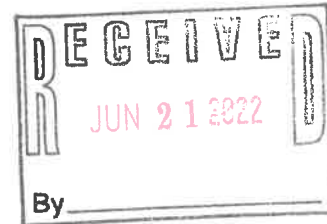


# JONES & BEACH ENGINEERS INC.

85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885  
603.772.4746 - JonesandBeach.com

June 21, 2022

Rochester Planning Board  
Attn. Mark Collopy, Chair  
31 Wakefield Street  
Rochester, NH 03867



**RE: Site Plan Application**  
**105 Farmington Road, Rochester, NH**  
**Tax Map 209, Lot 1**  
**JBE Project No. 21298.1**

Dear Mr. Collopy,


Jones & Beach Engineers, Inc., respectfully submits a Site Plan Application for the above-referenced parcel on behalf of our client, GR Development. The intent of this application is to propose a 4,200 S.F. carwash on Tax Map 209, Lot 1.

The following are provided in support of this application with the following items:

1. Site Plan Application with Checklist.
2. Current Deed.
3. Signed Letter of Authorization.
4. Abutters List with Three (3) Sets of Mailing Labels.
5. Two (2) Drainage Analysis.
6. Three (3) Full Size Plan Sets.
7. Three (3) 11x17 Architectural Plan Sets.
8. Three (3) 11x17 Plan Sets (Folded).
9. Fee Check.
10. Water Usage Report.
11. Traffic Report.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,  
**JONES & BEACH ENGINEERS, INC.**

  
Erik Poulin, P.E.  
Project Manager

cc: Jim Waterman, GR Development (application & plans via email)



Planning Board  
Conservation Commission  
Historic District Commission  
Arts & Culture Commission

## PLANNING & DEVELOPMENT DEPARTMENT

City Hall Annex  
33 Wakefield Street,  
Rochester, New Hampshire 03867-1917  
(603) 335-1338 - Fax (603) 330-0023  
Web Site: [www.rochesternh.net](http://www.rochesternh.net)



### MEMORANDUM

**TO:** Applicants for a **SITE PLAN - NONRESIDENTIAL**

**FROM:** Planning & Development

**DATE:** May 2019

**SUBJ:** **Submission Requirements and Review Process for Formal Applications**

We appreciate your interest in developing property in the City of Rochester and would like to make the application process as simple and pleasant as possible. Please review the following items carefully and feel free to contact our office with any questions, comments, or suggestions. For applicants/agents who are not highly familiar with the review process in Rochester it is strongly recommended that you speak with the Planning Department (603-335-1338) about the submission process before preparing an application.

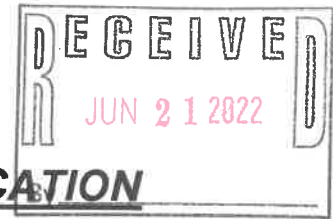
***\* Please note.** On any significant site plans and on major subdivisions, especially those involving a new road, a preliminary meeting with staff and/or a preliminary (conceptual or preferably design review) discussion with the Planning Board prior to engineering the project is **strongly encouraged**. In most cases, initial site layout or proposed lot and road locations will change as a result of the City's review and you will save time and money if you wait to do the engineering until you receive this feedback. A separate application form is used for preliminary applications.*

- A) The applicant must submit all of the following items in order for the application to be considered and processed as a formal application (*see exception/clarification at the end*):
- 1) Completed application form (blank attached) – **4 copies**
  - 2) Written narrative about the proposed project addressing the scope of operation, purpose, justification, and impacts (a simple letter of intent may suffice) – **4 copies**
  - 3) Complete set of drawings on 11" x 17" sheets – **2 sets folded in half**
  - 4) Complete sets of full size drawings as described in the regulations (a mylar is not required) – **3 sets**
  - 5) Drainage, traffic, and other studies as appropriate – **2 copies**

- 6) Completed checklist (corresponding to Section II.5.A. of the Site Plan Regulations or Section 4 of the Subdivision Regulations, blank attached) filled out by applicant – **1 checklist**
  - 7) All items specified on the checklist (5, above) and in the regulations must be submitted unless they are not applicable or a waiver is requested and approved. For site plans please be sure to include information on lighting, signage, and architecture, as specified.
  - 8) Application fee (see fee schedule). Checks or money orders should be made out to "City of Rochester".
  - 9) Completed abutter's list. All parcels of land which are contiguous to the subject property at any point or which would be contiguous if not for an intervening road or stream must be listed. The list is completed by the applicant directly from information on the computer terminal located in the Assessor's Office. The list may not be filled out more than 5 days prior to the application deadline. Please note that holders of conservation or preservation easements must also be notified. If there are any they must be included on the abutter's list. One original only. The applicant must pay the City of Rochester the current postal rate for a certified letter to be mailed to everyone on the abutter list. The Planning Department will generate the public hearing notice and take it to the post office to be mailed certified. The applicant shall supply two (2) mailing labels for each name on the abutter list.
  - 10) Requests for waivers, if any. The applicant may request waivers from submission requirements and design standards. Waivers are granted by the Planning Board at its discretion. Any request must be submitted by the applicant in writing specifying the regulation number and reason for the request. If you believe that obtaining a waiver will improve your project we encourage you to apply for it. Four (4) copies or 1 copy if requested on checklist
  - 11) ***Please submit the four (4) application packages - application form, narrative, and folded 11x17 drawings (and waivers if submitted as a separate memo) – with each clipped together as one set.*** Staff will inform you after the TRG meeting how many final application packages to submit for the Planning Board.
  - 12) If all necessary items are not submitted, such that the application cannot be accepted as complete, the application will be treated as a preliminary application. However, *at the discretion of the Planning Board*, various items which can be reviewed fairly independently and readily inserted into an engineered plan - such as landscaping, lighting, signage, and architecture – may be submitted later, after plan acceptance, provided they are submitted in a form and timeframe to allow for full review prior to final action. Consult the Planning Department for more information. In addition, particular items – such as the drainage report, for example – may be submitted after the application deadline but prior to the Planning Board meeting and not affect acceptance, *if the timeframe for submittal of those items is approved in advance by the Planning Department.*
- B) Agents (or applicants) must attend the Technical Review Group meeting held one week after the application deadline. **The applicant or agent must attend the Planning Board meeting.**

- C) The application must comply with all of the following: the City of Rochester Site Plan Regulations or Subdivision Regulations, as appropriate, unless a waiver is obtained; the City of Rochester Zoning Ordinance unless a variance is obtained; and all other applicable local, state, and federal regulations.
- D) The project must be built and executed exactly as specified in the approved application package unless modifications are subsequently approved. All of the documentation submitted in the application package will be considered part of the approval unless otherwise updated, revised, or superseded.
- E) The application may be subject to the following requirements, fees, and assessments:
- 1) A small monumentation fund fee will be assessed on all projects that are not surveyed using the New Hampshire State Plane Coordinate System.
  - 2) A connection fee will be imposed on all projects that tie into the City's water or sewer system.
  - 3) Where drainage systems, roads, sidewalks, or other infrastructure impacted by the project are substandard the applicant may be required to upgrade these facilities or contribute to an upgrade.
  - 4) Payment for inspection fees as determined by the Department of Public Works.
  - 5) Reimbursement of any out-of-pocket expenses incurred by the City in evaluating the project.
  - 6) A sewer impact contribution must be paid prior to the issuance of a certificate of occupancy. The sewer impact is a one time payment of \$2.00 per gallon for average daily flow for new connections to City sewer or increases in flow.
  - 7) The Planning Board may impose other requirements, fees, and assessments, as appropriate.
- F) A pre-construction meeting will be required for all projects that involve significant ground disturbance. The applicant will be required to sign pre-construction and inspection fee agreements after project approval. For projects substantial in scope the applicant may be required to enlist the services of the design engineer to inspect and certify the work. After construction is completed the applicant must submit as-built plans to the City.

Once again, please feel free to contact our department with any questions. Thank you for your cooperation.



**NONRESIDENTIAL SITE PLAN APPLICATION**  
**City of Rochester, New Hampshire**

Date: June 21, 2022 Is a conditional use needed? Yes:        No: X Unclear:         
(If so, we encourage you to submit an application as soon as possible.)

**Property information**

Tax map #: 209 ; Lot #(s): 1 ; Zoning district: Granite Ridge

Property address/location: 4 Little Falls Bridge Road

Name of project (if applicable): Proposed Car Wash

Size of site: 3.59 acres; overlay zoning district(s)? Aquifer Protection Overlay District

**Property owner**

Name (include name of individual): 105 Farmington, LLC, Attn. Scott Haley

Mailing address: 322 Reservoir Street, Needham, MA 02494

Telephone #: 781-675-2048 Email: shaley@waterstonepg.com

**Applicant/developer** (if different from property owner)

Name (include name of individual): Jim Waterman, GR Development

Mailing address: 7 Benedict Place, Greenwich, CT 06830

Telephone #: 978-337-9660 Email: jim.waterman@washvillecarwash.com

**Engineer/designer**

Name (include name of individual): Erik Poulin, P.E., Jones & Beach Engineers, Inc.

Mailing address: PO Box 219, Stratham, NH 03885

Telephone #: 603-772-4746 Fax #:                     

Email address: epoulin@jonesandbeach.com Professional license #: 16669

**Proposed activity** (check all that apply)

New building(s): X Site development (other structures, parking, utilities, etc.): X

Addition(s) onto existing building(s):            Demolition:            Change of use:

Describe proposed activity/use: To propose a 4,200 S.F. car wash development on Tax Map 209, Lot 1.

Describe existing conditions/use (vacant land?): Previously occupied by one single-family home, house  
demolished , currently vacant.

### Utility information

City water? yes ☒ no ☐; How far is City water from the site? 125'

City sewer? yes ☒ no ☐; How far is City sewer from the site? 24'

If City water, what are the estimated total daily needs? 8,510 gallons per day

If City water, is it proposed for anything other than domestic purposes? yes ☒ no ☐

If City sewer, do you plan to discharge anything other than domestic waste? yes ☒ no ☐

Where will stormwater be discharged? to rear of property. woodlands to North

### Building information

Type of building(s): Commercial Car Wash

Building height: 27' - 11 1/2" Finished floor elevation: 263.70

### Other information

# parking spaces: existing: 0 total proposed: 29; Are there pertinent covenants? Yes

Number of cubic yards of earth being removed from the site 0 - fill site

Number of existing employees: 0; number of proposed employees total: 2

Check any that are proposed: variance ☐; special exception ☐; conditional use ☐

Wetlands: Is any fill proposed? No; area to be filled:                     ; buffer impact?                     

Proposed <u>post-development</u> disposition of site (should total 100%)		
	Square footage	% overall site
Building footprint(s) – give for each building	4,200	5.6%
Parking and vehicle circulation	30,749	41.5%
Planted/landscaped areas (excluding drainage)	40,265	54.5%
Natural/undisturbed areas (excluding wetlands)	2,000	2.7%
Wetlands	0	0
Other – drainage structures, outside storage, etc.	3,466	4.7%

## Comments

Please feel free to add any comments, additional information, or requests for waivers here:

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## Submission of application

This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

*I (we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.*

Signature of property owner: Scott Haley

Date: 06-20-22

Signature of applicant/developer: LOA attached

Date: 6/20/22

Signature of agent: E R

Date: 6/20/22

## Authorization to enter subject property

*I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.*

Signature of property owner: Scott Haley

Date: 06-20-22





## **Site Plan Checklist** (residential and nonresidential)

*\*To be filled out by applicant/agent (with notes to be inserted by staff)*

See regulations for other specific requirements

City of Rochester Planning & Development Department

Project Name: Proposed Car Wash Map: 209 Lot: 1 Date: 6/21/22

Applicant/agent: Jones & Beach Engineers Signature: 

(Staff review by: \_\_\_\_\_ Date: \_\_\_\_\_)

### **General items**

	Yes	No	N/A	Waiver Requested	Comments
<u>4</u> sets completed application	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Total application fee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<u>4</u> copies of narrative	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<u>3</u> sets of full-size plans	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
<u>2</u> sets of 11 X 17 reductions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Completed abutters list	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Copy of existing covenants, easements, deed restrictions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

### **Plan Information**

Basic information including:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
• Title sheet					
• Name of Project					
• Date					
• North arrow					
• Scale					
• Legend					
• Revision block					
• Vicinity sketch -not less than 1" = 1,000'					
Name and address of developer/applicant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Name, stamp, and NH license # of land survey, engineer, and/or architect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
City tax map & lot #'s	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Notation on plans: "For more information about this site plan contact...."	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

### **General items Continued**

	Yes	No	N/A	Waiver Requested	Comments
Approval block (for signature by staff attesting to Planning Board approval)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
References to neighboring plans and subdivisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Surveyed property lines including: <ul style="list-style-type: none"><li>• existing and proposed bearings</li><li>• existing and proposed distances</li><li>• pins, stakes, bounds</li><li>• monuments</li><li>• benchmarks</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Include error of closure statement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Information on abutting properties: <ul style="list-style-type: none"><li>• owner name</li><li>• owner address</li><li>• tax map and lot #</li><li>• square footage of lots</li><li>• approximate building footprints</li><li>• use</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

### **Zoning**

Zoning designations of subject tract and in vicinity of tract	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Zoning requirements for district: <ul style="list-style-type: none"><li>• frontage</li><li>• lot dimensions/density</li><li>• all setbacks</li><li>• lot coverage</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Zoning overlay districts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

### **Existing Topographic Features:**

Contour lines a (not to exceed two-foot Intervals, except on steep slopes) and spot elevations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Soil types and boundaries	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Soil test pit locations, profiles, and Depth to water table and ledge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Percolation test locations and results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Existing Topographic Features Continued:**

	Yes	No	N/A	Waiver Requested	Comments
Water features (ponds, streams)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Wetlands including name of certified Wetlands scientist who delineated	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Statement whether located in flood area, And if so, 100 year flood elevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Delineation of trees and open areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Overview of types of trees and vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Stone walls and archaeological features	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Locations of trails and paths	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other natural/cultural resources (productive farmland, habitats, scenic views, historic structures, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

**Building Information**

Existing buildings/structures including square footage and use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
Proposed building/structures including <ul style="list-style-type: none"><li>• square footage</li><li>• first floor elevation</li><li>• use</li><li>• # bedrooms per unit if residential</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevation drawing of proposed buildings and structures as follows: <ul style="list-style-type: none"><li>• Showing all four sides</li><li>• Drawn to scale with dimensions</li><li>• Showing exterior materials</li><li>• Showing exterior colors</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Circulation and Parking Plans**

Existing and proposed driveways and access points including: <ul style="list-style-type: none"><li>• Width of opening</li><li>• Turning radii</li><li>• Cross section of driveway</li></ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Curbing & edge treatment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Traffic control devices, if appropriate:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Circulation and Parking Plans Continued:**

	Yes	No	N/A	Waiver Requested	Comments
Number of parking spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• required by ordinance					
• proposed					
Parking layout and dimensions of spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Handicap spaces	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Loading area	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Pedestrian circulation plan (including existing sidewalks in vicinity, if any)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bicycle rack, if appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Buffers, landscaping & screening	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Snow storage areas/plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Utilities**

Show all pertinent existing and proposed profiles, elevations, materials, sizes, and details

Water lines/well (with protective radius)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sewer lines/septic and leaching areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pump stations	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Stormwater management system: pipes, culverts,, catch basins detention/ retention basins, swales, rip rap, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire hydrant location(s) and details	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Electric, telephone, cable TV (underground or overhead)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gas lines	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fire alarm connections	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Treatment of solid waste (dumpsters?)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Handling of oil, grease, chemicals hazardous materials/waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## **Landscaping Plan**

	Yes	No	N/A	Waiver Requested	Comments
Demarcation of limits of construction, clear delineation of vegetation to be saved, and strategy for protecting vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Proposed ground cover, shrubbery, and trees including: <ul style="list-style-type: none"> <li>• botanical and common names</li> <li>• locations and spacing</li> <li>• total number of each species</li> <li>• size at installation</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Planting plan (size of holes, depth of planting, soil amendments, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Irrigation: system? soaker hose? Manual? underground, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Protection of landscaping from vehicles (Curb stops, berm, railroad ties, etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Specification all finished ground surfaces and edges (greenspace, mulch, asphalt, concrete, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Fencing/screening	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

## **Signage**

Location and type of signs: <ul style="list-style-type: none"> <li>• Attached to building</li> <li>• Freestanding</li> <li>• Directional, if appropriate</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Dimensions of signs: <ul style="list-style-type: none"> <li>• Height</li> <li>• Area</li> <li>• Setback</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Elevation drawings with colors & materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
Type of Illumination, if proposed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

### **Outdoor Lighting**

	Yes	No	N/A	Waiver Requested	Comments
Locations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Height of fixtures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Wattage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Type of light (high pressure sodium, etc)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Design/cut sheets of fixtures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Illumination study, if appropriate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### **Other Elements**

Traffic study, if appropriate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drainage study with calculations, storm Water impact analysis, and mitigation plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grading plan (including finish grades)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Earth being removed from site(in cubic yards)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion and sedimentation plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Proposed covenants, easements, And deed restrictions, if any	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fiscal impact study, if requested	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### **Additional Comments:**

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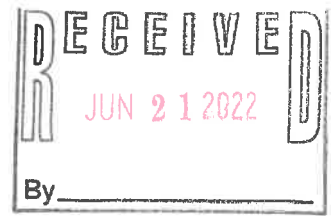
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### Letter of Authorization

I, Jim Waterman, GR Development, 7 Benedict Place, Greenwich, CT 06830, developer of property located in Rochester, NH, known as Tax Map 209, Lot 1 & Tax Map 216, Lot 12, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously mentioned property. The parcel is located on 105 Farmington Road & 4 Little Falls Bridge Road in Rochester, NH.

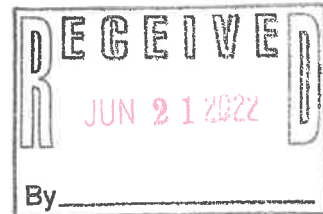
I hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

A handwritten signature in dark ink, appearing to be "Jim Waterman", written over a horizontal line.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Jim Waterman  
GR Development

\_\_\_\_\_  
Date



### Letter of Authorization

105 Farmington Rd LLC, 322 Reservoir Street, Needham, MA 02494, owner of property located in Rochester, NH, known as Tax Map 209, Lot 1, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously mentioned property. The parcel is located on 105 Farmington Road in Rochester, NH.

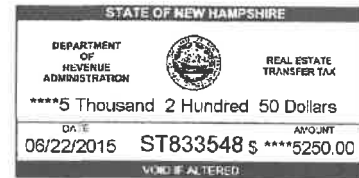
We hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

\_\_\_\_\_  
Witness

*Scott Haley*  
\_\_\_\_\_  
105 Farmington Rd, LLC

06-20-22  
Date





## WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS that I, Rudolph A. Tetreault, of 105 Farmington Rd., Rochester, County of Stratford and state of New Hampshire, a single person, for consideration the receipt of which is hereby acknowledged, grant to 105 Farmington Rd. LLC, a Delaware limited liability company having a mailing address of 322 Reservoir St., Needham, MA 02494 with warranty covenants the following:

A certain tract or parcel of land with building thereon situate in Rochester, County of Strafford and State of New Hampshire, more particularly bounded and described as follows:

Beginning at an iron pipe in the ground on the easterly side line of relocated Route 11 at the southwesterly corner of the premises herein conveyed land at of one Page; then running northerly three hundred sixty (360) feet, more or less, along Route 11 to an iron pipe at other land now or formerly of Rudolph and Julie Tetreault; then turning and running easterly (crossing the now abandoned portion of the old Farmington Road) and continuing one hundred twenty-one (121) feet, more or less, by land of said Tetreault to land of the Boston and Maine railroad; then turning and running southerly three hundred fifty-five (355) feet, more or less, by land of said railroad to a stone wall at land of said Page; then turning and running westerly two hundred forty-one (241) feet, more or less, by land of said Page along a stone wall to its end and then continuing westerly to relocated Route 11 and the point of beginning.

Meaning and intending to convey the premises described in the deed of Joseph E LaMontagne and Dorothy M LaMontagne to Rudolph A. Tetreault and Julie Tetreault dated November 10, 1978 and recorded in the Strafford County Registry of Deeds at Book 1025 Page 848. Rudolph Tetreault is the survivor of himself and Julie Tetreault who died on March 15, 1988 and whose death certificate is recorded in the Strafford County Registry of Deeds at book 1494, Pag256.

Grantor hereby releases his homestead rights.

Witness my hand this 22nd day of June 2015

  
Witness

  
Rudolph A. Tetreault

State of New Hampshire  
Strafford, ss

Personally appeared Rudolph A. Tetreault, known to me or satisfactorily proven to me, and acknowledged the foregoing deed to be his voluntarily act and deed this day of June, 2015.



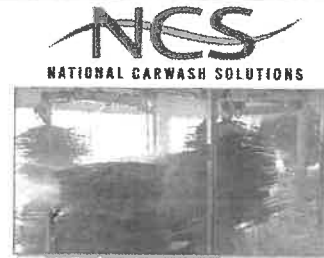
Notary Public/ Justice of the Peace



Customer Full Name Washville  
Office Address 1 Carwash Ln  
City, State, Zip Code Riverhead NY  
Phone Number 0  
Email Address 0

Site Name, Store # Riverhead NY  
Shipping Street Address <Enter>  
City, State, Zip Code <Enter>  
Site Phone # <Enter>

Date:



## SITE INPUT

KPI Input Fields		Data Input	Notes & Recommendations:	
Expected Annual Tunnel Volume:		140,000	Typical new site volumes range from 80-150,000 year 1.	
Conveyor Speed:		130	This is the average chain speed set in the controller.	
Average Length of Vehicle:		17	Range between 15-18, longer lengths increase water use per car.	
Average Operating Hours Per Day:		12	Hours of Operation Effect Daily Usage Breakdowns vs Annual Usage Stats.	
Water & Sewer Cost Per 1000 Gallons:		\$15.00	If Rates Are Unknown, Use Range of \$10-17 Per 1000 Gallons.	
Regional/Seasonal Market Considerations:				
	Summer	Fall	Winter	Spring
	40%	20%	30%	10%

Each market varies as to the seasonality of business, these fields allow for adjustments to be made accordingly. If the market knowledge is yet to be determined the standards may be applied which include; climates with snow typically peak in the winter and have lows in the fall, southern climates often peak around bug heavy seasons and coastal climates may be normalized across the seasons.

## Water Use Estimate Data Input Fields

### Explanatory Information:

The water water use is largely calculated by the backroom support piece capacities because this is where the actual usage is determined. For example: A rain bar may have a capacity of 10 gallons per minute based on the quantity of holes, however if a solenoid or product supply only allows for 7 gallons per minute the actual flow rate of the rain bar will be the lesser amount. For this reason we utilize the asset that provides the more accurate output.

## Section 1: Dilution Station - Water Use Estimate Data Input Fields

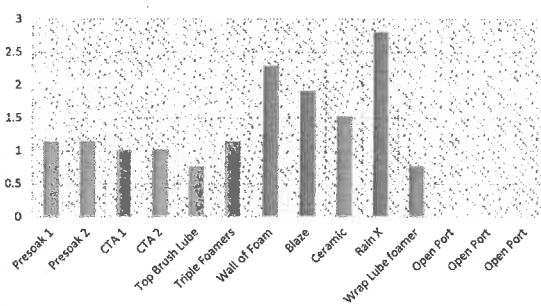
HFI Board #1:		Soft Water	
Solenoid	Application	Injector	GPM
Port 1	Presoak 1	Dark Blue 2.25	2.25
Port 2	Presoak 2	Dark Blue 2.25	2.25
Port 3	CTA 1	Gray 2.0	2
Port 4	CTA 2	Gray 2.0	2
Port 5	Top Brush Lube	Orange 1.50	1.5
Port 6	Triple Foamers	Dark Blue 2.25	2.25
Port 7	Wall of Foam	Purple 4.50	4.5

HFI Board #2:		Hard Water	
Solenoid	Application	Injector	GPM
Port 1	Blaze	Pink 3.75	3.75
Port 2	Ceramic	Light Blue 3.00	3
Port 3	Rain X	Dark Green 5.50	5.5
Port 4	Wrap Lube foamer	Orange 1.50	1.5
Port 5	Open Port	Select	0
Port 6	Open Port	Select	0
Port 7	Open Port	Select	0

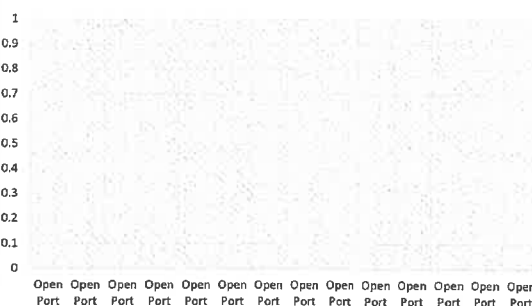
HFI Board 3:		Select Water Type:	
Solenoid	Application	Injector	GPM
Port 1	Open Port	Select	0
Port 2	Open Port	Select	0
Port 3	Open Port	Select	0
Port 4	Open Port	Select	0
Port 5	Open Port	Select	0
Port 6	Open Port	Select	0
Port 7	Open Port	Select	0

HFI Board 4:		Select Water Type:	
Solenoid	Application	Injector	GPM
Port 1	Open Port	Select	0
Port 2	Open Port	Select	0
Port 3	Open Port	Select	0
Port 4	Open Port	Select	0
Port 5	Open Port	Select	0
Port 6	Open Port	Select	0
Port 7	Open Port	Select	0

Product GPM - HFI Panel #1 & #2



Product GPM -HFI Panel #3 & #4



## SITE INPUT

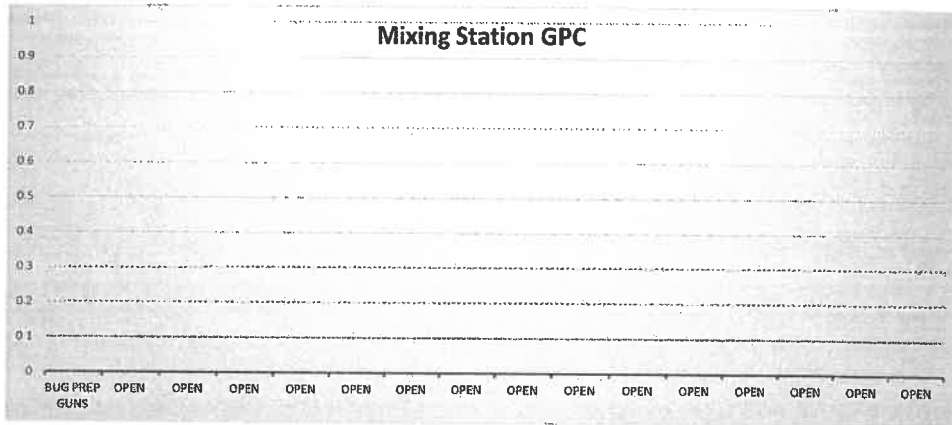
### Explanatory Information:

Dosatron & Hydrominder dilution stations have high flow rates which means bay applicators can have lower flow rates. In this situation the applicator rate should be entered into the right column to reflect the lower usage.  
 Note: Charts show gallons per car (GPC) usage, not gallons per minute (GPM).



#### Mixing Stations: Dosatron & Hydrominder Units

Unit #	Application	Model #	Select Water Type:	Maximum GPM:	Applicator (GPM)
1	Bug Prep Guns	Hydrominder Double	Soft Water	9	0
2	Open	Select Dilution Station	Select Source:	0	0
3	Open	Select Dilution Station	Select Source:	0	0
4	Open	Select Dilution Station	Select Source:	0	0
5	Open	Select Dilution Station	Select Source:	0	0
6	Open	Select Dilution Station	Select Source:	0	0
7	Open	Select Dilution Station	Select Source:	0	0
8	Open	Select Dilution Station	Select Source:	0	0
9	Open	Select Dilution Station	Select Source:	0	0
10	Open	Select Dilution Station	Select Source:	0	0
11	Open	Select Dilution Station	Select Source:	0	0
12	Open	Select Dilution Station	Select Source:	0	0
13	Open	Select Dilution Station	Select Source:	0	0
14	Open	Select Dilution Station	Select Source:	0	0
15	Open	Select Dilution Station	Select Source:	0	0
16	Open	Select Dilution Station	Select Source:	0	0



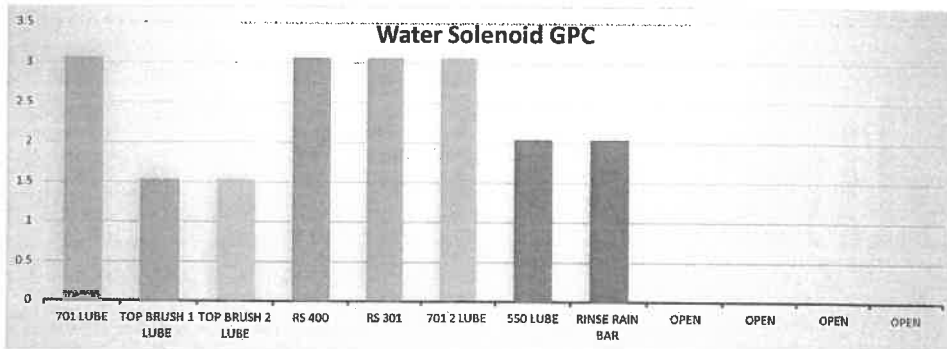
## Section 2: Production Units - Water Use Estimate Data Input Fields

### Explanatory Information:

Production equipment data is focused on back room pieces that are necessary for the operation of vehicle wash process but are not involved in any chemical application. Water valves are often used with reclaim water to provide additional wetting to vehicle surfaces and are accounted for individually.

#### Water Solenoid Valve

Unit #	Application	Select Water Type:	Applicator Restriction (GPM)	Unit #	Application	Select Water Type:	Applicator Restriction (GPM)
1	701 Lube	Reclaim	6	7	550 Lube	Reclaim	4
2	Top Brush 1 lube	Reclaim	3	8	Rinse Rain Bar	Hard Water	4
3	Top Brush 2 lube	Hard Water	3	9	Open	Select Source:	0
4	RS 400	Reclaim	6	10	Open	Select Source:	0
5	RS 301	Reclaim	6	11	Open	Select Source:	0
6	701 2 Lube	Reclaim	6	12	Open	Select Source:	0



## SITE INPUT

### Reverse Osmosis System

#### Explanatory Information:

Reverse Osmosis systems produce RO water and RO Reject Water based on an hourly maximum output. This water is stored in tanks and then pumped to the bay for application. The actual amount of water used is most directly related to the quantity/type of application devices, volume of vehicles washed, chain speed and vehicle length. For this reason the calculation is based on use rather than production capacity. RO Reject water is by-product of the process. Whether the reject water is used during the wash process or goes to drain it is also accounted for in total water usage statistics.



RO System Production Rate

80%

\*Note: RO Systems range from 50-80% RO production rates, if unsure use 60%.

RO System Water Source

Soft Water

Unit #	Application	Applicator Restriction (GPM)
1	Rain Bar #2	4
2	Mirror Rinse #2	2
3	Select RO Applicator	0
4	Select RO Applicator	0
5	Select RO Applicator	0
6	Select RO Applicator	0

\*Note #1: Rain Bars are typical rated between 4-8 GPM, if unsure use 6 GPM

\*Note #2: Mirror Rinse Applicators are typical rated 1-2 GPM, if unsure use 1.5 GPM

### High Pressure Pumping Stations

#### Explanatory Information:

Pumping Stations are often supplied by reclaim water with hard city water being an alternate. The pump capacity is restricted by the application equipment in the bay so calculations are based on applicators, volume, chain speed and vehicle length. Applications include undercarriage wash, pre-rinse, side blasters, arches and trench flush systems (choose all that apply).

Unit #	Application	Select Water Type:	Pump Designation	Pump GPM (Capacity)	Applicator Restriction (GPM)
1	Undercarriage	Reclaim	#1	5	2
2	Side Blasters	Reclaim	#2	20	12
3	Arch	Reclaim	#3	35	24
4	Select	Select Source:	Select	0	0
5	Select	Select Source:	Select	0	0
6	Select	Select Source:	Select	0	0

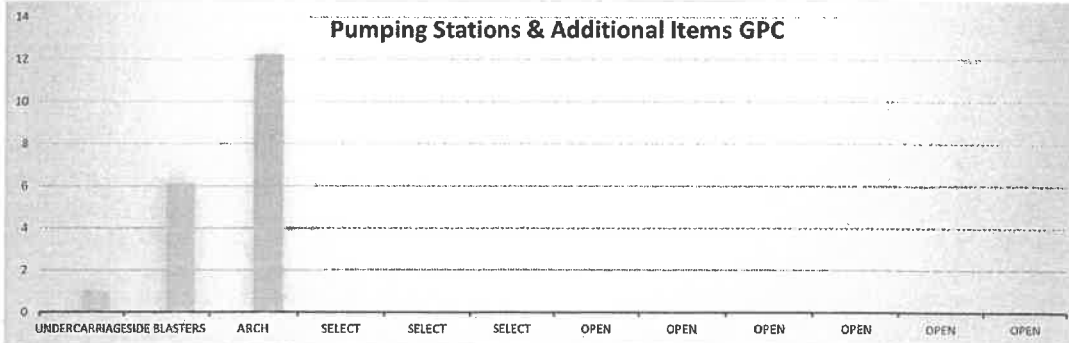
### Additional Items

#### Explanatory Information:

Any additional equipment that has not already been accounted for may be entered into this section. Choose all that apply and use the "Applicator Restriction" column to accurately reflect the GPM capacity in the bay.

Unit #	Application	Select Water Type:	Applicator Restriction (GPM)	Unit #	Application	Select Water Type:	Applicator Restriction (GPM)
1	Open	Select	0	4	Open	Select	0
2	Open	Select	0	5	Open	Select	0
3	Open	Select	0	6	Open	Select	0

### Pumping Stations & Additional Items GPC



## STATISTICAL MODELING

KPI Input Fields	Data Input
Expected Annual Tunnel Volume:	140,000
Conveyor Speed:	130
Average Length of Vehicle:	17
Average Operating Hours Per Day:	12
Water & Sewer Cost Per 1000 Gallons:	\$15.00



### CATEGORICAL USAGE STATS

#### Explanatory Information:

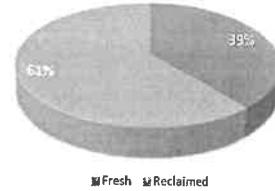
This data is used for many purposes; calculating water tap requirements, satisfying building or water department requirements, and the sizing of reclamation systems or other equipment. Municipalities requirements account for water usage in gallonage or acre feet so both units are shown here and equivalent. In addition there are views into annual, monthly, daily volumes as well peak demand vs average.

#### ANNUAL WATER USAGE ESTIMATE

	GALLONS	ACRE FEET	%
FRESH WATER - *FROM WATER UTILITY OR WELL	3,105,900	9.53	39%
RECLAIMED WATER - *ONSITE SYSTEM RE-USE	4,926,601	15.12	61%
TOTAL WATER USAGE	8,032,501	24.65	100%

FRESH WATER - *FROM WATER UTILITY OR WELL	3105900
WATER & SEWER COST PER 1000 GALLONS	\$ 15.00
ANNUAL WATER & SEWER EXPENSE	\$ 46,588.51

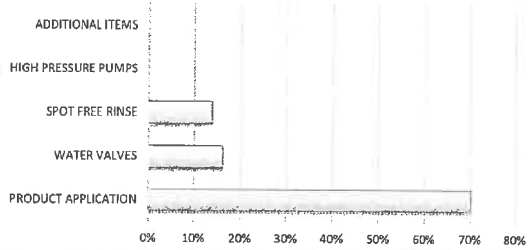
#### Annual Water Usage



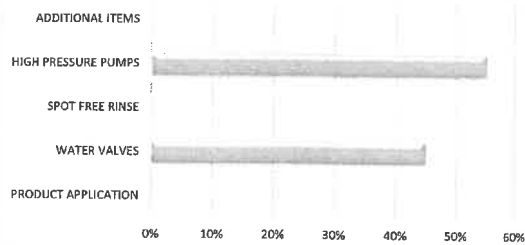
#### WATER USAGE BY CATEGORY

	FRESH (GAL)	RECLAIM (GAL)	%
PRODUCT APPLICATION	2,177,700	-	27%
WATER VALVES	499,800	2,213,400	34%
SPOT FREE RINSE	428,400	-	5%
HIGH PRESSURE PUMPS	-	2,713,200	34%
ADDITIONAL ITEMS	-	-	0%

#### % USE BY CATEGORY FRESH WATER

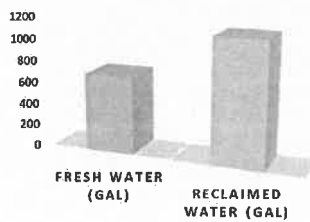


#### % USE BY CATEGORY RECLAIMED WATER



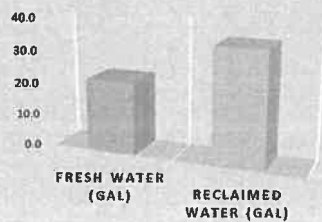
### USAGE BREAKDOWN - PERIODIC VIEW

#### AVERAGE USAGE (HOURLY)



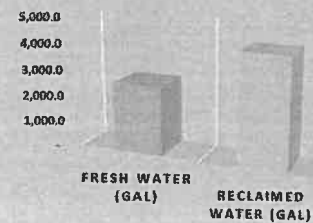
AVG. USAGE (HOURLY) - FRESH	709
AVG. USAGE (HOURLY) - RECLAIMED	1125

#### AVERAGE USAGE (PER CAR)



AVERAGE USAGE (PER CAR) - FRESH	22
AVERAGE USAGE (PER CAR) - RECLAIMED	35

#### PEAK DEMAND (HOURLY)



PEAK DEMAND (HOURLY) - FRESH	2,662
PEAK DEMAND (HOURLY) - RECLAIMED	4,223

#### NOTES - AVERAGE HOURLY USAGE:

This data is built with the annual volume estimate filtered with hours of operation, water usage statistics and daily volume expectations based on conveyor speed.

#### NOTES - AVERAGE HOURLY USAGE:

Per car usage incorporates the gallon per minute data with average and gate times. Gate times derive from the conveyor speed and average length of vehicle to determine the amount of time each application will be turned on. This reduces the gallon per minute capacity of each application to the running time or gate time.

#### NOTES - AVERAGE HOURLY USAGE:

Peak demand shows the full potential of the car wash at maximum possible volume. This reflects the highest possible water requirement which is used for calculating flow rates on water taps, backflow preventors, and other vital system components.

Customer Full Name	Washville
Site Name, Store #	Riverhead NY
Shipping Street Address	<Enter>
City, State, Zip Code	<Enter>
Date:	0

**NCS**  
NATIONAL CARWASH SOLUTIONS



KPI Input Fields	Data Input
Expected Annual Tunnel Volume:	140,000
Conveyor Speed:	130
Average Length of Vehicle:	17
Average Operating Hours Per Day:	12
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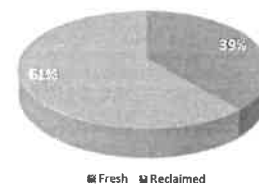
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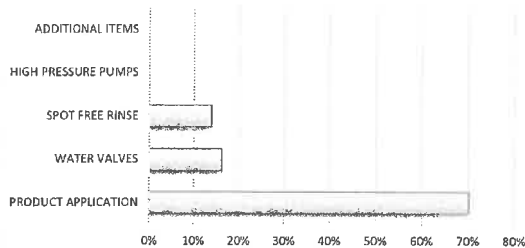
#### Annual Water Usage



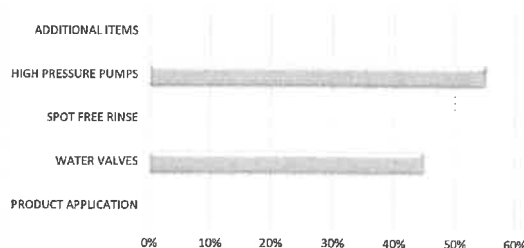
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ADDITIONAL ITEMS	-	-	0%

#### % USE BY CATEGORY FRESH WATER

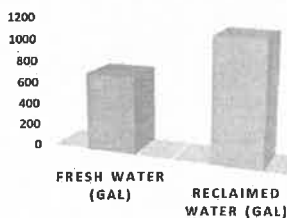


#### % USE BY CATEGORY RECLAIMED WATER



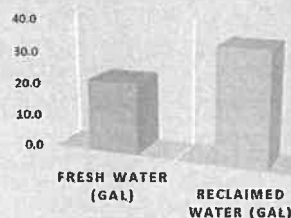
#### USAGE BREAKDOWN - PERIODIC VIEW

#### AVERAGE USAGE (HOURLY)



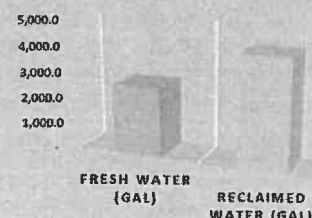
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April 13, 2022

NEX-2200053.00

Mr. Jim Waterman  
GR Development, LLC  
c/o Sevan Solutions  
3025 Highland Parkway Suite 850  
Downers Grove, Illinois 60515

Traffic report prepared for a identical car wash design for GR Development, LLC. The trip count for the proposed 105 Farmington Road car wash has been reviewed and found to be comparable.

SUBJECT: Trip Generation Letter  
Car Wash Renovation  
607 Amherst Street (NH Route 101A)  
Nashua, New Hampshire

Dear Mr. Waterman:

**Greenman-Pedersen, Inc.** (GPI) has prepared this letter to evaluate the expected trips associated with the proposed car wash renovation development to be located at 607 Amherst Street in Nashua, New Hampshire. The site is currently occupied by a 5,402(±) square foot car wash with four service bays/tunnels. The project consists of a full site renovation, and the construction of a new 4,403 (±) square foot car wash with one car wash tunnel. Additionally, secondary amenities consisting of self-service vacuum stations will also be provided. Primary access and egress are proposed to the site via two existing driveways on Amherst Street: one right-in only driveway and one right-out only driveway. Turn prohibitions are reinforced by the presence of a raised median on this section of Amherst Street. Secondary access and egress are provided in the rear of the property via a shared driveway/cross access connection with abutting properties and access to the traffic signal at the intersection of Amherst Street and Celina Avenue.

## **Trip Generation**

To estimate the volume of traffic to be generated by the proposed car wash development, trip-generation rates published by the ITE *Trip Generation Manual*<sup>1</sup> were researched. Land Use Code (LUC) 948 (Automated Car Wash) based on 4,403 square feet was used to estimate the proposed trip generation. In addition, the trip generation characteristics of the existing car wash site were developed utilizing the same methodology and applying LUC 948 based on 5,402 square feet. Table 1 summarizes the results of the trip-generation estimates and demonstrates the comparative trip characteristics of both the proposed and existing sites.

As shown in Table 1 below, the proposed car wash development is expected to generate 62 vehicle trips (31 entering and 31 exiting) during the weekday PM peak hour, and 134 vehicle trips (67 entering and 67 exiting) during the Saturday midday peak hour. On a daily basis, the proposed development is expected to generate 1,218 vehicle trips per day on a weekday and 1,166 vehicle trips per day on a Saturday. It should be noted that no reductions were taken for pass-by traffic, the portion of site generated vehicle-trips already present on the adjacent roadway system that turn into the site on impulse, or part of an overall trip elsewhere. Published pass-by rates for this land use are not available; however, pass-by trips typically account for a substantial component of vehicle-trips associated with commercial/retail developments.

By way of comparison with the current site, the proposed car wash development is expected to generate 14 *fewer* vehicle trips during the weekday PM peak hour, and 30 *fewer* vehicle trips during the Saturday midday peak hour. On a daily basis, the proposed development is expected to generate 278 *fewer* vehicle trips per day on a weekday and 264 *fewer* vehicle trips per day on a Saturday.

<sup>1</sup> *Trip Generation, 11<sup>th</sup> Edition*. Institute of Transportation Engineers; Washington, DC; 2021.



**TABLE 1**  
**Trip-Generation Summary**

Peak Hour/Direction	Proposed Trips <sup>a</sup>	Existing Trips <sup>b</sup>	Trip Decrease <sup>c</sup>
<b>Weekday Daily:</b>	1,218	1,496	-278
<b>Weekday PM Peak Hour:</b>			
<i>Enter</i>	31	38	-7
<i>Exit</i>	<u>31</u>	<u>38</u>	<u>-7</u>
<i>Total</i>	62	76	-14
<b>Saturday Daily:</b>	1,166	1,430	-264
<b>Saturday Midday Peak Hour:</b>			
<i>Enter</i>	67	82	-15
<i>Exit</i>	<u>67</u>	<u>82</u>	<u>-15</u>
<i>Total</i>	134	164	-30

<sup>a</sup> ITE LUC 948 (Automated Car Wash) for 4.403 ksf.

<sup>b</sup> ITE LUC 948 (Automated Car Wash) for 5.402 ksf.

<sup>c</sup> Proposed Trips minus Existing Trips.

Also included in this submission is the Traffic Impact Report (TIR) Threshold Worksheet for the City's use. Should you have any questions, require additional information, or if I can be of any assistance during the review process, please feel free contact me at (978) 570-2968.

Sincerely,

**GREENMAN-PEDERSEN, INC.**



Heather L. Monticup, P.E.

Assistant Vice President / Director of Traffic Engineering - Land Development

Attachments:

1. Trip Generation Data
2. Traffic Impact Report (TIR) Threshold Worksheet

***Institute of Transportation Engineers (ITE)***

**Land Use Code (LUC) 948 - Automated Car Wash**

**General Urban/Suburban**

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area

Independent Variable (X): 4.403

**WEEKDAY DAILY**

$$\frac{\text{ITE LUC 947 Weekday Daily Trip Rate}}{\text{ITE LUC 947 Weekday PM Trip Rate}} = \frac{\text{ITE LUC 948 Weekday Daily Trip Rate}}{\text{ITE LUC 948 Weekday PM Trip Rate}}$$

$$\frac{108.00}{5.54} = \frac{(Y)}{14.20} \quad Y = 276.82$$

$$T = Y * 4.403$$

$$T = 1218.85$$

$$T = 1,218 \text{ vehicle trips}$$

with 50% ( 609 vpd) entering and 50% ( 609 vpd) exiting.

(same distribution split as ITE LUC 947 during the weekday daily traffic)

Trip  
Decrease

Weekday Daily -278

PM Peak -14

Saturday Daily -264

Saturday Peak -30

**WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC**

$$T = 14.20 * (X)$$

$$T = 14.20 * 4.403$$

$$T = 62.52$$

$$T = 62 \text{ vehicle trips}$$

with 50% ( 31 vpd) entering and 50% ( 31 vpd) exiting.

**SATURDAY DAILY**

$$\frac{\text{ITE LUC 947 Saturday Daily Trip Rate}}{\text{ITE LUC 947 Saturday Midday Trip Rate}} = \frac{\text{ITE LUC 948 Saturday Daily Trip Rate}}{\text{ITE LUC 948 Saturday Midday Trip Rate}}$$

$$\frac{132.80}{15.25} = \frac{(Y)}{30.40} \quad Y = 264.73$$

$$T = Y * 4.403$$

$$T = 1165.6$$

$$T = 1,166 \text{ vehicle trips}$$

with 50% ( 583 vpd) entering and 50% ( 583 vpd) exiting.

(same distribution split as ITE LUC 947 during the saturday daily traffic)

**SATURDAY PEAK HOUR OF GENERATOR**

$$T = 30.40 * (X)$$

$$T = 30.40 * 4.403$$

$$T = 133.85$$

$$T = 134 \text{ vehicle trips}$$

with 50% ( 67 vph) entering and 50% ( 67 vph) exiting.

→

## Land Use Code (LUC) 948 - Automated Car Wash

### General Urban/Suburban

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area  
Independent Variable (X): 5.402

#### WEEKDAY DAILY

$$\frac{\text{ITE LUC 947 Weekday Daily Trip Rate}}{\text{ITE LUC 947 Weekday PM Trip Rate}} = \frac{\text{ITE LUC 948 Weekday Daily Trip Rate}}{\text{ITE LUC 948 Weekday PM Trip Rate}}$$

$$\frac{108.00}{5.54} = \frac{(Y)}{14.20} \quad Y = 276.82$$

$$T = Y * 5.402$$

$$T = 1495.4$$

$$T = 1,496 \text{ vehicle trips}$$

with 50% ( 748 vpd) entering and 50% ( 748 vpd) exiting.

(same distribution split as ITE LUC 947 during the weekday daily traffic)

#### WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 14.20 * (X)$$

$$T = 14.20 * 5.402$$

$$T = 76.71$$

$$T = 76 \text{ vehicle trips}$$

with 50% ( 38 vpd) entering and 50% ( 38 vpd) exiting.

#### SATURDAY DAILY

$$\frac{\text{ITE LUC 947 Saturday Daily Trip Rate}}{\text{ITE LUC 947 Saturday Midday Trip Rate}} = \frac{\text{ITE LUC 948 Saturday Daily Trip Rate}}{\text{ITE LUC 948 Saturday Midday Trip Rate}}$$

$$\frac{132.80}{15.25} = \frac{(Y)}{30.40} \quad Y = 264.73$$

$$T = Y * 5.402$$

$$T = 1430.07$$

$$T = 1,430 \text{ vehicle trips}$$

with 50% ( 715 vpd) entering and 50% ( 715 vpd) exiting.

(same distribution split as ITE LUC 947 during the saturday daily traffic)

#### SATURDAY PEAK HOUR OF GENERATOR

$$T = 30.40 * (X)$$

$$T = 30.40 * 5.402$$

$$T = 164.22$$

$$T = 164 \text{ vehicle trips}$$

with 50% ( 82 vph) entering and 50% ( 82 vph) exiting.

**CITY OF NASHUA, NH**

FILE NO. \_\_\_\_\_

**Traffic Impact Report (TIR) Threshold Worksheet**

Complete this form to determine if your project requires a Traffic Impact Report, as per City Code, Section

Project Name: Car Wash Remodel

Type of Development: Non-Residential

Applicant: GR Development, LLC Owner Agent

Location: Parcel ID: H-105 978-570-2968

Address: 607 Amherst Street Phone Number: GPI - Heather Monticup

Roadway(s) Where Site Access Drives Shall Be Located: Amherst Street (primary)  
Shared driveway on north  
side of Lot (secondary)

**RESIDENTIAL DEVELOPMENT**

Anticipated Land Use	Acreage to be Developed	Number of Units

CBD      NON-CBD

Development Peak Hour and Maximum Number of Generated Trips:

Trip Rate Source

TTE Code:

Other:

## **NON-RESIDENTIAL DEVELOPMENT**

Anticipated Land Use	Project Size (Acres, Employees, GFA, Unit, Other)
948 - Automated Car Wash	4,403(±) square feet

CBD

Non-CBD

### **Development Peak Hour and Maximum Number of Generated Trips:**

Trip Rate Source

ITE Code: Other:

**PLEASE COMPLETE THE TABLE BELOW:**

CONDITION	HOUR	ANTICIPATED GENERATED TRAFFIC (TRIP ENDS)	TIR THRESHOLD (TRIP ENDS)	TIR REQUIRED
ADJACENT ROADWAY PEAK HOUR	PM	Proposed/(Decrease) 62 / (-14)	75/HOURS	NO
DEVELOPMENT PEAK HOUR	SAT	Proposed/(Decrease) 134 / (-30)	100/HOURS	NO <sup>a</sup>
24-HOUR PERIOD	Weekday	Proposed/(Decrease) 1,218 / (-278)	1,200/24 HOURS	NO <sup>a</sup>
	Saturday	1,166 / (-264)		
PERMANENT ROADWAY CLOSURE	N.A.	N.A.	N.A.	YES
TEMPORARY ROADWAY CLOSURE GREATER THAN 14 DAYS	N.A.	N.A.	N.A.	YES
OTHER CONDITIONS			N.A.	

<sup>a</sup> Net decrease in traffic; this is a renovation of an existing site, replacing the existing use with a same/similar use. Further, no reductions were taken for pass-by trips.

**ABUTTERS LIST (DIRECT)  
AS OF  
JUNE 20, 2022  
FOR  
4 LITTLE FALLS BRIDGE ROAD, ROCHESTER, NH  
JBE PROJECT No. 21298.1**

**OWNERS OF RECORD:**

TAX MAP 209/LOT 1  
105 FARMINGTON RD LLC  
322 RESERVOIR ST  
NEEDHAM, MA 02494  
BK 4302/PG 330 (06/22/15)

**APPLICANT:**

GR DEVELOPMENT  
ATTN. JIM WATERMAN  
7 BENEDICT PLACE  
GREENWICH, CT 06830

**ABUTTERS:**

208/1-1  
INFINITY ROCHESTER PROP LP  
% WS ASSET MGMT INC  
33 BOYLSTON ST, STE 3000  
CHESTNUT HILL, MA 02467

208/19-1  
HERMITAGE PLACE LIMITED PARTNERSHIP  
PO BOX 648  
CONCORD, NC 28025

216/11-2  
CITY OF ROCHESTER  
31 WAKEFIELD ST  
ROCHESTER, NH 03867-1916

216/12  
RALPH W. TORR REV TRUST OF 2000  
RALPH W. TORR, TRUSTEE  
283 CHESTNUT HILL RD  
ROCHESTER, NH 03867

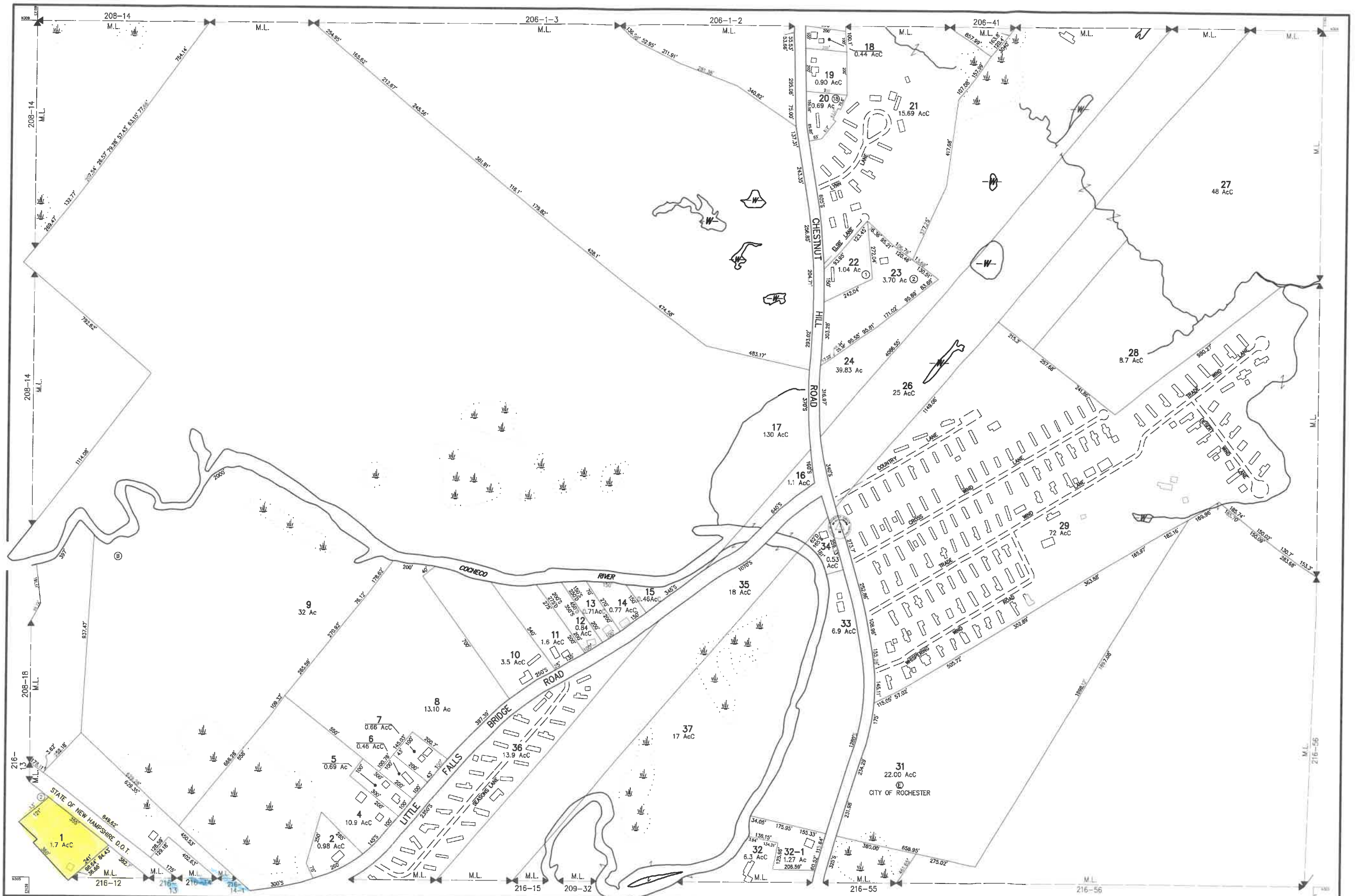
216/13  
STATE OF NEW HAMPSHIRE  
DEPT. OF TRANSPORTATION  
1 HAZEN DR  
CONCORD, NH 03302

216/14  
BRETT & SHANNON LANE  
10 LITTLE FALLS BRIDGE RD  
ROCHESTER, NH 03867

216/14-1  
MERRICK & DOLORES LANE  
12 LITTLE FALLS BRIDGE RD  
ROCHESTER, NH 03867

**ENGINEERS/SURVEYORS:**

JONES & BEACH ENGINEERS, INC.  
ATTN: ERIK POULIN, P.E.  
PO BOX 219  
STRATHAM, NH 03885



THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.

THE HORIZONTAL DATUM IS THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM.

PHOTOGRAPHY DATE: APRIL 28, 1990

COMPLETION DATE: JUNE 30, 1992

PRODUCED IN 1992 BY

**CAI Technologies**

Precision Mapping Geospatial Solutions

11 PLEASANT STREET, LITTLETON, CO 80120

800.322.4540 - WWW.CAI-TECH.COM

AREA SURVEYED  
AREA CALCULATED  
RECORD DIMENSION  
SCALED DIMENSION  
MATCH LINE  
WATER

LEGEND

Ac  
AcC  
100'  
100'S  
M.L.  
W

EXEMPT PROPERTY  
SUBDIVISION LOT NO.  
BUILDING  
RIGHT OF WAY  
COMMON OWNERSHIP  
WETLANDS

FEET  
100  
0  
200  
400  
600  
50  
0  
50  
100  
150  
METERS

SCALE 1" = 200'

REVISED TO: APRIL 1, 2021

PROPERTY MAPS

**ROCHESTER**

NEW HAMPSHIRE

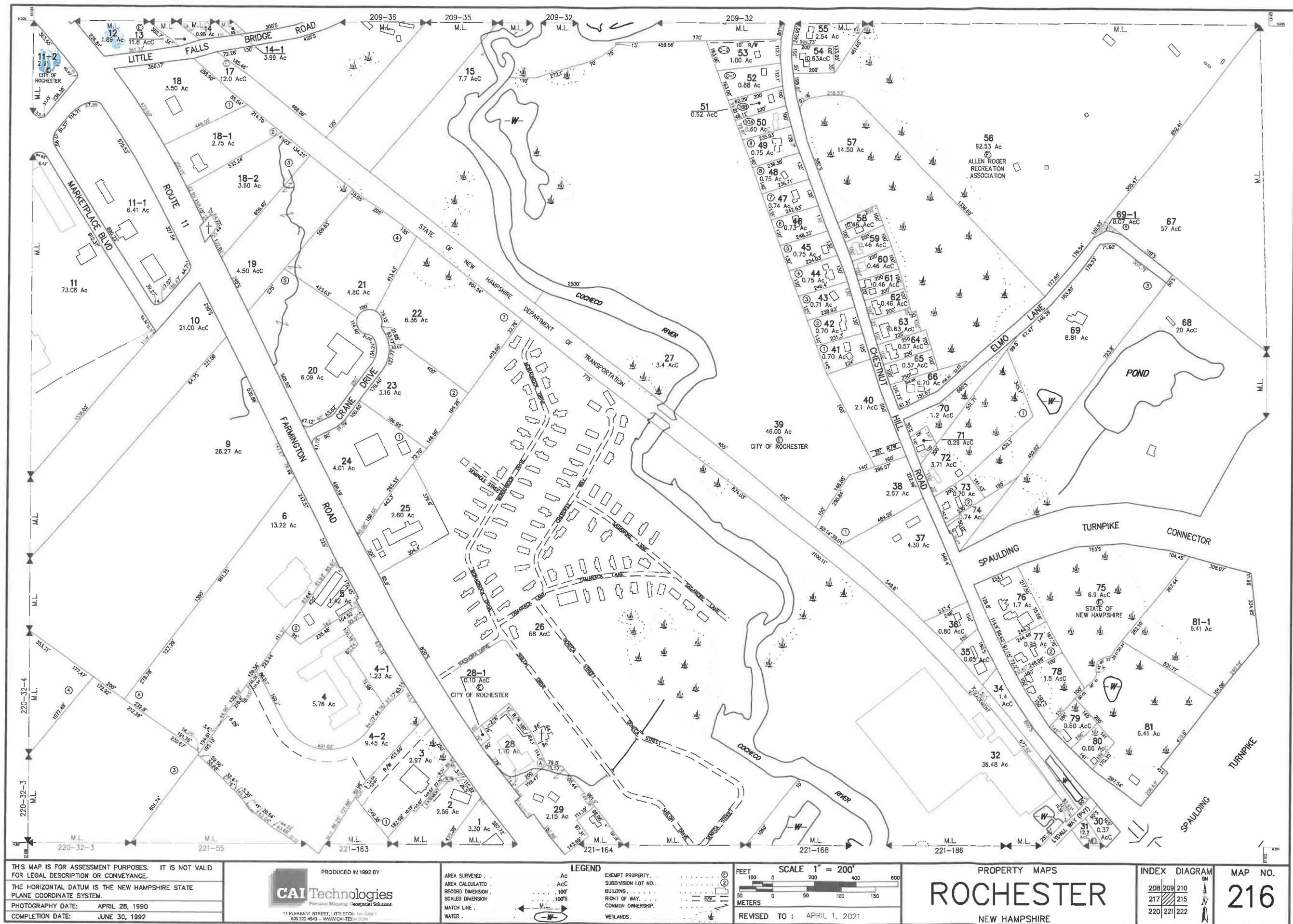
INDEX DIAGRAM

207 208 209  
210  
217 218 219

MAP NO.

**209**





# WASHVILLE CAR WASH

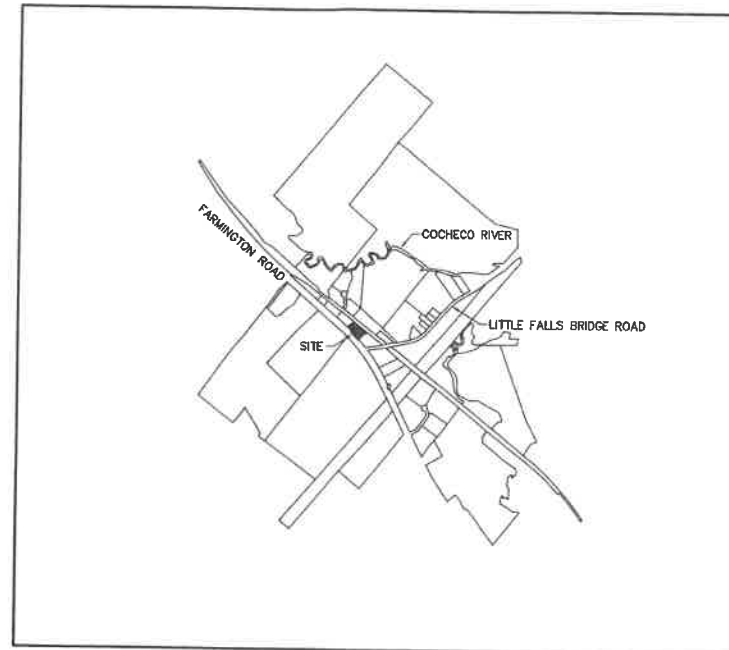
## TAX MAP 209, LOT 1

### 105 FARMINGTON ROAD, ROCHESTER, NH

FOR MORE INFORMATION ABOUT THIS SITE PLAN CONTACT:  
WAYNE MORRILL  
PHONE: (603) 772-4746  
EMAIL: WMORRILL@JONESANDBEACH.COM

#### SHEET INDEX

CS	COVER SHEET
C1	EXISTING CONDITIONS PLAN (DOUCET SURVEY INC.)
C2	SITE PLAN
C3	GRADING AND DRAINAGE PLAN
C4	UTILITY PLAN
L1	LANDSCAPE AND LIGHTING PLAN
D1-D5	DETAIL SHEETS
E1	EROSION AND SEDIMENT CONTROL DETAILS
A	ARCHITECTURAL ELEVATIONS



LOCUS MAP  
SCALE 1" = 2000'

#### PERMITS

##### TYPE OF PERMIT

NHDOT DRIVEWAY PERMIT:  
NEW HAMPSHIRE DEPARTMENT OF  
TRANSPORTATION, DISTRICT SIX  
P.O. BOX 740  
DURHAM, NEW HAMPSHIRE 03824  
(603) 868-1133  
RESPONSIBLE CONSULTANT:  
JONES & BEACH ENGINEERS, INC.

##### STATUS

SUBMITTED:  
PERMIT NO.  
DATED:  
EXPIRATION:

USEPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT,  
NOTICE OF INTENT (NOI), AND NOTICE OF TERMINATION  
(NOT) TO BE FILED IN ACCORDANCE WITH FEDERAL AND  
LOCAL REGULATIONS PRIOR TO AND FOLLOWING CONSTRUCTION:  
EPA STORMWATER NOTICE PROCESSING CENTER  
MAIL CODE 4203M,  
US EPA  
1200 PENNSYLVANIA AVENUE, NW  
WASHINGTON, DC 20460  
RESPONSIBLE CONSULTANT:  
JONES & BEACH ENGINEERS, INC.

##### TYPE OF PERMIT

ROCHESTER SITE PLAN APPROVAL:  
CITY OF ROCHESTER PLANNING BOARD  
31 WAKEFIELD ST  
ROCHESTER, NEW HAMPSHIRE 03867  
(603) 335-7600  
RESPONSIBLE CONSULTANT:  
JONES & BEACH ENGINEERS, INC.

##### STATUS

SUBMITTED: 06/20/22  
PERMIT NO.  
DATED:  
EXPIRATION:  
SUBMITTED:  
PERMIT NO.  
DATED:  
EXPIRATION:

NHDES SEWER CONNECTION PERMIT:  
NHDES - WASTEWATER ENGINEERING  
BUREAU  
29 HAZEN DRIVE, P.O. BOX 95  
CONCORD, NEW HAMPSHIRE 03302-0095  
(603) 271-3503  
RESPONSIBLE CONSULTANT:  
JONES & BEACH ENGINEERS, INC.

**APPLICANT / DEVELOPER**  
GR DEVELOPMENT  
7 BENEDICT PLACE  
GREENWICH, CT. 03860  
(978) 337-9660  
CONTACT: JIM WATERMAN

**OWNER OF RECORD**  
105 FARMINGTON RD, LLC  
322 RESERVOIR ST  
NEEDHAM, MA 02494-3154

**WATER AND SEWER**  
ROCHESTER PUBLIC WORKS DEPT.  
45 OLD DOVER ROAD  
ROCHESTER, NH 03867  
(603) 332-4096

**ELECTRIC**  
EVERSOURCE  
740 N COMMERCIAL ST  
PO BOX 330  
MANCHESTER, NH 03105-0330  
(800) 662-7764

**TELEPHONE**  
CONSOLIDATED COMMUNICATIONS  
100 TRI CITY ROAD  
SOMERWORTH, NH 03878  
ATTN: DAVE KESTNER  
(603) 743-1114

**CABLE TV**  
COMCAST COMMUNICATION  
CORPORATION 334-B CALEF HIGHWAY  
EPPING, NH 03042-2325  
(603) 679-5695

**CIVIL ENGINEER / SURVEYOR**  
JONES & BEACH ENGINEERS, INC.  
85 PORTSMOUTH AVENUE  
PO BOX 219  
STRATHAM, NH 03885  
(603) 772-4746  
CONTACT: WAYNE MORRILL  
EMAIL: WMORRILL@JONESANDBEACH.COM

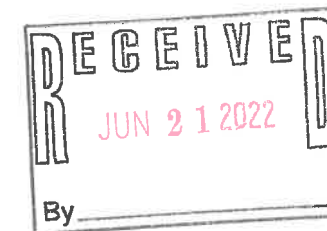
PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 209, LOT 1

APPLICANT  
GR DEVELOPMENT  
7 BENEDICT PLACE  
GREENWICH, CT 03860

TOTAL LOT AREA  
73,882 SQ. FT.  
1.70 ACRES

APPROVED - ROCHESTER, NH  
PLANNING BOARD

DATE:



Design: EMP Draft: GAP Date: 05/20/22  
Checked: EMP Scale: AS NOTED Project No.: 21298.1  
Drawing Name: 21298-PLAN.dwg  
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AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	REVISION	BY
0	6/20/22	ISSUED FOR REVIEW	EJH

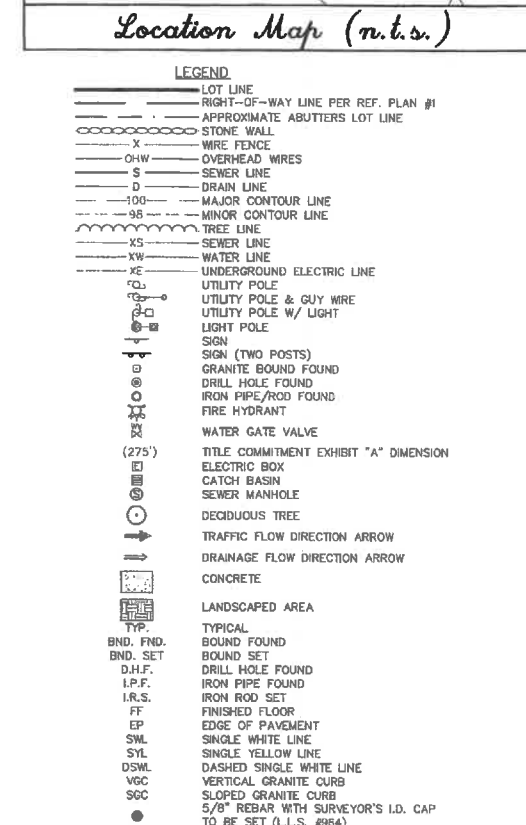
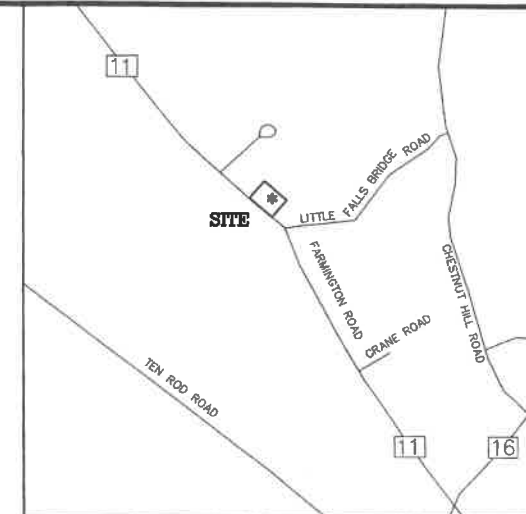
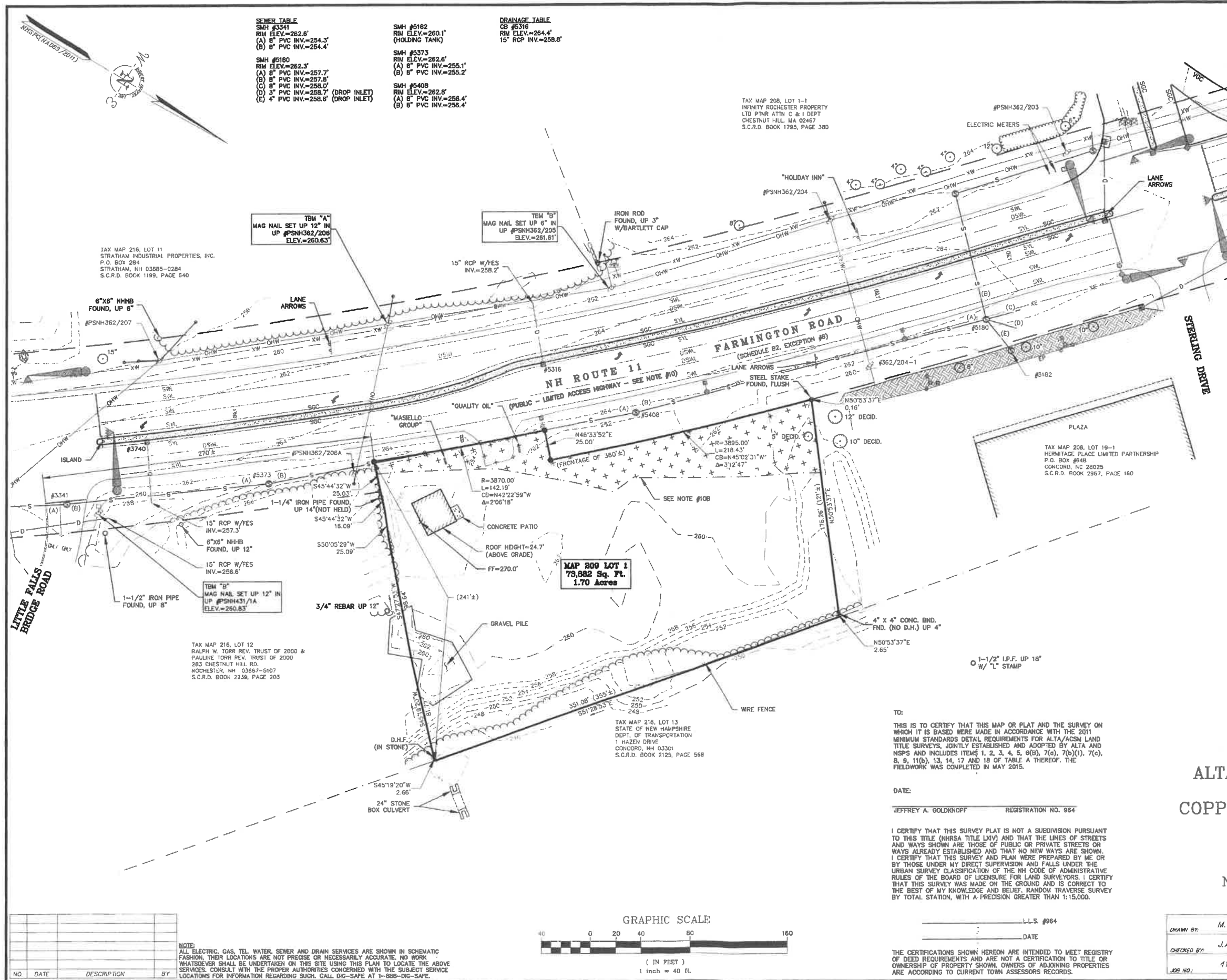
**J/B Jones & Beach Engineers, Inc.**  
Designed and Produced in NH  
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
Civil Engineering Services  
603-772-4746 FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **COVER SHEET**  
Project: **WASHVILLE CAR WASH**  
**105 FARMINGTON RD, ROCHESTER, NH**  
Owner of Record: **105 FARMINGTON RD, LLC**  
**322 RESERVOIR ST, NEEDHAM, MA 02494**

DRAWING No.  
**CS**  
SHEET 1 OF 12  
JBE PROJECT NO. 21298.1

PROPOSED CARWASH  
JBE # 21298.1 REVISION 1, 06/20/22





**\*DRAFT\***  
**5/28/2015**  
**ALTA/ACSM LAND TITLE SURVEY**  
**FOR**  
**COPPER CREEK CAPITAL PARTNERS**  
**LAND OF**  
**RUDOLPH A. TETREAULT**  
**TAX MAP 209, LOT 1**  
**NH ROUTE 11 (FARMINGTON ROAD)**  
**ROCHESTER, NEW HAMPSHIRE**

DRAWN BY:	M.T.L.	DATE:	MAY 2015
CHECKED BY:	J.A.G.	DRAWING NO.:	4172A
APP. NO.:	4172	SHEET	1 OF 2

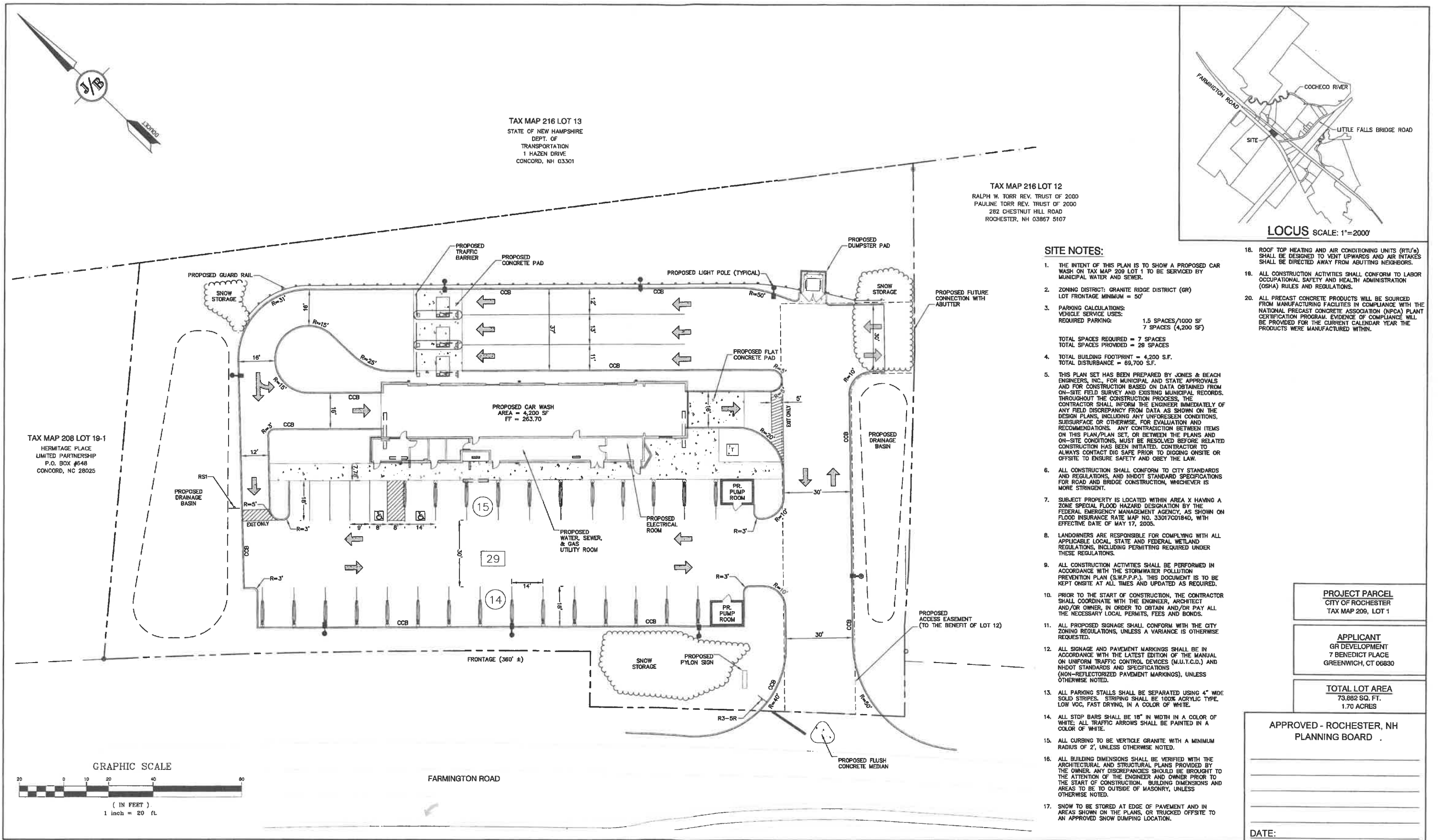


TO:  
 THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARDS DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 11(b), 13, 14, 17 AND 18 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED IN MAY 2015.

DATE:  
 JEFFREY A. GOLDKNOFF REGISTRATION NO. 984

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE (NHSA TITLE LXIV) AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY ME OR BY THOSE UNDER MY DIRECT SUPERVISION AND FALLS UNDER THE URBAN SURVEY CLASSIFICATION OF THE NH CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. I CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. RANDOM TRAVERSE SURVEY BY TOTAL STATION, WITH A PRECISION GREATER THAN 1:15,000.

THE CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET REGISTRY OF DEED REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.



Design: EMP Draft: GAP Date: 05/20/22  
Checked: EMP Scale: AS NOTED Project No.: 21298.1  
Drawing Name: 21298-PLAN.dwg  
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



REV.	DATE	ISSUED FOR REVIEW	BY
0	6/20/22	ISSUED FOR REVIEW	EJH
		REVISION	

**J/B Jones & Beach Engineers, Inc.**  
Civil Engineering Services  
85 Portsmouth Ave.  
PO Box 219  
Stratham, NH 03885  
803-773-4746  
FAX: 803-773-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **SITE PLAN**  
MAP 209, LOT 1  
Project: **WASHVILLE CAR WASH**  
105 FARMINGTON RD, ROCHESTER, NH  
Owner of Record: **105 FARMINGTON RD, LLC**  
322 RESERVOIR ST, NEEDHAM, MA 02494

DRAWING No.  
**C2**  
SHEET 3 OF 12  
JBE PROJECT NO. 21298.1

F:\CADD\MASTER STANDARD\dwg\JB-LAYOUTS.dwg 3/12/2015 3:27:28 PM EDT

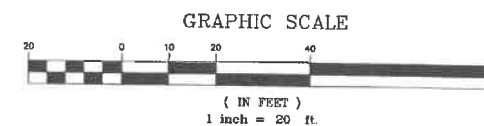
Design: EMP Draft: GAP Date: 06/20/22  
Checked: EMP Scale: AS NOTED Project No.: 21298.1  
Drawing Name: 21298-PLAN.dwg  
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REV.	DATE	ISSUED FOR REVIEW	BY
0	6/20/22	ISSUED FOR REVIEW	EJH

Designed and Produced in NH  
**J/B Jones & Beach Engineers, Inc.**  
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
Civil Engineering Services  
603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: **GRADING AND DRAINAGE PLAN**  
Project: **WASHVILLE CAR WASH**  
105 FARMINGTON RD, ROCHESTER, NH  
Owner of Record: **105 FARMINGTON RD, LLC**  
322 RESERVOIR ST, NEEDHAM, MA 02494



PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 209, LOT 1

APPLICANT  
GR DEVELOPMENT  
7 BENEDICT PLACE  
GREENWICH, CT 06830

TOTAL LOT AREA  
73,882 SQ. FT.  
1.70 ACRES

DRAWING No.

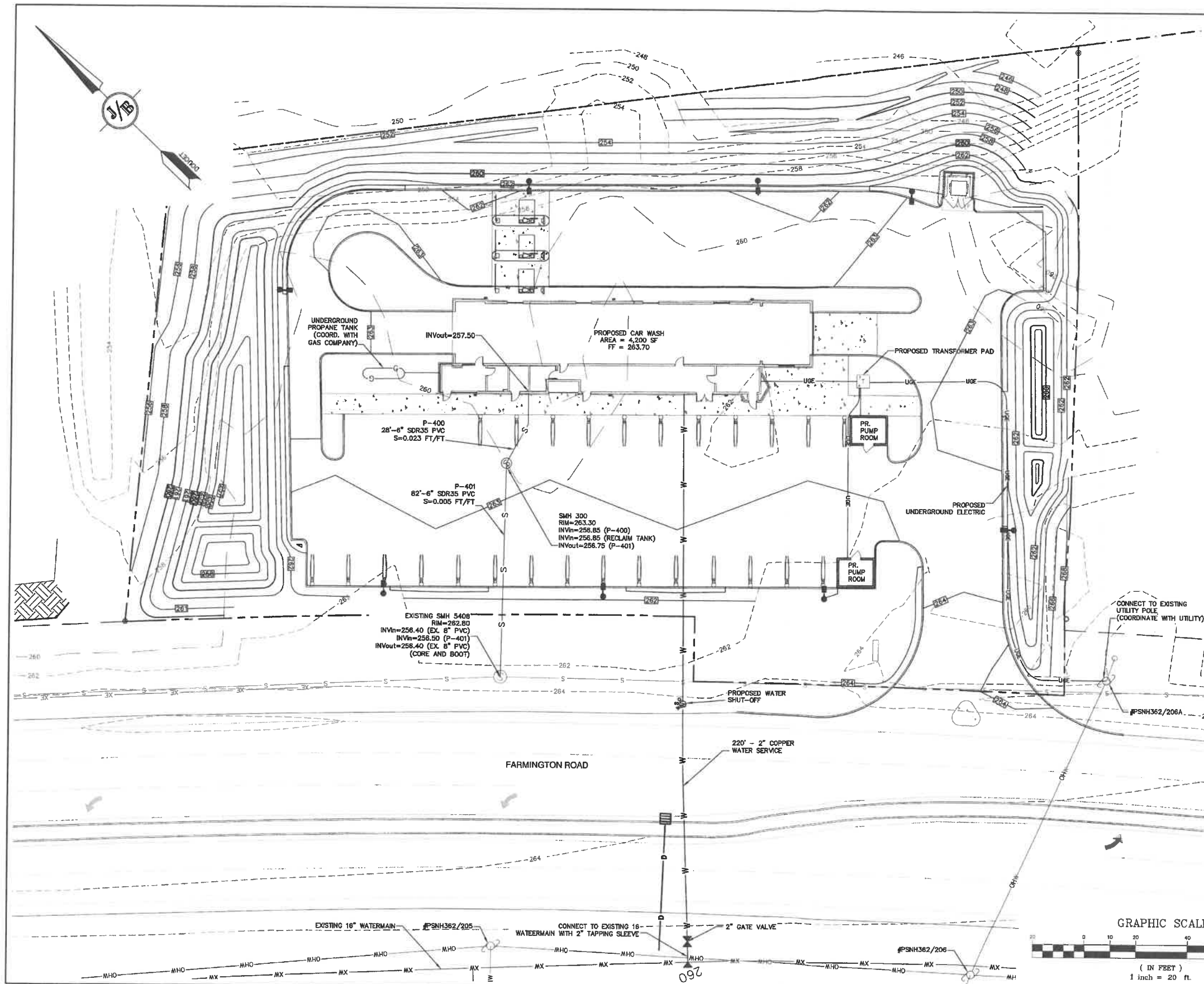
**C3**

SHEET 4 OF 12  
JBE PROJECT NO. 21298.1

### GRADING AND DRAINAGE NOTES:

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888-DIG-SAFE (888-344-7233).
- VERTICAL DATUM: BASED ON NAVD83 PER DISK X-4-1933 ELEV=234.93'. HORIZONTAL DATUM: NH STATE PLANE(2800) NAD83(2011).
- ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 48 HOURS NOTICE IS REQUIRED.
- ALL ROOF DRAINS FROM BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT THE END. ALL EXTERIOR ROOF DOWNSPOUTS ARE TO BE INSTALLED WITH OVERFLOW DEVICES.
- ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- PROPOSED RM ELEVATIONS OF DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES.
- ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIED.
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3' DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
- ALL DRAINAGE STRUCTURES SHALL BE PRECAST, UNLESS OTHERWISE SPECIFIED. SEE SHEET D2 FOR DRAINAGE STRUCTURE SCHEDULE AND SHEET D3 & D4 FOR DRAINAGE DETAILS.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- IMMEDIATELY APPLY AND COMPACT STONE BASE FOR BUILDING PAD TO  $\pm 1/2$ " PRIOR TO EXCAVATING INTERIOR AND PERIMETER FOOTINGS.
- IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- STONE INLET PROTECTION SHALL BE PLACED AT ALL CATCH BASINS. SEE DETAIL WITHIN THE DETAIL SHEETS.
- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SWPPP DURING CONSTRUCTION OPERATIONS.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING AND ANYTIME CONSTRUCTION STOPS FOR LONGER THAN 3 DAYS.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION.
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.
- CONTRACTOR TO DESIGN RECLAIM TANKS BY BUILDING DESIGN PLAN SPECIFICATIONS.
- ALL SOILS ON SITE ARE 12 - Hdb - HINCKLEY LOAMY SAND, HYDROLOGIC SOIL B.





# UTILITY NOTES:

- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT-RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE CITY STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- BUILDING TO BE SERVICED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS. ENGINEER TO BE NOTIFIED.
- AS-BUILT PLANS SHALL BE SUBMITTED TO DEPARTMENT OF PUBLIC WORKS.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT. CONSTRUCTION TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT, AND SHELF SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH DIA. CLEAR OPENING. THE WORD "SEWER" OR "DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
- SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H20 LOADS.
- CONTRACTOR SHALL PLACE 2" WIDE METAL WIRE IMPREGNATED RED PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS, SERVICES, AND FORCE MAINS.
- SANITARY SEWER FLOW CALCULATIONS:  
TOTAL FLOW = 8,510 GPD  
\*DAILY USAGE ASSESSED FROM PROJECT WATER USAGE REPORT. REPORT INCLUDED WITH APPLICATION.
- ALL SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS.
- PROPOSED RIM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
- ALL WATER MAINS AND SERVICE PIPES SHALL HAVE A MINIMUM 12" VERTICAL AND 24" HORIZONTAL SEPARATION TO MANHOLES, OR CONTRACTOR SHALL INSTALL BOARD INSULATION FOR FREEZING PROTECTION.
- WATER MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR LEAKAGE PRIOR TO ACCEPTANCE. WATERMAINS SHALL BE TESTED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PSI, WHICHEVER IS GREATER. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 600. WATERMAINS SHALL BE DISINFECTED AFTER THE ACCEPTANCE OF THE PRESSURE AND LEAKAGE TESTS ACCORDING TO AWWA STANDARD C 651.
- ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- IF THE BUILDING IS REQUIRED TO HAVE A SPRINKLER SYSTEM, A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CONTRACTOR, OWNER, ARCHITECT AND THE

LOCAL FIRE DEPARTMENT PRIOR TO THE INSTALLATION.

- THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, MECHANICAL JOINTS AND FIRE HYDRANTS.
- DIMENSIONS ARE SHOWN TO CENTERLINE OF PIPE OR FITTING.
- REFER TO FIRE PROTECTION SHEETS FOR LOCATION AND DETAIL OF FIRE LINE LEAD IN TO BUILDING. FIRE LINE SHALL BE STUBBED UP 1' ABOVE FINISH FLOOR ELEVATION IN SPRINKLER ROOM. AN APPROVED AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH 101 LIFE SAFETY CODE/NFPA 1 AND LOCAL REGULATIONS. FIRE DEPARTMENT CONNECTION SHALL BE FIELD VERIFIED BY LOCAL FIRE DEPARTMENT TO ENSURE OPTIMUM PLACEMENT.
- THE CONTRACTOR SHALL HAVE THE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER FIRE PROTECTION SYSTEM PRIOR TO INSTALLATION.
- CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPPLICATE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES SHALL BE DISGAGED BEFORE CONSTRUCTION.
- ALL WATER LINES SHOULD HAVE TESTABLE BACKFLOW PREVENTERS AT THE ENTRANCE TO EACH BUILDING.
- ALL GRAVITY SEWER PIPE, MANHOLES, AND FORCE MAINS SHALL BE TESTED ACCORDING TO NHDES STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTEWATER TREATMENT FACILITIES, CHAPTER ENV-WQ 700, ADOPTED ON 10-15-14.
- ENV-WQ 704.06 GRAVITY SEWER PIPE TESTING: GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY USE OF LOW-PRESSURE AIR TESTS CONFORMING WITH ASTM F1417-92(2005) OR UNI-BELL PVC PIPE ASSOCIATION UNI-B-8. LINES SHALL BE CLEANED AND VISUALLY INSPECTED AND TRUE TO LINE AND GRADE. DEFLECTION TESTS SHALL TAKE PLACE AFTER 30 DAYS FOLLOWING INSTALLATION AND THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.
- ENV-WQ 704.17 SEWER MANHOLE TESTING: SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST PRIOR TO BACKFILLING AND PLACEMENT OF SHELVES AND INVERTS.
- SANITARY SEWER LINES SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM AN EXISTING OR PROPOSED WATER LINE. WHEN A SEWER LINE CROSSES UNDER A WATER LINE, THE SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATERMAIN. THE SEWER LINE SHALL ALSO MAINTAIN A VERTICAL SEPARATION OF NOT LESS THAN 18 INCHES.
- SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6 FEET BELOW GRADE IN ALL ROADWAY LOCATIONS, AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS-COUNTRY LOCATIONS. PROVIDE TWO-INCHES OF R-10 FOAM BOARD INSULATION 2-FOOT WIDE TO BE INSTALLED 8-INCHES OVER SEWER PIPE IN AREAS WHERE DEPTH IS NOT ACHIEVED. A WAIVER FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER ENGINEERING BUREAU IS REQUIRED PRIOR TO INSTALLING SEWER AT LESS THAN MINIMUM COVER.
- ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END AT RIGHT OF WAY AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- THE CONTRACTOR SHALL MINIMIZE THE DISRUPTIONS TO THE EXISTING SEWER FLOWS AND THOSE INTERRUPTIONS SHALL BE LIMITED TO FOUR (4) HOURS OR LESS AS DESIGNATED BY THE CITY SEWER DEPARTMENT.
- LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRIC CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- DISINFECTION OF WATER MAINS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AWWA STANDARD C851, LATEST EDITION. THE BASIC PROCEDURE TO BE FOLLOWED FOR DISINFECTING WATER MAINS IS AS FOLLOWS:
  - PREVENT CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR.
  - REMOVE, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAINS.
  - CHLORINATE ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSH THE CHLORINATED WATER FROM THE MAIN.
  - PROTECT THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW DUE TO HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.
  - DETERMINE THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.
  - MAKE FINAL CONNECTION OF THE APPROVED NEW WATER MAIN TO THE ACTIVE DISTRIBUTION SYSTEM.

PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 209, LOT 1

APPLICANT  
GR DEVELOPMENT  
7 BENEDICT PLACE  
GREENWICH, CT 06830

TOTAL LOT AREA  
73,882 SQ. FT.  
1.70 ACRES

DRAWING No.

C4

SHEET 5 OF 12  
JBE PROJECT NO. 21298.1

Design: EMP Draft: GAP Date: 05/20/22  
Checked: EMP Scale: AS NOTED Project No.: 21298.1  
Drawing Name: 21298-PLAN.dwg

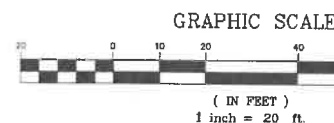
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REV.	DATE	ISSUED FOR REVIEW	BY
0	6/20/22	ISSUED FOR REVIEW	EJH
		REVISION	

J/B Jones & Beach Engineers, Inc.  
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
Civil Engineering Services  
603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: UTILITY PLAN  
Project: WASHVILLE CAR WASH  
105 FARMINGTON RD, ROCHESTER, NH  
Owner of Record: 105 FARMINGTON RD, LLC  
322 RESERVOIR ST, NEEDHAM, MA 02494



## PLANT SCHEDULE:

TREES:				
CODE	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PC	PIRUS CALLERYANA 'CHANTICLEER'	CHANTICLEER PEAR	3-3 1/2" CALIPER	B & B
UA	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	3-3 1/2" CALIPER	B & B
OP	QUERCUS PULCHERRIMA	PIN OAK	3-3 1/2" CALIPER	B & B
AR	ACER RUBRUM	RED MAPLE	3-3 1/2" CALIPER	B & B
PA	PICEA ABIES	NORWAY SPRUCE	8-10' HT.	B & B

SHRUBS:				
CODE	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SB	SPIREA BUMALDA 'GOLDFLAME'	GOLDFLAME SPIREA	#3	CONTAINER
SM	SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	#5	CONTAINER
FN	FORSYTHIA 'N.M. GOLD'	N.M. GOLD FORSYTHIA	#5	CONTAINER
CS	CORNUS SERICEA 'ALLEN'S COMPACT'	ALLEN'S RED STEM DOGWOOD	#5	CONTAINER

GROUNDCOVERS & PERENNIALS:				
CODE	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PV	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#3	CONTAINER
CA	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#3	CONTAINER
DL	HEMEROCALLIS 'STELLA DORO'	STELLA DORO DAYLILY	#2	CONTAINER
JS	JUNIPERUS CHINENSIS 'SARGENTI'	GREEN SARGENT JUNIPER	#3	CONTAINER

## Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description
	3	S3	Single	GLEON-SA1C-740-U-SL3-HSS / SS54A20SFN1 (20' AFG)
	5	S4	Single	GLEON-SA2C-740-U-T4FT-HSS / SS54A20SFN1 (20' AFG)
	7	W	Single	MERU-LED-AC-DB / WALL MTD 10' AFG

StatArea 1  
FRONT PARKING LOT  
Illuminance (Fc)  
Average = 1.58  
Maximum = 3.7  
Minimum = 0.6  
Avg/Min Ratio = 2.63  
Max/Min Ratio = 6.17

StatArea 2  
DRIVE ON SIDE AND REAR OF BUILDING  
Illuminance (Fc)  
Average = 1.98  
Maximum = 5.0  
Minimum = 0.7  
Avg/Min Ratio = 2.83  
Max/Min Ratio = 7.14

## LANDSCAPE NOTES:

- THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS.
- ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
- ALL PLANT SUBSTITUTIONS MUST BE APPROVED THE LANDSCAPE DESIGNER.
- ALL PLANT MATERIALS SHALL BE EXACTLY AS SPECIFIED BY THE LANDSCAPE DESIGNER. IF PLANT SPECIES CULTIVARS ARE FOUND TO VARY FROM THAT SPECIFIED AT ANY TIME DURING THE GUARANTEE PERIOD, THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE THAT PLANT MATERIAL.
- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING FOR CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
- PLANTS FURNISHED IN CONTAINERS SHALL HAVE THE ROOTS WELL ESTABLISHED IN THE SOIL MASS AND SHALL HAVE AT LEAST ONE (1) GROWING SEASON. ROOT-BOUND PLANTS OR INADEQUATELY SIZED CONTAINERS TO SUPPORT THE PLANT MAY BE DEEMED UNACCEPTABLE.
- NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE LANDSCAPE DESIGNER.
- ALL WORK AND PLANTS SHALL BE DONE, INSTALLED AND DETAILED IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN IF NECESSARY, DURING THE FIRST GROWING SEASON.
- ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSATISFIED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT TIME TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE LANDSCAPE DESIGNER IN WRITING OR OTHERWISE FORFEIT HIS CLAIM.
- FINAL ACCEPTANCE BY THE LANDSCAPE DESIGNER WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
- BY THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAS DIED, LOST NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT IS, IN THE OPINION OF THE LANDSCAPE DESIGNER, IN UNHEALTHY OR UNSIGHTLY CONDITION.
- ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION, EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS SPECIFIED.
- ALL TREES AND SHRUBS SHALL BE PLANTED IN MULCH BEDS WITH EDGE STRIPS TO SEPARATE TURF GRASS AREAS.
- THE CONTRACTOR SHALL REMOVE WEEDS, ROCKS, CONSTRUCTION ITEMS, ETC. FROM ANY LANDSCAPE AREA SO DESIGNATED TO REMAIN, WHETHER ON OR OFF-SITE. GRASS SEED OR FINE BARK MULCH SHALL BE APPLIED AS DEPICTED ON PLANS.
- FINISHED GRADES IN LANDSCAPED ISLANDS SHALL BE INSTALLED SO THAT THEY ARE 1" HIGHER THAN THE TOP OF THE SURROUNDING CURB.
- ALL LANDSCAPING SHALL MEET THE CITY STANDARDS AND REGULATIONS.
- EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE DRIPLINE OF THE TREE. THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- ALL MULCH AREAS SHALL RECEIVE A 3" LAYER OF SHREDDED PINE BARK MULCH OVER A 10 MIL WEED MAT EQUAL TO "WEEDBLOCK" BY EASY GARDENER OR DEMITT WEED BARRIER.
- ALL LANDSCAPED AREAS SHALL HAVE SELECT MATERIALS REMOVED TO A DEPTH OF AT LEAST 9" BELOW FINISH GRADE. THE RESULTING VOID IS TO BE FILLED WITH A MINIMUM OF 9" HIGH-QUALITY SCREENED LOAM AMENDED WITH 3" OF AGED ORGANIC COMPOST.
- THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO CIVIL/SITE DRAWINGS FOR OTHER SITE CONSTRUCTION INFORMATION.
- IRRIGATION PIPING SYSTEM SHALL BE REVIEWED AND APPROVED BY OWNER AND ENGINEER PRIOR TO INSTALLATION.
- ADDITIONAL PLANTING AND SEEDING MAY BE REQUIRED AS PART OF THE ON-SITE WETLANDS RESTORATION AND MITIGATION PACKAGE PREPARED BY WEST ENVIRONMENTAL CONTRACTOR SHALL COORDINATE WITH PROJECT ENGINEER AND WETLAND CONSULTANT TO ENSURE THAT THESE ADDITIONAL REQUIREMENTS ARE PROPERLY ADDRESSED.

## LIGHTING AND ELECTRICAL NOTES:

- SITE ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- CONTRACTOR SHALL INSTALL PROPOSED LIGHT POLES ACCORDING TO CITY REGULATIONS.
- ALL OUTDOOR LIGHTING SYSTEMS SHALL BE EQUIPPED WITH TIMERS TO REDUCE ILLUMINATION LEVELS TO NON-OPERATIONAL VALUES PER CITY REGULATIONS.
- LIGHTING CONDUIT SHALL BE SCHEDULE 40 PVC, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL PROVIDE EXCAVATION AND BACKFILL.
- ILLUMINATION READINGS SHOWN ARE BASED ON A TOTAL LLF OF 0.75 AT GRADE. ILLUMINATION READINGS SHOWN ARE IN UNITS OF FOOT-CANDLES.
- LIGHTING CALCULATIONS SHOWN ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM AND SAFETY.
- ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF DARK-SKY COMPLIANT, UNLESS OTHERWISE NOTED.
- SEE SHEET D5 FOR LIGHTING DETAILS.
- EXTEND A 480/277V, 3" DIAMETER SERVICE TO ROAD SIGN. INSTALL A 30A 3P NEMA 3R DISC. SWITCH (EACH LEG FUSED @ 20A). SIGN REQUIRES (3) 20A 277V CIRCUITS.
- THE PROPOSED LIGHTING CALCULATIONS AND DESIGN WAS PERFORMED BY CHARRON, INC., P.O. BOX 4550, MANCHESTER, NH 03108. ATTENTION KEN SWENEY. ALL LIGHTS SHOULD BE PURCHASED FROM THIS COMPANY, OR AN EQUAL LIGHTING DESIGN SHOULD BE SUBMITTED FOR REVIEW IF EQUAL SUBSTITUTIONS ARE PROPOSED BY THE CONTRACTOR OR OWNER.

PROJECT PARCEL  
CITY OF ROCHESTER  
TAX MAP 208, LOT 1

APPLICANT  
GR DEVELOPMENT  
7 BENEDICT PLACE  
GREENWICH, CT 06830

TOTAL LOT AREA  
78,882 SQ. FT.  
1.70 ACRES

GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.

FARMINGTON ROAD

Design: EMP Draft: GAP Date: 05/20/22  
Checked: EMP Scale: AS NOTED Project No.: 21298.1  
Drawing Name: 21298-PLAN.dwg  
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REV.	DATE	ISSUED FOR REVIEW	REVISION	BY
0	6/20/22			EJH

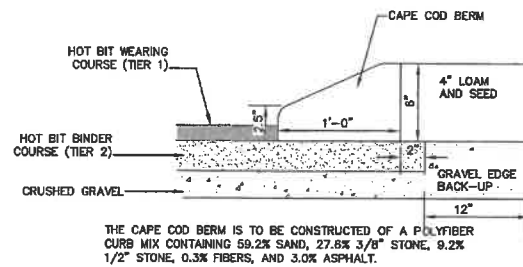
J/B Jones & Beach Engineers, Inc.  
85 Portsmouth Ave.  
PO Box 210  
Stratham, NH 03885  
Designed and Produced in NH  
Civil Engineering Services  
603-772-4746  
FAX: 603-772-0227  
E-MAIL: JBE@JONESANDBEACH.COM

Plan Name: LANDSCAPE AND LIGHTING PLAN  
Project: WASHVILLE CAR WASH  
105 FARMINGTON RD, ROCHESTER, NH  
Owner of Record: 105 FARMINGTON RD, LLC  
322 RESERVOIR ST, NEEDHAM, MA 02484

DRAWING No.

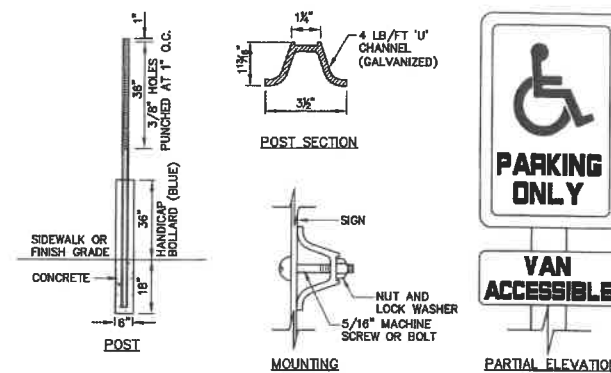
L1

SHEET 6 OF 12  
JBE PROJECT NO. 21298.1



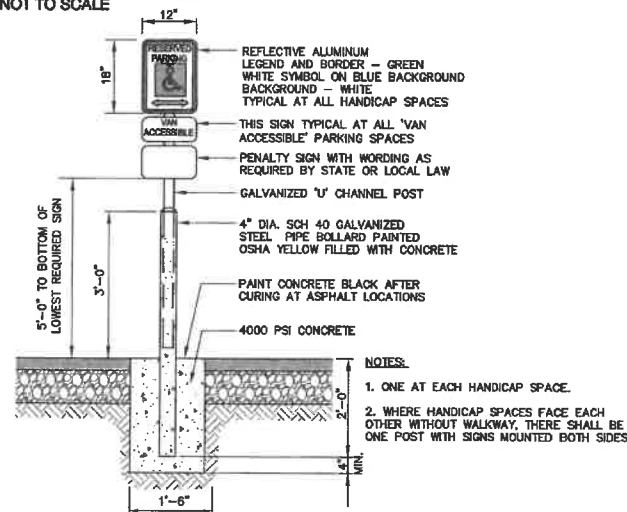
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NOT TO SCALE



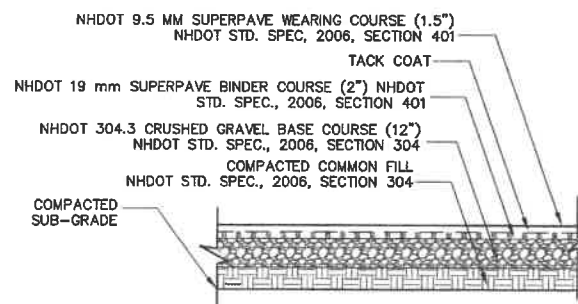
### HANDICAP SIGN DETAILS

NOT TO SCALE



### HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE

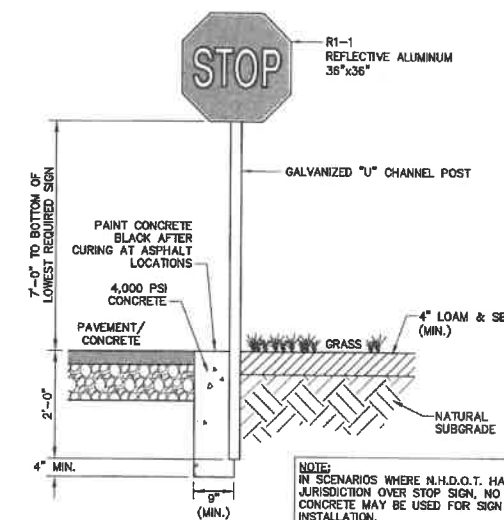


- NOTES:**
1. PAVEMENT SUBGRADES SHOULD BE PROOF ROLLED IN ORDER TO DENSIFY THE SUBGRADES USING A MINIMUM OF 4 PASSES WITH A 10-TON VIBRATORY DRUM COMPACTOR. THE GRAVEL BORROW SUBGRADE COURSE AND CRUSHED GRAVEL BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM-D698).
  2. PAVEMENT SECTION SUBJECT TO CHANGE BASED ON GEOTECHNICAL INVESTIGATION.

### STANDARD DUTY ASPHALT PAVEMENT SECTION

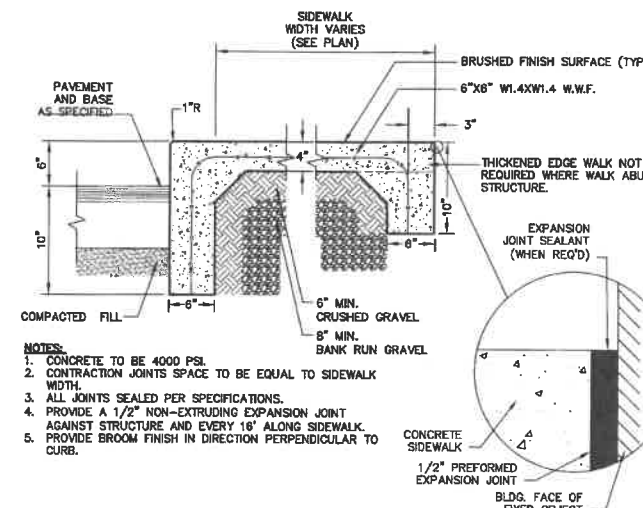
NOT TO SCALE

TRAFFIC CONTROL SCHEDULE						
SIGN NUMBER	SIGN	SIZE OF SIGN WIDTH HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
R1-1		30" 30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN
R7-8		12" 24"	BLUE & GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
R7-8A		12" 6"	BLUE & GREEN ON WHITE	CHANNEL	5'-0"	REFLECTORIZED SIGN
R5-1		30" 30"	RED / SILVER	CHANNEL	7'-0"	REFLECTORIZED SIGN



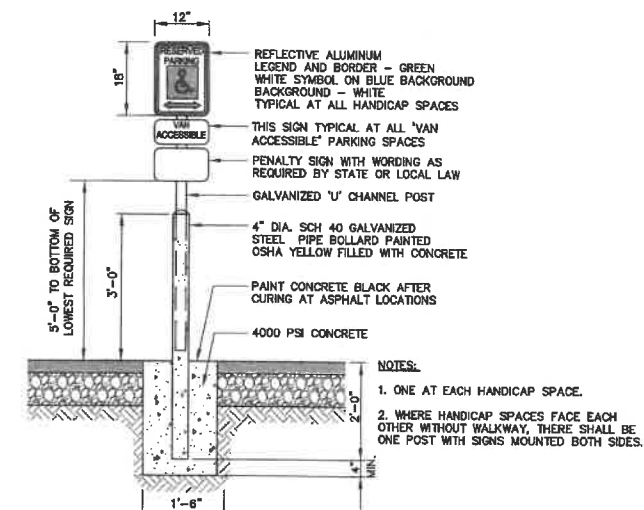
### STOP SIGN (R1-1)

NOT TO SCALE



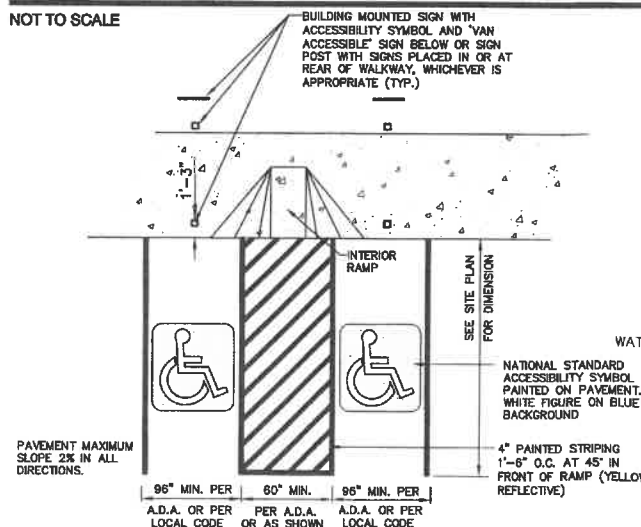
### MONOLITHIC CONCRETE SIDEWALK

NOT TO SCALE



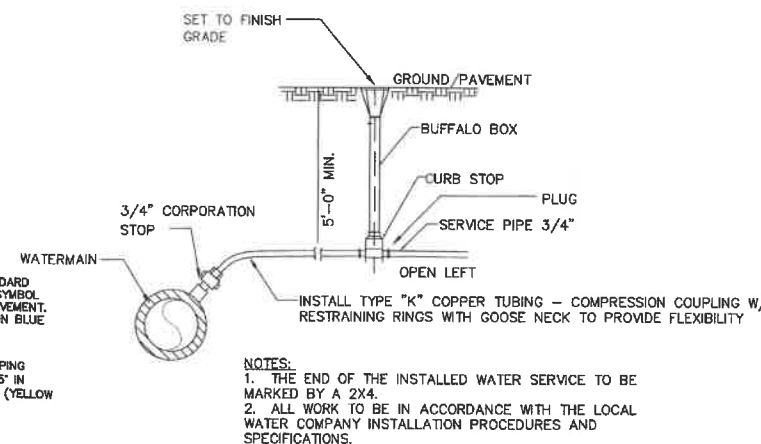
### HANDICAP PARKING SIGN (R7-8)

NOT TO SCALE



### HANDICAP PARKING LAYOUT

NOT TO SCALE



### TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE

PAINTING STRIPING LEGEND	
SSWL/4"	- SINGLE SOLID WHITE LINE / 4" WIDE
SSYL/4"	- SINGLE SOLID YELLOW LINE / 4" WIDE EACH
DSYL/4"	- DOUBLE SOLID YELLOW LINE / 4" WIDE EACH
SSYL/10"	- SINGLE SOLID YELLOW LINE / 10" WIDE
SBWL/4"	- SINGLE BROKEN WHITE LINE / 4" WIDE
SBYL/4"	- SINGLE BROKEN YELLOW LINE / 4" WIDE
SSWL/16"	- SINGLE SOLID WHITE LINE / 16" WIDE

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Design: EMP	Draft: GAP	Date: 05/20/22
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Drawing Name: 21298-PLAN.dwg		

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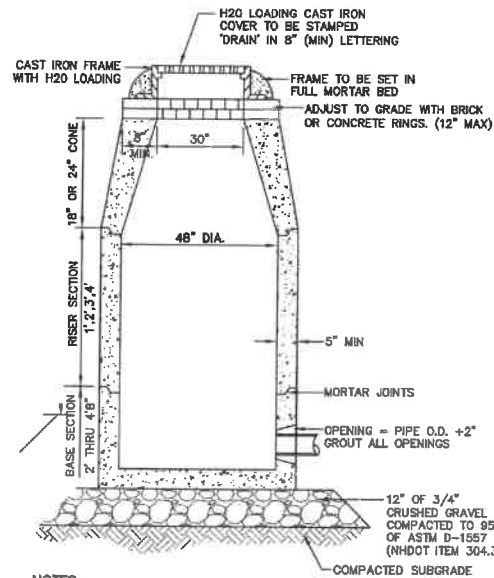
REV.	DATE	ISSUED FOR REVIEW	REVISION	EJH	BY
0	6/20/22				

**J/B Jones & Beach Engineers, Inc.**  
 85 Portsmouth Ave. PO Box 219 Stratham, NH 03885  
 Civil Engineering Services  
 603-772-4746  
 FAX: 603-772-0227  
 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WASHVILLE CAR WASH 105 FARMINGTON RD, ROCHESTER, NH
Owner of Record:	105 FARMINGTON RD, LLC 322 RESERVOIR ST, NEEDHAM, MA 02494

DRAWING No.	D1
SHEET 7 OF 12	JBE PROJECT NO. 21298.1



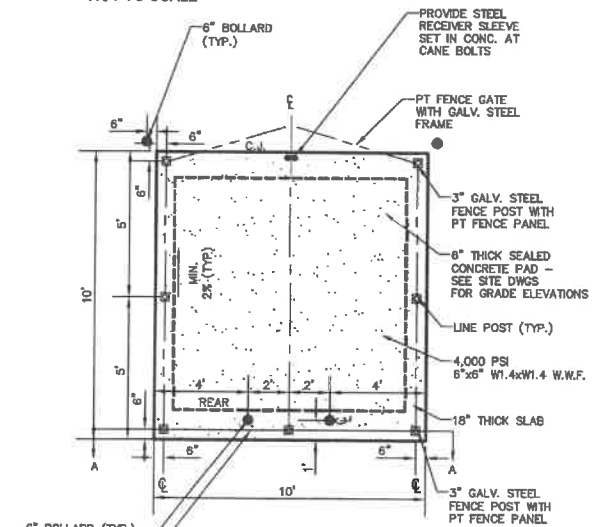


#### NOTES:

1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H2O LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H2O LOADING.
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL DRAIN MANHOLE FRAMES AND GRATES SHALL BE NHDOT TYPE MH-1, OR NEENAH R-1798 OR APPROVED EQUAL (30" DIA. TYPICAL).
8. STANDARD FRAME(S) AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"). OR PRECAST CONCRETE "DONUTS".
9. BACK FILL SHOULD COMPLY WITH NHDOT 209.1 GRANULAR BACKFILL OR ON SITE MATERIAL IF SUITABLE.

#### DRAIN MANHOLE

NOT TO SCALE

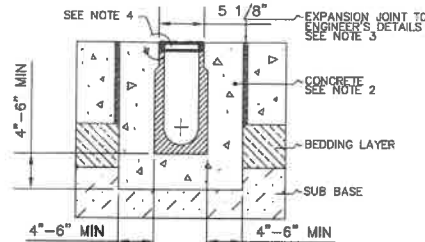


#### NOTES:

1. ALL LUMBER TO BE PRESSURE TREATED.
2. WOOD FENCE TO BE PAINTED OR STAINED TO MATCH BUILDING FOUNDATION.
3. DUMPSTER SIZE VARIES, SEE SITE PLANS FOR SCREENING SIZE

#### DUMPSTER ENCLOSURE PLAN

NOT TO SCALE



#### NOTES:

1. IT IS NECESSARY TO ENSURE THE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR THE EXISTING GROUND CONDITIONS. ENGINEERING ADVICE MAY BE REQUIRED.
2. A MINIMUM CONCRETE STRENGTH OF 3000 PSI IS RECOMMENDED. THE CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
3. EXPANSION AND CRACK CONTROL JOINTS ARE RECOMMENDED TO PROTECT THE CHANNEL AND THE CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" ABOVE THE TOP OF THE CHANNEL EDGE.
5. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR COMPLETE DETAILS.

THE SURFACE DRAINAGE SYSTEM SHALL BE POLYMER CONCRETE K100S CHANNEL SYSTEM WITH GALVANIZED STEEL OR STAINLESS STEEL K-RAILS AS MANUFACTURED BY ACO POLYMER PRODUCTS, INC., CHARDON, OH.

CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE WITH AN INTEGRALLY CAST-IN GALVANIZED STEEL OR STAINLESS STEEL EDGE RAIL.

THE SYSTEM SHALL BE 4 INCHES (100MM) NOMINAL INSIDE WIDTH WITH A 8.1 IN. (155MM) OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.6%. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT. EACH CHANNEL SHALL HAVE PREFORMED 4 IN. (100MM) ROUND AND 6 IN. (150MM) OVAL DRILL-OUTS ON THE BOTTOM FOR VERTICAL CONNECTION WITH UNDERGROUND PIPING.

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO POLYMER PRODUCTS, INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY ACO POLYMER PRODUCTS, INC.

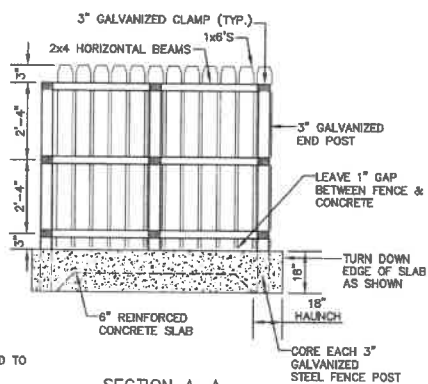
CHANNEL SHALL WITHSTAND LOADING TO LOAD CLASS E (DIN 19 580). GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED BY MEANS OF EITHER A BOLTLESS LOCKING "QUICKLOK" DEVICE OR LOCKING BOLT AND BAR. CHANNEL AND GRATE SHALL BE INDEPENDENTLY CERTIFIED TO MEET THE SPECIFIED DIN 19580 LOAD CLASS.

POLYMER CONCRETE SHALL HAVE MATERIAL PROPERTIES OF: COMPRESSIVE STRENGTH RANGE BETWEEN 14,000-14,500 PSI; FLEXURAL STRENGTH BETWEEN 3500-4500 PSI; TENSILE STRENGTH OF 1500 PSI. THE MATERIAL WATER ABSORPTION RATE SHALL NOT EXCEED 0.1% BY WEIGHT AND SHALL BE RESISTANT TO PROLONGED SALT EXPOSURE, REPETITIVE FROST CYCLES AND CHEMICALLY RESISTANT TO DILUTE ACIDS AND ALKALIS.

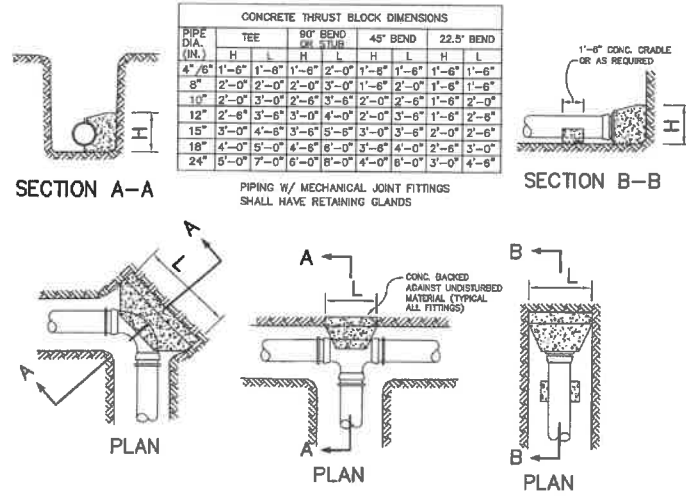
THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. \*FILL IN AS REQUIRED.

#### TRENCH DRAIN SYSTEM

NOT TO SCALE

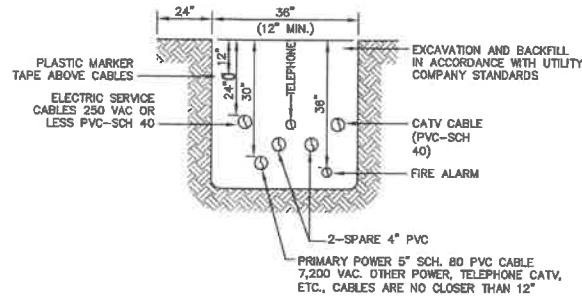


#### SECTION A-A



#### THRUST BLOCK DETAILS

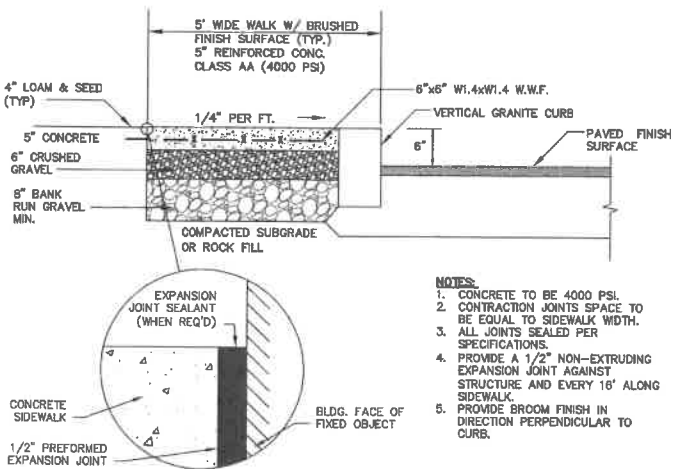
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NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY.

#### UTILITY TRENCH

NOT TO SCALE

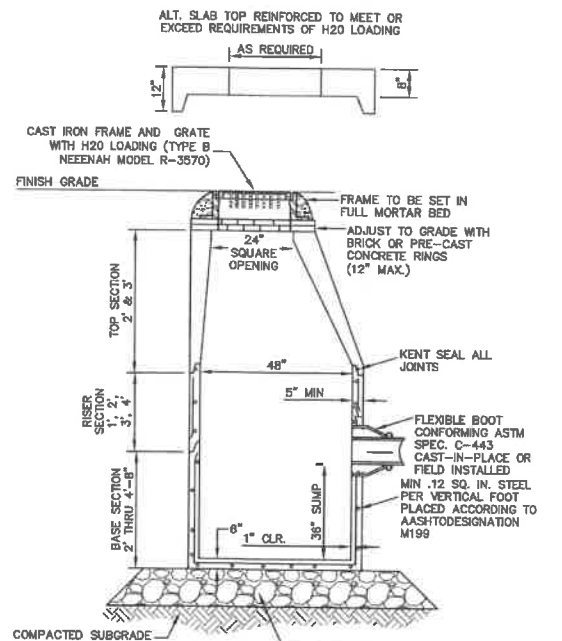


#### NOTES:

1. CONCRETE TO BE 4000 PSI.
2. CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
3. ALL JOINTS SEALED PER SPECIFICATIONS.
4. PROVIDE A 1/2" NON-EXTRUDING EXPANSION JOINT AGAINST STRUCTURE AND EVERY 16' ALONG SIDEWALK.
5. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

#### CONCRETE SIDEWALK W/ VERTICAL GRANITE CURB

NOT TO SCALE

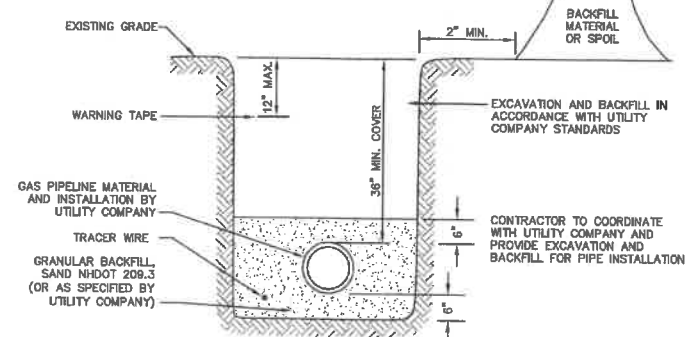


#### NOTES:

1. BASE SECTION SHALL BE MONOLITHIC WITH 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H2O LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI, TYPE II CEMENT.
4. FRAMES AND GRATES SHALL BE HEAVY DUTY AND DESIGNED FOR H2O LOADING.
5. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS SO AS TO BE WATERTIGHT.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
7. ALL CATCH BASIN FRAMES AND GRATES SHALL BE NHDOT CATCH BASIN TYPE ALTERNATE 1 OR NEENAH R-3570 OR APPROVED EQUAL (24"x24" TYPICAL).
8. STANDARD CATCH BASIN FRAME AND GRATE(S) SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM, BUT NO MORE THAN 12"). OR PRECAST CONCRETE "DONUTS".
9. BACK FILL SHOULD COMPLY WITH NHDOT 209.1 GRANULAR BACKFILL OR ON SITE MATERIAL IF SUITABLE.

#### CATCH BASIN

NOT TO SCALE



#### GAS TRENCH

NOT TO SCALE

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0	6/20/22	ISSUED FOR REVIEW	EJH
		REVISION	

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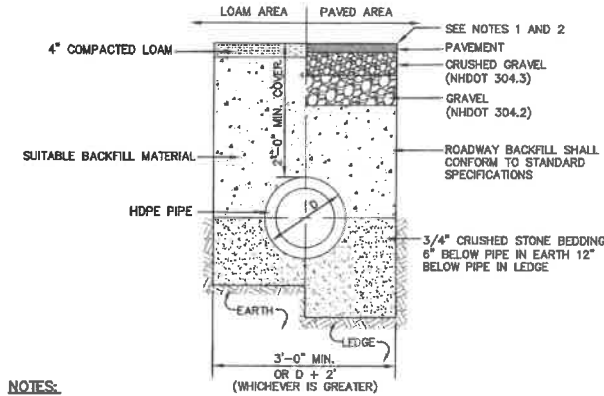
85 Portsmouth Ave. PO Box 219 Stratham, NH 03885

Civil Engineering Services

603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WASHVILLE CAR WASH 105 FARMINGTON RD, ROCHESTER, NH
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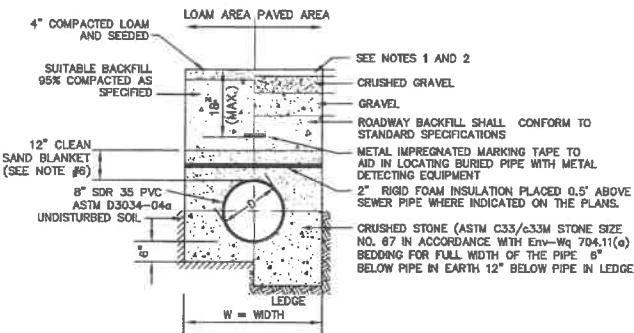
DRAWING No.	D2
SHEET 8 OF 12	JBE PROJECT NO. 21298.1



- NOTES:**
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
  2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND CITY SPECIFICATIONS.
  3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

#### DRAINAGE TRENCH

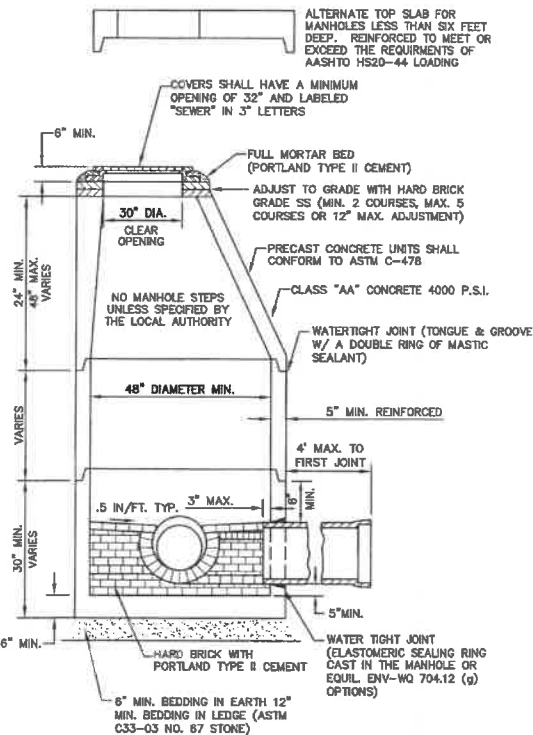
NOT TO SCALE



- NOTES:**
1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO PAVEMENT DETAILS.
  2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.
  3. TRENCH BACKFILL SHALL CONFORM WITH ENV. Wq 704.11(h) AND BE FREE OF DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE OR ROCKS OVER SIX INCHES.
  4. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12" INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, WIDTH SHALL BE NO MORE THAN 36"; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, WIDTH SHALL BE 24 INCHES PLUS PIPE O.D. WIDTH SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
  5. RIGID FOAM INSULATION TO BE PROVIDED WHERE COVER IN THE ROADWAY IS LESS THAN 6" AND CROSS COUNTRY IS LESS THAN 4", PURSUANT TO DES WAIVER BEING ISSUED.
  6. PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES A 1/2" SIEVE AND A MAXIMUM OF 15% PASSES A #200 SIEVE IN ACCORDANCE WITH ENV-Wq 704.11(b).
  7. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL AND CERTIFIED BY THE MANUFACTURER AS CONFORMING TO THE ASTM D3212 STANDARD IN EFFECT WHEN THE JOINT SEALS WERE MANUFACTURED, AND SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE PER ENV-Wq 704.05 (e).

#### SEWER TRENCH

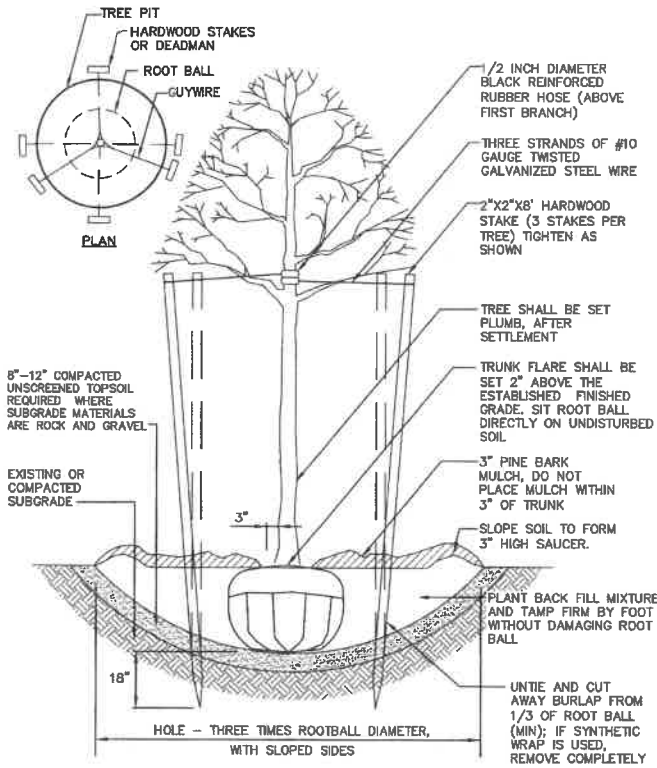
NOT TO SCALE



- NOTES:**
1. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:  
a. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION.  
b. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE PER TABLE 704-4:  
(1) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR  
(2) 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PART HYDRATED LIME;  
c. CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED.  
d. HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED.  
e. SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES.  
f. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT:  
[HTTP://WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM](http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/specifications/index.htm)
  2. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL IN ACCORDANCE WITH ENV-WQ 704.12 (K).
  3. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (c) THROUGH (e).
  4. SEWER MANHOLE COVERS SHALL CONFORM TO ASTM A48/48M WITH A CASTING EQUAL TO CLASS 30 IN ACCORDANCE WITH ENV-WQ 704.13 (c) (8).
  5. ALL PRECAST SECTIONS SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING IN ACCORDANCE WITH ENV-WQ 704.12 (j).
  6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL PER ENV-WQ 704.12 (j).
  7. BRICK MASONRY SHALL CONFORM TO ASTM C32 (ENV-WQ 704.12(a)(9)).

#### SEWER MANHOLE

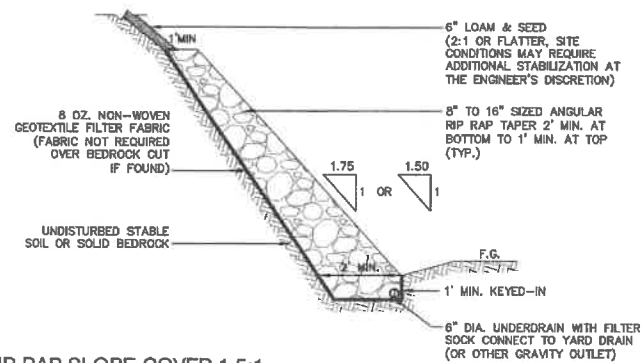
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#### TREE PLANTING (FOR TREES UNDER 4" CALIPER)

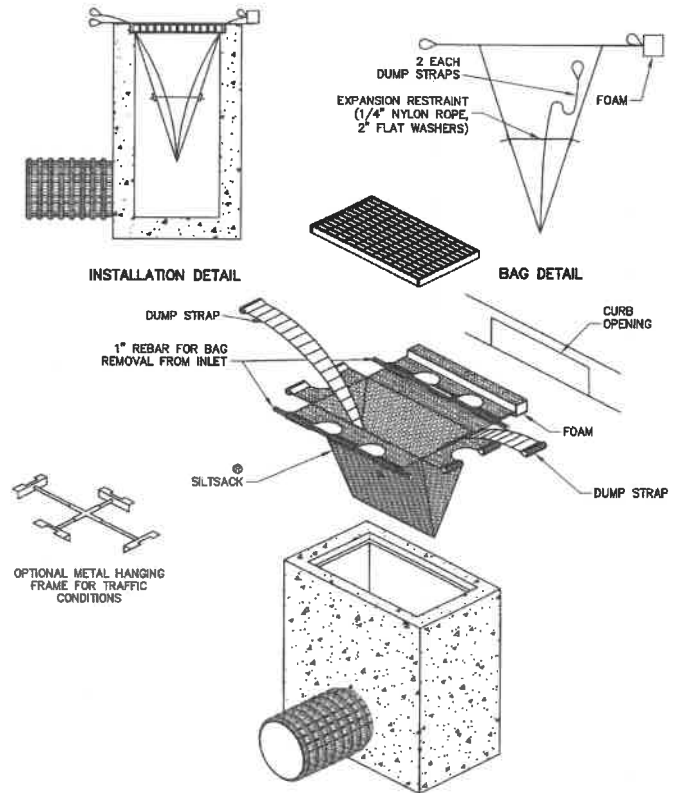
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RECOMMENDED RIP RAP GRADATION RANGES			
d50 SIZE=	1.00 FEET	12 INCHES	
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM TO		
100%	18	24	
85%	16	22	
50%	12	18	
15%	4	6	



#### RIP RAP SLOPE COVER 1.5:1

NOT TO SCALE

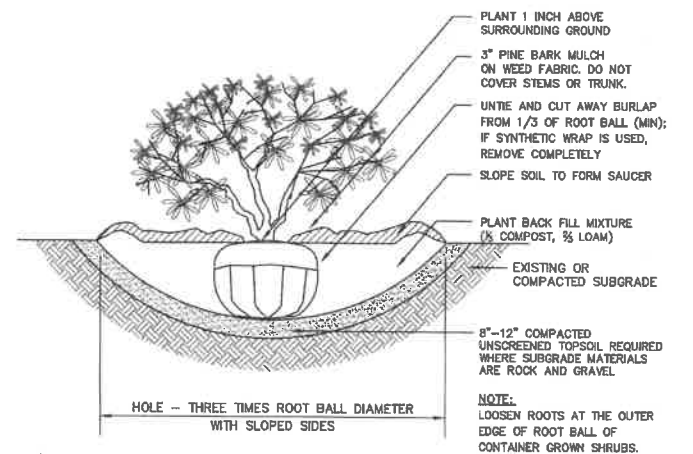


#### NOTES:

1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

#### SILTSACK INLET SEDIMENT CONTROL DEVICE TYPE B - WITH CURB DEFLECTOR

NOT TO SCALE



#### SHRUB PLANTING

NOT TO SCALE

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Drawing Name: 21298-PLAN.dwg		

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**J/B Jones & Beach Engineers, Inc.**

85 Portsmouth Ave. PO Box 210 Stratham, NH 03885

Civil Engineering Services

603-772-4748 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	DETAIL SHEET
Project:	WASHVILLE CAR WASH 105 FARMINGTON RD, ROCHESTER, NH
Owner of Record:	105 FARMINGTON RD, LLC 322 RESERVOIR ST, NEEDHAM, MA 02494

DRAWING No.	D3
SHEET 9 OF 12	JBE PROJECT NO. 21298.1





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**PRODUCT DESCRIPTION**

The MERU Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single 1/2" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,600 lumens in AC and 600 lumens in emergency. LED color at 4000K.

**PRODUCT SPECIFICATIONS**

**CONSTRUCTION**

Die cast aluminum housing with superior heat sink • Scratch resistant Polyester powder coat finish • UV resistant polycarbonate lens • Snap-fit housing and mounting plate are held together by four stainless steel clips • Universal mounting pattern molded into the back plate • 1/2" threaded top access for surface conduit installation • Silicone rubber seal with hollow center, shape adaptive design protects the electrical components • Junction box neoprene seal is attached to the back plate for a weather proof installation • Dark Bronze or White textured finish.

**ELECTRICAL**

Dual voltage 120/277VAC 60Hz input • Solid state charging and switching • Battery low voltage disconnect • AC power indicator and test switch at the bottom of the unit • Standard with Self Diagnostics to monitor proper operation.

**LAMPS**

Supplied with eight (8) LG SMD-4000K LEDs • L70 > 72,000hours • 17 Watts total (32 Watts with HI option) • 1600 Lumens in AC mode, 600 Lumens in Emergency mode • Full cut-off optics for Dark Sky compliance

**BATTERY**

Maintenance-free, long-life rechargeable NiCad battery will operate fixture for a minimum of 90 minutes in the event of a power outage • 24 hour recharge after 90 minute discharge

**CODE COMPLIANCE**

UL924 • Listed for wet location applications (0°C-50°C) • Optional "HI" cold weather package for (-10°C-50°C) • IP65 Rated • NFPA 101 Life Safety Code compliant • NEC and OSHA compliant • DLC Listed • RoHS Compliant

**WARRANTY**

5-year warranty. Product specifications subject to change without notice.

**INSTALLATION**

**MOUNTING**

Suitable for indoor or outdoor wall mounting on junction box, or with surface conduit using the supplied 1/2" threaded top access • Mounting plate has molded universal mounting pattern for simple mounting over junction box.

**ORDERING INFORMATION**

model	operation mode	housing color	options
MERU-LED	ACM = General & Emergency Lighting	DB = Dark Bronze	Self-Diagnostics & Photocell (optional handset)
	AC = General Lighting	WH = White	HI = Internal Heater
		BK = Black	PIR = Passive Infra-Red Motion Sensor
		NK = Nickel	

Ordering Example: MFRU-LEDWHDB

Mule Lighting, Inc. 46 Baker Street Providence, RI 02905 800 556-7690 P 401 941-2929 F www.mulelighting.com

PROJECT: LOCATION: CONTACT: PHONE:

PROJECT: LOCATION: CONTACT: PHONE:

Project	Category	Type
Prepared by	Notes	Date



**McGraw-Edison**  
**GLEON Galleon**  
Area / Site Luminaire

**Typical Applications**  
Outdoor • Parking Lots • Walkways • Roadways • Building Areas

**Product Certifications**  
ISO, DLC, IP66, etc.

**Product Features**  
Energy efficient, long life, etc.

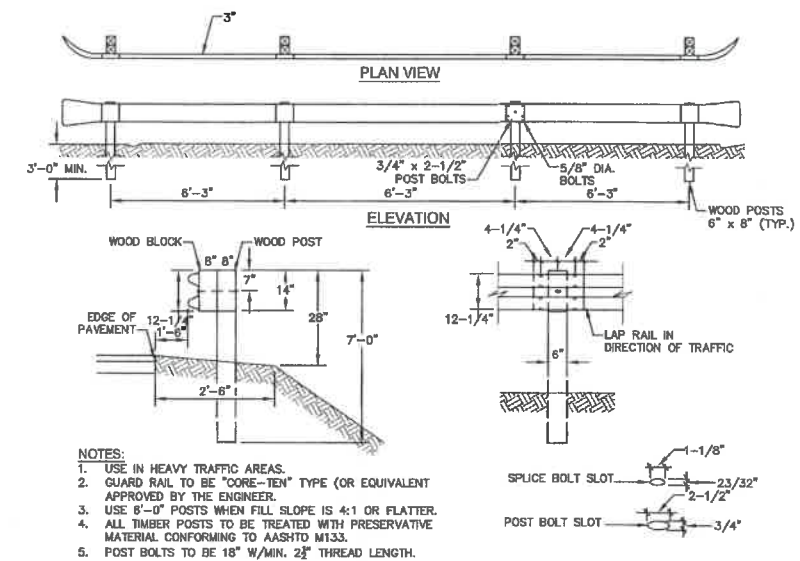
**Connected Systems**  
WaveLinx, Enlighted

**Quick Facts**  
• Lumen packages range from 4,200 - 80,800 (34W - 640W)  
• Efficacy up to 156 lumens per watt

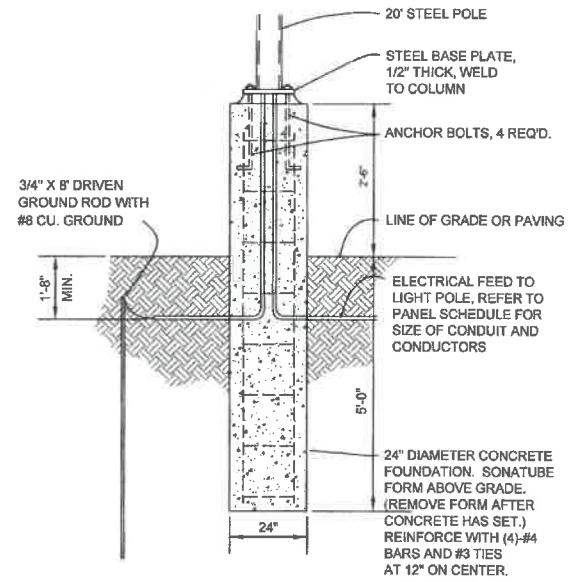
**Dimensional Details**

Height of Light Squirrel	1'4" High	1'8" High	2' High	2'4" High	2'8" High
1-4	15-1/2"	7"	10"	10-5/8"	16-9/16"
5-6	21-5/8"	7"	10"	10-5/8"	16-9/16"
7-8	27-5/8"	7"	13"	10-5/8"	-
9-10	33-3/4"	7"	16"	-	-

COOPER Lighting Solutions



GUARD RAIL (CORE-TEN)  
NOT TO SCALE



LIGHT POLE BASE FOUNDATION  
NOT TO SCALE

Design: EMP Draft: GAP Date: 05/20/22  
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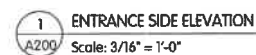
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Project:	WASHVILLE CAR WASH 105 FARMINGTON RD, ROCHESTER, NH
Owner of Record:	105 FARMINGTON RD, LLC 322 RESERVOIR ST, NEEDHAM, MA 02494

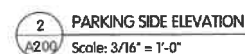
DRAWING No.

**D5**

SHEET 11 OF 12  
JBE PROJECT NO. 21298.1



\*ALL D2, D3, D4 EXTERIOR DOOR FINISHES TO USE FACTORY FINISH CLOSEST COLOR MATCH TO P4

[illegible]

WASHVILLE  
491 PAYNE RD | SCARBOROUGH, ME 04074

SHEET MANAGEMENT	
PROJECT #:	WAS04-055
DATE ISSUED:	03/11/22
DRAWN BY:	PK
REVIEWED BY:	PK







D/F PYLON

Location 5 • Option 2

Qty: 1

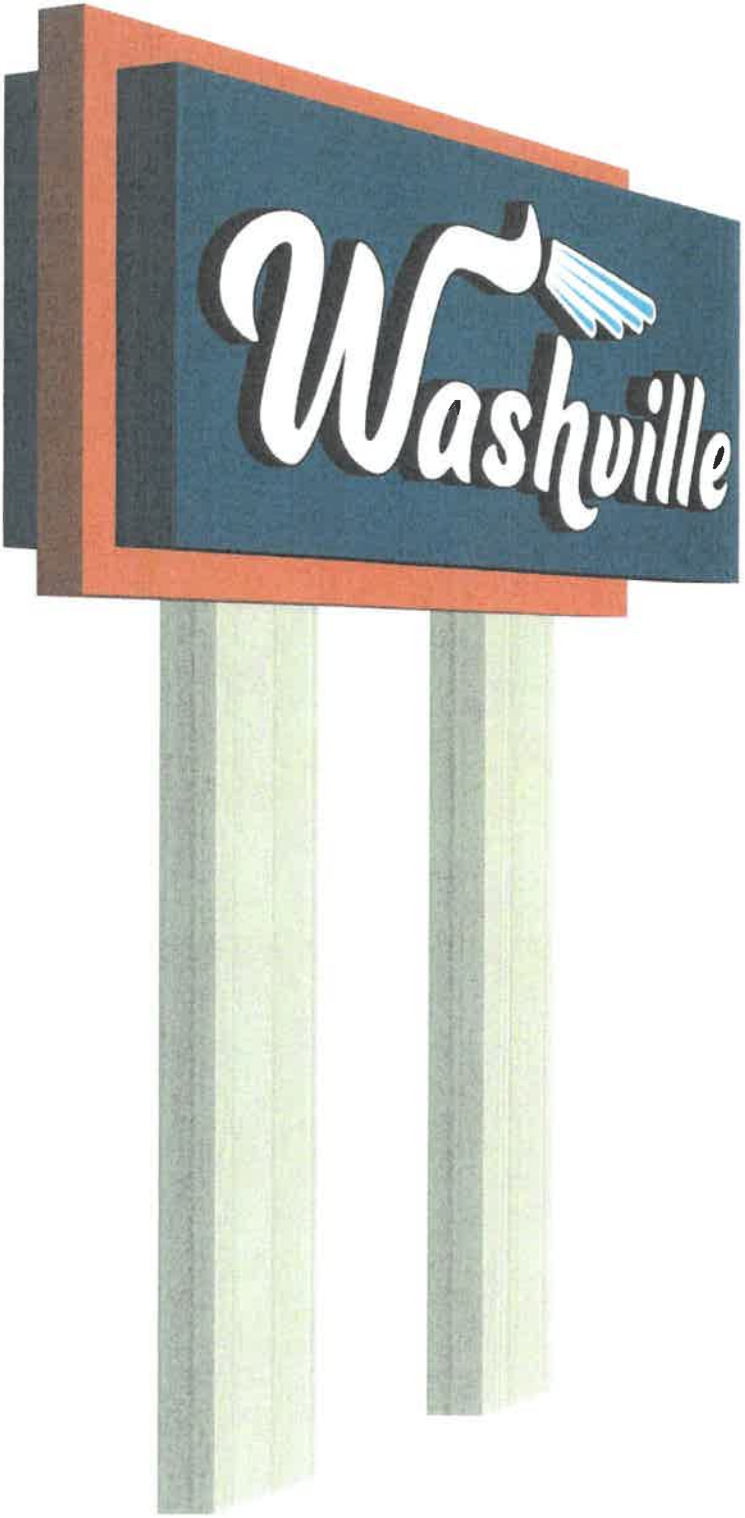
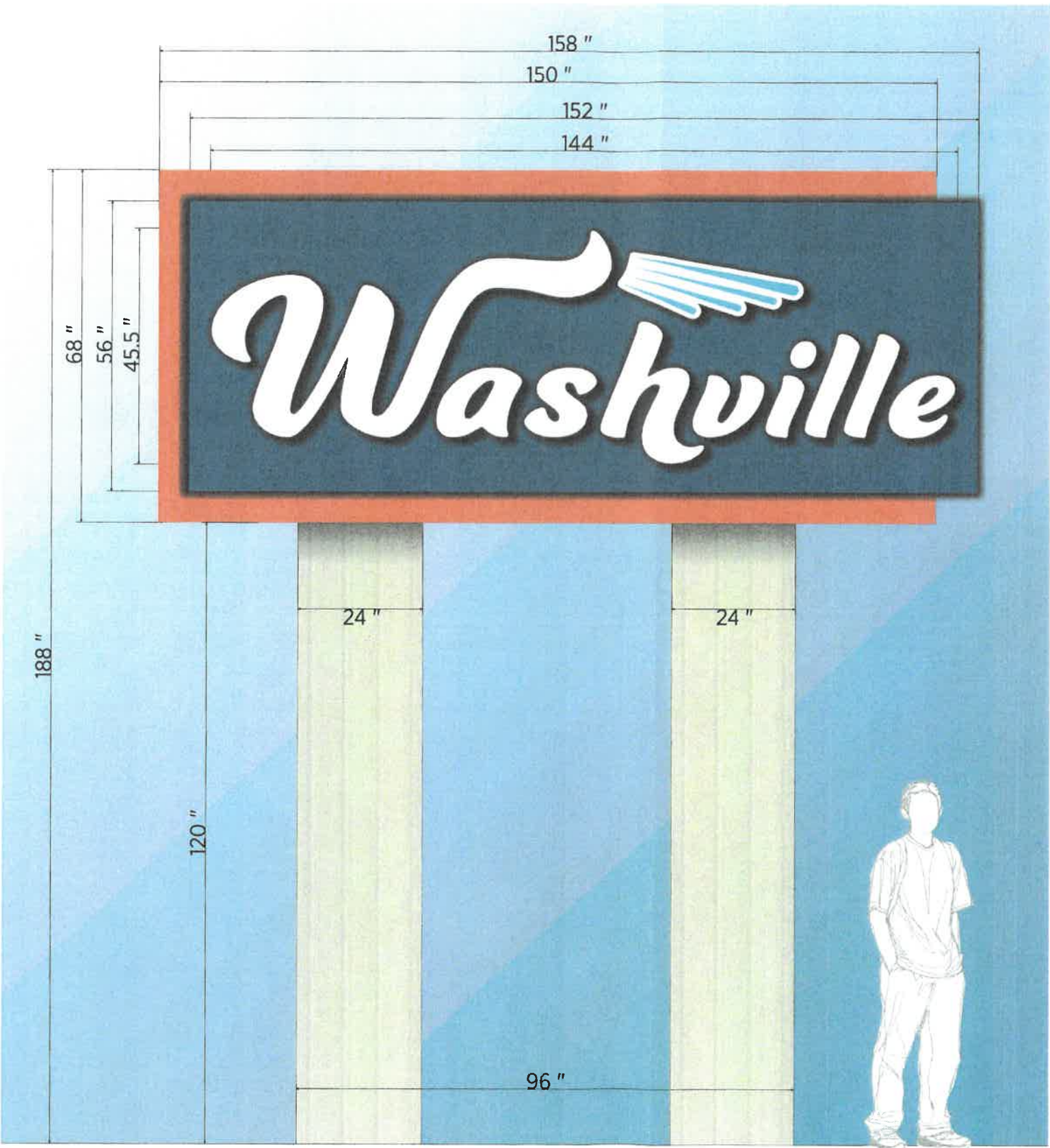
SCOPE

Fabricated multi-layered aluminum cabinet painted two colors.

Face-lit channel letters mounted to both sides of sign.

Woodgrain cladding to be direct print with matte clear coat.

Brick base/cap to match building.



Sign Sq Ftg: 74.6

Customer/Job Location:

**WASHVILLE**  
Rochester, NH

DWG. DATE: 2.9.2022

Rev	By	App
Rev1	Rev1	Rev1
Rev2	Rev2	Rev2

**APPROVAL** ☐ APPROVED ☐ APPROVED AS NOTED

Date **x**

File Name: Washville\_RochesterNH\_Sign Pkg\_22-03972

Sales: TD  
Design: JP  
PMgr: EC  
Drawing # **22-03972-6**

