SYSTEM TO BE DESIGN/BUILD. CONTACT OWNER FOR LOCATIONS OF ALL LOW VOLTAGE WIRING.

david sisson architecture pc
345 Taunton Ave
East Providence RI 02914
www.ds-arch.com info@ds-arch.com 401-595-7070

REV. #	DATE:	ISSUED FOR:
	2025-01-20	PLANNING BOARD REVIEW

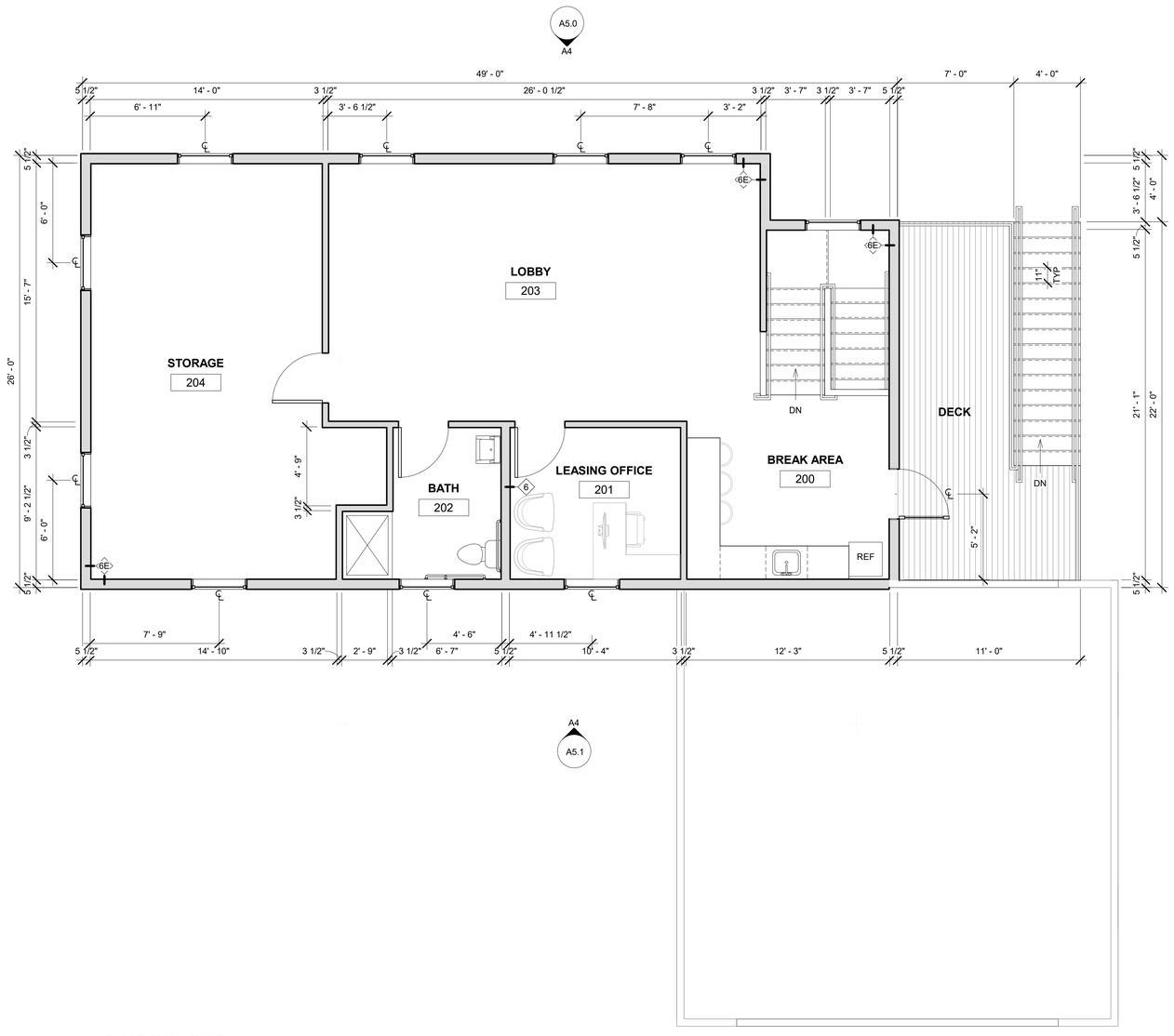
206 Bayview Ave
Bristol, RI 02809
PROJECT NUMBER: 23031

PLAN 1ST FL

DAVID SISSON
RHODE ISLAND
ARCHITECT
NOT FOR CONSTRUCTION
DATE SIGNED:
2025-01-20

A4.0

DAVID SISSON ARCHITECTURE PC -- ALL RIGHTS RESERVED



A4 FLOOR PLAN - 2ND FL
1/4" = 1'-0"

ELECTRICAL LEGEND	
DUPLEX OUTLET	
GFI OUTLET	G
REFRIGERATOR OUTLET	R
OUTLET LOW AND HIGH	*

KEYED NOTES

PLAN LEGEND

- EXISTING DOOR
- EXISTING PARTITION
- NEW DOOR
- FULL HEIGHT PARTITION
- PARTIAL HEIGHT PARTITION
- BEAM OVERHEAD
- DIMENSION TO THE FACE OF FRAMING OR MASONRY AT NEW CONSTRUCTION, TYP. DIMENSION TO THE FACE OF FINISH AT EXISTING CONSTRUCTION
- DIMENSION TO THE FACE OF FINISH
- COLUMN LOCATION
- (CO) CARBON MONOXIDE DETECTOR - HARDWIRED AND INTERCONNECTED
- (SD) SMOKE DETECTOR - HARDWIRED AND INTERCONNECTED
- (HD) HEAT DETECTOR - HARDWIRED AND INTERCONNECTED
- (60) FIRE RATED DOOR 60 MIN W/ CLOSER

GENERAL NOTES

1. VERIFY ALL DIMENSIONS IN THE FIELD. DO NOT SCALE DRAWINGS.
2. ALL INTERIOR WALLS 2X4 AT 16" O.C. UNLESS NOTED OTHERWISE. PROVIDE DOUBLE TOP PLATES. SEE B4/A0.0
3. ALL DOOR JAMBS 4" OFF WALL UNLESS NOTED OTHERWISE
4. CENTER DOORS IN WALL UNLESS NOTED OTHERWISE
5. PROVIDE HARDWIRED AND INTERCONNECTED SMOKE AND CO DETECTORS WITH BATTERY BACKUP PER CODE REQUIREMENTS & AS DIRECTED BY THE LOCAL BUILDING DEPT.
6. PROTECT IN PLACE ALL EXISTING FIXTURES AND SURFACES SCHEDULED TO REMAIN.
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12. PROVIDE PLUMBING PER STATE PLUMBING CODE REQUIREMENTS
13. HVAC SYSTEM TO BE DESIGN BUILD, PROVIDE PER STATE CODE REQUIREMENTS.
14. PROVIDE SOLID WOOD BLOCKING AS REQUIRED.
15. PROVIDE FIRE EXTINGUISHERS PER CODE AND PER REQUIREMENTS OF THE BUILDING OFFICIAL.
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19. ALL APPLIANCES PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.
20. RECONNECT EXISTING FIXTURES TO NEW SWITCH LOCATIONS AS REQUIRED IN THE FIELD.
21. PROVIDE DIMMERS AS DIRECTED BY OWNER
22. A/V, CATV, TELEPHONE AND OTHER LOW VOLTAGE WIRING NOT SHOWN. SYSTEM TO BE DESIGN/BUILD. CONTACT OWNER FOR LOCATIONS OF ALL LOW VOLTAGE WIRING.

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REV. #	DATE:	ISSUED FOR:
	2025-01-20	PLANNING BOARD REVIEW

206 Bayview Ave
Bristol, RI 02809
PROJECT NUMBER: 23031

PLAN 2ND FL

DAVID SISSON ARCHITECT
NOT FOR CONSTRUCTION
DATE SIGNED: 2025-01-20

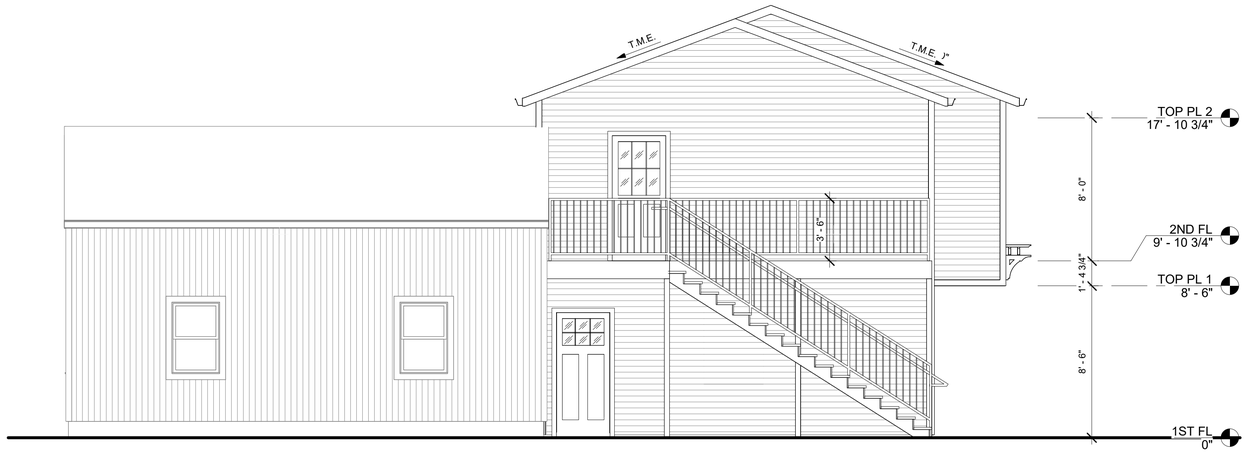
A4.1

DAVID SISSON ARCHITECTURE PC --- ALL RIGHTS RESERVED

A B C D

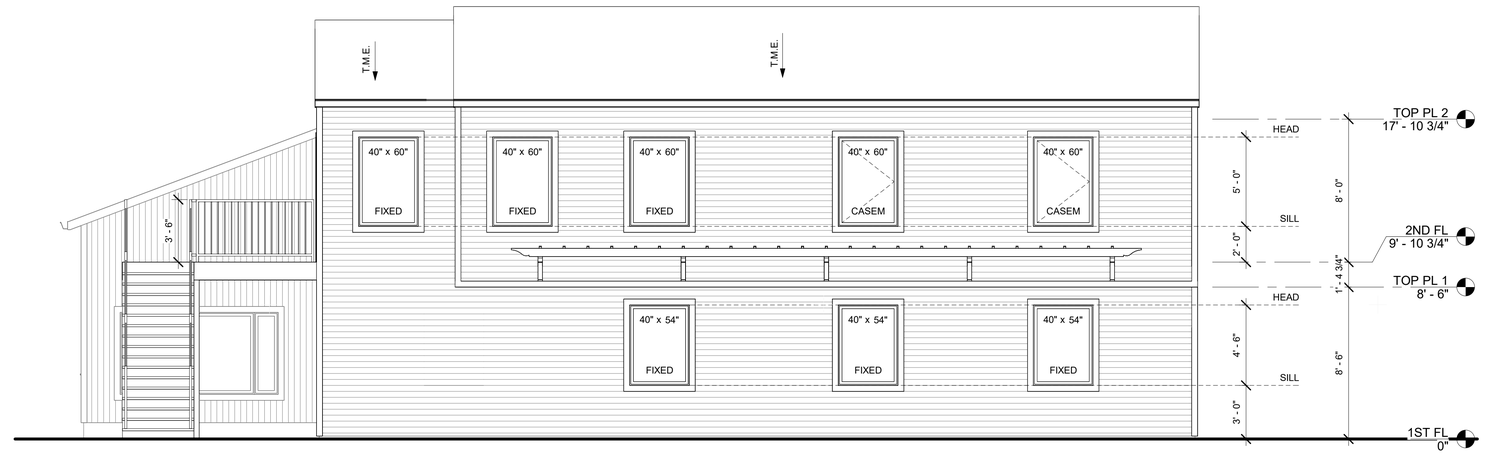
1 2

KEYED NOTES



A2 WEST ELEVATION
1/4" = 1'-0"

3 4



A4 SOUTH ELEVATION
1/4" = 1'-0"

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REV. # | DATE: | ISSUED FOR:
2025-01-20 | PLANNING BOARD REVIEW

206 Bayview Ave
Bristol, RI 02809
PROJECT NUMBER: 23031

ELEVATIONS

DAVID SISSON
REGISTERED
ARCHITECT
NOT FOR CONSTRUCTION
DATE SIGNED:
2025-01-20

A5.0

A B C D

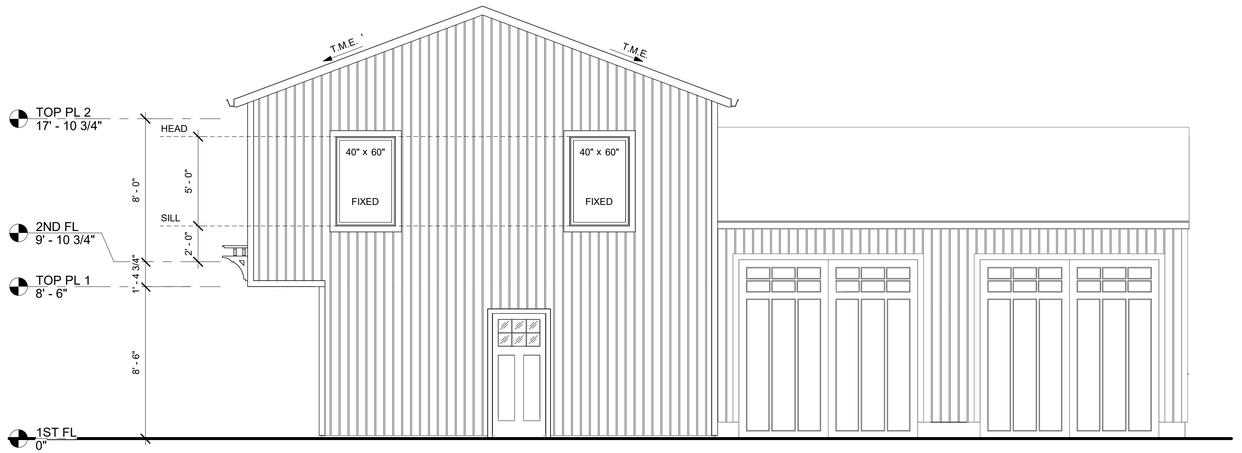
1

2

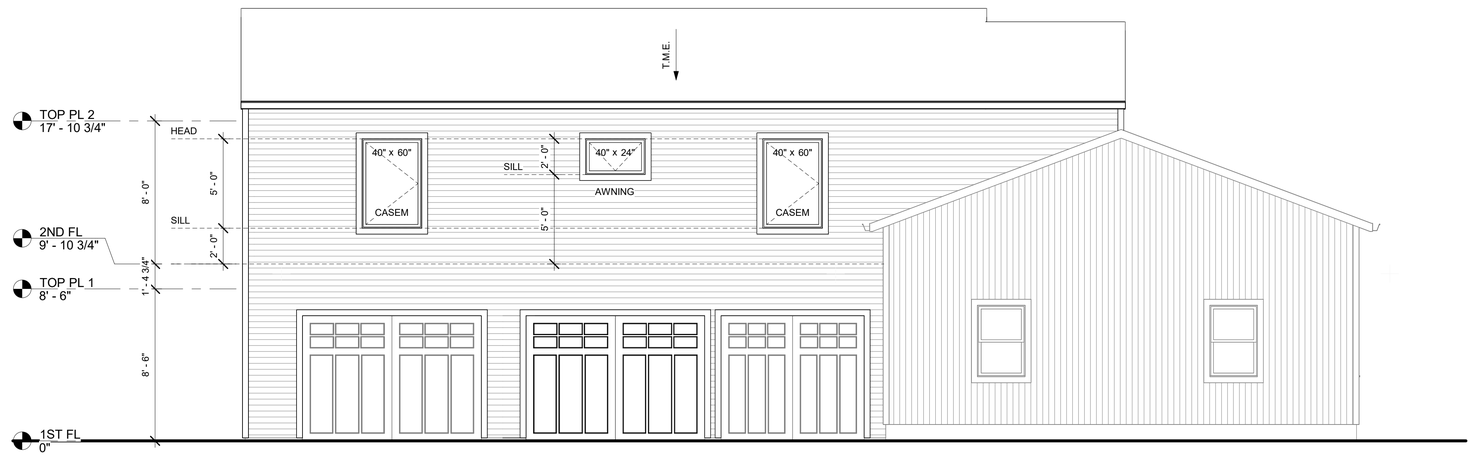
3

4

KEYED NOTES



A2 EAST ELEVATION
1/4" = 1'-0"



A4 NORTH ELEVATION
1/4" = 1'-0"

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REV. #	DATE:	ISSUED FOR:
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ELEVATIONS

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DATE SIGNED:
2025-01-20

A5.1

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

REPORT RELATING TO THE PETITION

For a Major Land Development at
206 Bay View Avenue
Bristol, Rhode Island 02809

PREPARED FOR
Scott Spear, Esquire, for
Fair Wind Properties, LLC
Bristol, RI 02809

PREPARED BY

James A. Houle
Rhode Island Certified General Appraiser
License #CGA.0A00769
198 Union Street,
Portsmouth, Rhode Island 02871
(401) 662-1543

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

Report Date
04/03/2025

Scott Spear, Esq.
Blish and Cavanagh
30 Exchange Terrace
Providence, RI 02903

04 April 2025

Dear Mr. Spear:

Pursuant to your request, I have reviewed the petition of Fair Wind Properties, LLC, for their proposed development of the property at 206 Bay View Avenue, Bristol, RI 02809. The property is also identified as tax assessor's plat 47, lot 3. The property is zoned R-10.

The petitioners would like to construct seventeen new dwelling units on the site, as part of an overall plan for twenty dwelling units, three of which would be the currently existing units located within the building found at the site at this time. This will be defined as a Major Land Development, per Article VII of the Bristol, RI Zoning Ordinance.

The units to be constructed will each contain three bedrooms. The existing units are two (2) three bedroom units and one (1) four bedroom unit.

Of the 20 units, there will be 5 income restricted units, representing the 25% required within the Comprehensive Permitting Section of the Bristol Zoning Code, Section 28-363 (2)(a1.

As part of this Comprehensive Permit, the petitioners will be seeking several items of relief. These are itemized below:

Requested Relief
Waivers and Variances Requested

A waiver is requested from Land Development Projects Section 28-282 (d) Standards for Multifamily Buildings:

Sub-Section (2)
Distance between multifamily buildings on same lot: Minimum 25 feet between multifamily buildings in the same row. 10 feet provided.

- Sub-Section (8)

Not more than four contiguous townhouses shall be built in a row with the same or approximately the same front line. Special architectural design offsets utilized.

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Variances are requested from the following Zoning Regulations:

- A variance is requested from Zoning Ordinance Article IV Dimensional Regulations Sec. 28-111 Table B requiring 80' of lot frontage. 72.50' of existing frontage provided. 64 feet is permitted after application of the 20% reduction provided for under the Low- and Moderate-Income Housing Incentive Section 28-370 (d)(2).

- A variance is requested from Zoning Ordinance Section 28-3 and Inclusionary Zoning Section 28-370 (d)(1): Reduction in minimum lot area: The density bonus shall be 20 percent with density bonus:
  92,656 s.f. / 8,000 s.f. = 12 units allowed; 20 units provided (17 to be newly constructed).

- A Variance is requested from Zoning Ordinance Section 28-363 (2)(a1) Municipal subsidies, Density Bonus. For projects providing at least 25 percent low- and moderate-income housing the density bonus shall be five units per acre. The yield map created by Principe Engineering showed that the project site can support 5 dwelling lots without the density bonus. The lot size is 2.1270 acres. Therefore the given lot size multiplied by the density bonus is equal to 10.635 additional units. The total allowed units per the density bonus is 15.635 rounded up to 16 units. 20 units are provided with 17 units to be newly constructed.

- A variance is requested from Zoning Ordinance Permitted Uses, Section 28-3 and Section 28-82. This R-10 zone is intended for high density residential areas comprising single household and two-household structures within a minimum density of 10,000 square feet per dwelling unit where public sewer and/or public water are provided. Multi-household dwelling units are not allowed. The site has public sewer and public water. Multi-household dwelling units are proposed.

- Variances are requested from Zoning Ordinance Section 28-252 General Requirements for parking as follows: Parking spaces are required to be 10'x18'. The proposed spaces are 9'x18'. The required aisle width is 24'. The proposed aisle width is 20'.

Article VIII. Nonconformance. The use of the Existing Garage/Barn will be used for property owner storage and for site maintenance equipment and supplies. A property management office will be added to the building above the garages and will be used for property management offices.

My assignment has been to review the proposal, forming opinions as to the plan's conformance to all applicable standards of the zoning code. Further, we are to review the Town's Comprehensive Land Use Plan, to form opinions as to the proposal's conformance with the goals of the Town as laid out in that document.

After my review of the plan, physical inspection of the subject and the surrounding neighborhood, and research in the Town's database, I have formed the opinion that the petition

meets all relevant standards for the requested relief. The proposal is also seen to meet the Town's land use goals.

We begin our analysis by identifying the property and its location within the neighborhood. Next, we review the proposal and the applicable regulations which apply to the proposal, including the requests for waivers and variances and the standards which apply to those requests. Once completed, we are able to properly opine as to the conformance of the proposal to the standards and needs of the community.

Aerial View of Subject & Neighborhood

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Street View, Bay View Ave, Facing North

Comments:
Note Police Station to right and commercial uses along Metacom Avenue to distant left

Street View, Bay View Ave, Facing South

Comments:
Residential, single family uses to south

Apartment Complex Across the Street

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GIS Map of Subject

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Proposed Site Plan

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Sec. 28-282. - Land development projects—general requirements.

a) *Authorization and general purposes. The purpose of this section is to encourage, and in zones to require, the comprehensive* development *of significant parcels, in order encourage a positive mix of uses and optimize scarce resources for the benefit of both the public and the* developer*. The method to accomplish this purpose is by authorizing the establishment of planned* land development *projects.* Land development *projects are intended to promote attractive, convenient, efficient* development *through careful site planning; to preserve open space, historic sites and valuable natural features of the* land*; to permit the creation of such uses as multifamily residential and mixed-use communities consistent with the character of the town and the neighborhood and the comprehensive plan; and to permit the design and construction of buildings, structures, and other facilities which by virtue of their location, orientation, landscaping and other features show unusual design merit. All such* land development *projects shall be governed in their establishment by the procedures of the town subdivision and* development *review regulations for* major land development *review.*

I have reviewed each standard for the variances and dimensional variances.

Comments:

We are taking these requested waivers and variances as a whole, rather than addressing each individually, as they tend to overlap.

We find from the Town Zoning code the following criteria:
Sec. 28-366. - Required findings.

(a) Required findings for approval. In approving a preliminary plan application for a comprehensive permit, the local review board shall make positive findings, supported by legally competent evidence on the record which discloses the nature and character of the observations upon which the fact finders acted, on each of the following standard provisions, where applicable:

(1) The proposed development is consistent with local needs as identified in the comprehensive plan with particular emphasis on the affordable housing plan and/or has satisfactorily addressed the issues where there may be inconsistencies.

The proposal clearly conforms to local needs, with the noted particular emphasis on affordable housing.

In terms of the need to keep the improvements consistent with the Town's Comprehensive Land Use Plan, we have closely reviewed the plan and find the following goals within the Town's Land Use Plan to which we feel the entire project conforms:

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Land Use

Goal 1. Promote land use patterns that are sensitive to the Town's character and assets, recognize the Town's resource constraints, are economically sound, and facilitate smart growth to build capacity in sustainability and climate resiliency in Bristol.

Policies to implement Goal 1:
A. Protect Bristol's natural landscape and resources for present and future generations.

B. Respect the historic resources that link Bristol's present with Bristol's past and use these resources as guidelines for managing future growth.

C. Plan for both passive and active recreation, conservation, and open space, using a comprehensive approach and giving consideration to development trends and to the demands of the community.

D. Maintain a strong tax base, favorable tax rate and identify alternative revenue sources.

E. Maintain the character of Bristol and make sure that new development does not adversely impact the integrity of the Town.

F. Embrace Smart Growth principles, conservation development zoning and encourage sustainability of our resources in all land use decisions made by the Town of Bristol.

Housing

Goal 1. Work for a continued range of housing opportunities so that Bristol can continue to be home to our traditionally diverse population.

Goal 4. Create affordable housing opportunities and diversify the housing stock.

Housing Needs

The US Department of Housing and Urban Development's (HUD) Comprehensive Housing Affordability Strategy (CHAS) database provides information on the housing needs. According to the CHAS data tabulations from 2006-2010, of the 8895 total households, 3310 (37%) pay more than 30% of their income to housing. The CHAS data also indicates that 3120 households are low income with approximately half rental (1735) and half home ownership (1385). Based on the population projections and the current housing inventory, there will be a need for additional housing for seniors and/or provisions for more residents to age in place.

Affordable Housing

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Housing Affordability The Town of Bristol has 9,015 total year round housing units with 535 qualifying as long-term affordable. Of the 535 units, 359 are reserved for elderly, 100 are long term affordable units reserved for families and 76 are reserved for special needs.

Comments: So, we see that the CHAS data indicates approximately 35% of the households in Bristol are low income. Yet, at the same time, we see that only 5.9% of the housing stock can be deemed affordable. The need for additional LMI units is inescapable.

Affordable housing in Bristol shall:

1. Be integrated with market price units.

2. Be dispersed throughout town rather than being congregated in specific areas or projects. It shall be developed in areas that are suitable for any type of housing development.

3. Be designed so as to physically blend with surrounding market price units in terms of height, massing, site design and architectural treatment.

4. Be designed to give the residents and neighbors' pride in their homes.

1. *Be developed to give residents the opportunity to share in the ownership of at least some of the units where feasible given the particular needs.*

There is little land available for large scale development which could include a percentage of affordable housing; therefore, infill development will continue to be the preferred way to achieve the affordable housing goals. There needs to be smaller sized, well designed housing units to fit into existing neighborhoods. A public advertising campaign and strong leadership on the importance and need for affordable housing is also necessary. In order to meet the affordable housing goals, the Town will need to find creative solutions.

Housing Profile Age and Condition of Housing Stock

Information on the age of the Town's housing stock is presented in Figure 2.6. According to the 2012 ACS 5-Year Estimates, the Town of Bristol has a total of 9,625 housing units. The Town's housing stock is relatively aged with approximately 34% or 3,259 of all the housing units in Bristol built before 1939. Another 24.1% of the housing stock was constructed during the past 30 years, among which only 7.2% or 685 units were added during the past 15 years or so.

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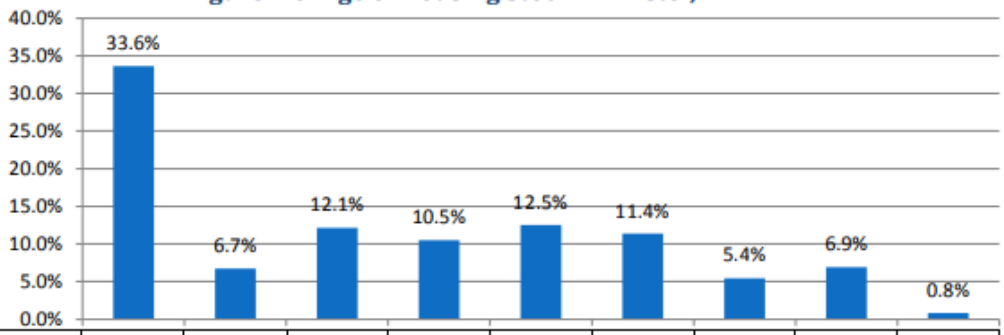
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

Figure 2.6: Age of Housing Stock in Bristol, RI



Year Built	1939 or earlier	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010 or later
Number	3,259	650	1,175	1,016	1,213	1,101	526	670	79
Percent	33.6%	6.7%	12.1%	10.5%	12.5%	11.4%	5.4%	6.9%	0.8%

Source: American Community Survey 2008-2012 5-Year Estimates

So, we find that from approximately 1945- 1989, there were approximately 100+/- housing units built each year. For a variety of reasons, mostly economic, from 1990 to 2016, there have only been 50+/- units built each year.

However, this reversal of construction trends comes at a point in which greater numbers of dwelling units of all types are needed. This lack of supply has forced values of homes and rents higher and higher, while income has remained fairly static. This has increased the need for low and moderate income units.

We find that throughout the plan, there are goals which apply directly to the need for additional housing, especially the affordable units which are provided within the proposed development.

(2) The proposed development is in compliance with the standards and provisions of the zoning ordinance and subdivision regulations, and/or where adjustments are requested by the applicant, that local concerns that have been affected by the relief granted do not outweigh the state and local need for low- and moderate-income housing.

All waivers and variances are seen to be of a minor scale, relative to the whole. We see a proposal which utilizes an “in fill” lot, one which has already being used for multi family housing. An expansion on this lot keeps development from spilling into previously undisturbed areas.

It is typical and common for proposals of this nature to require the types of minor modifications to the requirements of the zoning code, as in fill lots are naturally constrained by the pre-existing configurations.

But perhaps most importantly, none of the waivers or variances sought are of a nature that outweighs the greater need for additional housing, especially affordable housing in the community.

(3) All low- and moderate-income housing units proposed are integrated throughout the development; are compatible in scale and architectural style to the market rate units within the project; and will be built and occupied prior to, or simultaneous with the construction and occupancy of any market rate units.

The complex is set to allow all the moderate-income units to be spread evenly throughout the development. The units targeted for use in a restricted rental situation are seen as equal in all ways to the market rate units.

(4) There will be no significant negative impacts on the health and safety of current or future residents of the community, in areas including but not limited to, safe circulation of pedestrian and vehicular traffic, provision of emergency services, sewerage disposal, availability of potable water, adequate surface water runoff, and the preservation of natural, historical, or cultural features that contribute to the attractiveness of the community.

I feel strongly within my review of other experts' reports and findings, as well as in conversations with the developer, that all of the related infrastructure and community well being questions addressed in this standard are fully satisfied.

(5) All proposed land development and all subdivision lots will have adequate and permanent physical access to a public street.

The entire development is on a single lot. That lot and the traffic circulation within will all have adequate and permanent physical access to a public street.

(6) The proposed development will not result in the creation of individual lots with any physical constraints to development that building on those lots according to pertinent regulations and building standards would be impracticable, unless created only as permanent open space or permanently reserved for a public purpose on the approved, recorded plans.

No new lots are being created.

Final Conclusions:

We feel strongly that the lot size, coupled with the placement of the existing improvements at the site satisfies all requirements. Certainly, in spite of these minor waivers, the proposal

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

remains very much in harmony with the "*best interest of good planning practice and/or design as evidenced by consistency with the Comprehensive Plan and Zoning Ordinance."*

Therefore, in light of the requests for waivers for this project, the standards within the code are fully satisfied.

Within all the parameters of the zoning code, the comp plan and the needs for use, as well as the hardships outlined above, any relief needed is minimal. The applicant's proposal appears to be minimally impactful, yet provides substantial community benefit. The variances needed to produce a feasible complex are seen as minor, yet within the intent of the zoning code and land use plan.

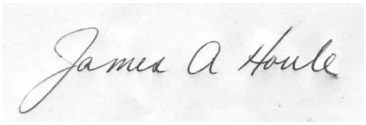
Because of impediments generated by the setting of the existing structure on what is a long and narrow lot, relief from strict application of the zoning code is necessary. In seeking this relief, we find there is no impact to the neighborhood or immediate neighbors which can be observed within the proposal.

We find that having a lot of the size of the subject, only improved with a three unit house is a woeful underutilization of an important site which can be used to much more effectively contribute to the needs of the community. To do this, some thoughtful variances are needed.

Therefore, when we study the requested waivers and variances, review the applicable portions of the Comprehensive Land Use Plan and its regulatory arm, the Bristol Zoning Code, and view the potential benefits which would be gained for the town as a whole, we see the larger petition properly and adequately answers any and all criteria related to the relief sought.

Thank you again for allowing me to have been of service.

Sincerely,



James A. Houle
RI Certified General Appraiser/Land Use Consultant

JAMES A. HOULE & ASSOCIATES

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****

QUALIFICATIONS OF APPRAISER

JAMES A. HOULE

LICENSING:

Rhode Island Appraisal Certification: #CGA.0A00769
Massachusetts Appraisal Certification: #1000015
Rhode Island Real Estate Broker: # REB.0009805

BUSINESS EXPERIENCE:

James Houle & Associates, Portsmouth, RI 1981- Present
Real Estate Appraisal, Consulting & Brokerage Services
Deputy Tax Assessor, City of Newport, RI 1990- 1998
Appraisal and Mass Assessment Services
Gold Star Group, Middletown, RI 1988-1989
Real Estate Education and Franchise Development
Atlantic Properties, Middletown, RI 1985-1988
Principal Broker
L.H. Houle Realty, Stafford Springs, Conn. 1975-1983
Consulting Broker
Better Homes Realty, Middletown, RI 1978-1981
Principal Broker
Heritage Realty, Newport, RI 1975-1978
Associate Broker
Kennan Associates, Cumberland, RI 1973-1975
Associate Broker

PROFESSIONAL QUALIFICATIONS AND RELATED BOARDS:
ACTIVE:
Licensed Real Estate Broker, Rhode Island
Certified Real Estate Appraiser, Rhode Island
Certified Real Estate Appraiser, Massachusetts
Approved by State of Rhode Island, Office of Municipal Affairs, to perform city- wide mass appraisals and revaluations, as required by Rhode Island law
Board of Realtors, (Officer of Newport County Board, 1975)

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RELATED EDUCATION:

BA, Clark University, Worcester, Mass. 1973

Society of Real Estate Appraisers, course #101 Introduction to Appraisal
Society of Real Estate Appraisers, course #102 Small Income Property Appraisal
R.I. Tax Assessor's Administrative Course
Graduate Realtor Institute, Board of Realtors
Uniform Standards of Professional Practice, University of Rhode Island
Income Approach to Property Valuation, University of Rhode Island
Practical Application of Income Approach to Value, University of Rhode Island

Seminars:
Impact of Environmental Issues in Appraisals, RI Board of Realtors
Rhode Island Tax Law, NLI Institute
Performing an In House Revaluation, International Order of Assessing Officers
Lead Issues in Real Estate, RI Board of Realtors
Tax Issues in Real Estate, RI Board of Realtors
Appraiser as Expert Witness, RI Board of Realtors
Appraising FHA Today, McKissock
Report Writing, MBREA
Oddball Properties, McKissock
Environmental Issues for Appraisers, McKissock
The Cost Approach, McKissock
History of Zoning, Appraisal Institute
Appraisal of Fast Food Facilities, McKissock
Appraisal of Land Subject to Ground Leases, McKissock
Appraisal of Owner Occupied Commercial Facilities, McKissock

Seminars as Approved Instructor:
Real Estate Tax Assessment: How to Judge its Equity
Real Estate Financing: Conventional and Creative

APPRAISAL EXPERIENCE:
Active since 1976, performing appraisals of single and multi family housing and commercial/ industrial properties.
Experience in appraising impacted/ contaminated properties
Experience in appraising specialty/ partial interests
Experience in appraising water related utilities
Accepted as expert in Rhode Island Family Court
Accepted as expert in Rhode Island Superior Court
Accepted as expert in Rhode Island Bankruptcy Court
Accepted as expert before several Rhode Island community Boards of Tax Appeals
Accepted as expert before several Rhode Island Zoning Boards of Appeal

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

SIGNIFICANT CLIENTS

Ford Motor Company
NYNEX (Bell Atlantic)
National Grid
Stone Bridge Water District, Tiverton, RI
Church Community Housing Corporation, Newport, RI
City of New Shoreham, Rhode Island, Assessor's Office
City of Swampscott, Massachusetts, Assessor's Office
City of Newport, Rhode Island, Assessor's Office
City of Newport, Rhode Island Planning Office
City of Newport, Rhode Island, Public Utilities Department
Twin River Gaming Facility, Lincoln, RI
Appraisal Resource, East Greenwich, RI

TRIP GENERATION & TRAFFIC IMPACT STUDY
FAIR WIND VILLAGE
17 UNIT RESIDENTIAL DEVELOPMENT
206 BAYVIEW AVENUE
BRISTOL, RI

Prepared by: Crossman Engineering
Engineers & Surveyors
151 Centerville Road
Warwick, RI 02886

AUGUST 2022
REVISED MAY 2025

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Trip Generation & Traffic Impact Study
Multi Family Development – Bristol, RI

INTRODUCTION

A Traffic Impact Study was performed to assess the potential impact of 17 new residential rental apartments. The proposed units will be located on the south side of Bayview Avenue behind the existing 3-unit house located at 206 Bayview Avenue.

This traffic study examines existing conditions, proposed development conditions and our subsequent conclusions/recommendations. The existing conditions consist of geometric data gathered from an on-site visit and existing traffic volume data collected for AM and PM peak hours. The proposed development section examines the site design, access and circulation, sight distance, projected site generated traffic, and capacity analysis of existing and proposed conditions. Our conclusions and recommendations are prepared following a comprehensive review of the capacity analysis.

EXISTING CONDITIONS

As stated, the site is located on the south side of Bay View Avenue at number 206. The property is currently occupied by a three-family home.

A. Roadway Geometrics

Bayview Avenue is classified as a minor arterial and runs east/west from Metacom Avenue to High Street. In the vicinity of the project, it is 36 feet wide with one travel lane in each direction and parking allowed on each side. The posted speed limit is 25 mph. The surrounding land uses along Bayview Avenue are residential.

The closest major intersection to the site is the signalized intersection at Metacom Avenue approximately 620 feet to the east.

B. Existing Traffic Volumes

Manual traffic counts were conducted between 7-9 AM and 4-6 PM at the Metacom Avenue/Bayview Avenue intersection and also at the Roger Williams University Almeida Apartments which is located opposite the site. The Almeida Apartments were not full due to Roger Williams University not being in session. The Almeida Apartments were then recounted in April 2025.

	Weekday AM Peak	Weekday PM Peak
Bay View Avenue	278	471
East	190	229
West	88	242
Metacom Avenue	1077	1496
North	451	772
South	626	724

When Almeida Apartments was recounted, it was found that the apartment driveway volumes were higher and were used for existing analysis. The Bayview volumes were similar in the AM peak but lower during the PM Peak so the original Bayview Avenue Volumes were used.

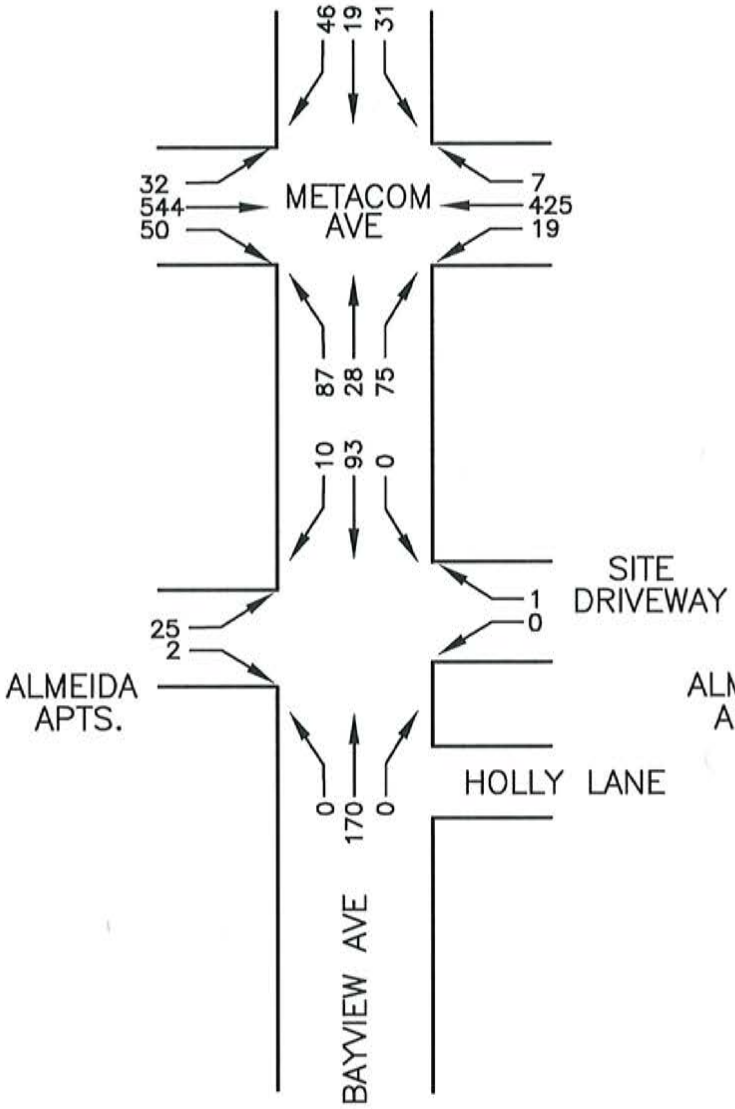
The manual traffic counts can be found in the Appendix and the peak hour volumes are shown in Figure 1.

C. Accident Summary

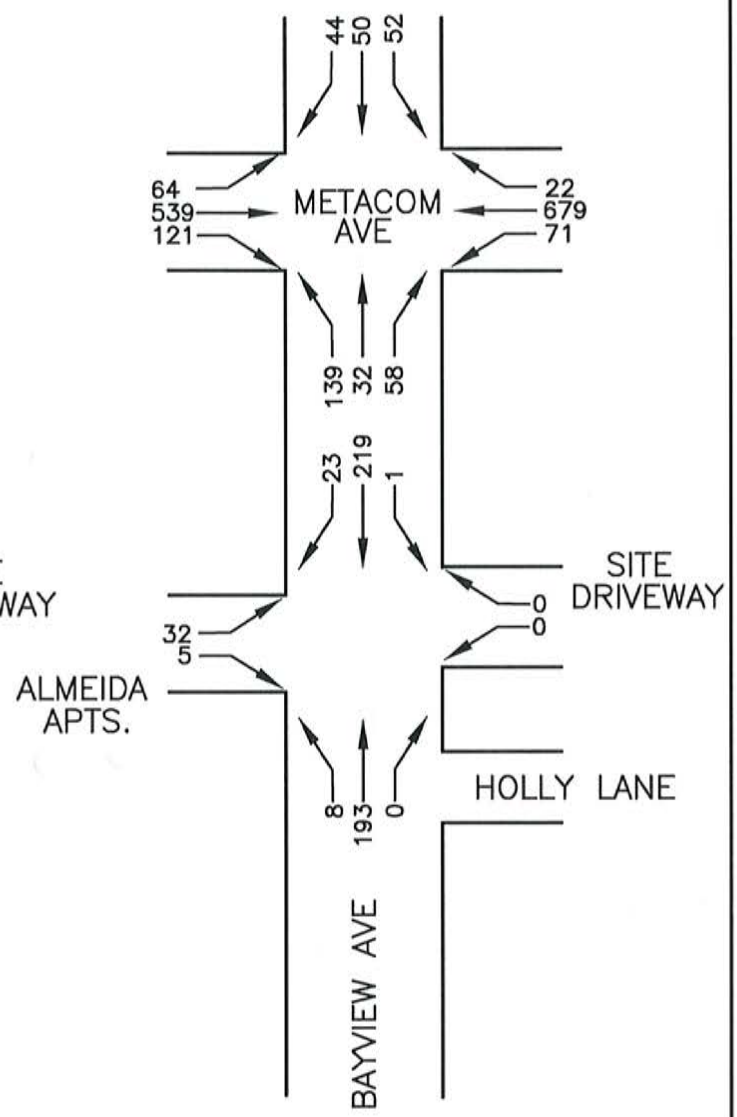
Crash data for Bayview Avenue was provided by the Bristol Police Department for the most recent three-year period. From January 2019 to the end of December 2021, a total of 9 accidents occurred in the project study area between the intersections of Metacom Avenue and Holly Lane. The majority of the accidents were rear end type accidents (6). Four of the accidents were motorists hitting parked cars; one said headlight glare caused it and another said an opposing vehicle made him shift over.

Year	# of Accidents
2019	4
2020	2
2021	3
Average per Year	3

The collision diagram is included in the appendix.



A.M. PEAK HOUR



P.M. PEAK HOUR

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PROJECT TITLE:

FIGURE 1

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

EXISTING TRAFFIC VOLUMES

DATE:	SCALE:
MAY 2025	NOT TO SCALE

REVISIONS:

D. Future Conditions

Traffic volumes were projected to the year 2030. Future traffic forecasts were developed for two scenarios: 2030 No-Build Conditions and 2030 Build Conditions (with project in place). Metacom Avenue and Bayview Avenue traffic was adjusted but Almeida Apartments traffic was not because the number of apartments will remain the same.

No-Build Conditions include existing traffic and all additional traffic due to future growth including:

- Historic annual traffic growth
- Specific Planned Development by others

Build Conditions were determined by adding the expected traffic generated by the proposed development to the 2030 No-Build Volumes.

E. Historic and Future traffic Growth

Information received from the Rhode Island Department of Administration indicated a yearly traffic growth of approximately 0.5% through 2030.

F. Specific Planned Development by Others

CE contracted Bristol Planning Department and inquired about any local future project that should be included as part of 2030 No-Build Conditions. They stated that there were no known projects that would impact future traffic in the area at this time.

G. No-Build Traffic Volumes

The existing peak hour traffic volumes were grown by 0.5 percent per year to establish the 2030 future base traffic volumes.

H. 2030 Build Traffic Volumes

Build conditions represents traffic conditions with the proposed development in place. 2030 Build volumes were determined by adding the expected vehicle trips generated by the proposed development to the 2030 No-Build volumes.

PROPOSED DEVELOPMENT

A. Site Design

The proposed development of the subject property is for the construction of two six-unit and one, five-unit multi-family buildings consisting of a total of 17 units. The existing house at 206 Bayview Avenue consists of three units so there will be a total of 20 units on the property.

B. Access and Circulation

The proposed multi-family development will have access to Bayview Avenue at the same location of the existing driveway to the site. The access will be located diagonally across from the access to Almeida Apartments. The driveway will be widened to 20 feet.

C. Sight Distance

The available safe stopping sight distance was measured at the proposed driveway. The posted speed limit on Bayview Avenue is 25 mph so a design speed of 30 mph was utilized which requires a stopping sight distance of 200 feet. This distance is exceeded at the driveway in both directions.

D. Projected Traffic

The projected number of vehicle trips was based on trip generation rates published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided by ITE is based on similar land uses and is an industry standard.

Apartments (20 Units)

AM Peak (0.4 trips/unit)	8 Trips
24% Enter	2
76% Exit	6
PM Peak (0.51 trips/unit	10 Trips
63% Enter	6
37% Exit	4

The projected traffic as shown on Figure 2 was then superimposed onto the 2030 No-Build traffic volumes for analysis.

E. Capacity Analysis

Capacity analyses were performed for the signalized intersection of Metacom Avenue at Bayview Avenue and for the site access driveway/Almeida Apartment. The analysis was performed for the Existing Conditions (Figure 1), No-Build Conditions (Figure 3) and Build Conditions (Figure 4).

The analyses result in a Level of Service being assigned to the intersection. Level of Service is defined as a qualitative measure describing operational conditions based on vehicular delay. There are six levels of service ranging from Level A to Level F with Level D being considered acceptable for peak hour conditions at signalized intersections.

1. Signalized Intersections

The levels of service at signalized intersections are determined by a procedure described in the 2010 Highway Capacity Manual and as shown in Table 1.

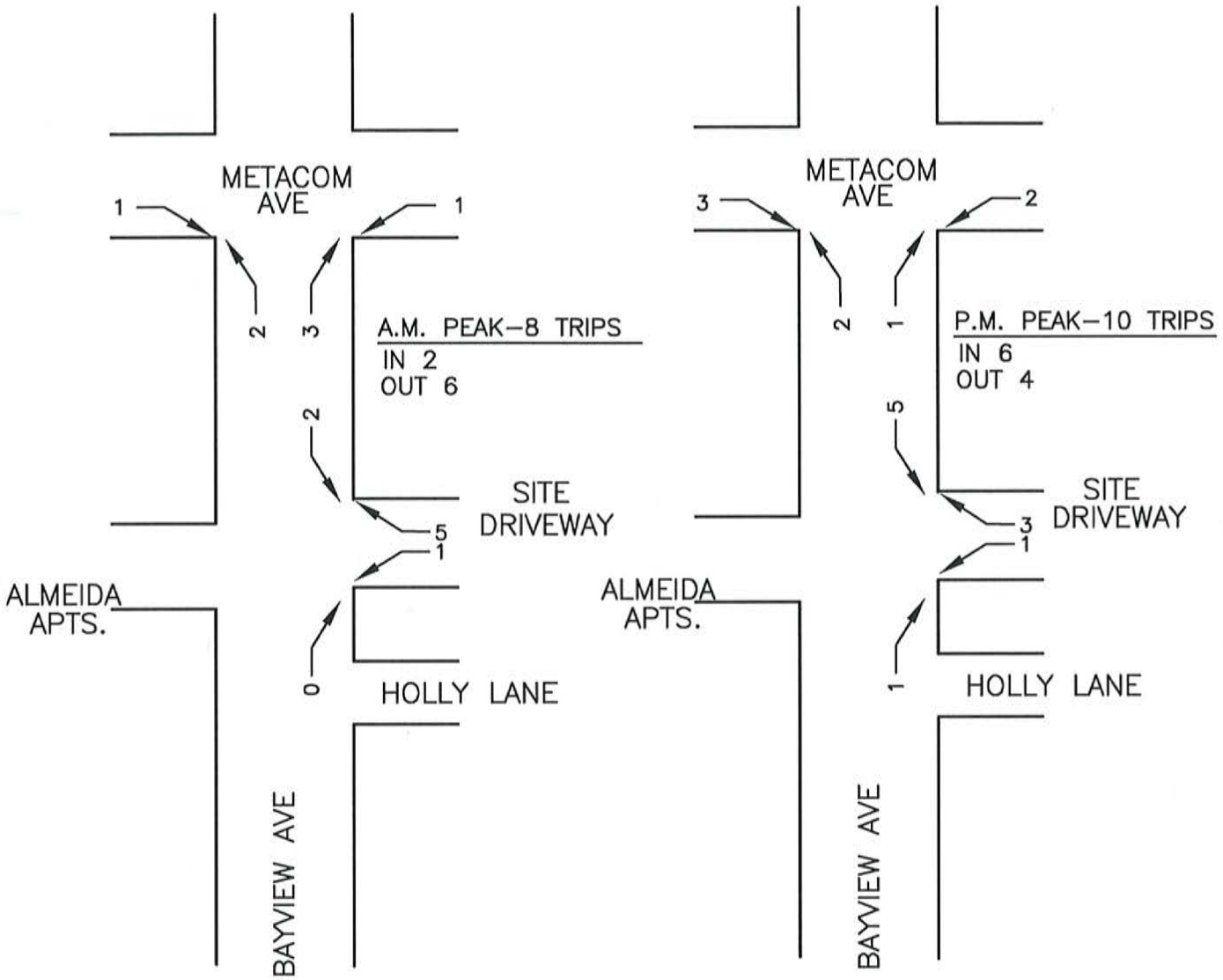
TABLE 1

Level of Service for Signalized Intersections

Level of Service	Control Delay per Vehicle (SEC)
A	<10
B	>10.0 to 20.0
C	>20.0 to 35.0
D	>35.0 to 55.0
E	>55.0 to 80 .0
F	>80.0

2. Un-Signalized Intersections

The levels of service at un-signalized intersections are determined by a procedure described in the 2010 Highway Capacity Manual. The level of service criteria for un-signalized intersections is described in Table 2.



A.M. PEAK HOUR

P.M. PEAK HOUR

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Email: cei@crossmaneng.com

PROJECT TITLE:

FIGURE 2

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

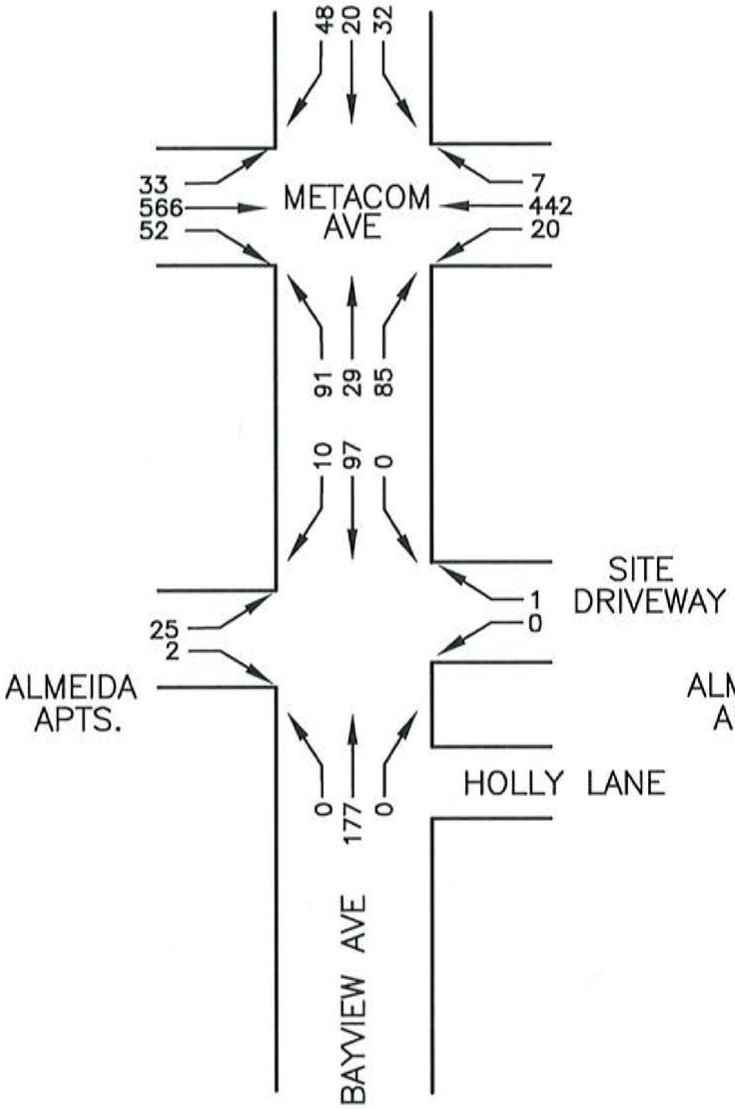
PREPARED FOR:

PROJECTED GENERATED TRAFFIC VOLUMES

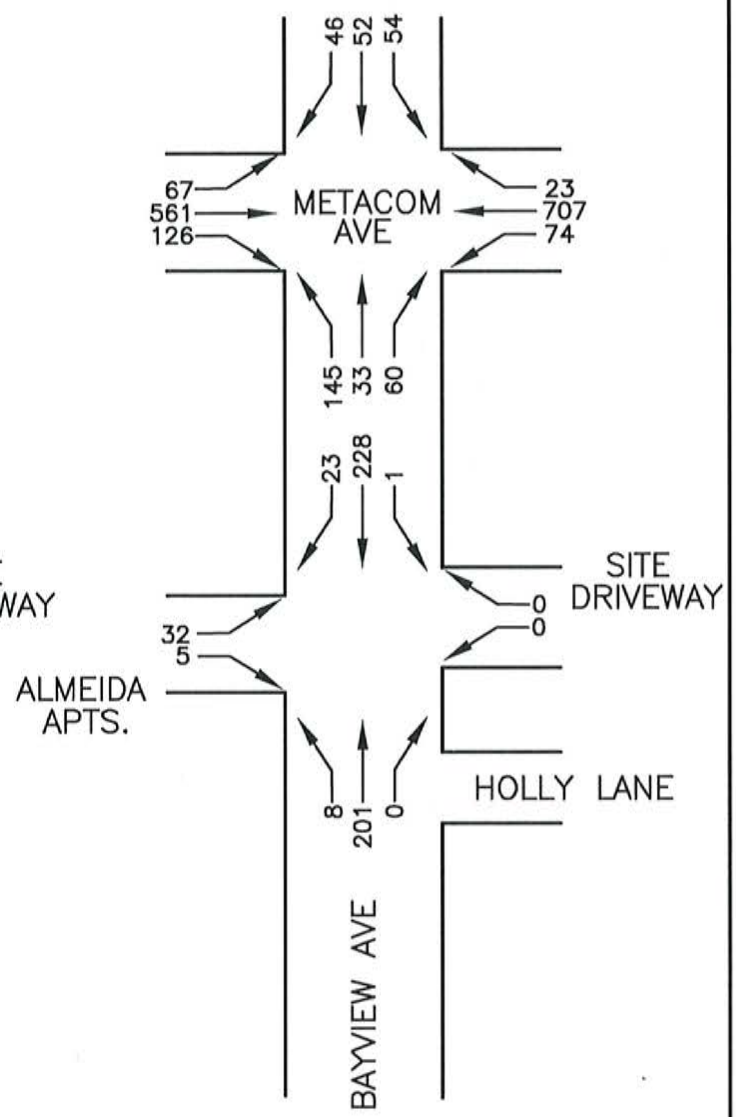
DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:



A.M. PEAK HOUR



P.M. PEAK HOUR

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- Site Planning
- Surveying
- Permitting
- Landscape Architecture

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PROJECT TITLE:

FIGURE 3

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

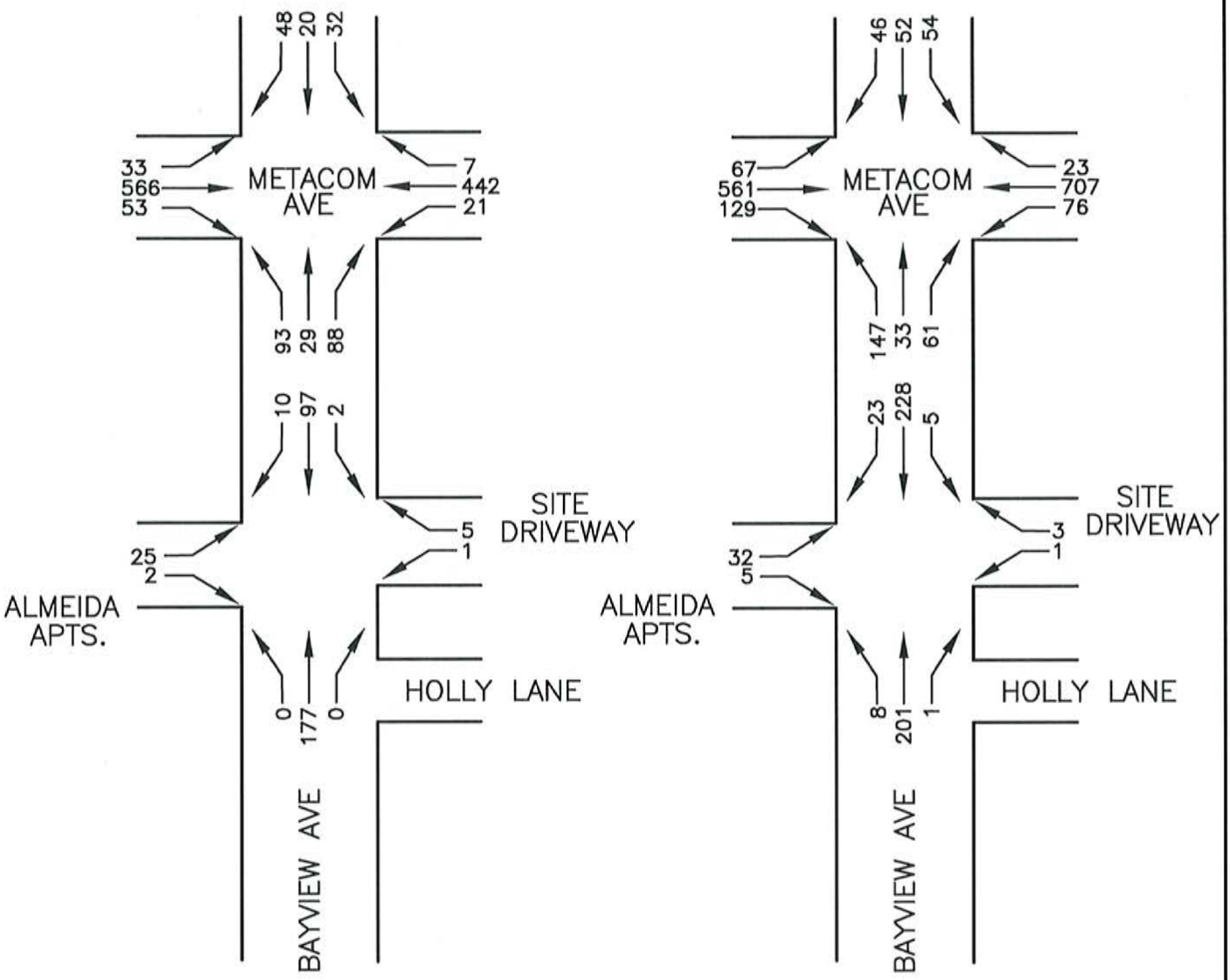
PREPARED FOR:

2030 NO-BUILD TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:



A.M. PEAK HOUR

P.M. PEAK HOUR

- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

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PROJECT TITLE:

FIGURE 4

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

2030 BUILD TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:

TABLE 2

Level of Service Criteria for Un-Signalized Intersections

Level of Service	Control Delay per Vehicle (SEC)
A	<10.
B	>10.0 to 15.0
C	>15.0 to 25.0
D	>25.0 to 35.0
E	>35.0 to 50.0
F	>50.0

The capacity analyses indicated the following overall levels of service:

	AM Peak LOS (Secs.)			PM Peak LOS (Secs)		
	Existing	2030 No Build	2030 Build	Existing	2030 No Build	2030 Build
Metacom Avenue at Bayview Avenue						
Overall	**C (21.4))**	**C (22.7)**	**C (23.0)**	**E (59.5)**	**E (71.0)**	**E (71.5)**
Northbound	B (15.8)	B (17.2)	B (17.6)	D (39.7)	D (44.9)	D (45.3)
Southbound	B (19.7)	B (22.1)	C (22.6)	D (44.0)	D (50.7)	D (51.5)
Eastbound	C (30.6)	C (29.8)	C (29.6)	D (40.2)	D (42.8)	D (43.4)
Westbound	D (33.9)	C (33.5)	C933.3)	F (266)	F (348)	F (348)
Site Access/Almeida						
Apartments, Site Drive						
Northbound	A (9.3)	A (9.4)	A (9.7)	A (0)	A (0)	B (10.5)
Southbound	B (11.0)	B (11.1)	B 11.2)	B (13.3)	B (13.5)	B (13.8)

CONCLUSION

After reviewing the data in this study, we conclude that the proposed 17-unit Multi-Family Development will not have a detrimental impact on adjacent roadways. This conclusion is based on the following facts:

- No detrimental impact on the level of service at the Metacom Avenue at Bayview Avenue intersection.
- The driveway of the development will operate at a good level of service.
- The proposed use is not a high traffic generator.
- The proposed safe stopping sight distance at the access driveway is more than sufficient.

APPENDIX

SIGHT DISTANCE

Metric					US Customary				
			Stopping sight distance					Stopping sight distance	
Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Calculated (m)	Design (m)	Design speed (mph)	Brake reaction distance (ft)	Braking distance on level (ft)	Calculated (ft)	Design (ft)
20	13.9	4.6	18.5	20	15	55.1	21.6	76.7	80
30	20.9	10.3	31.2	35	20	73.5	38.4	111.9	115
40	27.8	18.4	46.2	50	25	91.9	60.0	151.9	155
50	34.8	28.7	63.5	65	30	110.3	86.4	196.7	200
60	41.7	41.3	83.0	85	35	128.6	117.6	246.2	250
70	48.7	56.2	104.9	105	40	147.0	153.6	300.6	305
80	55.6	73.4	129.0	130	45	165.4	194.4	359.8	360
90	62.6	92.9	155.5	160	50	183.8	240.0	423.8	425
100	69.5	114.7	184.2	185	55	202.1	290.3	492.4	495
110	76.5	138.8	215.3	220	60	220.5	345.5	566.0	570
120	83.4	165.2	248.6	250	65	238.9	405.5	644.4	645
130	90.4	193.8	284.2	285	70	257.3	470.3	727.6	730
					75	275.6	539.9	815.5	820
					80	294.0	614.3	908.3	910

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s^2 [11.2 ft/s^2] used to determine calculated sight distance.

Exhibit 3-1. Stopping Sight Distance

Item C2.

TRAFFIC COUNTS

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587A
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Metacom Avenue (Route 136) From North				Bayview Avenue From East				Metacom Avenue (Route 136) From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	14	106	10	2	20	6	13	0	1	95	9	0	10	6	16	0	308
07:15 AM	8	129	11	0	16	8	9	0	1	88	4	0	15	9	18	0	316
07:30 AM	13	134	5	0	6	4	9	0	2	119	4	0	13	8	19	0	336
07:45 AM	19	143	4	0	16	4	4	0	2	116	4	0	16	6	33	0	367
Total	54	512	30	2	58	22	35	0	6	418	21	0	54	29	86	0	1327
08:00 AM	10	138	12	0	8	3	9	0	2	102	4	0	16	5	17	0	326
08:15 AM	15	118	13	0	13	4	6	0	3	92	4	0	12	5	28	0	313
08:30 AM	12	140	8	0	14	5	8	0	2	90	8	0	10	7	23	0	327
08:45 AM	11	121	9	0	12	7	10	0	4	133	6	0	12	8	20	0	353
Total	48	517	42	0	47	19	33	0	11	417	22	0	50	25	88	0	1319
Grand Total	102	1029	72	2	105	41	68	0	17	835	43	0	104	54	174	0	2646
Apprch %	8.5	85.4	6	0.2	49.1	19.2	31.8	0	1.9	93.3	4.8	0	31.3	16.3	52.4	0	
Total %	3.9	38.9	2.7	0.1	4	1.5	2.6	0	0.6	31.6	1.6	0	3.9	2	6.6	0	
Cars & Peds	99	1010	72	2	105	41	67	0	17	813	41	0	104	53	173	0	2597
% Cars & Peds	97.1	98.2	100	100	100	100	98.5	0	100	97.4	95.3	0	100	98.1	99.4	0	98.1
Trucks & Buses																	
% Trucks & Buses	2	1.8	0	0	0	0	1.5	0	0	2.6	4.7	0	0	1.9	0	0	1.8
Bikes by Direction	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
% Bikes by Direction	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0.1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	8	129	11	0	148	16	8	9	0	33	1	88	4	0	93	15	9	18	0	42	316
07:30 AM	13	134	5	0	152	6	4	9	0	19	2	119	4	0	125	13	8	19	0	40	336
07:45 AM	19	143	4	0	166	16	4	4	0	24	2	116	4	0	122	16	6	33	0	55	367
08:00 AM	10	138	12	0	160	8	3	9	0	20	2	102	4	0	108	16	5	17	0	38	326
Total Volume	50	544	32	0	626	46	19	31	0	96	7	425	16	0	448	60	28	87	0	175	1345
% App. Total	8	86.9	5.1	0		47.9	19.8	32.3	0		1.6	94.9	3.6	0		34.3	16	49.7	0		
PHF	.658	.951	.667	.000	.943	.719	.594	.861	.000	.727	.875	.893	1.00	.000	.896	.938	.778	.659	.000	.795	.916
Cars & Peds	48	536	32	0	616	46	19	30	0	95	7	410	15	0	432	60	27	86	0	173	1316
% Cars & Peds	96.0	98.5	100	0	98.4	100	100	96.8	0	99.0	100	96.5	93.8	0	96.4	100	96.4	98.9	0	98.9	97.8
Trucks & Buses	2	8	0	0	10	0	0	1	0	1	0	15	1	0	16	0	1	0	0	1	28
% Trucks & Buses	4.0	1.5	0	0	1.6	0	0	3.2	0	1.0	0	3.5	6.3	0	3.6	0	3.6	0	0	0.6	2.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0.6	0.1

Transportation Data Corporation
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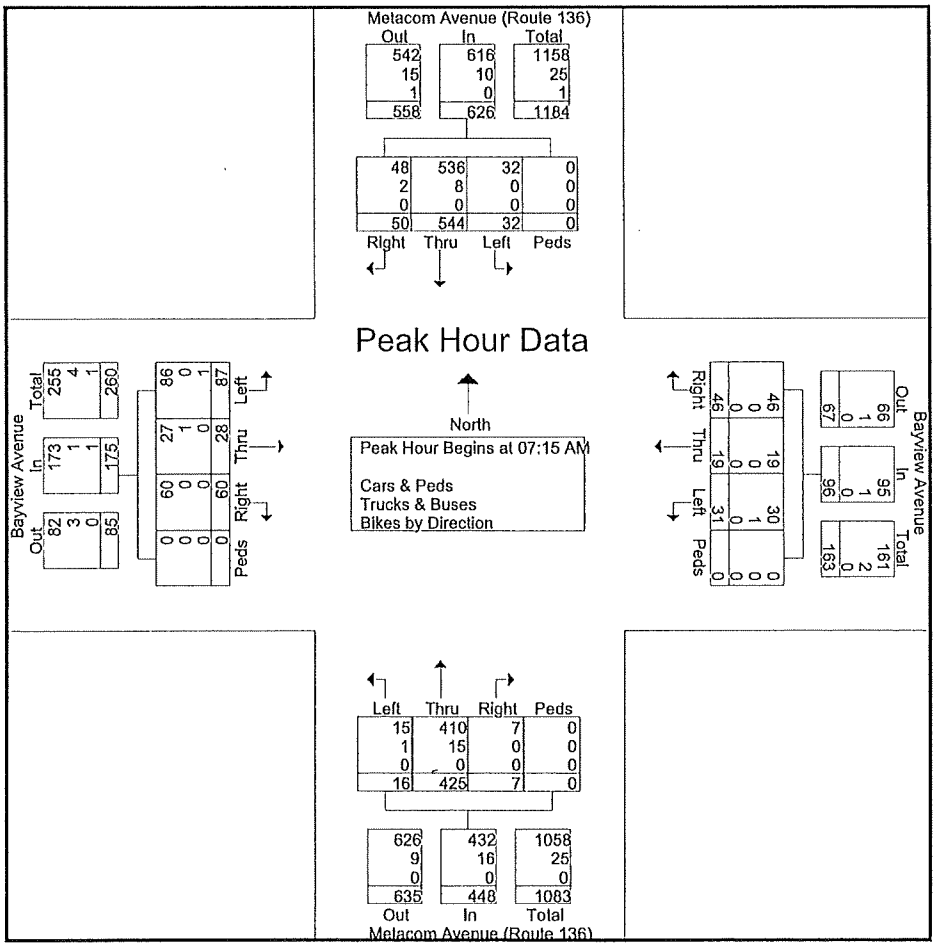
N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587A
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	8	129	11	0	148	16	8	9	0	33	1	88	4	0	93	15	9	18	0	42	316
07:30 AM	13	134	5	0	152	6	4	9	0	19	2	119	4	0	125	13	8	19	0	40	336
07:45 AM	19	143	4	0	166	16	4	4	0	24	2	116	4	0	122	16	6	33	0	55	367
08:00 AM	10	138	12	0	160	8	3	9	0	20	2	102	4	0	108	16	5	17	0	38	326
Total Volume	50	544	32	0	626	46	19	31	0	96	7	425	16	0	448	60	28	87	0	175	1345
% App. Total	8	86.9	5.1	0		47.9	19.8	32.3	0		1.6	94.9	3.6	0		34.3	16	49.7	0		
PHF	.658	.951	.667	.000	.943	.719	.594	.861	.000	.727	.875	.893	1.00	.000	.896	.938	.778	.659	.000	.795	.916
Cars & Peds	48	536	32	0	616	46	19	30	0	95	7	410	15	0	432	60	27	86	0	173	1316
% Cars & Peds	96.0	98.5	100	0	98.4	100	100	96.8	0	99.0	100	96.5	93.8	0	96.4	100	96.4	98.9	0	98.9	97.8
Trucks & Buses	2	8	0	0	10	0	0	1	0	1	0	15	1	0	16	0	1	0	0	1	28
% Trucks & Buses	4.0	1.5	0	0	1.6	0	0	3.2	0	1.0	0	3.5	6.3	0	3.6	0	3.6	0	0	0.6	2.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0.6	0.1



Transportation Data Corporation
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N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587B
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	#201 Almeida Apartments Driveway From North				Bayview Avenue From East				#206 Driveway From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	1	0	1	0	0	28	0	0	0	0	0	0	0	31	0	0	61
07:15 AM	0	0	4	0	2	20	0	0	1	0	0	0	0	36	1	0	64
07:30 AM	0	0	6	0	0	20	0	0	0	0	0	0	0	36	0	0	62
07:45 AM	1	0	3	0	1	26	0	0	1	0	0	0	0	53	0	0	85
Total	2	0	14	0	3	94	0	0	2	0	0	0	0	156	1	0	272
08:00 AM	1	0	3	0	0	20	0	0	0	0	0	0	0	36	0	0	60
08:15 AM	1	0	2	0	0	24	0	0	1	0	0	0	0	42	0	0	70
08:30 AM	0	0	2	0	2	23	0	0	0	0	0	0	0	39	0	0	66
08:45 AM	3	0	3	1	0	22	0	0	0	0	0	0	0	38	0	1	68
Total	5	0	10	1	2	89	0	0	1	0	0	0	0	155	0	1	264
Grand Total	7	0	24	1	5	183	0	0	3	0	0	0	0	311	1	1	536
Apprch %	21.9	0	75	3.1	2.7	97.3	0	0	100	0	0	0	0	99.4	0.3	0.3	
Total %	1.3	0	4.5	0.2	0.9	34.1	0	0	0.6	0	0	0	0	58	0.2	0.2	
Cars & Peds	7	0	24	1	5	178	0	0	3	0	0	0	0	309	1	1	529
% Cars & Peds	100	0	100	100	100	97.3	0	0	100	0	0	0	0	99.4	100	100	98.7
Trucks & Buses																	
% Trucks & Buses	0	0	0	0	0	2.2	0	0	0	0	0	0	0	0.3	0	0	0.9
Bikes by Direction	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
% Bikes by Direction	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0.3	0	0	0.4

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	3	0	4	1	26	0	0	27	1	0	0	0	1	0	53	0	0	53	85
08:00 AM	1	0	3	0	4	0	20	0	0	20	0	0	0	0	0	0	36	0	0	36	60
08:15 AM	1	0	2	0	3	0	24	0	0	24	1	0	0	0	1	0	42	0	0	42	70
08:30 AM	0	0	2	0	2	2	23	0	0	25	0	0	0	0	0	0	39	0	0	39	66
Total Volume	3	0	10	0	13	3	93	0	0	96	2	0	0	0	2	0	170	0	0	170	281
% App. Total	23.1	0	76.9	0		3.1	96.9	0	0		100	0	0	0		0	100	0	0		
PHF	.750	.000	.833	.000	.813	.375	.894	.000	.000	.889	.500	.000	.000	.000	.500	.000	.802	.000	.000	.802	.826
Cars & Peds	3	0	10	0	13	3	91	0	0	94	2	0	0	0	2	0	168	0	0	168	277
% Cars & Peds	100	0	100	0	100	100	97.8	0	0	97.9	100	0	0	0	100	0	98.8	0	0	98.8	98.6
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
% Trucks & Buses	0	0	0	0	0	0	2.2	0	0	2.1	0	0	0	0	0	0	0.6	0	0	0.6	1.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0.4

Transportation Data Corporation
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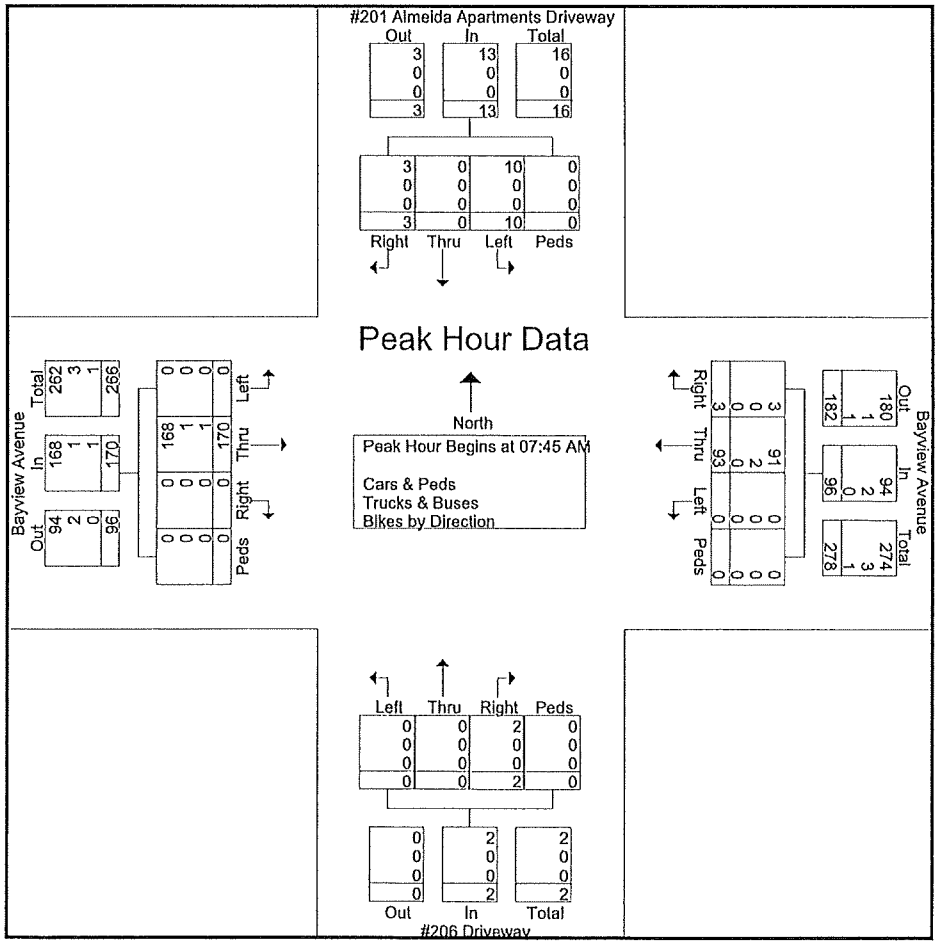
N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587B
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	3	0	4	1	26	0	0	27	1	0	0	0	1	0	53	0	0	53	85
08:00 AM	1	0	3	0	4	0	20	0	0	20	0	0	0	0	0	0	36	0	0	36	60
08:15 AM	1	0	2	0	3	0	24	0	0	24	1	0	0	0	1	0	42	0	0	42	70
08:30 AM	0	0	2	0	2	2	23	0	0	25	0	0	0	0	0	0	39	0	0	39	66
Total Volume	3	0	10	0	13	3	93	0	0	96	2	0	0	0	2	0	170	0	0	170	281
% App. Total	23.1	0	76.9	0		3.1	96.9	0	0		100	0	0	0		0	100	0	0		
PHF	.750	.000	.833	.000	.813	.375	.894	.000	.000	.889	.500	.000	.000	.000	.500	.000	.802	.000	.000	.802	.826
Cars & Peds	3	0	10	0	13	3	91	0	0	94	2	0	0	0	2	0	168	0	0	168	277
% Cars & Peds	100	0	100	0	100	100	97.8	0	0	97.9	100	0	0	0	100	0	98.8	0	0	98.8	98.6
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
% Trucks & Buses	0	0	0	0	0	0	2.2	0	0	2.1	0	0	0	0	0	0	0.6	0	0	0.6	1.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0.4



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N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587AA
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Metacom Avenue (Route 136) From North				Bayview Avenue From East				Metacom Avenue (Route 136) From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	23	144	9	0	12	16	7	0	6	154	9	0	6	11	32	0	429
04:15 PM	22	144	5	0	11	9	10	0	4	170	12	0	5	9	25	0	426
04:30 PM	26	133	10	0	7	9	15	0	5	184	13	1	7	9	29	0	448
04:45 PM	30	125	23	0	18	12	12	0	6	177	10	0	5	7	31	1	457
Total	101	546	47	0	48	46	44	0	21	685	44	1	23	36	117	1	1760
05:00 PM	29	126	19	0	8	13	15	0	2	167	19	0	13	10	39	0	460
05:15 PM	36	155	12	2	11	16	10	1	9	151	19	0	5	6	40	0	473
05:30 PM	22	117	17	0	18	8	9	0	1	154	11	2	4	9	30	0	402
05:45 PM	22	121	16	0	15	14	15	0	4	145	9	1	15	7	24	0	408
Total	109	519	64	2	52	51	49	1	16	617	58	3	37	32	133	0	1743
Grand Total	210	1065	111	2	100	97	93	1	37	1302	102	4	60	68	250	1	3503
Apprch %	15.1	76.7	8	0.1	34.4	33.3	32	0.3	2.6	90.1	7.1	0.3	15.8	17.9	66	0.3	
Total %	6	30.4	3.2	0.1	2.9	2.8	2.7	0	1.1	37.2	2.9	0.1	1.7	1.9	7.1	0	
Cars & Peds	209	1060	110	2	99	96	93	1	37	1295	102	4	59	68	246	1	3482
% Cars & Peds	99.5	99.5	99.1	100	99	99	100	100	100	99.5	100	100	98.3	100	98.4	100	99.4
Trucks & Buses																	
% Trucks & Buses	0.5	0.4	0.9	0	1	1	0	0	0	0.5	0	0	0	0	0.8	0	0.5
Bikes by Direction	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	0	4
% Bikes by Direction	0	0.1	0	0	0	0	0	0	0	0	0	0	1.7	0	0.8	0	0.1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	133	10	0	169	7	9	15	0	31	5	184	13	1	203	7	9	29	0	45	448
04:45 PM	30	125	23	0	178	18	12	12	0	42	6	177	10	0	193	5	7	31	1	44	457
05:00 PM	29	126	19	0	174	8	13	15	0	36	2	167	19	0	188	13	10	39	0	62	460
05:15 PM	36	155	12	2	205	11	16	10	1	38	9	151	19	0	179	5	6	40	0	51	473
Total Volume	121	539	64	2	726	44	50	52	1	147	22	679	61	1	763	30	32	139	1	202	1838
% App. Total	16.7	74.2	8.8	0.3		29.9	34	35.4	0.7		2.9	89	8	0.1		14.9	15.8	68.8	0.5		
PHF	.840	.869	.696	.250	.885	.611	.781	.867	.250	.875	.611	.923	.803	.250	.940	.577	.800	.869	.250	.815	.971
Cars & Peds	121	537	63	2	723	44	49	52	1	146	22	675	61	1	759	30	32	137	1	200	1828
% Cars & Peds	100	99.6	98.4	100	99.6	100	98.0	100	100	99.3	100	99.4	100	100	99.5	100	100	98.6	100	99.0	99.5
Trucks & Buses	0	1	1	0	2	0	1	0	0	1	0	4	0	0	4	0	0	2	0	2	9
% Trucks & Buses	0	0.2	1.6	0	0.3	0	2.0	0	0	0.7	0	0.6	0	0	0.5	0	0	1.4	0	1.0	0.5
Bikes by Direction	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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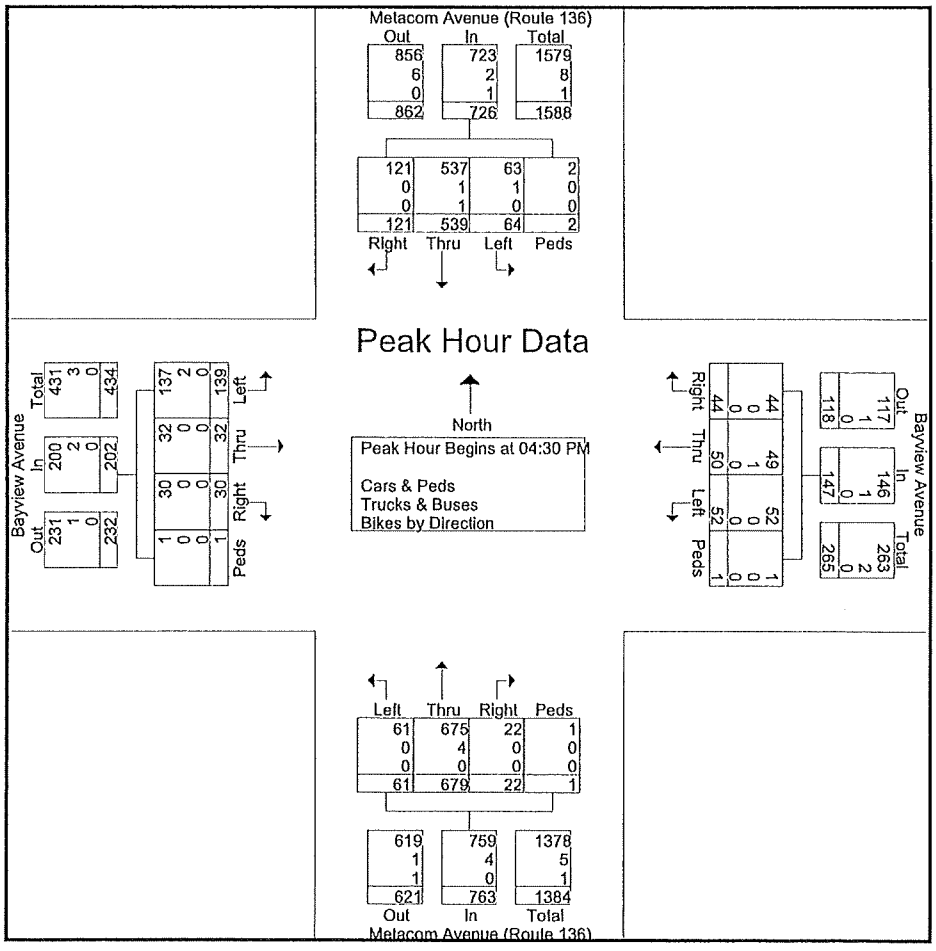
N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587AA
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	133	10	0	169	7	9	15	0	31	5	184	13	1	203	7	9	29	0	45	448
04:45 PM	30	125	23	0	178	18	12	12	0	42	6	177	10	0	193	5	7	31	1	44	457
05:00 PM	29	126	19	0	174	8	13	15	0	36	2	167	19	0	188	13	10	39	0	62	460
05:15 PM	36	155	12	2	205	11	16	10	1	38	9	151	19	0	179	5	6	40	0	51	473
Total Volume	121	539	64	2	726	44	50	52	1	147	22	679	61	1	763	30	32	139	1	202	1838
% App. Total	16.7	74.2	8.8	0.3		29.9	34	35.4	0.7		2.9	89	8	0.1		14.9	15.8	68.8	0.5		
PHF	.840	.869	.696	.250	.885	.611	.781	.867	.250	.875	.611	.923	.803	.250	.940	.577	.800	.869	.250	.815	.971
Cars & Peds	121	537	63	2	723	44	49	52	1	146	22	675	61	1	759	30	32	137	1	200	1828
% Cars & Peds	100	99.6	98.4	100	99.6	100	98.0	100	100	99.3	100	99.4	100	100	99.5	100	100	98.6	100	99.0	99.5
Trucks & Buses	0	1	1	0	2	0	1	0	0	1	0	4	0	0	4	0	0	2	0	2	9
% Trucks & Buses	0	0.2	1.6	0	0.3	0	2.0	0	0	0.7	0	0.6	0	0	0.5	0	0	1.4	0	1.0	0.5
Bikes by Direction	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



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N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587BB
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	#201 Almeida Apartments Driveway From North				Bayview Avenue From East				#206 Driveway From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	0	0	2	0	1	47	0	0	0	0	0	0	0	44	0	0	94
04:15 PM	0	0	0	0	1	47	0	0	0	0	0	0	0	45	2	0	95
04:30 PM	0	0	0	0	2	44	0	0	0	0	0	0	0	44	0	0	90
04:45 PM	1	0	1	0	4	50	0	0	0	0	0	0	0	47	1	0	104
Total	1	0	3	0	8	188	0	0	0	0	0	0	0	180	3	0	383
05:00 PM	0	0	1	0	4	56	1	0	0	0	0	0	0	55	1	0	118
05:15 PM	0	0	2	0	3	69	0	0	0	0	0	0	0	47	3	0	124
05:30 PM	1	0	2	0	6	36	1	0	0	0	0	0	0	44	0	0	90
05:45 PM	1	0	2	0	1	44	0	0	0	0	0	0	0	44	2	0	94
Total	2	0	7	0	14	205	2	0	0	0	0	0	0	190	6	0	426
Grand Total	3	0	10	0	22	393	2	0	0	0	0	0	0	370	9	0	809
Apprch %	23.1	0	76.9	0	5.3	94.2	0.5	0	0	0	0	0	0	97.6	2.4	0	
Total %	0.4	0	1.2	0	2.7	48.6	0.2	0	0	0	0	0	0	45.7	1.1	0	
Cars & Peds	3	0	10	0	21	390	2	0	0	0	0	0	0	363	8	0	797
% Cars & Peds	100	0	100	0	95.5	99.2	100	0	0	0	0	0	0	98.1	88.9	0	98.5
Trucks & Buses																	
% Trucks & Buses	0	0	0	0	4.5	0.5	0	0	0	0	0	0	0	0.5	0	0	0.6
Bikes by Direction	0	0	0	0	0	1	0	0	0	0	0	0	0	5	1	0	7
% Bikes by Direction	0	0	0	0	0	0.3	0	0	0	0	0	0	0	1.4	11.1	0	0.9

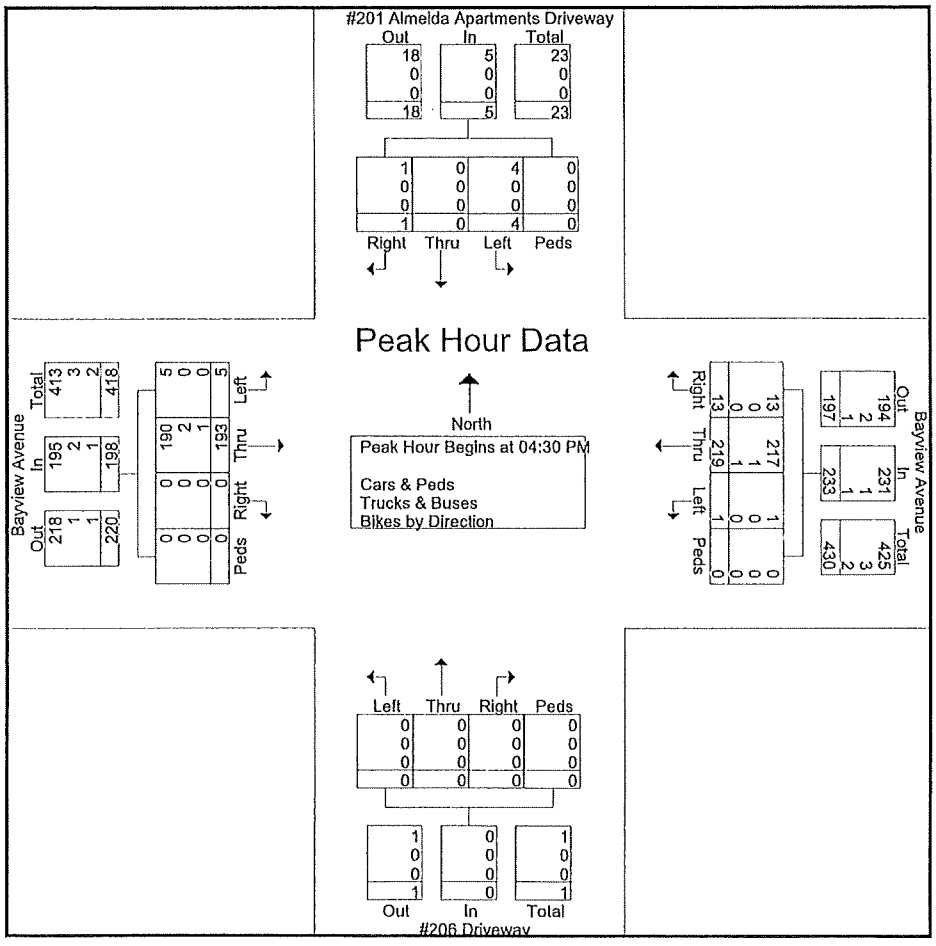
	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	2	44	0	0	46	0	0	0	0	0	0	44	0	0	44	90
04:45 PM	1	0	1	0	2	4	50	0	0	54	0	0	0	0	0	0	47	1	0	48	104
05:00 PM	0	0	1	0	1	4	56	1	0	61	0	0	0	0	0	0	55	1	0	56	118
05:15 PM	0	0	2	0	2	3	69	0	0	72	0	0	0	0	0	0	47	3	0	50	124
Total Volume	1	0	4	0	5	13	219	1	0	233	0	0	0	0	0	0	193	5	0	198	436
% App. Total	20	0	80	0		5.6	94	0.4	0		0	0	0	0		0	97.5	2.5	0		
PHF	.250	.000	.500	.000	.625	.813	.793	.250	.000	.809	.000	.000	.000	.000	.000	.000	.877	.417	.000	.884	.879
Cars & Peds	1	0	4	0	5	13	217	1	0	231	0	0	0	0	0	0	190	5	0	195	431
% Cars & Peds	100	0	100	0	100	100	99.1	100	0	99.1	0	0	0	0	0	0	98.4	100	0	98.5	98.9
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	1.0	0	0	1.0	0.7
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.5	0.5

Transportation Data Corporation
Mario Perone, mperone1@verizon.net
tel (781) 587-0086 cell (781) 439-4999

N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587BB
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	2	44	0	0	46	0	0	0	0	0	0	44	0	0	44	90
04:45 PM	1	0	1	0	2	4	50	0	0	54	0	0	0	0	0	0	47	1	0	48	104
05:00 PM	0	0	1	0	1	4	56	1	0	61	0	0	0	0	0	0	**55**	1	0	**56**	118
05:15 PM	0	0	2	0	2	3	69	0	0	72	0	0	0	0	0	0	47	3	0	50	**124**
Total Volume	1	0	4	0	5	13	219	1	0	233	0	0	0	0	0	0	193	5	0	198	436
% App. Total	20	0	80	0		5.6	94	0.4	0		0	0	0	0		0	97.5	2.5	0		
PHF	.250	.000	.500	.000	.625	.813	.793	.250	.000	.809	.000	.000	.000	.000	.000	.000	.877	.417	.000	.884	.879
Cars & Peds	1	0	4	0	5	13	217	1	0	231	0	0	0	0	0	0	190	5	0	195	431
% Cars & Peds	100	0	100	0	100	100	99.1	100	0	99.1	0	0	0	0	0	0	98.4	100	0	98.5	98.9
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	1.0	0	0	1.0	0.7
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.5	0.5



CROSSMAN ENGINEERING

DAY: Tuesday

DATE: 4/22/25

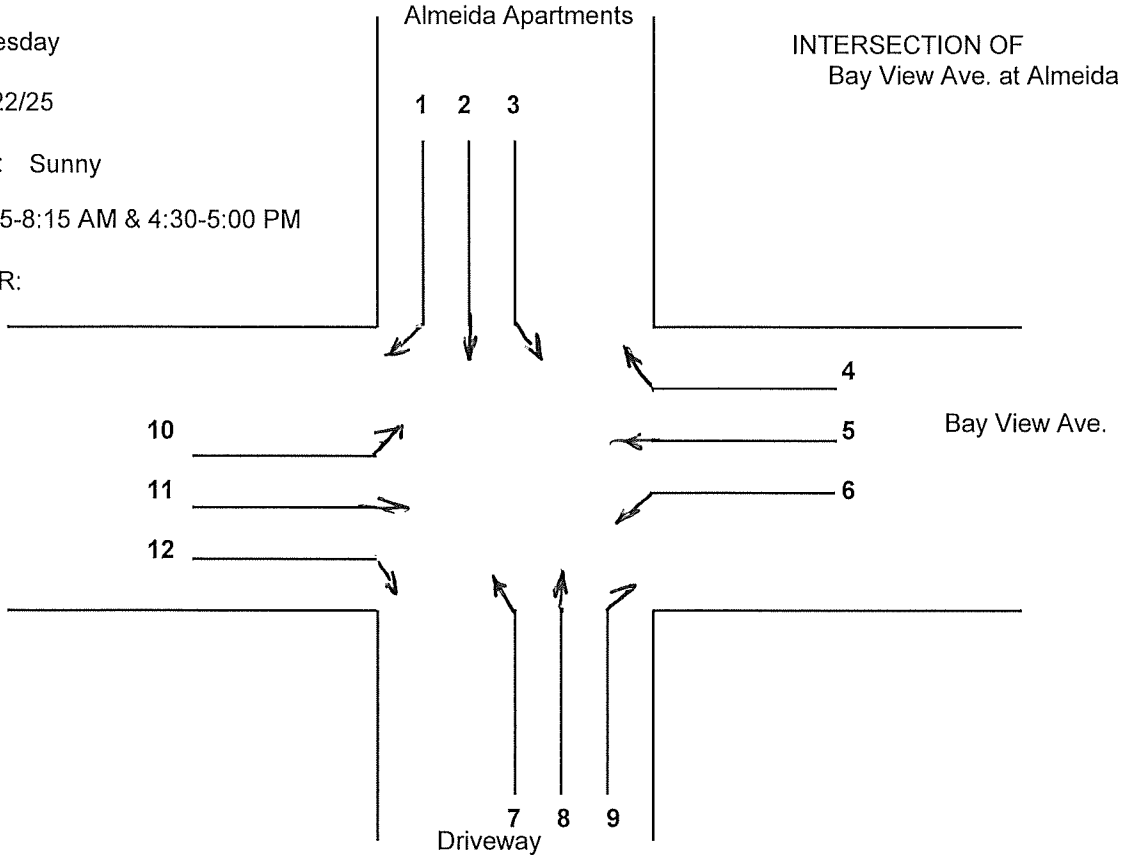
WEATHER: Sunny

TIME: 7:15-8:15 AM & 4:30-5:00 PM

RECORDER:

CITY/TOWN: Bristol

INTERSECTION OF
Bay View Ave. at Almeida Apartments



START TIME	END TIME	RD # 1			RD # 2			RD # 3			RD # 4			
		1	2	3	4	5	6	7	8	9	10	11	12	
7:15	7:30	1	0	3	3	26	0	0	0	1	0	37	0	0
7:30	7:45	0	0	6	3	24	0	0	0	0	0	38	0	0
7:45	8:00	0	0	11	1	19	0	0	0	0	0	46	0	0
8:00	8:15	1	0	5	3	23	0	0	0	0	0	44	0	0
														0
	Total	2	0	25	10	92	0	0	0	1	0	165	0	0
														0
4:30	4:45	2	0	9	9	42	1	0	0	0	2	43	1	0
4:45	5:00	2	0	11	6	41	0	0	0	0	3	43	0	0
5:00	5:15	0	0	5	6	43	0	0	0	0	1	44	0	0
5:15	5:30	1	0	7	2	48	0	0	0	0	2	49	0	0
														0
	Total	5	0	32	23	174	1	0	0	0	8	174	1	0
														0
														0
														0
TOTAL		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

TRIP GENERATION COMPUTATIONS

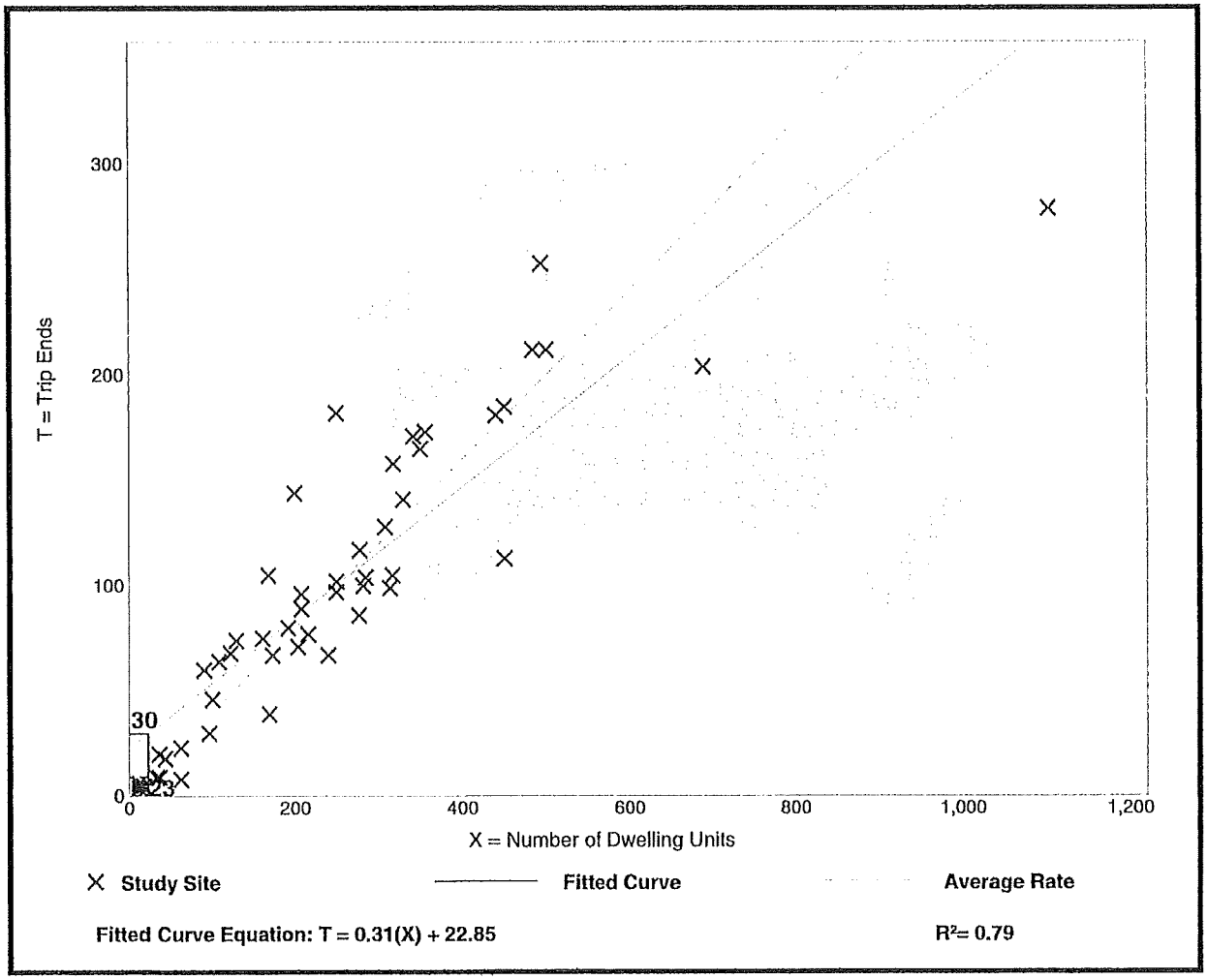
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



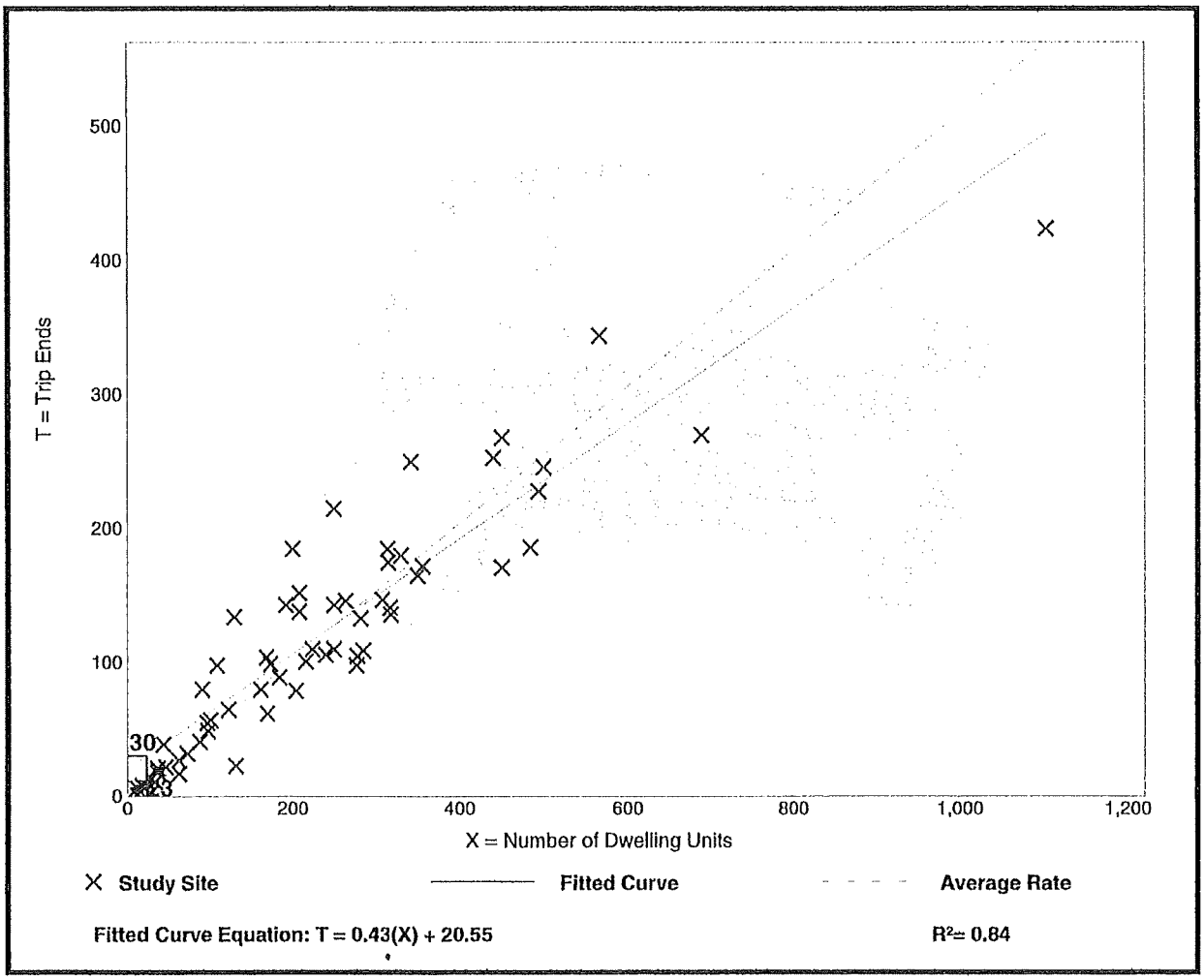
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

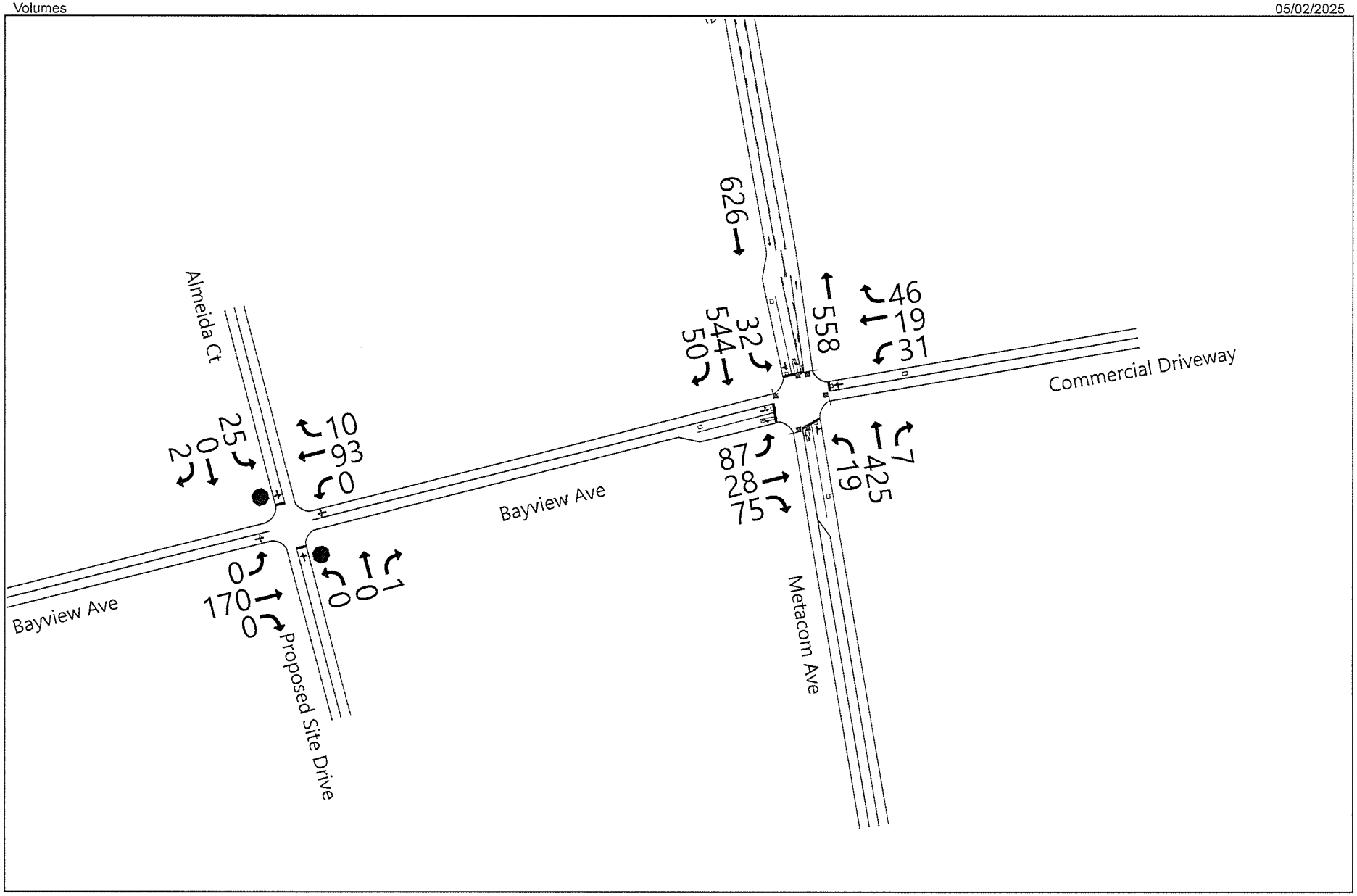
Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



CAPACITY ANALYSES

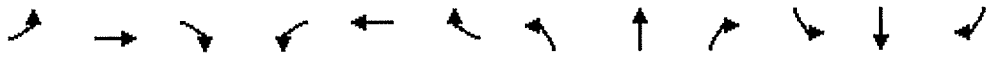
Map - S:\2684 - Daniel Ferreira, Bristol RI, 206 Bay View Ave Traffic Impact Study\Current\Traffic\Synchro\2684 - 2025 AM Existing.syn
Volumes
05/02/2025



2025 AM Existing Baseline
S:\2684 - Daniel Ferreira, Bristol RI, 206 Bay View Ave Traffic Impact Study\Current\Traffic\Synchro\2684 - 2025 AM Existing.syn

HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

04/30/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	28	75	31	19	46	19	425	7	32	544	50
Future Volume (veh/h)	87	28	75	31	19	46	19	425	7	32	544	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	109	35	94	42	26	63	21	472	8	34	579	53
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	211	57	353	83	56	80	35	915	16	52	853	78
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.56	0.56	0.03	0.56	0.56
Sat Flow, veh/h	577	234	1449	122	231	327	1552	1624	28	1629	1519	139
Grp Volume(v), veh/h	144	0	94	131	0	0	21	0	480	34	0	632
Grp Sat Flow(s),veh/h/ln	811	0	1449	681	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	4.7	3.5	0.0	0.0	1.2	0.0	16.1	1.9	0.0	24.3
Cycle Q Clear(g_c), s	15.9	0.0	4.7	19.4	0.0	0.0	1.2	0.0	16.1	1.9	0.0	24.3
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	268	0	353	219	0	0	35	0	930	52	0	931
V/C Ratio(X)	0.54	0.00	0.27	0.60	0.00	0.00	0.60	0.00	0.52	0.66	0.00	0.68
Avail Cap(c_a), veh/h	498	0	620	480	0	0	121	0	930	145	0	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.4	0.0	27.5	32.1	0.0	0.0	43.6	0.0	12.1	43.1	0.0	14.0
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.5	0.0	2.0	9.2	0.0	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	1.7	2.9	0.0	0.0	0.6	0.0	5.7	0.9	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	27.8	33.9	0.0	0.0	54.0	0.0	14.1	52.3	0.0	18.0
LnGrp LOS	C		C	C			D		B	D		B
Approach Vol, veh/h		238			131			501			666	
Approach Delay, s/veh		30.6			33.9			15.8			19.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	6.9	55.7	27.4	7.0	55.5	27.4
Change Period (Y+Rc), s	4.0	5.0	5.5	5.0	5.0	* 5.5
Max Green Setting (Gmax), s	8.0	29.0	38.5	7.0	29.0	* 39
Max Q Clear Time (g_c+I1), s	3.9	18.1	17.9	3.2	26.3	21.4
Green Ext Time (p_c), s	0.0	1.7	0.9	0.0	0.9	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

Notes

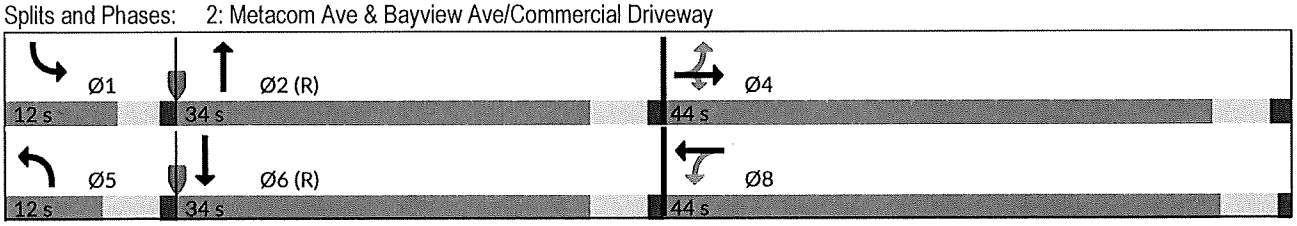
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 04/30/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	28	75	31	19	46	19	425	7	32	544	50
Future Volume (vph)	87	28	75	31	19	46	19	425	7	32	544	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	144	94	0	131	0	21	480	0	34	632	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.73	0.28		0.44		0.20	0.47		0.28	0.59	
Control Delay (s/veh)		55.1	8.5		21.3		43.2	13.5		44.2	15.1	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		55.1	8.5		21.3		43.2	13.5		44.2	15.1	
Queue Length 50th (ft)		78	0		34		12	145		19	142	
Queue Length 95th (ft)		112	27		55		34	297		47	#464	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		481	675		622		123	1031		148	1079	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.30	0.14		0.21		0.17	0.47		0.23	0.59	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



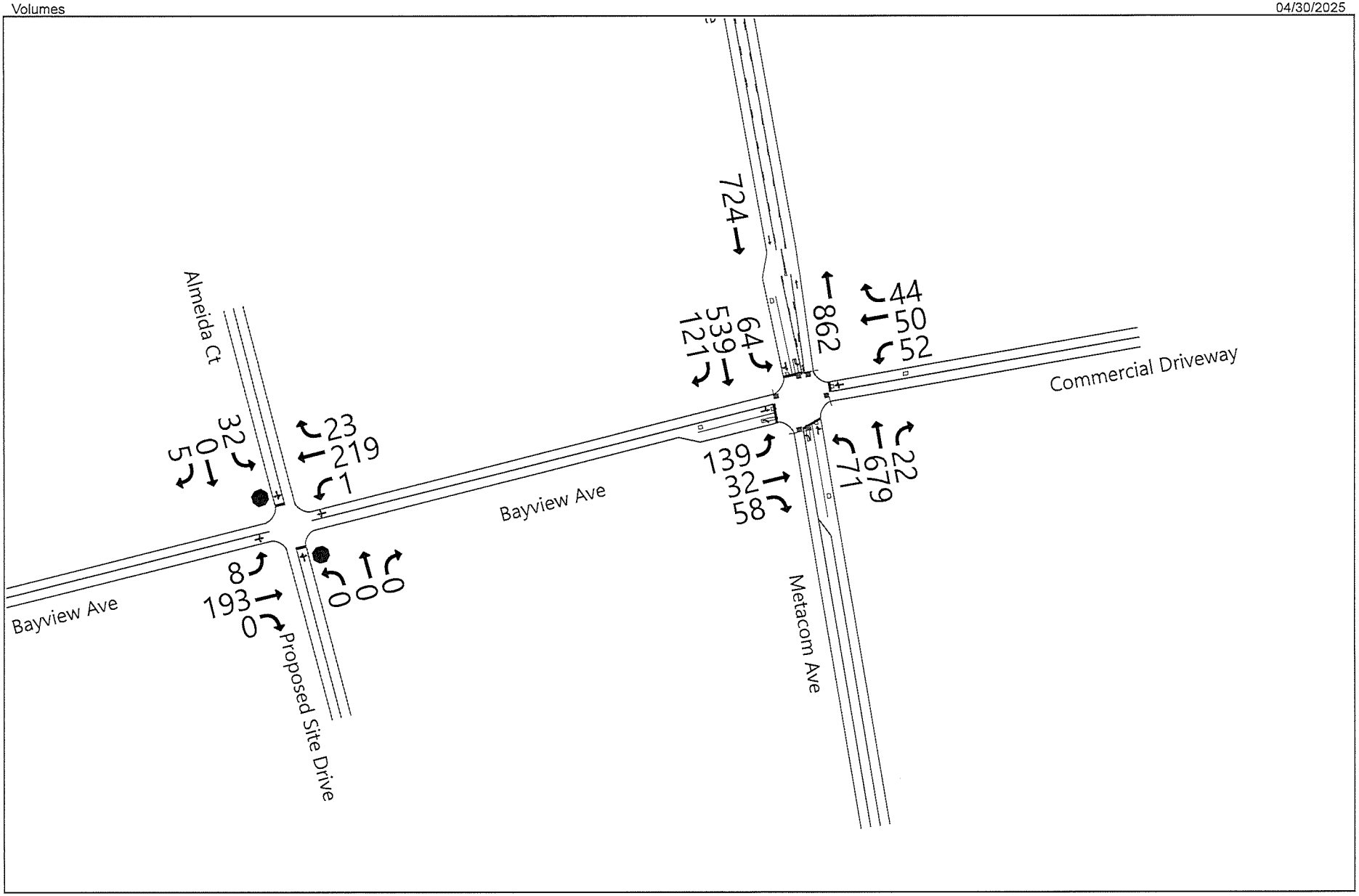
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	170	0	0	93	10	0	0	1	25	0	2
Future Vol, veh/h	0	170	0	0	93	10	0	0	1	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	213	0	0	104	11	0	0	2	41	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	116	0	0	213	0	0	317	328	213	323	323	110
Stage 1	-	-	-	-	-	-	213	213	-	110	110	-
Stage 2	-	-	-	-	-	-	104	116	-	213	213	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1486	-	-	1370	-	-	640	594	833	634	598	949
Stage 1	-	-	-	-	-	-	794	730	-	900	808	-
Stage 2	-	-	-	-	-	-	906	804	-	794	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1486	-	-	1370	-	-	637	594	833	633	598	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	637	594	-	633	598	-
Stage 1	-	-	-	-	-	-	794	730	-	900	808	-
Stage 2	-	-	-	-	-	-	903	804	-	792	730	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	9.33	10.96
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	833	1486	-	-	1370	-	-	649
HCM Lane V/C Ratio	0.002	-	-	-	-	-	-	0.068
HCM Ctrl Dly (s/v)	9.3	0	-	-	0	-	-	11
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2


724
862
44
50
52
64
539
121
Commercial Driveway
Almeida Ct
32
0
5
23
219
1
Bayview Ave
139
32
58
71
679
22
Bayview Ave
8
193
0
0
0
0
Proposed Site Drive
Metacom Ave

Item C2.

HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

04/30/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	32	58	52	50	44	71	679	22	64	539	121
Future Volume (veh/h)	139	32	58	52	50	44	71	679	22	64	539	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	170	39	71	59	57	50	76	722	23	72	606	136
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	40	435	53	44	21	95	816	26	89	658	148
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	575	135	1449	13	147	69	1629	1635	52	1603	1352	303
Grp Volume(v), veh/h	209	0	71	166	0	0	76	0	745	72	0	742
Grp Sat Flow(s),veh/h/ln	709	0	1449	228	0	0	1629	0	1687	1603	0	1655
Q Serve(g_s), s	0.0	0.0	3.6	0.8	0.0	0.0	4.6	0.0	39.6	4.4	0.0	41.7
Cycle Q Clear(g_c), s	29.2	0.0	3.6	30.0	0.0	0.0	4.6	0.0	39.6	4.4	0.0	41.7
Prop In Lane	0.81		1.00	0.36		0.30	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	278	0	435	117	0	0	95	0	842	89	0	806
V/C Ratio(X)	0.75	0.00	0.16	1.42	0.00	0.00	0.80	0.00	0.88	0.81	0.00	0.92
Avail Cap(c_a), veh/h	278	0	435	117	0	0	98	0	842	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	25.8	36.1	0.0	0.0	46.5	0.0	22.4	46.7	0.0	23.9
Incr Delay (d2), s/veh	10.3	0.0	0.1	229.7	0.0	0.0	34.6	0.0	13.1	25.2	0.0	17.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	1.3	10.4	0.0	0.0	2.7	0.0	17.2	2.3	0.0	18.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.0	0.0	25.9	265.8	0.0	0.0	81.2	0.0	35.5	71.9	0.0	41.3
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		280			166			821			814	
Approach Delay, s/veh		40.2			265.8			39.7			44.0	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	54.9		35.5	10.8	53.7		35.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5				
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30				
Max Q Clear Time (g_c+I1), s	6.4	41.6		31.2	6.6	43.7		32.0				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	1.9		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	59.5
HCM 7th LOS	E

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

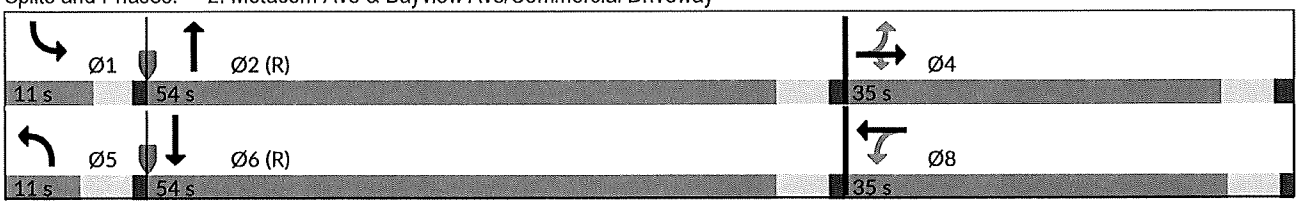
Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 04/30/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	32	58	52	50	44	71	679	22	64	539	121
Future Volume (vph)	139	32	58	52	50	44	71	679	22	64	539	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	209	71	0	166	0	76	745	0	72	742	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.87	0.18		0.55		0.60	0.78		0.59	0.83	
Control Delay (s/veh)		68.4	7.0		34.7		65.8	27.2		64.7	30.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.4	7.0		34.7		65.8	27.2		64.7	30.4	
Queue Length 50th (ft)		127	0		79		46	392		44	401	
Queue Length 95th (ft)		179	23		132		#130	#668		#111	#648	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		306	482		377		127	953		127	897	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.68	0.15		0.44		0.60	0.78		0.57	0.83	

Intersection Summary

Area Type: CBD
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	193	0	1	219	23	0	0	0	32	0	5
Future Vol, veh/h	8	193	0	1	219	23	0	0	0	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	219	0	1	270	28	0	0	0	45	0	7

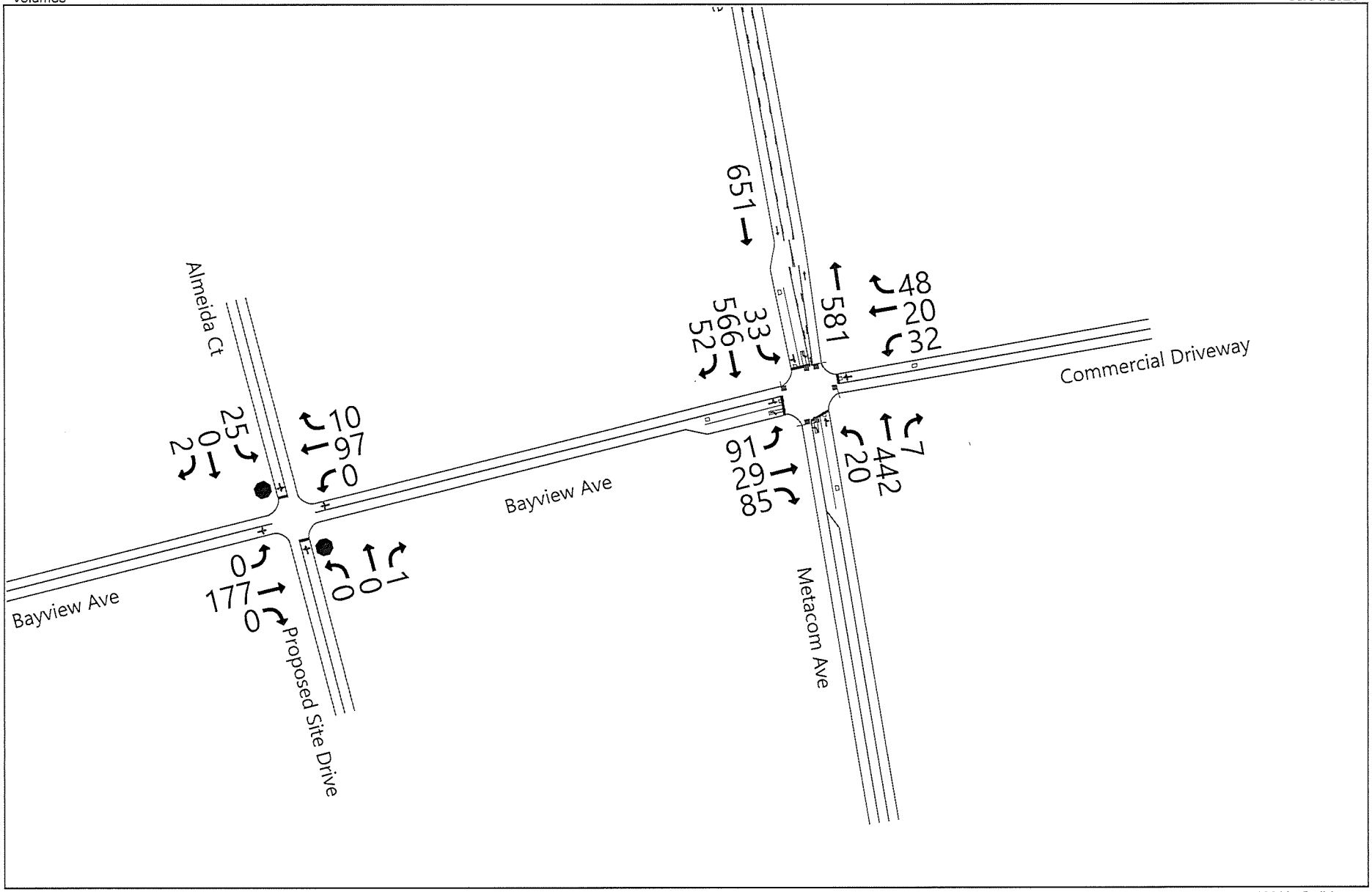
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	299	0	0	219	0	0	510	539	219	525	525	285
Stage 1	-	-	-	-	-	-	238	238	-	287	287	-
Stage 2	-	-	-	-	-	-	273	301	-	238	238	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1274	-	-	1362	-	-	477	452	825	467	461	759
Stage 1	-	-	-	-	-	-	770	712	-	725	678	-
Stage 2	-	-	-	-	-	-	738	668	-	770	712	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1274	-	-	1362	-	-	468	448	825	462	456	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	448	-	462	456	-
Stage 1	-	-	-	-	-	-	764	707	-	724	677	-
Stage 2	-	-	-	-	-	-	730	668	-	764	707	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.31	0.03	0	13.25
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	72	-	-	7	-	-	488
HCM Lane V/C Ratio	-	0.007	-	-	0.001	-	-	0.107
HCM Ctrl Dly (s/v)	0	7.8	0	-	7.6	0	-	13.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4

Map - S:\2684 - Daniel Ferreira, Bristol RI, 206 Bay View Ave Traffic Impact Study\Current\Traffic\Synchro\2684 - 2030 AM No-Build.syn
Volumes

05/01/2025



2030 AM No-Build 2030 AM No-Build

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HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

05/01/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	29	85	32	20	48	20	442	7	33	566	52
Future Volume (veh/h)	91	29	85	32	20	48	20	442	7	33	566	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	114	36	106	44	27	66	22	491	8	35	602	55
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	218	58	375	85	57	83	36	890	15	53	829	76
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.55	0.55	0.03	0.55	0.55
Sat Flow, veh/h	569	225	1449	122	222	320	1552	1625	26	1629	1520	139
Grp Volume(v), veh/h	150	0	106	137	0	0	22	0	499	35	0	657
Grp Sat Flow(s),veh/h/ln	793	0	1449	664	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	5.3	3.9	0.0	0.0	1.3	0.0	17.6	1.9	0.0	26.8
Cycle Q Clear(g_c), s	16.8	0.0	5.3	20.8	0.0	0.0	1.3	0.0	17.6	1.9	0.0	26.8
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	276	0	375	225	0	0	36	0	905	53	0	905
V/C Ratio(X)	0.54	0.00	0.28	0.61	0.00	0.00	0.60	0.00	0.55	0.66	0.00	0.73
Avail Cap(c_a), veh/h	486	0	620	464	0	0	121	0	905	145	0	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	26.7	31.7	0.0	0.0	43.5	0.0	13.2	43.1	0.0	15.4
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.4	0.0	2.4	9.3	0.0	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.8	3.0	0.0	0.0	0.6	0.0	6.3	0.9	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.7	0.0	27.0	33.5	0.0	0.0	53.9	0.0	15.6	52.3	0.0	20.5
LnGrp LOS	C		C	C			D		B	D		C
Approach Vol, veh/h		256			137			521			692	
Approach Delay, s/veh		29.8			33.5			17.2			22.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	54.3		28.8	7.1	54.1		28.8
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	8.0	29.0		38.5	7.0	29.0		* 39
Max Q Clear Time (g_c+I1), s	3.9	19.6		18.8	3.3	28.8		22.8
Green Ext Time (p_c), s	0.0	1.6		0.9	0.0	0.1		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

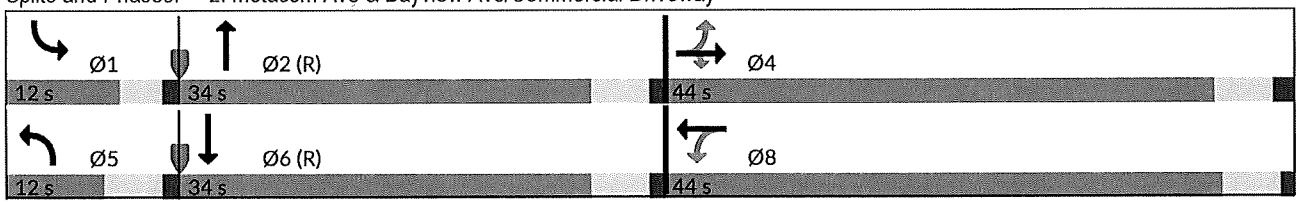
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 05/01/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	29	85	32	20	48	20	442	7	33	566	52
Future Volume (vph)	91	29	85	32	20	48	20	442	7	33	566	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	106	0	137	0	22	499	0	35	657	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.75	0.30		0.45		0.21	0.49		0.28	0.61	
Control Delay (s/veh)		56.6	8.1		21.0		43.4	14.2		44.3	16.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		56.6	8.1		21.0		43.4	14.2		44.3	16.3	
Queue Length 50th (ft)		82	0		35		12	156		19	155	
Queue Length 95th (ft)		116	28		56		35	318		48	#530	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		473	682		621		123	1023		149	1070	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.32	0.16		0.22		0.18	0.49		0.23	0.61	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



HCM 7th TWSC
6: Proposed Site Drive/Almeida Ct & Bayview Ave 05/01/2025

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	177	0	0	97	10	0	0	1	25	0	2
Future Vol, veh/h	0	177	0	0	97	10	0	0	1	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	221	0	0	109	11	0	0	2	41	0	3

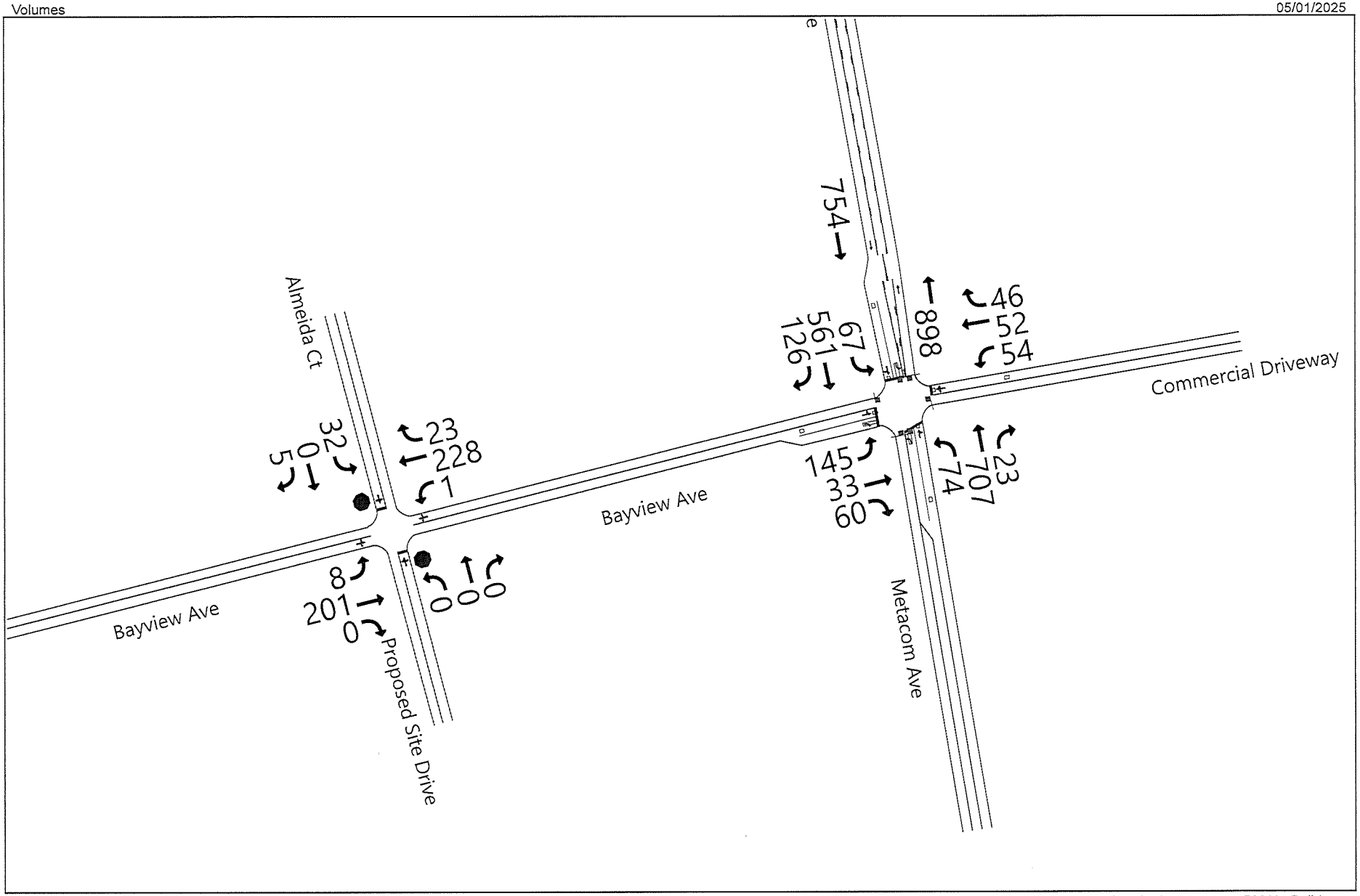
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	120	0	0	221	0	0	330	341	221	336	336	115
Stage 1	-	-	-	-	-	-	221	221	-	115	115	-
Stage 2	-	-	-	-	-	-	109	120	-	221	221	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1480	-	-	1360	-	-	627	584	823	622	588	943
Stage 1	-	-	-	-	-	-	786	724	-	895	805	-
Stage 2	-	-	-	-	-	-	901	800	-	786	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1360	-	-	625	584	823	620	588	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	625	584	-	620	588	-
Stage 1	-	-	-	-	-	-	786	724	-	895	805	-
Stage 2	-	-	-	-	-	-	898	800	-	784	724	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	9.38	11.08
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	823	1480	-	-	1360	-	-	636
HCM Lane V/C Ratio	0.002	-	-	-	-	-	-	0.07
HCM Ctrl Dly (s/v)	9.4	0	-	-	0	-	-	11.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Map - S:\2684 - Daniel Ferreira, Bristol RI, 206 Bay View Ave Traffic Impact Study\Current\Traffic\Synchro\2684 - 2030 PM No-Build.syn
Volumes

05/01/2025



2030 PM No-Build 2030 PM No-Build

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HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

05/01/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	33	60	54	52	46	74	707	23	67	561	126
Future Volume (veh/h)	145	33	60	54	52	46	74	707	23	67	561	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	177	40	73	61	59	52	79	752	24	75	630	142
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	39	435	49	40	18	98	813	26	93	655	148
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	575	130	1449	0	135	58	1629	1635	52	1603	1351	304
Grp Volume(v), veh/h	217	0	73	172	0	0	79	0	776	75	0	772
Grp Sat Flow(s),veh/h/ln	705	0	1449	193	0	0	1629	0	1687	1603	0	1655
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.0	4.8	0.0	42.8	4.6	0.0	45.0
Cycle Q Clear(g_c), s	30.0	0.0	3.7	30.0	0.0	0.0	4.8	0.0	42.8	4.6	0.0	45.0
Prop In Lane	0.82		1.00	0.35		0.30	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	277	0	435	107	0	0	98	0	839	93	0	803
V/C Ratio(X)	0.78	0.00	0.17	1.61	0.00	0.00	0.81	0.00	0.93	0.81	0.00	0.96
Avail Cap(c_a), veh/h	277	0	435	107	0	0	98	0	839	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	25.8	34.7	0.0	0.0	46.4	0.0	23.4	46.5	0.0	24.9
Incr Delay (d2), s/veh	13.1	0.0	0.1	313.8	0.0	0.0	36.7	0.0	17.5	26.8	0.0	23.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	1.3	12.0	0.0	0.0	2.9	0.0	19.4	2.5	0.0	21.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.4	0.0	25.9	348.4	0.0	0.0	83.1	0.0	40.9	73.3	0.0	48.6
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		290			172			855			847	
Approach Delay, s/veh		42.8			348.4			44.8			50.7	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	54.7		35.5	11.0	53.5		35.5
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30
Max Q Clear Time (g_c+I1), s	6.6	44.8		32.0	6.8	47.0		32.0
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.9		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	71.0
HCM 7th LOS	E

Notes

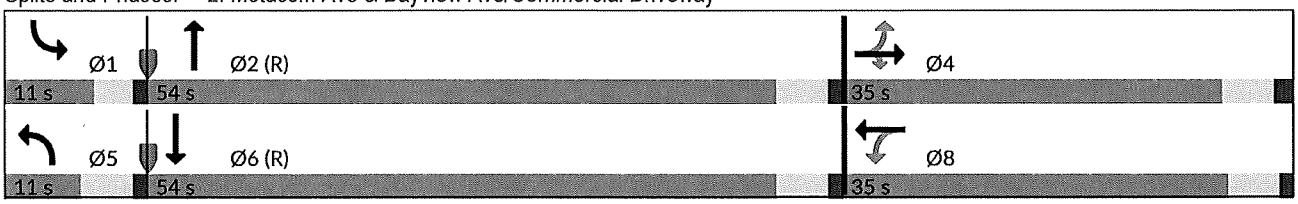
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 05/01/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	33	60	54	52	46	74	707	23	67	561	126
Future Volume (vph)	145	33	60	54	52	46	74	707	23	67	561	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	73	0	172	0	79	776	0	75	772	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.88	0.18		0.55		0.64	0.83		0.62	0.87	
Control Delay (s/veh)		68.4	7.1		34.5		69.8	30.3		67.8	34.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.4	7.1		34.5		69.8	30.3		67.8	34.6	
Queue Length 50th (ft)		131	0		82		48	437		46	440	
Queue Length 95th (ft)		187	25		138		#135	#713		#115	#691	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		304	482		374		124	940		125	884	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.71	0.15		0.46		0.64	0.83		0.60	0.87	

Intersection Summary	
Area Type:	CBD
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	201	0	1	228	23	0	0	0	32	0	5
Future Vol, veh/h	8	201	0	1	228	23	0	0	0	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	228	0	1	281	28	0	0	0	45	0	7

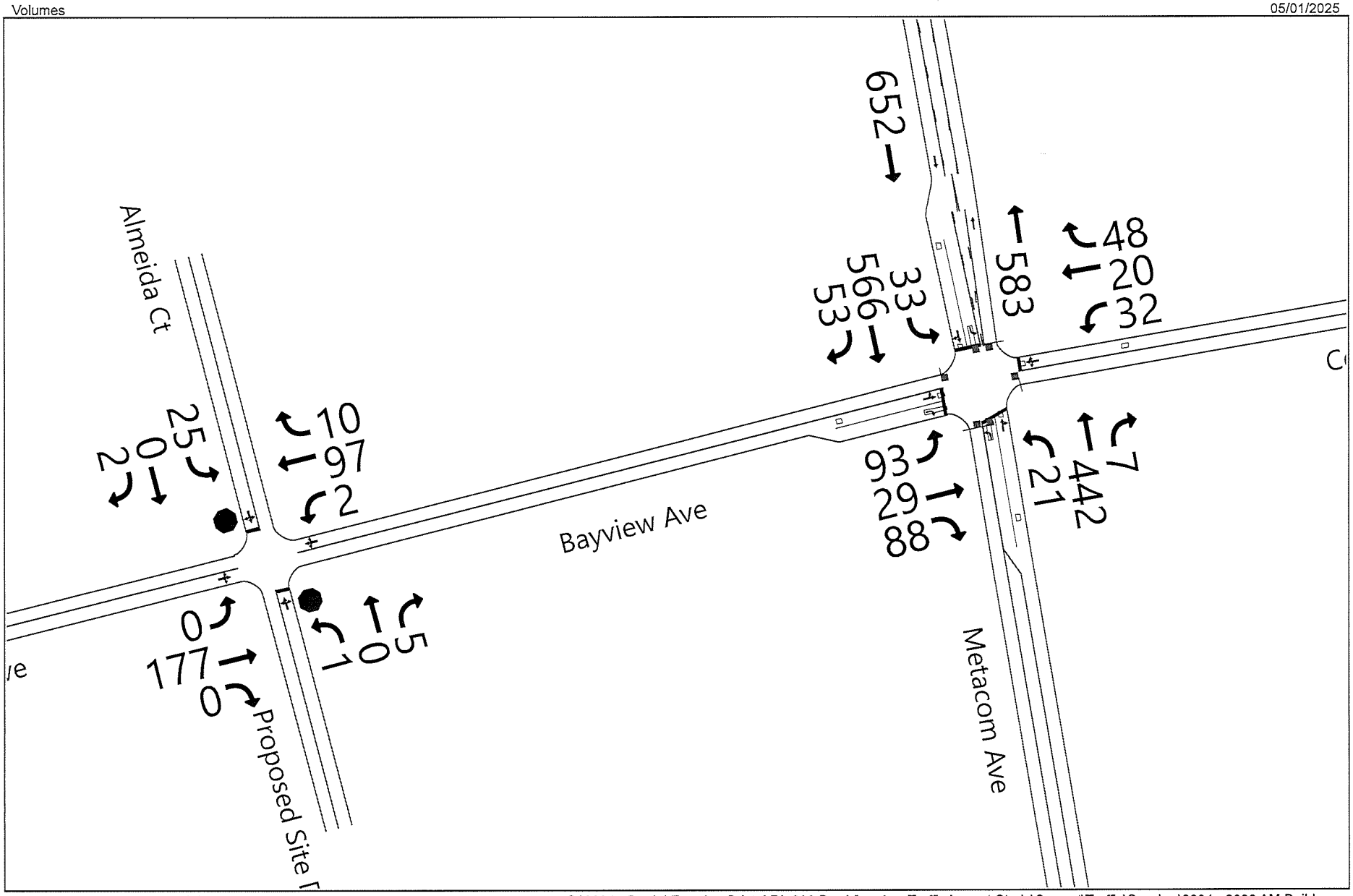
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	228	0	0	531	559	228	545	545	296
Stage 1	-	-	-	-	-	-	247	247	-	298	298	-
Stage 2	-	-	-	-	-	-	284	312	-	247	247	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1262	-	-	1352	-	-	462	440	816	452	449	748
Stage 1	-	-	-	-	-	-	762	706	-	715	670	-
Stage 2	-	-	-	-	-	-	728	661	-	762	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1262	-	-	1352	-	-	454	436	816	448	444	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	454	436	-	448	444	-
Stage 1	-	-	-	-	-	-	755	700	-	714	670	-
Stage 2	-	-	-	-	-	-	720	660	-	755	700	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.3	0.03	0	13.53
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	69	-	-	7	-	-	474
HCM Lane V/C Ratio	-	0.007	-	-	0.001	-	-	0.11
HCM Ctrl Dly (s/v)	0	7.9	0	-	7.7	0	-	13.5
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4

Map - S:\2684 - Daniel Ferreira, Bristol RI, 206 Bay View Ave Traffic Impact Study\Current\Traffic\Synchro\2684 - 2030 AM Build.syn
Volumes

05/01/2025



2030 AM Build 2030 AM Build

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Item C2.

HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

05/01/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	29	88	32	20	48	21	442	7	33	566	53
Future Volume (veh/h)	93	29	88	32	20	48	21	442	7	33	566	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	116	36	110	44	27	66	23	491	8	35	602	56
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	220	58	381	84	57	83	38	884	14	53	820	76
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.54	0.54	0.03	0.54	0.54
Sat Flow, veh/h	568	220	1449	120	218	315	1552	1625	26	1629	1517	141
Grp Volume(v), veh/h	152	0	110	137	0	0	23	0	499	35	0	658
Grp Sat Flow(s),veh/h/ln	787	0	1449	653	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	5.4	3.9	0.0	0.0	1.3	0.0	17.8	1.9	0.0	27.2
Cycle Q Clear(g_c), s	17.2	0.0	5.4	21.1	0.0	0.0	1.3	0.0	17.8	1.9	0.0	27.2
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.09
Lane Grp Cap(c), veh/h	277	0	381	224	0	0	38	0	898	53	0	896
V/C Ratio(X)	0.55	0.00	0.29	0.61	0.00	0.00	0.61	0.00	0.56	0.66	0.00	0.73
Avail Cap(c_a), veh/h	483	0	620	458	0	0	121	0	898	145	0	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	26.5	31.5	0.0	0.0	43.5	0.0	13.4	43.1	0.0	15.7
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.3	0.0	2.5	9.3	0.0	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.9	3.0	0.0	0.0	0.6	0.0	6.4	0.9	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	0.0	26.7	33.3	0.0	0.0	53.8	0.0	15.9	52.3	0.0	21.0
LnGrp LOS	C		C	C			D		B	D		C
Approach Vol, veh/h		262			137			522			693	
Approach Delay, s/veh		29.6			33.3			17.6			22.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	53.9		29.2	7.2	53.7		29.2
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	8.0	29.0		38.5	7.0	29.0		* 39
Max Q Clear Time (g_c+I1), s	3.9	19.8		19.2	3.3	29.2		23.1
Green Ext Time (p_c), s	0.0	1.6		0.9	0.0	0.0		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

Notes

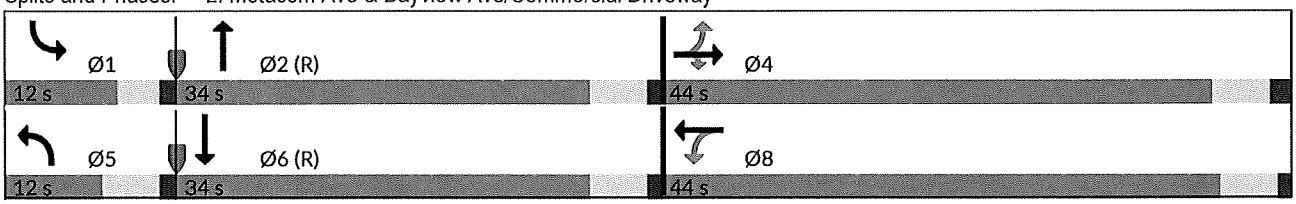
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 05/01/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	29	88	32	20	48	21	442	7	33	566	53
Future Volume (vph)	93	29	88	32	20	48	21	442	7	33	566	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	152	110	0	137	0	23	499	0	35	658	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.76	0.31		0.45		0.21	0.49		0.28	0.62	
Control Delay (s/veh)		57.0	8.1		20.9		43.4	14.3		44.3	16.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		57.0	8.1		20.9		43.4	14.3		44.3	16.5	
Queue Length 50th (ft)		83	0		35		13	157		19	157	
Queue Length 95th (ft)		117	28		56		36	319		48	#533	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		473	684		621		124	1022		149	1067	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.32	0.16		0.22		0.19	0.49		0.23	0.62	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



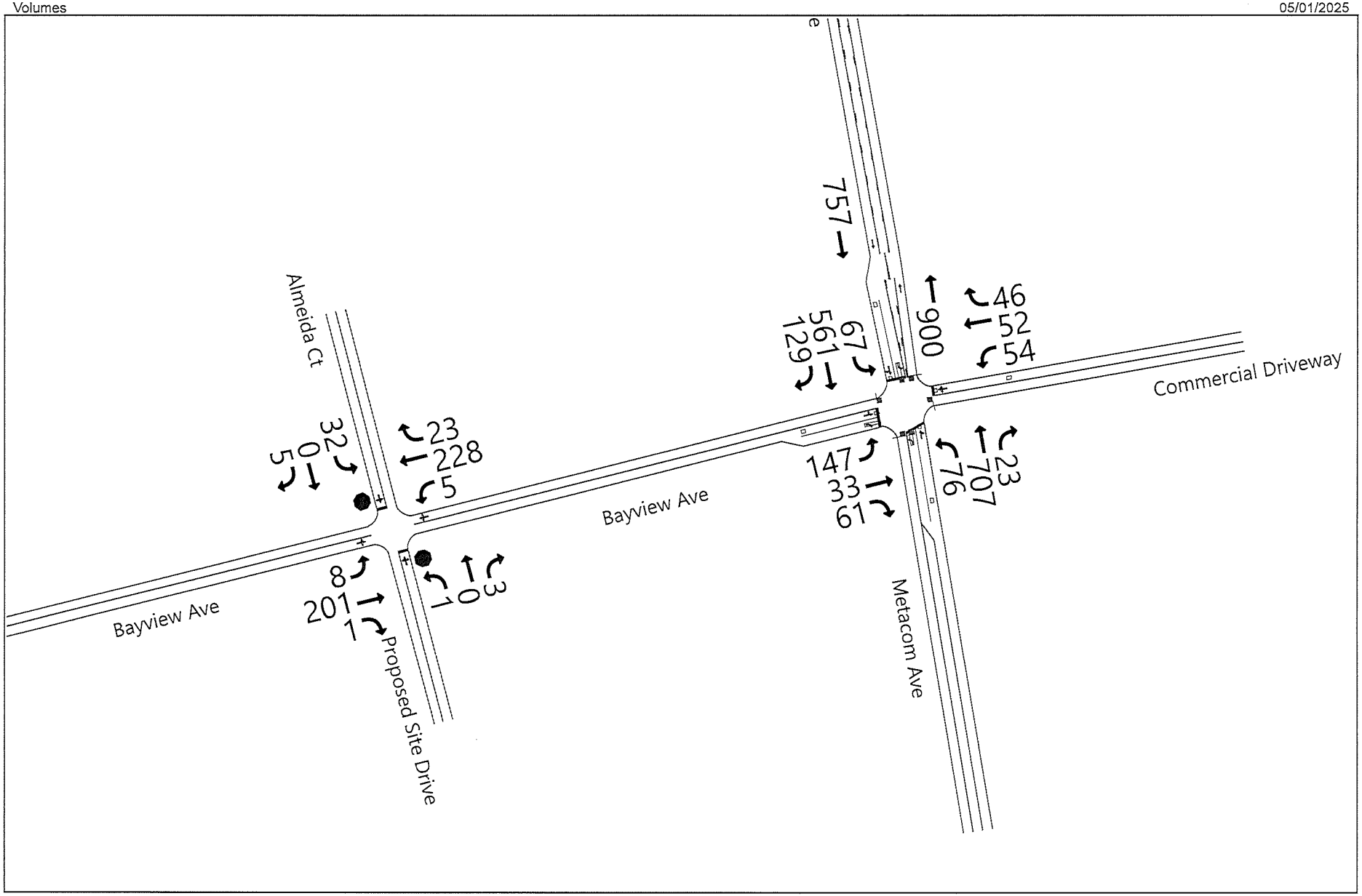
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	177	0	2	97	10	1	0	5	25	0	2
Future Vol, veh/h	0	177	0	2	97	10	1	0	5	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	221	0	2	109	11	2	0	10	41	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	120	0	0	221	0	0	335	346	221	340	340	115
Stage 1	-	-	-	-	-	-	221	221	-	119	119	-
Stage 2	-	-	-	-	-	-	113	125	-	221	221	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1480	-	-	1360	-	-	623	580	823	617	585	943
Stage 1	-	-	-	-	-	-	786	724	-	890	801	-
Stage 2	-	-	-	-	-	-	896	797	-	786	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1360	-	-	619	579	823	609	584	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	579	-	609	584	-
Stage 1	-	-	-	-	-	-	786	724	-	889	800	-
Stage 2	-	-	-	-	-	-	892	795	-	776	724	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.14	9.68	11.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	781	1480	-	-	32	-	-	625
HCM Lane V/C Ratio	0.015	-	-	-	0.002	-	-	0.071
HCM Ctrl Dly (s/v)	9.7	0	-	-	7.7	0	-	11.2
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2


e
757
900
67
561
129
46
52
54
Commercial Driveway
Almeida Ct
32
0
5
23
228
5
Bayview Ave
147
33
61
76
707
23
Bayview Ave
8
201
1
1
0
3
Proposed Site Drive
Metacom Ave

Item C2.

HCM 7th Signalized Intersection Summary
2: Metacom Ave & Bayview Ave/Commercial Driveway

05/01/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	33	61	54	52	46	76	707	23	67	561	129
Future Volume (veh/h)	147	33	61	54	52	46	76	707	23	67	561	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	179	40	74	61	59	52	81	752	24	75	630	145
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	39	435	49	40	18	98	813	26	93	652	150
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	576	129	1449	0	135	58	1629	1635	52	1603	1345	310
Grp Volume(v), veh/h	219	0	74	172	0	0	81	0	776	75	0	775
Grp Sat Flow(s),veh/h/ln	704	0	1449	193	0	0	1629	0	1687	1603	0	1654
Q Serve(g_s), s	0.0	0.0	3.8	0.0	0.0	0.0	4.9	0.0	42.8	4.6	0.0	45.4
Cycle Q Clear(g_c), s	30.0	0.0	3.8	30.0	0.0	0.0	4.9	0.0	42.8	4.6	0.0	45.4
Prop In Lane	0.82		1.00	0.35		0.30	1.00		0.03	1.00		0.19
Lane Grp Cap(c), veh/h	277	0	435	107	0	0	98	0	839	93	0	802
V/C Ratio(X)	0.79	0.00	0.17	1.61	0.00	0.00	0.83	0.00	0.93	0.81	0.00	0.97
Avail Cap(c_a), veh/h	277	0	435	107	0	0	98	0	839	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.5	0.0	25.8	34.7	0.0	0.0	46.5	0.0	23.4	46.5	0.0	24.9
Incr Delay (d2), s/veh	13.8	0.0	0.1	313.8	0.0	0.0	41.2	0.0	17.5	26.8	0.0	24.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	1.3	12.0	0.0	0.0	3.1	0.0	19.4	2.5	0.0	21.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.4	0.0	25.9	348.4	0.0	0.0	87.7	0.0	40.9	73.3	0.0	49.4
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		293			172			857			850	
Approach Delay, s/veh		43.4			348.4			45.3			51.5	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	54.7		35.5	11.0	53.5		35.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5				
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30				
Max Q Clear Time (g_c+I1), s	6.6	44.8		32.0	6.9	47.4		32.0				
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	71.5
HCM 7th LOS	E

Notes

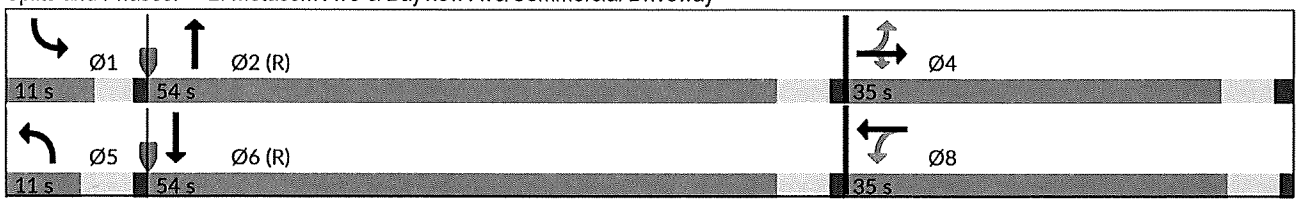
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings
2: Metacom Ave & Bayview Ave/Commercial Driveway 05/01/2025

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	33	61	54	52	46	76	707	23	67	561	129
Future Volume (vph)	147	33	61	54	52	46	76	707	23	67	561	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	219	74	0	172	0	81	776	0	75	775	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.88	0.18		0.55		0.65	0.83		0.62	0.88	
Control Delay (s/veh)		68.5	7.2		34.3		71.0	30.5		68.0	35.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.5	7.2		34.3		71.0	30.5		68.0	35.4	
Queue Length 50th (ft)		132	0		82		50	440		46	443	
Queue Length 95th (ft)		189	25		138		#139	#713		#115	#696	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		304	482		373		124	938		124	881	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.72	0.15		0.46		0.65	0.83		0.60	0.88	

Intersection Summary	
Area Type:	CBD
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	201	1	5	228	23	1	0	3	32	0	5
Future Vol, veh/h	8	201	1	5	228	23	1	0	3	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	228	1	6	281	28	4	0	12	45	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	230	0	0	541	569	229	555	556	296
Stage 1	-	-	-	-	-	-	247	247	-	308	308	-
Stage 2	-	-	-	-	-	-	294	322	-	247	248	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1262	-	-	1350	-	-	455	434	815	446	442	748
Stage 1	-	-	-	-	-	-	761	706	-	706	664	-
Stage 2	-	-	-	-	-	-	719	654	-	762	705	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1262	-	-	1350	-	-	445	428	815	433	436	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	445	428	-	433	436	-
Stage 1	-	-	-	-	-	-	755	700	-	702	660	-
Stage 2	-	-	-	-	-	-	708	651	-	744	699	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.3	0.15	10.47	13.84
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	675	69	-	-	35	-	-	459
HCM Lane V/C Ratio	0.024	0.007	-	-	0.005	-	-	0.113
HCM Ctrl Dly (s/v)	10.5	7.9	0	-	7.7	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

COLLISION DIAGRAM

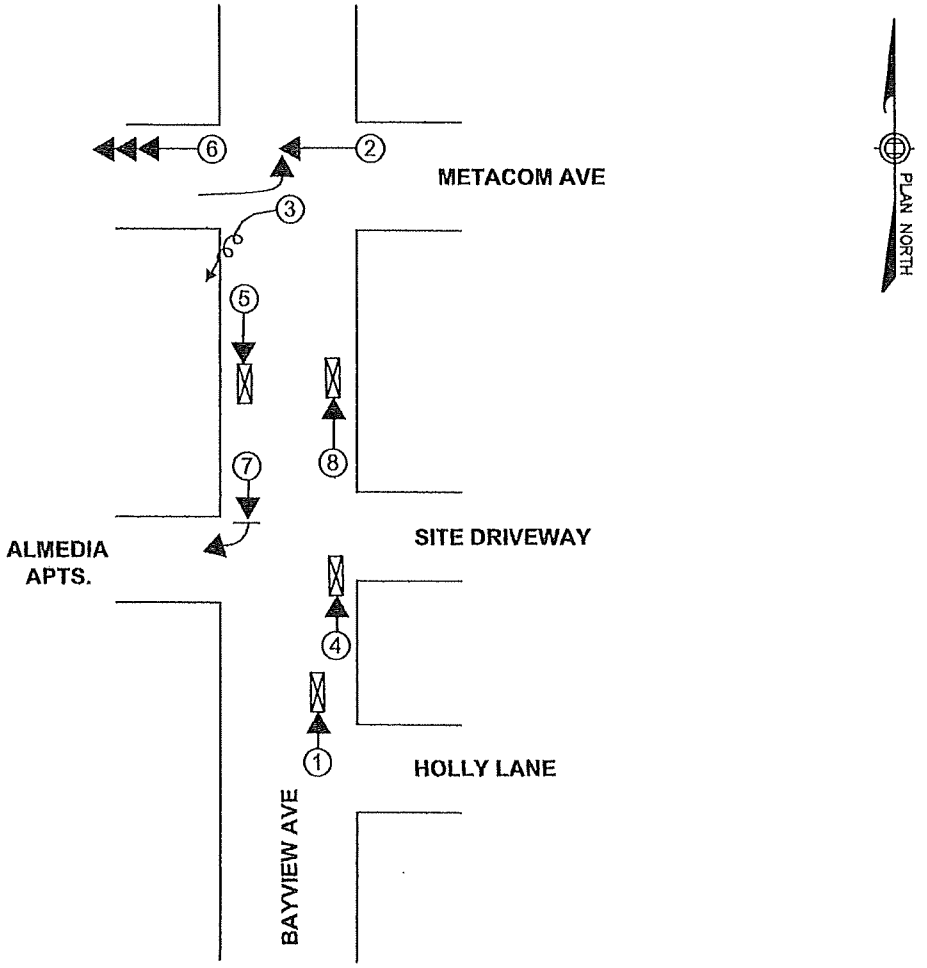
COLLISION DIAGRAM

EAST/WEST: BAYVIEW AVE

BETWEEN HOLLY LANE & METACOM AVE

TIME PERIOD: JANUARY 2019 - DECEMBER 2021

DATE: 08-02-2022



LEGEND

Moving Vehicle	Driver at Fault	Light:	Weather:	Surface:
Parked Vehicle	Pedestrian	L = Daylight	X = Other/Unknown	D = Dry
X Fixed Object	Bicycle/Moped	DN = Dawn	S = Snow/Ice	W = Wet
Head On	○ Deer/Animal	DU = Dusk	R = Rain	S = Snow/Ice
Rear End	Ⓚ Fatal Crash	D = Dark	C = Clear or Cloudy	X = Other/Unknown
Right Angle	Ⓐ Injury Crash A	X = Other/Unknown		
Turning	Ⓑ Injury Crash B			
Backing	Ⓒ Injury Crash C			
Sideswipe	Ⓓ Property Damage Only Crash			
Out of Control				

• Civil
• Transportation
• Environmental
• Site Planning
• Land Surveying

CROSSMAN ENGINEERING

151 Centerville Road | Warwick, Rhode Island 02886
Phone: (401) 738-5660 | Fax: (401) 738-8157

Email: cei@crossmaneng.com

PROJECT TITLE:

COLLISION DIAGRAM
PROPOSED 20 UNIT APARTMENTS AT 206 BAYVIEW AVE
BRISTOL, RI

DATE: AUGUST 2022

SCALE: NOT TO SCALE

REVISIONS:

FUTURE TRAFFIC GROWTH

VMT

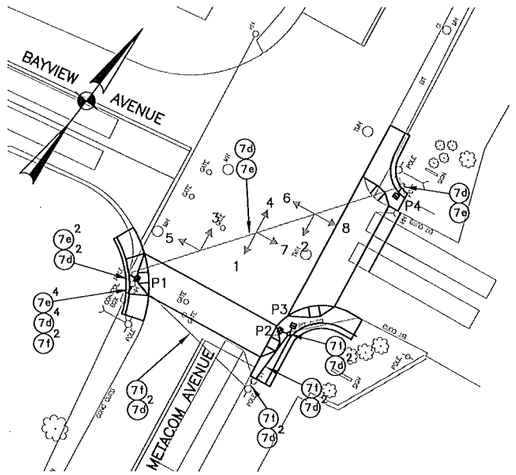
	2019	2025	2030	2035	2040	2045
Scituate	379,487	400,565	415,505	424,211	423,195	434,742
Johnston	952,470	982,461	1,003,677	1,010,589	1,014,466	1,026,987
Woonsocket	339,699	344,268	347,506	347,395	346,037	348,613
Bristol	235,402	243,264	249,028	252,218	254,568	255,977

Delta	2019	2025	2030	2035	2040	2045
Scituate	-	5.55%	3.73%	2.10%	-0.24%	2.73%
Johnston	-	3.15%	2.16%	0.69%	0.38%	1.23%
Woonsocket	-	1.35%	0.94%	-0.03%	-0.39%	0.74%
Bristol	-	3.34%	2.37%	1.28%	0.93%	0.55%

Information received from the RI department of Administration on Future Traffic Increases

RIDOT SIGNAL PLAN & TIMINGS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	STP-AWDA(025)	2012	V1_049	V1_049



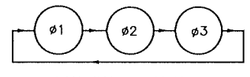
WIRING DIAGRAM

			SEQUENCE AND TIMING DIAGRAM									
APPROACH	DIRECTION	HOUSING	ø1			ø2			ø3			FLASHING OPERATION
MINIMUM INTERVAL			5			5			5			
VEHICLE EXTENSION			2.1			2.4			2.4			
MAXIMUM 1			8			47			25			
MAXIMUM 2			5			41			20			
YELLOW CLEARANCE				3			4			4		
RED CLEARANCE					1			1			1	
PED. WALK/CLEARANCE						4/9			4/10			
METACOM AVENUE	NB	1	G/G	G/Y	G	G	Y	R	R	R	R	Y
METACOM AVENUE	SB	3,4	R	R	R	G	Y	R	R	R	R	Y
METACOM AVENUE	NB	2	R	R	R	G	Y	R	R	R	R	Y
BAYVIEW AVENUE	EB	5,6	R	R	R	R	R	R	G	Y	R	R
CVS ACCESS ROAD	WB	7,8	R	R	R	R	R	R	G	Y	R	R
PEDESTRIAN		P1, P2	DW	DW	DW	DW	DW	DW	W/FDW	DW	DW	DARK
PEDESTRIAN		P3, P4	DW	DW	DW	W/FDW	DW	DW	DW	DW	DW	DARK
DETECTOR			NON-LOCK			NON-LOCK			NON-LOCK			
RECALL			SOFT			OFF			OFF			

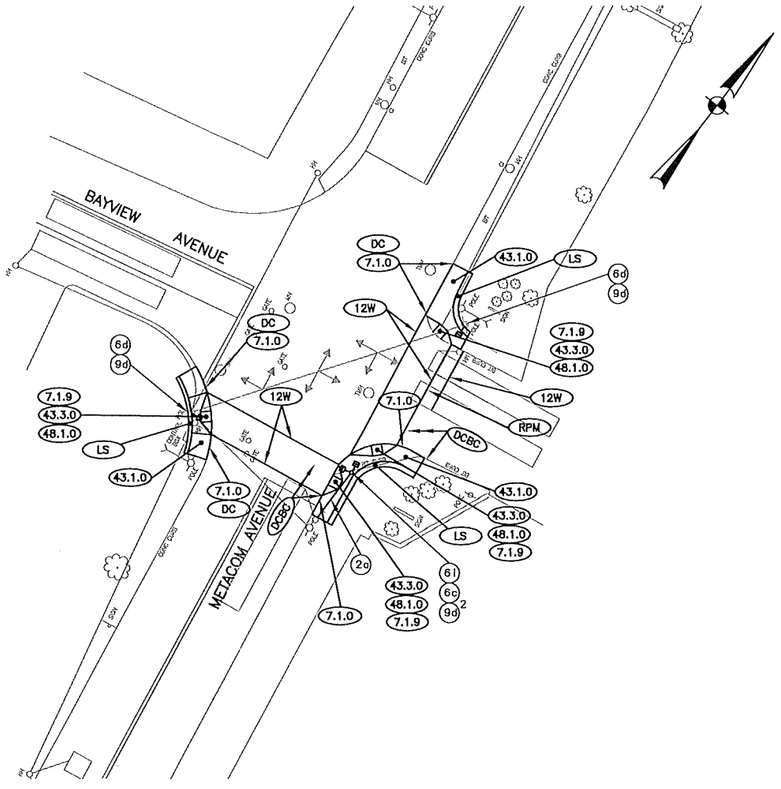
SEQUENCE AND TIMING NOTES:
1. MAXIMUM 1 = AM PEAK
2. MAXIMUM 2 = PM PEAK
3. PED. W/FDW UPON PUSHBUTTON ACTUATION ONLY

ø1	ø2	ø3	ø4
			NOT USED

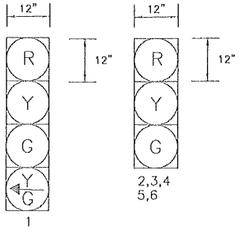
PHASING AND TIMING DIAGRAM



PHASING SEQUENCE



EXISTING SIGNAL FACES



PROPOSED SIGNAL FACES

NOTE: HAND / PERSON SYMBOL SHALL BE FILLED.

COUNTDOWN PEDESTRIAN SIGNAL

P1, P2, P3, P4

TRAFFIC SIGNAL LEGEND

T05.0100 1a	Precast Type A Handhole Standard 18.2.0
T06.5030 2a	3 Inch Polyvinyl Chloride Plastic Conduit Underground
T11.2008 6a	Traffic Signal Standard, 8 foot, std. 19.4.0
T11.2010 6i	Traffic Signal Standard 10ft Std. 19.4.0 Aluminum Pedestal Pole and Foundation.
T04.5303 7d	14 AWG 3 Conductor Cable
T04.5305 7e	14 AWG 5 Conductor Cable
T04.5307 7f	14 AWG 7 Conductor Cable
T04.9901 7j	36 Strand Single Mode Fiber Optic Cable
T05.9902 8d	Dual 1 ¼" HDPE Duct (Under Exist. Pvmt.)
T05.9903 8c	Dual 1 ¼" HDPE Duct (underground)
T06.9901 2a	4 Inch Polyvinyl Chloride Plastic Conduit (Schedule 80) (Underground)
T14.3911 6b	Pedestrian Signal Head, 1 Way, 12 Inch Pedestal Mounted (Top Post) with Countdown Pedestrian Signal
T14.3912 6c	Pedestrian Signal Head, 2 Way, 12 Inch Pedestal Mounted with Countdown Pedestrian Signal
T14.3913 6d	Pedestrian Signal Head, 1 Way, 12 Inch Bracket Mounted with Countdown Pedestrian Signal
T13.1000 9a	Traffic Detector Loop Std. 19.6.0
T13.8200 9d	Pedestrian Detector – Pushbutton with Sign RP-1000
T13.9901 10a	Global Positioning Satellite (GPS) Clock Assembly

FIBER OPTIC LEGEND

T05.9901 8b	Fiber Optic Handhole
T06.9901 2p	4 Inch Polyvinyl Chloride Plastic Conduit (Schedule 80) (Under Existing Pavement)

0 10' 20' 40'
SCALE: 1"=20'

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905

REVISIONS		
NO.	DATE	BY

TRAFFIC SIGNAL 296

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

ADA IMPROVEMENTS TO
METACOM AVENUE (RTE. 136)
WARREN, RHODE ISLAND

TRAFFIC SIGNAL PLAN #6
METACOM / BAYVIEW AVE.

CHECKED BY _____ DATE _____ SCALE _____

0078X_V1_049_TSIGNAL006

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DESIGN SECTION
TRAFFIC SIGNAL TIMING SHEET

City or town: BRISTOL
Major Road: METACOM AVE (RT 136)
Minor Street: BAYVIEW AVE / DRIVEWAY

Traffic Signal #: 296
Today's Date: 3/5/20
Last Update: / /

Controller Make: SIEMENS Model: 8132-1900-018 Serial No.: 164489
Firmware: SEPAC 3.58d (MAR 2018) LINUX

Phase 1 RT 136 SBLT Phase 2 RT 136 NB Phase 3 _____ Phase 4 BAY VIEW
Phase 5 RT 136 NBLT Phase 6 RT 136 SB Phase 7 _____ Phase 8 DRIVEWAY
Phase _____ Phase _____ Phase _____ Phase _____

BASIC TIMING:

Phase	1	2	3	4	5	6	7	8	
Min Green	5	10		8	5	10		8	
Passage	2.4	2.4		2.4	2.4	2.4		2.4	
Max Green 1	8	50		20	8	50		20	
Max Green 2	8	50		20	8	50		20	
Yellow	3	4		4	4	4		4	
Red	1	1		1.5	1	1		1	
Ped. Walk		7		7		7		7	
Ped. Clear		7		8		10		8	
Recall		SOFT				SOFT			
Memory – On/Off	NL	NL		NL	NL	NL		NL	
Delay									

COORDINATION: ϕ4 + ϕ8 = DUAL ENTRY NO FDW THRU Y OR R (EXTPCL = 0)

Setup		Coordinated phase(s)				X				X			
Oper.	1	D/S/O	Off.	Cycle									
Mode	0	1/2/1	26	90	12	34		44	12	34		44	
Max.	0	2/2/1	8	100	11	54		35	11	54		35	
Corr.	2	3/2/1	8	100	11	54		35	11	54		35	
Ofst.	0												
Prc. Off	0												
MD = 20													

YP = 6 CZ = 2400 DST OK GPS OK

TIME OF DAY:

~~Weekdays~~ ALL DAYS		~~Weekends~~	
D/S/O, Max 2 or 3, etc.	Time	D/S/O, Max 2 or 3, etc.	Time
1/2/1	0630 – 0900		
2/2/1	0900 – 1400		
3/2/1	1400 – 1900		
2/2/1	1900 – 2200		

Comments: ① TIMINGS FINE-TUNED FOR SILVER CREEK (HOPE ST) DETOUR

These timings have been field recorded or adjusted by JF/MDL – VHB Date 3/5/20

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

March 5, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Staff Report – 206 Bayview Preliminary Application
Fair Winds Comprehensive Permit

The above application is before you for a public hearing and potential action on the Comprehensive Permit application. The findings that the Board have to make in consideration of a Comprehensive Permit application have changed with State Law and a copy is provided for your information. In addition, the following is noted:

1. The Preliminary application has been certified complete and the time frame for action by the Planning Board is by December 3, 2025. The preliminary application is the subject of a public hearing and the final phase is administrative.
2. The TRC has met on this application several times and the TRC meeting notes are provided. This was also reviewed by the Planning Board as a concept application in March 2025 and those minutes are also provided.
3. The subject property is zoned R-10 and per the new State Law, the density bonus for a Comprehensive Permit application is based on a by-right plan excluding wetlands, wetland buffers, area devoted to infrastructure necessary for development and easements or rights of way of record. For projects connected to public water and sewer, demonstrated through written confirmation from each respective service provider the density bonus for 25% low and moderate income housing is 5 units per acre.

4. This applicant is proposing 25% low and moderate income housing which would allow the 5 units per acre as the density bonus. The calculation for the density bonus needs to be determined by the amount of land excluding area devoted to infrastructure necessary for the development; namely the roads and drainage and that are per the yield plan is 1.16 acres which would equal a bonus of 5.8 units rounded down to 5 plus the 5 by-right would total 10 units. The property has an existing 3 family dwelling and the applicant is proposing 17 new

units. According to the calculations with the density bonus, 15 units would be permitted. The 17 new units with the 3 existing would equal 20 units.

5. The applicant's narrative provides a draft list of waivers and variances needed The provision for a reduced lot frontage noted in the narrative, is not applicable since that is in the Inclusionary Zoning section of the ordinance which is not applicable to this proposal.
6. It is noted that the side slopes of the drainage basins are at a 2:1 slope which exceed the limits in the Subdivision and Development Review regulations of a 3:1 slope which was recently noted by the Peer Review Engineer. However, these basins are private and will not be maintained by the Town and the design was modified to provide more storage capacity.
7. The application will require a monitoring agreement and a deed restriction. As these are rental units, they will need to be rented at 80% of Area Median Income.
8. The Zoning per the State Law requires only 1 parking space per dwelling unit for off-street parking up to an including 2 bedrooms. This proposal has mostly 3 bedroom units; and, each unit also will have a 2 car garage.
9. The Zoning per the State Law also has no floor area limits and the bedroom count can't be limited to any less than 3 bedrooms.
10. It is recommended that any approval include a condition of approval for private trash and recycling service with no town service to be provided for this or snow removal as well as drainage and maintenance of the pervious pavement.
11. The Town of Bristol owns the property abutting this land on the east. It was acquired with the intention of having available land for a future police station and there is no schedule for when this would be built. A police station is a 24/7 essential service for the Town that is also a very active use.
12. The Peer Review Engineer also recommends a condition on the approval for an on-site review of the subgrade to be required prior to the placement of the reservoir or filter course and that a legally binding and enforceable maintenance agreement b executed between the owner and the Town. Pare's peer review report is attached.

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

September 4, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: Preliminary Plan Phase
Minor Land Development – Unified Development
668 and 670 Metacom Avenue

The above application is before you for a public hearing, consideration and action on a special use permit for a contract construction service in the General Business Zone, and consideration and action on the preliminary plan phase for the construction of a building and associated site work as a minor land development.

The TRC has met and their meeting notes are attached.

The application has been certified complete and the timeframe for a decision is 95 days from the date of certification which is December 7, 2025.

There are specific standards for the Special Use Permit and there are specific findings that the Board will have to make for the Special Use Permit which shall be done prior to considering the land development project. The sections from the Zoning Ordinance are attached for your reference.

Thank you.

Project Narrative – 668&670 Metacom Avenue

The Subject Property consists of two parcels of land situated at 668 & 670 Metacom Avenue in Bristol. The properties are more particularly described as Lots 15 & 16 on Town of Bristol Tax Assessor's Plat 12 and contains approximately 1.5acres (Lot 15) and 31,403sf (Lot 16) of area, respectively. The properties are situated within the General Business (GB) Zoning District and are within the limits of the Metacom Avenue Overlay District. The Owner/Applicants are David Ramos and Lionel Ramos.

Existing Conditions -

David Ramos (d/b/a/ Ramos Landscaping) currently uses portions of Lot 15 and Lot 16 in connection with his landscaping operation. Lot 15 is an unimproved lot being used primarily for the storage of earth and landscaping materials as well as equipment storage associated with an existing landscaping/construction services business use located on Lot 16. The existing landscaping operation and use of Lot 15 is a legal nonconforming use as it has been in operation on the site for many years (See Zoning Certificate Dated November 10th, 2022).

Proposed Development Plan -

The Applicant is proposing to construct a new warehouse/garage (3,500s.f.) on Lot 16 to allow storage of equipment, office space and supporting uses to be shifted to the new structure. Site improvements include the new warehouse, twelve (12) parking spaces and impervious surface area improvements. Applicant contemplates connections to municipal water and sewer. Lot 15 will continue to be used for landscaping and materials storage used in connection with the landscaping and construction operation. The Preliminary Plan/Development Plan Review set dated August 8th. 2025 prepared by Principe Engineering, Inc., provides a comprehensive re-development plan for Lot 15 and Lot 16 to bring the property into conformance with the Metacom Avenue Overlay District and applicable zoning regulations. The Application does not contemplate any waivers from underlying dimensional setbacks or zoning restrictions. All applicable RIDEM wetland buffers and construction setbacks have been identified and will be adhered to.

Development Plan Review/Unified Development Review –

The Applicant contemplates the proposal will be subject to Development Plan Review/Unified Development Review process (R.I. Gen. Laws § 45-23-50; §45-23-50.1; Zng. Ord. § 28-181). The existing business operation may be classified as a *contract service business use*, a permissible use allowed by Special-Use Permit in the General Business (GB) Distrct. Thus, the existing use is a legal nonconforming use as it has been in historic use on the property without issuance of a special-use permit. The proposed modifications contemplate relief for modifications under § 28-150 of the Zoning Ordinance, in addition to Development Plan Review.

Waivers –

The Applicant contemplates the following waivers are required:

- **Section 2.8b Sidewalks** – Within the proposed Metacom Mixed Use Zone, there shall be sidewalks connecting the Metacom Avenue sidewalk to the main entrance of the building and convenient sidewalks connecting adjacent parking lots and commercial uses.
    - Waiver – Requesting waiver to eliminate required sidewalk along north side of building from Metacom Avenue to entrance of building on Lot 16. A six (6) foot wide sidewalk is proposed along the Metacom Avenue frontage, as well as along the southerly side and rear of the building along all parking areas.
    - To the extent required, Applicant is seeking relief from this requirement as applied to Lot 15 as there are no new structures or improvements contemplated.
- **Section 5.2a Street Trees –** Metacom Avenue: Large deciduous trees shall be replanted along Metacom avenue approximately 40 feet on center. . .
    - Waiver – Applicant seeking a waiver from this requirement to allow tree plantings every 20feet to facilitate more tree plantings with less in between. Applicant also has concerns for overhead wires and other impeding factors. Applicant shall submit a landscaping plan for board review.
- **Waivers as applicable to Lot 15**
    - Applicant contemplates the removal of existing structures and/or encroachments present on Lot 15 as specified on the plan set. Existing storage bays and storage areas will remain. No further improvements or development is proposed. Applicant seeks a waiver from any provisions of the Metacom Avenue Overlay requirements due to lack of improvements as may be applicable.
- **Waivers from Subdivision Regulations:**
    - Waiver from Preliminary Plan Checklist items D.10 – RIDEM Wetlands Permit – Submittal pending review and approval. Waiver to permit approvals at Final Plan submission.
    - D.13 – Proof of water service; applicant has provided water bill; Waiver requested to extent required;
    - D.14 – Proof of sewer service; applicant has provided sewer bill; Waiver requested to extent required;
    - D.19 – Relief of RIDEM stormwater permits until Final Plan submission. Currently pending review.
    - D.24 – RIDOT – PAP application pending. Applicant requests waiver to Final Plan Submission.

Standards of Relief – Unified Development Review

Special Use Criteria – (Zng. Ord. § 28-150(jj))

Bristol Zoning Ordinance § 28-150(jj) – Special use permit standards for contract construction service:

1) Outside storage of equipment, supplies and materials associated with any of the normal operations of must be adequately screened along the interior side yard, rear yard, and road frontage with natural vegetation, landscaping, fencing and/or as shall be deemed appropriate by the board.
    a. **Existing storage areas are lawful nonconforming uses, and the Applicant does not intent any modifications. Existing material and equipment storage areas on Lot 15 contain concrete "bays" or similar enclosures. An existing berm along the frontage of Lot 15 provides additional screening from the roadway. Applicant has submitted a comprehensive landscaping plan for Lot 16 that conforms to the provisions of the Metacom Avenue Overlay requirements. Applicant is also contemplating additional vegetation/buffering where possible along the rear of the property where feasible. Existing vegetation along rear property line is thick and provides natural buffering from existing operation, but applicant continues to review and awaits public comment for additional solutions.**
2) The materials processing area shall be completed enclosed along all lot lines by an opaque fence, six feet in height;
    a. **Not applicable – As set forth above, existing materials bays on Lot 15 will remain for storage, loading and unloading.**

3) Where buildings are proposed, they should be located along the street frontage, meeting setback requirements. Otherwise, screening the operation from the street, which may include fences and tall vegetation is required.
    a. **The plan set conforms to the Metacom Avenue Overlay requirements for structural placement. The proposed building is located approximately twenty-six (26) feet from the property (Metacom Avenue) wherein the regulations provide a maximum of fifty (50) feet. The building was shifted closer to Metacom Avenue and further away from abutting residences to the rear. A comprehensive screening and buffering plan has been submitted.**

4) A narrative is required to be submitted explaining the scope of the business, including with limitation, the number of employees, the number and types of trucks and other vehicles and the provisions to protect adjoining and adjacent residential properties from noise, vibration, visual, odor, or other adverse effects;
    a. **As set forth more fully above, the Applicant current operates a contract services/landscaping construction business on Lots 15 and Lots 16 which includes materials and equipment storage, as well as office space. Normal hours of operation are 7am-5pm Monday through Saturday (Closed Sunday). Due to the nature of the business, approximately 90% of the**

business occurs off-site and on-site activity is limited. The company currently employes 6-10 individuals. A number of vehicles and other equipment are used in connection with the business, approximately 5-10 pieces of equipment/vehicles depending on the season and work. The property contains natural buffering along three sides of the property with a berm along the frontage of Lot 15. The Applicant continues to evaluate supplemental screening in conjunction with a formal landscaping plan submitted with this Application. On-site operations are limited along with any impacts due to mostly off-site work. Applicant will continue to evaluate improvements to abate any potential adverse impacts.

5) The subject property shall have frontage on, and direct vehicular access to an arterial or collector street;
    a. **Complies; The property has direct frontage and access to Metacom Avenue.**

6) Vehicular access to the subject property shall not be by means of local streets.
    a. **Complies; The property has direct frontage and access to Metacom Avenue.**

Special Use Criteria – Zng. Ord. § 28-409 (c)(2)

Special Use Permit. In granting a special use permit, the board shall require that evidence to the satisfaction of the following standards be entered into the record of the proceedings:

a) That the special use is specifically authorized by this chapter, and setting forth the exact section of this chapter containing the jurisdictional authorization;
    a. **As set forth in the Project Narrative above and with particularly reference to the November 10th, 2022 Zoning Certificate issued to David Ramos/Ramos Landscaping, the above property is located in the General Business (GB) Zoning District. A contract construction services business use, such as a landscape or excavation contractor, is permitted in the GB district after approval of a special use permit (See Art. III, Sec. 28-82, Table A). The existing landscape contractor storage use is a legal nonconforming use as it has been in operation on the property for many years. The Application seeks Unified Development Review/Development Plan Review for the modification and re-development of Lot 15 & Lot 16 as required.**

b) That the special use meets all of the standards set forth in the subsection of this chapter authorizing such special use; and
    a. **Applicant has set forth responses to the specific and objective criteria applicable to the use (per Sec. 28-150) above.**

c) That the granting of the special use permit will not alter the general character of the surrounding area or impair the intent or purposes of this chapter or the comprehensive plan of the town.

a. **The Applicant contemplates the construction of a 3,500s.f. building on Lot 16 to facilitate the *containment* and relocation of certain aspects of the existing landscaping operation. The new building will provide enclosed storage space, offices and other support for the business. Lot 15 will continue to provide area for earth and landscaping materials and other equipment as it has been historically used. No variances are sought from dimensional setbacks or buffer requirements. The proposed building and redevelopment of lot 16 conforms to the provisions of the Metacom Avenue Overlay District, specifically as it relates to building scale, location, treescape, buffering, trash receptacles, parking areas and other elements specifically designed to abate adverse impacts. The Applicant has included a comprehensive landscape plan for the site and will continue to evaluate improvements to the site, including potential landscaping improvements to residential properties to the rear of the site and supplemental plantings in areas deemed necessary. The Zoning Ordinance allows the use as a specially permitted use in this district and the Metacom Avenue Overlay District provisions allow a mixed-use environment comprised of commercial and residential uses.**

RESPONSES TO COMMENTS (TOWN DATED 8/13/25 & PARE DATED 8/25/25)
668-670 METACOM AVENUE, BRISTOL

Documents:
COMMENT #1: Proposal Narrative including how the development complies with the Special Use Permit Standards for this use (A3);
RESPONSE #1: See narrative attached.

Information required on all plan sheets:
COMMENT #2: Names, Addresses and Plat/Lot of abutting and adjacent property owners (B9)
RESPONSE #2: See existing conditions sheet, see abutter list attached.

Existing conditions Plan:
COMMENT #3: Copy of Survey Plan referenced is needed (C3);
RESPONSE #3: Provided.

COMMENT #4: Location of shared access easement between Lots 15 and 16 needs to be shown (C16);
RESPONSE #4: Shown on existing and proposed plans.

COMMENT #5: Location of existing buildings and structures on Lot 15 needs to be shown (C18);
RESPONSE #5: Tent structure has been shown.

COMMENT #6: Location of existing buildings and structures on parcels adjacent to the properties needs to be shown (C19).
RESPONSE #6: Immediately adjacent structures shown.

Proposed Conditions Plans:
COMMENT #7: Show all items noted on the Existing Conditions Plan as well as:
RESPONSE #7: Shown.

COMMENT #8: Boundaries and total area of any land classified as "unsuitable for development" as defined in the Regulations (D5)
RESPONSE #8: Wetland and w areas have been shown.

COMMENT #9: Location of Shared access easement (D12);
RESPONSE #9: Shown.

COMMENT #10: Certification of RI Registered Land Surveyor that the land being developed has been surveyed (D21);
RESPONSE #10: Provided on existing conditions plan.

Supporting Materials:
COMMENT #11: Written statement on any Special Use Permit and any zoning relief needed (F3);
RESPONSE #11: See narrative attached.

COMMENT #12: Written statement on any waivers or modifications from the regulations needed (F4);
RESPONSE #12: See narrative attached.

COMMENT #13: Copies of the deeds for the subject properties (F5)
RESPONSE #13: Provided.

COMMENT #14: Copies of the RIDEM and RIDOT permit applications (F6 and F26);
RESPONSE #14: RIDEM & RIDOT applications are now made entirely online (in particular, there are no longer application forms). Documents developed for the Town permitting process are the same documents that are uploaded to the RIDEM and RIDOT portals per their respective permitting requirements. RIDOT PAP permit application number is #25-131. and the documents were uploaded on 8/8/25. RIDEM permit application number is IA#10310 and the documents were uploaded on 7/31/25.

COMMENT #15: Narrative report addressing the applicable sections from checklist item F11 a-h
RESPONSE #15: See narrative attached.

COMMENT #16: Soil Erosion and Sediment Control Plan (F19);
RESPONSE #16: A separate SESC plan was not developed as the disturbance area is less than one acre and the required items can be found on several of the sheets included in the submission.

COMMENT #17: An estimate of the cost of installation of all on-site improvements including landscaping prepared by a Registered Professional Engineer (F21);
RESPONSE #17: This is not typically requested at this stage of the project submission. Work will be done primarily by the applicant and an estimate will be provided at Final.

COMMENT #18: Written Confirmation from BCWA that the existing water line can be used for the proposed building (F24);
RESPONSE #18: Provided.

COMMENT #19: Written Confirmation from the BWPCF that the existing sewer line can be used for the proposed building (F25);
RESPONSE #19: Provided.

COMMENT #20: Location, type, intensity and direction of illumination of all outdoor lighting fixtures (F28)
RESPONSE #20: Provided on the architectural plans.

COMMENT #21: Signage plan including the location, size, design and illumination (F29)
RESPONSE #21: The existing sign will be removed and any potential future sign will conform to Town requirements and will be submitted for review and approval by the Town at a later date.

<u>Fees:</u>
COMMENT #22: Application fee of $500 (G1)
RESPONSE #22: Delivered to the Town on August 14, 2025.

COMMENT #23: Engineering Review Fee (Will be determined by the peer review engineer) (G2)
RESPONSE #23: Delivered to the Town on August 14, 2025.

Waivers Requested:

1. Land Development Projects Section: Sidewalks shall be required to be installed on one side of new street in subdivisions and multifamily developments. No sidewalks are proposed in front of Lot 15.
   RESPONSE: The general consensus during the recent TRC meeting was that sidewalks would be pointless in front of Lot 15 (and in front of Lot 16, although one is proposed here) as they don't connect to anything and Lot 15 is not being developed.

General:

1. Town of Bristol Zoning Ordinance §28-22 Table A states that a warehouse in a GB zone is only permitted upon approval of the zoning board with a special use permit. Confirm that this warehouse has a been approved by the zoning board.
   RESPONSE: Applicant is proposing to construct a garage/warehouse structure to support the commercial services business currently in operation. Applicant is seeking modification of a legal nonconforming use and a preexisting condition on site and is subject to Unified Development Plan Review. Applicant has requested the appropriate relief regarding the proposed structure.

2. The project requires submission to the Rhode Island Department of Environmental Management (RIDEM) for Freshwater Wetlands Review and RIPDES Authorization.
   RESPONSE: A submission to RIDEM for both Wetlands and Stormwater was made on July 31, 2025.

Plans:

1. The Town of Bristol Subdivision and Development Review Regulations Appendix E Section C require all sheets to include:
   a. Notation of any permits and/or agreements obtained from or made with State and Federal agencies, including permit number if applicable.
   b. Names and address of adjoining communities or agencies requiring notice under these regulations.

   RESPONSE: Only a. is applicable and has been addressed on the plans.

2. The proposed building is identified as a "warehouse" and as a "garage." Review and revise the plans to remove inconsistent terminology.
   RESPONSE: Applicant is proposing to construct a garage/warehouse structure to support the commercial services business currently in operation. Applicant is seeking modification of a legal nonconforming use and a preexisting condition on site and is subject to Unified Development Plan Review. Applicant has requested the appropriate relief regarding the proposed structure.

3. Perimeter sediment controls shall be proposed on all downstream areas of the proposed site. Review and revise plan accordingly.

   RESPONSE: Perimeter sediment controls were/are shown at all areas downstream of the proposed work areas.

4. Existing Conditions-Lots 15 & 16: The Town of Bristol Subdivision and Development Review Regulations Appendix E Section C require the existing conditions plan to include:
   a. Boundaries of applicable watersheds for the parcel(s)

b. Notation indicating that the development parcel(s) (or existing structures) are located or not located within the following areas of special concern:
   i. Natural Heritage Areas, as defined by RIDEM
   ii. The area(s) under the jurisdiction of any Special Area Management Plan (SAMP) of RI CRMC
   iii. A Groundwater Protection Overlay District
   iv. A Wellhead Protection Area
   v. Groundwater Recharge Area
   vi. Areas within a TMDL watershed, as identified by RIDEM
   vii. OWTS Critical Resource Area, as defined by RIDEM
   viii. A Drinking Water Supply Watershed, as defined by RIDEM
   ix. National Register of Historic Places
   x. Bristol Historic District
   xi. Silver Creek Watershed in Town of Bristol
   xii. Tanyard Brook Watershed in Town of Bristol

RESPONSE: Provided.

5. Proposed Layout Plan-Lot 16: The Town of Bristol Subdivision and Development Review Regulations Appendix F Section F require that in commercial developments, there shall be at least one clearly designated pedestrian route between the street, the parking area and the main entrance of the building. Review and revise sidewalk.

RESPONSE: A sidewalk was initially shown in this location. However, subsequent conversations with the Town resulted in its removal, in order to move the building closer to the street and further away from the wetland areas. In addition, the business in this building is not intended for access from the general public and there are no sidewalks to this lot from any other parcels of land.

6. Proposed Layout Plan-Lot 16: Town of Bristol Zoning Ordinance §28-251(4) requires all driveways to be a minimum of 12 feet in width for each lane of traffic using such driveway. Revise driveway to accommodate 2-way traffic.

RESPONSE: The two lots in question have a common access easement with half of the easement on one lot and half on the other lot. Therefore, one 12' paved access is shown on Lot 16 (the lot to be developed), and the existing access drive on Lot 15 is proposed to remain as is.

7. Proposed Layout Plan-Lot 16: Town of Bristol Zoning Ordinance §28-253(a)(1) requires a minimum of 1 loading space for buildings with a GFA between 3,000 - 19,999 SF. Review and revise plan to include a loading space.

RESPONSE: Loading will be done within the building.

8. Construction Details-1: According to the RISDISM Chapter 5.5.3, pretreatment for bioretention systems should incorporate all of the following (unless a sediment forebay is provided):
   a. grass filter strip below a level spreader or grass channel (using guidelines in Chapter Six),
   b. pea gravel diaphragm (a small trench running along the edge of the practice), and
   c. a mulch layer.

   Review and confirm that the grass filter strip meets the guidelines from chapter 6 of the RISDISM. Additionally, review and revise the Bioretention Area Detail to include a mulch layer for pretreatment.

RESPONSE: A pea gravel diaphragm is shown on the plans, then there is a grass filter strip into the basin and then a mulch layer within the basin. This has been submitted to RIDEM for their review. If a sediment forebay is preferred by the review agency, then one can be incorporated.

9. Construction Details-1: According to the RISDISM Chapter 5.5.4, bioretention soils shall consist of USDA loamy sand to sandy loam classification and meet the following graduation: sand 85-88%, silt 8-12%, clay 0-2%, and organic matter (in the form of leaf compost) 3-5%. Confirm that the existing HTM conforms to these specifications.
RESPONSE: This comment is confusing, as the existing HTM is not proposed to be utilized within the bioretention basin. As indicated in the detail, all HTM is to be removed and replaced with the required bioretention component, including an appropriate (non HTM) soil. To clarify further, the detail has been updated to indicate that ***all HTM*** below the basin shall be removed and replaced.

Stormwater Report:

1. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section I (2) requires the drainage report to include a site locus map, a graphic depicting the site soils based on National Resources Conservation Service Soil Survey data, Floodplain information as indicated on the Town of Bristol Flood Insurance Rate Maps (FIRM). Revise the Drainage Report to provide the required information.
RESPONSE: An addendum with these additional items has been provided.

2. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section **I** (2)(c) requires an estimate of the quantity of stormwater surface run-off presently flowing from the land proposed to be subdivided, and that which would be generated by the proposed subdivision calculated on the basis of the two (2), ten (10), twenty-five (25), and one-hundred (100) year frequency, 24 hour, Type **III,** rainfall events. Provide an estimate of the quantity of stormwater runoff in a two-year storm event.
RESPONSE: As both RIDEM and RIDOT do not require the 2-year storm and usually request that it not be included in the calculations submitted to them, an addendum with these additional items has been provided for the Town's use and review, only.

3. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section M requires all O&M plans to include contact information for the party legally responsible for maintaining the proposed BMP's as well as proposed maintenance. Revise the O&M Plan to include the owner's contact information.
RESPONSE: At this Preliminary stage, the maintenance agreement is DRAFT that does not get completed and signed until construction is completed.

4. NRCS Soil Survey data shows hydrologic soil group of "D" for most of the site. Review and update the hydrologic model accordingly.
RESPONSE: As the site has been developed/farmed/disturbed since at least the 1950s, and the test holes indicate human transported materials (HTM) are present, the "D" soil mapped by NRCS decades ago is not correct. A hydrologic soil group of "C" is therefore utilized.

5. Test pits should be completed within the best management practice area to determining infiltration rate and depth to estimated seasonal high-water table.
RESPONSE: Test pits have been shown on the plan.

6. The proposed bioretention pond has a depth of only one foot and offers limited freeboard - approximately 3.5 inches during a 10-year storm event and 2 inches during a 100-year event. Due to the fact that the pond has a narrow berm and there is no flow diversion proposed, it is recommended that the pond be revised to provide additional freeboard.
   RESPONSE: Freeboard depth is a preferred condition, not a requirement, and is usually a protective measure for downslope abutters, etc. In this instance, the downslope condition is a pond/wetland and therefore personal or property damage is not an issue. Further, trying to increase the depth of the system could result in increased side slopes, increased maintenance requirements and erosive flows. As this project has been submitted to RIDEM for their review, we have not revised the basin at this time.

Trip Generation Statement:

1. A more conservative land use code shall be used to accurately represent the increase in traffic. Pare recommends utilizing ITE Land Use Code 180 — Specialty Trade Contractor, as it more accurately reflects the operational characteristics of the proposed building.
   RESPONSE: Trip Generation letter has been updated per Pare's recommendation. It should also be noted that a submission to RIDOT for a PAP has been made, and therefore we will adhere to their specific trip generation requirements.

Town of Bristol, RI
WATER POLLUTION CONTROL DEPARTMENT
2 PLANT AVENUE
BRISTOL, RI 02809-3015
(401) 253-8877 fax: (401) 253-2910

Jose' J. Da Silva, Superintendent

TOWN HALL
10 COURT STREET
BRISTOL, RI 02809
(401) 253-7000

8/21/2025

To: Planning Board

Re: Minor Land Development
670 – 688 Metacom Avenue
Plat 128, Lot 15 & 16
Bristol, RI 02809

Access to the Towns sanitary sewer system is available for the above location. There is a sanitary main on Metacom Avenue, records indicate that there is a lateral in place for connection on the property.

Respectfully,

Jose' Da Silva
Superintendent
Bristol WPCF

Cc: Diane Williamson – Director of Community Development

Trip Generation Statement
08/07/25
08/26/25 rev

668 & 670 Metacom Avenue
AP 128 Lot 15 & 16
Bristol, RI 02809

Prepared For:
David J. Ramos
12 Ruth Avenue
Bristol, RI 02809

Prepared By:
Principe Engineering, Inc.
27 Sakonnet Ridge Drive
Tiverton, RI, 02878

The above-referenced site currently has a gravel parking area. The proposed project will include the construction of 70 FT x 50 FT warehouse. The warehouse will have access/egress from Metacom Avenue in Bristol, RI. This trip generation statement has been prepared to contemplate any potential impacts of the proposed development. The proposed project is not projected to adversely affect the level of service for Metacom Avenue relative to the build year 2025/2026.

The trip generation calculations are based on data compiled in Trip Generation (10th edition, an informational report published by the Institute of Transportation Engineers (ITE). Trip Generation is a tool for planners, transportation professionals, zoning boards, and others who are interested in estimating the number of vehicle trips generated by a proposed development or land use. This document is based on more than 5,500 trip generation studies submitted to the Institute by public agencies, developers, consulting firms, and associations.

The anticipated change in number of trips to be generated by the new construction of a 70 FT x 50 FT warehouse was determined by using ITE Trip Generation Land Use Code 180 (Specialty Trade Contractor). ITE Trip Generation Land Use Code 180 sets forth trips generated at developments similar to the proposed facility. The increased volume anticipated to be generated by the proposed warehouse during the morning (am) and evening (pm) peak hours can be found in Table 1. The proposed project will increase traffic by approximately six (6) vehicles in the AM Peak and seven (7) vehicles in the PM Peak.

Table 1: Trip Generation Summary

Code 180 – Specialty Trade Contractor (Proposed 3.5 KSF)

Independent Variable (X) = KSF

AM Peak	Directional Distribution 74% Entering, 26% Exiting		
	T = 1.66 (X)	Enter:	4
	T = 1.66 (3.5)	Exit:	2
	T = 6	Total =	6
PM Peak	Directional Distribution 32% Entering, 68% Exiting		
	T = 1.93 (X)	Enter:	2
	T = 1.93 (3.5)	Exit:	5
	T = 7	Total =	7

Total AM Peak: 6 vehicles
Total PM Peak: 7 vehicles

Principe Engineering, Inc.

Thomas J. Principe III, P.E.

04534 000189

T91-J-1483
01-J-7016

BOOK 1144 PAGE 189

ACCESS AND CROSS EASEMENT AGREEMENT

ACCESS AND CROSS EASEMENT AGREEMENT made this 28th day of May, 2003, by and between LIONEL J. RAMOS, OF 9 Scott Lane, Bristol, Rhode Island 02809, and the REGO FAMILY PARTNERSHIP, a Rhode Island General Partnership, having its principal place of business at 443 Hope Street, Bristol, Rhode Island 02809.

WHEREAS, Lionel J. Ramos owns that certain real estate located on the easterly side of Metacom Avenue in the Town and County of Bristol, State of Rhode island, and further described as Lot 16 on Tax Assessors' Plat 128. Said real estate is further described as Parcel One in Exhibit A attached hereto; and

WHEREAS, Rego Family Partnership owns that certain abutting real estate located on the easterly side of Metacom Avenue in the Town and County of Bristol, State of Rhode Island, and further described as Lot 15 on Tax Assessors' Plat 128. Said real estate is further described as Parcel Two in Exhibit A attached hereto;

WHEREAS, the parties to this Agreement intend to create jointly shared driveways and/or entranceways between the above-described adjoining real estate owned by them for the benefit of each of them.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and in consideration of the covenants and agreements hereinafter set forth, the parties hereto agree as follows:

1. The parties hereto grants to each other and their respective permittees, for their use, a non-exclusive ingress and egress easement over and across those portions of the premises delineated as access easement on that certain plan entitled, "SITE PLAN FOR LIONEL J. RAMOS, by Barker Land Surveying, Inc., 168 High Street, Bristol, R.I. 02809, (401) 254-0824, scale 1" = 20', dated 8/21/02."

Or however the same may be bounded and described, meaning and intending to grant an access easement to each of the parties hereto on their respective real estate located on their northwesterly and southwesterly boundary lines measuring 17.50 feet wide on Metacom Avenue and for a depth of 25 feet.

2. The parties shall equally share the costs to maintain the shared driveways and/or entranceways in good repair and for snow and ice removal.

3. This easement shall run with the land and shall be binding on and shall inure to the benefit of the parties hereto, their heirs, successors or assigns.

002190

WITNESS the signatures of the above parties on the day and year first above written.

Lionel J. Ramos

Lionel J. Ramos

Rego Family Partnership

By: John G. Rego, General Partner

STATE OF RHODE ISLAND)
COUNTY OF BRISTOL)

In the Town of Bristol on the 29th day of May, 2003, before me personally appeared Lionel J. Ramos, to me known and known by me to be the party executing the foregoing instrument, and he acknowledged said instrument by him executed, to be his free act and deed.

Notary Public
Claire R Botelho
Notary Public
Commission Expires 11/3/04

STATE OF RHODE ISLAND)
COUNTY OF BRISTOL)

In the Town of Bristol on the 28th day of May, 2003, before me personally appeared John G. Rego, General Partner of the Rego Family Partnership, to me known and known by me to be the party executing the foregoing instrument for and on behalf of said Rego Family Partnership, and he acknowledged said instrument, by him executed, to be his free act and deed in his said capacity, and the free act and deed of the Rego Family Partnership.

Notary Public

Claire R Botelho
Notary Public
Commission Expires 11/3/04

T91-J-1483
01-J-7016

EXHIBIT A

000191

Parcel One:

That certain tract or parcel of land with any and all buildings and improvements thereon situated on the easterly side of Metacom Avenue in Bristol, Rhode Island, and bounded and described as follows:

Beginning at a survey stake or marker on the Easterly line of Metacom Avenue located at the center point of a stone wall and which stone wall is bounded on the South by land now or lately of Frank M. Fales and further described as Lot 1 on Tax Assessors' Plat 134. This survey stake or marker being the Southwest corner of the land herein described and the Northwest corner of land now or lately of said Frank M. Fales;

Thence going Easterly, bounded on the South by land now or lately of Frank M. Fales, along the center line of a stone wall, a distance of two hundred (200) feet, more or less, to a point;

Thence turning and going Northerly in a line parallel to the Easterly line of Metacom Avenue, bounded on the East by land now or lately of Ezra W. Mason, a distance of one hundred and fifty seven (157) feet, more or less, to a point;

Thence turning and going Westerly in a line parallel to the Southerly line of the herein described property, bounded on the North by land now or lately of this grantor, a distance of two hundred (200) feet, more or less, to a point;

Thence turning and going Southerly bounded on the West on said Metacom Avenue a distance of one hundred and fifty seven (157) feet, more or less, to a survey stake or marker and place of beginning.

Meaning and intending to convey Lot 16 on Tax Assessors' Plat 128, for future reference only.

000192

Parcel Two:

That certain tract or parcel of land with any and all buildings and improvements thereon, situated on the easterly side of Metacom Avenue in Bristol, Rhode Island, and bounded and described as follows:

Beginning at a survey stake or marker on the easterly line of Metacom Avenue located one hundred fifty (150) feet, more or less, south of a stone wall and which stone wall is bounded on the north by land now or lately of Village Investment Co. and further described as Lot 1 on Tax Assessors' Plat 128. This survey stake or marker being the northwest corner of land herein described and the southwest corner of land now or lately of Ezra W. Mason:

Thence going southerly bounded on the west on said Metacom Avenue a distance of three hundred and sixteen (316) feet, more or less, to a point;

Thence turning and going easterly, bounded on the south by land now or lately of Lionel J. Ramos, a distance of two hundred (200) feet, more or less, and in a line parallel to a stone wall and which stone wall is the southern most boundary of land now or lately of Lionel J. Ramos and the northern most boundary of land now or lately of Frank M. Fales and further described as Lot 1 on Tax Assessors' Plat 134, to a point;

Thence turning and going northerly in a line parallel to the easterly line of Metacom Avenue, bounded on the east by land now or lately of Ezra W. Mason, a distance of three hundred and sixteen (316) feet, more or less, to a survey stake or marker.

Thence turning and going westerly in a line parallel to the southerly line of the herein described property, bounded on the north by land now or lately of Ezra W. Mason, a distance of two hundred (200) feet, more or less, to a survey or marker and place of beginning.

Meaning and intending to convey Lot 15 on Tax Assessors' Plat 128, for future reference only.

Recorded AUG 19 2004 at 2:23P M.

Town Clerk

12/01/2023
08:46:01 AM
3 Pages
WARRANTY DEED
Bk: 2230 Pg: 118
Instr: 2023-6602

T91-J-1483

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that, EAST BAY HOLDING & REALTY LLC, a Rhode Island Limited Liability Company, having its principal place of business at 3913 Main Road, Suite E, Tiverton, Rhode Island 02878, Hope Street, Bristol, Rhode Island 02809, for consideration paid in the amount of $ 250,000.00, grant to DAVID J. RAMOS, of 12 Ruth Avenue, Bristol, Rhode Island 02809, with WARRANTY COVENANTS:

SEE ATTACHED EXHIBIT A

Being the same premises conveyed to this grantor by deed of MLR INVESTMENTS, LLC, recorded on January 31, 2022 in the Bristol, Rhode Island Land Evidence Records in Book 2156 at Page 172.

Subject to taxes and assessments assessed as of December 31, 20 22.

The undersigned hereby certifies that this transfer is not a sale of all or substantially all of the assets of EAST BAY HOLDING & REALTY LLC.

I, Gregory A. Mercurio, Jr, Sole Member of East Bay Holding & Realty LLC, do hereby covenant that this transfer is such that no RIGL 44-30-71.3 withholding is required as all members of East Bay Holding & Realty LLC, are residents of Rhode Island as evidenced by Affidavit.

The undersigned hereby certifies compliance with the requirements and all other provisions of the smoke detector and carbon monoxide detector laws and regulations of the Rhode Island Fire Safety Code.

12309
Town of Bristol, Rhode Island
Real Estate Conveyance Tax
Tax: $1150.01
Date: 12/01/2023
Clerk: MCH

IN WITNESS WHEREOF, EAST BAY HOLDING & REALTY LLC has caused this instrument to be executed by its Sole Member thereunto duly authorized on this 1st day of December, 2023.

EAST BAY HOLDING & REALTY LLC

By: _____
Gregory A. Mercurio, Jr.
Sole Member

STATE OF RHODE ISLAND
COUNTY OF BRISTOL

In the City/Town of Bristol on this 1st day of December, 2023, before me personally appeared GREGORY A. MERCURIO, JR., the Sole Member of EAST BAY HOLDING & REALTY LLC, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument on behalf of said limited liability company, and acknowledged that he executed said instrument with proper authority for the purpose stated therein as his free act and deed in said capacity and the free act and deed of said limited liability company.

_____
Notary Public

JOHN G. REGO
NOTARY PUBLIC
STATE OF RHODE ISLAND
NOTARY ID 12941
COMMISSION EXPIRES 6/16/2025

T91-J-1483

EXHIBIT A

That certain tract or parcel of land with any and all buildings and improvements thereon, situated on the easterly side of Metacom Avenue in Bristol, Rhode Island, and bounded and described as follows:

Beginning at a survey stake or marker on the easterly line of Metacom Avenue located one hundred fifty (150) feet, more or less, south of a stone wall and which stone wall is bounded on the north by land now or lately of Veader Realty RI, LLC and further described as Lot 13 on Tax Assessors' Plat 128. This survey stake or marker being the northwest corner of land herein described and the southwest corner of land now or lately of the Town of Bristol;

Thence going southerly bounded on the west on said Metacom Avenue a distance of three hundred and sixteen (316) feet, more or less, to a point;

Thence turning and going easterly, bounded on the south by land now or lately of Lionel J. Ramos, a distance of two hundred (200) feet, more or less, and in a line parallel to a stone wall and which stone wall is the southern most boundary of land now or lately of Lionel J. Ramos and the northern most boundary of land now or lately of Frank M. Fales, Jr. and Donald G. Fales, Trustees of The Fales Family Revocable Trust – 2007, and further described as Lot 1 on Tax Assessors' Plat 134, to a point;

Thence turning and going northerly in a line parallel to the easterly line of Metacom Avenue, bounded on the east in part by land now or lately of Shannon M. Lagarto (Plat 128 Lot 82), in part by land now or lately of the Town of Bristol (Plat 128 Lot 83), in part by land now or lately of Carol Phelan (Plat 128 Lot 84), in part by land now or lately of Anthony R. Desano, Jr., and Jennifer L. Desano (Plat 128 Lot 85), and in part by land now or lately of the Town of Bristol (Plat 128 Lot 86), a distance of three hundred and sixteen (316) feet, more or less, to survey stake or marker;

Thence turning and going westerly in a line parallel to the southerly line of the herein described property, bounded on the north by land now or lately of the Town of Bristol, a distance of two hundred (200) feet, more or less, to a survey stake or marker and place of beginning.

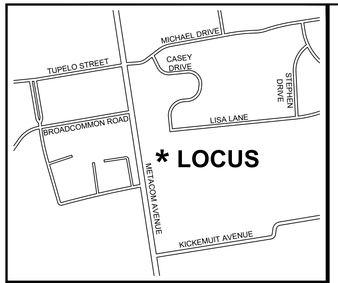
Meaning and intending to convey Lot 15 on Tax Assessors' Plat 128, for future reference only.

Subject to and together with Access and Cross Easement Agreement in Book 1144 at Page 189, and Site Plan for Lionel J. Ramos recorded on August 19, 2004, in Plat Location Number 468.

PROPERTY ADDRESS:

670 Metacom Avenue
Bristol, RI 02809

Received for record at Bristol, RI
12/1/2023 08:46:01 AM



LOCUS MAP
NOT TO SCALE

GENERAL NOTES:

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATE AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MU BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL CO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEA 72 HOURS IN ADVANCE.

2. THIS SITE LIES IN ZONE X AS SHOWN ON THE FIRM MAP FOR THE CITY OF BRISTOL, RI COMMUNITY PANEL NO.44001C0011H, MAP REVISED JULY 7, 2014.

3. THERE ARE NO KNOWN EASEMENTS OR RIGHTS OF WAY WITHIN OR ADJACENT TO THIS PARCEL UNLESS OTHERWISE SHOWN.

4. THE CONTOURS SHOWN HEREIN ARE BASED UPON THE NAVD88 DATUM.

5. THIS SITE DOES NOT LIE WITHIN ANY KNOWN AGRICULTURAL USE, SILVICULTURAL USE, NATURAL HERITAGE OR FARMLAND CONSERVATION AREAS.

6. THERE ARE UNDERGROUND UTILITIES LOCATED WITHIN METACOM AVENUE ALONG THIS PARCELS FRONTAGE.

7. LOT 15 HAS 4,353 SQ. FT.± OF LAND UNSUITABLE FOR DEVELOPMENT, LOT 16 HAS 1,134 SQ. FT.± OF LAND UNSUITABLE FOR DEVELOPMENT.

REFERENCES:

1. A CERTAIN PLAN ENTITLED " SUBDIVISION PLAN LISA LANE EXTENSION ASSESSORS PLAT 128, LOT 2 SITUATED IN BRISTOL, RHODE ISLAND, PREPARED FOR J.T. O'CONNELL REALTY COMPANY PREPARED BY JOHN P. CAITO LAND PLANNERS ; DATED JANUARY 12, 2003 . FINAL REVISION DATE OF AUGU 31, 2006 ; SCALE 1" = 40 " AND RECORDED IN THE TOWN OF BRISTOL, RHODE ISLAND IN THE TOWN CLERK'S OFFICE

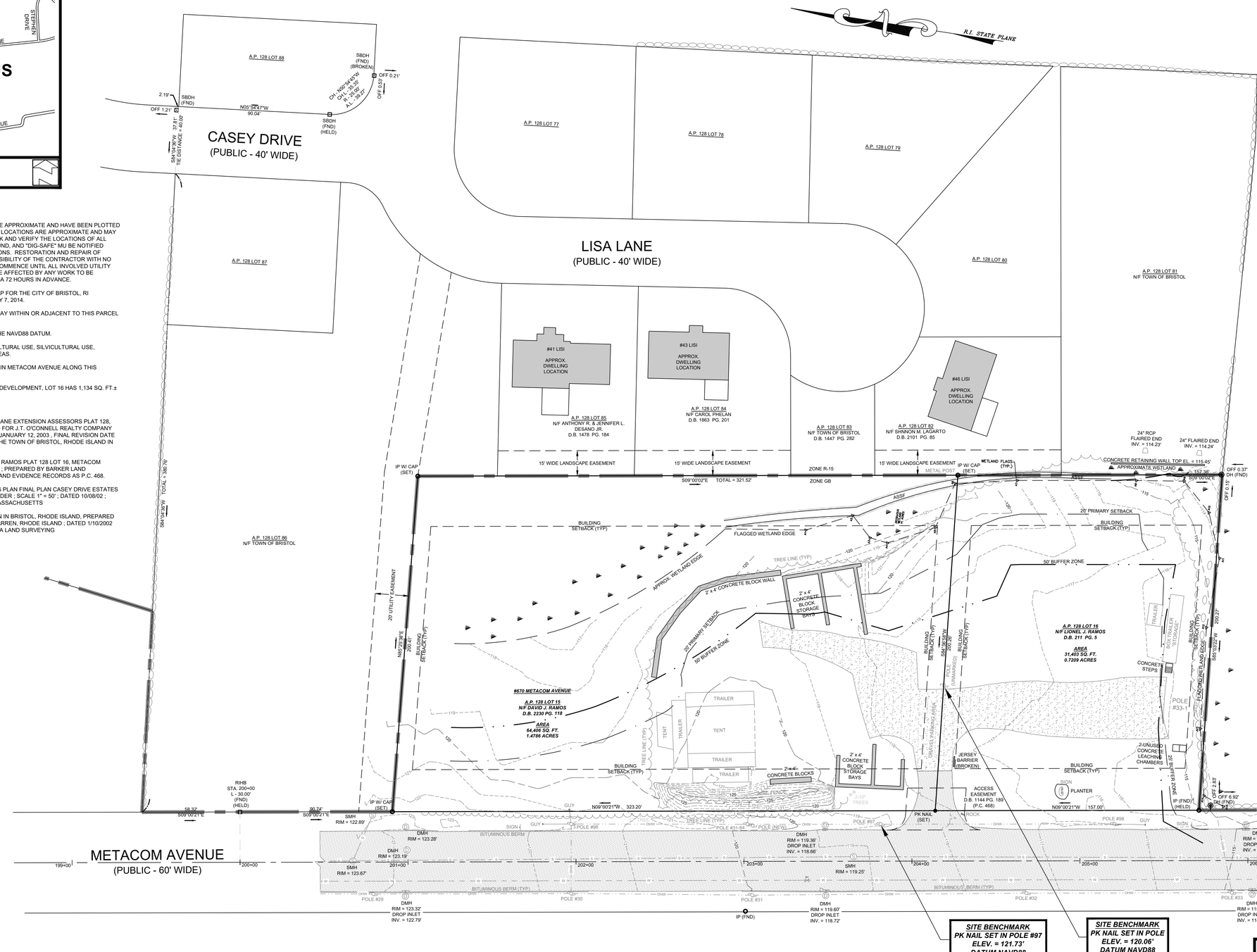
2. A CERTAIN PLAN ENTITLED " SITE PLAN FOR LIONEL J. RAMOS PLAT 128 LOT 16, METACOM AVENUE, BRISTOL, R.I. ; SCALE 1" = 20' ; DATED 8/21/2002 ; PREPARED BY BARKER LAND SURVEYING, INC." WHICH IS LOCATED IN THE BRISTOL LAND EVIDENCE RECORDS AS P.C. 468.

3. A CERTAIN PLAN ENTITLED " LOT LATOUT AND ZONING PLAN FINAL PLAN CASEY DRIVE ESTATES (PLAT 128) FOR NAOMI PROPERTIES LTD & EDWARD VEADER ; SCALE 1" = 50' ; DATED 10/08/02 ; PREPARED BY HOLMES ENGINEERING, INC BERKLEY, MASSACHUSETTS

4. A CERTAIN PLAN ENTITLED " PROPERTY SURVEY PLAN IN BRISTOL, RHODE ISLAND, PREPARED FOR NAOMI PROPERTIES LTD. 347B MARKET STREET WARREN, RHODE ISLAND ; DATED 1/10/2002 REVISED 8-15-2002 ; SCALE 1" = 50' ; PREPARED BY ALPHA LAND SURVEYING

5. R.I.D.O.T. PLAT #955

1-888-DIG-SAFE
PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE



ZONING CRITERIA

ZONING DISTRICT	GB
MINIMUM LOT AREA	10,000 SQ. FT.
MINIMUM LOT FRONTAGE	50'
MINIMUM FRONT YARD SETBACK	25'
MINIMUM SIDE YARD SETBACK	10'
MINIMUM REAR YARD SETBACK	30'
MAXIMUM BUILDING COVERAGE	40%
MAXIMUM BUILDING HEIGHT	35'

(SEE ZONING REGULATION FOR SPECIFICS OF THIS PARCEL)

NO.	DATE	DESCRIPTION	BY
2.	8-18-25	ADD STRUCTURES & EASEMENT	RAW
1.	7-3-25	ADD' TOPO & LOCATION	JML

LEGEND
NOT TO SCALE

- BOUNDARY
- ABUTTER
- ACCESS EASEMENT
- MAJOR CONTOUR
- MINOR CONTOUR
- ZONE LINE
- STONEWALL
- TREELINE
- WETLANDS EDGE
- 50' BUFFER ZONE
- PRIMARY SETBACK
- BUILDING ENVELOPE
- DRAINAGE LINE
- SEWER LINE
- WATER LINE
- ELECTRIC LINE
- IRON PIN
- BOUND
- DRILL HOLE
- UTILITY POLE
- WATER VALVE
- HYDRANT

STEPHEN T. LONG
RHODE ISLAND
No. 19301
REGISTERED
PROFESSIONAL LAND SURVEYOR

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR 00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: LIMITED CONTENT SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD / CLASS 3 TOPO

PURPOSE OF SURVEY: EXISTING CONDITIONS

BY: _____ DATE: 8/19/2025
STEPHEN T. LONG, PLS NO. 19301

GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

SCALE: 1"=30'	SHEET NO: 1 OF 1	
DRAWN BY: JML	DESIGN BY:	CHECKED BY: STL
DATE: 3-27-2024	PROJECT NO.: ERSC-2024-2	

PRINCIPE COMPANY, INC.
SURVEYING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPEENGINEERING.COM
SURVEY@PRINCIPEENGINEERING.COM
ESTABLISHED IN RI

EXISTING CONDITIONS PLAN
for
DAVID J. RAMOS
MAP 128 LOT 15
670 METACOM AVENUE
&
LIONEL J. RAMOS
MAP 128 LOT 16
in
BRISTOL, RHODE ISLAND

DRAINAGE ANALYSIS
ADDENDUM
AUGUST 27, 2025

668 & 670 Metacom Avenue
AP 128, Lots 15 & 16
Bristol, RI

Prepared For:

David J. Ramos
12 Ruth Avenue
Bristol, RI 02809

Prepared By:

Principe Engineering, Inc.
27 Sakonnet Ridge Drive
Tiverton, Rhode Island

Stormwater Calculations
ADDENDUM
668-670 Metacom Avenue
August 27, 2025

Storm Water Management

The storm water management system selected is best suited to the site and provides the least disturbance of the site while complying with the stormwater regulations. The storm water management system consists of the collection of overland runoff to a proposed bioretention system. The drainage system is designed to offset increased storm flows and provide water quality in accordance with the regulations of both state and local authorities. This drainage system is intended to mitigate increased runoff generated from new construction so the downstream wetlands, water bodies, and neighboring properties will not be impacted. The drainage system will control post development peak flows and provide for pollutant removal at the maximum possible rates.

The Pre-Development watershed area (PRE-WET) includes the entirety of the site, which drains to a neighboring wetland system. The site has been disturbed and altered over the years, including fill and establishment of an existing gravel work/parking surface. The observed surface water elevation in the adjacent open water area was utilized to determine the anticipated groundwater table and a "C" hydrologic group was utilized for the calculations/infiltration rate.

Under post development conditions the watershed was analyzed to address in two sub-areas: the area controlled (CONT) by the proposed bioretention basin

and the uncontrolled (UNC) portions of the site. The parking lot is proposed to be paved, per the Town of Bristol requirements.

The following table compares the flows between pre-development conditions and post development conditions, after flows are routed through the stormwater treatment areas:

WSHED	1-YR STORM	2-YR STORM	10-YR STORM	25-YR STORM	100-YR STORM
PRE-WET	0.71 CFS	0.94 CFS	1.72 CFS	2.32 CFS	3.57 CFS
POST-WET	0.15 CFS	0.23 CFS	0.49 CFS	1.15 CFS	3.63 CFS

Per RIDEM regulations, the required water quality volume and recharge volume for the new roof and paved parking area is provided by the project. There is a slight increase in peak flow rate for the 100-year storm event; however, there is a decrease in the peak volume (PRE = 0.390 af; POST = 0.239 af).

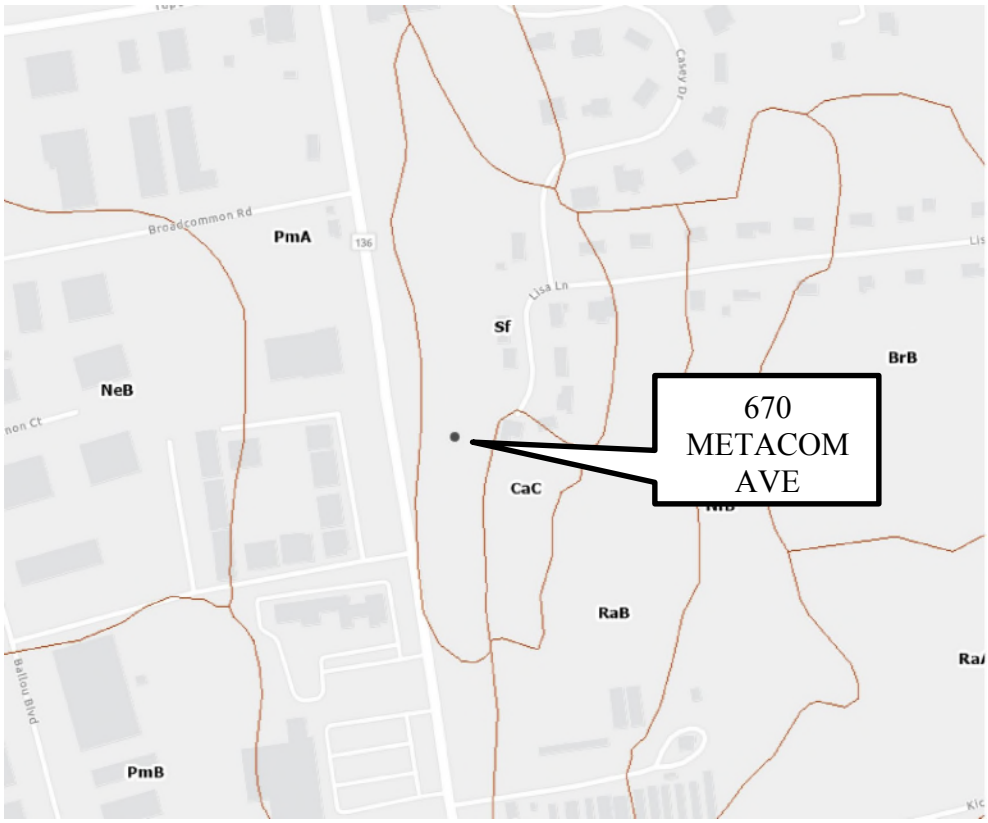
Per the Town of Bristol, the project adheres to the regulations associated with the site's location within the Silver Creek watershed. The proposed bioretention area completely infiltrates the entirety of the 1-, 2-, and 5-year storm events, and to the maximum extent practicable infiltrates the entirety of the 10-year storm event (i.e. more than the increase, as required). The drainage collection system proposed takes advantage of the natural slopes and contours of the site. It provides for both peak storm flow mitigation, recharge and water quality control. By reducing post-development storm water flows, the primary goal of the proposed drainage system is achieved. Any potential

impacts from the proposed development on the abutting properties have been mitigated.

RIDOT NOTE: It should be noted that the Town of Bristol is requiring that a concrete sidewalk be installed within the RIDOT/State ROW associated with Metacom Avenue. To the extent feasible this impervious surface area has been directed to flow away from Metacom Avenue. The site also takes advantage of an existing curb cut that supplies access to both Lot 15 and Lot 16. No future curb cuts are proposed or anticipated and no increase in the peak flow or volume into the state system is proposed or anticipated.

LOCUS MAP

Stormwater Calculations
ADDENDUM
668-670 Metacom Avenue
August 27, 2025

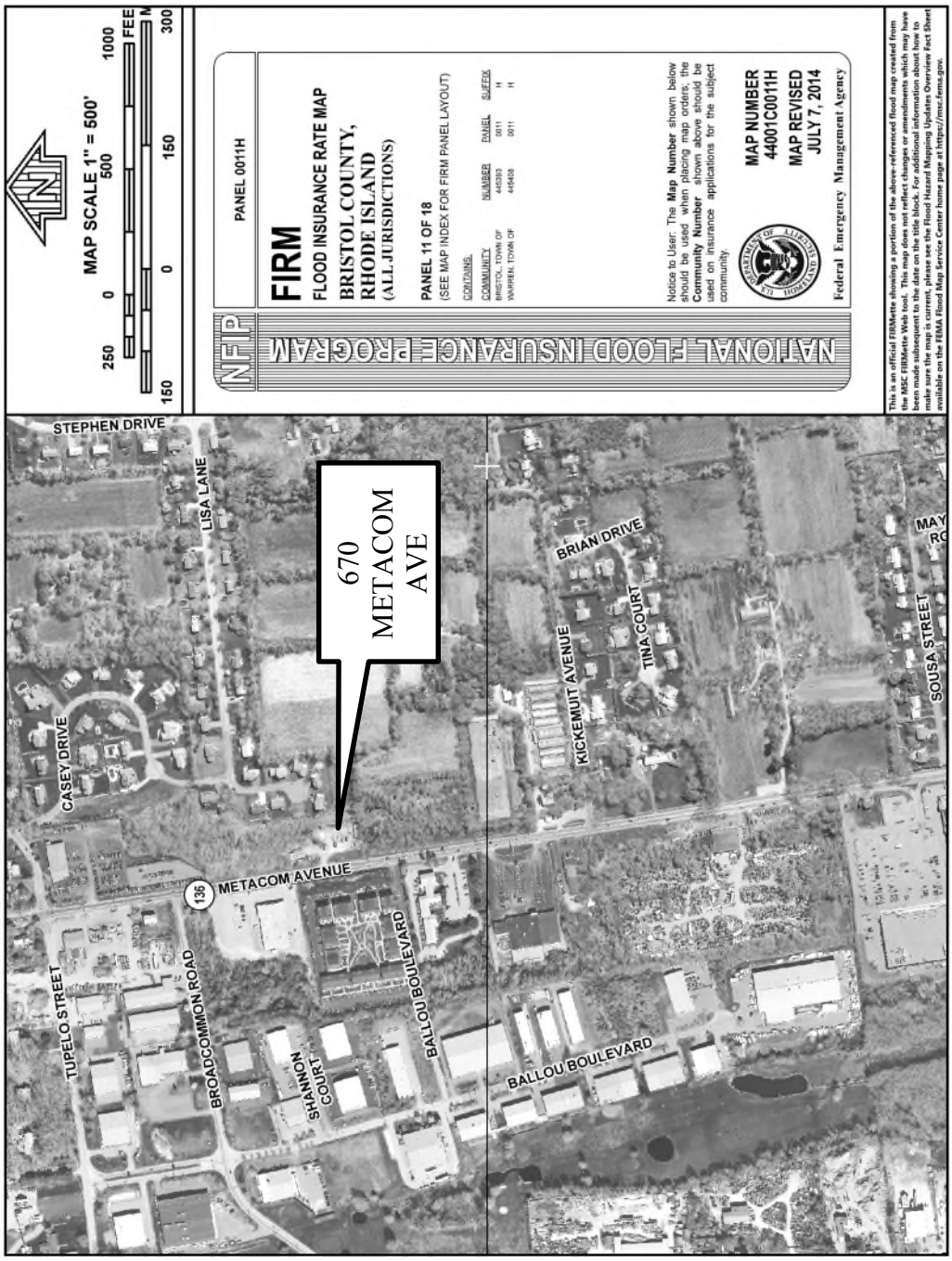


NRCS SOIL MAP

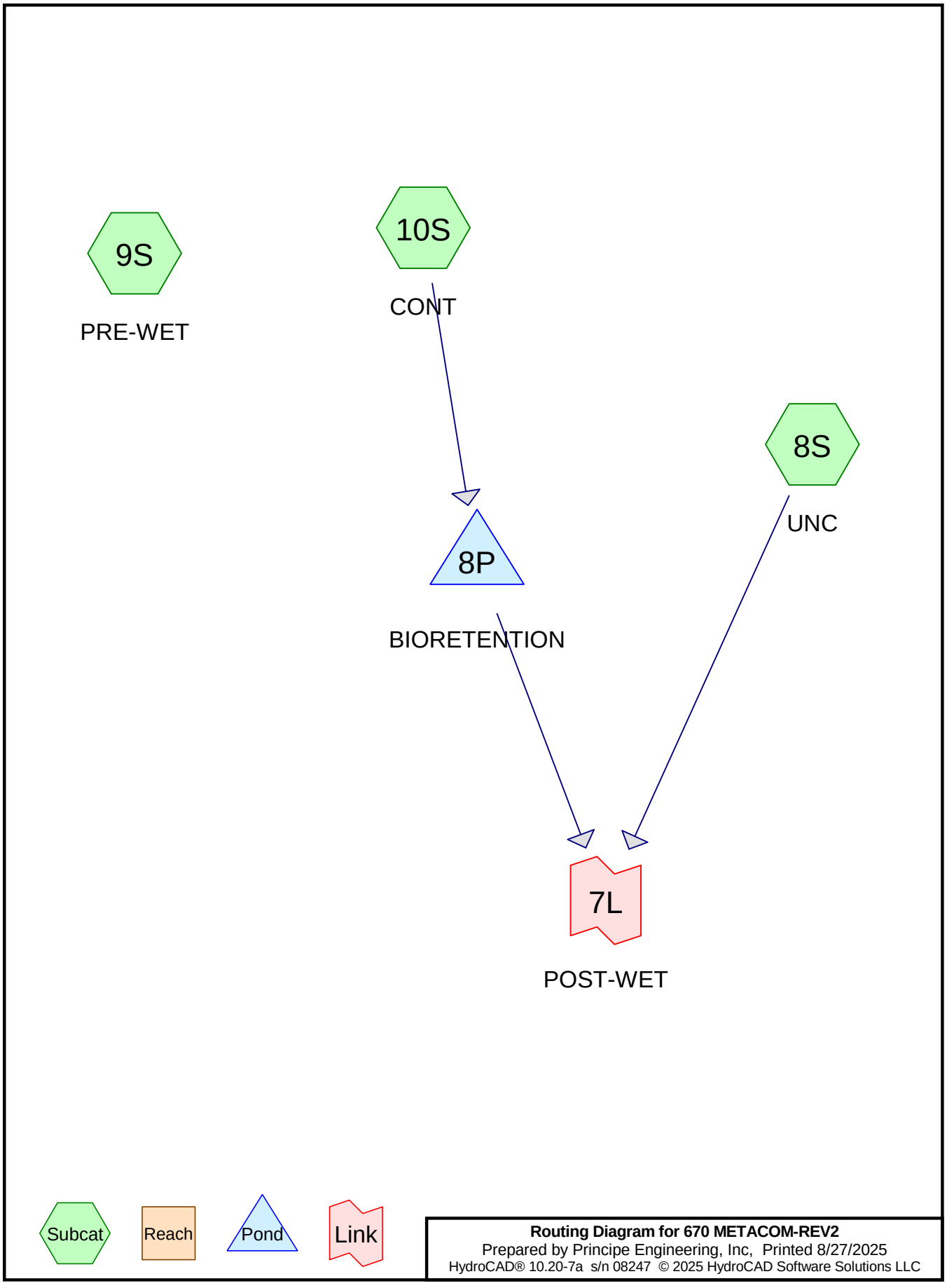
As the site has been developed/farmed/disturbed since at least the 1950s, and the test holes indicate human transported materials (HTM) are present, the "D" soil mapped by NRCS decades ago is not correct. A hydrologic soil group of "C" is therefore utilized.

Principe Company

Stormwater Calculations
ADDENDUM
668-670 Metacom Avenue
August 27, 2025



Principe Company



Routing Diagram for 670 METACOM-REV2
Prepared by Principe Engineering, Inc, Printed 8/27/2025
HydroCAD® 10.20-7a s/n 08247 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.662	74	>75% Grass cover, Good, HSG C (8S, 9S, 10S)
0.293	96	Gravel surface, HSG C (9S)
0.207	98	Paved parking, HSG C (9S, 10S)
0.080	98	Roofs, HSG C (10S)
0.017	98	Sidewalk (10S)
0.015	98	Town Concrete sidewalk, HSG C (8S)
0.154	70	Woods, Good, HSG C (8S, 9S)
1.428	**83**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
1.411	HSG C	8S, 9S, 10S
0.000	HSG D	
0.017	Other	10S
1.428		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.662	0.000	0.000	0.662	>75% Grass cover, Good	8S, 9S, 10S
0.000	0.000	0.293	0.000	0.000	0.293	Gravel surface	9S
0.000	0.000	0.207	0.000	0.000	0.207	Paved parking	9S, 10S
0.000	0.000	0.080	0.000	0.000	0.080	Roofs	10S
0.000	0.000	0.000	0.000	0.017	0.017	Sidewalk	10S
0.000	0.000	0.015	0.000	0.000	0.015	Town Concrete sidewalk	8S
0.000	0.000	0.154	0.000	0.000	0.154	Woods, Good	8S, 9S
0.000	**0.000**	**1.411**	**0.000**	**0.017**	**1.428**	**TOTAL AREA**	

Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 8S: UNC Runoff Area=7,996 sf 7.95% Impervious Runoff Depth=1.10"
Tc=6.0 min CN=74 Runoff=0.23 cfs 0.017 af

Subcatchment 9S: PRE-WET Runoff Area=31,096 sf 0.75% Impervious Runoff Depth=1.69"
Flow Length=149' Slope=0.0170 '/' Tc=20.5 min CN=83 Runoff=0.94 cfs 0.101 af

Subcatchment 10S: CONT Runoff Area=23,100 sf 56.32% Impervious Runoff Depth=2.09"
Tc=6.0 min CN=88 Runoff=1.29 cfs 0.092 af

Pond 8P: BIORETENTION Peak Elev=116.42' Storage=2,072 cf Inflow=1.29 cfs 0.092 af
Discarded=0.06 cfs 0.092 af Primary=0.00 cfs 0.000 af Outflow=0.06 cfs 0.092 af

Link 7L: POST-WET Inflow=0.23 cfs 0.017 af
Primary=0.23 cfs 0.017 af

Total Runoff Area = 1.428 ac Runoff Volume = 0.210 af Average Runoff Depth = 1.76"
77.68% Pervious = 1.109 ac 22.32% Impervious = 0.319 ac

Summary for Subcatchment 8S: UNC

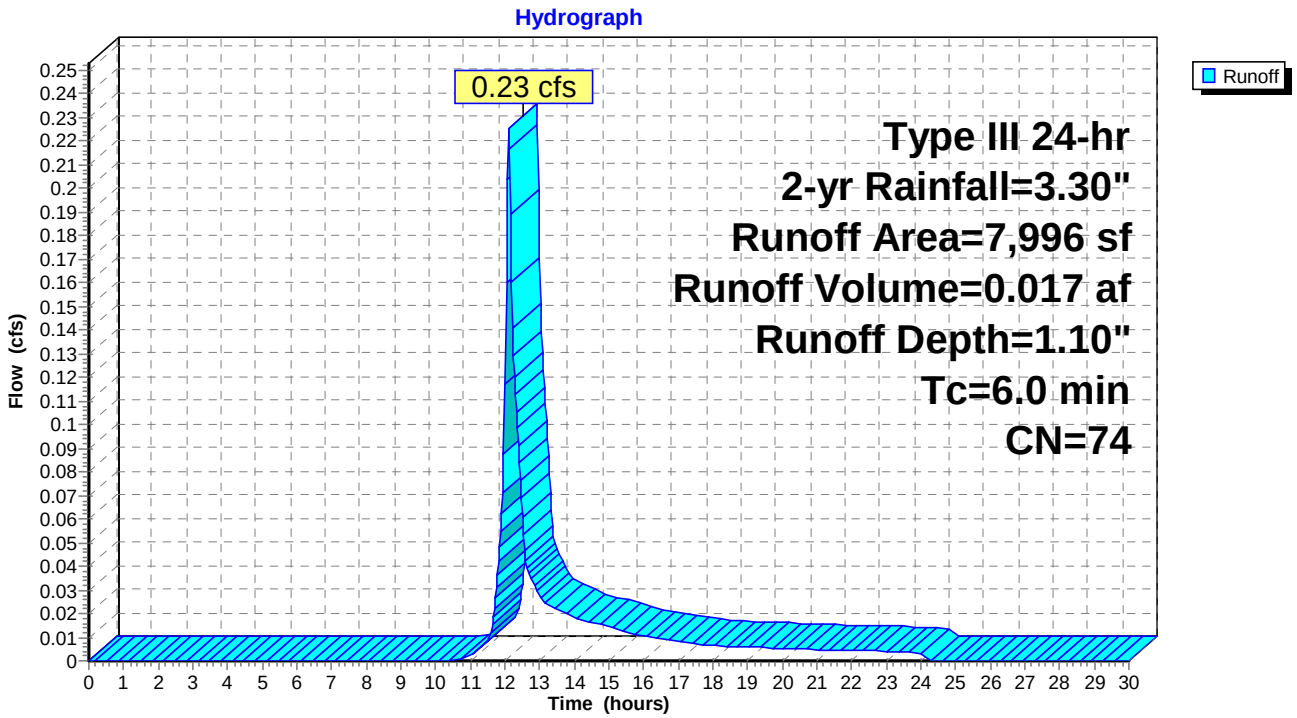
Runoff = 0.23 cfs @ 12.10 hrs, Volume= 0.017 af, Depth= 1.10"
Routed to Link 7L : POST-WET

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
*	636	98	Town Concrete sidewalk, HSG C
	3,625	74	>75% Grass cover, Good, HSG C
	3,735	70	Woods, Good, HSG C
	7,996	74	Weighted Average
	7,360	72	92.05% Pervious Area
	636	98	7.95% Impervious Area

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

Subcatchment 8S: UNC



Summary for Subcatchment 9S: PRE-WET

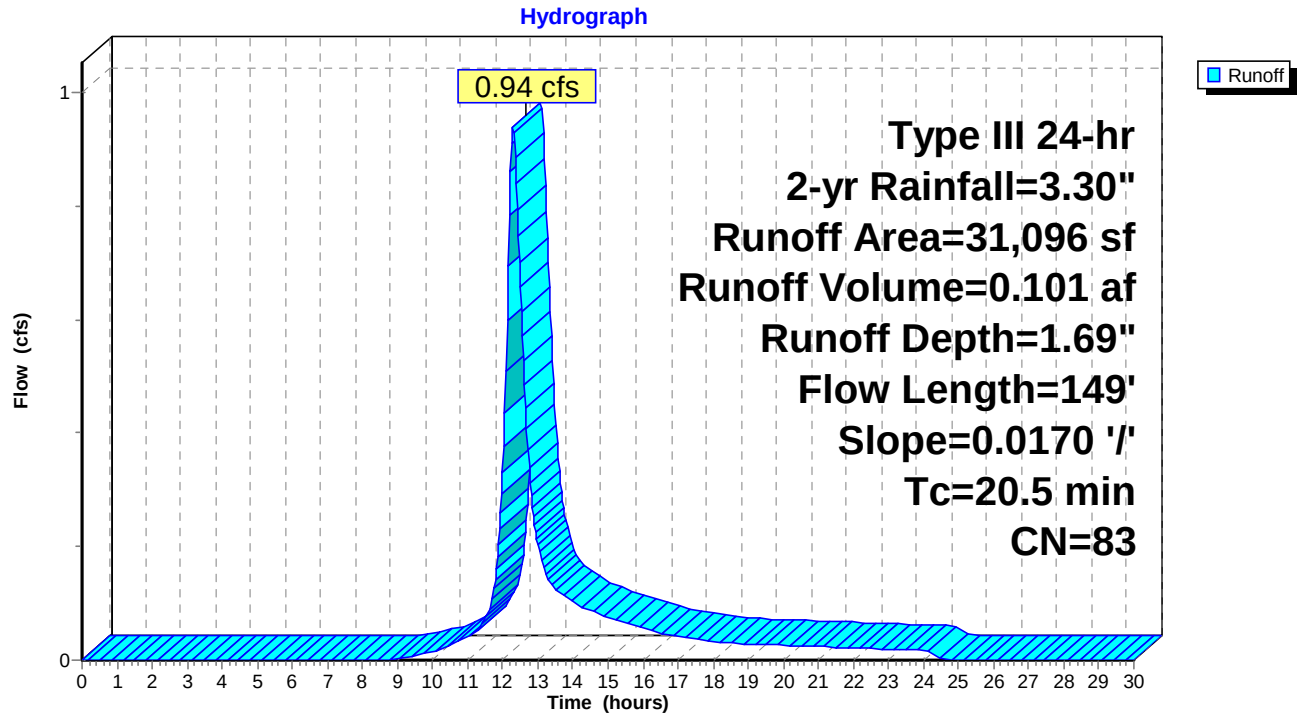
Runoff = 0.94 cfs @ 12.29 hrs, Volume= 0.101 af, Depth= 1.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2-yr Rainfall=3.30"

Area (sf)	CN	Description
233	98	Paved parking, HSG C
12,750	96	Gravel surface, HSG C
15,124	74	>75% Grass cover, Good, HSG C
2,989	70	Woods, Good, HSG C
31,096	83	Weighted Average
30,863	83	99.25% Pervious Area
233	98	0.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.5	149	0.0170	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.33"

Subcatchment 9S: PRE-WET



Summary for Subcatchment 10S: CONT

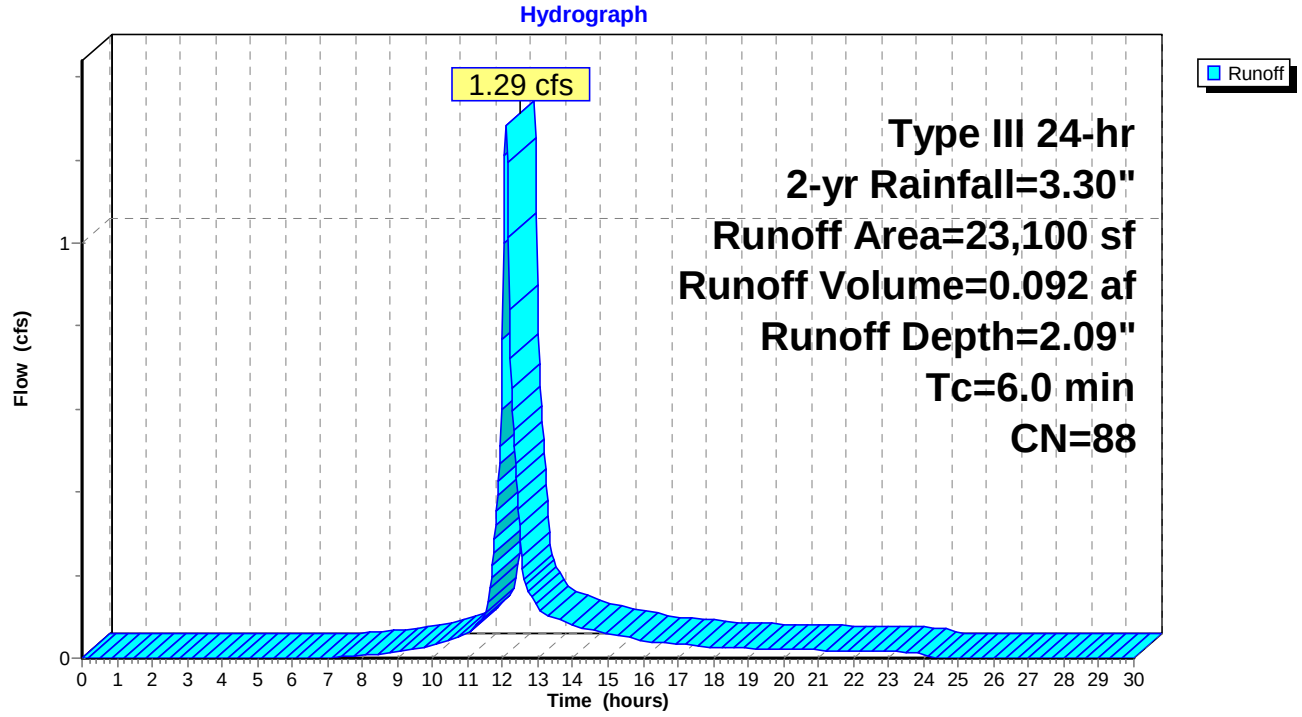
Runoff = 1.29 cfs @ 12.09 hrs, Volume= 0.092 af, Depth= 2.09"
Routed to Pond 8P : BIORETENTION

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 2-yr Rainfall=3.30"

	Area (sf)	CN	Description
	3,500	98	Roofs, HSG C
	8,788	98	Paved parking, HSG C
*	723	98	Sidewalk
	10,089	74	>75% Grass cover, Good, HSG C
	23,100	88	Weighted Average
	10,089	74	43.68% Pervious Area
	13,011	98	56.32% Impervious Area

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

Subcatchment 10S: CONT



Summary for Pond 8P: BIORETENTION

Inflow Area = 0.530 ac, 56.32% Impervious, Inflow Depth = 2.09" for 2-yr event
Inflow = 1.29 cfs @ 12.09 hrs, Volume= 0.092 af
Outflow = 0.06 cfs @ 14.80 hrs, Volume= 0.092 af, Atten= 95%, Lag= 162.8 min
Discarded = 0.06 cfs @ 14.80 hrs, Volume= 0.092 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Link 7L : POST-WET

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Peak Elev= 116.42' @ 14.80 hrs Surf.Area= 5,455 sf Storage= 2,072 cf

Plug-Flow detention time= 334.8 min calculated for 0.092 af (100% of inflow)
Center-of-Mass det. time= 334.8 min (1,148.6 - 813.8)

Volume	Invert	Avail.Storage	Storage Description
#1	116.00'	5,650 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

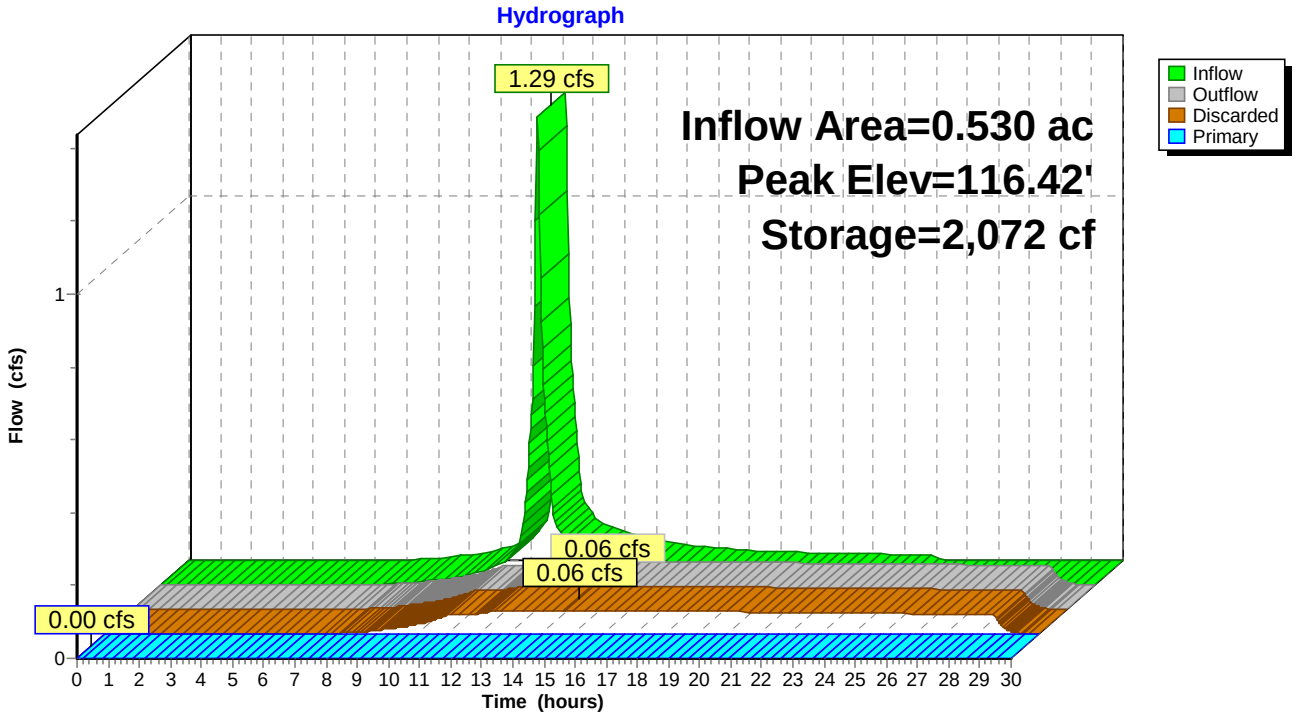
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
116.00	4,470	0	0
117.00	6,829	5,650	5,650

Device	Routing	Invert	Outlet Devices
#1	Discarded	116.00'	**0.500 in/hr Exfiltration over Surface area**
#2	Primary	116.60'	**10.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.06 cfs @ 14.80 hrs HW=116.42' (Free Discharge)
↑—**1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=116.00' (Free Discharge)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: BIORETENTION

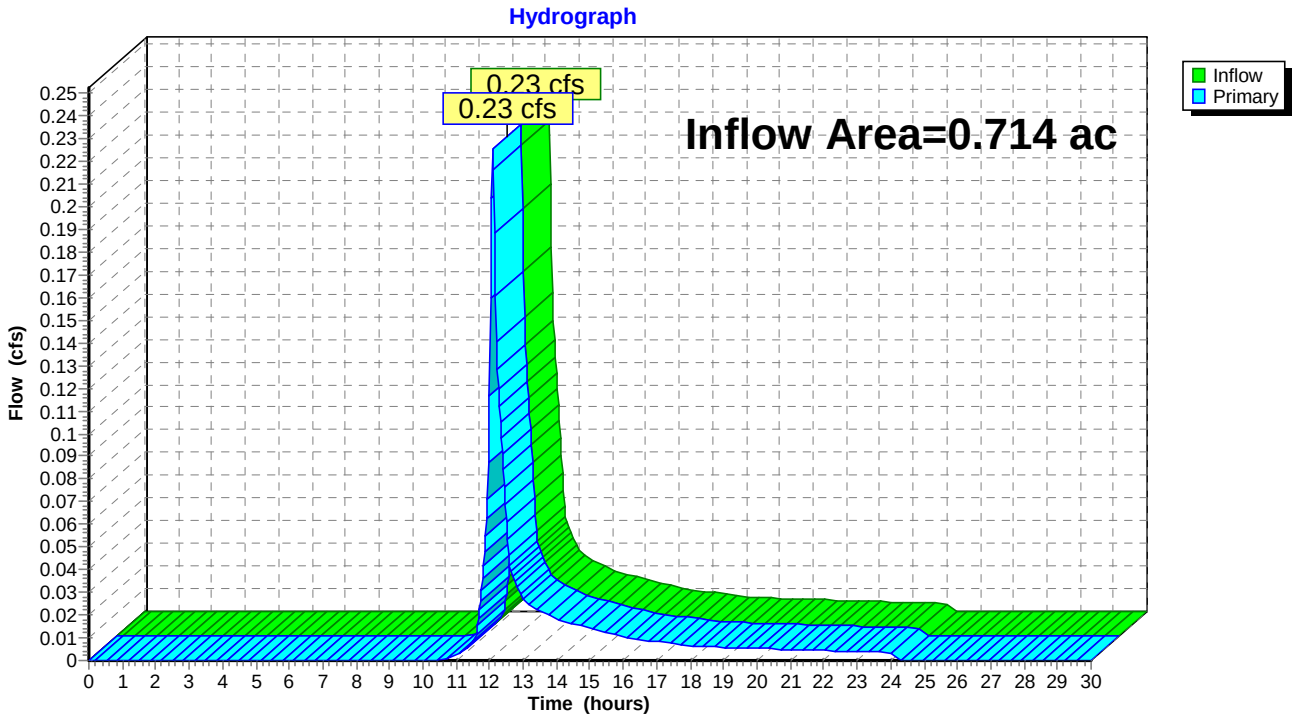


Summary for Link 7L: POST-WET

Inflow Area = 0.714 ac, 43.89% Impervious, Inflow Depth = 0.28" for 2-yr event
Inflow = 0.23 cfs @ 12.10 hrs, Volume= 0.017 af
Primary = 0.23 cfs @ 12.10 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-WET



Water Availability Request

BRISTOL COUNTY WATER AUTHORITY

Applicant Information

Date: 8/25/25

Property Owner Signature: DJR

Owner (please print): David J Ramos

Corporate Title (if not an individual): Ramos Landscaping LLC.

Address: 6668 Metacom Ave.

Phone: 401-867-1126 Email: ramoslandscaping401@gmail.com.

Contractor: Ramos L/S Email: ramoslandscaping401@gmail.com

Location

Preliminary request is hereby made for a confirmation that public water is available from BCWA to service this property:

Town: Bristol RI Location: Front Roadside

Address/Plat and Lot: 6668 Metacom Ave/ Plat 128 Lot 16

☐ Residential*

☒ Commercial*

Building Footprint: 70'x 50'

Occupancy: Storage.

Estimated Water Use: 5000 gal/mnth

***Site Plan Must Be Attached to All Applications**

For BCWA Office Use Only

Action by the Bristol County Water Authority

☑ Water Available ☐ Water Not Available

Approximate Static Pressure: 22 psi

Conditions: BCWA requires appropriately sized booster pumps for domestic and fire protection services for this property.

An RPZ backflow preventer is also required.

If connection to BCWA is desired, you must:

☐ Submit Application for Main Extension Form and Engineering Plans for Review

☑ Submit Application for New Water Service Installation and Fee

Date of Review: 8/27/2025 BCWA Engineer: Colin O'Hara

Rev April 2017

STATUTORY FORM WARRANTY DEED

KNOW ALL MEN BY THESE PRESENT, that I, JOHN G. REGO of the Town and County of Bristol in the State of Rhode Island for consideration paid, grant to LIONEL J. RAMOS of the Town and County of Bristol in the State of Rhode Island, with WARRANTY COVENANTS,

That certain tract or parcel of land with any and all buildings and improvements thereon situated on the easterly side of Metacom Avenue in Bristol, Rhode Island, and bounded and described as follows:

Beginning at a survey stake or marker on the Easterly line of Metacom Avenue located at the center point of a stone wall and which stone wall is bounded on the South by land now or lately of Frank M. Fales and further described as Lot 1 on Tax Assessors' Plat 134. This survey stake or marker being the Southwest corner of the land herein described and the Northwest corner of land now or lately of said Frank M. Fales;

Thence going Easterly, bounded on the South by land now or lately of Frank M. Fales, along the center line of a stone wall, a distance of two hundred (200) feet, more or less, to a point;

Thence turning and going Northerly in a line parallel to the Easterly line of Metacom Avenue, bounded on the East by land now or lately of Ezra W. Mason, a distance of one hundred and fifty seven (157) feet, more or less, to a point;

Thence turning and going Westerly in a line parallel to the Southerly line of the herein described property, bounded on the North by land now or lately of this grantor, a distance of two hundred (200) feet, more or less, to a point;

Thence turning and going Southerly bounded on the West on said Metacom Avenue a distance of one hundred and fifty seven (157) feet, more or less, to a survey stake or marker and place of beginning.

Meaning and intending to convey approximately one-third (1/3) of the Southerly portion of Lot 15 on Tax Assessors' Plat 128.

Being the same premises conveyed to this grantor by deed in Book 207 at Page 141 from Ezra W. Mason on May 18, 1976.

The consideration for this conveyance is such that no United States revenue stamps are required.

Reference also being made to the second page of this herein document to a diagram showing the aforesaid conveyance.

6

A.P. #128, LOT #1, VILLAGE DEVESTMENTS

STONE WALL

1.80' R.I.H.B.

A.P. #128, LOT #2, EZRA W. MASON

PIPE

±300'

±316'

±473'

REGO PROPERTY

±330'

±473'

±200' RAMOS PROPERTY

±157'

±157'

±200'

STONE WALL

PIPE

A.P. #134, LOT #1, FRANK M. FALES

METACOM AVENUE

DIVISION OF REGO-RAMOS LAND

SEP. 1976

SCALE: 1"=100'

7

I, GLORIA J. REGO, wife of JOHN G. REGO, release all my right, title, interest, and dower, in the above-described premises.

WITNESS our hands and seals this 4 day of September 1976.

John G. Rego
JOHN G. REGO

Gloria J. Rego
GLORIA J. REGO

STATE OF RHODE ISLAND)
COUNTY OF BRISTOL)

In the Town of Bristol on the 4th day of September 1976, before me personally appeared JOHN G. REGO and GLORIA J. REGO, husband and wife, to me known and known by me to be the parties executing the foregoing instrument, and they acknowledge said instrument, by them executed, to be their free act and deed.

Notary Public

NOTARY PUBLIC ALFRED RAYMOND REGO RHODE ISLAND

Recorded SEP 7 - 1976 at 3:46 P.M.
Orlando J. Viotano Town Clerk

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom -
Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Cover

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina

A0.00

Scale

8/27/2025 2:18:01 PM

1 Site Plan
1" = 20'-0"

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom -
Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Site Plan - Proposed

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina

A0.10

Scale	1" = 20'-0"

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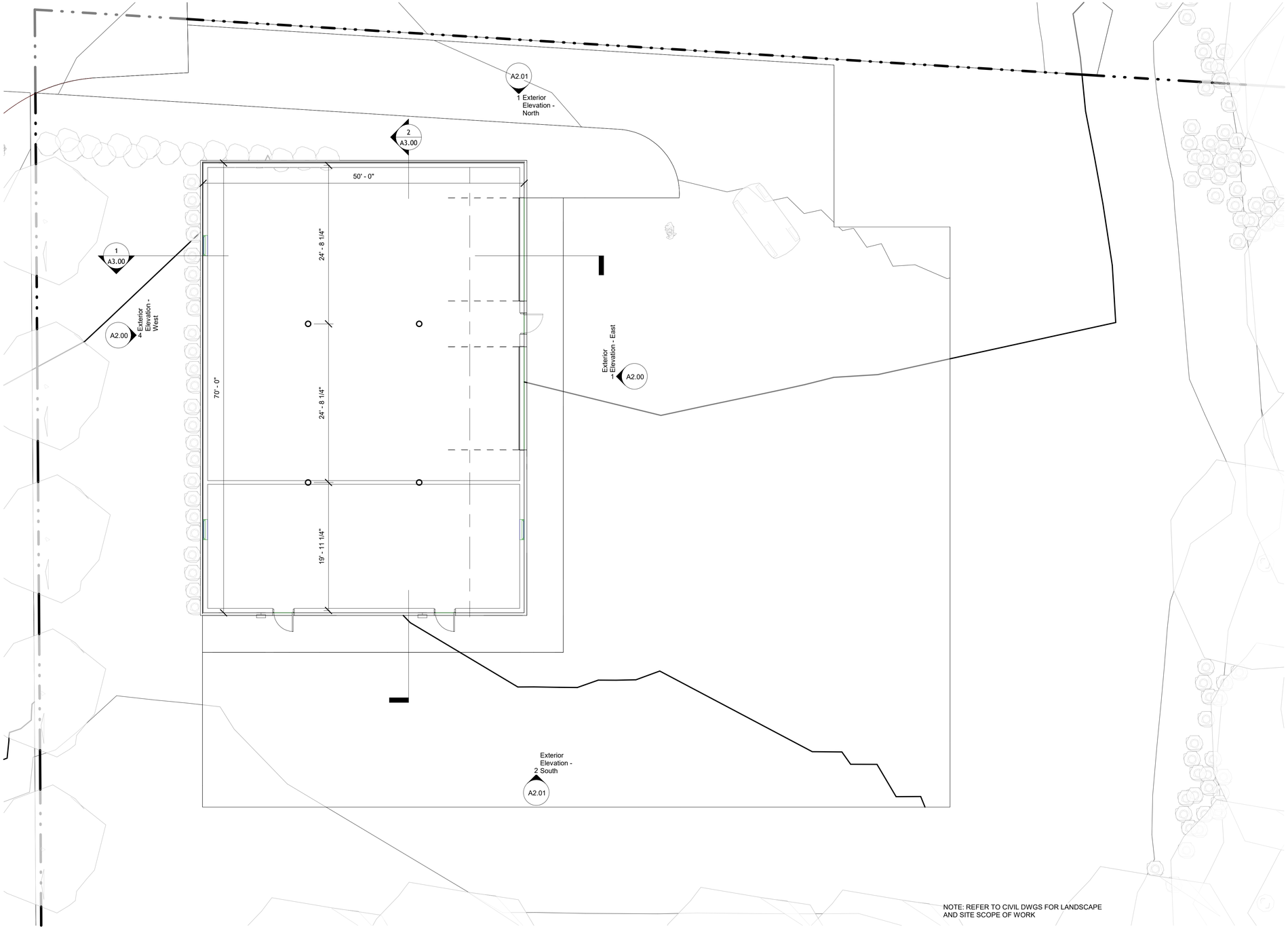

NOTE: REFER TO CIVIL DWGS FOR LANDSCAPE AND SITE SCOPE OF WORK

1 Floor Plan
1/8" = 1'-0"

N

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom - Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Floor Plan - Proposed

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina
Scale	1/8" = 1'-0"

A1.00

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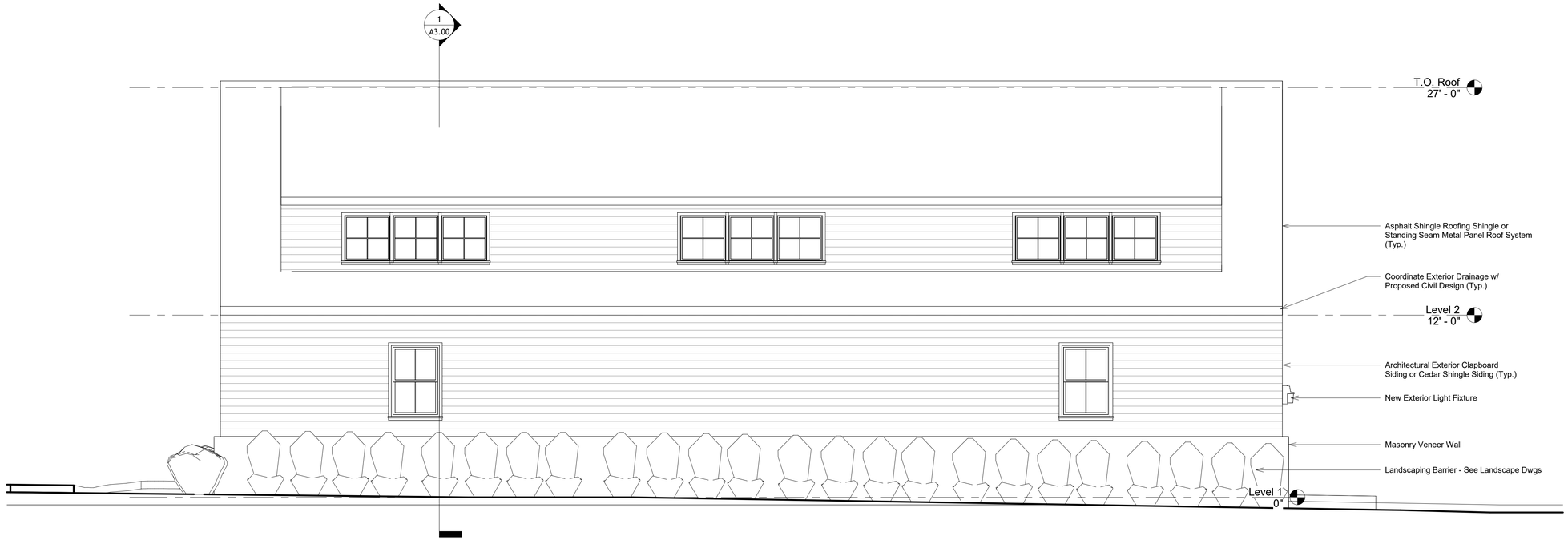
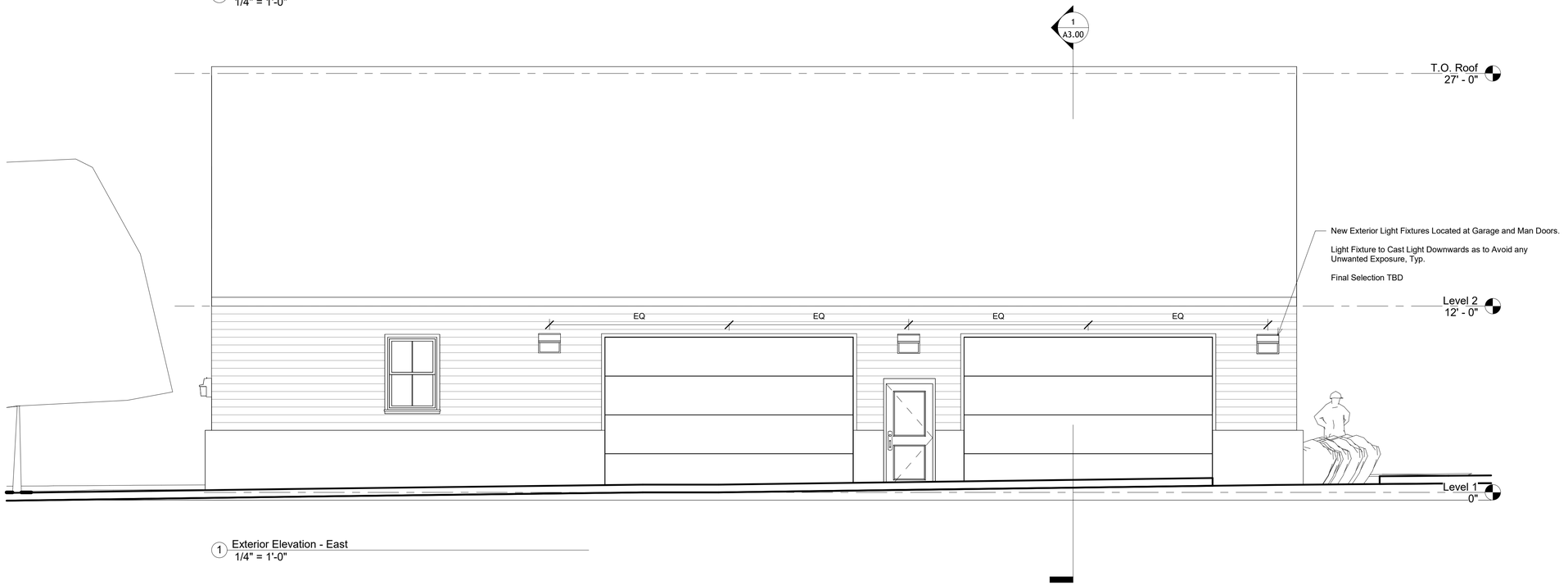


4 Exterior Elevation - West
1/4" = 1'-0"



1 Exterior Elevation - East
1/4" = 1'-0"

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom -
Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Exterior Elevations

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina

A2.00

Scale 1/4" = 1'-0"

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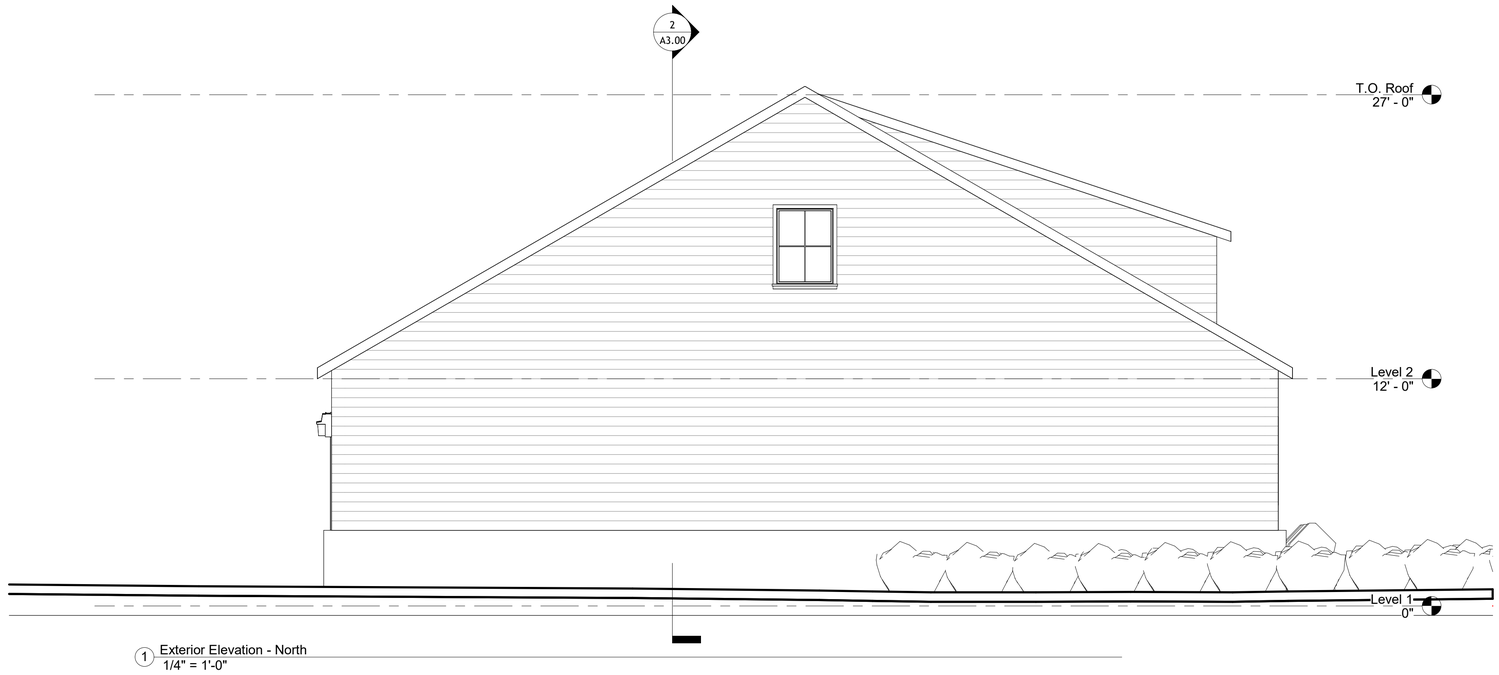
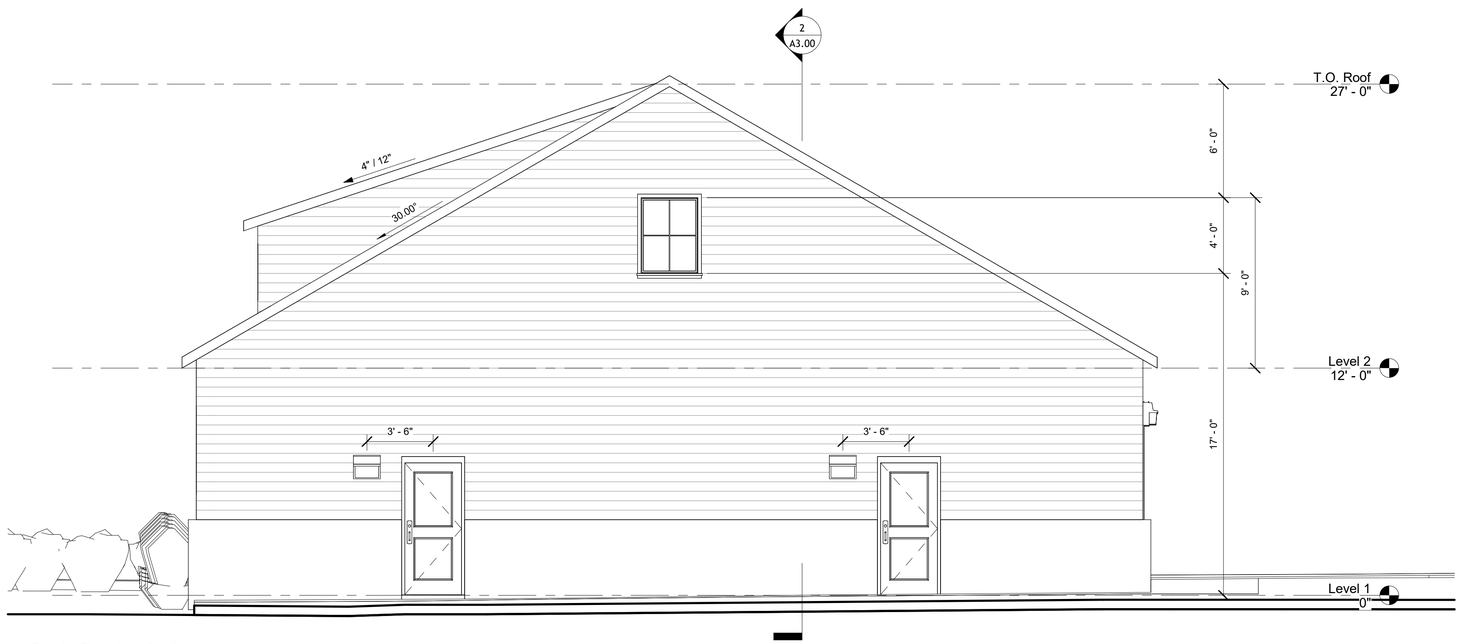


1 Exterior Elevation - North
1/4" = 1'-0"



2 Exterior Elevation - South
1/4" = 1'-0"

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom -
Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Exterior Elevations

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina
Scale	1/4" = 1'-0"

A2.01

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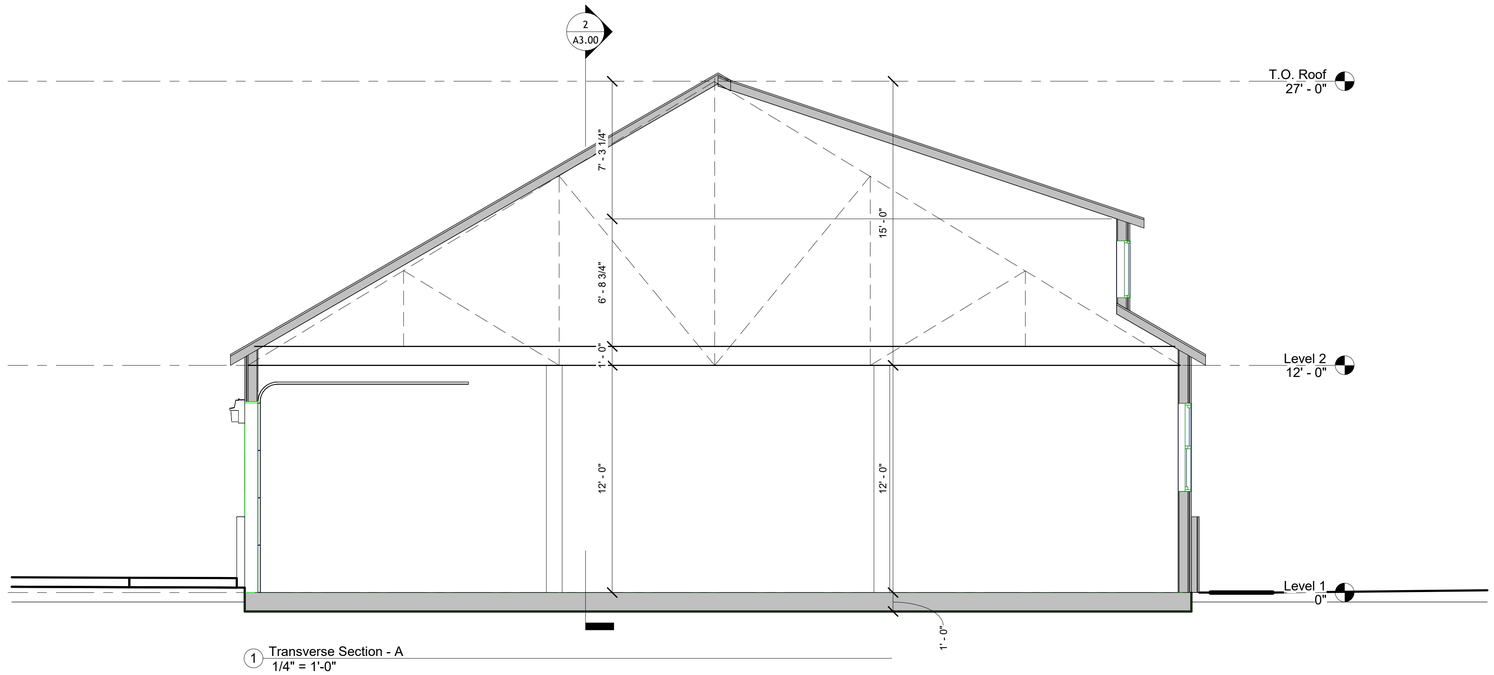

1 Transverse Section - A
1/4" = 1'-0"

2 Longitudinal Section - B
1/4" = 1'-0"

Studio Spina

No.	Description	Date

Ramos Landscaping LLC

668 Metacom - Concept

668 Metacom Ave.
Bristol, RI 02809

Concept Design - Not for Construction

Building Sections

Project Number	25002
Date	08/05/2025
Drawn By	B. Spina

A3.00

Scale 1/4" = 1'-0"

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PRELIMINARY SUBMISSION
FOR
668 & 670 METACOM AVENUE
ASSESSORS MAP 128 PARCELS 15 & 16
IN
BRISTOL, RHODE ISLAND

Thomas J. Principe, III
No. 9301
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY ESTABLISHED IN 1981

SITE LOCUS
SCALE: 1"=100'

APPLICANT:
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 15):
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 16):
LIONEL J. RAMOS
9 SCOTT LANE
BRISTOL, RI 02809

PREPARED BY:
PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RHODE ISLAND 02878
401.816.5385
INFO@PRINCIPECOMPANY.COM
WWW.PRINCIPECOMPANY.COM

AUGUST 8, 2025
REVISED AUGUST 27, 2025

DRAWING ISSUE:
- ☐ CONCEPT
- ☐ CUSTOMER APPROVAL
- ☒ PERMITTING
- ☐ CONSTRUCTION
- ☐ AS-BUILT
- ☐ OTHER:

ONLY PLANS ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

LIST OF DRAWINGS

1) TITLE SHEET
2) EXISTING CONDITIONS PLAN (LOTS 15 & 16)
3) PROPOSED LAYOUT PLAN (LOT 16)
4) DRAINAGE & GRADING PLAN (LOT 16)
5) LANDSCAPE PLAN (LOT 16)
6) PROPOSED CONDITIONS PLAN (LOT 15)
7) RIDOT PAP PLAN
8) CONSTRUCTION DETAILS – 1
9) CONSTRUCTION DETAILS – 2
10) CONSTRUCTION DETAILS – 3

REQUESTED RELIEF

WAIVERS REQUESTED

A waiver is requested from Land Development Projects Section:
Sidewalks shall be required to be installed on one side of new streets in subdivisions and in multifamily developments. No sidewalks is proposed in front of Lot 15.

ZONING-GB: LOT 15
ROUTE 136 (METACOM AVENUE) OVERLAY

DIMENSIONAL REQUIREMENTS	EXISTING
MIN. LOT AREA: 10,000 SF	64,406 SF
MIN. LOT WIDTH: 100 FT	323.2 FT
MIN. FRONT YARD: 25 FT	N/A
MIN. REAR YARD: 30 FT	N/A
MIN. SIDE YARD: 10 FT	N/A
MAX. BLDG. LOT COV.: 40%	N/A
MAX. TOTAL LOT COV.: 70%	N/A
MIN. DIST. FROM RES. ZONE: 25 FT	N/A
MAX. FLOOR AREA RATIO: 0.5	N/A

ZONING-GB: LOT 16
ROUTE 136 (METACOM AVENUE) OVERLAY

DIMENSIONAL REQUIREMENTS	EXISTING
MIN. LOT AREA: 10,000 SF	31,403 SF
MIN. LOT WIDTH: 100 FT	157.0 FT
MIN. FRONT YARD: 25 FT	N/A
MIN. REAR YARD: 30 FT	N/A
MIN. SIDE YARD: 10 FT	N/A
MAX. BLDG. LOT COV.: 40%	N/A
MAX. TOTAL LOT COV.: 70%	N/A
MIN. DIST. FROM RES. ZONE: 25 FT	N/A
MAX. FLOOR AREA RATIO: 0.5	N/A

GENERAL NOTES:

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATE AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MU BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL CO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEA 72 HOURS IN ADVANCE.

2. THIS SITE LIES IN ZONE X AS SHOWN ON THE FIRM MAP FOR THE CITY OF BRISTOL, RI COMMUNITY PANEL NO.44001C0011H, MAP REVISED JULY 7, 2014.

3. THERE ARE NO KNOWN EASEMENTS OR RIGHTS OF WAY WITHIN OR ADJACENT TO THIS PARCEL UNLESS OTHERWISE SHOWN.

4. THE CONTOURS SHOWN HEREIN ARE BASED UPON THE NAVD88 DATUM.

5. THERE ARE UNDERGROUND UTILITIES LOCATED WITHIN METACOM AVENUE ALONG THIS PARCELS FRONTAGE.

LEGEND

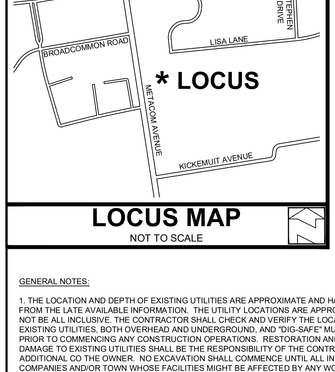
	EXISTING	PROPOSED
PERIMETER LINE		
ABUTTER LINE		
EDGE OF PAVEMENT		
FENCE	X X X	
EASEMENT		
CONTOUR	87	87
UTILITY POLE		
TEST HOLE	TH	
SAWCUT		
BUILDING SETBACK		
OVERHEAD WIRE	OHW	OHW
CATCH BASIN		
DRAIN MANHOLE		
DRAIN LINE	D D	D D
WATER LINE	W W	W W
WATER GATE VALVE	WV	WV
WELL	W	
SEWER LINE	S S	S S
WETLAND FLAG		
SIGN		
DOWNSPOUT		
LIGHT POST		
STONEWALL		
COMPOST FILTER SOCK		
RIDOT STD 9.9.0 CONSTRUCTION ACCESS		

STREET INDEX
METACOM AVENUE
(PUBLIC- STATE HIGHWAY)

SOIL REFERENCE:
NRCS WEB SOIL SURVEY:
PmA – PITTSTOWN SILT LOAM (0-3% SLOPES) [27" GWT]
Sf – STISSING VERY STONY SILT LOAM [9" GWT]
CaC – CANTON-CHARLTON-ROCK OUTCROP COMPLEX (3-15% SLOPES)
DATE ACCESSED: 03/25/24

PLAN REFERENCE:
1.) EXISTING CONDITIONS TAKEN FROM CLASS I SURVEY PLAN ENTITLED:
"EXISTING CONDITIONS PLAN FOR DAVID J. RAMOS & LIONEL J. RAMOS"
AP 128 LOT 15 & 16 IN BRISTOL, RI
DATE: 03/27/2024; REVISED JULY 3, 2025
PREPARED BY: PRINCIPE COMPANY, INC. – SURVEYING DIVISION
SIGNED BY: STEPHEN T. LONG, PLS NO. 1930

C:\Users\admin\Principe Engineering Dropbox\ERSC PLANS\2024\ERSC-2024-2_670 Metacom Avenue_Bristol_Dave Ramos\Drawings\ERSC-2024-2_670 METACOM AVENUE_BRISTOL_PRELIMINARY-rev.dwg, DWG To PDF.pc3



LOCUS MAP
NOT TO SCALE

GENERAL NOTES:

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATE AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MU BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL CO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEA 72 HOURS IN ADVANCE.

2. THIS SITE LIES IN ZONE X AS SHOWN ON THE FIRM MAP FOR THE CITY OF BRISTOL, RI COMMUNITY PANEL NO.44001C0011H, MAP REVISED JULY 7, 2014.

3. THERE ARE NO KNOWN EASEMENTS OR RIGHTS OF WAY WITHIN OR ADJACENT TO THIS PARCEL UNLESS OTHERWISE SHOWN.

4. THE CONTOURS SHOWN HEREIN ARE BASED UPON THE NAVD88 DATUM.

5. THIS SITE DOES NOT LIE WITHIN ANY KNOWN AGRICULTURAL USE, SILVICULTURAL USE, NATURAL HERITAGE OR FARMLAND CONSERVATION AREAS.

6. THERE ARE UNDERGROUND UTILITIES LOCATED WITHIN METACOM AVENUE ALONG THIS PARCELS FRONTAGE.

7. LOT 15 HAS 4,353 SQ. FT.± OF LAND UNSUITABLE FOR DEVELOPMENT, LOT 16 HAS 1,134 SQ. FT.± OF LAND UNSUITABLE FOR DEVELOPMENT.

REFERENCES:

1. A CERTAIN PLAN ENTITLED " SUBDIVISION PLAN LISA LANE EXTENSION ASSESSORS PLAT 128, LOT 2 SITUATED IN BRISTOL, RHODE ISLAND, PREPARED FOR J.T. O'CONNELL REALTY COMPANY PREPARED BY JOHN P. CAITO LAND PLANNERS ; DATED JANUARY 12, 2003 , FINAL REVISION DATE OF AUGU 31, 2006 ; SCALE 1" = 40' " AND RECORDED IN THE TOWN OF BRISTOL, RHODE ISLAND IN THE TOWN CLERK'S OFFICE

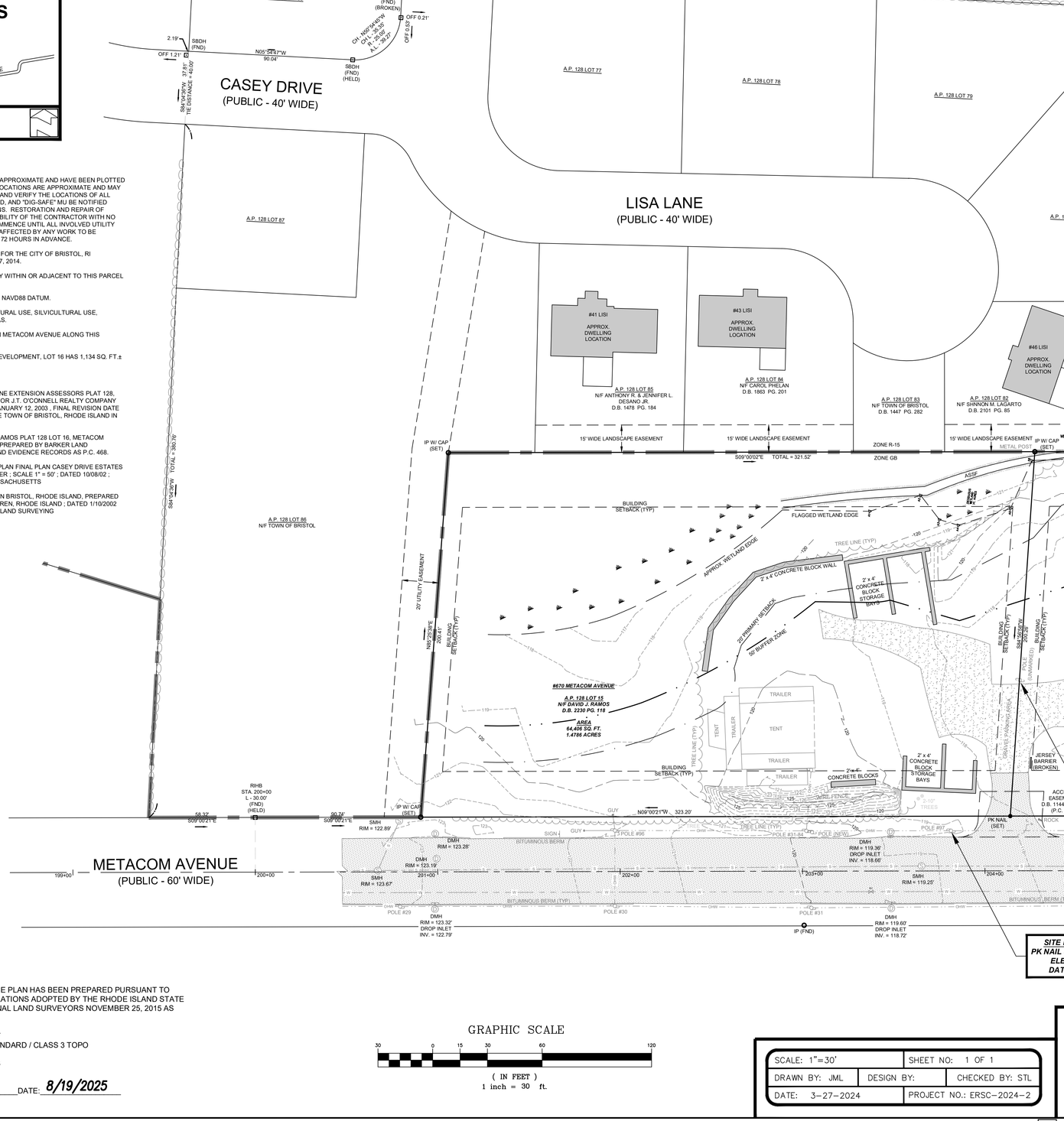
2. A CERTAIN PLAN ENTITLED " SITE PLAN FOR LIONEL J. RAMOS PLAT 128 LOT 16, METACOM AVENUE, BRISTOL, R.I. ; SCALE 1" = 20' ; DATED 8/21/2002 ; PREPARED BY BARKER LAND SURVEYING, INC." WHICH IS LOCATED IN THE BRISTOL LAND EVIDENCE RECORDS AS P.C. 468.

3. A CERTAIN PLAN ENTITLED " LOT LATOUT AND ZONING PLAN FINAL PLAN CASEY DRIVE ESTATES (PLAT 128) FOR NAOMI PROPERTIES LTD & EDWARD VEADER ; SCALE 1" = 50' ; DATED 10/08/02 ; PREPARED BY HOLMES ENGINEERING, INC BERKLEY, MASSACHUSETTS

4. A CERTAIN PLAN ENTITLED " PROPERTY SURVEY PLAN IN BRISTOL, RHODE ISLAND, PREPARED FOR NAOMI PROPERTIES LTD. 347B MARKET STREET WARREN, RHODE ISLAND ; DATED 1/10/2002 REVISED 8-15-2002 ; SCALE 1" = 50' ; PREPARED BY ALPHA LAND SURVEYING

5. R.I.D.O.T. PLAT #955

1-888-DIG-SAFE
PROTECT YOURSELF, GIVE TWO WORKING DAYS NOTICE



THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR 00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: LIMITED CONTENT SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD / CLASS 3 TOPO

PURPOSE OF SURVEY: EXISTING CONDITIONS

BY: _____ DATE: 8/19/2025
STEPHEN T. LONG, PLS NO. 19

GRAPHIC SCALE

30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

SCALE: 1"=30'	SHEET NO: 1 OF 1
DRAWN BY: JML / DESIGN BY:	CHECKED BY: STL
DATE: 3-27-2024	PROJECT NO.: ERSC-2024-2

NO CHANGES TO SURFACE MATERIALS, GRADES, OR LIMITS OF DISTURBANCE ARE PROPOSED ON LOT 15, WITH THE EXCEPTION OF WORK ADJACENT TO THE SOUTHERN SETBACK AREA AS SHOWN, CONSTRUCTION ACCESS AND CONTINUED EXISTING SITE USAGE.

BENCHMARK: PK NAIL SET IN UP #97 EL.=121.73' (NAVD-88)

BENCHMARK: PK NAIL SET IN UP EL.=120.06' (NAVD-88)

PK NAIL (SET)

ACCESS EASEMENT D.B. 1114 PG. 189 (P.C. 468)

EX. POLE TO BE REMOVED

POLE (UNMARKED)

S84°56'58"W 200.26'

BLDG. SETBACK LINE

12.0'

18.9'

21.9'

123.6'

R10.0'

24.0'

10.0'

18.0'

25.9'

50'

50'

PROPOSED WAREHOUSE ±3,500 SF T.O.F. EL.=±118.25' SLAB EL.=±117.75'

A.P. 128 LOT 16 N/F LIONEL J. RAMOS D.B. 211 PG. 5

AREA 31,403 SQ. FT. 0.7209 ACRES

EX. SEWER SERVICE TO BE CONNECTED TO PROP. GARAGE AS SHOWN

EX. SIGN TO BE REMOVED

EX. WATER SERVICE TO BE CONNECTED TO PROP. GARAGE AS SHOWN

N09°00'21"W 157.68'

PROP. 5' WIDE CONCRETE SIDEWALK (TYP.)

PROP. 6' WIDE CONCRETE SIDEWALK (TYP.)

BITUMINOUS PAVEMENT (TYP.)

25.4'

8.0'

5.0'

18.0'

PROP. DUMPSTER (TYP.)

24.0'

68.0'

64.8'

BOX TRAILER "STORAGE"

EX. BOX TRAILER & STEPS TO BE REMOVED

TH#1

TH#2

EX. LEACHING CHAMBERS TO BE REMOVED

IP (FND) (HELD)

25' BUFFER ZONE

50' BUFFER ZONE

20' PRIMARY SETBACK

GB ZONE

R-15 ZONE

A ZONE

EASEMENT W/ CAP (SET)

D.B. 2101

WETLAND FLAGS (TYP.)

CONCRETE RETAINING WALL TOP EL. = 115.45 INV. = 114.23'

S09°00'02"E 157.38'

FLAGGED WETLAND EDGE

S85°03'22"W 200.27'

OFF 0.15' DH (FND)

OFF 2.83'

OFF 6.92' (FND)

A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

PLAN NOTES:

1. CONTRACTOR TO VERIFY BENCHMARK AND EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

2. PLAN IS TO BE USED SOLELY FOR THE USE OF THE SOIL EROSION, RUNOFF AND SEDIMENT CONTROL ORDINANCE FOR THE TOWN OF BRISTOL AND IS NOT AUTHORIZED FOR ANY OTHER USE. CONTRACTOR TO STRICTLY ADHERE TO BRISTOL'S SOIL EROSION, RUNOFF, AND SEDIMENT CONTROL ORDINANCE AT ALL TIMES DURING CONSTRUCTION.

3. SEE ADDITIONAL NOTES ON SHEET 6 OF 6, WHICH NEED TO BE STRICTLY ADHERED TO AS WELL.

ARCHITECT NOTE:

IT IS THE RESPONSIBILITY OF THE ARCHITECT TO FINALIZE SITE LAYOUT & COORDINATE ELEMENTS WITH ENGINEER PRIOR TO CONSTRUCTION. FINAL GRADING & LAYOUT SHALL BE COORDINATED AND VERIFIED THROUGH ARCHITECT DRAWINGS.

BUILDING LOT COVERAGE:

NO EXISTING STRUCTURES
TOTAL EXISTING LOT COVERAGE = 0 SF

PROPOSED GARAGE – 3,500 SF

TOTAL PROPOSED LOT COVERAGE = 3,500 SF
TOTAL LOT AREA = 31,403 SF

LOT COVERAGE=
3,500 SF / 31,403 SF X 100% = 11.14%
11.14% TOTAL LOT COVERAGE < 25% O.K.

TOTAL LOT COVERAGE:

EXISTING GRAVEL PARKING AREA – 12,973 SF
TOTAL EXISTING LOT COVERAGE = 12,973 SF

PROPOSED BUILDING = 3,500 SF
PROPOSED ON-SITE SIDEWALK = 723 SF
PROPOSED PAVEMENT = 8,788 SF

TOTAL PROPOSED LOT COVERAGE = 13,011 SF
TOTAL LOT AREA = 31,011 SF

LOT COVERAGE=
13,011 SF / 31,403 SF X 100% = 43.14%
43.14% TOTAL LOT COVERAGE < 70% O.K.

PARKING REQUIREMENTS:

SERVICE BUSINESS: 1 SPOT / 300 SF GFA REQ.
3,500 SF PROPOSED x 1 SPOT/300 SF GFA = 11.7 REQ.

TOTAL PARKING SPOTS REQUIRED = 11.7
TOTAL PARKING SPOTS PROVIDED = 12

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

TEST HOLE DATA:
TH#1: HTM 0'-5'; LEDGE @ 5'; DRY TO 5'; HSG "C"
TH#2: HTM 0'-5'; NO LEDGE; DRY TO 7.5' HSG "C"

APPLICANT:	OWNER (LOT 15):	OWNER (LOT 16):
DAVID J. RAMOS	DAVID J. RAMOS	LIONEL J. RAMOS
12 RUTH AVENUE	12 RUTH AVENUE	9 SCOTT LANE
BRISTOL, RI 02809	BRISTOL, RI 02809	BRISTOL, RI 02809

PROPOSED LAYOUT PLAN-LOT 16

G.F.A. RATIO:

NO EXISTING STRUCTURES
TOTAL EXISTING GFA = 0 SF GFA

PROPOSED GARAGE – 3,500 SF GFA

TOTAL PROPOSED GFA = 3,500 SF GFA
TOTAL LOT AREA = 31,403 SF

GROSS FLOOR AREA RATIO=
3,500 SF / 31,403 SF = 0.11
0.11 < 0.5 O.K.

ZONING-GB: LOT 16

ROUTE 136 (METACOM AVENUE) OVERLAY

DIMENSIONAL REQUIREMENTS	EXISTING	PROPOSED
MIN. LOT AREA: 10,000 SF	31,272 SF	---
MIN. LOT WIDTH: 100 FT	157.0 FT	---
MIN. FRONT YARD: 25 FT	N/A	25.4 FT
MIN. REAR YARD: 30 FT	N/A	123.6 FT
MIN. SIDE YARD: 10 FT	N/A	18.9 FT/64.8 FT
MAX. BLDG. LOT COV.: 40%	N/A	11.14%
MAX. TOTAL LOT COV.: 70%	N/A	43.14%
MIN. DIST. FROM RES. ZONE: 25 FT	N/A	123.6 FT
MAX. FLOOR AREA RATIO: 0.5	N/A	0.11

Thomas J. Principe, III
No. 9801
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPECOMPANY.COM

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 10'	SHEET NO: 3 of 10	
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025	PROJECT NO.: ERSC-2024-2	

C:\Users\admin\Principe Engineering Dropbox\ERSC PLANS\2024\ERSC-2024-2_670 Metacom Avenue_Bristol_Dove Ramos\Drawings\ERSC-2024-2_670 METACOM AVENUE_BRISTOL_PRELIMINARY-rev.dwg, DWG To PDF.pc3

NO CHANGES TO SURFACE MATERIALS, GRADES, OR LIMITS OF DISTURBANCE ARE PROPOSED ON LOT 15, WITH THE EXCEPTION OF WORK ADJACENT TO THE SOUTHERN SETBACK AREA AS SHOWN, CONSTRUCTION ACCESS AND CONTINUED EXISTING SITE USAGE.

BENCHMARK: PK NAIL SET IN UP #97 EL.=121.73' (NAVD-88)

BENCHMARK: PK NAIL SET IN UP EL.=120.06' (NAVD-88)

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

METACOM AVENUE
ROUTE 136
S

S84°56'58"W 200.26'

BLDG. SETBACK LINE

PROPOSED WAREHOUSE
±3,500 SF
T.O.F. EL.=±118.25'
SLAB EL.=±117.75'

A.P. 128 LOT 16
N/F LIONEL J. RAMOS
D.B. 211 PG. 5

AREA
31,403 SQ. FT.
0.7209 ACRES

PROP. DOWNSPOUT w/ OVERFLOW @ BLDG. (SEE DETAIL)

EX. SEWER SERVICE TO BE CONNECTED TO PROP. GARAGE AS SHOWN

EX. WATER SERVICE TO BE CONNECTED TO PROP. GARAGE AS SHOWN

PROP. 6' WIDE CONCRETE SIDEWALK (TYP.)

RI STD. DETAIL 7.2.4

ADA SPACE; SEE DETAILS

BITUMINOUS PAVEMENT (TYP.)

SEE TRASH ENCLOSURE DETAIL

PROP. DUMPSTER (TYP.)

PEA STONE DIAPHRAGM

PROPOSED BIORETENTION BASIN

BOX TRAILER "STORAGE"

50' BUFFER ZONE

25' BUFFER ZONE

WEIR

FLAGGED WETLAND EDGE

S85°03'22"W 200.27'

N09°00'21"W 157.38'

S09°00'02"E 157.38'

PROP. 6' WIDE CONCRETE SIDEWALK (TYP.)

WETLAND FLAGS (TYP.)

PROPOSED EROSION CONTROLS @ LOD

20' PRIMARY SETBACK

R-15 ZONE

GB ZONE

A ZONE

CONCRETE RETAINING WALL TOP EL. = 115.45

FLARE END SECTION INV. = 114.23'

ASSF

D.B. 2101

TH#1

TH#2

A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15

PLAN NOTES:

1. CONTRACTOR TO VERIFY BENCHMARK AND EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

2. PLAN IS TO BE USED SOLELY FOR THE USE OF THE SOIL EROSION, RUNOFF AND SEDIMENT CONTROL ORDINANCE FOR THE TOWN OF BRISTOL AND IS NOT AUTHORIZED FOR ANY OTHER USE. CONTRACTOR TO STRICTLY ADHERE TO BRISTOL'S SOIL EROSION, RUNOFF, AND SEDIMENT CONTROL ORDINANCE AT ALL TIMES DURING CONSTRUCTION.

3. SEE ADDITIONAL NOTES ON SHEET 6 OF 6, WHICH NEED TO BE STRICTLY ADHERED TO AS WELL.

ARCHITECT NOTE:

IT IS THE RESPONSIBILITY OF THE ARCHITECT TO FINALIZE SITE LAYOUT & COORDINATE ELEMENTS WITH ENGINEER PRIOR TO CONSTRUCTION. FINAL GRADING & LAYOUT SHALL BE COORDINATED AND VERIFIED THROUGH ARCHITECT DRAWINGS.

BUILDING LOT COVERAGE:

NO EXISTING STRUCTURES
TOTAL EXISTING LOT COVERAGE = 0 SF

PROPOSED GARAGE – 3,500 SF

TOTAL PROPOSED LOT COVERAGE = 3,500 SF
TOTAL LOT AREA = 31,403 SF

LOT COVERAGE=
3,500 SF / 31,403 SF X 100% = 11.14%
11.14% TOTAL LOT COVERAGE < 25% O.K.

TOTAL LOT COVERAGE:

EXISTING GRAVEL PARKING AREA – 12,973 SF
TOTAL EXISTING LOT COVERAGE = 12,973 SF

PROPOSED BUILDING = 3,500 SF
PROPOSED ON-SITE SIDEWALK = 723 SF
PROPOSED PAVEMENT = 8,788 SF

TOTAL PROPOSED LOT COVERAGE = 13,011 SF
TOTAL LOT AREA = 31,011 SF

LOT COVERAGE=
13,011 SF / 31,403 SF X 100% = 43.14%
43.14% TOTAL LOT COVERAGE < 70% O.K.

PARKING REQUIREMENTS:

SERVICE BUSINESS: 1 SPOT / 300 SF GFA REQ.
3,500 SF PROPOSED x 1 SPOT/300 SF GFA = 11.7 REQ.

TOTAL PARKING SPOTS REQUIRED = 11.7
TOTAL PARKING SPOTS PROVIDED = 12

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

APPLICANT:
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 15):
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 16):
LIONEL J. RAMOS
9 SCOTT LANE
BRISTOL, RI 02809

G.F.A. RATIO:

NO EXISTING STRUCTURES
TOTAL EXISTING GFA = 0 SF GFA

PROPOSED GARAGE – 3,500 SF GFA

TOTAL PROPOSED GFA = 3,500 SF GFA
TOTAL LOT AREA = 31,403 SF

GROSS FLOOR AREA RATIO=
3,500 SF / 31,403 SF = 0.11
0.11 < 0.5 O.K.

ZONING-GB: LOT 16

ROUTE 136 (METACOM AVENUE) OVERLAY

DIMENSIONAL REQUIREMENTS	EXISTING	PROPOSED
MIN. LOT AREA: 10,000 SF	31,272 SF	---
MIN. LOT WIDTH: 100 FT	157.0 FT	---
MIN. FRONT YARD: 25 FT	N/A	25.4 FT
MIN. REAR YARD: 30 FT	N/A	123.6 FT
MIN. SIDE YARD: 10 FT	N/A	18.9 FT/64.8 FT
MAX. BLDG. LOT COV.: 40%	N/A	11.14%
MAX. TOTAL LOT COV.: 70%	N/A	43.14%
MIN. DIST. FROM RES. ZONE: 25 FT	N/A	123.6 FT
MAX. FLOOR AREA RATIO: 0.5	N/A	0.11

Thomas J. Principe, III
No. 9808
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

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PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 10'		SHEET NO: 4 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

DRAINAGE & GRADING PLAN-LOT 16

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SETBACK AREA AS SHOWN; CONSTRUCTION ACCESS AND CONTINUED EXISTING SITE USAGE.

BENCHMARK:
PK NAIL SET IN UP
EL.=120.06'
(NAVD-88)

S84°56'58"W
200.26'

ACCESS EASEMENT
P.B. 114 PG. 189
(P.C. 488)

A.P. 128 LOT 82
SHNNON M. LAGARTO
D.B. 2101
PG. 85

"ERNST RAIN GARDEN SEED MIX"

LOAM & SEED

PROPOSED WAREHOUSE
±3,500 SF
T.O.F. EL.=±118.25'
SLAB EL.=±117.75'

A.P. 128 LOT 16
N/F LIONEL J. RAMOS
D.B. 211 PG. 5

AREA
31,403 SQ. FT.
0.7209 ACRES

50' BUFFER ZONE

20' PRIMARY SETBACK

PROP. 6' WIDE CONCRETE SIDEWALK (TYP.)

BITUMINOUS PAVEMENT (TYP.)

PROTECTIVE BARRIER BOULDERS (TYP)

PROP. DUMPSTER (TYP.)

BOX TRAILER "STORAGE"

CONCRETE RETAINING WALL TOP EL.= 115.45

24" RCP FLAIRED END INV.= 114.23'

24" FLAIRED END INV.= 114.24'

R-15 ZONE
GB ZONE

S09°00'02"E
157.38'

204+00
205+00

METACOM AVENUE
ROUTE 114

BITUMINOUS BERM (TYP)

POLE #32

TH#1
TH#2

WETLAND FLAGS (TYP.)

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

APPLICANT:
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 15):
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 16):
LIONEL J. RAMOS
9 SCOTT LANE
BRISTOL, RI 02809

LANDSCAPE NOTES:

1) ALL PLANT MATERIAL TO CONFORM TO ANSI STANDARDS.
2) ALL PLANT MATERIAL TO RECEIVE THREE INCHES OF SHREDDED PINE BARK MULCH.
3) ALL PLANT MATERIAL TO BE GUARANTEED TO SURVIVE AT LEAST ONE GROWING SEASON, OR THEY SHALL BE REPLACED AT THE LANDSCAPE CONTRACTOR'S EXPENSE.
4) ALL PLANT MATERIAL SUBJECT TO VERIFICATION AS TO LOCATION AND SPECIES.
5) THERE WILL BE NO PLANT MATERIAL SUBSTITUTIONS WITHOUT THE WRITTEN CONSENT OF THE LANDSCAPE ARCHITECT.
6) DISTURBED SOILS WITHIN THE PROJECT LIMITS ARE TO BE LOAMED AND SEEDED.

MASTER PLANT SCHEDULE

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
Ac	4	Amelanchier canadensis Autumn Brilliance	Autumn Brilliance shadbush	1.5–2" cal.	B&B	---
CSS	15	Caryopteris x. clandonensis Sapphire Surf	Sapphire Surf Bluebeard	#3	CAN	3' o.c.
CTT	3	Chionanthus retusus Tokyo Tower	Tokyo Tower Chinese fringetree	2–2.5" cal.	B&B	---
Ca	14	Clethra alnifolia	Summersweet	#3	CAN	3' o.c.
CIH	12	Cornus alba Ivory Halo	Ivory Halo dogwood	#3	CAN	3' o.c.
Ig	5	Ilex glabra	Inkberry	2.5–3'	B&B	8' o.c.
Jv	5	Juniperus virginiana	Red cedar	6–7'	B&B	8' o.c.
Mp	5	Myrica pensylvanica	Bayberry	3–4'	B&B	8' o.c.
PBB	14	Pieris Brouwer's Beauty	Brouwer's Beauty Japanese andromeda	24–30"	B&B	3' o.c.
PVC	11	Pinus mugo Valley Cushion	Valley Cushion mugo pine	#3	CAN	3' o.c.
RGL	6	Rhus aromatica 'Gro-Low'	Gro-low fragrant sumac	#3	CAN	3' o.c.
TGG	15	Thuja plicata Green Giant	Green Giant arbor-vitae	6–7'	B&B	8' o.c.

REGISTERED LANDSCAPE ARCHITECT
KAREN A. BECK
No. 920

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
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WWW.PRINCIPECOMPANY.COM

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 10'		SHEET NO: 5 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

LANDSCAPE PLAN- LOT 16

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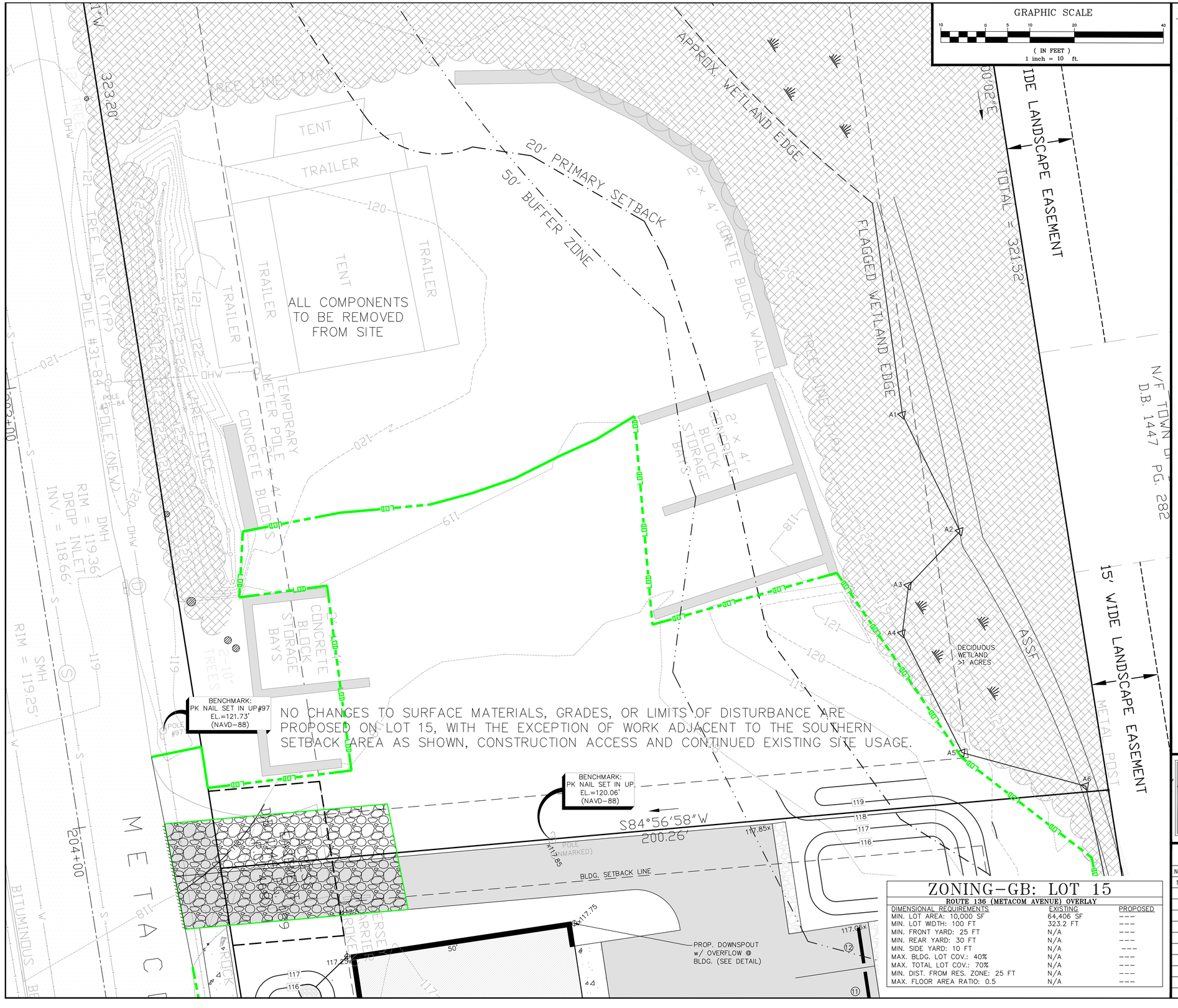

NO CHANGES TO SURFACE MATERIALS, GRADES, OR LIMITS OF DISTURBANCE ARE PROPOSED ON LOT 15, WITH THE EXCEPTION OF WORK ADJACENT TO THE SOUTHERN SETBACK AREA AS SHOWN, CONSTRUCTION ACCESS AND CONTINUED EXISTING SITE USAGE.

ZONING-GB: LOT 15

ROUTE 136 (METACOM AVENUE) OVERLAY

DIMENSIONAL REQUIREMENTS	EXISTING	PROPOSED
MIN. LOT AREA: 10,000 SF	64,406 SF	---
MIN. LOT WIDTH: 100 FT	323.2 FT	---
MIN. FRONT YARD: 25 FT	N/A	---
MIN. REAR YARD: 30 FT	N/A	---
MIN. SIDE YARD: 10 FT	N/A	---
MAX. BLDG. LOT COV.: 40%	N/A	---
MAX. TOTAL LOT COV.: 70%	N/A	---
MIN. DIST. FROM RES. ZONE: 25 FT	N/A	---
MAX. FLOOR AREA RATIO: 0.5	N/A	---

PLAN NOTES:

1. CONTRACTOR TO VERIFY BENCHMARK AND EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.

2. PLAN IS TO BE USED SOLELY FOR THE USE OF THE SOIL EROSION, RUNOFF AND SEDIMENT CONTROL ORDINANCE FOR THE TOWN OF BRISTOL AND IS NOT AUTHORIZED FOR ANY OTHER USE. CONTRACTOR TO STRICTLY ADHERE TO BRISTOL'S SOIL EROSION, RUNOFF, AND SEDIMENT CONTROL ORDINANCE AT ALL TIMES DURING CONSTRUCTION.

3. SEE ADDITIONAL NOTES ON SHEET 6 OF 6, WHICH NEED TO BE STRICTLY ADHERED TO AS WELL.

ARCHITECT NOTE:

IT IS THE RESPONSIBILITY OF THE ARCHITECT TO FINALIZE SITE LAYOUT & COORDINATE ELEMENTS WITH ENGINEER PRIOR TO CONSTRUCTION. FINAL GRADING & LAYOUT SHALL BE COORDINATED AND VERIFIED THROUGH ARCHITECT DRAWINGS.

BUILDING LOT COVERAGE:

NO EXISTING STRUCTURES
TOTAL EXISTING LOT COVERAGE = 0 SF

NO PROPOSED STRUCTURES
TOTAL PROPOSED LOT COVERAGE = 0 SF

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

APPLICANT:	OWNER (LOT 15):	OWNER (LOT 16):
DAVID J. RAMOS	DAVID J. RAMOS	LIONEL J. RAMOS
12 RUTH AVENUE	12 RUTH AVENUE	9 SCOTT LANE
BRISTOL, RI 02809	BRISTOL, RI 02809	BRISTOL, RI 02809

PROPOSED CONDITIONS PLAN-LOT 15

Thomas J. Principe, III
REGISTERED PROFESSIONAL ENGINEER

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ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPECOMPANY.COM

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 10'		SHEET NO: 6 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

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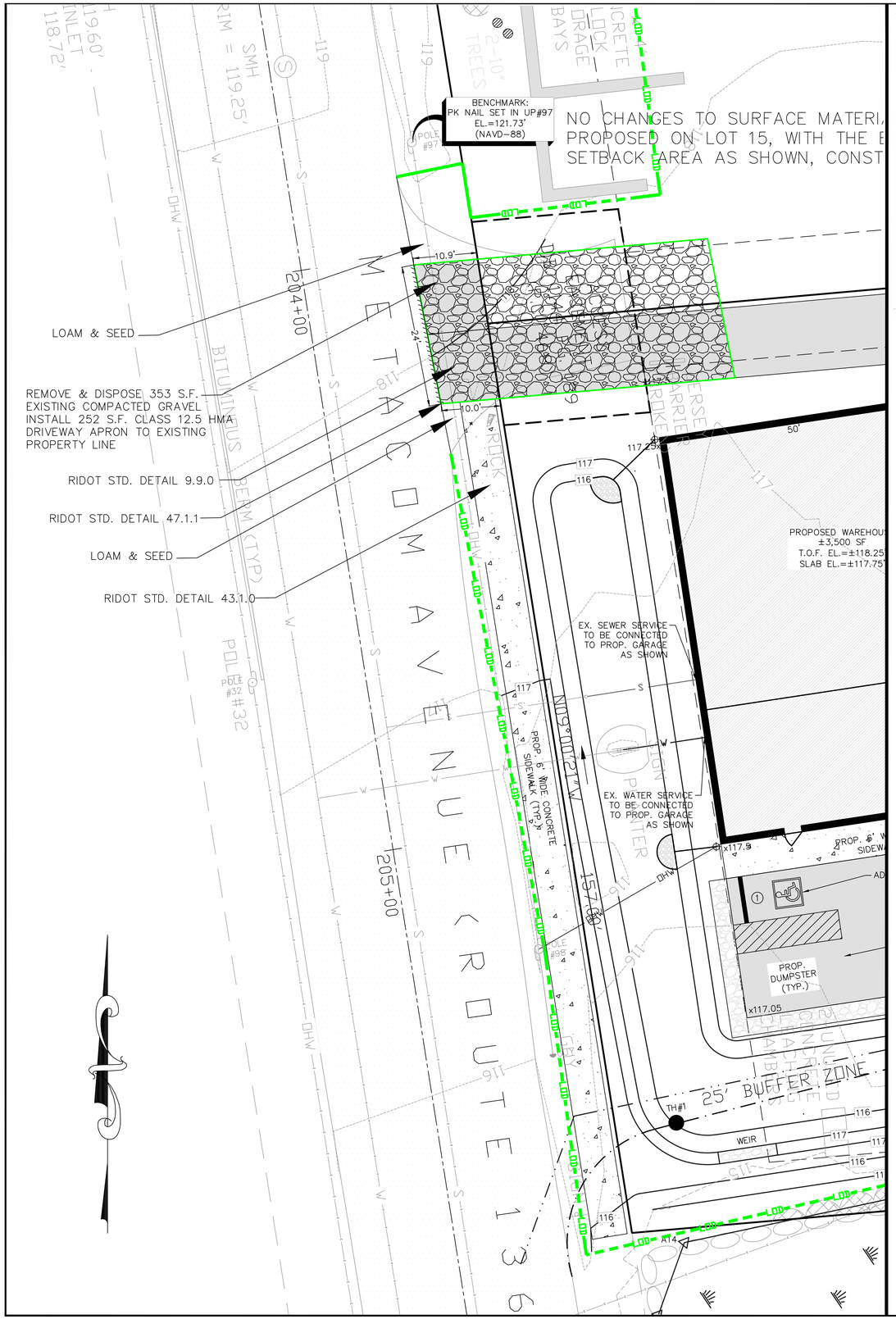
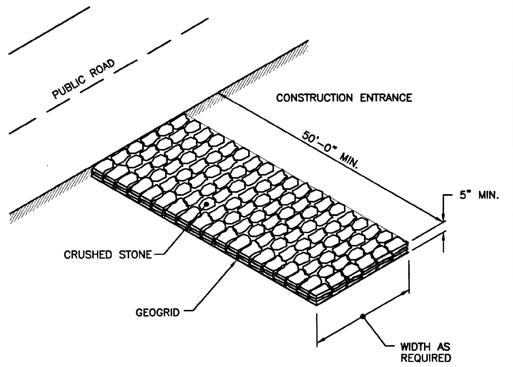




NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

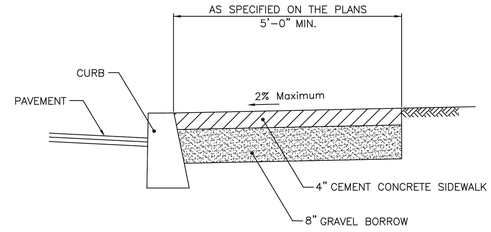
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

CONSTRUCTION ACCESS

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 9.9.0



NOTES
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.

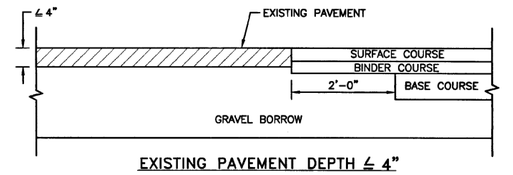
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	3/1/05
2	MLP	06/01/10

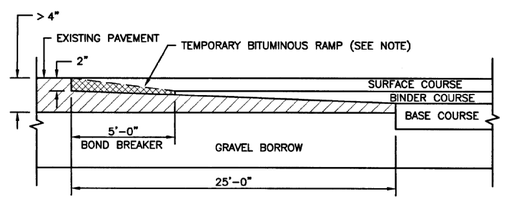
CEMENT CONCRETE SIDEWALK

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 43.1.0



EXISTING PAVEMENT DEPTH ≤ 4"



EXISTING PAVEMENT DEPTH > 4"

NOTE:
A BOND BREAKER (TAPERED OR EQUIVALENT) WILL BE PLACED 5'-0" FROM THE JOINT AND COVERED WITH THE BINDER COURSE AS THE TEMPORARY RAMP. PRIOR TO PLACING THE SURFACE COURSE, THE BINDER COURSE AND BOND BREAKER WILL BE REMOVED.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

TRANSVERSE PAVEMENT CUT AND MATCH

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 47.1.1

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

RIDOT NOTES:

1. THERE WILL BE NO IMPACT TO THE STATE HIGHWAY DRAINAGE SYSTEM AS THERE IS NO PROPOSED INCREASE IN UNTREATED IMPERVIOUS AREA AND NO CHANGE IN WATERSHED FLOW.

2. ALL WORK TO BE DONE WITHIN THE STATE HIGHWAY RIGHT OF WAY (ROW) SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.

3. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICED 2009, INCLUDING ALL REVISIONS.

STATE PERMITS REQUIRED/APPLIED FOR:

RIDEM WETLANDS IA#10310 (7/31/25)
RIDEM STORMWATER IA#10310 (7/31/25)
RIDOT PAP#25-131 (8/8/25)

1. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ANY APPLICABLE LOCAL, STATE AND FEDERAL LAWS GOVERNING HIS INTENDED ACTIVITIES. OSHA REGULATIONS ARE APPLICABLE OF PROJECT SITE CONSTRUCTION ACTIVITIES.

2. ALL CONSTRUCTION WILL BE UNDERTAKEN IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE TOWN OF TIVERTON.

3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.

4. IF THE MUNICIPALITY REQUIRES A PROJECT PRE-CONSTRUCTION CONFERENCE, THE PROJECT DEVELOPER AND THE PROJECT CONTRACTOR WILL ATTEND AND WILL PROVIDE ALL REQUESTED MATERIALS PRIOR TO COMMENCING ANY WORK.

5. IF CEMENT CONCRETE MIX TRUCKS ARE TO BE WASHED OUT ON SITE, THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING A WASH OUT AREA WITH APPROPRIATE PROTECTION CONTROLS.

6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING COLLECTION AND STORAGE LOCATIONS ON-SITE FOR ALL CONSTRUCTION DEBRIS AND TRASH SO THAT THIS MATERIAL DOES NOT BECOME A NEIGHBORHOOD NUISANCE.

RIDOT PAP PLAN

APPLICANT:	OWNER (LOT 15):	OWNER (LOT 16):
DAVID J. RAMOS	DAVID J. RAMOS	LIONEL J. RAMOS
12 RUTH AVENUE	12 RUTH AVENUE	9 SCOTT LANE
BRISTOL, RI 02809	BRISTOL, RI 02809	BRISTOL, RI 02809

Thomas J. Principe, III
No. 8189
REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
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TIVERTON, RI 02878
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REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: 1" = 10'		SHEET NO: 7 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

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GENERAL NOTES

1. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
2. IT SHALL ALSO BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
3. BEFORE STARTING ANY CONSTRUCTION THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ANY HYDRANTS, WATER MAINS, BLOWOFF ASSEMBLIES, FITTINGS, AND VALVES WITH THE LOCAL WATER DEPARTMENT AS TO TYPE AND MANUFACTURER.
4. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY COMPANY. A 48 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.
5. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE "R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (REVISION OF 1997)" WITH ALL CORRECTIONS AND ADDENDA AND THE 1974 R.I. STANDARD DETAILS WITH ALL CORRECTIONS AND ADDENDA AND THE TOWN OF BRISTOL STANDARD SPECIFICATIONS AND DETAILS.
6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE-OFF IN COMPUTING ANY ESTIMATES.
7. EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEEDED, SEE EROSION CONTROL PROGRAM.
8. UNLESS OTHERWISE SPECIFIED, ALL STORM DRAINS SHALL BE REINFORCED CONCRETE CLASS III PIPE.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS. THAT INCLUDES ANY CONSTRUCTION TO BRING UTILITIES TO SITE, ANY REPAIRS, ANY TRENCHING REQUIRED, HYDRANTS, ANY AND ALL CONSTRUCTION FOR ACCEPTANCE OF ROADS AND EASEMENTS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
11. THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR. "DIG SAFE" SHALL BE CONTACTED BY THE CONTRACTOR AS PART OF THIS VERIFICATION.
12. IN ALL EXCAVATION AND PLACEMENT OF FILL, THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.
13. ALL WATER MAINS SHALL BE DEFLECTED ALONG A CURVE WITH A MINIMUM RADIUS OF 250' AT ANY LOCATION WHERE THIS IS NOT POSSIBLE, PROPER BENDS AND FITTINGS SHALL BE USED.
14. ALL EXCESS SOIL, STUMPS, TREES, ROCKS, BOULDERS, AND OTHER REFUSE SHALL BE DISCARDED OFF SITE, IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.

EROSION CONTROL & SOIL STABILIZATION PROGRAM

1. DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
2. ALL DISTURBED SLOPES, EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE, FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
3. THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STD SPECIFICATION M 18.
4. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCOLUM FOR EACH VARIETY.
5. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWNG PERMANENT SEEDING MIXTURES:

A. MOWED AREA (ALL FLATS OR SLOPES LESS THAN 3:1)

MIXTURE:	% BY WEIGHT:	SEEDING DATES:
RED FESCUE	75	APRIL 1 – JUNE 15
KENTUCKY BLUEGRASS	15	AUGUST 15 – OCTOBER 15
COLONIAL BENTGRASS	5	
PERENNIAL RYEGRASS	5	
TOTAL:	100 lbs/Ac.	

B. UNMOWED AREA OR INFREQUENTLY MOSED (ALL SLOPES GREATER THAN 3:1)

MIXTURE:	% BY WEIGHT:	SEEDING DATES:
RED FESCUE	75	APRIL 1 – JUNE 15
COLONIAL BENTGRASS	5	AUGUST 15 – OCTOBER 15
PERENNIAL RYEGRASS	5	
BIRDSFOOT TREFOIL	15	
TOTAL:	100 lbs/Ac.	

6. TEMPORARY TREATMENTS SHALL CONSIST OF A STRAW, OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS) THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
7. STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3,000 – 4,000 lbs/Ac.
8. ALL STRAW BALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN HELP MINIMIZE THE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

MIXTURE:	lbs./1,000 S.F.	lbs/Ac.	SEEDING DATES:
ANNUAL RYEGRASS	1.0 – 1.5	40 – 60	3/1 – 6/1
PERENNIAL RYEGRASS	1.0 – 1.5	40 – 60	3/1 – 6/1
SUDAN GRASS	0.7 – 1.0	30 – 40	5/15 – 8/15
MILLET	0.7 – 1.0	30 – 40	5/15 – 8/15
WINTER RYE	3.0	120	4/15 – 6/15
OATS	0.5 – 5.0	86 – 120	3/1 – 6/15
WEEPING COVER GRASS	0.5 – 5.0	5 – 20	5/1 – 7/1

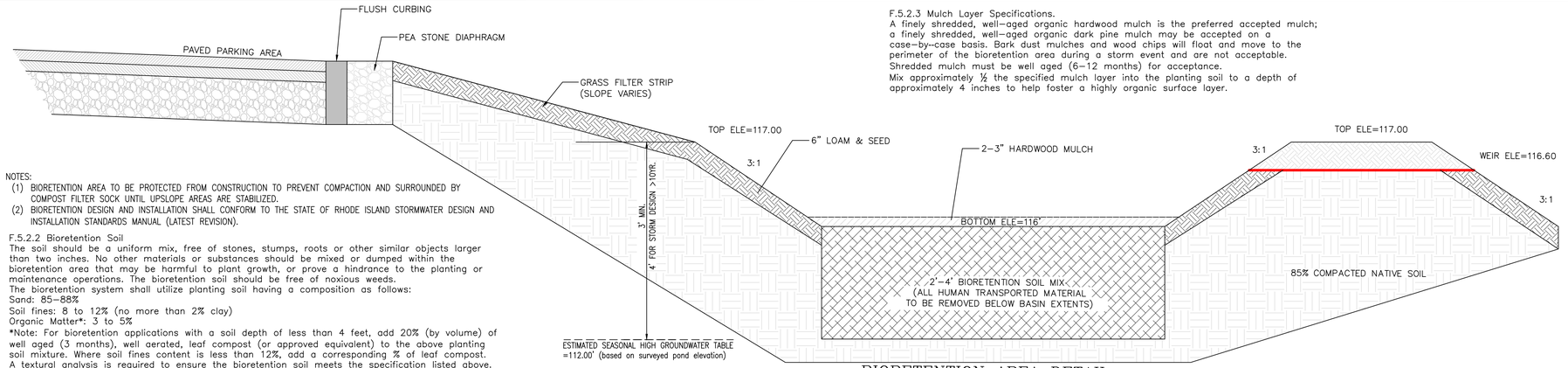
9. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
10. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.P.W. STD SPECIFICATIONS SECTION 202.
11. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
12. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAYS, THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.
13. ON BOTH STEEP AND LONG SLOPES CONSIDERATION SHALL BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
14. REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION
15. THE DRAINAGE SYSTEM SHALL RECEIVE ONE FINAL CLEANING PRIOR TO ACCEPTANCE TO THE OVERALL PROJECT BY THE OWNER SEDIMENTS SHALL BE DISPOSED OF IN A PROPER MANNER.

ORDER OF PROCEDURE:

1. PRIOR TO ANY CLEARING AND GRUBBING OR ANY ROUGH GRADING, TEMPORARY STRAW BALES AND SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF CONSTRUCTION AS PER THE PLANS (I.E. ALONG ROADWAYS, STREAM BANKS, CRITICAL AREAS, ETC.).
2. ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS FOR TEMPORARY CONTROL.
3. IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
4. TEMPORARY STRAW BALES AND SANDBAGS ALONG AND AT THE ENDS OF ROADWAYS MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
5. STRAW BALES LOCATED AT DRAINAGE OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

SEDIMENTATION CONTROL PROGRAM:

1. RIP RAP SPLASH PADS SHALL BE INSTALLED AT THE OUTLETS FOR ALL CULVERTS DISCHARGING INTO A WATERWAY.
2. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL ENTERING THE WETLANDS.
3. ALL DISTURBED AREAS SUBJECT TO EROSIVE TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL BE SEEDED AND PROTECTED WITH A FIBER MULCH.
4. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
5. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
6. CARE SHOULD BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.
7. ADDITIONAL STRAW BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT.
8. ALL SEDIMENTS SHALL BE REMOVED FROM THE DRAINAGE AND DETENTION FACILITIES AS SCHEDULED FOR EACH FACILITY (SEE DETENTION BASIN MAINTENANCE, THIS SHEET).
9. REFERENCE THE "R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, AS A GUIDE.



NOTES:
(1) BIORETENTION AREA TO BE PROTECTED FROM CONSTRUCTION TO PREVENT COMPACTION AND SURROUNDED BY COMPOST FILTER SOCK UNTIL UPSLOPE AREAS ARE STABILIZED.
(2) BIORETENTION DESIGN AND INSTALLATION SHALL CONFORM TO THE STATE OF RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL (LATEST REVISION).

F.5.2.2 Bioretention Soil
The soil should be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances should be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The bioretention soil should be free of noxious weeds.
The bioretention system shall utilize planting soil having a composition as follows:
Sand: 85–88%
Soil fines: 8 to 12% (no more than 2% clay)
Organic Matter*: 3 to 5%
*Note: For bioretention applications with a soil depth of less than 4 feet, add 20% (by volume) of well aged (3 months), well aerated, leaf compost (or approved equivalent) to the above planting soil mixture. Where soil fines content is less than 12%, add a corresponding % of leaf compost.
A textural analysis is required to ensure the bioretention soil meets the specification listed above.
The bioretention soil should also be tested for the following criteria:
pH range 5.2 – 7.0; magnesium not to exceed 32 ppm; phosphorus P2O5 not to exceed 69 ppm; potassium K2O not to exceed 78 ppm; soluble salts not to exceed 500 ppm.

F.5.2.3 Mulch Layer Specifications.
A finely shredded, well–aged organic hardwood mulch is the preferred accepted mulch; a finely shredded, well–aged organic dark pine mulch may be accepted on a case–by–case basis. Bark dust mulches and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable.
Shredded mulch must be well aged (6–12 months) for acceptance.
Mix approximately ½ the specified mulch layer into the planting soil to a depth of approximately 4 inches to help foster a highly organic surface layer.

BIORETENTION AREA DETAIL

NOT TO SCALE

BMP REQUIRED MAINTENANCE:

MONTHLY:

INSPECT AND REMOVE ANY TRASH
REMOVE ANY INVASIVE SPECIES PLANTS

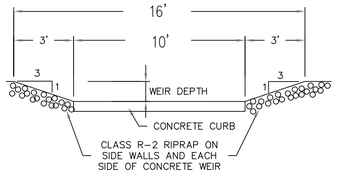
ANNUALLY:

MULCH– SPRING, AS NEEDED
REPLACE ANY DEAD VEGETATION–SPRING
REMOVE DEAD VEGETATION–FALL OR SPRING
PRUNE–SPRING

AS NEEDED:

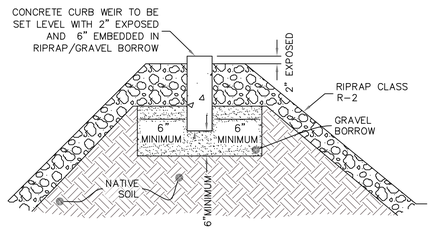
REPLACE SOIL MEDIA AND PLANTS WHEN PONDING DOES NOT SUBSIDE WITHIN 72 HRS
(CAREFUL MAINTENANCE SHOULD PROLONG THIS REQUIREMENT)

*ALL PLANT MATERIAL SHALL BE WATERED AND MAINTAINED BY THE OWNER TO ASSURE THAT SUITABLE GROWTH HAS BEEN ESTABLISHED.



Emergency Spillway / Overflow Weir Detail

NOT TO SCALE



ALL BACKFILL SHALL BE FREE FROM ORGANIC OR HTM.

Curb Outlet Weir Cross Section

NOT TO SCALE

Rain Garden Mix - ERNMX-180

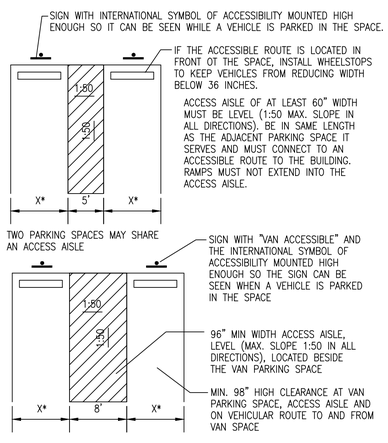
	Botanical Name	Common Name	Price/Lb
25.60 %	*Schizachyrium scoparium, Fort Indiantown Gap-PA Ecotype*	Little Bluestem, Fort Indiantown Gap-PA Ecotype	17.91
20.00 %	*Elymus virginicus, Madison-NY Ecotype*	Virginia Wildrye, Madison-NY Ecotype	11.22
9.00 %	*Carex vulpinoidea, PA Ecotype*	Fox Sedge, PA Ecotype	33.80
8.00 %	*Echinacea purpurea*	Purple Coneflower	46.80
7.80 %	*Chasmanthium latifolium, WV Ecotype*	River Oats, WV Ecotype	104.00
6.80 %	*Panicum rigidulum, PA Ecotype*	Redtop Panicgrass, PA Ecotype	78.00
3.00 %	*Coreopsis lanceolata*	Lanceleaf Coreopsis	31.20
3.00 %	*Rudbeckia hirta*	Blackeyed Susan	33.80
2.50 %	*Verbena hastata, PA Ecotype*	Blue Vervain, PA Ecotype	41.60
2.00 %	*Chamaecrista fasciculata, PA Ecotype*	Partridge Pea, PA Ecotype	13.00
2.00 %	*Panicum clandestinum, Tioga*	Deertongue, Tioga	23.87
1.50 %	*Asclepias incarnata, PA Ecotype*	Swamp Milkweed, PA Ecotype	192.40
1.50 %	*Heliopsis helianthoides, PA Ecotype*	Oxeye Sunflower, PA Ecotype	36.40
1.30 %	*Penstemon digitalis, PA Ecotype*	Tall White Beardtongue, PA Ecotype	182.00
1.20 %	*Zizia aurea, PA Ecotype*	Golden Alexanders, PA Ecotype	62.40
0.70 %	*Pycnanthemum tenuifolium*	Narrowleaf Mountainmint	260.00
0.50 %	*Aster novae-angliae*	New England Aster	390.00
0.50 %	*Baptisia australis, Southern WV Ecotype*	Blue False Indigo, Southern WV Ecotype	104.00
0.50 %	*Juncus effusus*	Soft Rush	52.00
0.50 %	*Juncus tenuis, PA Ecotype*	Path Rush, PA Ecotype	65.00
0.50 %	*Senna hebecarpa, VA & WV Ecotype*	Wild Senna, VA & WV Ecotype	31.20
0.50 %	*Vernonia noveboracensis, PA Ecotype*	New York Ironweed, PA Ecotype	286.00
0.30 %	*Monarda fistulosa, Fort Indiantown Gap-PA Ecotype*	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	104.00
0.20 %	*Aster lateriflorus*	Calico Aster	364.00
0.20 %	*Solidago nemoralis, PA Ecotype*	Gray Goldenrod, PA Ecotype	312.00
0.10 %	*Aster pilosus, PA Ecotype*	Heath Aster, PA Ecotype	286.00
0.10 %	*Eupatorium perfoliatum, PA Ecotype*	Boneset, PA Ecotype	208.00
0.10 %	*Mimulus ringens, PA Ecotype*	Square Stemmed Monkeyflower, PA Ecotype	260.00
0.10 %	*Solidago juncea, PA Ecotype*	Early Goldenrod, PA Ecotype	364.00

100.00 %

Seeding Rate: 20 lb per acre with a cover crop. For sites that drain within 24 hours of a rain event use one of the following cover crops:Oats (1 Jan to 31 Jul; 30 lbs/acre), Japanese Millet (1 May to 31 Aug; 10 lbs/acre), or grain rye (1 Aug to 31 Dec; 30 lbs/acre).

EROSION CONTROL, SOIL STABILIZATION AND SEDIMENT CONTROL PLAN

1. PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRUBBING, DEMOLITION OR EARTHWORK ACTIVITY, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLANS ARE TO BE INSTALLED BY THE CONTRACTOR.
2. CONSTRUCTION ACCESS STABILIZATION ENTRANCE PADS ARE TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE GRUBBING OR EARTHWORK ACTIVITY.
3. EXISTING CATCH BASINS ARE TO BE PROTECTED WITH HAY BALES AND/OR SILT SACS PRIOR TO THE START OF SITE GRUBBING, EARTHWORK OR UNDERGROUND UTILITY AND DRAINAGE INFRASTRUCTURE INSTALLATION TO SERVE THE DEVELOPMENT SITE.
4. THE PROJECT CONSTRUCTION SEQUENCE, TO THE EXTENT PRACTICAL, SHOULD REQUIRE THE INSTALLATION OF DOWN GRADE AND OFF SITE STORM DRAINAGE SYSTEM IMPROVEMENTS BEFORE THE START OF SITE GRUBBING AND EARTHWORK ACTIVITY.
5. TEMPORARY SITE SLOPE TREATMENTS FOR SOIL STABILIZATION SHALL CONSIST OF STRAW, FIBER MULCH, RIP RAP OR PROTECTIVE COVERS SUCH AS MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, AND EXCELSIOR OR EQUAL PRODUCTS). THESE AND OTHER ACCEPTABLE MEASURES SHALL BE INCORPORATED INTO THE SITE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
6. CONSTRUCTION SITES ARE DYNAMIC, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND OR MOVEMENT AND MAINTENANCE OF EROSION CONTROLS, SOIL STABILIZATION AND SEDIMENT CONTROL MEASURES AS NEEDED TO MAXIMIZE THE INTENT OF THE PLAN FOR ALL SITE CONDITIONS THROUGHOUT THE CONSTRUCTION PERIOD.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION, MAINTENANCE, REPAIR, AND REPLACEMENT OF EROSION CONTROLS, SOIL STABILIZATION AND SEDIMENT CONTROL DEVICES UNTIL AN ACCEPTABLE PERMANENT VEGETATIVE GROWTH IS ESTABLISHED. THE CONTRACTOR SHALL MAINTAIN A DETAIL LOG OF ALL EROSION CONTROL INSPECTIONS, COMPLAINTS RELATED TO EROSION OR SEDIMENT, AND CORRECTIVE REMEDIAL MEASURES TAKEN THROUGHOUT THE COURSE OF THE PROJECT CONSTRUCTION.
8. SOIL EROSION AND SEDIMENT CONTROL IS NOT LIMITED TO DAMAGES CAUSED BY WATER BUT ALSO INCLUDES EROSION AND SEDIMENT RESULTING FROM WINDS. MEASURES, SUCH AS TEMPORARY GROUND COVERS, WATER AND CALCIUM APPLICATIONS ARE TO BE UNDERTAKEN AS NEEDED TO MINIMIZE WIND RELATED SOIL AND DUST CONTROL.
9. STOCK PILES OF EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS OR WETLANDS. STOCK PILES SHALL HAVE SIDE SLOPES NO GREATER THAN THIRTY PERCENT (30%). STOCK PILES SHALL BE SURROUNDED ON THE DOWN GRADIENT OF THE EXISTING GROUND SURFACE BY STRAW BALES OR SILT FENCE. THE STOCK PILES SHALL ALSO BE SEEDED OR STABILIZED IN SOME MANOR TO PREVENT SOIL EROSION.
10. THE SMALLEST POSSIBLE SITE AREAS SHALL BE DISTURBED OR EXPOSED AT ONE TIME AND DENUDED SLOPES OR WORK AREAS SHALL NOT BE LEFT EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS INACTIVE PERIODS OR SITE WORK SHUT DOWNS.
11. TO THE EXTENT POSSIBLE, ALL DISTURBED AREAS MUST BE SEEDED OR STABILIZED WITHIN THE CONSTRUCTION SEASON. STABILIZATION OF ONE FORM OR ANOTHER SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
12. EXPOSED STEEP OR LONG SLOPES SHOULD BE TREATED WITH "CRIMPING" OR "TRACKING" TO REDUCE EROSION AND SEDIMENT AND TO TACK DOWN SEEDING OR MULCH APPLICATIONS.
13. IF CONCRETE IS TO BE USED ON SITE, THE CONTRACTOR MUST ESTABLISH AND MAINTAIN SPECIFIC WASHOUT AREAS FOR THE CONCRETE TRUCKS WITH APPROPRIATE PROTECTION CONTROLS.
14. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING COLLECTION AND STORAGE LOCATIONS ON–SITE FOR ALL CONSTRUCTION DEBRIS AND TRASH SO THAT THIS MATERIAL DOES NOT BECOME A NEIGHBORHOOD NUISANCE.
15. EXISTING TREES AND VEGETATION WILL BE RETAINED WHENEVER FEASIBLE.
16. SITE SOIL EROSION AND SOIL STABILIZATION AND SEDIMENT CONTROLS MUST CONFORM TO ALL REQUIREMENTS OF THE APPLICABLE LOCAL COMMUNITY ORDINANCES AND STATE REGULATIONS.



HANDICAP PARKING SPACES

NOT TO SCALE

APPLICANT:
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 15):
DAVID J. RAMOS
12 RUTH AVENUE
BRISTOL, RI 02809

OWNER (LOT 16):
LIONEL J. RAMOS
9 SCOTT LANE
BRISTOL, RI 02809

CONSTRUCTION DETAILS–1

Thomas J. Principe, III
RHODE ISLAND
REGISTERED
PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPECOMPANY.COM

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 8 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC–2024–2

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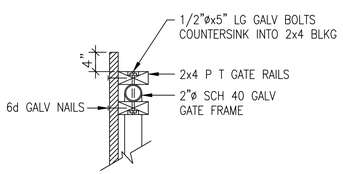

GATE DETAIL
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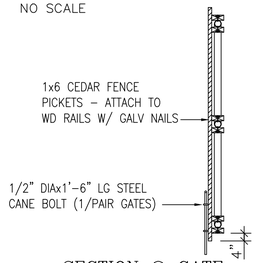

SECTION @ GATE
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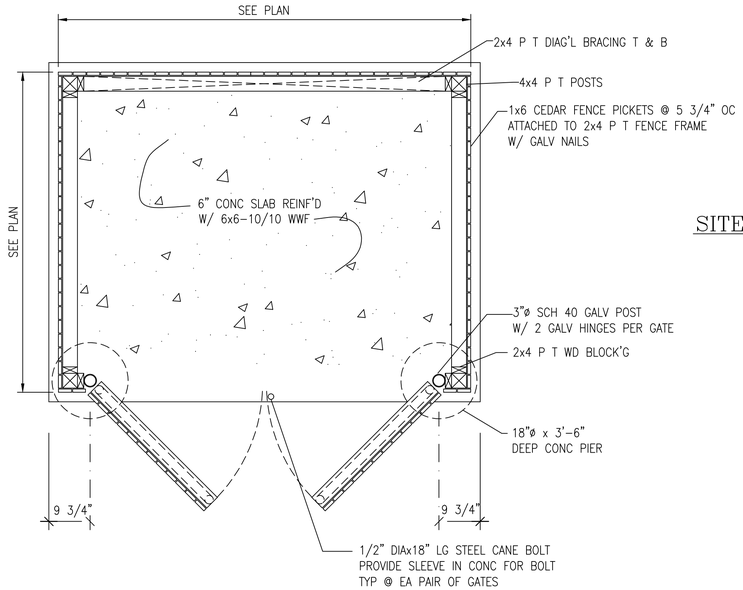

TRASH ENCLOSURE PLAN
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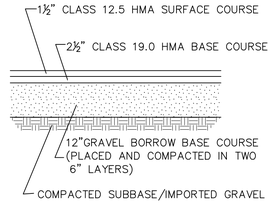
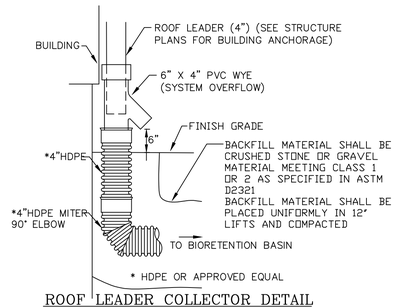


SITE PAVEMENT TYPICAL CROSS SECTION
NOT TO SCALE



ROOF LEADER COLLECTOR DETAIL
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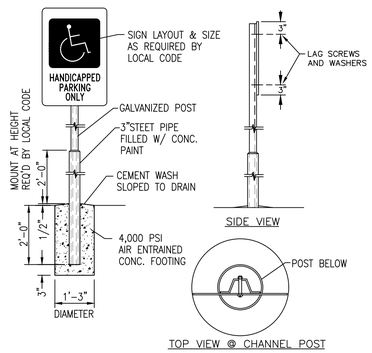
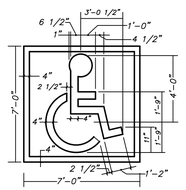
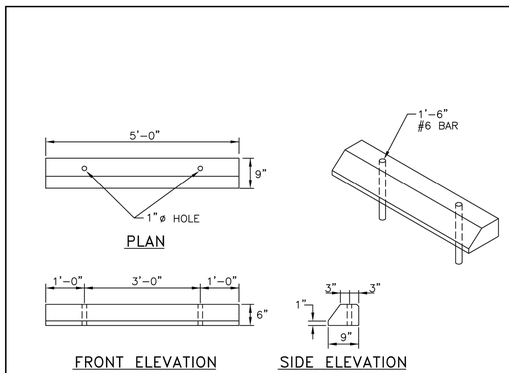


HANDICAPPED PARKING SIGN
NOT TO SCALE



NOTE:
SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL. SYMBOLS ARE REQUIRED TO CONTRAST WITH BACKGROUND. (COLOR NO. 105090 IN FEDERAL STANDARD 595a) DOUBLE COAT. (TYPICAL)

HANDICAPPED PARKING SYMBOL
NOT TO SCALE



NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. ALL EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
3. ALL SURFACES TO HAVE A SPONGE FLOAT FINISH.

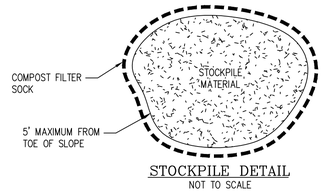
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE
1	MLP	Mar 05

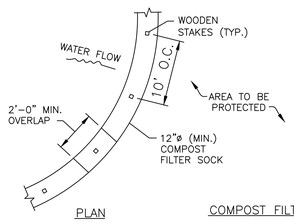
PRECAST CONCRETE CAR STOPS

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 7.2.4



STOCKPILE DETAIL
NOT TO SCALE



NOTES:
1. ALL MATERIAL TO MEET REQUIREMENTS OF SECTION 206 OF RI STANDARD SPECIFICATIONS.
2. COMPOST MATERIAL MUST BE ACCEPTED BY THE ENGINEER PRIOR TO PLACEMENT.

COMPOST FILTER SOCK

PERIMETER EROSION CONTROLS
NOT TO SCALE

BollardsPlus
www.BollardBarrier.com

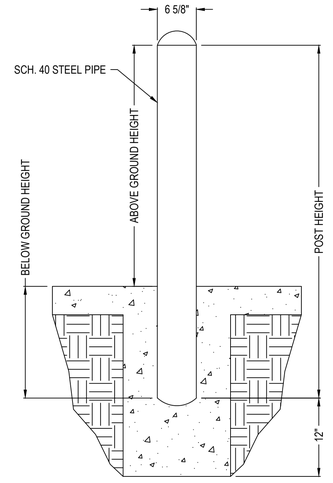
BOLLARDS PLUS
2121 GOLDEN RD. SUITE 2A
SPRING, TX 77380
PHONE: (713) 396-6166
www.bollardbarrier.com

☑ SELECT DESIRED FINISH:
- ☐ BLASTED, PRIMED AND PAINTED*
- ☐ BLASTED AND PRIMED
- ☐ HOT DIP GALVANIZED
- ☐ POWDER COATED

☑ SELECT DESIRED POST HEIGHT:
- ☐ 60"
- ☐ 72"
- ☐ 84"
- ☐ 96"
- ☐ CUSTOM HEIGHT: _____

☑ SELECT DESIRED ABOVE GROUND HEIGHT:
- ☐ 36"
- ☐ 48"

☑ SELECT DESIRED BELOW GROUND HEIGHT:
- ☐ 24"
- ☐ 36"



FRONT VIEW

SPECIFICATIONS
WEIGHT: 18.97 LB / FOOT
*CONTACT MANUFACTURER FOR CUSTOM PAINT COLORS.
MANUFACTURERS NOTES
1. RECOMMENDED FOR CONRETE, ASPHALT OR SOIL INSTALLATION.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER ERSC-2024

BOLLARD DETAIL
LOCATIONS T.B.D.

ERSC-202 — REVISION DATE 27/08/2025

CONSTRUCTION DETAILS-2

Thomas J. Principe, III — REGISTERED PROFESSIONAL ENGINEER

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPECOMPANY.COM

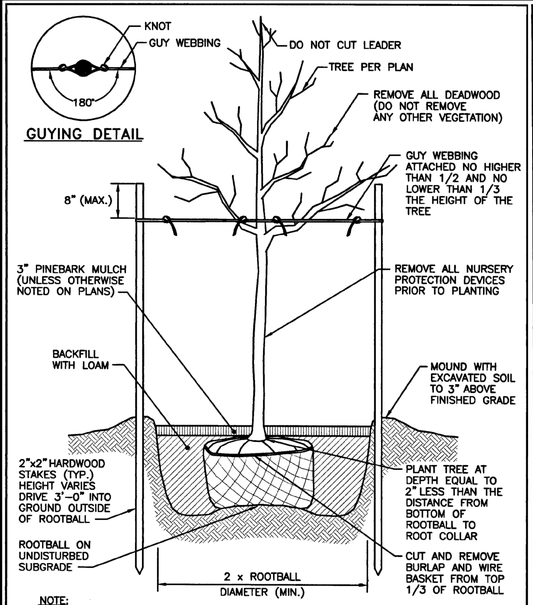
REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 9 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

C:\Users\admin\Principe Engineering Dropbox\ERSC PLANS\2024\ERSC-2024-2_670 Metacom Avenue_Bristol_Dave Ramos\Drawings\ERSC-2024-2_-2024-2_670 METACOM AVENUE_BRISTOL_PRELIMINARY-rev.dwg, DWG To PDF.pc3



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS.

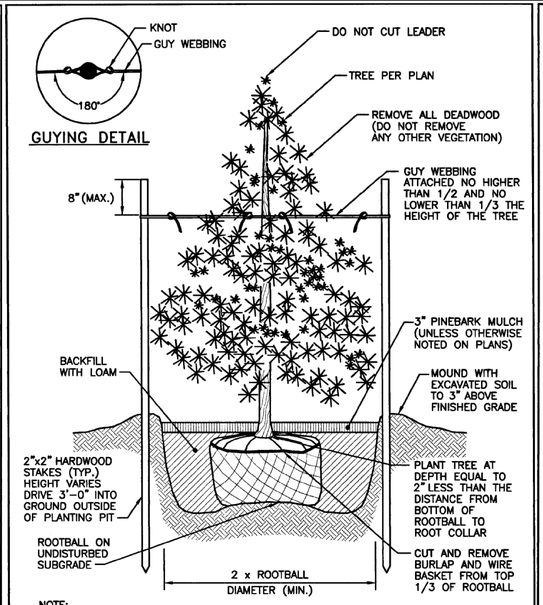
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

LARGE TREE STAKING AND PLANTING DETAIL (2" CALIPER AND GREATER)

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 50.1.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS.

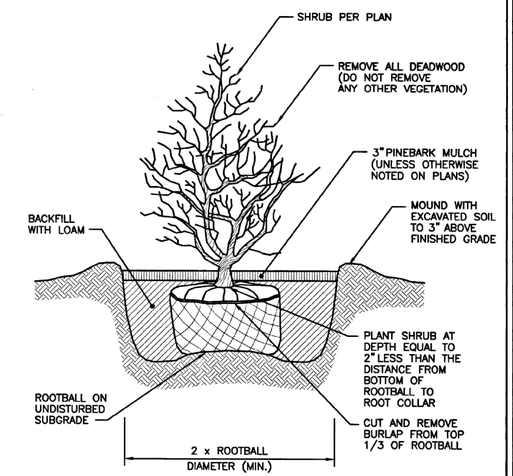
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

EVERGREEN TREE PLANTING DETAIL (4'-0" HIGH AND GREATER)

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 50.2.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS.

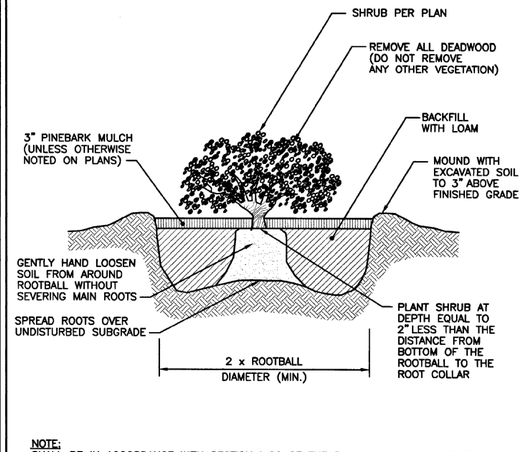
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

BALL AND BURLAP SHRUB PLANTING DETAIL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 50.3.0



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION L.06 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

REVISIONS		
NO.	BY	DATE

CONTAINER GROWN SHRUB PLANTING DETAIL

CHIEF ENGINEER TRANSPORTATION — CHIEF DESIGN ENGINEER TRANSPORTATION — JUNE 15, 1998 ISSUE DATE

R.I. STANDARD 50.3.1

CONSTRUCTION DETAILS-3

Thomas J. Principe, III
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

No.	DATE	DRWN	CHKD
1.	8/27/25	KAB	TJP

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
WWW.PRINCIPECOMPANY.COM

PRELIMINARY SUBMISSION
for
668 & 670 METACOM AVENUE
AP 128 LOTS 15 & 16
in
BRISTOL, RHODE ISLAND

SCALE: AS NOTED		SHEET NO: 10 of 10
DRAWN BY: KAB	DESIGN BY: KAB	CHECKED BY: TJP
DATE: 08/08/2025		PROJECT NO.: ERSC-2024-2

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PARE CORPORATION

September 5, 2025

Diane Williamson, AICP, CFM
Director of Community Development
Town of Bristol
10 Court Street
Bristol, RI 02809

Re: **Preliminary Submission Plan**
674 Metacom Avenue
Owner: Lionel J. Ramos
AP 128 Lot 15 & 16
Pare Project No. 98166.00, Task 109

Dear Ms. Williamson:

Pare Corporation (Pare) has completed our review of the Preliminary Plan Submission for 668 & 670 Metacom Avenue received from Principe Company, Inc. The materials provided for review include:

- Preliminary Plan Submissions for 668 and 670 Metacom Avenue prepared by Principe Company, Inc dated August 8, 2025,
- Drainage Analysis prepared by Principe Company, Inc dated August 8, 2025,
- Response to Comments dated July 30, 2024,
- Trip Generation Statement prepared by Principe Company, Inc dated August 8, 2025, and
- Architectural Plans dated August 5, 2025.

Pare offers the following comments pertaining to these submissions:

Waivers Requested:

1. Land Development Projects Section: Sidewalks shall be required to be installed on one side of new street in subdivisions and multifamily developments. No sidewalks are proposed in front of Lot 15.

   Response: The general consensus during the recent TRC (Technical Review Committee) meeting was that sidewalks would be pointless in front of Lot 15 (and in front of Lot 16, although one is proposed here) as they don't connect to anything and Lot 15 is not being developed.

   Pare Response: Noted.

General:

1. Town of Bristol Zoning Ordinance §28-22 Table A states that a warehouse in a GB zone is only permitted upon approval of the zoning board with a special use permit. Confirm that this warehouse has a been approved by the zoning board.

Response: Applicant is proposing to construct a garage/warehouse structure to support the commercial services business currently in operation. Applicant is seeking modification of a legal nonconforming use and a preexisting condition on site and is subject to Unified Development Plan Review. Applicant has requested the appropriate relief regarding the proposed structure.

Pare Response: Noted.

2. The project requires submission to the Rhode Island Department of Environmental Management (RIDEM) for Freshwater Wetlands Review and RIPDES Authorization.

   Response: A submission to RIDEM for both Wetlands and Stormwater was made on July 31, 2025.

   Pare Response: A copy of the applications should be provided to the Town.

Plans:

1. The Town of Bristol Subdivision and Development Review Regulations Appendix E Section C require all sheets to include:
   a. Notation of any permits and/or agreements obtained from or made with State and Federal agencies, including permit number if applicable.
   b. Names and address of adjoining communities or agencies requiring notice under these regulations.

   Response: Only a. is applicable and has been addressed on the plans.

   Pare Response: Accepted.

2. The proposed building is identified as a "warehouse" and as a "garage." Review and revise the plans to remove inconsistent terminology.

   Response: Applicant is proposing to construct a garage/warehouse structure to support the commercial services business currently in operation. Applicant is seeking modification of a legal nonconforming use and a preexisting condition on site and is subject to Unified Development Plan Review. Applicant has requested the appropriate relief regarding the proposed structure.

   Pare Response: Noted. The descriptions noted on the plans should match the use determined in the zoning relief.

   A condition may be included prohibiting exterior vehicle service, maintenance, and equipment cleaning; auto fueling; and road salt storage and loading. These uses are considered land uses with higher potential pollutant loads, and would require implementation of additional stormwater management standards.

3. Perimeter sediment controls shall be proposed on all downstream areas of the proposed site. Review and revise plan accordingly.

   Response: Perimeter sediment controls were/are shown at all areas downstream of the proposed work areas.

   Pare Response: Accepted.

4. Existing Conditions-Lots 15 & 16: The Town of Bristol Subdivision and Development Review Regulations Appendix E Section C require the existing conditions plan to include:
   a. Boundaries of applicable watersheds for the parcel(s)
   b. Notation indicating that the development parcel(s) (or existing structures) are located or not located within the following areas of special concern:
      i. Natural Heritage Areas, as defined by RIDEM
      ii. The area(s) under the jurisdiction of any Special Area Management Plan (SAMP) of RI CRMC
      iii. A Groundwater Protection Overlay District
      iv. A Wellhead Protection Area
      v. Groundwater Recharge Area
      vi. Areas within a TMDL watershed, as identified by RIDEM
      vii. OWTS Critical Resource Area, as defined by RIDEM
      viii. A Drinking Water Supply Watershed, as defined by RIDEM
      ix. National Register of Historic Places
      x. Bristol Historic District
      xi. Silver Creek Watershed in Town of Bristol
      xii. Tanyard Brook Watershed in Town of Bristol

   Response: Provided.

   Pare Response: This lot is located in the Silver Creek Watershed. Revise plans to include a notation indicating that the development parcels are in this watershed.

5. Proposed Layout Plan-Lot 16: The Town of Bristol Subdivision and Development Review Regulations Appendix F Section F require that in commercial developments, there shall be at least one clearly designated pedestrian route between the street, the parking area and the main entrance of the building. Review and revise sidewalk.

   Response: A sidewalk was initially shown in this location. However, subsequent conversations with the Town resulted in its removal, in order to move the building closer to the street and further away from the wetland areas. In addition, the business in this building is not intended for access from the general public and there are no sidewalks to this lot from any other parcels of land.

   Pare Response: If a waiver is being requested, this section should be included in the list of waivers on the cover sheet.

6. Proposed Layout Plan-Lot 16: Town of Bristol Zoning Ordinance §28-251(4) requires all driveways to be a minimum of 12 feet in width for each lane of traffic using such driveway. Revise driveway to accommodate 2-way traffic.

   Response: The two lots in question have a common access easement with half of the easement on one lot and half on the other lot. Therefore, one 12' paved access is shown on Lot 16 (the lot to be developed), and the existing access drive on Lot 15 is proposed to remain as is.

   Pare Response: The easement appears to only describe access at the roadway. Access easements should be provided to meet the minimum lane widths for the entirety of the driveway length.

7. Proposed Layout Plan-Lot 16: Town of Bristol Zoning Ordinance §28-253(a)(1) requires a minimum of 1 loading space for buildings with a GFA between 3,000 – 19,999 SF. Review and revise plan to include a loading space.

   Response: Loading will be done within the building.

   Pare Response: Noted. Zoning relief may be required.

8. Construction Details-1: According to the RISDISM Chapter 5.5.3, pretreatment for bioretention systems should incorporate all of the following (unless a sediment forebay is provided):
   a. grass filter strip below a level spreader or grass channel (using guidelines in Chapter Six),
   b. pea gravel diaphragm (a small trench running along the edge of the practice), and
   c. a mulch layer.

   Review and confirm that the grass filter strip meets the guidelines from chapter 6 of the RISDISM. Additionally, review and revise the Bioretention Area Detail to include a mulch layer for pretreatment.

   Response: A pea gravel diagram is shown on the plans, then there is a grass filter strip into the basin and then a mulch layer within the basin. This has been submitted to RIDEM for their review. If a sediment forebay is preferred by the review agency, then one can be incorporated.

   Pare Response: Noted.

9. Construction Details-1: According to the RISDISM Chapter 5.5.4, bioretention soils shall consist of USDA loamy sand to sandy loam classification and meet the following graduation: sand 85-88%, silt 8-12%, clay 0-2%, and organic matter (in the form of leaf compost) 3-5%. Confirm that the existing HTM conforms to these specifications.

   Response: This comment is confusing, as the existing HTM is not proposed to be utilized within the bioretention basin. As indicated in the detail, all HTM is to be removed and replaced with the required bioretention component, including an appropriate (non HTM) soil. To clarify further, the detail has been updated to indicate that ***all HTM*** below the basin shall be removed and replaced.

   Pare Response: Accepted.

PARE CORPORATION

Stormwater Report:

1. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section I (2) requires the drainage report to include a site locus map, a graphic depicting the site soils based on National Resources Conservation Service Soil Survey data, Floodplain information as indicated on the Town of Bristol Flood Insurance Rate Maps (FIRM). Revise the Drainage Report to provide the required information.

   Response: An addendum with these additional items has been provided.

   Pare Response: Accepted.

2. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section I (2)(c) requires an estimate of the quantity of stormwater surface run-off presently flowing from the land proposed to be subdivided, and that which would be generated by the proposed subdivision calculated on the basis of the two (2), ten (10), twenty-five (25), and one-hundred (100) year frequency, 24 hour, Type III, rainfall events. Provide an estimate of the quantity of stormwater runoff in a two-year storm event.

   Response: As both RIDEM and RIDOT do not require the 2-year storm and usually request that it not be included in the calculations submitted to them, an addendum with these additional items has been provided for the Town's use and review, only.

   Pare Response: Accepted.

3. The Town of Bristol Subdivision and Development Review Regulations Appendix F Section M requires all O&M plans to include contact information for the party legally responsible for maintaining the proposed BMP's as well as proposed maintenance. Revise the O&M Plan to include the owner's contact information.

   Response: At this Preliminary stage, the maintenance agreement is DRAFT that does not get completed and signed until construction is completed.

   Pare Response: Noted.

4. NRCS Soil Survey data shows hydrologic soil group of "D" for most of the site. Review and update the hydrologic model accordingly.

   Response: As the site has been developed/farmed/disturbed since at least the 1950s, and the test holes indicate human transported materials (HTM) are present, the "D" soil mapped by NRCS decades ago is not correct. A hydrologic soil group of "C" is therefore utilized.

   Pare Response: Provide test pit logs confirming classification as Hydrologic Soil Group C.

5. Test pits should be completed within the best management practice area to determining infiltration rate and depth to estimated seasonal high water table.

   Response: Test pits have been shown on the plan.

   Pare Response: Noted. Submit the test pit logs corresponding to 'TH#1' and 'TH#2' as shown on the plans.

6. The proposed bioretention pond has a depth of only one foot and offers limited freeboard - approximately 3.5 inches during a 10-year storm event and 2 inches during a 100-year event. Due to the fact that the pond has a narrow berm and there is no flow diversion proposed, it is recommended that the pond be revised to provide additional freeboard.

   Response: Freeboard depth is a preferred condition, not a requirement, and is usually a protective measure for downslope abutters, etc. In this instance, the downslope condition is a pond/wetland and therefore personal or property damage is not an issue. Further, trying to increase the depth of the system could result in increased side slopes, increased maintenance requirements and erosive flows. As this project has been submitted to RIDEM for their review, we have not revised the basin at this time.

   Pare Response: Noted.

Trip Generation Statement:

1. A more conservative land use code shall be used to accurately represent the increase in traffic. Pare recommends utilizing ITE Land Use Code 180 – Specialty Trade Contractor, as it more accurately reflects the operational characteristics of the proposed building.

   Response: Trip Generation letter has been updated per Pare's recommendation. It should also be noted that a submission to RIDOT for a PAP has been made, and therefore we will adhere to their specific trip generation requirements.

   Pare Response: Accepted.

New Comments:

1. Descriptions should be provided for the landscape easements shown on the neighboring properties. If plantings are proposed in these locations, a landscaping plan should be provided.

The applicant should provide a formal response to address each comment.

Ms. Williamson, AICP, CFM (7) September 5, 2025

If you have any questions or require any additional information, please do not hesitate to contact me at 401-334-4100 or bsykes@parecorp.com.

Sincerely,

Robert J. Sykes P.E.
Managing Engineer

Z:\JOBS\01 - Earlier Jobs\98166.00\CORRESP\Task 109 674 Metacom Ave\MEMOS\2025-09-5 Preliminary Submission Review RTC.docx

Town of Bristol, Rhode Island

Department of Community Development

10 Court Street
Bristol, RI 02809
bristolri.gov
401-253-7000

September 4, 2025

TO: Planning Board

FROM: Diane M. Williamson, Director

RE: 18 Burnside Street – 1 Resolute Lane
Minor Land Development/ Adaptive Re-Use and Unified Development

The above application is before you for a public hearing and action on the variance for density as well as for action on the minor land development – adaptive re-use proposal.

The TRC has met and their meeting notes are attached. The applicant has been working on re-submission of materials for the complete application.

The Planning Board will need to take action on the Variance request prior to taking action on the Minor Land Development. A copy of the findings that the Planning Board needs to take on the variance is provided as well as a template on the motion for your guidance.

APPLICATION FORM AND SUBMISSION CHECKLIST FOR MINOR SUBDIVISIONS AND MINOR LAND DEVELOPMENTS

The following completed application form together with the appropriate materials for either a preliminary or a final application, as indicated on the attached checklist, shall be submitted to the Administrative Officer.

APPLICATION FORM

Type of Application: Preliminary_____ Final:_____

1. Name of proposed subdivision/land development: Burnside

2. Name, address and telephone number of property owner: Halsey C. Herreshoff, Trustee c/o 443 Hope Street, Bristol, RI 02809 401-253-2500 John G. Rego, Esq.

3. Name, address of applicant, if different from owner: (A written, notarized confirmation from property owner authorizing the applicant to make the submission shall also be submitted): John J. Marshall 760-420-3301
950 Warren Avenue, East Providence, RI 02914

4. Plat and lot number(s) of the parcel being subdivided/developed: Plat 16 Lots 48 and 39

5. Area of the subdivision/development parcel(s): 3,649 sq ft / 4,638 sq ft

6. Zoning District(s), including any special Town or State overlay districts (i.e. Historic District, CRMC Jurisdiction, etc): M

Signed by ~~Owner~~/Applicant: _____ Date August 6 , 2025

Notarized:

Subscribed and sworn to before me this 6 day of August , 20 25

_____
NOTARY PUBLIC

Alfred R. Rego, Jr.
Notary Public
State of Rhode Island
Term Expires 06/24/2029 ID# 12939

TOWN OF BRISTOL
COMMUNITY DEV.
2025 AUG -8 PM 1:10

MINOR SUBDIVISION OR LAND DEVELOPMENT APPLICATION AND CHECKLIST

Name of proposed subdivision/development:
Burnside

Applicant Name and Address: John J. Marshall
950 Warren Avenue, East Providence, RI 02914

Phone Number: 760-420-3301

Email: JJMarshall@marshallpropertiesinc.com

Date of Application: August 6, 2025

Plat and Lot Number(s) of the land being subdivided/developed: Plat 16 Lots 48 and 39

Date Received / Initials

A COPY OF ALL PLANS AND SUPPORTING DOCUMENTS SHALL BE SUBMITTED IN DIGITAL FORM (PDF). APPLICATIONS WILL NOT BE CONSIDERED SUBMITTED FOR REVIEW OF COMPLETENESS UNTIL BOTH DIGITAL AND PAPER SUBMISSIONS ARE RECEIVED.

INSTRUCTIONS

Five (5) Copies of the application package including all plans and supporting documents shall be provided along with a Digital Form (PDF) of the entire application package. Each sheet shall be a minimum size of 8 1/2x 11" and a maximum of 24" x 36" and at a scale of 1"=40' with a sufficient number of sheets to clearly show all of the information required. Upon final approval one reproducible mylar, three (3) copies, and one electronic AutoCAD file of all plans shall be submitted. A reduced copy (11x17) shall be submitted for each plan.

All plans required by this checklist shall show the following information (as applicable). The shaded boxes within the checklist indicate an item is **not** required at a particular stage of review. If any checklist items are marked as not applicable (NA) please provide an explanation as to why the item is not applicable in the space provided at the end of the checklist. A separate sheet may be attached.

For the LOCATION column please provide the location of the specific checklist item. This can be a plan sheet number or the name of the supporting document and page. All revisions in response to comments shall include a written statement indicating the response.

Review Codes are for administrative use only and are to be entered by the Administrative Officer.

Please check the applicable stage of review for the submission

Project Type:	☐ Minor Subdivision ☐ Minor Land Development	Stage of Review:	☐ Preliminary Plan (PR) ☐ Final Plan (F)

[x] Adaptive Reuse
Residential 7 unit residential condominium

A. FORMS AND DOCUMENTS

A	PR	F	REQUIRED FORMS AND DOCUMENTS	REVIEW CODE
1.			Project Review Application Checklist	
2.			A notarized letter from the property owner(s) stating that the applicant has been granted the authority to proceed with the application with the owner(s) permission and consent	
3.			Proposal Narrative	
4.			Completed Application Checklist	

B. GENERAL INFORMATION (to be provided on all plan sheets)

B	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
1.			Title Block with Name of the proposed project, Plat and Lot Numbers of the subject property, Address of the subject property, Name and Address of the Owner/Applicant Name of the proposed subdivision/land development project		
2.			Name, address, phone, and stamp(s) of the RI Registered Engineer and/or RI Registered Land Surveyor responsible for the plans		
3.			Date of plan preparation and all revision date(s), if any		
4.			True north arrow and graphic scale		
5.			Plan legend (all items displayed on site plans shall be symbolized in a legend)		
6.			Relevant references to deeds and recorded plans		
7.			List of sheets contained within the plan set		
8.			Notation of any permits and/or agreements obtained from or made with State and Federal agencies, including permit number if applicable		
9.			Names, addresses and Plat/Lot identified of abutting and adjacent property owners		
10.			Names and addresses of adjoining communities or agencies requiring notification under these regulations		

C. EXISTING CONDITIONS PLAN(S) – Show the entire tract of the subject property and all lots owned by the owner/applicant as it currently exists

C	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
1.			A general location map showing the relationship of the parcel to the area within a half-mile radius, provide an aerial photograph or satellite image clearly depicting the subject parcel		
2.			Certification by a RI Registered Land Surveyor that a perimeter survey of the land being developed has been performed and meets a Class I standard for property lines and a Class III standard for topographic and existing conditions information		
3.			Zoning District Dimensional Regulations of the subject parcel		
4.			Density calculations based upon the exclusion of unsuitable land		

C	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
			from the total land area of the subject parcel, include the total acreage, the acreage of unsuitable land and the resulting total number of units allowed by right		
5.			Dimensions and total area of the subject parcel, and location and dimensions of existing property lines, type of easements and rights-of-way within or adjacent to the subject parcel		
6.			Existing contours at intervals at a minimum of two (2) feet		
7.			Base flood elevation data; use the North American Vertical Datum of 1988 (NAVD 88)		
8.			Boundaries and notation of the soil types classifications for the entire area of the subdivision parcel(s)		
9.			Location of soil contaminants present on the subject parcel, if any		
10.			Location of Phase III Remediation Plan area, if required by RIDEM		
11.			Location of wetlands, watercourses or coastal features within and adjacent to the parcel(s), including buffer areas as defined by RIDEM for wetlands		
12.			If no wetlands or coastal features are depicted within the plan set, an affidavit signed by a qualified professional stating that there are no freshwater wetlands and/or buffer areas within the subdivision/development parcel(s)		
13.			Notation of existing ground cover with approximate location of wooded areas and areas of active agricultural use including the location of any trees over 10" caliper.		
14.			Identification of areas containing prime agricultural soils and farmland soils of statewide importance, or if no such soils are present on the site, a notation indicating such		
15.			Determination if the proposed development or subdivision lies within any area designated by the town or state for purposes of environmental protection or natural or cultural resource protection, such as: a. Natural Heritage Areas, as defined by RIDEM b. The area(s) under the jurisdiction of any Special Area Management Plan (SAMP) of RI CRMC c. A Groundwater Protection Overlay District d. Wellhead Protection Area e. Groundwater Recharge Area f. Areas within a TMDL watershed, as identified by RIDEM g. National Register of Historic Places h. Bristol Local Historic District i. OWTS Critical Resource Area, as defined by RIDEM j. A Drinking Water Supply Watershed, as defined by RIDEM k. Silver Creek Watershed in Town of Bristol l. Tanyard Brook Watershed in Town of Bristol		
16.			Location of known existing easements and rights-of-way within or adjacent to the subdivision/development parcel(s), including streets, driveways, farm roads, woods roads, and/or trails that have been in public use		

C	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
17.			Location, width, classification, and names of existing public, private, and paper streets within and adjacent to the subdivision/development parcel(s)		
18.			Location, size, and use/type of all existing buildings or significant above-ground structures, including stone walls, on the subdivision/development parcel(s)		
19.			Location and size of existing buildings or significant above-ground structures on parcels immediately adjacent to the subdivision/development parcel(s)		
20.			Location, size, and type of all known, existing above and below ground utilities, including sewer, OWTS, wells, water, gas, electric, stormwater drainage and communications or telecommunications infrastructure, as may be present on the site or within the right of way along the property frontage		
21. 21.			Location of any unique and/or historic features within or adjacent to the subdivision/development parcel(s), including stone walls, historic cemeteries and access, or, if none, a notation indicating such		
22.			Accurate location of any unique natural features present on the site, including but not limited to significant specimen trees, or if none, a notation indicating such		
23.			Relevant references to deeds and recorded plans		

D. PROPOSED CONDITIONS PLAN(S) Show all items on existing conditions plan as well as the following:

D	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
1.			Location, size, and use/type of proposed buildings and structures, including proposed number of residential units per building, if applicable, and include all accessory structures and total lot coverage		
2.			Proposed buildings and other site improvements for a commercial or industrial development, include building setback lines and lot coverage		
3.			Proposed lots with lot numbers, with dimensions and areas indicated, include all interior lot lines, building setback lines and street lines with dimensions indicated and drawn so as to distinguish them from existing lot lines		
4.			Zoning Data Table to show the existing zoning requirements and proposed conditions		
5.			Boundaries and total area of any land classified as "unsuitable for development" as defined in the Regulations		
6.			Proposed connection with existing public water supply and sewer system or on-site wells and sewage disposal		
7.			If proposed, plan and profile design information for any extension of public or private utility infrastructure		
8.			Measures to minimize impacts to the natural topography of the site using the Low Impact Development (LID) Site Planning & Design Guidance Manual		
9.			Any proposed on- and /or off-site improvements including streets,		

D	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
			access drives, loading areas, parking areas, sidewalks, and bicycle paths, include profiles and typical cross-sections		
10.			Proposed location, size, and type of all above ground and underground utilities servicing the property, including wastewater, water, gas, electric, stormwater drainage and communications or telecommunications infrastructure, as may be required for site development		
11.			If future development is to be serviced by an On-Site Wastewater Treatment System(s), soil evaluations in the relative location where each system is proposed, which have been performed by a licensed RI soil evaluator and witnessed by RIDEM		
12.			Location and dimensions of proposed easements and rights-of-way within the development parcel(s), or those to be acquired adjacent to the development parcel(s) as maybe necessary		
13.			Location, dimension, monumentation, and proposed use of any area(s) proposed to be set aside as open space, or drainage or conveyed to the Town for public purposes, if any		
14.			Proposed phasing, including depiction of which structures and on- and off-site improvements are to be installed in which phase, if applicable		
15.			Limits of disturbance/work relative to on-and off-site improvements and infrastructure installation		
16.			Grading plan(s) to show contours at sufficient detail (2-foot intervals) for all on and off-site street construction, drainage facilities, and individual house lots, certified by a RI registered Professional Engineer for final plans		
17.			Stormwater management plan(s), to show accurate designs and details of proposed stormwater management and water quality infrastructure, including type, location, drainage calculations, extension of existing lines, and configuration, and operations and management plan prepared by a Registered Professional Engineer		
18.			Landscape plan(s), maintenance plan and tree preservation plan, to show all significant proposed clearing of land, removal of existing vegetation, re-vegetation, landscaping on street rights-of-way, and within common areas, and landscape installation details and related notations, signed by a licensed Landscape Architect for final plans		
19.			Location of proposed permanent bounds (document that all proposed bounds have been set shall be provided prior to plan recording)		
20.			Any revisions to the proposed conditions required by the Preliminary Plan approval		
21.			Certification by a RI Registered Land Surveyor that a survey of all perimeter lot lines and interior lot lines and street lines of the land being developed has been performed and meets a Class I standard for property lines and a Class III standard for topographic and existing conditions information		
22.			Certification by a RI Registered Professional Engineer that the Proposed Conditions Plan is correct		
23.			Notation of any special conditions/documents received as required by the Preliminary Plan approval		

E. PROJECTS WITH STREETS/ROADWAYS

If your project proposes to extend or create a roadway, please complete this section. If your project does not propose to extend or create a roadway, you may skip this section.

E	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
1.			Street plans (minimum scale of 1"=40' horizontal with profiles (minimum 1"=4' vertical) indicating the street center line, curblines, and the existing elevations of the ground at the street center line, location and size of proposed sewer lines, water lines and other underground utilities; and, street cross sections showing width of right-of-way, roadway; and, sidewalks. Plan must include street names and hydrant locations approved by the Fire Chief. Plan must include proposed street light locations.		
2.			Street typical cross-sections and paved (impervious) areas such as parking and loading areas, curb cuts, including all pedestrian facilities.		
3.			Stormwater management plan(s), and drainage calculations to show accurate designs and details of proposed stormwater management and water quality infrastructure, including type, location, drainage calculations, extension of existing lines, and configuration, including an operations and management plan prepared by a Registered Professional Engineer		
4.			Landscape plan(s), maintenance plan and tree preservation plan, to show all significant proposed clearing of land, removal of existing vegetation, re-vegetation, landscaping on street rights-of-way, and within common areas, and landscape installation details and related notations, signed by a licensed Landscape Architect in accordance with Appendix F		
5.			Construction Cost Estimate for all improvements		
6.			Soil Erosion and Sediment Control Plan		
7.			If any Streets, Areas or Facilities are to be dedicated to the Town of Bristol, the Final Plan shall include a Statement that such dedication shall not impose any duty or responsibility upon the Town of Bristol to maintain or improve any dedicated streets, areas or facilities until specifically authorized by the Town Council Per Section 6.7 of these regulations.		

F. SUPPORTING MATERIALS

F	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
1.			Renderings, elevations or photographs as may be requested to illustrate the visual impact of the proposal for subdivision/ development		
2.			Copies of an aerial photograph or satellite image vicinity map drawn to a measurable scale as necessary to show the relationship of the subject parcel(s) to the area within a half-mile radius, identifying the locations of all streets, zoning district boundaries, schools, parks, fire stations, and other significant public facilities		
3.			A written statement indicating any proposed zoning relief or waivers or modifications from the regulations, if any		
4.			Determination letter from the Zoning Official on the requested zoning waivers or modifications		
5.			Copy of the Deed/Title to the subject parcel		
6.			Copies of any RIDEM stormwater or other general construction permits that are required, or an affidavit, signed by a qualified professional stating that no RIDEM stormwater or construction permits are required.		
7.			Written report of Phase I Environmental Site Assessment, if any		
8.			Phase II Environmental Site Assessment, written report if indicated, if any		
9.			For subdivisions/developments proposing service by OWTS(s), copies of an On-Site Wastewater Treatment System permit issued by RIDEM confirming soil suitability or OWTS permits for individual lots.		
10.			Written report and approval from RIDEM of an Environmental Site Assessment Phase III (Remediation Plan) if required		
11.			Copies of a narrative report or written statement including: a. A general description of the existing physical environment and existing use(s) of the property; b. A general description of the use(s) and type(s) of subdivision/development proposed; c. A general statement and supporting maps and/or graphics that illustrates the approach utilized in designing the proposed subdivision/development, including consideration of existing conditions and significant site features; d. An estimate of the approximate population of the proposed subdivision/development, if any; e. An estimate of the number of school-aged children to be housed in the proposed subdivision/development, if any. f. A general analysis of soil types and suitability for the subdivision/development proposed;		

F	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
			g. A statement of the potential fiscal impacts of the subdivision/development on Town expenses and revenues; h. A description of proposed phasing, if any.		
12.			Either, copies of: a. An affidavit signed by a qualified professional stating that there are no coastal features and/or buffer areas adjacent to or within the subdivision/development parcel(s); or b. A Preliminary Determination, including coastal feature verification, from the Coastal Resources Management Council		
13.			Copies of drainage calculations, associated explanatory narrative, and all supporting documentation, including an Operations and Maintenance manual for the system		
14.			Written comments on the Plans, by the following as required (*Referrals to the agencies below will be made by the Planning Department Staff*): _____ _Building Official Date:_____ _____Zoning Official Date: _____ ____ Technical Review Committee Date _____ ____ Director of Public Works Date _____ ____ Fire Department Date _____ ____ Conservation Commission Date _____ ____ Police Department Date _____ ____School Department Date_____ Other (specify below) _____ Date _____ Adjacent Communities Date		
15.			Copies of all legal documents; legal description of property, proposed easement and rights-of-way, dedications, restrictions or other required legal documents including but not limited to covenants or Homeowners Association, Stormwater Management Plan, Landscaping Maintenance Plan, a deed conveying open space or offer of street dedication. Draft copies for Preliminary		
16.			Written confirmation and/or permits from any additional required federal, state or local agencies		
17.			Final utilities plan stamped by a licensed Professional Engineer; include the extension and location of gas, electric, water/wells, sewer/OWTS, signage or other proposed utilities as applicable		
18.			"Tax Certificate" from the Tax Collector showing that all taxes due on the parcel being developed have been paid to date and there are no outstanding municipal liens on the parcel		
19.			Soil Erosion and Sediment Control Plan		
20.			Draft copies of the metes and bounds description(s) and		

F	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
			warranty deed(s) for all proposed public roadways and/or lands proposed to be dedicated to the Town for open space purposes, if any, in a form acceptable to the Administrative Officer and reflective of any conditions of the Preliminary Plan approval		
21.			Copies of an estimate of the cost of installation of all on- and off-site improvements, including landscaping, prepared by a Registered Professional Engineer		
22.			Written approval (assent agreement) from the RI Coastal Resources Management Council of the proposed development or subdivision if the subject parcel has coastal shoreline, including any required off-site construction		
23.			For subdivisions/developments with freshwater wetlands present on the parcel(s), copies of either: a. An RIDEM wetlands permit, if required pursuant to RIDEM rules and regulations; or b. A letter of non-jurisdiction from RIDEM		
24.			For subdivisions/developments proposing service by public water, copies of a written statement from the Bristol County Water Authority that the proposed plan, with plan revision date indicated, has been reviewed and which provides: a. Confirmation that water service is available; b. Approval of connection to the existing water main as depicted on the plan; and, If extension is proposed, approval from the company or district of the extension of the water main as depicted on the plan		
25.			For subdivisions/developments proposing service by public sewer, copies of a written statement from the Bristol Water Pollution Control Department that the proposed plan, with plan revision date indicated, has been reviewed and which provides: a. Confirmation that sewer service is available; b. Approval of connection to the existing sewer main as depicted on the plan; and If extension is proposed, approval of extension of the sewer main as depicted on the plan		
26.			For subdivisions/developments proposing new physical access to a State right-of-way a letter evidencing the issuance of such a permit upon the submission of a bond and insurance[1]		
27.			Traffic study performed by a RI Licensed Engineer (as applicable), if required		
28.			Location, type, intensity and direction of illumination of all outdoor lighting fixtures.		
29.			Signage including location, size, design and illumination.		
30.			Proposed residential density and square footage of non residential use. Floor plans to scale for each building including the use of floor space, number of units, number of bedrooms and square footage of each unit and building		

F	PR	F	ELEMENT REQUIRED	LOCATION (PAGE #)	REVIEW CODE
			elevations showing exterior building design, materials, colors and height (for land developments and adaptive re-use)		
31.			Plans for trash and recycling, and transformer locations (for land developments)		
32.			Low Impact Development (LID) Site Planning and Design Strategies and Checklist from the RI Stormwater Design and Installation Standards Manual. Stormwater designs to meet RI Stormwater Manual Minimum Standards.		
33.			A plan with new street address numbers and new assessor's plat and lot numbers signed by the Tax Assessor.		

G. FEES

G	PR	F		*Received?*
1.			Application Fee	
2.			Engineering Review Fee	
3.			Advertising Reimbursement Fee (if applicable)	
4.			Final Plat Recording and Mapping Fees	
5.			Performance Guarantee (if applicable)	
6.			Engineering Inspection Fee	
7.			Maintenance Guarantee (if applicable)	
8.			Receipt that all other fees to outside agencies have been paid (if applicable)	

Applicant Comments on Required Items: (attach separate sheet if needed)
Reviewer Comments on Required Items:

Signature of Applicant: John J Marshall

Signature of Professional Land Surveyor /Engineer: _____ Registration No.____

Signature of Professional Land Surveyor /Engineer: _____ Registration No.____

Signature of Reviewer: _____ Date of Review: _____

Rego & Rego
Attorney At Law
443 Hope Street
Bristol, Rhode Island 02809

Alfred R. Rego, Jr.
John G. Rego
John J. Rego*
RI and MA

Area Code 401
Telephone 253-2500
Facsimile 254-0235
al@rego-law.com

August 7, 2025

Town of Bristol
10 Court Street
Bristol, RI 02809

Re: Adaptive Reuse Application - 18 Burnside Street (5 Units) and 1 Resolute Lane (2 Units) with 14 first floor - indoor parking spaces.

Gentlemen:

On behalf of the applicant, I submit preliminary plans for review under Rhode Island's Adaptive Reuse statute (R.I. Gen. Laws§ 45-24-31 et seq.). This proposal involves the redevelopment of property located on 18 Burnside Street and 1 Resolute Lane in Bristol, within the Downtown Historic District and on the eastern shore of Bristol Harbor. The proposal also suggests merger of the two parcels at 18 Burnside Street to be known as the Burnside Condominiums.

The application (buyer and seller) seeks approval for the adaptive reuse of historic manufacturing buildings that are currently underutilized and in varying states of disrepair. One of the primary buildings (1 Resolute Lane) is in need of substantial structural rehabilitation due to advanced deterioration.

The project proposes converting these buildings into seven (7) residential condominium units, in a manner that preserves and respects their historic character while addressing longstanding vacancy and functional obsolescence.

The redevelopment will be consistent with the guidelines established by the Rhode Island Historic Preservation & Heritage Commission and the Bristol Historic District Commission. It is also subject to marginal oversight by the Coastal Resources Management Council due to its location within the coastal zone.

Public utilities, including sewer and water, are available to the site. The plan includes at least fourteen (14) on-site parking spaces at the 1 Resolute Lane site, in compliance with applicable zoning requirements.

This adaptive reuse project directly advances the goals of the Town's Comprehensive Plan, which encourages the revitalization of deteriorated, underperforming structures through sustainable and historically sensitive redevelopment. The proposal will not result in any negative environmental impacts. On the contrary, it mitigates ongoing decay and safeguards a valuable architectural and cultural resource through thoughtful reinvestment.

Importantly, the project conforms with existing zoning for residential condominium use, and promotes compact, environmentally responsible development by reusing an existing footprint rather than new construction of 18 Burnside Street.

We appreciate your consideration of this application and welcome the opportunity to present this transformative rehabilitation proposal for your review and input.

Sincerely,

Alfred R. Rego, Jr.

12-J-12000

AFFIDAVIT

I, HALSEY C. HERRESHOFF, of PO BOX 687, Bristol, Rhode Island 02809, who after being duly sworn according to law, makes affidavit and swears that the following statements are true to the best of my knowledge and belief:

1. That I am the Manager of the real estate located at 18 Burnside Street and 1 Resolute Lane, Bristol, Rhode Island 02809, hereinafter referred to as "Premises".

2. That I hereby approve of the plans and renderings for the proposal to convert the Premises from manufacturing into residential condominiums.

3. That the Premises have not been used for boat manufacturing or any manufacturing purpose for approximately four years.

4. That the Premises are not suitable for manufacturing purposes because it has no off-street parking.

5. That as the Manager of the Premises, I am authorized to sign this affidavit.

Halsey C. Herreshoff

STATE OF RHODE ISLAND)
COUNTY OF BRISTOL)

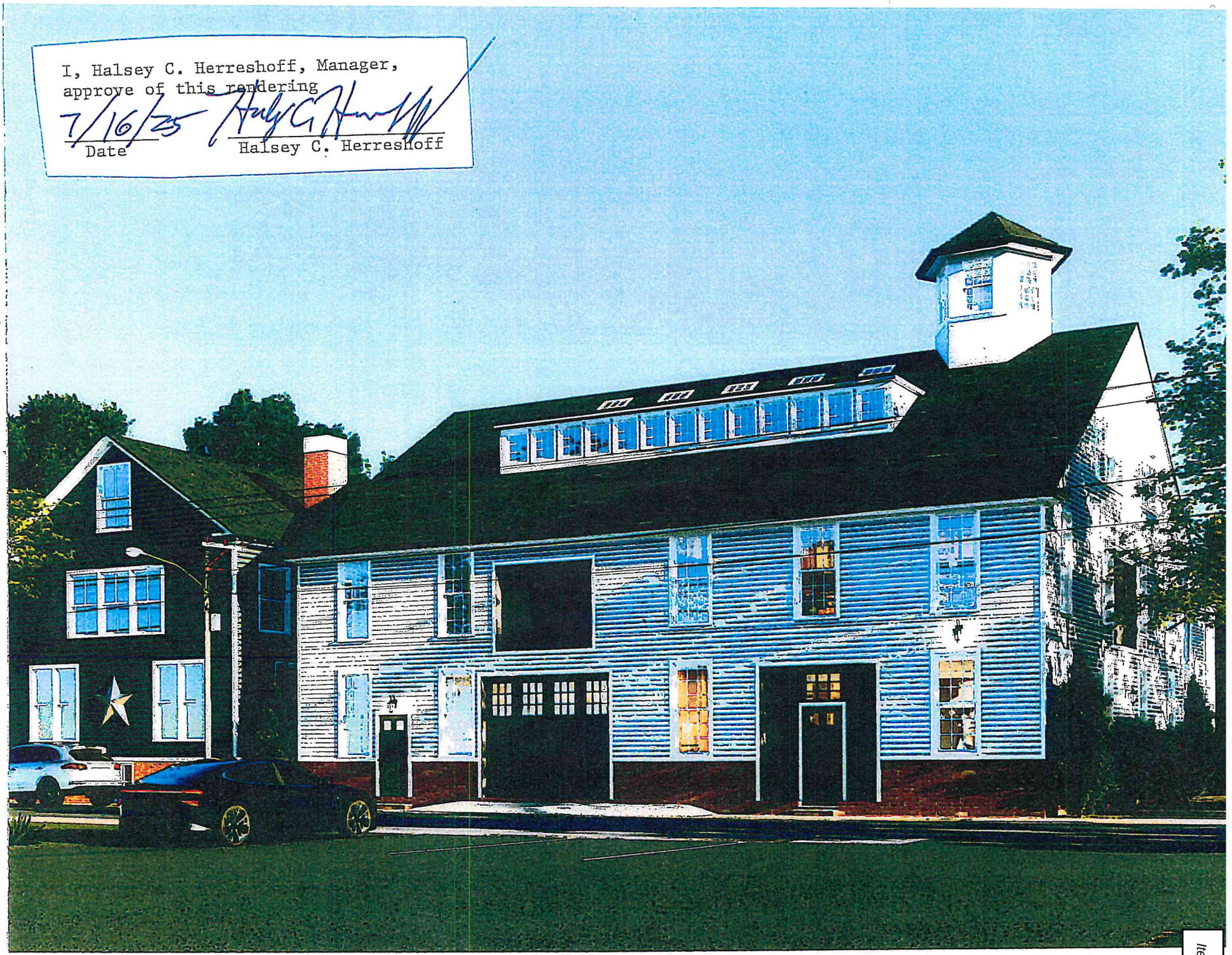
In the Town of Bristol on the 16th day of July, 2025, before me personally appeared, HALSEY C. HERRESHOFF, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument, and acknowledged that he executed said instrument for the purpose stated therein as his free act and deed.

Notary Public

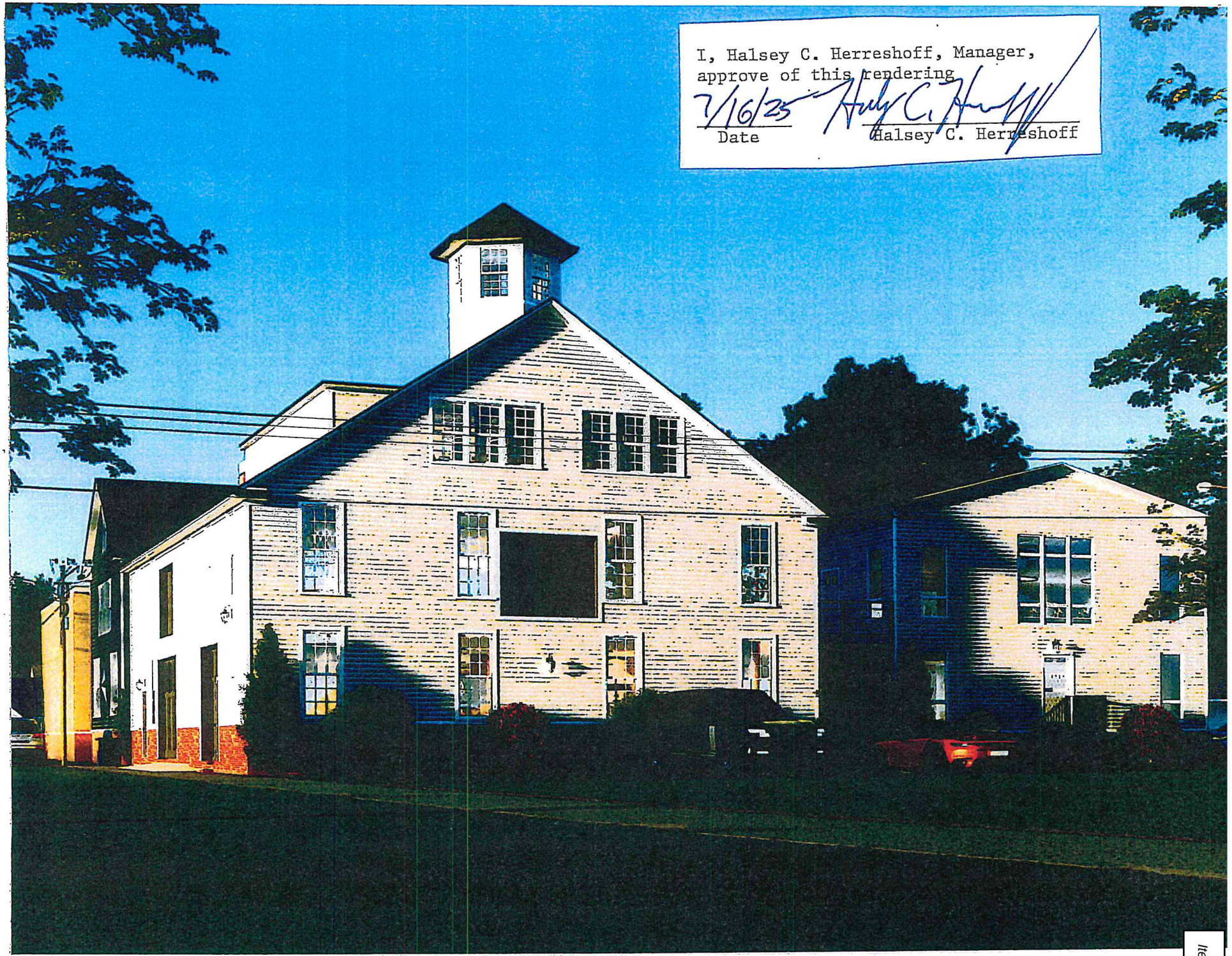
JOHN G. REGO
NOTARY PUBLIC
STATE OF RHODE ISLAND
NOTARY ID 12941
COMMISSION EXPIRES 6/16/2029

I, Halsey C. Herreshoff, Manager,
approve of this rendering

7/16/25 Halsey C. Herreshoff
Date Halsey C. Herreshoff



Item C4.



I, Halsey C. Herreshoff, Manager, approve of this rendering.

7/16/25
Date

Halsey C. Herreshoff

Item C4.

I, Halsey C. Herreshoff, Manager,
approve of this rendering

7/16/25
Date

Halsey C. Herreshoff

12-J-12000

AUTHORIZATION

The undersigned, being the Sole Owner of 18 Burnside Street, Bristol, Rhode Island 02809, hereby authorize attorney John G. Rego, Esq., address 443 Hope Street, Bristol, Rhode Island 02809, telephone number (401) 253-2500, to represent me before all local and state boards to obtain approval to build residential condominiums on 18 Burnside Street, Bristol, Rhode Island 02809.

WITNESS, my hand and seal this 16 day of July, 2025.

HALSEY C. HERRESHOFF, TRUSTEE
HALSEY C. HERRESHOFF REVOCABLE TRUST

12-J-12000

AUTHORIZATION

The undersigned, being all of the Owners of 1 Resolute Lane, Bristol, Rhode Island 02809, hereby authorize John G. Rego, Esq., address 443 Hope Street, Bristol, Rhode Island 02809, telephone number (401) 253-2500, to represent us before all local and state boards in order to obtain approval to build residential condominiums on 1 Resolute Lane, Bristol, Rhode Island 02809.

WITNESS our hands and seals this 16 day of July, 2025.

HALSEY C. HERRESHOFF, TRUSTEE
HALSEY C. HERRESHOFF REVOCABLE TRUST

NATHANAEL G. HERRESHOFF, III, TRUSTEE
NATHANAEL G. HERRESHOFF REVOCABLE TRUST

KARL F. HERRESHOFF

HALSEY C. HERRESHOFF, II

EXHIBIT A
DESCRIPTION

Parcel I

That parcel of land, with the buildings and improvements thereon, situated on the southerly side of Burnside Street [18 Burnside Street] in the Town of Bristol in the State of Rhode Island, bounded and described as follows:

Beginning at a point in the southerly line of Burnside Street at the southeasterly corner of said Burnside Street and Resolute Lane, formerly known as Willow Lane; thence easterly bounding northerly on Burnside Street 70 feet and 2 inches to land now or lately of Jesse P. Sousa Foundations, Inc.; thence southerly bounding easterly on the last mentioned land 52 feet to a corner; thence turning at right angles and running westerly bounding southerly on the last mentioned land 70 feet and 2 inches, more or less, to said Resolute Lane; thence northerly bounding westerly on said Resolute Lane 52 feet to said Burnside Street.

Together with rights appurtenant and subject to exceptions and reservations set forth or referred to in deed in Book 103 at Page 33.

Parcel II

That certain parcel of land, with all buildings and improvement thereon, situated southerly on Burnside Street, on the easterly side of Resolute Lane [1 Resolute Lane], in the Town and County of Bristol, State of Rhode Island, bounded and described as follows:

Beginning at the southwesterly corner of land now or lately of Halsey C. Herreshoff, Inc. said point being fifty-two (52) feet southerly of said Burnside Street as measured along the westerly line of said Herreshoff land, said point being the northwesterly corner hereof; thence southerly along a line in range with the westerly line of said Herreshoff land, bounding westerly on Resolute Lane (formerly Willow Lane), being land now or lately of Norman F. Herreshoff, forty-seven and 66/100 (47.66) feet to an angle in said Herreshoff land; thence turning an interior angle of 90°-43'30" and running easterly along the line of said Herreshoff land and along a line continued easterly in range therewith, bounding southerly on said Herreshoff land in part and in part on land now or lately of Jesse P. Sousa Foundation, Inc. ninety-six and 90/100 (96.90) feet; thence northerly bounding easterly on said last named land to the point of intersection of the southerly line of Halsey C. Herreshoff, Inc. land continued easterly in range thereof and distant ninety-six and 89/100 (96.89) feet easterly of the point of beginning; thence westerly along the last described line bounding northerly in part on land now or lately of Jesse P. Sousa Foundation, Inc. and in part on said Halsey C. Herreshoff, Inc. land ninety-six and 89/100 (96.89) feet to said Norman F. Herreshoff land, in the easterly line of Resolute Lane at the point and place of beginning.

This conveyance is executed together with the rights of passage and rights to lay water and other pipes as are set forth in title deeds, in common with others, said right being further subject to the rights of others in and to the shipping or loading platform situated on said Resolute Lane.

This conveyance is executed subject to the rights of the owners of land on the north (hereinabove referred to as Halsey C. Herreshoff, Inc.) to enter on the above described premises to inspect, paint, or repair the building on their premises.

For a source of title, see Deeds in Book 259 Page 263, Book 260 Page 39, Book 1425 Page 20, Book 1426 Page 3, Book 1096 Page 22, and in Book 1096 Page 26.

Meaning and intending to convey Lots 48 and 39 on Tax Assessors' Plat 16, for reference purposes only.

TOWN OF BRISTOL
DEPARTMENT OF COMMUNITY DEVELOPMENT
10 Court Street • Bristol, Rhode Island 02809

March 6, 2024

ZONING CERTIFICATE
for
1 RESOLUTE LANE, ASSESSOR'S PLAT 16, LOT 39
BRISTOL, RHODE ISLAND

According to tax assessor's records, the above property is currently owned by the Halsey C. Herreshoff Revocable Trust. This property contains approximately 4,651 square feet of land area and is located within the Manufacturing (M) zoning district. Lot 39 was created in its current configuration in 1969 via recorded deed; and it does not conform to the current minimum dimensional requirements for a lot in the M zone. However, as this parcel was created prior to adoption of Bristol's zoning ordinance it is considered legal nonconforming by dimension. This property is improved with a two-story commercial building that is used for light manufacturing, marine trades, and warehousing. These uses are permitted in the M zone.

Edward M. Tanner
Principal Planner / Zoning Enforcement Officer

cc: Building Department
Tax Assessor

Town of Bristol, Rhode Island
Real Estate Merging Declaration

Name:
Property: 18 Burnside Street Bristol, RI 02809
[1 Resolute Lane]

Pursuant to Town of Bristol Ordinance 28-221, the undersigned, as property owner/s of contiguous parcels known as Assessors Plat 16 lots 48 , and 39 , declare/s the lots herein listed to be one parcel with a total of 8,287 square feet. .1902 acres

This declaration is made with the full knowledge that all Town records for assessing purposes will forever reflect this change, and will only be changed or altered through the recording of a subdivision plan, properly approved by the Town of Bristol.

All valuations to be as of December 31, 2025 and subsequent revaluation anniversaries.

Owner/s John J. Marshall

950 Warren Avenue, East Providence, RI 02914

STATE OF RHODE ISLAND COUNTY OF BRISTOL

In Bristol this _____ day of _____, 20 before me personally appeared John J. Marshall to me known and known by me to be the person/s executing the foregoing and said person/s acknowledge this instrument to be their free act and deed.

_____

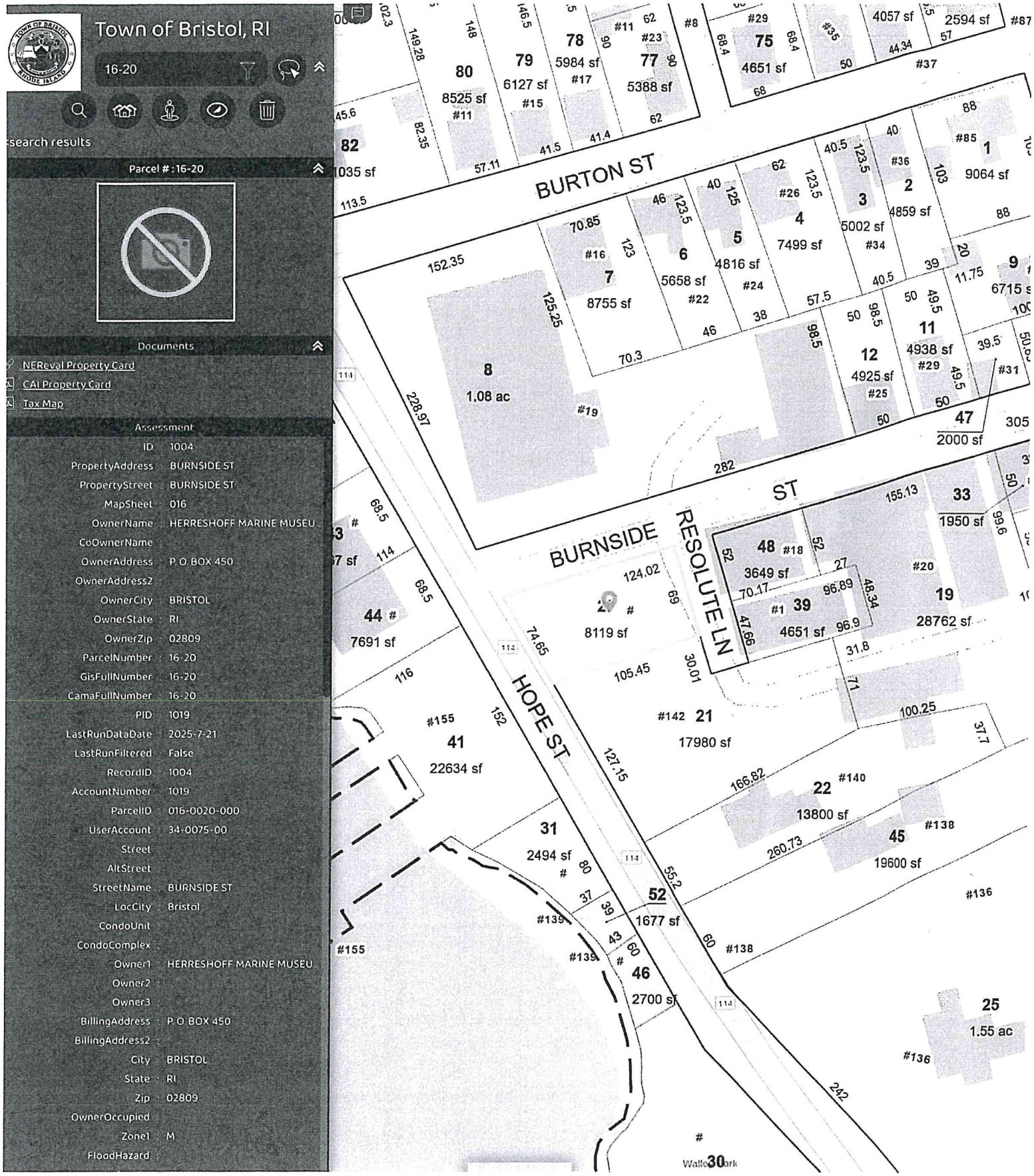
Notary Public Date
My Commission Expires:

To be known as Assessors Plat 16 Lot 48 18 Burnside Street, Bristol, RI 02809

Tax Assessor _____

Director of Community Development _____

TODAYS DATE


Town of Bristol, RI
16-20
search results
Parcel # :16-20
Documents
NEReval Property Card
CAI Property Card
Tax Map
Assessment
ID 1004
PropertyAddress BURNSIDE ST
PropertyStreet BURNSIDE ST
MapSheet 016
OwnerName HERRESHOFF MARINE MUSEU
CoOwnerName
OwnerAddress P.O. BOX 450
OwnerAddress2
OwnerCity BRISTOL
OwnerState RI
OwnerZip 02809
ParcelNumber 16-20
GisFullNumber 16-20
CamaFullNumber 16-20
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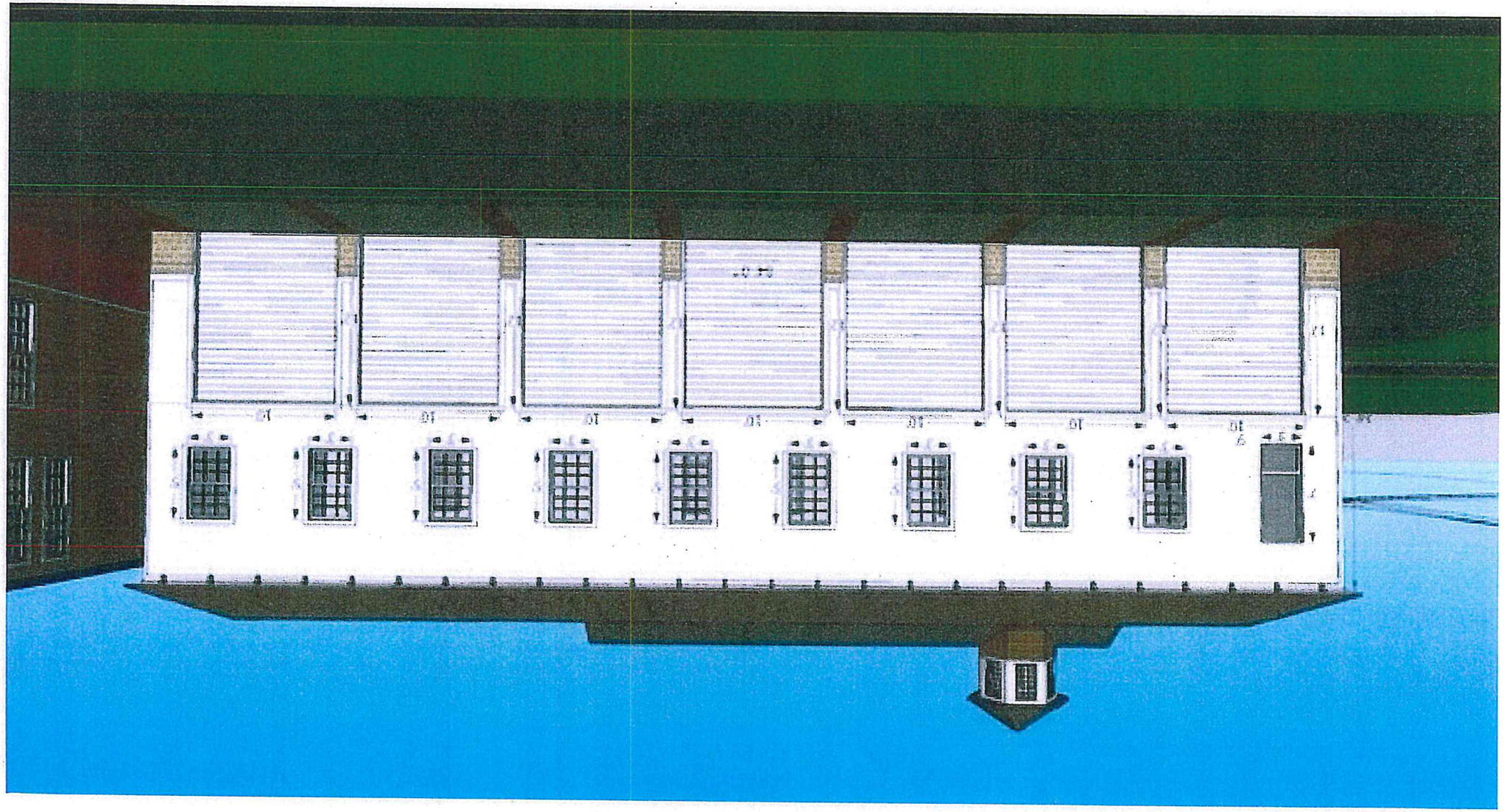
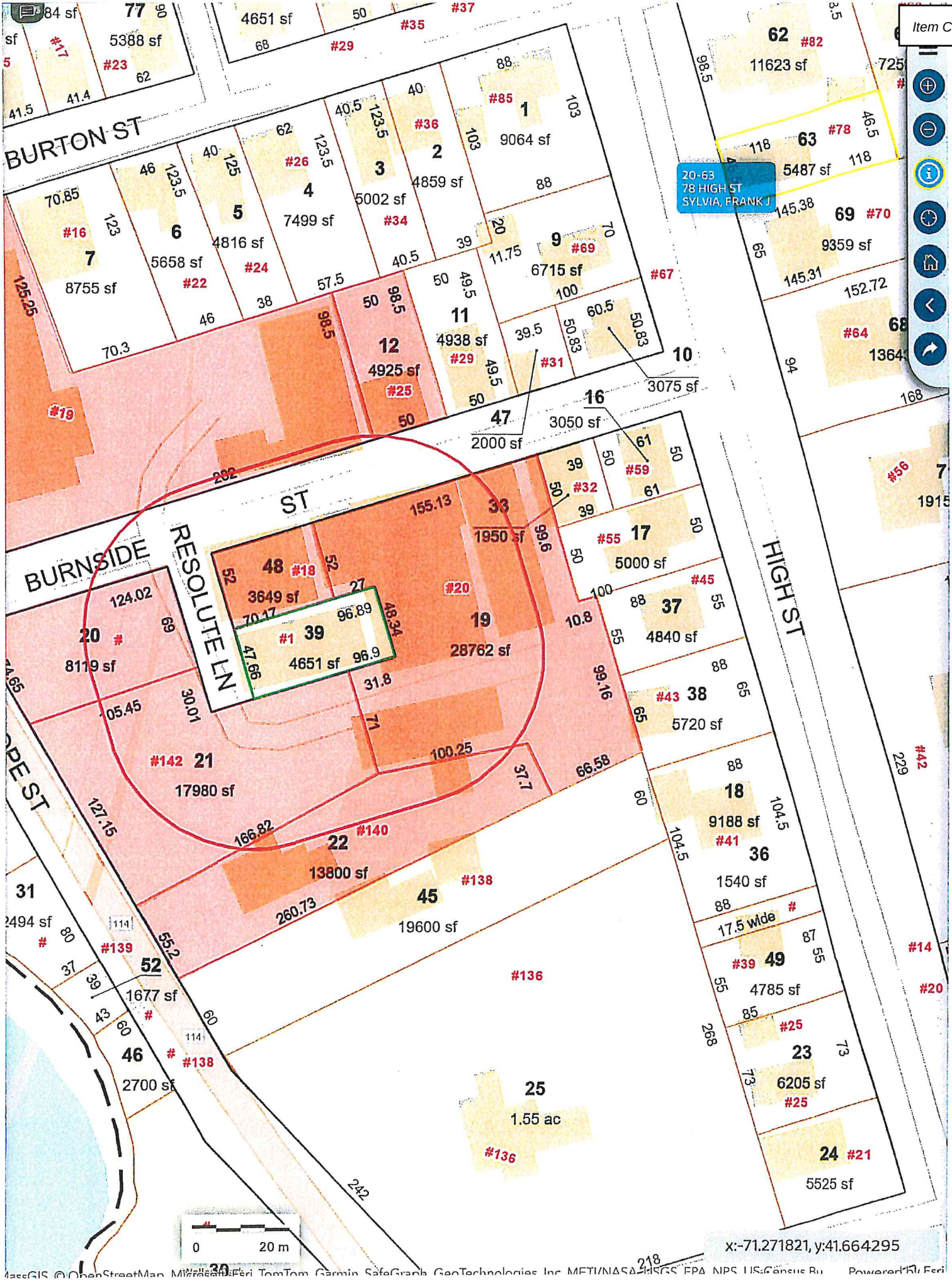
LastRunFiltered False
RecordID 1004
AccountNumber 1019
ParcelID 016-0020-000
UserAccount 34-0075-00
Street
AltStreet
StreetName BURNSIDE ST
LocCity Bristol
CondoUnit
CondoComplex
Owner1 HERRESHOFF MARINE MUSEU
Owner2
Owner3
BillingAddress P.O. BOX 450
BillingAddress2
City BRISTOL
State RI
Zip 02809
OwnerOccupied
Zone1 M
FloodHazard
BURTON ST
BURNSIDE ST
RESOLUTE LN
HOPE ST
82
1035 sf
80
8525 sf
#11
79
6127 sf
#15
78
5984 sf
#17
77
5388 sf
75
4651 sf
4057 sf
2594 sf
#87
#37
1
9064 sf
#85
2
4859 sf
#36
3
5002 sf
#34
4
7499 sf
#26
5
4816 sf
#24
6
5658 sf
#22
7
8755 sf
#16
8
1.08 ac
#19
9
67.15 s
47
2000 sf
305
11
4938 sf
#29
#31
12
4925 sf
#25
33
1950 sf
48
3649 sf
#18
#20
19
28762 sf
39
4651 sf
#1
8119 sf
44
7691 sf
41
22634 sf
#155
21
17980 sf
#142
22
13800 sf
#140
45
19600 sf
#138
#136
31
2494 sf
52
1677 sf
#139
46
2700 sf
25
1.55 ac
#136
30
Walter Clark

Herreshoff
Marine Museum
Exhibits on sailing
& the America's Cup
America's Hall of Fame
Gallery 26
Compass Group
International
Burnside Street
Resolute Lane
Burnside St
Burnside St
25
17
28
32
1
10
155
140
138
114




BURTON ST
BURNSIDE ST
RESOLUTE LN
HIGH ST
20-63
78 HIGH ST
SYLVIA, FRANK J
1 9064 sf
2 4859 sf
3 5002 sf
4 7499 sf
5 4816 sf
6 5658 sf
7 8755 sf
9 6715 sf
10 3075 sf
11 4938 sf
12 4925 sf
16 3050 sf
17 5000 sf
18 9188 sf
19 28762 sf
20 8119 sf
21 17980 sf
22 13800 sf
23 6205 sf
24 5525 sf
25 1.55 ac
31 2494 sf
33 1950 sf
36 1540 sf
37 4840 sf
38 5720 sf
39 4651 sf
45 19600 sf
46 2700 sf
47 2000 sf
48 3649 sf
49 4785 sf
52 1677 sf
62 11623 sf
63 5487 sf
68 13643
69 9359 sf
77 5388 sf
17.5 wide
0
20 m
x:-71.271821, y:41.664295

100 feet Abutters List Report

Bristol, RI
May 27, 2025

Subject Property:

Parcel Number: 16-39
CAMA Number: 16-39
Property Address: 1 RESOLUTE LANE

Mailing Address: HERRESHOFF, HALSEY C. TRUSTEE
(50%) ETAL
125 HOPE ST
BRISTOL, RI 02809

Abutters:

Parcel Number: 16-12
CAMA Number: 16-12
Property Address: 25 BURNSIDE ST

Mailing Address: FANTINI, JOANNE
169 HOPE ST
BRISTOL, RI 02809

Parcel Number: 16-19
CAMA Number: 16-19
Property Address: 20 BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-20
CAMA Number: 16-20
Property Address: BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-21
CAMA Number: 16-21
Property Address: 142 HOPE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-22
CAMA Number: 16-22
Property Address: 140 HOPE ST

Mailing Address: BARLOW, WILLIAM V. & BARLOW,
MILDRED M. TRUSTEES,
140 HOPE ST
BRISTOL, RI 02809

Parcel Number: 16-48
CAMA Number: 16-48
Property Address: 18 BURNSIDE ST

Mailing Address: HERRESHOFF, HALSEY C. TRUSTEE
P.O. BOX 687
BRISTOL, RI 02809

Parcel Number: 16-8
CAMA Number: 16-8-001
Property Address: 19 BURNSIDE ST

Mailing Address: HH ACQUISITIONS LLC
19 BURNSIDE ST
BRISTOL, RI 02809

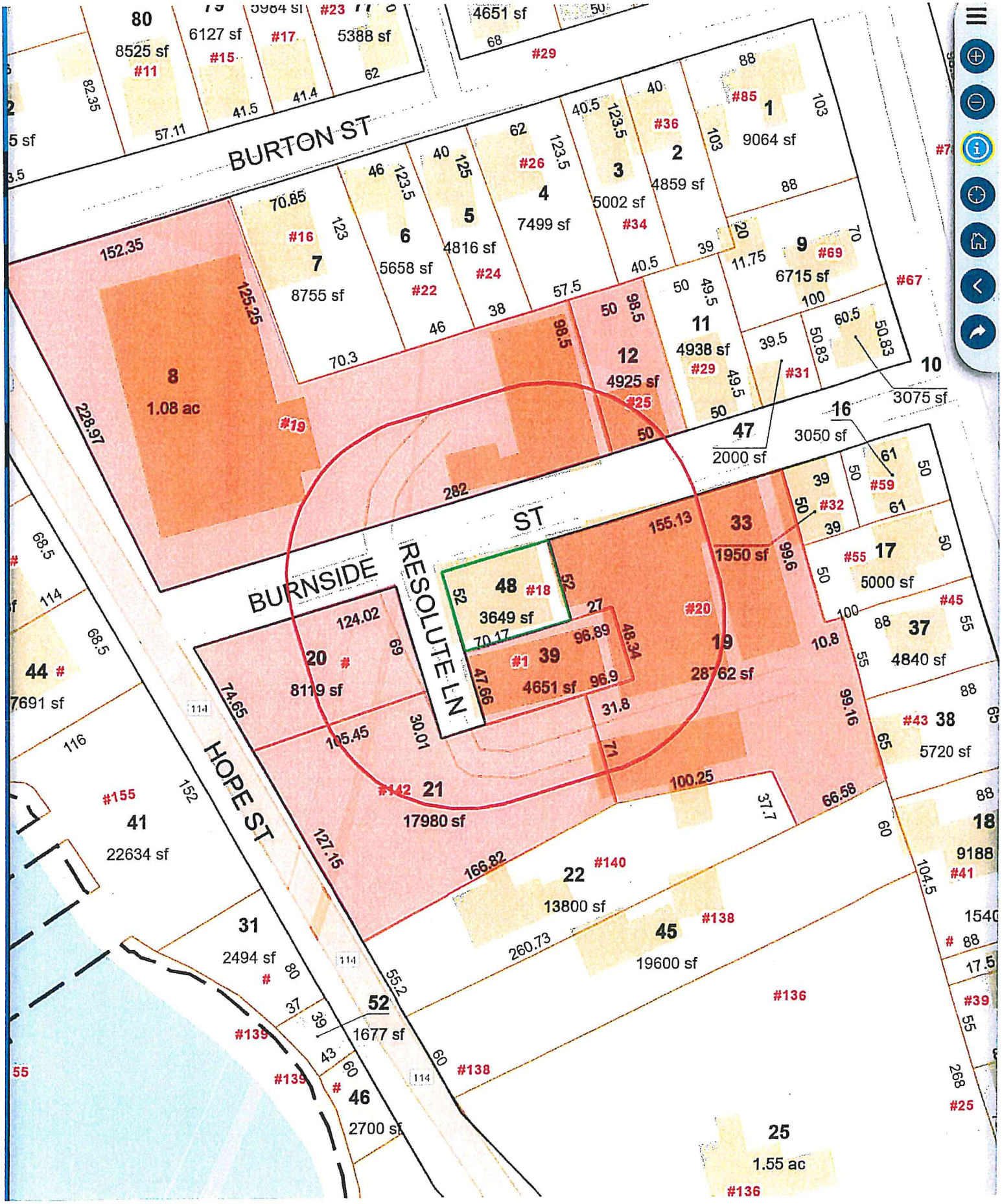
Parcel Number: 16-8
CAMA Number: 16-8-002
Property Address: 17 BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-8
CAMA Number: 16-8-003
Property Address: 1 BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

CAI Technologies
www.cai-tech.com
Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.


BURTON ST
BURNSIDE ST
RESOLUTE LN
HOPE ST
80
8525 sf
#11
6127 sf
#15
#17
5388 sf
#23
4651 sf
#29
#85
1
9064 sf
#36
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4859 sf
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#34
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7499 sf
#26
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4816 sf
#24
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5658 sf
#22
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8755 sf
#16
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1.08 ac
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6715 sf
#69
#67
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3075 sf
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4938 sf
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4925 sf
#25
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1950 sf
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5720 sf
#43
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9188
#41
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28762 sf
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48
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3649 sf
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4651 sf
20
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8119 sf
21
#142
17980 sf
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#140
13800 sf
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19600 sf
#136
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1.55 ac
#136
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1677 sf
46
2700 sf
#139
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2494 sf
41
22634 sf
#155
44
#
7691 sf
#7
#39
#25
1540
#
88
17.5
268
55
114
116
152
68.5
82.35
57.11
41.5
41.4
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70.85
123
46
123.5
125
40
62
123.5
40.5
123.5
40
103
88
103
88
20
39
40.5
70
11.75
100
60.5
50.83
50.83
39.5
50
49.5
49.5
50
57.5
38
46
70.3
98.5
50
98.5
50
152.35
125.25
228.97
282
50
39
61
50
50
61
50
39
50
50
155.13
99.6
50
100
88
55
55
10.8
88
65
99.16
65
71
37.7
66.58
60
104.5
100.25
166.82
127.15
74.65
105.45
30.01
31.8
47.66
96.9
96.89
48.34
27
52
52
70.17
124.02
69
68.5
114
68.5
114
114
114
114
55.2
60
43
60
80
37
39
260.73
#
#
#

100 feet Abutters List Report

Bristol, RI
May 27, 2025

Subject Property:

Parcel Number: 16-48
CAMA Number: 16-48
Property Address: 18 BURNSIDE ST

Mailing Address: HERRESHOFF, HALSEY C. TRUSTEE
P.O. BOX 687
BRISTOL, RI 02809

Abutters:

Parcel Number: 16-12
CAMA Number: 16-12
Property Address: 25 BURNSIDE ST

Mailing Address: FANTINI, JOANNE
169 HOPE ST
BRISTOL, RI 02809

Parcel Number: 16-19
CAMA Number: 16-19
Property Address: 20 BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-20
CAMA Number: 16-20
Property Address: BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-21
CAMA Number: 16-21
Property Address: 142 HOPE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809

Parcel Number: 16-39
CAMA Number: 16-39
Property Address: 1 RESOLUTE LANE

Mailing Address: HERRESHOFF, HALSEY C. TRUSTEE
(50%) ETAL
125 HOPE ST
BRISTOL, RI 02809

Parcel Number: 16-8
CAMA Number: 16-8-001
Property Address: 19 BURNSIDE ST

Mailing Address: HH ACQUISITIONS LLC
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BRISTOL, RI 02809

Parcel Number: 16-8
CAMA Number: 16-8-002
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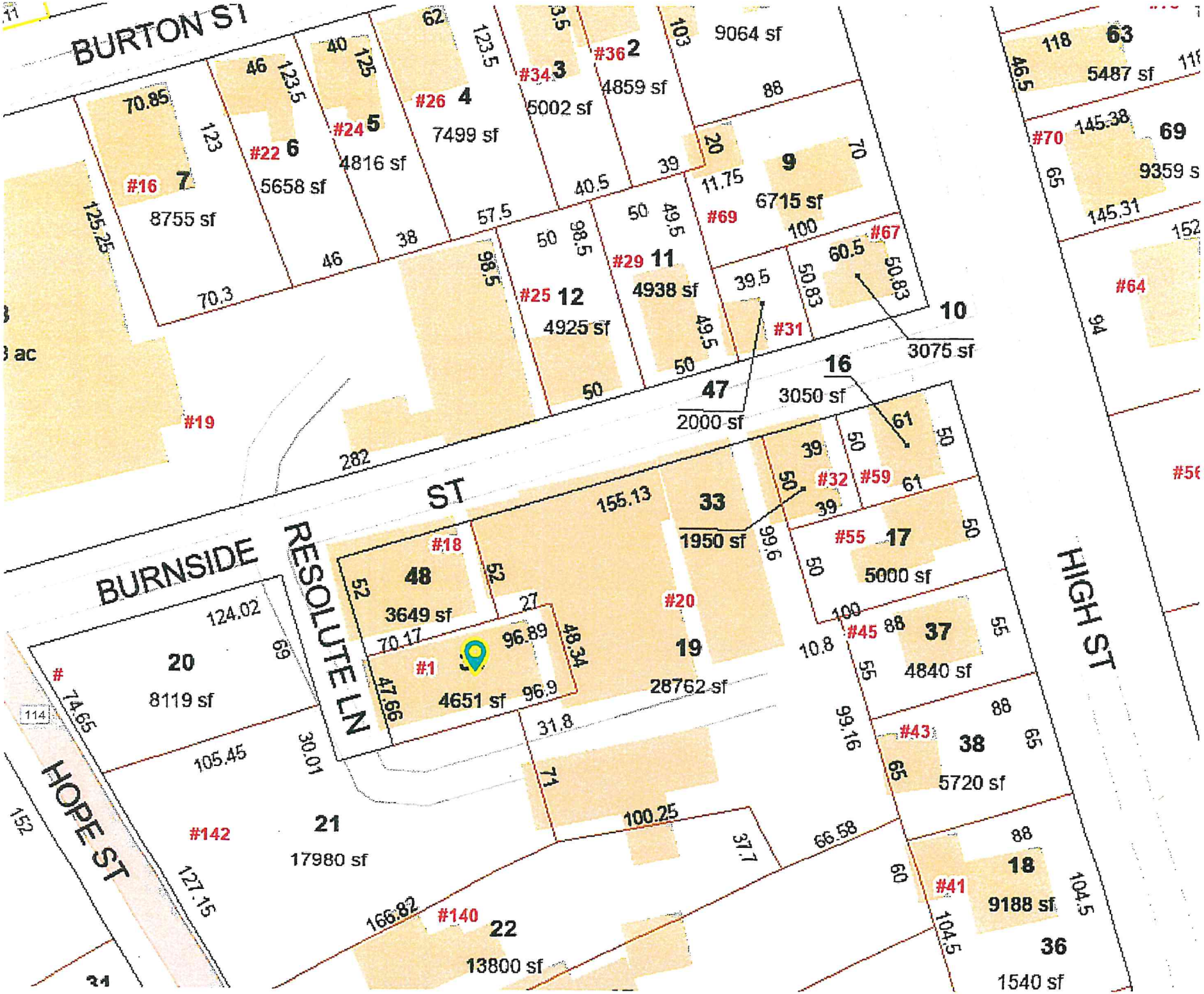
BRISTOL, RI 02809

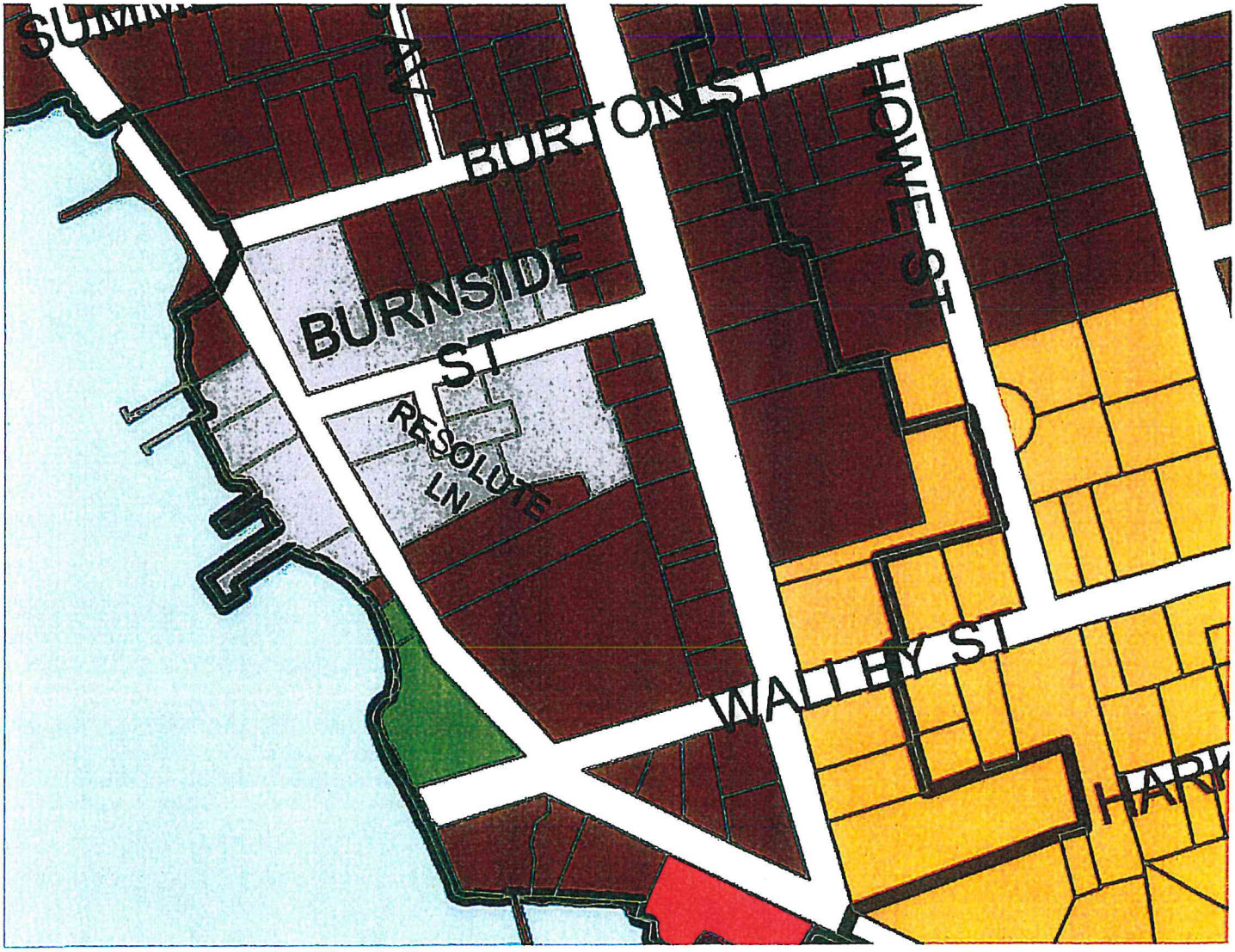
Parcel Number: 16-8
CAMA Number: 16-8-003
Property Address: 1 BURNSIDE ST

Mailing Address: HERRESHOFF MARINE MUSEUM
P. O. BOX 450
BRISTOL, RI 02809



Plat 16 Lots 48 and 39

Item C4.



(M) Manufacturing [Burnside / Resolute]

FirstAmerican Title™	Commitment for Title Insurance ISSUED BY First American Title Insurance Company
Commitment	

First American Title Insurance Company, a California corporation ("Company"), for a valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the Land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedules A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate six (6) months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

This Commitment shall not be valid or binding until countersigned by a validating officer or authorized signatory.

IN WITNESS WHEREOF, First American Title Insurance Company has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

FIRST AMERICAN TITLE INSURANCE COMPANY

BY: Curt B. Johnson

PRESIDENT

Attest:

SECRETARY

TITLE EXAMINATION CONCLUSION SHEET

Examiner name: CJE

Schedule A

: File # (do not use dashes or suffix): 110850205 Start date: 5/16/75 End date: 1/4/2025 at 1:00 PM

Street/Town/State/Zip Code: 18 Burnside Street, Bristol, RI 02809

Assessor's Plat #: 16 Assessors Lot #: 48 Recorded Lot/Plat Card:

Title in: Halsey C. Herreshoff, as Trustee of the Halsey C. Herreshoff Revocable Trust
Tenancy: sole

By Quitclaim Deed from: Halsey Properties, LLC

Signed Date: 11/19/2024 Recorded Date/Time: 11/20/2024 at 8:55 AM Book/Page: 2264/319

Legal Description in Book/Page (include the book/page of any drops and/or additions): 2264/319

Schedule B, Section 1, Requirements

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

s affected by:

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

s affected by:

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

s affected by:

Additional Liens:

TITLE EXAMINATION CONCLUSION SHEET

Note for informational purposes, the following deeds in the 24-month chain of title other than the deed cited above: Book 1985, Page 200
Book , Page ; Book , Page ;

Schedule B, Section 2, Exceptions

Restrictions/Easements/Other (including all exceptions from Start).

Exceptions and reservations in Book/Page: 103/33

Restrictions in Book/Page: 171/107

in Book/Page:

in Book/Page:

in Book/Page:

Other: Memorandum of Trust at 2270/77

Examiner Remarks/Comments:

Choose Box: 10 Year Buyer Run: yes Current Owner Check for Probate: no Examined Online: yes

EXHIBIT A
DESCRIPTION

Parcel I

That parcel of land, with the buildings and improvements thereon, situated on the southerly side of Burnside Street [18 Burnside Street] in the Town of Bristol in the State of Rhode Island, bounded and described as follows:

Beginning at a point in the southerly line of Burnside Street at the southeasterly corner of said Burnside Street and Resolute Lane, formerly known as Willow Lane; thence easterly bounding northerly on Burnside Street 70 feet and 2 inches to land now or lately of Jesse P. Sousa Foundations, Inc.; thence southerly bounding easterly on the last mentioned land 52 feet to a corner; thence turning at right angles and running westerly bounding southerly on the last mentioned land 70 feet and 2 inches, more or less, to said Resolute Lane; thence northerly bounding westerly on said Resolute Lane 52 feet to said Burnside Street.

Together with rights appurtenant and subject to exceptions and reservations set forth or referred to in deed in Book 103 at Page 33.

Parcel II

That certain parcel of land, with all buildings and improvement thereon, situated southerly on Burnside Street, on the easterly side of Resolute Lane [1 Resolute Lane], in the Town and County of Bristol, State of Rhode Island, bounded and described as follows:

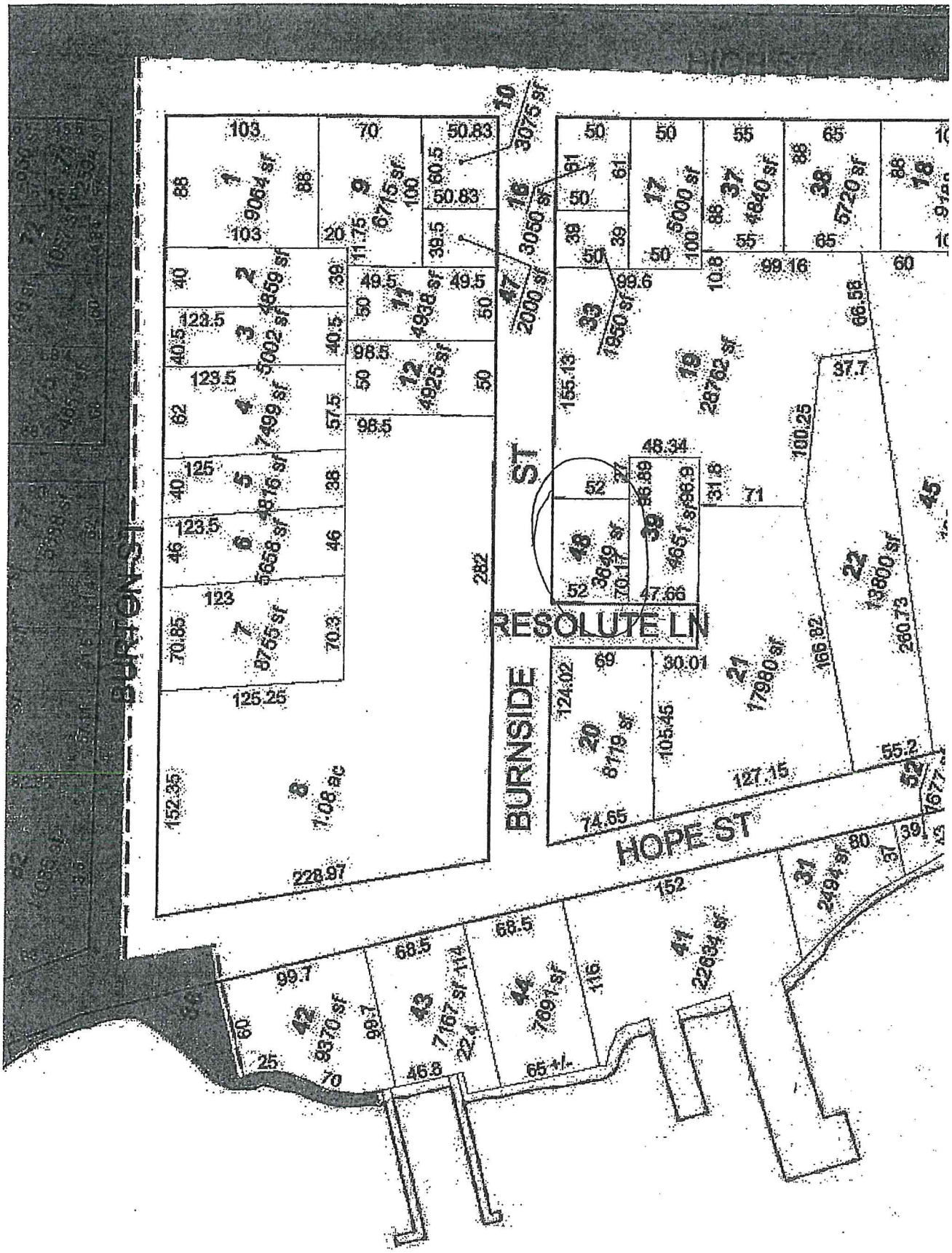
Beginning at the southwesterly corner of land now or lately of Halsey C. Herreshoff, Inc. said point being fifty-two (52) feet southerly of said Burnside Street as measured along the westerly line of said Herreshoff land, said point being the northwesterly corner hereof; thence southerly along a line in range with the westerly line of said Herreshoff land, bounding westerly on Resolute Lane (formerly Willow Lane), being land now or lately of Norman F. Herreshoff, forty-seven and 66/100 (47.66) feet to an angle in said Herreshoff land; thence turning an interior angle of 90°-43'30" and running easterly along the line of said Herreshoff land and along a line continued easterly in range therewith, bounding southerly on said Herreshoff land in part and in part on land now or lately of Jesse P. Sousa Foundation, Inc. ninety-six and 90/100 (96.90) feet; thence northerly bounding easterly on said last named land to the point of intersection of the southerly line of Halsey C. Herreshoff, Inc. land continued easterly in range thereof and distant ninety-six and 89/100 (96.89) feet easterly of the point of beginning; thence westerly along the last described line bounding northerly in part on land now or lately of Jesse P. Sousa Foundation, Inc. and in part on said Halsey C. Herreshoff, Inc. land ninety-six and 89/100 (96.89) feet to said Norman F. Herreshoff land, in the easterly line of Resolute Lane at the point and place of beginning.

This conveyance is executed together with the rights of passage and rights to lay water and other pipes as are set forth in title deeds, in common with others, said right being further subject to the rights of others in and to the shipping or loading platform situated on said Resolute Lane.

This conveyance is executed subject to the rights of the owners of land on the north (hereinabove referred to as Halsey C. Herreshoff, Inc.) to enter on the above described premises to inspect, paint, or repair the building on their premises.

For a source of title, see Deeds in Book 259 Page 263, Book 260 Page 39, Book 1425 Page 20, Book 1426 Page 3, Book 1096 Page 22, and in Book 1096 Page 26.

Meaning and intending to convey Lots 48 and 39 on Tax Assessors' Plat 16, for reference purposes only.



Assessor's Plat 16

21-J-12000

11/20/2024
08:55:07 AM
3 Pages
QUIT CLAIM DEED
Bk: 2264 Pg: 319
Instr: 2024-2687

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS, that, HALSEY PROPERTIES, LLC, a Rhode Island Limited Liability Company having its principal place of business at P.O. Box 687, Bristol, Rhode Island 02809, for consideration paid in the amount of One Dollar ($1.00) and other good and valuable consideration, grant to HALSEY C. HERRESHOFF, in his capacity as Trustee of the "HALSEY C. HERRESHOFF REVOCABLE TRUST," under that certain Revocable Trust Agreement dated September 18, 2020, and any amendments thereto, with an address of PO Box 687, Bristol, Rhode Island 02809, with QUITCLAIM COVENANTS:

SEE ATTACHED EXHIBIT A

Being the same premises conveyed to this grantor by deed of HALSEY C. HERRESHOFF, and recorded on June 17, 2019, in the Records of Land Evidence in the Town of Bristol, State of Rhode Island, in Book 1985 at Page 200.

The consideration for this conveyance is such that no documentary stamps are required. This transfer is by way of gift and no withholding is required under RIGL 44-30-71.3.

Subject to taxes and assessments assessed as of December 31, 2023.

The undersigned hereby certifies compliance with the requirements and all other provisions of the smoke detector and carbon monoxide detector laws and regulations of the Rhode Island Fire Safety Code.

IN WITNESS WHEREOF, HALSEY PROPERTIES, LLC, has caused this instrument to be executed by its Manager thereunto duly authorized on this 19th day of November, 2024.

HALSEY PROPERTIES, LLC

By: HALSEY C. HERRESHOFF, MANAGER

STATE OF RHODE ISLAND
COUNTY OF BRISTOL

In the Town of Bristol on the 19th day of November, 2024, before me personally appeared, HALSEY C. HERRESHOFF, the manager of HALSEY PROPERTIES, LLC, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument on behalf of said corporation, and acknowledged that he executed said instrument with proper authority for the purpose stated therein as his free act and deed in his said capacity and the free act and deed of said limited liability company.

Notary Public

JOHN G. REGO
NOTARY PUBLIC
STATE OF RHODE ISLAND
NOTARY ID 12941
COMMISSION EXPIRES 6/16/2025

21-J-12000

EXHIBIT A

That parcel of land, with the buildings and improvements thereon, situated on the southerly side of Burnside Street in the Town of Bristol in the State of Rhode Island, bounded and described as follows:

Beginning at a point in the southerly line of Burnside Street at the southeasterly corner of said Burnside Street and Resolute Lane, formerly known as Willow Lane; thence easterly bounding northerly on Burnside Street 70 feet and 2 inches to land now or lately of Jesse P. Sousa Foundations, Inc.; thence southerly bounding easterly on the last mentioned land 52 feet to a corner; thence turning at right angles and running westerly bounding southerly on the last mentioned land 70 feet and 2 inches, more or less, to said Resolute Lane; thence northerly bounding westerly on said Resolute Lane 52 feet to said Burnside Street.

Together with rights appurtenant and subject to exceptions and reservations set forth or referred to in deed in Book 103 at Page 33.

Meaning and intending to convey Lot 48 on Tax Assessors' Plat 16, for reference purposes only.

Received for record at Bristol, RI
11/20/2024 08:55:07 AM

PROPERTY ADDRESS:
18 BURNSIDE STREET
BRISTOL, RI 02809

by him executed in said capacity to be his free act and deed, and the free act and deed of the Henry C.McDuff Estate.

Dorothy K.Williams

Notary Public.

103/33

Recorded October 22, 1931

at 9:30 o'clock forenoon.

Town Clerk.

Know all Men by these Presents, that

COLLINS & AIKMAN CORPORATION, a corporation existing under the laws of the State of Delaware, hereinafter called the Grantor, in consideration of Ten ($10) Dollars, to it paid by HERRESHOFF MANUFACTURING COMPANY, a corporation existing under the laws of the State of Rhode Island, hereinafter called the Grantee, the receipt whereof is hereby acknowledged do hereby give, grant, bargain, sell and convey unto the said Grantee, and its successors and assigns, forever.

That certain lot of land with all the buildings and improvements thereon, situated on the southerly side of Burnside Street, in the Town of Bristol, State of Rhode Island, and bounded anddescribed as follows:

Beginning at the southeasterly corner of Burnside Street and Willow Lane, then turning and running easterly, bounding northerly by said Burnside Street to a point five (5) feet easterly from the northeasterly corner of the present foundation of the building on the land hereby conveyed, which point is approximately seventy (70) feet and two (2) inches from said corner of Burnside St.and Willow Lane; thence turning and running southerly fifty-two (52) feet to other land of this grantor, bounding easterly by other land of this grantor;thence turning a right angle and extending westerly to said Willow Lane, a distance of approximately seventy (70) feet and two (2) inches, bounding southerly by other land of this grantor; thence turning and extending northerly fifty-two (52) feet to said Burnside Street, and the point of beginning,bounded westerly by said Willow Lane; or however otherwise the same may be bounded, it being the northwesterly portion of the premises designated as parcel "(5)" in that certain deed from Cranston Worsted Mill to this grantor,dated July 29, 1927, and recorded in Book 97 at Page 18 of the records of deeds in said Town of Bristol.

Also the right to use and enjoy in common with this grantor, for a distance of fifty-two (52) feet from said Burnside Street, whatever rights or way,easements or privileges this grantor may have in and to Willow Lane.

Also the right, through its servants and agents, to enter at all reasonable times upon the land of this grantor, situated next adjoining, on the south, the land hereby conveyed, for the purpose of inspecting, painting or repairing the building now located on the

land hereby conveyed.

The grantor hereby excepts from this conveyance, and expressly reserves unto itself, its successors and assigns, the right to the exclusive use and enjoyment of that part of the cement vault now located on the easterly part of the premises hereby conveyed, said vault to be kept and maintained by this grantor, its successors and assigns, on the premises hereby conveyed; and also the right to enter upon the premises hereby conveyed at all reasonable times for the purpose of inspecting, repairing, or maintaining said vault.

In the event that the building owned by this grantor and now located easterly of the premises hereby conveyed, and from which building said vault now extends, shall be destroyed by fire or other causes, or shall be rendered unfit for use, and shall not be rebuilt or rendered fit for use within a period of one (1) year from the time when such destruction or unfitness shall occur, then the right to the use and enjoyment of said vault hereby created, shall cease and determine.

The grantor reserves and excepts from this conveyance the right to use and maintain on its present location the shipping platform, now situated on Willow Lane and lying between the building hereby conveyed and the building of this grantor next adjoining on the south.

To Have and to Hold, the aforegranted premises, with all the rights, privileges and appurtenances thereunto belonging, unto and to the use of the said Grantee, and its successors and assigns, forever.

And it the said Grantor, does hereby, for itself and for its successors and assigns, covenant with the said Grantee, and its successors and assigns that it is lawfully seized in fee simple of the said granted premises; that the same are free from all incumbrances that it has good right, full power and lawful authority to sell and convey the same in manner as aforesaid; that the said Grantee and its successors and assigns shall by these presents at all times hereafter peaceably and quietly have and enjoy the said premises, and that, if the said Grantor will, and its successors and assigns shall warrant and defend the same to the said Grantee and its successors and assigns forever against the lawful claims and demands of all persons.

IN WITNESS WHEREOF the said COLLINS & AIKMAN CORPORATION has caused these presents to be executed and its corporate seal hereunto duly affixed by C.B.Rockwell,Jr.its Treasurer, for this purpose duly authorized, this 20th day of October in the year of our Lord one thousand nine hundred and thirty-one.

Executed in the presence of

(CORPORATE SEAL)

Attested

C.H.Wilson

Secty

COLLINS & AIKMAN CORPORATION

By C.B.Rockwell, Jr.

Treasurer

STATE OF RHODE ISLAND }
COUNTY OF BRISTOL }

At Bristol, in said County and State, on the 20th day of October,A.D. 1931 before me personally appeared C.B.Rockwell,Jr., Treasurer of Collins & Aikman Corporation, to me known and known by me to be the party executing the foregoing instrument, and acknowledged said instrument by him executed as such Treasurer to be his free act and deed as such Treasurer and the free act and deed of said Collins & Aikman Corporation.

Edward L.Leahy

Notary Public.

Recorded October 23, 1931

at 12:40 o'clock forenoon.

Town Clerk.

UNITED STATES RUBBER COMPANY

FIRST AND REFUNDING MORTGAGE - RELEASE NO. 21

RELEASE

This indenture made this 20th day of October 1931, between CENTRAL HANOVER BANK AND TRUST COMPANY, a corporation organized and existing under and by virtue of the laws of the State of New York, as sole surviving Trustee under the Mortgage hereinafter referred to and hereinafter termed the Corporate Trustee, and UNITED STATES RUBBER COMPANY a corporation organized and existing under and by virtue of the laws of the State of New Jersey, hereinafter termed the Company;

WHEREAS the Company heretofore made, executed and delivered its certain Indenture of Mortgage dated February 15, 1917, under which it conveyed to Central Trust Company of New York and James N.Wallace, as Trustees, all and singular the lands and property as mentioned in the said Mortgage, and all other lands or interests in lands now owned or acquired by the Company subsequent to the date of the said Mortgage, as security for the payment of certain bonds or obligations for an aggregate principal sum not exceeding $97,252,900., which Mortgage was duly recorded March 7, 1917, in the office of the Town Clerk of Bristol in Mortgage Record, Vol.79, page 10.

WHEREAS on June 18, 1918, pursuant to the laws of the State of New York, Central Trust Company of New York merged unto itself the Union Trust Company of New York, and simultaneously changed its name to Central Union Trust Company of New York; and

WHEREAS on May 15, 1929, pursuant to the laws of the State of New York, Central Union Trust Company of New York merged unto itself The Hanover Bank of the City of New York and simultaneously changed its name to Central Hanover Bank and Trust Company, and under said name is duly constituted Corporate Trustee under the said Mortgage; and

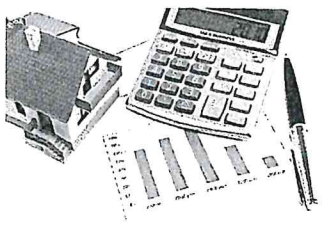
WHEREAS said James N.Wallace, one of the Trustees, died on the 11th day of October, 1919, and said Central Hanover Bank and Trust Company is the sole surviving Trustee under the said Mortgage; and

WHEREAS the Company has agreed to sell to JOHN E.BERNARDO certain real property hereinafter more particularly described, and to execute, acknowledge and deliver to said purchaser deed conveying to him the title to the said real property free from all encumbrances; and

WHEREAS it is provided by Article Ten of the said Mortgage that the Corporate Trustee shall, from time to time, upon request of the Company and upon conditions therein specified, release from the lien and operation of the said Mortgage, any part of the mortgaged premises; and

Item C4.

CATALIS® Bristol, RI



Home | Search | Print | Previous | Next

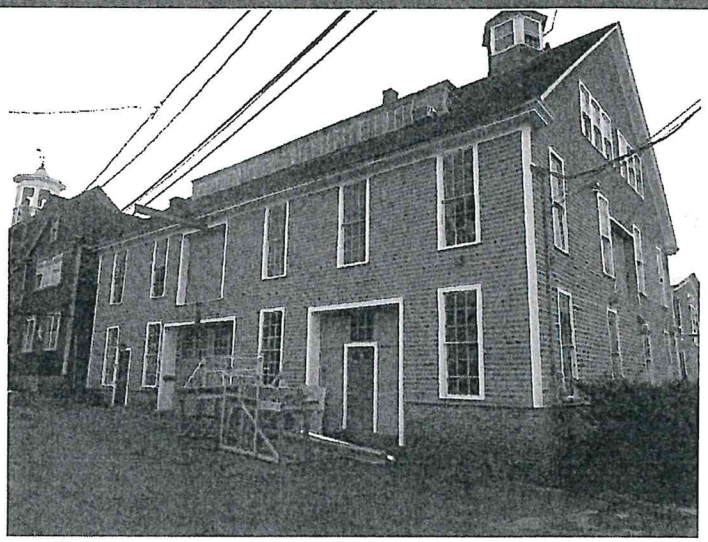
Disclaimer: This information is for tax assessing purposes and is not warranted

Parcel Identification

Map/Lot	016-0048-000
Account	1049
State Code	07 - Industrial
Card	1/1
User Account	50-0086-56

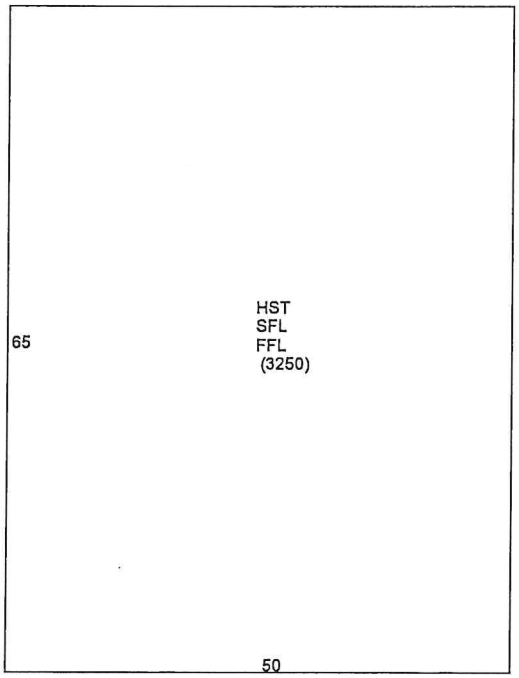
Assessment

Land	$344,600
Building	$238,700
Card Total	$583,300
Parcel Total	$583,300



Prior Assessments

Fiscal Year	Land Value	Building Value	Outbuilding Value	Total Value
2025	$344,600	$238,700	$0	$583,300
2024	$265,300	$197,500	$0	$462,800
2023	$265,300	$197,500	$0	$462,800
2022	$265,300	$197,500	$0	$462,800
2021	$273,500	$172,800	$0	$446,300



Location and Owner

Location	18 BURNSIDE ST
Owner	HERRESHOFF, HALSEY C. TRUSTEE
Owner2	
Owner3	
Address	P.O. BOX 687
Address2	
Address3	BRISTOL RI 02809

Building Information

Design	WhseStor
Year Built	1890
Heat	Wall Furnace
Fireplaces	0
Rooms	0
Bedrooms	0
Bathrooms	
Above Grade Living Area	8,125 SF

Sale Information

Sale Date	Sale Price	Legal Reference	Instrument
11/20/2024	$0	2264-319	Quit Claim
06/17/2019	$0	1985-200	Quit Claim
06/17/2019	$0	1985-197	Quit Claim
06/17/2019	$0	1985-194	Quit Claim
05/16/1975	$0	199-82	
01/01/1968	$0	171-10	
01/01/1963	$0	149-27	

Building Sub Areas

Sub Area	Net Area
1st FLOOR	3,250 SF
2nd FLOOR	3,250 SF
HALF STORY	1,625 SF

Land Information

Land Area	0.084 AC

01/01/1963	$0	136-52
01/01/1954	$0	126-550
01/01/1931	$0	103-33
01/01/1927	$0	97-16

Zoning	M
View	-
Neighborhood	Cl3

iisnode encountered an error when processing the request.

```
HRESULT: 0x6d
HTTP status: 500
HTTP subStatus: 1013
HTTP reason: Internal Server Error
```

You are receiving this HTTP 200 response because system.w
'true'.

In addition to the log of stdout and stderr of the node.exe pro
diagnose the problem.

The last 64k of the output generated by the node.exe process

```
(node:4084) [DEP0005] DeprecationWarning: Buffer()
(Use `node --trace-deprecation ...` to show where
Application has thrown an uncaught exception and i
Error: Town not found on gisserver3
    at \\axisfiles.aws.axisgis.com\share\axisapi_p
    at processTicksAndRejections (node:internal/pr
```

Click To Open AxisGIS Maps

Yard Item(s)

1 Resolute Lane

FirstAmerican Title™	Commitment for Title Insurance
	ISSUED BY First American Title Insurance Company
Commitment	

First American Title Insurance Company, a California corporation ("Company"), for a valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the Land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedules A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate six (6) months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

This Commitment shall not be valid or binding until countersigned by a validating officer or authorized signatory.

IN WITNESS WHEREOF, First American Title Insurance Company has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

FIRST AMERICAN TITLE INSURANCE COMPANY

BY: Curt B. Johnson

PRESIDENT

Attest: Timothy Gruber

SECRETARY

CONDITIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.

2. If the proposed Insured has or acquired actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act of reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions.

3. Liability of the Company under this Commitment shall be only to the named proposed Insured and such parties included under the definition of Insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions and Conditions and Stipulations and Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed Insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.

4. This Commitment is a contract to issue one or more title insurance policies and is not an abstract of title or a report of the condition of title. Any action or actions or rights of action that the proposed Insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.

5. The policy to be issued contains an arbitration clause. All arbitrable matters when the Amount of Insurance is $2,000,000 or less shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. You may review a copy of the arbitration rules at < http://www.alta.org/ >.

TITLE EXAMINATION CONCLUSION SHEET

Examiner name: CJE

Schedule A

File # (do not use dashes or suffix): 110850198 Start date: 3/14/85 End date: 8/4/2025 at 1:00 PM

Street/Town/State/Zip Code: 1 Resolute Lane, Bristol, RI 02809

Assessor's Plat #: 16 Assessors Lot #: 39 Recorded Lot/Plat Card:

Title in: Halsey C. Herreshoff; Halsey C. Herreshoff Revocable Trust; Nathanael G. Herreshoff, III; Nathanael G. Herreshoff, III Revocable Trust; Karl C. Herreshoff; Halsey C. Herreshoff, II

Tenancy: common

By Quitclaim Deed from: See deeds at 260/39, 1096/26, 1425/20, 1426/3, 2122/196, 2242/28, 2223/72

Signed Date: Recorded Date/Time: Book/Page:

Legal Description in Book/Page (include the book/page of any drops and/or additions): 260/39

Schedule B, Section 1, Requirements

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

as affected by:

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

as affected by:

Mortgage To: Amount: $

Signed Date: Recorded Date/Time: Book/Page:

as affected by:

Additional Liens:

TITLE EXAMINATION CONCLUSION SHEET

Note for informational purposes, the following deeds in the 24-month chain of title other than the deed cited above: Book , Page Book , Page ; Book , Page ;

Schedule B, Section 2, Exceptions

Restrictions/Easements/Other (including all exceptions from Start).

Rights in Book/Page: 260/39

in Book/Page:

in Book/Page:

in Book/Page:

in Book/Page:

Other:

Examiner Remarks/Comments:

Choose Box: 10 Year Buyer Run: yes Current Owner Check for Probate: no Examined Online: yes

EXHIBIT A
DESCRIPTION

Parcel I

That parcel of land, with the buildings and improvements thereon, situated on the southerly side of Burnside Street [18 Burnside Street] in the Town of Bristol in the State of Rhode Island, bounded and described as follows:

Beginning at a point in the southerly line of Burnside Street at the southeasterly corner of said Burnside Street and Resolute Lane, formerly known as Willow Lane; thence easterly bounding northerly on Burnside Street 70 feet and 2 inches to land now or lately of Jesse P. Sousa Foundations, Inc.; thence southerly bounding easterly on the last mentioned land 52 feet to a corner; thence turning at right angles and running westerly bounding southerly on the last mentioned land 70 feet and 2 inches, more or less, to said Resolute Lane; thence northerly bounding westerly on said Resolute Lane 52 feet to said Burnside Street.

Together with rights appurtenant and subject to exceptions and reservations set forth or referred to in deed in Book 103 at Page 33.

Parcel II

That certain parcel of land, with all buildings and improvement thereon, situated southerly on Burnside Street, on the easterly side of Resolute Lane [1 Resolute Lane], in the Town and County of Bristol, State of Rhode Island, bounded and described as follows:

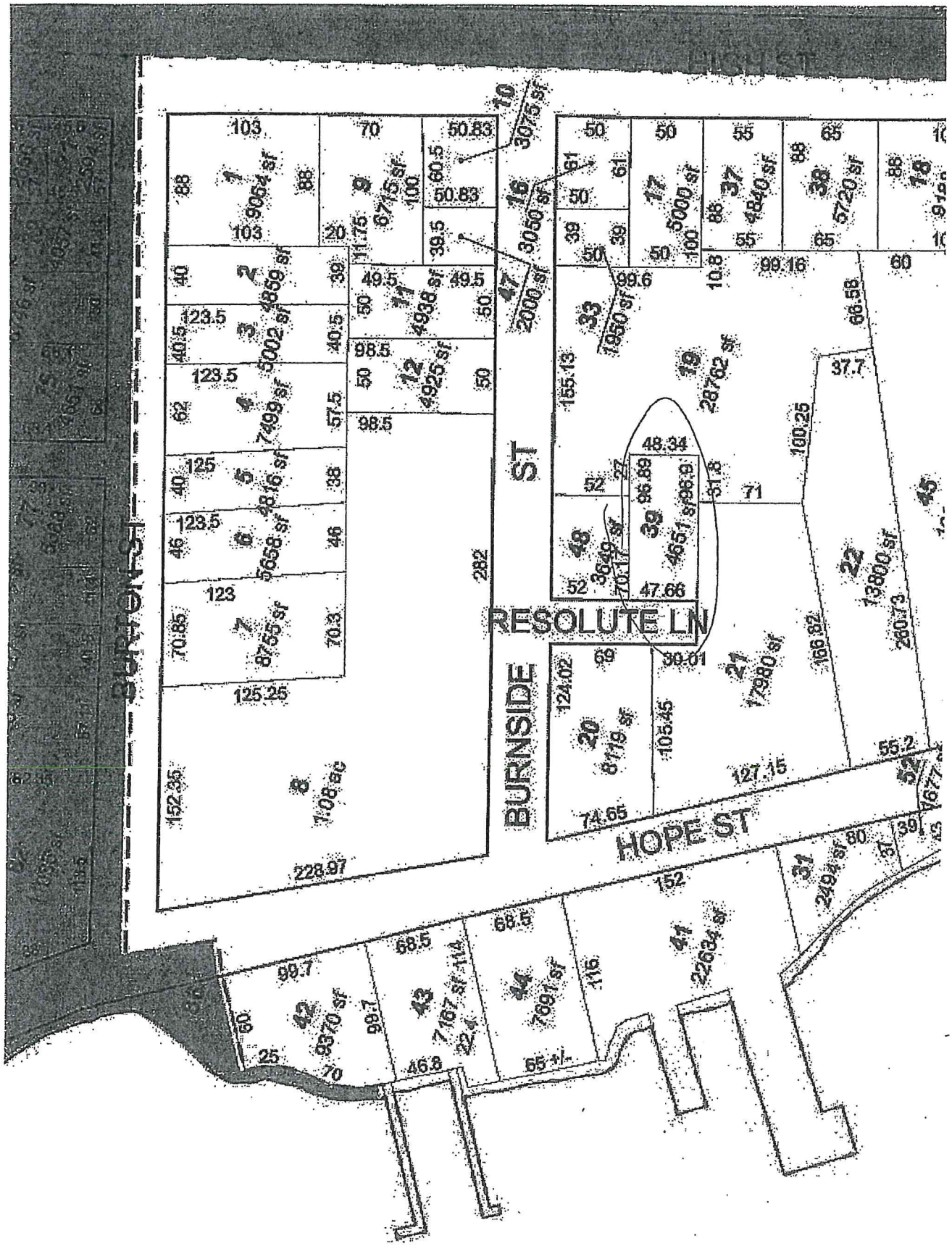
Beginning at the southwesterly corner of land now or lately of Halsey C. Herreshoff, Inc. said point being fifty-two (52) feet southerly of said Burnside Street as measured along the westerly line of said Herreshoff land, said point being the northwesterly corner hereof; thence southerly along a line in range with the westerly line of said Herreshoff land, bounding westerly on Resolute Lane (formerly Willow Lane), being land now or lately of Norman F. Herreshoff, forty-seven and 66/100 (47.66) feet to an angle in said Herreshoff land; thence turning an interior angle of 90°-43'30" and running easterly along the line of said Herreshoff land and along a line continued easterly in range therewith, bounding southerly on said Herreshoff land in part and in part on land now or lately of Jesse P. Sousa Foundation, Inc. ninety-six and 90/100 (96.90) feet; thence northerly bounding easterly on said last named land to the point of intersection of the southerly line of Halsey C. Herreshoff, Inc. land continued easterly in range thereof and distant ninety-six and 89/100 (96.89) feet easterly of the point of beginning; thence westerly along the last described line bounding northerly in part on land now or lately of Jesse P. Sousa Foundation, Inc. and in part on said Halsey C. Herreshoff, Inc. land ninety-six and 89/100 (96.89) feet to said Norman F. Herreshoff land, in the easterly line of Resolute Lane at the point and place of beginning.

This conveyance is executed together with the rights of passage and rights to lay water and other pipes as are set forth in title deeds, in common with others, said right being further subject to the rights of others in and to the shipping or loading platform situated on said Resolute Lane.

This conveyance is executed subject to the rights of the owners of land on the north (hereinabove referred to as Halsey C. Herreshoff, Inc.) to enter on the above described premises to inspect, paint, or repair the building on their premises.

For a source of title, see Deeds in Book 259 Page 263, Book 260 Page 39, Book 1425 Page 20, Book 1426 Page 3, Book 1096 Page 22, and in Book 1096 Page 26.

Meaning and intending to convey Lots 48 and 39 on Tax Assessors' Plat 16, for reference purposes only.


HIGH ST
BURNSIDE ST
RESOLUTE LN
HOPE ST
1 Assessor's Plat 16

06/12/2023
11:30:50 AM
3 Pages
TRUSTEES DEED
Bk: 2223 Pg: 72
Instr: 2023-5905

TRUSTEE'S DEED

KNOW ALL MEN BY THESE PRESENTS, That Nathaniel G. Herreshoff, III in his capacity as Trustee of the H. Herreshoff Irrevocable Trust dated January 2, 2002, by virtue and in exercise of the power and authority vested in him as successor Trustee by said Trust, and of every other power and authority hereunto enabling, for valuable consideration of One Dollar ($1), the receipt of which is hereby acknowledged, grants all of his right, title and interest, being a 5% undivided interest, in and to the following described property to the following individuals in the following percentages as Tenants in Common:

Halsey C. Herreshoff, II	2.5%
Karl C. Herreshoff	2.5%

That certain parcel of land, with all buildings and improvement thereon, situated southerly on Burnside Street, on the easterly side of Resolute Lane, in the Town and County of Bristol, State of Rhode Island, bounded and described as follows:

Beginning at the southwesterly corner of land now or lately of Halsey C. Herreshoff, Inc. said point being fifty-two (52) feet southerly of said Burnside Street as measured along the westerly line of said Herreshoff land, said point being the northwesterly corner hereof; thence southerly along a line in range with the westerly line of said Herreshoff land, bounding westerly on Resolute Lane (formerly Willow Lane), being land now or lately of Norman F. Herreshoff, forty-seven and 66/100 (47.66) feet to an angle in said Herreshoff land; thence turning an interior angle of 90°-43'-30" and running easterly along the line of said Herreshoff land and along a line continued easterly in range therewith, bounding southerly on said Herreshoff land in part and in part on land now or lately of Jesse P. Sousa Foundation, Inc. ninety-six and 90/100 (96.90) feet; thence northerly bounding easterly on said last named land to the point of intersection of the southerly line of Halsey C. Herreshoff, Inc. land continued easterly in range thereof and distant ninety-six and 89/100 (96.89) feet easterly of the point of beginning; thence westerly along the last described line bounding northerly in part on land now or lately of Jesse P. Sousa Foundation, Inc. and in part on said Halsey C. Herreshoff, Inc. land ninety-six and

89/100 (96.89) feet to said Norman F. Herreshoff land, in the easterly line of Resolute Lane at the point and place of beginning.

This conveyance is executed together with the rights of passage and rights to lay water and other pipes as are set forth in title deeds, in common with others, said right being further subject to the rights of others in and to the shipping or loading platform situated on said Resolute Lane.

This conveyance is executed subject to the rights of the owners of land on the north (hereinabove referred to as Halsey C. Herreshoff, Inc.) to enter on the above described premises to inspect, paint, or repair the building on their premises.

Meaning and intending to convey the same premises conveyed to this Grantor and others by a Trustee's Deed from Fleet National Bank dated February 17, 2004 and recorded in the office of the Recorder of Deeds in said Town of Bristol on February 25, 2004 at 2:03 p.m. in Deed Book 1096 at Page 26.

Subject to real estate taxes assessed December 31, 2022.

Consideration is of such nature that no real estate transfer stamps are required, and no withholding is required under RIGL 44-30-71.3. This transfer is also exempt from the smoke detector and carbon monoxide detector law as provided under RIGL 23-28.35-1, as it is commercial property.

TO HAVE AND TO HOLD the same, with all the privileges and appurtenances thereunto appertaining, unto and to the use of the said grantees, their heirs and assigns forever.

And Nathaniel G. Herreshoff, III as such successor Trustee, for himself and for his successors and assigns, does hereby covenant with the said grantees and their heirs and assigns, that he the duly appointed and qualified Trustee of the said Trust and that he, as such Trustee, has good right, full power, and lawful authority under the power, authority and direction given to him in said trust to transfer and convey the same in manner as aforesaid.

IN WITNESS WHEREOF, Nathaniel G. Herreshoff, III has hereunto set his hand and seal in his capacity as Trustee as aforesaid this 31st day of August, 2023.

H. Herreshoff Irrevocable Trust
dated January 2, 2002

By: Nathaniel G. Herreshoff III
Nathaniel G. Herreshoff, III
Trustee

State Of New Jersey
County Of Burlington

In Lumberton on this 31st day of August, 2023 before me personally appeared Nathaniel G. Herreshoff, III, the Trustee of H. Herreshoff Irrevocable Trust dated January 2, 2002, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument as trustee of said Trust, and acknowledged he executed said instrument with proper authority for the purpose stated therein as his free act and deed in said capacity as Trustee.

HANNAH E JOHNSON
Notary Public, State of New Jersey
Comm. # 50210087
My Commission Expires 05/15/2028

Notary Public
Printed Name: Hannah Johnson
My commission expires: 05/15/2028

PROPERTY ADDRESS:
1 Resolute Lane
Bristol, RI 02809

GRANTEES' ADDRESS:
c/o Halsey C. Herreshoff
125 Hope Street
Bristol, RI 02809

Received for record at Bristol, RI
9/12/2023 11:30:59 AM

260139

1/3 int ea.

T85-J-611

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that I, JOHN C. HICO of 1195 Hope Street, Bristol, Rhode Island, for consideration paid, grant to HALSEY C. HERRESHOFF of 125 Hope Street, Bristol, Rhode Island 02809, NATHANAEL H. HERRESHOFF, III of Easthampton Gardens 130, Mt. Holly, New Jersey 08060, and NATALIE V. HERRESHOFF of Ambrose Drive, Bristol, Rhode Island 02809, as tenants in common, with WARRANTY COVENANTS:

That certain parcel of land, with all buildings and improvements thereon, situated southerly of Burnside Street, on the easterly side of Resolute Lane, in the Town and County of Bristol, State of Rhode Island, bounded and described as follows:

Beginning at the southwesterly corner of land now or lately of Halsey C. Herreshoff, Inc. said point being fifty-two (52) feet southerly of said Burnside Street as measured along the westerly line of said Herreshoff land, said said point being the northwesterly corner hereof; thence southerly along a line in range with the westerly line of said Herreshoff land, bounding westerly on Resolute Lane (formerly Willow Lane), being land now or lately of Norman P. Herreshoff, forty-seven and 66/100 (47.66) feet to an angle in said Herreshoff land; thence turning an interior angle of 90°-43'-30" and running easterly along the line of said Herreshoff land and along a line continued easterly in range therewith, bounding southerly on said Herreshoff land in part and in part on land now or lately of Jesse P. Sousa Foundation, Inc. ninety-six and 90/100 (96.90) feet; thence northerly bounding easterly on said last named land to the point of intersection of the southerly line of Halsey C. Herreshoff, Inc. land continued easterly in range thereof and distant ninety-six and 89/100 (96.89) feet easterly of the point of beginning; thence westerly along the last described line bounding northerly in part on land now or lately of Jesse P. Sousa Foundation, Inc. and in part on said Halsey C. Herreshoff, Inc. land ninety-six and 89/100 (96.89) feet to said Norman P. Herreshoff land, in the easterly line of Resolute Lane at the point and place of beginning.

This conveyance is executed together with the rights of passage and rights to lay water and other pipes as are set forth in title deeds, in common with others, said right being further subject to the rights of others in and to the shipping or loading platform situated on said Resolute Lane.

This conveyance is executed subject to the rights of the owners of land on the north (hereinabove referred to as Halsey C. Herreshoff, Inc.) to enter on the above described premises to inspect, paint, or repair the building on their premises.

Meaning and intending to convey Lot 39 on the Assessors' Plat 16.

The consideration for this conveyance is such that no documentary stamps are required.

-1-

WITNESS my hand and seal this 1st day of [illegible], 1985.

John G. Bago

STATE OF RHODE ISLAND)
COUNTY OF BRISTOL)

In the Town of Bristol on the 1st day of [illegible], 1985, before me personally appeared John G. Bago to me known and known by me to be the party executing the foregoing instrument, and he acknowledged said instrument by him executed to be his free act and deed.

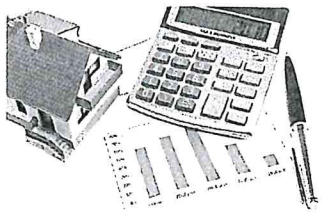
Notary Public

Notary Public
Commission Expires June 30, 1988

MAR 14 1985
Recorded at 11:25 AM.
[illegible] Town Clerk

-2-

CATALIS® Bristol, RI



Disclaimer: This information is for tax assessing purposes and is not warranted

Parcel Identification

Map/Lot	016-0039-000
Account	1040
State Code	07 - Industrial
Card	1/1
User Account	08-0687-10

Assessment

Land	$174,100
Building	$167,700
Card Total	$341,800
Parcel Total	$341,800

Prior Assessments

Fiscal Year	Land Value	Building Value	Outbuilding Value	Total Value
2025	$174,100	$167,700	$0	$341,800
2024	$134,100	$138,800	$0	$272,900
2023	$134,100	$138,800	$0	$272,900
2022	$134,100	$138,800	$0	$272,900
2021	$276,500	$88,400	$0	$364,900

Location and Owner

Location	1 RESOLUTE LANE
Owner	HERRESHOFF, HALSEY C. TRUSTEE (50%) ETAL
Owner2	
Owner3	
Address	PO BOX 687
Address2	
Address3	BRISTOL RI 02809

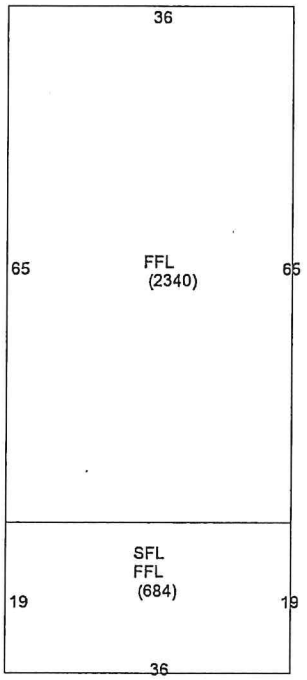
Building Information

Design	WhseStor
Year Built	1940
Heat	Forced Warm Air
Fireplaces	0
Rooms	0
Bedrooms	0
Bathrooms	
Above Grade Living Area	3,708 SF

Sale Information

Sale Date	Sale Price	Legal Reference	Instrument
04/24/2024	$0	2242-28	Quit Claim
09/12/2023	$0	2223-72	Trustee
07/12/2021	$0	2122-196	Quit Claim
03/20/2008	$0	1426-3	Quit Claim
03/14/2008	$0	1425-20	Quit Claim
02/25/2004	$0	1096-26	Trustee
02/25/2004	$0	1096-22	Executor

Picture Not Available



Building Sub Areas

Sub Area	Net Area
1st FLOOR	3,024 SF
2nd FLOOR	684 SF

Land Information

Land Area	0.107 AC
Zoning	M
View	-
Neighborhood	CI3

Yard Item(s)

03/14/1985	$0	260-39
02/15/1985	$0	259-263
05/19/1978	$0	219-481
01/01/1969	$0	172-1114

iisnode encountered an error when processing the request.

```
HRESULT: 0x6d
HTTP status: 500
HTTP subStatus: 1013
HTTP reason: Internal Server Error
```

You are receiving this HTTP 200 response because system.w
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diagnose the problem.

The last 64k of the output generated by the node.exe process

```
(node:7916) [DEP0005] DeprecationWarning: Buffer()
(Use `node --trace-deprecation ...` to show where
Application has thrown an uncaught exception and i
Error: Town not found on gisserver3
    at \\axisfiles.aws.axisgis.com\share\axisapi_p
    at processTicksAndRejections (node:internal/pr
```

Click To Open AxisGIS Maps

Exhibit A
Preliminary Draft of Proposed Easement

KNOW ALL MEN BY THESE PRESENTS, that _____, for good and valuable consideration paid, grant to _____ and his successors and assigns, a (27') foot access easement upon and across the northerly portion of lots 19 and 21 on Tax Assessor's Plat 16 as designated, described, and identified as an "access easement" on that certain plat entitled lot "[plat name]_____" which plat is recorded in the Land Evidence Records in the Town of Bristol, State of Rhode Island.

Said non exclusive access easement shall run with the land in for the purpose of locating and establishing and maintaining in, through, over, across and upon the herein described premises, along with the right to pass and re pass on foot and in a vehicle, along with all necessary equipment, and related facilities.

Said access easement is to be used for the benefit of the owners, their successors and assigns of 18 Burnside Street / 1 Resolute Lane, Bristol, Rhode Island otherwise designated as lots 48 and 39 on Tax Assessor's Plat 16. The said Owners of lot 48 and 39 or their servants and agents, shall have the right and easement to go upon and to enter the access easement area to perform maintenance work and repairs and park their vehicles in the parking area located under said 1 Resolute Lane. That promptly after completion of any such maintenance work and repairs the said owners of lots 48 and 39, or their servants and agents, shall restore the premises in as good condition as they were before the work was started as may be consistent with the proper exercise of said rights and easement.

Said owners of said parcel and their successors or assigns, shall be solely responsible to maintain the driveway access to the referenced parking area.

IN WITNESS WHEREOF, Grantor has duly executed this document on the date first above written.

Herreshoff Marine Museum

_____ _____

By John J. Marshall

STATE OF RHODE ISLAND
COUNTY OF BRISTOL

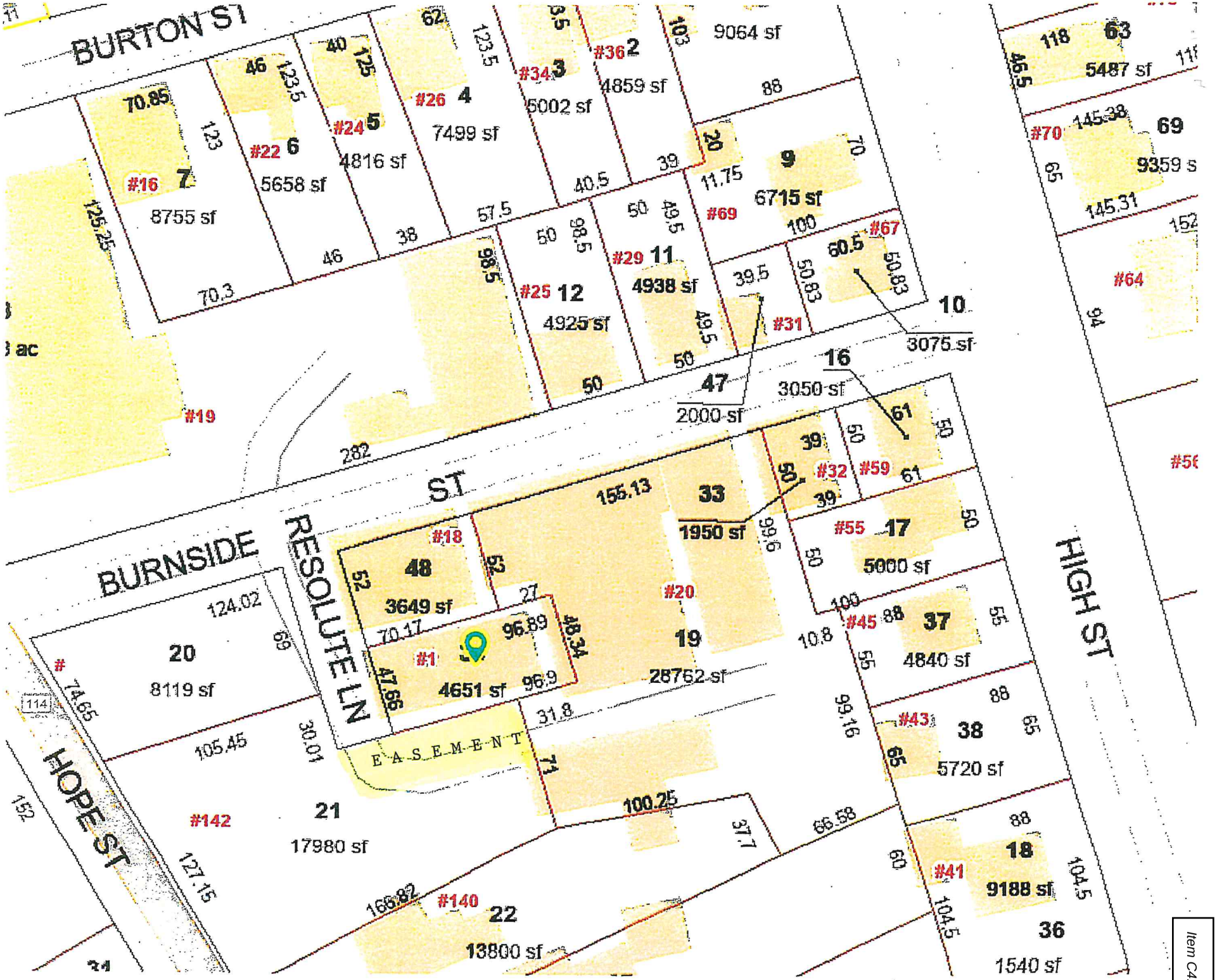
In the Town/City of Bristol on the ____ day of _____, 2025, before me personally appeared _____, the _____ of _____, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument on behalf of said corporation and acknowledged that he/she executed said instrument with proper authority for the purposes stated therein as his/her/their free act and deed in said capacity and the free act and deed of said corporation.

_____
Notary Public

STATE OF RHODE ISLAND
COUNTY OF BRISTOL

In the Town/City of Bristol on the ____ day of _____, 2025, before me personally appeared John J. Marshall, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument and acknowledged that he/she/they executed said instrument for the purposes stated therein as his/her/their free act and deed.

_____
Notary Public



Plat 16 Lots 48 and 39

Item C4.

NO.	DATE	DESCRIPTION	BY
1.	7-23-25	ADD' ROOF HEIGHTS	JML

SITE BENCHMARK
NAIL SET IN POLE #1
ELEVATION = 19.36'
DATUM NAVD88

SITE BENCHMARK
NAIL SET IN POLE #2
ELEVATION = 22.46'
DATUM NAVD88

BURNSIDE STREET
(PUBLIC - 37' WIDE)

HOPE STREET
(PUBLIC - VARIABLE WIDTH)

RESOLUTE LANE
(27' WIDE)

LEGEND
NOT TO SCALE

- BOUNDARY
- ABUTTER
- MAJOR CONTOUR
- MINOR CONTOUR
- BUILDING ENVELOPE
- G GAS LINE
- D DRAINAGE LINE
- S SEWER LINE
- W WATER LINE
- OHW ELECTRIC LINE
- IRON PIN
- BOUND
- DRILL HOLE
- UTILITY POLE
- WATER VALVE
- GAS VALVE

#18 BURNSIDE STREET
EXISTING 3 STORY
WOOD FRAMED WAREHOUSE
(1890)
ROOF ELEVATION = 64.80'
(MINUS) -
GROUND ELEVATION = 19.10'
BUILDING HEIGHT = 45.70'
A.P. 16 LOT 48
N/F HALSEY C. HERRESHOFF
TRUSTEE
D.B. 2264 PAGE 319
AREA
3,649 SQ. FT.
0.0838 ACRES

#1 RESOLUTE LANE
EXISTING 3 STORY
WOOD FRAMED WAREHOUSE
(1978)
ROOF ELEVATION = 45.52'
(MINUS) -
GROUND ELEVATION = 19.16'
BUILDING HEIGHT = 26.36'
A.P. 16 LOT 39
N/F HALSEY C. HERRESHOFF
TRUSTEE (50%) ETAL
D.B. 2242 PAGE 28
AREA
4,638 SQ. FT. / 0.1064 ACRES

#18-20 BURNSIDE STREET
EXISTING 2½ STORY
WOOD FRAMED BUILDING
(1917)
A.P. 16 LOT 19
N/F HERRESHOFF MARINE
MUSEUM
D.B. 261 PAGE 559

A.P. 16 LOT 21
N/F HERRESHOFF MARINE
MUSEUM
D.B. 388 PAGE 47

#142 HOPE STREET
A.P. 16 LOT 21
N/F HERRESHOFF MARINE
MUSEUM
D.B. 90 PAGE 6

ZONING CRITERIA (NONCONFORMING)

	ZONE M	LOT 16-48 ALLOWABLE:	LOT 16-39 ALLOWABLE:
MINIMUM LOT AREA	20,000 S.F.	3,649 S.F.	4,637 S.F.
MINIMUM LOT FRONTAGE & WIDTH	100'	18.25'	23.25'
MINIMUM FRONT YARD SETBACK	30'	5.5'	7.0'
MINIMUM SIDE YARD SETBACK	25'	4.5'	5.80'
MINIMUM REAR YARD SETBACK	20'	3.65'	4.65'
MAXIMUM BUILDING COVERAGE	50%	90.87%	88.40%
MAXIMUM BUILDING HEIGHT	35'	---	---

(SEE ZONING REGULATION FOR THE SPECIFICS OF THIS PARCEL)

(BUILDING SETBACKS SHOWN MUST BE REVIEWED BY THE TOWN ZONING – OFFICIAL FOR ACCURACY AND COMPLIANCE)

GENERAL NOTES:

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
2. THIS SITE LIES WITHIN ZONE X AS SHOWN ON THE FIRM MAP FOR THE TOWN OFBRISTOL, RHODE ISLAND COMMUNITY PANEL NUMBER 44001C0014H, MAP DATED 7/7/2014.
3. THE HORIZONTAL DATUM SHOWN HEREIN IS BASED ON RHODE ISLAND STATE PLANE COORDINATES NAD 83 DATUM AND VERTICAL DATUM IS BASED ON NAVD 88 DATUM.
4. THE TOWN DOES NOT HAVE RECORDS FOR ANY EXISTING SEWER CONNECTIONS TO #1 RESOLUTE LANE.

REFERENCES:

1. A CERTAIN PLAN ENTITLED " BOUNDARY SURVEY PLAN A.P. 16 LOTS 8, 13-15, 19-21, 31, 39, 41-44, & 48 HOPE STREET, BURTON STREET, & BURNSIDE STREET BRISTOL, RHODE ISLAND, HERRESHOFF MARINE MUSEUM. SURVEYED BY WATERMAN ENGINEERING CO. ; DATED 2/26/08 ; SCALE 1" = 30' " AND RECORDED IN THE TOWN OF BRISTOL IN THE TOWN CLERKS OFFICE IN ENVELOPE #617
2. RIGHTS TO RIGHT OF WAY KNOWN AS RESOLUTE LANE (FORMERLY WILLOW LANE) AS DESCRIBED IN D.B. 100 PAGE 27
3. RESTRICTIONS AS SET FORTH IN VOLUME 173 PAGE 153 (NOT PLOTTABLE)
4. RIGHTS AS DESCRIBED IN VOLUME 132 PAGE 40 (NOT PLOTTABLE)
5. RIGHTS AS DESCRIBED IN VOLUME 260 PAGE 39 (NOT PLOTTABLE)

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: LIMITED CONTENT BOUNDARY SURVEY
MEASUREMENT SPECIFICATION: CLASS 1 STANDARD / CLASS III TOPO

PURPOSE OF SURVEY: EXISTING CONDITIONS SURVEY

BY: _____ DATE: 7/23/2025
STEPHEN T. LONG, PLS NO. 1930

STEPHEN T. LONG
No. 1930
PROFESSIONAL LAND SURVEYOR

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft

STREET INDEX
BURNSIDE STREET
RESOLUTE LANE

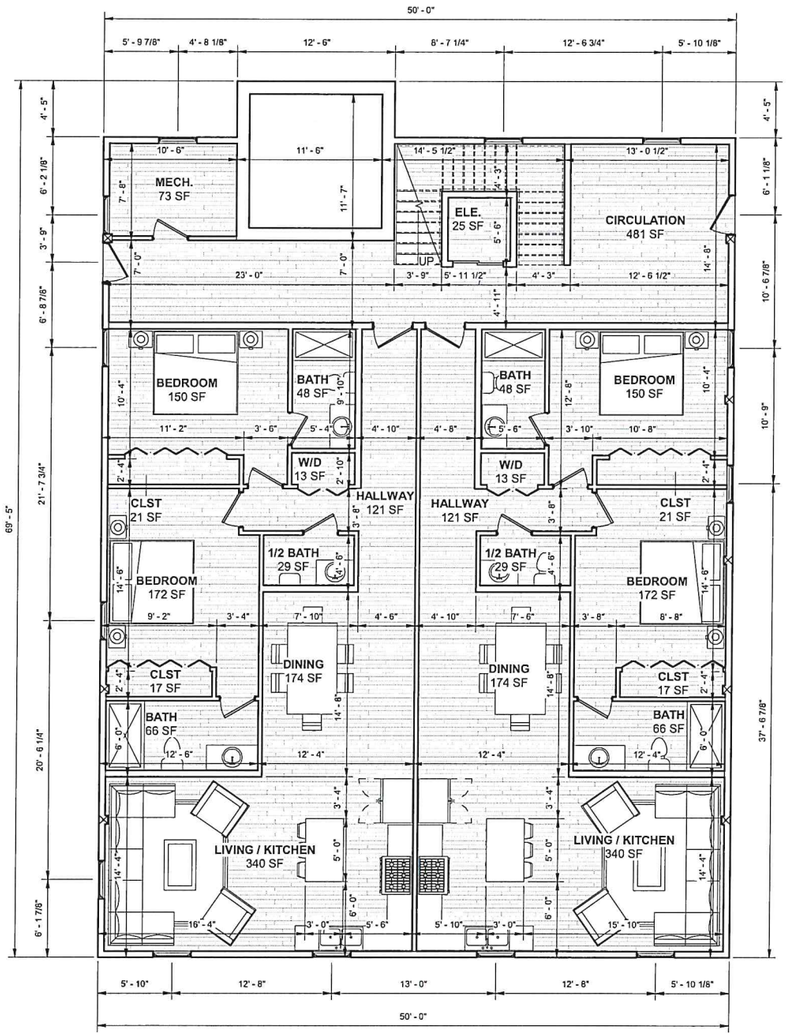
LOCUS MAP
NOT TO SCALE

PRINCIPE COMPANY, INC.
SURVEYING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
SURVEY@PRINCIPEENGINEERING.COM
PRINCIPEENGINEERING.COM

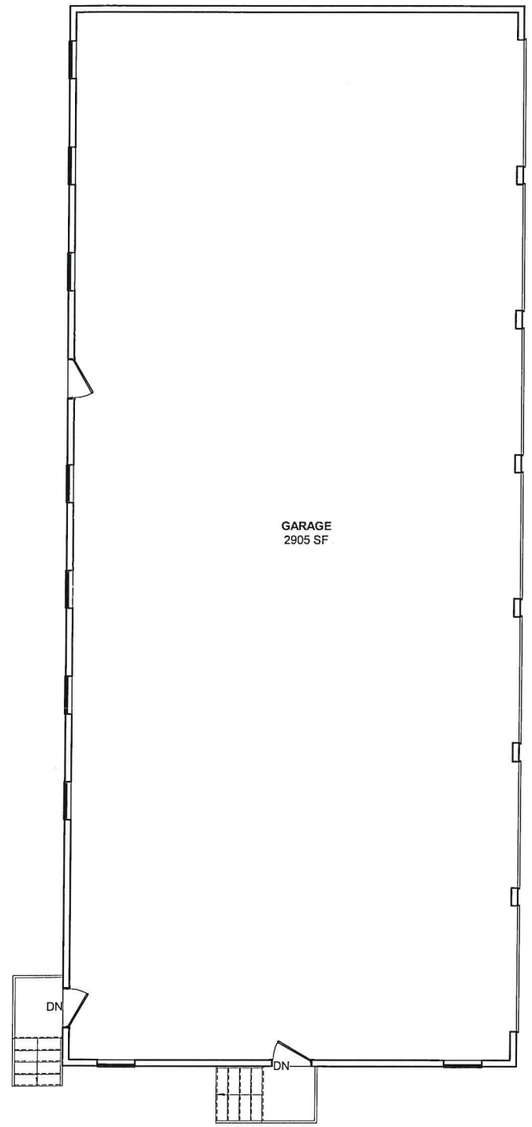
EXISTING CONDITIONS PLAN
for
HALSEY C. HERRESHOFF
TRUSTEE
ASSESSORS PLAT 16 LOTS 39 & 48
#18 BURNSIDE STREET
#1 RESOLUTE LANE
in
BRISTOL, RHODE ISLAND

SCALE: 1"=10'		SHEET NO: 1 OF 1
DRAWN BY: JML	DESIGN BY:	CHECKED BY: STL
DATE: 6-16-2025		PROJECT NO.: LD-2025-7

C:\Users\Princ\Principe Engineering Dropbox_Land Development\2025\LD-2025-7_ 1 Resolute Lane and 18 Burnside Street_Bristol_Herreshoff Musuem_John Marshall_REF S-2025-19\DWG\LD-2025-7.dwg, EXISTING, 7/23/2025 10:14:03 AM,
1:1



1 A101 MAIN LEVEL PLAN
3/16" = 1'-0"



DASTKAAR

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THIS DRAWING IS THE PROPERTY OF DASTKAAR STUDIO, LLC AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART. IT SHALL NOT BE USED FOR ANY OTHER PROJECT OTHER THAN WHAT IS LISTED IN THE BELOW TITLEBLOCK. THIS DRAWING IS AN INSTRUMENT OF SERVICE ONLY AND SHALL BE RETURNED TO THE ARCHITECT UPON REQUEST.

MAIN LEVEL PLAN

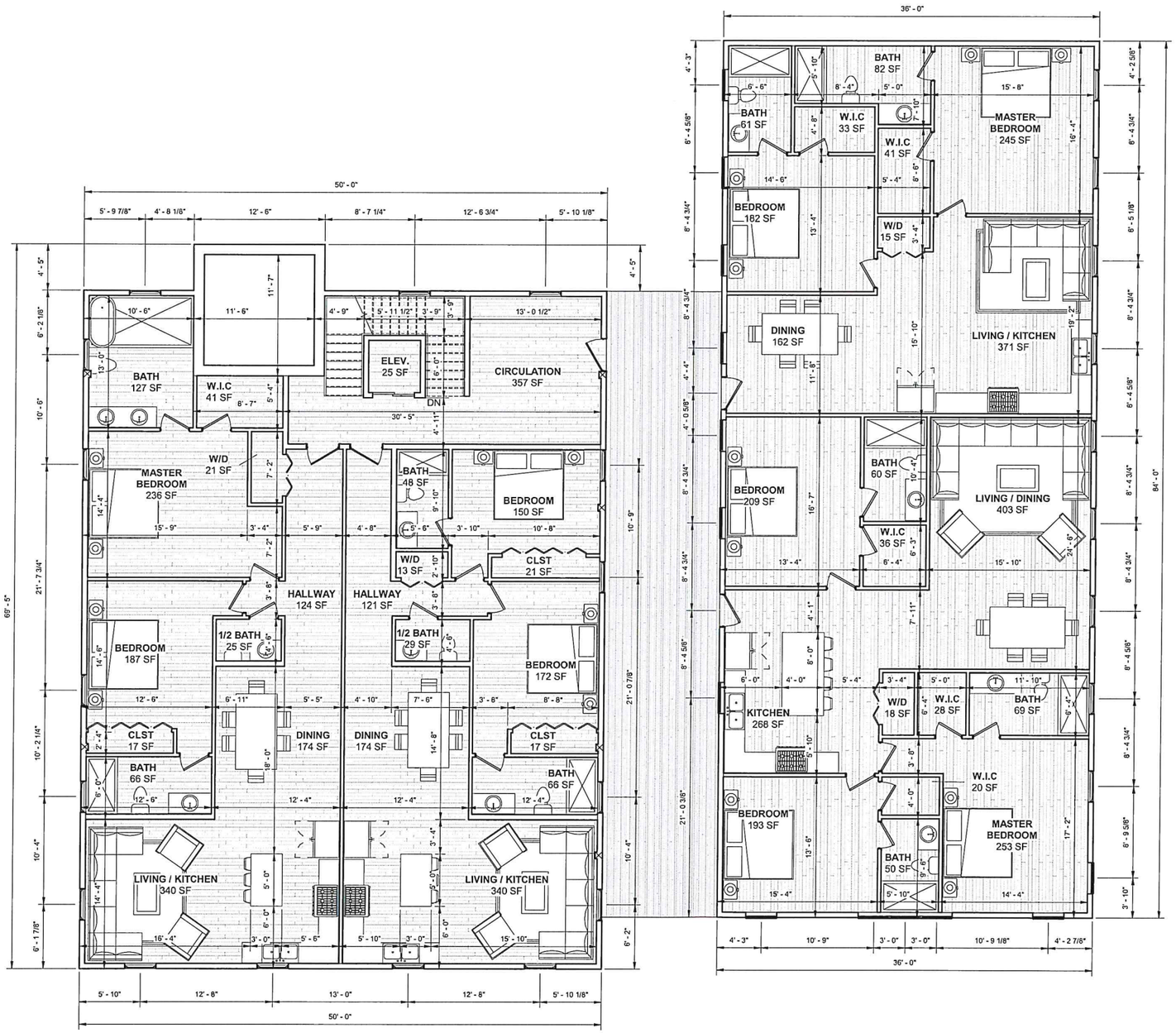
Burnside Street
Resolute Parking

PROJECT NO:
24181

DRAWN BY:
ARG

REV	DATE
A	12/15/2024

DRAWING NO:
A101



1 A102 UPPER LEVEL
3/16" = 1'-0"

DASTKAAR

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UPPER LEVEL PLAN

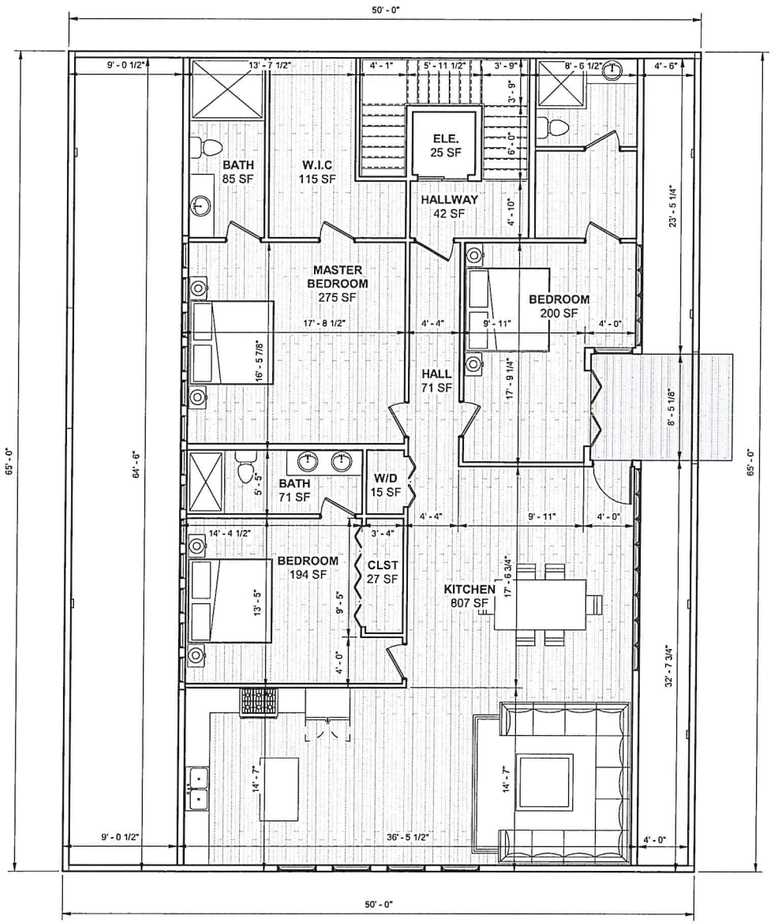
Burnside Street
Resolute Street

PROJECT NO: 24181

DRAWN BY: ARG

REV	DATE

DRAWING NO: A102



1 / A103 SECOND LEVEL
3/16" = 1'-0"

DASTKAAR

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SECOND LEVEL PLAN
BURNSIDE STREET
?.

PROJECT NO:
24181

DRAWN BY:
ARG

REV	DATE

DRAWING NO:
A103

AGREEMENT TO ACQUIRE ACCESS EASEMENT

This Agreement to define a parking access easement ("Agreement") is made this ___ day of _____, 2025, by and between John J. Marshall or nominee (hereinafter referred to as "Grantee"), and the Herreshoff Marine Museum (hereinafter referred to as "Grantor").

The parties hereby agree as follows:

1. Premises.

For good and valuable consideration, the receipt and sufficiency of which are acknowledged, the Grantor grants to the Grantee and the Grantee's assigns a non-exclusive access easement (the "Access Easement") to reach the proposed garage door(s) serving 18 Burnside Street / 1 Resolute Lane, Bristol, Rhode Island.

The Access Easement may be used by pedestrians and vehicles over the Grantor's property, specifically the northerly forty (40) feet of Bristol Tax Assessor's Lots 19 and 21 on Plat 16, as depicted on Exhibit A.

The Access Easement includes the right to construct, repave, and maintain a driveway connection from the southerly terminus of Resolute Lane to the proposed parking garage doors on the first floor of 1 Resolute Lane.

See Exhibit A for the area subject to this non-exclusive access easement.

2. Closing.

"Closing" means the settlement at which the Grantor delivers to the Grantee an easement in perpetuity, in recordable form. The Closing shall occur at the law offices of _____ at 10:00 a.m. on or before _____, 2025 (the "Closing Date"), or at such other time and place as the parties may agree, including to accommodate the Town of Bristol's review and/or approval of an adaptive reuse application to convert the premises to condominiums with a parking garage on the first floor of 1 Resolute Lane.

3. Possession / Use.

At Closing, the Grantee shall have the right to use the Access Easement in accordance with this Agreement and the easement document delivered at Closing.

4. Engineer's Inspection.

The Grantee may, at the Grantee's sole cost and expense, have the premises inspected by a licensed professional engineer.

5. Notices.

All notices, demands, and other communications required or permitted under this Agreement shall be in writing and delivered (a) by hand, (b) by Federal Express (or comparable overnight courier) with charges prepaid, or (c) by U.S. mail, postage prepaid. Notices shall be sent to the Grantor or the Grantee, as applicable, at their addresses first set forth above, or to such other address as either party designates by written notice given in accordance with this Section.

6. Survival.

Except as expressly stated in this Agreement, no representations, covenants, or obligations of either party survive the Closing.

7. Entire Agreement; Amendments.

This Agreement constitutes the entire agreement between the parties and supersedes all prior and contemporaneous oral or written statements, representations, and agreements. This Agreement may be amended, waived, or modified only by a written instrument signed by the party to be bound.

8. Governing Law; Severability; Headings.

This Agreement is governed by and shall be construed in accordance with the laws of the State of Rhode Island. If any provision is held unenforceable or invalid, the remaining provisions shall remain in full force and effect. Captions and headings are for convenience only and shall not affect interpretation.

9. Binding Effect; Counterparts.

This Agreement does not constitute an offer or acceptance by the Grantor and is not binding until executed and delivered by both the Grantor and the Grantee. Upon such execution and delivery, this Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, executors, administrators, successors, and assigns. This Agreement may be executed in counterparts.

IN WITNESS WHEREOF, Grantor and Grantee have duly executed this Agreement on the date first above written.

Herreshoff Marine Museum

_____ _____

By John J. Marshall

Access Easement for Parking

KNOW ALL MEN BY THESE PRESENTS, that Herreshoff Marine Museum for good and valuable consideration paid, grant to John J. Marshall and his successors and assigns, a non-exclusive parking access easement for the purpose of vehicular and pedestrian ingress and egress over, across, and through the real property described in Exhibit A ("Easement Area"), subject to the terms and conditions specified herein.

The Access Easement Area is on that parcel of land situated in Bristol, Rhode Island, measuring approximately (40') feet by (123.80') feet along a radius turn, , specifically the northerly forty (40) feet of Bristol Tax Assessor's Lots 19 and 21 on Plat 16, more particularly shown and described in Exhibit "A" attached hereto and made a part hereof.

The purpose of this Easement is to allow vehicle and foot access for parking garage ingress and egress. Parking within the Access Easement Area is expressly prohibited.

Responsibility for maintenance, repair, and upkeep of the Access Easement Area shall be as agreed by the parties or as required to permit unhindered access, unless otherwise specified.

This Easement shall be appurtenant to and run with the land in perpetuity.

The terms and conditions of this Easement may be modified only by written instrument executed and recorded by both parties.

This Easement shall be construed under the laws of the State of Rhode Island.

IN WITNESS WHEREOF, Grantor has duly executed this document on the date first above written.

Herreshoff Marine Museum

_____

By

STATE OF RHODE ISLAND
COUNTY OF BRISTOL

In the Town/City of Bristol on the ____ day of _____, 2025, before me personally appeared _____, the _____ of Herreshoff Marine Museum, to me known and known by me or proved to me through satisfactory evidence to be the party executing the foregoing instrument on behalf of said corporation and acknowledged that he/she executed said instrument with proper authority for the purposes stated therein as his/her/their free act and deed in said capacity and the free act and deed of said corporation.

_____

Notary Public

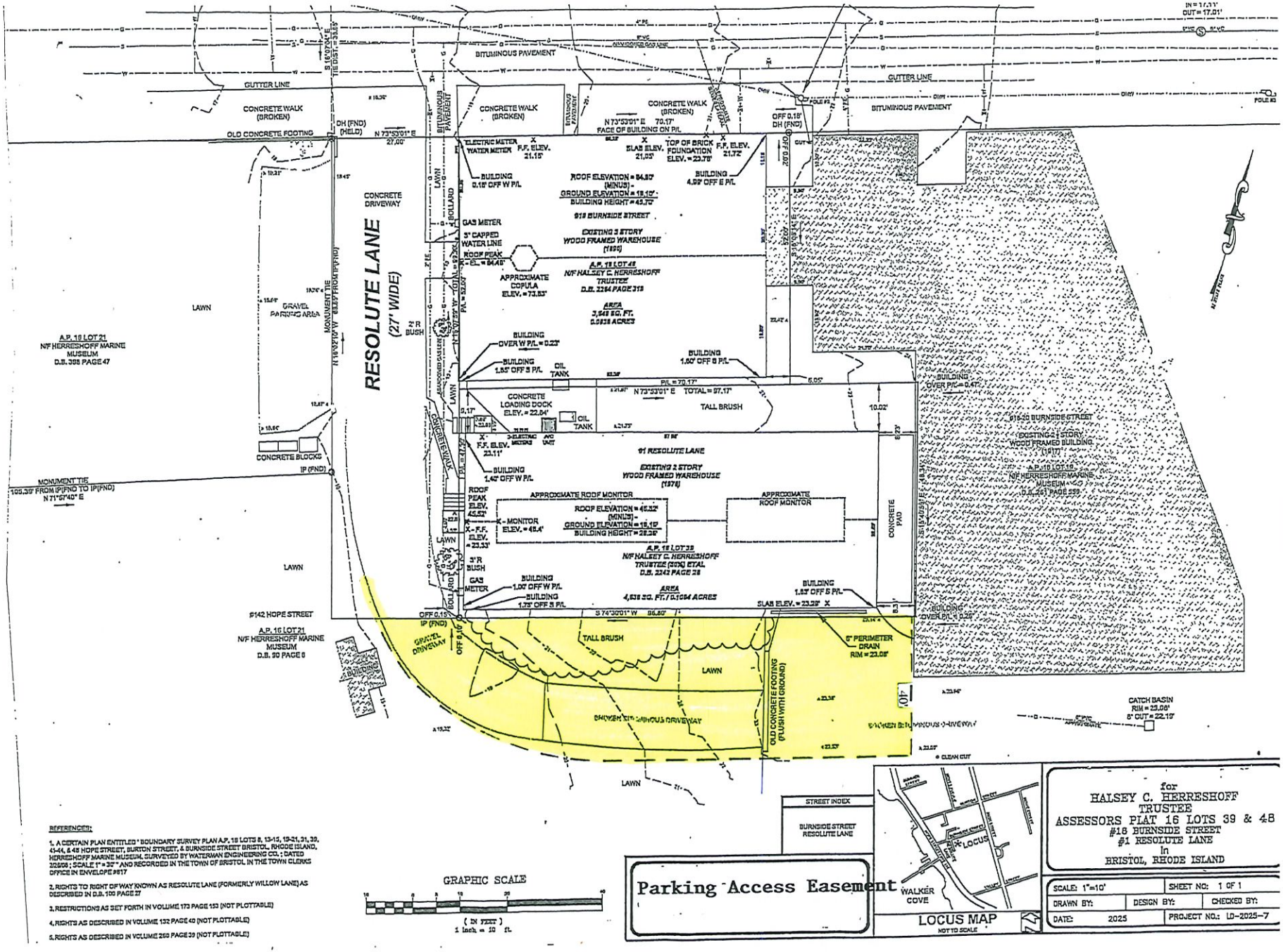


EXHIBIT A

Item C4.

Water Availability Request

BCW BRISTOL COUNTY WATER AUTHORITY

Applicant Information

Date: 08/18/2025

Property Owner Signature: _____

Owner (please print): Halsey C. Herreshoff, Trustee

Corporate Title (if not an individual): _____

Address: 18 Burnside Street - 1 Resolute Lane, Bristol, RI 02809

Phone: c/o 401 253-2500 Email: al@rego-law.com

Contractor: Marshall Properties Email: jjmarshall@marshallproeprtiesinc.com

Location

Preliminary request is hereby made for a confirmation that public water is available from BCWA to service this property:

Town: Bristol Location: 18 Burnside Street 1 Resolute Lane

Address/Plat and Lot: Plat 39 and 48

☐ Residential*

adaptive re-use
condominium conversion
7 - residential units

☒ Commercial*

Building Footprint: _____

Occupancy: _____

Estimated Water Use: _____

***Site Plan Must Be Attached to All Applications**

For BCWA Office Use Only

Action by the Bristol County Water Authority

☐ **Water Available** ☐ **Water Not Available**

Approximate Static Pressure: _____

Conditions: _____

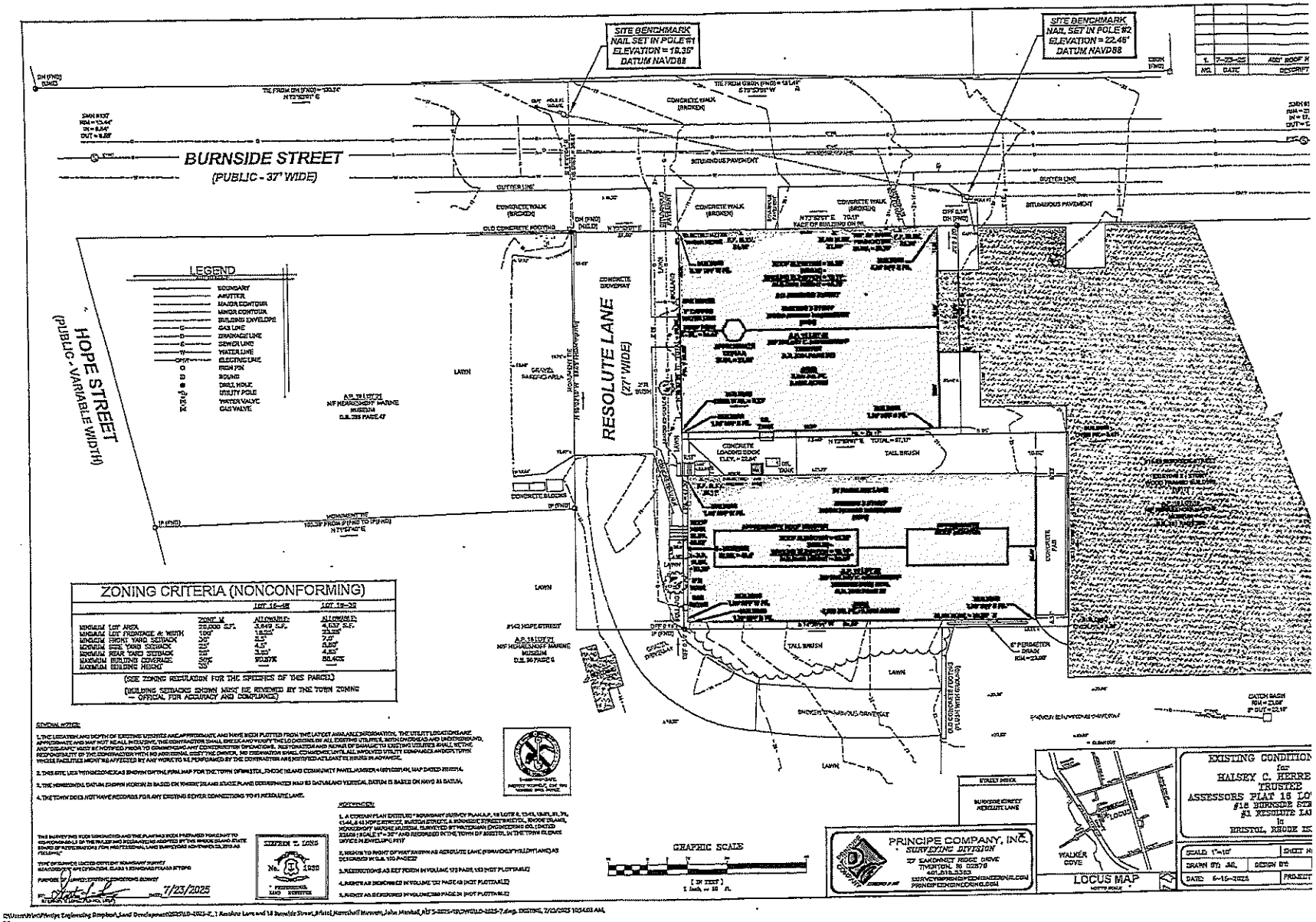
If connection to BCWA is desired, you must:

☐ **Submit Application for Main Extension Form and Engineering Plans for Review**

☐ **Submit Application for New Water Service Installation and Fee**

Date of Review: _____ **BCWA Engineer:** _____

Rev April 2017


SITE BENCHMARK
NAIL SET IN POLE #1
ELEVATION = 12.35'
DATUM NAVD88
SITE BENCHMARK
NAIL SET IN POLE #2
ELEVATION = 22.46'
DATUM NAVD88
BURNSIDE STREET
(PUBLIC - 37' WIDE)
HOPE STREET
(PUBLIC - VARIABLE WIDTH)
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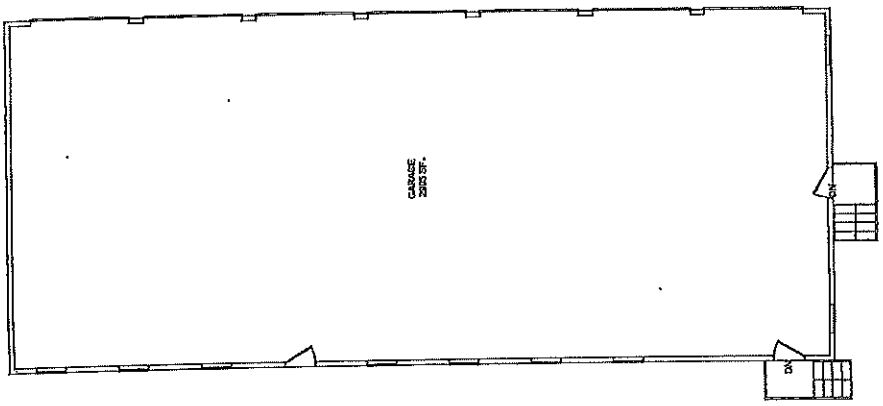
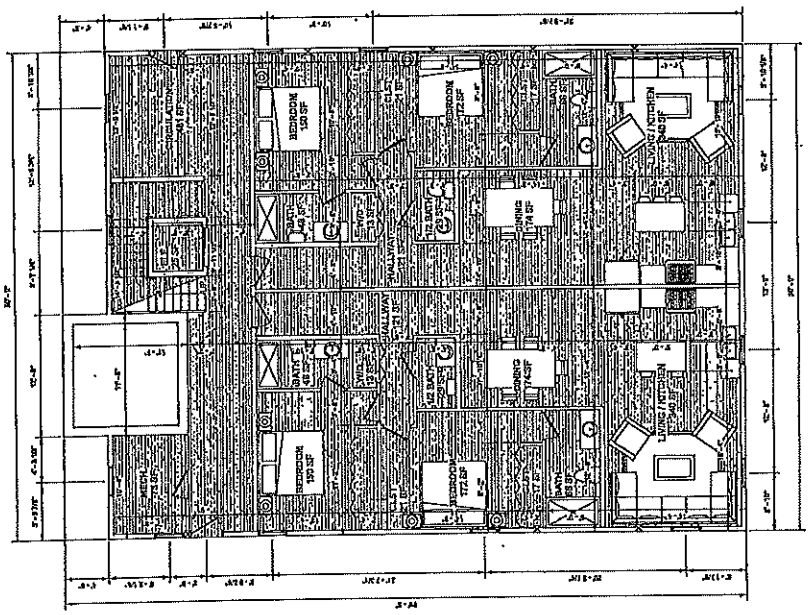
ABUTTER
MAJOR CONTOUR
MINOR CONTOUR
BUILDING ENVELOPE
GAS LINE
DRAINAGE LINE
SEWER LINE
WATER LINE
ELECTRIC LINE
IRON PIN
BOUND
DRILL HOLE
UTILITY POLE
WATER VALVE
GAS VALVE
CONCRETE WALK (BROKEN)
CONCRETE DRIVEWAY
CONCRETE LOADING DOCK
CONCRETE BLOCKS
GRAVEL PARKING AREA
LAWN
TALL BRUSH
BITUMINOUS PAVEMENT
OLD CONCRETE FOOTING
A.P. 18 LOT 24
NAT HERRESHOFF MARINE MUSEUM
D.B. 735 PAGE 47
A.P. 18 LOT 21
NAT HERRESHOFF MARINE MUSEUM
D.B. 90 PAGE 6
#142 HOPE STREET
ZONING CRITERIA (NONCONFORMING)
LOT 16-18
LOT 19-22
ZONE M
ALLOWABLE
ALLOWABLE
MINIMUM LOT AREA
20,000 SQ. FT.
3,649 SQ. FT.
4,057 SQ. FT.
MINIMUM LOT FRONTAGE & WIDTH
100'
18.00'
20.00'
MINIMUM FRONT YARD SETBACK
30'
5.5'
7.0'
MINIMUM SIDE YARD SETBACK
20'
4.5'
0.00'
MINIMUM REAR YARD SETBACK
20'
3.00'
4.80'
MAXIMUM BUILDING COVERAGE
50%
91.02%
86.40%
MAXIMUM BUILDING HEIGHT
100'
(SEE ZONING REGULATION FOR THE SPECIFICS OF THIS PARCEL)
(BUILDING SETBACKS SHOWN MUST BE REVIEWED BY THE TOWN ZONING — OFFICIAL FOR ACCURACY AND COMPLIANCE)
GENERAL NOTES:
1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, BEFORE STARTING ANY WORK. DIG SAFE SHALL BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND DPW/TOWN OFFICIALS HAVE BEEN NOTIFIED. ALL EXISTING UTILITY FACILITIES MUST BE PROTECTED DURING CONSTRUCTION. ANY UTILITY FACILITIES THAT MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE TO BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
2. THIS SITE LIES WITHIN ZONE X AS SHOWN ON THE FIRM MAP FOR THE TOWN OF BRISTOL, RHODE ISLAND COMMUNITY PANEL NUMBER 440120 0014 H, MAP DATED 9/30/14.
3. THE HORIZONTAL DATUM SHOWN HEREON IS BASED ON NORTH RHODE ISLAND STATE PLANE COORDINATES AND IS DATUM AND VERTICAL DATUM IS BASED ON NAVD 88 DATUM.
4. THE TOWN DOES NOT HAVE RECORDS FOR ANY EXISTING SEWER CONNECTIONS TO #1 RESOLUTE LANE.
SURVEYOR:
1. A COMPANY PLAN ENTITLED "BOUNDARY SURVEY PLAN MAP, 18 LOTS 6, 13-15, 18-20, 21, 24, 41-44, & 143 HOPE STREET, PLAT 18 LOTS 2, & PORTION OF STREET BISTOL, RHODE ISLAND, HERRESHOFF NICKLE MUSEUM, SURVEYED BY WATERMAN ENGINEERING CO., DATED 2/24/20 | SCALE 1" = 20'" AND RECORDED IN THE TOWN OF BRISTOL, IN THE TOWN ELIGIBLE OFFICE IN ENVELOPE # ###
2. RIGHTS TO RIGHT OF WAY SHOWN AS RESOLUTE LANE (FORMERLY WILLOW LANE) AS DESCRIBED IN D.B. 103 PAGE 27
3. RESTRICTIONS AS SET FORTH IN VOLUME 123 PAGE 153 (NOT PLOTTABLE)
4. RIGHTS AS DESCRIBED IN VOLUME 127 PAGE 48 (NOT PLOTTABLE)
5. RIGHTS AS DESCRIBED IN VOLUME 280 PAGE 31 (NOT PLOTTABLE)
STEVEN T. LONG
No. 13930
REGISTERED LAND SURVEYOR
7/23/2025
GRAPHIC SCALE
PRINCIPE COMPANY, INC.
SURVEYING DIVISION
27 ESCARPMENT RIDGE DRIVE
TIVERTON, RI 02878
401.816.5393
SURVEY@PRINCIPECOMPANY.COM
PRINCIPEENGINEERING.COM
LOCUS MAP
EXISTING CONDITION
for
HALSEY C. HERRE
TRUSTEE
ASSESSORS PLAT 18 LO
#18 BURNSIDE STR
#1 RESOLUTE LA
IN
BRISTOL, RHODE IS
SCALE 1"=10'
DRAWN BY: AM
DESIGN BY:
DATE: 6-15-2025
PROJECT

Item C4.

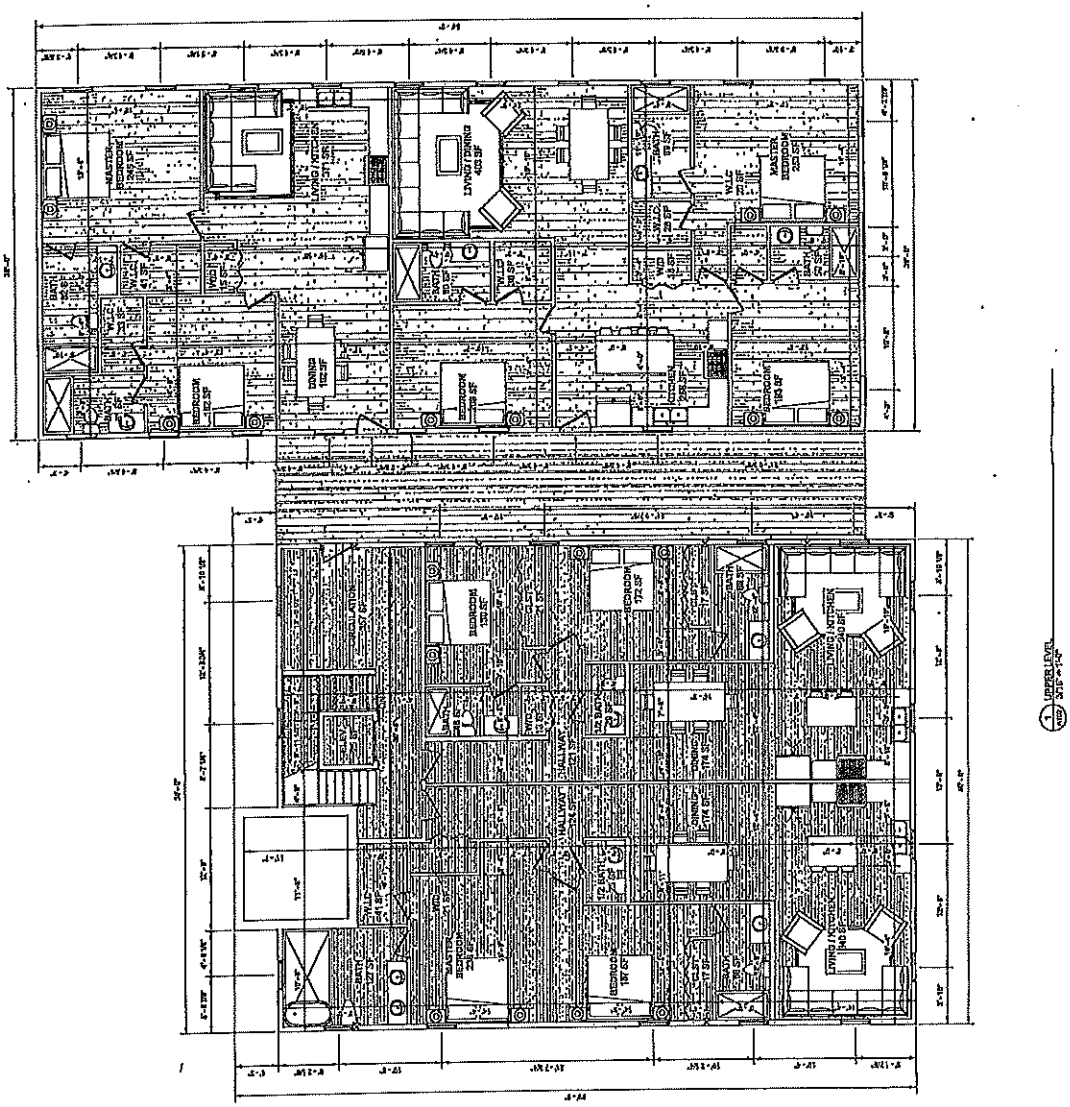




1 MAIN LEVEL PLAN

SECOND LEVEL PLAN

UPPER LEVEL PLAN



State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

PRELIMINARY DETERMINATION REQUEST FORM

CHECK ACTIVITY BOX AND DESCRIBE IN DETAIL FOR WHICH CRMC STAFF LEVEL FEASIBILITY ASSESSMENT IS REQUESTED:

- ☐ RESIDENTIAL DEVELOPMENT - (SINGLE FAMILY)
- ☐ NEW CONSTRUCTION
- ☐ DEMOLITION/ALTERATION
- ☐ ADDITION/ALTERATION
- ■ RESIDENTIAL DEVELOPMENT - 7 UNITS
- ☐ PIER/DOCK: _____ RESIDENTIAL: _____ COMMERCIAL/OTHER: _____
- ☐ SHORELINE PROTECTION: TYPE: _____
- ☐ OTHER, DESCRIBE: _____
- ☐ COASTAL FEATURE VERIFICATION

PROPERTY INFORMATION:

File Number (CRMC USE ONLY):

Project Location: 18 Burnside / 1 Resolute Lane, Bristol, RI 02809
No. Street City/Town

Plat: 16
Lot(s): 39 and 48

Does the site have access to:
Public Water service: yes Municipal sewer service: yes

Utility Pole:

Owner's Name: Halsey C. Herreshoff, Trustee / John J. Marshall

Owner's Contact:
Alfred R Rego Jr Esq
Number: 401 253-2500
Email Address:
al@rego-law.com

Mailing Address: c/o 443 Hope Street
City/Town Bristol State RI Zip Code 02809

Name of Waterway: Bristol Harbor

Is information available regarding riparian boundaries, channel lines, etc.? (Piers, docks, etc. only) Not applicable - property is located on the easterly side of Hope Street (route 114)

REQUEST FOR INFORMATION:

Name of Requestor: Alfred R Rego Jr, Esq.
Mailing Address: 443 Hope Street Bristol RI 02809
Phone Number & Email Address: 401-253-2500 al@rego-law.com
Designer or other contact person(s) include name, address, phone:
Principe Company, Inc. 27 Sakonnet Ridge Dr, Tiverton, RI 401 816-5385
Stephen Long Surveyor

Have you knowledge of any previous permits and/or violations (Local, State, and/or Federal) on this property? If so, describe and include pertinent information: No

Please include a general vicinity location map (street guide sheet, USGS topography sheet) and a lot map (portion of Tax Assessor's map), map with topography is helpful.

Halsey C Herreshoff, Trustee
Owner Name (PRINT)

Halsey C. Herreshoff
Owner's Signature (SIGN)

/ajt – 10-2021

SEE REVERSE SIDE FOR INSTRUCTIONS

INSTRUCTIONS

****PLEASE NOTE** When submitting large scale plans, four (4) physical copies as well as one (1) digital copy (sent via email to cstaff1@crmc.ri.gov) are both REQUIRED. This is for submitting new applications as well as any revisions or modifications made.**

** FILING FEE:

Preliminary Determination Application Fee Schedule

a. Those involving projects of the individual residential homeowner/potential homeowner: **$150.00 Determination request fee.**

✓ b. All other projects (development of subdivisions, condominiums, commercial, industrial waterfront business, etc.) **$1,000.00 Determination Request Fee.**

✓ c. Jurisdictional determinations: **$100.00**

✓ d. Coastal feature verification: **$300** (Note: requires surveyed plan prepared by Rhode Island registered P.E or R.L.S.)

Note: Filing fees are not refundable.

Special Note: Determination Request fees may be applied against the filing fee of applications for Council Assent when such application is made within one (1) year of the issuance of the Preliminary Determination Request report.

** Four (4) copies of the application, plans and location map must be submitted.

** A letter from the local tax assessor stating ownership of the property must be submitted.

** The current owner must sign this request, although a potential purchaser may sign if copy of a valid sales agreement is included with the tax assessors' letter.

** Note: This request does not constitute an application for permission to perform any activity. A CRMC Preliminary Determination Request is a determination of jurisdiction and a synopsis of which sections of the Rhode Island Coastal Resources Management Program apply to the project under consideration as presented herein.

Mail the above information to:

Attn: Applications Coordinator
Coastal Resources Management Council
Oliver Stedman Government Center
4808 Tower Hill Road; Suite 3
Wakefield, RI 02879

/ajt – 03-2020

Rego & Rego
Attorney At Law
443 Hope Street
Bristol, Rhode Island 02809

Alfred R. Rego, Jr.
John G. Rego
John J. Rego*
RI and MA

Area Code 401
Telephone 253-2500
Facsimile 254-0235
al@rego-law.com

August 20, 2025

Coastal Resource Management Council
Oliver H Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

Re: Preliminary Determination Request Form attached
18 Burnside Street - 1 Resolute Lane, Bristol, RI (Plat 16 Lots 39 and 48)
Adaptive re-use of existing buildings, which sit on the property line
The interior and exterior re-use adaptation has been approved by Bristol Historic Commission

Gentlemen:

From our review it appears that this project is *just* outside CRMC's 200' jurisdiction in light of the coastal feature referenced in the attached photo and Town's 200' radius map and engineering. The street area (Hope Street) is a manmade shoreline, measuring from the top of the seawall, bulkhead, revetment and all other areas appear to exceed the 200' in that the beach area has a boat ramp and small boat storage raised 3-4 foot bulkhead.

On behalf of the applicant, we submit these plans for review under Rhode Island's Adaptive Reuse statute (R.I. Gen. Laws§ 45-24-31 et seq.). The proposal involves the redevelopment of property located on 18 Burnside Street and 1 Resolute Lane in Bristol, within the Downtown Historic District and on the eastern shore of Bristol Harbor - Walkers Cove.

The application (buyer and seller) are seeking approval for the adaptive reuse of historic manufacturing buildings-structures which are currently underutilized and in varying states of disrepair. The project proposes converting these buildings into seven (7) residential condominium units (5 units at 18 Burnside Street, 2 units at 1 Resolute with ground level indoor parking.)

The redevelopment has been approved by the Bristol Historic District Commission. *It may also be subject to oversight by the Coastal Resources Management Council due to its location within the coastal zone?*

Public utilities, including sewer and water, are available to the site. Access to the property is on Burnside Street and Resolute Lane.

We appreciate your consideration of this "Preliminary Determination Request Form" and welcome the opportunity to present this transformative rehabilitation proposal for your review and input if deemed necessary.

Sincerely,

Alfred R. Rego, Jr.

Sale

Refinance

REQUEST FOR CERTIFICATE
SECTION 44-7-11
GENERAL LAWS OF RHODE ISLAND

Date: 8/14/2025 Requested by: ALFRED R. REGO, JR., ESQ.

Address: 443 HOPE STREET

BRISTOL, RI 02809

Taxpayer Name: HERRESHOFF, HALSEY C. TRUSTEE(50%) ETA Account #: 08-0687-10

Address: 1 RESOLUTE LANE Prev. Acct #

Plat: 016 **Lot:** 0039 **Unit:** 000 MV Acct #

BALANCE OUTSTANDING

Year	Original Tax	Exemption (if any)	Tax	Signature date Interest & Fees	Per Diem	Total Due (taxes, interest & fees)
2025	$ 4,428.30		$3,321.21			3,321.21
2024			$0.00			PAID IN FULL
Motor Vehicle/Excise Tax						
2021						
2020						

Supplemental billing may occur after December 31st assessment date (ex. Construction or subdivision)

Motor Vehicle billed 1 year in arrears subject to receive a bill next year

Sewer use fee of $ 801.80 are included in principal above. Current unit rate : $ 636.35

Sewer Assessment; Year assesed : N/A Remaining balance: N/A

****** Sewer Assessment may be be paid annually at $302.98 for 20 years ******

Prior year(s) deferred taxes (RIGL 44-3-20.2) are not included on this form. Refer to land evidence records.

Contact the Bristol County Water Authority (401) 245-2022 for water use and/or installation.

Tax Sale Information:

Tax sales are held annually. Any property with previous year's taxes due at that time is subject to effect from said action

Other Information:

Interest figures are valid as of the signature date below. The per diem rate is entered above.

PLEASE CALL TO GET CURRENT INTEREST & PENALTIES PRIOR TO CLOSING

Assessment information--An owner of property assessed December 31 would receive a bill in July representing taxes for the calendar year. The bill would be payable in installments in accordance with Rhode Island General Laws and the Town's Resolution to Levy.

THIS IS TO CERTIFY THAT THE ABOVE IS TRUE AND CORRECT, SAID CERTIFICATION IS GIVEN IN ACCORDANCE WITH SECTION 44-7-11 OF THE GENERAL LAWS OF RHODE ISLAND, 1956, AS OF THIS 14 DAY OF August 2025

Please Note: the information presented above is subject to provisions ro RIGL 44-5-13.

Fee $ 25.00

Town of Bristol
10 Court St
Bristol, RI 02809

Prepared By: Lisa Marshall

Approved By: Lori A Hubbard

☐ Sale

☐ Refinance

REQUEST FOR CERTIFICATE
SECTION 44-7-11
GENERAL LAWS OF RHODE ISLAND

Date: 8/14/2025 Requested by: ALFRED R. REGO, JR., ESQ.

Address: 443 HOPE STREET
BRISTOL, RI 02809

Taxpayer Name: HERRESHOFF, HALSEY C. TRUSTEE Account #: 50-0086-56

Address: 18 BURNSIDE STREET Prev. Acct #

Plat: 016 **Lot:** 0048 **Unit:** 000 MV Acct #

BALANCE OUTSTANDING

Year	Original Tax	Exemption (if any)	Tax	Signature date Interest & Fees	Per Diem	Total Due (taxes, interest & fees)
2025	$ 8,097.86		$6,073.38			6,073.38
2024			$0.00			PAID IN FULL
Motor Vehicle/Excise Tax						
2021						
2020						

Supplemental billing may occur after December 31st assessment date (ex. Construction or subdivision)

Motor Vehicle billed 1 year in arrears subject to receive a bill next year

Sewer use fee of $ 1,909.05 are included in principal above. Current unit rate : $ 636.35

Sewer Assessment; Year assesed : N/A Remaining balance: N/A

****** Sewer Assessment may be be paid annually at $302.98 for 20 years ******

Prior year(s) deferred taxes (RIGL 44-3-20.2) are not included on this form. Refer to land evidence records.

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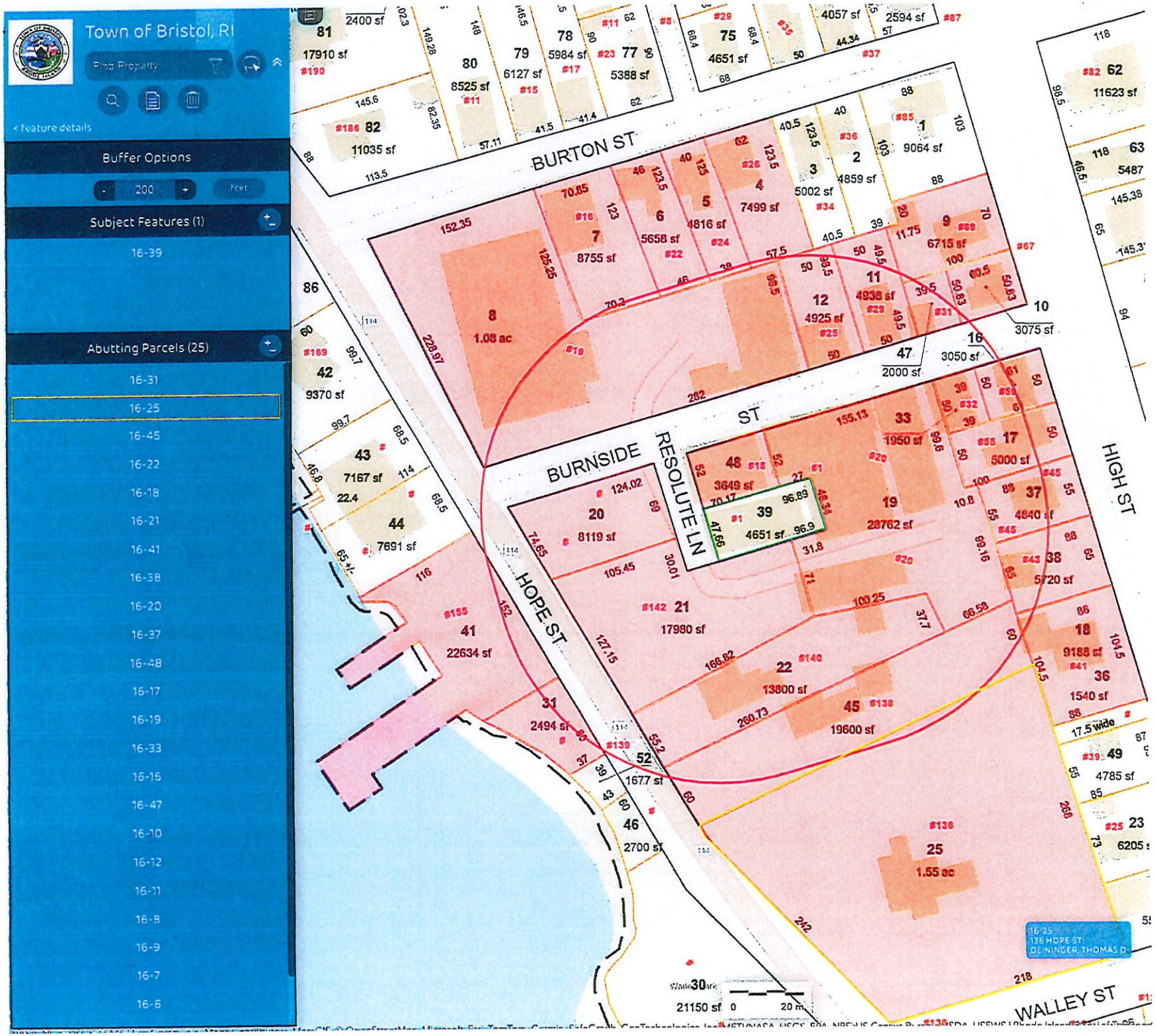
Fee $ 25.00

Town of Bristol
10 Court St
Bristol, RI 02809

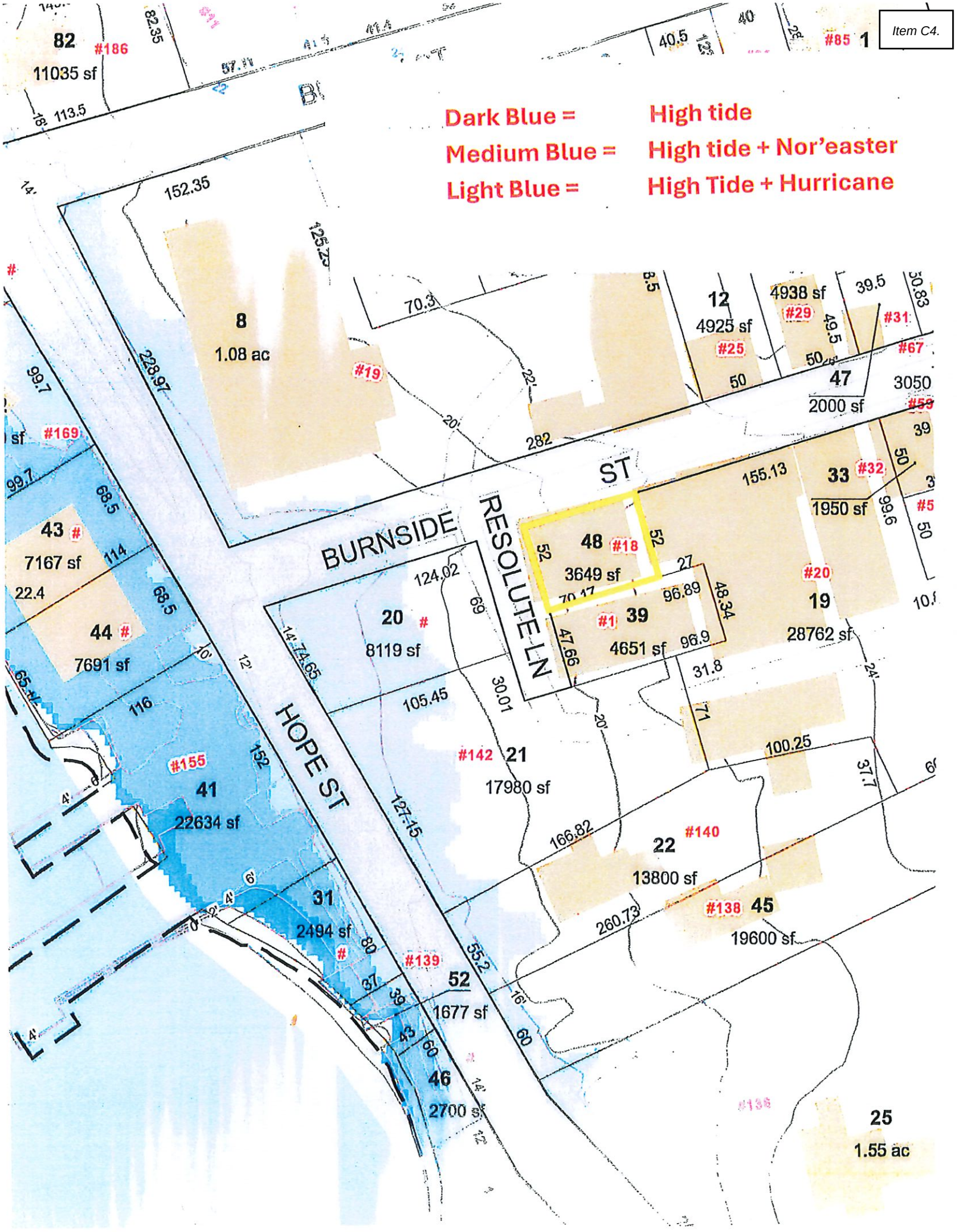
Prepared By: Lisa Marshall

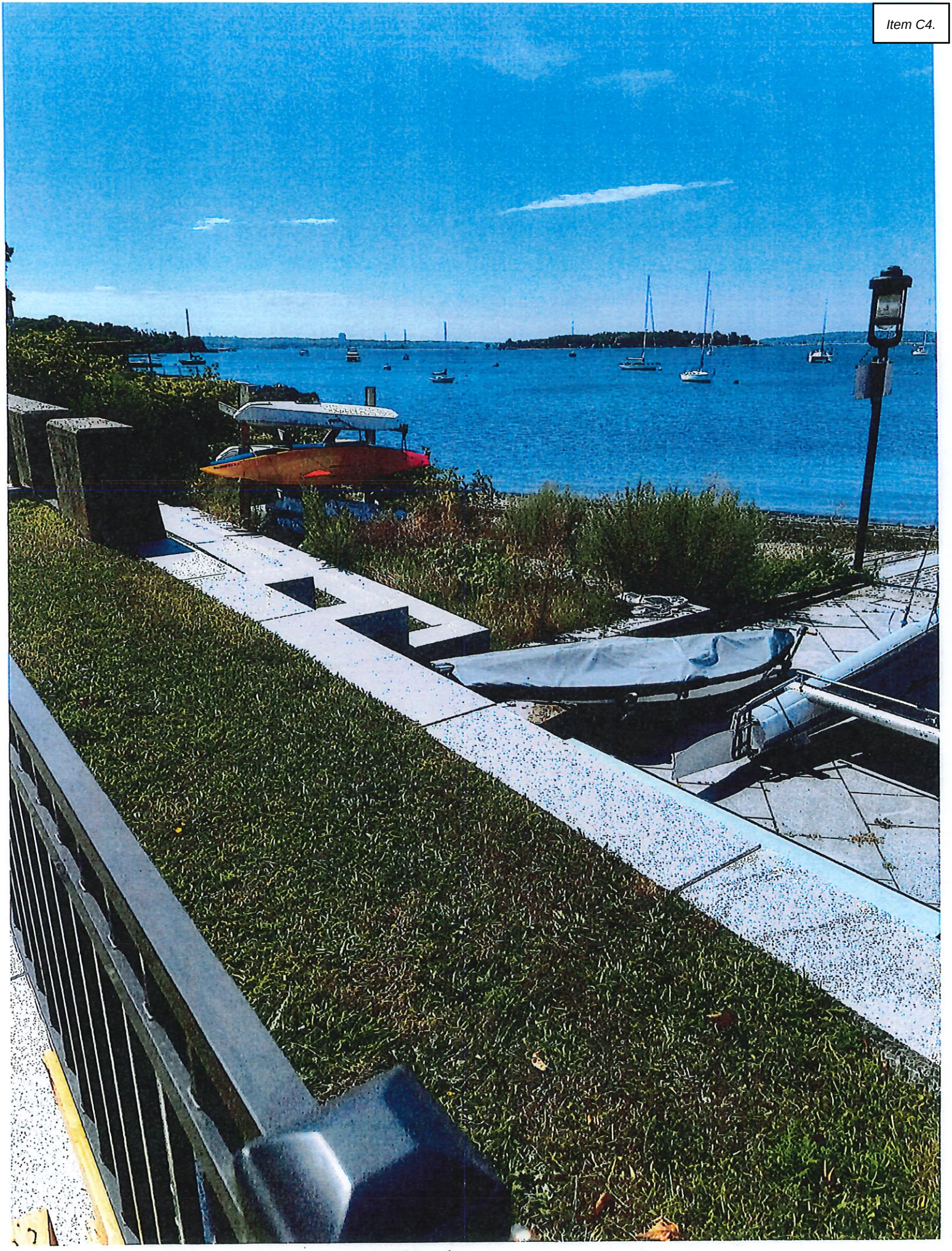
Approved By: Lori A Hubbard

Item C4.


Town of Bristol, RI
Find Property
< Feature details
Buffer Options
200
feet
Subject Features (1)
16-39
Abutting Parcels (25)
16-31
16-25
16-45
16-22
16-18
16-21
16-41
16-38
16-20
16-37
16-48
16-17
16-19
16-33
16-15
16-47
16-10
16-12
16-11
16-8
16-9
16-7
16-6
BURTON ST
BURNSIDE ST
RESOLUTE LN
HOPE ST
HIGH ST
WALLEY ST
16-25
136 HOPE ST
DEININGER, THOMAS D.
0
20 m

Burnside St
Gallery 26
114
Compass Group International
Hope St
114
Google
Layers

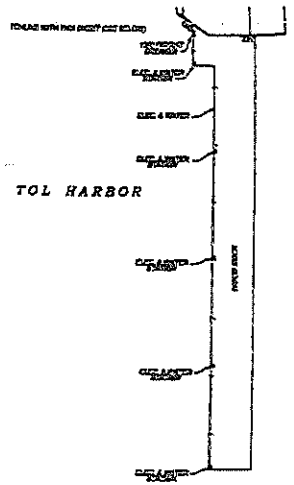

Dark Blue = High tide
Medium Blue = High tide + Nor'easter
Light Blue = High Tide + Hurricane
BURNSIDE ST
RESOLUTE LN
HOPE ST
82 #186 11035 sf
8 1.08 ac
12 4925 sf
4938 sf #29
#25
47 2000 sf
3050 #59
33 #32 1950 sf
48 #18 3649 sf
20 # 8119 sf
#1 39 4651 sf
19 28762 sf
#142 21 17980 sf
22 #140 13800 sf
#138 45 19600 sf
25 1.55 ac
#139 52 1677 sf
46 2700 sf
31 2494 sf
#155 41 22634 sf
43 # 7167 sf
44 # 7691 sf
#169
#19
#20
#67
#31
#85 1

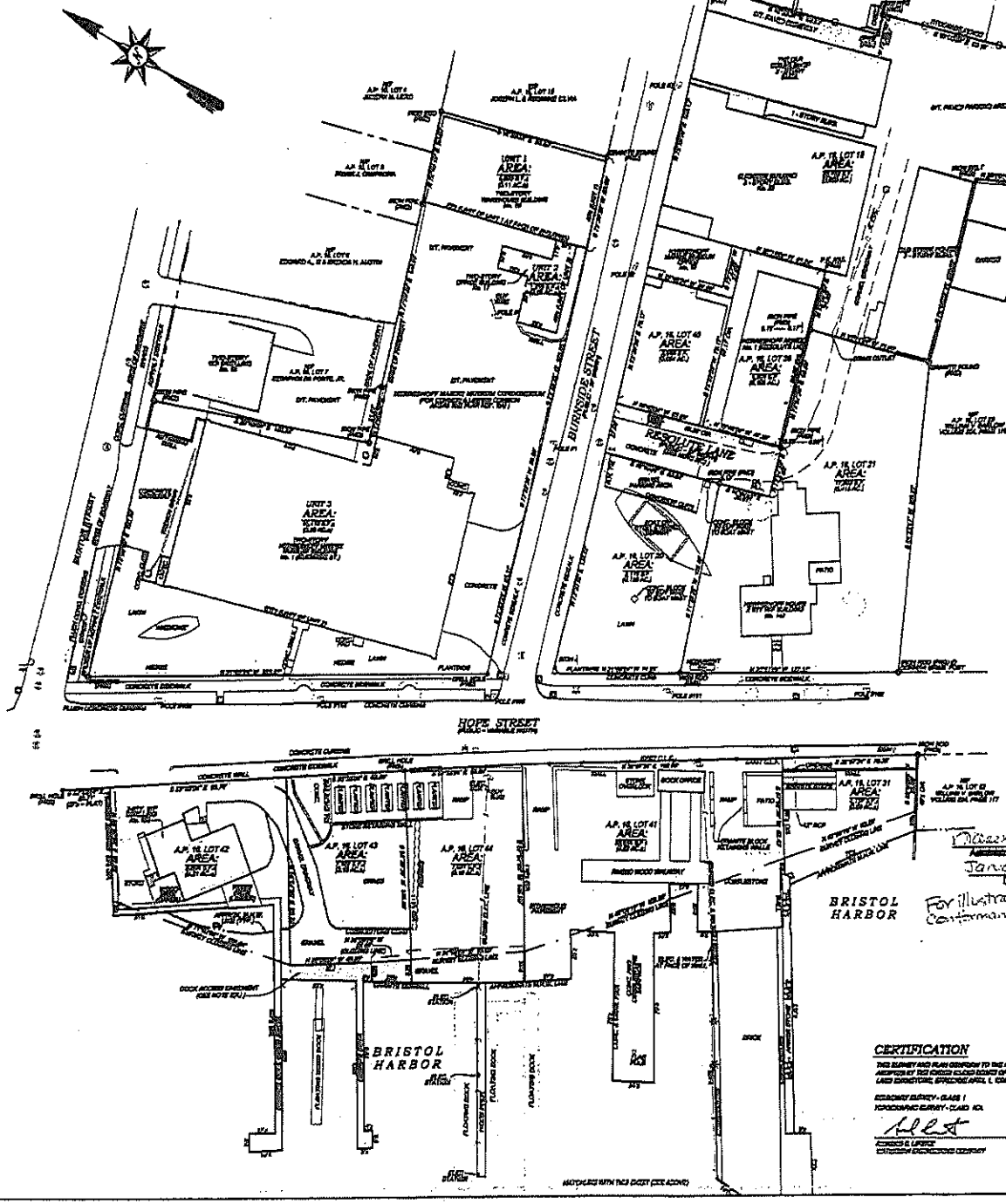


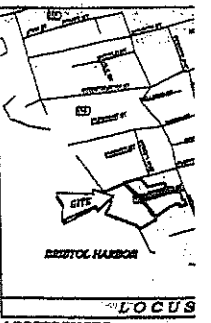
bulkhead

Bulkhead

Received for record on January 23, 2013 @ 2:05 pm Deborah Sims Clerk







LOCUS

NOTES / REFERENCES

LEGEND & ABBREVIATIONS

GRAPHIC SCALE

1 inch EQUALS 30 FEET

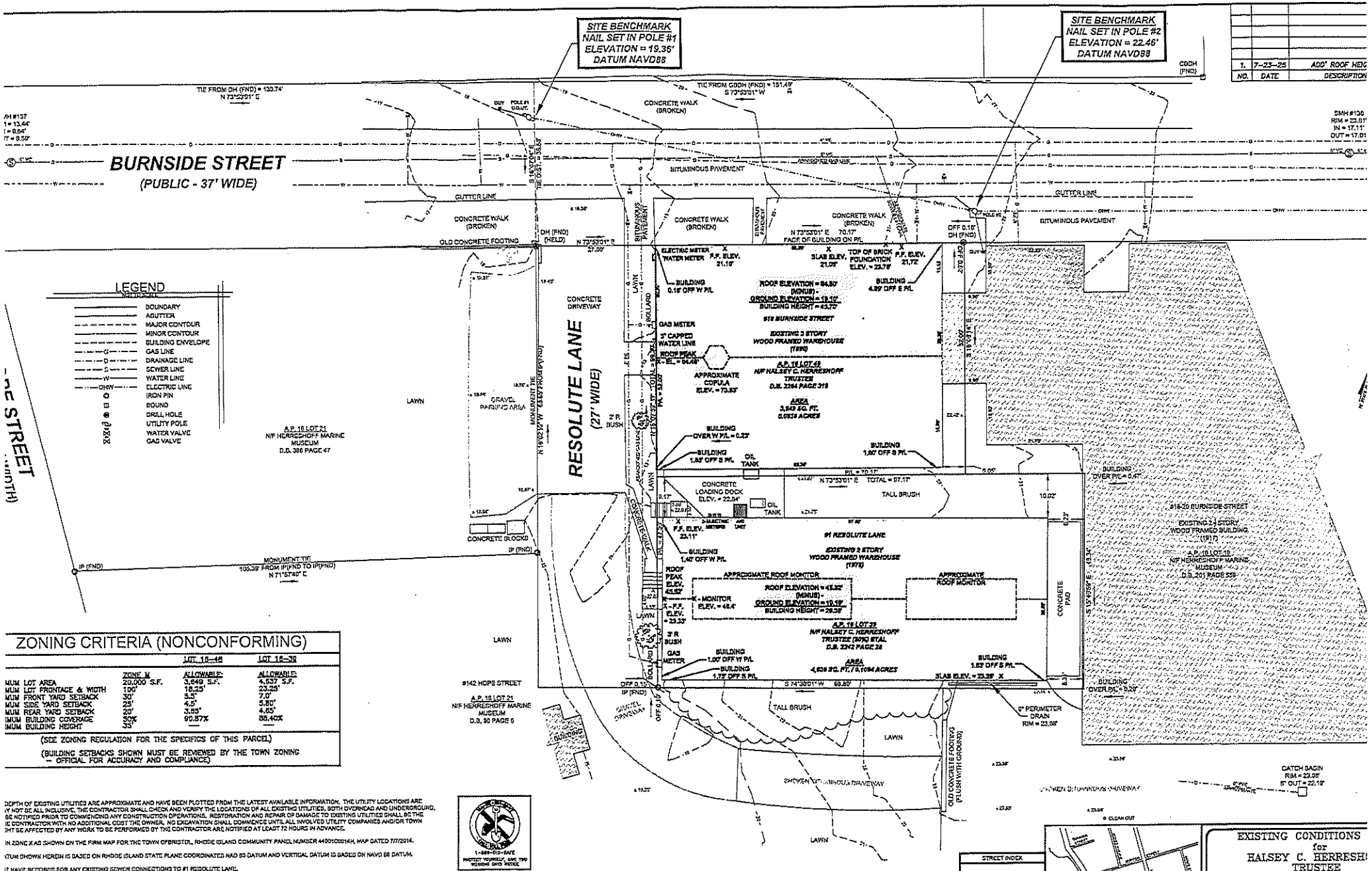
CERTIFICATION

BOUNDARY SURVEY PLAN
A.P. 16, LOTS 8, 13-18, 19-21, 31, 39, 41-44 & [illegible]
HOPE STREET, BURTON STREET & BURNSIDE [illegible]
BRISTOL, RHODE ISLAND

HERRESHOFF MARINE MUSEUM
P.O. BOX 450
BRISTOL, RHODE ISLAND 02809

WATERMAN ENGINEERING
CIVIL ENGINEERS / SURVEYORS - EST. 1974
45 SUTTON AVENUE
EAST PROVIDENCE, RHODE ISLAND

Item C4.



ZONING CRITERIA (NONCONFORMING)

	ZONE 'M'	LOT 16-48 ALLOWABLE:	LOT 16-39 ALLOWABLE:
MUM LOT AREA	20,000 S.F.	3,649 S.F.	4,637 S.F.
MUM LOT FRONTAGE & WIDTH	100'	18.25'	23.25'
MUM FRONT YARD SETBACK	30'	5.5'	7.0'
MUM SIDE YARD SETBACK	25'	4.5'	5.80'
MUM REAR YARD SETBACK	20'	3.65'	4.65'
MUM BUILDING COVERAGE	80%	90.87%	88.40%
MUM BUILDING HEIGHT	35'	—	—

(SEE ZONING REGULATION FOR THE SPECIFICS OF THIS PARCEL)

(BUILDING SETBACKS SHOWN MUST BE REVIEWED BY THE TOWN ZONING – OFFICIAL FOR ACCURACY AND COMPLIANCE)

DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE
Y NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND,
BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE
IC CONTRACTOR WITH NO ADDITIONAL COST THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN
HT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THIS CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.

IN ZONE X AS SHOWN ON THE FIRM MAP FOR THE TOWN OFBRISTOL, RHODE ISLAND COMMUNITY PANEL NUMBER 44001C0014H, MAP DATED 7/7/2014.

UTUM SHOWN HEREIN IS BASED ON RHODE ISLAND STATE PLANE COORDINATED NAD 83 DATUM AND VERTICAL DATUM IS BASED ON NAVD 88 DATUM.

IT HAVE RECORDS FOR ANY EXISTING SEWER CONNECTIONS TO #1 RESOLUTE LANE.

1-888-DIG-SAFE
PROTECT YOURSELF, DIG TWO WORKING DAYS NOTICE

REFERENCES:

1. A CERTAIN PLAN ENTITLED " BOUNDARY SURVEY PLAN A.P. 16 LOTS 8, 13-15, 19-21, 31, 39, 41-44, & 48 HOPE STREET, BURTON STREET, & BURNSIDE STREET BRISTOL, RHODE ISLAND, HERRESHOFF MARINE MUSEUM. SURVEYED BY WATERMAN ENGINEERING CO. ; DATED 3/28/08 ; SCALE 1" = 30' " AND RECORDED IN THE TOWN OF BRISTOL IN THE TOWN CLERKS OFFICE IN ENVELOPE #617
2. RIGHTS TO RIGHT OF WAY KNOWN AS RESOLUTE LANE (FORMERLY WILLOW LANE) AS DESCRIBED IN D.B. 100 PAGE 27
3. RESTRICTIONS AS SET FORTH IN VOLUME 173 PAGE 159 (NOT PLOTTABLE)
4. RIGHTS AS DESCRIBED IN VOLUME 192 PAGE 48 (NOT PLOTTABLE)
5. RIGHTS AS DESCRIBED IN VOLUME 269 PAGE 39 (NOT PLOTTABLE)

CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO
E RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE
NS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS

D CONTENT BOUNDARY SURVEY
ATION: CLASS 1 STANDARD / CLASS III TOPO

ISTING CONDITIONS SURVEY

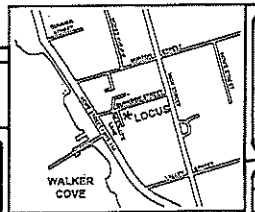
DATE: 7/23/2025

NO. 19

STEPHEN E. LONG
No. 19301
PROFESSIONAL LAND SURVEYOR

GRAPHIC SCALE
(IN FEET)
1 inch = 10 ft.

STREET INDEX
BURNSIDE STREET
RESOLUTE LANE



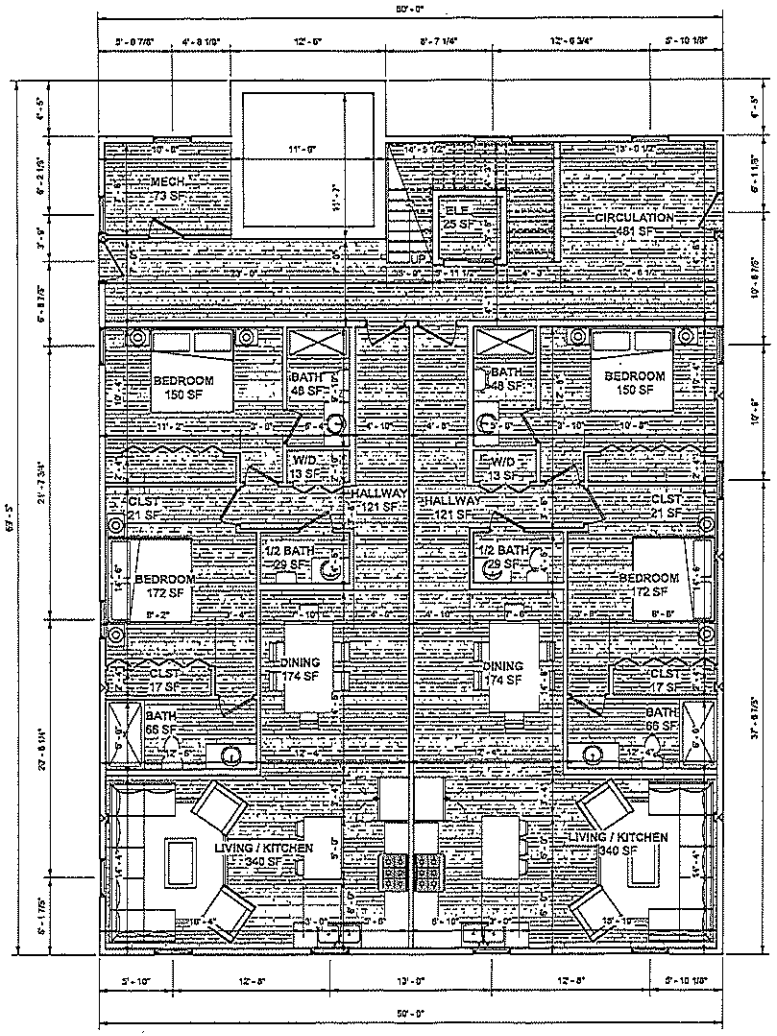
LOCUS MAP
NOT TO SCALE

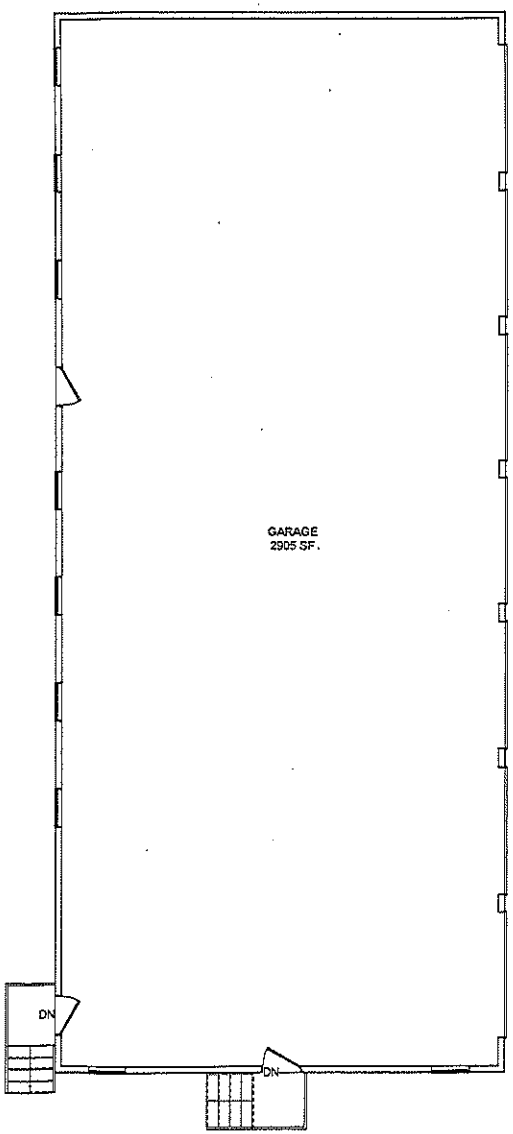
PRINCIPE COMPANY, INC.
SURVEYING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
SURVEY@PRINCIPEENGINEERING.COM
PRINCIPEENGINEERING.COM

EXISTING CONDITIONS
for
HALSEY C. HERRESH
TRUSTEE
ASSESSORS PLAT 16 LOTS
#18 BURNSIDE STREET
#1 RESOLUTE LANE
in
BRISTOL, RHODE ISLAND

SCALE: 1"=10'
DRAWN BY: JML | DESIGN
DATE: 6-16-2025

Item C4.





1 A101 MAIN LEVEL PLAN
3/16" = 1'-0"

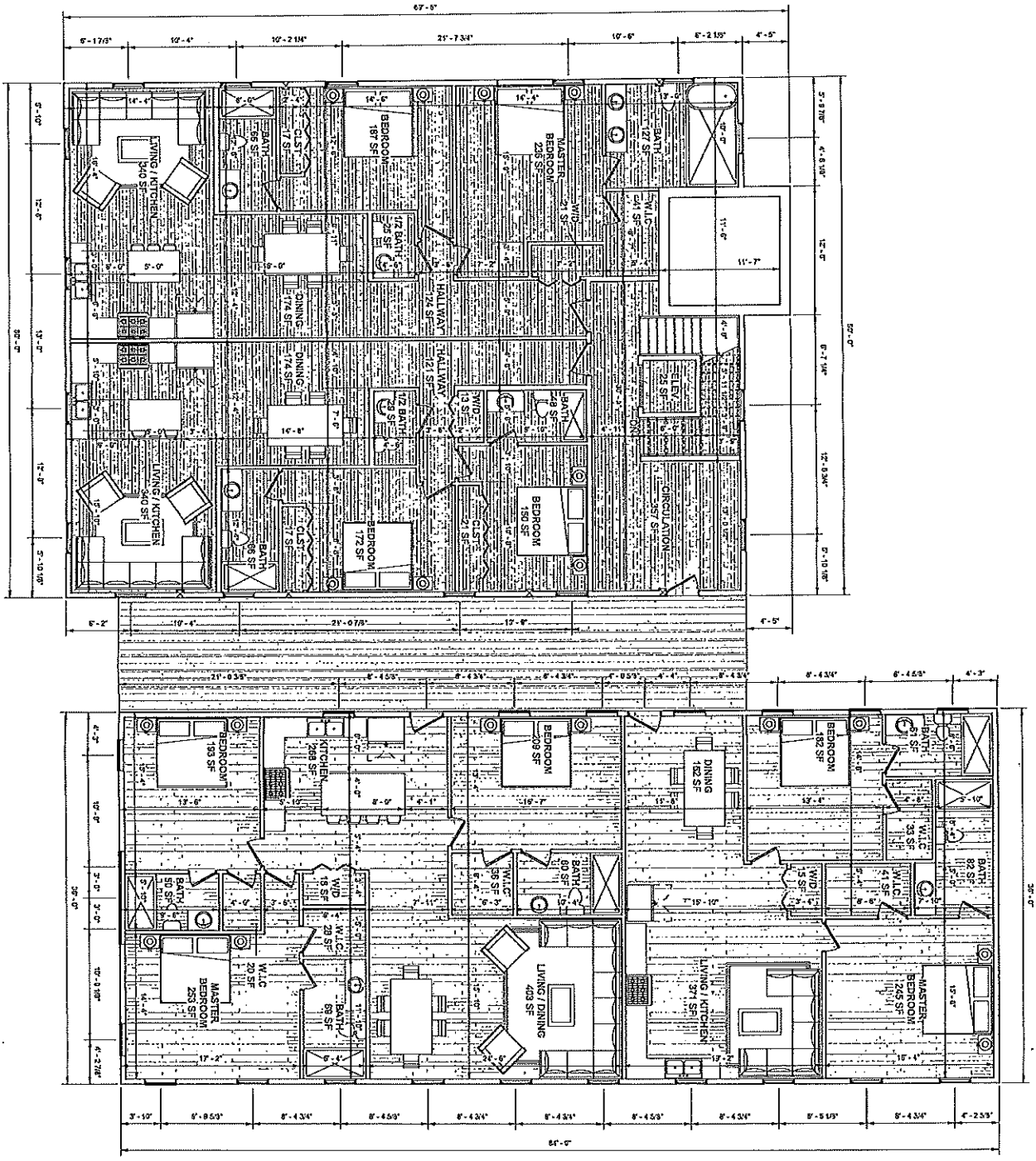
MAIN LEVEL PLAN

PROJECT NO
2

DRAWN BY:
A

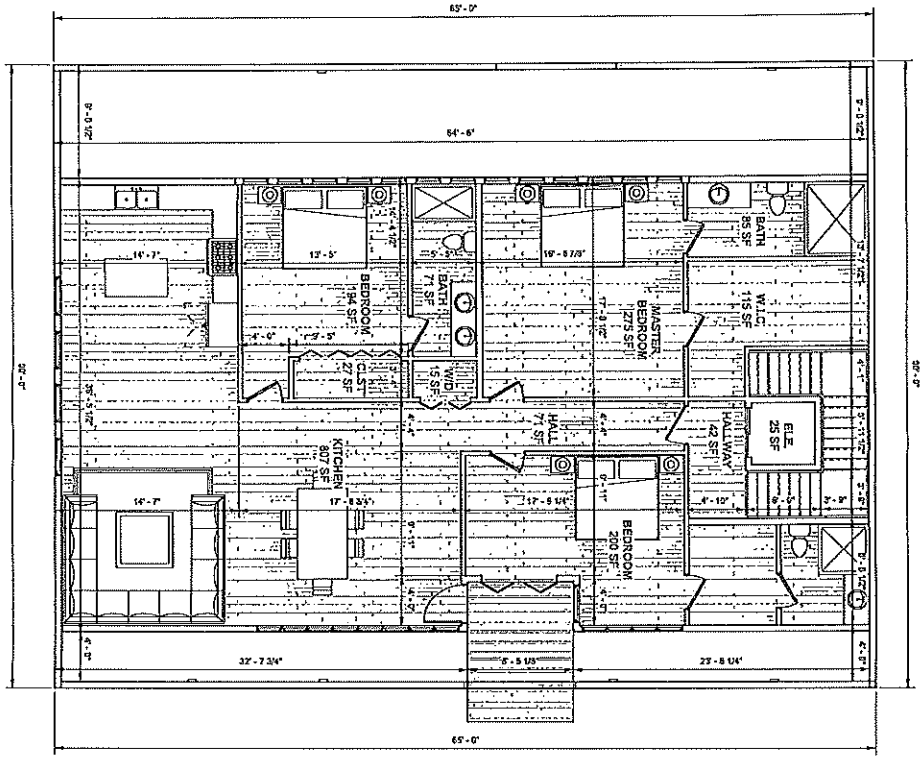
REV	D
A	12/1

Item C4.



UPPER LEVEL PLAN

Item C4.



1 SECOND LEVEL
3/16" = 1'-0"

SECOND LEVEL PLAN

BURNSIDE STREET

Item C4.

Item C4.

TOWN HALL
10 COURT ST.
BRISTOL, RI 02809
401-253-7000

Bristol Historic District Commission
Decision Letter

August 13, 2025 | 18 Burnside Street / 1 Resolute Lane, Plat #16, Lot #48 | Application 25-98

John J. Marshall/Herreshoff Revocable Trust
c/o 443 Hope Street, Bristol, RI 02809
RE: BHDC Review

Dear Applicant:

At its August 7, 2025 meeting, the Bristol Historic District Commission reviewed your proposed work on the property noted above; the motion on your application was as follows:

To approve application 25-98 as submitted for 7 unit adaptive reuse with material as presented

Finding of Fact: Property will not be used for original historical purpose but reuse will require minimal changes

The Findings of Facts include that this decision conforms to the Secretary of the Interior's Standards for:

1- A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

4- Changes to a property that have acquired historic significance in their own right will be retained and preserved.

6- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

9- New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

Commission member Susan C. Church will be your project monitor. If you need to speak with your monitor(s) or are ready for final review of the completed project please call me at Town Hall, 401-253-7000 x153, and I will contact them for you.

The Certificate of Appropriateness, referred to at the meeting as the "Green Sheet", is part of your permit and will be issued on approval. Work cannot begin, nor a building permit obtained, without your signing this document. Once signed and completed, a copy of the Certificate will be sent to you via the online permitting software, authorizing you to begin your work.

Sincerely,

Nicholas Toth
Planner/HDC Clerk
Town of Bristol Department of Community Development

ORIGIN ID:WSTA (401) 253-2500
ALFRED A REGO JR
REGO & REGO
443 HOPE STREET

BRISTOL, RI 02809
UNITED STATES US

SHIP DATE: 22AUG25
ACTWGT: 1.00 LB
CAD: 255895226/INET4535

BILL SENDER

TO ATTN: APPLICATIONS COURDINATOR
C R M C
4808 TOWER HILL ROAD SUITE 3

SOUTH KINGSTOWN RI 02879

(401) 783-3370
INV:
PO:

REF:

DEPT:

580J4/A855/59F2

FedEx Express

J2350256620XEV

TRK# 0201 8837 8914 4725

MON - 25 AUG 10:30A
PRIORITY OVERNIGHT

02879

04 NCOA

RI-US PVD

After printing this label:
CONSIGNEE COPY - PLEASE PLACE IN FRONT OF POUCH
1. Fold the printed page along the horizontal line.
2. Place label in shipping pouch and affix it to your shipment.

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CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

Item C4.

Rego & Rego
Special Account
65 Franklin Street
Bristol, RI 02809
401-253-2560

CITIZENS BANK OF RHODE ISLAND
464 HOPE STREET
BRISTOL, RI 02809
57-12/115

08/20/2025

PAY TO THE ORDER OF Coastal Reseources Management Council $ 1,400.00

One Thousand Four Hundred and 00/100****** DOLLARS

PROTECTED AGAINST FRAUD

Alfred R. Rego, Jr.

MEMO 18 Burnside - 1 Resolute

⑈001285⑈ ⑆011500120⑆ 2593 296 9⑈

Rego & Rego 1285

Rego & Rego 1285

PAYMENT RECORD

© 2021 INTUIT INC. 1-800-433-8810

Water Availability Request

BRISTOL COUNTY WATER AUTHORITY

Applicant Information

Date: 08/18/2025

Property Owner Signature: [signature]

Owner (please print): Halsey C. Herreshoff, Trustee

Corporate Title (if not an individual):

Address: 18 Burnside Street - 1 Resolute Lane, Bristol, RI 02809

Phone: c/o 401 253-2500 Email: al@rego-law.com

Contractor: Marshall Properties Email: jjmarshall@marshallproeprtiesinc.com

Location

Preliminary request is hereby made for a confirmation that public water is available from BCWA to service this property:

Town: Bristol Location: 18 Burnside Street 1 Resolute Lane

Address/Plat and Lot: Plat 39 and 48

☐ Residential*

adaptive re-use
condominium conversion
7 - residential units

☒ Commercial*

Building Footprint 18 Burnside 3,639 sq ft
5 units 2 baths each
Building Footprint 1 Resolute 4,638 sq ft
2 units 2 baths each
Total Occupancy: 7 residential condo units
Total Estimated water use: 9,000 to 12,000 gallons per week...

***Site Plan Must Be Attached to All Applications**

For BCWA Office Use Only

Action by the Bristol County Water Authority

☑ **Water Available** ☐ **Water Not Available**

Approximate Static Pressure: 70 psi

Conditions: 18 Burnside has frontage on a street with a water main, however, more information on domestic and fire protection demands are required in order to ensure sufficient supply for property.

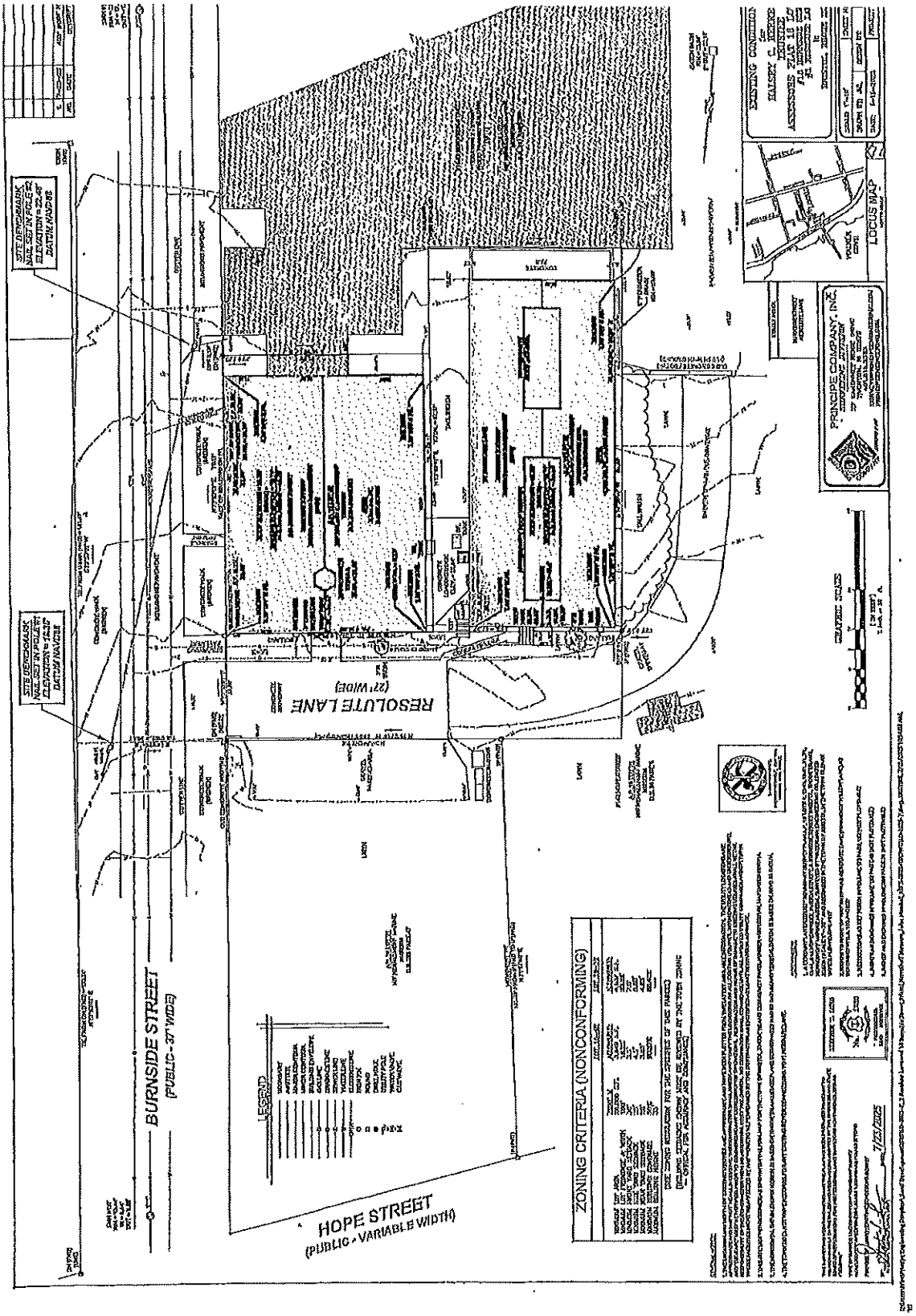
If connection to BCWA is desired, you must:

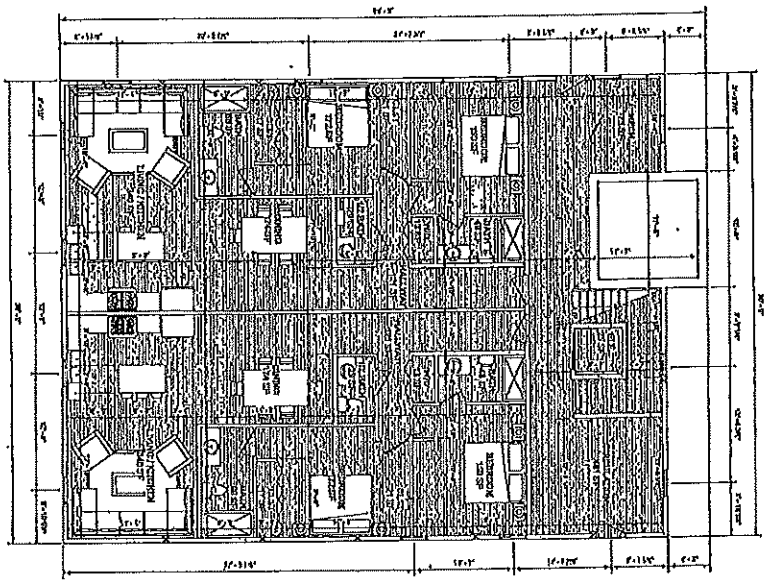
☐ **Submit Application for Main Extension Form and Engineering Plans for Review**

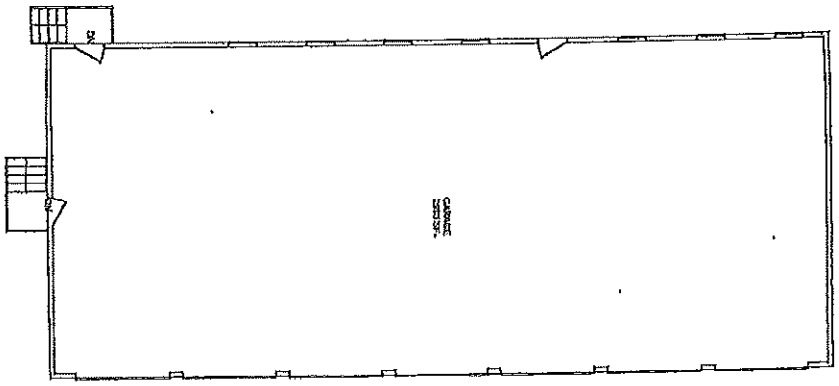
☑ **Submit Application for New Water Service Installation and Fee**

Date of Review: 8/28/2025 **BCWA Engineer:** Colin O'Hara

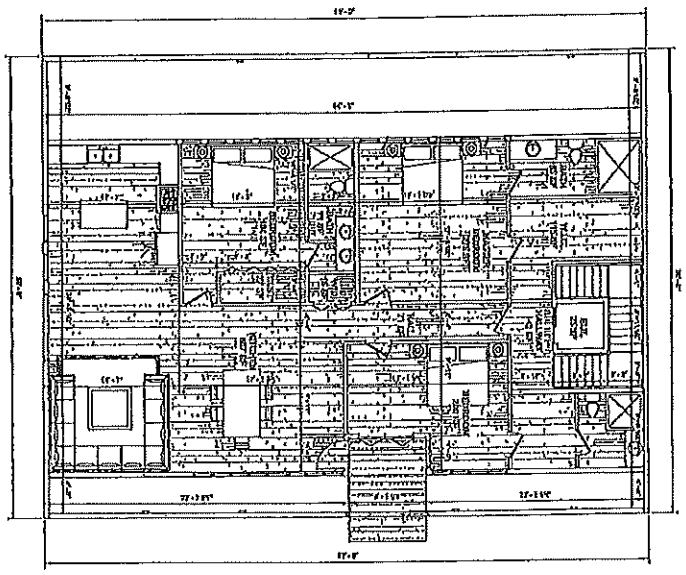
Rev April 2017


BURNSIDE STREET
(PUBLIC - 37' WIDE)
RESOLUTE LANE
(22' WIDE)
HOPE STREET
(PUBLIC - VARIABLE WIDTH)
ZONING CRITERIA (NONCONFORMING)
LEGEND
LOCUS MAP
PRINCIPE COMPANY, INC.
SITE BENCHMARK
NAIL SET IN POLE #2
ELEVATION = 12.49'
DATUM NAVD88
SITE BENCHMARK
NAIL SET IN POLE #1
ELEVATION = 12.19'
DATUM NAVD88

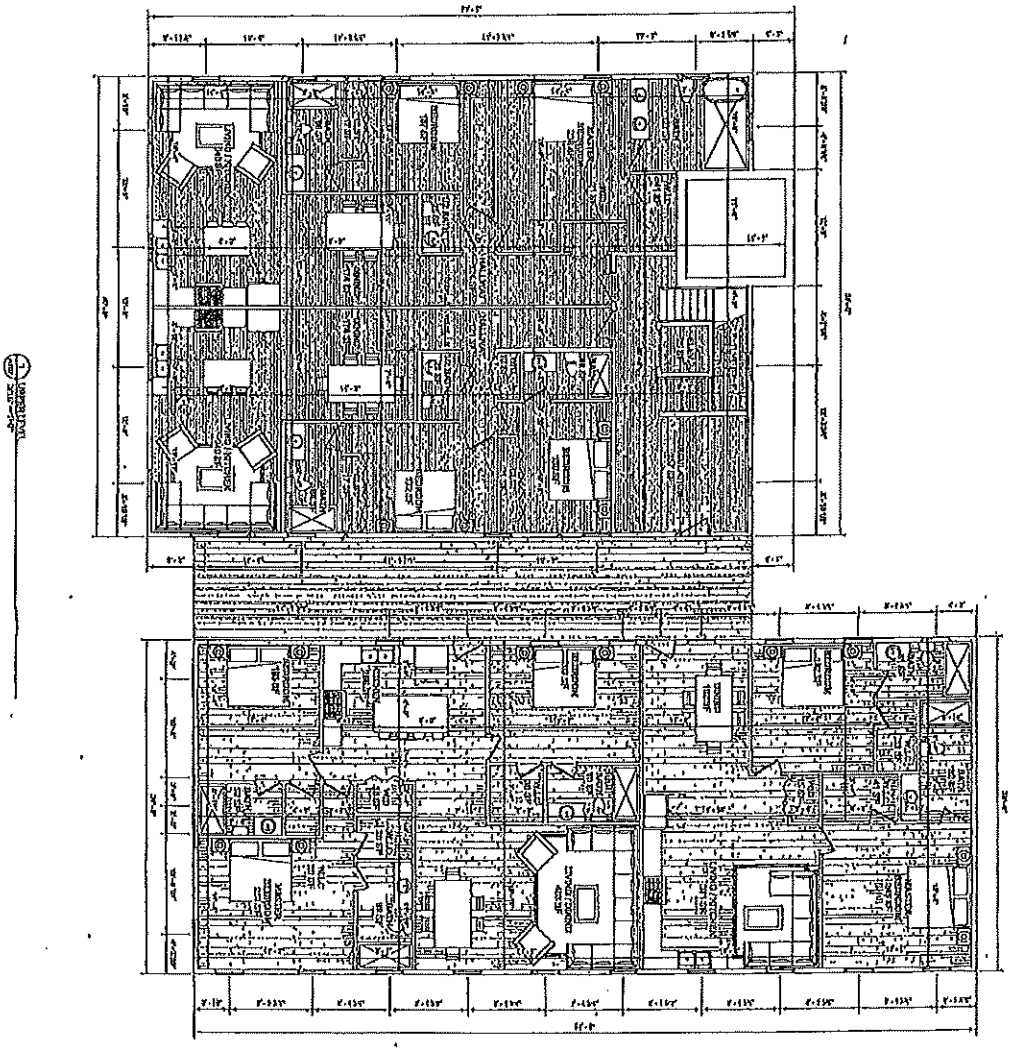




MAIN LEVEL PLAN



SECOND LEVEL PLAN



UPPER LEVEL PLAN

Roger Williams University

Facilities Management and Capital Projects, One Old Ferry Road, Bristol, Rhode Island 02809-2921
401.254.3136 • 401.254.3440 Fax • www.rwu.edu

To: Diane Williamson, Director of Community Development, Town of Bristol, RI

From: John Amitrano, AVP for Facilities and Capital Projects, Roger Williams University

Date: 7/30/25

Subject: Roger Williams University Master Plan and Campus Update, Summer '25

Introduction

Roger Williams University (RWU) is moving forward with several projects this summer. Per our Campus Master Plan submitted in February of 2023 we are continuing with Academic Renewal and beginning the design process for our proposed Campus Center. In other areas several small CAPEX projects are in progress related to campus infrastructure, classroom improvements, access control, and dining.

Campus Center

RWU has engaged the Architectural firm Architectura in the programming and design of our proposed Campus Center. The project is just entering the Design Development phase with Construction Documents projected for a December '25 delivery. The proposed building will be constructed on the current location of the mail room. It will be 4 stories with the ground level split between parking and program. At ~ 85,000 square feet the structure will house Admissions, Student Programs Leadership & Orientation (SPLO), the radio station, e-gaming, retail, a café, and Student Clubs and Organizations. With multiple event spaces leveraging views of Mount Hope Bay the Campus Center will be the focal point for RWU's student and community engagement.

Academic Renewal

Brewster Thornton Group Architects has worked with RWU to develop a multiphase renovation of the old SECCM Engineering Building. This year phase 3 is underway with the addition of an Instrument room to support Forensics and Environmental Sciences as well as two 30-seat modern classrooms that can be combined into one large one by a folding teaching wall. As part of this phase the fire sprinkler system will continue to be expanded and classroom 124 is being infilled to accommodate the proposed phase 4 Cyber Lab and Vivarium.

The Center for Environmental and Economic Development (CEED) in MNS has been awarded a grant which will be used in part to fund a Histology Mobile Classroom for the study fish tissues. This 900 square foot trailer will be placed between the parking structure and the Arts Annex on North Campus. Expected completion is December 2025.

Classroom improvements will focus on the MNS Building where two Biology labs are being renovated with new cabinetry, technology, and furnishings. This work will make these existing spaces better suited to modern teaching methods, more accessible and inviting to students.

2025 AUG -6 AM 11:26
TOWN OF BRISTOL
COMMUNITY DEV.

Student Life

RWU has partnered with BKP Architects on a new layout design for our Upper Commons Dining Room. This project is focused on improved work and traffic flow, modernized cabinetry and finishes, as well as the addition of a "You Cook It" area where students can prepare their own meals and cooking demonstration events can be held. Project will be completed in time for opening in August 2025.

Small CAPEX Projects

RWU is working with Integrated Security, converting our access control system from HID Safe to C-Cure. This project will improve both system and user security through improved hardware and software ensuring campus cyber security as well as better access control through a mobile credentialing allowing for instantaneous updates to a registered users status. Project will be completed in time for opening in August 2025.

Campus Infrastructure

Working with Fuss & O'Neil, RWU has purchased 3 new transformers which is the beginning completion of a multiyear multi-phase campus power upgrade where we are moving from 4.8 kV to 12 kV. The main trunks were completed in 2016, but the project was paused. This purchase is the first of several where ultimately 14 transformers will be purchased then in phases associated sets of wire and switch gear will be installed creating a more resilient infrastructure for future campus moves toward electrification.

Summary

We are looking forward to working with the Town of Bristol in the execution of these projects. I will be reaching out soon to schedule an initial meeting with the Town, our Architect and Site/Civil Engineering team to review the permitting and regulatory requirements relative to the Campus Centers construction. Thank you for being great partners.

John Amitrano

CC: Gloria M. Arcia, Ed.D.
Brian G. Williams, DM