## **Zoning Bylaw, Section 3.3.2.1 & 3.3.2.2 Petition for Site Plan Special Permit**

For

Proposed Site Plan 108-118 Great Road Stow, MA

August 1, 2019

Revised: November 2, 2023

Applicant/Owner JKC Properties, LLC

14 Nason Street, Suite 302 Maynard, MA 01754

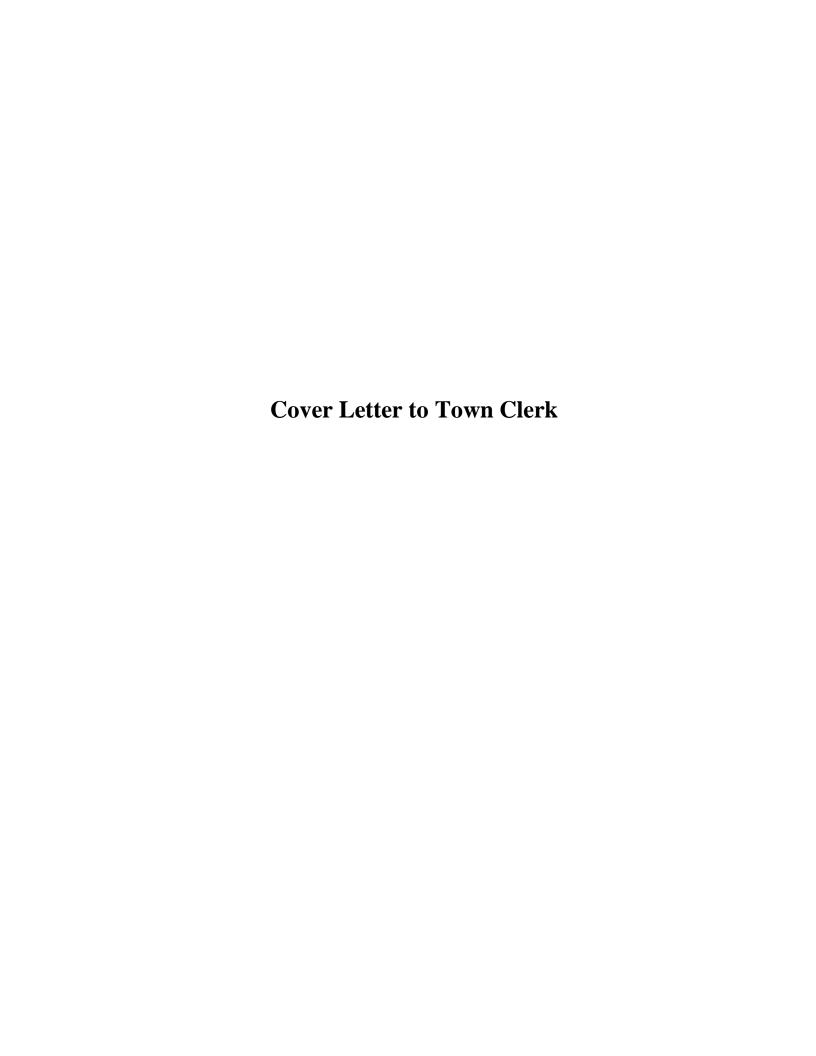
Engineering - Planning – Surveying 1000 Main Street; Acton, MA 01720 (978) 263-8585 www.stamskiandmenary.com

Stamski And McNary, Inc

SM-6189B

### **Table of Contents**

- 1. Cover Letter to Town Clerk
- 2. Petition for Special Permit
- 3. Application for Site Plan Approval
- 4. Development Impact Statement
- 5. Limited Traffic Study
- 6. Copy of 2022 Planning Board Special Permit/Site Plan Approval Decision
- 7. Draft Legal Notices
- 8. Assessor's Certified List of Abutters
- 9. MAP Holdings, LLC Manager's Certificate
- 10. Flint Road Realty LLC Manager's Certificate
- 11. JKC Properties, LLC Officer's Certificate
- 12. Stormwater Report & O&M Plan
- 13. Site Plan
- 14. Architectural Plans



### STAMSKI AND MCNARY, INC.

1000 Main Street Acton, Massachusetts 01720 (978) 263-8585, FAX (978) 263-9883

<u>PRINCIPALS</u> JOSEPH MARCH, P.E., P.L.S. GEORGE DIMAKARAKOS, P.E. <u>ASSOCIATE</u> JONATHAN BOLLEN, P.L.S.

November 2, 2023

Linda E. Hathaway, Town Clerk Town of Stow 380 Great Road Stow, MA 01775

Re: 108 Great Road- Applications for Special Permit and Site Approval for Dunkin Donuts

Dear Ms. Hathaway:

On behalf of MAP Holdings, LLC, Flint Road Realty LLC and JKC Properties, LLC, I enclose an original and five copies of the following for filing in support of Special Permit and Site Plan Approval applications for a Dunkin Donuts at 108 Great Road:

- 1. Petition for Special Permit
- 2. Application for Site Plan Approval
- 3. Development Impact Statement
- 4. Limited Traffic Study
- 5. Copy of 2022 Planning Board Special Permit/Site Plan Approval Decision
- 6. Draft Legal Notices
- 7. Assessor's Certified List of Abutters
- 8. A check for \$500 for the Special Permit filing fee
- 9. A check for \$250 for the Site Plan Approval filing fee
- 10. MAP Holdings, LLC Manager's Certificate
- 11. Flint Road Realty LLC Manager's Certificate
- 12. JKC Properties, LLC
- 13. Stormwater Report and O&M Plan
- 14. Site Plan

### 15. Architectural Plans

Please confirm the public hearing will commence on December 12, 2023, at your earliest convenience. Thank you for your attention to these applications.

If you have any questions regarding this matter, please feel free to call.

Respectfully,

Stamski and McNary, Inc.

Daniel Carr, P.E.

George Dimakarakos, P.E.



The undersigned hereby Petition the Planning Board for a public hearing and a Special Permit under the Town of Stow Zoning Bylaw approving the Special Permit Petition including the Site Plan described above.

The undersigned hereby certify that the information on this Petition and plans submitted herewith are correct, and that all applicable provisions of Statutes, Regulations, and Bylaws will be complied with.

The above is subscribed to and executed by the undersigned under the penalties of perjury in accordance with Section 1-A of Chapter 268, General Laws of the Commonwealth of Massachusetts.

MAP Holdings, LLC and Flint Road Really LLC

10/26/23

Date

Signature of Petitioner

Mark Pesce, Manager

### OWNER'S KNOWLEDGE AND CONSENT

I hereby assert that I have knowledge of and give my consent to the Petition presented above. JKC Properties LLC

Date

Signature of Owner and Petitioner

John J. Cramer, Manager



FLOOR PLAN
Certifications
Scale
Net floor area/s

Any additional maps, plans, photographs, deeds, or documents which the Applicant wishes to submit should be enclosed with each copy of this Application.

The undersigned hereby apply to the Planning Board for a public hearing and site plan approval under the Town of Stow Zoning Bylaw approving the Application as described above.

The undersigned hereby certify that the information on this Application and plans submitted herewith are correct, and that all applicable provisions of Statutes, Regulations, and Bylaws will be complied with.

The above is subscribed to and executed by the undersigned under the penalties of perjury in accordance with Section 1-A of Chapter 268, General Laws of the Commonwealth of Massachusetts.

MAP Holdings, LLC and Flint Road Realty LLC

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Date

Signature of Applicant

Mark Pesce, Manager

### OWNER'S KNOWLEDGE AND CONSENT

I hereby assert that I have knowledge of and give my consent to the Application presented above. JKC Properties LLC

Date

Signature of Owner and Applicant

John J Cramer, Manager



### **DEVELOPMENT IMPACT STATEMENT**

### E. Measures to Mitigate Impacts

Attach brief descriptions of the measures that will be taken to:

33. Prevent surface water contamination.

The surface runoff will drain as it has to existing leaching catch basins, but will now be directed to subsurface chambers after exiting the existing catch basins. There is a decrease in impervious surfaces as a result of removing extraneous pavement.

34. Prevent groundwater contamination.

The building will be served by a private well and the recently constructed septic system is sized large enough to handle proposed flow rates.

35. Maximize groundwater recharge.

<u>Infiltration will be provided within the subsurface chambers.</u>

36. Prevent erosion and sedimentation.

During construction, a siltation fence will be placed as shown down gradient of proposed work which will remain in place until a vegetative cover is established. Any silt, construction debris, etc. shall be removed. All sediments spilled, dropped, or washed into public rights-of-ways or abutting properties shall also be removed immediately. All catch basins will be fit with silt sacks to filter out any debris and shall be cleaned as needed. The developer shall comply with the Erosion and Sedimentation Control Plan.

37. Maintain slope stability.

The site is generally flat with little area at risk of eroding. 6" of loam and seed is proposed over disturbed areas to stabilize slopes.

38. Design the project to conserve energy.

The proposed building will meet the stringent requirements of the state and local building codes.

39. Preserve wildlife habitat.

The proposed work area has been previously developed and there are no natural resources on/near the site.

40. Preserve wetlands.

No work is proposed within the wetlands or the 100' Buffer Zone.

41. Ensure compatibility with the surrounding land uses.

The existing vegetation located along edges of parking lot will remain to the extent practicable and new landscaping is proposed.

42. Control peak runoff from the site so that the post-development rate of runoff will be no greater than the predevelopment in compliance with.

There is a decrease in impervious surfaces with the removal of portions of unneeded pavement. Infiltration from the proposed subsurface chambers will further decrease the rate of runoff compared to predevelopment conditions.

43. Preserve historically significant structures and features on the site.

There are no historically significant structures or features on site.

44. Mitigate the impact of the traffic generated by the development.

The total weekday vehicle trips generated are less than the historical conditions. The conversion of the 67 seat restaurant to a 56 seat Dunkin Donuts results in a decrease in total weekday trips, but an increase in peak hour trips.



## **Limited Traffic Study**

# 108-118 Great Road, Stow, MA

Date: 11/2/2023

			<b>WEEKDAY TRIPS</b>		Ь	PEAK HOUR TRIPS		AM PEAK PM PEAK	PM PEAK
ITE CODE	TE CODE EXISTING (TO BE REMOVED)								
932	67 SEAT RESTAURANT	4.83	PER SEAT=	323.61	0.72	PER SEAT=	48.24	40.2	48.24
	PROPOSED								
Ċ	COFFEE/DONUT SHOP	0	2.00		L	7 0 0	1	0	
936	WITHOUT DRIVE-THROUGH	108.38	PEK 1000 SF=	729.66	65.96	PEK IUUU SF=	139.//	T36.06	54.69
	WINDOW (DUNKINS)								

## 118 Great Road, Stow, MA

84.45 91.53 PEAK HOUR TRIPS	184.45 91.53	/ TRIPS	552.14 -93.95 WEEKDAY TRIPS	552.14 -93.95		TOTAL PROPOSED CHANGE	
<b>2</b> 1	92.92			646.09		TOTAL EXISTING	
<u> </u>	44.68			322.48		TOTAL 118 EXISTING	
8	7.8	1.56 PER 1000 SF=	1.	55.15	11.03 PER 1000 SF=	5000 SF OFFICE	710
2	4.82	4.82 PER 1000 SF=	4.	42.7	42.7 PER 1000 SF=	1000 SF RETAIL	820
-	25.3	0.72 PER SEAT=	0	169.05	4.83 PER SEAT=	35 SEAT RESTAURANT	932
10	1.56	1.56 PER 1000 SF=	1.	11.03	11.03 PER 1000 SF=	1000 SF MARTIAL ARTS	710
8	5.3	1.06 PER EMPLOYEE=	1.	44.55	8.91 PER EMPLOYEE=	ONE DENTIST, ~ 5 EMPLOYEES	720
		PEAK HOUR TRIPS			WEEKDAY TRIPS	TE CODE EXISTING (TO REMAIN)	ITE CODE

Copy of 2022 Planning Boar	rd Special Permit/s Decision	Site Plan Approval

### Middlesex South Registry of Deeds

## Electronically Recorded Document

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### **Recording Information**

Document Number : 14316
Document Type : DECIS

Recorded Date : February 09. 2023 Recorded Time : 12:22:28 PM

Recorded Book and Page : 81237 / 276

Number of Pages(including cover sheet) : 22
Receipt Number : 2889638
Recording Fee : \$105.00

Middlesex South Registry of Deeds Maria C. Curtatone, Register 208 Cambridge Street Cambridge, MA 02141 617-679-6300 www.middlesexsouthregistry.com



## Town of Stow PLANNING BOARD

380 Great Road Stow, Massachusetts 01775-1122 (508) 897-5098 FAX (508) 897-4534

### **NOTICE OF DECISION and DECISION**

### Special Permit and Site Plan Approval 108 and 118 Great Road

**December 13, 2022** 

### 1. Petition

This Document is the **DECISION** (hereinafter the Decision) of the Planning Board (hereinafter the Board) on a Request for Special Permit and Site Plan Approval submitted by JKC Properties, LLC and MAP Holdings, LLC (hereinafter the Petitioners), for the construction of a two story Retail and Office Building at 108 and 118 Great Road, on property owned by JKC Properties, LLC.

This Decision is in response to a Request for Site Plan Approval and Special Permit submitted to the Board on October 11, 2022 (hereinafter the Petition), pursuant to Sections 3.3, 9.2 and 9.3 of the Stow Zoning Bylaw and the Rules and Regulations for Special Permit and Site Plan Approval (hereinafter the Rules). The Petitioners seek permission to site a two-story Retail and Office Building.

### 2. Applicant/Owner

JKC Properties, LLC 14 Nason Street, Suite 302 Maynard, MA 01754

### Applicant

MAP Holdings, LLC c/o Beveridge & Diamond 155 Federal Street, Suite 1600 Boston, MA 02110

### 3. Location

Said property is shown on the Stow Property Map Sheet R-29 as Parcels 86 and 87 (hereinafter the Site), as more fully described in the Petition. See Deed in Book 72042, Page 557.

### 4. Board Action

After due consideration of the Petition, the record of proceedings, and based upon the findings set forth below, on December 13, 2022, by a vote of five (5) members present throughout the proceedings, the Board voted to **APPROVE** the request for Site Plan Approval, and by a vote of five members present throughout the proceedings, **GRANT** the Special Permit, including the

provision of retail and office uses, in accordance with the Findings, Plan Modifications and Conditions contained herein.

### 5. Proceedings

The Petition for Special Permit and Site Plan Approval was received by the Board on October 11, 2022 pursuant to MGL Ch. 40A and Section 9.2 and 9.3 of the Town of Stow Zoning Bylaws (hereinafter the Bylaw). The Board considered the Request and reviewed the Application at a Public Hearing held on November 15, 2022 and closed at the conclusion of that session. Notice of the hearing was duly published and sent to all parties in interest in accordance with MGL Chapter 40A.

Board Members Lori Clark, Karen Kelleher, John Colonna-Romano, Margaret Costello and Nancy Arsenault were present throughout the proceedings. The record of the proceedings and submissions, upon which this Decision is based, may be referred to in the Office of the Town Clerk or the Office of the Planning Board.

### 6. Exhibits

Submitted for the Board's deliberation were the following exhibits:

6.1 Documents Required by the Rules, consisting of the following:

### EXHIBIT 1 Application

- Petition for Special Permit or Special Permit Extension
- Application for Site Plan Approval or Site Plan Approval Extension
- Memorandum in Support of Special Permit and Site Plan Approval Applications and Request for Waivers
- Draft Legal Notices
- Filing Fee
- Assessor's Certified List of Abutters
- MAP Holdings, LLC Manager's Certificate

### EXHIBIT 2 Supplementary documents, consisting of the following:

- Special Permit and Site Plan Approval Decision, 108-118 Great Road, dated March 26, 2020
- Minor Modification #1 of Special Permit and Site Plan Approval Decision, 108-118 Great Road, dated November 17, 2020
- EXHIBIT 3 Plans entitled "Site Plan 108-118 Great Road, Stow Massachusetts, July 30, 2019," prepared by Stamski and McNary, Inc. for JKC Properties, LLC, last revised December 14, 2020
  - Sheet 1: Cover Sheet
  - Sheet 2: Site Development Plan
  - Sheet 3: Layout Plan
  - Sheet 4: Construction Details Plan
  - Sheet 5: Stormwater Pollution Prevention Plan
- EXHIBIT 4 Plans entitled "Site Plan 108-118 Great Road, Stow Massachusetts, Firetruck Turning Template," prepared by Stamski and McNary, Inc. for JFC Properties, LLC, dated October 25, 2019

- EXHIBIT 5 Architectural renderings titled "108 Great Road New Retail Construction, Stow, MA," prepared by RP Architectural Studio for John Cramer, Summer Street Properties, LLC, and dated January 31, 2021.
- 6.2 Additional Correspondence:
  - a) Letter from Daniel Carr of Stamski and McNary, dated December 14, 2020
  - b) Letter from Derek Houle, Hudson Light and Power, dated October 18, 2022
- 6.3 Comments received from Town Staff, Boards and Committees:
  - a) Memo from the Stow Treasurer/Collector, dated October 12, 2022
  - b) Memo from the Board of Assessors, dated October 14, 2022
  - c) Memo from the Police Department, dated October 18, 2022
  - d) Memo from the Fire Department, dated October 19, 2022
- 6.4 Documents submitted for the Board's deliberation relative to Special Permit and Site Plan Approval, 108-118 Great Road, dated August 30, 2019:
  - 1) Plans entitled:
    - "Site Plan 108-118 Great Road, Stow Massachusetts, July 30, 2019," prepared by Stamski and McNary, Inc. for JKC Properties, LLC, last revised October 25, 2019.
    - Architectural renderings titled "New Commercial Property for 108-118 Great Road, Stow, MA 01775," prepared by Boston Design Partners for JKC Properties, LLC and dated May 2, 2019.
  - 2) Application
    - Petition for Special Permit
    - Development Impact Statement
    - Record Deed
    - Use Description
    - Limited Traffic Study
    - Stormwater Operations and Maintenance Manual
    - Stormwater Management Report
  - 3) Request for Waivers
  - 4) Certified List of Abutters
  - 5) Filing Fee
  - 6) Additional Correspondence submitted by the Petitioner:
    - Email from John Cramer, dated November 15, 2019
    - Revised Site Plan, dated October 25, 2019 showing truck turning radii and proposed landscaping;
    - Letter from Daniel Carr of Stamski and McNary, dated October 25, 2019.
  - 7) Comments received from Town Staff, Boards and Committees:
    - Memo from the Stow Treasurer/Collector, dated September 5, 2019
    - Memo from the Board of Assessors, received September 5, 2019
    - Memo from the Town Clerk, dated September 6, 2019
    - Email from the Conservation Commission, dated September 25, 2019
    - Email from the Fire Department, dated December 13, 2019
    - Memo from the Stow Police Department, dated September 12, 2019
    - Department of Environmental Protection Sanitary Survey dated 4.3.2019, submitted by the Stow Board of Health.
  - 8) Correspondence from Places Associates, Inc., Town of Stow Consulting Engineer:
    - Letter and Plan markup dated October 21, 2019
    - Letter update, dated November 12, 2019

- 6.5 Documents submitted for the Board's deliberation relative to Minor Modification #1, Special Permit and Site Plan Approval Modification, 108 and 118 Great Road, dated November 17, 2020:
  - 1) Application for Special Permit Modification
  - 2) Filing Fee
  - 3) Letter submitted by John Cramer, dated September 30, 2020
  - 4) Comments received from Town Staff, Boards, and Committees:
    - Email from Building Inspector
    - 12.1.2010 For Lease Sign Permit for 108 Great Road
    - 2.15.1982 Retail Bank Sign Permit for 118 Great Road
  - 5) Correspondence from Places Associates, inc., Town of Stow Consulting Engineer:
    - Letter and Plan markup dated October 21, 2019
    - Letter update, dated November 12, 2019

Exhibits 6.1 through 6.5 are referred to herein as the Plan.

### 7. Findings and Conclusions

Based upon its review of the Exhibits and the record of the proceedings, the Board finds and concludes the following:

- 7.1 Finding: The Petitioner seeks renewal of the Special Permit and Site Plan Approval as approved on March 26, 2020, and modified on November 17, 2020 as the original permit expired and the modified permit was ineffective because it was not approved at a public hearing.
- 7.2 Finding: The Petitioner seeks Special Permit and Site Plan Approval for the razing of a vacant 67 seat restaurant at 108 Great Road and construction of two-story retail and office building at a similar location on the lot as the former building's footprint. The Plan further proposes upgrades to the existing site plan at 108 and 118 Great Road through reconfiguration of parking spaces, elimination of excess pavement, as well as the addition of an underground stormwater infiltration system and site lighting and landscaping.

**Finding:** The proposed retail and office building will initially consist of 2 units that may be reconfigured internally to fit the space needs of future tenants. Two tenant units are expected on the first floor while two mechanical and storage spaces occupy the second floor.

**Condition:** In accordance with Section 9.3.14 of the Zoning Bylaw, an as-built plan shall be provided prior to the issuance of an Occupancy Permit.

7.3 Finding: The proposed use is located in the Business and Residential District.

**Finding:** The proposed use, as conditioned herein, is allowed by Special Permit in accordance with the Business District - Section 3.3.2 of the Zoning Bylaw.

- 7.4 **Finding:** The Petitioners requested the following waivers from the Special Permit Rules and Regulations and Site Plan Approval Rules and Regulations governing filing requirements:
  - Section 3.3.1(1) Number of copies of properly executed Petition for Special Permit Form;

- Section 3.3.1(2) The required filing fee;
- Section 3.3.1(3) Number of copies of full scale and reduced scale plans;
- Section 3.3.1(4) Copies of the Stormwater Management Report;
- Section 3.3.1(5) Copy of the deed for all parcels contained within the site plan;
- Section 3.3.1(6) Development Impact Statement with supporting documentation;
- Section 3.3.1(8) Letter documenting authorizing vote if the developer is acting in the name of a trust, corporation or company;
- Section 3.4 Filing Fee
- Section 4.1.2 Required Components of a Site Plan;
- Section 4.4 Development Impact Statement;
- Section 4.5 Other Permits and Variances;
- Section 4.6 Recorded Plans
- Sections 4.7, 4.8, 4.9, 4.10. 4.11, and 4.12 Plans, Construction Detail Plan, Landscape Plan, Building Elevation Plan, Floor Plan, and Use Description
- Section 4.13, 4.14, 4.15, and 4.17 Stormwater Management, Earth Removal Calculations, Traffic Study, Recommendations from Other Boards, Committees, and Agencies

**Waiver:** The Planning Board therefore **GRANTS** the waivers requested from the Special Permit Rules and Regulations and Site Plan Approval Rules and Regulations Sections 3.3.1, Section 3.3.1(3), Section 3.3.1(4), Section 3.3.1 5), Section 3.3.1 (6), Section 3.3.1(8), Section 4.1.2, Section 4.4, Section 4.5, Section 4.6, Sections 4.7, 4.8, 4.9, 4.10. 4.11, and 4.12, Section 4.13, 4.14, and 4.15.

**Condition:** Prior to endorsement of the Plans, three full size copies of the Plans shall be provided to the Planning Department.

**Finding:** The Planning Board finds that the fee schedule is appropriate given the Petitioners' request for reissuance of the Special Permit and the staff time required to administer the permitting process, draft the decision, and communicate with abutters and Town Departments.

**Finding:** Prior to the public hearing, the Planning Board transmitted a copy of the Petition to relevant Boards, Committees, and Agencies per Section 4.17 of the Special Permit Rules and Regulations and Site Plan Approval Rules and Regulations.

**Waiver:** The Planning Board therefore **DENIES** the waivers requested from the Special Permit Rules and Regulations and Site Plan Approval Rules and Regulations Sections 3.3.1(2) and Section 3.4 related to provision of the filing fee and Section 4.17 related to seeking recommendations from other Boards, Committees, and Agencies.

Condition: Prior to endorsement of the Plans, the Petitioners shall provide the full filing fee.

7.5 **Finding:** The Board reviewed and considered the Application, as submitted, and finds the Application and supporting documentation as adequate for the type of Special Permit applied for.

### Site Characteristics

7.6 **Finding:** Parcels 86 and 87, known as 108 and 118 Great Road, are referred to as the Site, held in common ownership by JKC Properties, LLC and totaling 2.51 acres. The Site has a combined total frontage of +/-355 feet, meeting the threshold for 200 linear feet of frontage along Route 117 in accordance with Section 4.4(2). Together, the combined lots, held in common ownership meet the frontage and lot area requirements of the Zoning Bylaw.

**Finding:** The Parcels, held in common ownership, are interlinked and dependent on the infrastructure that each offers to the other, including a shared septic system and public water supply, as well as an interlinked stormwater management system.

### Site Circulation

7.7 **Finding:** The Plan shows the continued use of three separate curbcuts, two entering onto 108 Great Road and one onto 118 Great Road. Each curbcut conforms to the widths and geometries developed and constructed as part of the 2018 Lower Village Traffic Improvement Project by the Town.

**Condition:** Any additional curbcuts, including alterations and/or reconfigurations of existing curbcuts shall require further Modification of the Special Permit.

7.8 **Finding:** Currently, the largest fire apparatus that could be used to respond to emergencies at the Site through Mutual Aid is a 3 axle, 40.7' foot long firetruck.

**Finding:** The original Special Permit and Site Plan Approval issued on March 26, 2020, included a condition stating that Acton Fire Apparatus turning movements shall be shown navigating around the landscaped islands as conditioned herein, and specifically along the property boundary of 108 and 118 Great Road, for the purpose of demonstrating the ability of trucks to enter and exit the site. The Board's consulting engineer noted that although the Plan shows entrance to the site by the largest Acton firetruck (3 axle, 40.7' feet long) to simulate the largest mutual aid vehicles accessing the site, not all turns are accounted for and the simulation does not show the trucks completing a full entrance and exit of the site.

**Finding:** On December 14, 2020, the Board received a Firetruck Turning Template dated October 25, 2019 indicating the ability of the Acton Fire Apparatus to navigate around the landscaped islands and along the property boundary of 108 and 118 Great Road.

**Condition:** Emergency apparatus shall be able to adequately enter and exit the site from each of the three curbcuts.

7.9 Finding: In response to the August 30, 2019 Petition, the Police Department submitted correspondence recommending consideration of identifying each of the 108 Great Road curb cuts as entrance only and exit only, with a Do-Not-Enter sign posted at the chosen exit.

**Finding:** The Town's Lower Village Traffic Improvements were designed to accommodate two-way traffic at each of the curbcuts along Route 117.

**Condition:** Two-way traffic shall be maintained at each curbcut, consistent with the design of the Lower Village Traffic Improvements. The Planning Board reserves the right to modify the Special Permit in accordance with Section 7.40 of this Decision in the event that future communications with Public Safety and Highway Departments find that a one-way circulation pattern may increase vehicular safety.

7.10 Finding: In response to the August 30, 2019 Petition, the Fire Department indicated that the narrow, pre-existing access lane to the west of the building at 118 Great Road is not wide enough to provide meaningful circulation around the building for emergency apparatus and therefore need not be included in the Fire Department's analysis of site circulation. The access drive is not a viable connection to the rear parking area and unwitting drivers may attempt to use the access and be forced to back their vehicles out if blocked.

**Finding:** Since the time of the original Petition, the Plan has been modified to indicate an existing "Do Not Enter" sign by the southwesterly corner of the building and a proposed "Do Not Enter" sign by the northwesterly corner of the building in order to restrict vehicular access to the access lane.

**Condition:** Prior to issuance of a Certificate of Occupancy, the proposed "Do Not Enter" sign at the northwesterly corner of the building at 118 Great Road must be properly installed.

### Landscape Plan Waiver

7.11 **Finding:** Within the August 30, 2019 Petition, the Petitioner requested a waiver from the requirement for a landscape plan in accordance with Section 4.9 of the Rules, as the parking area is pre-existing and the existing landscaping will remain.

**Finding:** In the original Special Permit, the Planning Board found that the plan did not meet the expectations and vision for landscaping in the Lower Village as proposed. The Planning Board found that although the landscaping and parking areas on the site are pre-existing, there are opportunities to better conform to Section 7.7.4 and 7.7.6 of the Zoning Bylaw regarding parking area landscaping. The Planning Board therefore denied the waiver from Section 4.9 of the Rules for submission of a landscape plan.

**Finding:** The original Special Permit included a condition stating that prior to commencement of construction the Petitioner shall submit a landscaping and parking area upgrade plan consistent with the conditions herein. The Planning Board finds that the revised Site Plans dated December 14, 2020 include a satisfactory landscaping plan. The Board finds that this condition has been satisfied.

### **Parking**

- 7.12 **Finding:** The Planning Board finds that the Site's parking arrangement has been reconfigured to bring the overall parking arrangement further in compliance with current Zoning Bylaw requirements of Section 7.3.3.5 and is adequate for the proposed use as conditioned herein.
- 7.13 **Finding:** The Application proposes eighty (80) total parking spaces. Thirty one (31) spaces are proposed at 108 Great Road and forty nine (49) spaces at 118 Great Road.

7.14 Finding: The Petitioners have not provided information detailing the square footage of different tenant spaces at the 118 Great Road retail plaza for the purpose of confirming the required number of parking spaces in accordance with Section 7.3.3 of the Zoning Bylaw.

**Condition:** Prior to endorsement of the Plans, the Petitioners shall provide sufficient information to determine whether the required number of parking spaces are provided to service the existing and proposed parking demands at the Site.

7.15 **Finding:** Section 7.2.3.1 of the Zoning Bylaw provides relief from the parking regulations to be granted by the Zoning Board of Appeals where the Board can find that "it is not practicable to provide the number of parking spaces required..."

**Condition:** In the event that a use is proposed that would raise the number of parking spaces required by Section 7 of the Bylaw beyond the current allocation, the Petitioner shall seek a Special Permit from the Zoning Board of Appeals in accordance with Zoning Bylaw Section 7.2.3.1. for a determination that such an increase is deemed appropriate.

- 7.16 Finding: The proposed and existing buildings at 108 and 118 Great Road, respectively, contain a variety of existing and proposed uses that are likely to change over time. In the event that such changes trigger a Special Permit from the Zoning Board of Appeals under Section 7.2.3.1, the Planning Board recommends consideration of proposing a shared parking agreement as applicable. A shared parking agreement could be submitted to the Board of Appeals as part of any Special Permit request to address issues such as the maintenance, striping, and snow plowing of the shared parking area.
- 7.17 **Finding**: The original Petition for a Special Permit did not include any facilities for bicycle accommodation. The revised Plans include bicycle facilities, with a total of four (4) bicycle parking spaces. Two (2) are proposed at 108 Great Road and two (2) are proposed at 118 Great Road.

**Finding:** The Planning Board finds that the recently completed Lower Village Traffic Improvements, as well as the proximity of the Assabet River Rail Trail, offer businesses in Lower Village improved bicycle accessibility. The Planning Board finds that new development should provide appropriate facilities to accommodate that accessibility.

**Finding:** The original Petition for a Special Permit included a plan modification and corresponding condition stating that bicycle accommodations, such as bike racks, shall be incorporated into the site plan. The Planning Board finds that this condition has been satisfied.

Condition: Bicycle accommodations, such as bike racks, shall be provided at the Site.

7.18 **Finding:** The Plan shows proposed pavement removal extending over a corner of property owned by the Presti Family Limited Partnership. No easement for the pavement removal is shown on the plan.

**Condition:** Pavement removal or other work related to the parking and access of 108 and 118 Great Road shall not overlap with any abutting properties without an easement providing for such use being submitted to the Board.

**Plan Modification:** Prior to commencement of construction the Plan shall be modified and approval shall be obtained from the Board to clarify that no work is proposed along the abutting property owned by Presti Family Limited Partnership. In the event an easement is granted for the encroachment, the Plan shall be modified to note the easement and the easement shall be submitted to the Board for review and approval.

### Interior and Perimeter Landscaping for Parking Areas

7.19 **Finding:** The initial development of 108 and 118 Great Road was constructed prior to the 2003 amendment to Section 7.7.4, 7.7.5 and 7.7.6 of the bylaw and therefore does not comply with the current Zoning Bylaw governing perimeter and interior landscaping requirements

**Finding:** The Planning Board finds that the plan does not meet the expectations and vision for parking area landscaping in the Lower Village as proposed.

**Condition:** The Owner of 118 Great Road shall perpetually maintain a landscaped buffer along the perimeter of the rear lot lines of Parcel 87 in accordance with Section 7.7.4.1 of the Zoning Bylaws, as the lot is adjacent to a Residential District and a Recreation-Conservation District.

7.20 **Finding:** Section 7.7.4 of the Zoning Bylaw requires perimeter landscaping at all "parking areas with more than five spaces and all loading areas shall be bordered on all sides with a minimum of ten foot wide buffer strip..."

**Finding:** The Plan shows the removal of excess pavement at the site, focused primarily on the rear portions of the 108 and 118 Great Road parcels.

**Finding:** The Board finds that there are pre-existing conditions at 118 Great Road that do not comply with Section 7.7.4 of the Zoning Bylaw.

**Condition:** If future renovation of 118 Great Road is proposed, it shall comply with Section 7.7.4 of the Zoning Bylaw.

### Addition of Street Tree at Western Curbcut of 108 Great Road

7.21 **Finding:** During the Public Hearing on the August 30, 2019 Petition it was noted that an area of pavement immediately west of the primary entrance to 108 Great Road is proposed to be left as pavement, but striped to preclude parking. Given the proximity of the existing parking to Great Road, this location would be ideal as an area to be loamed and seeded and reserved for the installation of a street tree.

**Finding:** During the Public Hearing on the August 30, 2019 Petition the Petitioner indicated concern that a street tree at this location could inhibit sightlines of drivers exiting the property onto Route 117.

**Finding:** In the March 26, 2020 Special Permit, the Planning Board found that the area of pavement striped for no parking, immediately west of the primary entrance to 108 Great Road (entrance west of proposed building), is up to 15' feet deep, beginning at a setback of 10' feet from the edge of pavement. Although the Application is not a

Subdivision, the Planning Board's Rules and Regulations governing the Subdivision of Land require street trees to be planted 10' feet from the edge of the street. Given the depth of the area is at least 10' feet, the Planning Board feels the area of pavement would be an acceptable location for loaming, seeding and the planting of a street tree.

Finding: The March 26, 2020 Special Permit included a plan modification and corresponding condition stating that unless or until the Petitioner submits information from a registered professional engineer that the location of a street tree along west side of the eastern 108 Great Road entrance will detrimentally affect sightlines for vehicles, the area of pavement striped for no parking, and immediately west of the primary entrance to 108 Great Road (entrance west of proposed building), shall be loamed and seeded and planted with a variety of street tree listed on the "Tree Wardens List of Acceptable Species for Street Tree Plantings in the Town of Stow," dated 10.3.2017. The Planning Board finds that this condition has been satisfied as this area is proposed to be loamed and seeded, with the inclusion of a 2 – 2.5 inch caliper red oak.

### Additional Landscaped Islands

- 7.21 **Finding:** During the Public Hearing on the August 30, 2019 Petition, the Board raised concern that there are large swaths of existing pavement at the center of the site that will contain no vegetation to mitigate views, provide shade or add to the aesthetics of the Business District. The Planning Board found that the plan does not meet the expectations and vision for parking area landscaping in the Lower Village as proposed and included the following findings in the original Special Permit:
  - Zoning Bylaw Section 7.7.5 Standard Parking Dimensions requires a minimum maneuvering aisle width of 24' feet. The primary access driveway between parking stalls along the 108 Great Road frontage and the middle of the lot measures approximately 34' feet in width. The access driveway between the middle parking stalls and the parking stalls along the rear lot line of 108 Great Road measures approximately 32' feet in width. The Plan does not indicate whether the 10% minimum interior landscaping requirement under Section 7.7.5 of the Bylaw is met.
  - Section 7.7.6 of the Zoning Bylaw requires standards for interior parking landscaping requirements.
  - The Planning Board's consulting engineer noted the following concerns:
    - There is excessive pavement in the aisle widths of 108 Great Road with the potential to create additional islands and buffers;
    - A proposed 280' square foot island at the western edge of the mid-lot parking stalls, which straddles the property bound between 108 and 118 Great Road does not indicate any surface treatment, nor any notes on proposed curbing.
  - The Planning Board finds that the addition of a landscaped island separating the mid-lot parking stalls could be added while maintaining maneuvering aisle widths in excess of the required 24' feet. The Board finds that the addition of the

landscaped island would accommodate additional landscaping and potential for additional shade trees.

Finding: The original Petition for a Special Permit included a plan modification and corresponding condition stating that additional landscaping in the interior parking area shall be provided, separating the two rows of mid-lot stalls at 108 Great Road. The island shall meet the standards for interior landscaping in Section 7.7.6 of the Zoning Bylaw to the extent practicable. At least one shade tree shall be installed on the landscaped island as required in Section 7.7.6.1 and 7.7.6.2 of the Zoning Bylaw. In the event the Petitioners provide sufficient indication that underground utilities or stormwater management facilities preclude the installation of shade trees, the Petitioners shall provide shallow rooted shrubs and/or grasses as a substitute. Additional interior parking landscaping, including any proposed islands, shall be designed to meet the requirements of fire apparatus turning radii. The Planning Board finds that this condition has been satisfied.

Condition: The Site shall be in compliance with Section 7.7.6 of the Zoning Bylaw.

### Redesign of Proposed Island

- 7.29 **Finding:** During the Public Hearing on the August 30, 2019 Petition, the Planning Board raised concern with the design of a proposed approximately 280' square foot island at the western edge of the mid-lot parking stalls, which straddles the property bound between 108 and 118 Great Road. At the time, no treatment was noted on the plans for the island, nor any notes on proposed curbing. The Planning Board included the following findings as part of the original Special Permit:
  - The Board's consulting engineer noted that the purpose of the island is unclear and that the island should contain rounded corners in addition to surface cover and landscaping.
  - During the Public Hearing the Petitioner noted that the island will be loamed and seeded but is not proposed to have any curbing. The Petitioner's engineer noted that the island will contain a proposed diversion manhole cover.
  - The Planning Board finds that the plan does not meet the expectations and vision for parking area landscaping in the Lower Village as proposed. The Board finds that the proposed island breaks up the expansive pavement, provides an opportunity for further landscaping and brings the site in better compliance with the interior landscaping standards of Section 7.7.5 of the Zoning Bylaw. However, the island would benefit from a redesign to better relate to the required landscaped island in Condition 7.15 and provide for more definition around the perimeter of the mid-lot parking stalls.

**Finding:** The Planning Board included a plan modification and corresponding conditions in the original Special Permit stating that "the proposed island at the western end of the mid-lot parking stalls at 118 Great Road shall be redesigned to better conform to the perimeter shape of the mid-lot parking stalls, including the use of rounded corners. The island shall be redesigned to complement the landscaped island relating to Condition

7.15 of this Decision, including but not limited to the potential for creating a T-shaped island conforming to the perimeter shape of the mid lot parking stalls.

In the event that the landscaped island conflicts with truck turning radii as shown on the Plan, the Applicant shall provide a reduced width island that balances the need for emergency access with the conditions as stated herein.

The proposed island at the western end of the mid-lot parking stalls at 108 Great Road shall be landscaped to meet the requirements of Section 7.7.6 to the extent practicable. In the event the Applicant provides sufficient indication that underground utilities or stormwater management facilities preclude required landscaping, alternative treatments shall be proposed." The Planning Board finds that these conditions have been satisfied through plan revisions dated December 14, 2020.

7.23 Finding: During the Public Hearing on the August 30, 2019 Petition, it was noted that the final condition of the area between the proposed building and streetscape sidewalk is not labelled on the Plan. The Planning Board included a plan modification and corresponding condition in the original Special Permit stating that the area between the streetscape sidewalk and the proposed building shall be loamed and seeded. The Planning Board finds that this condition has been satisfied.

**Finding:** During the Public Hearing on the August 30, 2019 Petition, it was noted that the proposed snow storage area to the far northwest corner of the 118 Great Road parcel had formerly contained a mature street tree that was found to be in declining health at the start of the Lower Village Improvements and eventually removed, and the Board found the location to be suitable for the replanting of a street tree. The original Special Permit included a plan modification and corresponding condition stating that a street tree conforming to the "Tree Wardens List of Acceptable Species for Street Tree Plantings in the Town of Stow," dated 10.3.2017 shall be placed at the snow storage area at the far northwest corner of the 118 Great Road Parcel. The Planning Board finds that this condition has been satisfied as this area is proposed to include a 2 – 2.5 inch caliper red oak.

### **Traffic Study**

7.24 **Finding:** The Application includes the submission of a Limited Traffic Study in accordance with Section 4.15 of the Special Permit Rules. The findings indicate that with the removal of the 67 seat restaurant and the change to retail and office use at the proposed building, the net change in weekday trips at the site will drop by approximately 109 trips per day.

**Finding:** The Planning Board finds that the Business District fronts along Route 117, a principal arterial in the Town of Stow, and has been designed to effectively manage access along the corridor for business uses.

**Finding:** The Planning Board finds the Limited Traffic Study as proposed sufficient for compliance with Section 4.15 of the Special Permit Rules.

### Lower Village Streetscape Standards

7.25 **Finding:** During the Public Hearing the Planning Board noted that the Lower Village Committee's Standard Streetscape and Fencing Style and Specifications, which included the use of split rail fencing and street trees along property frontages in Lower Village, may be difficult to implement at this site. The Board noted that the split rail fence previously existing at the site prior to the Town's construction of the Lower Village Traffic Improvements is being stored at the Highway Department.

**Finding:** The Planning Board finds that the frontage area where such Streetscape standards would be applied is within the Town's pedestrian easement. The Board would be interested in working with the Petitioners at a future time to agree upon the placement of a split rail fence in the grass buffer between the frontage parking stalls and the sidewalk.

### Architectural Design of Proposed Building

7.26 **Finding:** The Plans include architectural elevations and layouts of the proposed building at 108 Great Road. The Petitioner stated during the Public Hearing on the August 30, 2019 Petition that he provided the results of the Stow Visual Preference Survey to their architect to inform the design of the structure.

**Finding:** The original Special Permit included a finding that the Building as proposed includes elements of New England vernacular design that fits with the rural, historic character of Stow. Additionally, the front porch, and pattern of doors and windows is designed to invite pedestrian use and provide visual interest. The Planning Board found the design and placement of the Building on the site suitable for the location and uses proposed.

**Finding:** The original Special Permit included a condition that stated if building elevations and architectural renderings are changed in a manner that alters the proposed roofline, porch features, entrance locations or contains changes that would otherwise alter the building's conformity to the New England vernacular architectural style, such plans and elevations shall be submitted to the Planning Board for review and approval.

**Finding:** On March 1, 2021, the Petitioner provided revised architectural renderings that altered the proposed roofline, porch features, and entrance locations. The revised renderings include tenant space on the first floor with the second floor reduced to only provide space for utilities and storage. The Planning Board requested the Petitioner further review the rear elevation, inclusion of symmetrical design features, and strategies for altering the significant areas of unbroken roofline.

**Finding:** On May 4, 2021, the Petitioner provided revised architectural renderings in response to the Planning Board's comments.

Finding: The revised architectural plans do not include the correct date of revision.

**Finding:** The Planning Board finds that the revised architectural renderings provided on May 4, 2021 provide the building with more architectural symmetry and better reflect the new one-story design.

**Plan Modification:** Prior to issuance of a Building Permit, the architectural renderings shall be revised to include the proper date of revision.

### **Dumpster Location**

7.27 Finding: The original Special Permit included a finding that the Plan shows the location of a dumpster to be placed on an existing concrete pad directly to the south of the easternmost curbcut with no screening shown on the plan. The original Special Permit included a plan modification and corresponding condition stating that screening for the dumpster from the road shall be provided. The Planning Board finds that this condition has been satisfied.

**Finding:** The Plan shows the location of a second dumpster to be placed at the rear of the parking lot of 118 Great Road.

**Condition:** All dumpsters and trash receptacles at the Site shall have fenced screening directly around them and the screening shall be perpetually maintained.

**Plan Modification:** Prior to the issuance of an Occupancy Permit, the Plan shall be revised to include proper screening of all dumpsters.

### Stormwater Management and Drainage

- 7.28 **Finding:** The original Special Permit included the following findings related to a requested a waiver from the requirement to provide stormwater management and drainage calculations, as the Petitioner indicated that a decrease in impervious surfaces and a decrease in rate and volume of runoff leaving the site is achieved through the proposed system:
  - The Plan shows stormwater to be managed through the use of two existing leaching catchbasins and one existing catchbasin, each along the boundary between 108 and 118 Great Road. The catchbasins, and associated roof drains from both the existing and proposed buildings, will accept stormwater from both parcels, and direct runoff to a proposed subsurface infiltration system below the paved parking area at the western end of 108 Great Road. The Application indicates that the use of subsurface chambers will mitigate the existing ponding issues at the site during large rain events.
  - The Application includes a "Limited Stormwater Report," including calculations showing adequate stormwater storage to meet the 10 year storm event – an improvement over current conditions.
  - The Application includes test hole data, proving sufficient offsets to groundwater for the proposed system to function as designed.
  - The Planning Board finds that due to the existing conditions at the site, the Stormwater Report is sufficient to show that the proposed stormwater system is appropriate for the development proposed. The Board further finds that there will be no increase in the rate and volume of runoff from the site. Therefore, the Board GRANTS the requested waiver from Section 4.13 of the Rules to provide

stormwater management and drainage calculations, as described in Section 7.4 of this decision.

7.29 Finding: The original Special Permit included a finding stating that the Plan includes a Stormwater Pollution Prevention Plan that provides relevant notes on stormwater pollution prevention and details on siltation barrier design. The Plan does not include erosion controls and siltation barriers around the area of the proposed building, walkways and other areas of excavation. The original Special Permit included a plan modification and corresponding condition stating that Erosion Control and sedimentation measures shall be incorporated around the building construction and other areas of excavation. The Planning Board finds that this condition has been satisfied.

**Condition:** Erosion Control and sedimentation measures shall be incorporated around the building construction and all other areas of excavation.

**Condition:** The drainage report and final plans shall be stamped with the seal of Registered Professional Engineer.

### **Construction Hours**

7.30 **Finding:** The original Special Permit included a plan modification and corresponding condition to ensure signage indicating hours for all trucks, including delivery and trash removal shall be installed at all loading areas, with hours for trucks, including delivery and trash removal shall be limited from 7:00 a.m. to 5:30 p.m.

**Finding:** The Board finds that the revised Plans indicate the location of a temporary sign limiting truck delivery hours to 7:00 a.m. to 5:30 p.m. daily during construction.

**Condition:** Exterior construction activity related to the Special Permit and Site Plan Approval as conditioned herein shall take place only between the hours of 7:00 a.m. and 5:30 p.m., Monday through Friday excluding official Town of Stow holidays and 8:00 a.m. to 12:00 p.m. Saturdays unless specific approval is granted by the Building Commissioner.

**Condition:** The Petitioner shall post allowable hours on site.

**Condition:** In the event that the Building Commissioner authorizes an exception to the posted hours, notice shall be provided to the Police Department and the Board by the Applicant.

### **Drinking Water and Wastewater Infrastructure**

7.31 Finding: The Plans show an existing Title V compliant septic system and pump chamber spanning the boundary of 108 and 118 Great Road immediately east of the existing building at 118 Great Road. An associated leaching field, located outside of the developments Interim Wellhead Protection Area, to the rear of the 118 Great Road plaza, was approved on 12.12.2018 and subsequently constructed. The design flow of the approved wastewater system is rated for 4270 gallons per day.

**Finding:** The Plan shows the location of the existing Public Water Supply well #2286004, its associated Department of Environmental Protection (DEP) Zone 1 radius of 136' feet, as well as the Interim Wellhead Protection Area radius of 439' feet.

**Finding:** Correspondence received from the Board of Health indicates multiple findings of Public Water Supply non-compliance with DEP Public Drinking Water Supply standards.

**Condition:** Public Water Supply infrastructure shall be approved by DEP or the Board of Health as necessary. Planning Board approval of this Decision shall not be deemed approval by DEP or the Board of Health.

**Condition:** If, at any time, a restaurant is proposed at the site, a new Special Permit is required and the number of seats in the proposed building shall be limited to the total number as approved by the Board of Health for the Title 5 Septic System and by the Department of Environmental Protection for the Public Water Supply.

### Shared Infrastructure

7.32 **Finding:** During the course of the Public Hearings on the August 30, 2019 Petition, the Planning Board's consulting engineer indicated that in addition to including recommendations for annual maintenance of the proposed stormwater system, the Operations and Maintenance Plan for the proposed system should be oriented to a layperson, and describe how to determine proper functionality of the chambered system, as well as to determine if and when remediation is necessary.

Finding: The Petition indicates the intent to divide ownership between 108 Great Road and 118 Great Road.

**Condition:** Prior to issuance of an Occupancy Permit, an Operations and Maintenance Plan oriented to a layperson shall be submitted with information adequate to determine proper functionality, remediation and annual maintenance of the proposed shared stormwater system, including maintenance during construction. The Operations and Maintenance Plan shall bind the Petitioners and all subsequent owners.

**Condition:** Prior to issuance of an Occupancy Permit, the Petitioners shall prepare and execute an Operating Agreement to govern the coordinated use, repair, and maintenance of the parking areas, facilities, and infrastructure to be shared by 108 Great Road and 118 Great Road. The Petitioners shall provide a copy of the Operating Agreement, and any updates to the same, to the Planning Department.

### Fire Safety Measures

- 7.33 **Finding:** The original Special Permit included the following findings related to fire safety measures:
  - The Stow Fire Chief indicated his discussions with the Petitioner regarding the installation of a possible cistern at the site, given the closest designated water sources for fire-fighting include the cistern at Meeting House at Stow, a pond located behind the Stow Shopping Plaza at 117 Great Road, the cul-de-sac at Heritage Lane, and a Maynard hydrant at the Stow Town line, all of which are considerable distance to the subject parcels.

• During the Public Hearing the Petitioner indicated he would consider the use of a cistern at the site but would need to finalize the construction plans prior to understanding the site limitations.

- The Planning Board recognizes the fire safety benefits that a cistern in Lower Village would provide. Although other properties would benefit from a cistern installation the Planning Board finds that requiring the cistern would place an undue burden on one property owner.
- The Planning Board finds that it would be advantageous for the Town to work with property owners in the Lower Village to find space for a cistern that could be used collectively among the properties.

### **Utilities**

7.34 **Finding:** Section 4.7.3.4 (d) of the Special Permit Rules requires the location and type of all utilities to be shown on the Plan and that such utilities, including electric and gas, "shall be located underground."

Finding: Proposed utilities are not shown on the Plan.

7.35 **Finding:** The Planning Board finds it is preferable to utilize existing poles to bring utilities to the site.

**Condition:** All onsite utilities serving 108 Great Road, including but not limited to electrical service, shall be located underground.

**Condition:** In the event that the 118 Great Road parcel is redeveloped, a modified Special Permit and Site Plan Approval shall be required and all proposed utilities shall be located underground. The Petitioner shall work with the utility provider to utilize existing poles to the extent possible in order to bring utilities to the site.

**Plan Modification:** Prior to issuance of a Building Permit, the Plan shall be modified and approved by the Board, showing the location of utilities serving 108 Great Road, including but not limited to proposed riser poles, overhead wire locations and electrical transformers.

### Lighting

7.36 **Finding:** Section 4.9.8 of the Special Permit Rules requires the location of any existing or proposed outdoor lighting facilities to be shown on the Plan.

**Finding:** Section 3.8.1.5 of the Zoning Bylaw requires that no lighting shine on a Street or abutting property in a manner that creates a nuisance or hazard.

**Finding:** No proposed lighting is shown on the Plan. During the Public Hearing on the August 30, 2019 Petition, the Petitioner indicated that they have obtained the services of an engineer to provide a compliant lighting plan for the site in accordance with the requirements of the Zoning Bylaw.

**Condition:** Prior to issuance of a Building Permit, a lighting plan conforming to the requirements Section 3.8.1.5 and all subsections, shall be submitted for review and approval by the Board.

**Condition:** All proposed exterior lighting fixtures shall conform to the Fixture Specific Conditions in Section 3.8.1.5.6 of the Zoning Bylaw. Cut sheets for proposed lighting shall be submitted to the Planning Board, demonstrating full cutoff design compliance.

**Condition:** Parking lot lighting shall be reduced to the extent practicable for safety concerns, from 10:00 p.m. until the earliest business opening time in the morning.

### Signage

7.37 **Finding:** Section 4.7.3.4 – Site Improvements of the Special Permit Rules requires the Plans to show the location of all existing and proposed signage for the uses at the site.

**Finding:** During the Public Hearing on the August 30, 2019 Petition, the Planning Board stated that aside from the requirements of Section 6.3 of the Zoning Bylaw governing the location, size and type of signs, the Board strongly recommends that the Petitioner consult the results of the Sign Visual Preference survey, which indicates the most preferred design attributes of Stow residents.

**Condition:** Prior to issuance of a Building Permit, the Planning Board shall review and approve the location and design of any proposed signage prior to installation. Proposed signage shall conform to the requirement of Section 6.3 of the Zoning Bylaw and to the Visual Preference Survey results as practicable.

**Condition:** All sign lighting practices shall comply with Section 6.3 of the Bylaw. Only continuous white lights shall be used for illumination of a SIGN. The illumination for any SIGN shall be shielded, directed and maintained so as to cast no direct beam up into the sky, on a public or private way, pedestrian way, or adjacent property, and shall be of sufficiently low intensity that it shall not cause a glare or reflection that may constitute a traffic hazard or a nuisance.

SIGNS shall not be illuminated between 9:00 p.m. and 5:00 a.m., except during business hours.

SIGNS, which are oscillating, internally illuminated, flashing or operating with moving parts are not permitted, except for internally illuminated signs as allowed in Section 6.3 of the Zoning Bylaw.

Each PERMANENT SIGN shall display its permit number at a location readily visible to the inspector.

**Finding:** The Planning Board finds that Section 6.3 of the Zoning Bylaw was amended through a Special Town Meeting vote on October 30, 2021 to allow a single internally illuminated window sign not exceeding three (3) square feet per establishment within the Business District.

7.38 **Finding:** The Special Permit Modification #1, dated October 27, 2020, considered the Petitioner's request for recognition of the pre-existing non-conforming status of internally lit signage at 118 Great Road.

**Finding:** Condition 7.4 in the original Special Permit states that "Non-conforming, internally lit signage at 118 Great Road shall be removed."

**Finding:** The Petitioner indicated that the internally lit signage at the Bank of America ATM site at 118 Great Road was installed prior to the Zoning Bylaw amendment prohibiting internally lit signage.

**Finding:** The Planning Board finds that the 118 Great Road ATM is a pre-existing non-conforming internally lit sign. The Zoning Bylaw was amended at the 1985 Annual Town Meeting to make several changes to the sign bylaw, including adding the prohibition on internally lit signage. The Building Inspector's submission of a Sign Permit dated 2.15.1982, describes the internally illuminated retail bank sign predating the 1985 zoning bylaw change.

**Condition:** With the exception of the pre-existing/non-conforming retail bank sign at 118 Great Road, all non-conforming, internally lit signage at 118 Great Road shall be removed.

**Finding:** In October 2020, the Petitioner stated that Bank of America will be replacing all signage within a three year timeframe at their Massachusetts locations. Based on the anticipated lease renewal, the Planning Board agreed to a three year timeframe for replacement of noncompliant signage.

**Condition:** The Petitioners shall require all pre-existing, non-conforming signage to be updated to conform to the current Zoning Bylaw standards upon replacement within three years of March 26, 2020, the date the original Special Permit was approved.

7.39 **Finding:** Prior to the 2019 Application for Special Permit a "For Lease" sign servicing 108 Great Road was removed by the contractor constructing the Lower Village Traffic Improvements. In the event the Petitioners propose to locate a lease sign for 108 Great Road, the sign shall conform to the dimensions of the lease sign previously removed by the Town during the construction of the Lower Village Improvements. In the event that a lease sign is proposed at the site, it shall conform to the dimensions of the sign previously removed.

### **Trail Access to Abutting Open Space**

7.40 **Finding:** The Stow Conservation Commission indicated that the property at 118 Great Road borders upon the Stow Town Forest and that with the number of entrances already managed by the Conservation Commission, the Commission does not recommend access to Town Forest or the Heritage Lane Open Space from 118 Great Road.

Finding: The Planning Board finds that no trail access is proposed in the Application.

**Condition:** Trail access shall not be proposed or created at either 108 or 118 Great Road without prior approval from the Planning Board, with input from the Conservation Commission.

### **Outdoor Dining**

7.41 **Finding:** The Planning Board finds that Stow Café, located within 118 Great Road, has provided tables and seating for accessory outdoor dining service.

**Finding:** The Planning Board finds that outdoor dining is allowed only through a Special Permit in accordance with Section 3.3.2.4 of the Zoning Bylaw.

**Condition:** Stow Café must put forth an application for a Special Permit granted through the Planning Board in accordance with Section 3.3.2.4 of the Zoning Bylaw.

### **Legal Provisions**

- 7.42 **Finding:** The foregoing required modifications and conditions have been stated for the purpose of emphasizing their importance, but are not intended to be all inclusive or to negate the remainder of the Bylaw, Rules, or other applicable laws and regulations. At the time of endorsement, the Plan must be in compliance with the Rules, except for the waivers granted herein.
- 7.43 **Condition:** This approval shall not be deemed approval by any other authority having its separate jurisdiction and inspection requirements.
- 7.44 **Finding:** The Board reserves the right to enter the property to review ongoing compliance with the conditions imposed within the Special Permits approved herein.
- 7.45 **Condition:** The Petitioner shall grant permission to agents of the Town of Stow, as said agency is determined by the Stow Planning Board, to enter, inspect and take whatever related actions are necessary to ensure completion of the ways and related infrastructure within the subject property.
- 7.46 **Condition**: This Special Permit/Site Plan Approval shall lapse in two (2) years from the date of this Decision unless substantial use or construction has commenced.
- 7.47 **Condition:** The terms, conditions and provisions of this Decision shall run with the land and shall be binding upon the Petitioner, its successors in interest and assigns, and shall be enforceable by the Town of Stow.
- 7.48 **Condition:** The Board hereby reserves its right and power to modify or amend the Plan and the terms and conditions of this Decision, with or without a public hearing, upon the request of the Petitioners or upon its own motion.
- 7.48 Condition: This Special Permit shall be recorded in the Middlesex South Registry of Deeds and duly indexed or noted on the Owner's Certificate of Title. Prior to issuance of a Building Permit, a copy of the recorded Decision, certified by the Registry, or notification by the Owner of the recording, including recording information, shall be furnished to the Town Clerk, the Building Commissioner and the Planning Board.

Bk: 81237 Pg: 297

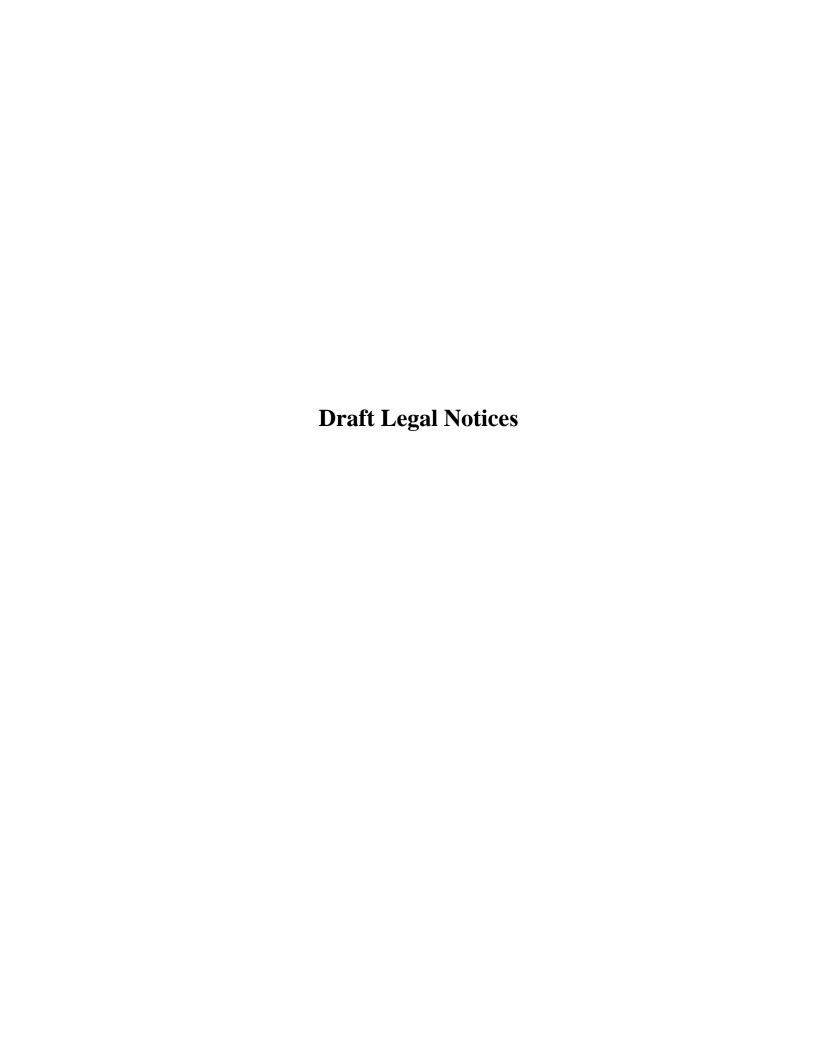
8.	AP	PE	AL	S
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Appeals, if any, shall be made pursuant to Section 17 of the Massachusetts General Laws, Chapter 40A and shall be filed within twenty (20) days after the date of filing this Decision with the Town Clerk.

Received and Filed

Volume <u>₹</u>, Page <u>200</u>20 5

This is to certify that the 20-day appeal period on this decision has passed and there have been no appeals made to this office.



## **DRAFT**

#### LEGAL NOTICE

## TOWN OF STOW PLANNING BOARD

## PUBLIC HEARING

December 12	, _2023, at _7:00	PM. in the Stow Town Building,
		tion of MAP Holdings LLC, Flint Road Realty LLC, JKC Properties LLC (name of Applicant)
for property located at	108-118 Great Road	, Stow, Massachusetts
Zoning Bylaw in order		mendment pursuant to Section _3.3.5 and 9.2_ of the Stow
	tified and shown as Parce	el(s) 86+87 on Assessor's Map(s) d attend the hearing.
A copy of the Applicati	on is available for review	at the Office of the Planning Board or the
Office of the Town Cle	rk during posted business	hours.

#### STOW PLANNING BOARD

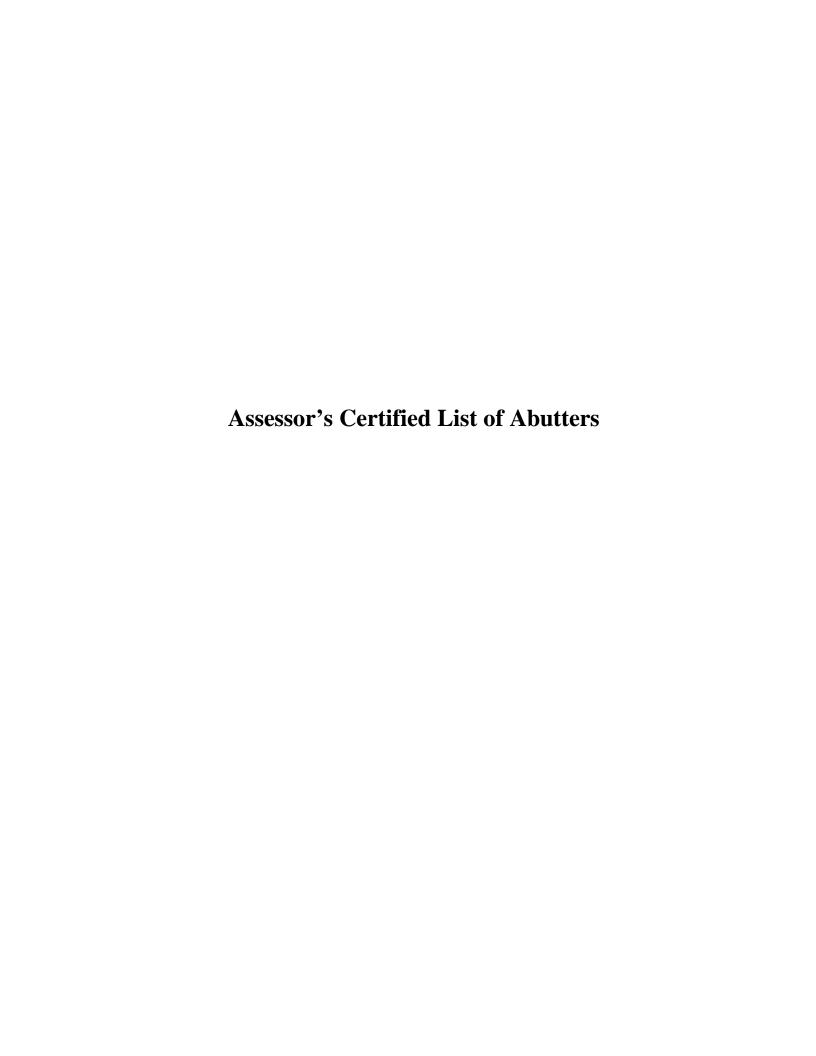
## **DRAFT**

#### LEGAL NOTICE

## TOWN OF STOW PLANNING BOARD

#### PUBLIC HEARING

Notice is hereby given	that the Stow Plan	ning Boai	rd will hold a public hearing on
December 12	,, at	7:00	PM. in the Stow Town Building,
Great Road, Stow, Mas	sachusetts on the	Application	on of MAP Holdings LLC, Flint Road Realty LLC, JKC Properties LLC
property located at	-118 Great Road		Stow, Massachusetts
for Special Permit and Stow Zoning Bylaw in	*	nendment	pursuant to Section 3.3.5 and 9.3 of the
permit a Dunkin Donuts F	Restaurant		
(Desc	ribe subject matte	r of the he	earing)
	tified and shown a interested persons		s) 86 + 87 on Assessor's Map(s) ttend the hearing.
A copy of the Applicati	on is available for	review at	at the Office of the Planning Board or the
Office of the Town Cle	rk during posted b	usiness h	ours.





10/12/22



## Town of Stow BOARD OF ASSESSORS

380 Great Road Stow, Massachusetts 01775-1122 (978) 897-4597

Email: Assessors2@Stow-MA.gov

## REQUEST FOR CERTIFIED ABUTTERS' LIST

Date of Request;	
Property Owner:	
Property Location:108-118 Great Road, Stow, MA 01775	
Parcel ID: (Map & Lot):	
Requesting Board: Planning Board	
Requestor Information:	
Name: Brian Levey, Esq. on behalf of MAP Holdings, LLC	
Mailing Address: c/o 155 Federal Street, Boston, MA 02110	
Email address:c/o BLevey@BDLaw.com	
Phone Number:	
FEE: \$20.00 for first 20 abutters or less:  PLUS: \$1.00 per abutter above 20 entries and \$2.00 per sheet of labels.	1E125 +2+2 24
Assessors' Office Use Only:	
Deposit: \$ Cash Check (check # 11777 )	
Addt'l Fee: \$ Cash Check (check #)	

The Board of Assessors has 10 business days to provide all Certified Lists of Abutters. The list is valid for 90 days from the date of Certification.

Applications submitted without all necessary information may be returned for completion.

# ABUTTERS LIST

D	L87
118 GREAT R	MAP R-29 PARCEI

PAGE	43	557	255	12	114	428	43	427	543	41	543	975	109	549	7	570	52
BOOK	44389	72042	72042	51375	55513	61436	44389	28554	26900	43710	26900	69094	30544	59529	579	43204	44697
CODE	01720	01754	01754	01720	02494	01720	01720	01775	01864	01775	01864	01775	01775	01775	01775	01775	01903
STATE	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
CITY	ACTON	MAYNARD	MAYNARD	ACTON	NEEDHAM	ACTON	ACTON	STOW	NORTH READING	STOW	NORTH READING	WOTS	WOTS	STOW	STOW	WOTS	BURI INGTON
MAILING ADDRESS	585 MASSACHUSETTS AVE	14 NASON STREET	14 NASON STREET	171 GREAT ROAD	75 SECOND AVE, STE 605	PO BOX 2350	585 MASSACHUSETTS AVE	380 GREAT ROAD	148 PARK STREET SUITE 3	380 GREAT ROAD	148 PARK STREET SUITE 3	24 LANES END	29 LANE'S END	19 LANE'S END	380 GREAT RD	12-14 RED ACRE RD	1 VAN DE GRAAFF DR SUITF 402
OWNER NAME 2	PRESTI MANAGEMENT CORP					C/O ACTON MANAGEMENT INC.	PRESTI MANAGEMENT CORPORATION	CONSERVATION COMMISSION				COFFMAN ANDREA	GRIFFIN SALLY M	LAWE DEIRDRE	LOWER COMMON		
OWNER NAME 1	PRESTI FAMILY LIMITED PARTNERSHIP	JKC PROPERTIES LLC	JKC PROPERTIES LLC	LOWER VILLAGE LLC	GREAT ROAD REAL ESTATE, LLC	132 GREAT ROAD STOW LLC	PRESTI FAMILY LIMITED PARTNERSHIP	TOWN OF STOW	HABITECH INC.	TOWN OF STOW	HABITECH INC	COFFMAN HAROLD DOUG	GRIFFIN STEPHEN	HALL PERRY JAMES	TOWN OF STOW	12 RED ACRE LLC	LINEAR RETAIL STOW #111.C
PROPERTY LOCATION	92 GREAT RD	108 GREAT RD	118 GREAT RD	124 GREAT RD	128 GREAT RD	132 GREAT RD	84 GREAT RD	0 HERITAGE LN #OFF	0 GREAT RD	0 LANE'S END	0 LANE'S END	24 LANE'S END	29 LANE'S END	19 LANE'S END	0 GREAT RD	12 RED ACRE RD #-14	117 GREAT RD
MAP/PARCEL	00R-29 000083	00R-29 000086	00R-29 000087	00R-29 000088	00R-29 000089	00R-29 000090	00R-29 00085A	00R-29 000858	00R-29 00100A	00R-29 00100B	00R-29 00100C	00R-29 0100-3	00R-29 0100-4	00R-29 0100-5	00R-30 000001	00R-30 000002	00R-30 00013A

JKC PROPERTIES LLC 14 NASON STREET MAYNARD MA 01754

JKC PROPERTIES LLC 14 NASON STREET MAYNARD MA 01754 LOWER VILLAGE LLC 171 GREAT ROAD ACTON MA 01720

GREAT ROAD REAL ESTATE, LLC 75 SECOND AVE, STE 605 NEEDHAM MA 02494

132 GREAT ROAD STOW LLC C/O ACTON MANAGEMENT INC PO BOX 2350 ACTON MA 01720 PRESTI FAMILY LIMITED PARTNERSHIP PRESTI MANAGEMENT CORPORATION 585 MASSACHUSETTS AVE ACTON MA 01720

TOWN OF STOW CONSERVATION COMMISSION 380 GREAT ROAD STOW MA 01775

HABITECH INC 148 PARK STREET SUITE 3 NORTH READING MA 01864 TOWN OF STOW 380 GREAT ROAD STOW MA 01775

HABITECH INC 148 PARK STREET SUITE 3 NORTH READING MA 01864 COFFMAN HAROLD DOUG COFFMAN ANDREA 24 LANES END STOW MA 01775 GRIFFIN STEPHEN GRIFFIN SALLY M 29 LANE'S END STOW MA 01775

HALL PERRY JAMES LAWE DEIRDRE 19 LANE'S END STOW MA 01775 TOWN OF STOW LOWER COMMON 380 GREAT RD STOW MA 01775 12 RED ACRE LLC 12-14 RED ACRE RD STOW MA 01775

LINEAR RETAIL STOW #1 LLC 1 VAN DE GRAAFF DR SUITE 402 BURLINGTON MA 01803

PRESTI FAMILY LIMITED PARTNERSHIP PRESTI MANAGEMENT CORP 585 MASSACHUSETTS AVE ACTON MA 01720





10/12/23

## Town of Stow BOARD OF ASSESSORS

380 Great Road Stow, Massachusetts 01775-1122 (978) 897-4597

Email: Assessors2@Stow-MA.gov

## REQUEST FOR CERTIFIED ABUTTERS' LIST

Date of Request:	12/23			
Property Owner:JKC	Properties, LLC			
Property Location:1	08-148 Great Road, Stow	, MA 01775		
Parcel ID: (Map & Lot	):R-29, 86 & 87			
Requesting Board:	Planning Board			
	Rec	questor Informati	on:	
Name: Brian Levey, Esq. o	n behalf of MAP Holdings	LLC		
Mailing Address:c/o	155 Federal Street, Bosto	n, MA 02110		
Email address:c/o BL	evey@BDLaw.com			
Phone Number:c/o 50	08-243-4250			
FEE: \$20.00 for firs	t 20 abutters or les			13 ABUTTERS
PLUS: \$1.00 per abu		T	sheet of labels.	+ ZO 124
	Asses	sors' Office Use	Only:	
Deposit: \$	Cash 🔲	Check 🔽	(check # 1)0	6)
Addt'l Fee: \$	Cash 🔲	Check	(check #	)

The Board of Assessors has 10 business days to provide all Certified Lists of Abutters. The list is valid for 90 days from the date of Certification.

Applications submitted without all necessary information may be returned for completion.

MAP/PARCEL	PROPERTY LOCATION	OWNER NAME 1	OWNER NAME 2	MAILING ADDRESS	CUL	STATE	ZIP	DEED	DEED
00R-29 000083	92 GREAT RD	PRESTI FAMILY LIMITED PARTNERSHIP	PRESTI MANAGEMENT CORP	585 MASSACHUSETTS AVE	ACTON	I MA	01720	44389	43
00R-29 000085	108 GREAT RD	JIKC PROPERTIES LLC		14 NASON STREET	MAYNARD	M	01754	72042	557
0000087	118 GREAT RD	JKC PROPERTIES LLC		14 NASON STREET	MAYNARD	, MA	01754	72042	557
00R-29 000068	124 GREAT RD	LOWER VILLAGE LLC		171 GREAT ROAD	ACTON	I. M.	01720	51375	12
00R-29 00085A	84 GREAT RD	PRESTI FAMILY LIMITED PARTNERSHIP	PRESTI MANAGEMENT CORPORATION	585 MASSACHUSETTS AVE	ACTON	W.	01720	44389	43
00R-29 00085B	0 HERITAGE LN #OFF	TOWN OF STOW	CONSERVATION COMMISSION	380 GREAT ROAD	STOW	W	01775	28554	427
00R-29 00100A	0 GREAT RD	HABITECH INC		148 PARK STREET SUITE 3	NORTH READING	W	01864	26900	543
00R-29 00100C	0 LANE'S END	HABITECH INC		148 PARK STREET SUITE 3	NORTH READING	W	01864	26900	543
00R-29 0100-3	24 LANE'S END	COFFMAN HAROLD DOUG	COFFMAN ANDREA	24 LANES END	STOW	MA	01775	69094	576
00R-30 000001	0 GREAT RD	TOWN OF STOW	LOWER COMMON	380 GREAT RD	STOW	W	01775	579	7
00R-30 000002	12 RED ACRE RD #-14	12 RED ACRE LLC		12-14 RED ACRE RD	STOW	M	01775	43204	570
00R-30 000072	5 RED ACRE RD	SHOEMAKER JR PHILIP 8	SHOEMAKER MICHELE L	5 RED ACRE ROAD	WOTS	MA	01775	27783	o.
00R-30 00013A	117 GREAT RD	LINEAR RETAIL STOW #1 LLC.		1 VAN DE GRAAFF DR SUITE 402	BURLINGTON	M	01803	44697	52

Certified by the Stow Board of Assessors: Letterities Fig.

JKC PROPERTIES LLC 14 NASON STREET MAYNARD MA 01754

JKC PROPERTIES LLC 14 NASON STREET MAYNARD MA 01754 LOWER VILLAGE LLC 171 GREAT ROAD ACTON MA 01720

PRESTI FAMILY LIMITED PARTNERSHIP PRESTI MANAGEMENT CORPORATION 585 MASSACHUSETTS AVE ACTON MA 01720 TOWN OF STOW CONSERVATION COMMISSION 380 GREAT ROAD STOW MA 01775 HABITECH INC 148 PARK STREET SUITE 3 NORTH READING MA 01864

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12 RED ACRE LLC 12-14 RED ACRE RD STOW MA 01775 SHOEMAKER JR PHILIP B SHOEMAKER MICHELE L 5 RED ACRE ROAD STOW MA 01775 LINEAR RETAIL STOW #1 LLC 1 VAN DE GRAAFF DR SUITE 402 BURLINGTON MA 01803

PRESTI FAMILY LIMITED PARTNERSHIP PRESTI MANAGEMENT CORP 585 MASSACHUSETTS AVE ACTON MA 01720



#### MAP HOLDINGS, LLC

#### MANAGER'S CERTIFICATE

#### October 26, 2023

The undersigned, Mark A. Pesce, hereby certifies that he is the duly appointed and acting Manager of MAP Holdings, LLC, a Massachusetts limited liability company (the "Company"), and that, as such, he is duly authorized to execute and deliver this Manager's Certificate on behalf of the Company.

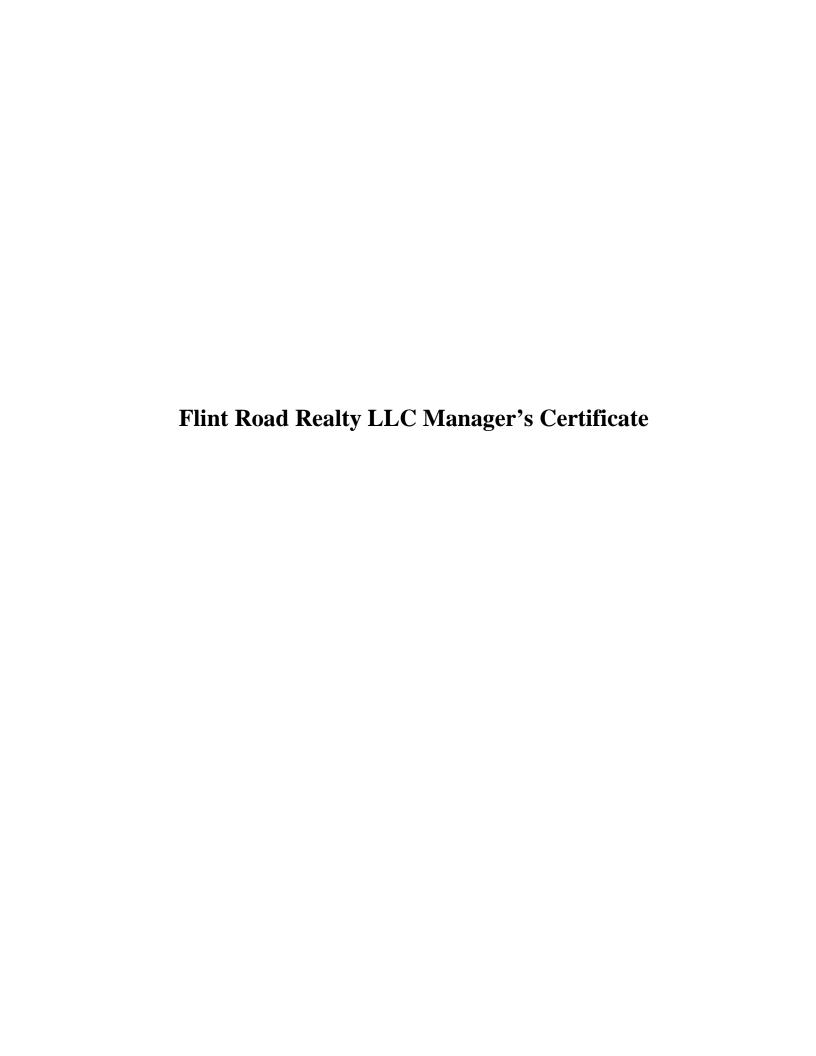
The undersigned hereby further certifies on behalf of the Company, in his capacity as the Manager of the Company and pursuant to the Company's Operating Agreement dated as of September 3, 2019, that he is authorized, as Manager, to execute and file any applications, requests for approval, and any submissions related thereto, for land use, zoning, and health and safety permits and approvals, including, without limitation, site plan and special permit approvals and extensions, with any and all local, state, and federal permitting authorities, including, without limitation, the Town of Stow, Massachusetts, regarding the real property located at 108-118 Great Road in Stow, Massachusetts.

IN WITNESS WHEREOF, the undersigned has executed this Manager's Certificate on behalf of the Company as Manager as of the date first written above.

MAP HOLDINGS, LLC,

a Massachusetts limited liability company

Mark A. Pesce, Manager



#### FLINT ROAD REALTY LLC

#### MANAGER'S CERTIFICATE

#### October 26, 2023

The undersigned, Mark A. Pesce, hereby certifies that he is the duly appointed and acting Manager of Flint Road Realty LLC, a Massachusetts limited liability company (the "Company"), and that, as such, he is duly authorized to execute and deliver this Manager's Certificate on behalf of the Company.

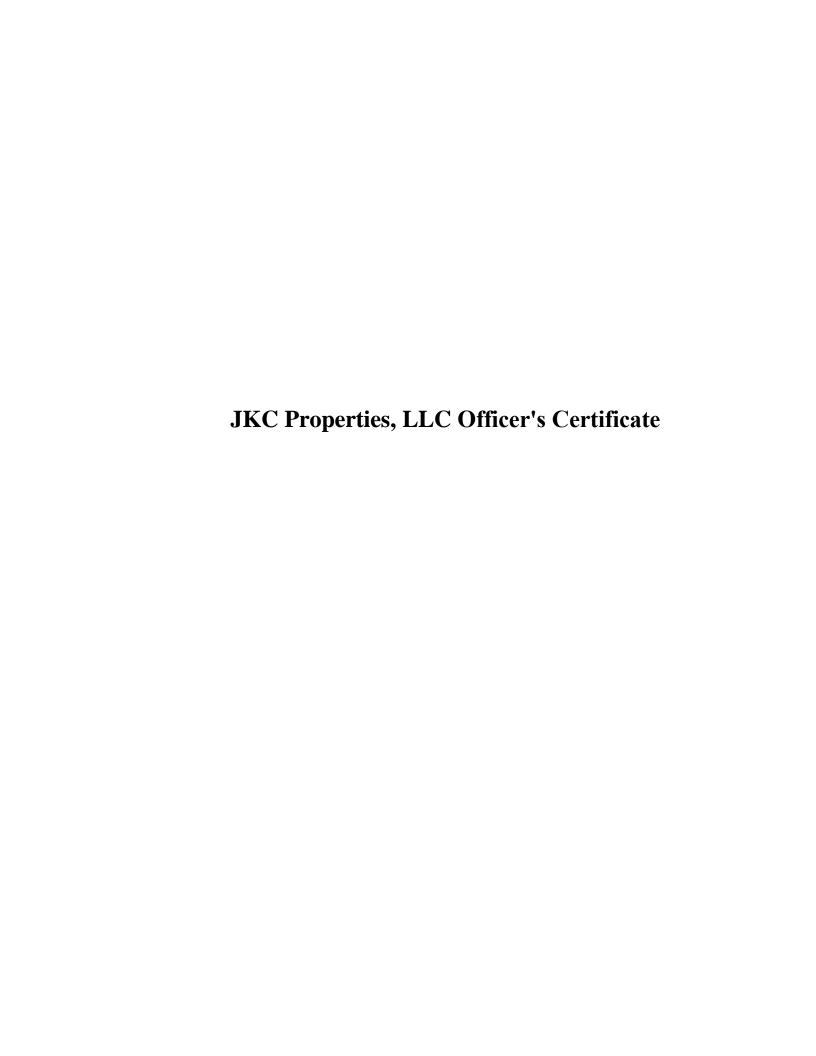
The undersigned hereby further certifies on behalf of the Company, in his capacity as the Manager of the Company and pursuant to the Company's Operating Agreement dated as of October 17, 2023, that he is authorized, as Manager, to execute and file any applications, requests for approval, and any submissions related thereto, for land use, zoning, and health and safety permits and approvals, including, without limitation, site plan and special permit approvals and extensions, with any and all local, state, and federal permitting authorities, including, without limitation, the Town of Stow, Massachusetts, regarding the real property located at 108-118 Great Road in Stow, Massachusetts.

**IN WITNESS WHEREOF**, the undersigned has executed this Manager's Certificate on behalf of the Company as Manager as of the date first written above.

Flint Road Realty LLC

a Massachusetts limited liability company

By: Mark A. Pesce, Manager



#### JKC PROPERTIES, LLC

#### OFFICER'S CERTIFICATE

#### October 27, 2023

The undersigned, John J. Cramer, hereby certifies that he is the duly appointed and acting President of JKC Properties, LLC, a Massachusetts limited liability company (the "Company"), and that, as such, he is duly authorized to execute and deliver this Officer's Certificate on behalf of the Company.

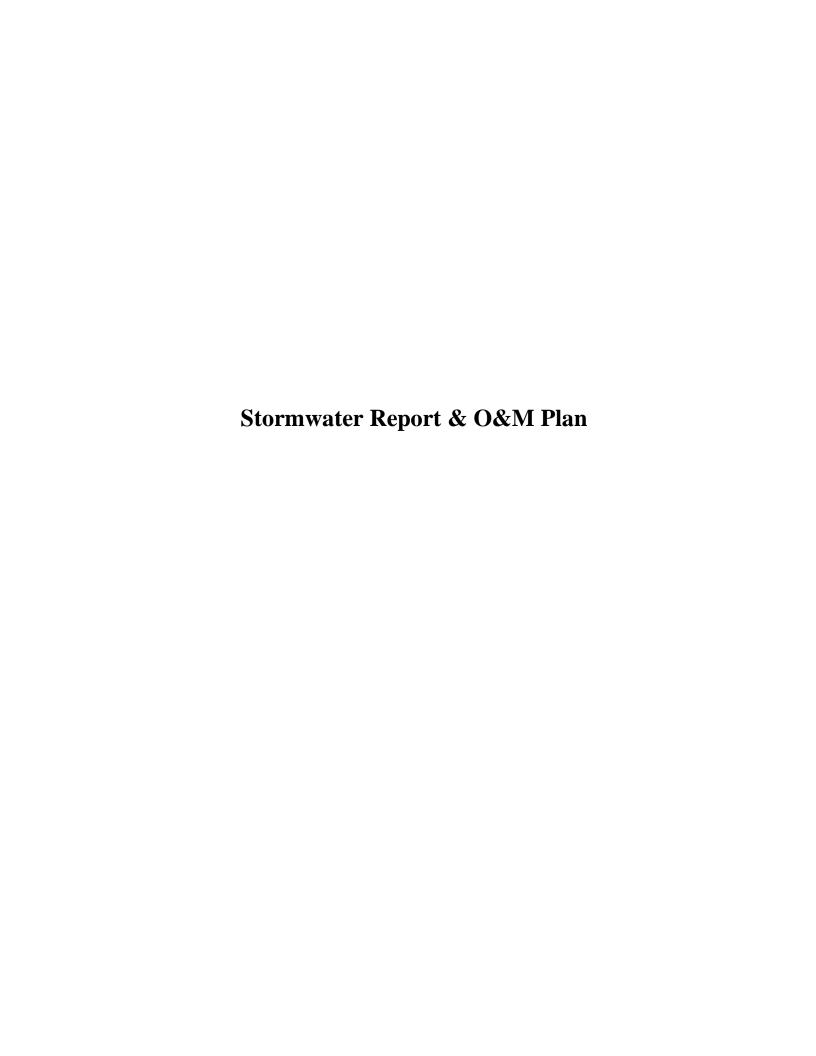
The undersigned hereby further certifies on behalf of the Company, in his capacity as the President of the Company and pursuant to the Company's Operating Agreement dated as of May 18, 2018, that he is authorized, as President, to execute and file any applications, requests for approval, and any submissions related thereto, for land use, zoning, and health and safety permits and approvals, including, without limitation, site plan and special permit approvals and extensions, with any and all local, state, and federal permitting authorities, including, without limitation, the Town of Stow, Massachusetts, regarding the real property located at 108-118 Great Road in Stow, Massachusetts

IN WITNESS WHEREOF, the undersigned has executed this Officer's Certificate on behalf of the Company as President as of the date first written above.

JKC PROPERTIES, LLC

a Massachusetts limited liability company

John J. Cramer, President



## **Stormwater Management Report**

For

## 108-118 Great Road

Stow, MA



October 25, 2019

Revised: November 2, 2023

Applicant/Owner:

JKC Properies, LLC 14 Nason Street, Suite 302 Maynard, MA 01754

Stamski And McNary, Inc. Engineering - Planning – Surveying 1000 Main Street; Acton, MA 01720 (978) 263-8585

## **Table of Contents**

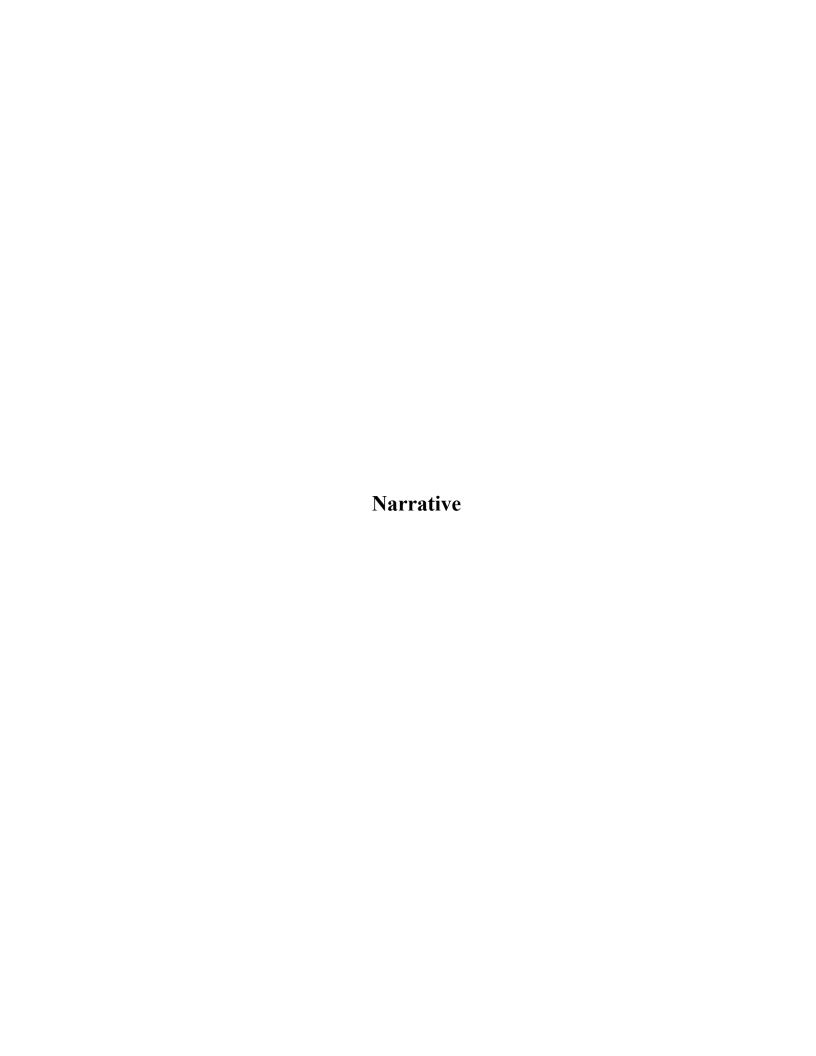
Narrative

Post-Development Hydrology

Drainage Maps

Soil Logs

Stormwater Operation & Maintenance (under separate cover)



#### **Stormwater Narrative**

The project is located at 108-118 Great Road in Stow, MA. The site is approximately 2.51 acres with residential lots to the southwest, Great Road to the north, commercial lots to the west and east, and Conservation land to the southeast. There are two buildings on site with a large parking area.

The Soil Survey for the site indicates that the soils consist of Merrimac-Urban Land Complex, Hydrologic Group A.

The proposed project consists of rehabilitating the vacant restaurant building into a Dunkin Donuts. Portions of extraneous pavement are also proposed to be removed, decreasing the total impervious surfaces on the lot, therefore decreasing the rate and volume of runoff leaving the site. There are two existing leaching catch basins in the low spots of the parking lot that historically have puddled during large rain events. To mitigate this, a system of subsurface chambers was designed to hold and infiltrate runoff up to and including the 10-year storm event. The proposed rehabilitated building's roof is also proposed to connect to these subsurface chambers.

Attached is a report showing the capacity of the subsurface chambers to handle the 10-year storm event.

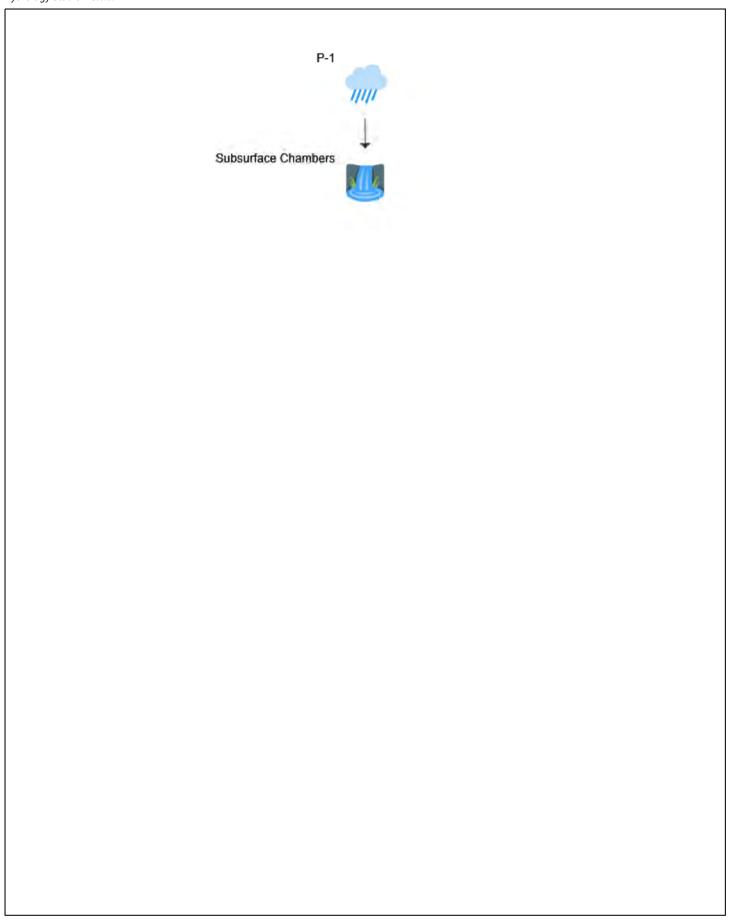
#### **Design Basis**

- 1. The twenty-four-hour rainfall, taken from N.R.C.S. publications, are 6.5 inches for the 100 Year Storm, 5.3 inches for the 25 Year Storm, 4.5 inches for the 10 Year Storm, and 3.1 inches for the 2 Year Storm event.
- 2. The soil types of the site were taken from the N.R.C.S. Soil Survey Map for Stow.



Basin Model

Hydrology Studio v 3.0.0.27 11-01-2023



#### Project Name:

## Hydrograph 2-yr Summary Hydrology Studio v 3.0.0.27

11-01-2023

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	NRCS Runoff	P-1	2.267	12.07	6,778			
2	Pond Route	Subsurface Chambers	0.000	11.07	0.000	1	214.04	2,143

#### Project Name:

# Hydrograph 10-yr Summary

11-01-2023

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	NRCS Runoff	P-1	3.968	12.07	11,924			
2	Pond Route	Subsurface Chambers	0.000	10.97	0.000	1	217.00	4,767

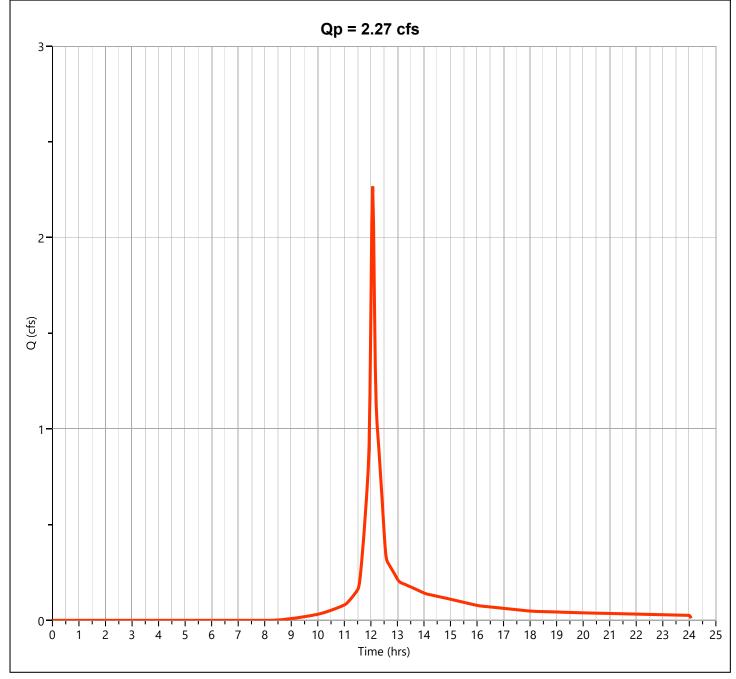
Worksheet 2:	Runoff curv	ve number and	d runoff

SM-6189B

Project:	108-118 Great Road	By DJC	Date	11/2/23			
Location:	Stow, MA	Checked	Date		•		
Circle one:	Present Developed	P1					
1. Runoff curve number (CN)							
Soil name and hydrologic	Cover descript (cover type, treatment, and			CN 1/		Area	Product of CN x Area
group (appendix A)	hydrologic cond percent impervi unconnected/connectec area ratio)	ous:	Table 2-2	Fig. 2-3	Fig. 2-4	Acres	
Merrimac-Urban 626B/255C A	Open Space		39			0.29	11.37
Merrimac-Urban 626B/255C A	Woods		30			0.00	0.00
Merrimac-Urban 626B/255C A	Gravel		76			0.00	0.00
Merrimac-Urban 626B/255C A	Impervious		98			0.95	93.06
Merrimac-Urban 626B/255C A	Brush		30			0.00	0.00
1/ Use only one CN source per	line.				Totals =	1.24	104.43
CN	(weighted) = total product = total area	104.43 =	84.15	; Use	CN =	84.1	1

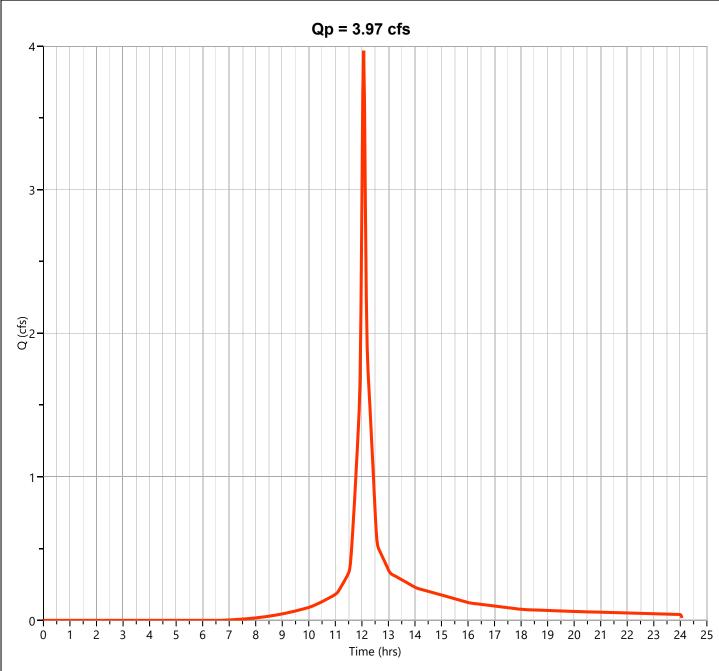
## P-1 Hyd. No. 1

Hydrograph Type	= NRCS Runoff	Peak Flow	= 2.267 cfs
Storm Frequency	= 2-yr	Time to Peak	= 12.07 hrs
Time Interval	= 2 min	Runoff Volume	= 6,778 cuft
Drainage Area	= 1.24 ac	Curve Number	= 84.1
Tc Method	= User	Time of Conc. (Tc)	= 6.0 min
Total Rainfall	= 3.10 in	Design Storm	= Type III
Storm Duration	= 24 hrs	Shape Factor	= 484



## P-1 Hyd. No. 1

Hydrograph Type	= NRCS Runoff	Peak Flow	= 3.968 cfs
Storm Frequency	= 10-yr	Time to Peak	= 12.07 hrs
Time Interval	= 2 min	Runoff Volume	= 11,924 cuft
Drainage Area	= 1.24 ac	Curve Number	= 84.1
Tc Method	= User	Time of Conc. (Tc)	= 6.0 min
Total Rainfall	= 4.50 in	Design Storm	= Type III
Storm Duration	= 24 hrs	Shape Factor	= 484



## **Subsurface Chambers**

## Hyd. No. 2

Ну	drograph Type	= Pond Route		Peak Flow	= 0.000 cfs
Sto	orm Frequency	= 2-yr		Time to Peak	= 11.07 hrs
Tim	ne Interval	= 2 min		Hydrograph Volume	= 0.000 cuft
Infl	ow Hydrograph	= 1 - P-1		Max. Elevation	= 214.04 ft
Poi	nd Name	= Subsurface Chambers		Max. Storage	= 2,143 cuft
Pon	d Routing by Storage Ir	ndication Method			
			Qp = 0.00 cfs		
	3				
	2				
	_				
Q (cfs)	1				
σ					
	-				
	0				
	1				
-	-1 <del>- </del>	2 3 4	5 6 7	8 9 1	10 11 12
			Time (hrs)		
		— P-1	— Subsurface Chamber	rs	

## **Subsurface Chambers**

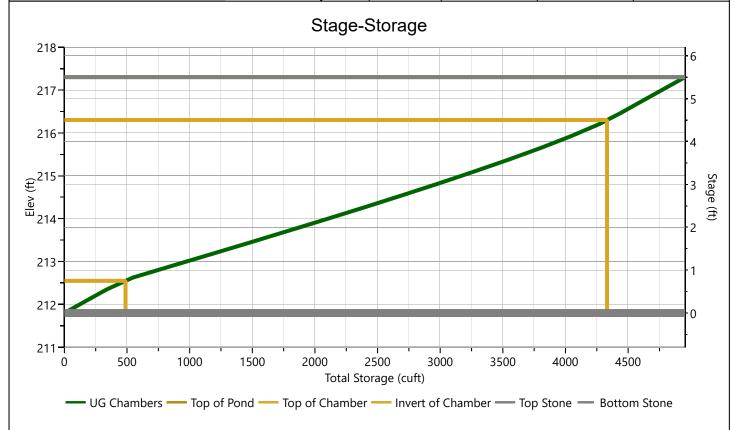
## Hyd. No. 2

Hydrograph Type	= Pond Route		Peak Flow	= 0.000 cfs
Storm Frequency	= 10-yr		Time to Peak	= 10.97 hrs
Time Interval	= 2 min		Hydrograph Volume	= 0.000 cuft
Inflow Hydrograph	= 1 - P-1		Max. Elevation	= 217.00 ft
Pond Name	= Subsurface Chambers		Max. Storage	= 4,767 cuft
Pond Routing by Storage Ind	lication Method			
		Qp = 0.00 cfs		
47				
-				
3-				
<u> </u>				
2				
Q (cfs)				
σ				
1-				
-				
0				
-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -	2 3 4	5 6	7 8 9	10 11
	2 3 4	Time (hrs)	, 0 3	10 11
	— P-	1 — Subsurface Chambers	3	

## **Subsurface Chambers**

## Stage-Storage

StormTech® MC-3500™ C	Stage / Storage Table							
Description	Input	Stage (in)	Elevation (ft)	Contour Area (sqft)	Incr. Storage (cuft)	Total Storage (cuft)		
Chamber Height, in	45				0.000	0.000		
Chamber Shape	Arch	0.0 3.3	211.80 212.08	1,537 1,537	0.000 169	0.000 169		
Chamber Width, in	77	6.6	212.35	1,537	169	338		
	7.47	9.9	212.63	1,537	207	545		
Installed Length, ft	7.17	13.2	212.90	1,537	315	860		
No. Chambers	23	16.5	213.18	1,537	314	1,175		
D 01 1 01 "	0.500	19.8	213.45	1,537	313	1,487		
Bare Chamber Stor, cuft	2,528	23.1	213.73	1,537	310	1,797		
No. Rows	3	26.4	214.00	1,537	306	2,104		
Chase Bahyaan Bayya in		29.7	214.28	1,537	302	2,406		
Space Between Rows, in	6	33.0	214.55	1,537	296	2,702		
Stone Above, in	12	36.3	214.83	1,537	290	2,992		
Ctoro Bolow in	9	39.6	215.10	1,537	281	3,273		
Stone Below, in	9	42.9	215.38	1,537	271	3,544		
Stone Sides, in	24	46.2	215.65	1,537	259	3,803		
Stone Ends, in	24	49.5	215.93	1,537	243	4,046		
Stolle Elius, III	24	52.8	216.20	1,537	220	4,265		
Encasement Voids, %	40.00	56.1	216.48	1,537	182	4,447		
Encasement Bottom Elevation, ft	211.80	59.4	216.75	1,537	169	4,616		
Endasement Dottom Lievation, it	211.00	62.7	217.03	1,537	169	4,785		
		66.0	217.30	1,537	169	4,954		

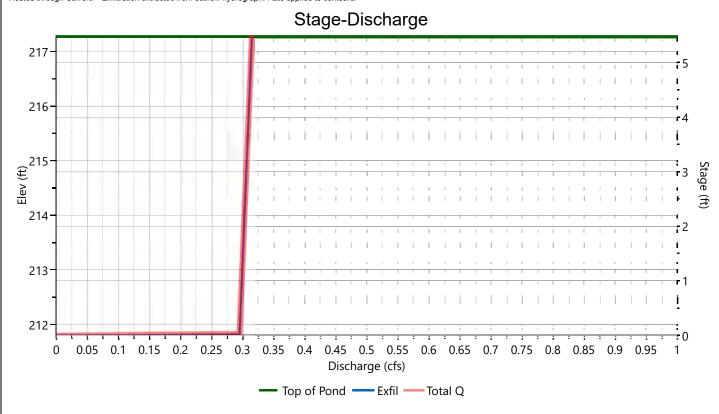


## **Subsurface Chambers**

## Stage-Discharge

Culvert / Ouifices	Culvent		Dayforeted Discr				
Culvert / Orifices	Culvert	1 2		3	Perforated Rise	Perforated Riser	
Rise, in					Hole Diameter, in		
Span, in					No. holes		
No. Barrels					Invert Elevation, ft		
Invert Elevation, ft					Height, ft		
Orifice Coefficient, Co					Orifice Coefficient, Co		
Length, ft							
Barrel Slope, %							
N-Value, n	0.000						
Waire	Din au*	Weirs			A a !!!! c		
Weirs	Riser*	1	2	3	Ancillary		
Shape / Type	Circular				Exfiltration, in/hr	8.27**	
Crest Elevation, ft							
Crest Length, ft							
Angle, deg							
Weir Coefficient, Cw							

\*Routes through Culvert. \*\*Exfiltration extracted from outflow hydrograph. Rate applied to contours.



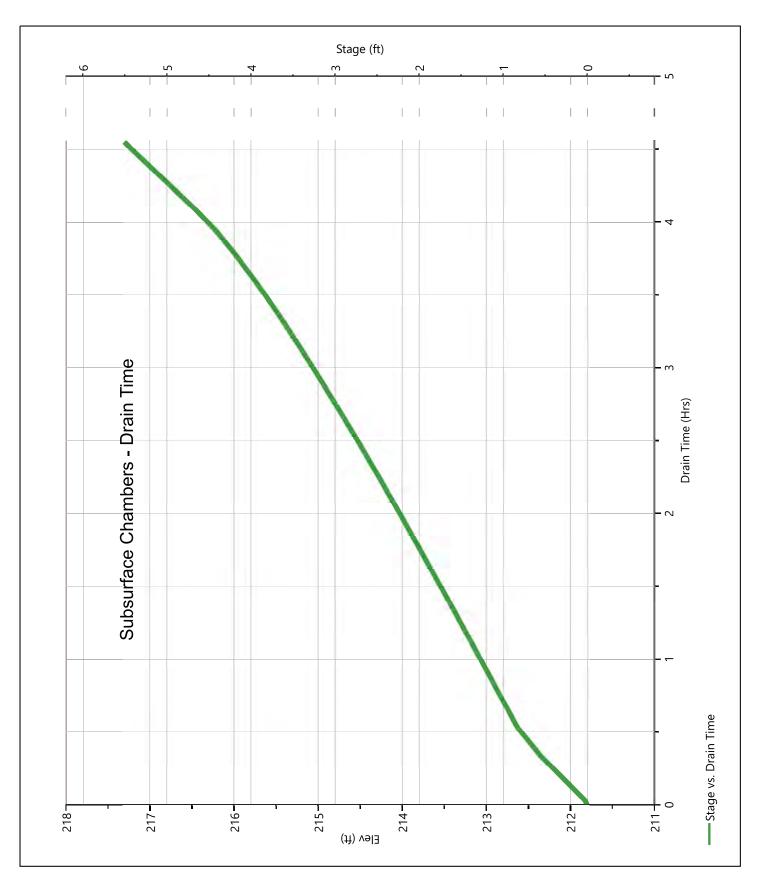
## **Subsurface Chambers**

## **Stage-Storage-Discharge Summary**

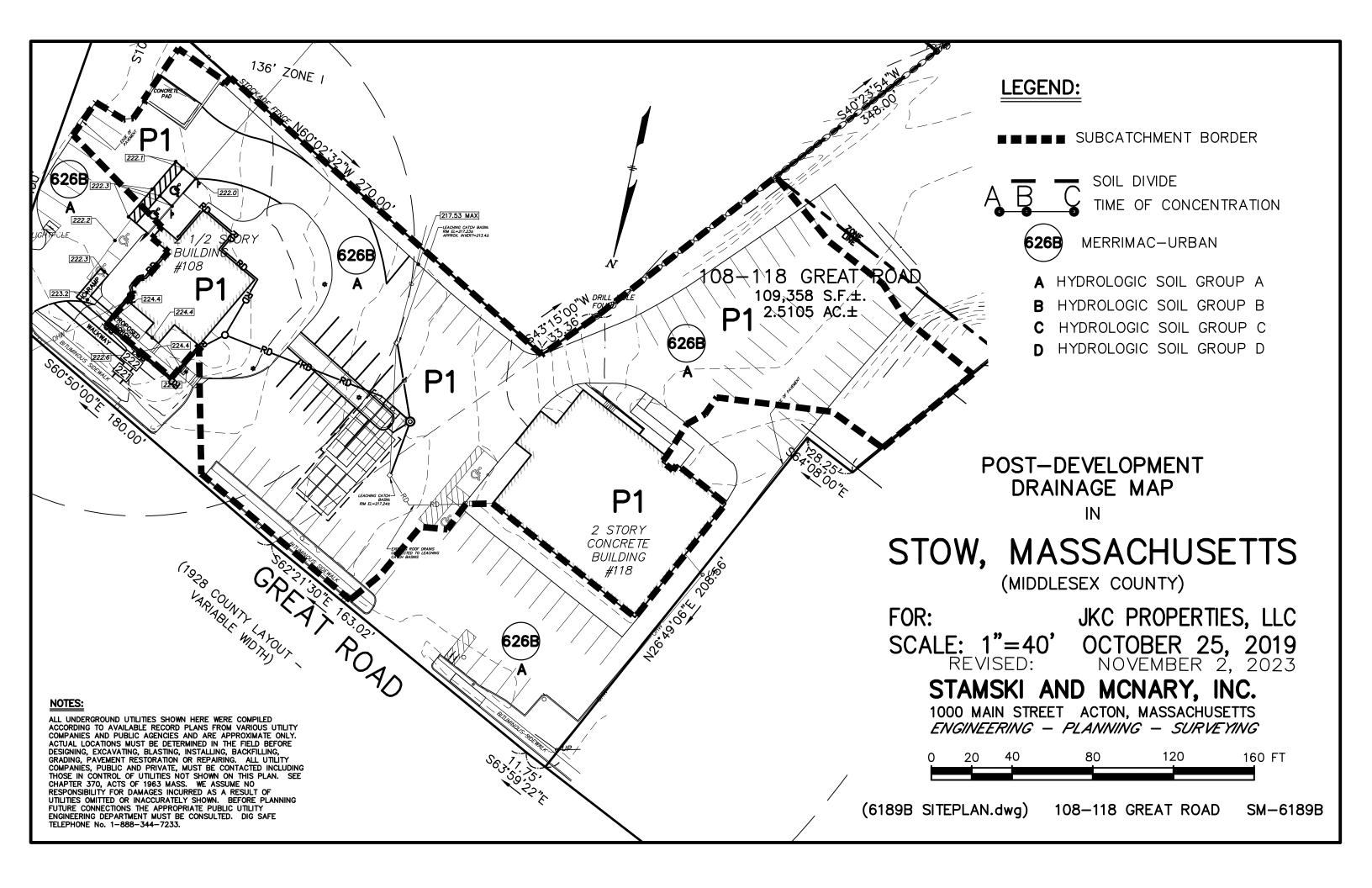
Stage Elev.		Storage	Culvert	(	Orifices, cf	s	Riser		Weirs, cfs		Pf Riser	Exfil	User	Total
(ft)	(ft)	(cuft)	(cfs)	1	2	3	(cfs)	1	2	3	(cfs)	(cfs)	(cfs)	(cfs)
0.00	211.80	0.000										0.000		0.000
0.28	212.08	169										0.295		0.295
0.55	212.35	338										0.296		0.296
0.83	212.63	545										0.297		0.297
1.10	212.90	860										0.298		0.298
1.38	213.18	1,175										0.299		0.299
1.65	213.45	1,487										0.300		0.300
1.93	213.73	1,797										0.301		0.301
2.20	214.00	2,104										0.302		0.302
2.48	214.28	2,406										0.303		0.303
2.75	214.55	2,702										0.304		0.304
3.03	214.83	2,992										0.305		0.305
3.30	215.10	3,273										0.306		0.306
3.58	215.38	3,544										0.307		0.307
3.85	215.65	3,803										0.308		0.308
4.13	215.93	4,046										0.309		0.309
4.40	216.20	4,265										0.310		0.310
4.68	216.48	4,447										0.311		0.311
4.95	216.75	4,616										0.312		0.312
5.23	217.03	4,785										0.313		0.313
5.50	217.30	4,954										0.314		0.314

## **Subsurface Chambers**

## **Pond Drawdown**











-	A. Facility Information				
	Stephen Steinberg				
	118 Great Road				
	Street Address Stow			Map/Lot#	75
	City			Slafe Tip Code	
	B. Site Information				
	1. (Check one) 🔀 New Construction		☐ Upgrade	☐ Repair	
	2. Soil Survey Available?	X Yes	o <sub>N</sub> □	If yes: Web Soil Survey	355C
	Windsor Loans Cand			Source Source	Soil Map Unit
	Louse and, glacinfluine	dollosit	deried	Soil Limitations February officer of	
က်	Geologic/Parent Maferial flyth gravitic schiol (gne.) is Surficial Geological Report Available? Tes	cerifc/schiol	/gneriss	Landform If yes:	
4	Flood Rate Insurance Map			Year Published/Source Publication Scale	cale Map Unit
	Above the 500-year flood boundary? 因 Yes If Yes, continue to #5.	₹ Yes	oN	Within the 100-year flood boundary?   Yes	oN 🗆
5	Within a velocity zone?	□ Yes	oN ⊠		
	6. Within a Mapped Wetland Area?	□ Yes	N N	MassGIS Wetland Data Layer.	
1	Current Water Resource Conditions (USGS):	JSGS);	05/2018	Range: Above Normal S Normal Below Normal	Below Normal



120			view ( <i>minimu</i> on Hole Numbe		P-1	5/10	18	Time		Clau	Carlotte Street Street Street	ilea)
1.	Locati	on				Date		ime		Weather	9	
	Groun	d Elevation	at Surface of H	ole:			Latitud	te/Longitu	ide:	1		
	Descri	ption of Lo	cation: 7	se hind	feet dump	mer! #	3)1				-	
2.	Land t	Jse	Woodlan	d				1	No		7	1.27
			o.g., woodland, agric		vacant lot, etc.)	Hill	5	urface Ston	es (e.g., co	bbles, stones, b	oulders, etc.)	Slope (%
3.	Distan	ces from:	egetation Open Water		>100'		nage Way	>/ feet	00'	on Landscape Wellands		S, TS) > 100° leet
			Property Lin		JIO,	Drink	ing Water W	ell >(	00'	Other	. 19	feet
4.	Parent	Material;	_Outer	ash			Unsuitabl		ls Preser	nt: 🔲 :		Z No
5.	Estimal	lwater Obs led Depth t	slurbed Soil erved:	ater: inch	☑ No >138"	] Impervi	ous Layer(s)  If yes:  elevation	California (	Weathern —— eeping from	ed/Fractured R	ock B ————————————————————————————————————	edrock Waler in Hole
		10 10 10 10 10 10 10 10 10 10 10 10 10 1	1,700 10	Redo	oximorphic Fea	tures	700557		Fragments			
Dep	th (in.)	Soll Horizon Layer	/Soll Matrix: Color- Moist (Munsell)	Depth	Color	Percent	Soli Texture (USDA)	Gravel	Cobbles & Stones	Soil Structure	Soil Consistence (Maist)	Other
0	-12	Ap	104R3/2	~	-	-	SL	-	~	M	F	
12-	24	BW	10 4R 4/G	AC.	_	-	Sard	) and	100	SG	Loose	
74-	138	C	104R6/3	120	- 4	Α,	Course	1).	-	56	Loose	
	×-	-					-					
		-						1 = 1	1		1	
-								1				
-												
P	ddition	al Notes:										
-												



	Observation	n Hole Number		holes req	5/10	3106	Day to	ALT: 100	Clos		
. Locati	ion				Date	11	me		Weather	9	
		at Surface of Ho	ila-			Leatherst	:/Longitu	200			
				feet	Tall Tall		Longitu	ae: _			
Descr	iption of Lac	100	ehind		Dun	poter					_
. Land	Use	.g., woodland, agricu	odlar	0					No		Slope
	/e	Brush getation	itural tielo,	vacant lot, etc.)		Su	rface Slon	es (e.g., co	bbles, stones, b	oulders, etc.)	Slope
Distan	veces from:	ogetation Open Water	Pody	100/	Landform	10/		Position	on Landscape		
Distan	cos nom,		71561	S/00'		age Way	feet	100'	Wetlands		>100 eel
		Property Line		7/0'	Drink	ing Water We	1 7/	00'	Other	7	ect
Parent	Material:	_ Outw	ash			Unsuitable			nt: 🗆		⊘ No
WY STATE	-		Lancas C	LIUULI L	40.00						
If Yes;		turbed Soil	☐ Fill N		1 Impervio	ous Layer(s)		Weather	ed/Fractured R	tock 🗆 B	edrock
Ground	dwaler Obse	erved:		No		If yes:	Donth M	eeping from	- Dil	Oneth Claudine	Afeles Is I
Estima	ted Depth to	High Groundwa	iter: 7	150"			Depth vv	eeping iron	(PIL	Depth Standing 1	water in F
						elevation					
Deep C	Observation	Hole Number:	11	)-2							
- Venez	Sall Harizoni	Soli Matrix: Color-	Redo	ximorphic Fea	tures	6.07	Coarse F	ragments Volume		Soil	
epth (in.)	Layer	Moist (Munsell)	Depth	Color	Percent	Soil Texture (USDA)	Gravel	Cobbles & Stones	Soll Structure		Other
5 137 1	1 1 2 1 1 1		-		~						
)-8	Ao	10 YR 3/2				SL	_	7	M	F	
) - 8 :- 20	Ap But	104R 3/2	-	_	^	Sand	1	1 1	M SG	F	
				( )	-		- 17.	1 1 1			
- 20		104R 4/6	1	( )	^	Sand	- 17.	, , ,	SG	Loose	
- 20		104R 4/6	1	2	^	Sand	- 17.		SG	Loose	
- 20		104R 4/6	1	2	^	Sand	17.		SG	Loose	
- 20		104R 4/6	1		^	Sand	17.		SG	Loose	
- 20 0-150	Bw	104R 4/6	1	2	^	Sand	17.		SG	Loose	
- 20 0-150		104R 4/6	1		^	Sand	17.		SG	Loose	
· 20	Bw	104R 4/6	1		^	Sand	17.	1	SG	Loose	



	Observation	on Hale Number	: <u>T</u>	P-3	5/10 Date	187 T	ime		Clou	dy	-
1. Locali	on								7,000,00		
Groun	d Elevation	at Surface of Ho	ole:			Latitud	e/Longitu	de:	-1		
Descr	iption of Lo	cation:	Sehin	(eet 401(8	Da	mpster	la sagar				
2. Land	Jse _	Moodland	1					No			1-2
		Bouth	illural field,	vacant lot, etc.)	Hi	Ile Si	rface Ston	es (e.g., co	bbles, stones, b	oulders, etc.)	1 - 2 Slope (
3. Distan	ces from:	ogetation Open Water Property Line	100	>100' feet >10'	Landform Drain	age Way ing Water We		Position	on Landscape Wellands Other		Sty CA
. Parent	Material:	Dutw	dias	feet		Unsuitable	feet	THE STATE OF THE S	nt: 🔲		eet M No
								201			3
If Yes:		slurbed Soil	☐ Fill N	Material [	] Impervio	us Layer(s)		Weather	ed/Fractured R	lock 🗆 B	edrock
. Ground	lwater Obs	erved:		No No		If yes:				-	
Estima	ted Depth to	o High Groundwa	ater:	>140"			Depth W	ceping from	n Pit	Depth Standing	Water in Hol
	12 P. S. T. T. S. S. S. S.					elevation		-			
			inch			erevation					
Deep C	bservation	Hole Number:		P-3		erevation					
	1442				itures		Coarse I	Fragments Volume		Soil	
Deep (	Observation Soil Horizon Layer			P-3	etures Percent	Soil Texture (USDA)	Coarse I % by	ragments Volume Cobbles & Stones	Soil Structure	Soll Consistence (Moist)	Other
	Soll Horizon	Soll Matrix: Color-	Rede	P - 3 eximorphic Fea	T.	Soil Texture	% by	Cobbles		Consistence	Other
Depth (in.)	Soll Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Redo	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)	% by	Volume Cobbles & Stones	Soil Structure	Consistence (Moist)	Other
Depth (in.)	Soll Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Redo Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)	% by	Volume Cobbles & Stones	Soil Structure	Consistence (Moist)	Other
0 - 8 S-20	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20 RO-140	Soil Horizon Layer  Ap  Bu	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20 RO-140	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other
0 - 8 S-20 RO-140	Soil Horizon Layer  Ap  Bu	Soll Matrix: Color- Moist (Munsell)	Rede Depth	P - 3 eximorphic Fea	Percent	Soil Texture (USDA)  SL  Sand Coare	% by Gravel	Volume Cobbles & Stones	soil Structure	Consistence (Moist)	Other



Dec		/iew ( <i>minimu</i> on Hole Number		P-4	5/10		osea pi	iiiaiy a	1 2 2 1 2 1 1 1 1 1	War Street and Street	nea)
			7	,	Dale	TI	me		Clou	9	
1. Loca	lion										
Grou	nd Elevation	at Surface of Ho		feet		Latitude	e/Longitu	de: _			
Desc	ription of Loc	cation: E	etin	11年 上	S Du	impoter					
2. Land	Use _	Lood Lood Lood g., woodland, agricu	and				N				3-4
	(e	.g., woodland, agricu	llural field, 1	vacant lot, etc.)	1111	Su	rface Slon	es (e.g., co	bbles, stones, bo		Slope (9
J (200.7)		egetation	1/47/	N	Landform	1000	S.		on Landscape		
3. Dista	nces from:	Open Water	Body	>100'	_ Drain	age Way		01	Wetlands		2100°
		Property Line	:	510'	Drink	ing Water We	11 2	00'	Other		/\
. Paren	it Material:	Ducha	den	leel		Unsuitable	feet Material	s Presen	t: 🗆		reet M No
			00000	OFF A		17117711151715	7,1918,191				
If Yes:	Luin 1734 P	sturbed Spil	□ Fill N		☐ Impervio	ous Layer(s)		Weather	d/Fractured R	ock 🗆 B	ledrock
. Grour	dwater Obs	erved: 🗌 Ye		☑ No		If yes:	-	episari -			
Estim	ated Depth to	o High Groundwa	ater:	2140" es		_	Depth W	eeping fron	n Pit I	Depth Standing	Waler in Hol
				es		elevation		-			
Deep	Observation	Hole Number:	T	P-4							
Deep	Observation	Hole Number:		P-4	QLOSS.		Coarse I	Fragments			
Deep Depth (in.)	Soil Horizon	Soll Matrix: Color-	Redo		atures	Soil Texture	Coarse I	Fragments Volume	Soil Structure	Soli Consistence	Other
	6.7111	Torre Zeri		P-4	atures Percent	Soil Texture (USDA)	Coarse F % by Gravel	Fragments Volume Cobbles & Stones	Marine St.		Other
	Soil Horizon Layer	Soll Matrix: Color-	Redo	P - 4			% Бу	Cobbles	Marine St.	Consistence	Other
Depth (in.)	Soil Horizon Layer	Soll Matrix: Color- Moist (Munsell)	Redo	P - 4		(USDA)	% Бу	Cobbles	Soil Structure	Consistence (Moist)	Other
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P - 4	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.)	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)	Redo	P-4 eximorphic Fe Calor	Percent -	(USDA)	% Бу	Cobbles	Soil Structure	Consistence (Moist)	Öther
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 10	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 24 0 - 140	Soil Horizon Layer Ap	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 24 0 - 140	Ap Bul	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other
Depth (in.) 0 - 24 0 - 140	Ap Bul	Soll Matrix: Color- Moist (Munsell)  10 YR 3/R  10 YR Y/6	Redo	P-4 eximorphic Fe Calor	Percent -	SL Sand	% by Gravel	Cobbles	soil structure	Consistence (Moist)	Other



			riew ( <i>minimul</i> on Hole Number		P-5	5/10	I's	Jacu pii	mary a	Su n	alsposal a	rea)
	Deep C	bservatio	n Hole Number	+	1-3	Date	110 TI	me	-	Weather	119	
í.	Locatio	n								1247.00		
	Ground	Elevation	at Surface of Ho	le:			Latitude	/Longitue	de:	1		
	Descrip	ition of Loc	cation: Ne	ecer p	nup ch	andre	er for	共10	શ્ર			
2.	Land U	se	Grassed					NI	0			3 - 52
		(e	.g., woodland, agricu	ltural field,	vacant lot, etc.)	H(1)	Su	rface Slone	s (e.g., co	bbles, stones, bo	ulders, etc.)	Slope (%
		Ve	egetation			Landform	.,	_	Position	SH on Landscape (	SII SH BS ES	Tel
3.	Distanc	es from:	Open Water	Body	>100'		age Way	210	00'_	Wetlands	30, 311, 63, 13	100
			Property Line		Teet 715	Drink	ing Water We	feet	00'	Other	1	eet
	onin.	10000			710	< 6106	3 , 1410, 110	feet		Otilei		eet
-	Parent I	Material:	_ Outw	ain	-		Unsuitable	Material	s Presen	it: 🗆 '	Yes [	No. No
	If Yes:	El Dir	sturbed Soil	CI co	Material [	T. Barrer			11.7			
	W. C. SAL	The state of the s				] Impervio	ous Layer(s)	П	Weathere	d/Fractured R	ock 🔲 B	edrock
),	Ground	water Obse	erved:	s	⊠ No		If yes:	B- 77.70				100
	Estimate	ed Depth to	o High Groundwa	iter:	7144"			Depth vvi	eeping fron	T PIE	Depth Standing	Water in Hole
				inch	nes		elevation					
	Deep O	bservation	Hole Number:		71-5							
	Deep O	bservation	Hole Number:		11.5							
	220		Local Table	Red	7(-5 oximorphic Fea	itures	Soil Texture		ragments Volume	A. 507.5 de. J	Soil	
			Hole Number.   Soll Matrix: Color-   Moist (Munsell)	Red Depth	7(7-5 oximorphic Fea Color	Percent	Soil Texture (USDA)		ragments /olume Cobbles & Stones	Soil Structure		Other
	oth (in.)	Soll Horizon Layer	Soll Matrix: Color-					% by '	Cobbles	A. 507.5 de. J	Consistence	Other
	oth (in.) - 84	Soll Horizon	Soll Matrix; Color- Moist (Munsell)				(USOA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.)	Soll Horizon Layer	Soll Matrix: Color-					% by '	Cobbles	A. 507.5 de. J	Consistence	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
	oth (in.) - 84	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
0	- 84 1-144	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
0	- 84 1-144	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
O Br	- 84 1-144	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other
O Br	- 84 1-144	Soll Horizon Layer	Soll Matrix; Color- Moist (Munsell)				(USDA)	% by '	Cobbles	Soil Structure	Consistence (Moist)	Other



### Commonwealth of Massachusetts City/Town of Percolation Test

Form 12

Percolation test results must be submitted with the Soil Suitability Assessment for On-site Sewage Disposal. DEP has provided this form for use by local Boards of Health. Other forms may be used, but the information must be substantially the same as that provided here. Before using this form, check with the local Board of Health to determine the form they use.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



118 Great Road Street Address or Lot #			
City/Town		State	OIT75 Zip Code
		(277	
Contact Person (if different from Owner) Test Results		Telephone Number	
	5/10/2018 PT-A	Time	5/10/2018 Time
Observation Hole #	44"		54"
Depth of Perc	11:36		19:01
Start Pre-Soak End Pre-Soak	11.51		19:16
Time at 12"	10.51		12:16
Time at 9"	11:52		12:16
Time at 6"	11:54		12:17
Time (9"-6")	2 MIN		1 MIN
Rate (Min./Inch)	Lampi		CAMPI
Daniel Cacc	Test Passed: Test Failed:	Image: Control of the	Test Passed:
Test Performed By:			
Witnessed By:			



# Commonwealth of Massachusetts

# City/Town of Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation



Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

# F. Certification

evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107. certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil

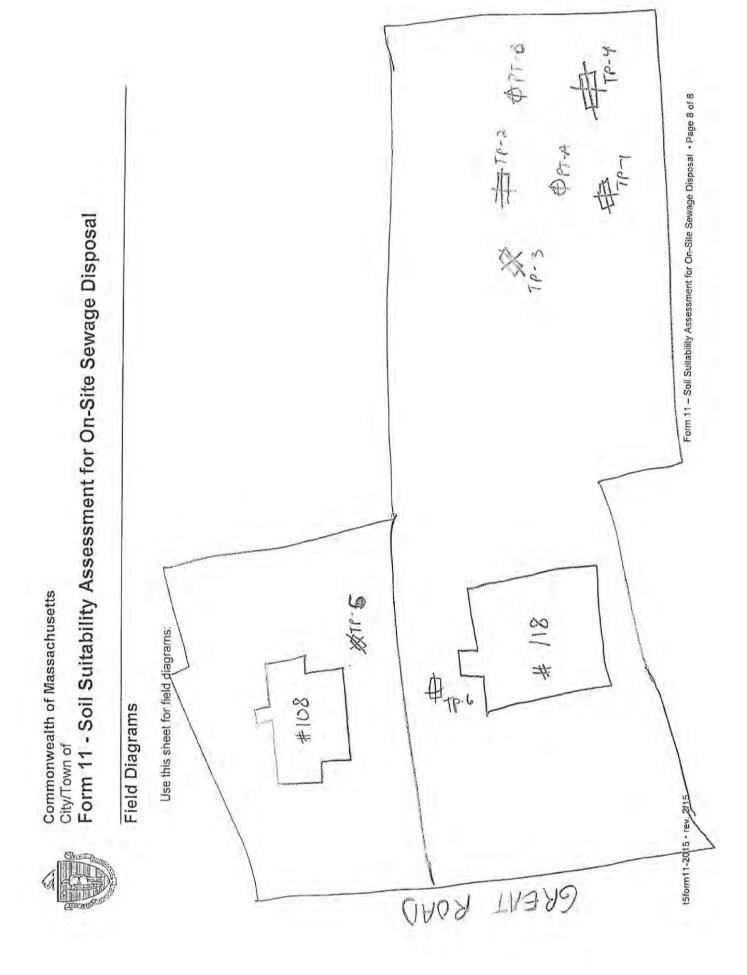
5/10/2018	Date / / /2018	Expiration/Date of License  A Joshaba Arrocarca	Board of Health
Danis Com	Soli Evaluator SE 13801	yped or Printed Name of Sofil Evaluator / License #  Jim Garre A	ame of Board of Health Witness

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

# Commonwealth of Massachusetts City/Town of Form 11 - Soil Suitability As

le Disposal	erve disposal area)
- Soil Suitability Assessment for On-Site Sewage Disposal	(minimum of two holes required at every proposed primary and reserve disposal area)
y Assessment r	es required at every pr
- Soil Suitabilit	(minimum of two hole
Form 11	C. On-Site Review

Surface Stones (e.g., cobbles, stones, boundform  Drainage Way 100 feet  Drinking Water Well 100 feet  Soil	and Use (e.g., woodland, agrice Description of Location:	to tol tonound blad los the		Dane				N.No		3-3/
Property Line	<	Hole dug f	5	5	NK	25	Surface Stone	s (e.g., cobbles	, stones, boulders, etc.)	Slope (%)
Dear Water Body   100   Feet   Drinking Water Well   100   Feet   Property Line   100   Feet   Drinking Water Well   Soil Structure Consists (Wois Water Well   100   Feet   Drinking Water Well   Soil Structure Consists (Mois Water Well   100   Feet   Drinking Water Well   Drinking Water Wate		twash		4					SS	
Open Water Body 7 (000 test         Property Line       200/set       feet       Drinking Water Well       200/set       feet         Property Line       200/set       feet       Drinking Water Well       200/set       feet         Deserved: □ Yes       ⊠ No       If Yes: □ Disturbed Soil □ Fill Material □ Weathered/Fractured Readoximorphic Features       Coarse Fragments % by Volume Soil Matrix: Color Bette □ Color □ Percent □ Gravel □ Soil Structure Consiste (USDA Moist (Munsell) □ Depth □ Color □ Percent □ Gravel □ Stones □ Soil Structure (Moist (Mois				[a]	ndform		Posit	ion on Landsca	pe (SU, SH, BS, FS, TS	0
ble Materials Present: ☐ Yes ☒ No If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Individual Fill Material ☐ Meathered/Fractured Individual Material ☐ Meathered/Fractured Individual Material ☐ Meathered/Fractured Individual ☐ No. If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Weathered/Fractured Individual ☐ No. If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Meathered/Fractured Individual ☐ No. If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Meathered/Fractured Individual ☐ No. If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Meathered/Fractured Individual ☐ No. If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Meathered/Fractured Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.    Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ Redoximorphic Features ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Matrix: Color ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.   Soil Actual ☐ No. If Yes: ☐ Depth Weeping from Pit.		Jen Water Body 7			ā	ainage W	'ay >100' t	eet	Wetlands	Wetlands 5/00' feet
Soil Horizon Soil Texture Soil Matrix: Color- Redoximorphic Features (USDA Moist (Munsell) Depth Color Percent Gravel Stones (Osbles & Soil Structure (Minsell) Depth Color Percent Gravel Stones (Minsell) Depth Color Percent Gravel Cobbles & Soil Structure (Minsell) Depth Color Percent Gravel Cobbles & Constructure Constructure (Minsell) Depth (Mins	nsuitable Materials Present:		f Yes:	] Disturbed	Drinking Soil   F	y Water W	)(C)	eet Veathered/Fra	Other actured Rock B	feet
Soil Horizon Soil Texture Soil Matrix: Color Redoximorphic Features % by Voluments (USDA Moist (Munsell) Depth Color Percent Gravel Stones Coarse Fragments	Groundwater Observed: ☐ Y	es K No		If ye	lio I lio		ping from Pit		Depth Standing Water in Hole	Water in Hole
Layer (USDA Moist (Munsell) Depth Color Percent Gravel Stones  C Sand 10 14 (C 3			Redo	ximorphic Fea	tures		ragments		Soil	
Fill  C Sand 1046/3 S6	Soil Horizon /Layer		Depth	Color	Percent	Gravel	Cobbles & Stones	Soil Structure	(Moist)	Other
C Sand 1046 (3 S6										
	U	1078 4	ı	V	ĵij.	ı	Ţ	25	25007	



No	d		Page 1 200 Page 1
No.	Commonweal		
	Stow	, Massa	chusetts
Cita Suit	ability Assassment t	Con On cit	a Camaraga Dianasat
Sue Suu	ibility Assessment j	or on-su	e Sewerage Disposal
Performed By:	Scott Hayes, P.E. FORESITE Enginee	ring Associates, In-	c.
Witnessed By: 2	Jack Wallace		
			Stow Land Associates
Location Address	118 Great Road	Owner's Name Address,	P.O. Box 2350
	Stow, MA 01775	Telephone #	Acton, MA 01720 (978) 263-2989 ext.5
	AVAILABLE TO THE STATE OF THE S		(978) 203-2989 CXLJ
Year Pub Drainage	Survey Available: No plished 1991 Publication Class A Soil Limitation Report Available: No	ns <u>Droughtiness</u>	
Year Pub Drainage Surficial Geolog Year Pub Geologic	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit)	n Scale 1:25000 ns Droughtiness Yes n Scale	Soil Map Unit 35C and slope
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit)	n Scale 1:25000 ns Droughtiness Yes n Scale	Soil Map Unit 35C and slope
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit)	n Scale 1:25000 ns Droughtiness Yes n Scale	Soil Map Unit 35C and slope
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Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit)	No No	Soil Map Unit 35C and slope
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit) Re Rate Map:	No Droughtiness	Soil Map Unit 35C and slope  Yes
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50 Within 50	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit) Rate Map: O year flood boundary	No No	Soil Map Unit 35C  and slope  Yes  Yes  Yes
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50 Within 50 Within 10 Vetland Area: National	olished 1991 Publication Class A Soil Limitation gic Report Available: No olished Publication Material (Map Unit) Rate Map: O year flood boundary	No N	Soil Map Unit 35C  and slope  Yes  Yes  Yes
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50 Within 50 Within 10 Vetland Area: National Wetlands	olished 1991 Publication Class A Soil Limitation Gic Report Available: No plished Publication Material (Map Unit) Publication Rate Map:  20 year flood boundary  20 year flood boundary  Wetland Inventory Map (map Conservancy Program Map	No No No (map unit)	Soil Map Unit 35C  and slope  Yes  Yes  Yes  Yes  Yes
Year Pub Drainage Surficial Geolog Year Pub Geologic Landform Flood Insurance Above 50 Within 50 Within 10 Vetland Area: National Wetlands	olished 1991 Publication Class A Soil Limitation Gic Report Available: No plished Publication Material (Map Unit) Publication Rate Map:  20 year flood boundary  20 year flood boundary  20 year flood boundary  Wetland Inventory Map (map Class A Soil Limitation Publication Publicatio	No No No (map unit)  No (map unit)  No (map unit)	Soil Map Unit 35C  and slope  Yes  Yes  Yes

### On-site Review

eation (identify	on site plant 118 C	rate: 11/02/01 ireat Road, Stow		- t	
nd Use None			Slope (%)2	% Sur	face Stones None
getation brush					
ndform Kame		Managara and Andrews and Andrews State			and the second s
ation on landscap	se see sketch				
tances from:					
Open Wate	r Body	feet	Drainagewa	ayfeet	
Possible W	et Area	feet	Property Li	ne 20 feet	
Drinking W	ater wen17	5 feet	Other		
D			Soil Color	Soil Mottling	LE LOG
THE RESIDENCE OF STREET, SALES AND ADDRESS OF THE PARTY O				7 2011 MORGINS	
pth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	(Munseil)		(Structure, Stones, Boulders, Consistency, % Gravel)
MANUFACTURE OF THE PARTY OF THE	Soil Horizon			None	
(Inches)		(USDA)	(Munseil)		Consistency, % Gravel)
(Inches)	A	(USDA)	(Munseil)	None	Consistency, % Gravel)  Weak, friable
0-4" 4-26"	A Bw	(USDA) SLLS	(Munseil)	None None	Weak, friable  Weak, massive  Weak, massive, some gravel medium sand
0-4" 4-26" 26-50"	Bw CI	SLLSS	10YR4/3 10YR5/6 2.5Y6/3	None None None	Weak, friable  Weak, massive  Weak, massive, some gravel medium sand  Weak, massive, some gravel
0-4" 4-26" 26-50"	Bw CI	SLLSS	10YR4/3 10YR5/6 2.5Y6/3	None None None	Weak, friable  Weak, massive  Weak, massive, some gravel medium sand  Weak, massive, some grave

Parent Material (geologic) Gl	acial Outwash	Depth to Bedrock: Not o	determined	
Depth to Groundwater:	Standing Water in the Hole: None	Weeping from Pit Face:	None	
	Estimated Seasonal Ground Water: >16	8"		

### On-site Review

Deep Hole Number  Location (identify of Land Use None			Slope (%)	2% Sur	face Stones None
Vegetation brush					
Landform Kame		_		TOTAL TO THE COLUMN TO STATE OF THE COLUMN TWO PARTS AND THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUMN TO THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUMN TO THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUMN TO THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUMN TO THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUMN TO THE COLUMN TO THE COLUMN TO THE COLUMN TWO COLUM	
osition on landscap	se see sketch				
istances from:					
	Body		1.0000040760	yay fect	
	et Aren			ine 20 feet	
Drinking W	ater Well 17	feet	Other		
D	EEP C	BSER	VATIO	N HOL	E LOG
Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munseil)	Soil Mottling	Ot.her (Structure, Stones, Boulders, Consistency, % Gravet)
0-6"	A	SL	10YR4/3	None	Weak, friable
6-48"	C1	S	2.5Y6/3	None	Weak to mod. firm, massive, medium sand
48-168"	C2	<u>S</u>	2.5Y5/3	FeO2@118"	Weak to mod. firm, massive medium sand, some gravel
		<u></u>			
					And the second s
	ic) Glacial Outv	and the second			Bedrock: Not determined

### Determination for Seasonal High Water Table

Method Used:		
Depth observed sta	anding in observation hole	e inches
Depth weeping fro	m side of observation hol	e inches
Depth to soil mottle	es <u>118</u> inches	
Ground water adju	stmentfeet	
Index Well Number Adjustment factor		Index well level
Depth of Naturally Occuring P  Does at least four feet observed throughout th	of naturally occurring per	rvious material exist in all areas soil absorption system? YES
If not, what is the depti	n of naturally occurring p	pervious material?
Certification		
Department of Environing performed by me consideration and considerations.	mental Protection and the stent with the required to 15.017.	ed the examination approved by the nat the above analysis was training, expertise and experience  Date November 5, 2001

### COMMONWEALTH OF MASSACHUSETTS

Stow , Massachusetts

	ne:
PT-1101-A	PT-1101_B
72"	68"
1:48	2:51
>24 Gal. App. <15 min.	>24 Gal. App. <15 min.
could	could
not	not
saturate	saturate
<2 MPI	<2 MPI
	PT-1101-A  72"  1:48  >24 Gal. App. <15 min.  could  not  saturate

Site Passed Site Failed	
Performed By: Scott Hayes, P.E.	
Witnessed By: Jack Wallace	
Comments: 'Site Passed' determination refers to p	percolation rate only

### FORESITE ENGINEERING 16 Gleasondale Road Suite 1 1 STOW, MA 01775 (978) 461-2350 SHEET NO CALCULATED BY CHECKED BY 11/2/01 POAD, STOW GREAT Rin QUELL PACKING) DWELL WELL 8 4118 DUMPSTER \$ PT 1101-3 10-80x R 2 WELL 150'+ PRODUCT 204-1 (Sixtle Shepts) 205-1 (Padded)

### **Stormwater Operation and Maintenance Manual**

For

108-118 Great Road

Stow, MA

October 25, 2019

Revised: November 2, 2023

Applicant/Owner:

JKC Properies, LLC 14 Nason Street, Suite 302 Maynard, MA 01754

Stamski And McNary, Inc. Engineering - Planning – Surveying 1000 Main Street; Acton, MA 01720 (978) 263-8585

### **Table of Contents**

Long Term Operation and Maintenance Plan

Operation and Maintenance Sample Inspection Log



### **Schedule for Inspection and Maintenance:**

### **Subsurface Structures:**

Inspect the system after every major storm for the first few months to ensure proper stabilization and function. Thereafter, inspect and clean it at least twice per year. Water levels should be recorded over several days to check the structures drainage. Also, mosquito controls may be necessary.

### **Existing Catch Basins:**

During construction, catch basin grates shall be wrapped with filter fabric. Catch basins shall be cleaned upon the completion of construction. After construction, the deep sumps for all catch basins and drain manholes shall be inspected four times a year and cleaned four times a year. Sediment removed shall be disposed of in accordance with applicable local, state, and federal guidelines and regulations. The depth of the sediment in a basin shall not exceed a depth of 18 inches as determined by probing with a stick. If the stick hits the bottom within 30 inches of the water level, more than 18 inches of sediment has accumulated and must be removed. Licensed persons should remove and dispose of the contents of the sump in accordance with applicable regulations.

### **Emergency Contacts:**

In the event of a hazardous materials spill on the site the following parties shall be contacted:

Stow Fire Department: ph: 978-897-4537

### **Records:**

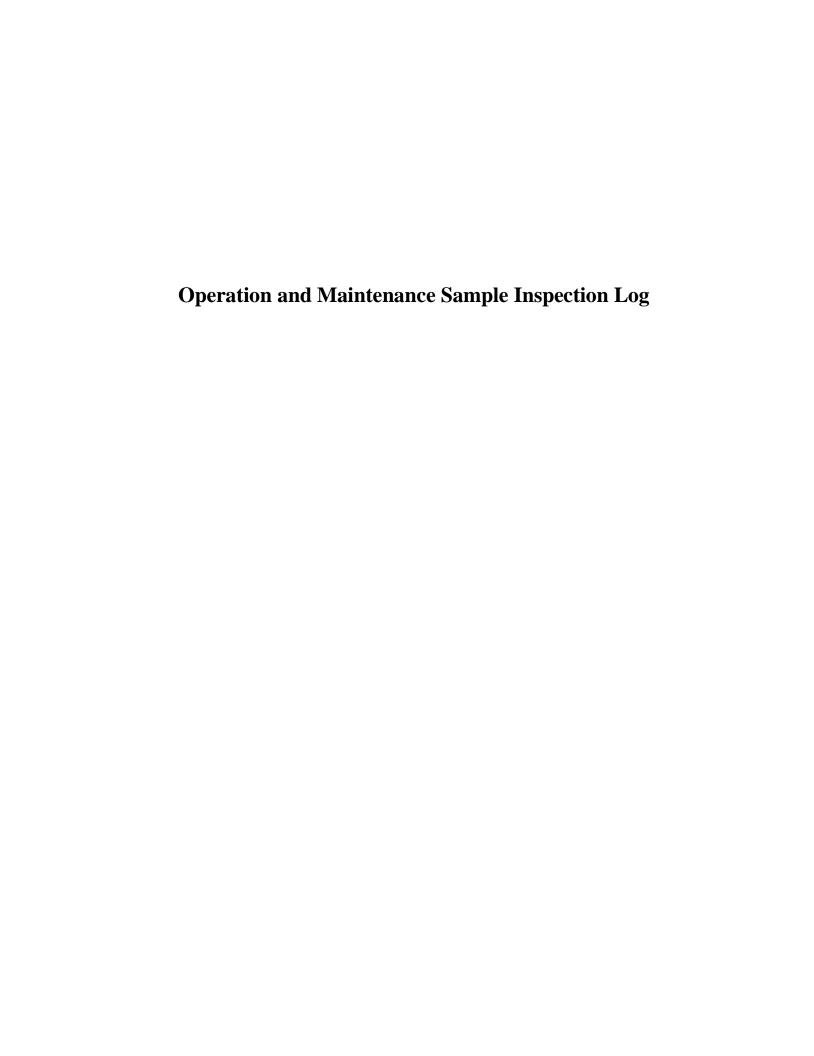
The Responsible Party shall maintain an inspection log of all elements of the storm water management plan. The Responsible Party shall maintain a maintenance log documenting the inspection and maintenance of the drainage structures under their control. A copy of the erosion control and storm water maintenance plan and inspection logs shall be kept onsite at all times.

**Budget:** The estimated annual operation and maintenance budget is \$1,000.

### **Responsible Party:**

The owner shall be responsible for the inspection and maintenance of the subsurface chambers and catch basins.

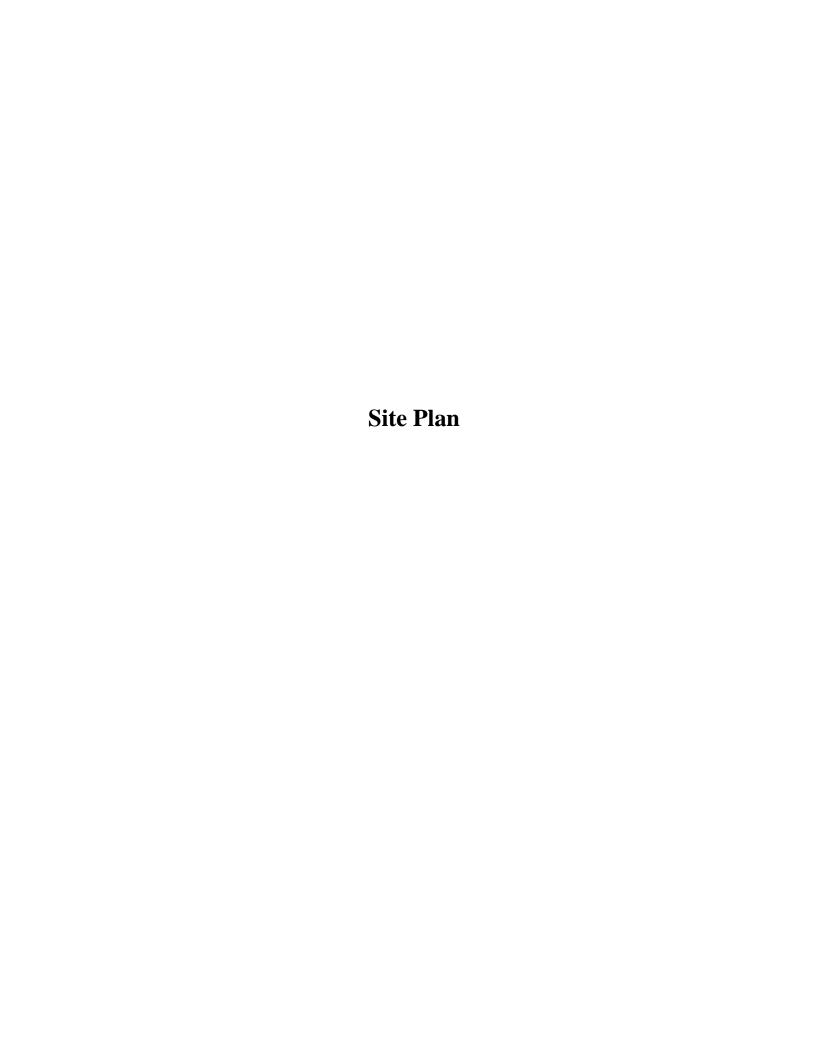
Name:	 	
Signature:	 	
Date:		



### 108-118 Great Road, Stow

Operation and Maintenance Inspection Log

	Year:
Inspection Items: Catch Basins Subsurface Chambers	<u>Frequency:</u> Four times per year Once per year
Catch Basins:	
Previous Inspection Date: Inspection Date: Inspector Name: Sediment Depth: Comments:	(Remove if depth greater than 18")
Action Required:	
Subsurface Chambers:	
Previous Inspection Date: Inspection Date: Inspector Name: Comments:	
Action Required:	

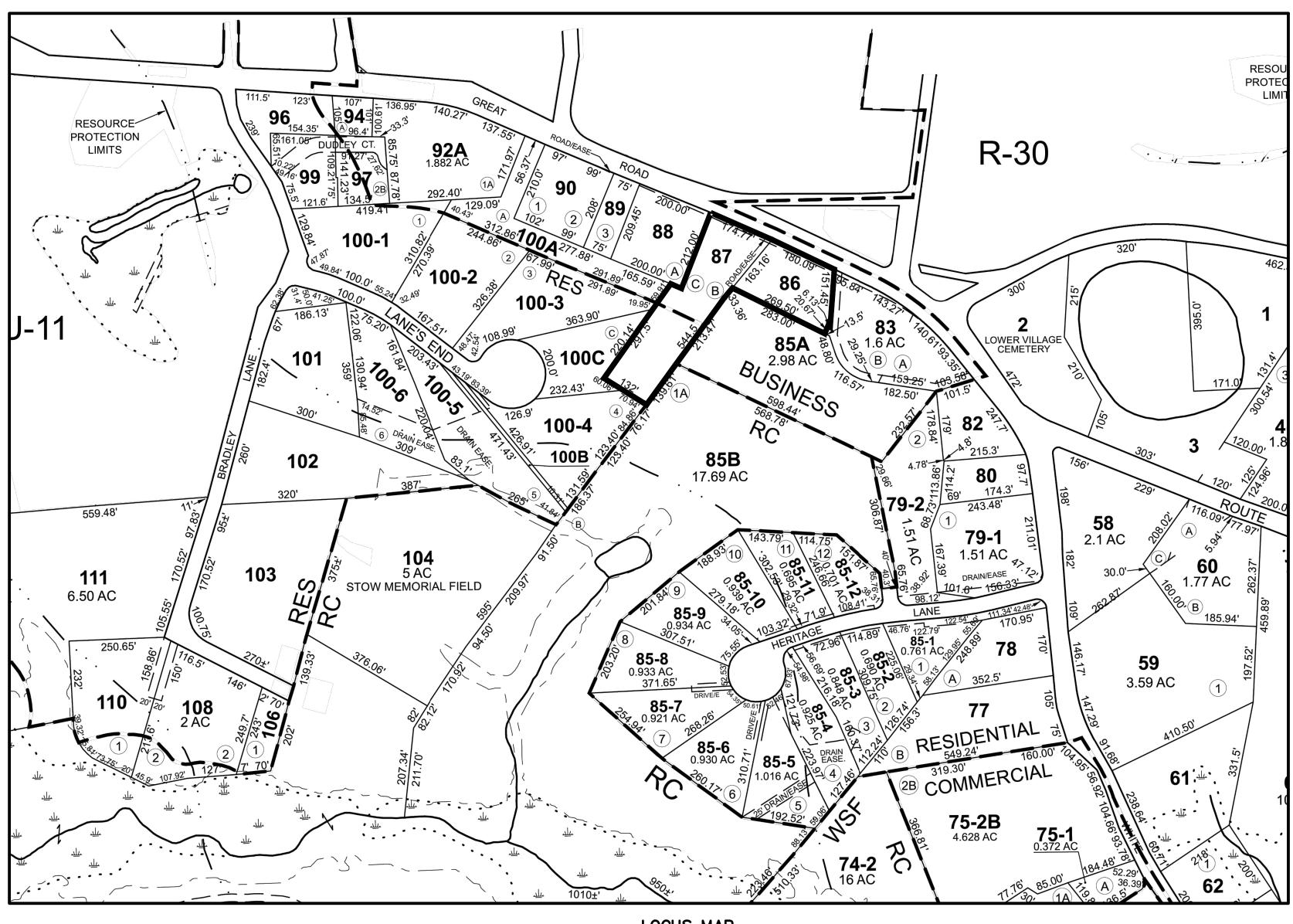


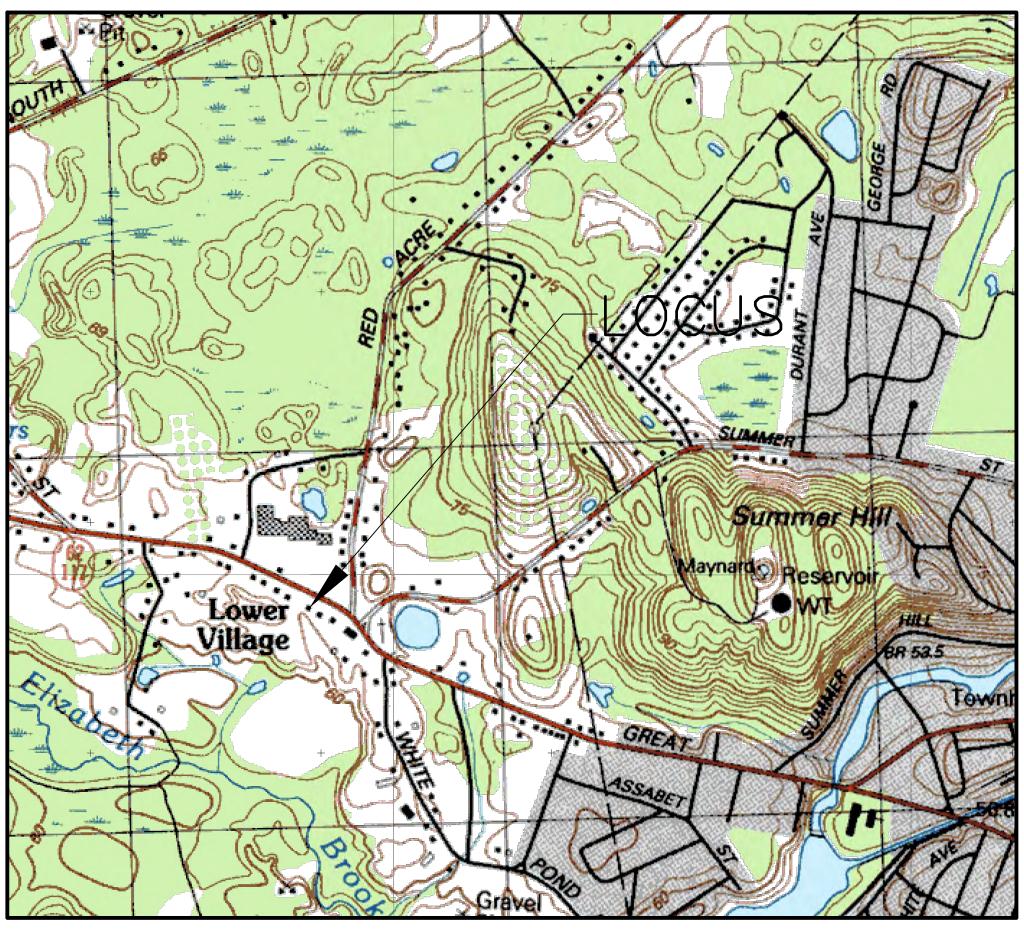
## SITE PLAN

# 108-118 GREAT ROAD

# STOW, MASSACHUSETTS

JULY 30, 2019 REVISED: OCTOBER 25, 2019 REVISED: DECEMBER 14, 2020 REVISED: NOVEMBER 2, 2023





LOCUS MAP SCALE: 1"=1200'





STOW PLANNING BOARD

DATE:

LOCUS MAP SCALE: 1"=200'

PLAN INDEX

SHEET 1 SHEET 2 SHEET 3

SHEET 4 SHEET 5

COVER SHEET SITE DEVELOPMENT PLAN LAYOUT PLAN CONSTRUCTION DETAILS PLAN STORMWATER POLLUTION PREVENTION PLAN

### APPLICANT/RECORD OWNER

JKC PROPERTIES LLC 14 NASON STREET SUITE 302 MAYNARD, MA

### **REFERENCES**

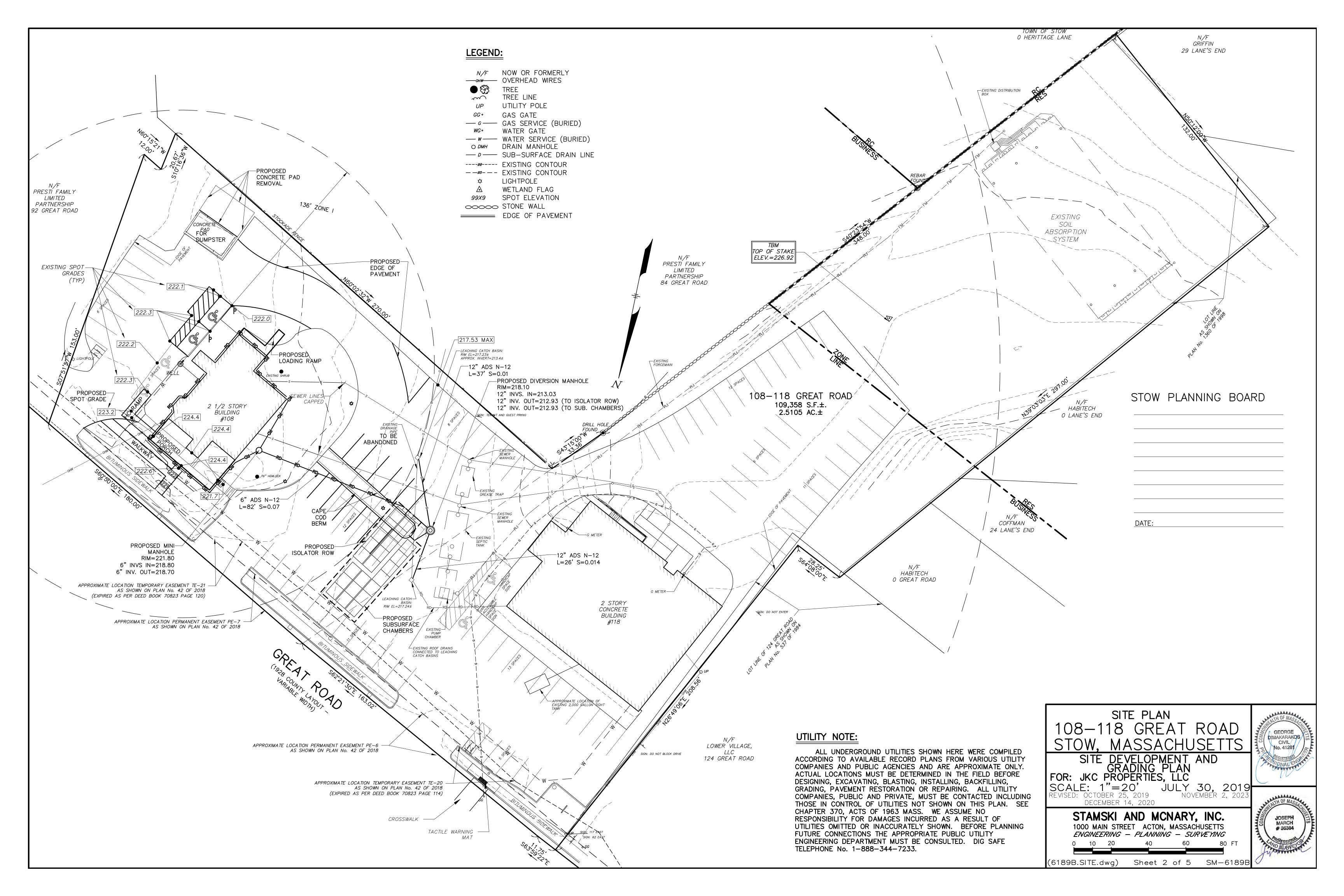
MIDDLESEX REGISTRY OF DEEDS SOUTH DISTRICT DEED BOOK 72042 PAGE 557 PLAN No. 1024 OF 1974

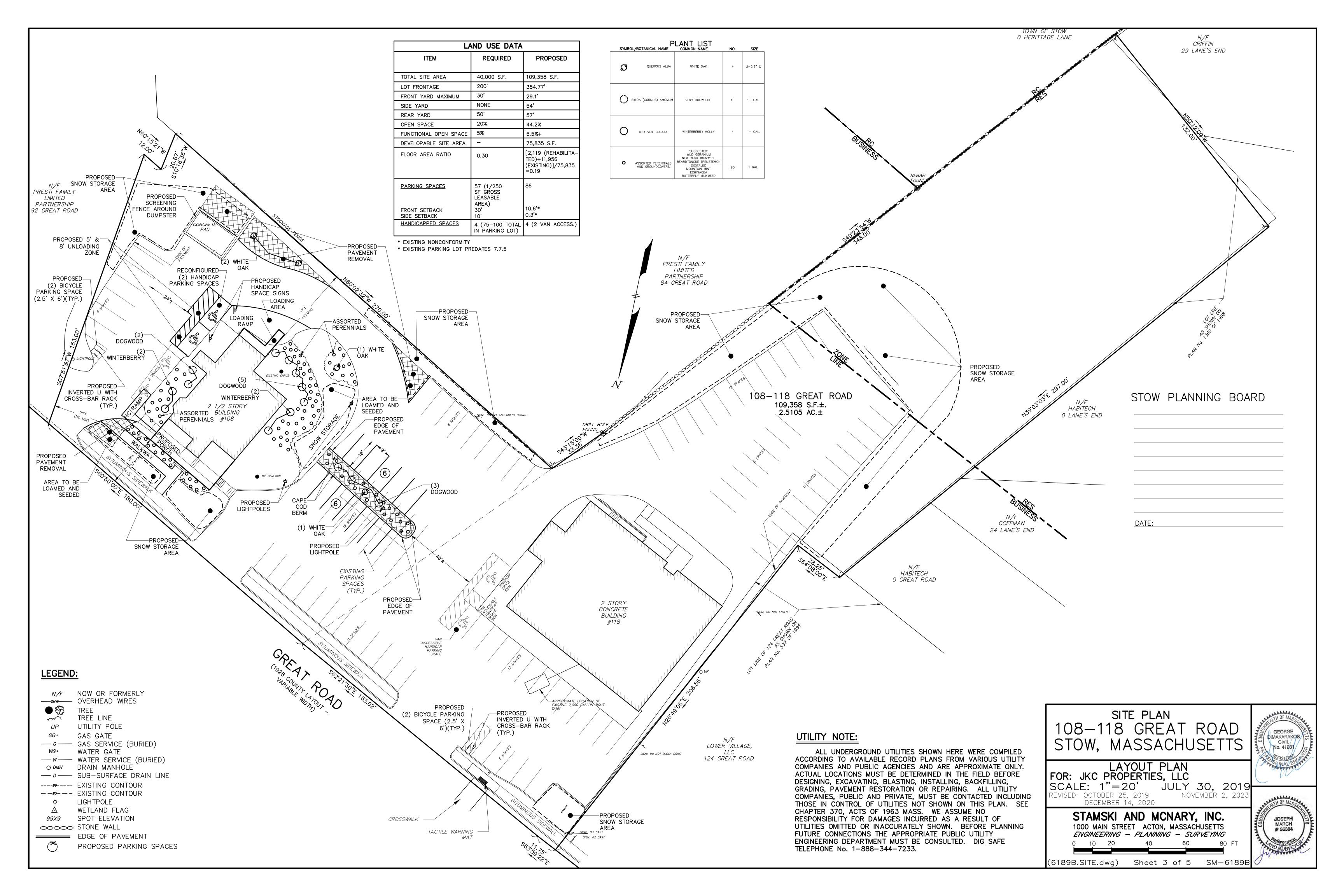
TOWN MAP R29 PARCELS 86 & 87

### ENGINEER/SURVEYOR

STAMSKI AND MCNARY, INC. 1000 MAIN STREET ACTON, MA 01720

ZONING DISTRICT BUSINESS RESIDENTIAL





### ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS **COMPACTION / DENSITY** AASHTO MATERIAL MATERIAL LOCATION DESCRIPTION CLASSIFICATIONS REQUIREMENT FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER PREPARE PER SITE DESIGN ENGINEER'S PLANS OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED ENGINEER'S PLANS CHECK PLANS FOR PAVEMENT PAVED INSTALLATIONS MAY HAVE STRINGENT N/A MATERIAL AND PREPARATION REQUIREMENTS. GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE SUBGRADE REQUIREMENTS. MAY BE PART OF THE 'D' LAYER AASHTO M145 BEGIN COMPACTIONS AFTER 24" (600 mm) OF A-1, A-2-4, A-3 INITIAL FILL: FILL MATERIAL FOR LAYER 'C' ANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% MATERIAL OVER THE CHAMBERS IS REACHED. STARTS FROM THE TOP OF THE EMBEDMENT FINES OR PROCESSED AGGREGATE. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN .95% PROCTOR DENSITY FOR STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT IOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU WELL GRADED MATERIAL AND 95% RELATIVE AASHTO M431 SUBBASE MAY BE A PART OF THE 'C' LAYER. OF THIS LAYER. DENSITY FOR PROCESSED AGGREGATE , 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 7 MATERIALS. 9, 10

AASHTO M431

3, 4

AASHTO M431

3, 4

LEBARON LC248 FRAME

EQUAL (SEE DETAIL)

AND COVER OR APPROVED

NO COMPACTION REQUIRED.

PLATE COMPACT OR ROLL TO ACHIEVE A FLAT

SURFACE. 2 3

PLEASE NOTE:

**EMBEDMENT STONE: FILL SURROUNDING THE** 

ICHAMBERS FROM THE FOUNDATION STONE ('A

FOUNDATION STONE: FILL BELOW CHAMBERS

FROM THE SUBGRADE UP TO THE FOOT (BOTTOM)

LAYER) TO THE 'C' LAYER ABOVE

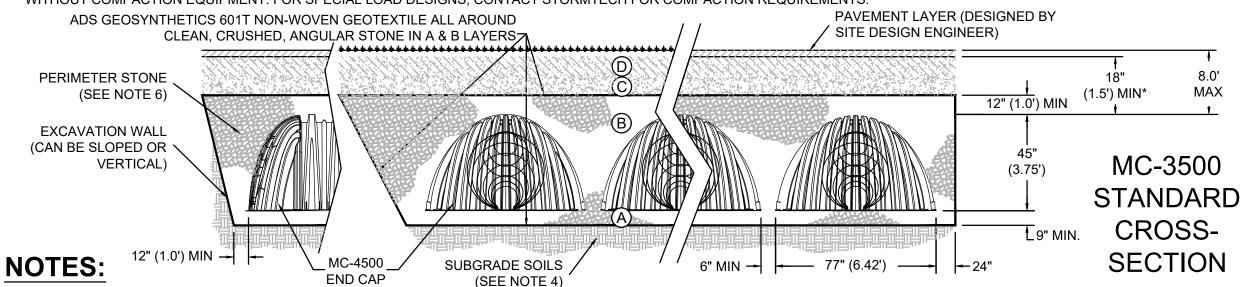
OF THE CHAMBER.

THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE"

CLEAN, CRUSHED, ANGULAR STONE

CLEAN, CRUSHED, ANGULAR STONE

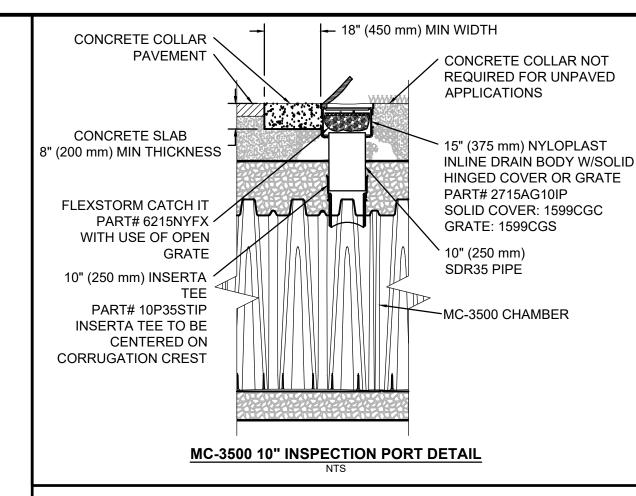
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

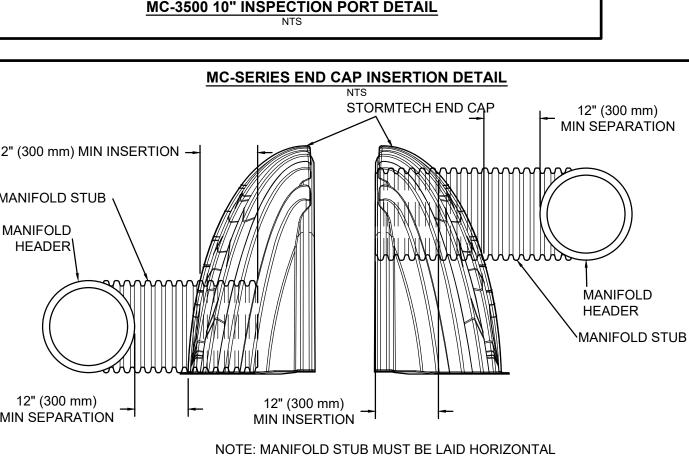


- MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION
- MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER **COLLECTION CHAMBERS"**
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND
- FILL MATERIALS STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS

STOW PLANNING BOARD

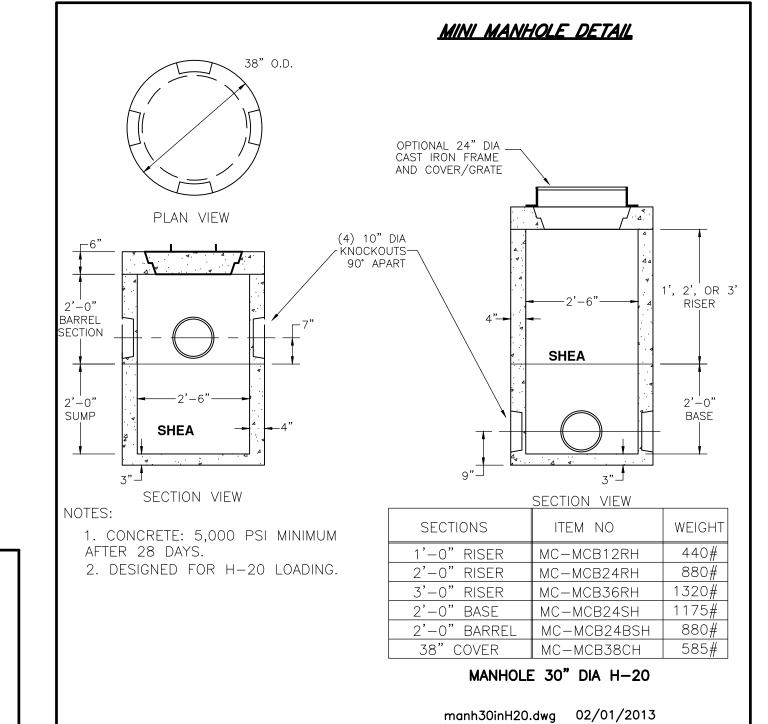
ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION





FOR A PROPER FIT IN END CAP OPENING.

DRAINI



COVER ENTIRE ROW WITH

STORMTECH END CAP-

ADS 601 NON-WOVEN

GEOTEXTILE (OR EQUAL)

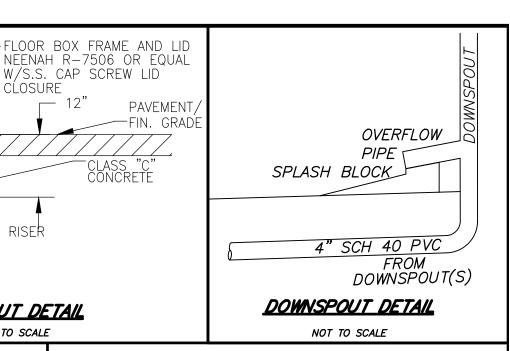
ISOLATOR ROW PROFILE

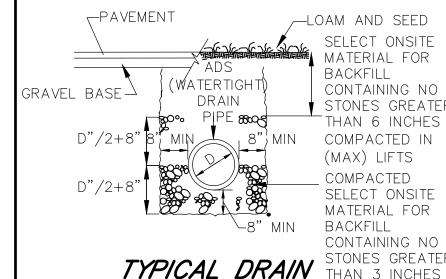
BETWEEN FOUNDATION STONE AND CHAMBERS

2 LAYERS OF ADS 315ST WOVEN GEOTEXTILE (OR EQUAL)

INSPECTION PORT (SEE STORMTECH

MC-3500 INSPECTION PORT DETAIL) -





6" P.V.C. RISE

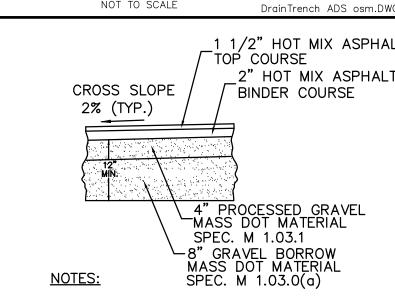
<u>CLEANOUT DETAIL</u>

NOT TO SCALE

EANOUT WITH-

CREW-IN CAP

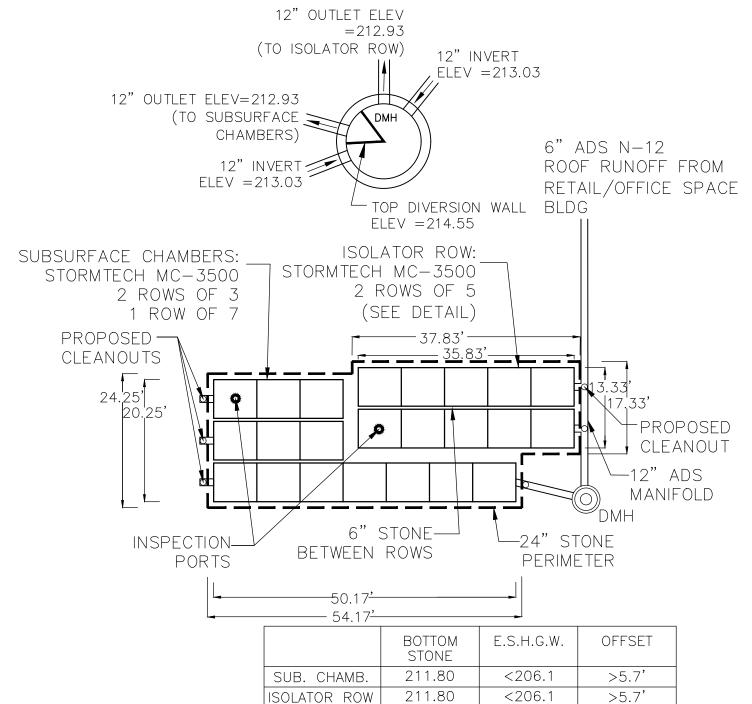
TRENCH DETAIL



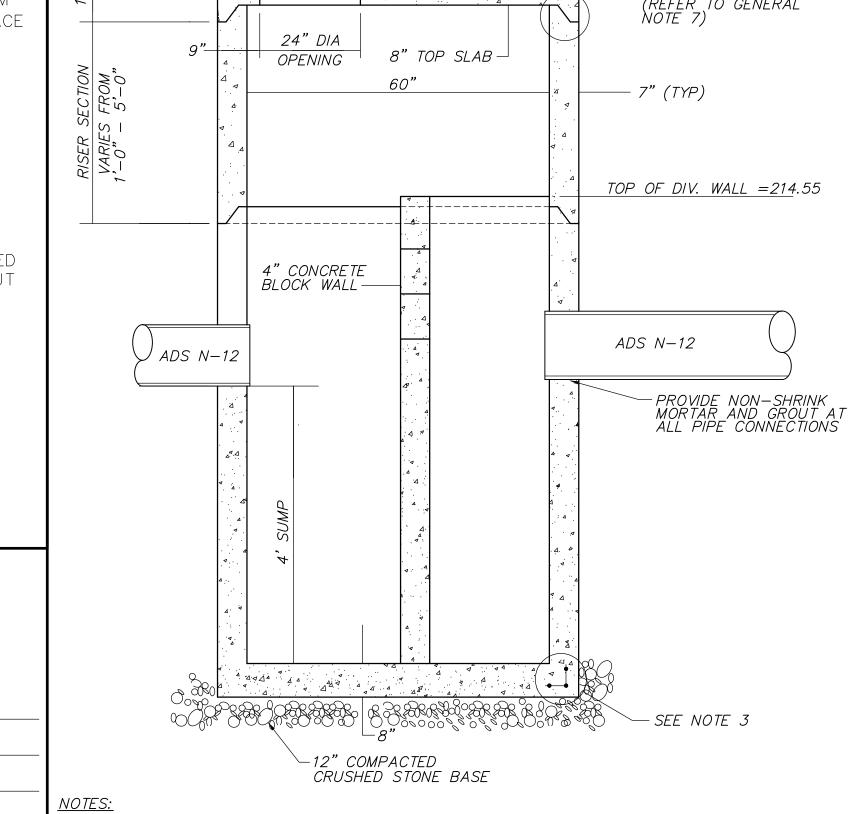
RECLAIMED ASPHALT PAVEMENT MATERIAL MAY BE SUBSTITUTED FOR DENSE GRADE CRUSHED STONE AND GRAVEL SUB-BASE

<u>TYPICAL PAVEMENT SECTION</u>

HANDICAP PARKING SIGN PAINTED WHITE (SEE DETAIL) & VAN ACCESSIBLE SIGN SYMBOL TO BE PAINTED ON BLUE NOTE: SYMBOL TO BE PAINTED IN ALL MOUNTED ON BOLLARD -NON-SKID BACKGROUND (TYP) (SEE DETAIL)(TYP) \_ WHITE LINES (TYP) — B DIA. STEEL PIPE, B LONG (18.97#/FT., 6.625" O.D.) FILLED WITH 3000psi CONCRETE PAINTED W/PRIMER AND YELLOW PAINT - PAVEMENT - 3000psi CONCRETE FOOTING (USED IN HANDICAPPED SPACES 5' (8' VAN ACCES) (8'-0" MIN)
HANDICAP SPACE <u>PAINTED</u> HANDICAP SIGN HANDICAP SYMBOL STALL STRIPING AND BOLLARD NOT TO SCALE NOT TO SCALE



DATE:



. STRUCTURE AS MANUFACTURED BY SHEA CONCRETE (978) 658—2645 OR APPROVED EQUAL

PRECAST CONCRETE DIVERSION

**MANHOLE** 

NOT TO SCALE

REINFORCED STEEL CONFORMS TO LATEST A.S.T.M. A185 SPEC. 0.18 SQ. IN./LINEAL

H-20 DESIGN LOADING PER AASHTO. HS-20-44: ASTM C478 SPEC. FOR "PRECAST

BUTYL RESIN SECTION JOINT CONFORMS TO LATEST ASTM C443 SPEC.

P. CONCRETE: 4,000 P.S.I. MIN. AFTER 28 DAYS.

REINFORCED CONCRETE MANHOLE SECTIONS.

FT. AND 0.18 SQ. IN. (BOTH WAYS) BASE BOTTOM.

-FRAME TO BE SET IN FULL BED OF MORTAR

STD COVER W/ 3" LETTERING

2.MINIMUM WEIGHT: 425 LBS

3.MATERIAL: ASTM A48, CLASS

4.LEBARON LK110A FRAME AND

35B GRAY IRON

COVER OR APPROVED EQUAL

FRAME TYPE: C

PLAN VIEW

1 1/8"¬

SECTION A-A

MANHOLE FRAME AND COVER

(SEE 202.8.0 MHD STANDARDS)

- 1. ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE EXCAVATING BLASTING, INSTALLING, BACK FILLING, GRADING OR PAVEMENT RESTORATION OR REPAIR ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS.

  WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPT. MUST BE CONSULTED. THE CONTRACTOR SHALL NOTIFY PUBLIC UTILITY COMPANIES AT LEAST 72 HOURS PRIOR TO DIGGING OR EXCAVATING ON PUBLIC OR PRIVATE PROPERTY. DIG SAFE TEL. NO. 1–888–344–7233
- 2. ALL STUMPS AND OTHER CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED FROM THE SITE.
- AND CONSTRUCTION DEBRIS.
- CONSTRUCTION OR SITE CLEARING PER THE STORMWATER POLLUTION PREVENTION PLAN.
- 5. EXISTING TOPSOIL SHALL BE STRIPPED, STOCKPILED, SCREENED AND SPREAD TO REQUIRED DEPTHS SHOWN ON THE PLAN.
- 6. CATCHBASIN SUMPS AND STORM WATER BASINS SHALL BE CLEANED FOLLOWING COMPLETION OF CONSTRUCTION AND ANNUALLY THEREAFTER PER O & M PLAN.
- THE ENTIRE WORK AREA SHALL BE CLEARED OF BUILDINGS TO BE RAZED, PAVEMENT, DEBRIS,
- ALL TOP AND SUBSOIL WITHIN WORK AREA SHALL BE REMOVED AND STOCKPILED ON SITE AS DIRECTED BY THE OWNER. LOAM SHALL BE SCREENED
- 9. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE CONDITION THROUGHOUT THE CONTRACT PERIOD. THE CONTRACTOR SHALL FULLY COMPLY WITH ALL STATE, FEDERAL, AND LOCAL
- VERSION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION (MASSDOT). STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND CONSTRUCTION AND

### GENERAL NOTES:

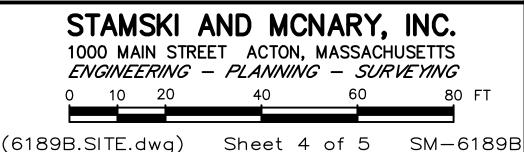
- 3. ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS, WASTE,
- 4. THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF

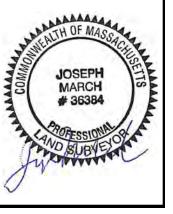
- BOULDERS, BRUSH, TREES, STUMPS, UNSUITABLE MATERIALS AND LIKE MATERIAL.
- AND STOCKPILED ON-SITE FOR RE-USE IN AREAS OF GENERAL LOAM AND SEED.
- REGULATIONS PERTAINING TO SAFETY. 10. ALL CONSTRUCTION METHODS SHALL CONFORM TO THE REQUIREMENTS CONTAINED IN THE LATEST
- TRAFFIC STANDARD DETAILS.

### SITE PLAN 108-118 GREAT ROAD STOW, MASSACHUSETTS

## CONSTRUCTION DETAILS FOR: JKC PROPERTIES, LLC

1"=20' JULY 30, 2019 NOVEMBER 2, 2023 REVISED: OCTOBER 25, 2019 DECEMBER 14, 2020



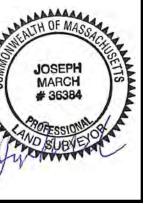


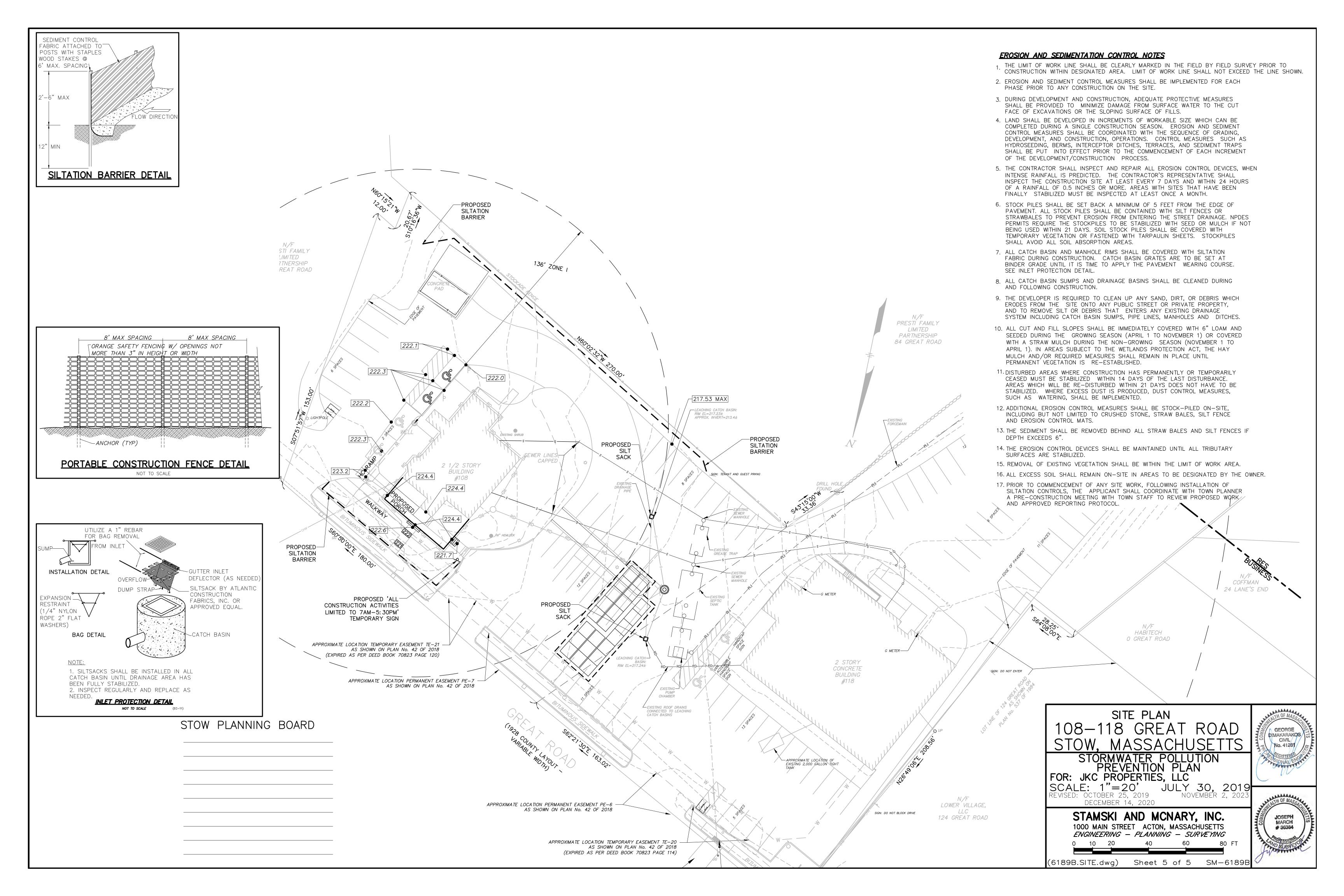
GEORGE

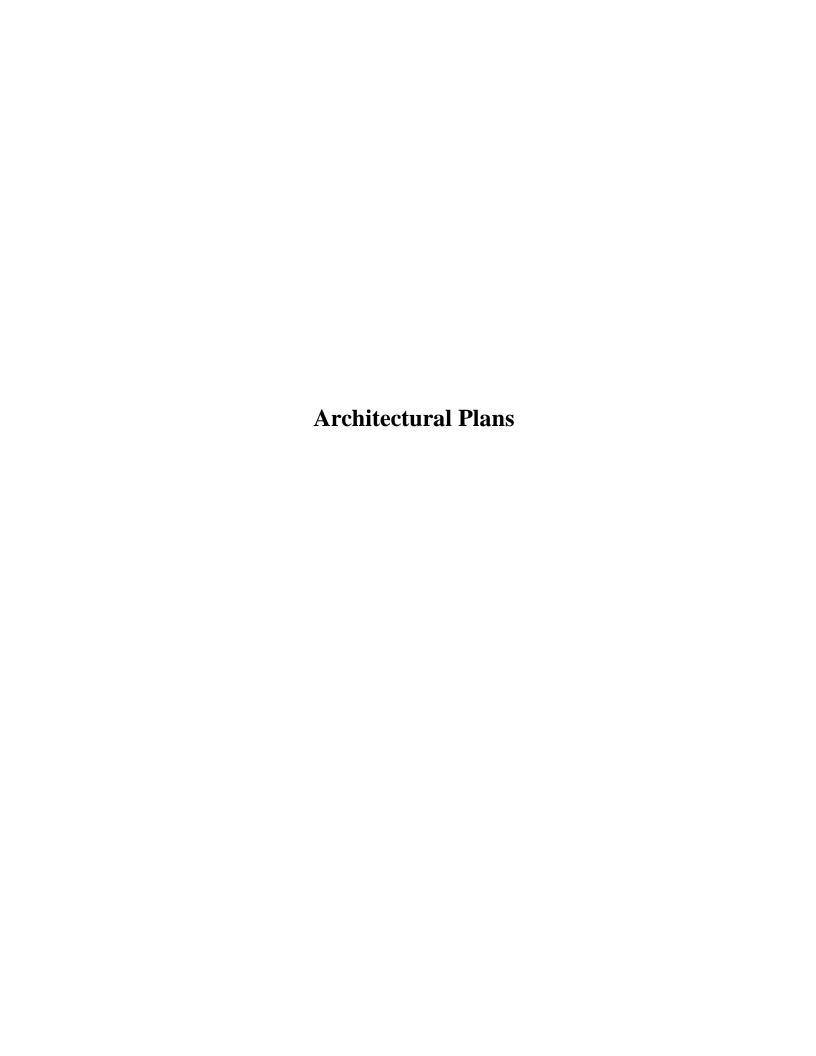
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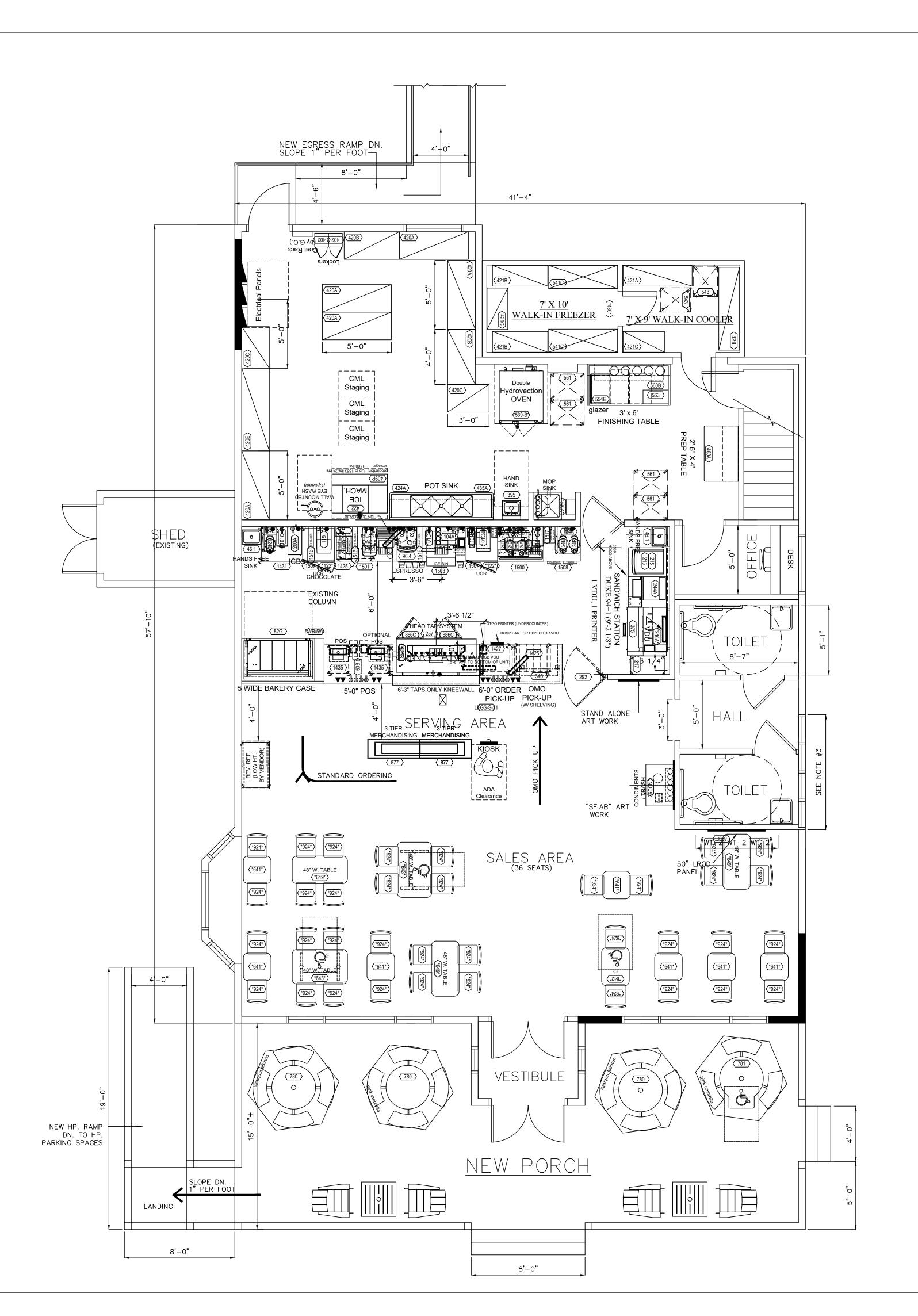


 $\angle$  $\bigcirc$ JOB LOCATION:

TOW, MA  $\bigcirc$ 

SHEET

JOB#: D23062 DATE: 10/28/23 PC#: 364641 (C.M.: -



### NOTES:

- 1. FRANCHISEE'S ARCHITECT SHALL ENSURE 40" MINIMUM CLEAR ACCESS INTO AND THROUGHOUT THE STORE FOR DELIVERY OF LARGE EQUIPMENT ITEMS.
- 2. FRANCHISEE'S ARCHITECT TO VERIFY COMPLIANCE WITH APPLICABLE ADA AND CODE REQUIREMENTS FOR RESTROOM(S) AND ENTRANCE(S).
- 3. WINDOW(S) TO BE IN-FILLED, TINTED, OR BLOCKED OUT WITH APPROVED DBI WINDOW GRAPHICS.
- 4. UNSIGHTLY UTILITIES:
- TO ENHANCE THE D/T EXPERIENCE PLAN ACCORDINGLY TO EITHER REMOVE OR SCREEN WHEN POSSIBLE.
- 5. DEFAULT WATER FILTRATION SYSTEM SHOWN. ARCHITECT TO HAVE WATER TESTED TO VERIFY ACTUAL SYSTEM REQUIRED. BOOSTER PUMP CAN BE ELIMINATED IF INCOMING WATER PRESSURE TO THE BUILDING IS 65PSI OR HIGHER.
- 6. DEFAULT EQUIPMENT FOOTPRINT SHOWN. ARCHITECT TO COORDINATE WITH FRANCHISEE TO DETERMINE ACTUAL EQUIPMENT REQUIRED.

= OPTIONAL OSB VDU

= VIDEO DISPLAY UNIT

= D/T MONITOR

■ = PRINTER

= PRINTER UNDERCOUNTER

= FLOOR SINK

φ = ELECTRICAL DUPLEX OUTLET

φ = ELECTRICAL SINGLE OUTLET

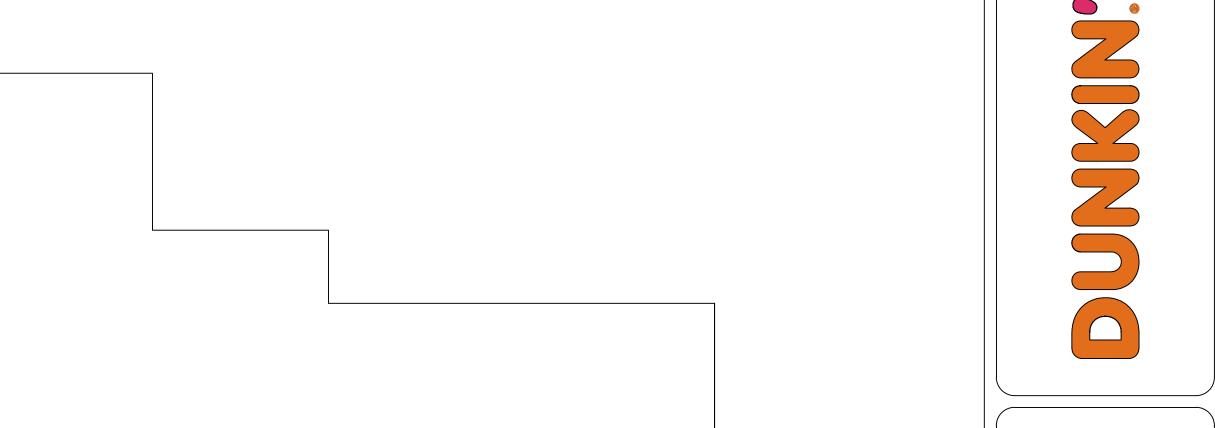
= SURFACE MOUNTED PLUMBING

▼ = RECESSED TECHNOLOGY

1195 SF Non-Retail 924 SF Retail 2119 SF Total 133 SF Interior Walk In 50 Linear feet dry storage 10 SEATS

(3) ASSETS "COFFEE STORY" OR "DONUT STORY" ART WORK

 $\frac{\text{FLOOR PLAN}}{\text{SCALE: } 1/4" = 1'-0"}$ 



JAMES D. SMITHARCHITECTS

S22 BAY LANE
GENTERVILLE, MA 02632

NO. DESCRIPTION BY DATE INITIAL ISSUE - -

STOW, MA
108 GREAT ROAD

ED ZND & 3RD FLOOR
PLANS

SHEET

JOB#: D23062 DATE: 09/26/23 PC#: 364641

(C.M.: –

NEW STAIR DOWN TO FIRST FLOOR——— REMOVE STAIRS DN. TO FIRST FLOOR/STAIRS TO 3RD FLOOR TO REMAIN REMOVE WINDOW, INFILL AND REPLACE WITH SIGN/SEE ELEVATIONS REMOVE WINDOW, INFILL AND REPLACE WITH SIGN/SEE ELEVATIONS REMOVE DOORS, INFILL AND REPLACE WITH SIGN/SEE ELEVATIONS

PROPOSED SECOND FLOOR PLAN

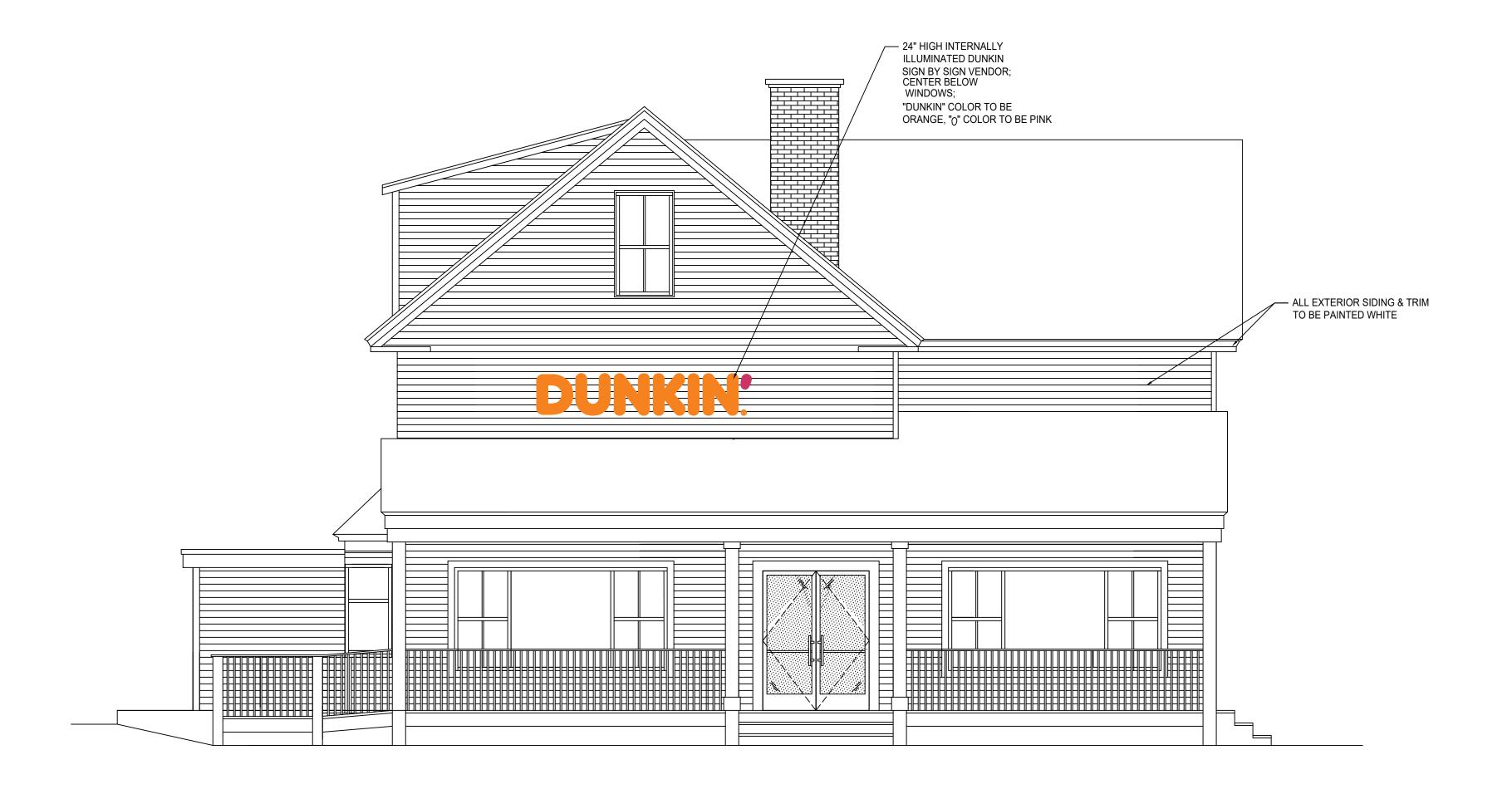
SCALE: 1/4" = 1'-0"

(NO WORK EXCEPT AS SHOWN/SECOND FLOOR TO BE USED ONLY AS OWNERS' PRIVATE OFFICE SPACE)

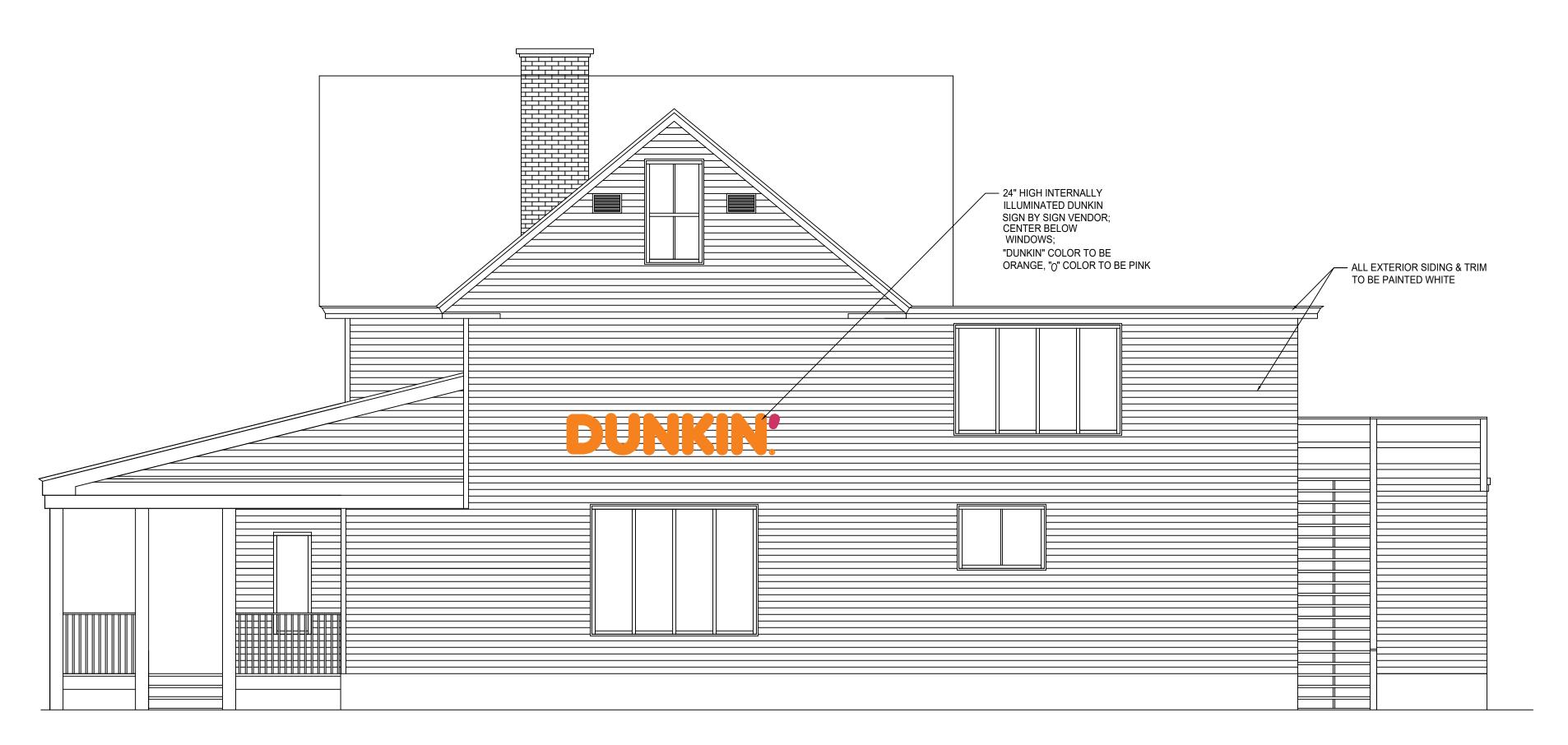
PROPOSED THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"

(NO WORK)



## PROPOSED FRONT ELEVATION SCALE: 1/4" = 1'-0"



PROPOSED RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

JAMES D. SMITTARECTS

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S GREAT ROAD

CD ELEVATIONS

PROPOSED ELEVA

SHEET **A-3.**(

JOB#: D23062 DATE: 10/28/23

PC#: 364641 (C.M.: –



MES D. SMITHARCHITECTS

ARCHITEC

522 BAY LANE
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CENTERVILLE, MA 02632
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FMAII : JAMES DISMITH 11@COMC.

NO. DESCRIPTION BY DATE INITIAL ISSUE - -

JOB LOCATION:
STOW, MA
108 GREAT ROAD

SED ELEVATIONS

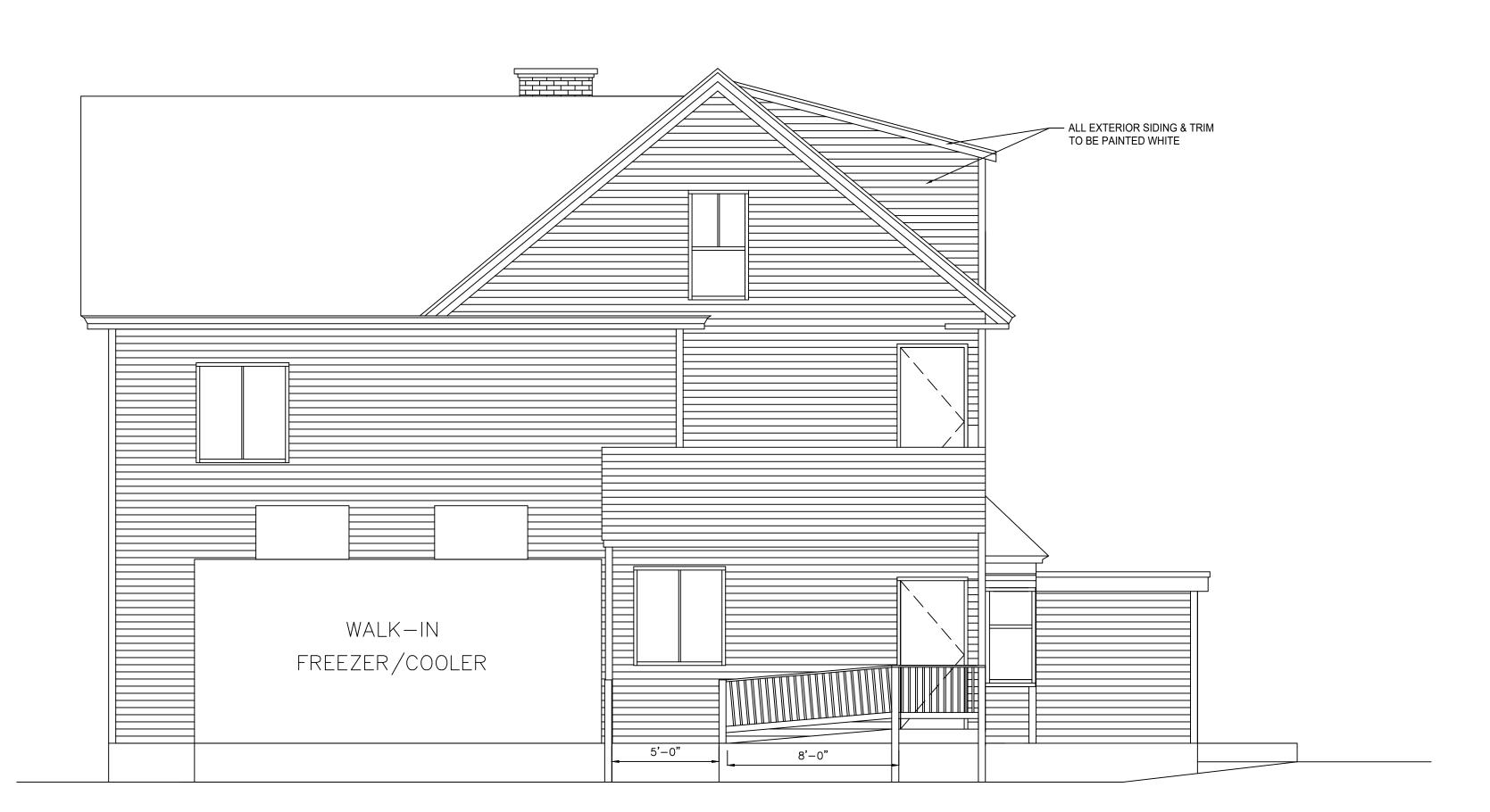
PROPOSED EL

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A-4.(

JOB#: D23062 DATE: 10/28/23 PC#: 364641 C.M.: -



## PROPOSED LEFT ELEVATION SCALE: 1/4" = 1'-0"



PROPOSED REAR ELEVATION

SCALE: 1/4" = 1'-0"