

Town of Leicester PLANNING BOARD

3 Washburn Square Leicester, Massachusetts, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

PLANNING BOARD AGENDA Tuesday April 6, 2021 @ 7:00PM ONLINE MEETING ONLY

Please join the meeting from your computer, tablet or smartphone.

https://global.gotomeeting.com/join/933168101

You can also dial in using your phone. United States (Toll Free): 1 866 899 4679 Access Code: 933-168-101

ORDER OF BUSINESS*

1.	7:00PM	Continued Public Hearing, Special Permit/Site Plan Review Town Meadow Farm/124 Green Street (SP2021-02), Outdoor Marijuana Cultivation (Applicant: Leon Dykas III)
2.	7:15PM	Public Hearing, Special Permit WorcShop/11 Hankey Street (SP2021-03), Makerspace (Applicant: The WorcShop)
3.	7:45PM	Discussion, Amendment of Site Plan Approval Leicester Fire & EMS Headquarters (SPR2015-06), 3 Paxton Street, Stormwater Improvements (Applicant: Town of Leicester)
4.	8:00PM	 General Board Discussion, Bylaw Amendments: A. General Bylaw Amendment: Architectural Conservation District (Historical Commission) B. Zoning Amendment Request: Marijuana Retail (Christopher Fevry)
5.	8:15PM	Approval of Minutes • March 16, 2021
6.	8:30PM	Town Planner Report/General Discussion: A. Miscellaneous Project Updates B. Board Member Committee Updates C. Upcoming Meeting Dates
7.	Adjourn	

*Note: Agenda times for items that are not public hearings may be taken out of order.

[&]quot;The listings of matters are those reasonably anticipated by the Chair 48 hours before said meeting, which may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law"



Town of Leicester PLANNING BOARD

3 Washburn Square Leicester, Massachusetts, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

Memorandum

To: Planning Board Members

FROM: Michelle R. Buck, AICP

Town Planner/Director of Inspectional Services

DATE: April 1, 2021

RE: April 6, 2021 Planning Board Meeting

Information to log in to the meeting is on the agenda, and a direct link is also available on the Planning Board web page where applications are posted. All votes must be **Roll Call** votes.

Remote Meeting – Suggested Instructions:

- 1. Ask the public participating to silence cell phones and mute their device during the meeting until called upon to speak
- 2. Ask all members of the Board to identify themselves by name for the public at the start of the meeting
- 3. When time for public comment, ask everyone to identify themselves before speaking.

Town Meadow Farm/124 Green Street (SP2021-02)

Revised Submittals from 3/16/2021 and 3/30/2021, my comments on the 3/16/2021 submittals, Kevin Quinn's comments, and a draft decision are enclosed. I defer to the Board as to the adequacy of odor control.

The WorcShop/11 Hankey Street (SP2021-03)

All applications materials and comments are enclosed. I expect additional comments from the Fire Department. I'm not sure how far along we'll get on this on Tuesday, but I enclosed a rough draft decision because it summarizes the issues for the Board's consideration. This is a complicated application because there are 4 Zoning districts involved (NB, R1, SA, and the Adaptive Reuse Ovelay District).

Leicester Fire & EMS Headquarters (SPR2015/06)

The Town has hired VHB to design stormwater improvements to the site. Application materials and a draft decision are enclosed.

Bylaw Amendments:

A. General Bylaw Amendment: Architectural Conservation District

B. Zoning Bylaw Amendment: Marijuana Retail

Proposals enclosed.

Please feel free to contact me with any questions.

LAW OFFICE OF HÉCTOR E. PIÑEIRO, P.C.

807 MAIN STREET WORCESTER, MASSACHUSETTS 01610 (508) 770-0600

> FAX (508) 770-1300 hector@pineirolegal.com

CORRESPONDENT

MARÍA S. PIÑEIRO SOLER, L.L.M. EDIFICIO PONCE DE LEÓN 161 PONCE DE LEÓN AVE., SUITE 302 SAN JUAN, PUERTO RICO 00918 TEL: (787) 250-8304 FAX (787) 758-4236

March 29, 2021

By email: BuckM@leicesterma.org

Ms. Michelle R. Buck, AICP, Town Planner Town of Leicester 3 Washburn Square Leicester, MA 01586

RE: Supplemental information to application for Special Permit for Outdoor Marijuana

Cultivation Leon H. Dykas III

Town Meadow Farm 124 Green Street, Leicester, MA

Dear Ms. Buck:

HÉCTOR E. PIÑEIRO

ROBERT A. SCOTT

Business Manager

NANCY CRUZ DE PIÑEIRO

I hope you find yourself well. We wanted to respond to your March 22, 2021 Memorandum.

1. Plantings/Odor Control

We have spent significant time and expense to develop an extensive odor mitigation plan even though we found no other outdoor marijuana cultivator in the Commonwealth doing anything close to what we are proposing. Our odor mitigation plan will consist of approximately 30,000 thousand square feet of mint. See DC Engineering plans, three plans included. Ex. 1 (original plan), Ex. 2 (plan with location of perennial plants), and Ex. 3 (mint). We will plant approximately 8,000 plants around the east, west, and, north side of the fence perimeter. (See plan). Our mint plantings will be mowed periodically. This, we submit, will provide a lush green, strong root base of perennial plants around the perimeter of the fence.

There will be two additional plant beds on the south side of the fence. These beds total 3,200 square feet of a variety of plants consisting of Lemon balm, Roses, Lavender, Marjoram, Rosemary, English Thyme, and Basil. i.e., Five Hundred and Twenty (520) plants in total. We have also taken the liberty of including some of our invoices from Griffin Green House & Nursery Supplies. See **Ex. 4**.

Ms. Michelle R. Buck, AICP, Town Planner March 29, 2021 Page two

The Planning Board has requested information on what other projects have done relative to odor mitigation as it relates to outdoor cultivation. As far as we know no one in Massachusetts has proposed anything as extensive as our plan. We spoke with a colleague from Sheffield, who informed us that they only plant sunflowers around their outdoor cultivation perimeter. We have asked our Sheffield colleague to join us for our upcoming meeting in the event you have any questions. We understand that odor from cultivation may be a concern to some. We told the Planning Board we intend to grow cannabis strains that are not high in noxious terpenes. ²

We submit our geographical location will be an important factor to our success. Our location is unique in the sense that the farm is set back from the road. The elevation at our outdoor cultivation site fluctuates between approximately 914' and 900' above sea level. To put things in perspective, Mr. Dykas' farm consists of approximately 141 acres. If we are permitted and licensed to do outdoor marijuana cultivation, the cultivated area of canopy will be 100,000 square feet or 2.29 acres. This means we will be utilizing approximately 1.62% of Mr. Dykas' land for marijuana cultivation.

Our proposed outdoor cultivation area is surrounded by hundreds of acres of woodlands. See, **Ex. 5**, Google earth view of the subject site as well as an aerial view taken from a drone from last year. https://vimeo.com/425530678. The farm experiences prominent southerly winds, especially during the summer and early fall including hurricane season. We submit there are other important factors that explain why we have not had odor problems during our growing season. Our farm is living ecosystem, it is alive. What we mean by that is that every living thing emits its own aroma and pollens. Our farm is encased with hundreds of thousands of trees, plants, bushes, and weeds. There are acres upon acres of grasses, alfalfa flowers, clover flowers, Timothy grass and every type of wild flower you can think of grows in it. Ten acres of corn produces approximately 300,000 corn plants. The air is rich with all these types of aromas from all these living plants and blend together. Our farm is not a sterile environment.

¹ Mr. Dykas spoke with the Assistant Town Manager, Jill Hughes in Sheffield on March 15, 2021. She told Mr. Dykas that they did not receive odor complaints from the two outdoor grow facilities. See, e.g., *Williamstown Cannabis Cultivation Assessment and Business Plan*. Their outdoor cultivation plan states: "Companion crops will be planted in between cannabis plants and along the fence line. They will serve to encourage pollinators, reduce soil loss, and reduce undesirable smells. Flowers along the fence line also give a more attractive appearance to the farm. Companion crops may include: buckwheat, clover, comfrey, lavender, and flowers such as nasturtiums and cosmos." https://ces.williams.edu/files/2021/01/Cannabis-Final-Report-MR-Edit.pdf

² Terpenes are aromatic oils that coat cannabis varieties with unique flavors such as citrus, berry, mint, and pine. More than 100 different terpenes have been identified in marijuana plants. A terpene profile, however, may change in the presence of other compounds. This is often referred to as the entourage effect. Online databases have determined that average terpenes profiles of many popular cannabis strains. Some of the most common are: 1) Pinene: producing smells found in pine needles, rosemary, basil and other perennials, 2) Caryophyllene: found in black pepper, cloves, cinnamon, 3) Myrcene: a herbal smell found in hops, lemongrass and mango, 4) Limonene: smells similar to citrus found in rinds, juniper, peppermint and, 5) Terpinolene: found in nutmeg, teas, cumin and lilacs.

Ms. Michelle R. Buck, AICP, Town Planner March 29, 2021 Page three

Our farm has a rich history of raising livestock and other agricultural commodities. In the past we have had cows, pigs, horses and poultry. At one point we had up to seventy (70) cows at a time and have had herds of over Four Hundred (400) feeder pigs. When Mr. Dykas was raising pigs he would buy tractor trailer loads of raw fish weekly, i.e., fish bi-products from Gordon Fisherman's fish sticks. By way of example, for the last decade Mr. Dykas has been growing cow corn and hay at his farm. Last year they planted ten (10) acres of corn as a result of crop rotation. However, with just ten (10) acres of corn being planted, approximately Four hundred thousand pounds 400,000 Lbs., of raw cow manure was spread. In previous years, when more corn was planted, 800,000 Lbs., or more of raw cow manure was spread at Mr. Dykas' farm. During the last few years winter rye seed was planted by helicopter. No one complained to him about any odors produced by cultivation or farming of his land.

We feel confident that our geographical location, topography, elevation, prevailing winds, cyclical planting (not more than 10 to 12.5% of our field will be mature at one time), our natural woodland buffer coupled with our extensive odor mitigation plan will comply with the requirements of Leicester's Zoning Bylaw § 5.15.04, (C)(8)(e). Any aroma from our proposed outdoor grow facility will blend with other agricultural scent from the farm including the planting and cultivation of corn and high quality hayfields. Another important factor regarding odor concerns is smell is much more prevalent in the trimming process. When you trim marijuana you break plants open and odors are emitted, similar to cutting an onion. We will not be processing or trimming our plants at the farm.

Just to put things in perspective, Mr. Dykas could legally grow unlimited acres of hemp on his farm for commercial purposes under Massachusetts General Law, Chapter 128, § 116 through 123. Hemp and marijuana are different varieties of the same plant species, *Cannabis sativa L*. Put differently, they are varieties of the same plant and cannot be distinguished visually. Hemp produces similar smells that marijuana produces. Jurisdiction for Hemp is given to the Massachusetts Department of Agricultural Resources ("MDAR") while marijuana falls under the Cannabis Control Commission. Under Massachusetts law, any person proposing to plant, grow or harvest, process or sell industrial Hemp in Massachusetts must obtain a license issued by the MDAR. Currently there are three different type of licenses available for growers. Under Massachusetts General Laws, Chapter 40A, Section 3, commercial agriculture use is protected from unreasonable regulations, special permit required under local municipal zoning ordinances or bylaws. ³

2. Lighting:

We are aware of the Leicester Zoning Bylaw (§5.15.02.J.), requiring that "Lighting shall not extend beyond property lines. Artificial lighting from within buildings(s) shall not create light pollution." Section 5.15.04.C.8.a, requires the Board to evaluate "character of the neighborhood to include visual compatibility with surrounding areas."

³ The cost of these licenses for a grower is \$300.00.

Ms. Michelle R. Buck, AICP, Town Planner March 29, 2021 Page four

We stated during our March 16, 2021 hearing that there would be no security lighting. That is our position, no perimeter lighting, motion activated or otherwise. Our security system does not require lighting to be effective. Other outdoor cultivation site will not use perimeter lighting. Night lights have a negative impact on cannabis plant cycle and cultivation. We have again reached out to enforcement section of the Cannabis Control Commission for additional clarification on an apparent conflict between the CCC security regulations in general, and the CCC regulations governing outdoor cultivation. As mentioned during our initial hearing, we also include photos and specifications of some of the lights will be using at our outdoor cultivation facility. The first is a Tripod LED portable point of use work light. These come with battery operated lights as well as 120 volt. We anticipate using these if we have to work at night, if necessary. **Ex. 6**, pp. 1. The next one is a standard electric water tight 8' LED, 120 volts work light typically used in garages, barns and greenhouses. *Id.* at 2. This is not a grow light. We anticipate having 10 to 12 of these lights in our greenhouse. Finally, we will have a Farmtech LED wall light, 120 volts. We anticipate having two of these lights in each of our tool sheds and at each gable end of our greenhouse, outside of the cement pad. *Id.* at 3.⁴

I also wanted to formally extend a formal invitation to the members of the Board to look at the parcel of land we intend to cultivate if given the necessary permits by the Planning Board and the Town of Leicester. Please feel free to contact me if you have any additional questions or concerns.

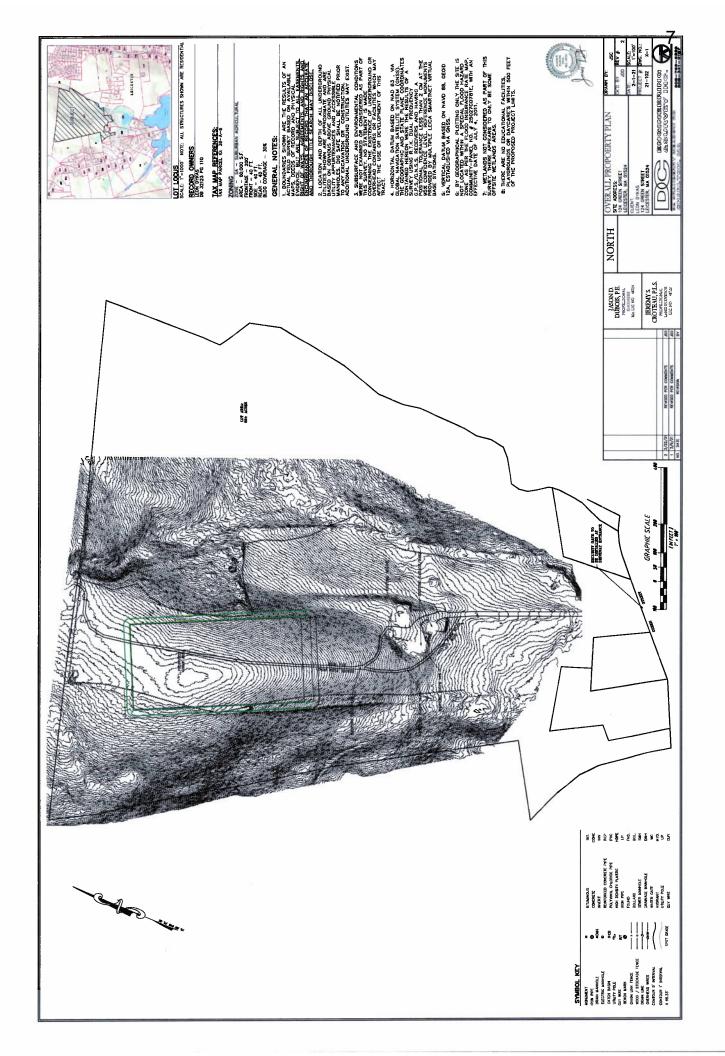
Sincerely

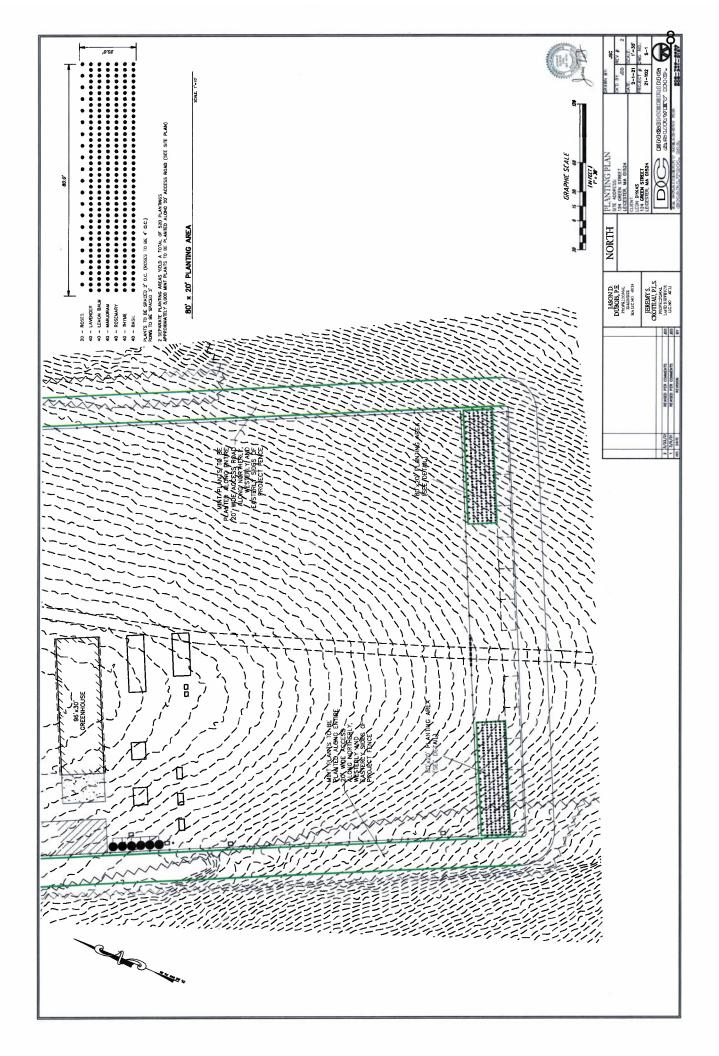
Hector E. Pineiro

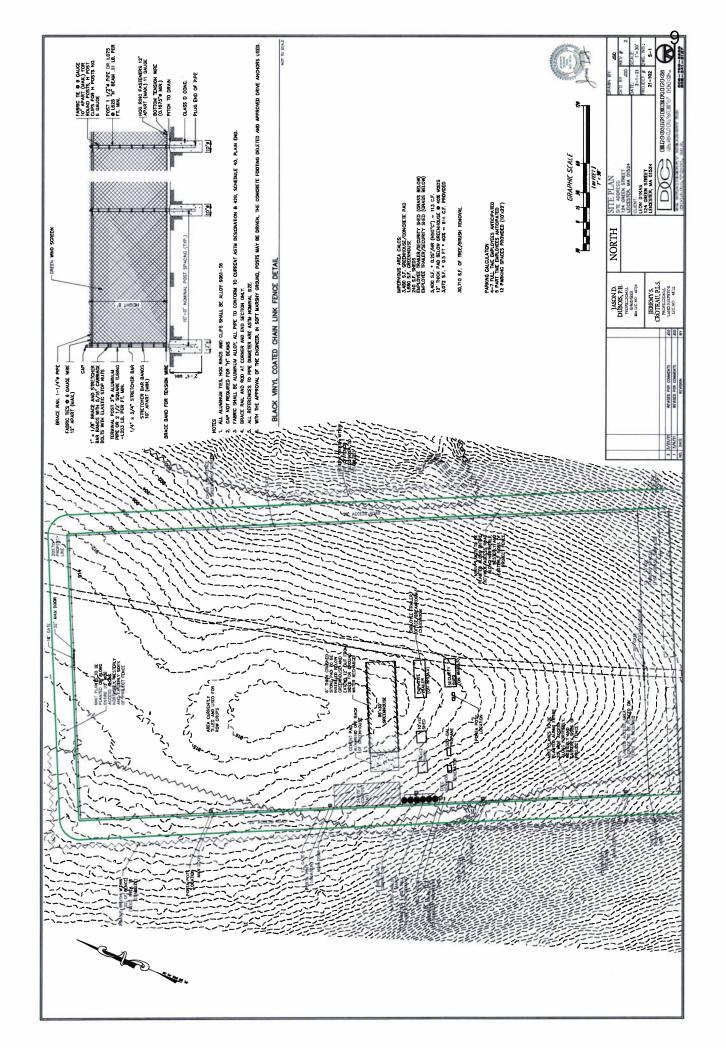
Enclosure Cc:

Leon H. Dykas, III

⁴ None of these are continuous lights.









March 26, 2021

To Whom it may concern,

I am a plant sales representative for Griffin Greenhouse Supply Inc, and have been working with Lee Dykas from Town Meadow Farm regarding various plantings around the property located at 124 Green St, Leicester, MA. We have been discussing various plant products to plant around the perimeter of his farm for odor mitigation. We are in the process of securing the purchase of 8,000 Mentha peppermint plants at a cost of approximately . \$6,000.00. These plants should emit a nice peppermint fragrance when mowed and trimmed.

If you have any further questions, feel free to contact me anytime at my cell number listed below.

Scott Almquist
Griffin Greenhouse Supply Inc
Plant Sales Representative
1-508-479-9904 — cell
1-888-800-0054 — office
salmquist@griffinmail.com



Next Truck Delivery: 03/22/2021

Search Customer

Q

My Order

Cart Number: 270579

Payment Method: Purchase Order

Ship To

TOWN MEADOW FARM 124 GREEN STREET LEICESTER, MA 01524

Customer #: 631052 Phone: 508-414-0130

Shipping Method

Ship Via: BEST WAY-PPD & ADD PLANT VEND Comments: PW pots and tags require. Estimated freight is \$100.00. Un-even boxing. Vendor may require second box to be filled. Freight is approximately \$85.00 per box.

omponig mene

Requ

Payment Method

E-mail: LDykas@live.com

Date: 03/19/21 2:26 PM PO Number: ROSES

TOWN MEADOW FARM

LEICESTER, MA 01524

124 GREEN STREET

Customer #: 631052

Phone: 508-414-0130

Bill To

Cart Type: Order PO Number: ROSES

Release Number: FOUR STAR SALES LLC

Customer Job #:

Required Date: 04/05/2021

Tags: Y

Products

Product	Description	Quantity	Unit Meas	P/O Line	Price	Extended
4091690875008	Rosa Oso Easy Hot Paprika 8/8 Qt/Tray	24	EA		4.1365	99.2760
4091551209008	Rosa Oso Easy Italian Ice 8/8 Qt/Tray	16	EA		4.1365	66.1840
Total		40				165.4600



Next Truck Delivery: 03/22/2021

Search Customer

Q

My Order

Cart Number: 270610

Payment Method: Purchase Order

Ship To

TOWN MEADOW FARM 124 GREEN STREET LEICESTER, MA 01524

Customer #: 631052 Phone: 508-414-0130

Shipping Method

Ship Via: BEST WAY-PPD & ADD PLANT VEND Comments: Tags and pots required for this product. Estimated freight is \$75.00. Tags and pots additional. Release Number: PLEASANT VIEW GARDENS First available ship date for this product is 4/19.

PO Number: Amazel Basil

Bill To

Date: 03/19/21 2:55 PM

TOWN MEADOW FARM **124 GREEN STREET LEICESTER, MA 01524**

Customer #: 631052 Phone: 508-414-0130 E-mail: LDykas@live.com

Payment Method

Cart Type: Order

PO Number: Amazel Basil

Customer Job #:

Required Date: 04/19/2021

Tags: Y

Products

Product	Description	Quantity	Unit Meas	P/O Line	Price	Extended
0841747053072	Herb Basii PW Amazel 72/72 Tray	72	EA		0.6688	48.1536
Total		72				48.1536



Next Truck Delivery: 03/22/2021

Search Customer

Q

My Order

Cart Number: 270609

Payment Method: Purchase Order

Ship To

TOWN MEADOW FARM 124 GREEN STREET LEICESTER, MA 01524

Customer #: 631052 Phone: 508-414-0130

Shipping Method

Ship Via: BEST WAY-PPD & ADD PLANT VEND

Comments: No tags needed. Ok to sub.

Date: 03/19/21 2:51 PM PO Number: HERBS

Bill To

TOWN MEADOW FARM 124 GREEN STREET LEICESTER, MA 01524

Customer #: 631052 Phone: 508-414-0130 E-mail: LDykas@live.com

Payment Method

Cart Type: Order PO Number: HERBS

Release Number: SILVERLEAF GREENHOUSES

Customer Job #:

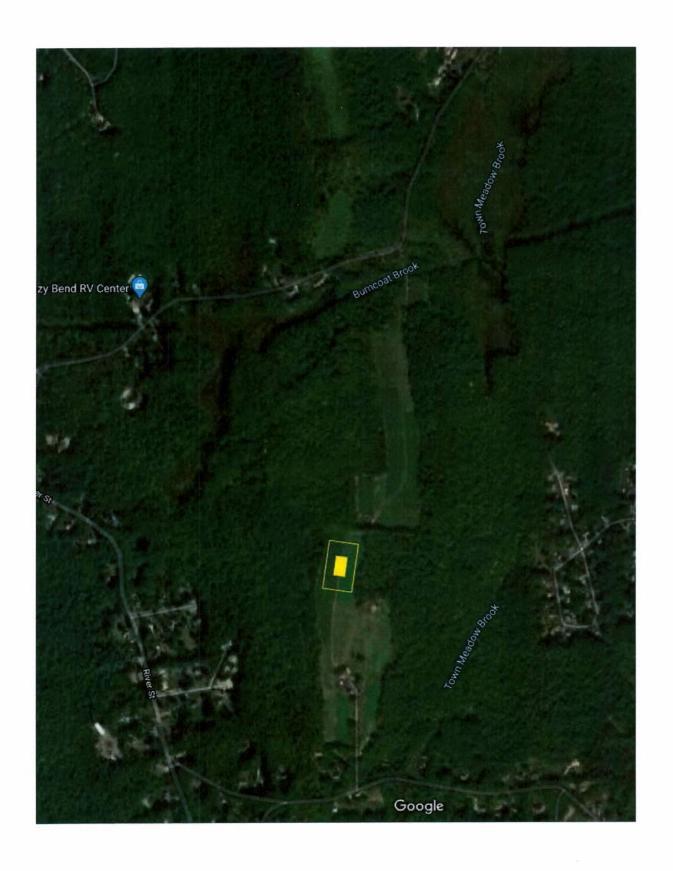
Required Date: 04/05/2021

Tags: N

Products

Product	Description	Quantity	Unit Meas	P/O Line	Price	Extended
900900517073	Herb Lemon Balm 51/50 Tray	100	EA		0,6000	60.0000
900900517080	The state of the s	100	EA		0.6000	60.0000
	Herb Rosemary Hill Hardy 51/50 Tray	100	EA		0.6000	60.0000
	Herb Thyme English 51/50 Tray	100	EA		0.6000	60.0000
900900517063	Herb Lavandula Lavender Goodwin Creek 51/50 Tray	100	EA		0.5800	58.0000
Total		500				298.0000







6000 Lumens ProSeries Ultra Bright Flood IP65 Weatherproof Plug-in Adjustable Dual-Head Tripod

9750 Lumens - 8 ft. LED Vapor Tight Fixture - 75 Watt - 4000 Kelvin 6 Lamp Fluorescent Equal - IP65 Rated - 120-277 Volt - PLT-1170



Energy efficient LED wall light. • Polycarbonate UV-stabilized refractor. • Corrosion-resistant rear housing. • Suitable in wet locations. • 5000K, 1600 Lumens. • UL listed. • 120V.



QUINN ENGINEERING, INC.

Paxton, Massachusetts 01612 Phone: (508) 753-7999 Fax: (508) 795-0939

April 1, 2021

Leicester Planning Board Town of Leicester 3 Washburn Square Leicester, Massachusetts 01524

Re: 124 Green Street

Marijuana Outdoor Cultivator Special Permit/Site Plan Review

Third Review

To the Board:

We are in receipt of the following information in association with the above referenced project:

- Plans entitled "124 Green Street, Leicester MA 01524", 2 sheets numbered X-1 and S-1 dated 2-1-21 with revision date 3/9/21, prepared by DC Engineering & Survey Inc of Charlton.
- Completed Site Plan Review & Special Permit Application Form, dated as received by the Town Clerk on February 3, 2021.
- Well Construction Permit Application, dated as received by the Town Clerk January 25, 2021.
- Cover Letter to Town Planner, Michelle Buck, dated February 2, 2021, from Attorney Hector Piniero, with attached Statement and Description in support of Town Meadow Farm Application.
- Letter to Town Planner, Michelle Buck, dated March 11, 2021, from Attorney Hector Piniero, identified as "Supplemental information for Special Permit for Outdoor Marijuana"
- Letter to Town Planner, Michelle Buck, dated March 15, 2021, from Attorney Hector Piniero, identified as "Supplemental information for Special Permit for Outdoor Marijuana"
- Letter to Town Planner, Michelle Buck, dated March 16, 2021, from Attorney Hector Piniero, identified as "Supplemental information for Special Permit for Outdoor Marijuana"

Leicester Planning Board 124 Green Street April 1, 2021 Page 2 of 4

- Letter to Town Planner, Michelle Buck, dated March 29, 2021, from Attorney Hector Piniero, identified as "Supplemental information for Special Permit for Outdoor Marijuana"
- A written submission entitled "Outdoor Adult Use Cultivation Facility Security Outline", with no date and no indication of the preparer.

The plans were submitted in response to comments of this office provided in a letter to Leicester Planning Board dated March 15, 2021. We have reviewed this submittal for responses to those comments only. Any changes made not in response to our comments must be identified by the Applicant.

In the comments, items identified as "*Resolved*" have received sufficient response. "*Comment Stands*" refers to an issue not satisfactorily resolved. "*No Further Comment*" refers to an issue requiring the attention of the Planning Board.

Our comments on the resubmittal follows:

As to §5.15.04, C, Performance Standards under *Marijuana Outdoor Cultivator Requirements*:

- 1. **Resolved**. Sheet X-1 of the plan set states that there are no educational facilities, playgrounds, or daycares within 500 feet of the proposed project limits, per §5.15.04, C, 1.
- 2. **No Further Comment**. The fenced grow area location has been revised on plan to comply with §5.15.04, C, 4. Letters from Atty Pineiro dated March 11 and 15, 2021, however, indicate that the grow area may be moved to its original proposed location, by merging the two properties in question to eliminate the property line from which the setbacks are being measured.
- 3. **Resolved**. Plans call for an 8 foot chain link with green wind screen, and signs identifying the site as "Limited Access Area", per §5.15.04, C, 5 and §5.15.04, C, 7, b).
- 4. **No Further Comment**. Atty Pineiro's letter of March 15, 2021 references an eight-page security plan delivered to Police Chief Antanavica, and states that the security plan documents compliance with §5.15.04, C, 7 a, c, d, e, f, g, h, j, k, m, n, o, p, and q. The "Outdoor Adult Use Cultivation Facility Security Outline",

Leicester Planning Board 124 Green Street April 1, 2021 Page **3** of **4**

three pages in length, appears to document substantial compliance with §5.15.04, C, 7 a, d, e, f, g, j, k, m, n, o and q. Some of the provisions in those sections are technical requirements pertaining to video and security specifications that we are not able to comment on. No documentation has been received as to an Emergency Response Plan, nor whether it has been submitted to Leicester Police Department or Leicester Fire Department. (REF: §5.15.04, C, 7, p).

5. **No Further Comment**. Atty Pineiro's letter of March 15, 2021 states that the eight page security plan submitted to Police Chief Antanavica documents that the site will be able to remain operational during a power outage. This office has not received the security plan and cannot comment as to compliance with §5.15.04, C, 7, i.

Pertaining to Site Plan Review Regulations:

- 6. **Resolved**. Information provided documents compliance with Massachusetts Stormwater Management Policy (REF Site Plan Review Regulations, II, F, 7, also II, H and §5.2.05, F).
- 7. **No Further Comment**. Engineer indicates that drinking water will be brought to the site, and that "porta potties" are shown on plan, presumably to provide wastewater disposal. (REF Site Plan Review Regulations, II, F, 7, also II, I and §5.2.05, E).
- 8. **Resolved**. Engineer asserts that no earth removal or filling will take place under the proposed site plan. (REF Site Plan Review Regulations, II, F, 9)
- 9. **No Further Comment**. Information and photographs of proposed structures submitted. (REF Site Plan Review Regulations, II, F, 10)

Pertaining to Site Plan Review approval standards:

- 10. **Resolved, with Comment**. Plans call for 12 parking spaces, and Engineer documents that 12 persons may be onsite. Plans also do not require surface finish of parking spaces, Applicant wishes to maintain the site in its current condition, as an agricultural field. (REF: §5.2.05, C)
- 11. **No Further Comment**. In the letter of March 11, 2021, Atty Pineiro provides information on planting fragrant species to control odor, reflected on plans. We are not able to comment on the effectiveness of the Odor Mitigation Plan. (REF: §5.2.05, G)

Leicester Planning Board 124 Green Street April 1, 2021 Page 4 of 4

Please contact this office should you have questions.

Respectfully Submitted, QUINN ENGINEERING, INC.

Kin J Li

Kevin J. Quinn, P.E.

President



Town of Leicester PLANNING BOARD

LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

Memorandum

To: Leon H. Dykas III

Idykas@live.com

FROM: Michelle R. Buck, AICP

Town Planner/Director of Inspectional Services

DATE: March 22, 2021

RE: Town Meadow Farm/124 Green Street Special Permit Application

PB File#: SP2021-02

I've reviewed the information submitted 3/11/2021 and 3/16/2021. Most of my earlier comments have been addressed by the revised information. The following issues remain:

Plantings/Odor Control

The 3/11/2021 narrative isn't consistent with the revised plans dated 3/9/2021. The plans should show the specific areas for planting, show more detail, and should match the narrative. It appears from the information submitted to date that other outdoor marijuana cultivators in Massachusetts have not provided odor control plantings (or have used different plants, such as sunflowers). If you are aware of other marijuana cultivators in other parts of the country that have used fragrant groundcovers as mitigation, or have research related to adequate distances and/or wind screening for odor control, it would assist the Board in evaluating the adequacy of your odor control plan.

2. Lighting

The Planning Board's Site Plan Regulations (§II.F.5) require plans to show "The location, height, size, and design of all proposed lighting fixtures." The Leicester Zoning Bylaw (§5.15.02.J.), requires that "Lighting shall not extend beyond property lines. Artificial lighting from within buildings(s) shall not create light pollution." Section 5.15.04.C.8.a. requires the Board to evaluate "character of the neighborhood to include visual compatibility with surrounding areas." It was stated at the 3/16/2021 hearing that there will be no security lighting. However, if the CCC requires security lighting, details should be provided. Previous correspondence (3/11/2021) related to security lighting only states that it will be motion-activated. (The 3/16/2021 letter states that headlamps and tripod halogen lights may also be used to assist with night harvesting). While it is understood that security lighting may be required by the CCC, it is possible to use security lighting systems that have less potential of glare on abutting property owners.

LAW OFFICE OF HÉCTOR E. PIÑEIRO, P.C.

807 MAIN STREET WORCESTER, MASSACHUSETTS 01610 (508) 770-0600

> FAX (508) 770-1300 hector@pineirolegal.com

CORRESPONDENT

MARÍA S. PIÑEIRO SOLER, L.L.M. EDIFICIO PONCE DE LEÓN 161 PONCE DE LEÓN AVE., SUITE 302 SAN JUAN, PUERTO RICO 00918 TEL: (787) 250-8304 FAX (787) 758-4236

March 15, 2021

By email: BuckM@leicesterma.org

Michelle Buck, Town Planner Town of Leicester Leicester, MA 01586

RE: Supplemental information to application for Special Permit for Outdoor Marijuana Cultivation Leon H. Dykas III

Town Meadow Farm 124 Green Street, Leicester, MA

Dear Ms. Buck:

HÉCTOR E. PIÑEIRO

ROBERT A. SCOTT

Business Manager

NANCY CRUZ DE PIÑEIRO

I wanted to provide the Planning Board additional information or comments in response to Quinn Engineering, Inc., March 15, 2021 follow-up letter to the Leicester Planning Board. I will respond to those items that Kevin J. Quinn, P.E., identified as "Comment Stands."

Comment Stands at ¶ 2: It is correct that the fence to the growing area was relocated in our engineering drawings. The reason I made the additional comment on our March 11, 2021 letter is because we have also considered merging the two deeds of Mr. Dykas' properties in order to meet the set-back requirements under Leicester's zoning bylaw.

Comment Stands at ¶ 4: We hired and delivered today via email to Chief Antavanica a copy of our security plans (8 pages of plans) with a three page narrative report prepared by Michael Terrizzi, Sales Engineer from Platinum Protection Systems, LLC of Methuen, Massachusetts. In his narrative report he addresses our proposed fully integrated security information management system, signage, visitor access, video surveillance system, alarm system, access control and intercom system as well as a discussion on our generator system.

Comment Stands at ¶ 5: Please note that our security plan submitted to Chief Antavanica addresses this concern as well, i.e., that the site will be able to remain operational during a power outage in accordance with 5.15.04, C,7, i).

Paragraph 11: No further comment: Please note that the plan does reflect the area of planting odor control species.

Thank you.

Haster E. Pineiro

Enclosure



The Commonwealth of Massachusetts General Court

March 12, 2021

TO: Leicester Board of Selectmen

RE: Special Permit and Site Plan Review of Leon Dykas, III, Town Meadow Farm to the Leicester Planning Board

Dear Members of the Board:

We write this follow-up letter to express our continued support on behalf of Leon Dykas, and Town Meadow Farm application for special permit and for site plan review scheduled with the Leicester Planning Board on March 16, 2021. We initially supported his efforts last year to Amend the Town of Leicester Zoning Bylaw in order to permit outdoor cultivation of marijuana in the Town of Leicester. Their special permit and site plan review will allow the farm, located at 124 Green Street in Leicester to cultivate cannabis outdoors. As you probably know, Mr. Dykas' property consists of approximately 140 acres of farmland and was part of the original Greene Estate, one of the oldest farms in Leicester which has been farmed since approximately 1770.

Mr. Dykas wants to do everything possible to preserve the land as a farm. We have reviewed some of the documents they have submitted to the Leicester Planning Board including their site plan and special permit application and believe that with the right controls outdoor cultivation of cannabis can produce a valuable crop that supports farming as well as jobs and state and local tax revenues without causing offensive odors or noise, and causing no appreciable change in traffic or demand for Town services.

The proposed project for 124 Green Street will allow cannabis cultivation only on land zoned suburban agricultural and only upon Town approval of a special permit and of what the law calls a "Host Community Agreement" or HCA. This will allow farmers to generate significant state and local tax revenues without adding to demand for Town or education services, and will help keep the own from being overrun by endless housing development, spiraling budgets, and suburban sprawl;

We support Mr. Dykas' special permit application because his proposal will allow him and other similarly situated farmers to make a living from farming;

Besides having to comply with the Town's zoning ordinance and special permit process, anyone proposing to cultivate cannabis under the existing bylaw will be required under state law to enter into an HCA with the Town. As part of an HCA the Town may require payment of a "a community impact fee" of up to 3% of the gross sales. The HCA must meet other requirements in the law and regulations that protect interests of the Town and of residents. See Massachusetts General Laws c. 94G § 3(d) and, as to HCAs, https://mass-cannabis-control.com/wp-content/uploads/2018/08/Guidance-on-Host-Community-Guidance.pdf.

Outdoor cultivation cannot be done by purely mechanical means. The crop requires skilled and semi-skilled workers and it brings in enough money to pay decent wages.

Approval of Mr. Dykas' special permit application will give Leicester a head start into this important market. At this time there is no licensed outdoor cannabis cultivation operation in Central Massachusetts and only a few licensed indoor growing facilities.

Mr. Dykas' special permit application will require strict state security measures that must be approved by the Town and by the Cannabis Control Commission, including but not limited to a securable 8' foot opaque perimeter security fence to protecting the cultivation area, a security alarm system, 24 hour man security and recorded monitored video surveillance system accessible to the Leicester Police Department.

We enthusiastically support this special permit and site plan application and urge the Planning Board to support it.

Sincerely,

Senator Michael Moore Second Worcester District State Representative David LeBoeuf Seventeenth Worcester District

Daniel Je Boens

LAW OFFICE OF HÉCTOR E. PIÑEIRO, P.C.

807 MAIN STREET WORCESTER, MASSACHUSETTS 01610 (508) 770-0600

> FAX (508) 770-1300 hector@pineirolegal.com

CORRESPONDENT

MARÍA S. PIÑEIRO SOLER, L.L.M. EDIFICIO PONCE DE LEÓN 161 PONCE DE LEÓN AVE., SUITE 302 SAN JUAN, PUERTO RICO 00918 TEL: (787) 250-8304 FAX (787) 758-4236

March 16, 2021

By email: BuckM@leicesterma.org

Michelle Buck, Town Planner Town of Leicester Leicester, MA 01586

RE: Supplemental information to application for Special Permit for Outdoor Marijuana Cultivation Leon H. Dykas III
Town Meadow Farm 124 Green Street, Leicester, MA

Dear Ms. Buck:

HÉCTOR E. PIÑEIRO

ROBERT A. SCOTT

Business Manager

NANCY CRUZ DE PIÑEIRO

I understand that you spoke with Mr. Dykas earlier on and requested more detailed information pertaining to odor control mitigation. You requested information on what other projects have done this and their effectiveness. As far as we know, no one no one in Massachusetts has proposed a similar plan for odor mitigation control as extensive as ours. We spoke with a colleague from Sheffield, who informed us that they plant sunflowers around their outdoor cultivation perimeter. We understand that odor from cultivation may be a concern to some. This is why we decided to implement our plan consisting of a combination of perennials and other herbs.

Our odor mitigation consists of approximately 31,000 S.F., of seeding of mint and peppermint around the west north and east exterior perimeter of our fence. We intend to plant approximately two hundred additional plants of perennials and for other species we intend to plant I refer you to our detailed exterior planting section contained in our March 11, 2021 letter to the Planning Board (attached). I am also enclosing an outdoor adult use cultivation facility security outline prepared by Michael Terrizzi, Sales Engineer for Platinum Protection Systems, LLC. It contains a narrative and details on our video and security system.¹

I also understand there were some questions pertaining lighting and that the Leicester zoning bylaw require that light glare be minimized on abutting properties. You may remember that in our March 11, 2021 letter we informed the planning board that exterior lighting would not be continuous during the night. It will be triggered only by sensor activity. We have been alerted by our security consultant to the CCC regulations at 935 CMR 500.110 (1)(k) (Security

¹ Because of security concerns I request that it be shared with the members of the planning board only.

Requirements for Marijuana Establishments) which provides "Ensuring that the outside perimeter of the Marijuana Establishment is sufficiently lit to facilitate surveillance where applicable." We recognize the conflict between our zoning bylaw and the CCC regulations and intend to work with the planning board and the CCC to satisfy any of these concerns.

I understand you had questions regarding point of use lighting for harvesting purposes, a point we raised in our March 11th letter to your office regarding hours of operation. This may consist of having our staff wear head lamps for harvesting, or tripod halogen lights to assist us with harvesting. During harvesting season we do not anticipate more than three truck trips per day. The trucks will not be large trucks. We intend to use a box truck or van under 10,000 pound GVW.

Thank you.

Heater E. Pineiro

Enclosure

HÉCTOR E. PIÑEIRO, P.C.

807 MAIN STREET WORCESTER, MASSACHUSETTS 01610 (508) 770-0600

> FAX (508) 770-1300 hector@pinelrolegal.com

CORRESPONDENT

MARÍA S. PIÑEIRO SOLER, L.L.M. EDIFICIO PONCE DE LEÓN 161 PONCE DE LEÓN AVE., SUITE 302 SAN JUAN, PUERTO RICO 00918 TEL: (787) 250-8304 FAX (787) 758-4236

March 11, 2021

By email: BuckM@leicesterma.org

Michelle Buck, Town Planner Town of Leicester Leicester, MA 01586

RE: Supplemental information to application for Special Permit for Outdoor Marijuana Cultivation Leon H. Dykas III

Town Meadow Farm 124 Green Street, Leicester, MA

Dear Ms. Buck:

HÉCTOR E. PIÑEIRO

ROBERT A. SCOTT

Business Manager

NANCY CRUZ DE PIÑEIRO

I wanted to provide some additional information regarding Mr. Dykas' application for special permit that we initially provided on February 2, 2021. A supplemental response was also emailed to you by our engineer DC Engineering & Survey, Inc., on March 8, 2021 (enclosed). He addressed eleven (11) points. I will respond to some additional concerns that you raised:

¶4)

Town Meadow Farm Cannabis Grow Odor Mitigation Plan Introduction

The intent of our plan is to undertake vigorous efforts to mitigate the odor that will be produced due to the development and operation of a two-acre outdoor cannabis grow on the property of Mr. Leon Dykas, located at 124 Green Street in Leicester, MA. The odor mitigation plan is one of the major processes that this organization will utilize to alleviate the impact that a cannabis grow can have on a community. This organization's goal is to responsibly provide a new cash crop to a local farm and help preserve some of the natural, agricultural heritage of Central Massachusetts while avoiding detriment to the surrounding community.

¹ It also includes a Stormwater Operation and Maintenance Plan & Long-term Pollution Prevention Plan, Stormwater Drainage Analysis and plan.

Project Location

The project is located on Town Meadow Farm, a 141 acre farm at 124 Green Street in Leicester, MA (see Figure 1). The location of the grow itself is strategically setback from the road and the nearest residential buildings (see Figure 2) in order to reduce the impact on the surrounding community. This is a much greater setback than has been proposed as regulations in other towns such as the 100 feet proposed by Williamstown, MA. The project is set on top of a secluded hill that receives substantial northward wind which will move the odor away from the residential areas located to the South of the project site. The hill itself is situated in the middle of Dykas' property, which is an actively farmed parcel surrounded by farmland and undeveloped woodland. Adjacent to the site is an additional 81 acres of working farm owned by Mr. Dykas. There are no retail businesses in the area to be affected by this project. The location of this project maximizes the effect of every odor mitigation process being implemented. By locating the project on a secluded hilltop that receives general wind patterns away from the nearest residential areas this organization has set itself up to be successful in its odor mitigation plan from the startup.

Spatial Analysis

The spatial analysis of the project revealed that the closest residential building to the grow site is that of the property owner of 124 Green Street, Mr. Leon Dykas who is invested in the project. Other abutters are appropriately distanced from the site. In addition the farm has natural barriers that will reduce the impact of any odor produced by the project.

Mitigation Techniques

Structural/Mechanical

This organization is installing an opaque 600 foot by 300 foot fence around the entire perimeter of the grow. The fence will not only contain much of the odor produced but will also act as the bulwark for the odorous groundcovers to be planted on either side of it. We have have chosen peppermint as the primary odorous groundcover. See **Exhibit 1**—photograph of a similar fence. Peppermint produces high amounts of potent essential oils such as menthol. limonene, and linalool. These oils will act as a mask for the terpenes that the cannabis plants will be producing.

Strain Selection

This organization will grow cannabis strains that are not high in noxious terpenes. Some of the terpenes produced by certain strains of cannabis have reputations for producing potent odors that many people are sensitive to. As a result, the strains that have been selected for this project in general do not produce high levels of these volatile organic compounds. Despite the limitations this will put on the organization it is a compromise that is built into the odor plan for the benefit of the community.

Cyclical Planting and Harvest

It is important to understand the whys and whens of Cannabinoid odor production and live odor in the plant cycle. A mature plant in flower is at its peak harvest time when it is on the cusp of becoming odorous. While mature plants can smell, it is in our best financial interest to remove these plants from the field before odor is an issue. The plant's terpenes values are at their highest, and if we let it run past that point the total value of our field drops dramatically. Similar to most agriculture, this grow will consist of staggered planting and staggered harvesting. At no point in

time will we have a field of fully matured plants. We have a tiered set up to have 8-10 different harvest times. Meaning no more than 10 - 12.5 % of the field will be mature at any one time.

Non-Cannabis Crops

We have chosen to give up some of the growing medium of the project to grow other non-cannabis crops that have odors of their own. The plants have been chosen to produce odors throughout the growing season and a planting of each will divide every cannabis plant. In total 3,000 Milkweed, Lemon Balm, Cerastium, Lavender (lavandula angustifolia) and Dill plants will accompany the 3,000 cannabis plants within the growing area.

Exterior Plantings

A 20 foot Peppermint ground cover will be planted around the perimeter of the fence and it will be maintained and routinely mowed to encourage vigorous oil production. Peppermint produces a variety of oils that are used in perfumes due to the potency of the oils. A plant will be planted every four squared feet to allow the plants to spread, grow, and produce an effective odorous groundcover. Sunflowers will be planted every five feet around the fence to attract pollinators and act as a green odorous fence. The same is true for lavender.

Four eight by eight foot herb plots will be installed near the southern boundary of the grow. Six plants of lavender, sage, and thyme will be grown in each of these plots. These herbs have been chosen for their pleasant scents and for their medicinal and culinary uses. Lavender for example is commonly used in perfumes due to its high levels of linalool, pinene, and myrcene all of which are considered to be relaxing, pleasant odors. Sage produces terpinolene, limonene, and myrcene. While Thyme produces thymol, carvacrol, and geraniol. These herbs and the potent oils they produce will attract pollinators and provide a pleasant odor to mask the odor of the cannabis throughout the growing season.

Four eight by eight foot flower plots will be installed near the southern boundary of the grow. Six plants of Orienpet, Lily, Peony, Aster, Echinacea, Dianthus will be planted in each of these plots. These flowers have been chosen for their pleasant aroma and their pleasing aesthetic quality. Orienpet Lily for example produces pinene, myrcene, and limonene. Peony will produce caryophyllene, linalool, and citronellol. Aster will produce germacrene, pinene, and caryophyllene. Echinacea will produce myrcene, pinene, and limonene. Dianthus will produce ocimene and caryophyllene. These flowers and their powerful oils will attract pollinators and provide a pleasant odor to mask the odor of the cannabis throughout the growing season.

Conclusion

This Odor Mitigation Plan describes the steps that will be taken by this organization to mitigate the odor produced by the construction and operation of a 2-acre cannabis grow at Town Meadow Farm. Included in this plan is an intensive planting to combat odors. This plan outlines how this organization will through: site selection, the use of existing and newly planted natural barriers, the construction of structural barriers, the planting of odorous and odor suppressing non-cannabis

species, and the overall strain selection of the grow in order to minimize the odor emitted by the proposed outdoor cannabis grow at Town Meadow Farm. ²

¶ 5 Lighting and general operations ¶8.

Work lighting and hours of operation are interrelated. The Planning Board asked the petitioner for additional information on lighting. Specifically, "What security lighting, if any, is required by the Cannabis Control Commission (CCC)? Describe the use of outdoor lights for farming operation."

Response:

The CCC has very specific regulations for indoor cultivation lighting. See, e.g., 935 CMR 500.120(11)(b)(1)(2)(3). For outdoor cultivation, their rules are as follows:

Outdoor Cultivation shall mean the cultivation of mature Cannabis without the use of artificial lighting in the Canopy area at any point in time. Artificial lighting is permissible only to maintain immature or vegetative Mother Plants. The remaining lighting provisions of the CCC appear primarily targeted towards indoor cultivation. 935 CMR 500.002 in the definition section at pp. 110 of the regulations.³

Security lighting: the interior and exterior security lighting is not continuous during the night. Security lighting is triggered only by sensor activity.

Hours of operation

Hours of operation and lighting are coterminous (dependent). Normal hours of operation will be dawn to dusk seven (7) days a week similar to any other agricultural activity. Working under natural light will be the preferred method of operation. However, weather and progress in planting and the demand of harvest may dictate work hours beyond daylight time. For instance,

² We consulted with another colleague running an outdoor cultivation site similar to our proposal. They notified us that they are going into their fourth growing season and that do date have not experienced any odor complaints.

³ Industrial F-1, as further defined in guidelines issued by the Commission.

⁽b) Lighting used for Cannabis Cultivation must meet one of the following compliance requirements:

^{1.} Horticulture Lighting Power Density must not exceed 36 watts per square foot, except for Tier 1 and Tier 2 which must not exceed 50 watts per square foot; or 2. All horticultural lighting used in a facility is listed on the current Design Lights Consortium Solid-state Horticultural Lighting Qualified Products List ("Horticultural QPL") or other similar list approved by the Commission as of the date of license application, and lighting Photosynthetic Photon Efficacy (PPE) is at least 15% above the minimum Horticultural QPL threshold rounded up to the nearest 0.1 µmol/J (micromoles per joule).

^{3.} A facility seeking to use horticultural lighting not included on the Horticultural QPL or other similar list approved by the Commission shall seek a waiver pursuant to 935 CMR 500.850 and provide documentation of third-party certification of the energy efficiency features of the proposed lighting. All facilities 935 CMR 500.120 (11)(b)(1)(2)(3)

during spring time, natural sunlight can last up to fifteen hours a day. As the summer progresses into the fall solstice months natural daylight is shorter.

Early spring

Once the greenhouse can sustain above freezing temperatures during the night, growing activity will slowly begin. Per our security plan before any work activity starts, there will be testing and implementation of the security plan.

You have also inquired about the length of our season: We submit the start of our season will be between approximately March and the month of May, weather dependent.

Mid Spring

During April and May most of our work will be dedicated to preparation and construction of the site to bring the necessary facilities. Some of our workers will involve greenhouse work and soil preparation.

Early fall and harvesting

We anticipate harvesting between late August thru October. Obviously the days will grow shorter thru the fall equinox (Sept. 21st). It is also hurricane season in New England with high winds, excessive rain. Thus, in some cases harvesting may continue thru the night. Work light are only meant for the safety of our employees and functionality. We may require point of use lighting to help facilitate harvesting.

¶6

We have retained the professional services of Platinum Protection Systems, LLC of 15 McGrath Road, Methuen, Massachusetts. As you probably know this company is involved in the Millbrook project on Huntoon Highway, Leicester, MA. Upon information and belief, this company has done over twenty-two marijuana establishment security plans in the Commonwealth. Mr. Dykas, Chief of Police Antanavica and Mr. Terrizzi from Platinum protection have already met and discussed the details of the security plans. These plans will comply in every respect with CCC requirements. The security plan will address other issues including but not limited to signage on the opaque fence, signage around the entire property. We anticipate a full security plan will be submitted to Chief Antanavica by tomorrow, Friday March 12, 2021.

¶8

With respect to processing, once harvested, our harvest will be immediately removed from the farm to another facility. We do not intend to process marijuana at 124 Green Street. As far as traffic, one of the seven employees lives at the farm. The other six will come into work and we do not belief this number of employees will affect traffic on Green Street. Our product will be transported in small box trucks or vans that comply with CCC regulations. We will submit an

application to the CCC as soon as we received our approval from the Board and the host community agreement from the Town of Leicester.

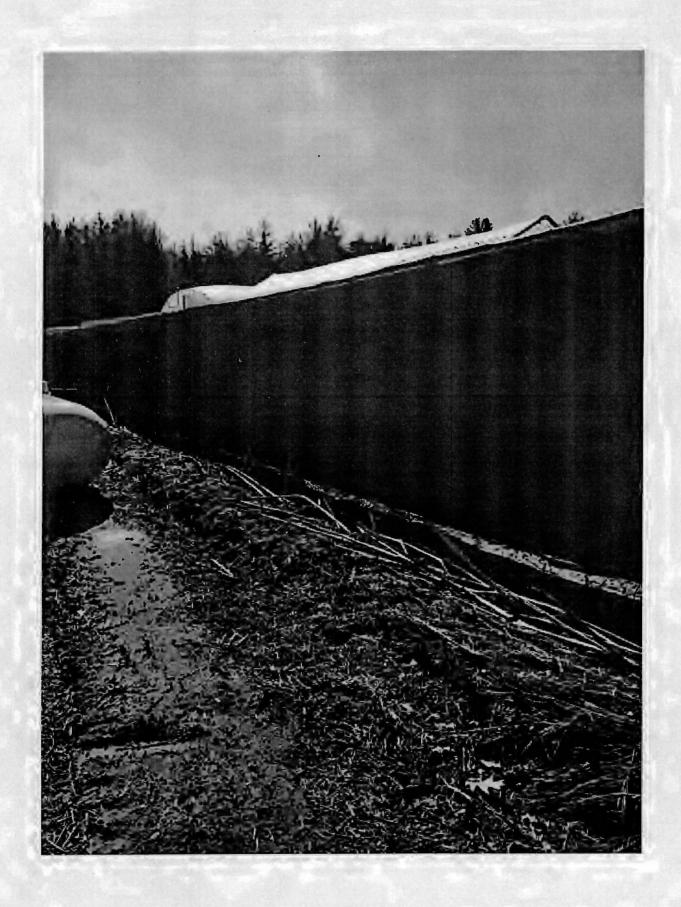
We will have an opaque green colored fence. Our worker's trailer and our security trailer will both be white. Our sheds will be built with lumber and stained. Our green house will be clear. On a final footnote, we may slightly reduce the area of the security fence and may move it back 200' to its original location.

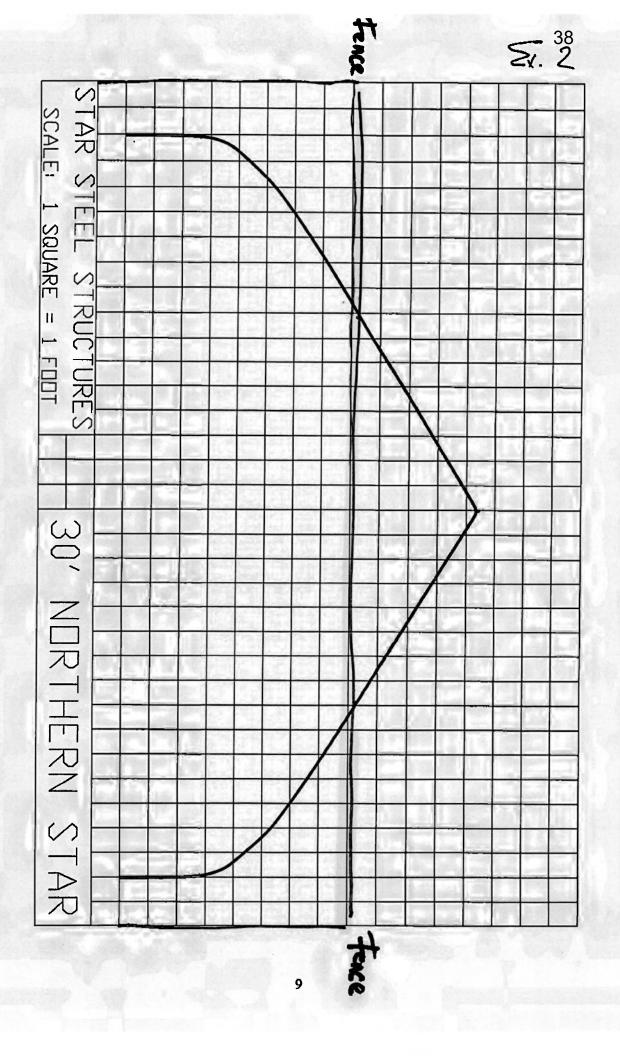
Sincerely, I remain

Hector E. Pineiro

Enclosure







Outdoor Adult Use Cultivation Facility Security Outline

- 1. Narrative
- 2. Video Surveillance System
- 3. Alarm System
- 4. Access Control
- 5. Intercom System
- 6. Interlock System

Narrative

The Town Meadow Farm Cultivation site will have a fully integrated physical security information management system installed at their premises. Though the video management platform software, mapping will outline all cameras at the facility and easily allow staff to follow an individual through the facility. A local alarm keypad will be installed in the security office, allowing direct access to the alarm system conditions for all zone for direct alarm events. All these assets will provide the on-staff site security officer the ability to respond quickly and appropriately to all events.

All exterior facing doors / fence areas entering the cultivation areas will be clearly marked with "Limited Access Area, Limited Access to Authorized Personnel Only" Exterior property line will be lined with "No Trespassing" signage.

All exterior entrance door, gates, storage doors will require two factor authentication. This will require staff to provide a "something they have" the access card and "something they know" a pin code to pass through a secure doorway. Once a person has authenticated that they do hold the correct card by two factors, the person can use the card on any interior doors without a pin code. Card Access doors will be installed on any doors to rooms that can contain plant material and may be left unattended and remain secure.

Visitor Access: When contractor approaches the facility a video and audio intercom will allow for two-way communication with the visitor. Once security has validated their purpose of entering the facility, security will grant access street gate, at which time they will drive up the secondary gate at the facility. At that time, the security staff will verify credentials outlined by the facilities procedural process. Provide badging and record drives license of anyone visiting the property.

Staff Access: Staff will be allowed to enter the site from the front gate via a secure keypad. Anyone leaving the facility shall go through a personnel inspection to make sure they are not leaving the site with any plant material. Specific details on escorting staff around the facility before and after their shift will be outline in the site procedural documentation.

Video Surveillance System

Site will contain an enterprise class video management platform from Tyco Inc. called Exacq Vision Professional. This video management platform will connect and record all IP based cameras.

All cameras will record to an onsite video server containing 120TB of video storage in RAID 5 redundancy providing 90+ days of video retention. The server can expand to 240TB of storage, in the event more storage is required, dual quad core CPUs, redundant power supply, connected to a back up battery system and generator. A failure of the video recording system will trip an alarm point in the alarm system which will notify the site staff that there is a failure in the video recording system and prompt them to dispatch for service.

All cameras shall be accessible to the video workstation in security, along with ownership, police and authorized authorities to view live video, recorded video and save any video as needed.

All cameras shall be 4MP resolution Wide Dynamic Range, double that of 1080P, recording at their max frame rate to provide detailed high-resolution images of activity throughout the facility. Cameras will be in all areas that will contain or store plant material.

Cameras will be covering all aspects of the facility including exterior, interior green house and any other areas where plant material shall be present.

Alarm System

Site will contain a Honeywell VISTA series alarm panel, the commercial grade alarm panel made by Honeywell. This alarm panel will provide full site intrusion protection, included areas are cultivation gates, motion detector zones. The Honeywell alarm system will be connected with multiple redundancy paths of communication to two distinct central stations. Primary and Secondary Paths shall be via Ethernet and Cellular via Verizon network to our central station in Manchester, NH with a 5minute check in / heartbeat. The redundant path via Quad Path Radio via StarLink Transmitter shall communicate via Ethernet or Cellular via ATT to back up central station in Syracuse, NY.

This means of communication shall provide total redundancy all the way down to central station, thus if there was a catastrophic failure at an alarm dispatch center, at no time would the site not be monitored.

Since there is a required heartbeat, the central station will actually call the customer if the radio fails to check in any 5 minute interval, if the alarm system is disabled for any reason while in the disarmed state.

Full tampers and end of line resistance will be provided on all devices thus ensuring no one at the site will tamper with any devices. A combination of tri-technology motion detectors, heat, seismic and door sense modular will monitor doors any area throughout the facility. Any exterior door shall be monitored, and any emergency egress doors shall send a 24 hour alarm to the central station. Since these emergency egress doors will only be used in an emergency, this will allow the central station to promptly the call to the site security officer and have the central station dispatch the police if necessary.

All these devices will be backed up by 48 hours batteries in the event a generator fails to turn on, the site has procedural documentation on restoring power beyond the 24 hour time frame. This will allow the site to remain under intrusion detection throughout an extended power loss. A generator will turn on in the event of a complete power loss, allowing the facility to operate without any utility power connection.

Attention to detail and additional devices are installed in the dry/curing rooms, since these either almost finished product. These additional layers of security are to protect and prevent loss of product.

Access Control Systems

The access control platform is Avigilon Access Control Manager, a fully integrated physical security information management platform. At its core the system will authenticate any valid badge at access control doors, record and provide audit logs for this access. With additional feature sets, the video and alarm system components will also report and interact with this system, providing a single web browser-based screen to view all facility interactions and provide a detail recall of site activity at any time.

Main exterior entrance will have dual factor authentication, allowing authorized staff to enter the facility with valid access. Any areas that are restricted access from customer facing doors to cultivation will also require two factor authentication.

All access control doors will limit, and control required access to areas, provide a detail audit log of which rooms are accessed, when and by whom.

There will be access control on the exterior gate, allowing vehicle to enter security area to load a shipment for transport to another facility.

Intercom System

At all street and facility entrance man gate there will be a video/audio door intercom system. This will allow for two-way voice communication to the security office to a desk mounted monitor station. A customer, visitor, vendor can communicate their intention and staff and choose to unlock the door or direct them away from the facility from one central location. Each intercom's video stream will be recorded to the video management system. This will capture anyone's face that directly communicates with the facility.

Town of Leicester PLANNING BOARD



LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070

www.leicesterma.org

3/31/2021 DRAFT

SPECIAL PERMIT/SITE PLAN REVIEW DECISION

and Stormwater Permit

Date:

File Number: SP2021-02

Applicant: Leon H. Dykas III

Town Meadow Farm 124 Green Street Leicester, MA 01524

Owner: Same as Applicant

Location: 124 Green Street /Map 38, parcel A60

Deed Ref.: Book 34762, Page 372

Zoning: Suburban Agriculture (SA)

Water/Sewer: private well/no sewer

Subject: Application for Special Permit under §3.2.03.23 and Section 5.15 of the

Leicester Zoning Bylaw to outdoor marijuana cultivation

The decision of the Planning Board on the above-referenced application is as follows:

Procedural History:

- 1. On <u>February 3, 2021</u>, an application for a Special Permit and Site Plan Approval was submitted to the Leicester Planning Board (the Special Permit Granting Authority). All application materials are on file with the Planning Board. The Board's decision is based on the following submittals:
 - A. Application packet (Application Form, Project Narrative, and abutters list)
 - B. Set of Site Plans (2 sheets) for 124 Green Street, prepared by DC Engineering and Survey, Inc. dated February 1, 2021, revised through March 9, 2021, as follows:

Sheet Title	Sheet number
Overall Property Plan	X-1
Existing Conditions Plan	S-1

- C. Stormwater Drainage Analysis prepared by DC Engineering & Survey, Inc. dated March 8, 2021.
- 2. The Board engaged Quinn Engineering of Paxton, Massachusetts, pursuant to G.L. c. 44, s. 53G, to review the Applicant's proposed development.

- 3. The Planning Board held a public hearing on the application on March 16, 2021. The hearing was continued to April 6, 2021. At each hearing date(s) opportunity was given to all those interested to be heard in favor of or opposition to such application. The hearing was closed on _______.
- 4. During the review process, the following documents, exhibits and plans were submitted to the Planning Board:
 - A. The plans and submittals referred to above;
 - B. Engineering response letter from DC Engineering & Survey Inc., dated March 8, 2021 with attachments.
 - C. Revised narrative letters from Attorney Hector Piniero (with attachments) dated March 11, 2021, March 15, 2021, March 16 2021, and March 30, 2021.
 - D. Correspondence of Quinn Engineering, Inc. to the Leicester Planning Board dated March 3, 2021, March 15, 2021, and ______.
 - E. Written comments from the following Town Boards and Departments: Highway Department, Police Department, and Town Planner.

Findings:

- 1. The project is located on a 58 acre parcel in the Suburban Agriculture (SA) Zoning District, which is within a 141 acre family farm owned by the Dykas family that extends from Green Street to Pine Street. The applicant proposes an enclosed 4.13 acre enclosed area that will be dedicated to outdoor marijuana cultivation (the marijuana growing area will be 100,000 square feet). The existing farm will continue to be used for agricultural purposes, including keeping of livestock and growing vegetables and hay. Twelve (12) parking spaces are provided for employees (7 employees). The marijuana growing area will be secured by a 300' x 600' eight (8) foot high opaque fence (chain link with wind screen) and other security measures including video surveillance, alarms, intercom systems and locks.
- 2. No lighting is proposed other than occasionally use of portable lighting for evening harvesting. The Applicant proposes an odor control plan that consists of fragrant plantings, wind-screen fencing, existing wooded areas, and distance from abutting property owners. Normal hours of operation will be dawn to dusk seven (7) days per week and working under natural light will be the preferred method of operation. Weather and harvest demands may sometimes require work beyond daylight hours.
- 3. Marijuana will not be processed in site. Once harvested, it will be immediately removed from the farm to an off-site processing facility using small box trucks or vans (approximately 6-7 per day) in conformance with CCC Regulations.
- 4. The subject property is located in the Suburban Agricultural (SA) zoning district, which allows "Marijuana Outdoor Cultivator" (§3.2.03.23 and §5.15) by Special Permit from the Planning Board. The agricultural zoning exemptions in MGL Chapter 40A§3 do not apply to marijuana cultivation.
- 5. Section 5.2.05 of the Zoning By-law contains Standards for Site Plan Approval (standards A-G). With regard to the Applicant's development proposal, the Planning Board makes the following findings pursuant to Section 5.2.05:

- A. The use complies with all the provisions of the Leicester Zoning By-Law; The Board finds that the proposed project, as conditioned in this approval, complies with the Leicester Zoning Bylaws.
- B. The use will not materially endanger or constitute a hazard to the public health; The Board finds that the proposed project, subject to the conditions set forth in this decision, will not constitute a hazard to public health or safety.
- C. The use will not create undue traffic congestion or unduly impair pedestrian safety; The Board finds that the project as designed will not create undue traffic congestion or unduly impair pedestrian safety.
- D. Sufficient off-street parking exists or will be provided to serve the use;

 There are no specific parking provisions for outdoor marijuana cultivation in Leicester's Parking Regulations. As noted above, the applicant has provided 12 parking spaces. The Board finds the parking adequate for the proposed use..
- E. The use can be adequately served by water, sewer, and other necessary utilities, or if these are unavailable, that they will be brought to the site at the owner's expense; or, the Planning Board is satisfied that the proposed alternatives will comply with all applicable regulations;

 A private well is proposed for irrigation. Porta-potties are provided for workers. Other
- F. The use will not result in a substantial increase of volume or rate of surface water runoff to neighboring properties and streets, nor will result in pollution or degradation to surface water or ground water;

 Based on the review by the Board's consulting engineer, Quinn Engineering, Inc., the

utilities will be provided by the owner at the owner's expense.

- Board finds the stormwater system meets applicable standards as conditioned herein.
- G. The use will not result in any undue disturbance to adjoining property owners or the Town caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, glare, etc.
 - As set forth in this Decision and based upon the revisions incorporated into the plans during the course of project review, the proposed development will have adequate screening, landscaping, and other safeguards to meet this standard.
- 6. MGL, Chapter 40A, §9 requires that the Board find uses allowed by special permit to be "in harmony with the general purpose and intent of the ordinance or bylaw." *The Board finds that this project is in harmony with the purpose and intent of the Bylaw.*
- 7. Section 5.15 of the Zoning Bylaw (Medical Marijuana Treatment Centers and Marijuana Establishments), subsections 5.15.03 and 5.15.04C.8, establish criteria for granting of a special permit, as described below:
 - $\underline{5.15.03}$: In addition to the special permit approval criteria for the applicable zoning district (n/a) and the Planning Board's Special Permit Regulations general special permit criteria (n/a-the more specific Section 5.15 requirements apply), the Planning Board shall find that the proposed use meets the requirements of this section 5.15.
 - Section 5.15 includes standards related to setbacks, minimum lot size, buffers, signage, odor control, lighting, and security. *The Board finds that the project meets these standards as conditioned herein.*

<u>5.15.04.C.8</u>: In reviewing a special permit under this section the Board shall consider the impact of the proposal on the following:

- a. Character of the neighborhood to include visual compatibility with surrounding uses.
- b. Proximity to other licensed marijuana uses to prevent clustering.
- c. Relationship to surrounding uses to avoid unnecessary exposure to minors.
- d. Site design and other development related site impacts.
- e. No odor from marijuana or its processing can be detected by a person with an unimpaired and otherwise normal sense of smell at the exterior of the Marijuana Establishment or at any adjoining use or property, except as allowed under a Special Permit granted to a Outdoor Marijuana Cultivator. Outdoor cultivation of marijuana will implement industry best practice to eliminate any noticeable trace of marijuana odor at the perimeter of property of the cultivator site.

The Board finds that the project meets these standards as conditioned herein.

Decision:

In view of the foregoing, at the meeting of _______, the Planning Board voted to approve the Special Permit application for the above-described project. As used in this decision, the term "Applicant" shall mean the Applicant, its heirs, successors and assigns. Unless otherwise specified, the Board may designate an agent or agents to review and approve matters set forth in this decision. The Planning Board's approval is subject to the following conditions:

Pre-Construction

- 1. The Special Permit shall not take effect until it has been recorded at the Worcester District Registry of Deeds and evidence of such recording is delivered to the Planning Board.
- 2. Prior to the commencement of authorized site activity, the Applicant shall provide to the Planning Board Office the following information:
 - a. The name, address, email, and business phone number of the individual who shall be responsible for all construction activities on site.
 - b. Copies of all required federal, state, and local permits and licenses for the construction of the proposed project which is the subject matter of the building permit shall be obtained and presented to the Leicester Office of Development & Inspectional Services. This shall specifically include a provisional license from the Massachusetts Cannabis Control Commission (CCC).

General

- 3. Final design and construction shall be in substantial conformance to the plans submitted to the Planning Board and this Order of Conditions. No substantial corrections, field modifications, additions, substitutions, alterations, or any changes shall be made in any plans, proposals, and supporting documents approved and endorsed by the Planning Board without the written approval of the Planning Board, which in its sole discretion, may determine such substantiality. Any requests for substantial modifications shall be made to the Planning Board for review and approval and shall include a description of the proposed modification, reasons the modification is necessary and supporting documentation.
- 4. Unauthorized deviations from the approved plan may result in the Planning Board seeking the issuance of a Cease and Desist Order until the deviation is addressed. Violation of any condition contained herein or failure to comply with the approved plan shall subject the

Applicant to a zoning enforcement action in accordance with the remedies set forth in M.G.L. c. 40A.

- 6. Litter and debris on-site shall be removed regularly to maintain a neat and orderly appearance.
- 7. The use shall not result in any undue disturbance to adjoining property owners or to the Town caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, glare, etc.
- 8. All travel lanes and parking areas shall remain accessible and clear of snow year-round. In such instances where snow storage areas are not sufficient to accommodate heavy snow, the Applicant shall remove snow off site to ensure that all travel lanes and parking areas are accessible.
- 9. All signs shall comply with CCC requirements, as well as §3.2.07 and §5.15 of the Zoning By-law, unless a special permit or variance is granted by the Zoning Board of Appeals.

Project-Specific Conditions:

- 10. No marijuana cultivation shall take place until the Applicant has received final approval from the CCC.
- 11. The project proposes no security lighting at this time. If security lighting is required by the CCC, the Applicant shall submit detailed information to the Planning Board to document conformance with Sections 5.15.02.J and 5.15.04.C.8.a of the Zoning Bylaw.
- 12. Fragrant plantings must be planted as early as practical in the growing season and established before cannabis plants mature.
- 13. The fabric wind screen must be maintained and repaired as needed to continually meet the requirement for an opaque fence.
- 14. Other project-specific conditions?

Construction

- 15. During construction, the Applicant shall comply with all local, state and federal laws regarding noise, vibration, dust and blocking of Town roads. The Applicant shall at all times use all reasonable means to minimize inconvenience to residents in the general area. Construction on exterior features shall not commence on any day before 7:00AM and shall not continue beyond 7:00PM; provided, however, that such construction shall not commence on Saturday before 8:00AM and shall end at 3:00PM. There shall be no construction on any Sunday or state or federal legal holiday.
- 16. Members or agents of the Planning Board shall have the right to enter the site at reasonable times to gather all information, measurements, photographs or other materials needed to

- ensure compliance with this approval. Members or agents of the Planning Board entering onto the site for these purposes shall comply with all safety rules, regulations and directives of the Applicant and the Applicant's contractors.
- 17. The Applicant and/or property owner shall provide at least forty-eight (48) hour notice to the Town Planner and the Planning Board's engineer, prior to commencing any work on the site that requires inspection or review.
- 18. The Applicant shall promptly pay the reasonable fee of the consulting engineers for review of plans or field inspections during the construction phase.
- 19. Sediment tracked onto abutting public or private ways from construction activities shall be swept at the conclusion of each construction day, until all work areas have been properly stabilized.

Occupancy/Project Completion

- 20. The Applicant shall notify the Planning Board when work is complete and ready for inspection. The Planning Board shall require a Certificate of Project Completion before operation of the facility.
- 21. No final Certificate of Project Completion or Certificate of Occupancy shall be issued until the structures, fencing, and utilities are completed and all conditions of approval have been addressed. Prior to the issuance of such Certificate(s), all site improvements, landscaping and infrastructure specified on the plans shall be constructed and installed to adequately serve said Facility, unless adequate security has been provided, reasonably acceptable to the Board, to ensure such completion. Any such performance guarantee shall be approved as to form by the Board's designee.
- 22. If there are field changes from the approved site plans referenced above, the Applicant shall submit as-built plans (3 full-size copies, 1 11" x 17" and a .pdf version) showing such changes prior to the final certificate of occupancy. No final Certificate of Project Completion or Certificate of Occupancy shall be issued until the Planning Board or its agent confirms that all improvements or alterations substantially comply with the approved Site Plan.

Approval by the Planning Board shall not be construed as approval from any other board, official or regulation that is needed regarding permitting for this project.

RECORD OF VOTE

	Ch. 110G and pursuant to the Planning Board's electronic n Book <u>62374</u> Page <u>135</u> at the Worcester District Registry
Jason Grimshaw, Chair	Debra Friedman, Vice Chair

Jaymi-Lyn Souza

James Reinke, Associate Member

Copy of Decision sent to:

-Town Clerk -Building Inspector -Assessors Office

The Board vote was __ in favor of approval __ opposed.

-Applicant* -Applicant Engineer** -Applicant's Attorney**
-Owner* -Town Administrator -Quinn Engineering**

Sharon Nist

Notice of Decision delivered to "Parties in Interest" (abutters & Planning Boards of abutting Towns)

^{*} by certified mail

^{**} where applicable



Town of Leicester PLANNING BOARD

LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

Project Name: WorcShop (11 Hankey St)

PUBLIC HEARING NOTICE

In accordance with MGL Ch. 40A, Sec. 9, the Leicester Planning Board will hold a public hearing regarding an application by Randolph Gardener for a special permit to allow reuse of the existing historic mill building at 11 Hankey St, Leicester, MA as a makerspace. The hearing will be held virtually using GoToMeeting on Tuesday, April 6, 2021 at 7:00PM or as soon thereafter can be heard. Members of the public can attend virtually by visiting https://global.gotomeeting.com/join/933168101 or by phone at +1 (866) 899 4679 by using access code 933-168-101. Copies of the plan and application may be inspected on the Planning Board's web page at www.leicesterma.org. Any person interested or wishing to be heard on this application should appear at the time and place designated.

Jason Grimshaw, Chair Leicester Planning Board

To be published in the Worcester Telegram & Gazette on: Tuesday, March 23, 2021 and Tuesday, March 30, 2021

For Planning Office Use: File #:____

Leicester Planning Board Site Plan Review & Special Permit Application Form

PERMI	T TYPE: 🖟	Special Permi	it Si	te Plan Re	view		m ² 5
CONTA	ACT INFOR	MATION					
Owner I	nformation						2H 1
Name:	David N	Magnus	son	Company Name:	Rochdale Ho	ldings / Worcester T	ool and Stámping
Signatur	e: /	Jond	\mathcal{M}	Jac, M	NO.		35 P
Address:	11 Hankey Rochdale, I			' (
	508) 892	-8195	Email:	adm	nin@wo	orcester-to	ol.com
	t Information						
Name:	Randolp	h Gard		Company Name:	Word	Shop	
Signatur	e:						
Address:	11 Hankey Rochdale, I						
Phone: (508) 713	-7776	Email:	thev	vorcsh	op@gmail	.com
Primary Contact Person (The person that will be contacted by Planning Board staff during the application process.)							
Name: Ethan DeSota Company Name: Ethan DeSota.com							
Address: 444 Henshaw Rochdale, MA 01542							
Phone: (810) 874-6463 Email: evdesota@gmail.com							
PROJECT INFORMATION							
Project Address: 11 Hankey St Zoning District: NB							
Assessors I & Parcel #	43 (I	Reference & Page):	3170 / 1	111
Applicable	Zoning Bylaw S	ection(s): Se	ction 5	5.10 Ad	laptive U	Jse Overlay	
Proposed	Land Use:	I				daptation	S
Existing	Land Use:	F2		-			

				File #:
PROJECT INF			d	
Total Lot Area:	9.96	⊥ Acres		
Water Source:	Private	Well	Che	erry Valley & Rochdale Water District
(Select One)	Hillcres	st Water District	Lei	cester Water Supply District
Sewer Source:	Private	Septic System	Che	erry Valley Sewer District
(Select One)	Hillcres	st Water District	Lei	cester Water Supply District
Zoning and By-lav	ws Section (acture, no ex	5.10. Although th cpansion of the c	nis permit antic	Makerspace via Leicester ipates remodeling and repairs or substantial reconfiguring c
Application C Use this checklist to Review & Special Perr	ensure you ha			t. See Planning Board Site Plan pt where noted.
Plans (2-full-size and 11"x17")		Detailed Project including any w	t Narrative	Drainage Analysis/ Stormwater Report, (3 copies)
Documentation of of Water & Sewer		Certified Abutte	ers List (1 copy) ²	Traffic Study (3 copies)
✓ Fees ³		pdf copy of all	required submittals	s (CD or USB Drive)
don't require conformate special permit approvate certified abutters lists a construction over 30,0	ance with Site Pla al criteria (see Spe are required for al 00 s.f. and ground	ın Review submittal requ ecial Permit Regulations	uirements, submit a n for details). cations and for Major 50,000 s.f or 2 acres o	
For Planning Bo	ard Use:			
Date of Submittal	!			
Public Hearing/Me	eting Date(s):			
Date of Planning	Board Vote:			

Page 2 of 2

Date Decision Filed with Town Clerk:

	ě
	E
	ľ
沙里工作 工作工	5
4.2	ŀ
- 6	ŀ
Δ.	ŀ
	ı
HARMLE TEST	ı,
	ı
	ŀ
CL)	ı
	ľ
	L
	ı
	ı
J 100	ŀ
	Ŀ
*	L
A SECTION OF THE RESIDENCE OF THE PARTY OF T	ı
	ŀ
2011 CH 2 2127M	ı
	ı
marting p. smart	ı
	ı.
THE THEORY	ı
Walley Walley Total	ŀ
	ŀ
	ï
	4
	ľ
	ľ
uranar 465	ľ
Man de Carrella	
	Ť,
	1
	Ä
	à
	÷
	Ĭ,
	THE PROPERTY OF A SECTION
	à
	1.
	ŝ
	2
	ú
	1
	ä
	į.
	ã
11.20	
ter ter territoria	10
	10 miles
.0 L	Commission
<u> </u>	The annual section is a
elce Project	The agrantisms from the
Leice fers L	Committee of the second
of Leice iffers I	Commentence from the comment of the
of Leice Tuffers L	
nofileice buffers i	
vin ofr∐eice ∆buffers I	
wn of Leice Abutters I	
own of Leice Abuffers I	
Town of Leice Abutters I	
Town of Leice Abutters L	
Town of Leice Abutters L	
Town of Leice Abutters L	
Town of Leice Abutters I	
Town of Leice Abutters L	
Town of Leice Abutters L	
	W. 7 C.

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	Stat	State Zip
43 A10 0	724 PLEASANT ST	JONES GUY G	JONES MAUREEN B	724 PLEASANT ST	ROCHDALE	MA	01542
43 A8 0	710 PLEASANT ST	WESSNER HOLDINGS CORP		65 JAMES ST	WORCESTER	MA	01603
43 A9 0	PLEASANT ST	BAPTIST PARSONAGE		700 PLEASANT ST	ROCHDALE	MA	01542
43 C5 0	PLEASANT ST	TOWN OF LEICESTER	TOWN HALL	3 WASHBURN SQUARE	LEICESTER	MA	01524
43 C6 0	709 PLEASANT ST	KIMBALL TANYA A		709 PLEASANT ST	ROCHDALE	MA	01542
43 C7 0	11 HANKEY ST	WORCESTER TOOL+STAMPING C		PO BOX 308	ROCHDALE	MA	01542-0308
43 C7.1 0	HANKEY ST	BERGIN JR JOSEPH D	BERGIN JR THOMAS J	P O BOX 486	HARDWICK	MA.	01037
43 C8 0	HANKEY ST	WORCESTER TOOL+STAMPING C		PO BOX 308	ROCHDALE	MΑ	01542-0308
43 C9 0	REAR PLEASANT ST	BERGIN JR JOSEPH D	BERGIN JR THOMAS J	P O BOX 486	HARDWICK	MA	01037
43A C9 0	693 695 PLEASANT ST	MURPHY EDWIN L	BERNIER SHARON A	693-695 PLEASANT STREET	ROCHDALE	MA	01542
43B A2 0	713 PLEASANT ST	VETERANS OF FOREIGN WARS	POST#7556-R WEYMOUTH E	PO BOX 47	ROCHDALE	MA	01542-0047
43B A3 0	PLEASANT ST	TOWN OF LEICESTER		3 WASHBURN SQUARE	LEICESTER	MA	01524
43B A4 0	721 725 PLEASANT ST	PAQUETTE MATTHEW P	PAQUETTE JESSICA L	723 PLEASANT ST	ROCHDALE	MA	01542
43B A4.1 0	719 PLEASANT ST	PAQUETTE ARTHUR J	PAQUETTE KATHLEEN M	17 CRAIG STREET	ROCHDALE	MA	01542
43B A5 0	731 PLEASANT ST	BRINK VANESSA		731 PLEASANT ST	ROCHDALE	MA	01542
43B A6 0	733 PLEASANT ST	YEAWOLO YATA		733 PLEASANT ST	ROCHDALE	MA	01542
43B A6.10	3 HANKEY ST	BLEASE LINDSEY P	LEVINE JOSEPH D	3 HANKEY ST	ROCHDALE	MA	01542
43B B1 0	HANKEY ST	WORCESTER TOOL+STAMPING C		P O BOX 308	ROCHDALE	MA	01542-0308
43B B2 0	6 8 HANKEY ST	LGA PROPERTIES LLC		58 DOUGLAS RD	SUTTON	MA	01590
43B B3 0	2.4 HANKEY ST	HAGGLUND CHARLES A	HAGGLUND NANCY	PO BOX 132	ROCHDALE	MΑ	01542-0132
43B B6 0	PLEASANT ST	GELINAS JAMES A		751-753 PLEASANT STREET	ROCHDALE	ΜĀ	01542
43B B7 0	PLEASANT ST	GELINAS JAMES A		751-753 PLEASANT STREET	ROCHDALE	M	01542
43B B8 0	761 PLEASANT ST	CASSANI JOHN	CASSANI HEATHER	761 PLEASANT ST	ROCHDALE	MA	01542

End of Report

Above is a certified list of abutters and abutters to abutters within 300 feet of subject. Subject property: 11 Hankey Street, Assessors Map 43-C7-0, Deed Ref. 3170/111 Subject owner(s): Worcester Tool & Stamping Co. Inc.

The WorcShop Project Narrative and Exhibits

TABLE OF CONTENTS:

Narrativep	op 2
Exhibit A – Current Conditions	op 9
Exhibit B – Site Plan/Draft Permit Sets	op 10
Exhibit C – Site Survey / Locus Plan	op 16
Exhibit D – Water District and Flood Plain Overlay	op 17
Exhibit E – Code Red Chapter 34 Review	op 18
Exhibit F – Future Parking Layoutr	op 40
Exhibit G – Certified Abutters List	op 41

Note: All exhibits provided digitally and in printed form separately.

Description and History of the Site:

(excerpted with edits/updates from current appraisal report by The Foster Company)

The property consists of freestanding, masonry, wood-frame & metal-frame and panel industrial/warehouse/office building of 52,065/SF GBA constructed circa 1927 with subsequent building additions and renovations.

Building Description - Table 201

Total Lot Square Footage	433,863 Sq Ft
Building Coverage %	12%
Parking Lot Coverage	Approximately 39,000 Sq Ft or 9%
Grace Building Area	52,065 Square Feet GBA, excluding a 1,250/SF NRA
Gross Building Area	office/storage mezzanine. 2,500 support office space.
Foundation	Concrete slab and a small 5' high concrete crawl space in a
Foundation	section.
	Masonry with brick veneer, wood-frame with vinyl clapboard
Structure – Exterior Walls	and metal frame and panel painted insulated metal panels.
and Service Doors	The building is served by four, truck height service doors and
	two, drive-through service doors.
	Thermal casement windows in the office and production
Windows – Clear heights	areas. Single pane casement windows in the industrial area.
	There are 13' clear ceiling heights in the industrial area. The
	ceiling height under the mezzanine is 10'.
Roof	Pitched asphalt in good and average condition and rubber
Rooi	and asphalt roof membrane in average condition.
	100% air-conditioned office space, and single furnace and
Heating and Cooling	hot water heater as well as suspended heaters fueled by oil for
	the industrial area.
Fire Safety	Smoke detector system emergency lighting, pulls and
File Salety	signage. 100% sprinkler system coverage.
Lavatories	Six lavatories in the building.
Finishes – Flooring	Unsealed concrete, vinyl, tile, and VCT.
Ceilings	Open metal truss and suspended tile ceiling.
Metering	Single metered for single occupant.

This is an older vintage industrial building that is a mix of several building additions with the building originally constructed circa 1927 and various building additions of various styles, and times constructed over the years. No exceptional historic value or significance seems to be attached to the site.

The WorcShop seeks to continue the manufacturing history begun by the Worcester Tool and Stamping Company at the site, by utilizing the site for modern micro-manufacturing and industrial business incubation that is flexible and responsive to the needs of the local community. We do this by providing member access to advanced manufacturing tools, software, and training to enable the invention and production of both traditional industrial products and high precision micro-manufacturing for a variety of industries.

General description of the proposed project:

The WorcShop is an industrial makerspace providing member-only access to manufacturing equipment, tool/job training and business incubation services as well as outreach to the general-public via vocational education programs.

The WorcShop conforms to the Makerspace definition within the June 2020 Leicester Zoning By-law: "a collaborative incubator workspace for making, learning, exploring in a variety of artistic, industrial, or light industrial activities such as machining, plasma cutting, sandblasting, ventilated painting, forging, casting, ceramics, and various other industrial processes. Such workspace may include a variety of low-tech and high-tech tools and equipment including but not limited to 3D printers, later cutters, cnc machines, soldering irons, blacksmith equipment, and woodworking machinery. Makerspaces may include training and educational activities, including training related to vehicle repair, and may also include live-work spaces."

The Makerspace designation is allowed via Special Permit in areas to which the Adaptive Use Overlay District applies (Section 5.10 of the Leicester Zoning By-law). The WorcShop's repurposing of the former mill known as the Worcester Tool and Stamping Co. meets and exceeds the purposes of Section 5.10.A.1-4. It is an ideal use for this mill building as the Makerspace model not only provides for the re-development of the site but also brings talent, business incubation, innovation and an increased tax base to the region via its educational, skill development, and business incubation model.

The 11 Hankey St Property is eligible for conversion to a Makerspace under Section 5.10.5.02 – Any existing structure having not less than 10,000 sq ft constructed more than (60) years ago and historically part of a mill complex.

The Attached Exhibit E – Code Red Chapter 34 Review demonstrates that the primary activities of the WorcShop will coincide with the F1, S1, and Group B building classifications as described in section 4.1 of Exhibit E.

1) WorcShop Hours of Operation:

- 24/7 Accessibility to full-time members.
- Open by appointment to the public.
- As per schedule for classes and events.

2) Occupancy Details:

Number of employees: 5 current employees with an addition 2-5 anticipated in the upcoming year.

Number of members: 80 current members. Member utilization rates are currently around 10% at any given time during the day. Currently, we will have from 8 to 10 members using the facility at any given time in addition to the 5 full-time employees.

Special Events: Classes are held to instruct members in the use of the manufacturing equipment and tools offered by the makerspace. An average of two classes are held concurrently with approximately 6-8 members per class.

Total building occupant load capacity per Table 1004.1.2 of the MA Building Code (Ninth Edition CMR 780) is approximately 550 occupants. Actual anticipated occupancy at any one time = 20 to 30.

3) Size of proposed structures, lot size, and building coverage %:

From Building Description - Table 201

Existing building size: 52,065 Square Feet GBA, excluding a 1,250/SF NRA office/storage mezzanine. 2,500 support office space.

Proposed building size: N/A At this time, the WorcShop is not proposing new structures or adjustments to current structures or outlying parking areas.

Lot Size: 433,863 Sq Ft

Building Coverage: 12%

Total Impervious Area: 91,065 or 21% of the lot (% subject to final survey being completed by Samiotes Consultants).

At this time, no proposed expansion of the existing structure is proposed.

4) Size of existing building or portion of the existing building proposed for a new use:

- The existing building is approximately 52,000 sq/ft (see Table 201); and the whole building and 9
 acre property will be rezoned as a Makerspace use under Section 5.10 Adaptive Reuse Overlay
 District.
- Consistent with the Makerspace designation, approximately 20,000 sq/ft will be utilized as common industrial shops and work/skill development areas of various types such as:

Blacksmithing	2.000 sa/ft
Glass and jewelry	
Metal fabrication	
Machine Shop	, I
Wood Shop	•
Conference room	
Electronics	300 sq/ft
2D/3D Print Shop	300 sq/ft
Automotive Innovation Shop	Future/TBD
Sandblasting and Finishes	Future/TBD
CNC Shop	1,000 sq/ft

- Approximately 12,000 sq/ft is to be utilized as subleased commercial and industrial manufacturing space for members and business incubation.
- Approximately 18,000 sq/ft remains utilized as warehouse storage.

(See attached site plan/architectural prints under Exhibit B)

5) Number of existing and/or proposed parking spaces proposed, and description of conformance with the Planning Board's Parking Regulations:

Parking Spaces are marked in Exhibit F and we are applying for a variance/exception to the Leicester Planning Board Regulations (adopted 2013) Table of Parking Space Requirements which requires 1 space per 1000 square feet of space plus adjustments for various building uses. Also required per MA 521 CMR 23, Table 23.2.1 are 3 accessible spaces of which one is a van accessible space.

Our current plan shows 46 Regular spaces in addition to the requisite 3 accessible spaces including one van accessible space.

Given the Workshop's 24/7 operation, it is rare that more than 13 individual members and staff are in the building at a time with an average of 10% membership utilization per hour of operation (currently 80 members or 8 people in addition to 4 regular WorcShop operational staff). Skills classes bump that up by an additional 12-16 (two classes concurrent) cars when offered. This brings the total needed spaces at any one time to between 25 and 29, or 59% of capacity counting the accessible spaces. Staff and full-time members will be directed to the overflow parking at the rear of the building (see Exhibit F).

Given the use case of the WorcShop as described above, we are requesting a variance approving the parking plan as provided in this Narrative.

6) Description of water and sewer source: as applicable:

Water is already sufficient and provided at the site by the Cherry Valley and Rochdale Water District.

Sewer is already sufficient and provided at the site via the Oxford and Rochdale Sewer District

7) A description of how the project meets each of the Standards for Site Plan Approval (see Section 5.2.05 of the Zoning Bylaw):

Below, find comments pertaining to each point in Section 5.2.05

a. Any new use, or any expansion of an existing use, that results in 3,000 square feet of new floor area, addition, or creation of more than 20 parking spaces, or 10,000 square feet of new land area devoted to a use.

Comment: No additional floor space or parking is proposed. Per the Code Red review included in Exhibit E, Page 8, Section 4.1 Use and Occupancy Applications, the WorcShop includes the following Use and Occupancy Classifications.

Description	780 CMR Classification
Office Space	Group B (Business)
Wood Shop/ Machine Shop/ Metal	Group F-1 (Moderate-Hazard Factory
Fabrication	Industrial)
Storage	Group S-1 (Moderate-Hazard Storage)

TABLE 1: PRIMARY OCCUPANCIES

Comment: Not applicable

c. Any building over 35 feet in height.

Comment: Not Applicable

d. Radio or TV broadcasting towers and any structure meeting the definition of a wireless communication facility or large wind facility.

Comment: Not Applicable

e. All non-residential projects in the Greenville Village Neighborhood Business District (NB) per Section 5.6.02.2 of the Zoning Bylaw.

Comment: This is a non-residential Makerspace project in the Greenville Village Neighborhood Business District (NB). It is in keeping with the spirit of Section 5.6.01 Purpose and Intent with the sole exception of its hours of operation as a 24/7 facility. Further, a Makerspace is a permitted use under Section 5.10 – Adaptive User Overlay District. It is our assertion that in areas of seeming conflict between the two portions of the Zoning By-law that Section 5.10 (AROD) supersedes Section 5.6.02.2

5.6.02.1 – Not Applicable

5.6.02.2: The Makerspace will include spaces including the following permitted uses designated in Section 5.6.02.2:

• B, F, and H. Individual use areas are not anticipated to exceed 3,000 sq ft per use, although the WorcShop Makerspace functions as a united entity encompassing the use of the entire property including all 52,000 Sq Ft of the current mill building on the site.

5.6.03.1 – The WorcShop includes Storage (storage of industrial materials used in technology and artisanal development) as a business use not designated elsewhere. Due to the extensive requirement for storage in a Makerspace, space in excess of 6,000 feet is designated for Storage. The Makerspace AROD designation is assumed to supersede this paragraph.

5.6.03.2 - Not Applicable

5.6.03.3 - Not Applicable

5.6.03.4 – The WorcShop Makerspace functions as an individual entity of greater than 6,000 Sq Ft with separate shops within that structure including subleased spaces to technology and manufacturing startups supported by the shop and educational system offered by the WorcShop. The Makerspace AROD designation is assumed to supersede this paragraph.

5.6.04.2 – Prohibition of Automotive Uses. As a Makerspace (a permitted use under Section 5.10 Adaptive Use Overlay District (AROD)) item D.2.0, Automotive education including modifications and experimentation such as the conversion of vehicles to electric drivetrains are anticipated in the future. The Makerspace AROD designation is assumed to supersede this paragraph.

5.6.05 – The site conforms with this section (see comments below)

5.6.05.1 – The Parking and Loading on the site conforms with this section with the exception of the number of total parking spaces as noted in 5) of this Narrative

Our current application does not request a change to the exterior façade and the use of the building and traffic patterns are closely aligned with the historical use and patterns of the property.

5.6.05.2 - Landscaping A-J

The property as it currently sits conforms substantially to the buffer zone required for a non-residential project in a NB District and all storage related to the business use of the property is situated either behind the building or in areas screened from the view of abutting residential properties. Although the drive and parking for the property runs directly along the property lines to the west, southwest, and south of the property, there is a buffer of at least 50' of trees and forest growth on the abutting properties shielding the WorcShop from view. We would ask that the Makerspace designation be allowed to stand with no essential changes to the current landscaping other than continued maintenance of the boundary lines, keeping them free of debris and trimmed.

f. All business and/or multiple family uses set forth in the BR-1, and RIB Zones per Section 4.4 of the Zoning Bylaw.

Comments: The impervious area of the site is less than 2/3 of the site and includes the required green space per Section 4.4.

g. Medium-Scale Ground-Mounted Solar Energy Systems that occupy 3,000 square feet or more of surface area and Large-Scale Ground-Mounted Solar Energy Systems.

Comments: Not Applicable.

h. Medical Marijuana Treatment Centers and Marijuana Establishments.

Comments: Not Applicable.

8) Where applicable, a description of how the project meets the criteria for issuance of a Special Permit (see Special Permit Regulations):

- a) The WorcShop does not change the current vehicle circulation or significantly increase traffic to the site compared to historical traffic patterns. The WorcShop will have speed limit and pedestrian warning signs on the entrance drive and appropriate signage and striping designating and differentiating all parking and accessible spaces. This will include signage directing delivery vehicles to loading docs as well as directions to parking spaces located at the rear of the structure.
- b) The occupancy load does not exceed the building capacity, or the capacity of waste, stormwater, or any other utility services located at the site.
- c) The building has appropriately designated waste and recycling bins managed by Waste Management Services (designated on Exhibit F Parking Layout).
- d) The WorcShop use, occupancy, and load is consistent with the historical use of the property and permitted under Section 5.10 Adaptive Reuse Overlay District.

- e) The project complies with applicable environmental laws and regulations.
- f) The project supports strong economic development by nurturing technology and manufacturing startups and locating them within the community. The project also supports the Master Plan's stated purpose of redeveloping former mill and manufacturing sites while also maintaining the historic nature of those sites. As a Makerspace, the project is a match for the AROD zoning designation and is located within a Neighborhood Business District.

9) Description of permits/approvals from other permitting authorities:

- Additional Mechanical/Plumbing permits to be applied for to provide for necessary plumbing and mechanical upgrades as determined by Exhibit E – Code Red Chapter 34 Review.
- Building permits for items as described in Exhibit E Code Red Chapter 34 Review. Additional building permits for partition buildouts. Additional building permits for roof replacement on Building 3.
- Electrical permits for partition buildout, exit and emergency lighting, etc.
- Fire Suppression Permits to address the issues raised in Exhibit E Code Red Chapter 34 Review.
- Fire Alarm System Permits to be applied for per Exhibit E Code Red Chapter 34 Review.

10) Proposed development schedule showing the beginning of construction, the rate of construction and development, including stages, if applicable, and the estimated date of completion:

Stage	Start Date	Completion Date	Description
Initial	ASAP	April 2021	Fire and Safety, Egress, Parking, Partitions,
			Basic Repairs
First Year	April 2021	September	Roof
		2021	
Year 2-5	TBD	TBD	TBD

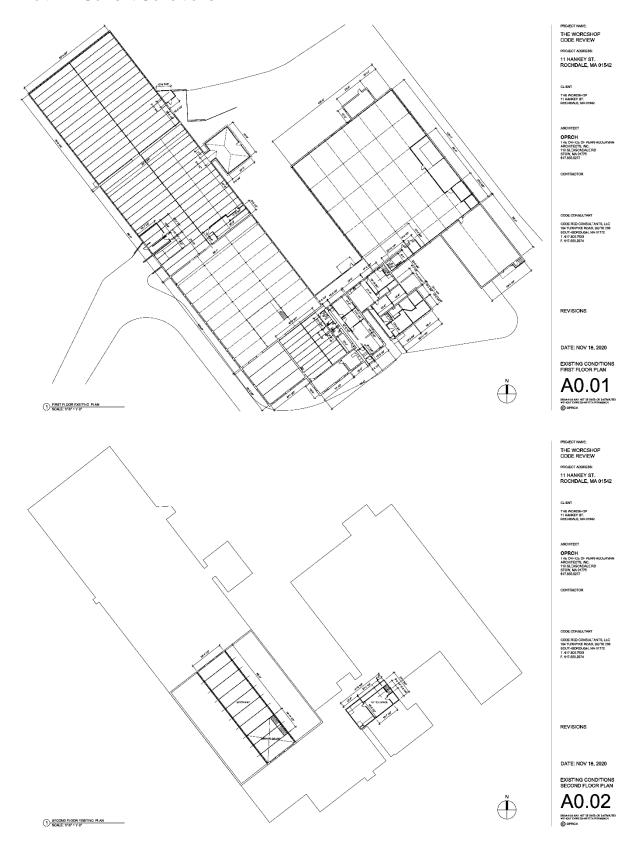
11) Waiver Requests:

- Parking space requirements as requested in 5) of this document and shown in Exhibit F –
 Parking Layout.
- Exception to the requirement of a 50' buffer on the WorcShop property as noted in the comments on 5.6.05.2 in Section 7.e of this narrative.

Exhibits – Special Permit Narrative

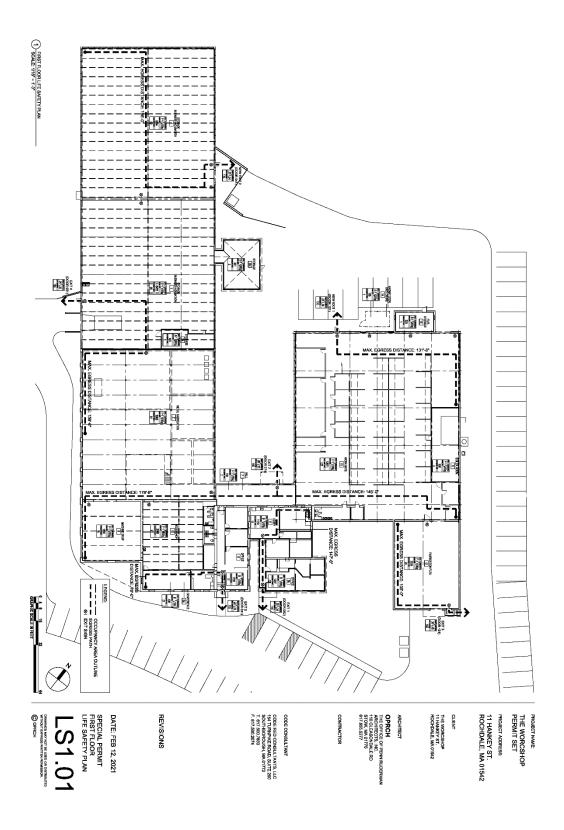
Note: All drawings provided separately in large format but included here for continuity.

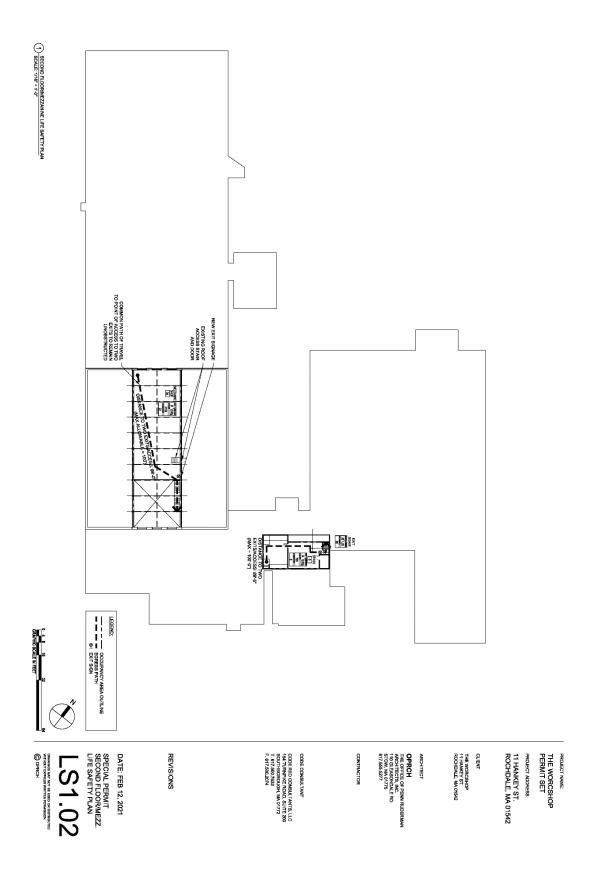
Exhibit A - Current Conditions

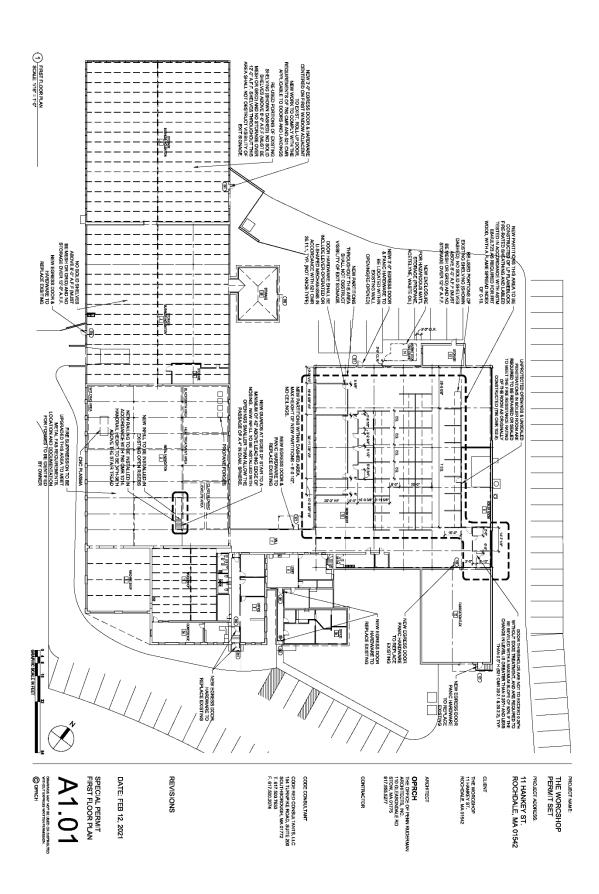


2/10/2021

Exhibit B - Site Plan / Architectural Prints







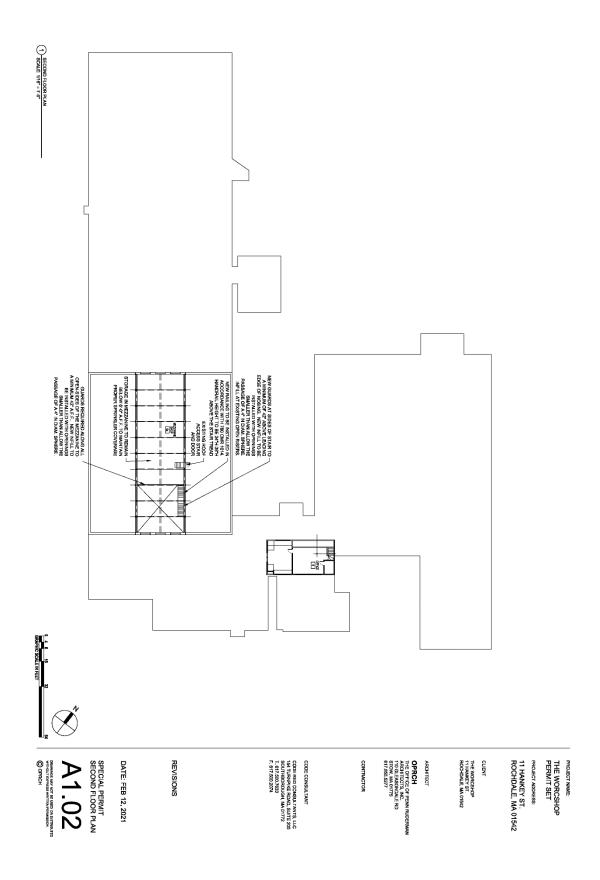


Exhibit C - Site Survey / Locus Plan

(This is a Draft Survey – We are awaiting detailed layout of the pavement boundaries as well as the wetlands delineation. At this time, we are requesting no exterior changes)

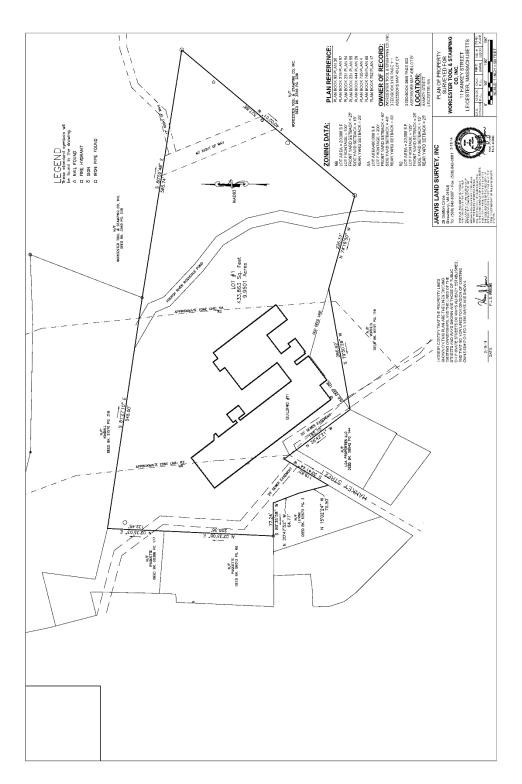


Exhibit D - Water District and Flood Plain Overlay

11 HANKEY STREET LEICESTER, MA

Figure 5. Flood Map

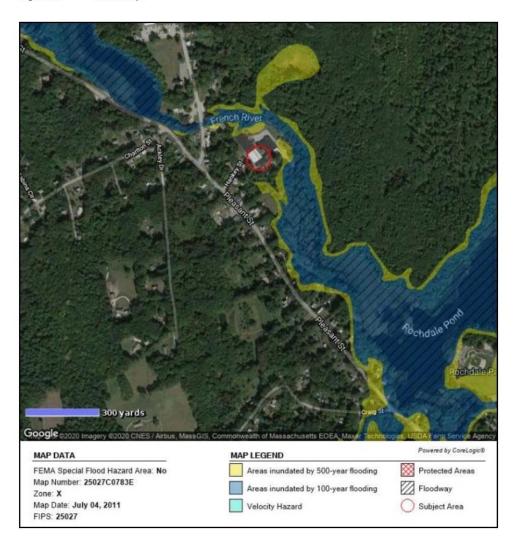


Exhibit E – Code Red Chapter 34 Review



154 TURNPIKE ROAD SUITE 200, SOUTHBOROUGH MA 01772 WWW.CRCFIRE.COM

Fire Protection/Life Safety Chapter 34 Building Investigation & Evaluation Report

Project:

The Worcshop 11 Hankey Street Leicester, MA

Prepared for:

The Office of Penn Ruderman Architects 110 Gleasondale Rd. Stow, MA 01775

Prepared by:

Kevin N. Lynch

Reviewed by:

Jeff D. Perras, P.E.

February 2, 2021



Table of Contents

1.	In	troduction	3
2.	Ap	pplicable Codes	4
3.	Ex	isting Building Code Scoping Requirements	5
	3.1	General Requirements	5
	3.2	Means of Egress, Lighting and Ventilation	5
	3.3	Compliance Method & Classification of Work	7
4.	Fi	re Protection/ Life Safety Analysis	8
	4.1	Use and Occupancy Classifications	8
	4.2	Construction Type	9
	4.3	Exterior Walls	10
	4.4	Interior Walls	11
	4.5	Vertical Openings	13
	4.6	Interior Finishes & Furniture	13
	4.7	Fire Protection Systems.	14
	4.8	Means of Egress	15
	4.9	Standby/Emergency Power Systems	19
	4.10	Accessibility	19
	4.11	Plumbing Fixtures	20
	4.12	Energy Code	22



1. Introduction

The Office of Penn Ruderman Architects has retained Code Red Consultants to provide fire protection, life safety, and accessibility code consulting services for the Worcshop Renovation project located at 11 Hankey Street, in Leicester, MA. The scope of the project includes alterations to the existing facility in order to facilitate its new use as a maker space.

The existing facility was originally constructed in 1927 and expanded over the years to its current footprint of approximately 52,000 GSF. The building was previously owned by Worcester Tool and Stamping Co. Inc. and used as industrial building for manufacturing and fabrication operations. The entire structure is 1-story in height, with 2 intermediate mezzanine/2nd floor levels located at different portions of the facility. A variety of construction types are present throughout, consisting of a mix of unprotected structural steel, brick masonry exterior walls, metal exterior walls, and combustible framing. Two automatic, wet-type sprinkler systems serve the facility, with deficiencies observed as outlined in Section 4.7.1 of this report. A fire alarm system consisting of a single audio-visual notification appliance is also provided in the building.



FIGURE 1: BUILDING EXTERIOR



FIGURE 2: BUILDING INTERIOR

The facility is proposed to consist of the following building portions as outlined in Figure 3. These areas are currently referred to as "Buildings" by ownership (i.e. Building 1, Building 2, etc.). For the purposes of this report, these numbered areas illustrated in Figure 3 are herein referred to as "Spaces" in order to prevent misinterpretation that these areas are separate buildings from a code perspective (i.e. Space 1, Space 2, etc.)

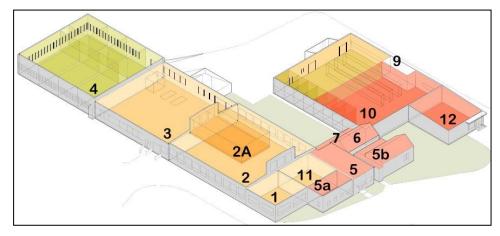


FIGURE 3: PROPOSED DIAGRAM



2. Applicable Codes

Building 780 CMR - Massachusetts State Building Code 9th Edition, which is an amended

version of the 2015 International Building Code (IBC)

780 CMR 34.00, which is an amended version of the 2015 International Existing

Building Code (IEBC), herein referred to as the MEBC.

Fire 527 CMR 1.00 - Massachusetts Comprehensive Fire Safety Code, which is an

amended version of the 2015 Edition of NFPA 1, Uniform Fire Code

Accessibility 521 CMR - Massachusetts Architectural Access Board (MAAB) Rules and

Regulations and the 2010 ADA Standards for Accessible Design

Electrical 527 CMR 12.00 - Massachusetts Electrical Code, which is an amended version of

the 2020 Edition of NFPA 70, National Electrical Code

Mechanical 2015 International Mechanical Code (IMC) as amended by 780 CMR 28.00.

Plumbing 248 CMR 10.00 - Uniform State Plumbing Code

Energy 780 CMR 13.00, which is an amended version of the 2018 International Energy

Conservation Code (IECC) or the 2016 ASHRAE 90.1

Elevator 524 CMR - Massachusetts Board of Elevator Regulations, which is an amended

version of the 2013 ASME A17.1, Safety Code for Elevators and Escalators

Other National Fire Protection Association (NFPA) Standards, as referenced by the

above codes, including the following:

- 2013 NFPA 10: Standard for Portable Fire Extinguishers

- 2013 NFPA 13: Standard for the Installation of Sprinkler Systems

- 2014 NFPA 51B: Standard for Fire Prevention During Welding, Cutting, and Other Hot Work

- 2013 NFPA 72: National Fire Alarm and Signaling Code

- 2015 NFPA 484: Standard for Combustible Metals

- 2013 NFPA 654: Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids

- 2012 NFPA 664: Standard for the Prevention of Fires and Explosions in Wood

Processing and Woodworking Facilities

The primary intent of this document is to (1) coordinate the fire protection and life safety approach between all design disciplines, (2) demonstrate building, fire and life safety code compliance to the Authorities Having Jurisdiction per Section 104.2.2.1 of the Massachusetts Existing Building Code, and (3) serve as a record document for the building owner. Details of compliance are left to the construction documents and the contractors. This report is intended to address code requirements as enforced by Authorities Having Jurisdiction only. It is the responsibility of the design team to ensure that any owner or insurance carrier requirements, which may exceed the provisions of the applicable codes and standards, are met.



3. Existing Building Code Scoping Requirements

3.1 General Requirements

Portions of an existing building undergoing repair, alteration, addition, or a change of occupancy are subject to the requirements of the MEBC. In general, existing materials and conditions can remain provided they were installed in accordance with the code at the time of original installation and are not deemed a hazardous condition by an authority having jurisdiction (AHJ). All new work in existing buildings is required to comply with the materials and methods in accordance with 780 CMR, or the applicable code for new construction unless otherwise specified by the MEBC (MEBC 702.6). Alterations to an existing building or portion thereof are not permitted to reduce the level of safety currently provided within the building unless portion altered complies with the requirements of 780 CMR for new construction (MEBC 701.2).

Where compliance with the requirements of the code for new construction is impractical due to construction difficulties or regulatory conflicts, compliance alternatives may be approved by the building official. Any compliance alternatives being sought are required to be identified on the submittal documents (MEBC 104.11). Refer to Section 3.2 for the compliance alternative being requested as part of the project in order to mitigate the lack of headroom provided at the mezzanine level.

3.2 Means of Egress, Lighting and Ventilation

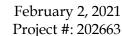
Regardless of the scope of work performed, the building official may cite any of the following conditions as not compliant, and require them to be mitigated or made safe (780 CMR 102.6.4):

- Inadequate number of means of egress: The number of exits serving every space and/or story must comply with 780 CMR 10.00.
 - The building is being provided with a sufficient number of exits as part of the project.
- Egress components with insufficient width or so arranged to be inadequate, including signage and lighting: Means of egress components must be of sufficient width to provide adequate exit capacity.
 - The building is provided with sufficient egress capacity based on the calculated occupant load as outlined on the Life Safety Plans for the project.
- Inadequate lighting and ventilation. Lighting levels and ventilation are to be provided for egress systems such that they are maintained as usable.
 - Coverage of lighting and ventilations systems was not verified as part of the survey. It should be confirmed that the means of egress throughout the building is illuminated at all times and illumination levels are maintained to be greater than 1 foot-candle at walking surface as outlined in Section 4.8.10 of this Report. The emergency power system within the building is required to be provided for these features (780 CMR 2702.2).

February 2, 2021 Project #: 202663



- Means of egress components that have not be maintained in a safe, operable, and sanitary condition. Means of egress are to be configured such they are safe and adequate in accordance with 780 CMR 10.00.
 - The following noncompliant deficiencies associated with existing means of egress components were observed during the survey and are being corrected as part of the project:
 - 1. Non-illuminated exit signage (780 CMR 1013.6 & 1013.5);
 - 2. Noncompliant guards (780 CMR 1015);
 - 3. Noncompliant handrails (780 CMR 1014);
 - 4. Surface bolts on egress doors (780 CMR 1010.1.9);
 - 5. Steps at exit discharge doors (780 CMR 1010.1.5 & 1010.1.7);
 - 6. Noncompliant changes in elevation (780 CMR 1003.5 & 1012);
 - 7. Doors with insufficient clear width (780 CMR 1010.1.1);
 - 8. Obstructed paths of egress (780 CMR 1003.6); and
 - 9. Open stair risers (780 CMR 1011.5.5.3).





3.3 Compliance Method & Classification of Work

The MEBC has 3 different compliance methods that can be used to evaluate a renovation project:

- Prescriptive Method (MEBC Chapter 4)
- Work Area Method (MEBC Chapters 5-13)
- Performance Method (MEBC Chapter 14)

The **Work Area Compliance Method** has been selected for use on this project (MEBC 301.1.2). The project includes the alterations to the existing building to facilitate the proposed program for the conversion to a maker space. The planned work primarily consists of the construction of new partial-height interior partitions, means of egress upgrades, building and life safety system upgrades, and the reconfiguration of existing rack storage shelves. Less than 50% of the floor area of the facility is being reconfigured as a result of the scope of work. The following changes of occupancy are also taking place respective to the areas shown in Figure 3:

- Space 3: Metal fabrication (Group F-1) to workspace (Group F-1 or Group B) and storage space (Group S-1)
- <u>Space 4:</u> Metal fabrication (Group F-1) to workspace (Group F-1 or Group B) and storage space (Group S-1).
- Space 10: Metal fabrication (Group F-1) to workspace (Group F-1 or Group B).
- Space 12: Shipping and receiving (Group S-1) to fabrication space (Group F-1).

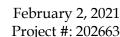
Therefore, the planned work is classified as a mix of **Level 1 Alterations and Level 2 Alterations**, and a **Change of Occupancy** subject to compliance with MEBC Chapters 7, 8, and 10 (MEBC 503.1, 504.1, 506.1 & 202 – Work Area definition). An addition is not planned as part of the project.

The following are the definitions for each level of work:

Level 1 Alteration – Includes the removal and replacement of the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose (MEBC 503.1).

Level 2 Alteration – Includes the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment in less than 50% of the aggregate building area (MEBC 504.1).

Change of Occupancy - A change in the use of the building or a portion of a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in use within a group for a specific occupancy classification (MEBC 202).





4. Fire Protection/ Life Safety Analysis

The following section has been prepared to illustrate compliance with the requirements of the MEBC based on the compliance method and classifications of work identified above. In general, new work is required to comply with the new construction requirements of 780 CMR unless otherwise stated herein (MEBC 702.4 & 801.3).

The observations outlined herein are based on visual observations made by Jeff Perras and Kevin Lynch of Code Red Consultants on November 5, 2020, progress design drawings dated January 11, 2021, and discussions with the design team. No destructive inspection or functional testing of building systems were performed as part of the evaluation.

4.1 Use and Occupancy Classifications

4.1.1 Primary Occupancies

The building was previously owned and operated by the Worcester Tool and Stamping Co. as a manufacturing facility with areas designated for fabrication (**Group F-1**) and office space (**Group B**).

The facility is proposed to serve as a maker space with the following occupancies listed in Table 1 below.

Description	780 CMR Classification		
Office Space	Group B (Business)		
Wood Shop/ Machine Shop/ Metal Fabrication	Group F-1 (Moderate-Hazard Factory Industrial)		
Storage	Group S-1 (Moderate-Hazard Storage)		

TABLE 1: PRIMARY OCCUPANCIES

Small assembly spaces within office areas are permitted to be classified as part of the **Group B** occupancy in which they are located, provided these assembly spaces are less than 750 sf in area or have an occupant load that is less than 50 (780 CMR 303.1.2).

4.1.3 High-Hazard Group H

Based on the observed features provided in the areas housing hazardous materials, it is assumed by this Report that none of the spaces within the building constitute a Group H occupancy. A detailed analysis is planned as part of the project which will outline the quantity and classification of all chemicals included within the building in order to verify compliance with the Maximum Allowable Quantities per Control Area of 780 CMR Table 307.1(1) / Table 307.1(2), as applicable. The actual chemical classifications will be determined based on review of Safety Data Sheets (SDS's) for each chemical. These classifications may ultimately impact the hazard classification and required design of the fire protection systems protecting these areas. This Section of this Report will be updated once this analysis is complete.



4.1.4 Special Uses and Occupancies

4.1.4.1 Wood Shop

Wood shops are required to comply with 527 CMR 1.00 Chapter 40 and NFPA 664 (780 CMR 426.1 & 527 CMR 1.00, 40.1).

4.1.4.2 Metal Fabrication

The facility is anticipated to contain a variety of metal fabrication and processing equipment including welders, cutting and grinding machinery, lathes and other metal processing tools.

Equipment, processes, and operations that involve the manufacture, processing, blending, repackaging, and handling of combustible particulate solids or combustible dusts, regardless of concentration is required to be installed and maintained in accordance with the requirements of 527 CMR 1.00 Chapter 40 and NFPA 484 (780 CMR 426.1 & 527 CMR 1.00, 40.1).

All welding, cutting, and hot work operations are required to be in accordance with 527 CMR 1.00 Chapter 41, NFPA 484, and NFPA 51B.

4.2 Construction Type

4.2.1 Existing Construction Classification

A variety of construction types are present throughout, consisting of a mix of unprotected structural steel, brick masonry exterior walls, metal exterior walls, and combustible framing without any true building separations. The majority of the facility primarily consists of unprotected steel structure that is most consistent with Type IIB construction. The office wing consists of combustible construction and most closely represents Type VB construction.



FIGURE 4: OFFICE WING COMBUSTIBLE FRAMING (TYPE VB CONSTRUCTION)



FIGURE 5: UNPROTECTED STEEL JOISTS (TYPE IIB CONSTRUCTION)

Limited quantities of combustible construction were observed throughout Type IIB portions of the facility including framing and interior partitions. It should be confirmed that all combustible construction in the Type IIB portion of the building is in accordance with 780 CMR 603.1, previously permitted, or otherwise approved by the building official.



4.2.2 Height and Area Limitations

Compliance with new construction height and area limitations is required for projects including a change of occupancy to a higher hazard classification per MEBC Table 1012.5 or an addition (MEBC 1012.5 & 1102).

The change of occupancy throughout Spaces 3, 4, 10, and 12 do not require compliance with new construction height and area limitations since the relative hazard of the proposed occupancies (Group B, F-1 and S-1) per MEBC Table 1012.5 are considered lesser or equal hazards to the existing occupancy (Group F-1) (MEBC Table 1012.5.2).

The existing height and area of the entire facility is as follows:

Footprint Area: 52,841 ft.²
 Aggregate Area: 56,678 ft.²
 Height: 2 Stories/ ~40 ft.

4.2.3 Fire Resistance Rating of Building Elements

As part of the renovation project the existing construction types are required to be maintained. Unless otherwise required to have a higher fire resistance rating by other sections of this Report, the following table indicates the minimum fire-resistance ratings based on construction type (780 CMR 601).

Building Element	Type IIB/ VB
Primary Structural Frame	0 Hour
Interior Bearing Walls	0 Hour
Exterior Bearing Walls	0 Hour
Exterior Nonbearing Walls	Refer to Section 4.3
Floor Construction and Secondary Members	0 Hour
Roof Construction and Secondary Members	0 Hour

TABLE 2: FIRE RESISTANCE RATINGS

4.2.4 Mezzanines

Upgrades to the existing mezzanine located at Space 2 are not required to take place unless otherwise noted in another Section of this report (MEBC 701.2). The aggregate area of the mezzanine does not exceed one-third the floor area of space in which it is located (780 CMR 505.2.1).

4.3 Exterior Walls

Existing exterior walls are not required to be altered or upgraded as part of a renovation and are permitted to be replaced in kind (MEBC 701.2 & 1012.5). Alterations are required to comply with the code for new construction.

^{1.} Not less than the rating of supported elements, such as stairs and shafts (780 CMR 704.1).



The opening limitations for new or altered exterior walls are based on the fire separation distance for each wall, measured from the building face to the closest interior lot line, the centerline of a street, alley, or public way, or to an imaginary lot line between two buildings (780 CMR 202). The table below indicates the opening limitations required for the exterior walls based on fire separation distance of a fully sprinklered building (780 CMR 602 & 705.8).

TABLE 3: EXTERIOR WALL FIRE RATING AND OPENING LIMITATIONS

Fire Separation Distance (ft)	Rating	Allowable Area
$0 \le X \le 3$	1 Hour	Not Permitted
$3 \le X < 5$	1 Hour	15%
5 ≤ X < 10	1 Hour	25%
X ≥ 10	0 Hour	No Limit

All exterior elevations of the building have a fire separation distance of at least 10 feet, permitting nonrated construction with unlimited unprotected openings.

4.4 Interior Walls

4.4.1 Fire/Smoke Resistive Assemblies

Alterations to existing rated walls are required to maintain the existing level of safety provided within the building, including new penetrations of these assemblies. New assemblies are required to comply with the code for new construction (MEBC 801.3).

New rated assemblies are not required or planned as part of the project.

The existing boiler room was observed to be provided with 90-minute rated opening protectives, which is required for 2-hour rated construction. Unprotected openings and unsealed penetrations were observed at this enclosure. These openings and penetrations are required to be repaired or sealed in order to meet the required fire resistance rating of the room as originally constructed (780 CMR 102.8).



FIGURE 6: 90-MINUTE RATED FIRE DOOR

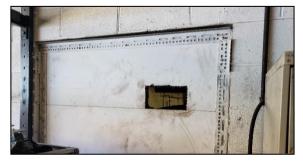


FIGURE 7: ENCLOSURE OPENING

4.4.2 Penetrations

New penetrations of existing fire-resistance-rated walls that are not protected with dampers are required to comply with this section. Ducts and air transfer

February 2, 2021 Project #: 202663

NFPA 252 or UL 10B



openings that are protected by dampers are required to comply with Section 4.4.4 of this report. Existing penetrations in the work area that are not protected with fire stopping are also required to comply with this section.

New through and membrane penetrations of fire-resistance-rated walls are required to be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (780 CMR 714.3 & 714.4). Penetrations of fire-resistance-rated walls must have an F rating of not less than the required fire-resistance rating of the wall penetrated (780 CMR 714.3.1).

4.4.3 Doors and Fire Shutters

New doors, fire shutters, and their corresponding components are required to have fire-resistance ratings and meet the required testing standards as specified in Table 4. All doors and fire shutters required to be fire-resistance-rated must be designed, installed, and labeled in accordance with NFPA 80 (780 CMR 716.5).

Wall Type	Required Wall Minimum Fire Rating Door Rating		Performance Criteria for Doors/Shutters ¹		
Eine hannione	2-hours	1½-hours	NFPA 252 or UL 10C /		
Fire barriers	4.1	0/1	3 TED 4 000 TIT 40D		

³∕₄-hour

TABLE 4: FIRE & SMOKE DOOR RATING SUMMARY TABLE

1-hour

No new fire doors or fire shutters are to be located within rated assemblies as part of the scope of work.

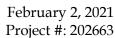
4.4.4 Ducts and Air Transfer Openings

Where new dampers are installed, they must be listed and bear the label of an approved testing agency (780 CMR 717.3.1). Fire dampers must be tested in accordance with UL 555 and smoke dampers must be tested in accordance with UL 555S. Combination fire/smoke dampers must comply with both test standards.

Fire dampers are required to be rated for 1.5 hours, unless they are installed in a 3-hour or greater assembly, in which case they are required to be 3-hour rated (780 CMR 717.3.2.1). Smoke damper leakage ratings must be Class I or II. Elevated temperature ratings must not be less than 250°F (780 CMR 717.3.2.2). Combination fire/smoke dampers must comply with both rating requirements (780 CMR 717.3.2.3). Refer to 780 CMR 717.3.3 for required damper actuation methods.

Fire, smoke, and fire/smoke dampers are required to be provided with an approved means of access that permits inspection and maintenance of the damper and its operating parts (780 CMR 717.4). Access points are required to

^{2.} All doors are required to be self- or automatic closing and provided with an active latch bolt that will secure the door when it is closed (780 CMR 716.5.9.1).





have permanent labels with letters that are not less than ½ inch in height that reads "FIRE/SMOKE DAMPER, SMOKE DAMPER, or FIRE DAMPER".

4.5 Vertical Openings

The building is provided with an existing two-story open stair connecting the First and Second Floors within the existing office wing. This stair is permitted to remain unenclosed since the building is being provided with sprinkler coverage throughout as part of the project and only connects two stories (MEBC 803.2.1 & 780 CMR 1019.3(1)).

Portions of the facility undergoing a change of occupancy as part of the project are 1-story in height and do not contain vertical openings. Therefore, no further compliance is necessary.

4.6 Interior Finishes & Furniture

4.6.1 Wall and Ceiling Finishes

The interior finish of walls and ceiling in the work area and any exits or corridors within the work area are required to comply with the code for new construction (MEBC 803.4). In areas of the building undergoing a change of occupancy classification, the interior finish of walls and ceilings are required to comply with the new construction requirements for the new occupancy classification in accordance with 780 CMR (MEBC 1012.3).

Table 5 outlines the minimum interior wall and ceiling finish requirements for new construction (780 CMR 803.11). It should be noted that Chapter 8 of 780 CMR contains other requirements for interior finishes, which vary based the type of finish selected (i.e. textile wall coverings). As finishes are selected, it should be verified that they comply with these requirements.

Occupancy Exit Corridors, Exit Access Rooms and Classification **Enclosures** Stairways/Ramps **Enclosed Spaces** Class A, B or \overline{C} В Class A, B or C Class A or B F-1/S-1 Class A, B or C Class A, B or C Class A, B or C

TABLE 5: INTERIOR WALL & CEILING FINISH REQUIREMENTS 1

1. Interior finishes are grouped in the following classes: Class A – flame spread index 0- 25, Class B – flame spread index 26-75, Class C – flame spread index 76-200. All classes must have a smoke-developed index that does not exceed 450 (780 CMR 803.1.1).

4.6.2 Interior Floor Finish

Existing floor finishes are permitted to remain as is. New floor finishes and coverings of a traditional type, such as wood, vinyl, linoleum or terrazzo, and resilient floor covering materials that are not comprised of fibers are permitted throughout (MEBC 702.2 & 780 CMR 804.1 Exception). Other interior floor covering materials are required to comply with the requirements of the DOC FF-1 "pill test" (CPSC 16 CFR Part 1630) (780 CMR 804.4.1 Exception).



4.7 Fire Protection Systems

4.7.1 Automatic Sprinkler Systems

The existing building is provided with two automatic, wet-type sprinkler systems that are each fed by separate risers. The following sprinkler system deficiencies were observed throughout the complex:

- Spare sprinklers were observed to be dated 1944 and loaded with foreign material (i.e. dust, debris, etc.). Sprinkler heads in service for at least 75 years are required to be tested or replaced in accordance with NFPA 25, 5.3.1.1.1.5.
- Storage at the ceiling joists was observed to be within 18" of sprinklers located at the ceiling, thus obstructing sprinkler coverage (NFPA 13, 8.6.5.2).
- Sprinklers located within 4" of walls. The minimum distance the sprinkler is permitted to be from the wall is 4" (NFPA 13, 8.6.3.3).

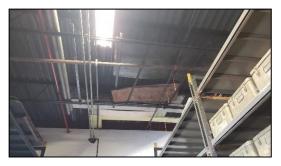


FIGURE 8: STORAGE AT CEILING



FIGURE 9: 1944 SPRINKLER HEAD



FIGURE 10: SPRINKLER ASSEMBLY (SPACE 10)



FIGURE 11: SPRINKLER ASSEMBLY (SPACE 3)

A survey has been conducted by a licensed Fire Sprinkler Contractor in order to identify deficiencies associated with the existing systems, required corrective actions, and additional alterations to provide full coverage per the scope of work (MEBC 1012.2.1).

Coverage of the existing sprinkler system is required to be maintained and extended as necessary in accordance with the 2013 NFPA 13 as part of the renovation (MEBC 703.1). Areas undergoing a change of occupancy are



required to be provided with sprinkler system coverage based on the new occupancy (MEBC 1012.2.1).

4.7.2 Fire Extinguishers

Portable fire extinguishers were observed to be provided throughout the building and last inspected October, 2020. As part of this renovation, fire extinguisher coverage should be maintained/reconfigured as necessary to comply with NFPA 10, 780 CMR and 527 CMR.

4.7.3 Fire Alarm and Detection Systems

A single audio-visual notification appliance is located within Space 3, and was the only fire alarm system appliance observed throughout the existing facility during the survey. Operation of the existing fire alarm system was not confirmed during the survey. An evaluation of the existing fire alarm system was recently conducted by a licensed Fire Alarm Contractor to determine its existing capabilities and planned upgrades as part of the project.

Fire alarm system coverage is required to be provided to monitor the sprinkler system and an provide coverage the work areas and spaces undergoing a change of occupancy as part of the project in accordance with NFPA 72 and 780 CMR Section 907 (780 CMR 102.8 & 903.4; MEBC 804.4).

4.8 Means of Egress

Existing means of egress, that have been maintained as originally designed and constructed, are permitted to remain unless deemed hazardous by the building official (780 CMR 102.6.4). Newly constructed or reconfigured means of egress and alterations to the means of egress are required to comply with the code for new construction (MEBC 803.2). The means of egress serving spaces undergoing a change of occupancy are required to comply with MEBC Section 805 and 905 (MEBC 1012.4.2).

4.8.1 Occupant Load

The number of occupants is computed at the rate of one occupant per unit of area (780 CMR 1004.1.2). Factors anticipated to be used on this project are listed in the table below. The occupant load is permitted to be increased from the occupant load established for the given use where all other requirements of 780 CMR are met (780 CMR 1004.2).

TABLE 6: OCCUPANT LOAD FACTORS

Function of Space	Occupant Load Factor
Assembly, Standing Space	5 net
Assembly, Concentrated (Chairs Only)	7 net
Assembly, Unconcentrated (Tables & Chairs)	15 net
Office/ Shops	100 gross
Storage/MEP	300 gross

Refer to the Life Safety Plans which outline detailed occupant load calculations.

February 2, 2021 Project #: 202663



4.8.2 Egress Width Factors

The required egress capacity for any means of egress component is based on the following capacity factors (780 CMR 1005.3.1 & 1005.3.2):

TABLE 7: EGRESS WIDTH FACTORS

Stairways (inches of width per person)	All Other Components (inches of width per person)
0.3	0.2

Refer to the Life Safety Plans which summarize the egress capacity of the building.

4.8.3 Number of Exits

The number of exits required from every story is not permitted be less than that specified in Table 8 (780 CMR 1006.2.1).

TABLE 8: MINIMUM NUMBER OF EXITS REQUIRED

Occupant Load	Number of Exits Required	
1 - 500	2	
501 – 1,000	3	
> 1,000	4	

Two exits or exit access doorways are also required to be provided from any new space where the occupant load or common path of travel distances in the following table are exceeded (780 CMR 1006.2.1):

TABLE 9: SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

Occupancy Maximum Occupant Load M		Maximum Common Path of Travel Distance
B/F-1	49	100 feet
S-1	29	100 feet

Where two exits or exit access doorways are required from any new portion of the exit access as outlined above, the exit doors or exit access doorways are required to be placed a distance apart equal to not less than 1/3 of the length of the maximum overall diagonal dimension of the building or area served (780 CMR 1007.1.1).



4.8.4 Exit Access Travel Distances

Exit access travel distances is not permitted to exceed the maximum values specified in the table below for newly reconfigured areas (780 CMR 1017.1).

TABLE 10: EXIT ACCESS TRAVEL DISTANCES

Occupancy	Maximum Exit Access Travel Distance
F-1/S-1	250 feet
В	300 feet

4.8.5 Corridors

The width of new corridors is not permitted to be less than that specified in the table below or as determined using the egress factors in based on the occupant load served (780 CMR 1020.2).

TABLE 11: MINIMUM CORRIDOR WIDTH

Occupancy	Minimum Width
Access to and utilization of MEP equipment	24 inches
With a required occupancy capacity < 50 people	36 inches
Any areas not listed above	44 inches

Where more than one exit or exit access doorway is required, the exit access is required to be arranged such that any dead ends in the corridor do not exceed that specified in the following table (780 CMR 1020.4).

TABLE 12: MAXIMUM DEAD END CORRIDOR LENGTH

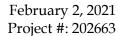
Occupancy	Maximum Dead End Length $^{\mathrm{1}}$	
B/F-1/S-1	50 feet	

^{1.} A dead end corridor is not limited in length where the length of the dead end corridor is less than 2.5 times the least width of the dead end corridor (780 CMR 1020.4(3)).

4.8.6 Doors

All doors in the work area and in portions of the building undergoing a change of occupancy are required to swing in the direction of exit travel (MEBC 805.4.2 & 1012.4.1). New doors are required to comply with 780 CMR Section 1010. Major requirements include:

- <u>Width</u>. Doors are required to be a minimum of 32 inches in clear width and are not permitted to have a swinging door leaf greater than 48 inches in nominal width (780 CMR 1010.1.1).
- <u>Landings</u>. Level landing are required to be provided on each side of the door (780 CMR 1010.1.5 & 1010.1.6).
- <u>Door Swing</u>. Egress doors are required to be of the pivoted or side- swinging type and are required to swing in the direction of egress travel where serving an occupant load of 50 or more persons (780 CMR 1010.1.2).





- <u>Locking</u>. Except as specifically permitted by 780 CMR Section 1010.1.9, doors
 are required to be readily operable in the direction of egress travel.
- <u>Doors in Series</u>. Space between two doors in series is required to be a minimum of 48 inches plus the width of the door swinging into the space. Doors in series are required to swing either in the same direction or away from the space between the doors (780 CMR 1010.1.8).
- <u>Electrical Rooms</u>. Electrical rooms with equipment rated over 1,200 amperes or more and over 6 feet in width that contain overcurrent devices, switching devices, or control devices with exit or exit access doors are required to be equipped with panic hardware or fire exit hardware and swing in the direction of egress travel (780 CMR 1010.1.10).

4.8.7 Stairs

Existing stairways are permitted to remain (MEBC 704.1 1012.4). In the event stairs are altered as part of the project, they are required to be constructed in accordance with 780 CMR 1011. Major requirements include:

- Width. Minimum clear width off 44" (780 CMR 1011.2)
- Headroom. Minimum headroom of 80" (780 CMR 1011.3)
- Riser Height. Maximum 7" riser height (780 CMR 1011.5.2)
- Riser Depth. Minimum 11" riser depth (780 CMR 1011.5.2)
- <u>Landings</u>. Compliant landings at the top and bottom of runs (780 CMR 1011.6). Maximum 12-foot vertical rise between landings (780 CMR 1011.8)
- Handrails. Handrails within 30" of required egress width (780 CMR 1011.11 & 1014.6)

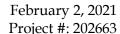
4.8.8 Guards

Existing guards are permitted to remain provided they are not in danger of collapsing (MEBC 805.11.1). Where new guards are installed, they are required to be provided in accordance with 780 CMR Section 1015.

4.8.9 Exit Signage

Exit and exit access doors are required to be marked by an approved exit sign readily visible from any direction of egress travel (780 CMR 1013.1). The path of egress travel to exits and within exits is required to be marked by readily visible exit signs to clearly indicate the direction of egress travel where the exit or path of travel is not immediately visible. Exit signs within corridors are required to be placed such that no point is more than 100 feet or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign. Exit signs are not required in rooms or areas that require only one exit or means of exit access.

Exit signage coverage is required to be maintained/reconfigured in accordance with 780 CMR 1011 as part of this project.





4.8.10 Egress Illumination

The means of egress, including the exit discharge, is required to be illuminated at all times the building served by the means of egress is occupied (780 CMR 1008.1). The illumination level is not permitted to be less than 1 foot-candle at the walking surface (780 CMR 1008.2.1)

In the event of power supply failure, an emergency electrical system is required to automatically illuminate all of the following areas (780 CMR 1008.3):

- Spaces that require two or more means of egress.
- Corridors and interior exit access stairways.
- Exterior landings for exit discharge doorways.

The emergency power system must provide power for a duration of not less than 90 minutes and must consist of storage batteries, unit equipment, or an on-site generator (780 CMR 1008.3.4). The initial illumination must be an average of 1 foot-candle and a minimum at any point of 0.1 foot-candle measured along the path of egress at the floor level. Illumination levels are permitted to decline to 0.6 foot-candle average and a minimum of 0.06 foot-candle at the end of the emergency lighting time duration (780 CMR 1008.3.5).

Emergency lighting was observed to be lacking throughout the facility and is recommended to be upgraded to comply with the code for new construction as part of this project.

4.9 Standby/Emergency Power Systems

Regardless of the scope of work, alterations to the existing standby/ emergency power supply are not permitted to reduce the level of safety currently provided within the building unless portion altered complies with the requirements of 780 CMR for new construction (MEBC 701.2).

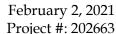
4.10 Accessibility

The building is required to meet the requirements of 521 CMR, Massachusetts Architectural Access Board (MAAB) and the Americans with Disabilities Act (ADA).

4.10.1 Massachusetts Architectural Access Board Regulations (521 CMR)

The requirements of 521 CMR are limited to buildings or portions thereof that are open to the public. Employee-only spaces are exempt from these requirements. 521 CMR Section 3.3 contains the following scoping requirements for projects in existing buildings. The costs referred to in the scoping requirements below are cumulative for all projects to the building within a rolling 36-month period:

1. If the work is less than \$100,000, then only the work being performed is required to comply with 521 CMR.





- 2. If the work costs more than \$100,000 but is less than 30% of the full and fair cash value of the building then in addition to the working being performed, the following accessible features are also required to be provided in the building:
 - a. Accessible entrance
 - b. Accessible toilet room
 - c. Accessible drinking fountain (if provided)
 - d. Accessible public telephone (if provided)
- 3. If the work, and all permitted work within a 36 month rolling window, costs more than 30% of the full and fair cash value of the building (prorated based on public spaces), then all public portions of the building are subject to the requirements of 521 CMR.

It is our understanding that the cumulative cost of this project and all work conducted within the past 36-month period will not exceed the \$100,000. Based on this, only the work performed is required to comply with 521 CMR as outlined above.

4.10.2 2010 ADA Standards

The American with Disabilities Act (ADA) is federal civil rights law enacted in 1990 and enforced by the U.S. Department of Justice (DOJ). Title III of the ADA requires that the design, construction and alteration of state owned buildings and facilities be carried out in a manner that is accessible and usable by people with disabilities. Where discrepancies exist between the ADA and 521 CMR, the regulation that provides the greater level of accessibility must be followed. Though 521 CMR does not regulate employee only areas, Title III makes it clear that employee-only areas are required to comply with the 2010 ADA Standards.

The 2010 ADA Standards require altered portions of an existing building to be readily accessible to and usable by individuals with disabilities to the maximum extent feasible (ADA 35.151(b)). Further, alterations to primary function areas should be made such that the level of accessibility, including the path of travel to the space, is made accessible to the maximum extent feasible. When determining if the upgrade is feasible, the ADA requirements state that the upgrade to the path of travel is disproportionate to the project when the cost to perform the work exceeds 20% of the cost of the alteration to the primary function area

4.11 Plumbing Fixtures

248 CMR 10.00, *Uniform State Plumbing Code*, regulates the minimum number of plumbing fixtures. The requirements set forth in 248 CMR 10.10(18) Table 1: Minimum Facilities for Building Occupancy apply to plumbing system <u>installation</u>, <u>alteration</u>, <u>or extension</u> projects in which the plumbing work begins on or after June 3, 1994. The minimum number of plumbing fixtures are based upon the use and occupancy classification of the building or space and the population as established by the authority having jurisdiction. The following table outlines the plumbing fixture requirements for the building.



TABLE 13: PLUMBING FIXTURE FACTORS

Han Cuore	To	ilets	Urinals	Lavatories	Drinking	Service	Bath/
Use Group	F	M	Officials	Per Sex	Fountains	Sink	Shower
Office	1 per 20	1 per 25	33% substitution	1 per 50	1 per floor	1 per floor	N/A
Industrial (Employee)	1 per 15	1 per 20	1 per 40	1 per 30	1 per 15	1 per floor	1 per 15

Single-user gender-neutral toilet fixtures are permitted to be substituted for gender-designated toilet fixtures provided that all fixtures are designated as gender neutral or gender-neutral toilets are provided in increments of two (248 CMR 10.10(18)(r)). A gender-neutral toilet fixture is only permitted to be counted once toward the minimum fixture requirements. All gender-neutral toilet rooms are required to be fully accessible in accordance with 521 CMR Chapter 30.

Where the occupant load of a story is increased by more than 20 percent, plumbing fixtures for the story are required to be provided based on the increased occupant load (MEBC 810.1). Where the occupancy of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements, the new occupancy is required to comply with the intent of the provisions outlined in 248 CMR.

Based on the factors provided in Table 13, an evaluation of the expected number of occupants and the existing number of plumbing fixtures is summarized below.

TABLE 14: PLUMBING FIXTURE CALCULATIONS

Occupant	Occupant Classification		Water Closets		Lavatories	Drinking	Service	Showers
Load	Classification	Female	Male	Urinals	Per Sex	Fountains	Sink	Per Sex
80	Office (Worcshop Members)	1 per 20	1 per 25	0.33 A	1 per 50	1 per floor	1 per floor	-
	Required fixtures	2.00	1.60	0.53	0.80	1	-	-
Total Required Fixtures		2	2	1	1	1 B	1	-
Total Provided Fixtures		2	2	1	1	0	1	-
15	Industrial (Employee)	1 per 15	1 per 20	1 per 40	1 per 20	N/A	1 per floor	1 per 15
15	Required fixtures	0.33	0.25	0.13	0.25	0	1	0.67
Total Required Fixtures		1	1	1	1	0	1	1
Total Provided Fixtures		1	1	1	1	0	1	0

A Permitted to be substituted for male water closets.

As shown above the building is provided with a sufficient number of plumbing fixtures based on the expected population with exception to the bath/shower required for Industrial Employees, and a drinking fountain. As a result of the project, it is anticipated that the expected population within the building will not

^B Permitted to be substituted for a water station without a drain.

increase the existing occupant load of the building by more than 20% (MEBC 810.1). Therefore, no further compliance is required.

4.12 Energy Code

Except as specified in the 2015 IECC, the energy code does not require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system law-fully in existence at the time of adoption of this code (2015 IECC C501.2). Alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of this code than the existing building or structure was prior to the alteration. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall not create an unsafe or hazardous condition or overload existing building systems (2015 IECC 503.1). Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with the code for new construction (2015 IECC 505.1).

Exhibit F - Future Parking Layout

(Being provided by Penn Ruderman Associates after receiving the Locus Plan/Survey)

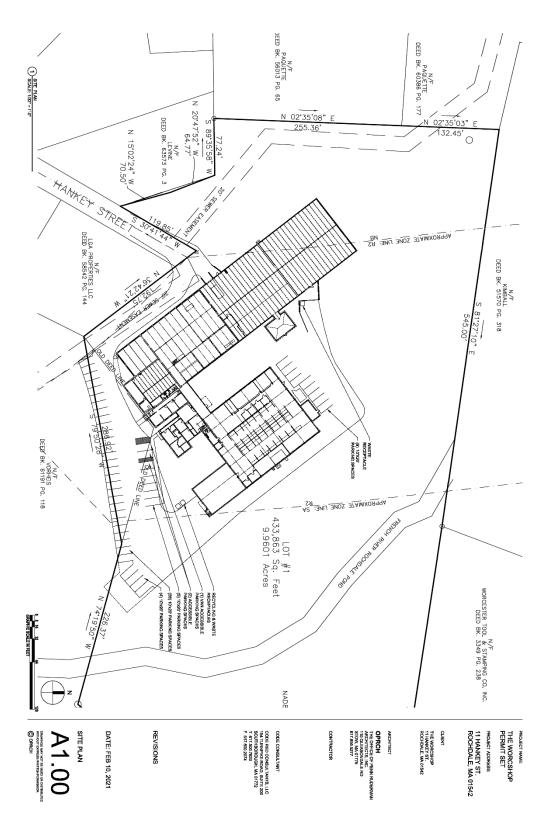
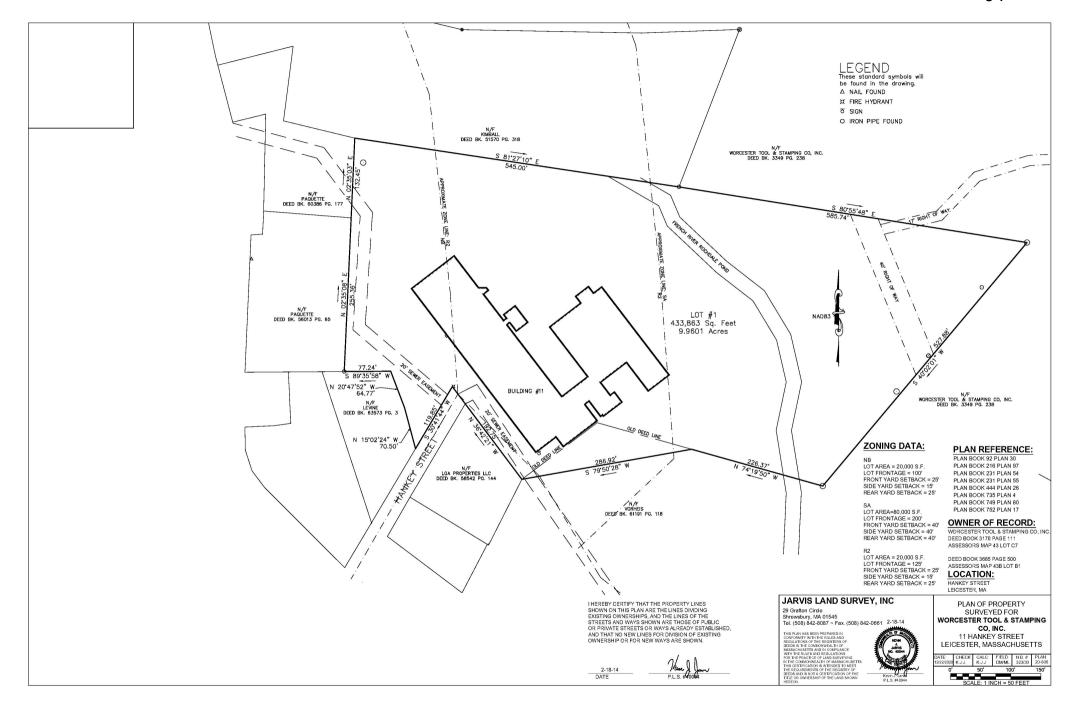
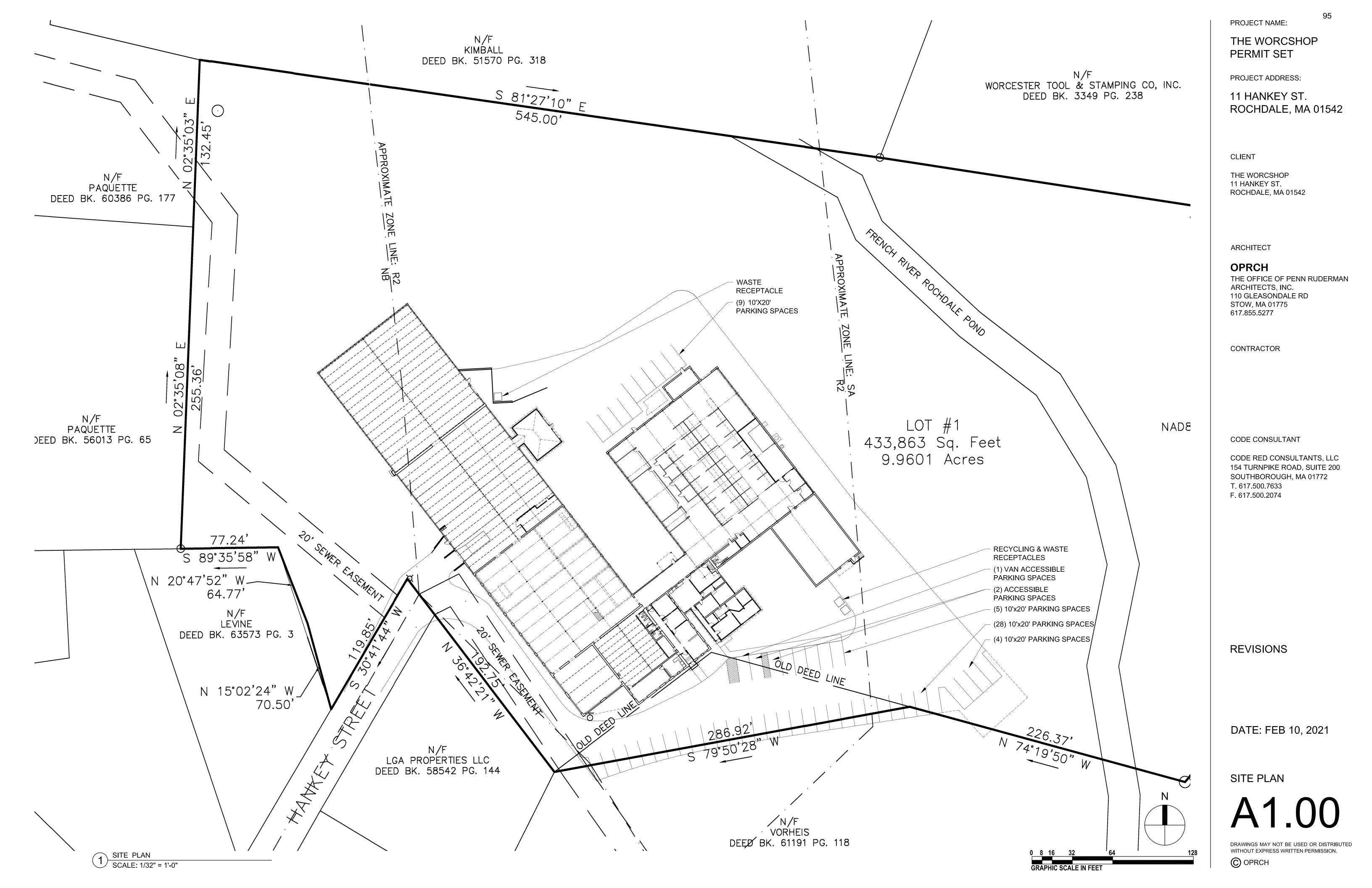
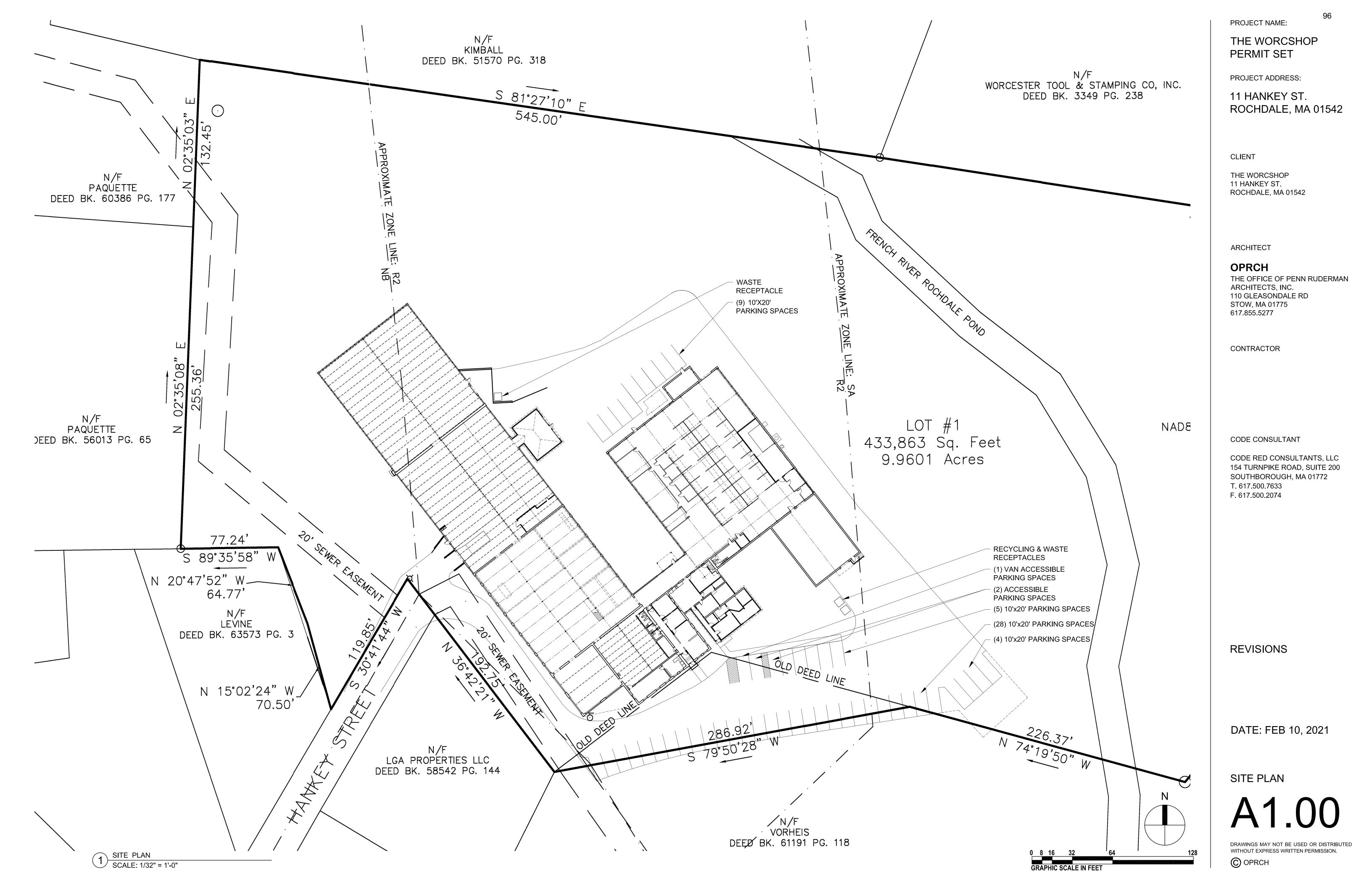


Exhibit G – Certified Abutters List

(To be inserted when received from the Town of Leicester)







THE WORCSHOP PERMIT SET

PROJECT ADDRESS:

11 HANKEY ST. ROCHDALE, MA 01542

CLIENT

THE WORCSHOP 11 HANKEY ST. ROCHDALE, MA 01542

ARCHITECT

OPRCH

THE OFFICE OF PENN RUDERMAN ARCHITECTS, INC. 110 GLEASONDALE RD STOW, MA 01775 617.855.5277

CONTRACTOR

CODE CONSULTANT

CODE RED CONSULTANTS, LLC 154 TURNPIKE ROAD, SUITE 200 SOUTHBOROUGH, MA 01772 T. 617.500.7633 F. 617.500.2074

REVISIONS

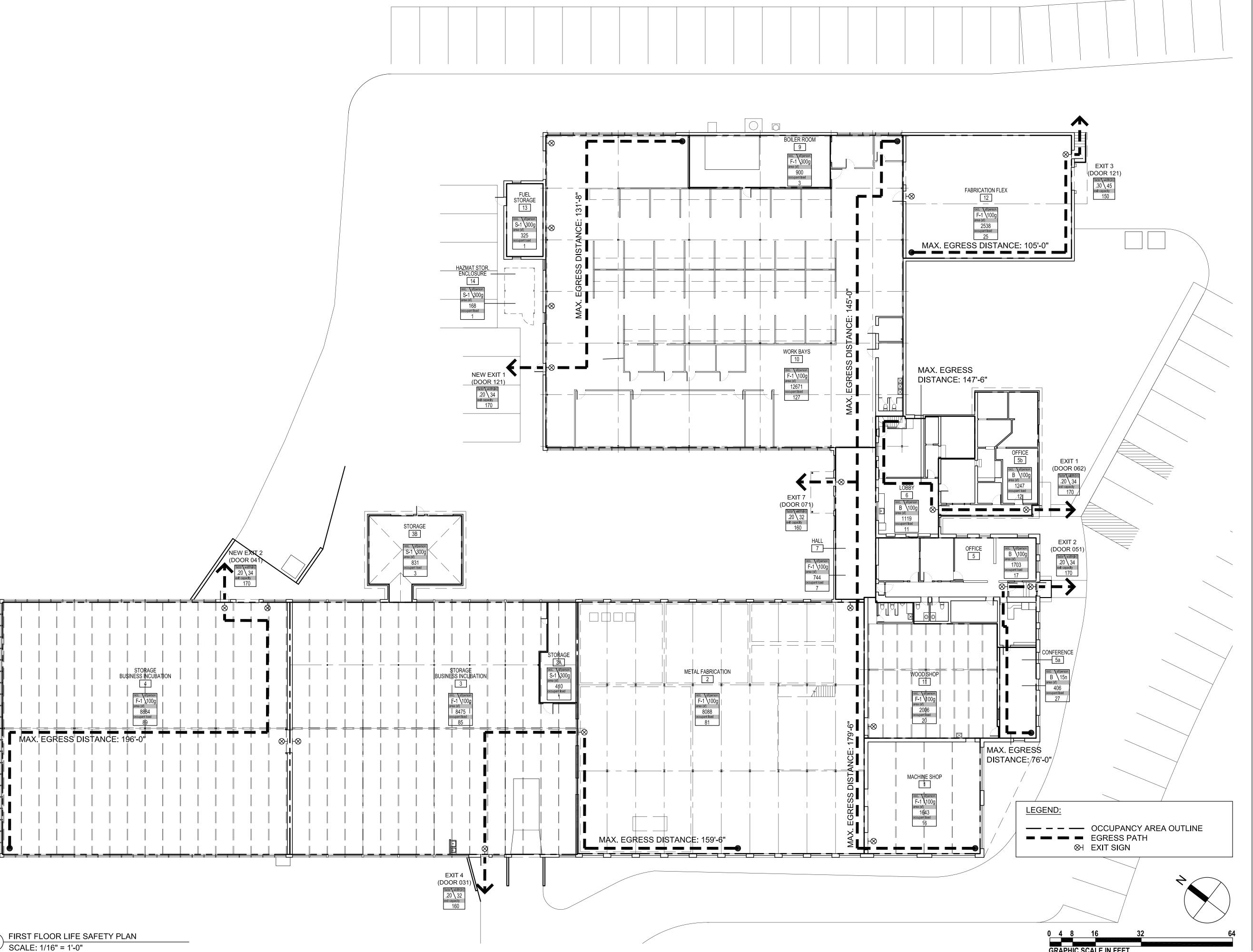
DATE: FEB 12, 2021

SPECIAL PERMIT FIRST FLOOR LIFE SAFETY PLAN

LS1.01

DRAWINGS MAY NOT BE USED OR DISTRIBUTED WITHOUT EXPRESS WRITTEN PERMISSION.





98

PROJECT ADDRESS:

11 HANKEY ST. ROCHDALE, MA 01542

CLIENT

THE WORCSHOP 11 HANKEY ST. ROCHDALE, MA 01542

ARCHITECT

OPRCH

THE OFFICE OF PENN RUDERMAN ARCHITECTS, INC. 110 GLEASONDALE RD STOW, MA 01775 617.855.5277

CONTRACTOR

CODE CONSULTANT

CODE RED CONSULTANTS, LLC 154 TURNPIKE ROAD, SUITE 200 SOUTHBOROUGH, MA 01772 T. 617.500.7633 F. 617.500.2074

REVISIONS

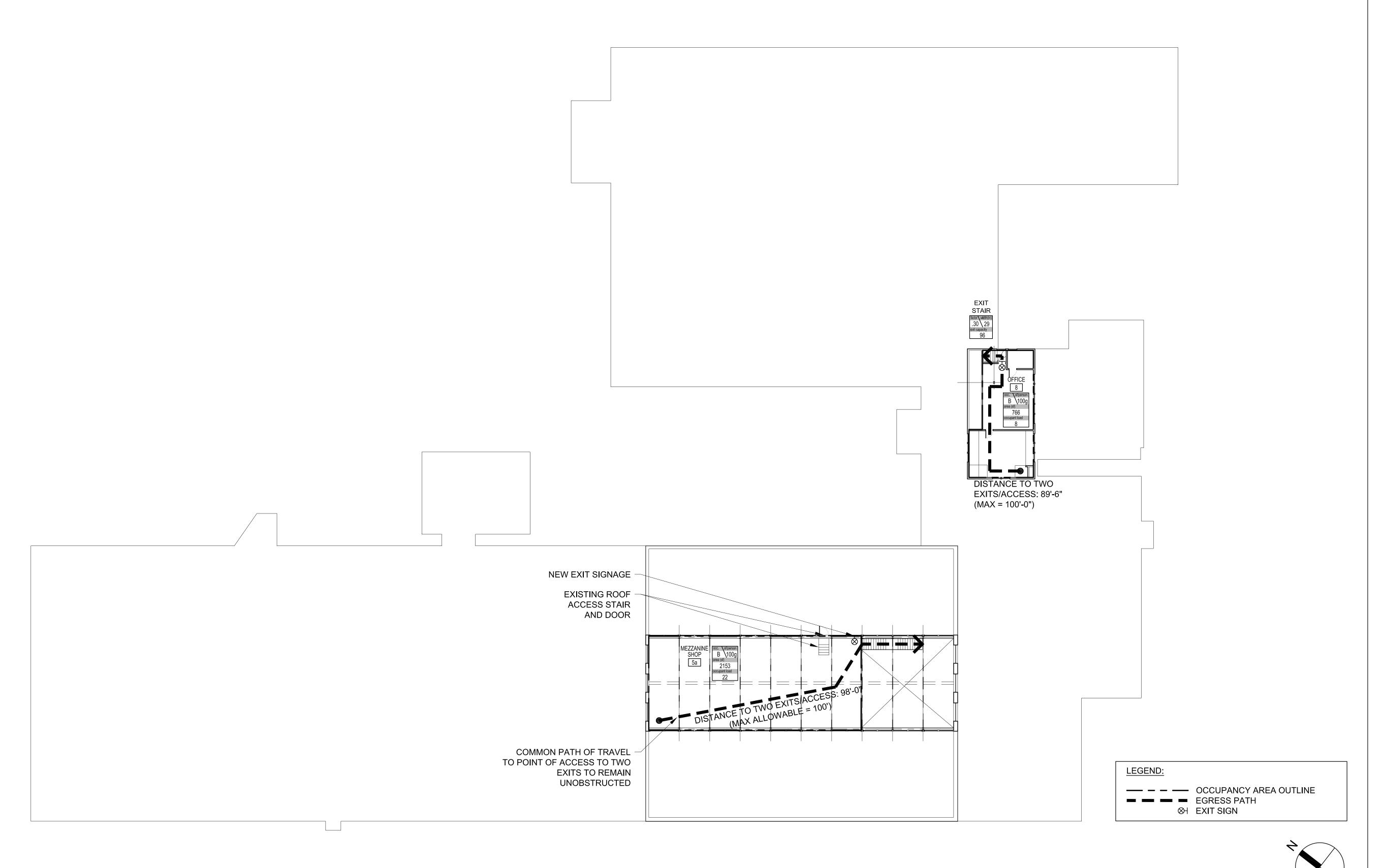
DATE: FEB 12, 2021

SPECIAL PERMIT SECOND FLOOR/MEZZ. LIFE SAFETY PLAN

LS1.02

DRAWINGS MAY NOT BE USED OR DISTRIBUTED WITHOUT EXPRESS WRITTEN PERMISSION.





99

PROJECT NAME:

THE WORCSHOP PERMIT SET

PROJECT ADDRESS:

11 HANKEY ST. ROCHDALE, MA 01542

CLIENT

THE WORCSHOP 11 HANKEY ST. ROCHDALE, MA 01542

ARCHITECT

OPRCH

THE OFFICE OF PENN RUDERMAN ARCHITECTS, INC. 110 GLEASONDALE RD STOW, MA 01775 617.855.5277

CONTRACTOR

CODE CONSULTANT

CODE RED CONSULTANTS, LLC 154 TURNPIKE ROAD, SUITE 200 SOUTHBOROUGH, MA 01772 T. 617.500.7633 F. 617.500.2074

REVISIONS

DATE: FEB 12, 2021

SPECIAL PERMIT FIRST FLOOR PLAN

A1.01

DRAWINGS MAY NOT BE USED OR DISTRIBUTED WITHOUT EXPRESS WRITTEN PERMISSION.

© OPRCH

THE WORCSHOP PERMIT SET

PROJECT ADDRESS:

11 HANKEY ST. ROCHDALE, MA 01542

100

CLIENT

THE WORCSHOP 11 HANKEY ST. ROCHDALE, MA 01542

ARCHITECT

OPRCH

THE OFFICE OF PENN RUDERMAN ARCHITECTS, INC. 110 GLEASONDALE RD STOW, MA 01775 617.855.5277

CONTRACTOR

CODE CONSULTANT

CODE RED CONSULTANTS, LLC 154 TURNPIKE ROAD, SUITE 200 SOUTHBOROUGH, MA 01772 T. 617.500.7633 F. 617.500.2074

REVISIONS

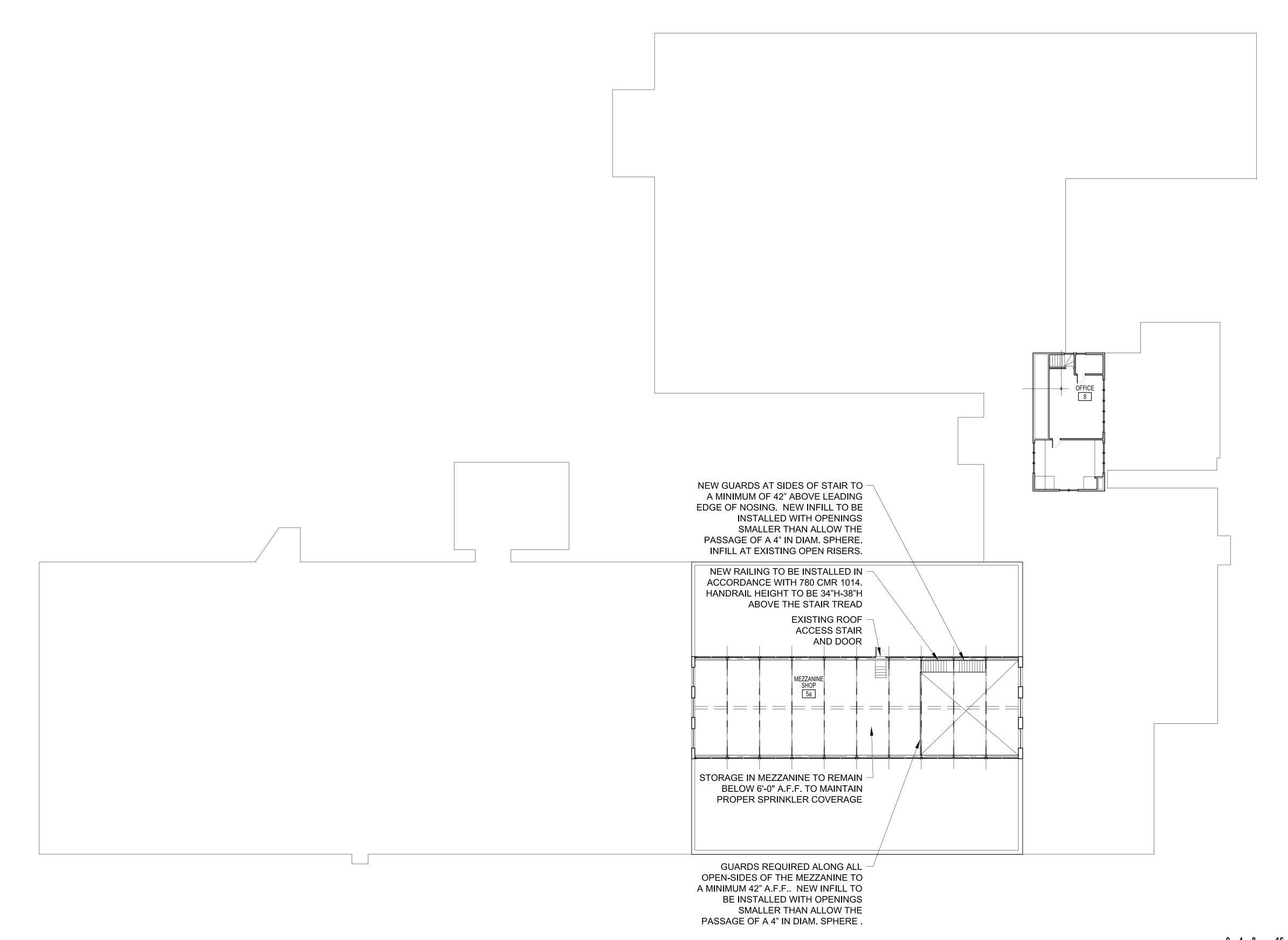
DATE: FEB 12, 2021

SPECIAL PERMIT
SECOND FLOOR PLAN

A1.02

DRAWINGS MAY NOT BE USED OR DISTRIBUTED WITHOUT EXPRESS WRITTEN PERMISSION.

© OPRCH





154 TURNPIKE ROAD SUITE 200, SOUTHBOROUGH MA 01772 WWW.CRCFIRE.COM

Fire Protection/Life Safety Chapter 34 Building Investigation & Evaluation Report

Project:

The Worcshop 11 Hankey Street Leicester, MA

Prepared for:

The Office of Penn Ruderman Architects 110 Gleasondale Rd. Stow, MA 01775

Prepared by:

Kevin N. Lynch

Reviewed by:

Jeff D. Perras, P.E.

February 2, 2021



Table of Contents

1.	Int	troduction	3
2.		oplicable Codes	
3.		isting Building Code Scoping Requirements	
	3.1	General Requirements	
	3.2	Means of Egress, Lighting and Ventilation	5
	3.3	Compliance Method & Classification of Work	
4.	Fir	e Protection/ Life Safety Analysis	8
	4.1	Use and Occupancy Classifications	8
	4.2	Construction Type	9
	4.3	Exterior Walls	10
	4.4	Interior Walls	11
	4.5	Vertical Openings	13
	4.6	Interior Finishes & Furniture	13
	4.7	Fire Protection Systems	14
	4.8	Means of Egress	15
	4.9	Standby/Emergency Power Systems	19
	4.10	Accessibility	19
	4.11	Plumbing Fixtures	20
	4.12	Energy Code	22



1. Introduction

The Office of Penn Ruderman Architects has retained Code Red Consultants to provide fire protection, life safety, and accessibility code consulting services for the Worcshop Renovation project located at 11 Hankey Street, in Leicester, MA. The scope of the project includes alterations to the existing facility in order to facilitate its new use as a maker space.

The existing facility was originally constructed in 1927 and expanded over the years to its current footprint of approximately 52,000 GSF. The building was previously owned by Worcester Tool and Stamping Co. Inc. and used as industrial building for manufacturing and fabrication operations. The entire structure is 1-story in height, with 2 intermediate mezzanine/2nd floor levels located at different portions of the facility. A variety of construction types are present throughout, consisting of a mix of unprotected structural steel, brick masonry exterior walls, metal exterior walls, and combustible framing. Two automatic, wet-type sprinkler systems serve the facility, with deficiencies observed as outlined in Section 4.7.1 of this report. A fire alarm system consisting of a single audio-visual notification appliance is also provided in the building.







FIGURE 2: BUILDING INTERIOR

The facility is proposed to consist of the following building portions as outlined in Figure 3. These areas are currently referred to as "Buildings" by ownership (i.e. Building 1, Building 2, etc.). For the purposes of this report, these numbered areas illustrated in Figure 3 are herein referred to as "Spaces" in order to prevent misinterpretation that these areas are separate buildings from a code perspective (i.e. Space 1, Space 2, etc.)

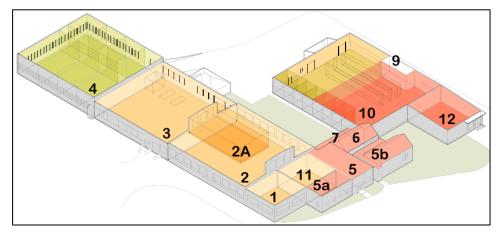


FIGURE 3: PROPOSED DIAGRAM



2. Applicable Codes

Building 780 CMR - Massachusetts State Building Code 9th Edition, which is an amended

version of the 2015 International Building Code (IBC)

780 CMR 34.00, which is an amended version of the 2015 International Existing

Building Code (IEBC), herein referred to as the MEBC.

Fire 527 CMR 1.00 - Massachusetts Comprehensive Fire Safety Code, which is an

amended version of the 2015 Edition of NFPA 1, Uniform Fire Code

Accessibility 521 CMR - Massachusetts Architectural Access Board (MAAB) Rules and

Regulations and the 2010 ADA Standards for Accessible Design

Electrical 527 CMR 12.00 - Massachusetts Electrical Code, which is an amended version of

the 2020 Edition of NFPA 70, National Electrical Code

Mechanical 2015 International Mechanical Code (IMC) as amended by 780 CMR 28.00.

Plumbing 248 CMR 10.00 – Uniform State Plumbing Code

Energy 780 CMR 13.00, which is an amended version of the 2018 International Energy

Conservation Code (IECC) or the 2016 ASHRAE 90.1

Elevator 524 CMR - Massachusetts Board of Elevator Regulations, which is an amended

version of the 2013 ASME A17.1, Safety Code for Elevators and Escalators

Other National Fire Protection Association (NFPA) Standards, as referenced by the

above codes, including the following:

- 2013 NFPA 10: Standard for Portable Fire Extinguishers

- 2013 NFPA 13: Standard for the Installation of Sprinkler Systems

- 2014 NFPA 51B: Standard for Fire Prevention During Welding, Cutting, and Other Hot Work

- 2013 NFPA 72: National Fire Alarm and Signaling Code

- 2015 NFPA 484: Standard for Combustible Metals

- 2013 NFPA 654: Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids

- 2012 NFPA 664: Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities

The primary intent of this document is to (1) coordinate the fire protection and life safety approach between all design disciplines, (2) demonstrate building, fire and life safety code compliance to the Authorities Having Jurisdiction per Section 104.2.2.1 of the Massachusetts Existing Building Code, and (3) serve as a record document for the building owner. Details of compliance are left to the construction documents and the contractors. This report is intended to address code requirements as enforced by Authorities Having Jurisdiction only. It is the responsibility of the design team to ensure that any owner or insurance carrier requirements, which may exceed the provisions of the applicable codes and standards, are met.



3. Existing Building Code Scoping Requirements

3.1 General Requirements

Portions of an existing building undergoing repair, alteration, addition, or a change of occupancy are subject to the requirements of the MEBC. In general, existing materials and conditions can remain provided they were installed in accordance with the code at the time of original installation and are not deemed a hazardous condition by an authority having jurisdiction (AHJ). All new work in existing buildings is required to comply with the materials and methods in accordance with 780 CMR, or the applicable code for new construction unless otherwise specified by the MEBC (MEBC 702.6). Alterations to an existing building or portion thereof are not permitted to reduce the level of safety currently provided within the building unless portion altered complies with the requirements of 780 CMR for new construction (MEBC 701.2).

Where compliance with the requirements of the code for new construction is impractical due to construction difficulties or regulatory conflicts, compliance alternatives may be approved by the building official. Any compliance alternatives being sought are required to be identified on the submittal documents (MEBC 104.11). **Refer to Section 3.2 for the compliance alternative being requested as part of the project in order to mitigate the lack of headroom provided at the mezzanine level.**

3.2 Means of Egress, Lighting and Ventilation

Regardless of the scope of work performed, the building official may cite any of the following conditions as not compliant, and require them to be mitigated or made safe (780 CMR 102.6.4):

- Inadequate number of means of egress: The number of exits serving every space and/or story must comply with 780 CMR 10.00.
 - The building is being provided with a sufficient number of exits as part of the project.
- Egress components with insufficient width or so arranged to be inadequate, including signage and lighting: Means of egress components must be of sufficient width to provide adequate exit capacity.
 - The building is provided with sufficient egress capacity based on the calculated occupant load as outlined on the Life Safety Plans for the project.
- Inadequate lighting and ventilation. Lighting levels and ventilation are to be provided for egress systems such that they are maintained as usable.
 - Coverage of lighting and ventilations systems was not verified as part of the survey. It should be confirmed that the means of egress throughout the building is illuminated at all times and illumination levels are maintained to be greater than 1 foot-candle at walking surface as outlined in Section 4.8.10 of this Report. The emergency power system within the building is required to be provided for these features (780 CMR 2702.2).



- Means of egress components that have not be maintained in a safe, operable, and sanitary condition. Means of egress are to be configured such they are safe and adequate in accordance with 780 CMR 10.00.
 - The following noncompliant deficiencies associated with existing means of egress components were observed during the survey and are being corrected as part of the project:
 - 1. Non-illuminated exit signage (780 CMR 1013.6 & 1013.5);
 - 2. Noncompliant guards (780 CMR 1015);
 - 3. Noncompliant handrails (780 CMR 1014);
 - 4. Surface bolts on egress doors (780 CMR 1010.1.9);
 - 5. Steps at exit discharge doors (780 CMR 1010.1.5 & 1010.1.7);
 - 6. Noncompliant changes in elevation (780 CMR 1003.5 & 1012);
 - 7. Doors with insufficient clear width (780 CMR 1010.1.1);
 - 8. Obstructed paths of egress (780 CMR 1003.6); and
 - 9. Open stair risers (780 CMR 1011.5.5.3).



3.3 Compliance Method & Classification of Work

The MEBC has 3 different compliance methods that can be used to evaluate a renovation project:

- Prescriptive Method (MEBC Chapter 4)
- Work Area Method (MEBC Chapters 5-13)
- Performance Method (MEBC Chapter 14)

The **Work Area Compliance Method** has been selected for use on this project (MEBC 301.1.2). The project includes the alterations to the existing building to facilitate the proposed program for the conversion to a maker space. The planned work primarily consists of the construction of new partial-height interior partitions, means of egress upgrades, building and life safety system upgrades, and the reconfiguration of existing rack storage shelves. Less than 50% of the floor area of the facility is being reconfigured as a result of the scope of work. The following changes of occupancy are also taking place respective to the areas shown in Figure 3:

- <u>Space 3:</u> Metal fabrication (Group F-1) to workspace (Group F-1 or Group B) and storage space (Group S-1)
- <u>Space 4:</u> Metal fabrication (Group F-1) to workspace (Group F-1 or Group B) and storage space (Group S-1).
- <u>Space 10:</u> Metal fabrication (Group F-1) to workspace (Group F-1 or Group B).
- Space 12: Shipping and receiving (Group S-1) to fabrication space (Group F-1).

Therefore, the planned work is classified as a mix of **Level 1 Alterations and Level 2 Alterations**, and a **Change of Occupancy** subject to compliance with MEBC Chapters 7, 8, and 10 (MEBC 503.1, 504.1, 506.1 & 202 – Work Area definition). An addition is not planned as part of the project.

The following are the definitions for each level of work:

Level 1 Alteration – Includes the removal and replacement of the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose (MEBC 503.1).

Level 2 Alteration – Includes the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment in less than 50% of the aggregate building area (MEBC 504.1).

Change of Occupancy - A change in the use of the building or a portion of a building. A change of occupancy shall include any change of occupancy classification, any change from one group to another group within an occupancy classification or any change in use within a group for a specific occupancy classification (MEBC 202).

Project #: 202663



4. Fire Protection/ Life Safety Analysis

The following section has been prepared to illustrate compliance with the requirements of the MEBC based on the compliance method and classifications of work identified above. In general, new work is required to comply with the new construction requirements of 780 CMR unless otherwise stated herein (MEBC 702.4 & 801.3).

The observations outlined herein are based on visual observations made by Jeff Perras and Kevin Lynch of Code Red Consultants on November 5, 2020, progress design drawings dated January 11, 2021, and discussions with the design team. No destructive inspection or functional testing of building systems were performed as part of the evaluation.

Use and Occupancy Classifications

4.1.1 **Primary Occupancies**

The building was previously owned and operated by the Worcester Tool and Stamping Co. as a manufacturing facility with areas designated for fabrication (**Group F-1**) and office space (**Group B**).

The facility is proposed to serve as a maker space with the following occupancies listed in Table 1 below.

Description	780 CMR Classification		
Office Space	Group B (Business)		
Wood Shop/ Machine Shop/ Metal	Group F-1 (Moderate-Hazard Factory		
Fabrication	Industrial)		
Storage	Group S-1 (Moderate-Hazard Storage)		

TABLE 1: PRIMARY OCCUPANCIES

Small assembly spaces within office areas are permitted to be classified as part of the **Group B** occupancy in which they are located, provided these assembly spaces are less than 750 sf in area or have an occupant load that is less than 50 (780 CMR 303.1.2).

4.1.3 High-Hazard Group H

Based on the observed features provided in the areas housing hazardous materials, it is assumed by this Report that none of the spaces within the building constitute a Group H occupancy. A detailed analysis is planned as part of the project which will outline the quantity and classification of all chemicals included within the building in order to verify compliance with the Maximum Allowable Quantities per Control Area of 780 CMR Table 307.1(1) / Table 307.1(2), as applicable. The actual chemical classifications will be determined based on review of Safety Data Sheets (SDS's) for each chemical. These classifications may ultimately impact the hazard classification and required design of the fire protection systems protecting these areas. This Section of this Report will be updated once this analysis is complete.



4.1.4 Special Uses and Occupancies

4.1.4.1 Wood Shop

Wood shops are required to comply with 527 CMR 1.00 Chapter 40 and NFPA 664 (780 CMR 426.1 & 527 CMR 1.00, 40.1).

4.1.4.2 Metal Fabrication

The facility is anticipated to contain a variety of metal fabrication and processing equipment including welders, cutting and grinding machinery, lathes and other metal processing tools.

Equipment, processes, and operations that involve the manufacture, processing, blending, repackaging, and handling of combustible particulate solids or combustible dusts, regardless of concentration is required to be installed and maintained in accordance with the requirements of 527 CMR 1.00 Chapter 40 and NFPA 484 (780 CMR 426.1 & 527 CMR 1.00, 40.1).

All welding, cutting, and hot work operations are required to be in accordance with 527 CMR 1.00 Chapter 41, NFPA 484, and NFPA 51B.

4.2 Construction Type

4.2.1 Existing Construction Classification

A variety of construction types are present throughout, consisting of a mix of unprotected structural steel, brick masonry exterior walls, metal exterior walls, and combustible framing without any true building separations. The majority of the facility primarily consists of unprotected steel structure that is most consistent with Type IIB construction. The office wing consists of combustible construction and most closely represents Type VB construction.



FIGURE 4: OFFICE WING COMBUSTIBLE FRAMING (TYPE VB CONSTRUCTION)



FIGURE 5: UNPROTECTED STEEL JOISTS (TYPE IIB CONSTRUCTION)

Limited quantities of combustible construction were observed throughout Type IIB portions of the facility including framing and interior partitions. It should be confirmed that all combustible construction in the Type IIB portion of the building is in accordance with 780 CMR 603.1, previously permitted, or otherwise approved by the building official.



4.2.2 Height and Area Limitations

Compliance with new construction height and area limitations is required for projects including a change of occupancy to a higher hazard classification per MEBC Table 1012.5 or an addition (MEBC 1012.5 & 1102).

The change of occupancy throughout Spaces 3, 4, 10, and 12 do not require compliance with new construction height and area limitations since the relative hazard of the proposed occupancies (Group B, F-1 and S-1) per MEBC Table 1012.5 are considered lesser or equal hazards to the existing occupancy (Group F-1) (MEBC Table 1012.5.2).

The existing height and area of the entire facility is as follows:

Footprint Area: 52,841 ft.²
Aggregate Area: 56,678 ft.²
Height: 2 Stories/~40 ft.

4.2.3 Fire Resistance Rating of Building Elements

As part of the renovation project the existing construction types are required to be maintained. Unless otherwise required to have a higher fire resistance rating by other sections of this Report, the following table indicates the minimum fire-resistance ratings based on construction type (780 CMR 601).

Building Element	Type IIB/ VB
Primary Structural Frame	0 Hour
Interior Bearing Walls	0 Hour
Exterior Bearing Walls	0 Hour
Exterior Nonbearing Walls	Refer to Section 4.3
Floor Construction and Secondary Members	0 Hour
Roof Construction and Secondary Members	0 Hour

TABLE 2: FIRE RESISTANCE RATINGS

4.2.4 Mezzanines

Upgrades to the existing mezzanine located at Space 2 are not required to take place unless otherwise noted in another Section of this report (MEBC 701.2). The aggregate area of the mezzanine does not exceed one-third the floor area of space in which it is located (780 CMR 505.2.1).

4.3 Exterior Walls

Existing exterior walls are not required to be altered or upgraded as part of a renovation and are permitted to be replaced in kind (MEBC 701.2 & 1012.5). Alterations are required to comply with the code for new construction.

^{1.} Not less than the rating of supported elements, such as stairs and shafts (780 CMR 704.1).



The opening limitations for new or altered exterior walls are based on the fire separation distance for each wall, measured from the building face to the closest interior lot line, the centerline of a street, alley, or public way, or to an imaginary lot line between two buildings (780 CMR 202). The table below indicates the opening limitations required for the exterior walls based on fire separation distance of a fully sprinklered building (780 CMR 602 & 705.8).

TABLE 3: EXTERIOR WALL FIRE RATING AND OPENING LIMITATIONS

Fire Separation Distance (ft)	Rating	Allowable Area
$0 \le X \le 3$	1 Hour	Not Permitted
3 ≤ X < 5	1 Hour	15%
5 ≤ X < 10	1 Hour	25%
X ≥ 10	0 Hour	No Limit

All exterior elevations of the building have a fire separation distance of at least 10 feet, permitting nonrated construction with unlimited unprotected openings.

4.4 Interior Walls

4.4.1 Fire/Smoke Resistive Assemblies

Alterations to existing rated walls are required to maintain the existing level of safety provided within the building, including new penetrations of these assemblies. New assemblies are required to comply with the code for new construction (MEBC 801.3).

New rated assemblies are not required or planned as part of the project.

The existing boiler room was observed to be provided with 90-minute rated opening protectives, which is required for 2-hour rated construction. Unprotected openings and unsealed penetrations were observed at this enclosure. These openings and penetrations are required to be repaired or sealed in order to meet the required fire resistance rating of the room as originally constructed (780 CMR 102.8).





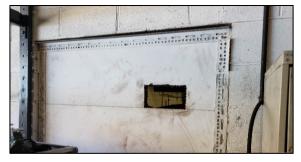


FIGURE 7: ENCLOSURE OPENING

4.4.2 Penetrations

New penetrations of existing fire-resistance-rated walls that are not protected with dampers are required to comply with this section. Ducts and air transfer



openings that are protected by dampers are required to comply with Section 4.4.4 of this report. Existing penetrations in the work area that are not protected with fire stopping are also required to comply with this section.

New through and membrane penetrations of fire-resistance-rated walls are required to be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (780 CMR 714.3 & 714.4). Penetrations of fire-resistance-rated walls must have an F rating of not less than the required fire-resistance rating of the wall penetrated (780 CMR 714.3.1).

4.4.3 Doors and Fire Shutters

New doors, fire shutters, and their corresponding components are required to have fire-resistance ratings and meet the required testing standards as specified in Table 4. All doors and fire shutters required to be fire-resistance-rated must be designed, installed, and labeled in accordance with NFPA 80 (780 CMR 716.5).

Wall Type	Required Wall Rating	Minimum Fire Door Rating	Performance Criteria for Doors/Shutters ¹	
Fire barriers	2-hours	1½-hours	NFPA 252 or UL 10C /	
rife barriers	1-hour	3/4-hour	NFPA 252 or UL 10B	

TABLE 4: FIRE & SMOKE DOOR RATING SUMMARY TABLE

No new fire doors or fire shutters are to be located within rated assemblies as part of the scope of work.

4.4.4 Ducts and Air Transfer Openings

Where new dampers are installed, they must be listed and bear the label of an approved testing agency (780 CMR 717.3.1). Fire dampers must be tested in accordance with UL 555 and smoke dampers must be tested in accordance with UL 555S. Combination fire/smoke dampers must comply with both test standards.

Fire dampers are required to be rated for 1.5 hours, unless they are installed in a 3-hour or greater assembly, in which case they are required to be 3-hour rated (780 CMR 717.3.2.1). Smoke damper leakage ratings must be Class I or II. Elevated temperature ratings must not be less than 250°F (780 CMR 717.3.2.2). Combination fire/smoke dampers must comply with both rating requirements (780 CMR 717.3.2.3). Refer to 780 CMR 717.3.3 for required damper actuation methods.

Fire, smoke, and fire/smoke dampers are required to be provided with an approved means of access that permits inspection and maintenance of the damper and its operating parts (780 CMR 717.4). Access points are required to

^{2.} All doors are required to be self- or automatic closing and provided with an active latch bolt that will secure the door when it is closed (780 CMR 716.5.9.1).



have permanent labels with letters that are not less than ½ inch in height that reads "FIRE/SMOKE DAMPER, SMOKE DAMPER, or FIRE DAMPER".

4.5 Vertical Openings

The building is provided with an existing two-story open stair connecting the First and Second Floors within the existing office wing. This stair is permitted to remain unenclosed since the building is being provided with sprinkler coverage throughout as part of the project and only connects two stories (MEBC 803.2.1 & 780 CMR 1019.3(1)).

Portions of the facility undergoing a change of occupancy as part of the project are 1-story in height and do not contain vertical openings. Therefore, no further compliance is necessary.

4.6 Interior Finishes & Furniture

4.6.1 Wall and Ceiling Finishes

The interior finish of walls and ceiling in the work area and any exits or corridors within the work area are required to comply with the code for new construction (MEBC 803.4). In areas of the building undergoing a change of occupancy classification, the interior finish of walls and ceilings are required to comply with the new construction requirements for the new occupancy classification in accordance with 780 CMR (MEBC 1012.3).

Table 5 outlines the minimum interior wall and ceiling finish requirements for new construction (780 CMR 803.11). It should be noted that Chapter 8 of 780 CMR contains other requirements for interior finishes, which vary based the type of finish selected (i.e. textile wall coverings). As finishes are selected, it should be verified that they comply with these requirements.

Occupancy Classification	Exit Enclosures	Corridors, Exit Access Stairways/Ramps	Rooms and Enclosed Spaces	
В	Class A or B	Class A, B or C	Class A, B or C	
F-1/S-1	Class A, B or C	Class A, B or C	Class A, B or C	

TABLE 5: INTERIOR WALL & CEILING FINISH REQUIREMENTS 1

4.6.2 Interior Floor Finish

Existing floor finishes are permitted to remain as is. New floor finishes and coverings of a traditional type, such as wood, vinyl, linoleum or terrazzo, and resilient floor covering materials that are not comprised of fibers are permitted throughout (MEBC 702.2 & 780 CMR 804.1 Exception). Other interior floor covering materials are required to comply with the requirements of the DOC FF-1 "pill test" (CPSC 16 CFR Part 1630) (780 CMR 804.4.1 Exception).

^{1.} Interior finishes are grouped in the following classes: Class A – flame spread index 0-25, Class B – flame spread index 26-75, Class C – flame spread index 76-200. All classes must have a smoke-developed index that does not exceed 450 (780 CMR 803.1.1).



4.7 Fire Protection Systems

4.7.1 Automatic Sprinkler Systems

The existing building is provided with two automatic, wet-type sprinkler systems that are each fed by separate risers. The following sprinkler system deficiencies were observed throughout the complex:

- Spare sprinklers were observed to be dated 1944 and loaded with foreign material (i.e. dust, debris, etc.). Sprinkler heads in service for at least 75 years are required to be tested or replaced in accordance with NFPA 25, 5.3.1.1.1.5.
- Storage at the ceiling joists was observed to be within 18" of sprinklers located at the ceiling, thus obstructing sprinkler coverage (NFPA 13, 8.6.5.2).
- Sprinklers located within 4" of walls. The minimum distance the sprinkler is permitted to be from the wall is 4" (NFPA 13, 8.6.3.3).

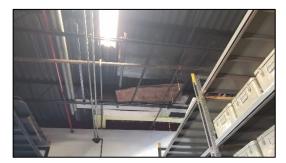


FIGURE 8: STORAGE AT CEILING



FIGURE 9: 1944 SPRINKLER HEAD



FIGURE 10: SPRINKLER ASSEMBLY (SPACE 10)



FIGURE 11: SPRINKLER ASSEMBLY (SPACE 3)

A survey has been conducted by a licensed Fire Sprinkler Contractor in order to identify deficiencies associated with the existing systems, required corrective actions, and additional alterations to provide full coverage per the scope of work (MEBC 1012.2.1).

Coverage of the existing sprinkler system is required to be maintained and extended as necessary in accordance with the 2013 NFPA 13 as part of the renovation (MEBC 703.1). Areas undergoing a change of occupancy are



required to be provided with sprinkler system coverage based on the new occupancy (MEBC 1012.2.1).

4.7.2 Fire Extinguishers

Portable fire extinguishers were observed to be provided throughout the building and last inspected October, 2020. As part of this renovation, fire extinguisher coverage should be maintained/reconfigured as necessary to comply with NFPA 10, 780 CMR and 527 CMR.

4.7.3 Fire Alarm and Detection Systems

A single audio-visual notification appliance is located within Space 3, and was the only fire alarm system appliance observed throughout the existing facility during the survey. Operation of the existing fire alarm system was not confirmed during the survey. An evaluation of the existing fire alarm system was recently conducted by a licensed Fire Alarm Contractor to determine its existing capabilities and planned upgrades as part of the project.

Fire alarm system coverage is required to be provided to monitor the sprinkler system and an provide coverage the work areas and spaces undergoing a change of occupancy as part of the project in accordance with NFPA 72 and 780 CMR Section 907 (780 CMR 102.8 & 903.4; MEBC 804.4).

4.8 Means of Egress

Existing means of egress, that have been maintained as originally designed and constructed, are permitted to remain unless deemed hazardous by the building official (780 CMR 102.6.4). Newly constructed or reconfigured means of egress and alterations to the means of egress are required to comply with the code for new construction (MEBC 803.2). The means of egress serving spaces undergoing a change of occupancy are required to comply with MEBC Section 805 and 905 (MEBC 1012.4.2).

4.8.1 Occupant Load

The number of occupants is computed at the rate of one occupant per unit of area (780 CMR 1004.1.2). Factors anticipated to be used on this project are listed in the table below. The occupant load is permitted to be increased from the occupant load established for the given use where all other requirements of 780 CMR are met (780 CMR 1004.2).

TABLE 6: OCCUPANT LOAD FACTORS

Function of Space	Occupant Load Factor
Assembly, Standing Space	5 net
Assembly, Concentrated (Chairs Only)	7 net
Assembly, Unconcentrated (Tables & Chairs)	15 net
Office/ Shops	100 gross
Storage/MEP	300 gross

Refer to the Life Safety Plans which outline detailed occupant load calculations.

February 2, 2021 Project #: 202663

4.8.2 Egress Width Factors

The required egress capacity for any means of egress component is based on the following capacity factors (780 CMR 1005.3.1 & 1005.3.2):

TABLE 7: EGRESS WIDTH FACTORS

Stairways (inches of width per person)	All Other Components (inches of width per person)
0.3	0.2

Refer to the Life Safety Plans which summarize the egress capacity of the building.

4.8.3 Number of Exits

The number of exits required from every story is not permitted be less than that specified in Table 8 (780 CMR 1006.2.1).

TABLE 8: MINIMUM NUMBER OF EXITS REQUIRED

Occupant Load	Number of Exits Required		
1 – 500	2		
501 – 1,000	3		
> 1,000	4		

Two exits or exit access doorways are also required to be provided from any new space where the occupant load or common path of travel distances in the following table are exceeded (780 CMR 1006.2.1):

TABLE 9: SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

Occupancy	Maximum Occupant Load	Maximum Common Path of Travel Distance
B/F-1	49	100 feet
S-1	29	100 feet

Where two exits or exit access doorways are required from any new portion of the exit access as outlined above, the exit doors or exit access doorways are required to be placed a distance apart equal to not less than 1/3 of the length of the maximum overall diagonal dimension of the building or area served (780 CMR 1007.1.1).



4.8.4 Exit Access Travel Distances

Exit access travel distances is not permitted to exceed the maximum values specified in the table below for newly reconfigured areas (780 CMR 1017.1).

TABLE 10: EXIT ACCESS TRAVEL DISTANCES

Occupancy	Maximum Exit Access Travel Distance
F-1/S-1	250 feet
В	300 feet

4.8.5 Corridors

The width of new corridors is not permitted to be less than that specified in the table below or as determined using the egress factors in based on the occupant load served (780 CMR 1020.2).

TABLE 11: MINIMUM CORRIDOR WIDTH

Occupancy	Minimum Width	
Access to and utilization of MEP equipment	24 inches	
With a required occupancy capacity < 50 people	36 inches	
Any areas not listed above	44 inches	

Where more than one exit or exit access doorway is required, the exit access is required to be arranged such that any dead ends in the corridor do not exceed that specified in the following table (780 CMR 1020.4).

TABLE 12: MAXIMUM DEAD END CORRIDOR LENGTH

Occupancy	Maximum Dead End Length ¹		
B/F-1/S-1	50 feet		

^{1.} A dead end corridor is not limited in length where the length of the dead end corridor is less than 2.5 times the least width of the dead end corridor (780 CMR 1020.4(3)).

4.8.6 Doors

All doors in the work area and in portions of the building undergoing a change of occupancy are required to swing in the direction of exit travel (MEBC 805.4.2 & 1012.4.1). New doors are required to comply with 780 CMR Section 1010. Major requirements include:

- Width. Doors are required to be a minimum of 32 inches in clear width and are not permitted to have a swinging door leaf greater than 48 inches in nominal width (780 CMR 1010.1.1).
- <u>Landings</u>. Level landing are required to be provided on each side of the door (780 CMR 1010.1.5 & 1010.1.6).
- <u>Door Swing</u>. Egress doors are required to be of the pivoted or sideswinging type and are required to swing in the direction of egress travel where serving an occupant load of 50 or more persons (780 CMR 1010.1.2).



- <u>Locking</u>. Except as specifically permitted by 780 CMR Section 1010.1.9, doors are required to be readily operable in the direction of egress travel.
- <u>Doors in Series</u>. Space between two doors in series is required to be a minimum of 48 inches plus the width of the door swinging into the space. Doors in series are required to swing either in the same direction or away from the space between the doors (780 CMR 1010.1.8).
- <u>Electrical Rooms</u>. Electrical rooms with equipment rated over 1,200 amperes or more and over 6 feet in width that contain overcurrent devices, switching devices, or control devices with exit or exit access doors are required to be equipped with panic hardware or fire exit hardware and swing in the direction of egress travel (780 CMR 1010.1.10).

4.8.7 Stairs

Existing stairways are permitted to remain (MEBC 704.1 1012.4). In the event stairs are altered as part of the project, they are required to be constructed in accordance with 780 CMR 1011. Major requirements include:

- Width. Minimum clear width off 44" (780 CMR 1011.2)
- Headroom. Minimum headroom of 80" (780 CMR 1011.3)
- Riser Height. Maximum 7" riser height (780 CMR 1011.5.2)
- Riser Depth. Minimum 11" riser depth (780 CMR 1011.5.2)
- <u>Landings</u>. Compliant landings at the top and bottom of runs (780 CMR 1011.6). Maximum 12-foot vertical rise between landings (780 CMR 1011.8)
- Handrails. Handrails within 30" of required egress width (780 CMR 1011.11 & 1014.6)

4.8.8 Guards

Existing guards are permitted to remain provided they are not in danger of collapsing (MEBC 805.11.1). Where new guards are installed, they are required to be provided in accordance with 780 CMR Section 1015.

4.8.9 Exit Signage

Exit and exit access doors are required to be marked by an approved exit sign readily visible from any direction of egress travel (780 CMR 1013.1). The path of egress travel to exits and within exits is required to be marked by readily visible exit signs to clearly indicate the direction of egress travel where the exit or path of travel is not immediately visible. Exit signs within corridors are required to be placed such that no point is more than 100 feet or the listed viewing distance for the sign, whichever is less, from the nearest visible exit sign. Exit signs are not required in rooms or areas that require only one exit or means of exit access.

Exit signage coverage is required to be maintained/reconfigured in accordance with 780 CMR 1011 as part of this project.



4.8.10 Egress Illumination

The means of egress, including the exit discharge, is required to be illuminated at all times the building served by the means of egress is occupied (780 CMR 1008.1). The illumination level is not permitted to be less than 1 foot-candle at the walking surface (780 CMR 1008.2.1)

In the event of power supply failure, an emergency electrical system is required to automatically illuminate all of the following areas (780 CMR 1008.3):

- Spaces that require two or more means of egress.
- Corridors and interior exit access stairways.
- Exterior landings for exit discharge doorways.

The emergency power system must provide power for a duration of not less than 90 minutes and must consist of storage batteries, unit equipment, or an on-site generator (780 CMR 1008.3.4). The initial illumination must be an average of 1 foot-candle and a minimum at any point of 0.1 foot-candle measured along the path of egress at the floor level. Illumination levels are permitted to decline to 0.6 foot-candle average and a minimum of 0.06 foot-candle at the end of the emergency lighting time duration (780 CMR 1008.3.5).

Emergency lighting was observed to be lacking throughout the facility and is recommended to be upgraded to comply with the code for new construction as part of this project.

4.9 Standby/Emergency Power Systems

Regardless of the scope of work, alterations to the existing standby/ emergency power supply are not permitted to reduce the level of safety currently provided within the building unless portion altered complies with the requirements of 780 CMR for new construction (MEBC 701.2).

4.10 Accessibility

The building is required to meet the requirements of 521 CMR, Massachusetts Architectural Access Board (MAAB) and the Americans with Disabilities Act (ADA).

4.10.1 Massachusetts Architectural Access Board Regulations (521 CMR)

The requirements of 521 CMR are limited to buildings or portions thereof that are open to the public. Employee-only spaces are exempt from these requirements. 521 CMR Section 3.3 contains the following scoping requirements for projects in existing buildings. The costs referred to in the scoping requirements below are cumulative for all projects to the building within a rolling 36-month period:

1. If the work is less than \$100,000, then only the work being performed is required to comply with 521 CMR.



- 2. If the work costs more than \$100,000 but is less than 30% of the full and fair cash value of the building then in addition to the working being performed, the following accessible features are also required to be provided in the building:
 - a. Accessible entrance
 - b. Accessible toilet room
 - c. Accessible drinking fountain (if provided)
 - d. Accessible public telephone (if provided)
- 3. If the work, and all permitted work within a 36 month rolling window, costs more than 30% of the full and fair cash value of the building (prorated based on public spaces), then all public portions of the building are subject to the requirements of 521 CMR.

It is our understanding that the cumulative cost of this project and all work conducted within the past 36-month period will not exceed the \$100,000. Based on this, only the work performed is required to comply with 521 CMR as outlined above.

4.10.2 2010 ADA Standards

The American with Disabilities Act (ADA) is federal civil rights law enacted in 1990 and enforced by the U.S. Department of Justice (DOJ). Title III of the ADA requires that the design, construction and alteration of state owned buildings and facilities be carried out in a manner that is accessible and usable by people with disabilities. Where discrepancies exist between the ADA and 521 CMR, the regulation that provides the greater level of accessibility must be followed. Though 521 CMR does not regulate employee only areas, Title III makes it clear that employee-only areas are required to comply with the 2010 ADA Standards.

The 2010 ADA Standards require altered portions of an existing building to be readily accessible to and usable by individuals with disabilities to the maximum extent feasible (ADA 35.151(b)). Further, alterations to primary function areas should be made such that the level of accessibility, including the path of travel to the space, is made accessible to the maximum extent feasible. When determining if the upgrade is feasible, the ADA requirements state that the upgrade to the path of travel is disproportionate to the project when the cost to perform the work exceeds 20% of the cost of the alteration to the primary function area

4.11 Plumbing Fixtures

248 CMR 10.00, *Uniform State Plumbing Code*, regulates the minimum number of plumbing fixtures. The requirements set forth in 248 CMR 10.10(18) Table 1: Minimum Facilities for Building Occupancy apply to plumbing system <u>installation</u>, <u>alteration</u>, <u>or extension</u> projects in which the plumbing work begins on or after June 3, 1994. The minimum number of plumbing fixtures are based upon the use and occupancy classification of the building or space and the population as established by the authority having jurisdiction. The following table outlines the plumbing fixture requirements for the building.

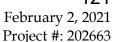




TABLE 13: PLUMBING FIXTURE FACTORS

Usa Crassa	To	ilets	Urinals	Lavatories	Drinking	Service	Bath/
Use Group	F	M	Officials	Per Sex	Fountains	Sink	Shower
Office	1 per 20	1 per 25	33% substitution	1 per 50	1 per floor	1 per floor	N/A
Industrial (Employee)	1 per 15	1 per 20	1 per 40	1 per 30	1 per 15	1 per floor	1 per 15

Single-user gender-neutral toilet fixtures are permitted to be substituted for genderdesignated toilet fixtures provided that all fixtures are designated as gender neutral or gender-neutral toilets are provided in increments of two (248 CMR 10.10(18)(r)). A gender-neutral toilet fixture is only permitted to be counted once toward the minimum fixture requirements. All gender-neutral toilet rooms are required to be fully accessible in accordance with 521 CMR Chapter 30.

Where the occupant load of a story is increased by more than 20 percent, plumbing fixtures for the story are required to be provided based on the increased occupant load (MEBC 810.1). Where the occupancy of an existing building is changed such that the new occupancy is subject to increased or different plumbing fixture requirements, the new occupancy is required to comply with the intent of the provisions outlined in 248 CMR.

Based on the factors provided in Table 13, an evaluation of the expected number of occupants and the existing number of plumbing fixtures is summarized below.

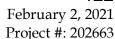
TABLE 14: PLUMBING FIXTURE CALCULATIONS

Occupant	Classification	Water C	losets	Male	Lavatories	Drinking	Service	Showers
Load	Ciassification	Female	Male	Urinals	Per Sex	Fountains	Sink	Per Sex
80	Office (Worcshop Members)	1 per 20	1 per 25	0.33 A	1 per 50	1 per floor	1 per floor	-
	Required fixtures	2.00	1.60	0.53	0.80	1	-	-
Total Req	Total Required Fixtures		2	1	1	1 ^B	1	-
Total Prov	rided Fixtures	2	2	1	1	0	1	-
15	Industrial (Employee)	1 per 15	1 per 20	1 per 40	1 per 20	N/A	1 per floor	1 per 15
15	Required fixtures	0.33	0.25	0.13	0.25	0	1	0.67
Total Req	uired Fixtures	1	1	1	1	0	1	1
Total Prov	rided Fixtures	1	1	1	1	0	1	0

A Permitted to be substituted for male water closets.

As shown above the building is provided with a sufficient number of plumbing fixtures based on the expected population with exception to the bath/shower required for Industrial Employees, and a drinking fountain. As a result of the project, it is anticipated that the expected population within the building will not

^B Permitted to be substituted for a water station without a drain.





increase the existing occupant load of the building by more than 20% (MEBC 810.1). Therefore, no further compliance is required.

4.12 Energy Code

Except as specified in the 2015 IECC, the energy code does not require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system law-fully in existence at the time of adoption of this code (2015 IECC C501.2). Alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of this code than the existing building or structure was prior to the alteration. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall not create an unsafe or hazardous condition or overload existing building systems (2015 IECC 503.1). Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with the code for new construction (2015 IECC 505.1).

TOWN AND THE PER CONTROL OF THE

Town of Leicester PLANNING BOARD

LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

Memorandum

To: Ethan DeSota

evdesota@gmail.com

FROM: Michelle R. Buck, AICP

Town Planner/Director of Inspectional Services

DATE: March 22, 2021

RE: 11 Hankey Street - WorcShop

Special Permit Application

PB File#: SP2021-02

I've reviewed the above referenced application and have the following comments and questions:

1. General

Please clarify what parcels are included in the total lot area provided. It appears that you're including Assessors Map 43, parcels C7 and C8, as well as Map 43B, parcel B-1. Is the intent to combine parcels into a single parcel?

2. Parking

I understand you're working on a revised/more detailed parking plan, but below are my initial comments:

- The Site Plan (Sheet A1.00) shows that the parking spaces on the south side of the property are
 encroaching on the neighboring property. Is this accurate? Also, is this existing or proposed
 layout?
- Where is the overflow parking mentioned in the narrative as being shown on Exhibit F?
 I don't see overflow parking on Exhibit F.
- What other uses are operating or planned for the building besides the activities described in your application? (I'm only aware of Valenti Precision) Describe the parking needs of other uses.

QUINN ENGINEERING, INC.

Paxton, Massachusetts 01612 Phone: (508) 753-7999 Fax: (508) 795-0939

March 17, 2021

Leicester Planning Board Town of Leicester 3 Washburn Square Leicester, Massachusetts 01524

Re: 11 Hankey Street

Special Permit for "Makerspace" Use

To the Board:

We are in receipt of the following information in association with the above referenced project:

- Plans entitled "The Worcshop Permit Set, 11 Hankey St, Rochdale, MA 01524", sheets A1.00, A1.02, A1.01, LS1.02, LS1.01 dated Feb 10, 2021 without revision date, prepared by The Office of Penn Ruderman Architects, Inc., of Stow, MA.
- Plans entitled "Plan of Property Surveyed for Worcester Tool and Stamping Co, Inc., 11 Hankey Street, Leicester, Massachusetts", dated 2-18-14 with no revision date, prepared by Jarvis Land Survey, Inc., of Shrewsbury, MA.
- Completed Special Permit Application Form, dated as received by the Town Clerk on February 22, 2021.
- Package of information entitled "The WorcShop Project Narrative and Exhibits", dated 2/10/2021

We have performed a review of the submitted plans for conformance with §5.10, *Adaptive Reuse Overlay District* of the Leicester Zoning By-Laws, and with *Special Permit Regulations*, as issued June 20, 2017.

Our comments are found below:

1. Regarding §5.10, E (2), *Parking Requirements*, the Applicant has documented that 49 parking spaces exist on site, of which 3 are handicapped accessible. In addition, the Narrative estimates that as many as 29 staff, members and students could be onsite while 2 classes are concurrently held. From this it appears that the existing parking capacity will accommodate the stated number of vehicles to be parked.

We did not conduct a detailed dimensional assessment of the existing parking area, however, in a general way, the parking area appears to be functional for vehicle maneuvering, access and loading. We would describe the condition of the paved parking area surface as "serviceable"; not perfect but functional.

2. Regarding §5.10, G, Standards for Approval (for Special Permit):

Standard 1: Not applicable (multifamily use)

Standard 2: Defer to Leicester Planning Board

Standard 3: Defer to Leicester Planning Board

Standard 4: The Applicant has documented that the site receives municipal water and sewer service, and power supply. Solid waste will be removed by a contractor.

Standard 5:

- a) Documentation as to effects of noise not found;
- b) Applicant has addressed vehicular traffic, and indicates that signage for pedestrians will be provided;
- Applicant states that the project complies with applicable environmental laws and regulations;
- d) Not applicable (no proposed changes to visual appearance)

Leicester Planning Board 11 Hankey Street March 17, 2021 Page 3 of 3

- 3. The site is located within three separate zoning districts: SA, R2 and NB, as well as the AROD overlay district. Under §5.2.02, 1, e, Site Plan Review is required for non-residential projects in the NB district.
- 4. The application package does not identify any current uses onsite.

Please contact this office should you have questions.

Respectfully Submitted, QUINN ENGINEERING, INC.

Kevin J. Quinn, P.E.

President

Brooke Hammond

From: Ken Antanavica <antanavicak@leicesterpd.org>

Sent: Tuesday, February 23, 2021 11:11 AM

To: Brooke Hammond

Subject: RE: Special Permit Application: WorcShop/11 Hankey Street

Hello Brooke:

I do not see any effect this construction/ establishment would have on the LPD except that noise may become an issue in the future if the shops operate 24-7 which it indicates can only be done by members and not by the public. If they are mindful of their neighbors there may be no issues.

Thank You

Chief Kenneth M Antanavica Leicester Police Department 90 S. Main St. Leicester, Ma 01524 (508) 892-7010 ext 2010 Fax (508) 892-7012

From: Brooke Hammond hammondb@leicesterma.org

Sent: Monday, February 22, 2021 4:43 PM

To: jlennerton@aol.com; Michael Silva <SilvaM@leicesterma.org>; Ken Antanavica <antanavicak@leicesterpd.org>; mwilson@leicesterfireems.org; Dennis Griffin <griffind@leicesterma.org>; Francis Dagle <DagleF@leicesterma.org>;

Buck, Michelle <BuckM@leicesterma.org>; rwilson@leicesterfireems.org; bmorris@cvrwd.com

Subject: Special Permit Application: WorcShop/11 Hankey Street

The Planning Board has received a new application, as summarized below. Comments, if any, should be submitted <u>by email</u> to <u>hammondb@leicesterma.org</u> or <u>planning@leicesterma.org</u>.

Type of Application: Special Permit

Project Name: WorcShop

Location/Description: 11 Hankey St/Makerspace adaptations, interior renovations and repairs

Water/Sewer: CVRWD/Oxford Rochdale Sewer Planning Board Meeting Date: 4/6/2021 Deadline for Comments: 3/29/2021

The application & plans are available at the link below:

https://www.leicesterma.org/planning-board/pages/current-applications-plans

Brooke Hammond

Department Assistant - Planning, Conservation, ZBA

Town of Leicester (508) 892-7007

Please note that Leicester Town Hall is closed on Fridays.

Town of Leicester PLANNING BOARD



LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070

www.leicesterma.org

ROUGH DRAFT 4/1/2021

SPECIAL PERMIT/SITE PLAN REVIEW DECISION

Date:

File Number: SP2021-02

Applicant: Randolph Gadner

The WorcShop 11 Hankey Street Rochdale, MA 01542

Owner: David Magnuson

Rochdale Holdings/Worcester Tool & Stamping

11 Hankey Street Rochdale, MA 01542

Location: 11 Hankey Street (Map 43 C7 & C8)

Deed Ref.: Book 3170, Page 111

Book 3685, Page 500

Zoning: Greenville Village Neighborhood Business District (NB)

Residential 1 (R1)

Suburban Agriculture (SA)

Adaptive Reuse Overlay District (AROD)

Water/Sewer: Cherry Valley & Rochdale Water District/Oxford Rochdale Sewer District

Subject: Application for Special Permit under §5.10 of the Leicester Zoning Bylaw to

allow Adaptive Reuse of an existing structure as a makerspace

The decision of the Planning Board on the above-referenced application is as follows:

Procedural History:

- 1. On <u>February 22, 2021</u>, an application for a Special Permit and Site Plan Approval was submitted to the Leicester Planning Board (the Special Permit Granting Authority). All application materials are on file with the Planning Board. The Board's decision is based on the following submittals:
 - A. Application packet (Application Form, Project Narrative, and abutters list)
 - B. Code Red Consultants Fire Protection/Life Safety Chapter 34 Building Investigation & Evaluation Report, The WorcShop, 11 Hankey Street, Leicester MA, Prepared for Penn Ruderman Architects, and dated February 2, 2021.

C.	Set of Plans ((7)	sheets)	١.	as follows:

Sheet #	Prepared By:	Sheet Title	Last Revision Date
A1.00	Penn Ruderman Architects,	Site Plan	3/24/2021
	Inc.		
A1.01	Penn Ruderman Architects,	Special Permit First Floor	2/12/2021
	Inc.	Plan	
A1.02	Penn Ruderman Architects,	Special Permit Second Floor	2/12/2021
	Inc.	Plan	
LS1.01	Penn Ruderman Architects,	Special Permit First Floor	2/12/2021
	Inc.	Life Safety Plan	
LS1.02	Penn Ruderman Architects,	Special Permit Second	2/12/2021
	Inc.	Floor/Mezz. Life Safety Plan	
20-806	Jarvis Land Survey	Plan of Property	12/22/2020
EX-1	Samiotes Consultants, Inc.	Existing Conditions of Land	3/19/2021

2. The Board engaged Quinn Engineering of Paxton, Massachusetts, pursuant to G.L. c. 44, s. 53G, to review the Applicant's proposed development.

3.	The Planning Board held a public hearing on the application on April 6, 2021. The hearing
	was continued to At each hearing date(s) opportunity was given to all those
	interested to be heard in favor of or opposition to such application. The hearing was closed
	on

- 4. During the review process, the following documents, exhibits and plans were submitted to the Planning Board:
 - A. The plans and submittals referred to above;
 - B. Correspondence of Quinn Engineering, Inc. to Leicester Planning Board dated March 17, 2021 and ______;
 - C. Written comments from the following Town Boards and Departments:

Findings:

- 1. The subject property is located in the following Zoning Districts: Greenville Village Neighborhood Business District (NB), Residential 1 (R1), Suburban Agriculture (SA), and Adaptive Reuse Overlay District (AROD). A portion of the site (approximately 150' from the eastern boundary of parcel 43-C7) and only a small portion of the existing building is in the NB district; the remainder of the building is in the R1 district. The rear (west) portion of the site (some of the paved area and vacant lant) is in the SA district. The AROD is applicable as the structure meets the eligibility requirement of §5.10.B.2 ("an existing structure having not less than 10,000 square feet constructed more than sixty (60) years ago and historically part of a mill complex.").
- 2. Much of the parcel is within the wetland buffers and the Riverfront Area of the French River (200 feet on either). No work is currently proposed in this area.
- 3. The Adaptive Reuse Overlay District allows a makerspace (§5.10.D.2.o) by Special Permit. Site Plan Review is required as a portion of the site is in the NB district.
- 4. Specifically the applicants have requested the following activities to be included in the makerspace use: blacksmithing, glass & jewelry making, metal fabrication, machine shop, wood shop, conference room, electronics, 2D/3D Print Shop, CNC Shop, as well as

associated office and storage space.	Future planned	uses are an	automotive	innovation	shop
as well as sandblasting and finishes.					

- 5. Insert summary of parking. Where is the overflow parking mentioned in narrative?
- 6. Section 5.2.05 of the Zoning By-law contains Standards for Site Plan Approval (standards A-G). With regard to the Applicant's development proposal, the Planning Board makes the following findings pursuant to Section 5.2.05:

Α.	The use complies with all the provisions of the Leicester Zoning By-Law;
B.	The use will not materially endanger or constitute a hazard to the public health;
C.	The use will not create undue traffic congestion or unduly impair pedestrian safety;
D.	Sufficient off-street parking exists or will be provided to serve the use;

- E. The use can be adequately served by water, sewer, and other necessary utilities, or if these are unavailable, that they will be brought to the site at the owner's expense; or, the Planning Board is satisfied that the proposed alternatives will comply with all applicable regulations;
 - Public water & sewer will be provided by the Cherry Valley & Rochdale Water District/Oxford Rochdale Sewer District. Other utilities will be provided by the owner at the owner's expense.
- F. The use will not result in a substantial increase of volume or rate of surface water runoff to neighboring properties and streets, nor will result in pollution or degradation to surface water or ground water;
 - No exterior changes that would affect stormwater are proposed.
- G. The use will not result in any undue disturbance to adjoining property owners or the Town caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, glare, etc.

7. NB district site development standards [Note: much of the standards are inapplicable either because the land involved is not in the district or because the project involves no exterior changes. From AROD (2)The Site Development Standards for the underlying district are applicable. Where the underlying district does not have Site Development Standards, the standards for the Business (B) District shall apply. The Board, through the ARD special permit, may allow for modifications of Site Development Standards where not feasible due to existing site constraints. Insert summary/findings

- 8. MGL, Chapter 40A, §9 requires that the Board find uses allowed by special permit to be "in harmony with the general purpose and intent of the ordinance or bylaw."

 The Board finds that this project is in harmony with the purpose and intent of the Bylaw.
- 9. Section 5.10.G. of the Zoning By-law, Adaptive Reuse Overlay District Standards for Approval, contains the following standards for approval:
 - (1) As a condition of any special permit for the an Adaptive Reuse Project that proposes 10 or more multi-family dwelling units, a minimum of ten (10%) of the total number of dwelling units shall be required, in perpetuity, to be restricted to persons qualifying as moderate income in accordance with the Massachusetts Department of Housing and Community Development definitions of low and moderate incomes. This affordability requirement is recommended but not required for livework spaces associated with makerspaces. N/A
 - (2) The proposed project preserves or enhances the historic significance of existing buildings on or eligible to be on the State or National Register of Historic Places and, where applicable, the eligibility of the same for listing on the State or National Register of Historic Places as an individual property or a contributing property to an area.
 - (3) Any expansion of existing buildings on or eligible to be on the State or National Register of Historic Places is consistent with the U.S. Secretary of the Interior's Standards for Rehabilitation, as determined by the Leicester Historical Commission. N/A
 - (4) The project shall have sufficient local infrastructure to accommodate the proposed development. ???
 - (5) The proposed ARD does not cause substantial detriment to the neighborhood after considering the following potential consequences
 - a) noise, during the construction and operational phases,
 - b) pedestrian and vehicular traffic,
 - c) environmental harm,
 - d) visual impact caused by the character and scale of the proposed structure(s), and

•	•	•	•	` '

Waivers:

In accordance with the Planning Board's Regulations and the Zoning Bylaw, after finding that it is in the public interest and not inconsistent with the Leicester Zoning Bylaw, the Planning Board agrees to accept the plans and related materials as is and to waive applicable provisions of Planning Board requirements including the following:

Detailed Site Plan Requirements (required as an Adaptive Reuse) – see SP regulations.

Applicant requested a waiver from 5.6.05.2 B (landscape buffer from NB) – page 38 of ZB

Applicant requested a waiver from 5.6.05.2.B (landscape buffer from NB) – page 38 of ZBL [not clear if required/review this issue]

Decision:

In view of the foregoing, at the meeting of _______, the Planning Board voted to approve/disapprove the Special Permit application for the above-described project. As used in this decision, the term "Applicant" shall mean the Applicant, its heirs, successors and assigns. Unless otherwise specified, the Board may designate an agent or agents to review and approve matters set forth in this decision. The Planning Board's approval is subject to the following conditions:

Pre-Construction

- 1. The Special Permit shall not take effect until it has been recorded at the Worcester District Registry of Deeds and evidence of such recording is delivered to the Planning Board.
- 2. Prior to the issuance of a building permit, all required federal, state, and local permits and licenses for the construction of the proposed project which is the subject matter of the building permit shall be obtained and presented to the Building Inspector.
- 3. Prior to the commencement of authorized site activity, the Applicant shall provide to the Planning Board Office the name, address, email, and business phone number of the individual who shall be responsible for all construction activities on site.

General

- 4. Final design and construction [and use of the structure] shall be in substantial conformance to the plans submitted to the Planning Board and this Order of Conditions. No substantial corrections, field modifications, additions, substitutions, alterations, or any changes shall be made in any plans, proposals, and supporting documents approved and endorsed by the Planning Board without the written approval of the Planning Board, which in its sole discretion, may determine such substantiality. Any requests for substantial modifications shall be made to the Planning Board for review and approval and shall include a description of the proposed modification, reasons the modification is necessary and supporting documentation.
- 5. Unauthorized deviations from the approved plan [and related application materials] may result in the Planning Board seeking the issuance of a Cease and Desist Order until the deviation is addressed. Violation of any condition contained herein or failure to comply with the approved plan shall subject the Applicant to a zoning enforcement action in accordance with the remedies set forth in M.G.L. c. 40A.
- 7. Litter and debris on-site shall be removed regularly to maintain a neat and orderly appearance.
- 8. The use shall not result in any undue disturbance to adjoining property owners or to the Town caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, glare, etc.
- 9. All travel lanes and parking areas shall remain accessible and clear of snow year-round. In such instances where snow storage areas are not sufficient to accommodate heavy snow, the Applicant shall remove snow off site to ensure that all travel lanes and parking areas are accessible.
- 10. All signs shall comply with §3.2.07 of the Zoning By-law, unless a special permit or variance is granted by the Zoning Board of Appeals.

Project-Specific Conditions:

- 11. Hours of Operation: ______ The Planning Board may modify hours of operation upon the written request of the Applicant, with at least thirty (30) days' notice.
- 12. This special permit is limited to the activities described above. *Changes shall require an amendment to this special permit*
- 13. Activities authorized by this special permit are limited to the interior of the building. Outside activity (e.g. repair, manufacturing, construction) is prohibited. storage trailers?
- 14. Residential occupancy on the site or in the building is prohibited.
- 15. Fire Department restrictions?
- 16. Special Events?
- 17. Storage in the building shall be limited to storage associated with uses in the building. Rental self-storage not permitted by this special permit.

Construction

- 18. During construction, the Applicant shall comply with all local, state and federal laws regarding noise, vibration, dust and blocking of Town roads. The Applicant shall at all times use all reasonable means to minimize inconvenience to residents in the general area. Construction on exterior features shall not commence on any day before 7:00AM and shall not continue beyond 7:00PM; provided, however, that such construction shall not commence on Saturday before 8:00AM and shall end at 3:00PM. There shall be no construction on any Sunday or state or federal legal holiday.
- 19. Members or agents of the Planning Board shall have the right to enter the site at reasonable times to gather all information, measurements, photographs or other materials needed to ensure compliance with this approval. Members or agents of the Planning Board entering onto the site for these purposes shall comply with all safety rules, regulations and directives of the Applicant and the Applicant's contractors.
- 20. The Applicant and/or property owner shall provide at least forty-eight (48) hour notice to the Town Planner and the Planning Board's engineer, prior to commencing any work on the site that requires inspection or review.
- 21. The Applicant shall promptly pay the reasonable fee of the consulting engineers for review of plans or field inspections during the construction phase.
- 22. Sediment tracked onto abutting public or private ways from construction activities shall be swept at the conclusion of each construction day, until all work areas have been properly stabilized.

Occupancy

- 23. The Applicant shall notify the Planning Board when work is complete and ready for inspection.
- 24. No final certificate of occupancy shall be issued until the building is complete and all conditions of approval have been addressed. Prior to the issuance of a certificate of occupancy, all site improvements, landscaping, and infrastructure specified on the plans shall

- be constructed and installed to adequately serve said Facility, unless adequate security has been provided, reasonably acceptable to the Board, to ensure such completion. Any such performance guarantee shall be approved as to form by the Board's designee.
- 25. If there are field changes from the approved site plans referenced above, the Applicant shall submit as-built plans (3 full-size copies, 1 11" x 17" and a .pdf version) showing such changes prior to the final certificate of occupancy. No final certificate of occupancy shall be issued until the Planning Board or its agent confirms that all improvements or alterations substantially comply with the approved Site Plan.
- 26. Approval by the Planning Board shall not be construed as approval from any other board, official or regulation that is needed regarding permitting for this project.

RECORD OF VOTE

The Board vote wa	as in favor of approval	opposed.
		AGL Ch. 110G and pursuant to the Planning Board's electronic 1 <u>20</u> in Book <u>62374</u> Page <u>135</u> at the Worcester District Registry
Jason Grimshaw, G	Chair	Debra Friedman, Vice Chair
Sharon Nist		Jaymi-Lyn Souza
James Reinke, Ass	sociate Member	_
-Applicant* -Owner*	-Building Inspector -Applicant Engineer** -Town Administrator	***
-Town Clerk -Applicant*	-Building Inspector -Applicant Engineer** -Town Administrator	-Applicant's Attorney**

** where applicable

Notice of Decision delivered to "Parties in Interest" (abutters & Planning Boards of abutting Towns)

From: <u>ethan desota</u>

To: <u>Buck, Michelle</u>; <u>Michael Silva</u>

Subject: Revised Survey and Parking Plan for Hankey Special Permit

Date: Wednesday, March 31, 2021 6:59:06 AM

Attachments: 2010 WorcShop A1.00 SITE PLAN Parking 2021-03-24.pdf

51008 -24x36 Hankey Full Survey.pdf

Michelle and Michael.

Thank you for your patience. Please find attached the revised and redrawn survey and parking plan per that survey for 11 Hankey St. It seems that about 10' of the current pavement is on an abutters property and we are working with them to see if we can purchase an easement. This parking plan moves the parking area back to within the lot line boundaries to accommodate until a future date when an easement can be purchased.

Please feel free to connect with any questions. The WorcShop will be dropping off physical copies today. If there are further concerns we should address prior to next week's meeting, please let us know.

Ethan DeSota evdesota@gmail.com 810.874.6463 www.ethandesota.com

THE WORCSHOP PERMIT SET

PROJECT ADDRESS:

11 HANKEY ST. ROCHDALE, MA 01542

CLIENT

THE WORCSHOP 11 HANKEY ST. ROCHDALE, MA 01542

ARCHITECT

OPRCH

THE OFFICE OF PENN RUDERMAN ARCHITECTS, INC. 110 GLEASONDALE RD STOW, MA 01775 617.855.5277

CONTRACTOR

CODE CONSULTANT

CODE RED CONSULTANTS, LLC 154 TURNPIKE ROAD, SUITE 200 SOUTHBOROUGH, MA 01772 T. 617.500.7633 F. 617.500.2074

REVISIONS

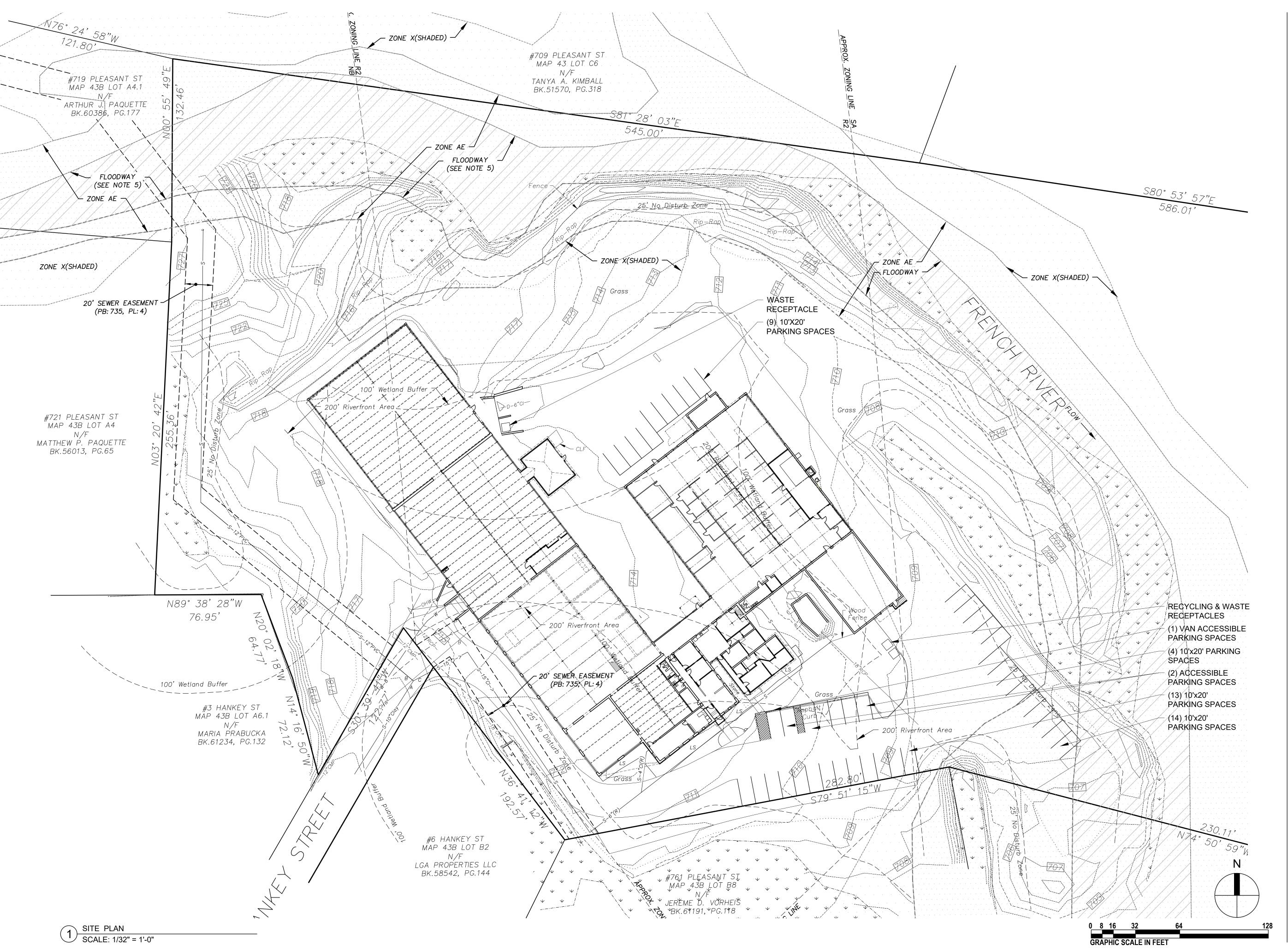
DATE: MAR 24, 2021

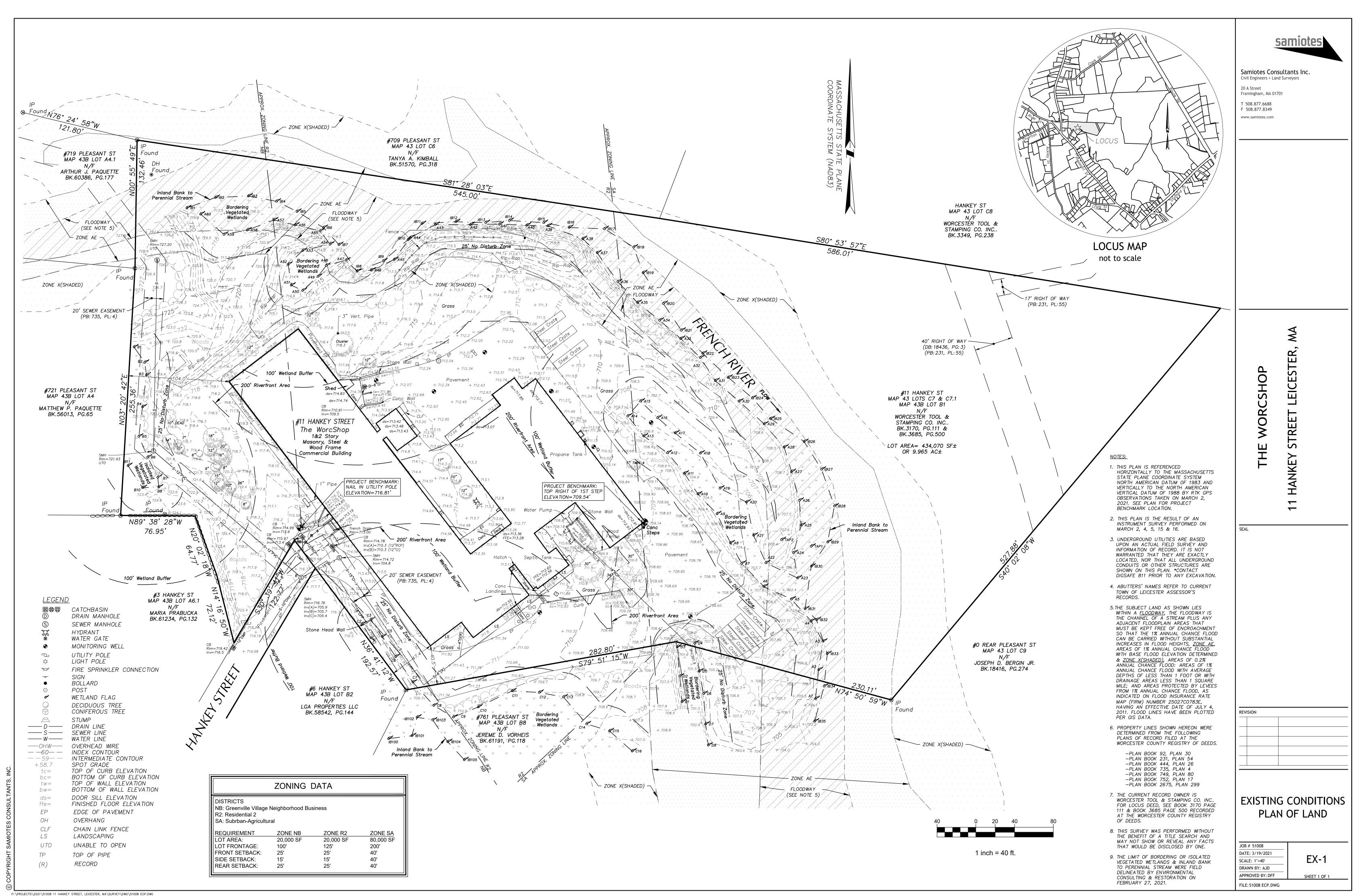
SITE PLAN

A1.00

DRAWINGS MAY NOT BE USED OR DISTRIBUTED WITHOUT EXPRESS WRITTEN PERMISSION.

© OPRCH





4.40
For Dianning Office 1140
For Planning Office Use:
⊏а. д.
File #:

Leicester Planning Board Site Plan Review & Special Permit Application Form

PERMI	TT	YPE:	Special Permi	it 🗸	Site Plan Re	eview			
CONT	ACT	INFOR	MATION						
Owner I	nfori	nation							
Name:	Da	avid G	enereu:	X	Company Name:	Town	of Leicest	er	
Signatur	Signature:								
Address	3	Town Hall 3 Washburn Square Leciester, MA 01524							
Phone: (508) 892-70	22	Email	gene	rauxd@le	eicesterma.or	g	
Applicar	nt Inf	formation							
Name:		David Genereaux			Company Name:	Town	of Leicest	er	
Signatur	Signature: 2 CeS								
Address	3	Town Hall 3 Washburn Square Leciester, MA 01524							
Phone: (508) 892-70	22	Email	: gene	generauxd@leicesterma.org			
Primary	Con	tact Perso	n (The person th	at will be	contacted by	Planning Boar	d staff during the app	lication process.)	
Name:	Lu	ke Bo	ucher, P	E	Company Name:	VHB,	Inc.		
Address	Si	120 Front Street Suite 500 Worcester, MA 01608							
Phone: (617) 607-6272 Emai				Email	lboucher@vhb.com				
PROJE	ECT	INFOR	MATION						
Project Address: 3 Paxton Street, Leciester,				iester, N	1A 01524	Zoning District:	R2		
Assessors Map & Parcel # 19B E9.10				Reference k & Page):	Book: 55010) Page: 25			
Applicable	e Zoni	ng Bylaw S	ection(s):						
Propose	d Laı	ıd Use:	Exempt -	Fire	& EMS	Station			
Existing	Lan	d Use:	Exempt -	xempt - Fire & EMS Station					

For Planning Office	Use:
File #:	

PRO.	JECT	INFOI	RMATIO	ON,	Continue	d
------	-------------	--------------	--------	-----	----------	---

PROJECT INFO	DRMATIO	N, Continued				
Size of Proposed St	tructure(s):	N/A				
Total Lot Area:	1.91 acres					
Water Source: (Select One)	Private Well		Che	Cherry Valley & Rochdale Water District		
	Hillcrest Water District		Leic	Leicester Water Supply District		
Sewer Source: (Select One)	Private Septic System		Che	Cherry Valley Sewer District		
	Hillcrest Water District		Leic	Leicester Water Supply District		
Brief Project Desci		Rochdale Sewer District				
20,000s.f. retail building pet grooming clinic.] This is an AMENDM stormwater manage includes the modification pipe from the proper	g and associate ENT to the pment basins ation and/or ty. The disch	is form (i.e. do not write "s d parking; Use of a 1,000s. previously approved proto reduce flooding onexpansion of the existinarge pipe will extend to through easements of the existing through easements of the existing through easements of the existing through easements of the parking through easements of the parking; the parking through easements of the parking; the parking through through the parking through the parking through the parking thr	f. portion of a oject for mo site and on ng basins a through an	odifications abutting pr and installat easement o	to the existing operties. The project ion of a discharge on #22 Warren Ave,	
		for details. 13 copies are re Detailed Project Narra	covided all required information. See Planning Board Site Plan etails. 13 copies are required except where noted. Detailed Project Narrative Including any waiver requests Including any waiver requests Including any waiver requests Including Incl			
Documentation of Availability of Water & Sewer		Certified Abutters Lis	Certified Abutters List (1 copy) ² n/a		Traffic Study (3 copies) n/a	
Fees ³		pdf copy of all require	.pdf copy of all required submittals (CD or USB Drive)			
don't require conforman special permit approval certified abutters lists ar construction over 30,000	ce with Site Plan criteria (see Spec e required for all) s.f. and ground-	s for details on what should be Review submittal requiremential Permit Regulations for det Special Permits applications a mounted solar over 250,000 s Regulations. Checks must be	its, submit a na ails). and for Major S .f or 2 acres or	rrative explaini lite Plan Review more of tree cle	ng conformance with v Applications (new earing)	
For Planning Board Use:						
Date of Submittal:						
Public Hearing/Meeting Date(s):						
Date of Planning B	oard Vote:					
Date Decision Filed wi		:				

Page 2 of 2 rev. 6-2017



March 25, 2021

Ref: 14751.00

Jason Grimshaw, Chair Town of Leicester Planning Board 3 Washburn Square Leicester, MA 01524

Attn: Michelle Buck, AICP

Re: Leicester Fire & EMS Headquarters - Stormwater Improvements Amendment to Site Plan Approval

Mr. Grimshaw and Board Members,

On behalf of the Town of Leicester, Vanasse Hangen Brustlin, Inc. is pleased to submit an amendment to an existing Site Plan Approval for the Town of Leicester Fire and EMS Headquarters Stormwater Improvements Project. The submission includes the following:

- Completed Site Plan Application form
 - o Completed to provide description of work and contact information for current designer
- Site Plans
- Stormwater Memorandum

Since the completion of construction in 2017, the two on-site infiltration basins and sediment forebays have been unable to dewater through infiltration, resulting in permanent pools of water in the basins. As a result, less storage is available during storm events and stormwater overtops the basin in the northwest corner of the site, discharging onto adjacent properties. Owners of the adjacent properties to the west of the site also report an increase in water on these properties since the completion of construction. To minimize discharge onto the adjacent properties and to maximize storage available during storm events, Fire & EMS staff have used submersible pumps to dewater the basins, pumping the water into catch basins located in Paxton Street and Main Street.

In 2020, the Town hired VHB to perform extensive testing and review of the existing stormwater system, which determined that the above issues result from high groundwater and impermeable soils below the basins. VHB has been contracted by the Town to redesign the existing on-site stormwater system to eliminate the standing water. The design concept, which the Select Board and area residents in the area have expressed their support for, includes the following:

Ref: 14751.00 March 25, 2021 Page 2



- 1. Raising the bottom of the on-site stormwater basins to bring them above seasonal high groundwater
- 2. Lateral expansion of on-site stormwater basins to make up for the storage lost in item 1 above
- 3. Designing the basins as detention basins (to slow the water leaving the site), including a new pipe discharging from the site through an easement on #22 Warren Ave (property owner has verbally agreed to easement and easement plans are being prepared)
- 4. Installation of a drainage trunkline on Warren Ave and Gleason Way, discharging through easements on #5 Gleason Way and #14 Harberton Dr (property owners have verbally agreed to easement and easement plans are being prepared)
- 5. Discharge will be over 100' from the wetland(s) in the area and will include a riprap apron and level spreader to dissipate energy and prevent erosion

The proposed work does not involve any permanent modifications to the existing building or parking areas.

If you have any questions, please do not hesitate to contact me 617-607-6272 or lboucher@vhb.com.

Sincerely,

Luke Boucher, PE

Water Resources Project Manager

11 En

<u>Iboucher@vhb.com</u>

CC: David Genereux, Town Administrator



To: Town of Leicester Planning Board

Date: March 17, 2021

Memorandum

Project #: 14751.00

From: Luke Boucher, PE

Rachel Luna, PE

Re: Leicester Fire & EMS Headquarters Stormwater Improvements

Stormwater Memorandum Site Plan Review Application

This Stormwater Management Memorandum has been prepared to show compliance with the Massachusetts Stormwater Management Standards in accordance with the Town of Leicester Planning Board Stormwater Regulations and the Site Plan Review Regulations.

Project Description

At the request of the Town of Leicester (the "Applicant"), Vanasse Hangen Brustlin, Inc ("VHB") conducted a review in January 2020 of the stormwater and drainage design and construction for the Fire and EMS Headquarters at 3 Paxton Street (the "Site"). The Site was constructed in 2017 on an undeveloped parcel of land. The existing stormwater management includes two infiltration basins, one in the northwest corner of the site (Infiltration Basin 1) and one to the south of the building (Infiltration Basin 2). The Town has reported standing water within the basins, even during dry periods. The resulting lack of available storage within the basins has resulted in the basins filling up and overflowing onto abutting properties during rainfall events.

The Applicant is proposing to retrofit the existing stormwater management system at the Site to alleviate the flooding on site and on abutting properties, herein as referred to as the "Project".

The Project is considered a redevelopment as it is a retrofit and should comply fully with Stormwater Standards 1, 7, 8, 9 & 10 and to the maximum extent practicable with Stormwater Standards 2 thru 6.

The Project is not located within any critical areas. Areas of temporary disturbance will be minimized to the maximum extent practicable and will be restored in place to their original conditions and stabilized to prevent future erosion and degradation. Construction controls and best practices will be implemented throughout the project site to avoid and minimize construction impacts to wetland resource areas.

Site Description

Soils

As a part of the initial review, VHB conducted three test pits outside of the infiltration basins on 11/14/2019 to observe in-situ soil conditions. Test pit logs are included in Appendix E. Below is a summary of the findings:

• VHB's licensed soil evaluator performed a NRCS field textural classification of the onsite soils in the soil horizon where infiltration was proposed and classified the soils from all three test pits as silty clay loam and silt loam. These soil textures are designated as Hydrologic Soil Group C and D, respectively, based on Table 2.3.3 in Vol. 3, Ch. 1 of the Massachusetts Stormwater Handbook. Based on this table, MassDEP recommends using an infiltration rate of 0.27 in/hr for silt loam and 0.06 in/hr for silty clay loam.



- VHB's licensed soil evaluator determined estimated seasonal high groundwater (ESHGW) adjacent to Infiltration Basin 2 to be at approximate Elevation 976.5, approximately 2.75-feet below ground, approximately 1.5-feet above the bottom of Infiltration Basin 2.
- VHB's licensed soil evaluator determined ESHGW near Infiltration Basin 1 to be at approximate Elevation 972.5, approximately 3.3-feet below ground, approximately 6.5-feet above the bottom of Infiltration Basin 1.
- Two falling head permeability tests were conducted by VHB, one adjacent to each of the infiltration basins.
 The permeability of the soils was calculated to be between 0.08 and 0.09 inches/hour. Per Vol. 3, Ch. 1 of the Massachusetts Stormwater Handbook, 50% of the in-situ permeability rate should be used for design purposes.

Proposed Improvements

Based on the soil information observed on the Site, VHB proposes raising the bottom of both the infiltration basins to be above the groundwater table and installing outlet control structures to manage the basin overflow, effectively converting the infiltration basins into detention basins. Infiltration Basin 2 (now Detention Basin 2) is to be retrofitted with an outlet control structure to discharge to the closed drainage on the Site. Infiltration Basin 1 (now Detention Basin 1) is expanded to create additional storage required to attenuate peak flows and has an outlet control structure that discharges to the closed drainage on Site. Two water quality units are proposed within the stormwater management system to provide additional water quality treatment prior to leaving the site. The closed drainage is routed through an abutting property via a proposed easement, out to Warren Avenue and Gleason Way through a proposed easement at 5 Gleason Way and eventually to a flared end outfall via easement at 14 Harberton Drive. The outfall is equipped with a riprap apron and level spreader to distribute the flow and dissipate velocities to the wooded area adjacent to Sargent Pond.

In addition to the basin modifications, VHB proposes to minimize the flows to the detention basins by collecting runoff from the upper parking lot, east of the building, via a new catch basin and connecting it to the municipal drainage system in Paxton Street. VHB also proposes re-routing a portion of the roof runoff from the drainage swale on the northern side of the Site to the municipal drainage system in Paxton Street. Diverting this flow will reduce the rate and quantity of flow tributary to the lower end of the Site, which will minimize the amount of earthwork required to create additional storage required in the basin in the northwest corner of the Site.

Massachusetts Department of Environmental Protection (MassDEP) – Stormwater Management Standards

As previously stated, the Project is a redevelopment and has been designed to comply fully with Stormwater Standards 1, 7, 8, 9 & 10 and to the maximum extent practicable for Stormwater Standards 2 thru 6.

Standard 1: No New Untreated Discharges or Erosion to Wetlands

The Project has been designed to comply with Standard 1.

101 Walnut Street PO Box 9151 Watertown, MA 02472-4026 P 617.924.1770



The Best Management Practices (BMPs) included in the proposed stormwater management system have been designed in accordance with the Massachusetts Stormwater Handbook. Supporting information and computations demonstrating that no new untreated discharges will result from the Project are presented through compliance with Standards 4 through 6.

All proposed Project stormwater outlets and conveyances have been designed to not cause erosion or scour to wetlands or receiving waters. Outlets from closed drainage systems have been designed with flared end sections, stone protection, and a level spreader to dissipate discharge velocities and protect downgradient areas from erosion.

Computations and supporting information for the sizing and selection of materials used to protect from scour and erosion are included in Appendix C.

Standard 2: Peak Rate Attenuation

The Project is seeking relief under Stormwater Management Standard 7 and as such complies with Standard 2 to the maximum extent practicable.

VHB performed hydraulic and hydrologic calculations using HydroCAD 10.00-25 software and SCS TR-20 methodology to estimate attenuated peak flow rates. The calculations utilized 24-hour rainfall depths provided by the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 for the Town of Leicester, Massachusetts. The rainfall-runoff response of the Site under existing and proposed conditions was analyzed for storm events with recurrence intervals of 2, 10, and 100 years. The results of the analysis, as summarized in Table 1 below, indicate that there is an increase in peak discharge rates between the existing and proposed conditions for Design Point 1.

Table 1: Peak Discharge Rates (cfs)

Design Point	2-year	10-year	100-year
Design Point 1: Sargent Pond			
Existing	10.63	16.79	62.10
Proposed	12.22	19.25	46.15
Design Point 2: Main Street			
Existing	0.80	1.64	3.80
Proposed	0.12	0.23	0.51

Supporting calculations for peak flow rate attenuation are included in Appendix C.



Standard 3: Stormwater Recharge

The Project is seeking relief under Stormwater Management Standard 7 and as such complies with Standard 3 to the maximum extent practicable.

The Site consists of low infiltrating soils (HSG C/D) and high groundwater table. As discussed in the soils section, the onsite soils have negligible capacity to infiltrate. As a result, infiltrating BMPs are not feasible for this Site.

Standard 4: Water Quality

The Project has been designed to comply with Standard 4.

The proposed stormwater management system implements two Water Quality Units that have been designed to provide a minimum of 80% TSS removal of stormwater runoff from proposed impervious surfaces.

As there are no Outstanding Resource Waters located near the project area, the required Water Quality Volume (WQV) was determined using 0.5 inches of rainfall. Massachusetts Stormwater Standards require a reduction in Total Suspended Solids (TSS) of 80%.

Supporting calculations for Water Quality treatment BMPs including BMP sizing and TSS removal are included in Appendix C.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The Project is not considered a land use with higher potential pollutant loads (LUHPPL).

Standard 6: Critical Areas

The Project will not discharge stormwater near or to a critical area.

Standard 7: Pedevelonments and Other Projects Subject to the

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the Maximum Extent Practicable

The Project is a redevelopment and has been designed to comply with Stormwater Management Standards 2-6 to the maximum extent practicable. Standards 8-10 have been met completely.



Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Controls

The proposed project will disturb more than 1 acre of land and is therefore required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. As required under this permit, a Stormwater Pollution Prevention Plan (SWPPP) will be developed and submitted by the contractor before land disturbance begins.

Standard 9: Operation and Maintenance Plan

In compliance with Standard 9, a Post Construction Stormwater Operation and Maintenance (O&M) Plan has been developed for the project. The O&M Plan is included in Appendix D as part of the Long-Term Pollution Prevention Plan.

Standard 10: Prohibition of Illicit Discharges

The Project does not have any known illicit connections. Any illicit connections to sanitary sewer or storm drainage structures found in the Project limit of work will be removed or incorporated into the Project. The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges.

Appendices: Appendix A – Stormwater Checklist

Appendix B – Locus Map, Soil Map

Appendix C – Stormwater Calculations

Appendix D - Operation and Maintenance Plan and Long-Term Pollution Prevention Plan



Town of Leicester PLANNING BOARD

LEICESTER, MASSACHUSETTS, 01524-1333 Phone: 508-892-7007 Fax: 508-892-7070 www.leicesterma.org

4/1/2021 DRAFT

SITE PLAN APPROVAL & STORMWATER PERMIT ORDER OF CONDITIONS

AMENDMENT

Date:				

File Number: SPR2015-06

Project Name: Leicester Fire/EMS Headquarters

Applicant: Town of Leicester

Attn: David Genereux, Town Administrator

3 Washburn Square Leicester, MA 01524

Owner: Same as Applicant

Proposed Use: Municipal - Fire &EMS Headquarters (§3.2.06.1)

Location: 1 & 3 Paxton Street

Assessors Map 19B, Parcels E9 and E9.1

Zoning: Central Business (CB) and Residential 2 (R2)/Watershed Resources Protection

Overlay District

Deed Ref.: Book 54983/Page 393 (1 Paxton St.) and Book 55010/Page 25 (3 Paxton St.)

Water/Sewer: Leicester Water Supply District

Subject: Amendment to Site Plan Approval for addition of training structure

APPLICATION SUMMARY

- 1. On March 25, 2021, the Planning Board received an application to amend the Site Plan Approval for the Town of Leicester Fire/EMS Headquarters (approved February 2, 2016, amended August 23, 2016). There were also minor modifications of the landscaping plan approved on September 19, 2017. The current applications is for modifications to the existing stormwater management basins to reduce flooding on-site and on abutting properties. The project includes the modification and/or expansion of the existing basins and installation of a discharge pipe from the property. The discharge pipe will extend through an easement on #22 Warren Ave, extend down Gleason Way, then through easements on #5 Gleason Way and #14 Harberton Drive.
- 2. All application materials are on file with the Planning Board. The Board's decision is based on the following submittal:
 - A. Site Plan Application Form
 - B. Letter from VHB (Luke Boucher, PE) dated March 25, 2021
 - C. Stormwater Memo from VHB dated March 17, 2021

D. Set of plans Site Plans (14 sheets), entitled "Town of Leicester Fire & EMS Headquarters Stormwater Improvements", prepared by VHB, dated March 25, 2021:

Sheet Title	Sheet number	
Legend & General Notes	C1.01	
Site Preparation & Erosion	C2.01-C2.03	
Control Plans (3)	C2.01-C2.03	
Layout & Materials Plans (3)	C3.01-C3.03	
Grading & Drainage Plans (3)	C4.01-C4.03	
Site Details (3)	C5.01-C5.03	

E. Photograph of white vinyl fence received 8/23/2016 (proposed fence to be of similar style)

DECISION:

At its meeting	of, the Planning Board voted to	the proposed
amendments.	The Planning Board's approval is subject to the	conditions and waivers contained
in this Order o	f Conditions.	

CONDITIONS

- 1. All conditions of approval contained in the February 2, 2016 and August 23, 2016 Decisions remain in effect except where modified herein.
- 2. The project shall include addition of a 6 foot high white vinyl fence along the north and west sides of the site.

-Continued on following page-

RECO	ORD	OF	<i>VOTE</i>

The Board vote was	in favor of approval, _	opposed.
Jason Grimshaw, Chair		Debra Friedman, Vice Chair
Sharon Nist		Jaymi-Lyn Souza

Copy of Decision sent to:

Copy of Decision sent to:

-Town Clerk -Building Inspector -Assessors Office

-Applicant -Applicant Engineer* -Applicant's Attorney* -Owner -Town Administrator -Quinn Engineering*

^{*} where applicable

450
For Planning Office Use:
For Planning Office Use.
l
File #:

Leicester Planning Board Site Plan Review & Special Permit Application Form

CONTACT INFORMATION Owner Information Name: David Genereux Company Name: David Genereux Company Name: Town of Leicester	PERMI	T TY	'PE: [Special Permi	t 🗸	Site Plan Re	view		
Name: David Genereux Signature: Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Applicant Information Name: David Genereaux Signature: David Genereaux Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Phone: (508) 892-7022 Phone: (508) 892-7022 Primary Contact Person (The person that will be contacted by Phanding Board staff during the application process) Name: Luke Boucher, PE Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Assessors Map & Parcel # 19B E9.10 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station Evieting Lond Use: Exempt - Fire & EMS Station	CONTA	CT	INFOR	MATION					
David Genereux Name: Town of Leicester	Owner I	nform	nation 💮						
Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Email: generauxd@leicesterma.org Applicant Information Name: David Genereaux Signature: Jown Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Email: generauxd@leicesterma.org Primary Contact Person (The person that will be contacted by Planning Board staff during the application process.) Name: Luke Boucher, PE Company Name: VHB, Inc. Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 Email: lboucher@vhb.com PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Zoning District: R2 Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station	Name:	Da	vid G	Senereux	X		Town	of Leicest	er
Phone: (508) 892-7022	Signatur	e:							
Applicant Information Name: David Genereaux Company Name: Town of Leicester Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Primary Contact Person (The person that will be contacted by Planning Board staff during the application process) Name: Luke Boucher, PE Company Name: VHB, Inc. Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Assessors Map & Parcel # 19B E9.10 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station Existing Land Use: Exempt - Fire & EMS Station	Address:	3 V	Vashbur						
Name: David Genereaux Company Name: Town of Leicester	Phone: (508)	892-70)22	Email	gene	rauxd@le	eicesterma.or	g
David Genereaux Name: Town of Leicester Signature: Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Primary Contact Person (The person that will be contacted by Planning Board staff during the application process.) Name: Luke Boucher, PE Company Name: VHB, Inc. Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Assessors Map & Parcel # 19B E9.10 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station Existing Lond Use:	Applican	t Info	ormation	endreksetekseteksete Kolumandelekseteksete				pavakovan nej užujunu zekorie nime izminan napanej	en osa kanon kanon akan kalendaria. Dan Baran dasa dan Galendaria
Address: Town Hall 3 Washburn Square Leciester, MA 01524 Phone: (508) 892-7022 Primary Contact Person (The person that will be contacted by Planning Board staff during the application process.) Name: Luke Boucher, PE Company Name: VHB, Inc. Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Assessors Map & Parcel # 19B E9.10 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station Existing Land Use: Exempt - Fire & EMS Station	Name:	Da	vid G	enereau	X		Town	of Leicest	er
Phone: (508) 892-7022	Signatur	e:	2	ce St					
Primary Contact Person (The person that will be contacted by Planning Board staff during the application process.) Name: Luke Boucher, PE Company Name: VHB, Inc.	Address:	3 V	Nashbur	•					
Name: Luke Boucher, PE Company Name: VHB, Inc.	Phone: (508)	892-70)22	Email	gene	rauxd@le	eicesterma.or	g
Luke Boucher, PE Name: VHB, Inc. Address: 120 Front Street Suite 500 Worcester, MA 01608 Phone: (617) 607-6272 Email: Iboucher@vhb.com PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Zoning District: R2 Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Exempt - Fire & EMS Station	Primary	Cont	act Pers	n (The person the	at will be	contacted by	Planning Boar	d staff during the app	lication process.)
Phone: (617) 607-6272 Email: Iboucher@vhb.com PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Zoning District: R2 Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station	Name:	Lul	ke Bo	ucher, P	E		VHB,	Inc.	
PROJECT INFORMATION Project Address: 3 Paxton Street, Leciester, MA 01524 Zoning District: R2 Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Exempt - Fire & EMS Station Existing Land Use:	Address:	Su	ite 500						
Project Address: 3 Paxton Street, Leciester, MA 01524 Zoning District: R2 Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Exempt - Fire & EMS Station Existing Land Use:	Phone: (617)	607-62	272	Email	bouc	her@vht	o.com	
Assessors Map & Parcel # 19B E9.10 Deed Reference (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Exempt - Fire & EMS Station Existing Land Use:	PROJE	CT	INFOR	MATION					
& Parcel # 19B E9.10 (Book & Page): Book: 55010 Page: 25 Applicable Zoning Bylaw Section(s): Proposed Land Use: Exempt - Fire & EMS Station Existing Land Use:	Project Ad	ldress:	3 Pa	xton Street	, Lec	iester, M	A 01524	Zoning District:	R2
Proposed Land Use: Exempt - Fire & EMS Station									
Existing Land Uses	Applicable Zoning Bylaw Section(s):								
Existing Land Use: Exempt - Fire & EMS Station	Proposed	l Lan	d Use:	Exempt -	Fire	& EMS	Station		
	Existing	Land	Use:	Exempt -	Fire	& EMS	Station	and a second	

For Planning Office	Use:
File #:	

PRC	JECT	INFOR	MATION.	Continued
-----	-------------	--------------	---------	-----------

	Size of Proposed Structure(s):						
Total Lot Area:	<u> </u>						
Total Lot Area:							
Water Source:	☐ Private	Well	☐ Che	erry Valley & Ro	ochdale Water District		
(Select One)	Hillcres	t Water District	☐ Lei	cester Water Sup	oply District		
Sewer Source:	☐ Private	Septic System	☐ Ch	erry Valley Sewe	er District		
(Select One)	Hillcres	t Water District	☐ Lei	cester Water Sup	oply District		
	☐ Oxford	Rochdale Sewer Distric	et				
Please include a brief de	Brief Project Description: Please include a brief description on this form (i.e. do not write "see attached"). [Examples: New construction of a 20,000s.f. retail building and associated parking; Use of a 1,000s.f. portion of an existing structure for a proposed pet grooming clinic.]						
Application Ch Use this checklist to e Review & Special Perm Plans (2-full-size & 11"x17")	nsure you ha it Regulations		<i>re required exce</i> Varrative	ot where noted.	Analysis/ Stormwater		
☐ Documentation of A	Availability	☐ Certified Abutters	List (1 copy) ²	_	dy (3 copies)		
of Water & Sewer		□ n/a	□ n/a		□ n/a		
☐ Fees ³		.pdf copy of all re	quired submittals	(CD or USB Dr	rive)		
See Planning Board Site Plan Regulations for details on what should be included in a Project Narrative. For special permits that don't require conformance with Site Plan Review submittal requirements, submit a narrative explaining conformance with special permit approval criteria (see Special Permit Regulations for details). certified abutters lists are required for all Special Permits applications and for Major Site Plan Review Applications (new construction over 30,000 s.f. and ground-mounted solar over 250,000 s.f or 2 acres or more of tree clearing) Please refer to the Planning Board's Fee Regulations. Checks must be made out to the <u>Town of Leicester</u>							
For Planning Boa	For Planning Board Use:						
Date of Submittal:							
Public Hearing/Mee	ting Date(s):						
Data af Di) J X 7 - 4						
Date of Planning B Date Decision Filed wi		lz•					

Page 2 of 2



March 25, 2021

Ref: 14751.00

Jason Grimshaw, Chair Town of Leicester Planning Board 3 Washburn Square Leicester, MA 01524

Attn: Michelle Buck, AICP

Re: Leicester Fire & EMS Headquarters - Stormwater Improvements Amendment to Site Plan Approval

Mr. Grimshaw and Board Members,

On behalf of the Town of Leicester, Vanasse Hangen Brustlin, Inc. is pleased to submit an amendment to an existing Site Plan Approval for the Town of Leicester Fire and EMS Headquarters Stormwater Improvements Project. The submission includes the following:

- Completed Site Plan Application form
 - o Completed to provide description of work and contact information for current designer
- Site Plans
- Stormwater Memorandum

Since the completion of construction in 2017, the two on-site infiltration basins and sediment forebays have been unable to dewater through infiltration, resulting in permanent pools of water in the basins. As a result, less storage is available during storm events and stormwater overtops the basin in the northwest corner of the site, discharging onto adjacent properties. Owners of the adjacent properties to the west of the site also report an increase in water on these properties since the completion of construction. To minimize discharge onto the adjacent properties and to maximize storage available during storm events, Fire & EMS staff have used submersible pumps to dewater the basins, pumping the water into catch basins located in Paxton Street and Main Street.

In 2020, the Town hired VHB to perform extensive testing and review of the existing stormwater system, which determined that the above issues result from high groundwater and impermeable soils below the basins. VHB has been contracted by the Town to redesign the existing on-site stormwater system to eliminate the standing water. The design concept, which the Select Board and area residents in the area have expressed their support for, includes the following:

Ref: 14751.00 March 25, 2021 Page 2



- 1. Raising the bottom of the on-site stormwater basins to bring them above seasonal high groundwater
- 2. Lateral expansion of on-site stormwater basins to make up for the storage lost in item 1 above
- 3. Designing the basins as detention basins (to slow the water leaving the site), including a new pipe discharging from the site through an easement on #22 Warren Ave (property owner has verbally agreed to easement and easement plans are being prepared)
- 4. Installation of a drainage trunkline on Warren Ave and Gleason Way, discharging through easements on #5 Gleason Way and #14 Harberton Dr (property owners have verbally agreed to easement and easement plans are being prepared)
- 5. Discharge will be over 100' from the wetland(s) in the area and will include a riprap apron and level spreader to dissipate energy and prevent erosion

The proposed work does not involve any permanent modifications to the existing building or parking areas.

If you have any questions, please do not hesitate to contact me 617-607-6272 or lboucher@vhb.com.

Sincerely,

Luke Boucher, PE

Water Resources Project Manager

11 En

lboucher@vhb.com

CC: David Genereux, Town Administrator



To: Town of Leicester Planning Board

Date: March 17, 2021

Memorandum

Project #: 14751.00

From: Luke Boucher, PE

Rachel Luna, PE

Re: Leicester Fire & EMS Headquarters Stormwater Improvements

Stormwater Memorandum Site Plan Review Application

This Stormwater Management Memorandum has been prepared to show compliance with the Massachusetts Stormwater Management Standards in accordance with the Town of Leicester Planning Board Stormwater Regulations and the Site Plan Review Regulations.

Project Description

At the request of the Town of Leicester (the "Applicant"), Vanasse Hangen Brustlin, Inc ("VHB") conducted a review in January 2020 of the stormwater and drainage design and construction for the Fire and EMS Headquarters at 3 Paxton Street (the "Site"). The Site was constructed in 2017 on an undeveloped parcel of land. The existing stormwater management includes two infiltration basins, one in the northwest corner of the site (Infiltration Basin 1) and one to the south of the building (Infiltration Basin 2). The Town has reported standing water within the basins, even during dry periods. The resulting lack of available storage within the basins has resulted in the basins filling up and overflowing onto abutting properties during rainfall events.

The Applicant is proposing to retrofit the existing stormwater management system at the Site to alleviate the flooding on site and on abutting properties, herein as referred to as the "Project".

The Project is considered a redevelopment as it is a retrofit and should comply fully with Stormwater Standards 1, 7, 8, 9 & 10 and to the maximum extent practicable with Stormwater Standards 2 thru 6.

The Project is not located within any critical areas. Areas of temporary disturbance will be minimized to the maximum extent practicable and will be restored in place to their original conditions and stabilized to prevent future erosion and degradation. Construction controls and best practices will be implemented throughout the project site to avoid and minimize construction impacts to wetland resource areas.

Site Description

Soils

As a part of the initial review, VHB conducted three test pits outside of the infiltration basins on 11/14/2019 to observe in-situ soil conditions. Test pit logs are included in Appendix E. Below is a summary of the findings:

• VHB's licensed soil evaluator performed a NRCS field textural classification of the onsite soils in the soil horizon where infiltration was proposed and classified the soils from all three test pits as silty clay loam and silt loam. These soil textures are designated as Hydrologic Soil Group C and D, respectively, based on Table 2.3.3 in Vol. 3, Ch. 1 of the Massachusetts Stormwater Handbook. Based on this table, MassDEP recommends using an infiltration rate of 0.27 in/hr for silt loam and 0.06 in/hr for silty clay loam.



- VHB's licensed soil evaluator determined estimated seasonal high groundwater (ESHGW) adjacent to Infiltration Basin 2 to be at approximate Elevation 976.5, approximately 2.75-feet below ground, approximately 1.5-feet above the bottom of Infiltration Basin 2.
- VHB's licensed soil evaluator determined ESHGW near Infiltration Basin 1 to be at approximate Elevation 972.5, approximately 3.3-feet below ground, approximately 6.5-feet above the bottom of Infiltration Basin 1.
- Two falling head permeability tests were conducted by VHB, one adjacent to each of the infiltration basins.
 The permeability of the soils was calculated to be between 0.08 and 0.09 inches/hour. Per Vol. 3, Ch. 1 of the Massachusetts Stormwater Handbook, 50% of the in-situ permeability rate should be used for design purposes.

Proposed Improvements

Based on the soil information observed on the Site, VHB proposes raising the bottom of both the infiltration basins to be above the groundwater table and installing outlet control structures to manage the basin overflow, effectively converting the infiltration basins into detention basins. Infiltration Basin 2 (now Detention Basin 2) is to be retrofitted with an outlet control structure to discharge to the closed drainage on the Site. Infiltration Basin 1 (now Detention Basin 1) is expanded to create additional storage required to attenuate peak flows and has an outlet control structure that discharges to the closed drainage on Site. Two water quality units are proposed within the stormwater management system to provide additional water quality treatment prior to leaving the site. The closed drainage is routed through an abutting property via a proposed easement, out to Warren Avenue and Gleason Way through a proposed easement at 5 Gleason Way and eventually to a flared end outfall via easement at 14 Harberton Drive. The outfall is equipped with a riprap apron and level spreader to distribute the flow and dissipate velocities to the wooded area adjacent to Sargent Pond.

In addition to the basin modifications, VHB proposes to minimize the flows to the detention basins by collecting runoff from the upper parking lot, east of the building, via a new catch basin and connecting it to the municipal drainage system in Paxton Street. VHB also proposes re-routing a portion of the roof runoff from the drainage swale on the northern side of the Site to the municipal drainage system in Paxton Street. Diverting this flow will reduce the rate and quantity of flow tributary to the lower end of the Site, which will minimize the amount of earthwork required to create additional storage required in the basin in the northwest corner of the Site.

Massachusetts Department of Environmental Protection (MassDEP) – Stormwater Management Standards

As previously stated, the Project is a redevelopment and has been designed to comply fully with Stormwater Standards 1, 7, 8, 9 & 10 and to the maximum extent practicable for Stormwater Standards 2 thru 6.

Standard 1: No New Untreated Discharges or Erosion to Wetlands

The Project has been designed to comply with Standard 1.

101 Walnut Street PO Box 9151 Watertown, MA 02472-4026 P 617.924.1770



The Best Management Practices (BMPs) included in the proposed stormwater management system have been designed in accordance with the Massachusetts Stormwater Handbook. Supporting information and computations demonstrating that no new untreated discharges will result from the Project are presented through compliance with Standards 4 through 6.

All proposed Project stormwater outlets and conveyances have been designed to not cause erosion or scour to wetlands or receiving waters. Outlets from closed drainage systems have been designed with flared end sections, stone protection, and a level spreader to dissipate discharge velocities and protect downgradient areas from erosion.

Computations and supporting information for the sizing and selection of materials used to protect from scour and erosion are included in Appendix C.

Standard 2: Peak Rate Attenuation

The Project is seeking relief under Stormwater Management Standard 7 and as such complies with Standard 2 to the maximum extent practicable.

VHB performed hydraulic and hydrologic calculations using HydroCAD 10.00-25 software and SCS TR-20 methodology to estimate attenuated peak flow rates. The calculations utilized 24-hour rainfall depths provided by the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 for the Town of Leicester, Massachusetts. The rainfall-runoff response of the Site under existing and proposed conditions was analyzed for storm events with recurrence intervals of 2, 10, and 100 years. The results of the analysis, as summarized in Table 1 below, indicate that there is an increase in peak discharge rates between the existing and proposed conditions for Design Point 1.

Table 1: Peak Discharge Rates (cfs)

Design Point	2-year	10-year	100-year
Design Point 1: Sargent Pond			
Existing	10.63	16.79	62.10
Proposed	12.22	19.25	46.15
Design Point 2: Main Street			
Existing	0.80	1.64	3.80
Proposed	0.12	0.23	0.51

Supporting calculations for peak flow rate attenuation are included in Appendix C.



Standard 3: Stormwater Recharge

The Project is seeking relief under Stormwater Management Standard 7 and as such complies with Standard 3 to the maximum extent practicable.

The Site consists of low infiltrating soils (HSG C/D) and high groundwater table. As discussed in the soils section, the onsite soils have negligible capacity to infiltrate. As a result, infiltrating BMPs are not feasible for this Site.

Chandand 4. Water Ovelite

Standard 4: Water Quality

The Project has been designed to comply with Standard 4.

The proposed stormwater management system implements two Water Quality Units that have been designed to provide a minimum of 80% TSS removal of stormwater runoff from proposed impervious surfaces.

As there are no Outstanding Resource Waters located near the project area, the required Water Quality Volume (WQV) was determined using 0.5 inches of rainfall. Massachusetts Stormwater Standards require a reduction in Total Suspended Solids (TSS) of 80%.

Supporting calculations for Water Quality treatment BMPs including BMP sizing and TSS removal are included in Appendix C.

Standard 5: Land Uses with Higher Potential Pollutant Loads (LUHPPLs)

The Project is not considered a land use with higher potential pollutant loads (LUHPPL).

Standard 6: Critical Areas

The Project will not discharge stormwater near or to a critical area.

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the Maximum Extent Practicable

The Project is a redevelopment and has been designed to comply with Stormwater Management Standards 2-6 to the maximum extent practicable. Standards 8-10 have been met completely.



Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Controls

The proposed project will disturb more than 1 acre of land and is therefore required to obtain coverage under the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit. As required under this permit, a Stormwater Pollution Prevention Plan (SWPPP) will be developed and submitted by the contractor before land disturbance begins.

Standard 9: Operation and Maintenance Plan

In compliance with Standard 9, a Post Construction Stormwater Operation and Maintenance (O&M) Plan has been developed for the project. The O&M Plan is included in Appendix D as part of the Long-Term Pollution Prevention Plan.

Standard 10: Prohibition of Illicit Discharges

The Project does not have any known illicit connections. Any illicit connections to sanitary sewer or storm drainage structures found in the Project limit of work will be removed or incorporated into the Project. The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges.

Appendices:

Appendix A – Stormwater Checklist Appendix B – Locus Map, Soil Map

Appendix C – Stormwater Calculations

Appendix D - Operation and Maintenance Plan and Long-Term Pollution Prevention Plan

Checklist (continued)

environmentally sensitive design and LID Techniques were considered during the planning and design of the project: No disturbance to any Wetland Resource Areas Site Design Practices (e.g. clustered development, reduced frontage setbacks) Reduced Impervious Area (Redevelopment Only) ☐ Minimizing disturbance to existing trees and shrubs ☐ LID Site Design Credit Requested: Credit 1 Credit 2 Credit 3 ☐ Use of "country drainage" versus curb and gutter conveyance and pipe ☐ Bioretention Cells (includes Rain Gardens) Constructed Stormwater Wetlands (includes Gravel Wetlands designs) ☐ Treebox Filter ☐ Water Quality Swale Grass Channel ☐ Green Roof Other (describe): Standard 1: No New Untreated Discharges No new untreated discharges Outlets have been designed so there is no erosion or scour to wetlands and waters of the

Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

LID Measures: Stormwater Standards require LID measures to be considered. Document what

Commonwealth

Checklist (continued)

Sta	ndard 2: Peak Rate Attenuation (Maximum Extent Practicable)					
	Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding. Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.					
	Calculations provided to show that post-development peak discharge rates do not exceed pre- development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24- hour storm.					
Sta	ndard 3: Recharge					
\boxtimes	Soil Analysis provided.					
	Required Recharge Volume calculation provided.					
	Required Recharge volume reduced through use of the LID site Design Credits.					
	Sizing the infiltration, BMPs is based on the following method: Check the method used.					
	☐ Static ☐ Simple Dynamic ☐ Dynamic Field¹					
	Runoff from all impervious areas at the site discharging to the infiltration BMP.					
	Runoff from all impervious areas at the site is <i>not</i> discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.					
	Recharge BMPs have been sized to infiltrate the Required Recharge Volume.					
	Recharge BMPs have been sized to infiltrate the Required Recharge Volume <i>only</i> to the maximum extent practicable for the following reason:					
	Site is comprised solely of C and D soils and/or bedrock at the land surface					
	☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000					
	☐ Solid Waste Landfill pursuant to 310 CMR 19.000					
	☑ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.					
	Calculations showing that the infiltration BMPs will drain in 72 hours are provided.					
	Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.					

 $^{^{\}rm 1}$ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

Site Plans

Issued for PERMIT ONLY

Date Issued March 25, 2021

Latest Issue March 25, 2021

Town of Leicester Fire & EMS Headquarters Stormwater Improvements

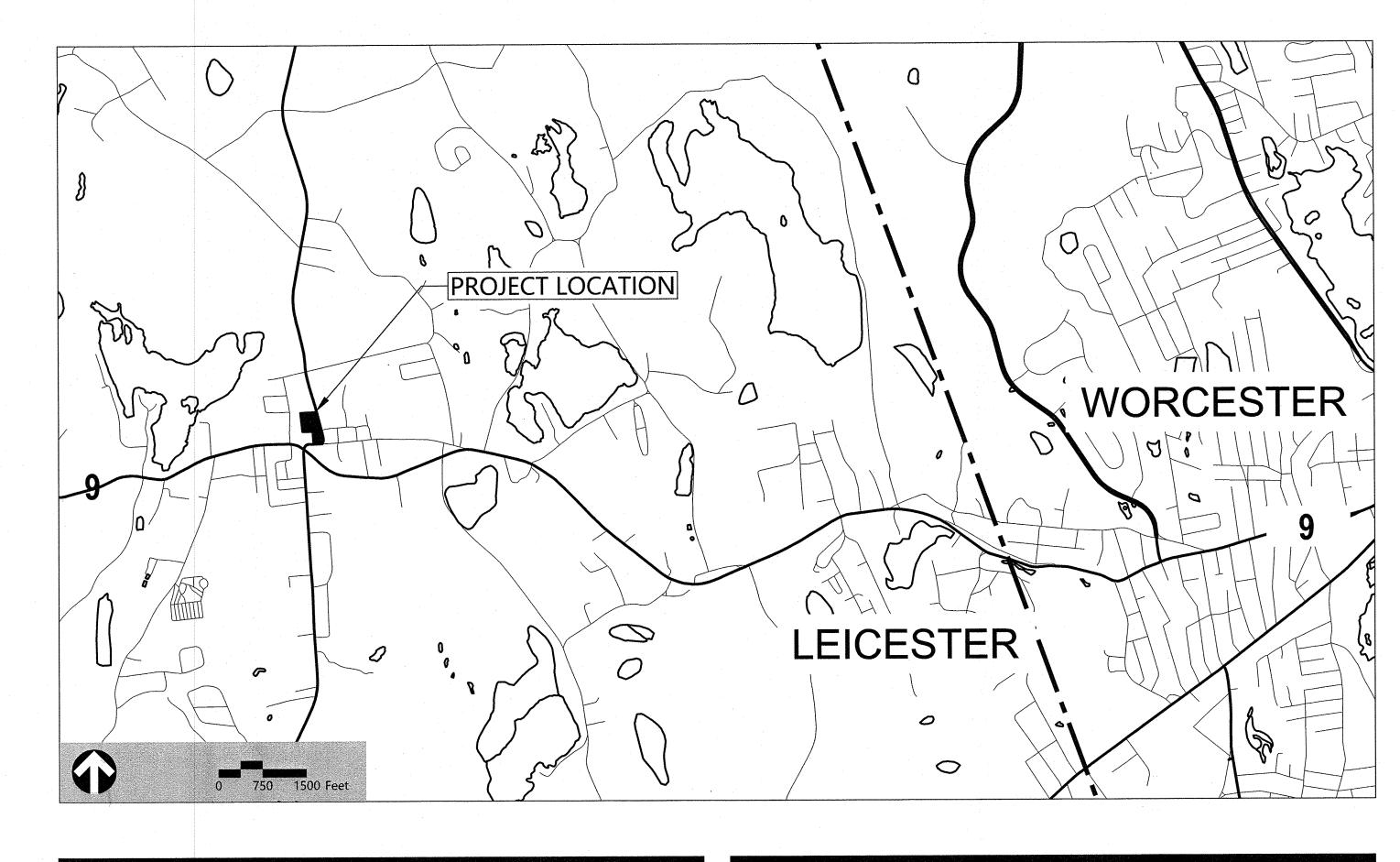
3 Paxton Street Leicester, MA

Owner

Town of Leicester
3 Washburn Square
Leicester, MA 01524

Assessor's Map: 19B

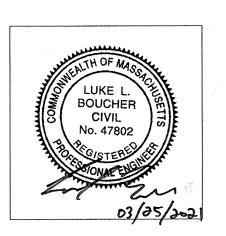
Lot: E9.10



Sheet Index				
No.	Drawing Title	Latest Issue		
C1.01	Legend and General Notes	March 25, 202		
C2.01	Site Preparation and Erosion Control Plan 1	March 25, 202		
C2.02	Site Preparation and Erosion Control Plan 1	March 25, 202		
C2.03	Site Preparation and Erosion Control Plan 1	March 25, 202		
C3.01	Layout and Materials Plan 1	March 25, 202		
C3.02	Layout and Materials Plan 2	March 25, 202		
C3.03	Layout and Materials Plan 3	March 25, 202		
C4.01	Grading and Drainage Plan 1	March 25, 202		
C4.02	Grading and Drainage Plan 2	March 25, 202		
C4.03	Grading and Drainage Plan 3	March 25, 202		
C5.01	Site Details 1	March 25, 202		
C5.02	Site Details 2	March 25, 202		
C5.03	Site Details 3	March 25, 202		

Refe	erence Drawings	
No.	Drawing Title	Latest Issue
Sv-1	Existing Conditions Plan of Land	March 1, 2021





Exist.	Prop.	· · · · · · · · · · · · · · · · · · ·	Exist.	Prop.	
		PROPERTY LINE			CONCRETE
	· · · · · · · · · · · · · · · · · · ·	PROJECT LIMIT LINE			
		RIGHT-OF-WAY/PROPERTY LINE			
edistributes ensurement .		EASEMENT			RIPRAP
		BUILDING SETBACK		%%% 	CONSTRUCTION EXIT
10+00	10+00	PARKING SETBACK	27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
		BASELINE	26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT ZONING LINE	132.75 ×	132.75 ×	SPOT ELEVATION
		TOWN LINE	45.0 TW × 38.5 BW	45.0 TW × 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE	-		BORING LOCATION
<u></u>		LIMIT OF DISTURBANCE	era.		TEST PIT LOCATION
· ·	the manifold of the first of the first of the same of	WETLAND LINE WITH FLAG	⊕ MM		MONITORING WELL
		FLOODPLAIN	UD	UD	UNDERDRAIN
BLSF		BORDERING LAND SUBJECT TO FLOODING	· 12°0	12″D-►	DRAIN
BZ		WETLAND BUFFER ZONE	6,k0	6"RD►	ROOF DRAIN
NDZ	 	NO DISTURB ZONE	12°S		SEWER
200'RA		200' RIVERFRONT AREA	FM		FORCE MAIN
			- OHW management		OVERHEAD WIRE
£1/£5		GRAVEL ROAD	representation of W temperature and		WATER
EOP	EOP BB	EDGE OF PAVEMENT	recomment but minimum		FIRE PROTECTION
98 ac	BB BC	BITUMINOUS BERM			DOMESTIC WATER
<u>BC</u>	BC CC	BITUMINOUS CURB	manage of the second se		GAS
<u> </u>	CG	CONCRETE CURB			ELECTRIC
	ECC	CURB AND GUTTER	4. 		STEAM
CC	MCC	EXTRUDED CONCRETE CURB MONOLITHIC CONCRETE CURB	······································		TELEPHONE
<u>CC</u>	PCC	PRECAST CONC. CURB	CATV		FIRE ALARM
	SGE	SLOPED GRAN. EDGING	VA: Y		CABLE TV
	VGC	VERT. GRAN. CURB			CATCH BASIN CONCENTRIC
		LIMIT OF CURB TYPE			CATCH BASIN ECCENTRIC
		SAWCUT			DOUBLE CATCH BASIN CONCENTRIC
	<u> </u>		_		DOUBLE CATCH BASIN ECCENTRIC
Valadabeladabe		BUILDING	233	=	GUTTER INLET
A. one		BUILDING ENTRANCE	0	(•)	DRAIN MANHOLE CONCENTRIC
		LOADING DOCK	()	lacktriangle	DRAIN MANHOLE ECCENTRIC
*		BOLLARD	i.		TRENCH DRAIN
Accession of the Control of the Cont		DUMPSTER PAD	CO	со	PLUG OR CAP CLEANOUT
manufalances		SIGN	≫	>	FLARED END SECTION
delingue fran Verifieldens		DOUBLE SIGN			HEADWALL
		STEEL GUARDRAIL			
ea marine in the Source management and Source arrays.		WOOD GUARDRAIL	\$		SEWER MANHOLE CONCENTRIC
			~ <u>~</u>		SEWER MANHOLE ECCENTRIC
		PATH	CS	CS ⊚	CURB STOP & BOX
	~~~	TREE LINE	<b>©</b>	₩V <b>©</b>	WATER VALVE & BOX
of manners were an executive services.	<del></del>	WIRE FENCE	TSV	TSV	TAPPING SLEEVE, VALVE & BOX
and the second s		FENCE	◆◆ HYO	_HAD →	SIAMESE CONNECTION
Same announcement Survey of the same of		STOCKADE FENCE	WW	<b>⊘</b> WM	FIRE HYDRANT
		STONE WALL	ea Ea	⊡ PIV	WATER METER
inan in manura menerantanggi minininanisi minin perinturan penerangan penerangan penerangan penerangan penerang pengahanggan mengapan mengapa di bangan pengangan pengangan pengangan mengangan pengangan pengangan pengangan		RETAINING WALL	<b>©</b> 500		POST INDICATOR VALVE
Condenses and Co		STREAM / POND / WATER COURSE		<b>@</b>	WATER WELL
		DETENTION BASIN	GG O		GAS GATE
		HAY BALES SILT FENCE	GA GA T		GAS METER
(	X	SILT FENCE SILT SOCK / STRAW WATTLE	0		ELECTRIC MANHOLE
and the second second		J.E. SOCK, STIVIN WATEL	<del>-</del>		ELECTRIC METER
on was one of our some some one	4	MINOR CONTOUR	žÇŽ		LIGHT POLE
· ····· 20 ·······	20	MAJOR CONTOUR	_		TELEPHONE MANHOLE
			**************************************		TRANSFORMER PAD
			<i>^</i>		UTILITY POLE
			Ç		GUY POLE
					GUY WIRE & ANCHOR
			PB		HAND HOLE
			B		PULL BOX

brevi	ations	
Genera		
ABAN	ABANDON	
ACR	ACCESSIBLE CURB RAMP	
ADJ	ADJUST	
APPROX	APPROXIMATE	
BIT	BITUMINOUS	
BS	BOTTOM OF SLOPE	
BWLL	BROKEN WHITE LANE LINE	
CONC	CONCRETE	
DYCL	DOUBLE YELLOW CENTER LINE	
EL	ELEVATION	
ELEV	ELEVATION	
EX	EXISTING	
FDN	FOUNDATION	
FFE	FIRST FLOOR ELEVATION	
GRAN	GRANITE	
GTD	GRADE TO DRAIN	
LA	LANDSCAPE AREA	•
LF	LINEAR FOOT	
LOD	LIMIT OF DISTURBANCE	
MAX	MAXIMUM	
MIN	MINIMUM	
NIC	NOT IN CONTRACT	•
NTS	NOT TO SCALE	
PERF	PERFORATED	
PROP	PROPOSED	
REM	REMOVE	
RET	RETAIN	
R&D	REMOVE AND DISPOSE	
R&R	REMOVE AND RESET	
SWEL	SOLID WHITE EDGE LINE	
SWLL	SOLID WHITE LANE LINE	
TS	TOP OF SLOPE	
TYP Utility	TYPICAL	
CB	CATCH BASIN	
CMP	CORRUGATED METAL PIPE	
co	CLEANOUT	
DCB	DOUBLE CATCH BASIN	
DMH	DRAIN MANHOLE	
CIP	CAST IRON PIPE	
COND	CONDUIT	
DIP	DUCTILE IRON PIPE	
FES	FLARED END SECTION	
FM	FORCE MAIN	
F&G	FRAME AND GRATE	
F&C	FRAME AND COVER	
Gl	GUTTER INLET	
GT	GREASE TRAP	
HDPE	HIGH DENSITY POLYETHYLENE PIPE	
HH	HANDHOLE	
HW	HEADWALL	
HYD	HYDRANT	
INV	INVERT ELEVATION	
	INVERT ELEVATION	
=   D		
LP	LIGHT POLE	
MES	METAL END SECTION	
PIV	POST INDICATOR VALVE	
PWW	PAVED WATER WAY	
PVC	POLYVINYLCHLORIDE PIPE	
RCP	REINFORCED CONCRETE PIPE	
R=	RIM ELEVATION	
RIM=	RIM ELEVATION	
SMH	SEWER MANHOLE	
TSV	TAPPING SLEEVE, VALVE AND BOX	
UG	UNDERGROUND	

UTILITY POLE

Notes

# General

- CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- 3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
- 4. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 4 INCHES LOAM AND SEED.
- 5. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
- 6. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- 7. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 8. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S
- 9. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT

MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER

IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.

- 10. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- 11. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO
- 12. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- 13. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.

- 1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- 2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- 3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
- 4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
  - A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
  - B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
  - C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- 5. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
- 6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
- 7. UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
  - A. STORM DRAINAGE PIPES SHALL BE 12" HDPE
  - B. PIPE INSTALLATION AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING CODE WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE WITH LOCAL PLUMBING INSPECTOR PRIOR TO
- 8. CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
- 9. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

# Layout and Materials

- 1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- 2. ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
- 3. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.

# Demolition

- 1. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES
- 2. CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- 4 THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR

LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE

WORK.

5. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

# **Erosion Control**

- 1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- 2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- 3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- 4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED
- 5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

# **Existing Conditions Information**

- 1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC AND FROM DEEDS AND PLANS OF RECORD. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VHB, INCH, IN MARCH 2020 AND FEBRUARY 2021.
  - A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB,
- B. FLAGS MARKING THE WETLANDS WERE LOCATED BY: VHB, INC BY FIELD SURVEY
- 2. TOPOGRAPHY: ELEVATIONS ARE BASED ON NAVD 1988.

# Document Use

- 1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- 2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- 3. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



101 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770

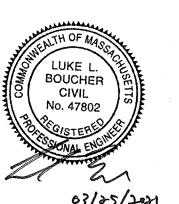
TOWN OF LEICESTER FIRE & EMS **HEADQUARTERS STORMWATER IMPROVEMENTS 3 PAXTON STREET** 

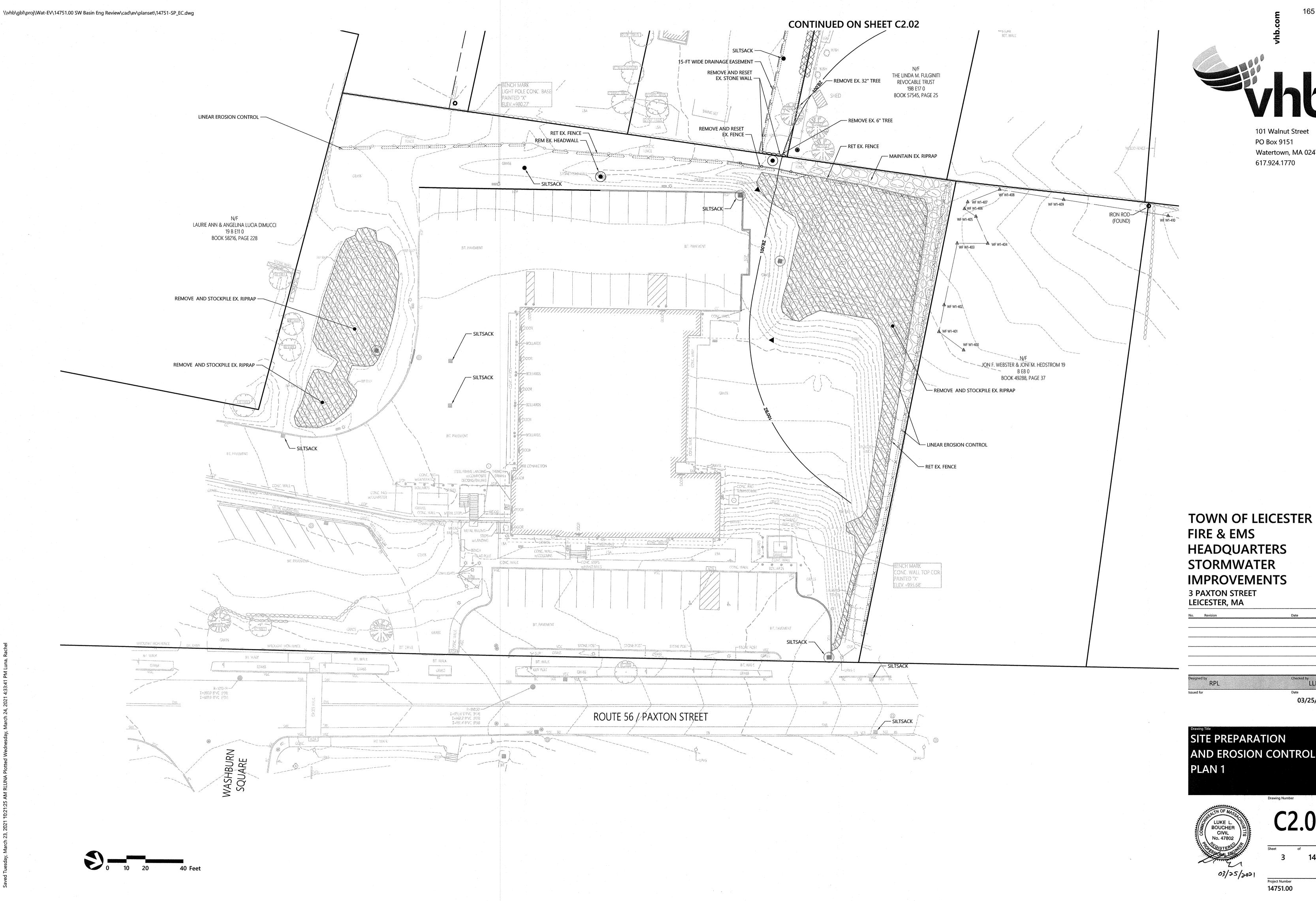
LEICESTER, MA				
No.	Revision	Date	А	

 		·····	 	
 	<del>~</del>		 	

03/25/2021

**GENERAL NOTES AND LEGEND** 







101 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770

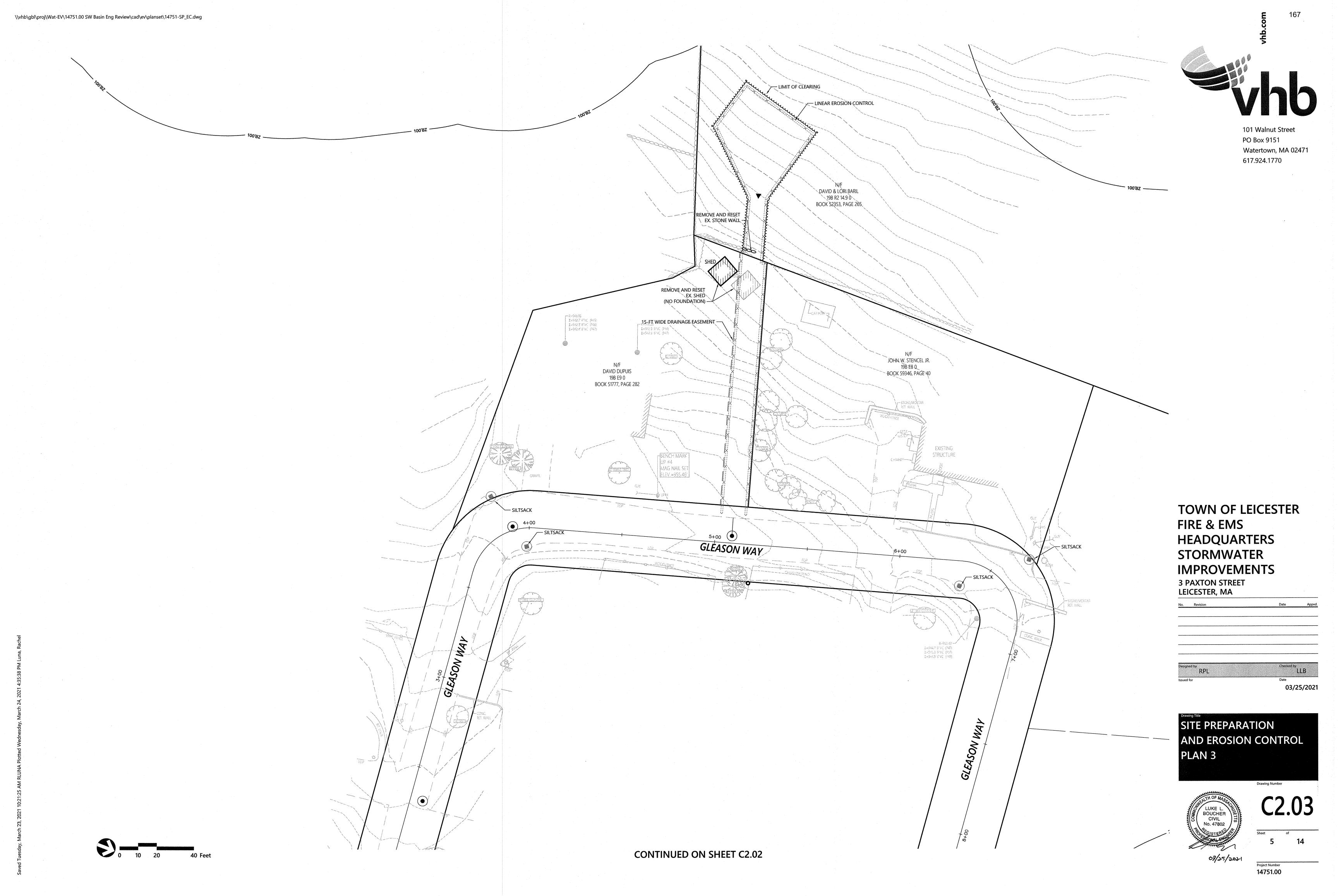
**HEADQUARTERS IMPROVEMENTS** 

03/25/2021

SITE PREPARATION AND EROSION CONTROL

Project Number







TOWN OF LEICESTER
FIRE & EMS
HEADQUARTERS
STORMWATER
IMPROVEMENTS

3 PAXTON STREET LEICESTER, MA

Revision Date Appvo

RPL Checked by LLB ssued for Date 03/25/2021

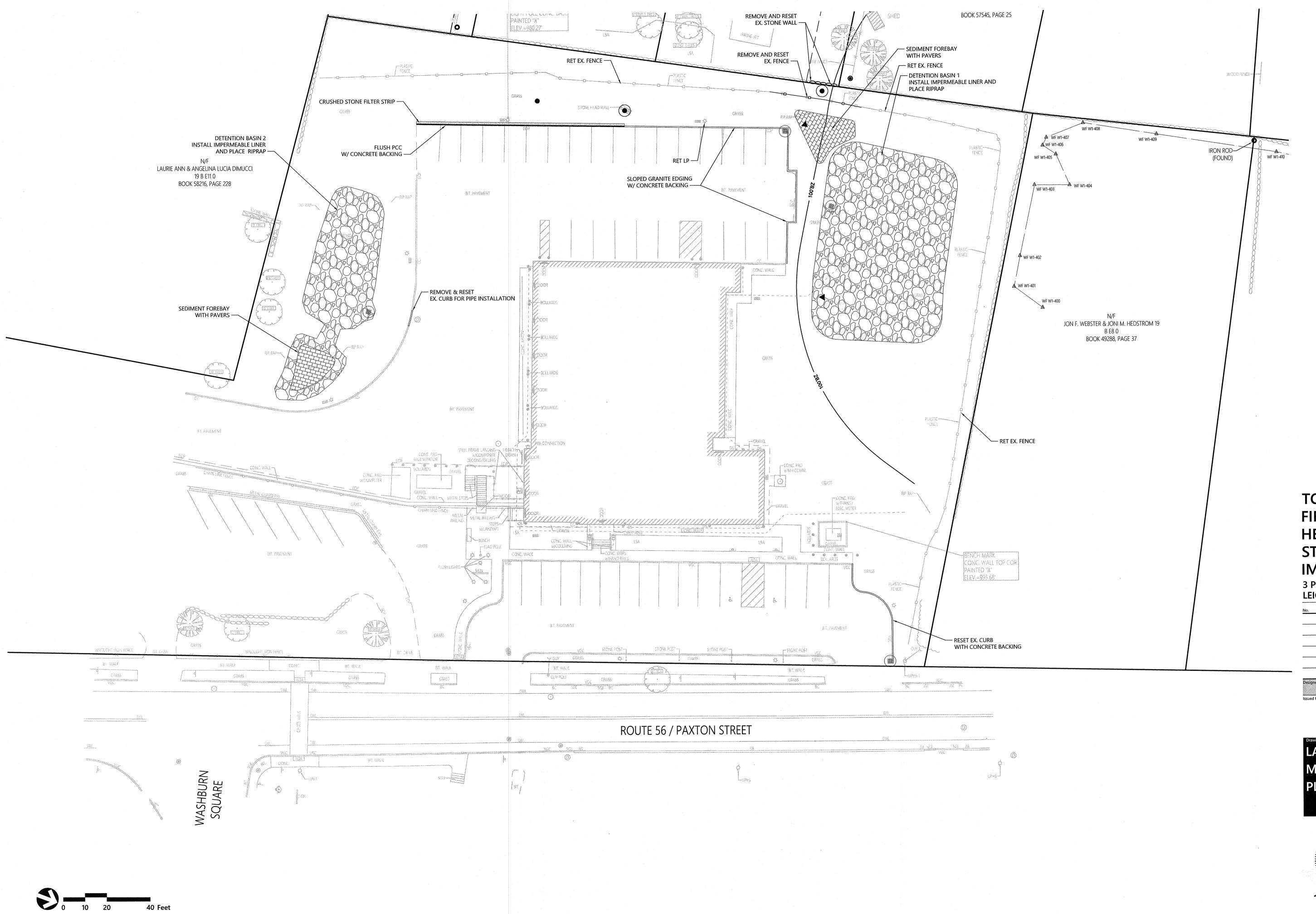
LAYOUT AND
MATERIALS
PLAN 1

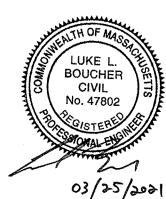


C3.0°

63/25/2021

Project Number 14751.00





Project Number 14751.00

101 Walnut Street PO Box 9151 Watertown, MA 02471 617.924.1770

171

# TOWN OF LEICESTER FIRE & EMS **HEADQUARTERS** STORMWATER **IMPROVEMENTS 3 PAXTON STREET**

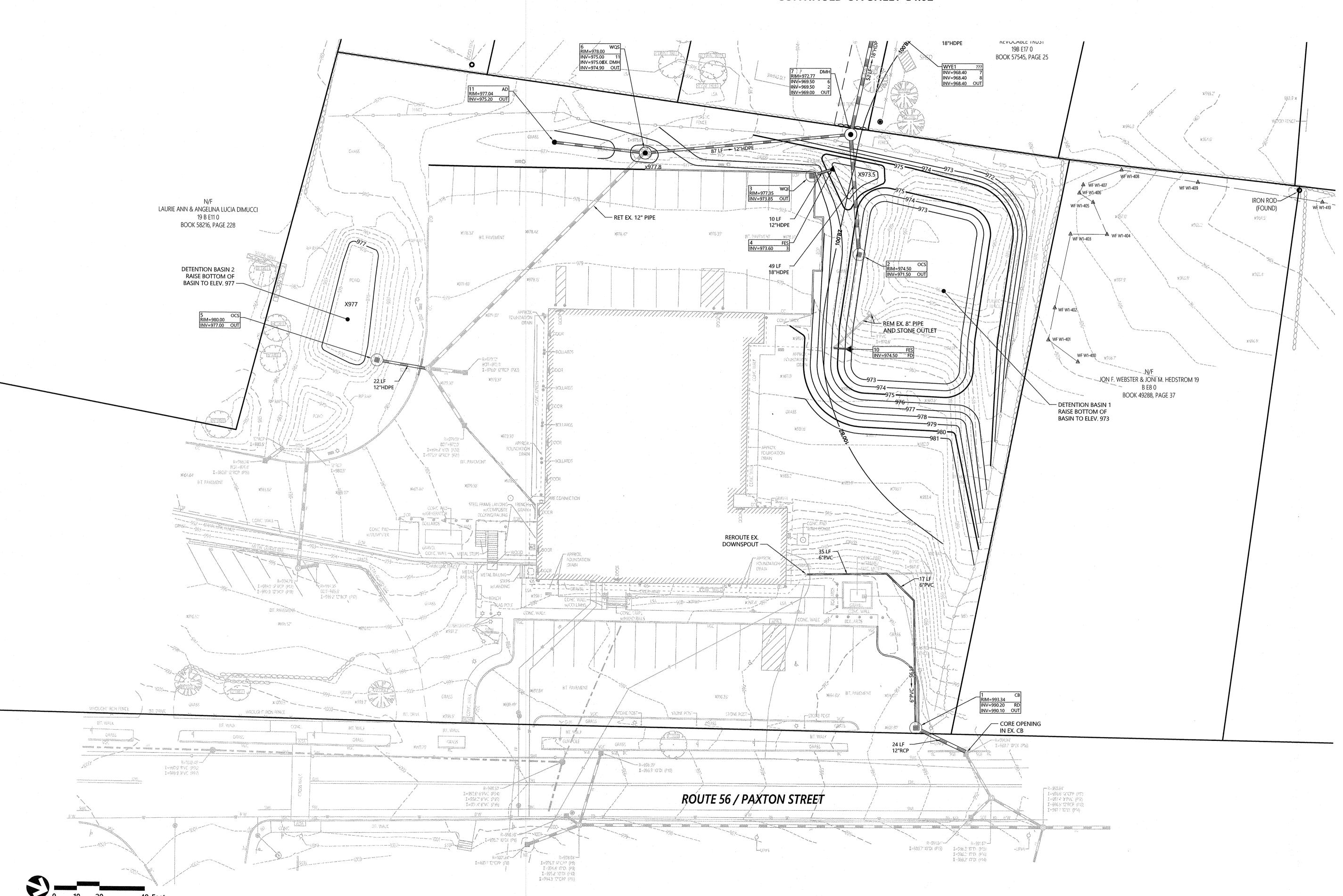
LEICESTER, MA

03/25/2021

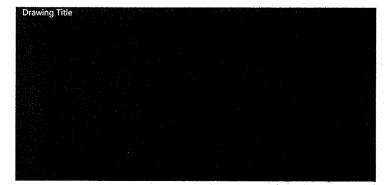




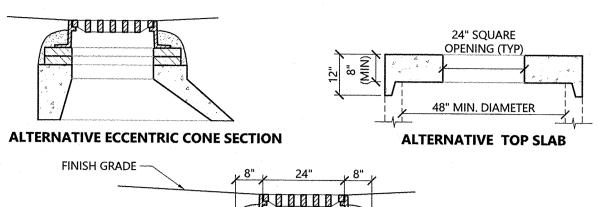
CONTINUED ON SHEET C4.02

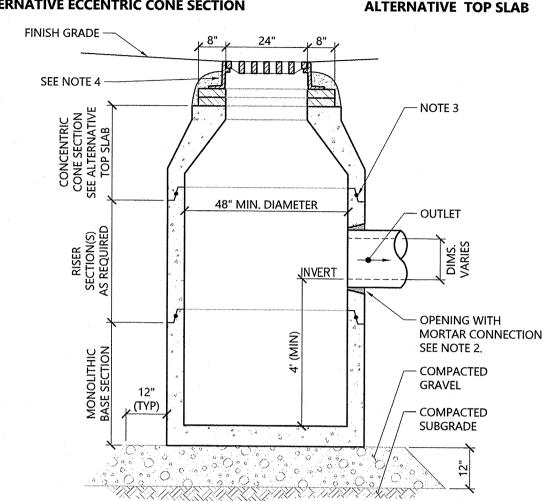


Project Number 14751.00



174

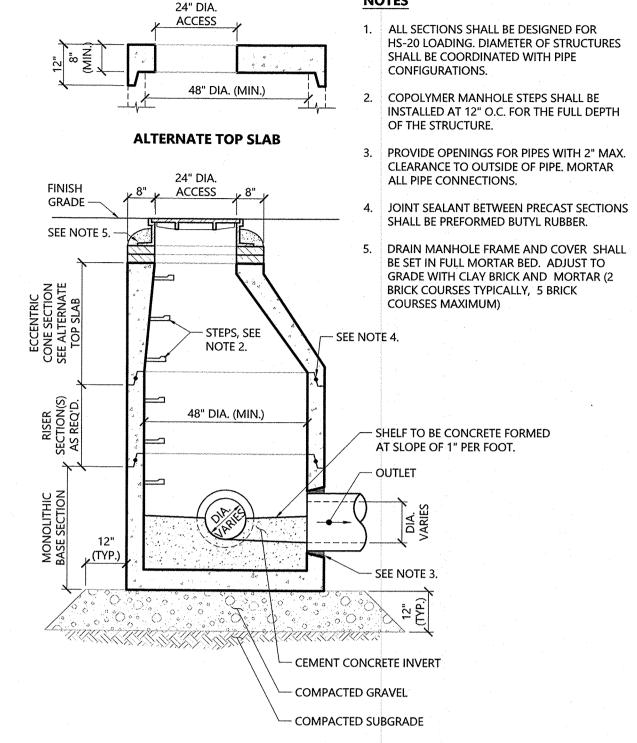


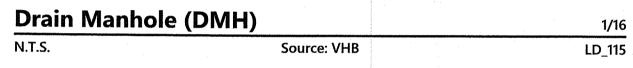


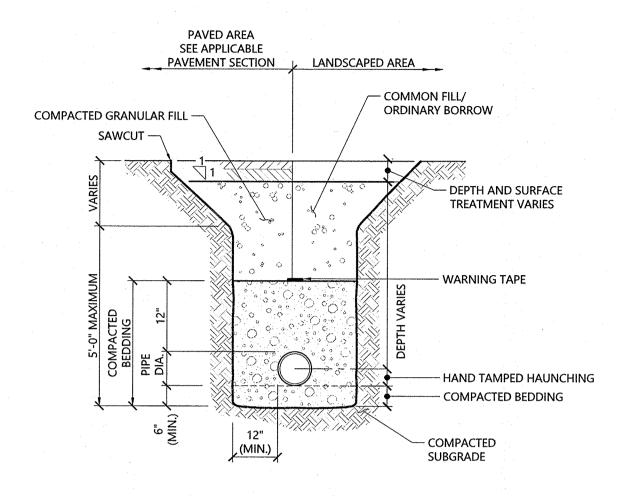
ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.

- PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- 4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB)		1/16
N.T.S.	Source: VHB	LD_100



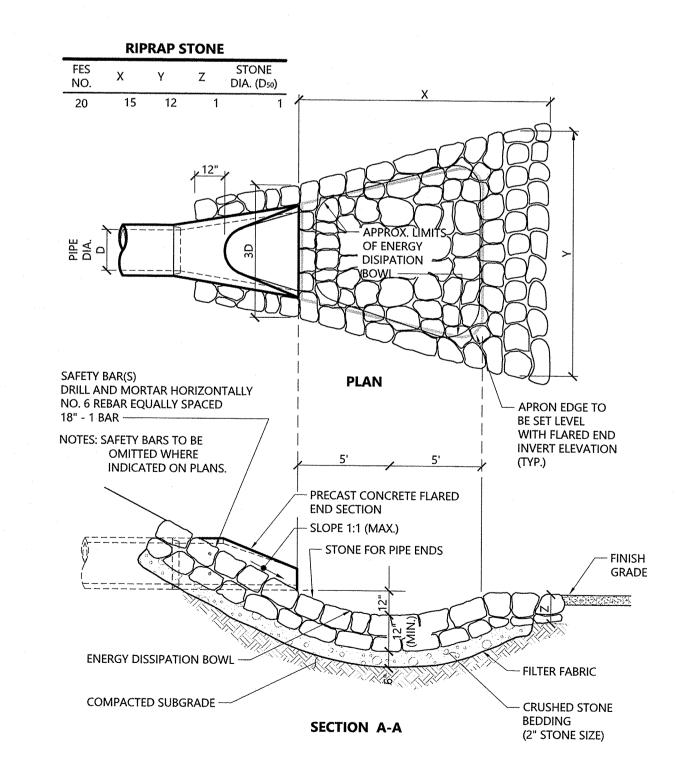




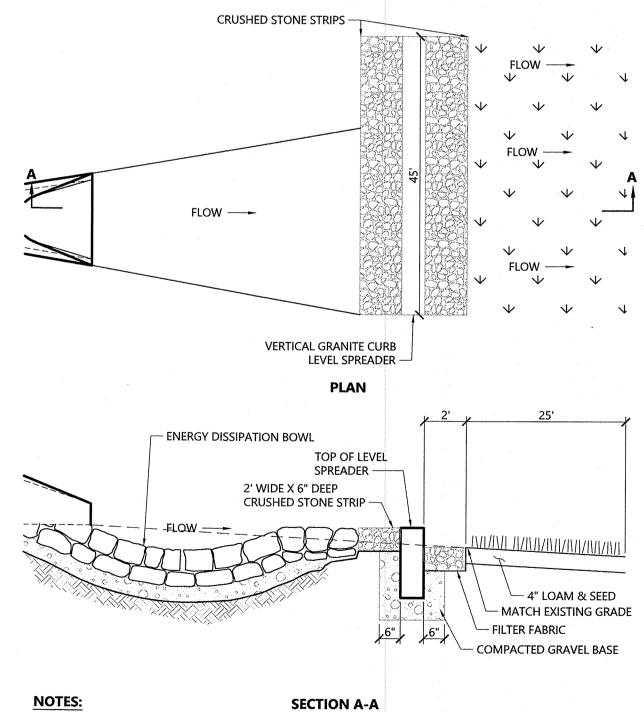
# NOTE

- 1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
- 2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.

Utility Trench		1/16
N.T.S.	Source: VHB	LD_300



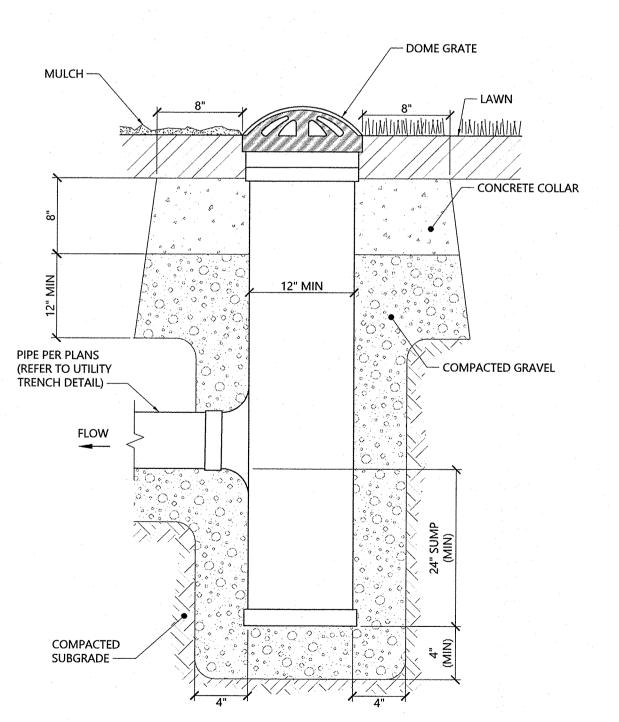




REFER TO PLANS FOR RIPRAP APRON AND LEVEL SPREADER CONFIGURATION.

2. SEED MIX FOR GRASSED AREA DOWNGRADE OF LEVEL SPREADER SHALL BE MEADOW MIX.

Level Spreader Detail1/16N.T.S.Source: VHBLD_172



# NOTES:

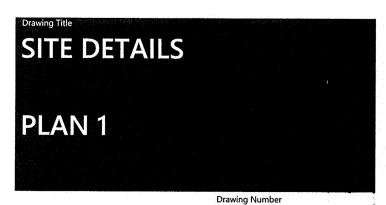
- 1. LANDSCAPE DRAINS SHALL BE NYLOPLAST 12" DRAIN BASIN, OR APPROVED EQUAL.
- 2. GRATES SHALL BE NYLOPLAST, 12" DOME GRATE MODEL 1299CGD, OR APPROVED EQUAL AS SHOWN ON

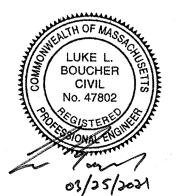
Area Drain (AD)	· · · · · ·	9/17
N.T.S.	Source: VHB	LD_197



No.	Revision	Date	Appvd
			,
	The state of the s		
Nostan	odki.	ch i li	
Design	ed by RPI	Checked by	HR

RPL LLB  Issued for Date
--------------------------





C5.01

Project Number 14751.00

**DETENTION BASIN** SEDIMENT FOREBAY SEDIMENT FOREBAY BERM (WIDTH VARIES) (SEE PLANS (WIDTH VARIES) (WIDTH VARIES) AND DETAIL) BOTTOM OF SEDIMENT BASIN (WIDTH VARIES) MEET EXISTING (SEE PLAN) GRADE -(SEE NOTE 1) - BERM HEIGHT VARIES 12-6 VARIES 12-6 - GEOTEXTILE FABRIC FOR SEPARATION - STONE FOR PIPE ENDS --- 6" OF DENSE GRADED CRUSHED STONE FOR DRAINAGE - ORDINARY 1:1 SLOPE — 12" PLACED MODIFIED ROCK FILL. — BORROW - SEDIMENT FOREBAY PAVING BASE — 1:1 SLOPE TO BE LAID DOWN FLAT GEOTEXTILE FABRIC - DENSE GRADED FOR SEPARATION — CRUSHED STONE OVERFLOW STONE SPILLWAY (SEE DETAIL) —

101 Walnut Street
PO Box 9151
Watertown, MA 02471
617.924.1770

**DETENTION BASIN (TYPICAL SECTION)** 

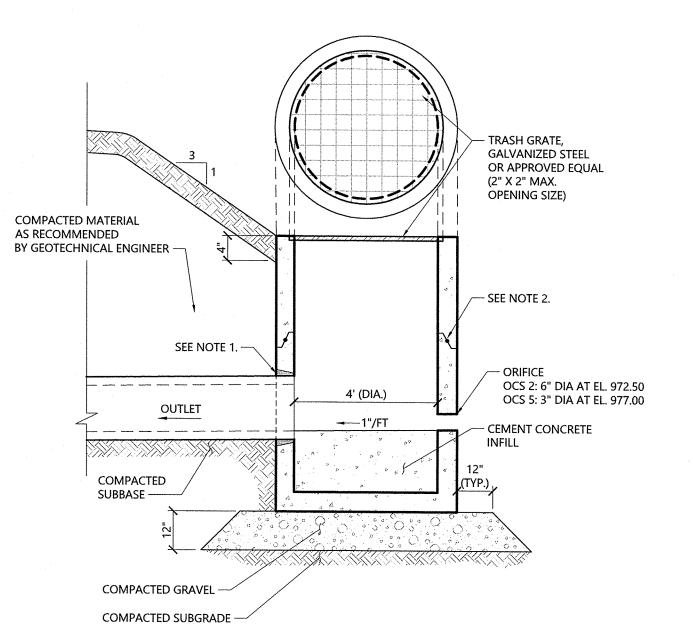
Source: VHB

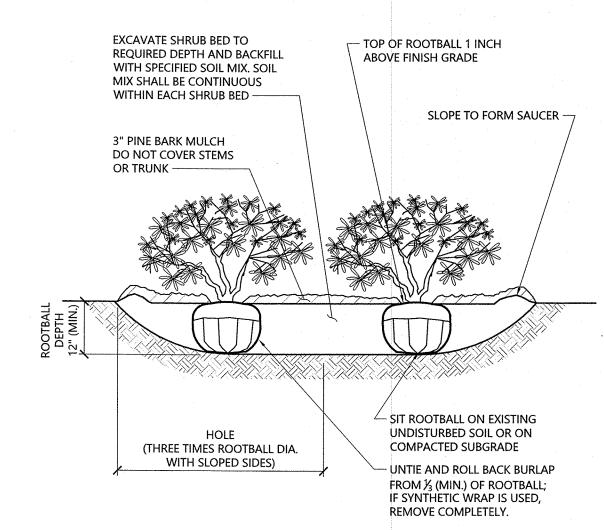
**B** 

SEDIMENT FOREBAY WITH GRANITE EDGE BASE N.T.S.

Source: VHB

8/15





# NOTES

- PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.

Outlot	Cantral	<b>Structure</b>	Datail
Outlet	COULTO	Suucture	Detail
	~~		

N.T.S. Source: VHB REV LD_163

 LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.

Shrub Bed Planting
N.T.S.

Source: VHB

1/16 LD_601

11/15 9/19

# TOWN OF LEICESTER FIRE & EMS HEADQUARTERS STORMWATER IMPROVEMENTS

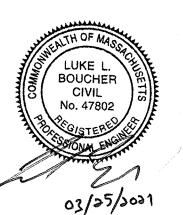
3 PAXTON STREET LEICESTER, MA

Designed by RPL LLB

Issued for Date

03/25/2021



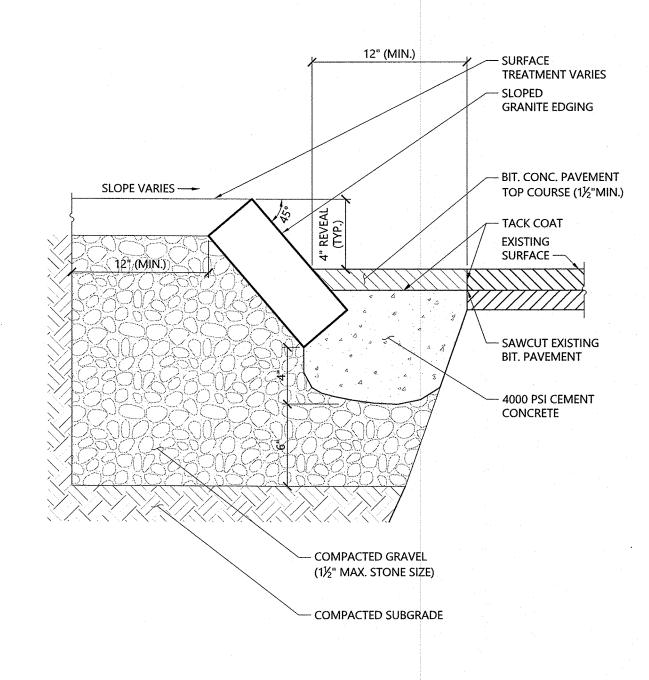


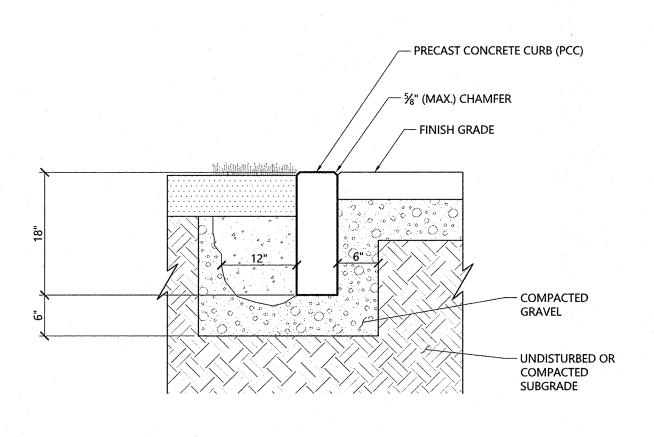
C5.02

Sheet of 13 14

Project Number 14751.00

4

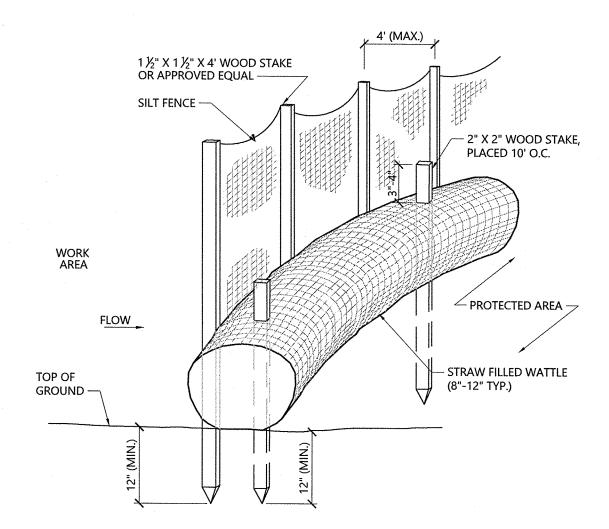




**Precast Concrete Curb (PCC)** LD_404

Sloped Granite Edging (SGE) Set in Existing Pavement_{1/16} N.T.S. Source: VHB

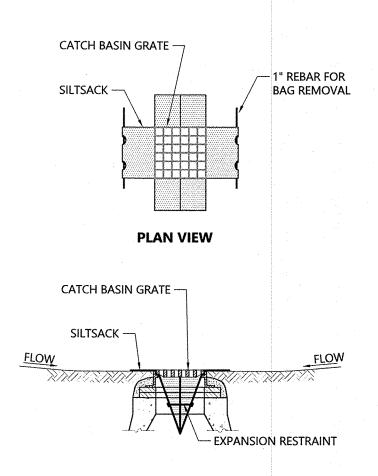
Flush Precast Concrete Curb (PCC) N.T.S. Source: VHB



- STRAW WATTLE SHALL BE AS MANUFACTURED BY EARTHSAVER OR APPROVED EQUAL.
- 2. STRAW WATTLES SHALL OVERLAP A MINIMUM OF 12 INCHES.
- STRAW WATTLE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY
- 4. TEMPORARY STRAW WATTLES TO BE REMOVED BY CONTRACTOR. ALL OTHERS TO REMAIN IN PLACE UNLESS DIRECTED OTHERWISE BY ENGINEER.
- 5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

**Straw Wattle - Erosion Control Barrier** 

Source: VHB LD_659-A



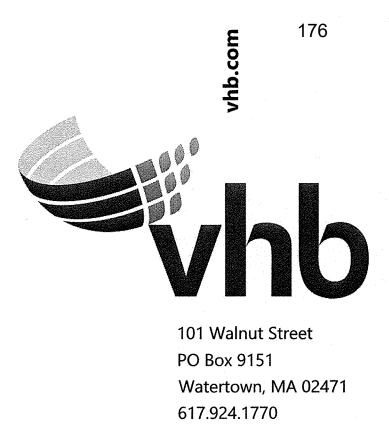
# **NOTES**

1. INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.

**SECTION VIEW** 

- 2. GRATE TO BE PLACED OVER SILTSACK.
- 3. SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED

Siltsack Sediment	Trap	1	/16
N.T.S.	Source: VHB	LD_6	574

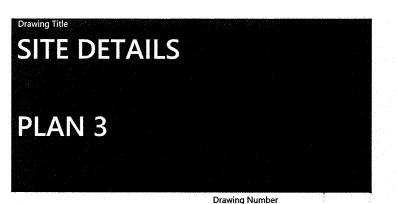


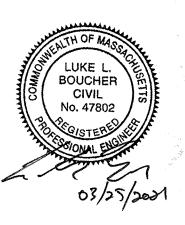
# TOWN OF LEICESTER FIRE & EMS **HEADQUARTERS STORMWATER IMPROVEMENTS**

**3 PAXTON STREET** LEICESTER, MA

No.	Revision	Date	Appv
<del></del>			
			***************************************

03/25/2021





# **Architectural Conservation District Bylaw**

rev. 10-6-09

The Town of Leicester hereby establishes an Architectural Conservation District, to be administered by an Architectural Conservation District Commission.

# 1. PURPOSE

This by-law is enacted for the purpose of preserving and protecting groups of buildings and their settings that are architecturally and historically distinctive which constitute or reflect distinctive features of the architectural, cultural, economic, political or social history of the town and to limit the detrimental effect of alterations, additions, demolitions and new construction on the character of the town. Through this bylaw, alterations, additions, demolition and new construction may be reviewed for compatibility with the existing buildings, setting and neighborhood character. This bylaw seeks to encourage the protection of the built environment through regulatory review. This bylaw promotes the public welfare by making the town a more attractive and desirable place in which to live and work.

#### 2. **DEFINITIONS**

As used in this Bylaw the following terms shall have the following meaning:

ADDITION: A change to a building that includes additional stories, height or floor area.

ALTERATION, TO ALTER: A change to a building or part thereof such as removal, construction, reconstruction, restoration, replication, rehabilitation, demolition and other similar activities. A change to a building that includes additions and other similar activities. A change to a site that includes constructing, placing, erecting, installing, enlarging and moving a building or other similar activities.

APPLICATION: The complete document(s) and supporting material(s) to be submitted by an applicant desiring to obtain a Certificate to Alter. A complete application shall include information reasonably deemed necessary by the commission to enable it to make a determination.

BUILDING: A combination of materials forming a shelter for persons, animals or property.

CERTIFICATE TO ALTER: document granted by the Architectural Conservation District Commission in order to obtain a building (or demolition) permit.

COMMISSION: The Architectural Conservation District Commission

COMPATIBLE: A project that meets the design guidelines of the architectural conservation district commission.

DESIGN GUIDELINES: The document used by the Architectural Conservation District Commission to determine whether a proposed project is compatible. The design guidelines are appended to this bylaw.

DISTRICT: The Architectural Conservation District as established in this bylaw.

PERSON AGGRIEVED: An applicant, an abutter or an owner of property within the district.

SUBSTITUTE SIDING: Exterior building cladding such as vinyl, aluminum or cement board.

TEMPORARY BUILDING: A building, necessary for a specific event, incident or project, erected for a period of no more than 6 months, unless otherwise agreed to by the commission.

# 3. DISTRICT

The Architectural Conservation District shall encompass the area shown on the Leicester Architectural Conservation District maps.

# 4. ARCHITECTURAL CONSERVATION DISTRICT COMMISSION

The Architectural Conservation District shall be overseen by a Commission consisting of five members, to be appointed by the Board of Selectmen, two members initially to be appointed for one year, two for two years, and one for three years, and each successive appointment to be made for three years.

The Board of Selectmen may appoint up to five alternate members to the Architectural Conservation District. Said alternate members shall initially be appointed for terms of one, two and three years, and for three year terms thereafter. In the case of absence, inability to act, or recusal from action due to a conflict of interest, his or her place shall be taken by an alternate member designated by the Chairperson, if available, otherwise by the Vice-Chairperson if available, otherwise by a majority vote of the members and alternate members of the Commission present.

The Commission shall include the following:

- a. two members of the local historical commission;
- b. two residents of the district, or if not possible residents of Leicester; and
- c. a realtor, architect, or building contractor familiar with historic rehabilitation.

Members and alternates of an architectural conservation district shall by reason of experience or education have demonstrable knowledge and concern for improvement, conservation and enhancement of the district.

Each member and alternate member shall continue to serve in office after the expiration date of his or her term until a successor is duly appointed.

Meetings of the Commission shall be held at the call of the Chairperson, at the request of two members and in such other manner as the Commission shall determine in its Rules and Regulations. Three members of the Commission shall constitute a quorum.

# 5. ARCHITECTURAL CONSERVATION DISTRICT COMMISSION POWERS AND DUTIES

The Commission shall exercise its powers in administering and regulating the alteration of buildings within the architectural conservation district as set forth under the procedures and criteria established in this bylaw.

# Adoption of Rules & Regulations

The Commission, after a public hearing duly posted and advertised at least 14 days in advance in a conspicuous place in Town Hall, may adopt and from time to time amend, reasonable Rules and Regulations not inconsistent with the provisions of this bylaw or setting forth such forms and procedures as it deems desirable and necessary for the regulation of its affairs and the conduct of its business, including requirements for the contents and form of applications for certificates, fees hearing procedures and other matters. The Commission shall file a copy of any such Rules

and Regulations with the office of the Town Clerk.

# Adoption of Design Guidelines

The Commission, after a public hearing duly posted and advertised at least 14 days in advance in a conspicuous place in Town Hall may from time to time amend the design guidelines which set forth the designs for certain alterations which are, in general, suitable for the issuance of a Certificate to Alter. No such design guidelines shall limit the right of an applicant for a Certificate to Alter to present other designs to the Commission for approval.

# **Commission Organization**

The Commission shall annually hold an organizational meeting and elect a Chairperson, a Vice Chairperson and Secretary, and file notice of such election with the office of the Town Clerk. The Commission shall keep a permanent record of its regulations, transactions, decisions and determinations and of the vote of each member participating therein. The Commission shall undertake educational efforts to explain to the public and property owners the merits and functions of an Architectural Conservation District.

# 6. ALTERATION PROHIBITED WITHOUT A CERTIFICATE

Except as this Bylaw provides, no building or part thereof within a Architectural Conservation District shall be altered unless the commission shall first have issued a Certificate to Alter.

# 7. ALTERATIONS EXCLUDED FROM COMMISSION REVIEW

It shall be the responsibility of the Commission, or its delegate thereof to determine whether an alteration is exempt from review. The Commission or its delegate thereof shall have seven days to make this determination. The following projects are excluded from Commission review.

- a. Projects not requiring a building (or demolition) permit.
- b. Structures when not defined as buildings or parts of buildings
- c. Temporary buildings subject to time limits and size limits by the Architectural Conservation District Commission.
- d. Interior Alterations
- e. Storm windows and doors, screen windows and doors.
- f. Removal, replacement or installation of gutters and downspouts.
- g. Removal, replacement or installation of window and door shutters.
- h. Accessory buildings of less than 100 square feet of floor area.
- i. Removal of substitute siding.
- j. Alterations not visible from a public way.
- k. Ordinary maintenance and repair of architectural features that match the existing conditions including materials, design and dimensions.
- 1. Reconstruction, substantially similar in exterior design, of a building, damaged or destroyed by fire, storm or other disaster, provided such reconstruction is begun within one year thereafter and carried forward with due diligence.
- m. Accessibility Improvements including ramps, rails, walkways and mechanical equipment associated with exterior architectural barriers subject to the extent possible under MGL 40A and other applicable state or federal laws.
- n. Substitute siding
- o. Removal of architectural trim
- p. Replacement of Windows and Doors

# 8. PROCEDURES FOR THE REVIEW OF MAJOR ALTERATIONS

The following major alterations require the submittal of an application for a regulatory review by the Commission. The decision of the Commission shall be binding on the applicant.

- a. Demolition of a building or part of a building.
- b. New construction including buildings and additions.

Within forty five days of the submittal of an application for a major alteration, the Commission shall hold a public hearing on the application. At least seven days before said public hearing, public notice shall be given by posting in a conspicuous place in Town Hall. Such notice shall identify the time, place and purpose of the public hearing. At least seven days before said public hearing, a copy of said public notice shall be mailed to the applicant, to the owners of all adjoining properties and of other properties deemed by the Commission to be materially affected thereby all as they appear on the most recent applicable tax list.

Following the public hearing, the Commission shall determine whether the proposed alteration is compatible with the design guidelines and the purpose of this bylaw. If the Commission determines that the alteration is compatible, the Commission shall issue a Certificate to Alter. The concurring vote of a majority of the members shall be required to issue a Certificate to Alter.

If the Commission cannot determine that the alteration is compatible, the Commission shall decline to issue the Certificate to Alter. The Commission shall provide the applicant with the reasoning for their disapproval including how the alteration does not meet the design guidelines or the purpose of this bylaw.

# 9. PROCEDURES FOR ISSUANCE AND FILING OF CERTIFICATES

Each Certificate issued by the Commission shall be dated and signed by its chairperson or such other person designated by the Commission to sign such Certificates on its behalf. The Commission shall send a copy of its Certificates and disapprovals to the applicant and shall file a copy of its Certificates and disapprovals with the office of the Town Clerk and the Code Enforcement Officer (Building Inspector). The date of issuance of a Certificate or disapproval shall be the date of the filing of a copy of such Certificate or disapproval with the office of the Town Clerk.

If the Commission should fail to make a determination within sixty days of the filing of the application for a Certificate, or within such further time as the applicant may allow in writing, the Commission shall thereupon issue a Certificate to Alter due to failure to act.

# 10. ENFORCEMENT AND PENALTIES

The Architectural Conservation District Commission is specifically authorized to institute any and all actions, proceedings in law and in equity, as they deem necessary and appropriate to obtain compliance with the requirements of this bylaw or to prevent a threatened violation thereof.

The Commission shall designate the Code Enforcement Officer to act on its behalf and to enforce this Bylaw under the direction of the Commission.

Any owner of a building subject to this bylaw that altered a building without first obtaining a Certificate to Alter in accordance with the provisions of this bylaw shall be subject to a fine of not more than Three Hundred Dollars. Each day the violation exists shall constitute a separate offense until the alteration is corrected, the addition is removed or a faithful restoration of the

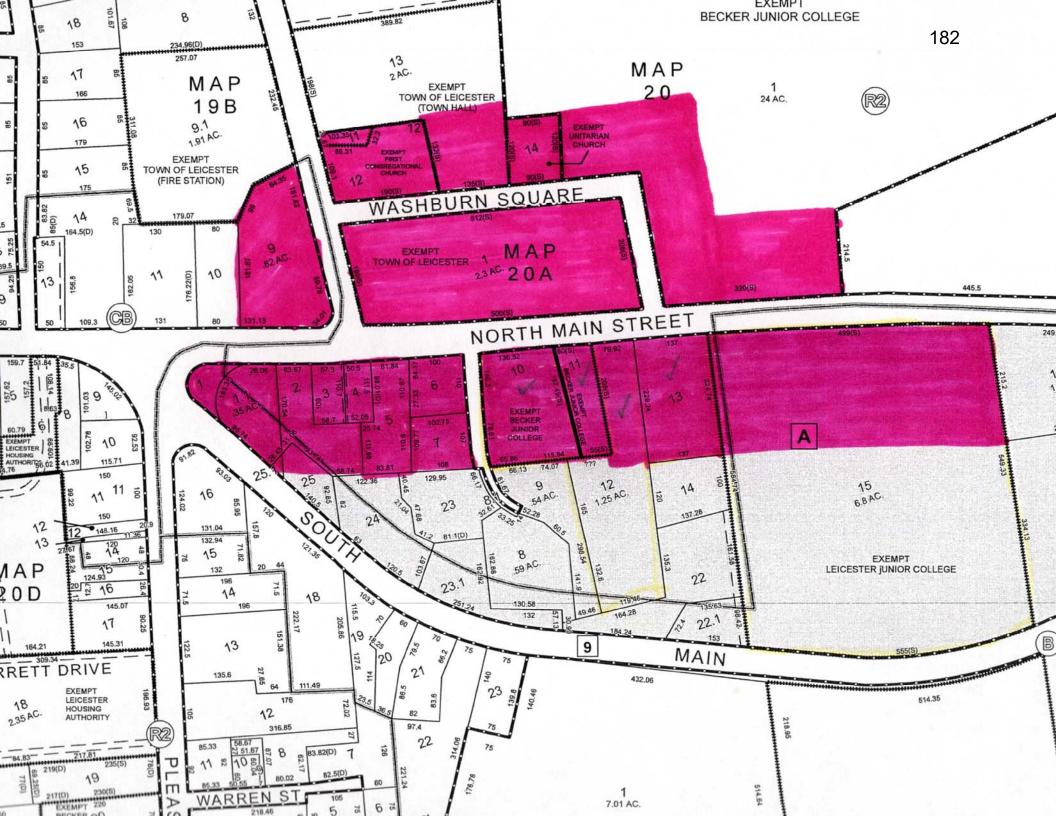
demolished building is completed or unless otherwise agreed to by the Commission. If a violation of this bylaw remains outstanding, no building or demolition permit on the premises shall be issued until the violation is corrected or unless otherwise agreed to by the Commission.

#### 11. APPEAL PROCEDURE

Any applicant or person aggrieved by a determination of an architectural conservation district commission may appeal as provided for in the Massachusetts General Laws.

#### 12. VALIDITY AND SEPARABILITY

The provisions of this Bylaw shall be deemed to be separable. If any of its provisions, sections, subsections, sentences or clauses shall be held to be invalid or unconstitutional by any court of competent jurisdiction, the remainder of this Bylaw shall continue to be in full force and effect.



#### **Buck, Michelle**

**From:** Christopher Fevry <chris@yourgreenpackage.com>

**Sent:** Tuesday, March 30, 2021 12:30 PM

**To:** Forsberg, Kristen; Genereux, David; Buck, Michelle

**Subject:** Letter to Planning & Select Board **Attachments:** Leicester Presentation April 2021 (2).pdf

Hello David, Michelle, and Kristen,

Below is the letter to share with the Planning and Select Board.

David Generoux Town Administrator Town of Leicester

Dear Mr. Genereux:

My name is Christopher Fevry. I'm the Co-Founder of Dris Dispensary. We are a social equity-approved company as defined by the Cannabis Control Commission and 90%+ minority-owned and operated.

Our team has deep roots in Massachusetts. I currently live in Quincy, MA and graduated from Bentley University with a degree in management w/a concentration Entrepreneurship, and a 2nd major of Global Perspectives. My business partner (who also happens to be my fiancé), Lourdharry Pauyo, grew up in Brockton and graduated from Umass Amherst with a degree in Building Construction Technologies. Our long-term goal is to settle down and establish a family business while supporting our local community.

Therefore, when we heard that Leicester was open to Cannabis, committed to working with small minority businesses, and increasing the retail cap, we identified Leicester as a city with which we wanted to partner.

We felt that Leicester would be a great place to open a dispensary, give back to the community, and provide products that would help people dealing with conditions like cancer, anxiety, and more. Also, due to the proximity to Worcester and being able to supplement the retail location with Delivery (due to our social equity status) presented an exceptional opportunity to create a great business while generating additional revenue for the town.

Last month, we invested in a property on 488 Stafford Street in Leicester only to discover shortly thereafter that Leicester was no longer considering increasing its number of retail locations.

Therefore, we are writing this letter to gracefully ask that the Select Board and Planning Board to reconsider this decision.

We've attached an overview of our plans and can provide more information if requested. Please do not hesitate to contact me if you have any questions about our plans. Thank you in advance for your time and consideration.

Sincerely,

**Christopher Fevry** 

--

Christopher Fevry Co-Founder of Your Green Package 401-261-2950



Your Favorite Dispensary.

# Planning Board Presentation April 5th - 6:30pm

### Meet The Team



#### <u>Christopher Fevry</u> - Co-Founder & CEO

- Massachusetts based
- Bentley University graduate with a double major in Management w/ a concentration Entrepreneurship and Global Perspectives.
- Previous President of the MA Cannabis Association for Delivery that led the charge in the successful creation of the new delivery license. Currently, VP of Operations at Plymouth Armor Group (largest licensed 3rd party cannabis transporter).
- Prior to entering the cannabis space, he worked at a tech startup helping grow that company from zero dollars in revenue to 2 million. Chris, brings deep understanding of cannabis regulations, team building, and operations experience to the team.



### Lourdharry Pauyo - Co-Founder & Chief of Staff

- Massachusetts based & Social Equity Applicant
- Graduated from UMASS Amherst with a degree in Building Construction Technology.
- Dharry has had many years of working in customer relations and understands the entire customer experience.
- Works as a Real Estate Agent at Keller Williams Realty (#1 Real Estate Firm in the Country).
- Dharry does an excellent job at building relationships, solving complex problems, and helping assess buildout requirements.

### **Mentors**



#### Caroline Frankel- CEO of Caroline's Cannabis - Mentor

- Caroline's Cannabis is the first woman-owned and operated marijuana retailer, and first general applicant to commence operations in MA.
- Graduate from Johnson & Wales University with a Bachelor's Degree in Business Management
- Commenced operations in 2019 for stores in Uxbridge, MA
- Massachusetts Resident & Social Equity participant

### **Advisors**



#### Dennis Kunian - Cannabis Consultant - Advisor

- United States Veteran & MA Resident
- Dennis was intimately involved in all aspects of launching 13 dispensary and cultivation facilities throughout the Midwest and Northeast
- Dennis led the Colombia care team that was responsible for the first dispensary license in Boston, and the opening of cultivation and dispensary facilities in Lowell and Greenfield Massachusett
- Dennis has served on the board of numerous state and national opiate addiction task forces and is active in Massachusetts state and federal politics, specifically as a consultant to Senator Ed Markey

## Company Highlights:

- 51% Cannabis Control Commission certified Social Equity owned
- 94.3% Minority Owned & Operated
- As a Social Equity owned company, we will receive priority review on all applications and
   3-year exclusive access to delivery licenses
  - Owners of Your Green Package, a provisionally licensed Marijuana Courier service located in Bellingham, MA
- Priority review of applications as a social equity owned company
- Currently represented by Vicente Sederberg (Top Cannabis Law Firm in the US)
- Team possesses deep experience in operations, security, and compliance.

# The Proposed Location

### Proposed Marijuana Establishment at 488 Stafford Street, Leicester, MA 01611

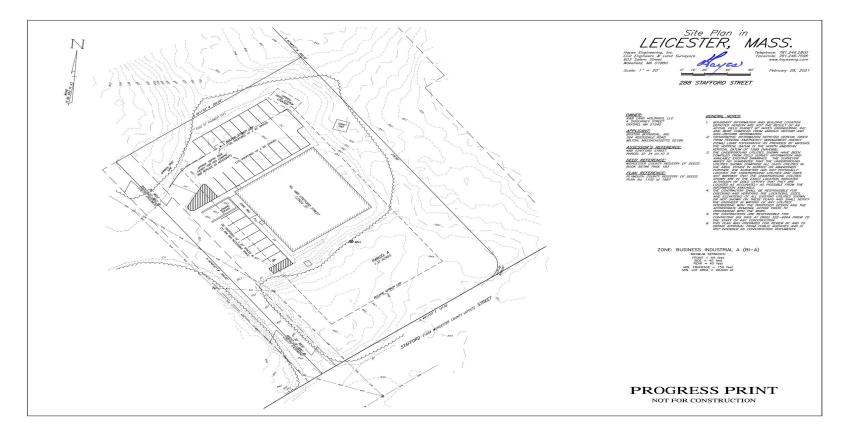
- Dris is proposing a Marijuana Retail location at 488 Stafford Street
  - Plans to invest in Cultivation in 2022
  - Dris will contract with Your Green Package to provide delivery services in Leicester & Worcester.
- A Marijuana Retailer is defined pursuant to 935 CMR 500.002 means an entity licensed to purchase and transport cannabis or marijuana product from Marijuana Establishments and to transfer or otherwise transfer this product to Marijuana Establishments and to sell to consumers. Unless licensed, retailers are prohibited from offering marijuana or marijuana products for the purposes of on-site consumption on the premises of a Marijuana Establishment

Zoning 191

- Zoned: Industrial
- 500+ feet from any schools, playgrounds, daycare, parks, and any place where children congregate
- Adheres to all MA zoning stipulations for a Marijuana Recreational dispensary

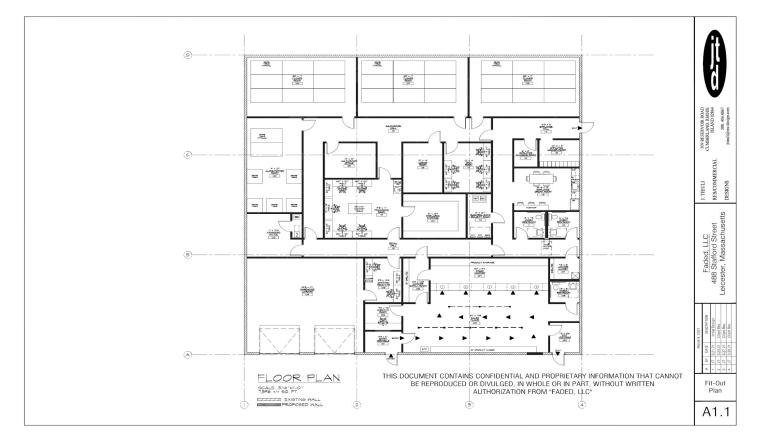


Site Plan



Highlight: Increased the amount of parking spaces onsite from 6 to 24

Floor Plan



Highlight: 5 POS Stations to allow customers to go in and out within minutes

# Security

# Security

Security measures will be fully compliant with 935 CMR 500.110 and provide safety measures to deter and prevent: unauthorized entrance into areas containing marijuana and the theft of marijuana while protecting the premises, employees, consumers, and the general public.

- Perimeter Alarms
- Proper Lighting
- Motion Detection
- 24/7 Recording Video Surveillance
- 24/7 Monitoring Station
- Panic Alarms connected to local safety and law enforcement
- Limited Access utilizing Only-Control Door System
- Professional Security Personnel will be present during hours of operations

# **Preventing Diversion To Minors**

- Upon entry into store, an individual's ID will immediately be inspected to verify individual is 21 and over.
- 24/7 video surveillance cameras will be positioned to immediately capture a clear still photo of any person entering or exiting with date and time stamp embedded.
- Professional uniformed security personnel
- Fully Integrated alarm system
- Marijuana and marijuana products will be sold in child-resistant packaging that will be plain and opaque.
- Product labeling will include required statement: KEEP THIS PRODUCT AWAY FROM CHILDREN, and symbols indicating: NOT SAFE FOR KIDS and CONTAINS THC.
- Comprehensive daily, monthly, and yearly inventory tracking will be conducted and recorded to prevent any product diversion.
- All employees will be rigorously trained on compliance regulations and prevention system protocols.
- Providing consumer education material about the penalties of diversion to minors.



# The Dispensary Would Be Low-Key and Safe

- All exterior lighting will be code conforming
- No exterior neon signage
- No on-site consumption
- Loitering is strictly prohibited
- Air filtration system will be used to eliminate any possible odor

# Conclusion

### Summary

- Opportunity to partner with a Minority owned and Operated Cannabis retailer.
- Cannabis Control Commission Social Equity Certified.
- Rare opportunity to also offer home delivery services in the Worcester county area.
- Team is very invested in Leicester and wants to partner and invest in the local community.
- Opportunity to greatly increase tax revenue.
- Team possesses deep experience in operations, security, compliance.

