Supporting Materials

Applications for a Special Permit and for Site Plan Review

Town of Salisbury Planning Board

Submitted by:

191 Lafayette Road LLC

in conjunction with

CAMPFIRE CANNABIS

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Attachment i

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By Hand

November 1, 2021

John "Marty" Doggett, Chairman
Salisbury Planning Board
5 Beach Road
Salisbury, Massachusetts 01952

Re: Applications for a Special Permit and for Site Plan Review
Recreational Marijuana Retail Facility
Brewery
191 Lafayette Road

Requests for Special Permit and for Site Plan Review Amendments
Recreational Marijuana Cultivation and Product Manufacturing Facility
187 Lafayette Road

Dear Chairman Doggett and Members of the Board:

Reference is made to the above-captioned matter. In that connection, I represent 191 Lafayette Road LLC (the "Applicant") relative to its proposal to develop both an approximately 4,588-square-foot marijuana retail facility and an approximately 6,166-square-foot brewery (together, the "Project") at property known as and numbered 191 Lafayette Road in Salisbury (the "Locus"). The Locus is approximately 64,715 square feet, or 1.49 acres, in size, and is situated in the Lafayette-Main Commercial District Subdistrict B (LM-B) as well as the Recreational Marijuana Overlay District (RMOD). Under Article XXIIIA, Section 300-156.5.A, of the Town's Zoning Bylaw (the "Zoning Bylaw"), recreational marijuana establishments within the Overlay District require both a special permit and site plan review. Likewise, under Article III, Section 300-12, of the Zoning Bylaw, a.k.a. the "Table of Use Regulations," in conjunction with Article XVIII of the Zoning Bylaw, breweries in excess of 5,000 square feet of gross floor area require both a special permit and site plan review. Accordingly, I now submit, on the Applicant's behalf, applications for these permits and reviews.

Development of the Locus will also require an adjustment of the boundary dividing the Locus from the adjacent 187 Lafayette Road. The 187 Lafayette Road property is the site of a recreational marijuana cultivation and product manufacturing facility now under construction, as was permitted by the Board in mid-2020. I also represent the permittee thereof, Salisbury Cultivation and Product Manufacturing LLC, d/b/a Root and Bloom. To effectuate the aforesaid boundary adjustment as well as to incorporate associated changes to the adjacent layout and configuration of parking spaces on the 187 Lafayette Road property, I also submit, on Root and Bloom's behalf, applications to amend the special permit and site plan approvals issued by the Board on or about August 26, 2020. The sole objective of these applications is to address the boundary adjustment and associated changes as

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aforesaid, not to otherwise modify the 187 Lafayette Road project itself.

Included for submittal to the Board herewith are the following items as required by the instructions accompanying the above applications (the "Applications"):

- **Special permit** application form for both a marijuana retail facility and a brewery at the Locus:

  - with the applicable filing fee;
  - with site plans, floor plans and elevations, identified as **Attachments 1 through 4**, below;
  - with a certified list of abutters from the Assessor's office, for the Locus;
  - with a tax and betterment payment certification from the Treasurer's office; and
  - with a completed Special Permit Submittal Checklist.

- **Site plan review** application form for the Locus:

  - with the applicable filing fee;
  - with the same site plans, floor plans and elevations referenced above, see **Attachments 1 through 4**;
  - with a certified list of abutters from the Assessor's office, for the Locus;
  - with a tax and betterment payment certification from the Treasurer's office;
  - with a completed Site Plan Review Submittal Checklist.

- Application form for a **special permit amendment** for the 187 Lafayette Road recreational marijuana cultivation and product manufacturing facility:

  - with the applicable filing fee;
  - referencing the aforesaid site plans submitted herewith as **Attachment 1**, specifically Sheet C-8 thereof;
  - with a certified list of abutters from the Assessor's office, for the 187 Lafayette Road property;
  - with a tax and betterment payment certification from the Treasurer's office; and
  - with a completed Special Permit Submittal Checklist, as applicable.

- Application form for a **site plan approval amendment** for the 187 Lafayette Road property:

  - with the applicable filing fee;
  - with the same site plans referenced above, see **Attachment 1**,

specifically Sheet C-8 thereof;

- with a certified list of abutters from the Assessor's office, for the 187 Lafayette Road property;
- with a tax and betterment payment certification from the Treasurer's office;
- with a completed Site Plan Review Submittal Checklist.

To supplement the aforementioned filings, I also provide the following narrative and the supporting plans and other documentation included herewith as **Attachments 1 through 12**. If not expressly required by the Applications, these Attachments supplement the above submittals by addressing the criteria for and conditions of issuance of zoning approvals for a marijuana establishment and a brewery.

Application for a Special Permit
Marijuana Retail Facility
Brewery
191 Lafayette Road

Section 300-156.5.A of the Zoning Bylaw expressly provides that "[r]ecreational marijuana establishments," including "marijuana retailer[s]," "may be permitted in the RMOD pursuant to a special permit…" Breweries are a use allowed by special permit in the LM-B District, pursuant to Section 300-12 of the Zoning Bylaw. For the issuance of special permit(s), both marijuana retailers and breweries must satisfy the seven (7) enumerated criteria in Section 300-35.A. Additionally, marijuana retailers (and other marijuana establishments) must comply with the location and dimensional controls, and well as other procedural and substantive requirements, found in Article XIIIA, particularly Sections 300-156.5 and 300-156.6. All of these are addressed below.

Section 300-35.A
Special permit general conditions

1. The use requested is listed in the Table of Use Regulations as a special permit in the district for which application is made…

Marijuana establishments, expressly defined by Section 300-5 of the Zoning Bylaw to include "marijuana retailer[s]," are not expressly referenced in the Bylaw's Table of Use Regulations; provided, however, that they are elsewhere in the Bylaw, see Article XXIIIA, allowed by special permit in the RMOD, as quoted above.

Breweries are included among the uses referenced in the aforesaid Table of Use Regulations. They are allowed in the LM-B District by special permit.

2. The requested use is essential and/or desirable to the public convenience or welfare.

While not an essential service in the usual sense, a marijuana retailer is a desirable use in the RMOD: a determination made not only by Town officials and staff, but also

by two-thirds of Town Meeting voters, in amending the Zoning Bylaw to add Article XXIIIA, the "Recreational Marijuana Overlay District," at the 2018 Annual Town Meeting. By its express language, the RMOD exists "[t]o provide for the placement of adult use marijuana establishments" therein, "in locations suitable for such uses…"

For essentially the same reason, a brewery has been deemed a desirable use of the Locus by virtue of the Bylaw's allowance thereof in the LM-B District.

For the reasons further addressed herein, the Applicant believes that the Locus is an ideal site for both uses. The Locus is situated along Route 1, a major throughfare with a mix of uses, many nonresidential. Immediately adjacent to the Locus at 187 Lafayette Road is the marijuana cultivation and product manufacturing facility previously permitted by the Board, soon-to-be operational.

3. <u>The requested use will not create undue traffic congestion or unduly impair pedestrian safety.</u>

The Locus is situated along Lafayette Road, a.k.a. Route 1, which has adequate capacity to absorb any additional traffic generated by the proposed development and the marijuana retailer and brewery operations comprising the same. The site has been carefully designed to provide for ease of circulation throughout; and with connectivity to the adjacent 187 Lafayette Road property.

The Applicant engaged Vanasse & Associates, Inc., to conduct a comprehensive Traffic Impact Analysis (TIA) to determine the scope and extent of the Project's traffic impacts by evaluating existing and future – i.e. both no-build and build – conditions at and in the vicinity of the Locus. A copy of the TIA is submitted herewith as **Attachment 5**. The TIA's existing conditions analysis evaluates roadway conditions, nearby intersections, traffic volumes, vehicle speed, sight distances and motor vehicle crash data. Its analysis of future conditions includes consideration of background traffic growth, planned development(s) in close proximity to the Locus, roadway improvement projects and, of course, project-generated traffic. The report provides an anticipated trip generation summary (both by use and combined); an estimation of peak-hour traffic volume increases external to the study area, i.e. along Route 1, along Route 286 and on Toll Road west of Route 1; and an analysis of traffic operations including levels of service by facility (signalized intersections, unsignalized intersections and rotaries) and vehicle queuing. The TIA also incorporates a review of parking demand and adequacy, both for the marijuana retailer, i.e. referred to therein as the "dispensary," and for the brewery.

The TIA concludes that, with implementation of certain recommendations made therein (and with which the Applicant concurs and to which it commits), "safe and efficient access can be provided to the Project site and the Project can be accommodated within the confines of the existing transportation infrastructure with minimal impacts." More specifically, the TIA finds: that "Project-related traffic volume increases… relative to the 2028 No-Build conditions are anticipated to range from 0.8 to 9.3 percent" and only "during the peak periods"; that "[a]ll movements

at the Project and the [f]acility site driveway intersections with Route 1 are predicted to operate at a LOS [level of service] D or better during the peak hours" with vehicle queuing of "up to 1 vehicle," no more; that "[l]ines of sight at the Project site driveway intersections with Route 1 were found to exceed the recommended minimum sight distances"; and that "[t]he parking supply that is provided for the Project and the [adjacent marijuana cultivation and product manufacturing f]acility (132 spaces) is sufficient to support the peak parking demand."

Prior to any construction activity on the Locus, the Applicant anticipates meeting with the Chief of Police, among others, to address in advance route(s) for construction traffic, avoiding off-site impacts, etc.

4. The requested use will not overload any public water, drainage, or sewer system or any other municipal system…

Adequate utilities, e.g. water and sewer, are available at the Locus. Water quality, quantity and pressure were all reviewed by the Board in connection with its permitting of the 187 Lafayette Road property. (Submitted to the Board in 2020 was a 2019 Water Quality Report for the Salisbury Water Supply; as well as the results of a January 30, 2020 hydrant flow test in the vicinity of the Locus, demonstrating the adequacy of water quantity and pressure for fire protection.)

The drainage system proposed for the Locus will be designed in accordance with applicable provisions of the Massachusetts Stormwater Handbook. It is shown on Sheet C-4 of the site plans, a.k.a. the Grading Plan, see **Attachment 1**; with further details shown on Sheet C-6 of said site plans, a.k.a. the Drainage Details, see **Attachment 1**. A complete Stormwater Management Report, as prepared by Millennium Engineering, Inc., is forthcoming for review by the Board's consultant.

5. Any special regulations for the use… are fulfilled.

A variety of special regulations apply to marijuana establishments within the RMOD, per Sections 300-156.5 and 300-156.6 of the Zoning Bylaw. Except where these regulations require no response, e.g. because they state a condition of approval like non-transferability (Section 300-156.6.B.6) or lapse (Section 300-156.6.B.7), each of them is addressed in detail below.

No special regulations apply to use of the Locus for a brewery.

6. The requested use will not impair the integrity or character of the district or adjoining districts, nor be detrimental to the health or welfare of the neighborhood.

Per the Zoning Bylaw, the purposes of the Lafayette-Main Commercial District, of which the Locus is a part, "are to encourage diverse, high-quality and attractive commercial developments and mixed use developments on Lafayette Road, Main Street and Toll Road, substantially consistent with the Salisbury Master Plan; to meet the goods and services needs of residents and visitors; and to create attractive,

organized activity centers on Lafayette Road and Main Street." See Zoning Bylaw, § 300-157. The referenced Master Plan acknowledges the Town's "potential to encourage and direct economic development in several key 'Opportunity Areas,' including… Route 1…" and, further, encourages the pursuit of "opportunities for revitalization" of existing commercial areas "to promote the desired development."

The foregoing is paired with language in Article XXIIIA of the Zoning Bylaw, entitled the "Recreational Marijuana Overlay District," stating that the RMOD exists "[t]o provide for the placement of adult use marijuana establishments… in locations suitable for such uses…"

The Project's uses, including a marijuana retailer and a brewery, are thus appropriately located on the site, particularly at it has been designed. Zoning requirements are more than satisfied: the Locus' area is nearly three (3) times the applicable minimum; it has twice the required frontage; and side- and rear-yard setbacks will far exceed applicable requirements. Building height is far less than the maximum, as well. As is shown on the site lighting layout plan, see **Attachment 2**, neither glare nor light trespass, generally, will occur. As is shown on the landscape plan, with accompanying landscape palette, see **Attachment 3**, the Locus will be landscaped for aesthetics but also to provide adequate screening and buffering from its surroundings. The proposal is consistent with – and, with its thoughtful design, will add to the integrity of – the character of other development along Route 1, including the project at 187 Lafayette Road. It will not be harmful to the health or welfare of the neighborhood.

7. The requested use will not… cause an excess of th[e] particular use that could be detrimental to the character of said neighborhood.

No other marijuana retailers are located in the immediate vicinity of the Locus. Development of the Project will not cause an excess of such use to exist in the neighborhood. The same can be said of the brewery proposed for the site.

Section 300-156.5
Recreational marijuana establishments
Location and dimensional controls (as applicable)

B. Recreational marijuana establishments may not be located within 500 feet of the following preexisting uses: (a) [s]chool…; (b) [v]ideo arcade facility; (c) [s]tate-licensed child care facility; (d) [l]ibrary, playground, public park, public beach, youth center; and/or (e) [s]imilar facility in which minors commonly congregate.

The Applicant is unaware of any pre-existing school, video arcade facility, state-licensed child care facility, library, playground, public park, public beach or youth center, or any similar facility in which minors commonly congregate, within 500 feet of the Locus. Major adjacent or nearby uses include Root and Bloom's recreational marijuana cultivation and product manufacturing facility; properties owned by G.

Mello Disposal Corporation, Antonio's Pizzeria Restaurant and Bar and Essex County Motor Cars; and a select number of residential homes.

Submitted collectively as **Attachment 6**, Millennium Engineering, Inc., has prepared multiple graphics showing a 500-foot radius from the Locus, and the nearby properties within it. Per Section 300-156.5.B.2 of the Zoning Bylaw, said distance has been measured "in a straight line from… the property line[s] of the proposed recreational marijuana establishment."

> E. Recreational marijuana establishments shall be located only in a permanent building and not within any mobile facility. All sales shall be conducted either within the building or by home delivery…

The Applicant's proposed marijuana retail facility will be located in a permanent building as depicted on the site plan, namely Sheet C-2 thereof. See **Attachment 1**. No mobile facility is proposed. All sales will be conducted either within the building or by home delivery pursuant to applicable state regulations, as required.

> F. [R]ecreational marijuana establishments shall conform to the dimensional requirements applicable to non-residential uses within the underlying zoning district.

Included with the site plan, i.e. on Sheet C-2, is a zoning matrix identifying the dimensional requirements applicable in the LM-B zoning district; existing conditions relative thereto; and the dimensions of the proposed Project. See **Attachment 1**.

ZONING TABLE			
	Required	Existing	Proposed
Lot Area:	0.5 ac.	1.49 ac.	1.61 ac.
Lot Frontage:	100 ft.	200.00 ft.	227.84 ft.
Front Setback:	20 ft. to 40 ft.	78.1 ft.	30.0 ft.
Side Setback:	15 ft.	0 ft.	40.2 ft.
Rear Setback:	20 ft.	66.8 ft.	69.2 ft.
Lot Coverage:	–	–	–
Open Space:	20%	73.8%	26.6%
Building Height:	45 ft.	< 45 ft.	31 ft.

As shown above, the Project will satisfy the applicable dimensional standards of the Zoning Bylaw.

> G. All recreational marijuana establishments shall conform to the signage requirements of Chapter 214 of the General Bylaw…

Signage for the Locus has yet to be determined. Per the notation on the site plan, namely Sheet C-2, see **Attachment 1**, the proposed business sign, a.k.a. the "Prop. Business Sign," at the entrance to/exit from the Locus "shall meet all applicable

Town zoning standards." Signage will also satisfy all requirements of Chapter 214 of the Town's General Bylaw.

With regard to the marijuana retailer component of the Project, it must also comply with the content-based regulations of the Cannabis Control Commission, at 935 CMR 500.00, *et seq.* These regulations prohibit, for example, the use of medical symbols or images of marijuana or related paraphernalia that are appealing to persons younger than 21 years old, or colloquial references to cannabis, as a part of any business name, logo and, consequently, signage.

Section 300-156.6.A.1
Recreational marijuana establishments
Special permit application requirements

(a) A detailed floor plan of the premises of the proposed recreational marijuana establishment that identifies the square footage available and describes the functional areas of the facility…

Submitted as **Attachment 4**, specifically Sheet A1.0, are floor plans for the proposed marijuana establishment, identified thereon as "Building A," prepared by Anderson Porter Design, including areas designated for sales, order fulfillment, shipping and receiving, storage (including the vault), etc. Also shown are offices, a conference room, a break room, bathrooms and a mechanical room. For security reasons, further particulars concerning the interior layout and design of the facility are omitted from these plans. (The aforesaid floor plans also show the interior layout of the brewery, a.k.a. "Building B.")

(b) Detailed site plans…

The site plans provided as **Attachment 1** include nine (9) Sheets in total, identified as follows:

Sheet C-1	Existing Conditions
Sheet C-2	Site Plan
Sheet C-3	Utility Plan
Sheet C-4	Grading Plan
Sheet C-5	Site Details
Sheet C-6	Drainage Details
Sheet C-7	Erosion Control Details
Sheet C-8	Proposed Lot Line Adjustment
Sheet F-1	Truck Template Plan

Additionally, **Attachments 2 and 3** add the following two (2) Sheets:

Sheet E-1	Site Lighting Layout
Sheet L-0	Landscape Plan

These above plans show that the requirements of Section 200-156.6.A.1.b.1 through Section 200-156.6.A.1.b.7 of the Zoning Bylaw are satisfied, to wit: (1) compliance with the requirements the Bylaw's dimensional requirements and requirements for parking and loading spaces and signage; (2) vehicular and pedestrian movement on-site that is safe and secure for clients and employees alike; (3) safe vehicular and pedestrian movement off-site, to the extent applicable; (4) adequate arrangement and number of parking and loading spaces; (5) site design that provides convenient, secure and safe access and egress for clients and employees; (6) appropriate design and appearance of the proposed building, screening and landscaping; and (7) adequate water supply, surface and subsurface drainage and light. With regard to building design and appearance, reference is made to the elevations prepared by Anderson Porter Design and submitted as part of **Attachment** 4.

(c) A description of the security measures, including employee security policies.

It is anticipated that the marijuana retail facility will be operated by Ganesh Wellness, Inc., d/b/a Campfire Cannabis. Accordingly, submitted together herewith is Campfire Cannabis' comprehensive "Security SOP [Standard Operating Procedure]" and accompanying "Security System Plan," as **Attachments 7 and** 8. The extensive SOP and Plan were drafted in compliance with applicable Massachusetts law, i.e. 935 CMR 500.000, *et seq.*, and address chain-of-command, opening and closing procedures and business hours procedure. With respect to the last of these, the SOP provides protocols for identification management, customer entrance, visitor management, access to restricted areas, staff communication, incident reporting, product transfer, theft, robbery, circumstances of duress and regulatory notifications. The Plan adds to the foregoing "physical security elements, electronic security systems, manned security and policies, procedures and plans to provide a comprehensive integrated secure environment that will deter and prevent unauthorized entrance into areas containing marijuana and theft of marijuana at the [m]arijuana [e]stablishment."

(d) A copy of the emergency procedures.

Also submitted together herewith as **Attachment 9** is Campfire Cannabis' "Emergency SOP [Standard Operating Procedure]." The SOP "is designed to comply with the Occupational Safety and Health Administration's (OSHA) Emergency Action Plan Standard, 29 CFR 1910.38, by preparing staff to identify, and properly and reasonably react, to emergency situations… [and] to minimize exposure to injurious situations, injury or loss of human life and company assets." It addresses emergencies including, but not limited to, fires, explosions, floods, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances and workplace violence. The SOP includes components for assigning responsibilities, plan implementation, employee training and routine plan evaluation. Affixed to the SOP as Appendix A is an "Emergency Action Plan Checklist" courtesy of OSHA.

(e) A copy of proposed waste disposal procedures.

Included herewith as **Attachment 10** is Campfire Cannabis' "Waste Disposal SOP." It is the objective of the SOP "[t]o provide clear and concise instructions for Campfire Cannabis employees who will be involved with… waste and waste disposal… in compliance with the current [m]arijuana regulations set forth by the [Commonwealth] of Massachusetts." The SOP addresses general waste disposal requirements, specifications for and placement of waste containers, the process for marijuana waste disposal and disposal of non-marijuana waste.

(f) A copy of all licensing materials issued by the Cannabis Control Commission, and any materials submitted to the… [CCC] by the applicant…

Licensure information for Ganesh Wellness, Inc., d/b/a Campfire Cannabis, i.e. from the Cannabis Control Commission, is provided herewith as **Attachment 11**. These materials include a "Provisional License Executive Summary" as well as notice that the Cannabis Control Commission approved renewal of Campfire Cannabis' license on or about August 13, 2021.

Section 300-156.6.B
Recreational marijuana establishments
Special permit conditions (as applicable)

(1) The use shall not generate outside odors from the cultivation or processing of marijuana and marijuana products.

No marijuana will be cultivated or processed at the marijuana retail facility proposed for the Locus (nor can it be under the Cannabis Control Commission license referenced above).

(2) A security plan shall be required for all recreational marijuana establishments, which shall be subject to approval by the Salisbury Fire and Police Chiefs…

As noted above, Campfire Cannabis has developed a "Security SOP [Standard Operating Procedure]," accompanying "Security System Plan" and an "Emergency SOP [Standard Operating Procedure]," see **Attachments 7 through 9**, all applicable to its operations at the Locus. These plans address routine security at the facility as well as security protocols in the event of an emergency (including preparations therefor). Copies of these materials – together with all other Application materials in their entirety – will be presented to the Salisbury Fire and Police Chiefs for approval, as part of the permitting process now underway.

(3) The permit holder shall provide to the Zoning Enforcement Officer and Chief of the Police Department the name, telephone number and electronic mail address of a contact person in the

event that such person needs to be contacted after regular business hours to address an urgent issue…

Should an urgent issue arise before or after normal business hours, or on a weekend or holiday, Campfire Cannabis' principals will be available to both the Town's Zoning Enforcement Officer and its Chief of Police. Their contact information will be provided to Mr. Vandewalle and to Chief Fowler, separately.

(5) Recreational marijuana establishments may not operate, and the special permit will not be valid, until the applicant has entered into a host community agreement with the Town…

Pursuant to G.L. c. 94G, § 3(d), Ganesh Wellness, Inc., has entered into a Host Community Agreement (HCA) with the Town of Salisbury, dated May 12, 2019. Said HCA was subsequently amended by the parties, in writing, on or about June 14, 2021. Copies of both the HCA and the amendment thereto are included herewith, collectively, as **Attachment 12**.

Application for Site Plan Review
Marijuana Retail Facility
Brewery
191 Lafayette Road

Also required by Section 300-156.5.A of the Zoning Bylaw is site plan review of any recreational marijuana establishment, i.e. in conjunction with the Board's action on an accompanying special permit application. Soo too must a brewery in excess of 5,000 square feet of gross floor area, see Zoning Bylaw, § 300-111.B.1.a.1, seek and obtain site plan review in connection with the special permit required therefor. Site plan review is either "major" or "minor," depending on the nature and extent of the proposal submitted to the Board. It is undisputed that the Project requires major, not minor, site plan review.

The Applicant accordingly submits its plans, see **Attachments 1 through 4**, for review by the Board at a duly-noticed public hearing consistent with Article XVIII of the Zoning Bylaw; and hereby incorporates into its Application for Site Plan Review the information and Attachments referenced and explained above, to the extent they are applicable.

Requests for Special Permit and Site Plan Review Amendments
Recreational Marijuana Cultivation and Product Manufacturing Facility
187 Lafayette Road

To facilitate development of the Locus but also to provide needed connectivity with the adjacent 187 Lafayette Road property, the boundary between these two (2) properties has been modified as part of the proposal above. The boundary adjustment is shown on Sheet C-8 of the site plans, a.k.a. the Proposed Lot Line Adjustment plan, see **Attachment 1**. Relocation of the boundary is of no impact on or to the zoning compliance of either the Locus or the 187 Lafayette Road property;

nor does it in any way implicate the marijuana cultivation and product manufacturing operations soon-to-be underway by Root and Bloom. But because it modifies the underlying plan approved by the Board in its August 26, 2020 special permit and site plan approvals, they must be amended accordingly.

It is unnecessary for Root and Bloom to address, again, the special permit and site plan criteria applicable to its project at 187 Lafayette Road. These standards were deemed satisfied more than a year ago, and the minimal site alteration now proposed, i.e. a shifting of the boundary with the Locus and associated parking space alterations, should not alter the Board's analysis.

Thank you for your consideration. Should the Board have questions or concerns relative to the Applications or the Project, generally, I will be happy to address them at the public hearing. If you wish to contact me for information in advance thereof, I am available by telephone, at 978.463.7700, Ext. 102, or via e-mail, at adam@mtclawyers.com.

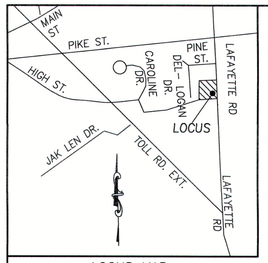
Respectfully submitted,

191 Lafayette Road LLC,
by its attorney,

Adam J. Costa

AJC/fhs
Attachments 1-12
cc: Project team (electronically, w/ Attachments)
Client (electronically, w/ Attachments)

Attachment 1

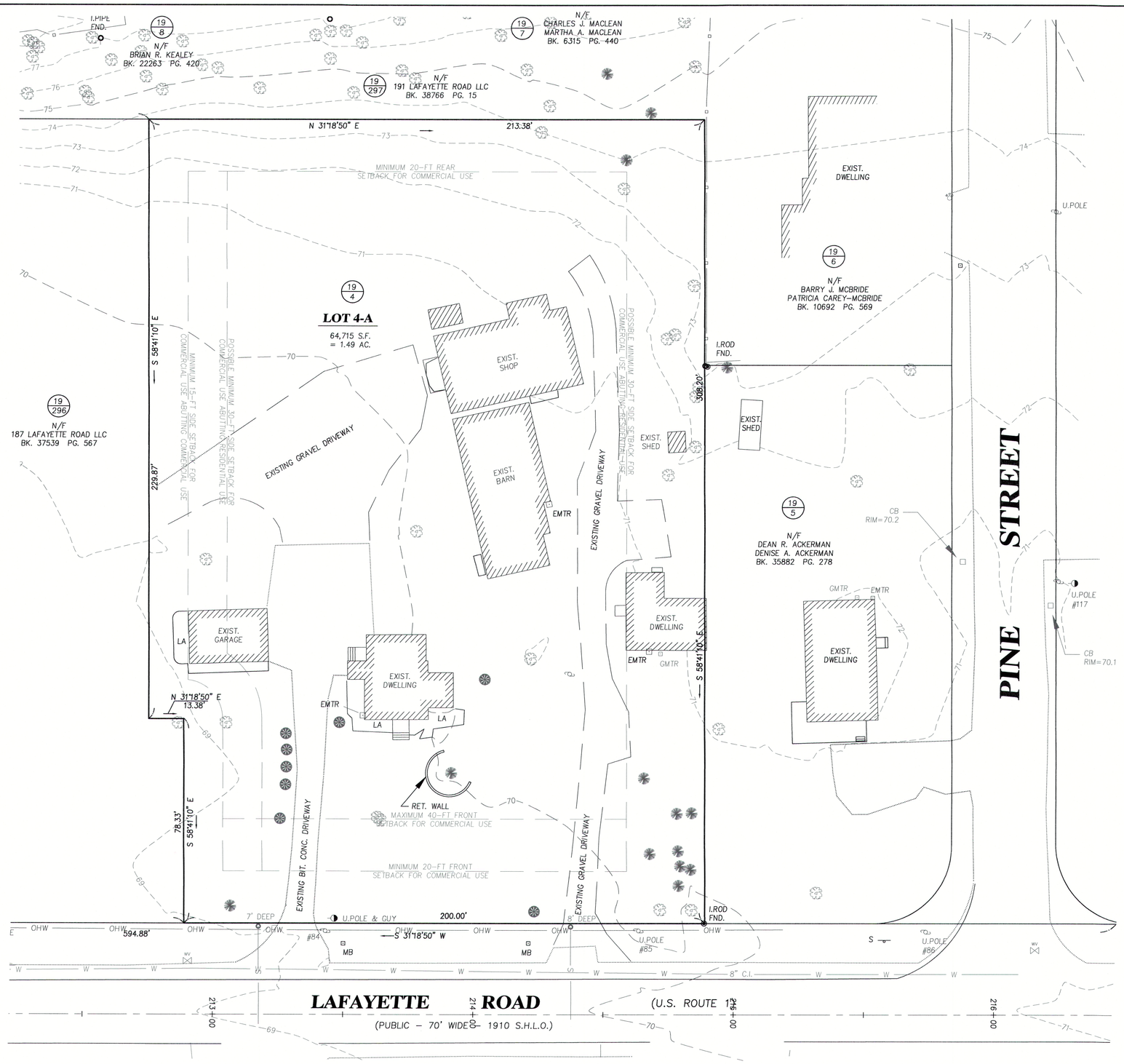


LOCUS MAP
N.T.S.

ZONING TABLE

191 LAFAYETTE ROAD – ASSESSORS MAP 19 LOT 4
ZONING DISTRICT LAFAYETTE–MAIN COMMERCIAL–B

	REQUIRED	EXISTING
LOT AREA:	½ AC.	1.49 AC.
LOT FRONTAGE:	100 FT.	200.00 FT
FRONT SETBACK:	20 FT TO 40 FT	78.1 FT
SIDE SETBACK:	15 FT.	0 FT
REAR SETBACK:	20 FT.	66.8 FT
LOT COVERAGE:	**	**
OPEN SPACE:	20% MIN.	73.8%
BLDG HEIGHT:	45 FT.	< 45 FT



BASIS OF BEARINGS
1910 STATE HIGHWAY LAYOUT

OWNER OF RECORD
191 LAFAYETTE ROAD LLC
BK. 38760 PG. 335

PLAN REFERENCES
1910 STATE HIGHWAY LAYOUT
PLAN BK. 459 PLAN 78

LEGEND

M.H.B.	MASSACHUSETTS HIGHWAY BOUND
D.H.	DRILL HOLE
PK	MASONRY NAIL
I.P.	IRON PIPE
I. ROD	IRON ROD
FND.	FOUND
N/F	NOW OR FORMERLY
MB	MAIL BOX
GMTR	GAS METER
EMTR	ELECTRIC METER
UPOLE	UTILITY POLE
	GUY
D	DRAINAGE
W	WATER
G	GAS
OHW	OVERHEAD WIRE
CMP	CORREGATED METAL PIPE
CI	CAST IRON
INV.	INVERT
B	BOLLARD
70	EXISTING CONTOUR ELEVATION
	CONIFEROUS TREE
	DECIDUOUS TREE
CB	CATCH BASIN
DMH	DRAIN MANHOLE
	HYDRANT
WV	WATER VALVE
LA	LANDSCAPED AREA
0	ASSESSORS MAP#
00	PARCEL#

NOTES:

THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

RECORD UTILITY INFORMATION HAS BEEN OBTAINED FOR LOCUS. VISIBLE SURFACE STRUCTURES HAVE BEEN LOCATED AND ARE SHOWN HEREON. SUBSURFACE UTILITY LINES ARE SHOWN FROM RECORD INFORMATION.

THE CERTIFICATIONS SHOWN HEREON ARE NOT INTENDED AS CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN OF SALISBURY ASSESSORS RECORDS.

I CERTIFY:
THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN OCTOBER 21, 2019 AND JUNE 29, 2020, AND THAT THE STRUCTURES AND PHYSICAL FEATURES ARE LOCATED AS SHOWN TO THE BEST OF MY ABILITY AND BELIEF.

COMMONWEALTH OF MASSACHUSETTS JEFFREY S. HOFMANN 36381 PROFESSIONAL LAND SURVEYOR

PROFESSIONAL LAND SURVEYOR — DATE 10/20/21

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20'

PREPARED FOR
191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

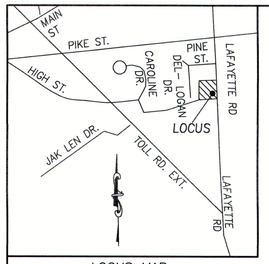
SCALE: 1"=30' | CALC. BY: P.D.B.
DATE: OCT. 20, 2021 | CHKD. BY: J.S.H.
PROJECT: M193564

PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

EXISTING CONDITIONS

SHEET: C–1



LOCUS MAP
N.T.S.

ZONING TABLE

191 LAFAYETTE ROAD – ASSESSORS MAP 19 LOT 4
ZONING DISTRICT LAFAYETTE–MAIN COMMERCIAL–B

	REQUIRED	EXISTING	PROPOSED
LOT AREA:	½ AC.	1.49 AC.	1.61 AC.
LOT FRONTAGE:	100 FT.	200.00 FT	227.84 FT
FRONT SETBACK:	20 FT TO 40 FT	78.1 FT	30.0 FT
SIDE SETBACK:	15 FT.	0 FT	40.2 FT
REAR SETBACK:	20 FT.	66.8 FT	69.2 FT
LOT COVERAGE:	**	**	**
OPEN SPACE:	20% MIN.	73.8%	26.6%
BLDG HEIGHT:	45 FT.	< 45 FT	31 FT

ORIGINAL PARKING SPACES FOR 187 LAFAYETTE ROAD
60

PROPOSED PARKING SPACES FOR 187 LAFAYETTE ROAD
50

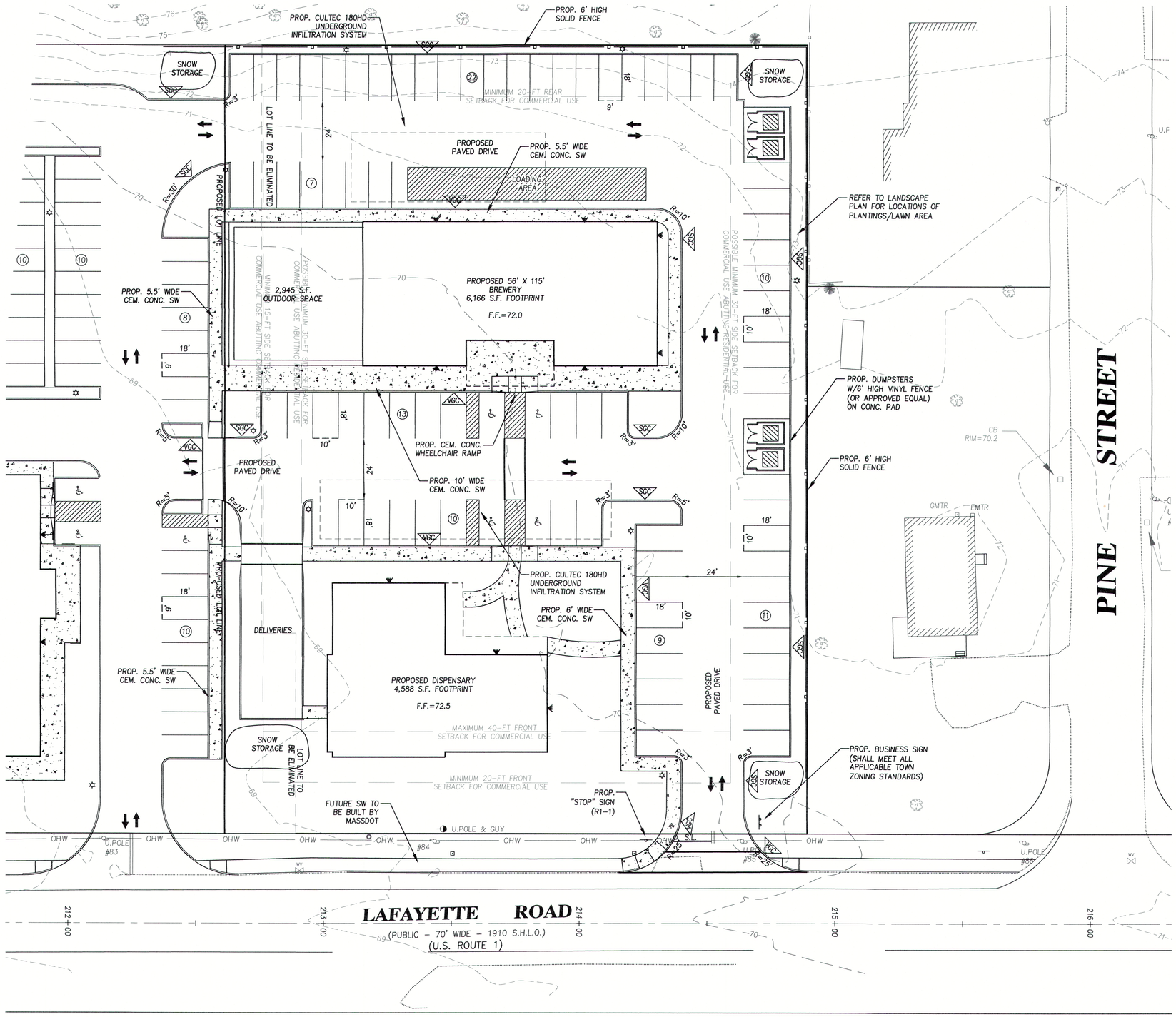
PROPOSED PARKING SPACES FOR 191 LAFAYETTE ROAD
82

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO; THE SALISBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND AND THESE PLANS.
2. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS TO THE WORK SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND REGULATING MUNICIPAL AND/OR STATE AGENCIES.
3. THE LOCATION OF ALL UTILITIES, AS SHOWN ON THESE PLANS, ARE BASED UPON PLANS AND RECORD INFORMATION PROVIDED BY MUNICIPAL AND PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. NO WARRANTY IS MADE TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL NOT RELY ON THESE PLANS FOR SUCH INFORMATION AND SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY COMPANIES AND INDIVIDUALS, AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
4. THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE NEW WORK. HE/SHE SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.
5. ALL EXISTING STRUCTURES AND SURFACES, UNLESS OTHERWISE SHOWN, SHALL BE COMPLETELY REMOVED FROM THE AREAS OF WORK. ALL TREES SCHEDULED FOR REMOVAL SHALL BE FIELD MARKED AND APPROVED FOR REMOVAL BY THE CONSERVATION COMMISSION PRIOR TO CUTTING OPERATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PUBLIC, EMPLOYEES, AND ALL OTHER PERSONS ASSOCIATED WITH THE PROJECT. HE/SHE SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
7. ALL SIGNS AND PAVEMENT MARKINGS TO BE INSTALLED WITHIN THE PROJECT SITE SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
8. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING "DIG–SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. DIG–SAFE TELEPHONE NUMBER: 1–888–344–7233.
9. 14 DAYS PRIOR TO COMMENCING CONSTRUCTION, THE OWNER/DEVELOPER SHALL PRESENT A CONSTRUCTION SCHEDULE TO THE PLANNING DEPARTMENT.
10. THE OWNER/DEVELOPER SHALL SUBMIT TWO HARD COPIES OF AS–BUILT DRAWINGS TO THE PLANNING DEPARTMENT UPON COMPLETION OF THE PROJECT. AS–BUILTS SHALL INCLUDE ALL LANDBASE AND UTILITIES INFORMATION.
11. ONSITE BURIAL OF STUMPS OR ANY OTHER DEBRIS IS PROHIBITED.
12. THE PROPERTY DOES NOT LIE WITHIN THE 100–YEAR FLOOD PLAIN ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 25009C0126F.
13. ELEVATIONS ARE BASED ON NAVD 1988 DATUM.

LEGEND

W	EXISTING WATER MAIN
S	EXISTING SEWER MAIN
W	PROPOSED WATER SERVICE
S	PROPOSED SEWER MAIN
SS	PROPOSED SEWER SERVICE
G	PROPOSED GAS MAIN
GS	PROPOSED GAS SERVICE
UU	PROPOSED UNDERGROUND UTILITIES
WV	PROPOSED WATER GATE
VGC	PROP. VERTICAL GRAN. CURB
SGC	PROP. SLOPED GRAN. EDGING
	PROPOSED STREET LIGHT
	EXISTING FIRE HYDRANT
	PROPOSED WATER SHUTOFF
	PROPOSED SEWER SERVICE
	PROPOSED BUILDING LIGHT



GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20'

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M. YORK
CIVIL
No. 49181
REGISTERED PROFESSIONAL ENGINEER
10-20-21

PREPARED FOR

191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463–8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778–0528

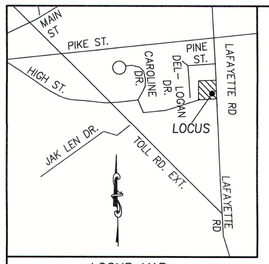
SCALE: 1"=20'
DATE: OCT. 20, 2021
DESG. BY: C.M.Y.
CHKD. BY: E.W.B.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA

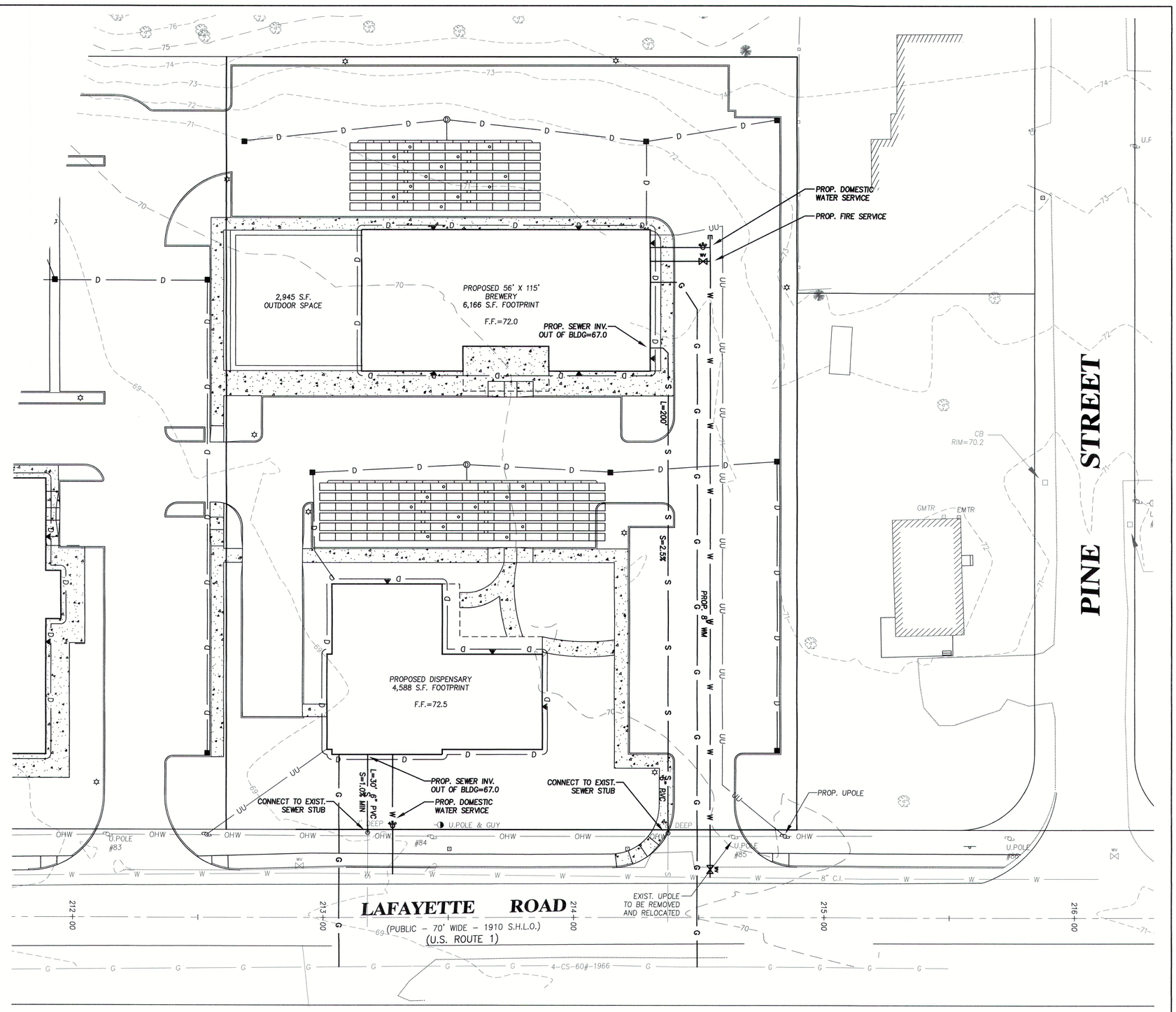
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

SITE PLAN

SHEET: C–2



LOCUS MAP
N.T.S.



LEGEND

W	EXISTING WATER MAIN
S	EXISTING SEWER MAIN
W	PROPOSED WATER SERVICE
S	PROPOSED SEWER MAIN
SS	PROPOSED SEWER SERVICE
G	PROPOSED GAS MAIN
GS	PROPOSED GAS SERVICE
UU	PROPOSED UNDERGROUND UTILITIES
	PROPOSED WATER GATE
VCC	PROP. VERTICAL GRAN. CURB
SGC	PROP. SLOPED GRAN. EDGING
	PROPOSED STREET LIGHT
	EXISTING FIRE HYDRANT
	PROPOSED WATER SHUTOFF
	PROPOSED SEWER SERVICE
	PROPOSED BUILDING LIGHT

GRAPHIC SCALE
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(IN FEET)
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CHRISTOPHER M. YORK
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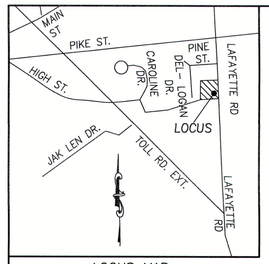
PLAN OF LAND
IN
SALISBURY, MA

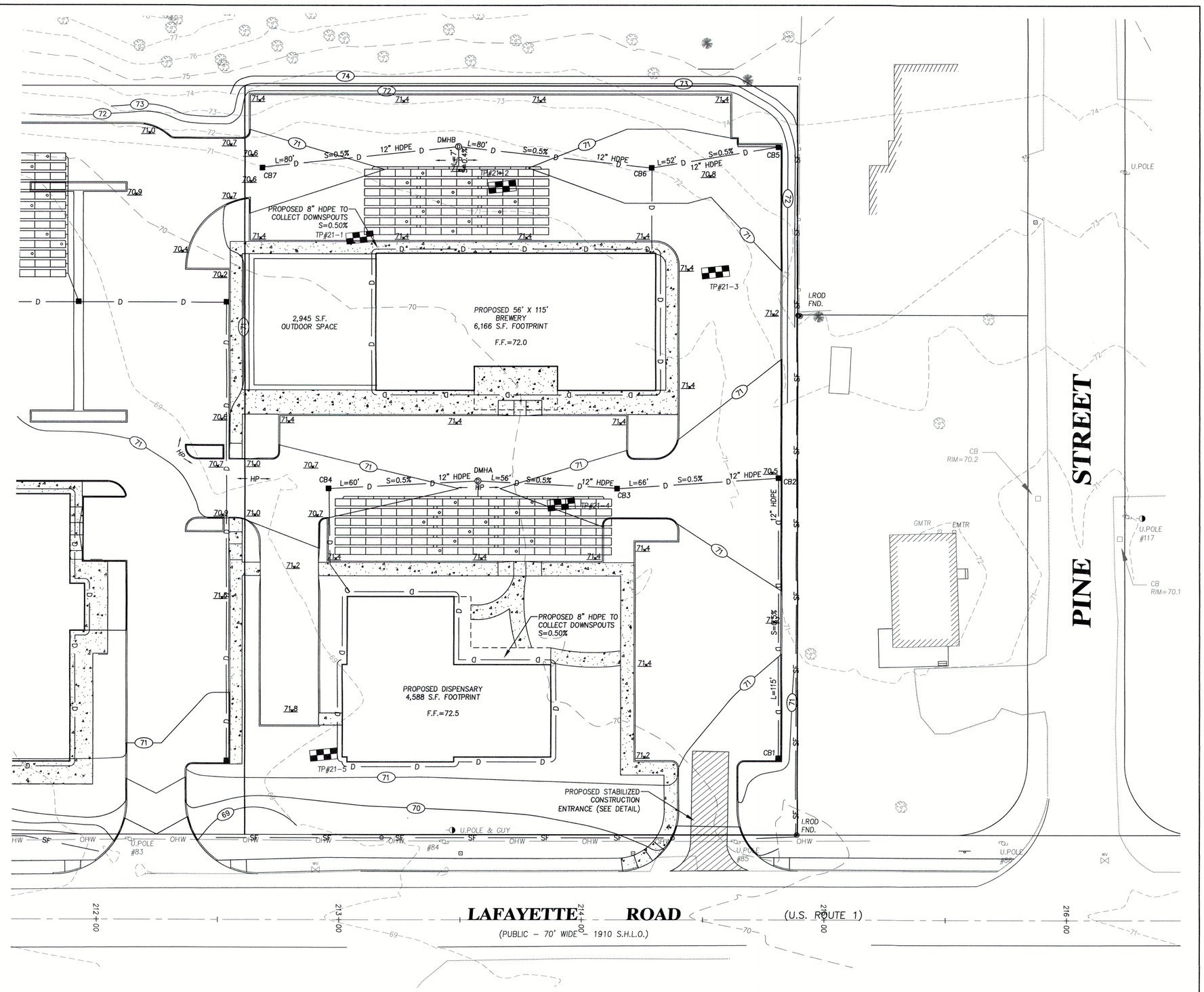
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 - LOT 4)

UTILITY PLAN

SHEET: C-3



LOCUS MAP
N.T.S.



1910 S.H.L.O.

INVERT TABLE

CB1 (GUTTER INLET) R=70.5 12" INV. OUT=67.9	**CB2** R=70.5 12" INV. IN=67.3 (CB1) 12" INV. OUT=67.2	**CB3** R=70.5 12" INV. IN=66.9 (CB2) 12" INV. OUT=66.8
CB4 R=70.5 8" INV. IN=67.2 12" INV. OUT=66.8	**CB5 (GUTTER INLET)** R=70.5 12" INV. OUT=67.5	**CB6** R=70.5 8" INV. IN=67.5 12" INV. IN=67.2 (CB5) 12" INV. OUT=67.1
CB7 (GUTTER INLET) R=70.5 12" INV. OUT=67.1	**DMHA (STC450i)** RIM=71.1 INV. IN=66.5 (CB3) INV. IN=66.5 (CB4) INV. OUT=66.4	**DMHB (STC450i)** RIM=71.4 INV. IN=66.7 (CB6) INV. IN=66.7 (CB7) INV. OUT=66.6

LEGEND

28	EXIST. CONTOUR
27	PROP. CONTOUR
SF	PROP. SILTATION BARRIER
	PROP. TREELINE/LIMIT OF WORK
	PROP. CONC. SIDEWALK
■	PROP. CATCH BASIN
28.3	PROP. SPOT GRADE
▦	PROP. OUTLET STRUCTURE
□	EXIST. CATCH BASIN
	EXIST. UTILITY POLE
	WETLANDS
TP	EXIST. TEST PIT

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20'

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M. YORK
CIVIL
No. 49181
REGISTERED PROFESSIONAL ENGINEER
10-20-21

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PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 - LOT 4)

GRADING PLAN

SHEET: C-4

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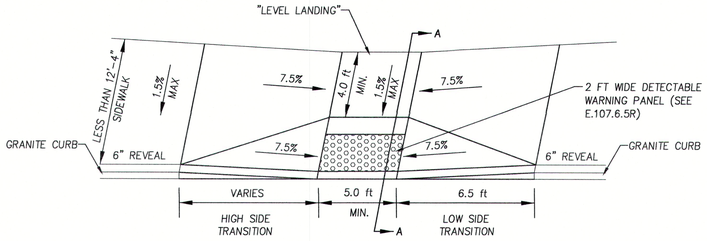
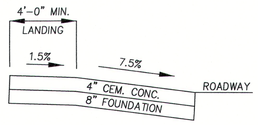


PLAN VIEW



SECTION A–A

NOTES:

1.) RAMP CROSS SECTION TO BE SAME AS SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.

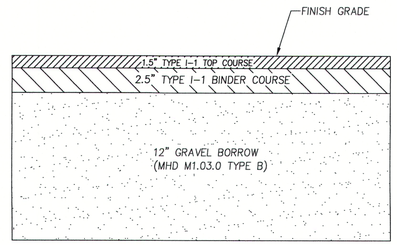
2.) BASE OF RAMP SHALL MEET PAVEMENT GUTTER SUCH THAT THERE IS NO DIFFERENCE IN ELEVATION. RAMP SHALL BE CONSTRUCTED SUCH THAT WATER DOES NOT "PUDDLE" AT THE BASE OF THE RAMP.

3.) THE PAVEMENT AT THE BASE OF THE RAMP SHALL BE PART OF THE CONTINUOUS TOP COURSE. THE USE OF A "PAVEMENT PATCH" TO COMPLY WITH THE CONDITIONS IN NOTE 2, ABOVE IS PROHIBITED.

4.) RAMPS SHALL CONFORM TO MASS DOT WHEELCHAIR RAMP STANDARDS – LATEST REVISIONS.

CEMENT CONCRETE WHEELCHAIR RAMP DETAIL

N.T.S.



PAVEMENT DETAIL

N.T.S.

PAVEMENT NOTES

1.) ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED PAVEMENT GRADE.

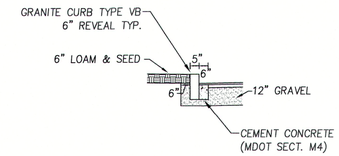
2.) PAVEMENT SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.

3.) GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.

4.) ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.

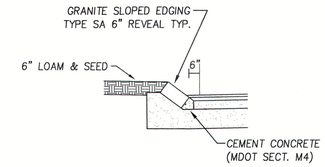
5.) AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE TRACK WILL EFFECTIVELY BE DRAINED.

6.) THE CONTRACTOR SHALL REFER TO THE SALISBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, SECTIONS I – VII.



TYPICAL GRANITE CURBING INSTALLATION DETAIL

N.T.S.



TYPICAL SLOPED EDGING DETAIL

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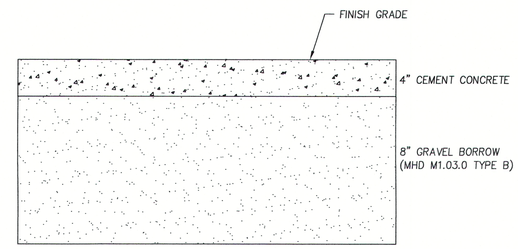
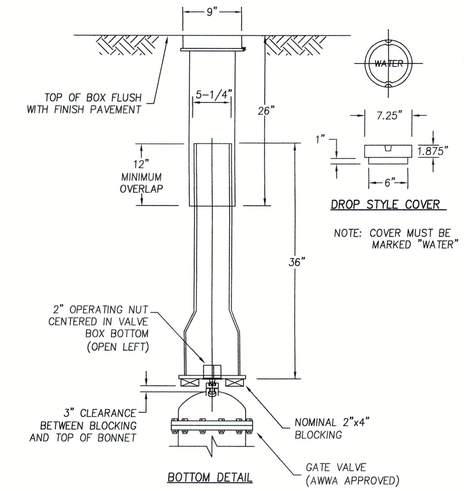


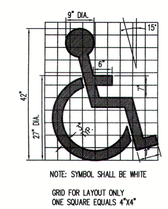
CONCRETE SIDEWALK DETAIL

N.T.S.



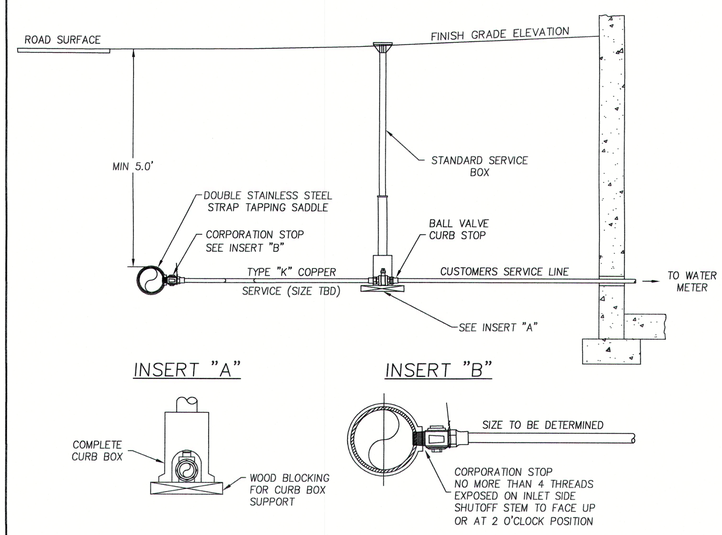
TYPICAL GATE VALVE BOX DETAIL

N.T.S.



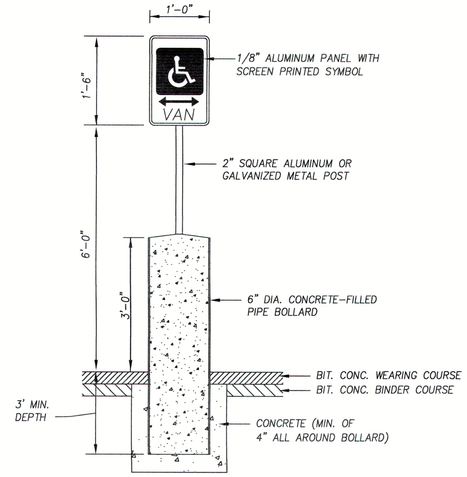
PAINTED HANDICAP PARKING SYMBOL

N.T.S.



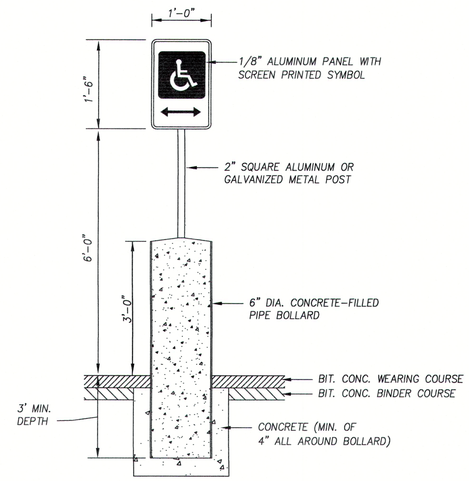
TYPICAL COPPER SERVICE CONNECTION

N.T.S.



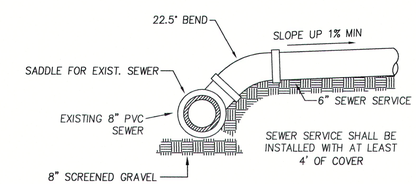
HANDICAP PARKING VAN–ACCESSIBLE SIGN DETAIL

N.T.S.



HANDICAP PARKING SIGN DETAIL

N.T.S.



SEWER SERVICE DETAIL

N.T.S.

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M. YORK
CIVIL
No. 49181
REGISTERED PROFESSIONAL ENGINEER
10-20-21

PREPARED FOR

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62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

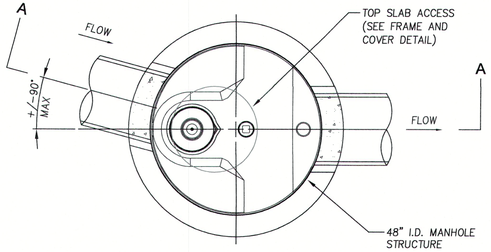
SCALE: AS NOTED | DESG. BY: C.M.Y.
DATE: OCT. 20, 2021 | CHKD. BY: E.W.B.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA

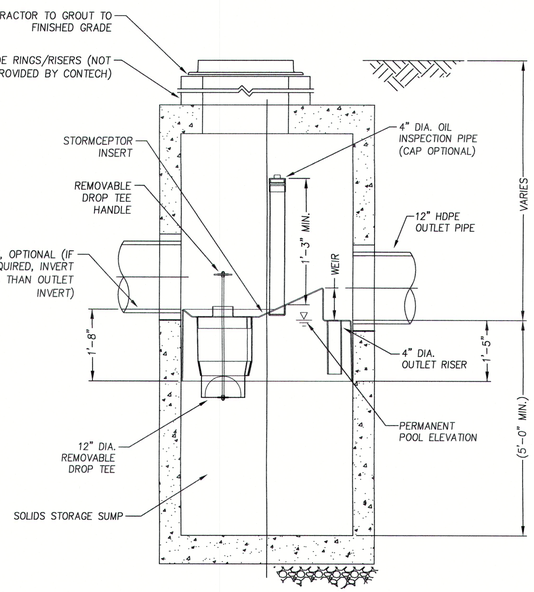
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

SITE DETAILS

SHEET: C–5

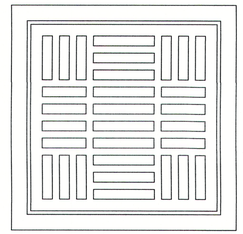


PLAN VIEW A–A
N.T.S.

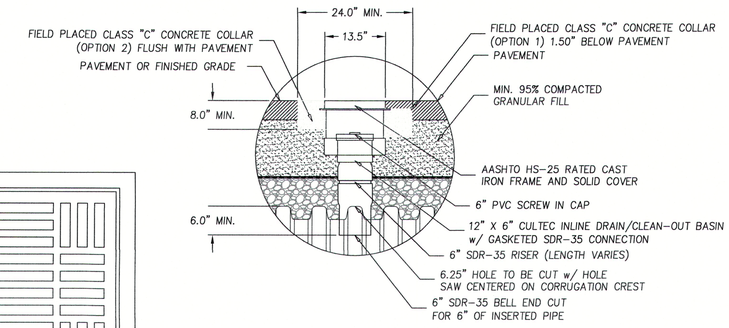


SECTION A–A
N.T.S.

STC450i STORMCEPTOR
DETAIL N.T.S.



FRAME AND GRATE
(24" SQUARE)
N.T.S.



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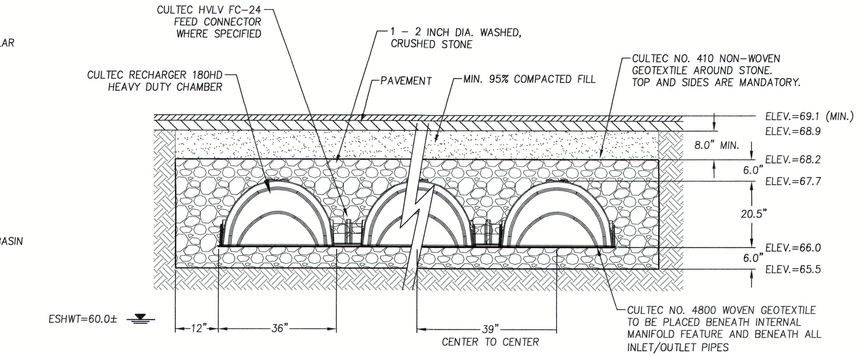
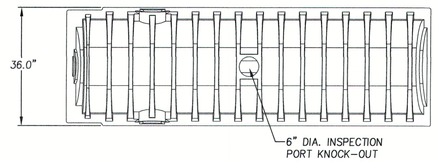
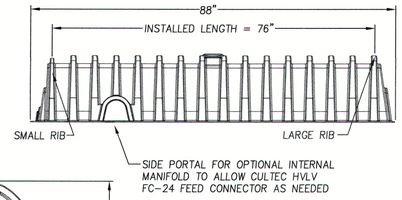
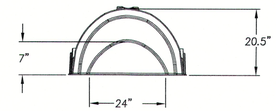








CULTEC RECHARGER
180HD DETAILS N.T.S.

GENERAL NOTES:

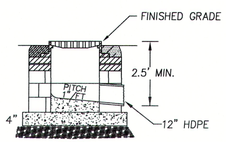
1) RECHARGER 180HD BY CULTEC, INC. OF BROOKFIELD, CT. ALL RECHARGER 180HD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION.

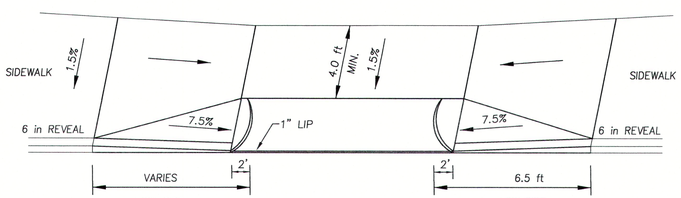
GENERAL NOTES

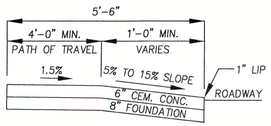
1. CONTECH SHALL PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
3. STORMCEPTOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' – 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
4. STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

1. ANY SUB–BASE, BACKFILL DEPTH, AND/OR ANTI–FLOTATION PROVISIONS ARE SITE–SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
3. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

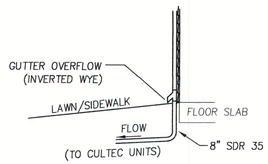




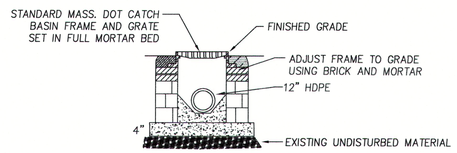


SECTION A–A

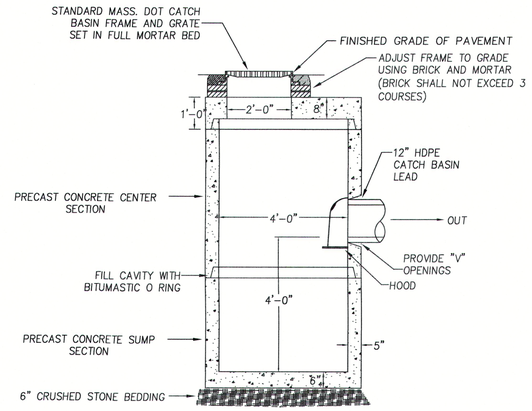
CEM. CONC. DRIVEWAY
RAMP DETAIL (E 107.8.0) N.T.S.



GUTTER DOWN
SPOUT DETAIL N.T.S.



CONCRETE BLOCK
GUTTER INLET N.T.S.



NOTES: 1) CATCH BASINS SHALL CONFORM TO ASTM C478 AND ASTM C185
2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H–20 LOADING.
3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT–TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST DEEP SUMP
CATCH BASIN DETAIL N.T.S.

COMMONWEALTH OF MASSACHUSETTS CHRISTOPHER M. YORK CIVIL No. 49181 REGISTERED PROFESSIONAL ENGINEER
Christ M. York 10-20-21

PREPARED FOR
191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463–8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778–0528

SCALE: AS NOTED | DESG. BY: C.M.Y.
DATE: OCT. 20, 2021 | CHKD. BY: E.W.B.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

DRAINAGE DETAILS
SHEET: C–6

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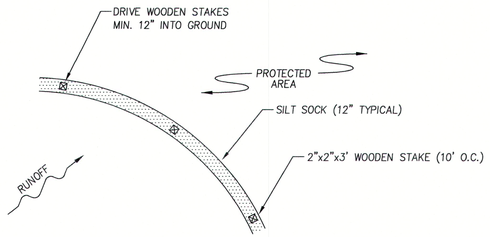
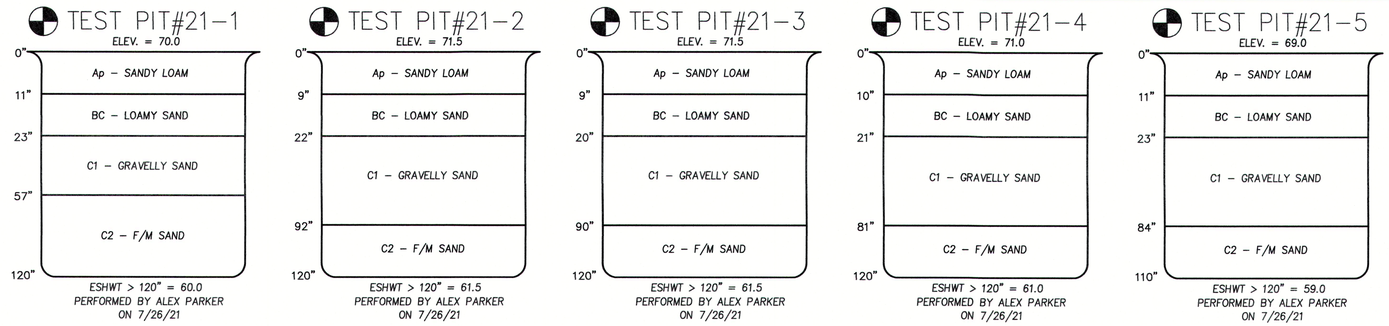


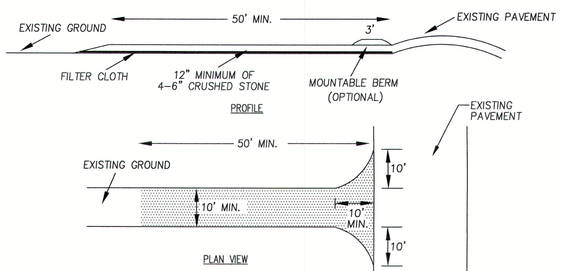
NOTES

1. ALL MATERIAL SHALL MEET SPECIFICATIONS BY FILTREXX OR APPROVED EQUAL.
2. SILT SOCK SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
3. THE CONTRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE SILT SOCK WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE SILT SOCK.
4. SILT SOCK SHALL BE MAINTAINED UNTIL DISTURBED AREA ABOVE THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
5. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE SOCK HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT SOCK INSTALLATION

N.T.S.



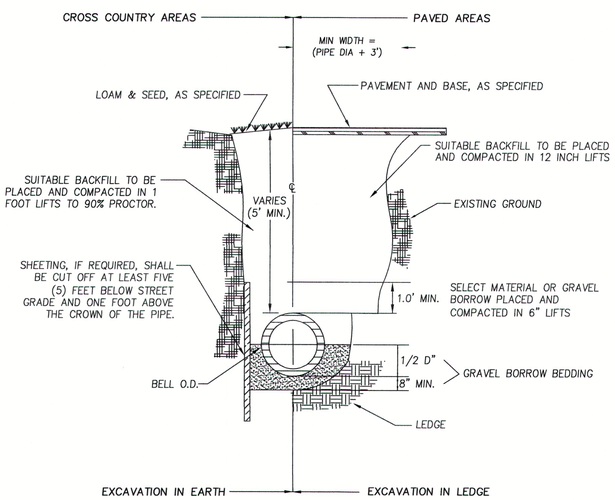


NOTES

1. STONE SHALL BE 4–6" STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50'.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 12".
4. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP–DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED PROMPTLY.
7. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



TYPICAL TRENCH DETAIL

N.T.S.

GENERAL EROSION CONTROL NOTES

1. ALL EROSION CONTROL SHALL BE INSTALLED BEFORE THE START OF CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED UPON COMPLETION OF THE PROJECT AND STABILIZATION OF ALL SOIL.
2. ALL FILL SHALL BE FREE OF STUMPS AND LARGE STONES.
3. ANY STANDING BODIES OF WATER CREATED DURING EXCAVATION SHALL BE ELIMINATED.
4. EROSION CONTROL BARRIERS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL AND PROMPTLY REPAIRED OR REPLACED AS NECESSARY.
5. ACCUMULATED SEDIMENT DEPOSITS UPSTREAM OF BARRIERS SHALL BE PROPERLY DISPOSED OF ON A REGULAR BASIS.
6. AREAS OUTSIDE THE LIMITS OF WORK (EROSION CONTROL/SILT FENCE LOCATIONS) DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND/OR SEDIMENT CONTROLS DURING CONSTRUCTION. HE/SHE SHALL INSPECT CONTROLS WEEKLY AND AFTER ALL STORM EVENTS. REPAIRS, IF REQUIRED, SHALL BE MADE IMMEDIATELY.
8. ANY DISTURBED AREAS OF THE SITE NOT USED FOR ROADWAY OR UTILITY CONSTRUCTION SHALL BE STABILIZED WITH LOAM AND SEED UNTIL FURTHER DISTURBANCE IS REQUIRED FOR BUILDING CONSTRUCTION.
9. PROVIDE GRAVEL AND WIRE MESH SEDIMENT FILTER AT ALL CATCH BASINS.
10. A MINIMUM OF 6" OF LOAM SHALL BE INSTALLED ON ALL DISTURBED UNPAVED SURFACES.
11. PERMANENT SEED MIX SHALL BE MA STATE SLOPE MIXTURE (50% CREEPING RED FESCUE, 30% KENTUCKY 31 TALL FESCUE, 10% ANNUAL RYEGRASS, 5% RED TOP, 5% LADINO CLOVER) AND MA STATE PLOT MIXTURE (50% CREEPING RED FESCUE, 25% 85/80 KENTUCKY BLUEGRASS, 10% ANNUAL RYEGRASS, 10% RED TOP, 5% LADINO CLOVER)
12. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
13. WHERE PLACEMENT OF FILL IS REQUIRED FOR STORM WATER CONTROL, FILL SHALL BE PLACED IN AN UNFROZEN STATE UPON UNFROZEN GROUND. UNDER NO CIRCUMSTANCES SHALL FILL BE PLACED FROM NOVEMBER THROUGH JANUARY.
14. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED: BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED; A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
15. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCT. 15TH, OR WHICH ARE DISTURBED AFTER OCT. 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
16. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCT. 15TH, OR WHICH ARE DISTURBED AFTER OCT. 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

CONSTRUCTION SEQUENCE

1. INSTALL EROSION CONTROL AT LIMIT OF WORK & STAKE OUT STORMWATER AREAS.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AS DEPICTED.
3. CLEAR AND GRUB DEBRIS AND DISPOSE OF PROPERLY.
4. STRIP, SCREEN AND STOCKPILE TOPSOIL. TOPSOIL CAN BE TEMPORARILY STOCKPILED ON SITE PROVIDING THAT THE PERIMETER OF THE STOCKPILES ARE PROPERLY STAKED WITH EROSION CONTROL AT THE TOE OF SLOPE.
5. CLEAR AND EXCAVATE FOR BUILDING FOUNDATIONS.
6. BEGIN BUILDING CONSTRUCTION.
7. INSTALL PROPOSED UTILITIES TO BUILDING FOOTPRINTS INCLUDING DRAINAGE SYSTEM, WATER/SEWER SERVICES AND PRIVATE UTILITIES.
8. GRADE PAVEMENT TO TOP OF SUBGRADE ELEVATIONS. ALL ROADWAYS MUST BE STABILIZED IMMEDIATELY AFTER GRADING.
9. SPREAD, SHAPE, AND COMPACT PAVEMENT SUBBASE AS PER TYPICAL ROADWAY SECTION TO ATTAIN FINAL DESIGN ELEVATIONS.
10. INSTALL CURBING, SIDEWALKS AND PROPOSED PAVEMENT TO BINDER GRADE.
11. INSTALL TOP COURSE PAVEMENT AND PAVEMENT MARKINGS.
12. INSTALL LANDSCAPING AND LOAM AND HYDROSEED ANY DISTURBED SURFACES ALONG EDGES OF PAVEMENT AS REQUIRED.
13. REMOVE EROSION CONTROL.

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M. YORK
CIVIL
No. 49151
REGISTERED PROFESSIONAL ENGINEER

Christ M. Y. 10-20-21

PREPARED FOR

191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463–8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778–0528

SCALE: AS NOTED | DESG. BY: C.M.Y.
DATE: OCT. 20, 2021 | CHKD. BY: E.W.B.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

EROSION CONTROL DETAILS

SHEET: C–7

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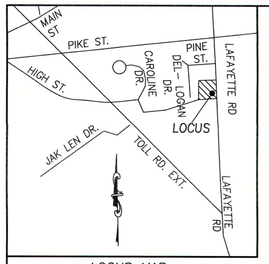


LOCUS MAP
N.T.S.

ZONING DISTRICT– LAFAYETTE – MAIN – COMMERCIAL–B

LOT AREA	1/2 AC.
FRONTAGE	100 FT.
SETBACKS	
FRONT	20 FT. TO 40 FT.
SIDE	15 FT.
REAR	20 FT.

BASIS OF BEARINGS
PLAN BOOK 459 PLAN 78

OWNERS OF RECORD

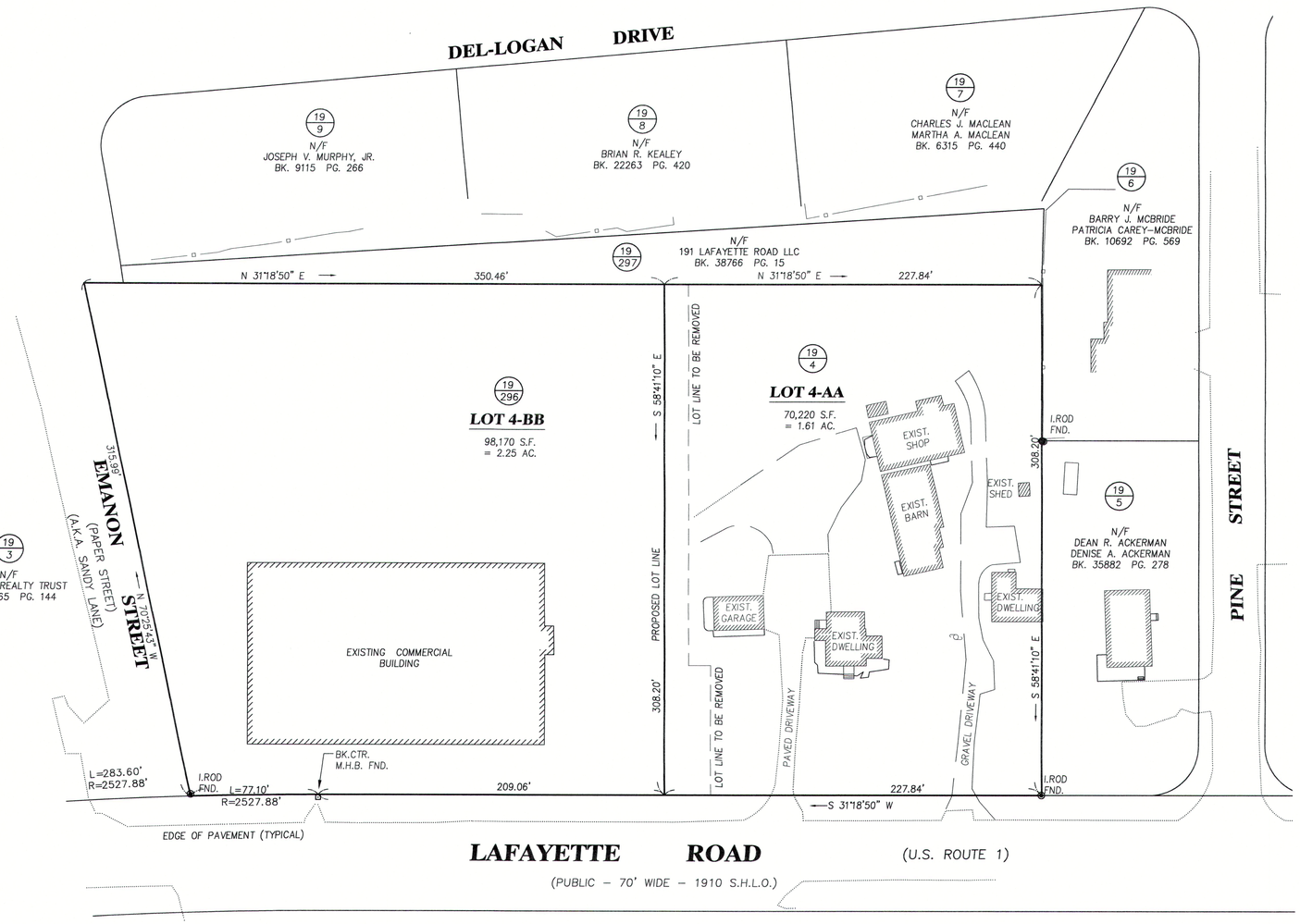
187 LAFAYETTE ROAD LLC
BK. 37539 PG. 567

191 LAFAYETTE ROAD LLC
BK. 38760 PG. 335

PLAN REFERENCES

PLAN BK. 459 PLAN 78
1910 STATE HIGHWAY LAYOUT

FOR REGISTRY USE



PLANNING BOARD APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

SALISBURY PLANNING BOARD

DATE

"ENDORSEMENT OF THIS PLAN SHALL NOT BE AN INDICATION, EXPRESS OR IMPLIED, THAT THE PARCELS OR STRUCTURES SHOWN ON THIS PLAN CONFORM TO APPLICABLE ZONING, CONSERVATION COMMISSION OR BOARD OF HEALTH REQUIREMENTS."

NOTES:

THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

THE CERTIFICATIONS SHOWN HEREON ARE NOT INTENDED AS CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN OF SALISBURY ASSESSORS RECORDS.

I CERTIFY:
THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

COMMONWEALTH OF MASSACHUSETTS JEFFREY S. HOFMANN 36381 PROFESSIONAL LAND SURVEYOR

10/20/21

PROFESSIONAL LAND SURVEYOR DATE

LEGEND

M.H.B.	MASSACHUSETTS HIGHWAY BOUND
N/FND	NOT FOUND
I.P.	IRON PIPE
I ROD	IRON ROD
FND.	FOUND
N/F	NOW OR FORMERLY
0/00	ASSESSORS MAP# PARCEL#

GRAPHIC SCALE
40 0 20 40 80 16
(IN FEET)
1 inch = 40'

PREPARED FOR

187 LAFAYETTE ROAD LLC
191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40' | CALC. BY: S.F.R.
DATE: OCT. 20, 2021 | CHKD. BY: J.S.H.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA

SHOWING
APPROVAL NOT REQUIRED
AT
187 & 191 LAFAYETTE ROAD
(MAP 19 – LOTS 4 & 296)

PROPOSED LOT LINE ADJUSTMENT

SHEET: C–8

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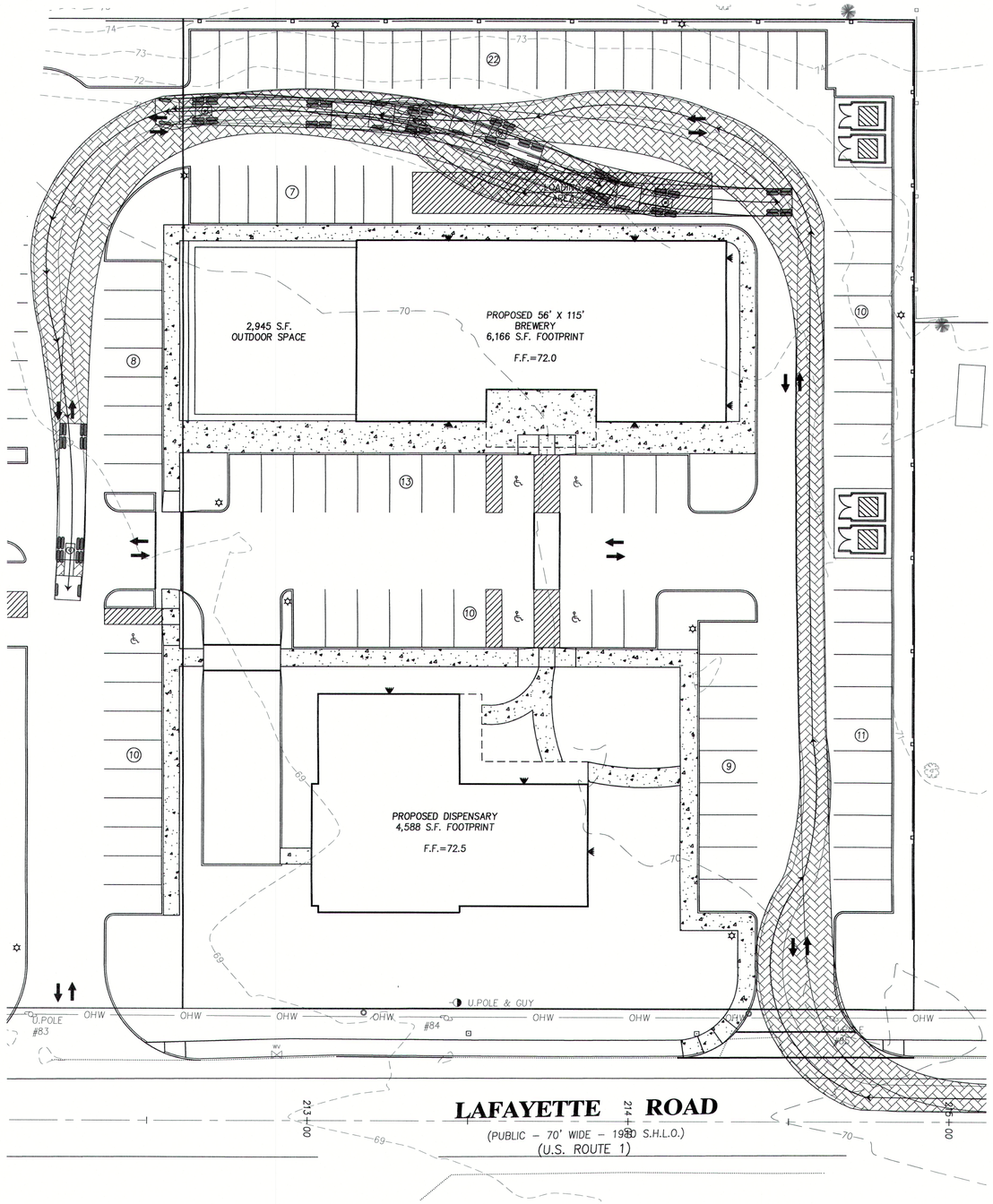
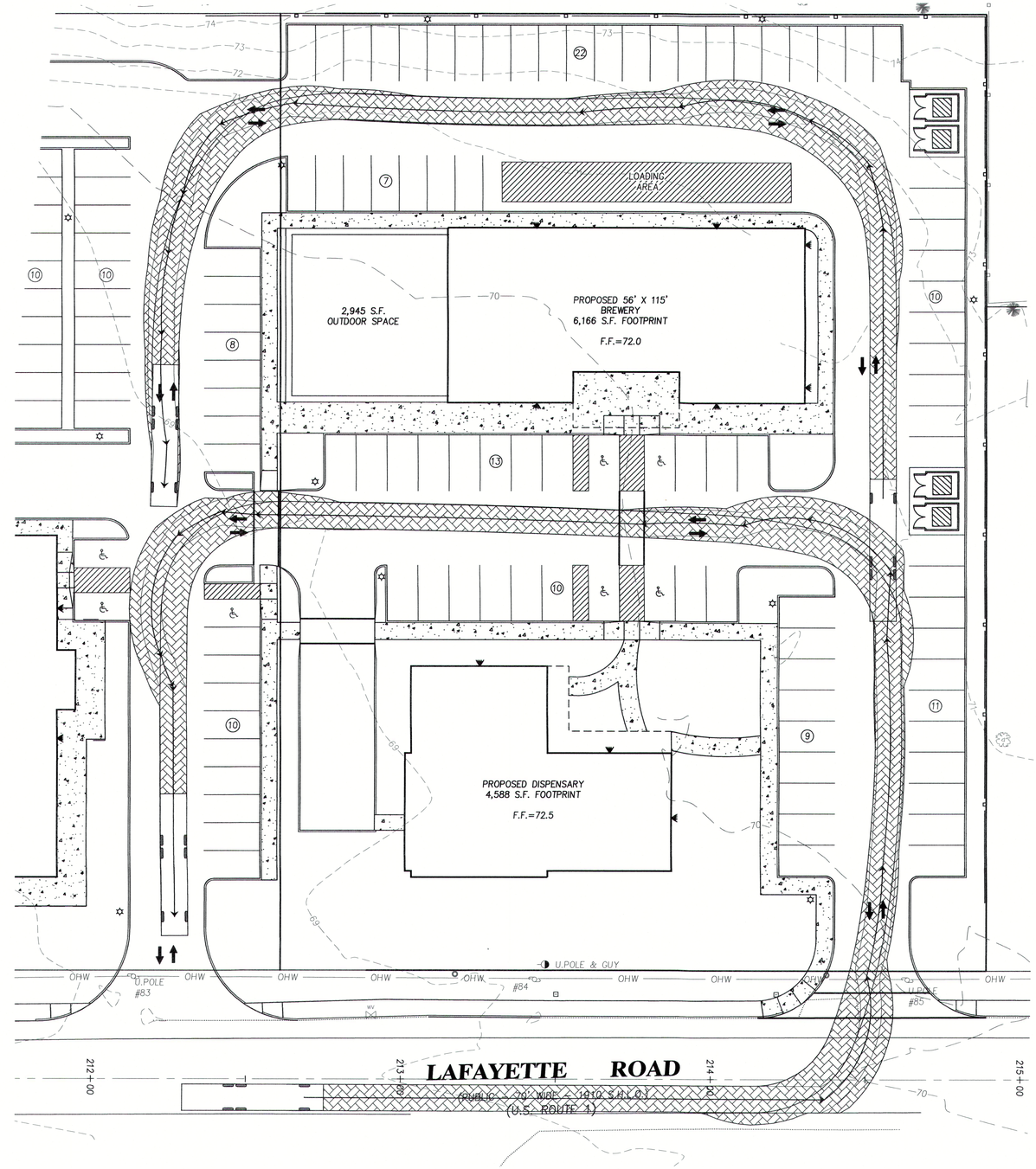


WB-50 TURNING MOVEMENTS



FIRE TRUCK TURNING MOVEMENTS

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20'

COMMONWEALTH OF MASSACHUSETTS
CHRISTOPHER M. YORK
CIVIL
No. 49181
REGISTERED PROFESSIONAL ENGINEER

Chrst M. Y. 10-20-21

PREPARED FOR

191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI
MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=20'
DATE: OCT. 20, 2021
DESG. BY: C.M.Y.
CHKD. BY: E.W.B.
PROJECT: M213997

PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 - LOT 4)

TRUCK TEMPLATE PLAN

SHEET: F-1

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Attachment 2

D-Series Size 0
LED Area Luminaire

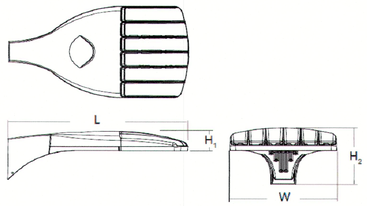
d^series

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.95 ft² (.09 m²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height$_1$:	3" (7.62 cm)
Height$_2$:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

WDGE2 LED
Architectural Wall Sconce
Precision Refractive Optic

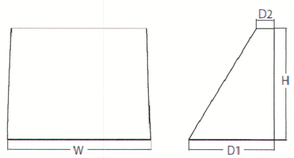
Buy American

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1):	7"
Depth (D2):	1.5"
Height:	9"
Width:	11.5"
Weight: (without options)	13.5 lbs



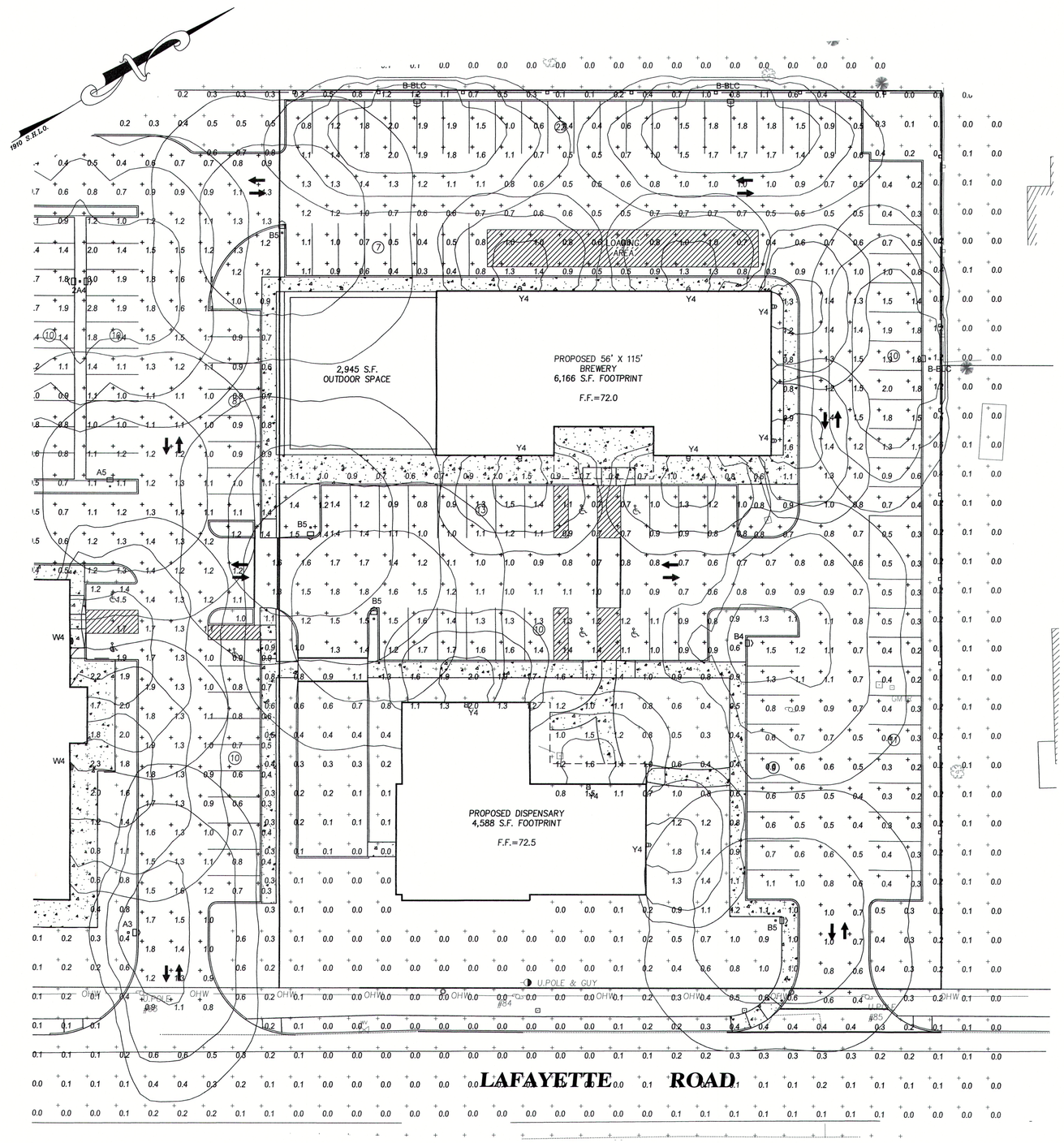
Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens per Lamp	LLF	Wattage
	2A4	1	Lithonia Lighting	DSX0 LED P2 30K TFTM MVOLT SPA DDBXD with SSS 18 4C DM28AS DDBXD	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_TFTM_MVOLT.ies	5576	0.9	98
	A3	1	Lithonia Lighting	DSX0 LED P2 30K T3M MVOLT SPA DDBXD with SSS 18 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_T3M_MVOLT.ies	5416	0.9	49
	A4	2	Lithonia Lighting	DSX0 LED P2 30K TFTM MVOLT SPA DDBXD with SSS 18 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_TFTM_MVOLT.ies	5576	0.9	49
	A5	1	Lithonia Lighting	DSX0 LED P2 30K T5M MVOLT	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_T5M_MVOLT.ies	5789	0.9	49
	B4	1	Lithonia Lighting	DSX0 LED P2 30K TFTM MVOLT SPA DDBXD with SSS 18 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_TFTM_MVOLT.ies	5576	0.9	49
	B5	4	Lithonia Lighting	DSX0 LED P2 30K T5M MVOLT	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_T5M_MVOLT.ies	5789	0.9	49
	B-BLC	3	Lithonia Lighting	DSX0 LED P2 30K BLC MVOLT SPA DDBXD with SSS 18 4C DM19AS DDBXD	DSX0 LED Area Fixture; mounted at 20ft (18ft pole on 2ft base)	LED	DSX0_LED_P2_30K_BLC_MVOLT.ies	4572	0.9	49
	W4	2	Lithonia Lighting	DSXW1 LED 20C 700 30K TFTM MVOLT	DSXW1 LED Wall pack mounted at 16ft	LED	DSXW1_LED_20C_700_30K_TFTM_MVOLT.ies	5172	0.9	45.7
	Y4	9	Lithonia Lighting	WDGE2 LED P2 30K 80CRI TFTM MVOLT DDBXD	WDGE2 LED Wall pack; mounted at 12ft	LED	WDGE2_LED_P2_30K_80CRI_TFTM.ies	1934	0.9	18.9815



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
187 Lafayette Parking Lot		1.1 fc	3.0 fc	0.3 fc	10.0:1	3.7:1
191 Lafayette Rd Parking Lot		1.0 fc	2.0 fc	0.2 fc	10.0:1	5.0:1
Landscape Island Around Building		1.0 fc	1.6 fc	0.4 fc	4.0:1	2.5:1
Outside of Parking Lots		0.2 fc	2.3 fc	0.0 fc	N/A	N/A

Site Lighting Layout
At
191 LAFAYETTE ROAD

Designer
Heidi G. Connors
Visible Light, Inc.
24 Stickney Terrace
Suite 6
Hampton, NH 03842

Date
10/20/2021
Scale
1"=20'
Drawing No.

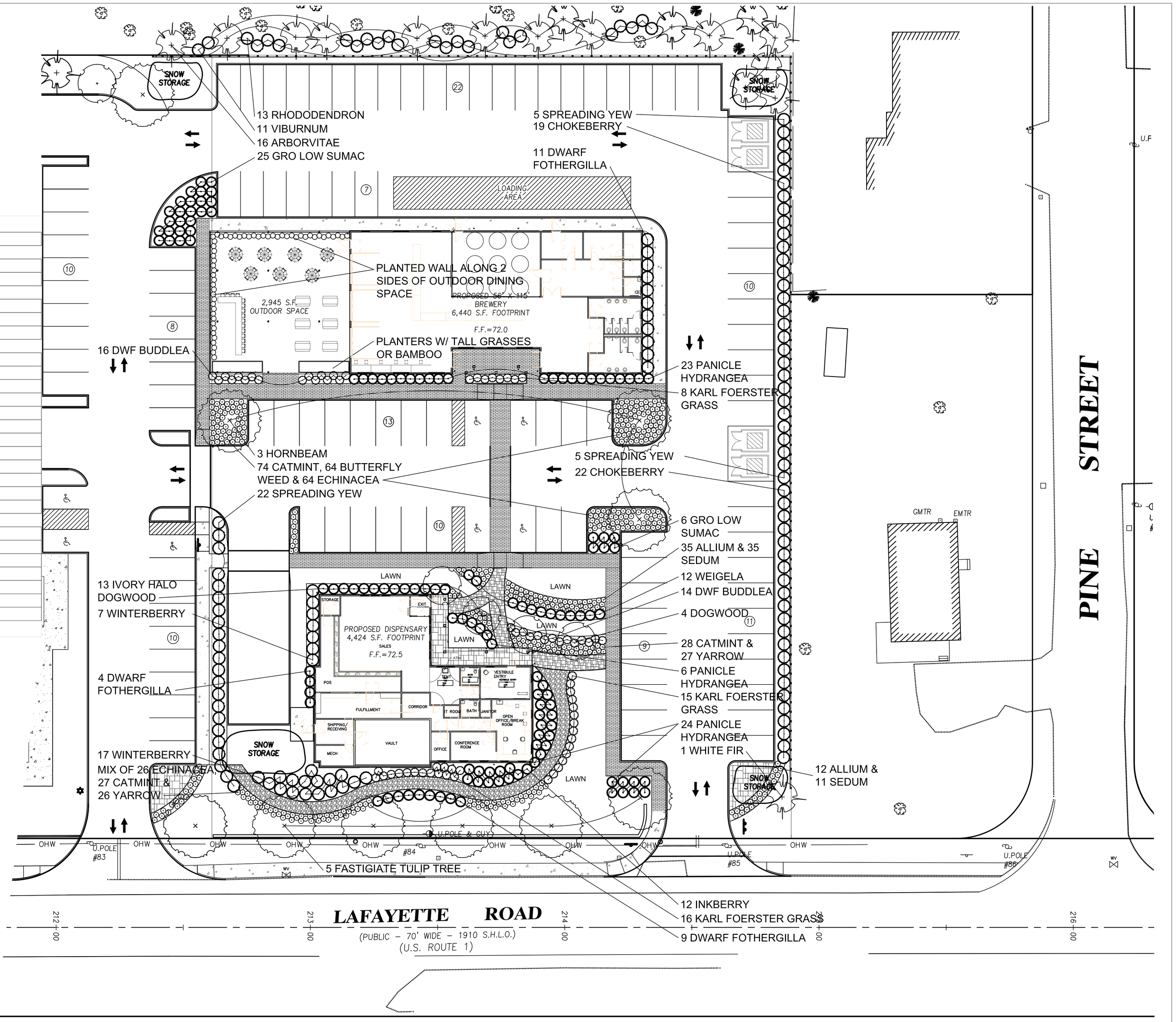
Summary

E-1

Attachment 3

191 Lafayette St Salisbury Plant List

Qty.	Scientific Name	Common Name	Size	Notes
Evergreen Trees				
1	Abies concolor	White Fir	6-8' ht.	
16	Thuja 'Green Giant'	Green Giant Arborvitae	6-8' ht.	
Deciduous Trees				
3	Carpinus betulus 'Fastigiata'	Hornbeam	2.5-3" cal.	
4	Cornus x 'Rutban'	Dogwood	2.5-3" cal.	
5	Liriodendron tulipifera 'Fastigiata'	Fastigiate Tuliptree	3-3.5" cal.	
Shrubs				
19	Aronia arbutifolia 'Brilliantissima'	Chokeberry	7 gal.	
30	Buddleia 'Pugster Blue'	Dwarf Butterfly Bush	3 gal.	
13	Cornus alba 'Bailhalo'	Ivory Halo Dogwood	5 gal.	
24	Fothergilla gardenii 'Mt Airy'	Dwarf Fothergilla	5 gal.	
62	Hydrangea paniculata 'Quickfire'	Panicle Hydrangea	7 gal.	
12	Ilex glabra 'Shamrock'	Inkberry	7 gal.	
24	Ilex verticillata	Winterberry	7 gal.	
13	Rhododendron cat. 'Boursault'	Rhododendron	7 gal.	
31	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	3 gal.	
27	Taxus x media 'Densiformis'	Spreading Yew	7 gal.	
11	Viburnum lantana 'Mohican'	Viburnum	7 gal.	
12	Weigela florida 'Minuet'	Minuet Weigela	5 gal.	dwarf
Perennials				
53	Achillea 'Terra Cotta'	Yarrow	1 gal.	apricot
47	Allium 'Summer Beauty'	Flowering Onion	1 gal.	
64	Asclepias tuberosa	Butterfly Weed	1 gal.	
39	Calamagrostis x acutiflora 'Karl Foerste	Karl Foerster Grass	1 gal.	
90	Echinacea purpurea	Echinacea	1 gal.	dwarf
129	Nepeta 'Walkers Low'	Catmint	1 gal.	dwarf
21	Sedum 'Autumn Joy'	Sedum	1 gal.	



Issued:		
1	9-7-21	For review
2	9-21-21	For review
3	9-28-21	For review
4	10-6-21	For review
5	10-20-21	For review

LANDSCAPE PLAN

Scale: 1"=20'-0"

191 LAFAYETTE RD LLC

191 Lafayette Rd.
Salisbury, MA

KDTurner Design
landscape architecture

27 High St.
Newburyport, MA 01950

ph) 781.632.6004

L-0

White Fir

Arborvitae

Hornbeam

Fastigiate Tuliptree

Dogwood

Weigela

Gro-low Sumac

Dwarf Fothergilla

Chokeberry

Panicle Hydrangea

Viburnum

Buddleia

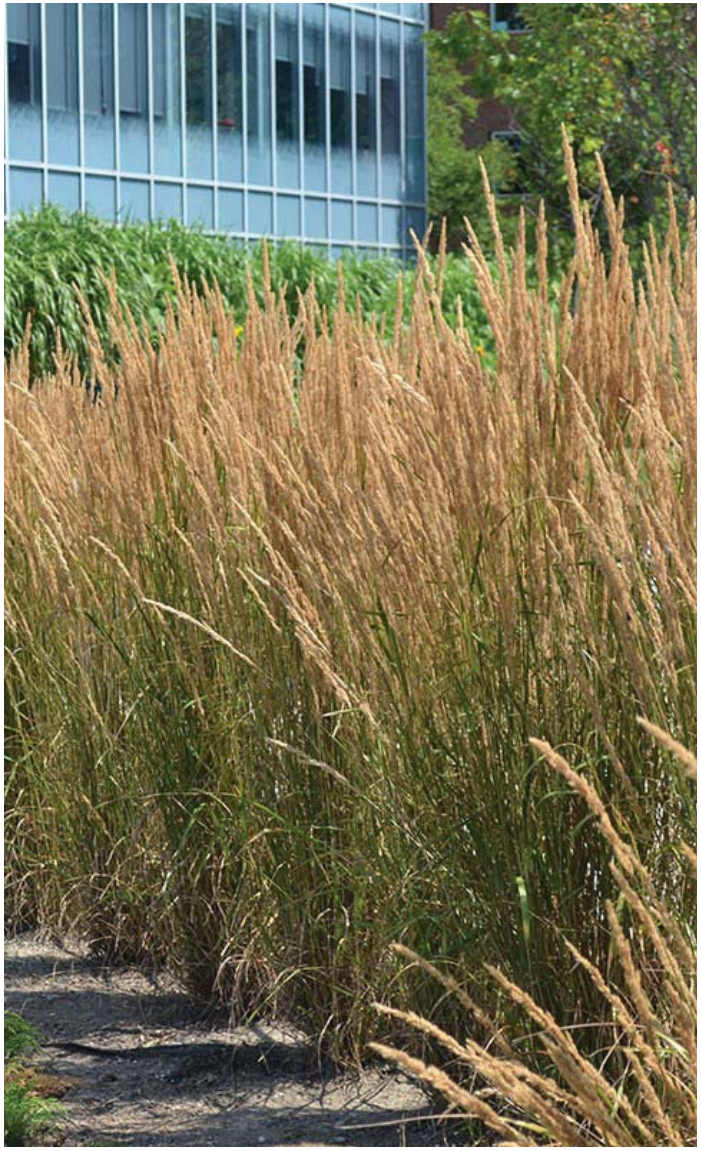
Ivory Halo Dogwood

Winterberry

Inkberry

Rhododendron

Yew



Karl Foerster Grass

Allium

Sedum

Butterfly Weed

Catmint

Echinacea

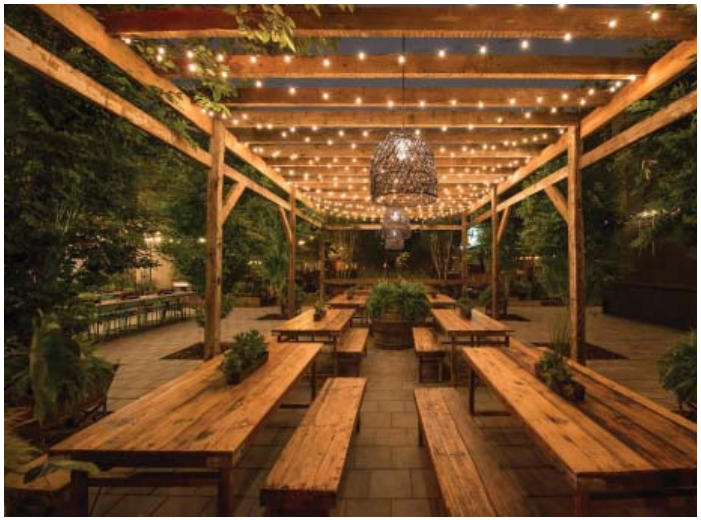
Yarrow

Corten elements

Pavers

Textured concrete wall

River rock



Attachment 4

191 LAFAYETTE

BUILDINGS A & B

191 LAFAYETTE RD
SALISBURY, MA
01952

ANDERSON
PORTER
DESIGN

SPECIAL PERMIT

LIST OF SYMBOLS

- EXISTING PARTITION OR PARTITION W/ DOOR TO BE REMOVED
- EXISTING STRUCTURE OR PARTITION TO REMAIN
- NEW STRUCTURE OR PARTITION
- FIRST FLOOR 0'-0" — FINISH ELEVATION
- NEW ROOM 101 — ROOM TAG
- GENERAL DETAIL
- WALL SECTION
- INTERIOR ELEVATION
- 001 — DOOR IDENTIFICATION SYMBOL
- 1 — WALL TYPE TAG
- 1 — WINDOW IDENTIFICATION SYMBOL
- DUPLEX OUTLET
- GFI — GROUND FAULT OUTLET
- CAT 5 /COAX/DATA
- CO — CARBON MONOXIDE DETECTOR
- SA — SMOKE ALAM

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
ADD	ADDITIONAL
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
ALUM	ALUMINUM
APPX	APPROXIMATELY
BC	BRICK COURSE
BD	BOARD
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BO	BOTTOM OF
BOT	BOTTOM
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEARANCE
CLO	CLOSET
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESSIBLE
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CPT	CARPET
CRS	COURSES
CT	CERAMIC TILE
CUB	COLUMN UTILITY BOX
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DN	DOWN
DR	DOOR
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENC	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
ERD	EMERGENCY ROOF DRAIN
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FC	FURRING CHANNEL
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFT	FINISH FLOOR TRANSITION
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FR	FIRE-RATED
FT	FEET
FTG	FOOTING
FUB	FLOOR UTILITY BOX
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
HC	HOLLOW CORE
HDW	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HIGH POINT
HT	HEIGHT
HTR	HEATER
HVAC	HEATING, VENTILATING, & AIR CONDITIONING
IN	INCH
INCAN	INCANDESCENT
INCL	INCLUDING
INSUL	INSULATION
INT	INTERIOR
JC	JANITOR'S CLOSET
JT	JOINT
LAM	LAMINATED
LAV	LAVATORY
LINO	LINOLEUM
LP	LOW POINT
LTG	LIGHTING
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBER
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OVERFLOW DRAIN
OHD	OVERHEAD DOOR
OHG	OVERHEAD GRILLE
OPNG	OPENING
OPP	OPPOSITE
PC	PRECAST
PGL	PLATE GLASS
PL	PLATE
PLAM	PLASTIC LAMINATE
PLUM	PLUMBER
PLY	PLYWOOD
PT	PAINT
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
QT	QUARRY TILE
QTY	QUANTITY
R	RADIUS
RA	RETURN AIR
RD	ROOF DRAIN
REG	REGISTER
REV	REVISION
REINF	REINFORCING
REQD	REQUIRED
RL	RAIN LEADER
RM	ROOM
RO	ROUGH OPENING
RSL	RESILIENT FLOORING
SC	SOLID CORE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATIONS
SQ	SQUARE
SSTL	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUC	STRUCTURAL
SUSP	SUSPENDED
TBD	TO BE DETERMINED
TD	TRENCH DRAIN
TEL	TELEPHONE
THK	THICKNESS
TO	TOP OF
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOR	TOP OF RAIL
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRT	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VP	VENEER PLASTER
VWC	VINYL WALL COVERING
W/	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WF	WIDE FLANGE
W/O	WITHOUT
WPR	WATERPROOFING
WUB	WALL UTILITY BOX
WWF	WELDED WIRE FABRIC
&	AND
∠	ANGLE
"	INCH
'	FOOT
@	AT
CL	CENTERLINE
[	CHANNEL
#	NUMBER
Ø	DIAMETER

SITE LOCATION

CONTACTS

ARCHITECT

Anderson Porter Design
875 Main Street
Cambridge MA 02139

Brian Anderson
brian@andersonporter.com
617.354.2501 x 110

CIVIL ENGINEER

Millennium Engineering, Inc.
62 Elm St
Salisbury, MA 01952

Christopher M. York, P.E.
CYork@Mei-MA.com
Phone: (978) 463-8980

LANDSCAPE ARCHITECT

KD Turner Design
High St
Newburyport, MA 01950

Kimberly Turner
duffykt@gmail.com
Phone: (781) 632-6004

PROJECT DESCRIPTION

PROPERTY ADDRESS:	191 Lafayette Rd, Salisbury, MA 01952
ZONING DISTRICT:	REFER TO CIVIL
PROJECT DESCRIPTION:	(1) NEW BREWERY AND (1) NEW DISPENSARY TO BE CONSTRUCTED AT 191 LAFAYETTE ROAD IN SALISBURY, MASSACHUSETTS

DRAWING LIST

GENERAL

G1.0	COVER SHEET
G2.0	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
G3.0	BUILDING CODE REVIEW BUILDING A
G4.0	BUILDING CODE REVIEW BUILDING B
G5.0	USE AND OCCUPANCY
G6.0	BUILDING LIFE SAFETY
G7.0	BASE BUILDING ACCESSIBILITY
G8.0	TYPICAL MOUNTING HEIGHTS + CLEARANCES

CIVIL

C-1	EXISTING CONDITIONS PLAN
C-2	SITE PLAN
C-3	UTILITY PLAN
C-4	GRADING PLAN
C-5	SITE DETAILS
C-6	DRAINAGE DETAILS
C-7	EROSION CONTROL DETAILS
C-8	PROPOSED LOT LINE ADJUSTMENT PLAN
E-1	LIGHTING PLAN
F-1	TRUCK TEMPLATE PLAN

LANDSCAPE

L-0	LANDSCAPE PLAN

ARCHITECTURE

A1.0	PROPOSED FLOOR PLAN - BUILDING A & B
A1.1	PROPOSED ROOF PLAN
A2.1	EXTERIOR ELEVATIONS - BUILDING A
A2.2	EXTERIOR ELEVATIONS - BUILDING B

REVISIONS

No.	Description	Date

AndersonPorterDesign
1972 Massachusetts Ave, 4th Floor
Cambridge, MA 02140
Tel. 617.354.2501 Fax. 617.354.2509

Project: 191 LAFAYETTE ROAD

Address: 191 Lafayette Rd, Salisbury, MA 01952

Title: COVER SHEET

Drawing Issued By: ANDERSON PORTER DESIGN

Project #: 2113

Date: 2021.10.20

Scale:

Drawn by: GA

Drawn No. G1.0

10/20/2021 2:57:26 PM

SYMBOLS LEGEND

SHEET NUMBER

A1.1

SHEET NUMBER
SHEET GROUP
DISCIPLINE CODE

NORTH ARROW

PLAN NORTH

COLUMN SYMBOL & GRID LINES

1 2 A B

VERTICAL ELEVATION

LEVEL 2
118'-6"

SPOT ELEVATION

LEVEL 2
118'-6"

DATUM POINT

118'-6"

MATCH LINE

MATCHLINE
SEE ? / ?
SHEET NUMBER ON WHICH CONTINUATION IS FOUND

BREAK LINE

DRAWING TITLE

TITLE
1A DRAWING
1/4" = 1'-0"
PLAN OR DETAIL DESIGNATION
SCALE

KEY NOTE

00 00 00.00
TEXT

PLAN NOTE

P10

ROOM NAME & NUMBER TAG

?
?

DOOR NUMBER TAG

NEW DOOR & FRAME
EXISTING DOOR & FRAME

BUILDING SECTION TAG

SECTION DESIGNATION
LINE MAY NOT BE CONTINUOUS
SHEET NUMBER

DETAIL OR WALL SECTION TAG

SECTION DESIGNATION
SHEET NUMBER

PARTIAL PLAN & DETAIL TAG

PLAN OR DETAIL DESIGNATION
SHEET NUMBER

EXTERIOR ELEVATION TAG

ELEVATION DESIGNATION
SHEET NUMBER

INTERIOR ELEVATION TAG

ELEVATION DESIGNATION
SHEET NUMBER

DRAWING REVISIONS

REVISION NUMBER
3

AREA OUT OF SCOPE

CONTROL JOINT

CJ

EXPANSION JOINT

EJ

FLOOR DRAIN

FD

TOILET ACCESSORY TAG

?

WINDOW TYPE TAGS

INTERIOR WINDOW TAG (NUMERIC)
EXTERIOR WINDOW TAG (ALPHA)
LOUVER TYPE IDENTIFIER (ALPHA AND NUMERIC)

MATERIALS

SOIL - COMPACTED
SOIL - UNDISTURBED
POROUS FILL - COURSE (CRUSHED STONE)
POROUS FILL - MEDIUM (GRAVEL)
POROUS FILL - FINE (SAND)
BITUMINOUS PAVING (ASPHALT)
CONCRETE - CAST IN PLACE
CONCRETE - LIGHTWEIGHT (TOPPING)
TERRAZZO
STONE - CUT
STONE - CAST
MASONRY - BRICK
MASONRY - GLAZED BRICK
MASONRY - CONCRETE MASONRY UNIT (CMU)
MASONRY - GLAZED OR GROUND FACED CMU
MASONRY - STRUCTURAL CLAY TILE
METAL - STEEL
METAL - ALUMINUM
METAL - ORNAMENTAL
CONTINUOUS WOOD FRAMING
DISCONTINUOUS WOOD BLOCKING OR SHIM
WOOD - FINISH WOODWORK
WOOD - PLYWOOD
WOOD - PARTICLE BOARD
WOOD - FLOORING
GYPSUM WALLBOARD
GYPSUM WALLBOARD - LEAD LINED
WATERPROOFING OR AIR/VAPOR BARRIER
RIGID INSULATION
BATT INSULATION
SPRAY-ON FIREPROOFING
PLASTER STUCCO W/ METAL LATH
RESILIENT FLOORING
CARPETING
INSULATED GLAZING
IMP INSULATED MINERAL FIBER
MONOLITHIC GLASS
GLASS BLOCK
ACOUSTICAL CEILING PANEL
BACKER ROD AND SEALANT

ABBREVIATIONS

NOTE 1: ABBREVIATIONS WHEN USED IN COMPOSITION MAY INCLUDE PERIODS FOR CLARIFICATION
NOTE 2: ABBREVIATIONS MAY BE DIFFERENT WHEN A PART OF A LEGEND

A/C	AIR CONDITION(ING)(ED)
ACC	ACCESSIBLE
ACST	ACOUSTIC(AL)
AD	AREA DRAIN
ADA	AMERICANS WITH DISABILITIES
ADJ	ADJUSTABLE/ ADJACENT
AFC	ABOVE FINISHED COUNTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGGR	AGGREGATE
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZE(D)
APC	ACOUSTICAL PANEL CEILING
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL), ARCHITECT
ASPH	ASPHALT
ATC	ACOUSTICAL TILE CEILING
AUTO	AUTOMATIC
AWT	ACOUSTICAL WALL TREATMENT
B/	BOTTOM OF
B/B	BACK TO BACK
BC	BACK OF CURB
BD	BOARD
BITUM	BITUMINOUS
BLDG	BUILDING
BM	BEAM/ BENCHMARK
BOT/	BOTTOM OF
BSMT	BASEMENT
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
C/C	CENTER TO CENTER
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CF/CI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED, OWNER INSTALLED
CFM	CUBIC FEET PER MINUTE
CFMF	COLD-FORMED METAL FRAMING
CG	CORNER GUARD
CI	CAST IRON, CURB INLET
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CLRM	CLASSROOM
CM	CENTIMETER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMM	COMMUNICATION
CONC	CONCRETE
CONF	CONFERENCE
CONT	CONTINUOUS
COORD	COORDINATE
CORR	CORRIDOR
CP	CARPET
CPT	CARPET TILES
CT	CERAMIC TILE
CTR	CENTER/CONTOUR
CU	CUBIC
CUH	CABINET UNIT HEATER
CUST	CUSTODIAN
CW	COLD WATER PIPING/ CHEMICAL WASTELINE
D	DEEP, DEPTH, PENNY (NAIL)
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLISH, DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER (EXTERIOR)
DIAG	DIAGONAL
DIFF	DIFFUSER/ DIFFERENCE
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DR	DOOR/ DRAIN
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELAST	ELASTOMERIC
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
EMER	EMERGENCY
EMER SHR	EMERGENCY SHOWER
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
EO	ELECTRIC OUTLET
EOS	EDGE OF SLAB
EP	ELECTRICAL PANEL
EQ	EQUAL
EQUIP	EQUIPMENT
ETC	ET CETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR, EXTERNAL
F/	FACE OF
F/F	FACE TO FACE
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCO	FLOOR CLEANOUT
FC	FURRING CHANNEL
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDCC	FIRE DEPARTMENT CONNECTION
CABINET	
FDTN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FACE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FIN	FINISH(ED)
FF EL	FINISHED FLOOR ELEVATION
FL	FLOOR
FLUOR	FLUORESCENT
FO	FINISHED OPENING
FOC	FACE OF CURB
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF SLAB/ FACE OF STUD
FP	FIRE PROTECTION/ FIREPROOF
FRMG	FRAMING
FRTW	FIRE RETARDANT TREATED WOOD
FT	FOOT (FEET)/ FIRE TREATED
FTG	FOOTING
FURG	FURRING
FURN	FURNISH, FURNITURE
FUT	FUTURE
FV	FIELD VERIFY
GA	GAGE
GALV	GALVANIZED
GEN	GENERAL
GFRC	GLASS FIBER REINFORCED CONCRETE
GFRG	GLASS FIBER REINFORCED GYPSUM
GL	GLASS
GL BLK	GLASS BLOCK
GLU LAM	GLUED LAMINATED WOOD
GR LN	GRADE LINE
GRFL	GROUND FLOOR
GSB	GYPSUM SHEATHING BOARD
GT	GREASE TRAP
GWB	GYPSUM WALL BOARD
GYP BD	GYPSUM BOARD
GYP PLAS	GYPSUM PLASTER
H	HIGH
HB	HOSE BIBB
HC	HOLLOW CORE
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HO	HOLD OPEN
HORIZ	HORIZONTAL
HPT	HIGH POINT
HS	HEAT STRENGTHENED
HSKPG	HOUSEKEEPING
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
INCAND	INCANDESCENT
INCL	INCLUDE(D), INCLUDING
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JAN CLO	JANITOR'S CLOSET
KIT	KITCHEN
L	LONG, LENGTH
LAB	LABORATORY
LAM	LAMINATE(D)
LAU	LAUNDRY
LAV	LAVATORY
LB	POUND(S)
LF	LINEAR FOOT, (FEET)
LH	LEFT HAND
LIB	LIBRARY
LKR	LOCKER
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LOC	LOCATION
LPT	LOW POINT
LT	LIGHT
LTG	LIGHTING
LVR	LOUVER
M	METER
MACH	MACHINE
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MANHOLE
MHO	MAGNETIC HOLD OPEN
MIN	MINIMUM
MISC	MISCELLANEOUS
MKR BD	MARKER BOARD
MM	MILLIMETER
MO	MASONRY OPENING
MTG	MEETING
MTL	METAL
MULL	MULLION
N	NORTH
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/O	OUT TO OUT
OC	ON CENTER
OCC	OCCUPY, OCCUPANT
OD	OUTSIDE DIAMETER
OF/CI	OWNER FURNISHED, CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED, OWNER INSTALLED
OFF	OFFICE
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
PA	PUBLIC ADDRESS
PAR	PARAPET, PARALLEL
PCC	PRE-CAST CONCRETE
PERF	PERFORATED
PERP	PERPENDICULAR
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLYWD	PLYWOOD
PNT	PAINT
POL	POLISHED
PR	PAIR
PREFAB	PREFABRICATE(D)
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PROJ	PROJECT
PROP	PROPERTY
PS	PULL STATION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT/ PRESSURE TREATED
PTD	PAINTED
PTN	PARTITION
PTS	PNEUMATIC TUBE SYSTEM
PVC	POLYVINYL CHLORIDE
PVG	PAVING
QT	QUARRY TILE
QTY	QUANTITY
R	THERMAL RESISTANCE, RADIUS, RISER
RB	RUBBER BASE
RC	REINFORCED CONCRETE
RCP	REFLECTED CEILING PLAN
RCPTN	RECEPTION
RD	ROOF DRAIN
REC	RECESSED
REF	REFERENCE, REFRIGERATOR
REINF	REINFORCE, REINFORCING
REQ(D)	REQUIRE, REQUIRED
RESIL	RESILIENT
REV	REVISION
RF	RESILIENT FLOORING
RH	RIGHT HAND
RL	RAIN LEADER
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RTF	RUBBER TILE FLOOR
RVL	REVEAL
S	SOUTH
SAN	SANITARY
SC	SOLID CORE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT(FEET)
SGL	SINGLE
SHR	SHOWER
SHT	SHEET
SIM	SIMILAR
SJ	SLIP JOINT, SCORED JOINT
SPEC	SPECIFICATION
SPKR	SPEAKER
SQ	SQUARE
SS	SERVICE SINK
SST	STAINLESS STEEL
STA	STATION
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STRL	STRUCTURE, STRUCTURAL
STOR	STORAGE
SUSP	SUSPENDED
SYS	SYSTEM
SYMM	SYMMETRICAL
T	TREAD
T/	TOP OF
TA	TOILET ACCESSORY
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
THK	THICK
TI	TENANT IMPROVEMENT
TLT	TOILET
TO_	TOP OF _____
TOPO	TOPOGRAPHY, TOPOGRAPHIC
TRTD	TREATED
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
U	HEAT TRANSFER COEFFICIENT
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORIES
UNEX	UNEXCAVATED
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VENT	VENTILATION
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WG	WALL GUARD
WH	WATER HEATER
WI	WROUGHT IRON
WNDW	WINDOW
WP	WORKING POINT
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
X	BY
YD	YARD
YR	YEAR
ZN	ZINC

GENERAL PROJECT NOTES

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE EXISTING SITE CONDITIONS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO THE START OF WORK. NOTIFY THE ARCHITECT OF ANY SIGNIFICANT CHANGES IN DIMENSIONS OR CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF THE BUILDING ON THE SITE. AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE BIDDING THE PROJECT OR THE COMMENCEMENT OF WORK. THE OWNER SHALL NOT BE RESPONSIBLE FOR CHANGES TO THE WORK DUE TO THE FAILURE OF THE CONTRACTOR TO FAMILIARIZE HIMSELF OR HERSELF WITH EXISTING CONDITIONS.
4. THE DRAWINGS ARE INTENDED TO BE FOLLOWED IN CONJUNCTION WITH THE SPECIFICATIONS AND/OR PROJECT MANUAL. THE SPECIFICATION AND/OR PROJECT MANUAL FORMS PART OF THE CONTRACT DOCUMENTS AND CONTAINS ADDITIONAL INFORMATION REQUIRED TO CONSTRUCT THE WORK OF THIS CONTRACT.
5. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT AND NECESSARY FACILITIES, AND PERFORM ALL LABOR AND SERVICES OF EVERY DESCRIPTION AS MAY BE NECESSARY TO COMPLETE THE SCOPE OF WORK DEFINED ON THE DRAWINGS.
6. THE CONTRACTOR SHALL ARRANGE FOR, OBTAIN AND PAY FOR ALL PERMITS, CERTIFICATES, INSPECTIONS, AGENCY APPROVALS, ETC. AND PAY ALL FEES LEVIED BY STATE, LOCAL AND MUNICIPAL AUTHORITIES HAVING JURISDICTION OVER WORK PERFORMED UNDER THIS CONTRACT. PROVIDE COPIES OF ALL REQUIRED PERMITS, CERTIFICATES, INSPECTIONS AND AGENCY APPROVALS TO THE OWNER.
7. ALL WORK SHALL BE FABRICATED AND INSTALLED IN STRICT ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, ALL APPLICABLE STATE AND LOCAL CODES, AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THE CONTRACT. ANY CODE DEFICIENCIES IN THE DRAWINGS RECOGNIZED BY THE CONTRACTOR SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
8. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THEIR WORK, COORDINATING WITH OTHER TRADES, MEANS AND METHODS OF CONSTRUCTION, SAFETY, AND SECURITY ON SITE.
9. CUTTING AND PATCHING SHALL BE PERFORMED BY EACH TRADE AS NECESSARY FOR THE PERFORMANCE AND INSTALLATION OF THEIR WORK. CUTTING AND PATCHING SHALL BE PERFORMED IN A WORKMANLIKE MANNER CONSISTENT WITH INDUSTRY STANDARDS FOR FINISHES AND SUBSTRATES AFFECTED.
10. THE CONTRACTOR SHALL PROTECT THE FACILITY FROM WEATHER AND MAINTAIN SECURITY DURING ALL CONSTRUCTION WORK.
11. EXISTING PROPERTY SHALL BE PROTECTED DURING CONSTRUCTION. REPAIR OR REPLACE, WITHOUT ADDITIONAL CHARGE TO THE OWNER, ANY EXISTING WORK DAMAGED DURING THE COURSE OF CONSTRUCTION.
12. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE FOR A PLUMB, LEVEL, AND SQUARE STRUCTURE UNLESS OTHERWISE NOTED. ANY DEVIATION FROM THIS GENERAL INTENT SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
13. DO NOT SCALE DRAWINGS: ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE AND BE FIELD VERIFIED AND COORDINATED WITH WORK OF ALL TRADES. IF NO DIMENSIONS ARE GIVEN, OR IF DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION BEFORE BIDDING OR COMMENCING THE WORK.
14. DETAILS ARE INTENDED TO SHOW METHODS AND MANNER OF ACCOMPLISHING WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, ALL INCLUDED AS PART OF THE WORK.
15. THE CONTRACTOR SHALL VERIFY THE SIZES AND LOCATIONS OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT PADS AND BASES, AS WELL AS POWER, WATER AND DRAIN REQUIREMENTS FOR SUCH EQUIPMENT WITH EQUIPMENT MANUFACTURER. DEVIATION OF THE AFOREMENTIONED REQUIREMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
16. UNLESS ITEMS OR MATERIAL, EQUIPMENT OR WORK ARE SPECIFICALLY NOTED TO BE PROVIDED OR FURNISHED BY OTHERS, THEY SHALL BE PROVIDED UNDER THIS CONTRACT.
17. ALL WORK SHALL BE PERFORMED BY SKILLED WORKERS IN A WORKMANLIKE AND PROFESSIONAL MANNER CONSISTENT WITH INDUSTRY STANDARDS.
18. MATERIALS AND COMPONENTS AS SPECIFIED CONSTITUTE A STANDARD OF QUALITY, UNLESS OTHERWISE NOTED. EQUAL SUBSTITUTES WILL BE ACCEPTABLE ONLY WITH WRITTEN PRIOR APPROVAL BY THE ARCHITECT.
19. THE CONTRACTOR SHALL PERFORM TESTS AT THEIR OWN EXPENSE, AS NECESSARY OR AS REQUIRED BY ANY INSPECTION AGENCY. TEST SHALL BE MADE TO VERIFY WHETHER THE SYSTEM OR COMPONENTS INSTALLED COMPLY WITH THE SPECIFICATIONS AND ARE IN WORKING ORDER.
20. THE CONTRACTOR SHALL LEAVE THE WORK IN PROPER WORKING ORDER AND SHALL, WITHOUT ADDITIONAL CHARGE, REPLACE ANY WORK, MATERIALS, OR EQUIPMENT FURNISHED AND INSTALLED UNDER HIS CONTRACT WHICH DEVELOPS DEFECTS, EXCEPT FROM ORDINARY WEAR AND TEAR, WITHIN ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
21. THE CONTRACTOR SHALL INSPECT THE UNDERSIDE OF ROOF DECK CURRENTLY COVED WITH INSULATION BLANKETS AND REPAIR AND REPLACE DAMAGED INSULATION AS NECESSARY. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
22. THE CONTRACTOR SHALL REPAIR ALL OPENINGS BETWEEN EXTERIOR WALL ASSEMBLIES AND FOUNDATION WALL. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
23. THE CONTRACTOR SHALL REPLACE SEALANT AT ALL EXTERIOR PENETRATIONS AT EXTERIOR WALLS AND ROOF. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
24. THE CONTRACTOR SHALL CLEAN ASPHALT SHINGLE ROOF. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
25. **THE CONTRACTOR SHALL REMOVE GUTTERS AT METAL SNOW SLIDE AREAS AND INSTALL DIVERTERS TO DIRECT RAIN WATER FROM ENTRANCES. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.**
26. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL WINDOWS PER THE WINDOW SCHEDULE.
27. THE CONTRACTOR SHALL INFILL ANY AND ALL HOLES IN THE BUILDING EXTERIOR. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
28. THE CONTRACTOR SHALL PREPARE AND PAINT ALL WOOD SIDING TO MATCH EXISTING PAINT COLOR.
29. THE CONTRACTOR SHALL REPLACE ALL DETERIORATED AND INSECT DAMAGED WOOD FASCIA BOARDS. REFER TO BUILDING ENVELOPE ASSESSMENT REPORT BY BUILDING ENCLOSURE ASSOCIATES, FOR ADDITIONAL RECOMMENDATIONS.
30. THE CONTRACTOR SHALL PROVIDE STAINLESS STEEL CORNER GUARDS ON ALL EXTERIOR CORNERS IN THE ALL CORRIDORS IN THE CULTIVATION, MANUFACTURING AND PROCESSING AREAS.
31. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BLOCKING FOR ALL WALL MOUNTED EQUIPMENT.
32. THE CONTRACTOR SHALL PROVIDE A PRIVACY FILM ON ALL WINDOWS. SEE SPECIFICATIONS FOR MORE INFORMATION.
33. THE CONTRACTOR SHALL PROVIDE WALL GUARDS AT THE APPROPRIATE HEIGHT A.F.F. IN ALL CORRIDORS, AS NEEDED.
34. IN BUILDINGS TO BE OCCUPIED DURING CONSTRUCTION, DO NOT OBSTRUCT ACCESS TO EXISTING EXITS, AND DO NOT REDUCE THE WIDTH OF EXIT PATHWAYS.
35. MEMBRANE-PENETRATIONS AND THROUGH-PENETRATIONS IN FIRE RATED WALLS, FLOORS, CEILINGS, AND ROOF ASSEMBLIES SHALL BE SEALED WITH A LISTED AND RATED PENETRATION SEALANT SYSTEM MEETING OR EXCEEDING THE REQUIRED FIRE RATING OF THE ASSEMBLY.
36. FIRE RESISTIVE RATINGS MUST BE MAINTAINED AROUND AND BEHIND CABINETS, ELECTRICAL PANELS, JUNCTION BOXES, AND ANY DEVICES OR EQUIPMENT RECESSED INTO RATED ASSEMBLIES.
37. THE CONTRACTOR SHALL INSTALL CONTINUOUS PERIMETER FIRESAFING AT RATED FLOORS AND ROOFS, AND COORDINATE THE INSTALLATION WITH EXTERIOR WALLS. FIRE RATINGS OF SAFING SYSTEMS SHALL MATCH, OR EXCEED, THE FIRE RATING OF THE FLOOR AND/OR ROOF ASSEMBLIES.
38. THE CONTRACTOR SHALL INSTALL STIFFENERS, BRACING, BACKING PLATES AND/OR BLOCKING AS REQUIRED FOR SECURE INSTALLATION OF WALL AND CEILING MOUNTED ITEMS (INCLUDING, BUT NOT LIMITED TO: TOILET PARTITIONS, DOORS AND WALL-MOUNTED DOOR HARDWARE, HANDRAILS, WALL-MOUNTED CASEWORK, ARTWORK, OPERABLE PARTITIONS, DEMOUNTABLE PARTITIONS, GLAZINGS, MESCELLANEOUS FURNISHINGS AND EQUIPMENT, MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT.) WOOD BLOCKINGS, IF PERMITTED BY CODE AND INSPECTIONAL AUTHORITIES, SHALL BE FIRE AND MOISTURE TREATED.

ANDERSON PORTER DESIGN

SPECIAL PERMIT

SPECIAL PERMIT

REVISIONS

No.	Description	Date

AndersonPorterDesign
1972 Massachusetts Ave, 4th Floor
Cambridge, MA 02140
Tel. 617.354.2501 Fax. 617.354.2509

Project: 191 LAFAYETTE ROAD

Address: 191 Lafayette Rd, Salisbury, MA 01952

Title: GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

Drawing Issued By: ANDERSON PORTER DESIGN

Project #: 2113

Date: 2021.10.20

Scale: 12" = 1'-0"

Drawn by: GA

Drawn No. G2.0

10/20/2021 2:42:54 PM

BUILDING CODE REVIEW

FOR 'BUILDING A'
(CANNABIS DISPENSARY)

BUILDING CODE REFERENCES

- INTERNATIONAL BUILDING CODE (2015)
- MASSACHUSETTS STATE BUILDING CODE: 780 CMR (9TH Ed.)
- MASSACHUSETTS ARCHITECTURAL ACCESS BOARD: 521 CMR (2018)
- MASSACHUSETTS UNIFORM STATE PLUMBING CODE: 248 CMR 10.00 (2017)
- MASSACHUSETTS CANNABIS CONTROL COMMISSION REGULATIONS: 935 CMR 500 (2021)
- INTERNATIONAL ENERGY CONSERVATION CODE (2018)
- TOWN OF SALISBURY ZONING BY-LAWS

PROJECT DESCRIPTION

CONSTRUCTION WORK IS PROPOSED FOR A NEW BUILDING TO BE LOCATED AT 191 LAFAYETTE ROAD IN SALISBURY, MASSACHUSETTS.

THE TENANTS OF THE PROPOSED BUILDING WILL BE A CANNABIS RETAIL BUSINESS. THE SCOPE OF CONSTRUCTION WILL INCLUDE: SITEWORK, NEW FOUNDATION, NEW SUPERSTRUCTURE, AND INTERIOR FIT-OUT

THE NEW BUILDING WILL BE A SINGLE-STORY, LIGHT-FRAMED STRUCTURE.

TOTAL GROSS BUILDING AREA

4,588 SF

USE & OCCUPANCY CLASSIFICATION

IBC 301

SINGLE USE OCCUPANCY

- **M** (MERCANTILE GROUP) = **4,588** SF

TYPE OF CONSTRUCTION

IBC TABLE 601

TYPE VB (COMBUSTIBLE UNPROTECTED)

ALLOWABLE BUILDING HEIGHT & STORIES ABOVE GRADE PLANE

IBC 504.3

TABLE 504.3[a] ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION	
	SEE FOOTNOTES	TYPE V
		B
A, B, E, F, M, S, U	NS[b]	40

For SI: 1 foot = 304.8 mm.

Note: UL = Unlimited; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

ALLOWABLE BUILDING HEIGHT = 40' - 0" PER IBC 504.3
PROPOSED BUILDING HEIGHT* = 30'-3"

ALLOWABLE STORIES ABOVE GRADE PLANE = 1 PER IBC 504.4
PROPOSED STORIES ABOVE GRADE PLANE = 1

ALLOWABLE BUILDING AREA

IBC 506.2

OCCUPANCY CLASSIFICATION	FIRE PROTECTION CATEGORY	ALLOWABLE BUILDING AREA	PROPOSED BUILDING AREA
M	NO SPRINKLER SYSTEM	15,750 SF PER 506.2.1	4,588 SF

FIRE-RESISTANCE RATINGS

IBC TABLE 601

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT		TYPE V
		B
Primary structural frame[f] (see Section 202)		0
Bearing walls Exterior[e, f] Interior		0 0
Nonbearing walls and partitions Exterior	See Table 602	
Nonbearing walls and partitions Interior[d]		0
Floor construction and associated secondary members (see Section 202)		0
Roof construction and associated secondary members (see Section 202)		0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
c. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
d. Not less than the fire-resistance rating required by other sections of this code.
e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
f. Not less than the fire-resistance rating as referenced in Section 704.10.

FIRE SEPARATION

IBC 508.4

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

OCCUPANCY	B[a], F-1, M, S-1	
		NS
B[a], F-1, M, S-1		N

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
N = No separation requirement.
NP = Not permitted.

a. See Section 420.
b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but not to less than 1 hour.
c. See Section 406.3.4.
d. Separation is not required between occupancies of the same classification.
e. See Section 422.2 for ambulatory care facilities.

NUMBER OF EXITS OR ACCESS TO EXITS PER STORY

IBC 1006.3.1

NUMBER OF EXITS **REQUIRED**: 2

NUMBER OF EXITS **PROVIDED**: 3

MEANS OF EGRESS SIZING

IBC 1005.3.2

EXIT #	DESIGN OCCUPANT LOAD	EGRESS CAPACITY FACTOR	EGRESS WIDTH REQUIRED	EGRESS WIDTH PROVIDED
1	24	0.20"	4.8"	36"
2	22	0.20"	4.4"	36"
3	15	0.20"	3.0"	36"

EXIT ACCESS TRAVEL DISTANCE

IBC 1017.2

FOR 'MERCANTILE' USE GROUPS, **WITHOUT** A SPRINKLER SYSTEM:

MAXIMUM **ALLOWABLE** TRAVEL DISTANCE = **200'-0"**
MAXIMUM **PROPOSED** TRAVEL DISTANCE = **75'-2"**

COMMON PATH OF EGRESS TRAVEL DISTANCE

IBC 1006.2.1

FOR 'MERCANTILE' USE GROUPS, **WITHOUT** A SPRINKLER SYSTEM:

MAXIMUM **ALLOWABLE** COMMON PATH OF EGRESS TRAVEL DISTANCE = **75'-0"**
MAXIMUM **PROPOSED** COMMON PATH OF EGRESS TRAVEL DISTANCE = **51'-0"**

DESIGN OCCUPANT LOAD

PER IBC 1004.1.2

SUM OF (AREAS/OCCUPANT LOAD FACTORS) = DESIGN OCCUPANT LOAD - BUILDING A

Room No.	Room Name	Area	Occupant Load Factor	Occupant Load
MERCANTILE				
100	VESTIBULE ENTRY	248 SF	60	5
101	BATH	51 SF	0	0
102	TENT	209 SF	60	4
103	SALES AREA	1063 SF	60	18
104	EXIT	58 SF	0	0
105	POS	448 SF	60	8
106	STORAGE	56 SF	300	1
107	FULFILLMENT	447 SF	300	2
108	SHIPPING/RECEIVING	148 SF	300	1
109	MECH	116 SF	300	1
110	VAULT	537 SF	300	2
111	CORRIDOR	142 SF	60	3
112	OFFICE	85 SF	100	1
113	IT ROOM	27 SF	300	1
114	BATH	51 SF	0	0
115	JANITOR	28 SF	300	1
116	OFFICE	83 SF	100	1
117	CONFERENCE ROOM	114 SF	15	8
118	OPEN OFFICE/BREAK ROOM	351 SF	100	4
		4261 SF		61

MINIMUM PLUMBING FACILITIES FOR BUILDING OCCUPANCY

248 CMR 10.10 TABLE 1

BUILDING CLASSIFICATION: RETAIL (MERCANTILE)

	MINIMUM FIXTURES REQUIRED	PROPOSED FIXTURE COUNT	OCCUPANT LOAD PER FIXTURE
TOILETS (FEMALES)	1 per 20	1	20
TOILETS (MALES)	1 per 20	1	20
URINALS (MALES)	-	-	-
LAVATORIES (FEMALES)	1 per 40	1	40
LAVATORIES (MALES)	1 per 40	1	40
DRINKING WATER STATION	-	-	-
BATH/ SHOWER	-	-	-
OTHER FIXTURES	-	-	-
TOTAL ALLOWABLE BUILDING OCCUPANT LOAD (PER PLUMBING FACILITIES)			40

ANDERSON PORTER DESIGN

SPECIAL PERMIT

SPECIAL PERMIT

REVISIONS

No.	Description	Date

AndersonPorterDesign
1972 Massachusetts Ave, 4th Floor
Cambridge, MA 02140
Tel. 617.354.2501 Fax. 617.354.2509

Project: 191 LAFAYETTE ROAD
Address: 191 Lafayette Rd, Salisbury, MA 01952
Title: BUILDING CODE REVIEW BUILDING A

Drawing Issued By: ANDERSON PORTER DESIGN
Project #: 2113
Date: 2021.10.20
Scale: 12" = 1'-0"
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Drawn No. G3.0

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BUILDING CODE REVIEW

FOR 'BUILDING B'
(BREWERY)

BUILDING CODE REFERENCES

- INTERNATIONAL BUILDING CODE (2015)
- MASSACHUSETTS STATE BUILDING CODE: 780 CMR (9TH Ed.)
- MASSACHUSETTS ARCHITECTURAL ACCESS BOARD: 521 CMR (2018)
- MASSACHUSETTS UNIFORM STATE PLUMBING CODE: 248 CMR 10.00 (2017)
- INTERNATIONAL ENERGY CONSERVATION CODE (2018)
- TOWN OF SALISBURY ZONING BY-LAWS

PROJECT DESCRIPTION

CONSTRUCTION WORK IS PROPOSED FOR A NEW BUILDING TO BE LOCATED AT 191 LAFAYETTE ROAD IN SALISBURY, MASSACHUSETTS.

THE TENANTS OF THE PROPOSED BUILDING WILL BE A BREWERY & TAPROOM. THE SCOPE OF CONSTRUCTION WILL INCLUDE: SITEWORK, NEW FOUNDATION, NEW SUPERSTRUCTURE, AND INTERIOR FIT-OUT.

THE NEW BUILDING WILL BE A SINGLE-STORY, LIGHT-FRAMED STRUCTURE.

TOTAL GROSS
BUILDING AREA

6,166 SF

USE & OCCUPANCY CLASSIFICATION

IBC 301

MIXED OCCUPANCIES

- A-2 (ASSEMBLY GROUP) = 4,150 SF
- F-1 (MODERATE-HAZARD FACTORY INDUSTRIAL GROUP) = 2,016 SF

TOTAL AREA = 6,166 GSF

TYPE OF CONSTRUCTION

IBC TABLE 601

TYPE VB (COMBUSTIBLE UNPROTECTED)

ALLOWABLE BUILDING HEIGHT & STORIES ABOVE GRADE PLANE

IBC 504.3

TABLE 504.3[a] ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE

OCCUPANCY CLASSIFICATION	TYPE OF CONSTRUCTION	
	SEE FOOTNOTES	TYPE V
		B
A, B, E, F, M, S, U	S	60

For SI: 1 foot = 304.8 mm.

Note: UL = Unlimited; NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

ALLOWABLE BUILDING HEIGHT = 60' - 0" PER IBC 504.3
PROPOSED BUILDING HEIGHT* = 28' - 10"

ALLOWABLE STORIES ABOVE GRADE PLANE = 2 PER IBC 504.4
PROPOSED STORIES ABOVE GRADE PLANE = 1

ALLOWABLE BUILDING AREA

IBC 506.2

OCCUPANCY CLASSIFICATION	FIRE PROTECTION CATEGORY	ALLOWABLE BUILDING AREA	PROPOSED BUILDING AREA
A-2	SPRINKLERED/SINGLE STORY	22,500 SF PER 506.2.1	4,150 SF
F-1	SPRINKLERED/SINGLE STORY	31,875 SF PER 506.2.1	2,016 SF

FIRE-RESISTANCE RATINGS

IBC TABLE 601

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING ELEMENT		TYPE V
		B
Primary structural frame[f] (see Section 202)		0
Bearing walls Exterior[e, f] Interior		0 0
Nonbearing walls and partitions Exterior	See Table 602	
Nonbearing walls and partitions Interior[d]		0
Floor construction and associated secondary members (see Section 202)		0
Roof construction and associated secondary members (see Section 202)		0

For SI: 1 foot = 304.8 mm.

a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
c. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
d. Not less than the fire-resistance rating required by other sections of this code.
e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
f. Not less than the fire-resistance rating as referenced in Section 704.10.

FIRE SEPARATION

IBC 508.4

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

OCCUPANCY	B[a], F-1, M, S-1
	S
A, E	1

S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
NS = Buildings not equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
N = No separation requirement.
NP = Not permitted.

a. See Section 420.
b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but not to less than 1 hour.
c. See Section 406.3.4.
d. Separation is not required between occupancies of the same classification.
e. See Section 422.2 for ambulatory care facilities.

NUMBER OF EXITS OR ACCESS TO EXITS PER STORY

IBC 1006.3.1

NUMBER OF EXITS **REQUIRED**: 2

NUMBER OF EXITS **PROVIDED**: 3

MEANS OF EGRESS SIZING

IBC 1005.3.2

EXIT #	DESIGN OCCUPANT LOAD	EGRESS CAPACITY FACTOR	EGRESS WIDTH REQUIRED	EGRESS WIDTH PROVIDED
1	89	0.15"	13.4"	72"
2	99	0.15"	14.9"	72"
3	57	0.15"	8.6"	36"

EXIT ACCESS TRAVEL DISTANCE

IBC 1017.2

FOR BOTH 'ASSEMBLY GROUP ' & ' MODERATE-HAZARD FACTORY ' USE GROUPS, WITH A SPRINKLER SYSTEM:

MAXIMUM **ALLOWABLE** TRAVEL DISTANCE = **250'-0"**
MAXIMUM **PROPOSED** TRAVEL DISTANCE = **84'-11"**

COMMON PATH OF EGRESS TRAVEL DISTANCE

IBC 1006.2.1

FOR BOTH 'ASSEMBLY' & ' MODERATE-HAZARD FACTORY ' USE GROUPS, WITH A SPRINKLER SYSTEM:

MAXIMUM **ALLOWABLE** COMMON PATH OF EGRESS TRAVEL DISTANCE = **75'-0"**
MAXIMUM **PROPOSED** COMMON PATH OF EGRESS TRAVEL DISTANCE = **47'-10"**

DESIGN OCCUPANT LOAD

PER IBC 1004.1.2

SUM OF (AREAS/OCCUPANT LOAD FACTORS) = DESIGN OCCUPANT LOAD - BUILDING B

Room No.	Room Name	Area	Occupant Load Factor	Occupant Load
ASSEMBLY GROUP A-2				
200	ASSEMBLY AREA	2656 SF	15	178
201	SERVING AREA	849 SF	15	57
202	BATH 1	248 SF	0	0
203	BATH 2	248 SF	0	0
FACTORY F-1				
204	KITCHEN	456 SF	200	3
205	BREW TANKS	872 SF	300	3
206	COLD STORAGE	170 SF	300	1
207	DRY STORAGE	161 SF	300	1
208	STORAGE	72 SF	300	1
209	MECH	44 SF	300	1
210	BATH 3	51 SF	0	0
		5829 SF		245

MINIMUM PLUMBING FACILITIES FOR BUILDING OCCUPANCY

248 CMR 10.10 TABLE 1

BUILDING CLASSIFICATION: NIGHTCLUBS/PUBS

	MINIMUM FIXTURES REQUIRED	PROPOSED FIXTURE COUNT	OCCUPANT LOAD PER FIXTURE
TOILETS (FEMALES)	1 per 30	4	120
TOILETS (MALES)	1 per 50	2	100
URINALS (MALES)	50%	2	100
LAVATORIES (FEMALES)	1 per 75	3	225
LAVATORIES (MALES)	1 per 75	3	225
DRINKING WATER STATION	1 per 500	-	-
BATH/ SHOWER	-	-	-
OTHER FIXTURES	-	-	-
TOTAL ALLOWABLE BUILDING OCCUPANT LOAD (PER PLUMBING FACILITIES)			320

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1972 Massachusetts Ave, 4th Floor
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Project: 191 LAFAYETTE ROAD
Address: 191 Lafayette Rd, Salisbury, MA 01952
Title: BUILDING CODE REVIEW BUILDING B

Drawing Issued By: ANDERSON PORTER DESIGN
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Drawn No. G4.0

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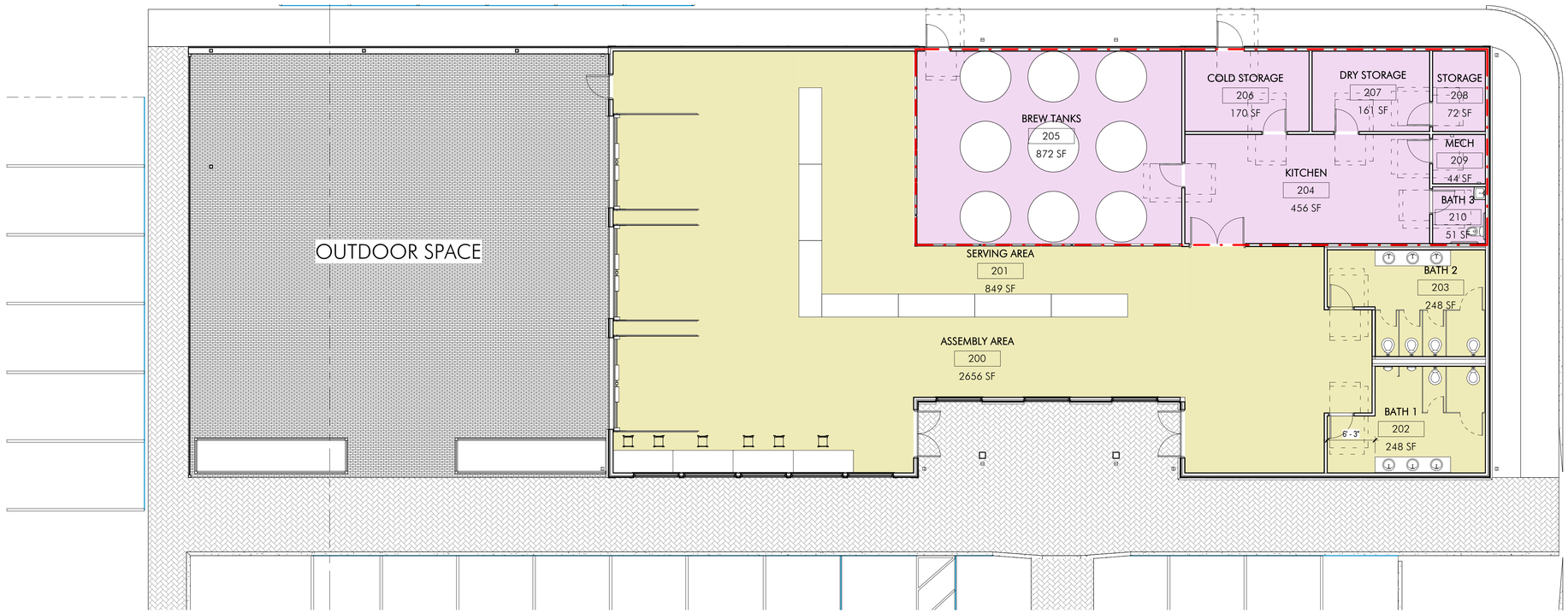
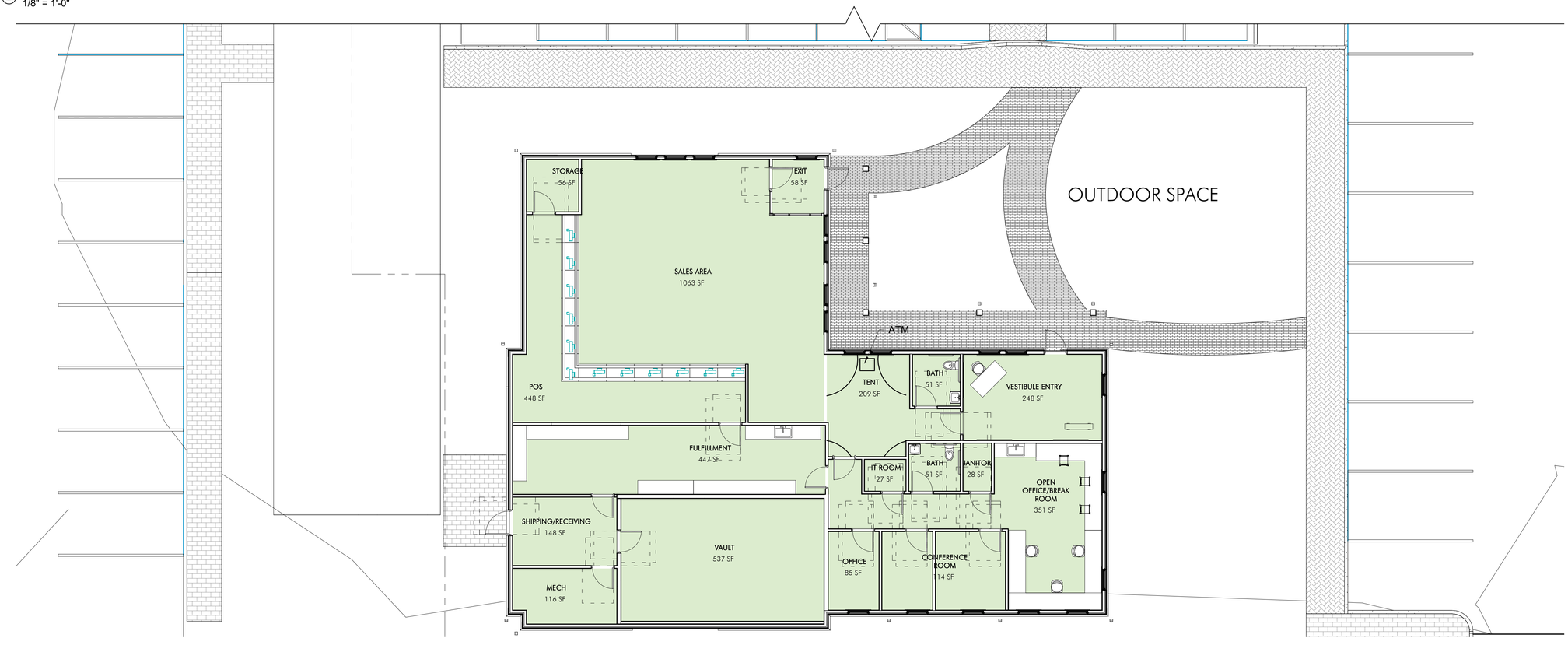


2 LEVEL 1 - FLOOR PLAN - BUILDING B OCCUPANCY DIAGRAM
1/8" = 1'-0"



1 LEVEL 1 - FLOOR PLAN - BUILDING A OCCUPANCY DIAGRAM
1/8" = 1'-0"

OCCUPANCY USE LEGEND	
	M = MERCANTILE 4,190 SQ FT
	A-2 = ASSEMBLY 4,150 SQ FT
	F-1 = MODERATE HAZARD FACTORY 2,016 SQ FT
	1-HOUR FIRE RATED WALL

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Title: USE AND OCCUPANCY

Drawing Issued By: ANDERSON PORTER DESIGN

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Date: 2021.10.20

Scale: As indicated

Drawn by: GA

Drawn No. G5.0

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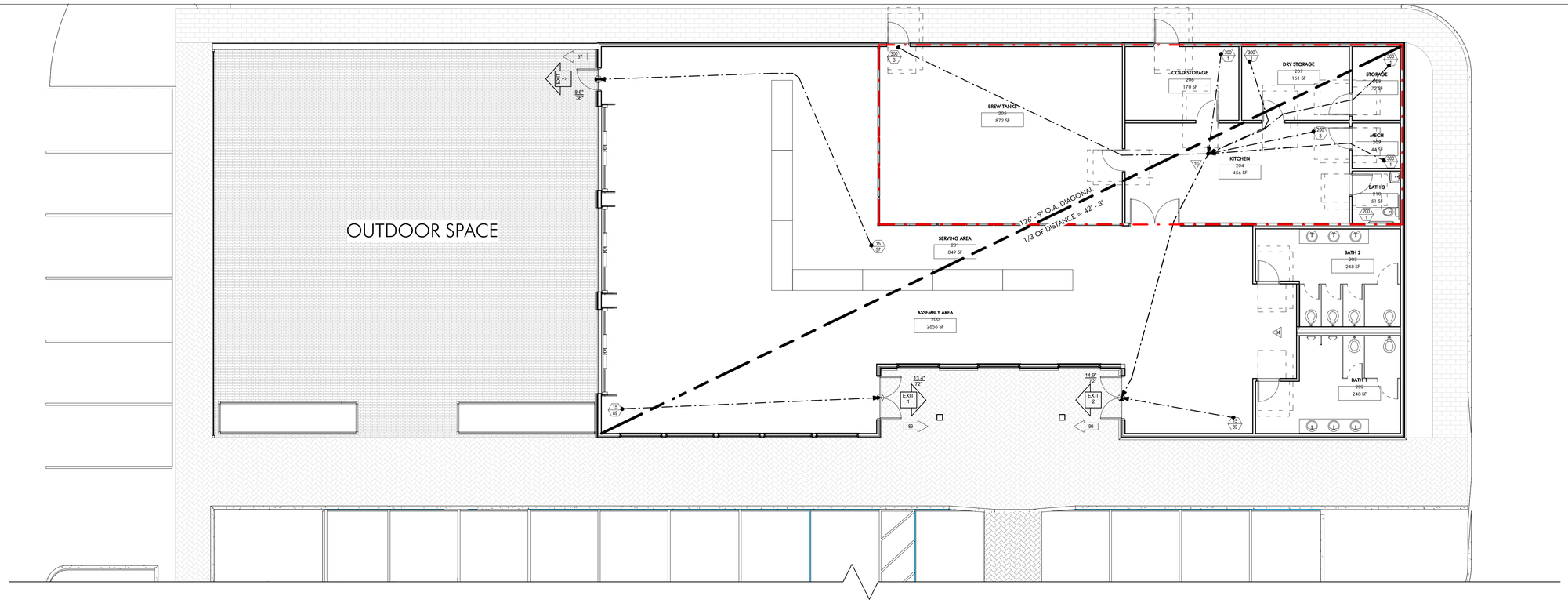
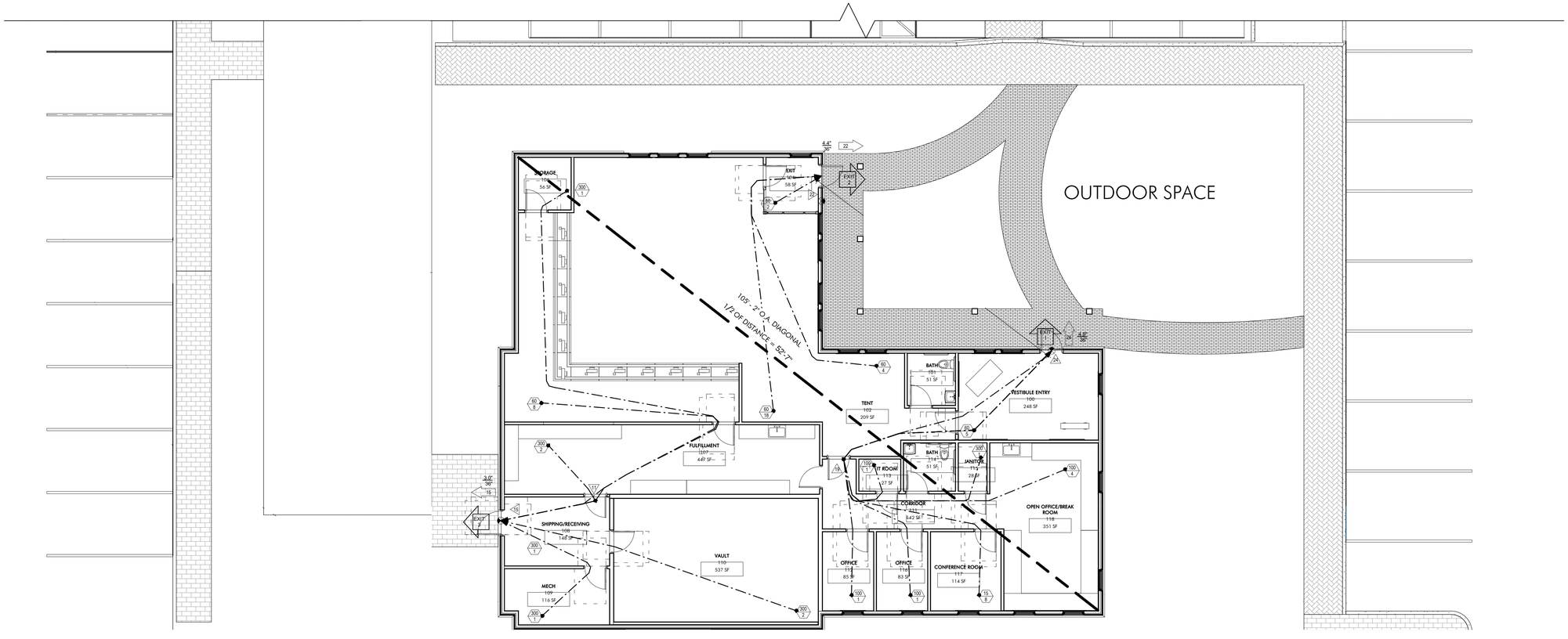


② LEVEL 1 - FLOOR PLAN - BUILDING B LIFE SAFETY DIAGRAM
1/8" = 1'-0"



① LEVEL 1 - FLOOR PLAN - BUILDING A LIFE SAFETY DIAGRAM
1/8" = 1'-0"

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Address:
191 Lafayette Rd, Salisbury, MA 01952

Title:
BUILDING LIFE SAFETY

Drawing Issued By: ANDERSON PORTER DESIGN

Project #: 2113
Date: 2021.10.20
Scale: 1/8" = 1'-0"
Drawn by: GA

Drawn No.
G6.0

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NOTE:

THE CONDITIONS ILLUSTRATED ON THIS SHEET CONSTITUTE LEGAL STANDARDS FOR HANDICAPPED ACCESSIBILITY. THEY DO NOT CONSTITUTE ACTUAL ARCHITECTURAL CONDITIONS FOR CONSTRUCTION IN THE COURSE OF THIS WORK.

SEE ENCLOSED ARCHITECTURAL DRAWINGS FOR ACTUAL EXTENT OF WORK. NOT ALL CONDITIONS SHOWN HERE NECESSARILY OCCUR IN THIS PROJECT.

CONTRACTOR TO INFORM ARCHITECT WHEN DUE TO FIELD CONDITIONS, ETC., ACTUAL CONSTRUCTION WILL NOT CONFORM TO THESE STANDARDS.

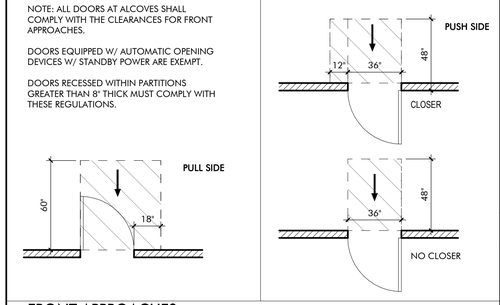
REFER TO 521 CMR AND 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN FOR ALL ACCESSIBILITY REQUIREMENTS.

GENERAL NOTES

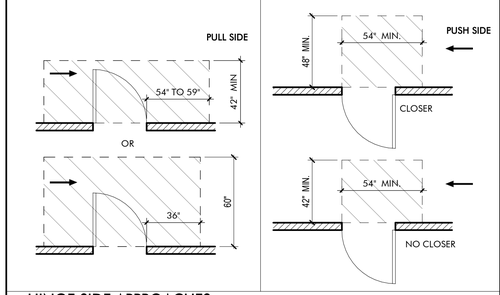
NOTE: ALL DOORS AT ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES.

DOORS EQUIPPED W/ AUTOMATIC OPENING DEVICES W/ STANDBY POWER ARE EXEMPT.

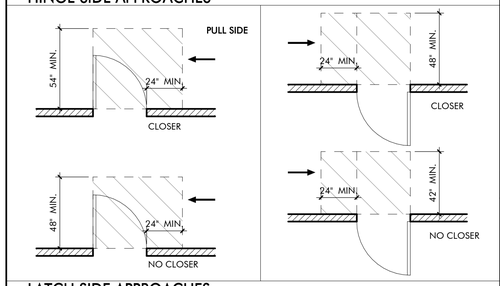
DOORS RECESSED WITHIN PARTITIONS GREATER THAN 8" THICK MUST COMPLY WITH THESE REGULATIONS.



FRONT APPROACHES

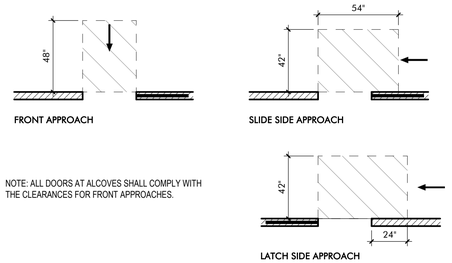


HINGE SIDE APPROACHES



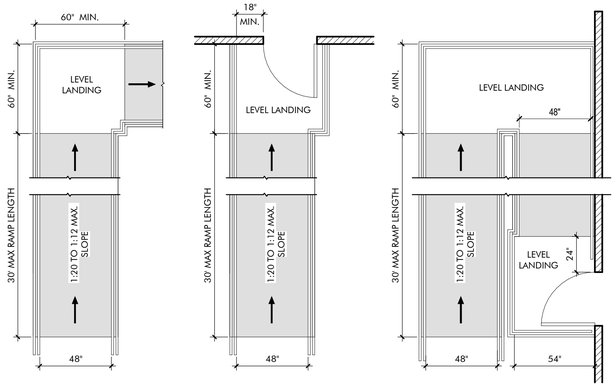
LATCH SIDE APPROACHES

MANEUVERING CLEARANCES AT SWINGING DOORS

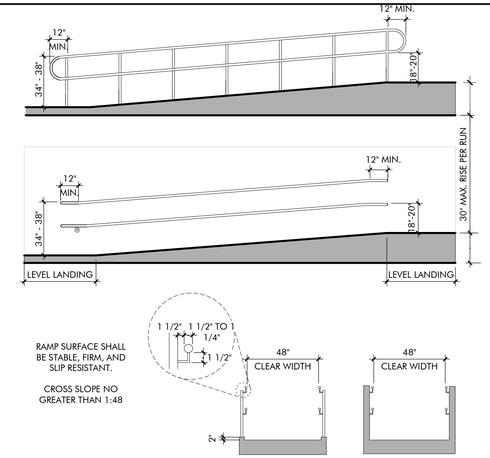


NOTE: ALL DOORS AT ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES.

MANEUVERING CLEARANCE AT SLIDING / FOLDING DOORS



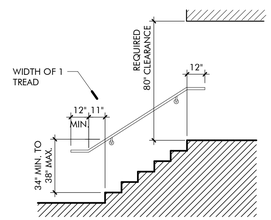
INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 30" OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. A SLOPE BETWEEN 1:10 (10%) AND 1:12 (8.3%) IS ALLOWED FOR A SINGLE RISE OF MAXIMUM THREE INCHES (3").



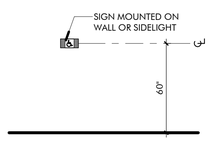
RAMP SURFACE SHALL BE STABLE, FIRM, AND SLIP RESISTANT.

CROSS SLOPE NO GREATER THAN 1:48

RAMPS / HANDRAILS



STAIR RAILING DETAIL

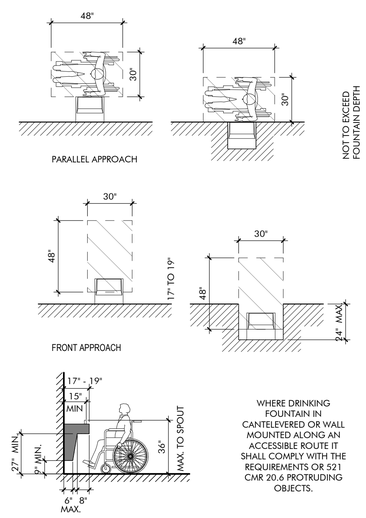


ALL SIGNAGE TO COMPLY WITH ADA AND MASS. ARCH. ACCESS BOARD REQUIREMENTS

FINAL GRAPHICS TO BE APPROVED BY ARCHITECTS/TENANT

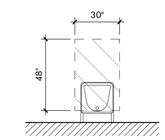
PROVIDE CONCEALED FASTENERS OR ADHESIVES AS RECOMMENDED BY MANUFACTURERS AND AS REQUIRED FOR PERMANENT AND SECURE MOUNTING TO SUBSTRATES INDICATED. SUITABLE FOR CONDITIONS OF APPLICATION AND USE.

INTERIOR TENANT SPACE SIGNAGE

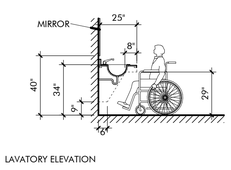


WHERE DRINKING FOUNTAIN IN CANTELEVERED OR WALL MOUNTED ALONG AN ACCESSIBLE ROUTE IT SHALL COMPLY WITH THE REQUIREMENTS OR 521 CMR 20.6 PROTRUDING OBJECTS.

DRINKING FOUNTAINS

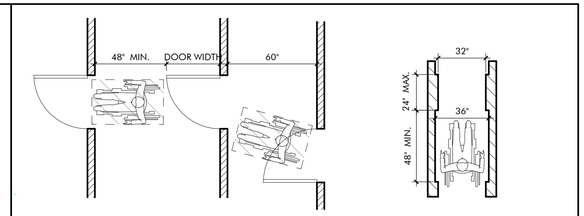


LAVATORY PLAN CLEARANCES

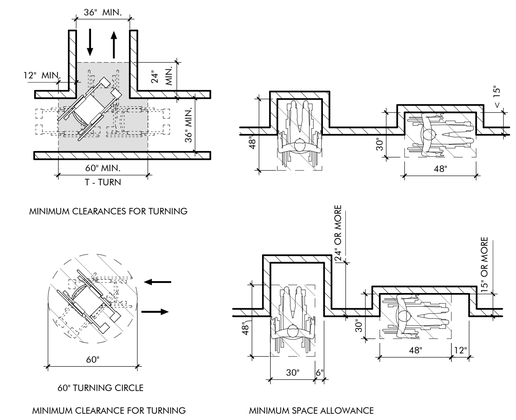


LAVATORY ELEVATION

LAVATORIES



WHEEL CHAIR PASSAGE

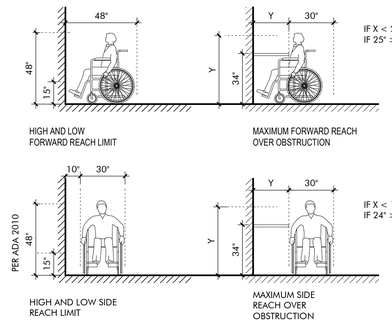


MINIMUM CLEARANCES FOR TURNING

MINIMUM CLEARANCE FOR TURNING

MINIMUM SPACE ALLOWANCE

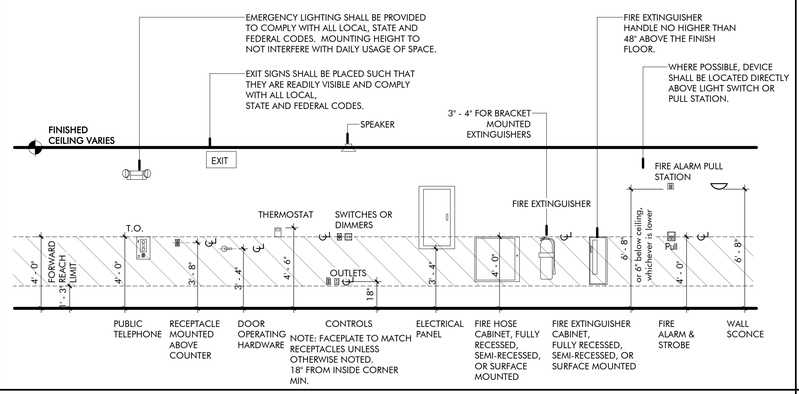
WHEEL CHAIR - SPACE ALLOWANCE



IF X < 20" THAN Y = 48" MAX.
IF 25" > X > 20" THAN Y = 44" MAX.

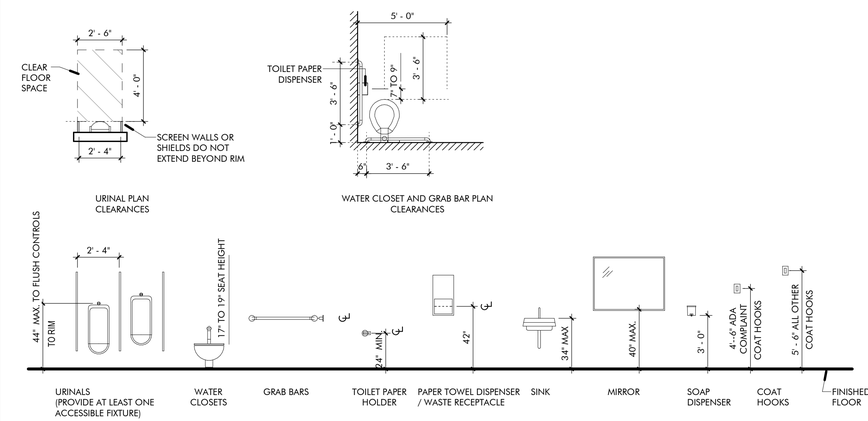
IF X < 10" THAN Y = 48" MAX.
IF 24" > X > 10" THAN Y = 46" MAX.

REACH RANGES



MOUNTING HEIGHTS

REFER TO ELEVATIONS FOR EXACT MOUNTING HEIGHTS OF DEVICES AND FINISHES.



FIXTURE AND ACCESSORY MOUNTING HEIGHTS

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1	Revision 1	Date 1

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Project: 191 LAFAYETTE ROAD

Address: 191 Lafayette Rd, Salisbury, MA 01952

Title: BASE BUILDING ACCESSIBILITY

Drawing Issued By:	ANDERSON PORTER DESIGN
Project #:	2113
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Drawn No.	G7.0

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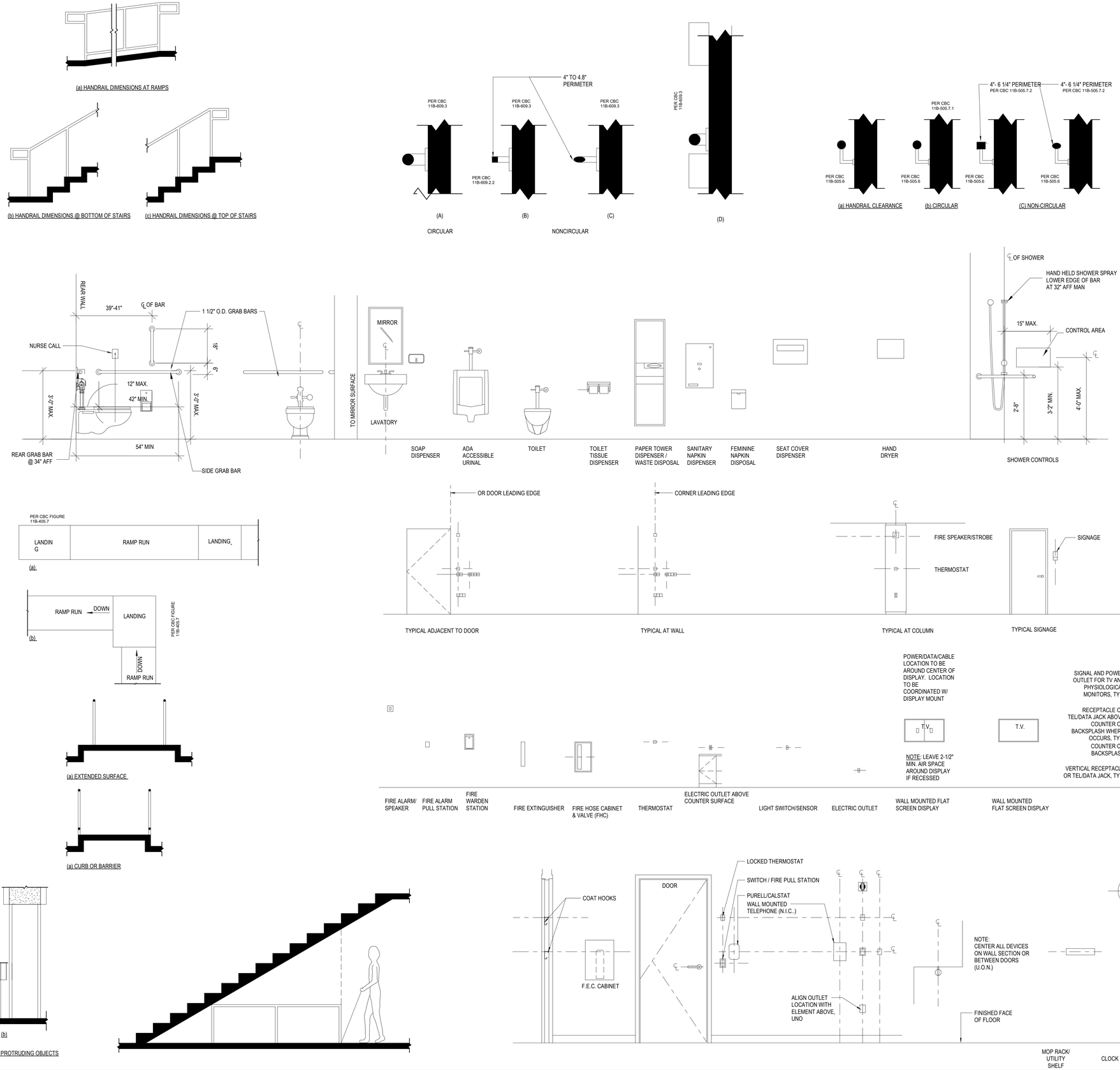

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1	Revision 1	Date 1

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Address: 191 Lafayette Rd, Salisbury, MA 01952

Title: TYPICAL MOUNTING HEIGHTS + CLEARANCES

Drawing Issued By:	ANDERSON PORTER DESIGN
Project #:	2113
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Drawn No. G8.0

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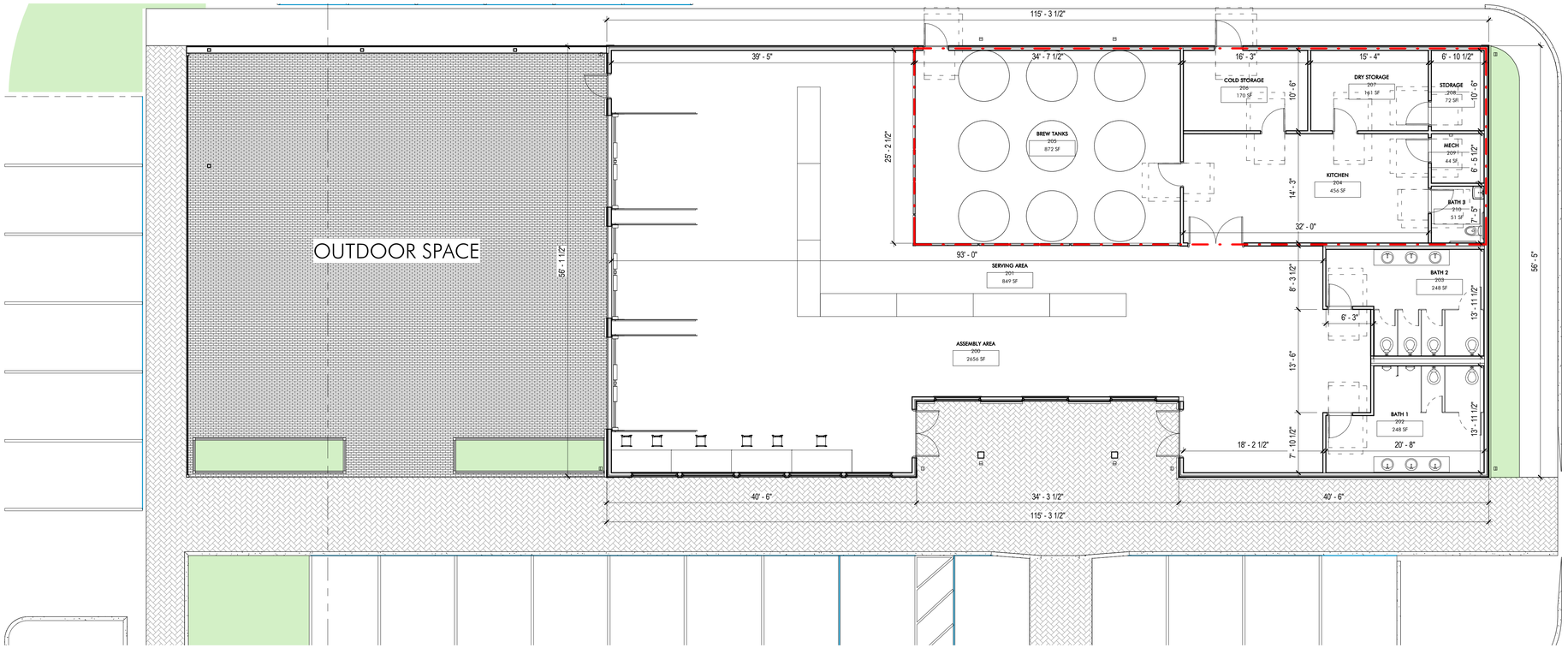
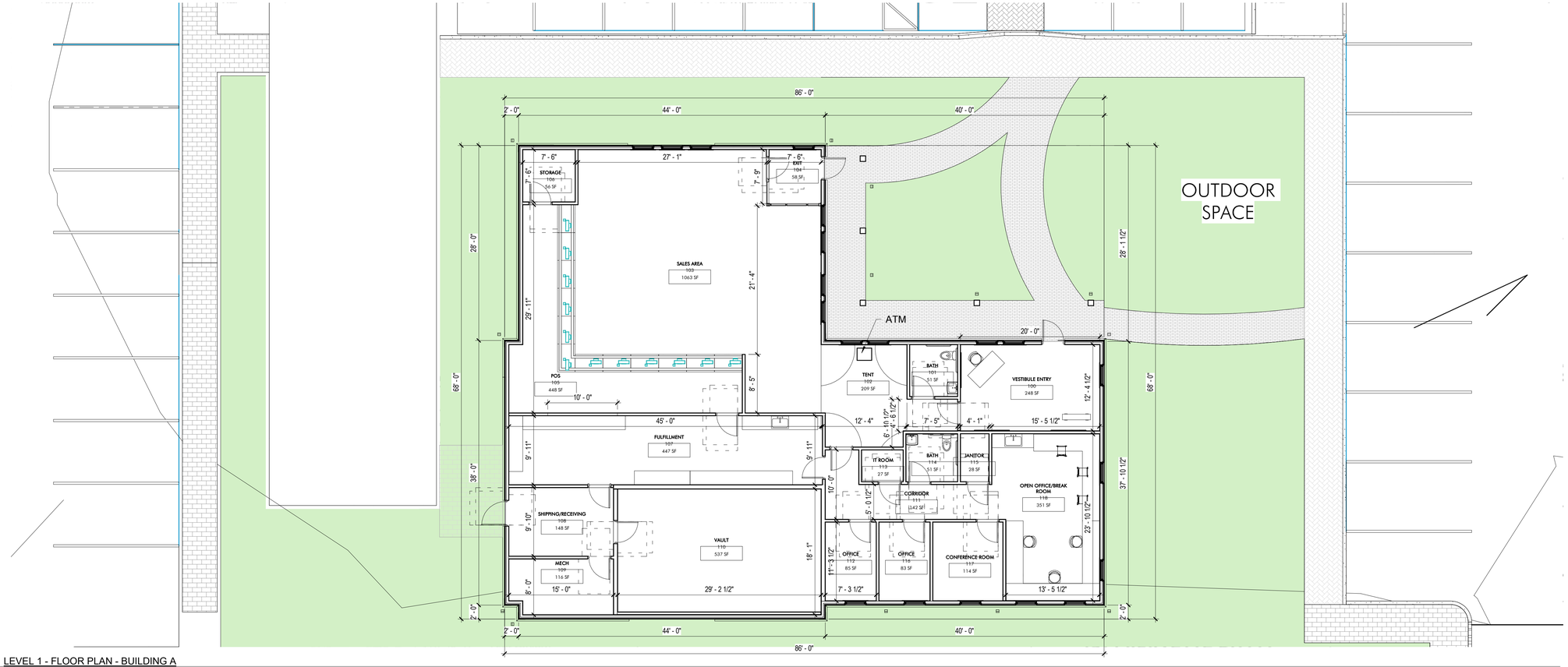


2 LEVEL 1 - FLOOR PLAN - BUILDING B
1/8" = 1'-0"



1 LEVEL 1 - FLOOR PLAN - BUILDING A
1/8" = 1'-0"

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191 LAFAYETTE ROAD

Address:
191 Lafayette Rd, Salisbury, MA 01952

Title:
PROPOSED FLOOR PLAN - BUILDING A & B

Drawing Issued By:	ANDERSON PORTER DESIGN
Project #:	2113
Date:	2021.10.20
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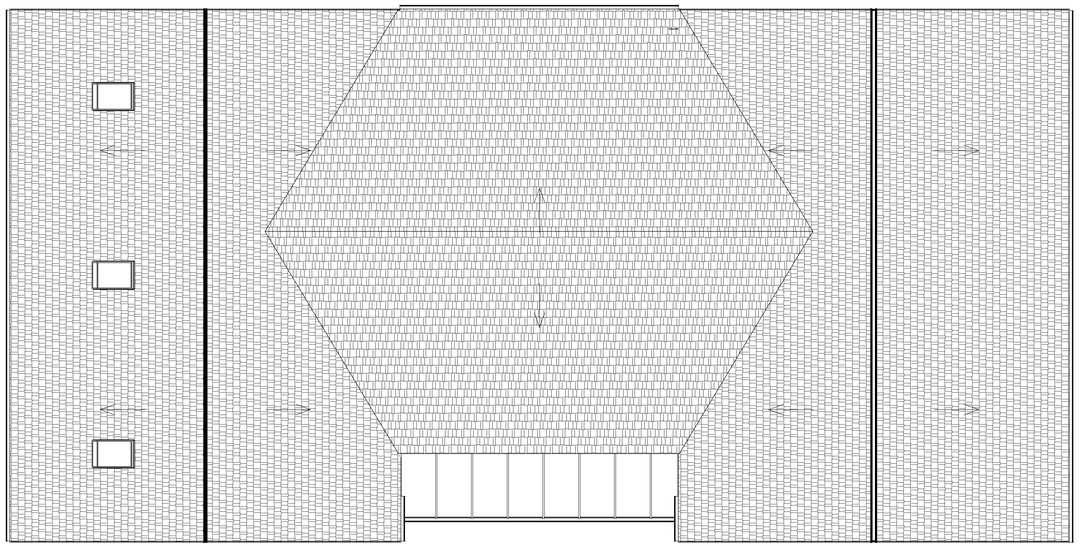
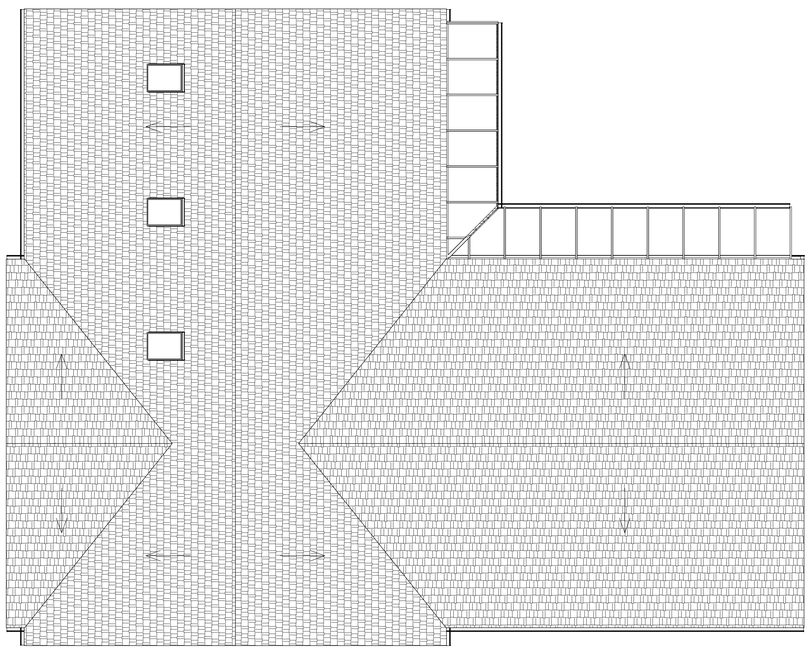
Drawn No.	A1.0



3 ROOF - BUILDING B
1/8" = 1'-0"



1 ROOF - BUILDING A
1/8" = 1'-0"

ROOF PLAN LEGEND

AREA NOT IN CONTRACT (N.I.C.)

ROOF PLAN NOTES

ROOF PLAN KEYNOTES

12.1 XXX

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191 LAFAYETTE ROAD

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191 Lafayette Rd, Salisbury, MA 01952

Title:
PROPOSED ROOF PLAN

Drawing Issued By:	ANDERSON PORTER DESIGN	
Project #:	2113	Drawn No.
Date:	2021.10.20	A1.1
Scale:	As indicated	
Drawn by:	GA	

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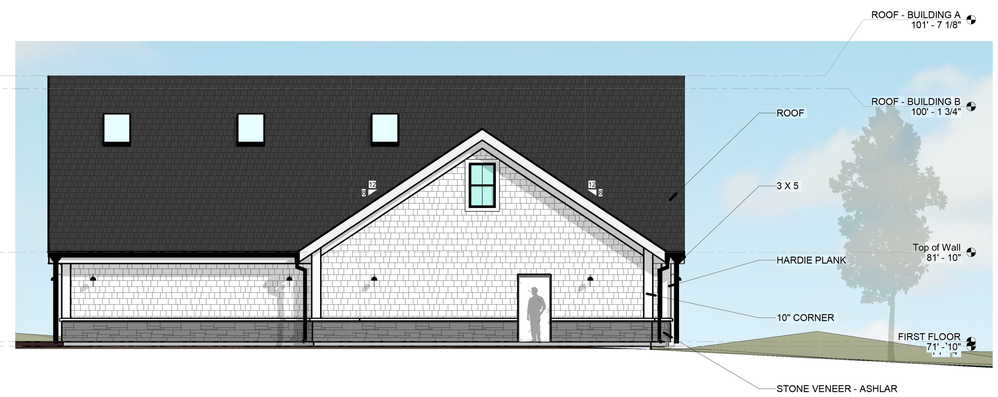
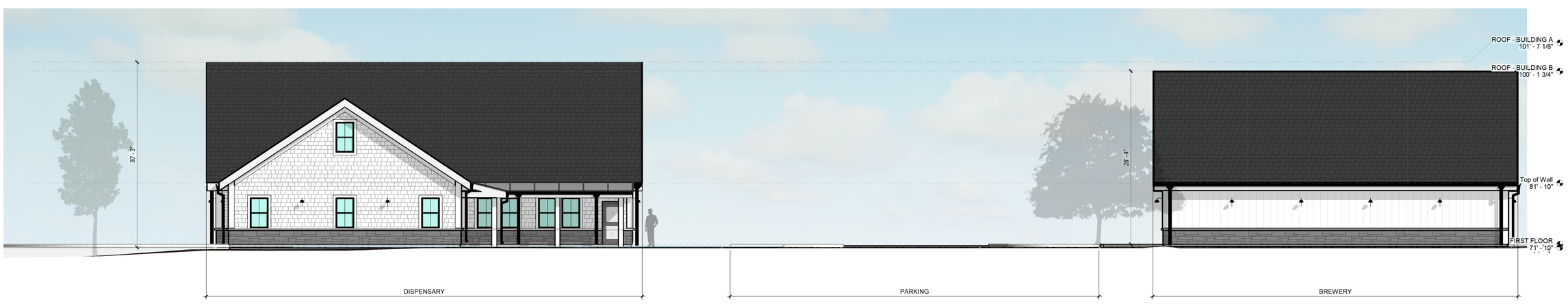
1 NORTH - BUILDING A (DISPENSARY)
1/8" = 1'-0"

2 WEST - BUILDING A (DISPENSARY)
1/8" = 1'-0"

3 EAST - BUILDING A (DISPENSARY)
1/8" = 1'-0"



4 SOUTH - BUILDING A (DISPENSARY)
1/8" = 1'-0"



5 NORTH ELEVATION - BUILDINGS A & B
1/8" = 1'-0"

ANDERSON
PORTER
DESIGN

SPECIAL PERMIT

REVISIONS

No.	Description	Date

AndersonPorterDesign
1972 Massachusetts Ave, 4th Floor
Cambridge, MA 02140
Tel. 617.354.2501 Fax. 617.354.2509

Project:
191 LAFAYETTE ROAD

Address:
191 Lafayette Rd, Salisbury, MA 01952

Title:
EXTERIOR ELEVATIONS - BUILDING A

Drawing Issued By: ANDERSON PORTER DESIGN

Project #: 2113
Date: 2021.10.20
Scale: 1/8" = 1'-0"
Drawn by: GA

Drawn No.
A2.1

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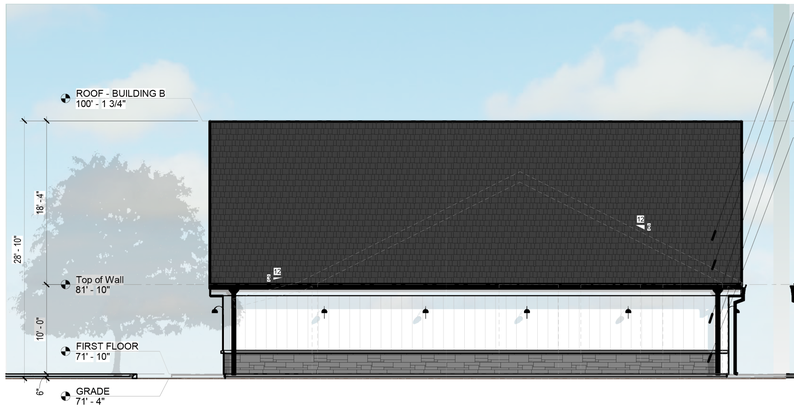
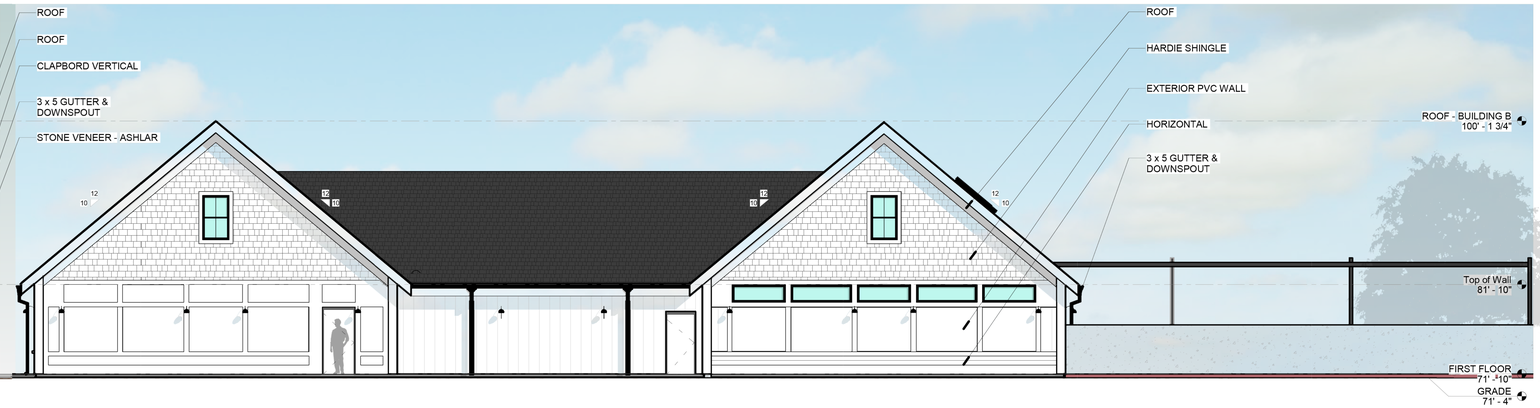


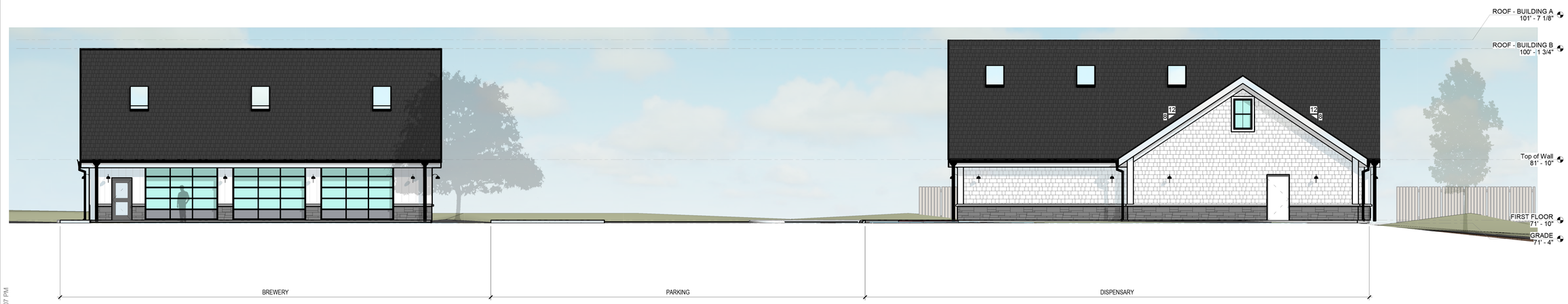
2 NORTH - BUILDING B (BREWERY)
1/8" = 1'-0"



3 EAST - BUILDING B (BREWERY)
1/8" = 1'-0"

1 WEST - BUILDING B (BREWERY)
1/8" = 1'-0"

4 SOUTH - BUILDING B (BREWERY)
1/8" = 1'-0"



5 SOUTH ELEVATION - BUILDINGS A & B
1/8" = 1'-0"

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191 Lafayette Rd, Salisbury, MA 01952

Title:
EXTERIOR ELEVATIONS - BUILDING B

Drawing Issued By: ANDERSON PORTER DESIGN

Project #: 2113
Date: 2021.10.20
Scale: 1/8" = 1'-0"
Drawn by: GA

Drawn No.
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Attachment 5

MEMORANDUM

TO:	Mr. Christopher M. York, P.E. Millennium Engineering, Inc. 62 Elm Street Salisbury, MA 01952	**FROM:**	Scott W. Thornton, P.E. *and* Rana Eslamifard Vanasse & Associates, Inc. 35 New England Business Center Drive Suite 140 Andover, MA 01810-1066 (978) 474-8800
DATE:	October 21, 2021	**RE:**	9080

SUBJECT: Proposed Dispensary and Brewery Development – 191 Lafayette Road
Salisbury, Massachusetts

Vanasse & Associates, Inc. (VAI) has conducted a Traffic Impact Analysis (TIA) in order to determine the traffic impacts associated with the proposed development to be located at 191 Lafayette Road (Route 1) in Salisbury, Massachusetts. The purpose of this TIA is to review existing and future traffic conditions in the vicinity of the site, determine the traffic impact from the proposed Project at key intersections expected to experience increased traffic levels from the Project, and review the need for improvements to mitigate the Project's traffic impact. This assessment identifies existing conditions and reviews access requirements, circulation, and safety considerations. Since the Project site abuts a state highway, a Massachusetts Department of Transportation (MassDOT) curb cut permit application will be required.

PROJECT DESCRIPTION

The Project will entail the construction of a 6,166 square foot (sf) brewery and a 4,588 sf retail marijuana dispensary to be located at 191 Lafayette Road (Route 1) in Salisbury, Massachusetts. The Project site is bounded by residential properties to the north and west, commercial properties to the south, and Route 1 to the east. Access to the Project will be provided by a full-access driveway that intersects Route 1 approximately 160 feet south of Pine Street. Parking will be provided for 82 vehicles on site. At present the Project site includes residential buildings, garage space, and areas of open and wooded space. The existing buildings will be razed to accommodate the Project.

A marijuana cultivation facility ("the Facility") is located adjacent to the Project at 187 Lafayette Road. This site was recently constructed but is not yet occupied. Approximately 50 spaces are provided for the Facility, which has its own full-access driveway to Route 1. The two sites will have a connected parking lot and share parking facilities, with a total combined parking supply of 132 parking spaces between the two sites. Figure 1 depicts the Project site location in relation to the existing roadway network.

EXISTING CONDITIONS

A comprehensive field inventory of existing conditions on the study area roadways was conducted in September 2021. The field investigation consisted of an inventory of existing roadway geometrics; traffic volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area for the Project consisted of Route 1 at the following intersections:

Source: Google Earth

Figure 1

Site Location Map

Vanasse & Associates inc

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- Route 1 at Pike Street/Collins Street (Route 286)
- Route 1 at Toll Road

The following describes the study area roadways and intersections at the study area intersections.

Roadway

Lafayette Road (Route 1)

Within the study area, Route 1 is a two-lane roadway under State jurisdiction that traverses the study area in a general north-south direction. Route 1 provides one 12-foot wide travel lane per direction separated by a double-yellow centerline with 5-foot shoulders. The posted speed limit along Route 1 is 40 and 45 miles per hour (mph), with land use consisting of residential and commercial properties.

Intersections

Lafayette Road at Collins Street and Pike Street (Route 1 at Route 286)

Route 1 intersects Route 286 from the north and south to form this four-way signalized intersection with each approach consisting of a single multi-purpose travel lane. This intersection is under jurisdictions of the State and the Town.

Toll Road at Route 1

Toll Road intersects Route 1 from the north and northwest to form this three-way signalized intersection with exclusive right-turn lanes on Route 1. This intersection is under jurisdiction of the State.

Existing Traffic Volumes

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, manual turning movement counts (TMCs), and vehicle classification counts were completed in September 2021. The ATR counts were conducted on September 17th through 18th, 2021 (Friday through Saturday, inclusive) on Route 1 in the vicinity of the Project site in order to record weekday traffic conditions over an extended period with three-hour Saturday midday (11:00 AM to 2:00 PM) and two-hour weekday evening (4:00 to 6:00 PM) peak-period manual TMCs performed at the study intersections on September 16th and 18th, 2021.

Traffic-Volume Adjustments

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, traffic count data for MassDOT count station No. 5234 were reviewed. Based on a review of this data, it was determined that traffic volumes for the month of September are approximately 4.0 percent *above* average-month conditions. In order to be conservative, the raw traffic count data that forms the basis of this assessment was not adjusted downward.

In order to account for the reduction in traffic volumes caused by the COVID-19 travel restrictions, a review of historic traffic studies and traffic count data at MassDOT count station No. 5234 on Interstate-495 (I-495) was conducted. The 2019 traffic-volume data were expanded to 2021 by applying a background traffic growth rate of 1.0 percent per year (discussion follows) in order to allow for a comparison to 2021 data. Based on this comparison, the average daily traffic in September 2021 was found to be approximately 8

percent lower than the average daily traffic in September 2019. In addition, the COVID-19 adjustment factor of 3 percent from a recent traffic study[1] was used in order to provide an average adjustment factor to account for traffic-volume reductions in the area. Therefore, September 2021 counts were increased by an average factor of 1.06 to provide pre-COVID-19 operating conditions.

In order to account for changes in traffic pattern as a result of the Town ongoing sewer construction project (discussion follows), historic count data on Route 1 and Route 286 in the vicinity of the Route 1 at Route 286 intersection was reviewed and compared to September 2021 counts that was collected as part of the Project to account for pre- and post-construction traffic reductions. Based on this comparison a factor of 1.32 was applied to adjust the 2021 traffic counts. The 2021 Existing traffic volumes are summarized in Table 1, with the weekday evening and Saturday midday peak-hour traffic volumes graphically depicted on Figure 2.

Table 1
EXISTING ROADWAY TRAFFIC-VOLUME SUMMARY

Location/Peak Hour	AWT[a]	VPH[b]	K Factor[c]	Directional Distribution[d]
Route 1 in the vicinity of the Site Driveway:	7,680	--	--	--
Weekday Evening (4:15 – 5:15 PM)	--	721	9.3	51% SB
Saturday Midday (11:30 AM – 12:30 PM)	--	927	12.1	51% NB

[a]Average weekday traffic in vehicles per day adjusted upward 6 percent to account for COVID-19 travel reductions and 32 percent to account constructions on Route 1.
[b]Vehicles per hour.
[c]Percent of daily traffic occurring during the peak hour.
[d]Percent traveling in peak direction.
NB = northbound, SB= southbound.

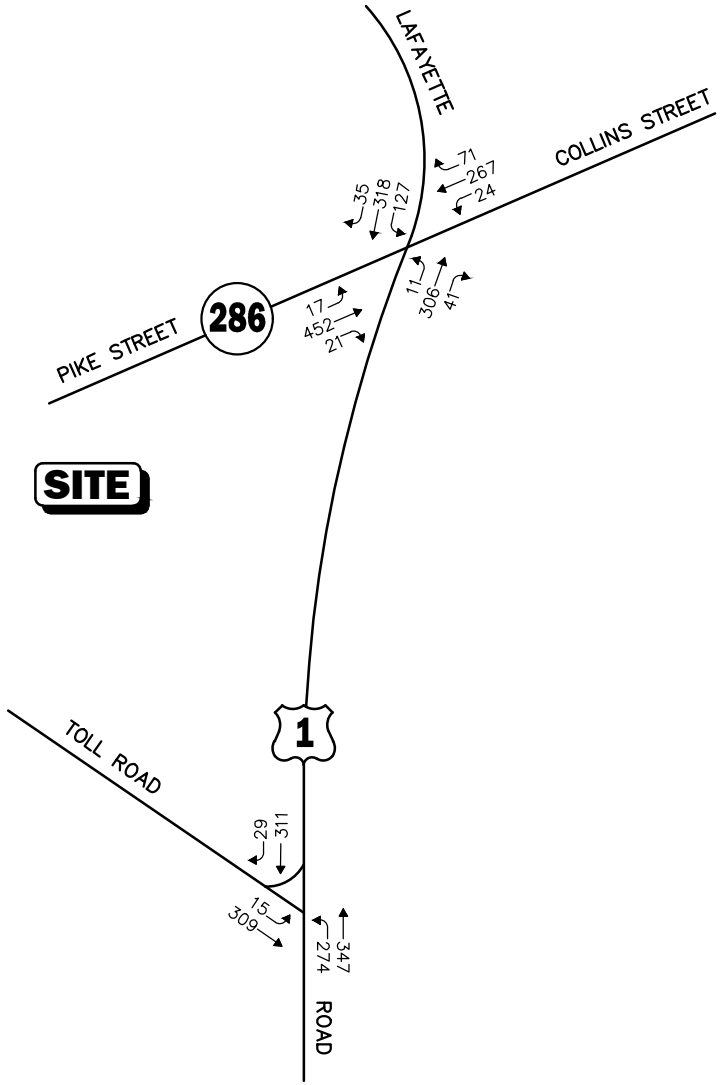
As can be seen in Table 1, Route 1 in the vicinity of the site driveway was found to accommodate approximately 7,680 vehicles on an average weekday (24-hour, two-way volume), with approximately 721 vehicles per hour (vph) during the weekday evening peak hour and 927 vph during the Saturday midday peak hour. A review of the peak-period traffic counts indicate that the weekday evening peak hour generally occurs between 4:15 and 5:15 PM with the Saturday midday peak hour generally occurring between 1:00 and 2:00 PM.

Motor Vehicle Crash Data

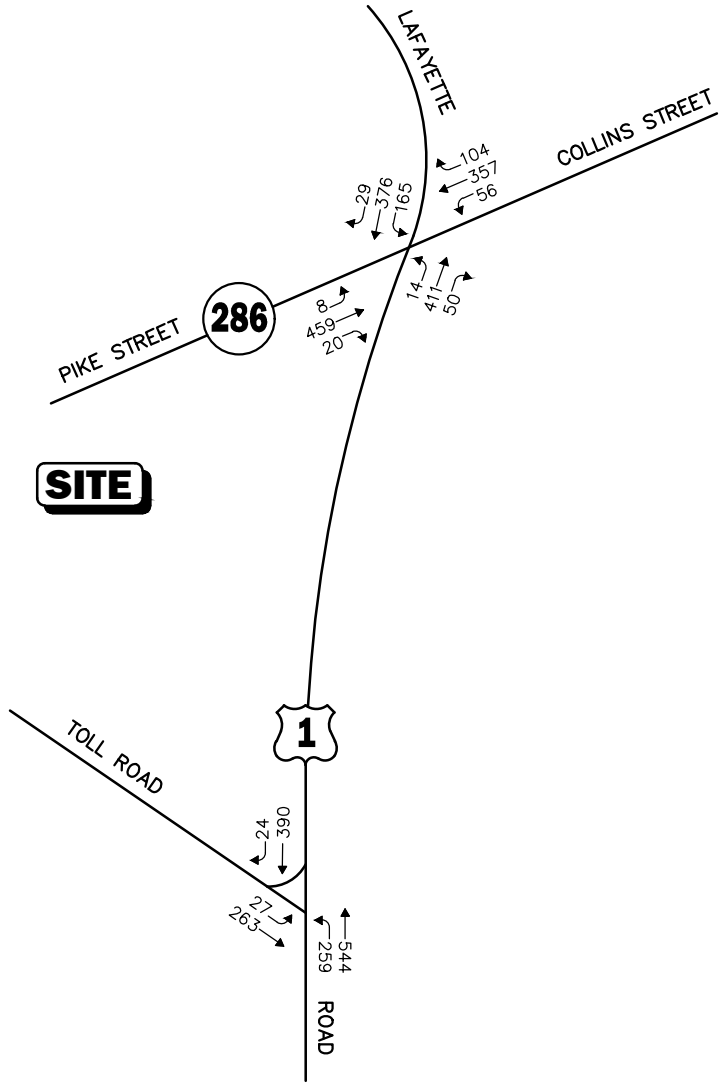
Motor vehicle crash information for the study area intersections was provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the most recent five-year period available (2014 through 2018, inclusive) in order to examine motor vehicle crash trends occurring within the study area. The data is summarized by intersection, type, severity, roadway and weather conditions, and day of occurrence, and presented in Table 2.

[1]*Traffic Assessment*, Proposed Residential Development, Forest Road Salisbury, Massachusetts; by Bayside Engineering; September 30, 2021.

WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Figure 2

2021 Existing Peak-Hour Traffic Volumes

Vanasse & Associates inc

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Table 2
MOTOR VEHICLE CRASH DATA SUMMARY[a]

	Route 1 at Route 286	Route 1 at Toll Road
Traffic Control Type[b]	U	TS
Year:		
2014	3	1
2015	3	1
2016	3	1
2017	5	1
2018	5	0
Total	19	4
Average	3.80	0.80
Rate[c]	0.47	0.13
MassDOT Crash Rate:[d]	0.57/0.57	0.78/0.73
Significant?[e]	No	No
Type:		
Angle	7	2
Rear-End	9	0
Head-On	2	0
Single Vehicle Crash	1	2
Unknown/Other	0	0
Total	19	4
Conditions:		
Clear	13	3
Cloudy	4	1
Rain	1	0
Snow/Ice	1	0
Total	19	4
Lighting:		
Daylight	18	2
Dawn/Dusk	0	1
Dark (Road Lit)	1	1
Dark (Road Unlit)	0	0
Total	19	4
Day of Week:		
Monday through Friday	12	4
Saturday	3	0
Sunday	4	0
Total	14	4
Severity:		
Property Damage Only	13	2
Non-fatal Injury	6	2
Total	19	4

[a]Source: MassDOT Safety Management/Traffic Operations Unit records, 2014 through 2018.
[b]Traffic Control Type: U = unsignalized; TS = traffic signal.
[c]Crash rate per million vehicles entering the intersection.
[d]Statewide/District crash rate.
[e]The intersection crash rate is significant if it is found to exceed the MassDOT crash rate for the MassDOT Highway Division District in which the Project is located (District 4).

As can be seen in Table 2, the study area intersections were found to have averaged approximately 4 or fewer reported motor vehicle crashes over the five-year review period, the majority of which occurred on a weekday, under clear weather conditions during daylight, and involved rear-end and angle-type collisions that resulted in property damage only. Both of the study intersections were found to have a motor vehicle crash rate *below* the MassDOT statewide and District average crash rates for a signalized or unsignalized intersection, as appropriate, for the MassDOT Highway Division District in which the intersections are located (District 4).

A review of the current MassDOT statewide High Crash Location Listing indicated that none of the study intersections are included on MassDOT's Highway Safety Improvement Program (HSIP) listing as a high crash location. It should be noted that a Road Safety Audit (RSA) was performed in August 2013 at the intersection of Route 1 at Route 286[2] and intended to identify potential safety improvements that can be evaluated and included as part of the design process for the MassDOT plan for future reconstruction of this intersection (discussion follows). In addition, no fatal motor vehicle crashes were reported to have occurred at the study area intersections over the five-year review period.

The detailed MassDOT Crash Rate Worksheets are provided in the Appendix.

Vehicle Speed Measurements

Vehicle travel speed measurements were performed on Route 1 in the vicinity of the Project site in conjunction with the ATR counts. Table 3 summarizes the vehicle travel speed measurements.

Table 3
VEHICLE TRAVEL SPEED MEASUREMENTS

	Route 1	
	Northbound	Southbound
Mean Travel Speed (mph)	33	35
85th Percentile Speed (mph)	38	41
Posted Speed Limit (mph)	40	45

mph = miles per hour.

As can be seen in Table 3, the mean vehicle travel speed along Route 1 in the vicinity of the Project site was found to be 33 mph in the northbound direction and 35 mph traveling southbound. The measured 85th percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below, was found to be 38 mph in the northbound direction and 41 mph traveling southbound, which is below the posted speed limit along the northbound and southbound directions (40 and 45 mph, respectively). The 85th percentile speed is used as the basis of engineering design and in the evaluation of sight distances and is often used in establishing posted speed limits.

[2]Road Safety Audit, Route 1 at Route 286, Salisbury-Prepared by Howard/Stein-Hudson Associates, Inc, August 2013.

Sight Distance Evaluation

Sight distance measurements were performed at the proposed driveway to the new parking lot with Route 1 in accordance with MassDOT and American Association of State Highway and Transportation Officials (AASHTO)[3] standards. In brief, stopping sight distance (SSD) is the minimum distance required for an approaching driver at a height of 3.5 feet to perceive and react accordingly to a stationary object 2 feet tall in its path. The values are based on a perception and reaction time of 2.5 seconds and braking distance required under wet, level pavements. Intersection sight distance (ISD) is based on the time required to perceive, react, and complete desired exiting maneuver from a driveway once the driver decides to execute the maneuver. Values for exiting sight distance represent the time to (1) turn left or right, in addition to accelerating to the operating speed of the roadway, without causing approaching vehicles to reduce speed by more than 10 mph; and (2) upon turning left, to clear the near half of the intersection without conflicting with the vehicles approaching from the left. When the roadway is either on an upgrade or downgrade, grade correction factors are applied. Table 4 presents the measured sight distances at the proposed site driveway intersecting with Route 1.

Table 4
SIGHT DISTANCE MEASUREMENTS

Intersection/Sight Distance Measurement	Required Minimum (Feet)[a]	Measured (Feet)
191 Lafayette Road (Route 1) Site Driveway:		
Stopping Sight Distance:		
Looking to the north towards the driveway	360	500+
Looking to the south towards the driveway	360	500+
Intersection Sight Distance:		
Looking to the north from the driveway	430	500+
Looking to the south from the driveway	500	500+

[a]Recommended minimum values obtained from *A Policy on Geometric Design of Highways and Streets,* Fifth Edition; American Association of State Highway and Transportation Officials (AASHTO); 2011. Based on 45 mph approach speed on Route 1.

As can be seen in Table 4, the available lines of sight to and from the Project site driveway intersection with Route 1 will meet or exceed the recommended minimum sight distances to function in a safe (SSD) and efficient (ISD) manner based on a 45-mph approach speed, which is slightly above the measured 85th percentile vehicle travel speed (38/41 mph) and equal to maximum posted speed limit of 45 mph on Route 1.

FUTURE CONDITIONS

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic

[3]*A Policy on Geometric Design of Highway and Streets,* 6th Edition; American Association of State Highway and Transportation Officials (AASHTO); 2011.

volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

Specific Development by Others

The Town of Salisbury Planning Board was contacted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes within the study area. Based on this consultation the following projects were identified:

Proposed Marijuana Cultivation Facility ("The Facility")

This development is located adjacent to the proposed Project and includes a marijuana cultivation facility with a two-story, 19,800 sf building and approximately 50 parking spaces. The traffic expected to be generated by this project were obtained from the traffic study prepared by VAI and assigned to the study area roadway network.[4]

Proposed Townhouse Units

This project entails construction of 56 townhouse units including 28 duplexes and two quadplexes located off Forest Road in Salisbury, Massachusetts. The traffic expected to be generated by this project were obtained from the traffic study prepared by Bayside Engineering and assigned to the study area roadway network.[5]

Proposed Residential Development

This project entails construction of nine single-family homes located at 9 Gerrish Road in Salisbury, Massachusetts. Traffic volumes associated with this project within the study area are expected to be relatively minor and would be reflected in the general background traffic growth rate (discussion follows).

Proposed Single Family Homes

This project includes construction of the three single-family homes located at 15 Forest Road. Traffic volumes associated with this project within the study area are expected to be relatively minor and would be reflected in the general background traffic growth rate.

No other developments were identified at this time that are expected to result in an increase in traffic within the study area beyond the general background traffic growth rate.

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[4] *Traffic Assessment – Marijuana Cultivation Facility – 187 Lafayette Road Salisbury, Massachusetts;* VAI; May 7, 2020.

[5] *Traffic Assessment – Proposed Residential Development – Forest Road Salisbury, Massachusetts;* Bayside Engineering; September 30, 2020.

General Background Traffic Growth

Traffic-volume data compiled by MassDOT from permanent count stations were reviewed. This data indicated that traffic volumes are decreasing in the area by 0.82 percent per year. In order to be conservative a 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

Roadway Improvement Projects

The MassDOT and Town of Salisbury were consulted in order to determine if there were any planned future roadway improvement projects expected to be complete by 2028 within the study area. Based on these discussions, the following projects and improvements were identified to be planned within the study area at this time:

Town of Salisbury - Route 1/Lafayette Road Sewer Project

This project includes installation of approximately 180 linear feet of the gravity sewer via horizontal directional drilling at the existing bridge above Smallpox Brook on Lafayette Road/Route 1. The project also includes the construction of three new sewer pump stations. Two submersible pumpstations are located on Bayberry Lane and Jak-Len Drive. The third pump station is a flooded suction, dry pit pump station at 63 Lafayette Road/Route 1. Currently, installation of the mainline sewer has been ongoing in the area south of the Salisbury Elementary School. The project is expected to be completed in September 2022.

MassDOT - Reconstruction of Route 1/Lafayette Road

The purpose of this project is the reconstruction of a section of Route 1/Lafayette Road in the Town of Salisbury. The project begins at Beach Road in Salisbury Square and extends northerly for approximately 2.42 miles to the New Hampshire state line. The proposed roadway shall provide two travel lanes, shoulders, sidewalks, curbing, and sidewalks with planting strips. In conjunction with this project, intersections of Route 1 and Toll Road as well as Route 1 and Route 286 will be reconstructed to function as a modern roundabout. In addition, a crosswalk is proposed south of Pine Street (approximately 150 feet north of the Project site driveway) for crossing Route 1. This Project is in the design phase and construction is expected to begin in the summer of 2023.

No-Build Traffic Volumes

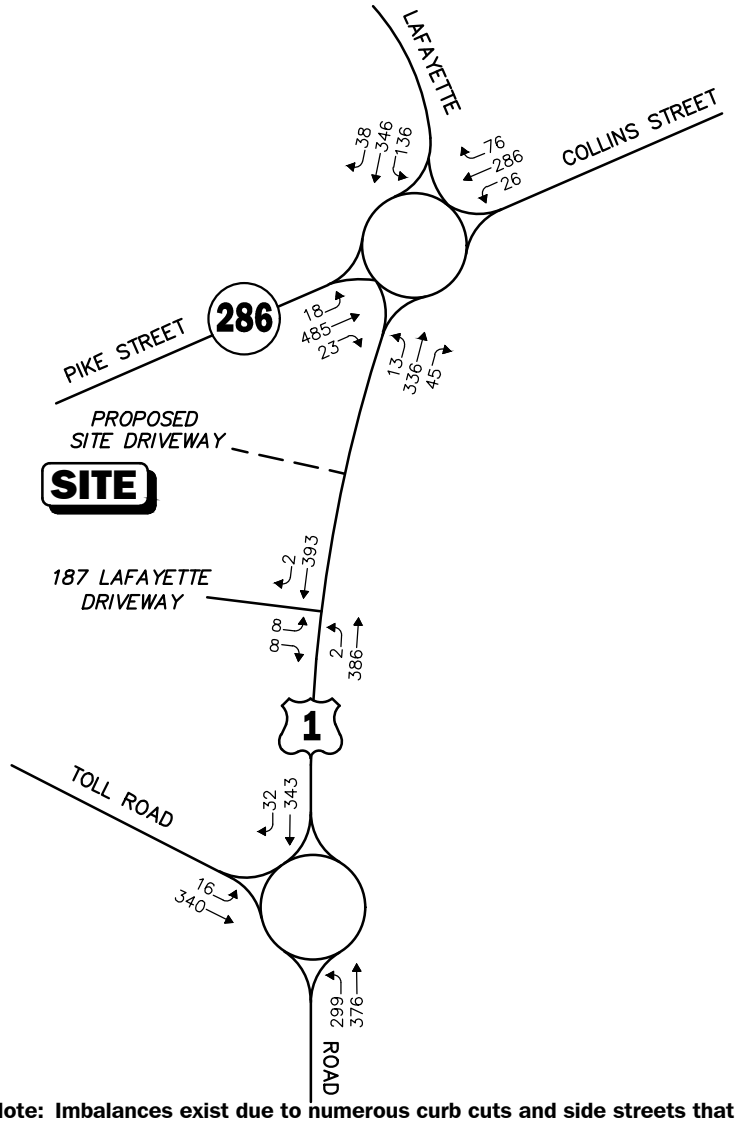
Traffic volumes in the study area were projected to the year 2028. The 2028 No-Build condition peak-hour traffic volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2021 Existing peak-hour traffic volumes and then adding the peak-hour traffic volumes associated with the identified specific development projects by others. The resulting 2028 No-Build weekday morning and evening peak-hour traffic volumes are shown on Figure 3.

Project-Generated Traffic

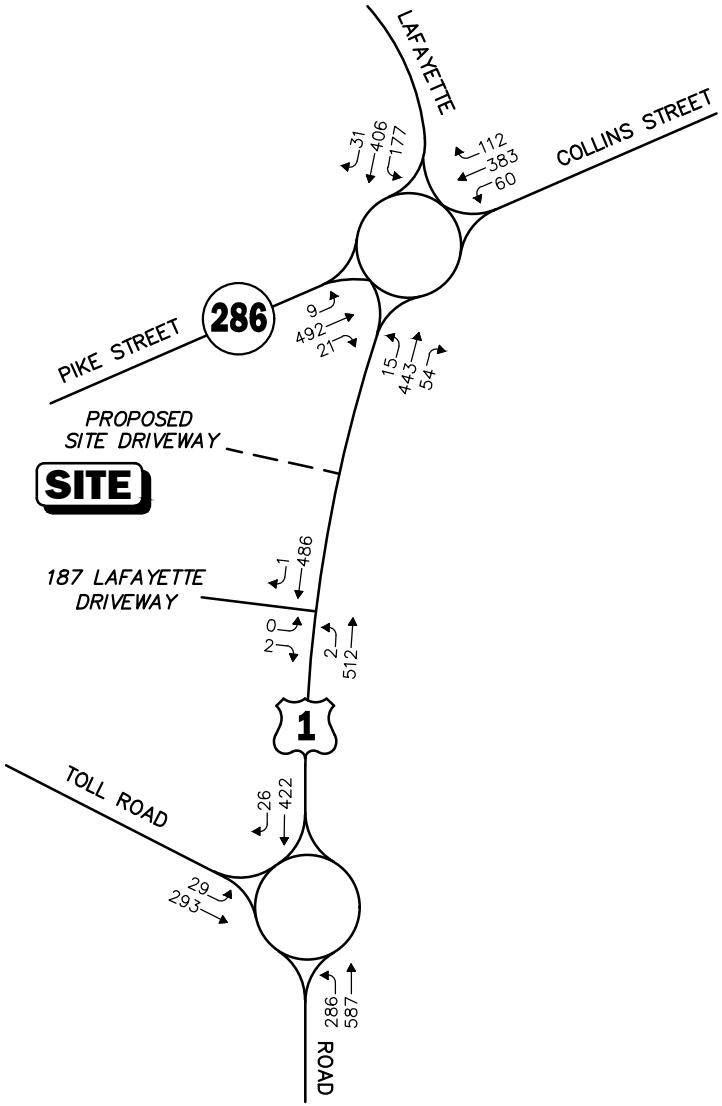
As proposed, the Project will entail the construction of a 6,166 sf brewery and a 4,588 sf marijuana dispensary. In order to develop the traffic characteristics of the proposed Project, the most recent trip-generation statistics published by Institute of Transportation Engineers (ITE)[6] for Land Use Code (LUC) 971, *Brewery Tap Room* and for LUC 882, *Marijuana Dispensary* were used. In order to provide a conservative (worst case) analysis scenario for the dispensary use, it was assumed that the weekday evening

[6] *Trip Generation*, 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.

WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 3

2028 No-Build
Peak-Hour Traffic Volumes

Vanasse & Associates inc

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and Saturday midday peak hour of the Project (peak of the generator), will occur coincidental with the weekday evening and Saturday midday peak hour of Route 1.

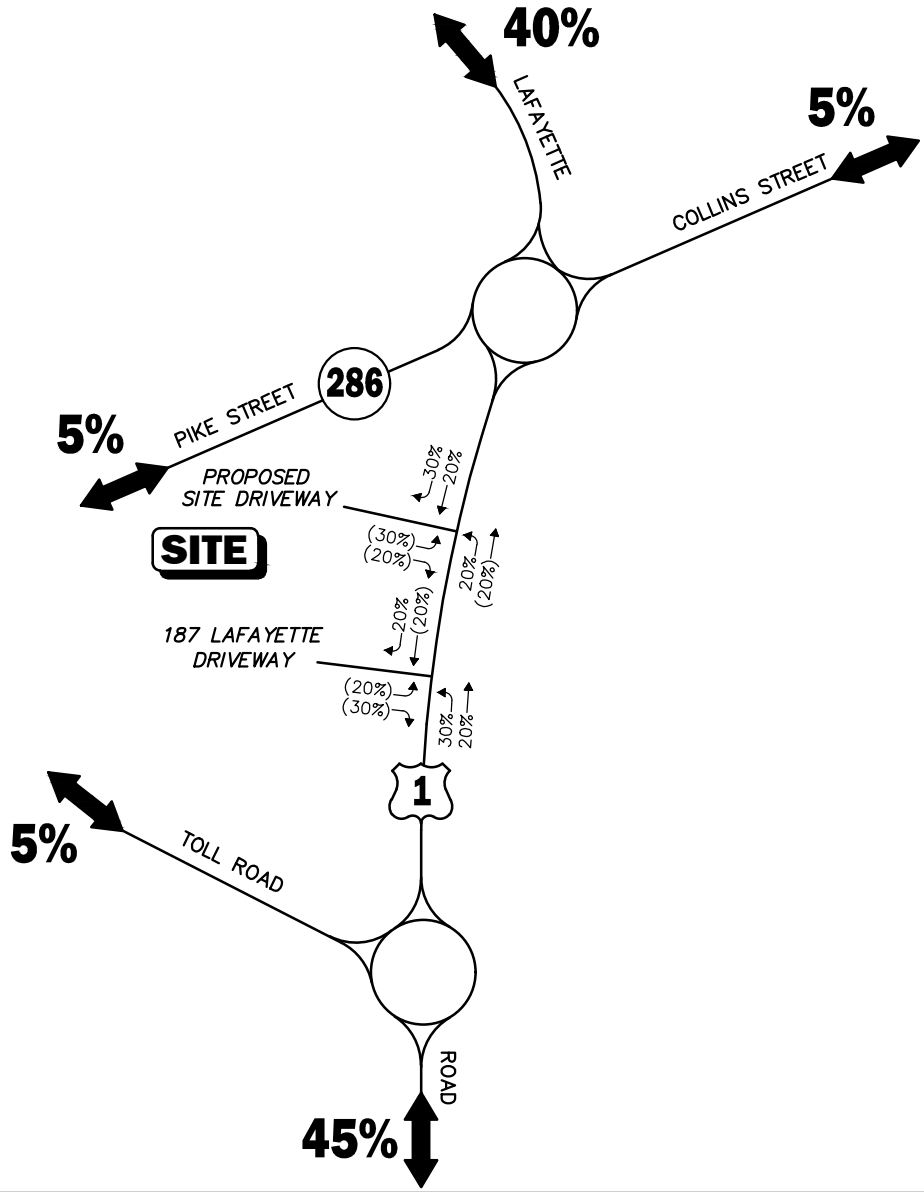
Also, it should be noted that LUC 971 was recently added to the ITE 11th Edition and includes two study sites that were surveyed in Florida and Minnesota. The surveyed sites have similar gross floor area when compared to the Project and therefore calculated trips based on the ITE average rate indicates appropriate trip-generation estimates. Table 5 summarizes the anticipated traffic characteristics of the Project

Table 5
TRIP GENERATION SUMMARY

Time Period/Direction	Brewery Tap Room[a] (6,166 sf)	Dispensary[b] (4,588 sf)	Total Trips
Average Weekday Daily:			
Entering	190	484	674
Exiting	190	484	674
Total	380	968	1,348
Weekday Evening Peak Hour:			
Entering	36	55	91
Exiting	25	58	83
Total	61	113	174
Average Saturday Daily:			
Entering	376	594	970
Exiting	376	594	970
Total	752	1,188	1,940
Saturday Midday Peak Hour:			
Entering	79	66	145
Exiting	62	66	128
Total	141	132	273

[a]Based on ITE LUC 971, *Brewery Tap Room*.
[a]Based on ITE LUC 882, *Marijuana Dispensary*.

As can be seen in Table 5, the Project is predicted to generate approximately 1,348 vehicle trips on an average weekday (two-way volume, or 674vehicles entering and 674 exiting) and approximately 1,940 vehicle trips on a Saturday (also two-way volume, or 970 vehicles entering and 970 vehicles exiting), with 174 vehicle trips (91 vehicles entering and 83 exiting) expected during the weekday evening peak hour, and 273 vehicle trips (145 vehicles entering and 128 exiting) expected during the Saturday midday peak hour.



Not To Scale

Figure 4

Trip Distribution Map

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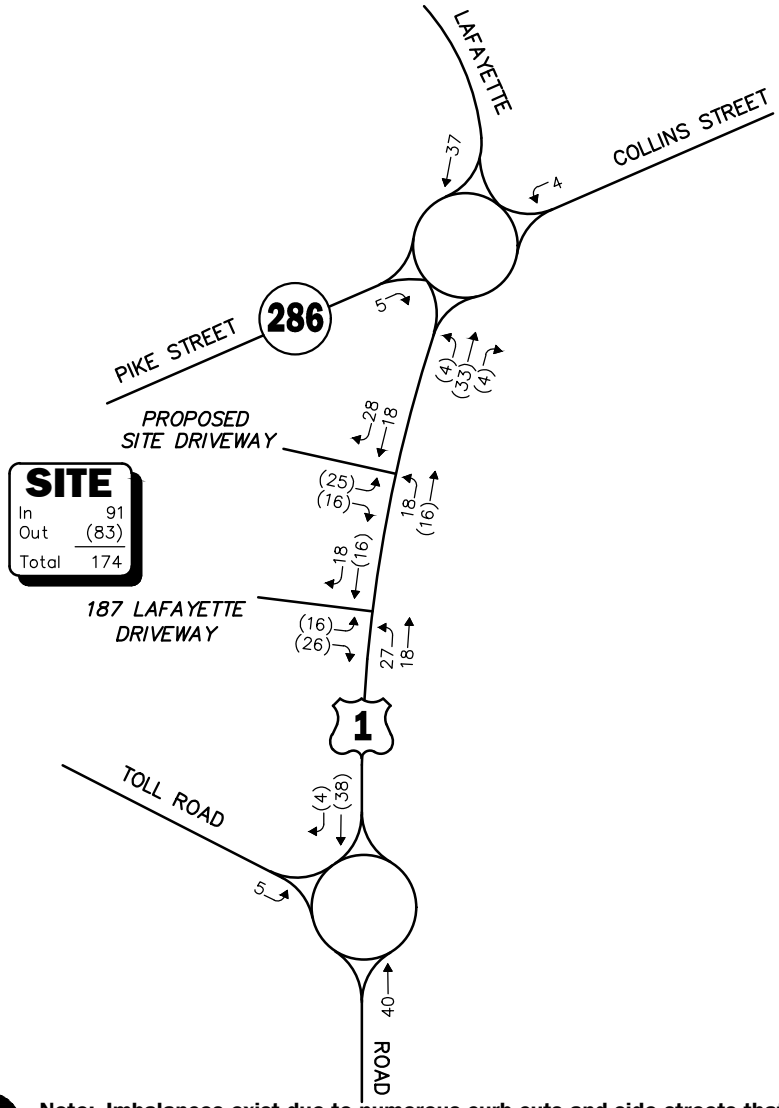
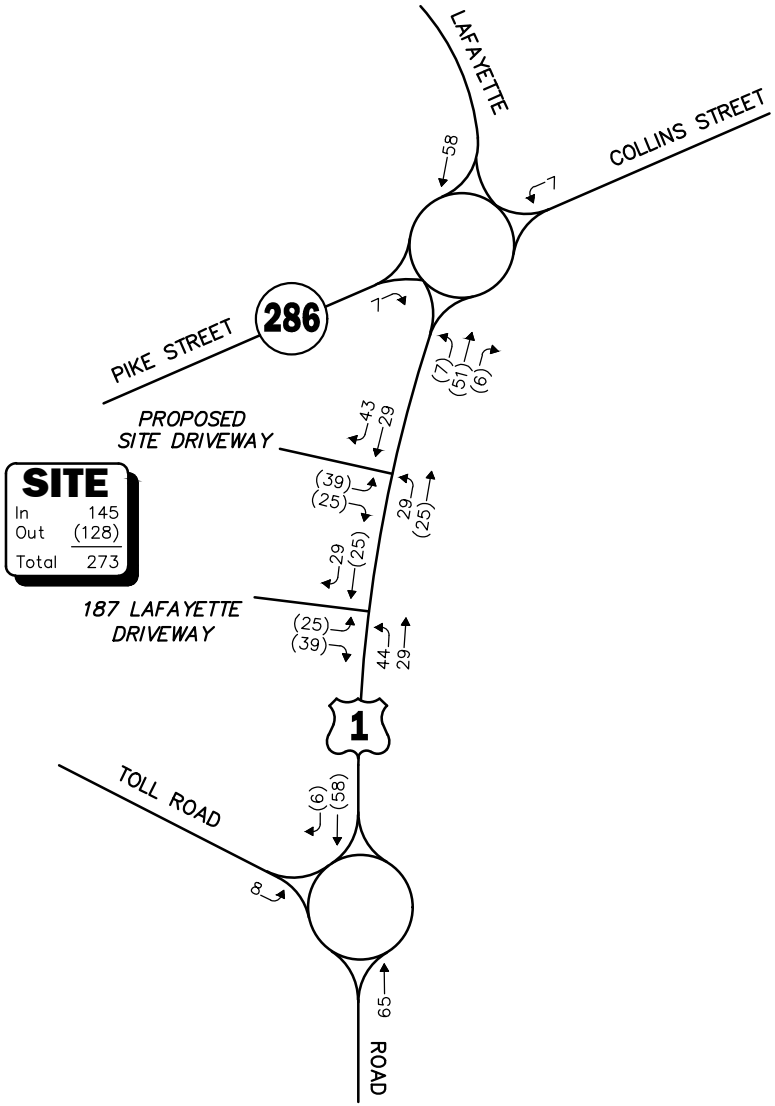
WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 5

Project-Generated Peak-Hour Traffic Volumes

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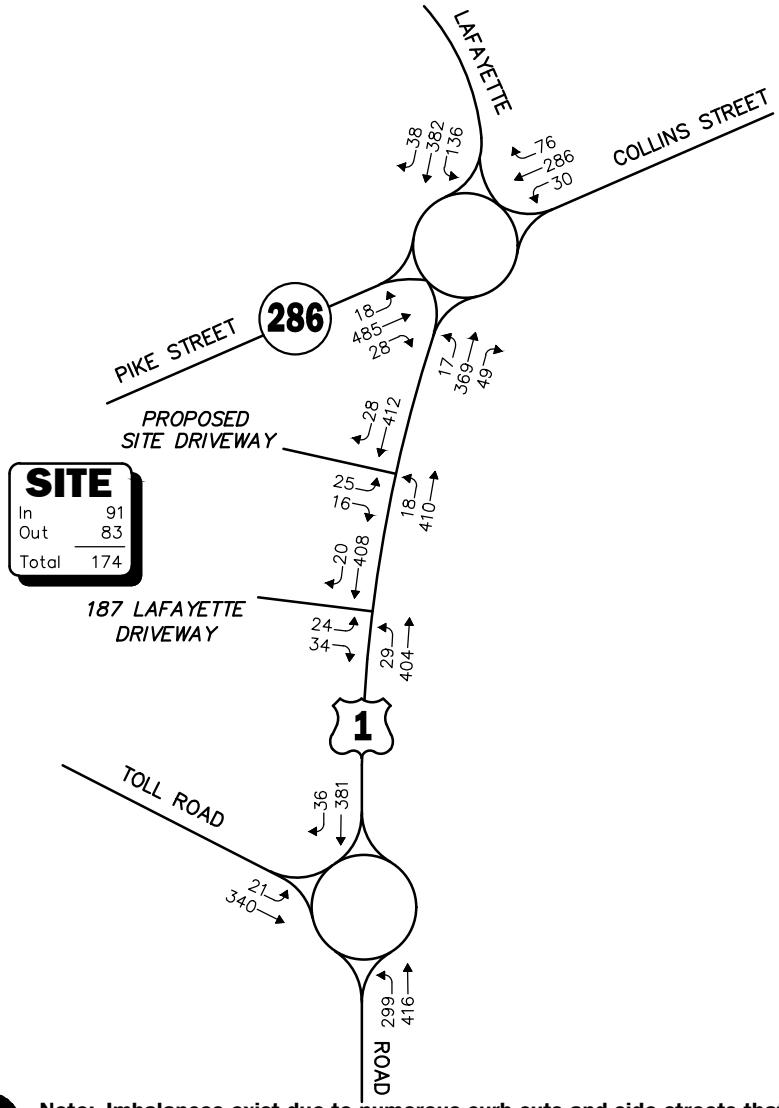
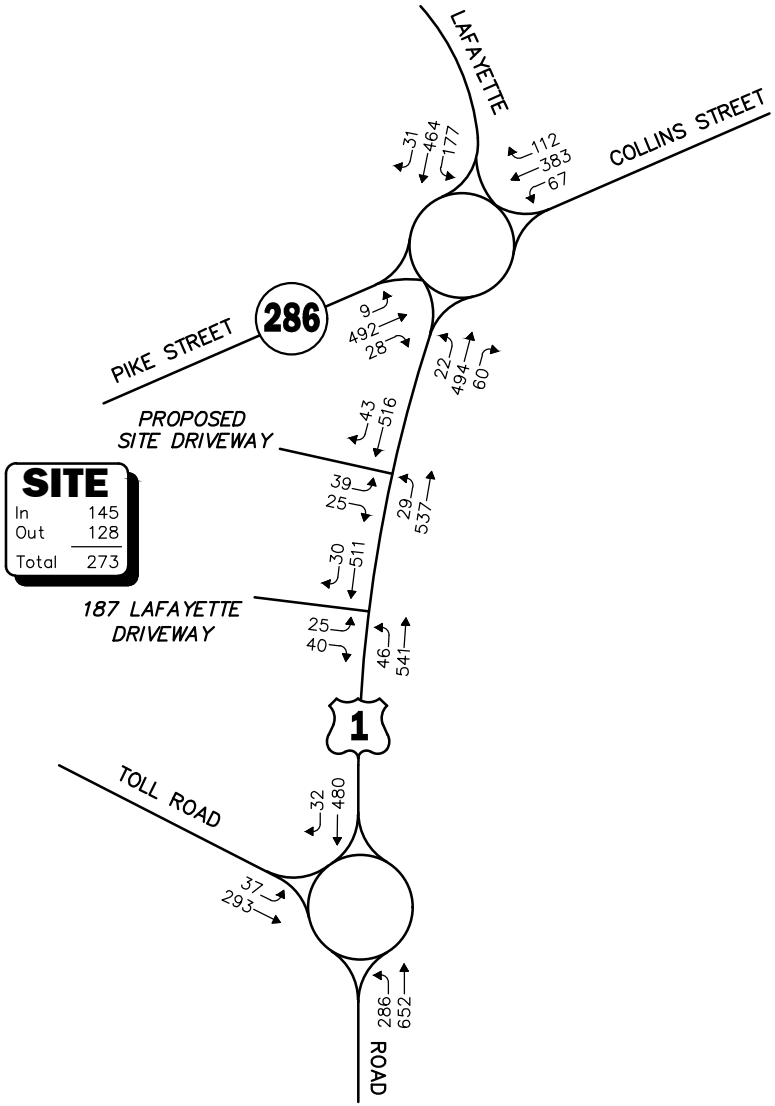
WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 6

2028 Build
Peak-Hour Traffic Volumes

Vanasse & Associates inc

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Trip Distribution

The directional distribution of generated trips to and from the Project site was determined based on a review of existing traffic patterns within the study area. The anticipated distribution is shown on Figure 4. Traffic volumes expected to be generated by the Project were assigned onto the study area roadway network as shown on Figure 5 for the weekday evening and Saturday midday peak hours.

FUTURE TRAFFIC VOLUMES – BUILD CONDITION

The 2028 Build condition networks consist of the 2028 No-Build traffic volumes with the anticipated site-generated traffic added to them. The 2028 Build weekday evening and Saturday midday peak-hour traffic-volume networks are graphically depicted on Figure 6.

A summary of peak-hour projected traffic-volume increases external to the study area that is the subject of this assessment is shown in Table 6. These volumes are based on the expected increases from the Project.

Table 6
PEAK-HOUR TRAFFIC-VOLUME INCREASES[a]

Location/Peak Hour	2028 No-Build	2028 Build	Traffic-Volume Increase Over No-Build	Percent Increase Over No-Build
Route 1, north of Route 286:				
Weekday Evening	950	1,020	70	7.4
Saturday Midday	1,178	1,287	109	9.3
Route 286, east of Route 1:				
Weekday Evening	1,054	1,062	8	0.8
Saturday Midday	1,278	1,291	13	1.0
Route 286, west of Route 1:				
Weekday Evening	863	872	9	1.0
Saturday Midday	951	965	14	1.5
Toll Road, west of Route 1:				
Weekday Evening	687	696	9	1.3
Saturday Midday	634	648	14	2.2
Route 1, south of Toll Road:				
Weekday Evening	1,358	1,436	78	5.7
Saturday Midday	1,588	1,711	123	7.7

[a]Two-way traffic total.

As shown in Table 6, Project-related traffic-volume increases within of the study area relative to 2028 No-Build conditions are anticipated to range from 0.8 to 9.3 percent during the peak periods, with vehicle increases shown to range from 8 to 123 vehicles.

TRAFFIC OPERATIONS ANALYSIS

Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity and vehicle queue analyses were conducted under Existing, No-Build, and Build traffic-volume conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

Methodology

Levels of Service

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions.[7] The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with level-of-service (LOS) A representing the best operating conditions and LOS F representing congested or constrained operating conditions. Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week, or period of year.

Signalized Intersections

The six levels of service for signalized intersections may be described as follows:

- *LOS A* describes operations with very low control delay; most vehicles do not stop at all.
- *LOS B* describes operations with relatively low control delay. However, more vehicles stop than LOS A.
- *LOS C* describes operations with higher control delays. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
- *LOS D* describes operations with control delay in the range where the influence of congestion becomes more noticeable. Many vehicles stop, and individual cycle failures are noticeable.
- *LOS E* describes operations with high control delay values. Individual cycle failures are frequent occurrences.
- *LOS F* describes operations with high control delay values that often occur with over-saturation. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Levels of service for signalized intersections were calculated using the Percentile Delay Method implemented as a part of the Synchro™ 11 software as required by MassDOT. The Percentile Delay

[7]The capacity analysis methodology is based on the concepts and procedures presented in the *Highway Capacity Manual 6th Edition;* Transportation Research Board; Washington, DC; 2016.

Method assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on "percentile" delay. Level-of-service designations are based on the criterion of percentile delay per vehicle and is a measure of: i) driver discomfort; ii) motorist frustration; and iii) fuel consumption; and includes a uniform delay based on percentile volumes using a Poisson arrival pattern, an initial queue move-up time, and a queue interaction delay that accounts for delays resulting from queues extending from adjacent intersections. Table 7 summarizes the relationship between level-of-service and percentile delay and uses the same numerical delay thresholds as the 2000 *Highway Capacity Manual (HCM)*[8] method. The tabulated percentile delay criterion may be applied in assigning level-of-service designations to individual lane groups, to individual intersection approaches, or to entire intersections.

Table 7
LEVEL-OF-SERVICE CRITERIA
FOR SIGNALIZED INTERSECTIONS[a]

Level of Service	Control (Signal) Delay Per Vehicle (Seconds)
A	≤10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	>80.0

[a]Source: *Highway Capacity Manual*, Transportation Research Board; Washington, DC; 2000; page 16-2.

Unsignalized Intersections

The six levels of service for unsignalized intersections may be described as follows:

- *LOS A* represents a condition with little or no control delay to minor street traffic.
- *LOS B* represents a condition with short control delays to minor street traffic.
- *LOS C* represents a condition with average control delays to minor street traffic.
- *LOS D* represents a condition with long control delays to minor street traffic.
- *LOS E* represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
- *LOS F* represents a condition where minor street demand volume exceeds capacity of an approach lane, with extreme control delays resulting.

[8]*Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2000.

The levels of service of unsignalized intersections are determined by application of a procedure described in the HCM 6th Edition.[9] Level of service is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Definitions for level of service at unsignalized intersections are also given in the HCM 6th Edition. Table 8 summarizes the relationship between level of service and average control delay for two-way STOP-controlled and all-way STOP-controlled intersections.

Table 8
LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS[a]

Level-Of-Service by Volume-to-Capacity Ratio		Average Control Delay (Seconds Per Vehicle)
v/c ≤ 1.0	v/c > 1.0	
A	F	≤10.0
B	F	10.1 to 15.0
C	F	15.1 to 25.0
D	F	25.1 to 35.0
E	F	35.1 to 50.0
F	F	>50.0

[a]Source: *Highway Capacity Manual 6th Edition*; Transportation Research Board; Washington, DC; 2016; page 20-6.

Rotaries

The unsignalized capacity analysis is based on the procedures described in the *Traffic Signalized* and *Unsignalized Intersection Design and Research Aid* (*SIDRA*) *Intersection*.[10] The main features of the *SIDRA Intersection* method for unsignalized capacity estimation are the dependence of gap acceptance parameters on roadway geometry, entry lane flows, and the designation of traffic control on approach lanes.

The SIDRA analytical model calculates several components of delay. One of these, the average total delay component, produces level-of-service results based on the concepts described in the HCM. The delay ranges that define levels of service for roundabouts are shown in Table 9.

[9]*Highway Capacity Manual 6th Edition*; Transportation RESEARCH Board; Washington, DC; 2016.

[10]Traffic Signalized and Unsignalized Intersection Design and Research Aid, SIDRA Intersection 9.0 User Guide; Akcelik & Associates Pty Ltd; Greythorn, Victoria 3104, October 2020.

Table 9
LEVEL-OF-SERVICE CRITERIA FOR SIDRA: UNSIGNALIZED INTERSECTIONS[a]

Level-Of-Service by Volume-to-Capacity Ratio		Control Delay Per Vehicle (Seconds)
v/c ≤ 1.0	v/c > 1.0	
A	F	≤10.0
B	F	10.1 to 15.0
C	F	15.1 to 25.0
D	F	25.1 to 35.0
E	F	35.1 to 50.0
F	F	>50.0

[a]Source: *SIDRA Intersection 9.0 User Guide;* Akcelik & Associates Pty Ltd; Greythorn, Victoria 3104, October 2020.

ANALYSIS RESULTS

Level-of-service and vehicle queue analyses were conducted for 2021 Existing, 2028 No-Build, and 2028 Build conditions for the intersections within the study area. The results of the intersection capacity and vehicle queue analyses are summarized in Table 12 and Table 13 with the detailed analysis results presented in the Appendix. The following is a summary of the level-of-service and delay analyses for the intersections within the study area.

Route 1 at Route 286

Under 2021 Existing conditions and prior to being reconstructed as a modern roundabout, the intersection was shown to operate at LOS C during weekday evening and LOS D during the Saturday midday peak hour. With the reconstruction of this intersection to function as a roundabout (Table 12), under 2028 No-Build conditions, the intersection is predicted to operate at overall LOS B during weekday evening and LOS C during Saturday midday peak hours. Under 2028 Build conditions, the intersection is predicted to operate at an overall LOS B during weekday evening and LOS D during Saturday midday peak hours with overall delay increases of up to 6.1 seconds over No-Build conditions.

Toll Road at Route 1

Prior to being reconstructed as a roundabout, the intersection was predicted to operate at LOS B during the peak hours under 2021 Existing conditions. With the reconstruction of this intersection to function as a roundabout, the improved intersection is predicted to operate at LOS B or better during the peak hours under 2028 No-Build and 2028 Build conditions.

Route 1 at Proposed Site Driveway

Under 2028 Build conditions, the critical movements at this intersection were shown to operate at LOS D or better with vehicle queuing of up to 1 vehicle during peak periods.

Route 1 at 187 Lafayette Road Driveway

Under 2021 Existing conditions, the adjacent facility located at 187 Lafayette Road is not occupied and the critical movements at this intersection had no demand during the weekday evening peak hour and therefore no results are presented. Under 2028 No-Build and Build conditions, after opening the critical movements were shown to operate at LOS C or better with vehicle queuing of up to 1 vehicle.

Table 10
SIGNALIZED INTERSECTION CAPACITY ANALYSIS SUMMARY

	2021 Existing				2028 No-Build				2028 Build			
Signalized Intersection/Peak Hour	V/C[a]	Delay[b]	LOS[c]	Queue[d] Avg/95th	V/C	Delay	LOS	Queue Avg/95th	V/C	Delay	LOS	Queue Avg/95th
Route 1 at Route 286:												
Weekday Evening:												
Route 286 EB LT/TH/RT	0.72	31.5	C	299/398								
Route 286 WB LT/TH/RT	0.63	28.2	C	218/278								
Route 1 NB LT/TH/RT	0.71	37.8	D	225/324								
Route 1 SB LT/TH/RT	0.84	32.7	C	320/544	This Intersection will be reconstructed as a roundabout							
Overall	**--**	**32.4**	**C**	**--**	See Table 12							
Saturday Midday:												
Route 286 EB LT/TH/RT	0.67	29.8	C	281/393								
Route 286 WB LT/TH/RT	0.97	58.5	E	365/540								
Route 1 NB LT/TH/RT	0.94	59.8	E	330/520								
Route 1 SB LT/TH/RT	0.96	49.5	D	383/591								
Overall	**--**	**49.6**	**D**	**--**								
Route 1 at Toll Road:												
Weekday Evening:												
Route 1 SB LT	0.66	24.0	C	104/164								
Route 1 SB RT	0.07	6.1	A	0/14								
Toll Road SEB LT/TH	0.21	8.5	A	30/62								
Route 1 NB TH	0.16	8.2	A	24/52								
Route 1 NB RT	0.37	2.5	A	0/39	This Intersection will be reconstructed as a roundabout							
Overall	**--**	**10.7**	**B**	**--**	See Table 12							
Saturday Midday:												
Route 1 SB LT	0.71	24.7	C	125/205								
Route 1 SB RT	0.05	6.2	A	0/13								
Toll Road SEB LT/TH	0.23	9.6	A	33/61								
Route 1 NB TH	0.16	9.2	A	25/55								
Route 1 NB RT	0.55	3.3	A	0/51								
Overall	**--**	**11.0**	**B**	**--**								

[a]Volume to capacity ratio.
[b]Average stopped delay per vehicle (in seconds).
[c]Level of service.
[d]Queue length in feet.
EB = eastbound; WB = westbound; NB = northbound; SB = southbound; SEB=southeast bound, LT = left-turning movements; TH = through movements; RT =right-turning movements.

Table 11
UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS SUMMARY

Unsignalized Intersection/ Peak Hour/Critical Movement	2021 Existing				2028 No-Build				2028 Build			
	Demand[a]	Delay[b]	LOS[c]	Queue[d] 95th	Demand	Delay	LOS	Queue 95th	Demand	Delay	LOS	Queue 95th
Route 1 at Proposed Site Driveway												
Weekday Morning:												
Site Driveway EB LT/RT	--	--	--	--	--	--	--	--	41	16.6	C	0.4
Route 1 NB LT/TH	--	--	--	--	--	--	--	--	428	8.4	A	0.1
Weekday Evening:												
Site Driveway EB LT/RT	--	--	--	--	--	--	--	--	64	25.3	D	1.1
Route 1 NB LT/TH	--	--	--	--	--	--	--	--	566	8.8	A	0.1
Route 1 at 187 Lafayette Road Driveway												
Weekday Morning:												
Site Driveway EB LT/RT	--	--	--	--	16	13.7	B	0.1	58	15.5	C	0.5
Route 1 NB LT/TH	--	--	--	--	388	8.2	A	0.0	433	8.4	A	0.1
Weekday Evening:												
Site Driveway EB LT/RT	--	--	--	--	2	11.6	B	0.0	65	21.0	C	0.9
Route 1 NB LT/TH	--	--	--	--	514	8.5	A	0.0	587	8.8	A	0.2

[a]Demand in vehicles per hour.
[b]Average control delay per vehicle (in seconds).
[c]Level of service.
[d]Queue length in vehicles.
EB = eastbound; NB = northbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

Table 12
ROUNDABOUT LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

	2028 No-Build				2028 Build			
Rotary/Peak Hour/Movement	Demand[a]	Delay[b]	LOS[c]	Queue[d] 95th	Demand	Delay	LOS	Queue 95th
Route 1 at Route 286:								
Weekday Evening:								
Route 1 NB	394	14.0	B	4	435	16.0	C	5
Route 286 WB	388	9.2	A	2	392	9.7	A	3
Route 1 SB	520	11.5	B	5	556	12.7	B	6
Route 286 EB	526	16.8	C	7	531	18.7	C	8
Overall	--	**13.1**	**B**	--	--	**14.5**	**B**	--
Saturday Midday:								
Route 1 NB	512	23.2	C	8	576	32.2	D	13
Route 286 WB	555	16.9	C	8	562	19.8	C	9
Route 1 SB	614	20.2	C	11	672	20.0	D	16
Route 286 EB	522	22.2	C	8	529	27.4	D	10
Overall	--	**20.5**	**C**	--	--	**26.6**	**D**	--
Route 1 at Toll Road:								
Weekday Evening:								
Route 1 NB	675	9.5	A	4	715	10.4	B	5
Route 1 SB	375	8.1	A	2	417	8.8	A	2
Toll Road SEB	356	8.4	A	2	361	8.9	A	2
Overall	--	**8.9**	**A**	--	--	**9.6**	**A**	--
Saturday Midday:								
Route 1 NB	873	15.1	C	9	938	18.6	C	12
Route 1 SB	448	9.3	A	3	512	10.7	B	4
Toll Road SEB	322	8.5	A	2	330	9.3	A	2
Overall	--	**12.2**	**B**	--	--	**14.6**	**B**	--

[a]Demand in vehicles per hour.
[b]Average control delay per vehicle (in seconds).
[c]Level of service.
[d]Queue length in vehicles.
EB = eastbound; WB = westbound; NB = northbound; SB = southbound; SEB = southeast bound.

PARKING

Dispensary

In order to determine the parking demands for the Project, parking demand data that was derived from the traffic-volume observations that were conducted at a recreational marijuana dispensary located in Millbury, Massachusetts. Table 13 summarizes the peak parking demand rates (per 1,000 sf) that were observed at Millbury dispensary.

Table 13
DISPENSARY PARKING CALCULATIONS

Land Use	(A) Mean Parking Demand (per 1000 sf)	(B) Required Parking Spaces (B=A*4.588)
Millbury Dispensary:[b]		
Weekday	4.05	19
Saturday	4.59	21

[a]Based on observations performed at Natures Remedy, 266 North Main Street, Millbury, Massachusetts, in July 2020; spaces per 1,000 sf.

As can be seen in Table 13, the observed mean parking demand on a weekday was observed to be 4.05 parking spaces per 1,000 sf. On a Saturday, the mean parking demand was observed to be 4.59 parking spaces per 1,000 sf.

Applying the mean observed weekday and Saturday parking demand (4.05 and 4.59 parking spaces per 1,000 sf) to the Project (4,588 sf) results in an average parking demand of 19 to 21 parking spaces, respectively.

Brewery

In order to determine the parking demands for the brewery, parking demand data was derived from ITE *Parking Generation Manual*[11] (PGM) for an available land use operating similar to the brewery use of the Project. The PGM does not have data available for the brewery use; therefore, LUC 932, *High-Turnover Restaurant* was used as some of the surveyed facilities within this land use contain lounge or bar areas for serving food or alcoholic drinks similar to the brewery.

[11] *Parking Generation Manual 5th Edition*; Institute of Transportation Engineers; January 2019.

Table 14
BREWERY/RESTAURANT PARKING CALCULATIONS[a]

Time Period	(A) Mean Parking Demand (per 1000 sf)	(B) Parking Spaces (B=A*6.166)
Weekday	9.44	58
Saturday	12.28	76

[a]Based on *ITE LUC 932, High-Turnover Restaurant* and 6,166 sf.

As can be seen in Table 14, the mean parking demand on a weekday was observed to be 9.44 parking spaces per 1,000 sf. On a Saturday, the mean parking demand was shown to be 12.28 parking spaces per 1,000 sf. Applying the mean weekday and Saturday parking demand (9.44 and 12.28 parking spaces per 1,000 sf) to the brewery use (6,166 sf) results in a parking demand of 58 to 76 parking spaces, respectively.

As it can be seen in Table 13 and Table 14, the maximum parking demand during these peak periods is expected to be 97 spaces during Saturday. The parking supply that is provided for the Project and the Facility (132 spaces) is sufficient to support the peak parking demand that occurs during this period.

CONCLUSIONS

VAI has completed a TIA in order to determine the potential impacts on the transportation infrastructure associated with the proposed project to be located at 191 Lafayette Road in Salisbury, Massachusetts. The following conclusions have been identified as they relate to the Project:

1. Using trip-generation statistics published by the ITE, the Project is expected to generate approximately 1,348 vehicle trips on an average weekday (two-way volume, or 674vehicles entering and 674 exiting) and approximately 1,940 vehicle trips on a Saturday (also two-way volume, or 970 vehicles entering and 970 vehicles exiting), with 174 vehicle trips (91 vehicles entering and 83 exiting) expected during the weekday evening peak hour, and 273 vehicle trips (145 vehicles entering and 128 exiting) expected during the Saturday midday peak hour;

2. Project-related traffic-volume increases external to the study area relative to 2028 No-Build conditions are anticipated to range from 0.8 to 9.3 percent during the peak periods, with vehicle increases shown to range from 8 to 123 vehicles ;

3. All movements at the Project and the Facility site driveway intersections with Route 1 are predicted to operate at a LOS D or better during the peak hours with vehicle queuing of up to 1 vehicle;

4. The parking supply that is provided for the Project and the Facility (132 spaces) is sufficient to support the peak parking demand; and

5. Lines of sight at the Project site driveway intersections with Route 1 were found to exceed the recommended minimum sight distances to function in a safe and efficient manner.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with implementation of the recommendations that follow.

RECOMMENDATIONS

The following is recommended with respect to the site access:

- The site driveway intersection with Route 1 should be a minimum of 24 feet in width and support the turning and maneuvering requirements of delivery trucks and the largest anticipated responding emergency vehicle as defined by the Salisbury Fire Department.

- Drive aisles should be a minimum of 24 feet in width where perpendicular parking is proposed in order to allow for vehicle maneuvering.

- A STOP sign should be installed, and a STOP bar be marked at the site driveway intersection with Route 1.

- All signs and pavement markings to be installed within the Project site shall conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD).[12]

- ➢ A traffic and parking management plan should be developed in consultation with the MassDOT and the Salisbury Police Department to accommodate the increased customer demand that may

[12] *Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, D.C.; 2009.

occur during the initial opening period for adult use sales. The goal of the traffic and parking management plan will be to manage customer demands so as not to exceed the available parking within the project site with consideration of employee parking requirements. After the initial opening period, operations should be reviewed with MassDOT and the Police Chief on a periodic basis to determine if there is a need to continue the elements of the traffic and parking management plan.

With implementation of the above recommendation, safe and efficient access can be provided to the Project site and the Project can be accommodated within the confines of the existing transportation infrastructure with minimal impacts.

cc: File

APPENDIX

PROJECT SITE PLAN
AUTOMATIC TRAFFIC RECORDER COUNT DATA
MANUAL TURNING MOVEMENT COUNT DATA
SEASONAL AND COVID ADJUSTMENT DATA
VEHICLE TRAVEL SPEED DATA
CRASH DATA
PARKING OBSERVATION DATA
GENERAL BACKGROUND TRAFFIC GROWTH
BACKGROUND PROJECT NETWORKS
TRIP-GENERATION CALCULATIONS
CAPACITY ANALYSIS WORKSHEETS

PROJECT SITE PLAN

AUTOMATIC TRAFFIC RECORDER COUNT DATA

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA

9/17/2021	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	4	45			4	4				
12:15	4	49			0	4				
12:30	1	47			0	2				
12:45	3	53	12	194	1	0	5	10	17	204
1:00	2	44			2	0				
1:15	1	42			2	1				
1:30	1	35			1	0				
1:45	1	49	5	170	0	1	5	2	10	172
2:00	1	63			0	2				
2:15	1	57			0	3				
2:30	0	56			0	3				
2:45	2	65	4	241	1	28	1	36	5	277
3:00	1	54			1	67				
3:15	0	49			0	71				
3:30	1	55			2	69				
3:45	1	55	3	213	0	52	3	259	6	472
4:00	1	61			0	59				
4:15	2	54			6	80				
4:30	6	58			1	63				
4:45	4	56	13	229	11	60	18	262	31	491
5:00	6	51			6	71				
5:15	3	69			3	74				
5:30	7	54			7	63				
5:45	7	45	23	219	12	89	28	297	51	516
6:00	8	61			6	56				
6:15	20	45			19	56				
6:30	13	44			8	62				
6:45	26	34	67	184	19	42	52	216	119	400
7:00	13	45			6	41				
7:15	32	35			1	38				
7:30	21	33			1	40				
7:45	23	31	89	144	0	39	8	158	97	302
8:00	28	36			3	29				
8:15	18	27			2	22				
8:30	31	25			1	25				
8:45	21	23	98	111	0	11	6	87	104	198
9:00	28	20			1	17				
9:15	20	24			1	17				
9:30	29	14			1	18				
9:45	29	13	106	71	3	8	6	60	112	131
10:00	40	14			2	6				
10:15	34	13			1	12				
10:30	26	9			0	15				
10:45	42	6	142	42	0	6	3	39	145	81
11:00	38	6			0	9				
11:15	40	6			0	9				
11:30	31	4			3	5				
11:45	50	1	159	17	1	5	4	28	163	45
Total	721	1835			139	1454			860	3289
Percent	28.2%	71.8%			8.7%	91.3%			20.7%	79.3%

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA

9/18/2021	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	4	63			7	90				
12:15	4	46			1	125				
12:30	4	76			2	83				
12:45	1	78	13	263	3	81	13	379	26	642
1:00	1	85			0	81				
1:15	2	65			2	97				
1:30	1	72			2	78				
1:45	1	61	5	283	0	68	4	324	9	607
2:00	1	78			0	77				
2:15	0	79			5	73				
2:30	0	90			0	62				
2:45	1	75	2	322	0	76	5	288	7	610
3:00	0	60			1	75				
3:15	1	83			1	63				
3:30	1	67			0	63				
3:45	1	77	3	287	1	60	3	261	6	548
4:00	0	65			2	65				
4:15	0	72			0	70				
4:30	2	76			1	71				
4:45	2	63	4	276	4	59	7	265	11	541
5:00	3	56			4	65				
5:15	4	53			4	63				
5:30	5	64			5	62				
5:45	9	53	21	226	8	63	21	253	42	479
6:00	5	61			6	55				
6:15	11	63			12	43				
6:30	3	51			16	52				
6:45	9	49	28	224	19	49	53	199	81	423
7:00	13	39			22	44				
7:15	20	51			20	39				
7:30	17	33			17	42				
7:45	22	28	72	151	30	31	89	156	161	307
8:00	18	32			30	27				
8:15	26	30			47	19				
8:30	38	22			45	30				
8:45	30	11	112	95	35	19	157	95	269	190
9:00	31	25			56	23				
9:15	33	18			53	18				
9:30	42	18			67	19				
9:45	71	24	177	85	56	27	232	87	409	172
10:00	55	9			59	9				
10:15	58	14			67	12				
10:30	66	9			82	13				
10:45	74	7	253	39	81	4	289	38	542	77
11:00	49	5			90	8				
11:15	68	3			93	3				
11:30	71	3			76	5				
11:45	70	3	258	14	106	12	365	28	623	42
Total	948	2265			1238	2373			2186	4638
Percent	29.5%	70.5%			34.3%	65.7%			32.0%	68.0%
Grand Total	1669	4100			1377	3827			3046	7927
Percent	28.9%	71.1%			26.5%	73.5%			27.8%	72.2%
ADT		ADT: 5,486		AADT: 5,486						

MANUAL TURNING MOVEMENT COUNT DATA

Accurate Counts

978-664-2565

N/S Street : Route 1
E/W Street : Collins St / Pike St
City/State : Salisbury, MA
Weather : Clear

File Name : 90800001
Site Code : 90800001
Start Date : 9/16/2021
Page No : 1

Groups Printed- Cars - Trucks

	Route 1 From North			Collins St From East			Route 1 From South			Pike St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	16	57	5	6	51	13	3	61	11	2	64	1	290
04:15 PM	19	57	7	4	60	16	2	62	9	4	63	5	308
04:30 PM	26	56	11	5	48	8	1	60	10	2	96	4	327
04:45 PM	25	65	2	2	33	15	2	47	7	4	77	3	282
Total	86	235	25	17	192	52	8	230	37	12	300	13	1207
05:00 PM	21	49	5	6	50	12	3	50	3	2	87	3	291
05:15 PM	19	46	4	5	49	22	2	70	12	3	68	3	303
05:30 PM	32	45	3	3	49	20	1	41	6	3	80	2	285
05:45 PM	27	59	3	6	50	19	1	62	8	4	82	1	322
Total	99	199	15	20	198	73	7	223	29	12	317	9	1201
Grand Total	185	434	40	37	390	125	15	453	66	24	617	22	2408
Apprch %	28.1	65.9	6.1	6.7	70.7	22.6	2.8	84.8	12.4	3.6	93.1	3.3	
Total %	7.7	18	1.7	1.5	16.2	5.2	0.6	18.8	2.7	1	25.6	0.9	
Cars	185	434	40	36	390	124	15	453	66	24	615	22	2404
% Cars	100	100	100	97.3	100	99.2	100	100	100	100	99.7	100	99.8
Trucks	0	0	0	1	0	1	0	0	0	0	2	0	4
% Trucks	0	0	0	2.7	0	0.8	0	0	0	0	0.3	0	0.2

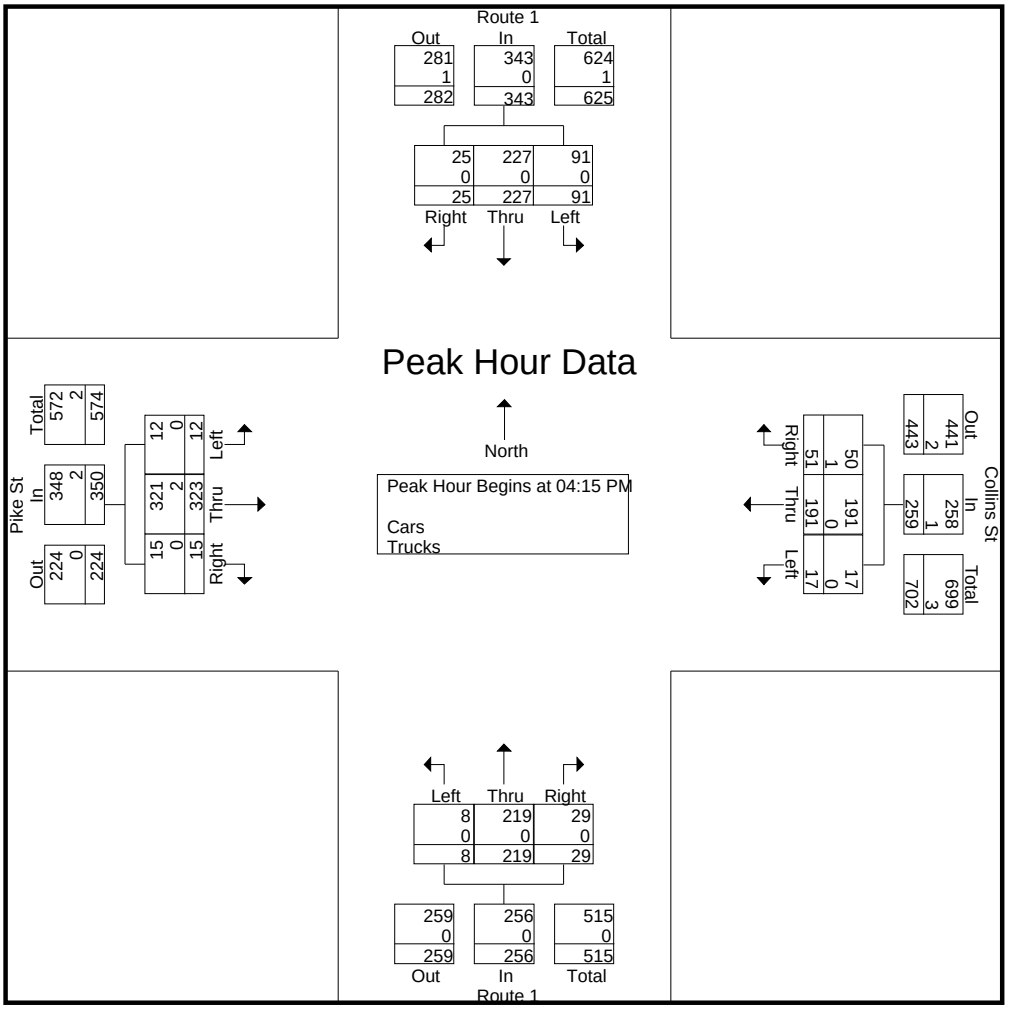
	Route 1 From North				Collins St From East				Route 1 From South				Pike St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	19	57	7	83	4	**60**	**16**	**80**	2	**62**	9	**73**	**4**	63	**5**	72	308
04:30 PM	**26**	56	**11**	**93**	5	48	8	61	1	60	**10**	71	2	**96**	4	**102**	**327**
04:45 PM	25	**65**	2	92	2	33	15	50	2	47	7	56	4	77	3	84	282
05:00 PM	21	49	5	75	**6**	50	12	68	**3**	50	3	56	2	87	3	92	291
Total Volume	91	227	25	343	17	191	51	259	8	219	29	256	12	323	15	350	1208
% App. Total	26.5	66.2	7.3		6.6	73.7	19.7		3.1	85.5	11.3		3.4	92.3	4.3		
PHF	.875	.873	.568	.922	.708	.796	.797	.809	.667	.883	.725	.877	.750	.841	.750	.858	.924
Cars	91	227	25	343	17	191	50	258	8	219	29	256	12	321	15	348	1205
% Cars	100	100	100	100	100	100	98.0	99.6	100	100	100	100	100	99.4	100	99.4	99.8
Trucks	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
% Trucks	0	0	0	0	0	0	2.0	0.4	0	0	0	0	0	0.6	0	0.6	0.2

Accurate Counts

978-664-2565

N/S Street : Route 1
E/W Street : Collins St / Pike St
City/State : Salisbury, MA
Weather : Clear

File Name : 90800001
Site Code : 90800001
Start Date : 9/16/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:00 PM				04:30 PM			
+0 mins.	16	57	5	78	**6**	**50**	12	68	**3**	61	**11**	**75**	2	**96**	**4**	**102**
+15 mins.	19	57	7	83	5	49	**22**	**76**	2	**62**	9	73	**4**	77	3	84
+30 mins.	**26**	56	**11**	**93**	3	49	20	72	1	60	10	71	2	87	3	92
+45 mins.	25	**65**	2	92	6	50	19	75	2	47	7	56	3	68	3	74
Total Volume	86	235	25	346	20	198	73	291	8	230	37	275	11	328	13	352
% App. Total	24.9	67.9	7.2		6.9	68	25.1		2.9	83.6	13.5		3.1	93.2	3.7	
PHF	.827	.904	.568	.930	.833	.990	.830	.957	.667	.927	.841	.917	.688	.854	.813	.863
Cars	86	235	25	346	20	198	73	291	8	230	37	275	11	326	13	350
% Cars	100	100	100	100	100	100	100	100	100	100	100	100	100	99.4	100	99.4
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0.6

Accurate Counts

978-664-2565

N/S Street : Route 1
E/W Street : Collins St / Pike St
City/State : Salisbury, MA
Weather : Clear

File Name : 908000S1
Site Code : 90800001
Start Date : 9/18/2021
Page No : 1

Groups Printed- Cars - Trucks

	Route 1 From North			Collins St From East			Route 1 From South			Pike St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
11:00 AM	26	53	3	4	53	29	1	78	12	2	56	6	323
11:15 AM	30	67	4	10	62	15	0	82	5	3	65	0	343
11:30 AM	26	67	2	2	53	19	5	66	10	5	64	4	323
11:45 AM	41	65	4	13	55	20	2	98	6	4	70	7	385
Total	123	252	13	29	223	83	8	324	33	14	255	17	1374
12:00 PM	23	68	5	2	51	16	0	80	11	4	66	1	327
12:15 PM	33	64	3	5	58	28	0	107	11	3	80	1	393
12:30 PM	24	70	5	7	55	23	4	83	8	5	62	3	349
12:45 PM	20	74	3	5	66	19	1	78	7	0	72	1	346
Total	100	276	16	19	230	86	5	348	37	12	280	6	1415
01:00 PM	25	88	6	10	59	18	2	75	6	2	68	1	360
01:15 PM	33	61	4	11	55	18	2	80	15	3	78	4	364
01:30 PM	30	65	5	13	73	23	4	76	8	0	88	6	391
01:45 PM	30	55	6	6	68	15	2	63	7	1	94	3	350
Total	118	269	21	40	255	74	10	294	36	6	328	14	1465
Grand Total	341	797	50	88	708	243	23	966	106	32	863	37	4254
Apprch %	28.7	67.1	4.2	8.5	68.1	23.4	2.1	88.2	9.7	3.4	92.6	4	
Total %	8	18.7	1.2	2.1	16.6	5.7	0.5	22.7	2.5	0.8	20.3	0.9	
Cars	341	796	50	87	702	243	23	965	106	32	861	37	4243
% Cars	100	99.9	100	98.9	99.2	100	100	99.9	100	100	99.8	100	99.7
Trucks	0	1	0	1	6	0	0	1	0	0	2	0	11
% Trucks	0	0.1	0	1.1	0.8	0	0	0.1	0	0	0.2	0	0.3

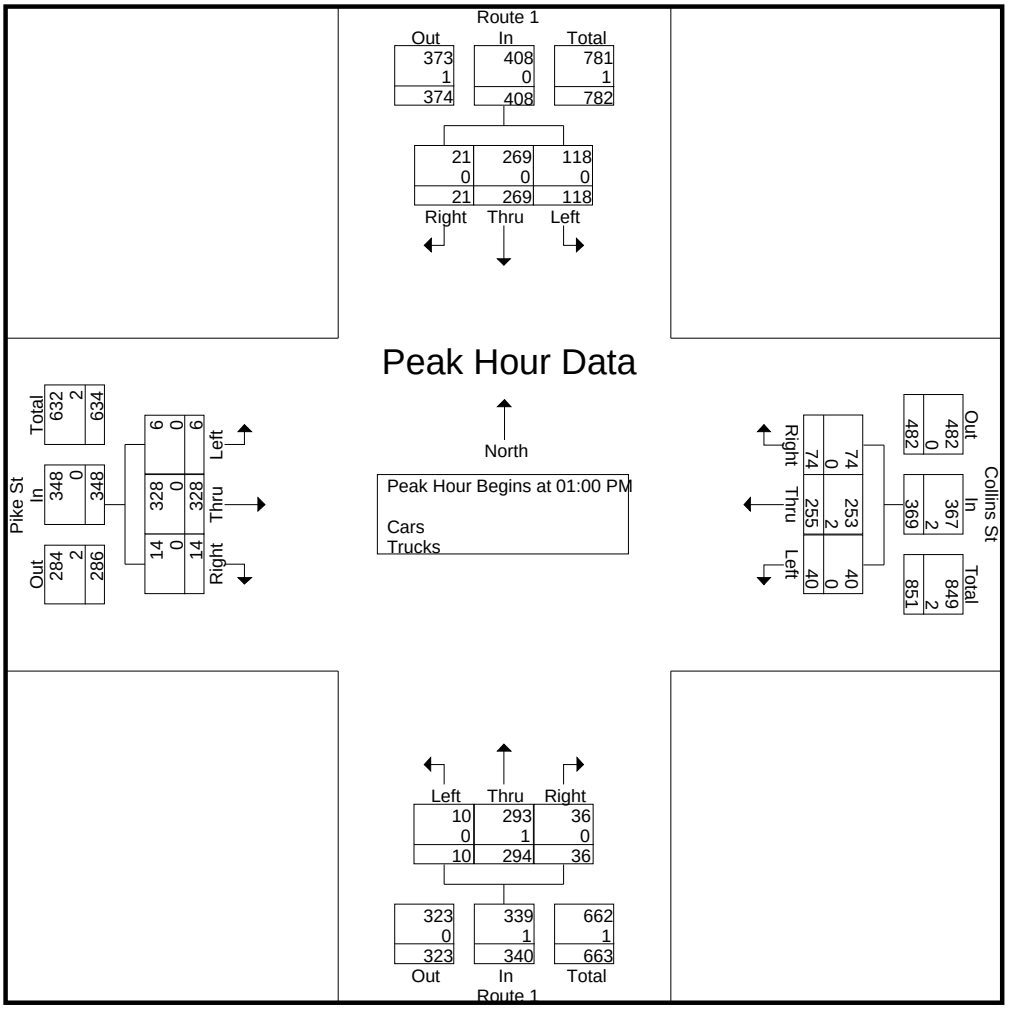
	Route 1 From North				Collins St From East				Route 1 From South				Pike St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 01:00 PM																	
01:00 PM	25	**88**	**6**	**119**	10	59	18	87	2	75	6	83	2	68	1	71	360
01:15 PM	**33**	61	4	98	11	55	18	84	2	**80**	**15**	**97**	**3**	78	4	85	364
01:30 PM	30	65	5	100	**13**	**73**	**23**	**109**	**4**	76	8	88	0	88	**6**	94	**391**
01:45 PM	30	55	6	91	6	68	15	89	2	63	7	72	1	**94**	3	**98**	350
Total Volume	118	269	21	408	40	255	74	369	10	294	36	340	6	328	14	348	1465
% App. Total	28.9	65.9	5.1		10.8	69.1	20.1		2.9	86.5	10.6		1.7	94.3	4		
PHF	.894	.764	.875	.857	.769	.873	.804	.846	.625	.919	.600	.876	.500	.872	.583	.888	.937
Cars	118	269	21	408	40	253	74	367	10	293	36	339	6	328	14	348	1462
% Cars	100	100	100	100	100	99.2	100	99.5	100	99.7	100	99.7	100	100	100	100	99.8
Trucks	0	0	0	0	0	2	0	2	0	1	0	1	0	0	0	0	3
% Trucks	0	0	0	0	0	0.8	0	0.5	0	0.3	0	0.3	0	0	0	0	0.2

Accurate Counts

978-664-2565

N/S Street : Route 1
E/W Street : Collins St / Pike St
City/State : Salisbury, MA
Weather : Clear

File Name : 908000S1
Site Code : 90800001
Start Date : 9/18/2021
Page No : 2



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				12:45 PM				11:45 AM				01:00 PM			
+0 mins.	**33**	64	3	100	5	66	19	90	2	98	6	106	2	68	1	71
+15 mins.	24	70	5	99	10	59	18	87	0	80	**11**	91	**3**	78	4	85
+30 mins.	20	74	3	97	11	55	18	84	0	**107**	11	**118**	0	88	**6**	94
+45 mins.	25	**88**	**6**	**119**	**13**	**73**	**23**	**109**	**4**	83	8	95	1	**94**	3	**98**
Total Volume	102	296	17	415	39	253	78	370	6	368	36	410	6	328	14	348
% App. Total	24.6	71.3	4.1		10.5	68.4	21.1		1.5	89.8	8.8		1.7	94.3	4	
PHF	.773	.841	.708	.872	.750	.866	.848	.849	.375	.860	.818	.869	.500	.872	.583	.888
Cars	102	295	17	414	39	251	78	368	6	368	36	410	6	328	14	348
% Cars	100	99.7	100	99.8	100	99.2	100	99.5	100	100	100	100	100	100	100	100
Trucks	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0
% Trucks	0	0.3	0	0.2	0	0.8	0	0.5	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Toll Road / Route 1
E/W Street : Route 1 / Site Driveway
City/State : Salisbury, MA
Weather : Clear

File Name : 90800003
Site Code : 90800003
Start Date : 9/16/2021
Page No : 1

Groups Printed- Cars - Trucks

	Toll Rd From North			Route 1 From East			Route 1 From South			Site Dwy From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	3	48	0	61	0	1	0	42	75	0	0	0	230
04:15 PM	3	34	0	62	0	8	0	39	71	0	0	0	217
04:30 PM	4	53	0	58	0	5	0	42	64	0	0	0	226
04:45 PM	2	52	0	66	0	5	0	46	59	0	0	0	230
Total	12	187	0	247	0	19	0	169	269	0	0	0	903
05:00 PM	1	56	0	53	0	5	0	60	61	0	0	0	236
05:15 PM	4	60	0	45	0	6	0	48	64	0	0	0	227
05:30 PM	3	41	0	52	0	5	0	41	50	0	0	0	192
05:45 PM	5	42	0	59	0	2	0	30	72	0	0	0	210
Total	13	199	0	209	0	18	0	179	247	0	0	0	865
Grand Total	25	386	0	456	0	37	0	348	516	0	0	0	1768
Apprch %	6.1	93.9	0	92.5	0	7.5	0	40.3	59.7	0	0	0	
Total %	1.4	21.8	0	25.8	0	2.1	0	19.7	29.2	0	0	0	
Cars	24	381	0	455	0	37	0	346	516	0	0	0	1759
% Cars	96	98.7	0	99.8	0	100	0	99.4	100	0	0	0	99.5
Trucks	1	5	0	1	0	0	0	2	0	0	0	0	9
% Trucks	4	1.3	0	0.2	0	0	0	0.6	0	0	0	0	0.5

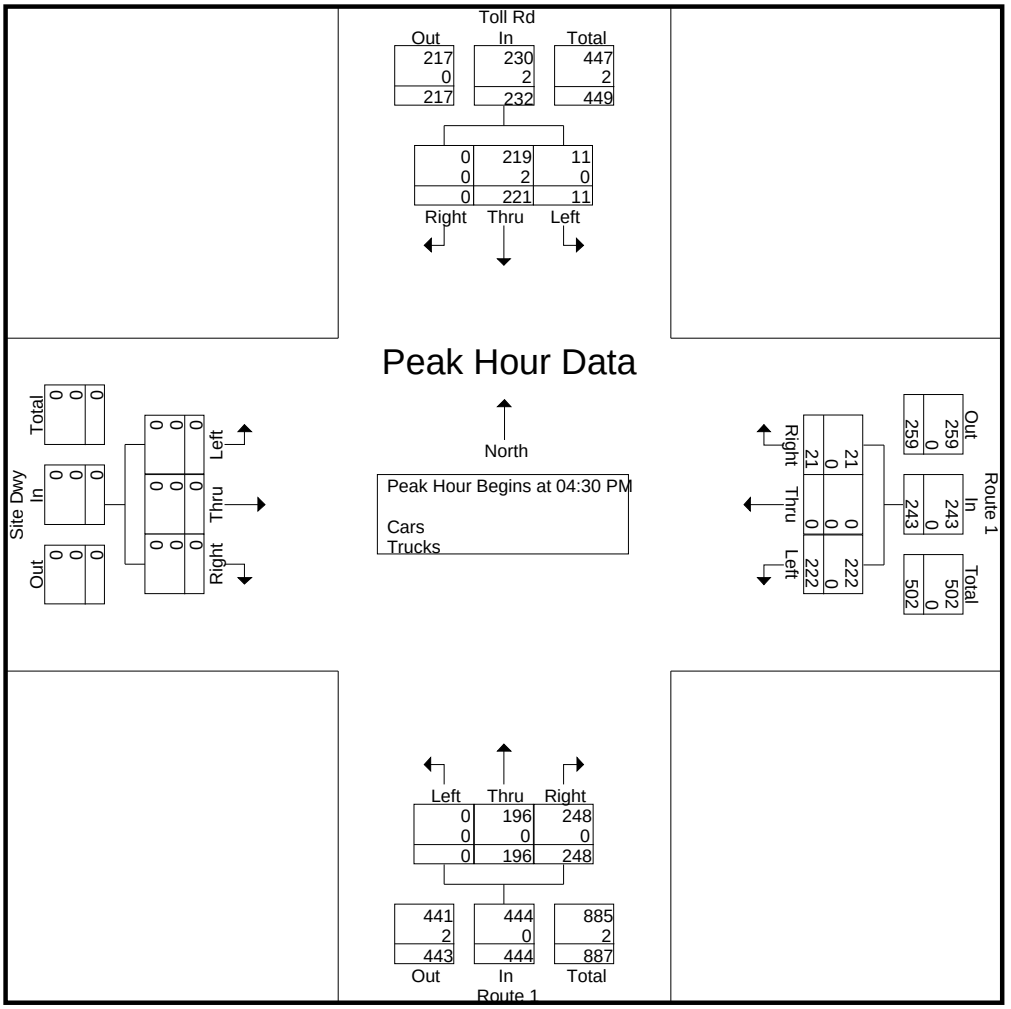
	Toll Rd From North				Route 1 From East				Route 1 From South				Site Dwy From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**4**	53	0	57	58	0	5	63	0	42	**64**	106	0	0	0	0	226
04:45 PM	2	52	0	54	**66**	0	5	**71**	0	46	59	105	0	0	0	0	230
05:00 PM	1	56	0	57	53	0	5	58	0	**60**	61	**121**	0	0	0	0	**236**
05:15 PM	4	**60**	0	**64**	45	0	**6**	51	0	48	64	112	0	0	0	0	227
Total Volume	11	221	0	232	222	0	21	243	0	196	248	444	0	0	0	0	919
% App. Total	4.7	95.3	0		91.4	0	8.6		0	44.1	55.9		0	0	0		
PHF	.688	.921	.000	.906	.841	.000	.875	.856	.000	.817	.969	.917	.000	.000	.000	.000	.974
Cars	11	219	0	230	222	0	21	243	0	196	248	444	0	0	0	0	917
% Cars	100	99.1	0	99.1	100	0	100	100	0	100	100	100	0	0	0	0	99.8
Trucks	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	0	0.9	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0.2

Accurate Counts

978-664-2565

N/S Street : Toll Road / Route 1
E/W Street : Route 1 / Site Driveway
City/State : Salisbury, MA
Weather : Clear

File Name : 90800003
Site Code : 90800003
Start Date : 9/16/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:00 PM			
+0 mins.	**4**	53	0	57	61	0	1	62	0	42	**64**	106	0	0	0	0
+15 mins.	2	52	0	54	62	0	**8**	70	0	46	59	105	0	0	0	0
+30 mins.	1	56	0	57	58	0	5	63	0	**60**	61	**121**	0	0	0	0
+45 mins.	4	**60**	0	**64**	**66**	0	5	**71**	0	48	64	112	0	0	0	0
Total Volume	11	221	0	232	247	0	19	266	0	196	248	444	0	0	0	0
% App. Total	4.7	95.3	0		92.9	0	7.1		0	44.1	55.9		0	0	0	
PHF	.688	.921	.000	.906	.936	.000	.594	.937	.000	.817	.969	.917	.000	.000	.000	.000
Cars	11	219	0	230	246	0	19	265	0	196	248	444	0	0	0	0
% Cars	100	99.1	0	99.1	99.6	0	100	99.6	0	100	100	100	0	0	0	0
Trucks	0	2	0	2	1	0	0	1	0	0	0	0	0	0	0	0
% Trucks	0	0.9	0	0.9	0.4	0	0	0.4	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Toll Road / Route 1
E/W Street : Route 1 / Site Driveway
City/State : Salisbury, MA
Weather : Clear

File Name : 908000S3
Site Code : 90800003
Start Date : 9/18/2021
Page No : 1

Groups Printed- Cars - Trucks

	Toll Rd From North			Route 1 From East			Route 1 From South			Site Dwy From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
11:00 AM	3	54	0	55	0	1	0	51	93	0	0	0	257
11:15 AM	4	51	0	67	0	2	0	45	90	0	0	0	259
11:30 AM	2	40	0	72	0	6	0	54	73	0	0	0	247
11:45 AM	9	54	0	76	0	4	0	40	102	0	0	0	285
Total	18	199	0	270	0	13	0	190	358	0	0	0	1048
12:00 PM	4	47	0	70	0	2	0	47	99	0	0	0	269
12:15 PM	4	47	0	61	0	5	0	44	115	0	0	0	276
12:30 PM	2	35	0	76	0	2	0	41	80	0	0	0	236
12:45 PM	0	44	0	79	0	2	0	40	79	0	0	0	244
Total	10	173	0	286	0	11	0	172	373	0	0	0	1025
01:00 PM	5	56	0	90	0	4	0	47	86	0	0	0	288
01:15 PM	5	67	0	67	0	5	0	52	87	0	0	0	283
01:30 PM	3	48	0	85	0	3	0	37	85	0	0	0	261
01:45 PM	1	59	0	60	0	6	0	22	66	0	0	0	214
Total	14	230	0	302	0	18	0	158	324	0	0	0	1046
Grand Total	42	602	0	858	0	42	0	520	1055	0	0	0	3119
Apprch %	6.5	93.5	0	95.3	0	4.7	0	33	67	0	0	0	
Total %	1.3	19.3	0	27.5	0	1.3	0	16.7	33.8	0	0	0	
Cars	42	600	0	858	0	42	0	516	1054	0	0	0	3112
% Cars	100	99.7	0	100	0	100	0	99.2	99.9	0	0	0	99.8
Trucks	0	2	0	0	0	0	0	4	1	0	0	0	7
% Trucks	0	0.3	0	0	0	0	0	0.8	0.1	0	0	0	0.2

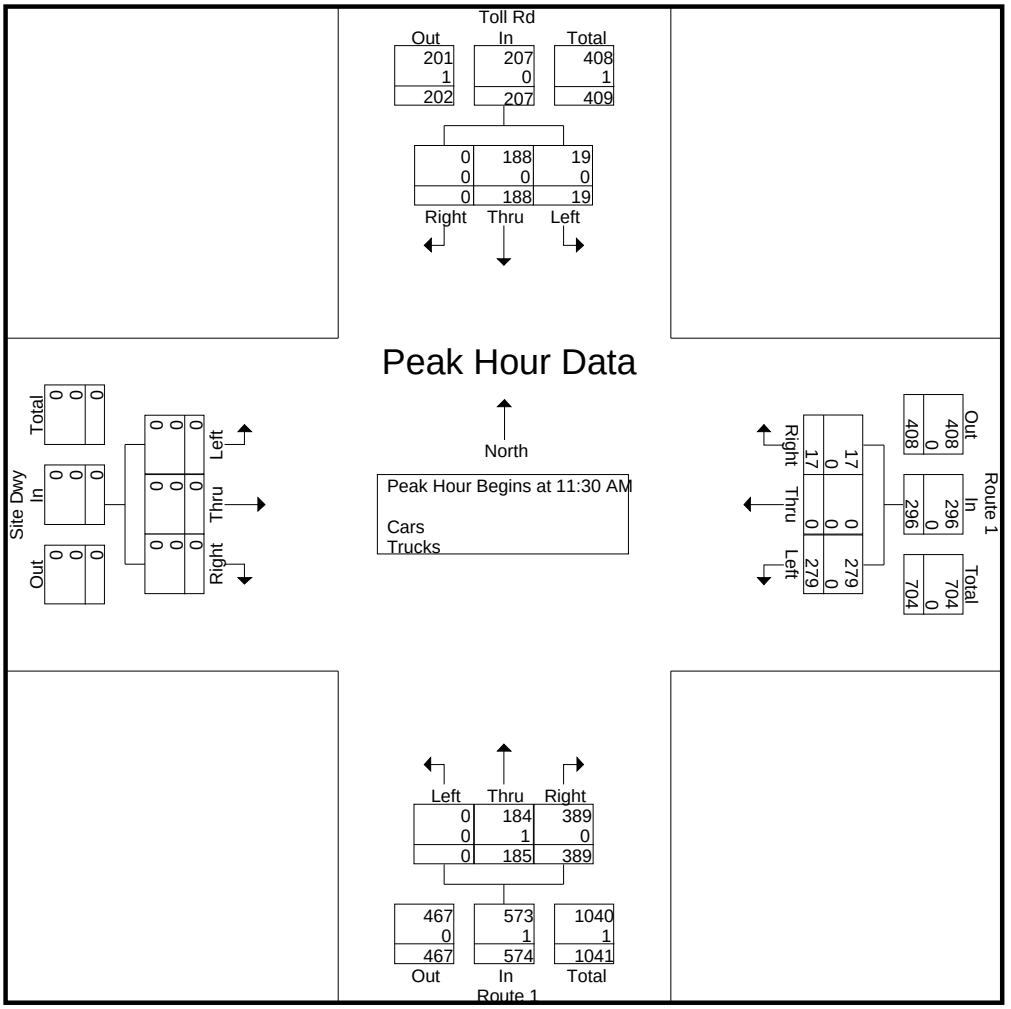
	Toll Rd From North				Route 1 From East				Route 1 From South				Site Dwy From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	2	40	0	42	72	0	**6**	78	0	**54**	73	127	0	0	0	0	247
11:45 AM	**9**	**54**	0	**63**	**76**	0	4	**80**	0	40	102	142	0	0	0	0	**285**
12:00 PM	4	47	0	51	70	0	2	72	0	47	99	146	0	0	0	0	269
12:15 PM	4	47	0	51	61	0	5	66	0	44	**115**	**159**	0	0	0	0	276
Total Volume	19	188	0	207	279	0	17	296	0	185	389	574	0	0	0	0	1077
% App. Total	9.2	90.8	0		94.3	0	5.7		0	32.2	67.8		0	0	0		
PHF	.528	.870	.000	.821	.918	.000	.708	.925	.000	.856	.846	.903	.000	.000	.000	.000	.945
Cars	19	188	0	207	279	0	17	296	0	184	389	573	0	0	0	0	1076
% Cars	100	100	0	100	100	0	100	100	0	99.5	100	99.8	0	0	0	0	99.9
Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% Trucks	0	0	0	0	0	0	0	0	0	0.5	0	0.2	0	0	0	0	0.1

Accurate Counts

978-664-2565

N/S Street : Toll Road / Route 1
E/W Street : Route 1 / Site Driveway
City/State : Salisbury, MA
Weather : Clear

File Name : 908000S3
Site Code : 90800003
Start Date : 9/18/2021
Page No : 2



Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1

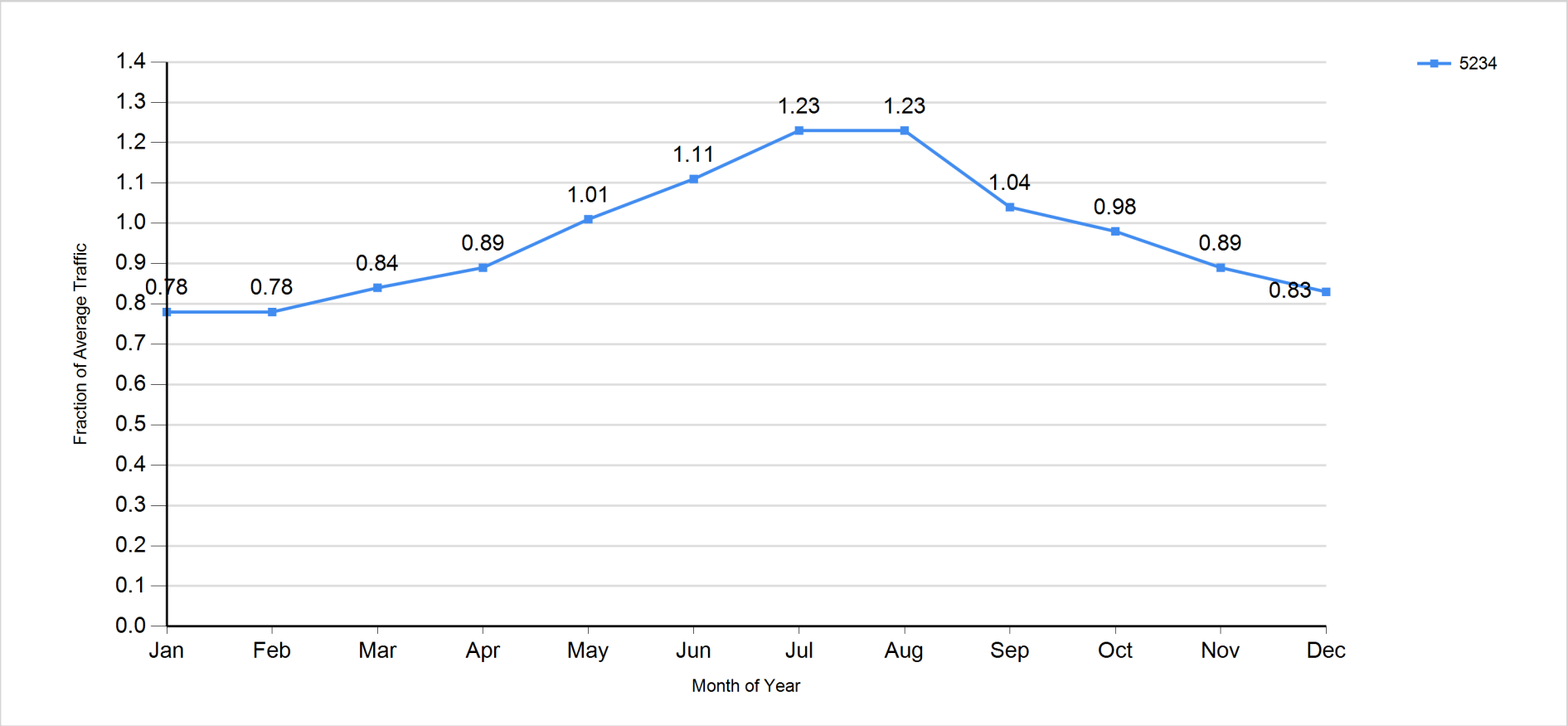
Peak Hour for Each Approach Begins at:

	01:00 PM				12:45 PM				11:30 AM				11:00 AM			
+0 mins.	**5**	56	0	61	79	0	2	81	0	**54**	73	127	0	0	0	0
+15 mins.	5	**67**	0	**72**	**90**	0	4	**94**	0	40	102	142	0	0	0	0
+30 mins.	3	48	0	51	67	0	**5**	72	0	47	99	146	0	0	0	0
+45 mins.	1	59	0	60	85	0	3	88	0	44	**115**	**159**	0	0	0	0
Total Volume	14	230	0	244	321	0	14	335	0	185	389	574	0	0	0	0
% App. Total	5.7	94.3	0		95.8	0	4.2		0	32.2	67.8		0	0	0	
PHF	.700	.858	.000	.847	.892	.000	.700	.891	.000	.856	.846	.903	.000	.000	.000	.000
Cars	14	229	0	243	321	0	14	335	0	184	389	573	0	0	0	0
% Cars	100	99.6	0	99.6	100	0	100	100	0	99.5	100	99.8	0	0	0	0
Trucks	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
% Trucks	0	0.4	0	0.4	0	0	0	0	0	0.5	0	0.2	0	0	0	0

SEASONAL AND COVID ADJUSTMENT DATA

Massachusetts Highway Department

Traffic Pattern by Month for 1/1/2019 - 12/31/2019
Criteria: Location ID = 5234, From 1/1/1900 To 12/31/2049 12:00:00 AM



Traffic Pattern by Month for 1/1/2019 - 12/31/2019
Criteria: Location ID = 5234, From 1/1/1900 To 12/31/2049 12:00:00 AM

Factor Group	Station	Weight	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
U1-Essex	5234	0	0.777	0.784	0.842	0.892	1.012	1.112	1.232	1.234	1.038	0.981	0.889	0.834
	Average of Weighted Factors		**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

2021 COVID Adjustement			
Continues Count Station No.5234-I495			
Year	Month	Average-Month Count Data	Adjustement to 2021
2019	Septmeber	76,802	78346
2021	Septemebr	6,297	72,383
Covid Adjustement Rate			1.08
From Traffic Study that was prepared for 76 Townhose units on Forest Road, south of School House Lane			
Covid Adjustement Rate			1.03

Adjust 2021 Volume up to 6%

Note: 1.0% Background Growth Rate per Year

Adjustement for Travel Reduction as Route 1 Construction

Route 1 at Route 286:

2021 COUNTS Raw	PM	Adjusted to Average Month PM	PM		PM	
EB L	13	12				
EB T	342	328	355	EB Approach	228	West of Rte 1
EB R	16	15				
WB L	18	17				
WB T	202	194	263	WB Approach	450	East of Rte 1
WB R	54	52				
NB L	8	8				
NB T	232	223	261	NB Approach	254	South of 286
NB R	31	30				
SB L	96	92				
SB T	241	231	349	SB Approach	287	North of 286
SB R	27	26				

			PM			
		count station	985	1.548742		
			349			
			287			
			636			
	in	228		450		
	out	355	Route 1 at	263		
	total	583	Route 286	713		
count station	607		261		837	count station
	1.04117		254		1.173913	
			515			
		count station	781	1.516505		

AVERAGE 1.320082

USE **32%**

North of site driveway

Location Info	
Location ID	257581
Type	I-SECTION
Functional Class	4
Located On	LAFAYETTE ROAD
NORTH OF	INTERSTATE 95 CONNECTOR
Direction	2-WAY
Community	Salisbury
MPO_ID	
HPMS ID	
Agency	Massachusetts Highway Department

Count Data Info	
Start Date	6/21/2016
End Date	6/22/2016
Start Time	9:00 AM
End Time	9:00 AM
Direction	
Notes	
Count Source	v257851
File Name	
Weather	
Study	
Owner	rpa07
QC Status	Accepted

Interval: 15 mins

Time	15 Min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	7	2	13	6	28
01:00 - 02:00	1	3	2	5	11
02:00 - 03:00	6	1	3	5	15
03:00 - 04:00	2	8	3	3	16
04:00 - 05:00	9	11	13	17	50
05:00 - 06:00	25	37	35	56	153
06:00 - 07:00	60	75	84	81	300
07:00 - 08:00	65	114	113	122	414
08:00 - 09:00	131	115	122	124	492
09:00 - 10:00	156	130	136	141	563
10:00 - 11:00	156	147	183	163	649
11:00 - 12:00	182	202	175	188	747
12:00 - 13:00	180	192	184	186	742
13:00 - 14:00	179	170	196	190	735
14:00 - 15:00	157	196	187	185	725
15:00 - 16:00	212	215	192	215	834
16:00 - 17:00	213	195	203	203	814
17:00 - 18:00	187	166	151	165	669
18:00 - 19:00	151	166	128	142	587
19:00 - 20:00	116	127	120	110	473
20:00 - 21:00	95	80	79	72	326
21:00 - 22:00	63	47	53	62	225
22:00 - 23:00	26	32	18	24	100
23:00 - 24:00	18	13	15	15	61
TOTAL					9729
PM Peak					15:15-16:15 835

		2016	2021	0.89
Growth	1.01	835	**878**	781
5			June'	Average Month

Location Info	
Location ID	3372659
Type	I-SECTION
Functional Class	4
Located On	PIKE STREET
WEST OF	LAFAYETTE ROAD
Direction	2-WAY
Community	Salisbury
MPO_ID	
HPMS ID	
Agency	Massachusetts Highway Department

Count Data Info		
Start Date	11/2/2017	Thur
End Date	11/3/2017	
Start Time	12:00 PM	
End Time	12:00 PM	
Direction		
Notes		
Count Source	0	
File Name		
Weather		
Study		
Owner	rpa07	
QC Status	Accepted	

Interval: 15 mins

Time	15 Min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	17	15	11	5	48
01:00 - 02:00	7	9	5	9	30
02:00 - 03:00	4	4	4	3	15
03:00 - 04:00	4	4	5	3	16
04:00 - 05:00	6	7	14	14	41
05:00 - 06:00	26	38	34	57	155
06:00 - 07:00	56	70	53	73	252
07:00 - 08:00	80	113	112	103	408
08:00 - 09:00	106	123	105	90	424
09:00 - 10:00	85	89	82	82	338
10:00 - 11:00	82	88	83	76	329
11:00 - 12:00	89	85	69	89	332
12:00 - 13:00	79	80	77	81	317
13:00 - 14:00	72	84	102	88	346
14:00 - 15:00	99	75	110	84	368
15:00 - 16:00	99	107	125	113	444
16:00 - 17:00	116	108	105	125	454
17:00 - 18:00	124	127	140	134	525
18:00 - 19:00	120	132	104	95	451
19:00 - 20:00	101	66	73	51	291
20:00 - 21:00	52	37	55	42	186
21:00 - 22:00	47	52	36	36	171
22:00 - 23:00	33	39	29	37	138
23:00 - 24:00	27	22	28	14	91
TOTAL					6170
PM Peak					17:30-18:30 526

		2017	2021	1.11
Growth	1.01	526	**547**	607
4				AVG

On 286, east of Route 1

Location Info	
Location ID	258235
Type	I-SECTION
Functional Class	4
Located On	COLLINS STREET
AT	NEW HAMPSHIRE STATE LINE
Direction	2-WAY
Community	Salisbury
MPO_ID	
HPMS ID	
Agency	Massachusetts Highway Department

Count Data Info	
Start Date	7/15/2015
End Date	7/16/2015
Start Time	1:00 PM
End Time	1:00 PM
Direction	
Notes	
Count Source	258235
File Name	
Weather	
Study	
Owner	rpa07
QC Status	Accepted

Interval: 15 mins

Time	15 Min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	37	26	15	19	97
01:00 - 02:00	19	14	17	5	55
02:00 - 03:00	6	9	4	4	23
03:00 - 04:00	3	6	5	5	19
04:00 - 05:00	8	14	22	27	71
05:00 - 06:00	43	54	56	76	229
06:00 - 07:00	81	102	129	159	471
07:00 - 08:00	147	137	143	206	633
08:00 - 09:00	151	167	165	172	655
09:00 - 10:00	180	183	205	245	813
10:00 - 11:00	227	253	255	270	1005
11:00 - 12:00	249	256	279	266	1050
12:00 - 13:00	246	229	246	250	971
13:00 - 14:00	171	208	203	227	809
14:00 - 15:00	193	208	208	190	799
15:00 - 16:00	228	226	220	243	917
16:00 - 17:00	280	240	229	238	987
17:00 - 18:00	242	268	262	252	1024
18:00 - 19:00	228	210	236	256	930
19:00 - 20:00	248	213	157	198	816
20:00 - 21:00	171	134	138	131	574
21:00 - 22:00	131	136	87	90	444
22:00 - 23:00	125	162	90	93	470
23:00 - 24:00	60	55	44	33	192
TOTAL					14054
PM Peak					17:00-18:00 1,024

		2015	2021	0.77
Growth	1.01	1,024	**1087**	837
6			Jul	AVG

Route 1, north of 286

Location Info	
Location ID	225938
Type	I-SECTION
Functional Class	4
Located On	LAFAYETTE ROAD
AT	NEW HAMPSHIRE STATE LINE
Direction	2-WAY
Community	Salisbury
MPO_ID	
HPMS ID	
Agency	Massachusetts Highway Department

Count Data Info		
Start Date	11/2/2017	
End Date	11/3/2017	Thu
Start Time	11:00 AM	
End Time	11:00 AM	
Direction		
Notes		
Count Source	0	
File Name		
Weather		
Study		
Owner	rpa07	
QC Status	Accepted	

Interval: 15 mins

Time	15 Min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	14	8	4	8	34
01:00 - 02:00	6	4	6	1	17
02:00 - 03:00	3	3	2	3	11
03:00 - 04:00	0	7	6	6	19
04:00 - 05:00	4	6	20	16	46
05:00 - 06:00	23	25	38	38	124
06:00 - 07:00	59	58	85	85	287
07:00 - 08:00	81	105	91	132	409
08:00 - 09:00	118	154	123	138	533
09:00 - 10:00	150	155	158	174	637
10:00 - 11:00	163	184	177	210	734
11:00 - 12:00	197	157	189	193	736
12:00 - 13:00	179	183	199	185	746
13:00 - 14:00	178	194	230	190	792
14:00 - 15:00	186	205	198	183	772
15:00 - 16:00	207	202	217	226	852
16:00 - 17:00	206	194	204	188	792
17:00 - 18:00	195	198	216	193	802
18:00 - 19:00	160	151	142	140	593
19:00 - 20:00	124	111	96	90	421
20:00 - 21:00	84	71	63	71	289
21:00 - 22:00	61	55	49	46	211
22:00 - 23:00	48	28	28	14	118
23:00 - 24:00	12	12	9	16	49
TOTAL					10024
PM Peak					15:00-16:00 852

		2017	2021	1.11
Growth	1.01	852	**887**	985
4			Nov	AVG

VEHICLE TRAVEL SPEED DATA

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: SB,

9/17/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	5	3	4	0	0	0	0	0	0	12
1:00	0	0	0	0	0	3	0	2	0	0	0	0	0	5
2:00	0	0	0	1	1	0	1	1	0	0	0	0	0	4
3:00	0	0	0	1	1	0	1	0	0	0	0	0	0	3
4:00	0	0	1	0	2	6	3	1	0	0	0	0	0	13
5:00	1	0	1	1	3	8	7	2	0	0	0	0	0	23
6:00	0	1	4	0	10	23	23	5	0	1	0	0	0	67
7:00	4	4	6	8	33	26	8	0	0	0	0	0	0	89
8:00	2	12	2	9	35	32	6	0	0	0	0	0	0	98
9:00	1	7	6	17	38	31	5	1	0	0	0	0	0	106
10:00	5	9	8	30	59	28	3	0	0	0	0	0	0	142
11:00	1	2	1	23	84	38	10	0	0	0	0	0	0	159
12:00 PM	6	11	10	41	91	35	0	0	0	0	0	0	0	194
1:00	1	7	6	24	84	45	3	0	0	0	0	0	0	170
2:00	2	9	17	38	96	70	8	1	0	0	0	0	0	241
3:00	0	5	4	12	46	100	42	3	1	0	0	0	0	213
4:00	0	3	2	9	48	126	34	6	1	0	0	0	0	229
5:00	0	6	4	9	40	102	48	9	1	0	0	0	0	219
6:00	1	6	0	15	39	84	30	7	2	0	0	0	0	184
7:00	0	2	3	14	63	52	10	0	0	0	0	0	0	144
8:00	0	5	6	11	27	47	11	3	1	0	0	0	0	111
9:00	0	1	0	3	22	28	14	2	1	0	0	0	0	71
10:00	0	0	1	4	11	17	8	0	1	0	0	0	0	42
11:00	0	0	0	2	4	5	5	1	0	0	0	0	0	17
Total	24	90	82	272	842	909	284	44	8	1	0	0	0	2556

Percentile	15th	50th	85th	95th
Speed	29.9	34.9	39.9	42.9

Mean Speed (Average)	34.2
10 MPH Pace Speed	30-39
Number in Pace	1738
Percent in Pace	68.0%
Number > 35 MPH	1246
Percent > 35 MPH	48.7%

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: SB,

9/18/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	8	3	2	0	0	0	0	0	0	13
1:00	0	0	0	1	0	2	1	1	0	0	0	0	0	5
2:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
3:00	0	0	1	0	0	2	0	0	0	0	0	0	0	3
4:00	0	1	0	1	0	1	1	0	0	0	0	0	0	4
5:00	0	1	1	0	3	11	4	1	0	0	0	0	0	21
6:00	1	4	0	2	13	5	3	0	0	0	0	0	0	28
7:00	0	2	0	6	23	26	13	2	0	0	0	0	0	72
8:00	0	2	0	5	25	54	22	4	0	0	0	0	0	112
9:00	0	5	4	9	48	73	33	2	3	0	0	0	0	177
10:00	0	3	2	15	70	116	31	14	2	0	0	0	0	253
11:00	1	2	2	17	81	110	34	10	1	0	0	0	0	258
12:00 PM	2	3	5	13	78	110	45	6	1	0	0	0	0	263
1:00	0	3	2	14	70	128	61	5	0	0	0	0	0	283
2:00	2	7	5	15	93	154	42	3	0	1	0	0	0	322
3:00	0	5	11	19	81	116	48	7	0	0	0	0	0	287
4:00	0	8	5	5	91	123	39	4	0	1	0	0	0	276
5:00	0	3	7	7	58	99	48	3	1	0	0	0	0	226
6:00	0	0	4	10	70	99	38	2	1	0	0	0	0	224
7:00	0	2	0	11	63	54	20	1	0	0	0	0	0	151
8:00	1	1	3	12	27	34	15	2	0	0	0	0	0	95
9:00	0	0	2	4	26	40	9	3	1	0	0	0	0	85
10:00	0	1	0	5	19	12	1	1	0	0	0	0	0	39
11:00	0	1	0	3	4	5	1	0	0	0	0	0	0	14
Total	7	54	54	174	952	1378	511	71	10	2	0	0	0	3213
			Percentile	15th	50th	85th	95th							
			Speed	31.9	36.9	40.9	43.9							
			Mean Speed (Average)	35.9										
			10 MPH Pace Speed	30-39										
			Number in Pace	2306										
			Percent in Pace	71.8%										
			Number > 35 MPH	1972										
			Percent > 35 MPH	61.4%										
Grand Total	31	144	136	446	1794	2287	795	115	18	3	0	0	0	5769
Stats			Percentile	15th	50th	85th	95th							
			Speed	30.9	35.9	40.9	43.9							
			Mean Speed (Average)	35.2										
			10 MPH Pace Speed	30-39										
			Number in Pace	4044										
			Percent in Pace	70.1%										
			Number > 35 MPH	3218										
			Percent > 35 MPH	55.8%										

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: NB,

9/17/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	2	0	0	1	0	2	0	0	0	0	0	0	5
1:00	0	0	0	2	1	2	0	0	0	0	0	0	0	5
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	1
3:00	0	0	0	2	0	1	0	0	0	0	0	0	0	3
4:00	1	1	2	3	4	4	1	2	0	0	0	0	0	18
5:00	1	1	0	1	9	11	4	1	0	0	0	0	0	28
6:00	1	4	1	3	26	14	2	1	0	0	0	0	0	52
7:00	2	5	1	0	0	0	0	0	0	0	0	0	0	8
8:00	2	1	2	0	1	0	0	0	0	0	0	0	0	6
9:00	2	2	1	1	0	0	0	0	0	0	0	0	0	6
10:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
11:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
12:00 PM	3	4	3	0	0	0	0	0	0	0	0	0	0	10
1:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
2:00	1	4	4	8	13	4	2	0	0	0	0	0	0	36
3:00	0	5	11	67	108	58	9	1	0	0	0	0	0	259
4:00	0	4	5	33	136	73	9	1	1	0	0	0	0	262
5:00	0	7	14	45	142	78	9	2	0	0	0	0	0	297
6:00	1	3	7	33	88	70	11	3	0	0	0	0	0	216
7:00	1	7	10	23	61	50	5	1	0	0	0	0	0	158
8:00	0	4	2	16	36	20	8	1	0	0	0	0	0	87
9:00	0	0	1	8	25	19	6	1	0	0	0	0	0	60
10:00	0	0	0	4	16	14	3	2	0	0	0	0	0	39
11:00	0	0	0	5	11	9	3	0	0	0	0	0	0	28
Total	15	59	66	255	679	427	74	17	1	0	0	0	0	1593

Percentile	15th	50th	85th	95th
Speed	27.9	33.9	37.9	40.9

Mean Speed (Average)	32.5
10 MPH Pace Speed	30-39
Number in Pace	1103
Percent in Pace	69.2%
Number > 35 MPH	519
Percent > 35 MPH	32.6%

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: NB,

9/18/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	3	4	5	1	0	0	0	0	0	0	13
1:00	0	0	0	0	1	3	0	0	0	0	0	0	0	4
2:00	0	0	0	0	4	1	0	0	0	0	0	0	0	5
3:00	0	0	1	0	1	1	0	0	0	0	0	0	0	3
4:00	0	1	0	0	0	2	2	2	0	0	0	0	0	7
5:00	0	0	0	4	9	6	2	0	0	0	0	0	0	21
6:00	1	2	1	9	22	13	4	1	0	0	0	0	0	53
7:00	0	2	0	12	34	33	8	0	0	0	0	0	0	89
8:00	0	2	4	16	55	65	14	1	0	0	0	0	0	157
9:00	0	4	6	27	99	83	12	1	0	0	0	0	0	232
10:00	0	4	2	32	169	78	4	0	0	0	0	0	0	289
11:00	2	3	7	69	181	95	7	1	0	0	0	0	0	365
12:00 PM	1	8	8	68	197	88	7	2	0	0	0	0	0	379
1:00	1	1	5	47	169	86	13	2	0	0	0	0	0	324
2:00	0	4	6	48	121	98	11	0	0	0	0	0	0	288
3:00	4	3	5	37	100	98	12	2	0	0	0	0	0	261
4:00	0	4	3	37	119	83	17	1	1	0	0	0	0	265
5:00	3	8	6	15	90	107	22	1	0	1	0	0	0	253
6:00	0	4	2	24	80	73	13	3	0	0	0	0	0	199
7:00	0	1	2	22	83	42	5	0	1	0	0	0	0	156
8:00	0	2	2	11	44	32	1	3	0	0	0	0	0	95
9:00	0	2	1	14	40	22	8	0	0	0	0	0	0	87
10:00	0	0	1	6	11	16	4	0	0	0	0	0	0	38
11:00	0	0	1	4	12	5	6	0	0	0	0	0	0	28
Total	12	55	63	505	1645	1135	173	20	2	1	0	0	0	3611
			Percentile	15th	50th	85th	95th							
			Speed	29.9	33.9	37.9	40.9							
			Mean Speed (Average)	33.5										
			10 MPH Pace Speed	30-39										
			Number in Pace	2767										
			Percent in Pace	76.6%										
			Number > 35 MPH	1331										
			Percent > 35 MPH	36.9%										
Grand Total	27	114	129	760	2324	1562	247	37	3	1	0	0	0	5204
Stats			Percentile	15th	50th	85th	95th							
			Speed	29.9	33.9	37.9	40.9							
			Mean Speed (Average)	33.2										
			10 MPH Pace Speed	30-39										
			Number in Pace	3870										
			Percent in Pace	74.4%										
			Number > 35 MPH	1850										
			Percent > 35 MPH	35.5%										

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: Combined

9/17/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	2	0	0	6	3	6	0	0	0	0	0	0	17
1:00	0	0	0	2	1	5	0	2	0	0	0	0	0	10
2:00	0	0	0	1	1	0	1	2	0	0	0	0	0	5
3:00	0	0	0	3	1	1	1	0	0	0	0	0	0	6
4:00	1	1	3	3	6	10	4	3	0	0	0	0	0	31
5:00	2	1	1	2	12	19	11	3	0	0	0	0	0	51
6:00	1	5	5	3	36	37	25	6	0	1	0	0	0	119
7:00	6	9	7	8	33	26	8	0	0	0	0	0	0	97
8:00	4	13	4	9	36	32	6	0	0	0	0	0	0	104
9:00	3	9	7	18	38	31	5	1	0	0	0	0	0	112
10:00	5	12	8	30	59	28	3	0	0	0	0	0	0	145
11:00	1	3	3	23	85	38	10	0	0	0	0	0	0	163
12:00 PM	9	15	13	41	91	35	0	0	0	0	0	0	0	204
1:00	1	8	6	25	84	45	3	0	0	0	0	0	0	172
2:00	3	13	21	46	109	74	10	1	0	0	0	0	0	277
3:00	0	10	15	79	154	158	51	4	1	0	0	0	0	472
4:00	0	7	7	42	184	199	43	7	2	0	0	0	0	491
5:00	0	13	18	54	182	180	57	11	1	0	0	0	0	516
6:00	2	9	7	48	127	154	41	10	2	0	0	0	0	400
7:00	1	9	13	37	124	102	15	1	0	0	0	0	0	302
8:00	0	9	8	27	63	67	19	4	1	0	0	0	0	198
9:00	0	1	1	11	47	47	20	3	1	0	0	0	0	131
10:00	0	0	1	8	27	31	11	2	1	0	0	0	0	81
11:00	0	0	0	7	15	14	8	1	0	0	0	0	0	45
Total	39	149	148	527	1521	1336	358	61	9	1	0	0	0	4149

Percentile	15th	50th	85th	95th
Speed	28.9	34.9	38.9	42.9

Mean Speed (Average)	33.5
10 MPH Pace Speed	30-39
Number in Pace	2841
Percent in Pace	68.5%
Number > 35 MPH	1765
Percent > 35 MPH	42.5%

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA
Direction: Combined

9/18/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	3	12	8	3	0	0	0	0	0	0	26
1:00	0	0	0	1	1	5	1	1	0	0	0	0	0	9
2:00	0	0	0	0	5	2	0	0	0	0	0	0	0	7
3:00	0	0	2	0	1	3	0	0	0	0	0	0	0	6
4:00	0	2	0	1	0	3	3	2	0	0	0	0	0	11
5:00	0	1	1	4	12	17	6	1	0	0	0	0	0	42
6:00	2	6	1	11	35	18	7	1	0	0	0	0	0	81
7:00	0	4	0	18	57	59	21	2	0	0	0	0	0	161
8:00	0	4	4	21	80	119	36	5	0	0	0	0	0	269
9:00	0	9	10	36	147	156	45	3	3	0	0	0	0	409
10:00	0	7	4	47	239	194	35	14	2	0	0	0	0	542
11:00	3	5	9	86	262	205	41	11	1	0	0	0	0	623
12:00 PM	3	11	13	81	275	198	52	8	1	0	0	0	0	642
1:00	1	4	7	61	239	214	74	7	0	0	0	0	0	607
2:00	2	11	11	63	214	252	53	3	0	1	0	0	0	610
3:00	4	8	16	56	181	214	60	9	0	0	0	0	0	548
4:00	0	12	8	42	210	206	56	5	1	1	0	0	0	541
5:00	3	11	13	22	148	206	70	4	1	1	0	0	0	479
6:00	0	4	6	34	150	172	51	5	1	0	0	0	0	423
7:00	0	3	2	33	146	96	25	1	1	0	0	0	0	307
8:00	1	3	5	23	71	66	16	5	0	0	0	0	0	190
9:00	0	2	3	18	66	62	17	3	1	0	0	0	0	172
10:00	0	1	1	11	30	28	5	1	0	0	0	0	0	77
11:00	0	1	1	7	16	10	7	0	0	0	0	0	0	42
Total	19	109	117	679	2597	2513	684	91	12	3	0	0	0	6824
			Percentile	15th	50th	85th	95th							
			Speed	30.9	34.9	39.9	42.9							
			Mean Speed (Average)	34.7										
			10 MPH Pace Speed	30-39										
			Number in Pace	5073										
			Percent in Pace	74.3%										
			Number > 35 MPH	3303										
			Percent > 35 MPH	48.4%										
Grand Total	58	258	265	1206	4118	3849	1042	152	21	4	0	0	0	10973
Stats			Percentile	15th	50th	85th	95th							
			Speed	29.9	34.9	39.9	42.9							
			Mean Speed (Average)	34.2										
			10 MPH Pace Speed	30-39										
			Number in Pace	7914										
			Percent in Pace	72.1%										
			Number > 35 MPH	5068										
			Percent > 35 MPH	46.2%										

Location : Route 1 90800001
Location : Just North of South Driveway
City/State: Salisbury, MA

9/18/2021	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	4	63			7	90				
12:15	4	46			1	125				
12:30	4	76			2	83				
12:45	1	78	13	263	3	81	13	379	26	642
1:00	1	85			0	81				
1:15	2	65			2	97				
1:30	1	72			2	78				
1:45	1	61	5	283	0	68	4	324	9	607
2:00	1	78			0	77				
2:15	0	79			5	73				
2:30	0	90			0	62				
2:45	1	75	2	322	0	76	5	288	7	610
3:00	0	60			1	75				
3:15	1	83			1	63				
3:30	1	67			0	63				
3:45	1	77	3	287	1	60	3	261	6	548
4:00	0	65			2	65				
4:15	0	72			0	70				
4:30	2	76			1	71				
4:45	2	63	4	276	4	59	7	265	11	541
5:00	3	56			4	65				
5:15	4	53			4	63				
5:30	5	64			5	62				
5:45	9	53	21	226	8	63	21	253	42	479
6:00	5	61			6	55				
6:15	11	63			12	43				
6:30	3	51			16	52				
6:45	9	49	28	224	19	49	53	199	81	423
7:00	13	39			22	44				
7:15	20	51			20	39				
7:30	17	33			17	42				
7:45	22	28	72	151	30	31	89	156	161	307
8:00	18	32			30	27				
8:15	26	30			47	19				
8:30	38	22			45	30				
8:45	30	11	112	95	35	19	157	95	269	190
9:00	31	25			56	23				
9:15	33	18			53	18				
9:30	42	18			67	19				
9:45	71	24	177	85	56	27	232	87	409	172
10:00	55	9			59	9				
10:15	58	14			67	12				
10:30	66	9			82	13				
10:45	74	7	253	39	81	4	289	38	542	77
11:00	49	5			90	8				
11:15	68	3			93	3				
11:30	71	3			76	5				
11:45	70	3	258	14	106	12	365	28	623	42
Total	948	2265			1238	2373			2186	4638
Percent	29.5%	70.5%			34.3%	65.7%			32.0%	68.0%
Grand Total	1669	4100			1377	3827			3046	7927
Percent	28.9%	71.1%			26.5%	73.5%			27.8%	72.2%
ADT		ADT: 5,486		AADT: 5,486						

CRASH DATA

Crash Number	Crash Date	Date	Crash Severity	Crash Year	Max Injury Severity Reported	Driver Contributing Circumstances (All Drivers)	Light Conditions	Manner of Collision	Road Surface Condition	Vehicle Actions Prior to Crash (All Vehicles)	Vehicle Travel Directions (All Vehicles)	Weather Conditions	Latitude	Longitude	Roadway
3804367	05/15/2014	Thursday	Non-fatal injury	2014	injury - Non-incap	D1: (Failed to yield right of way) / D2: (No improper driving)	Daylight	Head-on	Dry	V1: Turning left / V2: Travelling straight ahead	V1: W / V2: E	Clear	42.86789	-70.8806	TOLL ROAD / PIKE STREET Rte 286
3878683	07/10/2014	Thursday	Property damage only (none injured)	2014	No injury	D1: (Inattention),(Distracted) / D2: (No improper driving)	Daylight	Rear-end	Dry	V1: Travelling straight ahead / V2: Slowing or stopped in traffic	V1: S / V2: S	Clear	42.86789	-70.8806	TOLL RD / PIKE ST Rte 286 E
3898715	08/01/2014	Friday	Property damage only (none injured)	2014	No injury	D1: (No improper driving) / D2: (Other improper action)	Daylight	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1: S / V2: S	Clear	42.86789	-70.8806	TOLL ROAD / PIKE STREET Rte 286
4051843	06/10/2015	Wednesday	Non-fatal injury	2015	tal injury - Incapac	D1: (Inattention),(Failed to yield right of way) / D2: (No improper driving)	Daylight	Angle	Dry	V1: Turning left / V2: Travelling straight ahead	V1: W / V2: S	Clear	42.86789	-70.8806	PIKE ST Rte 286 W / TOLL RD
4066531	07/24/2015	Friday	Non-fatal injury	2015	-fatal injury - Poss	D1: (Inattention),(Distracted) / D2: (No improper driving) / D3: (No improper driving)	Daylight	Angle	Dry	V1: Turning left / V2: Slowing or stopped in traffic / V3: Slowing or stopped in traffic	V1: E / V2: N / V3: N	Clear/Cloudy	42.86789	-70.8806	TOLL RD
4079585	08/30/2015	Sunday	Property damage only (none injured)	2015	No injury	D1: (No improper driving) / D2: (No improper driving)	Daylight	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1: S / V2: S	Clear	42.86789	-70.8806	PIKE STREET Rte SR286 / INTERSTATE 95 CONNECTOR
4137472	01/16/2016	Saturday	Non-fatal injury	2016	-fatal injury - Poss	D1: (Driving too fast for conditions)	Daylight	le vehicle c	Snow	V1: Turning left	V1: S	Snow	42.86789	-70.8806	PIKE ST / TOLL RD
4211361	06/27/2016	Monday	Property damage only (none injured)	2016	No injury	D1: (No improper driving) / D2: (No improper driving) / D3: (Inattention)	Daylight	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic / V3: Travelling straight ahead	V1: S / V2: S / V3: S	Clear	42.86789	-70.8806	PIKE STREET Rte SR286 / INTERSTATE 95 CONNECTOR
4299459	12/06/2016	Tuesday	Property damage only (none injured)	2016	No injury	D1: (No improper driving) / D2: (Inattention)	lighted roa	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: W / V2: W	Clear	42.86789	-70.8806	TOLL RD / PIKE ST
4363062	05/14/2017	Sunday	Property damage only (none injured)	2017	No injury	D1: (Inattention) / D2: (No improper driving)	Daylight	Rear-end	Wet	V1: Turning left / V2: Slowing or stopped in traffic	V1: E / V2: E	Rain	42.86789	-70.8806	TOLL RD / PIKE ST Rte 286
4368363	03/03/2017	Friday	Non-fatal injury	2017	-fatal injury - Poss	D1: (No improper driving) / D2: (Disregarded traffic signs, signals, road markings)	Daylight	Angle	Dry	V1: Travelling straight ahead / V2: Travelling straight ahead	V1: W / V2: S	Clear	42.86789	-70.8806	TOLL RD / PIKE ST
4376743	06/10/2017	Saturday	Property damage only (none injured)	2017	No injury	D1: (Unknown) / D2: (Unknown)	Daylight	Angle	Dry	V1: Travelling straight ahead / V2: Travelling straight ahead	V1: W / V2: S	Clear/Cloudy	42.86789	-70.8806	PIKE STREET Rte SR286 E / INTERSTATE 95 CONNECTOR
4403712	07/16/2017	Sunday	Property damage only (none injured)	2017	No injury	D1: (Failed to yield right of way) / D2: (No improper driving)	Daylight	Head-on	Dry	V1: Turning left / V2: Travelling straight ahead	V1: W / V2: S	Clear/Other	42.8679	-70.8805	PIKE STREET Rte SR286 W / INTERSTATE 95 CONNECTOR / TOLL ROAD
4443438	10/20/2017	Friday	Non-fatal injury	2017	injury - Non-incap	D1: (Failed to yield right of way) / D2: (No improper driving)	Daylight	Angle	Dry	V1: Turning left / V2: Travelling straight ahead	V1: S / V2: N	Clear	42.86789	-70.8806	TOLL RD / PIKE ST
4538879	05/13/2018	Sunday	Property damage only (none injured)	2018	No injury	D1: (No improper driving) / D2: (Unknown)	Daylight	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Slowing or stopped in traffic	V1: W / V2: W	Clear	42.86789	-70.8806	PIKE ST Rte 286 W / TOLL RD
4544357	05/26/2018	Saturday	Property damage only (none injured)	2018	No injury	D1: (No improper driving) / D2: (Inattention)	Daylight	Rear-end	Dry	V1: Slowing or stopped in traffic / V2: Backing	V1: S / V2: W	Clear	42.86789	-70.8806	PIKE ST / TOLL RD
4573382	07/25/2018	Wednesday	Property damage only (none injured)	2018	No injury	D1: (No improper driving) / D2: (Visibility obstructed)	Daylight	Angle	Wet	V1: Slowing or stopped in traffic / V2: Backing	V1: S / V2: N	Clear/Cloudy	42.86817	-70.8809	TOLL RD
4576434	07/30/2018	Monday	Property damage only (none injured)	2018	No injury	D1: (No improper driving),(Unknown) / D2: (No improper driving),(Unknown)	Daylight	Rear-end	Dry	V2: Slowing or stopped in traffic / V1: Travelling straight ahead	V2: S / V1: S	Clear/Unknown	42.86789	-70.8806	TOLL ROAD / PIKE STREET
4593009	06/13/2018	Wednesday	Property damage only (none injured)	2018	No injury	D1: (Unknown) / D2: (No improper driving)	Daylight	Angle	Dry	V1: Turning left / V2: Travelling straight ahead	V1: S / V2: S	Cloudy	42.86789	-70.8806	TOLL RD / PIKE ST
3923492	08/18/2014	Monday	Non-fatal injury	2014	-fatal injury - Poss	D1: (Unknown)	Daylight	le vehicle c	Dry	V1: Slowing or stopped in traffic	V1: S	Clear/Unknown	42.86125	-70.8737	TOLL RD
4127264	12/24/2015	Thursday	Property damage only (none injured)	2015	No injury	D1: (Inattention) / D2: (No improper driving)	lighted roa	Angle	Dry	V1: Changing lanes / V2: Travelling straight ahead	V1: N / V2: N	Clear	42.86126	-70.8737	LAFAYETTE ROAD Rte US1 N / INTERSTATE 95 CONNECTOR
4217657	07/18/2016	Monday	Property damage only (none injured)	2016	No injury	D1: (Unknown) / D2: (No improper driving)	Daylight	Angle	Dry	V1: Travelling straight ahead / V2: Travelling straight ahead	V1: N / V2: N	Clear	42.86125	-70.8737	INTERSTATE 95 CONNECTOR / LAFAYETTE ROAD Rte US1 S
4319879	01/31/2017	Tuesday	Non-fatal injury	2017	injury - Non-incap	D1: (Unknown)	Dusk	le vehicle c	Other	V1: Travelling straight ahead	V1: S	Cloudy	42.86125	-70.8737	INTERSTATE 95 CONNECTOR / LAFAYETTE ROAD Rte US1 S

MassHighway

CRASH RATE WORKSHEET

CITY/TOWN : Manchester by the sea COUNT DATE : 2020

MHD USE ONLY

DISTRICT : 4 UNSIGNALIZED : x SIGNALIZED :

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Toll Road ST #

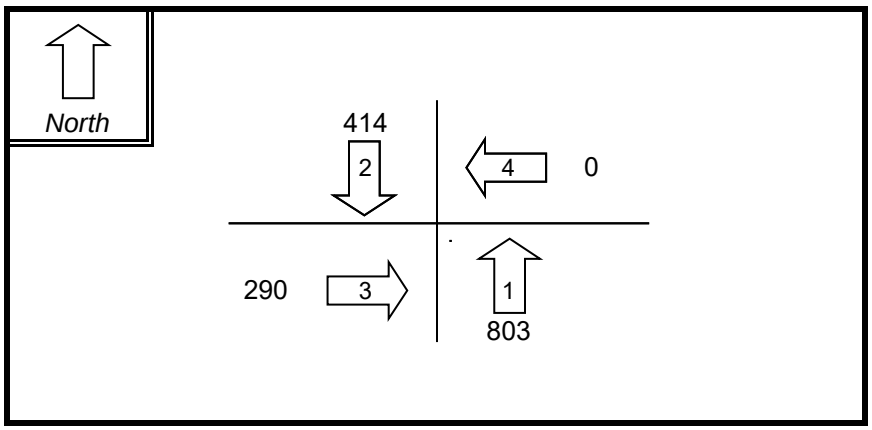
MINOR STREET(S) : Route 128 Southbound Ramp ST #

ST #

ST #

ST #

INTERSECTION DIAGRAM
(Label Approaches)



INTERSECTION REF #

Peak Hour Volumes

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	NEB			
VOLUMES (PM) :	803	414	290			1,507

" K " FACTOR : 0.092 APPROACH ADT : 16,380 **ADT** = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS : 4 # OF YEARS : 5 AVERAGE # OF ACCIDENTS (**A**) : 0.80

CRASH RATE CALCULATION : 0.13 RATE = $\frac{(A * 1{,}000{,}000)}{(ADT * 365)}$

Comments : Accident Rate for District 4 signalized intersections = 0.73

Accident Rate for District 4 unsignalized intersections = 0.57

Statewide Accident Rate for Signalized Inteserction = 0.78 and Unsignalized/Inteserction = 0.57

S:\Jobs\9080\5-Crash\Crash Rates Worksheet

MassHighway

CRASH RATE WORKSHEET

CITY/TOWN : Manchester by the sea COUNT DATE : 2020

MHD USE ONLY

DISTRICT : 4 UNSIGNALIZED : x SIGNALIZED :

Source #

~ INTERSECTION DATA ~

MAJOR STREET : Route 1 ST #

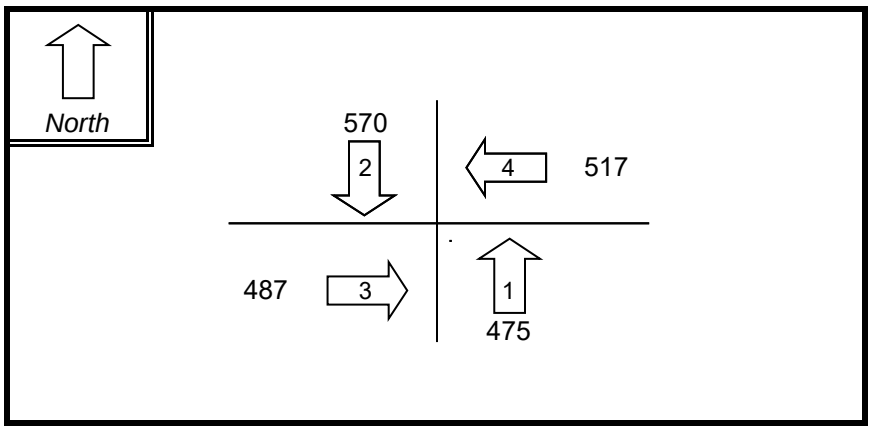
MINOR STREET(S) : Route 286 ST #

ST #

ST #

ST #

INTERSECTION DIAGRAM
(Label Approaches)



INTERSECTION REF #

Peak Hour Volumes

APPROACH :	1	2	3	4	5	Total Entering Vehicles
DIRECTION :	NB	SB	EB	WB		
VOLUMES (PM) :	475	570	487	517		2,049

" K " FACTOR : **0.092** APPROACH ADT : **22,272** **ADT** = TOTAL VOL/"K" FACT.

TOTAL # OF ACCIDENTS : 19 # OF YEARS : 5 AVERAGE # OF ACCIDENTS (**A**) : **3.80**

CRASH RATE CALCULATION : 0.47

$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(ADT * 365)}$$

Comments : Accident Rate for District 4 signalized intersections = 0.73

Accident Rate for District 4 unsignalized intersections = 0.57

Statewide Accident Rate for Signalized Inteserction = 0.78 and Unsignalized/Inteserction = 0.57

S:\Jobs\9080\5-Crash\Crash Rates Worksheet

PARKING OBSERVATION DATA

VAI Calculations

Job:	Millbury	Job Number:	8667
Location:	266 N. Main Street	Date:	7/25/20
Title:	Traffic Count (Saturday)	Sheet:	1 of 1
Calculated by:	SRF	Checked by:	
		Size:	3,700 SF

Start Time	Ins	Outs	Total	Parking Demand	Parking Demand Ratio
11:00AM	14	14	28	18	4.86
11:15	12	14	26	16	4.32
11:30	11	13	24	14	3.78
11:45	15	14	29	15	4.05
12:00	8	10	18	13	3.51
12:15	14	11	25	16	4.32
12:30	13	11	24	18	4.86
12:45	10	10	20	18	4.86
1:00	10	11	21	17	4.59
1:15	9	8	17	18	4.86
1:30	10	9	19	19	5.14
1:45	6	11	17	14	3.78
Total	132	136	268		
Pk Hr Total	52	55	107		

* 17 cars and 1 box truck in lot at 11:00 a

*** 14 cars in lot at 2:00 pm.

** 1 of the outs in interval 1 (11:00-11:15) was the box truck

VAI Calculations

Job:	Millbury	8667
Location:	266 N. Main Street	7/29/20
Title:	Traffic Count (Weekday)	1 of 1
Calculated by:	SRF	3,700 SF

Start Time	Ins	Outs	Parking Demand	Parking Demand Ratio
7:00AM	0	0	1	0.27
7:15	1	0	2	0.54
7:30	1	0	3	0.81
7:45	2	0	5	1.35
8:00	1	0	6	1.62
8:15	3	0	9	2.43
8:30	1	0	10	2.70
8:45	0	0	10	2.70
9:00	1	0	11	2.97
9:15	0	0	11	2.97
9:30	0	0	11	2.97
9:45	2	0	13	3.51
10:00	7	5	15	4.05
10:15	11	7	19	5.14
10:30	11	15	15	4.05
10:45	10	7	18	4.86
11:00	7	10	15	4.05
11:15	10	8	17	4.59
11:30	6	8	15	4.05
11:45	7	6	16	4.32
12:00	9	10	15	4.05
12:15	7	6	16	4.32
12:30	13	7	22	5.95
12:45	8	15	15	4.05
1:00	10	9	16	4.32
1:15	9	5	20	5.41
1:30	5	8	17	4.59
1:45	7	5	19	5.14
2:00	10	9	20	5.41
2:15	5	7	18	4.86
2:30	4	3	19	5.14
2:45	7	6	20	5.41
3:00	10	9	21	5.68
3:15	8	12	17	4.59
3:30	11	11	17	4.59
3:45	7	9	15	4.05
4:00	11	10	16	4.32
4:15	11	13	14	3.78
4:30	17	10	21	5.68
4:45	11	20	12	3.24
5:00	10	10	12	3.24
5:15	11	13	10	2.70
5:30	6	7	9	2.43
5:45	12	7	14	3.78
6:00	9	11	12	3.24
6:15	15	12	15	4.05
6:30	8	12	11	2.97
6:45	10	8	13	3.51
Total	342	330		
Pk Hr Total	50	53		

: in lot at 7:00 am / 13 cars in lot at

GENERAL BACKGROUND TRAFFIC GROWTH

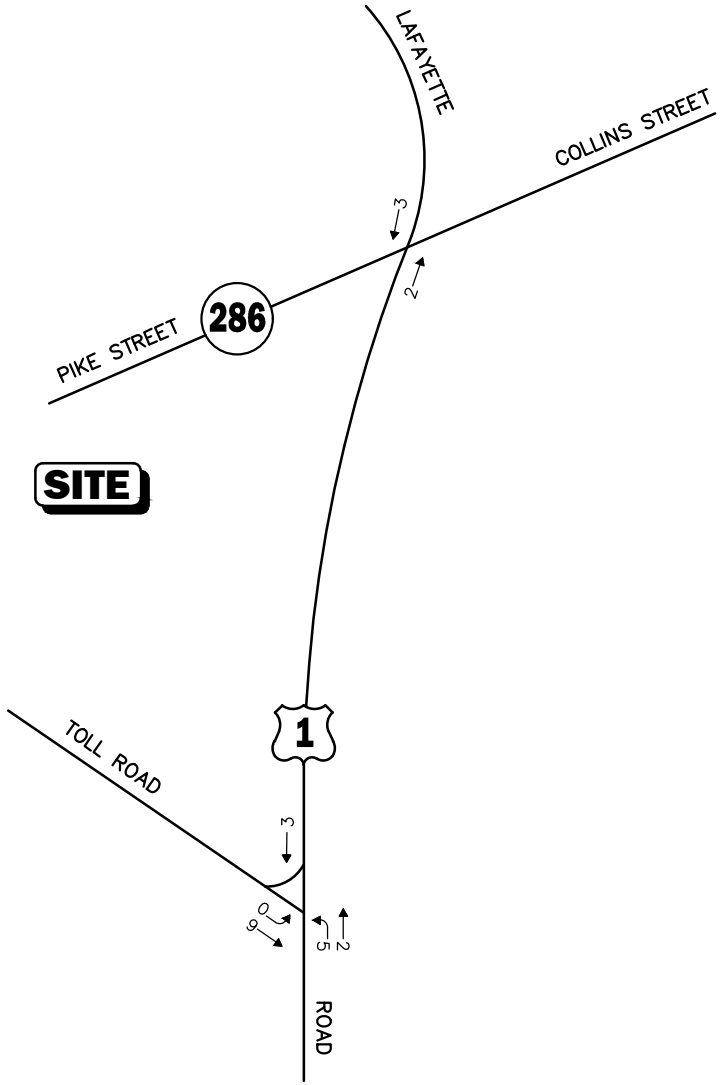
General Background Traffic Growth - Daily Traffic Volumes

Station Number	ROUTE/STREET	LOCATION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average Annual Growth Rate
5108	INTERSTATE 95	SOUTH OF MAIN ST.	99,787	100,000	104,307	100,735	105,993	105,357	107,886	110,583	111,357	112,916	114,158	**1.42%**
225926	LAFAYETTE ROAD SOUTH OF 1000FT S OF TOLL ROAD	NORTH OF WATER STREET								11,613	11,810	11,845	11,798	**0.51%**
257581	LAFAYETTE ROAD NORTH OF INTERSTATE 95 CONNECTOR	NORTH OF WATER STREET								8,361	8,503	8,529	8,495	**0.51%**
														0.82%

USE:1.0%

BACKGROUND PROJECT NETWORKS

WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)

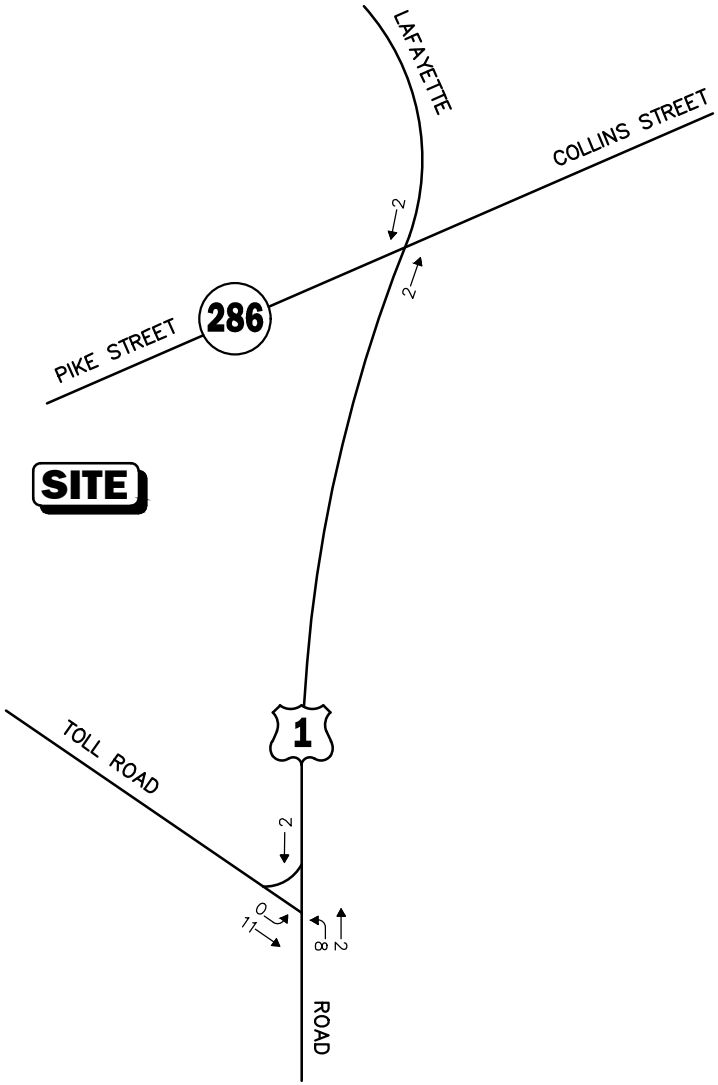


Figure A-1

76 Town House Units
Off Forest Road
Peak-Hour Traffic Volumes

Vanasse & Associates inc

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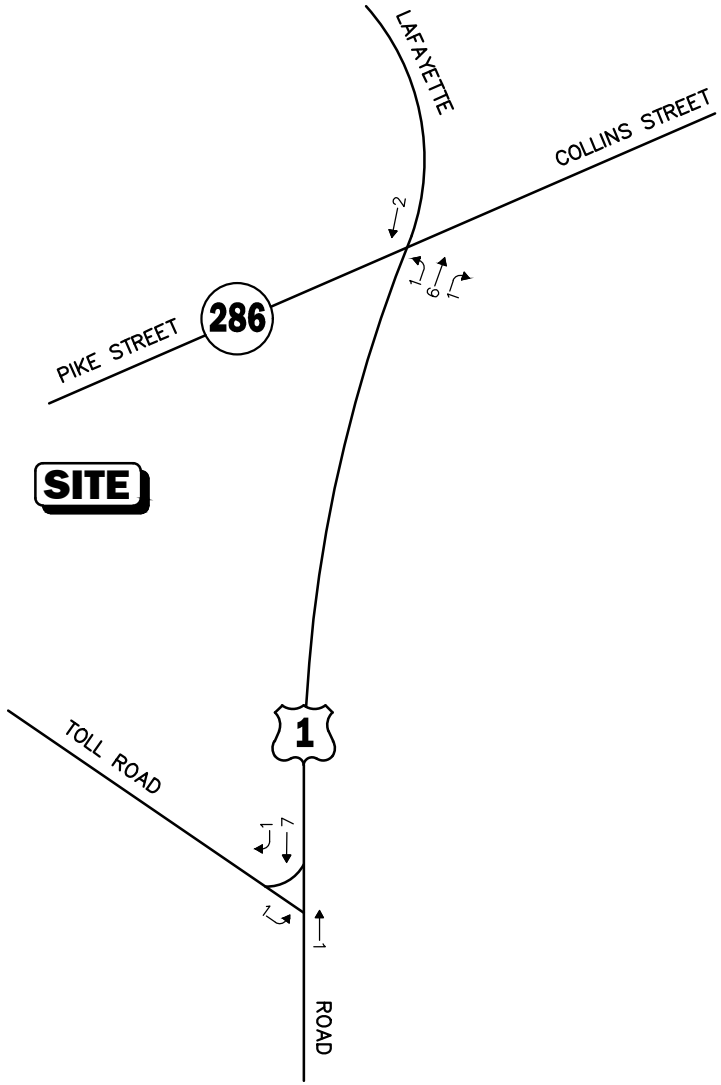
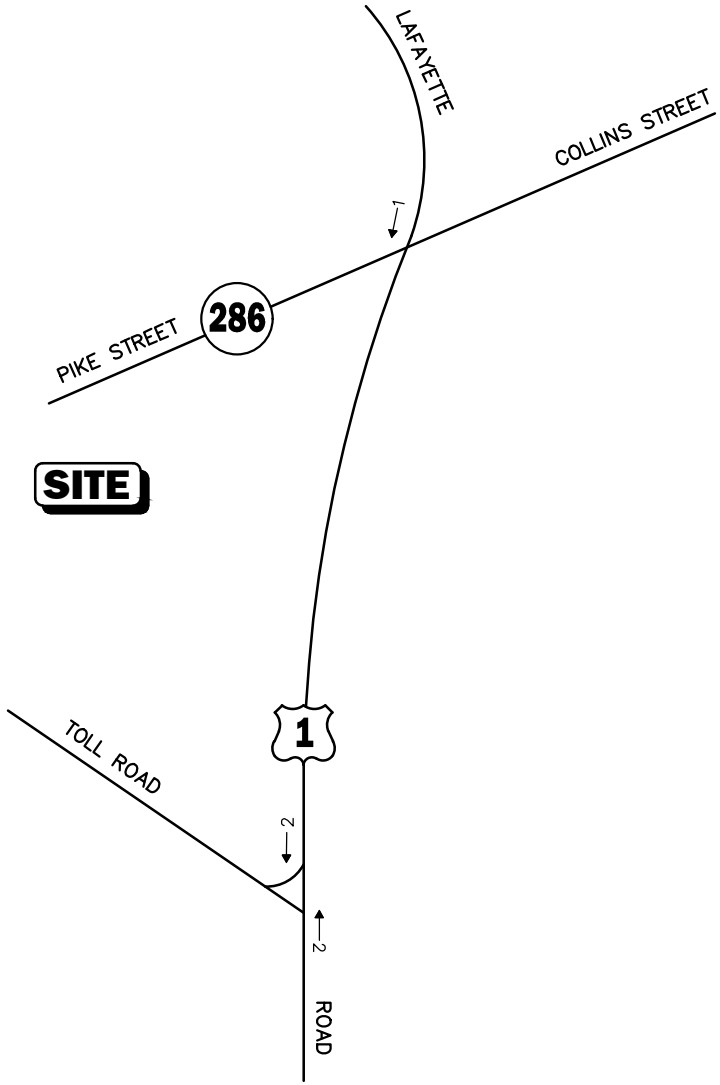
WEEKDAY EVENING PEAK HOUR (4:15 - 5:15 PM)



SATURDAY MIDDAY PEAK HOUR (1:00 - 2:00 PM)



Note: No Trips on Saturday Midday for facility employees

Figure A-2

Marijuana Cultivation Facility
187 Lafayette Road
Peak-Hour Traffic Volumes

Vanasse & Associates inc

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TRIP-GENERATION CALCULATIONS

Brewery Tap Room
(971)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

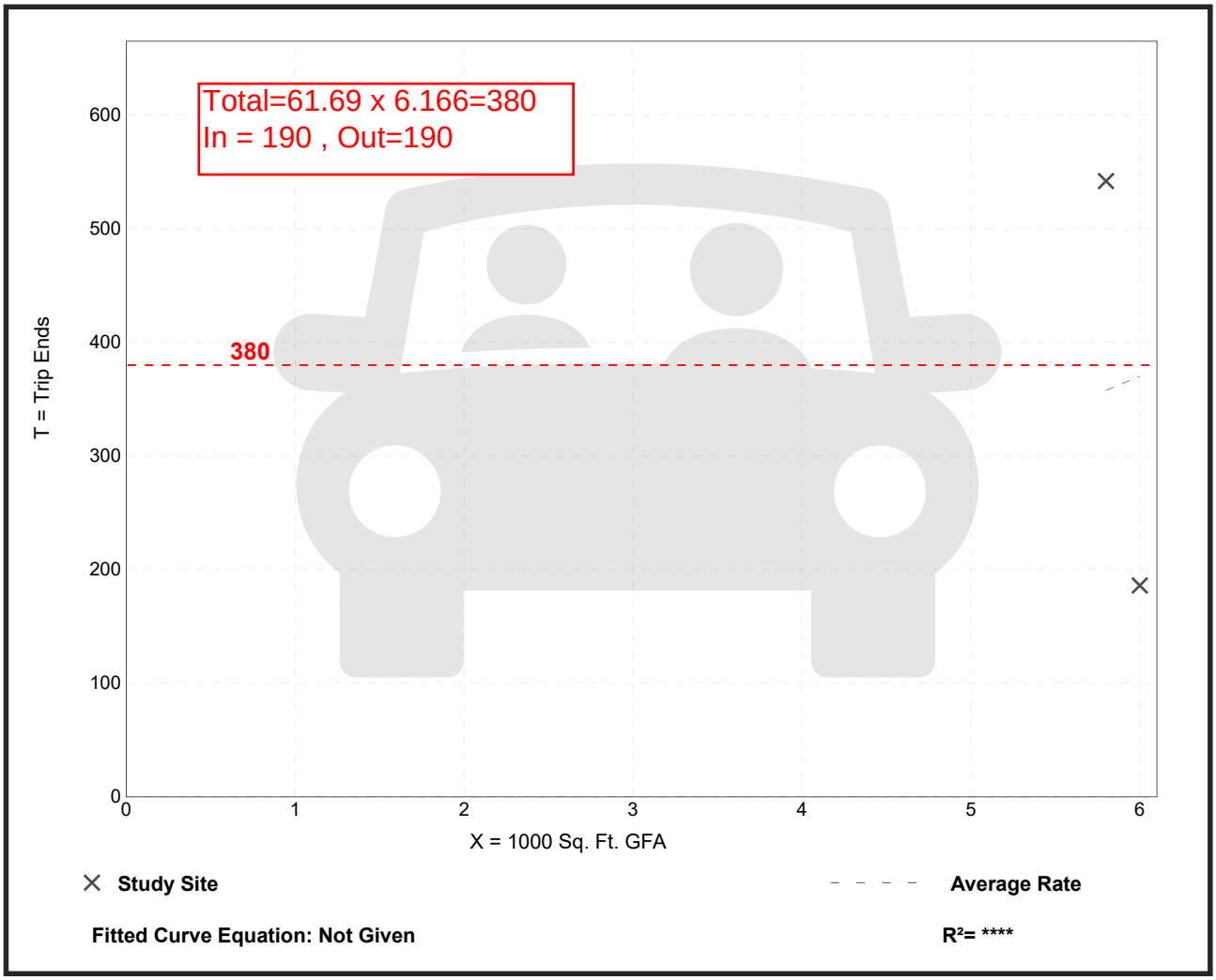
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
61.69	31.00 - 93.45	*

Data Plot and Equation

Caution – Small Sample Size



Brewery Tap Room
(971)

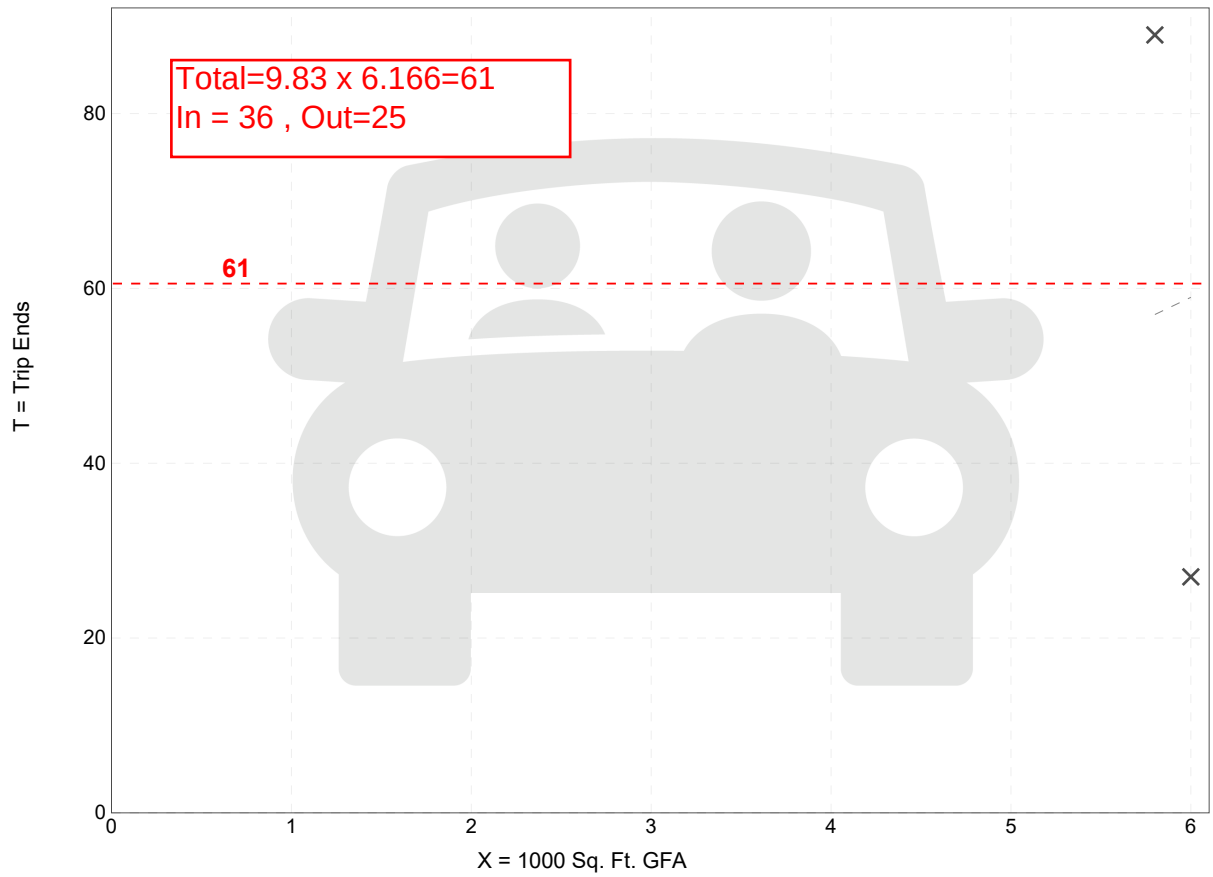
Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	2
Avg. 1000 Sq. Ft. GFA:	6
Directional Distribution:	59% entering, 41% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.83	4.50 - 15.34	*

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** — — — — **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Brewery Tap Room
(971)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday**

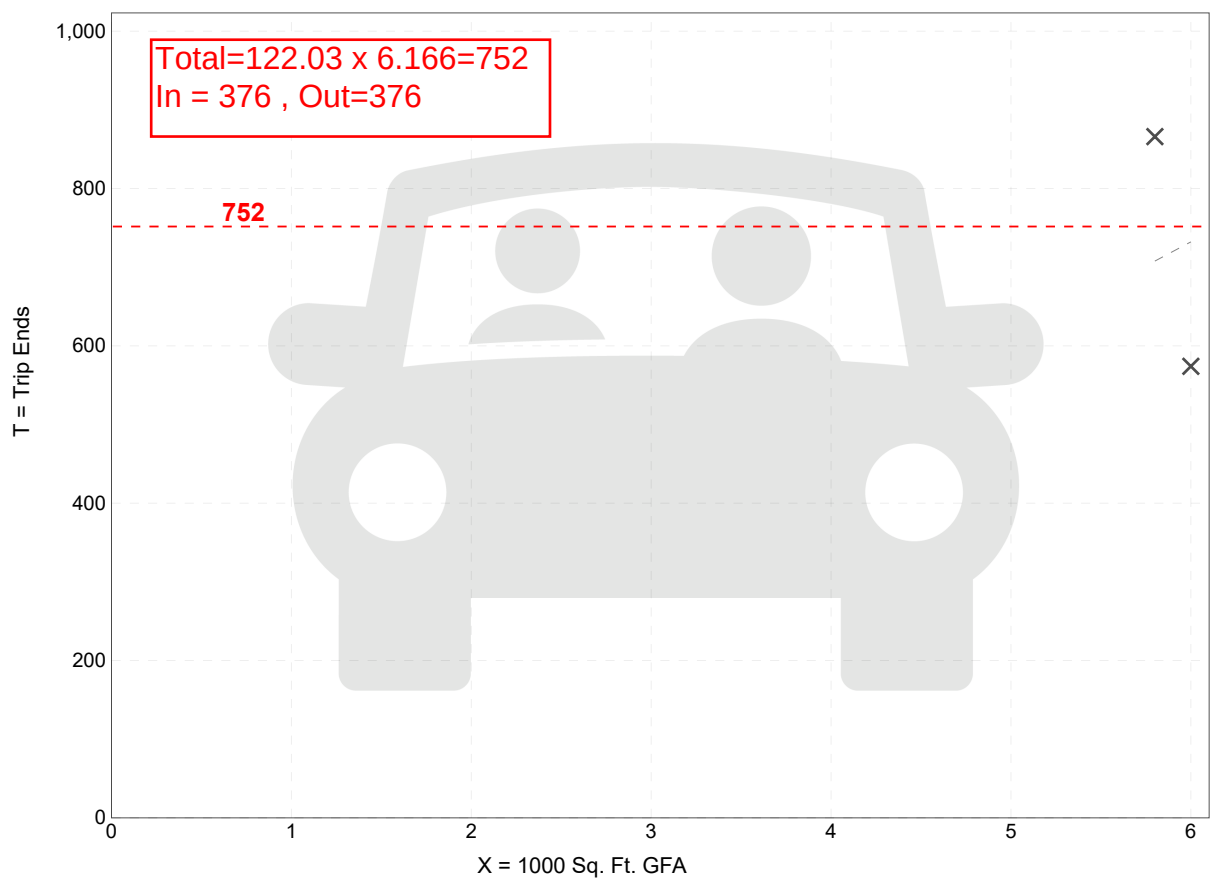
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
122.03	95.67 - 149.31	*

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** — — — — **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Brewery Tap Room
(971)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

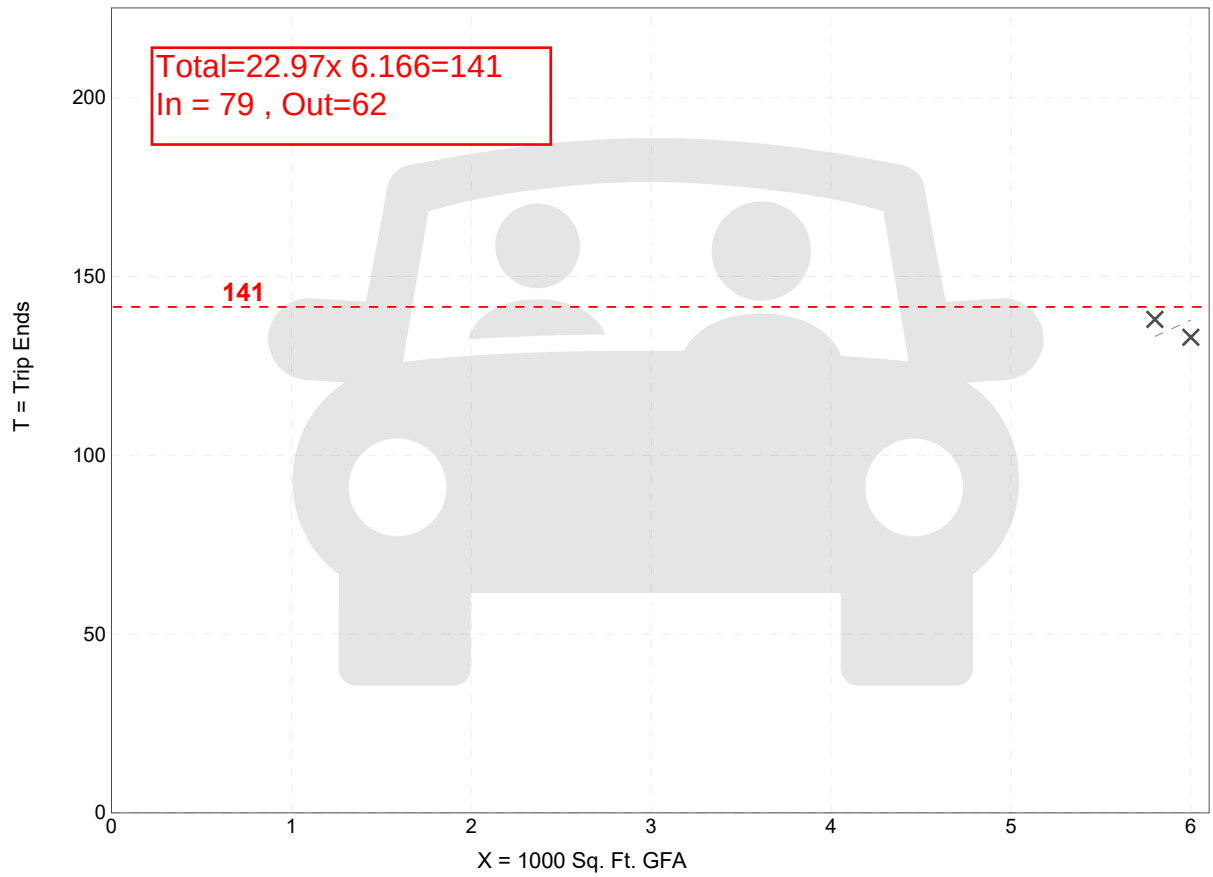
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
22.97	22.17 - 23.79	*

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** - - - - **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Marijuana Dispensary
(882)

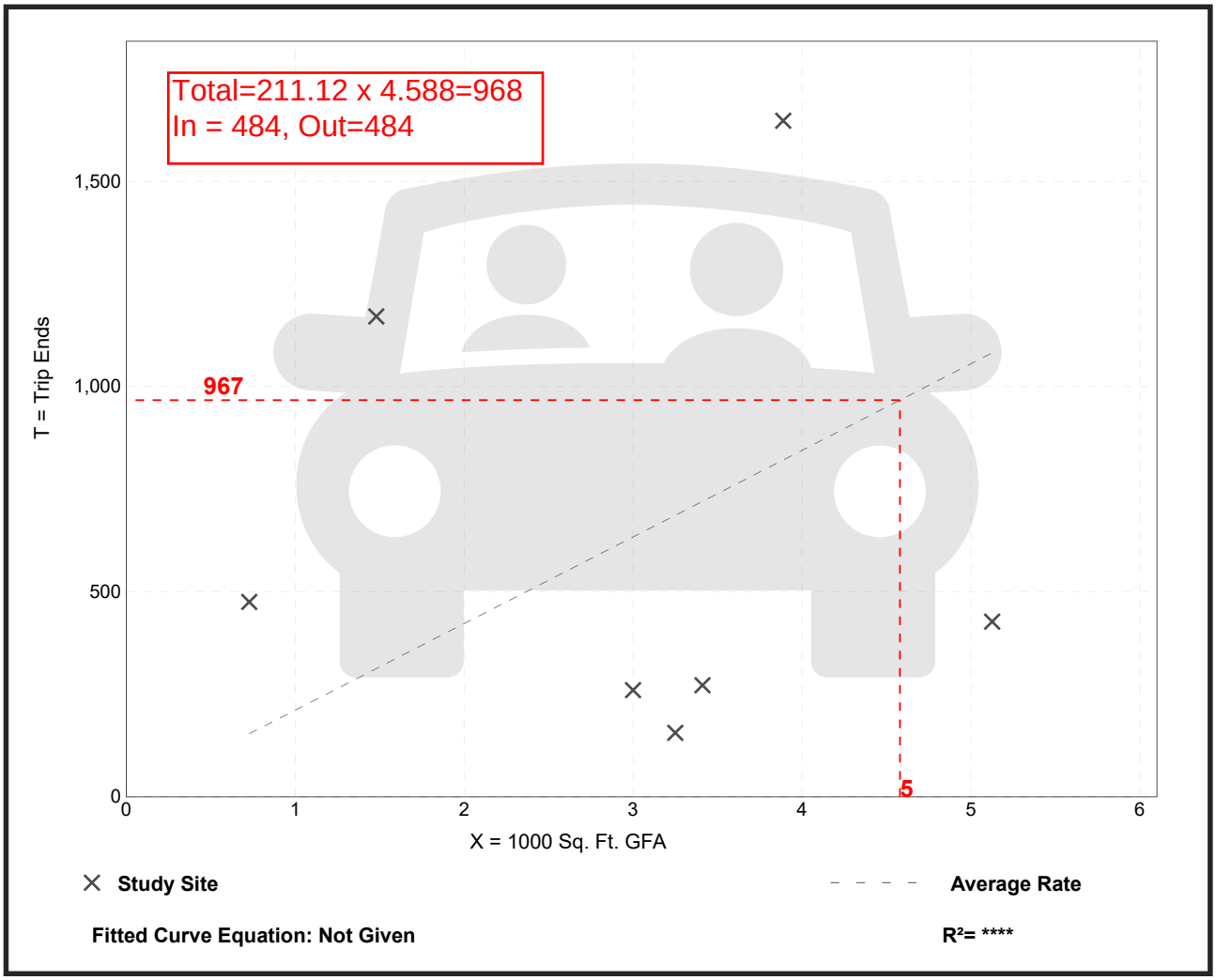
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 7
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
211.12	48.00 - 791.22	246.90

Data Plot and Equation



Marijuana Dispensary
(882)

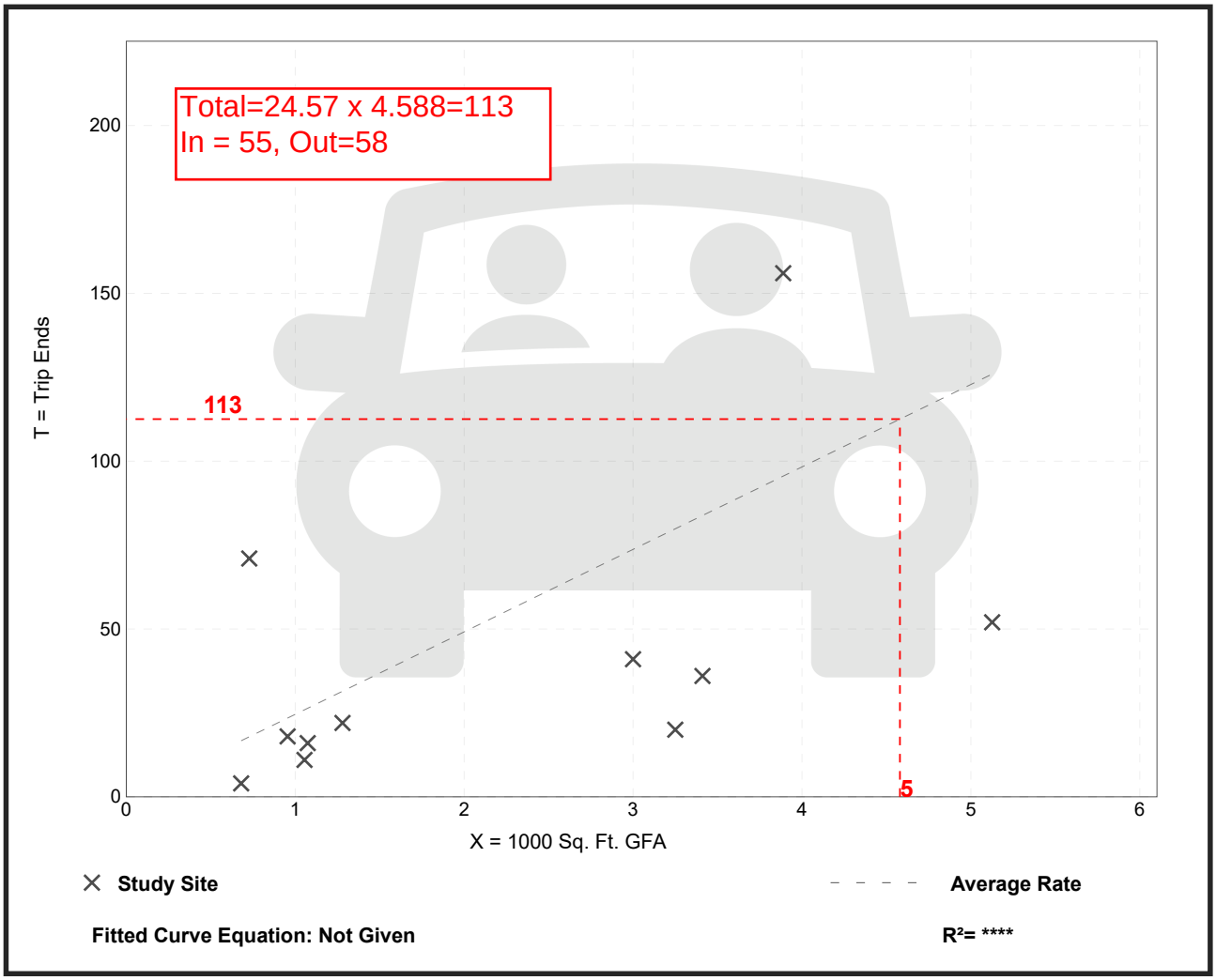
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 12
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
24.57	5.88 - 128.38	32.18

Data Plot and Equation



Marijuana Dispensary
(882)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday**

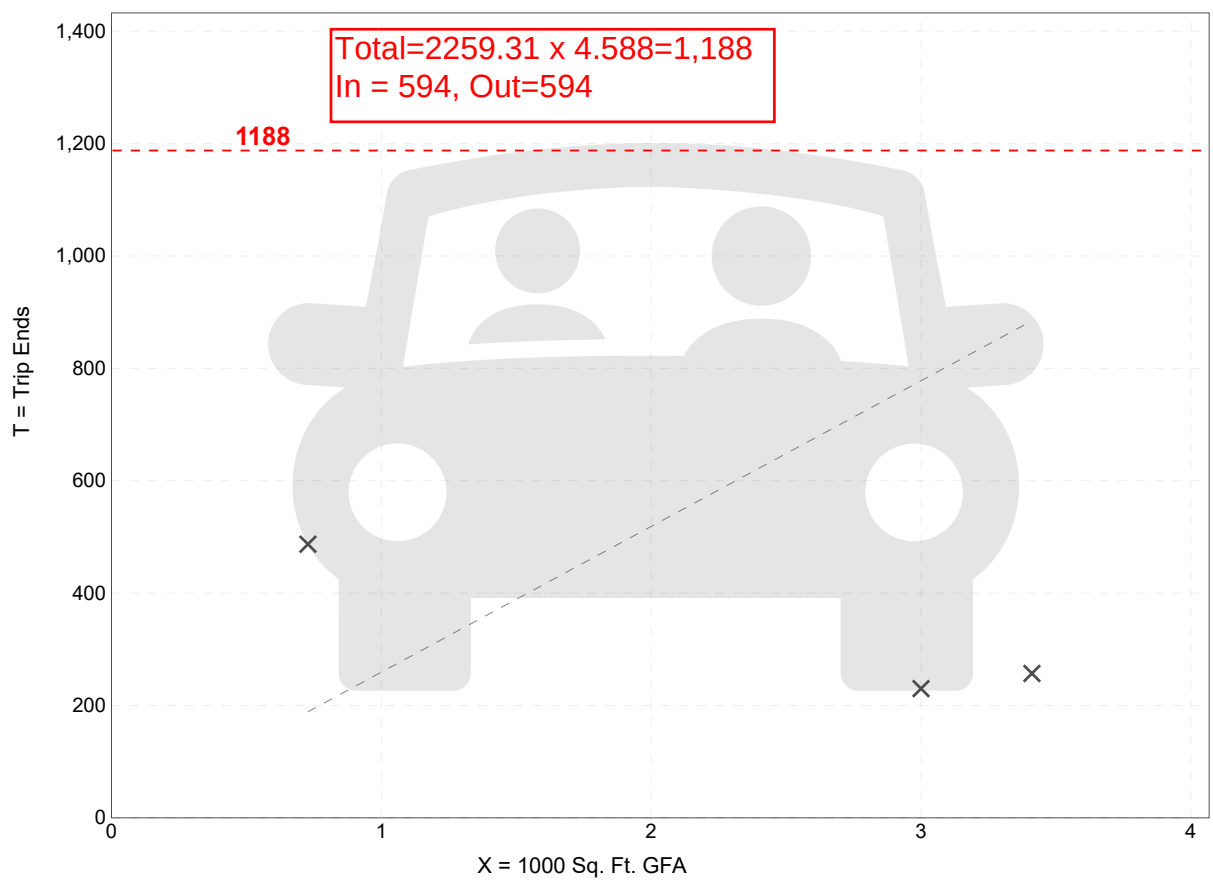
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GFA: 2
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
259.31	75.34 - 852.03	364.24

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** — — — — **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

Marijuana Dispensary
(882)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

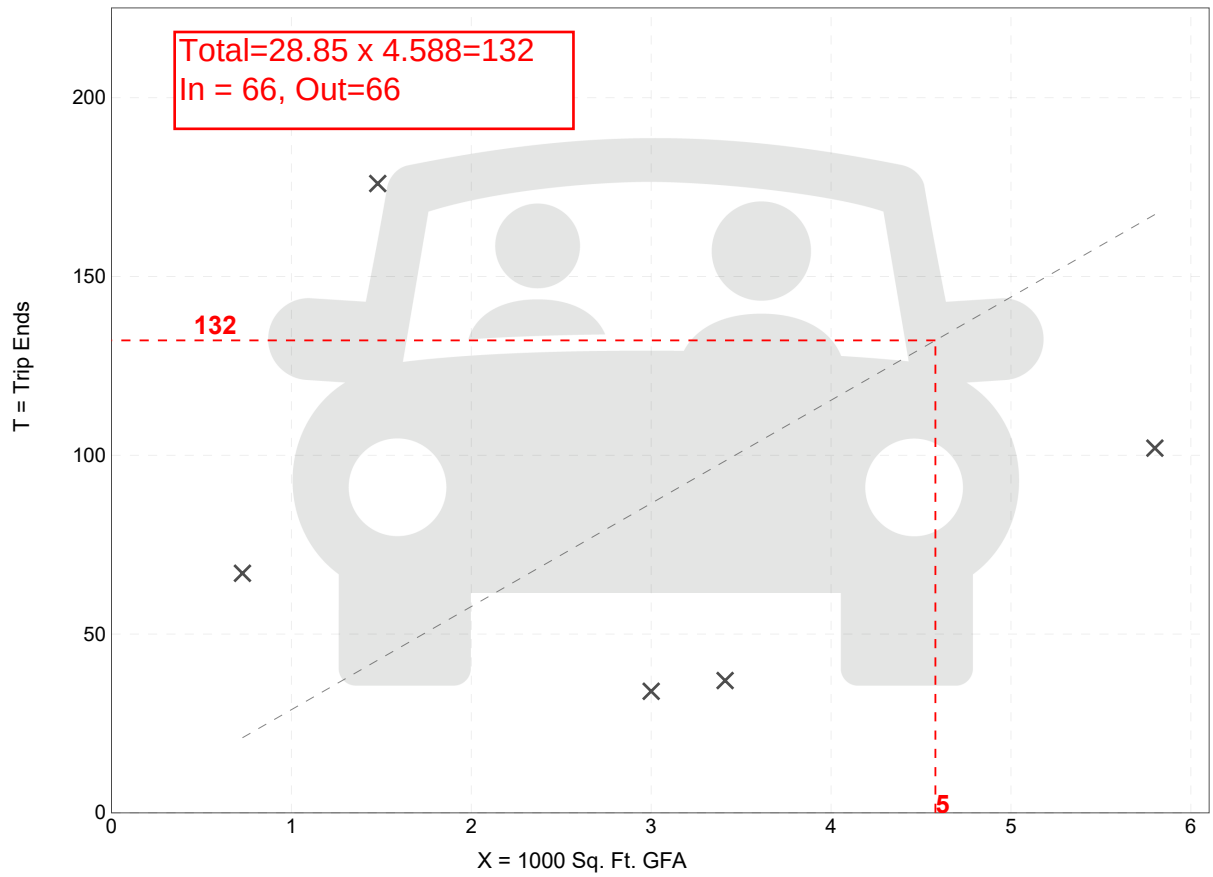
Setting/Location: **General Urban/Suburban**
Number of Studies: 5
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
28.85	10.85 - 118.92	39.14

Data Plot and Equation

Caution – Small Sample Size



× **Study Site** — — — — **Average Rate**

Fitted Curve Equation: Not Given **R^2= ******

CAPACITY ANALYSIS WORKSHEETS

CAPACITY ANALYSIS WORKSHEETS

Route 1 at Route 286
Toll Road at Route 1
Route 1 at Proposed Site Driveway
Route 1 at Existing Site Driveway (187 Lafayette Road)

Route 1 at Route 286

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	452	21	24	267	71	11	306	41	165	376	29
Future Volume (vph)	17	452	21	24	267	71	11	306	41	165	376	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	13	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2054	0	0	1897	0	0	1866	0	0	1860	0
Flt Permitted		0.978			0.941			0.966			0.761	
Satd. Flow (perm)	0	2013	0	0	1791	0	0	1806	0	0	1436	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15			7			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		552			684			664			381	
Travel Time (s)		12.5			15.5			15.1			8.7	
Lane Group Flow (vph)	0	570	0	0	448	0	0	408	0	0	620	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		custom	NA	
Protected Phases		4			8			2			6 10	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6 10	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5		
Total Split (s)	44.0	44.0		44.0	44.0		36.0	36.0		36.0		
Total Split (%)	44.0%	44.0%		44.0%	44.0%		36.0%	36.0%		36.0%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		Max	Max		Max		
Act Effct Green (s)		39.5			39.5			31.5			51.5	
Actuated g/C Ratio		0.40			0.40			0.32			0.52	
v/c Ratio		0.72			0.63			0.71			0.84	
Control Delay		31.5			28.2			37.8			32.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		31.5			28.2			37.8			32.7	
LOS		C			C			D			C	
Approach Delay		31.5			28.2			37.8			32.7	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)		299			218			225			320	
Queue Length 95th (ft)		398			278			324			#544	
Internal Link Dist (ft)		472			604			584			301	
Turn Bay Length (ft)												
Base Capacity (vph)		796			716			573			741	
Starvation Cap Reductn		0			0			0			0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	20.0
Total Split (%)	20%
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.72			0.63			0.71			0.84	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 80	
Control Type: Pretimed	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 90.9%	ICU Level of Service E
Analysis Period (min) 15	

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 1 & Route 286

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	459	20	56	357	104	14	411	50	165	376	29
Future Volume (vph)	8	459	20	56	357	104	14	411	50	165	376	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	13	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	2077	0	0	1888	0	0	1872	0	0	1860	0
Flt Permitted		0.990			0.829			0.966			0.713	
Satd. Flow (perm)	0	2059	0	0	1573	0	0	1810	0	0	1345	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			15			6			4	
Link Speed (mph)		30			30			40			30	
Link Distance (ft)		552			684			664			381	
Travel Time (s)		12.5			15.5			11.3			8.7	
Lane Group Flow (vph)	0	547	0	0	608	0	0	540	0	0	663	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		custom	NA	
Protected Phases		4			8			2			6 10	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6 10	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0		
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5		
Total Split (s)	44.0	44.0		44.0	44.0		36.0	36.0		36.0		
Total Split (%)	44.0%	44.0%		44.0%	44.0%		36.0%	36.0%		36.0%		
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0		
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		Max	Max		Max		
Act Effct Green (s)		39.5			39.5			31.5			51.5	
Actuated g/C Ratio		0.40			0.40			0.32			0.52	
v/c Ratio		0.67			0.97			0.94			0.96	
Control Delay		29.8			58.5			59.8			49.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		29.8			58.5			59.8			49.5	
LOS		C			E			E			D	
Approach Delay		29.8			58.5			59.8			49.5	
Approach LOS		C			E			E			D	
Queue Length 50th (ft)		281			365			330			383	
Queue Length 95th (ft)		393			#540			#520			#591	
Internal Link Dist (ft)		472			604			584			301	
Turn Bay Length (ft)												
Base Capacity (vph)		814			630			574			694	
Starvation Cap Reductn		0			0			0			0	

Lane Group	Ø10
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	10
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	22.5
Total Split (s)	20.0
Total Split (%)	20%
Yellow Time (s)	3.5
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	Max
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.67			0.97			0.94			0.96	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Pretimed	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 49.6	Intersection LOS: D
Intersection Capacity Utilization 125.1%	ICU Level of Service H
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 1 & Route 286

LANE SUMMARY

Site: 101 [2028 No-Build PM (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	428	0.0	746	0.574	100	14.0	LOS B	3.9	96.4	Full	1600	0.0	0.0
Approach	428	0.0		0.574		14.0	LOS B	3.9	96.4				
NorthEast: Collins Street													
Lane 1[d]	422	0.4	939	0.449	100	9.2	LOS A	2.4	59.1	Full	1600	0.0	0.0
Approach	422	0.4		0.449		9.2	LOS A	2.4	59.1				
North: Route 1													
Lane 1[d]	565	0.0	977	0.579	100	11.5	LOS B	5.0	124.4	Full	1600	0.0	0.0
Approach	565	0.0		0.579		11.5	LOS B	5.0	124.4				
SouthWest: Pike Street													
Lane 1[d]	572	0.9	829	0.690	100	16.8	LOS C	7.0	176.1	Full	1600	0.0	0.0
Approach	572	0.9		0.690		16.8	LOS C	7.0	176.1				
Intersection	1987	0.3		0.690		13.1	LOS B	7.0	176.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1

Mov. From S To Exit:	L3 SW	T1 N	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	14	365	49	428	0.0	746	0.574	100	NA	NA
Approach	14	365	49	428	0.0		0.574			

NorthEast: Collins Street

Mov. From NE To Exit:	L1 S	T1 SW	R3 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	28	311	83	422	0.4	939	0.449	100	NA	NA
Approach	28	311	83	422	0.4		0.449			

North: Route 1										
Mov.	L3	T1	R1	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane
From N To Exit:	NE	S	SW			veh/h	v/c	%	%	No.
Lane 1	148	376	41	565	0.0	977	0.579	100	NA	NA
Approach	148	376	41	565	0.0		0.579			

SouthWest: Pike Street										
Mov.	L1	T1	R3	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane
From SW To Exit:	N	NE	S			veh/h	v/c	%	%	No.
Lane 1	20	527	25	572	0.9	829	0.690	100	NA	NA
Approach	20	527	25	572	0.9		0.690			

	Total	%HV	Deg.Satn (v/c)
Intersection	1987	0.3	0.690

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Collins Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
SouthWest Exit: Pike Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

LANE SUMMARY

Site: 101 [2028 No-Build SAT (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	557	0.0	725	0.768	100	23.2	LOS C	8.1	203.4	Full	1600	0.0	0.0
Approach	557	0.0		0.768		23.2	LOS C	8.1	203.4				
NorthEast: Collins Street													
Lane 1[d]	603	0.7	860	0.701	100	16.9	LOS C	7.8	195.0	Full	1600	0.0	0.0
Approach	603	0.7		0.701		16.9	LOS C	7.8	195.0				
North: Route 1													
Lane 1[d]	667	0.0	870	0.767	100	20.2	LOS C	10.7	266.6	Full	1600	0.0	0.0
Approach	667	0.0		0.767		20.2	LOS C	10.7	266.6				
SouthWest: Pike Street													
Lane 1[d]	567	0.0	747	0.760	100	22.2	LOS C	8.2	204.5	Full	1600	0.0	0.0
Approach	567	0.0		0.760		22.2	LOS C	8.2	204.5				
Intersection	2395	0.2		0.768		20.5	LOS C	10.7	266.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1

Mov. From S To Exit:	L3 SW	T1 N	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	16	482	59	557	0.0	725	0.768	100	NA	NA
Approach	16	482	59	557	0.0		0.768			

NorthEast: Collins Street

Mov. From NE To Exit:	L1 S	T1 SW	R3 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	65	416	122	603	0.7	860	0.701	100	NA	NA
Approach	65	416	122	603	0.7		0.701			

North: Route 1										
Mov. From N To Exit:	L3 NE	T1 S	R1 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	192	441	34	667	0.0	870	0.767	100	NA	NA
Approach	192	441	34	667	0.0		0.767			

SouthWest: Pike Street										
Mov. From SW To Exit:	L1 N	T1 NE	R3 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	10	535	23	567	0.0	747	0.760	100	NA	NA
Approach	10	535	23	567	0.0		0.760			

	Total	%HV	Deg.Satn (v/c)
Intersection	2395	0.2	0.768

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Collins Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
SouthWest Exit: Pike Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

LANE SUMMARY

Site: 101 [2028 Build PM (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	473	0.0	746	0.634	100	16.0	LOS C	4.9	122.1	Full	1600	0.0	0.0
Approach	473	0.0		0.634		16.0	LOS C	4.9	122.1				
NorthEast: Collins Street													
Lane 1[d]	426	0.4	910	0.468	100	9.7	LOS A	2.7	67.1	Full	1600	0.0	0.0
Approach	426	0.4		0.468		9.7	LOS A	2.7	67.1				
North: Route 1													
Lane 1[d]	604	0.0	970	0.623	100	12.7	LOS B	6.3	156.7	Full	1600	0.0	0.0
Approach	604	0.0		0.623		12.7	LOS B	6.3	156.7				
SouthWest: Pike Street													
Lane 1[d]	577	0.9	802	0.720	100	18.7	LOS C	7.6	191.7	Full	1600	0.0	0.0
Approach	577	0.9		0.720		18.7	LOS C	7.6	191.7				
Intersection	2080	0.3		0.720		14.5	LOS B	7.6	191.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1

Mov. From S To Exit:	L3 SW	T1 N	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	18	401	53	473	0.0	746	0.634	100	NA	NA
Approach	18	401	53	473	0.0		0.634			

NorthEast: Collins Street

Mov. From NE To Exit:	L1 S	T1 SW	R3 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	33	311	83	426	0.4	910	0.468	100	NA	NA
Approach	33	311	83	426	0.4		0.468			

North: Route 1											
Mov. From N To Exit:	L3 NE	T1 S	R1 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	148	415	41	604	0.0	970	0.623	100	NA	NA	
Approach	148	415	41	604	0.0		0.623				
SouthWest: Pike Street											
Mov. From SW To Exit:	L1 N	T1 NE	R3 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.	
Lane 1	20	527	30	577	0.9	802	0.720	100	NA	NA	
Approach	20	527	30	577	0.9		0.720				
	Total	%HV	Deg.Satn (v/c)								
Intersection	2080	0.3		0.720							

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**											
Full Length Lane	1	Merge Analysis not applied.									
NorthEast Exit: Collins Street Merge Type: **Not Applied**											
Full Length Lane	1	Merge Analysis not applied.									
North Exit: Route 1 Merge Type: **Not Applied**											
Full Length Lane	1	Merge Analysis not applied.									
SouthWest Exit: Pike Street Merge Type: **Not Applied**											
Full Length Lane	1	Merge Analysis not applied.									

LANE SUMMARY

Site: 101 [2028 Build SAT (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	626	0.0	725	0.864	100	32.2	LOS D	12.7	316.6	Full	1600	0.0	0.0
Approach	626	0.0		0.864		32.2	LOS D	12.7	316.6				
NorthEast: Collins Street													
Lane 1[d]	611	0.7	819	0.746	100	19.8	LOS C	8.8	221.0	Full	1600	0.0	0.0
Approach	611	0.7		0.746		19.8	LOS C	8.8	221.0				
North: Route 1													
Lane 1[d]	730	0.0	860	0.849	100	27.0	LOS D	15.6	390.9	Full	1600	0.0	0.0
Approach	730	0.0		0.849		27.0	LOS D	15.6	390.9				
SouthWest: Pike Street													
Lane 1[d]	575	0.0	707	0.814	100	27.4	LOS D	9.6	240.7	Full	1600	0.0	0.0
Approach	575	0.0		0.814		27.4	LOS D	9.6	240.7				
Intersection	2542	0.2		0.864		26.6	LOS D	15.6	390.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1

Mov. From S To Exit:	L3 SW	T1 N	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	24	537	65	626	0.0	725	0.864	100	NA	NA
Approach	24	537	65	626	0.0		0.864			

NorthEast: Collins Street

Mov. From NE To Exit:	L1 S	T1 SW	R3 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	73	416	122	611	0.7	819	0.746	100	NA	NA
Approach	73	416	122	611	0.7		0.746			

North: Route 1										
Mov. From N To Exit:	L3 NE	T1 S	R1 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	192	504	34	730	0.0	860	0.849	100	NA	NA
Approach	192	504	34	730	0.0		0.849			

SouthWest: Pike Street										
Mov. From SW To Exit:	L1 N	T1 NE	R3 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	10	535	30	575	0.0	707	0.814	100	NA	NA
Approach	10	535	30	575	0.0		0.814			

	Total	%HV	Deg.Satn (v/c)
Intersection	2542	0.2	0.864

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Collins Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
North Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
SouthWest Exit: Pike Street Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

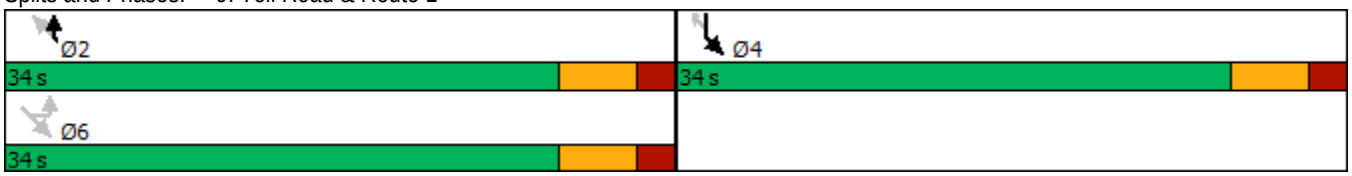
Toll Road at Route 1

Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	311	29	15	309	274	347
Future Volume (vph)	311	29	15	309	274	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	100			0
Storage Lanes	1	1	0			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	2046	1830	0	3450	3610	1615
Flt Permitted	0.950			0.936		
Satd. Flow (perm)	1669	1830	0	3235	3610	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34				377
Link Speed (mph)	30			30	30	
Link Distance (ft)	1224			1220	584	
Travel Time (s)	27.8			27.7	13.3	
Lane Group Flow (vph)	362	34	0	356	298	377
Turn Type	Prot	Perm	custom	NA	NA	custom
Protected Phases	4					2
Permitted Phases		4	6	6	2	
Detector Phase	4	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	14.7	14.7		28.2	28.2	28.2
Actuated g/C Ratio	0.27	0.27		0.51	0.51	0.51
v/c Ratio	0.66	0.07		0.21	0.16	0.37
Control Delay	24.0	6.1		8.5	8.2	2.5
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay	24.0	6.1		8.5	8.2	2.5
LOS	C	A		A	A	A
Approach Delay	22.5			8.5	5.0	
Approach LOS	C			A	A	
Queue Length 50th (ft)	104	0		30	24	0
Queue Length 95th (ft)	164	14		62	52	39
Internal Link Dist (ft)	1144			1140	504	
Turn Bay Length (ft)						
Base Capacity (vph)	1049	954		1658	1851	1011
Starvation Cap Reductn	0	0		0	0	0

Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Spillback Cap Reductn	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0
Reduced v/c Ratio	0.35	0.04		0.21	0.16	0.37

Intersection Summary	
Area Type: Other	
Cycle Length: 68	
Actuated Cycle Length: 54.9	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 10.7	Intersection LOS: B
Intersection Capacity Utilization 46.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Toll Road & Route 1



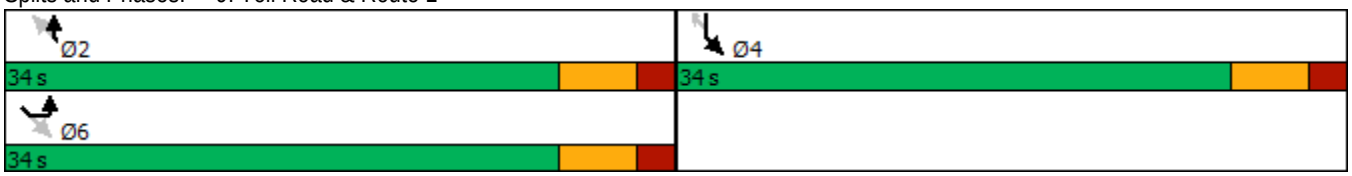
Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	390	24	27	263	259	544
Future Volume (vph)	390	24	27	263	259	544
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	16	16	11	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	100			0
Storage Lanes	1	1	0			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	2046	1830	0	3472	3574	1615
Flt Permitted	0.950			0.906		
Satd. Flow (perm)	1771	1830	0	3162	3574	1615
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		26				604
Link Speed (mph)	40			40	40	
Link Distance (ft)	1224			1220	584	
Travel Time (s)	20.9			20.8	10.0	
Lane Group Flow (vph)	424	26	0	354	288	604
Turn Type	Prot	Perm	Prot	NA	NA	custom
Protected Phases	4		6!			2!
Permitted Phases		4		6	2!	
Detector Phase	4	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	16.7	16.7		28.1	28.1	28.1
Actuated g/C Ratio	0.29	0.29		0.49	0.49	0.49
v/c Ratio	0.71	0.05		0.23	0.16	0.55
Control Delay	24.7	6.2		9.6	9.2	3.3
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay	24.7	6.2		9.6	9.2	3.3
LOS	C	A		A	A	A
Approach Delay	23.6			9.6	5.2	
Approach LOS	C			A	A	
Queue Length 50th (ft)	126	0		33	25	0
Queue Length 95th (ft)	205	13		61	55	51
Internal Link Dist (ft)	1144			1140	504	
Turn Bay Length (ft)						
Base Capacity (vph)	1012	918		1564	1768	1104
Starvation Cap Reductn	0	0		0	0	0

Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Spillback Cap Reductn	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0
Reduced v/c Ratio	0.42	0.03		0.23	0.16	0.55

Intersection Summary	
Area Type: Other	
Cycle Length: 68	
Actuated Cycle Length: 56.9	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	

! Phase conflict between lane groups.

Splits and Phases: 9: Toll Road & Route 1



LANE SUMMARY

Site: 101 [2028 No Build PM (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route1													
Lane 1[d]	734	0.0	1268	0.578	100	9.5	LOS A	4.0	100.4	Full	1600	0.0	0.0
Approach	734	0.0		0.578		9.5	LOS A	4.0	100.4				
NorthEast: Route 1													
Lane 1[d]	408	0.0	999	0.408	100	8.1	LOS A	1.8	44.4	Full	1600	0.0	0.0
Approach	408	0.0		0.408		8.1	LOS A	1.8	44.4				
NorthWest: Toll Road													
Lane 1[d]	387	1.0	953	0.406	100	8.4	LOS A	1.7	43.0	Full	1600	0.0	0.0
Approach	387	1.0		0.406		8.4	LOS A	1.7	43.0				
Intersection	1528	0.2		0.578		8.9	LOS A	4.0	100.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

Mov. From S To Exit:	L1 NW	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
South: Route1									
Lane 1	325	409	734	0.0	1268	0.578	100	NA	NA
Approach	325	409	734	0.0		0.578			
NorthEast: Route 1									
Mov. From NE To Exit:	L1 S	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	373	35	408	0.0	999	0.408	100	NA	NA
Approach	373	35	408	0.0		0.408			
NorthWest: Toll Road									
Mov. From NW To Exit:	L2 NE	R1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

Lane 1	17	370	387	1.0	953	0.406	100	NA	NA
Approach	17	370	387	1.0		0.406			

	Total	%HV	Deg.Satn (v/c)
Intersection	1528	0.2	0.578

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthWest Exit: Toll Road Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

LANE SUMMARY

Site: 101 [2028 No Build SAT (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	949	0.3	1250	0.759	100	15.1	LOS C	8.6	215.8	Full	1600	0.0	0.0
Approach	949	0.3		0.759		15.1	LOS C	8.6	215.8				
NorthEast: Route 1													
Lane 1[d]	487	0.0	1007	0.484	100	9.3	LOS A	2.7	67.2	Full	1600	0.0	0.0
Approach	487	0.0		0.484		9.3	LOS A	2.7	67.2				
NorthWest: Toll Road													
Lane 1[d]	350	0.0	900	0.389	100	8.5	LOS A	1.7	42.1	Full	1600	0.0	0.0
Approach	350	0.0		0.389		8.5	LOS A	1.7	42.1				
Intersection	1786	0.2		0.759		12.2	LOS B	8.6	215.8				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1									
Mov. From S To Exit:	L1 NW	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	311	638	949	0.3	1250	0.759	100	NA	NA
Approach	311	638	949	0.3		0.759			

NorthEast: Route 1									
Mov. From NE To Exit:	L1 S	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	459	28	487	0.0	1007	0.484	100	NA	NA
Approach	459	28	487	0.0		0.484			

NorthWest: Toll Road									
Mov. From NW To Exit:	L2 NE	R1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

Lane 1	32	318	350	0.0	900	0.389	100	NA	NA
Approach	32	318	350	0.0		0.389			
	Total	%HV	Deg.Satn (v/c)						
Intersection	1786	0.2		0.759					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthWest Exit: Toll Road Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

LANE SUMMARY

Site: 101 [2028 Build PM (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route1													
Lane 1[d]	777	0.0	1263	0.615	100	10.4	LOS B	4.6	116.0	Full	1600	0.0	0.0
Approach	777	0.0		0.615		10.4	LOS B	4.6	116.0				
NorthEast: Route 1													
Lane 1[d]	453	0.0	999	0.454	100	8.8	LOS A	2.2	55.1	Full	1600	0.0	0.0
Approach	453	0.0		0.454		8.8	LOS A	2.2	55.1				
NorthWest: Toll Road													
Lane 1[d]	392	0.9	923	0.425	100	8.9	LOS A	2.0	51.2	Full	1600	0.0	0.0
Approach	392	0.9		0.425		8.9	LOS A	2.0	51.2				
Intersection	1623	0.2		0.615		9.6	LOS A	4.6	116.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

Mov. From S To Exit:	L1 NW	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
South: Route1									
Lane 1	325	452	777	0.0	1263	0.615	100	NA	NA
Approach	325	452	777	0.0		0.615			
NorthEast: Route 1									
Mov. From NE To Exit:	L1 S	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	414	39	453	0.0	999	0.454	100	NA	NA
Approach	414	39	453	0.0		0.454			
NorthWest: Toll Road									
Mov. From NW To Exit:	L2 NE	R1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

Lane 1	23	370	392	0.9	923	0.425	100	NA	NA
Approach	23	370	392	0.9		0.425			
	Total	%HV	Deg.Satn (v/c)						
Intersection	1623	0.2		0.615					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthWest Exit: Toll Road Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

LANE SUMMARY

Site: 101 [2028 Build SAT (Site Folder: General)]

New Site
Site Category: (None)
Roundabout

Lane Use and Performance

	DEMAND FLOWS [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
South: Route 1													
Lane 1[d]	1020	0.3	1242	0.821	100	18.6	LOS C	11.8	295.4	Full	1600	0.0	0.0
Approach	1020	0.3		0.821		18.6	LOS C	11.8	295.4				
NorthEast: Route 1													
Lane 1[d]	557	0.0	1007	0.553	100	10.7	LOS B	4.3	106.7	Full	1600	0.0	0.0
Approach	557	0.0		0.553		10.7	LOS B	4.3	106.7				
NorthWest: Toll Road													
Lane 1[d]	359	0.0	857	0.419	100	9.3	LOS A	2.1	51.4	Full	1600	0.0	0.0
Approach	359	0.0		0.419		9.3	LOS A	2.1	51.4				
Intersection	1935	0.2		0.821		14.6	LOS B	11.8	295.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

South: Route 1

Mov. From S To Exit:	L1 NW	R1 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	311	709	1020	0.3	1242	0.821	100	NA	NA
Approach	311	709	1020	0.3		0.821			

NorthEast: Route 1

Mov. From NE To Exit:	L1 S	R2 NW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	522	35	557	0.0	1007	0.553	100	NA	NA
Approach	522	35	557	0.0		0.553			

NorthWest: Toll Road

Mov. From NW To Exit:	L2 NE	R1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

Lane 1	40	318	359	0.0	857	0.419	100	NA	NA
Approach	40	318	359	0.0		0.419			
	Total	%HV	Deg.Satn (v/c)						
Intersection	1935	0.2		0.821					

Lane flow rates given in this report are based on the arrival flow rates subject to upstream capacity constraint where applicable.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
South Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthEast Exit: Route 1 Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										
NorthWest Exit: Toll Road Merge Type: **Not Applied**												
Full Length Lane	1	Merge Analysis not applied.										

Route 1 at Proposed Site Driveway

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	25	29	537	516	43
Future Vol, veh/h	39	25	29	537	516	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	27	32	584	561	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1233	585	608	0	-	0
Stage 1	585	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	195	511	970	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	185	511	970	-	-	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.3	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	970	-	246	-	-
HCM Lane V/C Ratio	0.032	-	0.283	-	-
HCM Control Delay (s)	8.8	0	25.3	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	39	25	29	537	516	43
Future Vol, veh/h	39	25	29	537	516	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	27	32	584	561	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1233	585	608	0	-	0
Stage 1	585	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	195	511	970	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	185	511	970	-	-	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.3	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	970	-	246	-	-
HCM Lane V/C Ratio	0.032	-	0.283	-	-
HCM Control Delay (s)	8.8	0	25.3	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

Route 1 at Existing Site Driveway (187 Lafayette Road)

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	40	46	541	511	30
Future Vol, veh/h	25	40	46	541	511	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	43	50	588	555	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1260	572	588	0	-	0
Stage 1	572	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	188	520	987	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	174	520	987	-	-	-
Mov Cap-2 Maneuver	174	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	499	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	987	-	295	-	-
HCM Lane V/C Ratio	0.051	-	0.239	-	-
HCM Control Delay (s)	8.8	0	21	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.9	-	-

Intersection	
Int Delay, s/veh	1.5

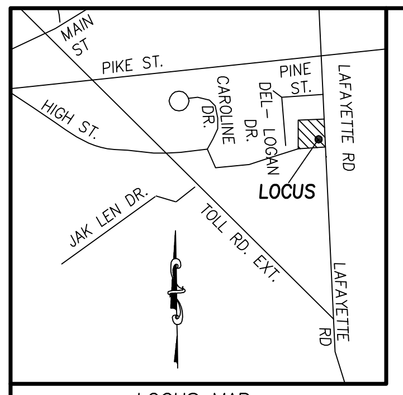
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	40	46	541	511	30
Future Vol, veh/h	25	40	46	541	511	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	43	50	588	555	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1260	572	588	0	-	0
Stage 1	572	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	188	520	987	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	174	520	987	-	-	-
Mov Cap-2 Maneuver	174	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	499	-	-	-	-	-

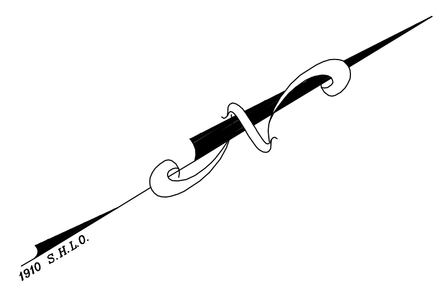
Approach	EB	NB	SB
HCM Control Delay, s	21	0.7	0
HCM LOS	C		

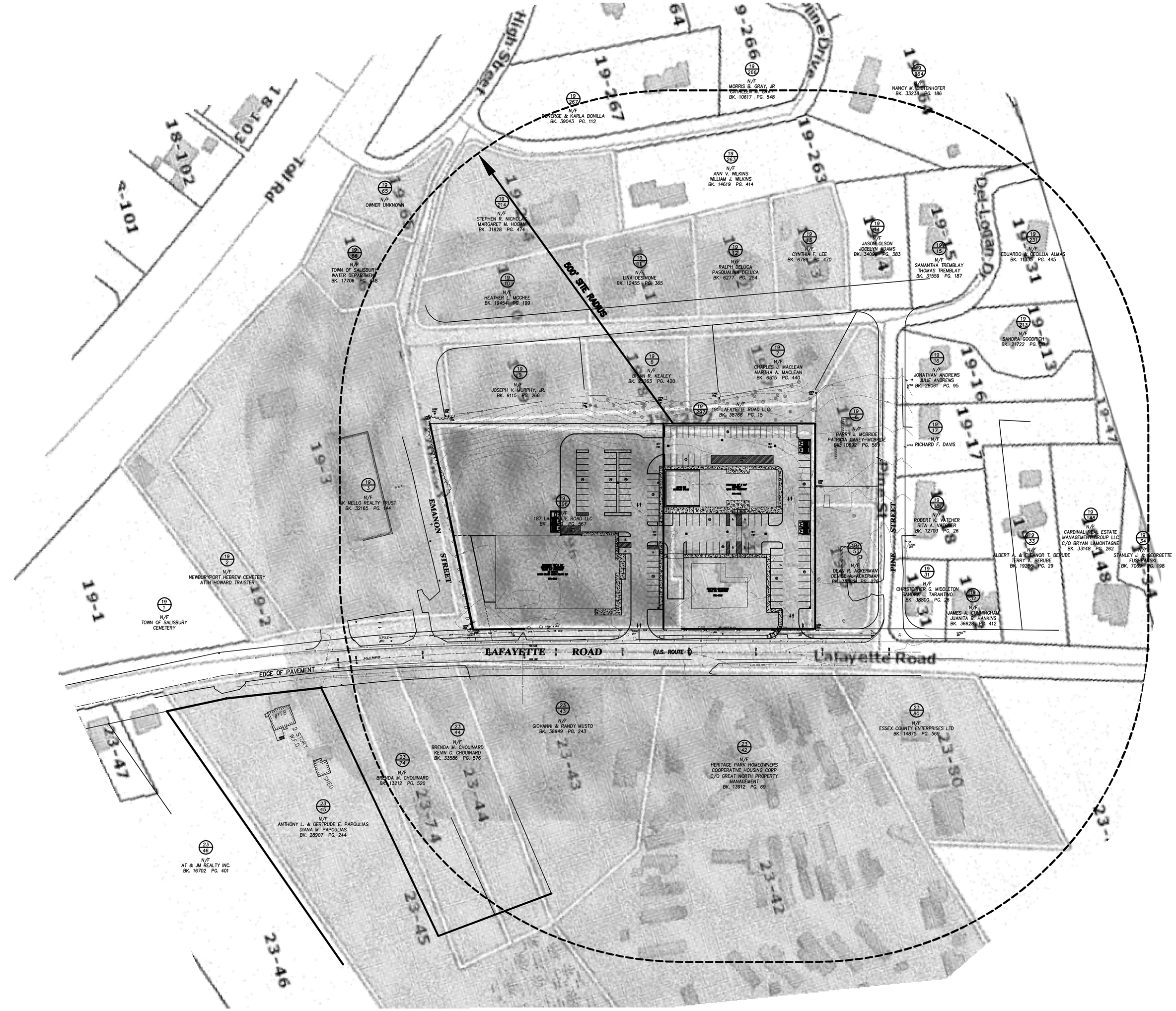
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	987	-	295	-	-
HCM Lane V/C Ratio	0.051	-	0.239	-	-
HCM Control Delay (s)	8.8	0	21	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.9	-	-

Attachment 6



LOCUS MAP
N.T.S.





GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80'

PREPARED FOR

191 LAFAYETTE ROAD LLC
P.O. BOX 1479
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY

MEI

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=80'	DESG. BY: C.M.Y.	PROJECT: M213997
DATE: OCT. 20, 2021	CHKD. BY: E.W.B.	

PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

500' SITE RADIUS

SHEET: 1 OF 2

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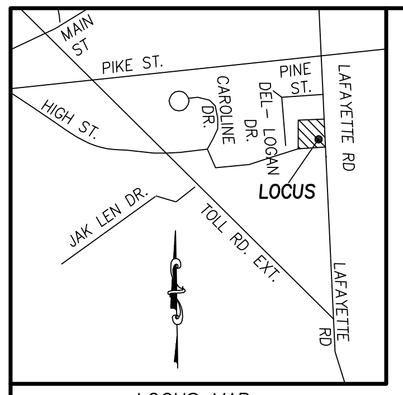
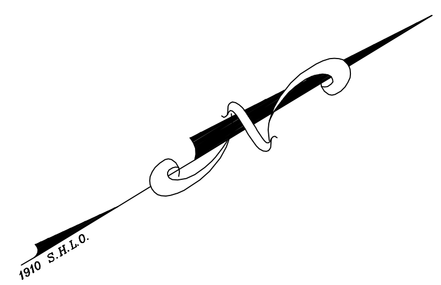


LOCUS MAP
N.T.S.



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PLAN OF LAND
IN
SALISBURY, MA

SHOWING
PROPOSED SITE IMPROVEMENTS
AT
191 LAFAYETTE ROAD
(MAP 19 – LOT 4)

500' SITE RADIUS

SHEET: 2 OF 2

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Attachment 7

Security SOP

Salisbury, MA

Campfire Cannabis

West Boylston, MA | Salisbury, MA

hello@campfirecannabis.com

Security SOP

Intent

It shall be the Policy of Campfire Cannabis to provide employees, clients, vendors, customers, and visitors a safe and secure environment in which to work or visit. To accomplish this objective, Campfire Cannabis will promulgate, review, and refine existing Policy and Procedures.

Campfire Cannabis has developed Policies and Procedures for the safety and benefit of employees, clients, vendors, and visitors so they may consider themselves safe and secure to the industry standard. Policy goals will be defined through the implementation of specific actions and tasks to achieve that standard.

Procedures shall detail how Policy will be implemented throughout Campfire Cannabis facilities. Procedures may be further implemented using Post-Orders.

Post-Orders will clearly define the tasks to be undertaken and completed at a specific Campfire Cannabis security post during a specific tour of duty, specific duty to be undertaken that may be location and time specific.

Chain of Command

1. The security chain of command is established as follows:

<u>Opening Procedure</u>

The Campfire Cannabis facility will be staffed by Campfire Cannabis security during all working hours. At the beginning of the workday Campfire Cannabis Security will ensure that the opening procedure is done in a secure manner as to identify and mitigate any possible threats to security and employees.

The procedures described herein are intended to provide for the safety and security of Campfire Cannabis staff and community stakeholders. All employees are expected to fully comply with all provisions of this procedure. Any employee who is found to be in violation of this procedure may be subject to disciplinary action.

The Head of Security and/or Store Manager will provide all new staff members with a copy of this procedure at the time of new employee orientation/hire. The procedure can also be found in the New Employee Handbook.

Campfire Cannabis Security procedures include, but are not limited to:

1. **ARRIVAL TO FACILITY:** Security Employees will arrive to the facility at least one (1) hour before opening to the public. Security employee(s) will conduct a walk around through the perimeter of the facility.

2. **FACILITIES INSPECTION (EXTERIOR):** Campfire Cannabis security employees will walk the perimeter of the facility looking for:

    a. **PEOPLE:** If there are any people present on or around Campfire Cannabis facility before business hours then security employees will politely and firmly inform the individual(s) that access to Campfire Cannabis facility is restricted to Campfire Cannabis customers during business hours only. If the individuals do not leave when requested, phone Salisbury Police Department immediately at (978) 225-2038 or 911. Campfire Cannabis security employees will then fill out a Campfire Cannabis serious incident report.

    b. **POSSIBLE BREAK-IN:** Campfire Cannabis security employees will look for breaches, obstructions, and damages on or around any possible entrance/exit points to the facility. If there has been the likelihood of a possible break-in then contact the Salisbury Police Department immediately at (978) 225-2038 or 911. Campfire Cannabis Security Employees will then contact the Head of Security and Store Managers immediately after. Campfire Cannabis security employees will fill out a serious incident report.

    c. **BROKEN/DAMAGED FACILITIES:** Campfire Cannabis security employees will inspect the Campfire Cannabis Facility looking for damaged or broken items in need of repair. If the Campfire Cannabis security employees find damaged or broken items during the inspection, then a broken/damaged facilities Report will be filled out.

3. **ALARM AND SECURITIES OPENING PROCEDURE:** After conducting the Campfire Cannabis facilities inspection (exterior), the group of Campfire Cannabis security employees will relocate to Campfire Cannabis facility rear entry point. One Campfire Cannabis security employee will stand guard outside the facility, while the other Campfire Cannabis security employee will enter the facility. Campfire Cannabis security employee who entered the building will shut the rear entry-point behind them, ensuring the door locks. They will then enter their private security pin code to disarm the security alarm system.

4. **FACILITIES INSPECTION (INTERIOR):** After disarming the security alarm, both Campfire Cannabis Security employees will enter the facility and conduct a Campfire Cannabis facilities inspection (interior). Campfire Cannabis Security employees will look for:

    a. **PEOPLE:** If there are any people inside Campfire Cannabis facility before business hours then Security employees will exit the immediate area to a safe position and call Salisbury Police Dept. immediately at (978) 225-2038 or 911. The head of Security and Store Managers will be notified immediately following.

    b. **POSSIBLE BREAK-IN:** Campfire Cannabis security employees will look for breaches, obstructions and damages on or around any possible entrance/exit points to the facility. If

there has been the likelihood of a possible break-in then contact the Salisbury Police Dept immediately at (978) 225-2038 or 911. Campfire Cannabis Security Employees will then contact the Head of Security and Store Managers immediately after. Campfire Cannabis security employees will fill out a Serious Incident Report.

c. **BROKEN/DAMAGED FACILITIES:** Campfire Cannabis security employees will inspect the Campfire Cannabis Facility looking for damaged or broken items in need of repair. If Campfire Cannabis security employees find damaged or broken items during the inspection, then a Broken/Damaged Facilities Report will be filled out.

5. **EMERGENCY EXIT INSPECTIONS:** Security Employees will ensure that each Fire Exit is unlocked in preparation for the day's shifts. These Exits are to remain unlocked throughout the workday. Security employees will ensure that there are no blockages, obstructions, or damages to the Fire Exit doorway.

6. **EMPLOYEE ID BADGE HANDOUT:** After ensuring that positive security has been maintained over the entire Campfire Cannabis facility, then the senior ranking Campfire Cannabis employee will gather the upcoming shifts ID badges. The senior Campfire Cannabis security employee will maintain positive security over the Campfire Cannabis ID badges until the Store Manager arrives on scene, at which point the ID Badges will be handed over.

7. **SECURITY FOR EMPLOYEES AS THEY ENTER THE FACILITY:** Campfire Cannabis security employees will ensure that positive identification of main access routes in anticipation of the arrival of Campfire Cannabis employees.

8. **PREP FOR DAILY DUTIES/ FUNCTIONS:** After ID badges have been passed to the Store Manager, Campfire Cannabis security employees will meet with the line engagement team and prep the facility for opening.

Business Hours Procedure

The Campfire Cannabis facility will be staffed by one or more Campfire Cannabis Security Agents during all working hours. At least one Security Agent will be assigned to retail. During business hours Campfire Cannabis Security will perform security related functions including perimeter and interior patrols, security system checks and audits, monitor CCTV systems, greet employees and visitors, escort visitors, investigate suspicious activity and other appropriate functions.

Campfire Cannabis Security procedures include, but are not limited to:

1. Conduct routine and random patrols of all areas of the facility.

2. Interior patrols shall be conducted, with a recorded log of patrol activity, at random intervals to identify Campfire Cannabis policy discrepancies or weaknesses;

3. The random interior patrols will augment electronic surveillance to identify product diversion or attempted diversion.

4. Perform perimeter checks of the facility by monitoring the CCTV system and through physical perimeter checks:

    a. Exterior patrols will augment perimeter and interior security.

    b. Look for suspicious persons or activity
    c. Check that perimeter doors are secure
    d. Ensure that no one loiters or remain on the premises
    e. Ensure that there is no consumption of marijuana on the premises or grounds
5. Investigate any and all ACMS alarms
6. Escort agents to and from their vehicles as requested
7. Monitor all doors and alarms
8. Assist the facility managers with any security related issues
9. Periodically monitor the CCTV system
10. Look for signs of suspicious activity and persons
11. Monitor Campfire Cannabis Agents to ensure compliance with the regulations including signs of diversion
12. Sign Campfire Cannabis Agents in and out
    a. Employees coming to work need to be on the schedule
    b. Give staff members their Campfire Cannabis and CCC issued ID's as they enter
    c. Retrieve Campfire Cannabis and CCC issued ID's as staff members leave at the end of their shift
13. Assist and be present when any Shipping and Receiving doors are opened
    a. Prior to the opening of any shipping or receiving door Campfire Cannabis security must perform a check of the area ensuring that there are no suspicious persons, vehicles or activities are present
    b. Campfire Cannabis Security Agents must be present when shipping and receiving doors are open.
14. Sign in and out Radios, cell phones, and panic alarms to Campfire Cannabis Agents
15. Sign keys in and out, to and from authorized Agents
16. Perform escorts to authorized visitors
17. Assist with transportation duties (See Campfire Cannabis Transportation Policy)
18. Assist the facility managers in Campfire Cannabis case of emergency
19. Identify and mitigate any unsafe practices or situations

Identification Management

Campfire Cannabis security will identify all persons entering the facility.

1. All employees shall at all times wear a Campfire Cannabis identification credential and their CCC issued Agent ID card that is clearly and prominently displayed.
2. No employee badges or CCC Agent ID Cards are allowed outside the facility unless the agent is transporting marijuana in accordance with Campfire Cannabis Transportation Policy or authorized by the Director of Security or designee.
3. Each employee shall present daily, proper identification. Upon presenting this identification, Campfire Cannabis identification credential shall be issued to the employee.

Customer Entrance

Customer access to the retail areas of the facility will be done through the main entrance. The customer must present an authorized government issued ID card to a Campfire Cannabis Agent ("Agent") stationed in the waiting area. The entry vestibule is, in essence, a mantrap where the customer must go through a secure door to access the sales floor. Once that ID is presented, the door will be opened and the customer can access the sales area. For security reasons there will be a limit on the number of customers in the sales area. In the entry vestibule an Agent will take the ID and verify that the ID is valid, and that the customer is 21 or older.

1. To verify a customer is 21 or older an Agent must receive and examine from the customer one of the following authorized government issued ID Cards;

    a. Massachusetts Issued driver's license;

    b. Massachusetts Issued ID card;

    c. Out-of-state driver's license or ID card (with photo);

    d. Passport; or

    e. U.S. Military I.D.

2. To verify the age of the customer the Agent will use an Age Verification Smart ID Scanner that will be supplied by Campfire Cannabis.

    a. In the event that the ID is not a scannable ID, or if for any reason the scanner is not operational or available of if the ID is questionable the Agent must use the **FLAG** methodology of ID verification

        - **F**. Feel

            1. Have the customer remove the ID from their wallet or plastic holder (never accept a laminated document)

            2. Feel for information cut-out or pasted on (especially near photo and

birth date areas)

3. Feel the texture – most driver's license should feel smooth, or (depending on your State) they will have an identifying texture

- **L**. Look

1. Look for the State seals or water marks; these seals are highly visible without any special light.

2. Look at the photograph. Hairstyles, eye makeup and eye color can be altered, so focus your attention on the person's nose and chin as these features don't change. When encountering people with beards or facial hair, cover the facial hair portion of the photo and concentrate on the nose or ears.

3. Look at the height and weight. They should reasonably match the person.

4. Look at the date of birth and do the math!

5. Compare the age on the ID with the person's apparent age.

6. Look at the expiration date. If the ID has expired, it is not acceptable.

7. If needed, compare the ID to the book of Government Issued ID's

- **A.** Ask

1. Ask questions of the person, such as their middle name, zodiac sign, or year of high school graduation. Ask them the month they were born. If they respond with a number, they may be lying. If the person is with a companion, ask the companion to quickly tell you the person's name.

2. If you have questions as to their identity, ask the person to sign their name, and then compare signatures.

- **G**. Give Back

1. If the ID looks genuine, give the ID back to the customer and allow entry.

Visitor Management

Campfire Cannabis will only allow authorized individuals into the facility. Campfire Cannabis Security will be responsible for the identification, logging and issuance of visitor badges to all authorized visitors.

Unless pre-scheduled and approved by a manager, all visitors must report to the main entrance.

1. Other than customers 21 years of age or older, Campfire Cannabis restricts individuals from entering the facility. Other than Campfire Cannabis agents the following individuals will be allowed entrance:

    a. Representatives of CCC in the course of responsibilities authorized by St. 2016, c. 334, as amended by St. 2017, c. 55 or 935 CMR 500.000;

    b. Representatives of other state agencies of the Commonwealth;

    c. Emergency responders in the course of responding to an emergency;

    d. Authorized law enforcement personnel or local public health, inspectional services, or other permit-granting agents acting within their lawful jurisdiction; and

    e. Outside vendors, contractors, and other authorized visitors.

2. All visitors must report to the employee entrance of the facility and announce their business at check in.

3. Upon entrance into the mantrap they must present a government issued ID to the security team.

    a. No one will be allowed passed the mantrap unless their identity is verified by Campfire Cannabis Security

4. When a representative of CCC requests access to the facility the Security Agent will notify the senior management Agent of the request and allow access.

    a. Campfire Cannabis Security will provide or arrange for a Campfire Cannabis Agent to escort the individual(s).

5. Emergency responders in the course of responding to an emergency will be given immediate access to the facility.

    a. Campfire Cannabis Security will provide or arrange for a Campfire Cannabis Agent to escort the individual(s). (if possible)

6. When authorized law enforcement personnel, local public health, inspectional services, or other permit-granting agents request access to the facility the Security Agent will notify the senior management Agent of the request.

    a. Access to the facility will be allowed after the individual(s) identity and purpose is confirmed.

b. Campfire Cannabis Security will provide or arrange for a Campfire Cannabis Agent to escort the individual(s).

7. When a vendor, contractor or other authorized visitor requests access to the facility the Security Agent will confirm that the individual(s) is authorized by Campfire Cannabis management.

    a. The Security Agent will scan the individual's government issued ID Card into the "Visitor Management System" ("VMS") and enter their pertinent information into the system.

    b. For individual(s) who are confirmed as an authorized visitor and who is not on the "Watch List" the Security Agent will issue a Visitor Badge to the visitor

        i. The visitor will be instructed to visibly display the Visitor Badge at all times while the visitor is in the facility.

    c. The Security Agent will fill out the hard copy "Visitor Log" (attached to this SOP) and enter the visit into the VMS.

        i. The Visitor Log shall be available for inspection by CCC at all times

8. The Security Agent will contact the manager responsible for the vendor, contactor or visitor who will arrange for a Campfire Cannabis Agent to escort them into the facility.

    a. Only when a Campfire Cannabis agent is assigned as an escort to the visitor(s) will they be allowed access to the facility.

    b. All visitors must be escorted by a Campfire Cannabis agent at all times while the visitor is in the facility.

9. Upon leaving the facility Campfire Cannabis Security will ensure that all visitor badges are returned.

Restricted Areas

To reduce the possibility of workplace injury or product loss, including diversion, access shall be restricted in product areas as determined by management. These restrictions may be based on job description, job assignments, and level of training. Campfire Cannabis Security will ensure that:

1. Each employee is issued an RFID Access Card which will allow access to certain areas of the facility based on the employee's job description, job assignment, level of training and the requirements of Campfire Cannabis Certain employees will also be issued a secure PIN number for access to limited or restricted access areas.

2. No employee shall enter or attempt to enter areas that are restricted to that employee.

3. Campfire Cannabis shall monitor and maintain a log of restricted access attempts by unauthorized employees. This log shall be reviewed, and video footage of attempts shall also be reviewed.

a. The Head of Security or designee will investigate all unauthorized access attempts and suggest corrective or disciplinary action to the COO if appropriate.

4. All vendors and service contractors shall be escorted by facility staff at all times during their visit to the secure part of the facility.

5. No doors shall be propped open in a limited or restricted access area.

Communication

1. Portable radios will be assigned to security and specific staff.

    a. Portable radios will be logged out by security to assigned personnel and returned at the end of shift.

    b. Campfire Cannabis Security Agents shall be responsible for the care and maintenance of portable radios. Portable radios shall be sufficiently charged, and a sufficient quantity of batteries shall be held in reserve to maintain communication.

2. Mobile phones shall be assigned to specific staff based on the requirements of the Campfire Cannabis

3. The facility is equipped with an inter-facility phone system that have paging and alarm capabilities. Each phone will have a list of emergency contact numbers.

Incident Reports

Campfire Cannabis Security shall complete incident reports for any incident or unusual circumstance that occurs at the facility. These incident reports will be completed by Security Agents reviewed by the Director of Security.

1. All Campfire Cannabis Security Agents must fill out a "Campfire Cannabis Incident Report" in the following circumstances:

    a. Actual or attempted security breach;

    b. Actual or attempted diversion;

    c. Unauthorized entry by anyone into a limited or restricted access area;

    d. Suspicious activity;

    e. Any Law Enforcement, Emergency Service or Inspectional Service interaction;

    f. Unsafe working practices or conditions;

    g. Damages property or equipment;

h. Employee violence;

i. Any on site injury or accident;

j. Denial of anyone into the facility; or

k. Any other incident or circumstance where it would be reasonably assumed that the Director of Security or Campfire Cannabis management would want to be notified.

2. All incident reports will be emailed to the Director of Security or designee

3. Director of Security will review these reports immediately but no longer than 8 hours after submission and:

    a. Make a determination if the report needs further investigation;

    b. Make a determination if the report needs to be forwarded to CCC or any other regulatory agency;

    c. File the report.

        i. All incident reports will be stored electronically for at least two years.

Receiving Marijuana Products

Campfire Cannabis Security employees shall review the Marijuana Transfer Manifest prior to the arrival of all shipments. All transfers will take place before or after operational hours. These transfers will be randomized to limit security risks.

1. Campfire Cannabis Security Agents will review the Marijuana Transfer Manifest prior to the arrival of the marijuana product.

2. Campfire Cannabis Security Agents will inspect the perimeter of the parking lot looking for:

    a. Ensure Campfire Cannabis Parking Space is open

    b. Actual or attempted security breach;

    c. Actual or attempted diversion;

    d. Unauthorized entry by anyone into a limited or restricted access area;

    e. Suspicious activity;

    f. Any Law Enforcement, Emergency Service or Inspectional Service interaction;

    g. Any other incident or circumstance where it would be reasonably assumed that the

Director of Security or Campfire Cannabis management would want to be notified.

3. Campfire Cannabis Security Agents will maintain parking lot security 30 minutes prior to the expected arrival time of the marijuana products.

4. Upon arrival of the marijuana products, Campfire Cannabis security agents will instruct the transfer vehicle to back their vehicle as close to the rear entry of the facility. Campfire Cannabis security agents will ensure that there is enough space to open doors and move product quickly into the building, while limiting access and opportunity to theft and diversion.

5. A security agent will sign in the marijuana product transfer agent that has entered the building into Campfire Cannabis Visitor Log.

6. The operations team will be escorted by a security agent as the products are moved into the Inventory room to weigh, inspect, and receive the marijuana products.

7. After receiving the shipment into METRC the security agent will escort the marijuana product transfer agent back to their transfer.

Theft/Diversion

Campfire Cannabis Security shall be proactive in preventing theft/diversion by utilizing industry wide best practices in theft prevention and detection.

1. Loss Prevention techniques such a video surveillance, intrusion, and restricted area alarms will be constantly utilized to identify weaknesses in overall security, deter loss or theft and to identify and prosecute any person or person engaged in the diversion of company assets.

2. When theft or loss is identified, the area of that loss or theft will be immediately secured so that a full accounting of the loss or theft may be determined.

3. The Director of Security shall be contacted as soon as possible to report the incident. The type of incident, estimated loss, time of loss and other pertinent information will be furnished at that time.

4. All person's present shall be identified, and a log created with names and in the case of contractors or vender's names and contact information.

5. Campfire Cannabis will immediately notify appropriate law enforcement authorities and the Commission within 24 hours after discovering the following:

    a. Discrepancies identified during inventory, diversion, theft, loss, and any criminal action involving the Establishment or a dispensary agent; or

    b. Any suspicious act involving the sale, cultivation, distribution, processing, or production of marijuana by any person

Notifications

Campfire Cannabis Security will ensure that all notifications required by CCC or other regulatory agencies are completed.

1. Campfire Cannabis will Notify the CCC and the appropriate law enforcement authorities within 24 hours after discovering the following:

    a. Discrepancies identified during inventory, diversion, theft, loss, and any criminal action involving the Establishment or a dispensary agent;

    b. Any suspicious act involving the sale, cultivation, distribution, processing, or production of marijuana by any person;

    c. Unauthorized destruction of marijuana;

    d. Any loss or unauthorized alteration of records related to marijuana, customers or dispensary agents;

    e. An alarm activation or other event that requires response by public safety personnel;

    f. The failure of any security alarm system due to a loss of electrical power or mechanical malfunction that is expected to last longer than eight hours; and

    g. Any other breach of security.

        i. Campfire Cannabis will, within 10 calendar days, provide written notice to the Commission of any incident described above (VIII 1. a-g), by submitting an incident report in the form and manner determined by CCC which details the circumstances of the event, any corrective actions taken, and confirmation that the appropriate law enforcement authorities were notified.

        ii. All documentation related to an incident will be maintained by Campfire Cannabis for no less than one year and made available to CCC and to law enforcement authorities acting within their lawful jurisdiction upon request.

2. Campfire Cannabis will notify CCC no more than one business day after a dispensary agent ceases to be associated with Establishment NAME.

3. After obtaining a registration card for a dispensary agent, Campfire Cannabis will notify CCC, in a form and manner determined by CCC, as soon as possible, but in any event, within five business days after any changes to the information that Campfire Cannabis was previously required to submit to CCC, or after discovery that a registration card has been lost or stolen.

Closing Procedure

Policy: Campfire Cannabis facility will be staffed by Campfire Cannabis Security Agents during all working hours. At the end of the work day Campfire Cannabis Security will ensure that the closing procedure is done in a secure manner as to identify and mitigate any possible threats to security and employees. Campfire Cannabis Security will:

1. **PREPARING FOR FACILITY CLOSURE:** Campfire Cannabis security employees will start facility closure preparations no earlier than 18:30, as the sales floor closes.

2. **Campfire Cannabis FACILITIES INSPECTION (EXTERIOR):** Campfire Cannabis security employees will walk the perimeter of the facility looking for:

   a. **PEOPLE:** If there are any people present on or around Campfire Cannabis facility after business hours then security employees will politely and firmly inform the individual(s) that access to Campfire Cannabis facility is restricted to Campfire Cannabis customers during business hours only. If the individuals do not leave when requested, phone Salisbury Police Dept. immediately at (978) 225-2038 or 911. Campfire Cannabis security employees will then fill out a Campfire Cannabis serious Incident Report.

   b. **POSSIBLE BREAK-IN:** Campfire Cannabis Security employees will look for breaches, obstructions and damages on or around any possible entrance/exit points to the facility. If there has been the likelihood of a possible break-in then contact the Salisbury Police Dept immediately at (978) 225-2038 or 911. Campfire Cannabis Security employees will then contact the Head of Security and Store Managers immediately after. Campfire Cannabis Security Employees will fill out a Serious Incident Report.

   c. **BROKEN/DAMAGED FACILITIES:** Campfire Cannabis security employees will inspect Campfire Cannabis facility looking for damaged or broken items in need of repair. If Campfire Cannabis security employees find damaged or broken items during the inspection, then a broken/damaged facilities report will be filled out.

3. **Campfire Cannabis FACILITIES INSPECTION (INTERIOR):** Campfire Cannabis security employees will maneuver through the facility and conduct a Campfire Cannabis facilities inspection (Interior). Campfire Cannabis security employees will look for:

   a. **PEOPLE:** If there are any people inside Campfire Cannabis facility after business hours then security employees will exit the immediate area to a safe position and call Salisbury Police Dept. immediately at (978) 225-2038 or 911. The head of security and store managers will be notified immediately following. Campfire Cannabis security employees will then fill out a Campfire Cannabis serious Incident report form.

   b. **POSSIBLE BREAK-IN:** Campfire Cannabis security employees will look for breaches, obstructions and damages on or around any possible entrance/exit points to the facility. If there has been the likelihood of a possible break-in then contact the Salisbury Police Dept immediately at (978) 225-2038 or 911. Campfire Cannabis security employees will then contact the head of security and store managers immediately after. Campfire Cannabis security employees will fill out a serious incident report.

c. **BROKEN/DAMAGED FACILITIES:** Campfire Cannabis security employees will inspect Campfire Cannabis facility looking for damaged or broken items in need of repair. If Campfire Cannabis security employees find damaged or broken items during the inspection, then a broken/damaged facilities report will be filled out.

4. **Campfire Cannabis ID BADGE RETRIEVAL PROCESS:** With the store manager, the senior ranking Security employee will collect all Campfire Cannabis employee ID badges at the conclusion of the shift. Both parties will ensure that 100% accountability of ID badges are in effect. In case of a missing ID badge the head of security will be notified and the store manager will fill out a Campfire Cannabis serious incident report.

5. **Campfire Cannabis ID Badge Storage:** The senior ranking Campfire Cannabis security employee will place all Campfire Cannabis employee ID badges in a binder and secure binder inside a wall mounted, locking, file cabinet.

6. **EMERGENCY EXIT INSPECTIONS:** Security employees will ensure that each (2) fire exit deadbolt is unlocked in preparation for the days shifts. These deadbolts will be liked prior to the final exiting of the facility at closing. Security employees will ensure that there are no blockages, obstructions, or damages to the fire exit doorway.

7. **CLOSURE AND SETTING OF ALARM:** Campfire Cannabis employees will exit Campfire Cannabis facility when they have finished their closing procedures. One Campfire Cannabis security employee will remain with the group who just exited the facility, while the Store Manager or senior ranking security employee deploys the security alarm.

8. **CLOSURE AND SETTING OF ALARM:** Campfire Cannabis employees will exit Campfire Cannabis facility when they have finished their closing procedures. One Campfire Cannabis security employee will remain with the group who just exited the facility, while the store manager or senior ranking security employee deploys the security alarm.

Duress Procedure

Policy: It is Campfire Cannabis policy that if any Campfire Cannabis Agent is forced to disarm the SAS under duress from physical or the threat of physical harm to you or anyone else, enter the duress code into the SAS Arming Station.

1. The duress code will send a silent alarm to the Salisbury Police Department signaling that the SAS System was deactivated under duress

2. The SAS will disarm as usual.

3. Campfire Cannabis Agents and employees should not place themselves or others in needless physical harm and should offer cooperate ration to achieve that objective

4. Campfire Cannabis Agents and employees should try to memorize descriptions of persons, clothing, and weapons shown or informed of, vehicles and direction of travel during a duress

event.

5. Campfire Cannabis Agents and employees shall, when safe to do so call 911 to report the incident as soon as practicable

6. Campfire Cannabis Agents and employees shall after calling 911, write down all information as it relates to description of persons, clothing, and weapons shown or informed of, vehicles and direction of travel during a duress event.

7. The Director of Security or designee shall be notified as soon as practicable.

Robbery

Policy: Any Establishment Agent who is confronted by an individual(s) that communicates to them by force or the threat of force their intent to take money or property shall;

1. Cooperate with the Robber

2. Give them exactly what they want

3. Weapons or implied weapons should be treated as real and loaded

4. Not make loud noises or sudden moves

5. Try to alert other employees

6. Activate silent "holdup" alarm (only if activation of the alarm will not be noticed by the robber)

7. Carefully observe the robber, make eye contact and mental notes on appearance

8. Look for accomplices

9. Make mental notes of weapon- type, size and size

10. Observe and identify vehicle and direction of travel

    a. Color

    b. Make

    c. Model

    d. Old or New

    e. License Plate (State, Color, Number)

f. Unusual Characteristics or Body Damage

11. After a robbery or attempted robbery, and after the individual(s) has exited the Establishment:

a. The facility Manager or their designee shall immediately call 911, even if the silent holdup alarm has been activated, and notify the 911 operator that:

i. A robbery has just occurred at (Establishment Address)

ii. Identify Yourself

iii. Stay on the Phone

iv. Answer Questions about the Robbery

v. Descriptions of Robbers

vi. Weapons

vii. Injuries

viii. How long ago

ix. Vehicles

x. Direction of travel

b. The facility Manager shall;

i. Lock all the doors

ii. Calmly tell customers a robbery has just occurred

iii. Stop all business transactions

iv. Ask all witnesses to stay until Police arrive

v. Not touch anything in the robbery area

vi. Not allow customers, friends, media into business until Law Enforcement arrives

vii. Notify the Director of Security

viii. Have employees use Suspect ID Chart

SUSPECT DESCRIPTION:

August 1995

Sex:	Tattoos/ Scars/ Marks:	Complexion:
Race:		Hat (Color & Type):
Age:		Jewelry:
Height:		
Weight:		Coat/ Jacket:
Build:		Shirt/ Blouse:
Hair Color:		
Hair Length:		Pants/ Dress/ Skirt:
Facial Hair:	Additional Information:	Shoes:
Eyes/ Glasses:		

WEAPONS:

Circle the Closest

VEHICLE:

Year:	License #:
Make:	State:
Model:	Additional Information:
Color (Top & Bottom):	

Campfire Cannabis
Visitors Log

Date	Time-In	Time-Out	Visitor Name	Signature	Reason for Visit	Escort	Visitor Badge #	ID Checked

Attachment 8

Security System Plan

Salisbury, MA

Campfire Cannabis

West Boylston, MA | Salisbury, MA

hello@campfirecannabis.com

Security System Plan

Overview of Premises Security

The security at Ganesh Wellness, Inc d/b/a Campfire Cannabis at 191 Lafayette Rd. in Salisbury, MA (the "Premise or Premises") incorporates physical security elements, electronic security systems, manned security, and policies, procedures and plans to provide a comprehensive integrated secure environment that will deter and prevent unauthorized entrance into areas containing marijuana and theft of marijuana at the Marijuana Establishment. These security measures have been designed to protect the Premises, Agents of Campfire Cannabis, and the public.

Campfire Cannabis' Management Team, along with their consultants have vast experience in Premise security in the legal marijuana industry. This team has been on the design, installation, operational, and compliance side of these security systems and programs. The team will ensure that the security for Campfire Cannabis is in compliance with all relevant regulations and provides superior security for our products, team, and the public.

The security plans and systems have been designed and installed to be compliant with all the requirements of 935 CMR 500.000 et. seq. with particular attention to 935 CMR 500.110.

The security plans and systems will ensure Campfire Cannabis:

1. Allows only customers (consumers), Marijuana Establishment Agents, persons authorized by 935 CMR 500.105(14), and, subject to the requirements of 935 CMR 500.110(4)(e), outside vendors, contractors, and visitors, access to the Premise;
2. Positively identifies individuals seeking access to the Premises of the Marijuana Establishment or to whom or marijuana products are being transported pursuant to 935 CMR 500.105(14) to limit access solely to individuals 21 years of age or older;
3. Prevents loitering and ensures that only individuals engaging in activity expressly or by necessary implication permitted by these regulations and its enabling statute are allowed to remain on the Premises;
4. Has established limited access areas pursuant to 935 CMR 500.110(4), which shall be accessible only to specifically authorized personnel limited to include only the minimum number of employees essential for efficient operation;
5. Stores all finished marijuana products in a secure, locked safe or vault in such a manner as to prevent diversion, theft and loss;
6. Keep all safes, vaults, and any other equipment or areas used for the production, manufacturing, processing, handling, packaging, or storage of marijuana and MIPs securely locked and protected from entry, except for the actual time required to remove or replace marijuana;
7. Keeps all locks and security equipment in good working order;
8. Prohibit keys from being left in the locks, or stored or placed in a location accessible to persons other than specifically authorized personnel;
9. Prohibits accessibility of security measures, such as combination numbers, passwords, or electronic security systems, to persons other than specifically authorized personnel;
10. Ensures that the outside perimeter of the Premise is sufficiently lit to facilitate surveillance;
11. Ensures that all marijuana products are kept out of plain sight and are not visible from a public

place without the use of binoculars, optical aids or aircraft;

12. Has developed emergency policies and procedures for securing all product following any instance of diversion, theft, or loss of marijuana, and conduct an assessment to determine whether additional safeguards are necessary; and
13. Has developed sufficient additional safeguards as required by the Commission for Marijuana Establishments that present special security concerns.

The Premise is equipped with the following electronic security systems:

1. Closed Circuit Television System (CCTV)
2. Access Control & Monitoring System (ACMS)
3. Security Alarm System (SAS)

These electronic security systems will be designed utilizing the best practice technology that is commercially available and the best security features available for an operation of this nature. The systems will be flexible and scalable for future growth or additional security. The systems will be integrated such that an alarm input from a security device (e.g., door contact) will cause an automatic response by the Closed-Circuit Television System (CCTV) so that the nature of the alarm can be viewed and analyzed, and the appropriate response initiated by management.

Access to rooms where surveillance, monitoring, recording and/or data storage equipment will be limited to persons that are essential to surveillance operations, law enforcement authorities, security system service personnel and the Commission. The surveillance room will remain locked and shall not be used for any other function.

Records

All required records, lists, and logs will be retained in compliance with the Regulations. Computer log files will be retained for at least (90) ninety days. The VMS will provide a minimum of (90) ninety days of storage on-site. Video surveillance documenting a security event will be retained indefinitely.

Back-Up Power

All security system components and other critical infrastructure of the Premise including safety lighting, etc. will be supported by battery back-ups and a failure notification system with audio/visual alert. Security and emergency systems will remain online so that the security systems will not be compromised, even in a power outage. In the event of an extended power outage a gas generator will be used keep all security equipment operational.

Security Audits

On an annual basis Campfire Cannabis will perform an audit of all security infrastructure and obtain a comprehensive security system audit by a vendor approved by the Commission. A report of this audit will be submitted, in a form and manner determined by the Commission, no later than 30 calendar days after the audit is conducted. If the audit identifies concerns related to the Premise's security system, we will also submit a plan to mitigate those concerns within ten business days of submitting the audit.

Limited Access Areas

A limited access area is an indoor or outdoor area on the registered Premises of a Marijuana Establishment where cannabis or marijuana products, or their byproducts are manufactured, stored, weighed, packaged, processed, or disposed, under the control of a Marijuana Establishment, with access limited to only those Marijuana Establishment agents designated by the establishment.

Access to limited access areas will be controlled by the electronic security systems with locking devices that authorize access to credentialed users only. All outside vendors, contractors, and visitors must obtain a visitor identification badge prior to entering a limited access area and will be escorted at all times by an Agent of Campfire Cannabis authorized to enter the limited access area. The visitor identification badge must be visibly displayed at all times while the visitor is in any limited access area. All visitors will be logged in and out, and that log shall be available for inspection by the Commission at all times. All visitor identification badges shall be returned to the establishment upon exit.

All limited access areas are identified by the posting of a sign that will be a minimum of 12' x 12' that states "Do No Enter – Limited Access Area – Access Limited to Authorized Personnel Only" in lettering no smaller than one inch in height.

All limited access areas will be clearly described by the filing of a diagram of the registered Premises, in the form and manner determined by the Commission, reflecting entrances and exits, walls, partitions, storage, disposal and retail sales areas.

Perimeter Security

The entire outside perimeter of the Premise will be monitored by CCTV and will be sufficiently lit to facilitate surveillance. Trees, bushes, and other foliage outside of the Premise will be removed or maintained to ensure they do not allow for a person or persons to conceal themselves from sight.

During hours of operation, Agents of Campfire Cannabis will randomly patrol the perimeter of the Premise to provide a physical deterrent and monitor the perimeter of the Premise including the parking lot.

Through camera monitoring and random patrols, Campfire Cannabis will be able to prevent individuals from loitering or remaining on the Premises of the Premise if they are not engaging in an activity expressly or by necessary implication permitted by the Regulations and its enabling statute are allowed to remain on the Premises.

Secured Points of Entry

Each entry and exit point to the Premise which will be controlled by the ACMS and monitored by CCTV system. If it is determined that these doors are required to be fire/emergency egresses, they will have audio alarms and transmit an alarm to the Security Room. All activity related to entry and exit doors and limited-access area doors will be monitored and controlled by the electronic security systems and Campfire Cannabis security.

Customers, employees, and certain contractors, vendors and other authorized visitors will be allowed into the entrance mantrap by a Campfire Cannabis Agent. Access to the sales area will only be granted after the individual is confirmed to be a customer 21 years of age or older, active employee or authorized contractor, vendor, or visitor with legitimate business.

Individuals must remain in the check-in area until their identification, reason of business, verification, and authorization (or lack of) is verified by management. Only after an individual has completed the check-in process are they eligible to proceed to the next level of access. Individuals not able to complete this process will not be allowed to remain and must leave the Premise.

Door Hardware

All exterior doors and interior doors into restricted access or limited access areas will be protected by magnetic contacts connected to the security alarm system. These doors will provide a high degree of physical security and will require substantial force and/or time to compromise.

Doors leading into and exiting the entry vestibule will use high security magnetic locks. During business hours, the entrance door leading into the entry vestibule will remain unlocked. Customers that enter during business hours will be greeted by a security agent who will verify the customer's age prior to allowing access to the sales floor. The door leading into the sales floor will always remained locked. Interior doors that require access control will have electrified strikes.

Lighting

Safety lighting has been installed throughout the interior and exterior of the building. Proper lighting technology will be utilized to ensure optimal security surveillance (e.g., no sodium vapor lights) and eliminate any interference with the CCTV system.

Closed Circuit Television System (CCTV)

Campfire Cannabis CCTV system has been designed to ensure compliance with all the requirements outlined in 935 CMR 500.110 including, but not limited to:

a. Video cameras in all areas that may contain marijuana, at all points of entry and exit, and in all parking lots, which is appropriate for the normal lighting conditions of the area under surveillance;
b. Video Cameras are directed at all safes, vaults, sales areas and areas where marijuana is prepared, stored, handled or dispensed.
c. Video Cameras are angled so as to allow for the capture of clear and certain identification of any person entering or exiting the Premise or area;
d. All video cameras will record twenty-four hours a day;
e. The VMS ensures that the camera images will be available for immediate viewing by the Commission upon request and that it is retained for at least 90 calendar days.;
f. Recordings will not be destroyed or altered, and will be retained as long as necessary if Campfire Cannabis is aware of a pending criminal, civil, or administrative investigation, or legal proceeding for which the recording may contain relevant information;
g. The VMS has the ability to immediately produce a clear, color, still photo (live or recorded) with a date and time stamp embedded on all recordings. The date and time are synchronized and set correctly and shall not significantly obscure the picture;
h. The CCTV system and the VMS have ability to remain operational during a power outage; and
i. The VMS has the ability to produce a video recording that allows for the exporting of still images in an industry standard image format, including .jpg, .bmp, and .gif. Exported video has the ability to be archived in a proprietary format that ensures authentication of the

video and guarantees that no alteration of the recorded image has taken place. Exported video also has the ability to be saved in an industry standard file format that can be played on a standard computer operating system. All recordings will be erased or destroyed prior to disposal.

1. Overview of System

The CCTV system utilized at the Premise will meet or exceed the regulations. Safety and security purposes for the CCTV system include but are not limited to:

a. Protection of individuals, including employees, contractors, and deliveries;

b. Protection of property, marijuana product, building perimeter, entrances and exits, lobbies and corridors, receiving docks, and storage areas;

c. Verification of alarms and electronic security systems;

d. Video patrol of restricted areas; and

e. Investigation of criminal activity and disciplinary activity.

The CCTV system will be comprised of a Video Management System (VMS), a dedicated Local Area Network (LAN), LAN switches, a PC-based workstation, Network Video Recorders (NVRs), uninterruptible power supply (UPS) units, and Network IP cameras.

2. Video Management System

i. A comprehensive enterprise level Video Management System (VMS) comprised of a server-based, Network Video Recorder (NVR) that will be the backbone of the CCTV system and include the following features:

ii. Displays a date and time stamp on all recorded video;

iii. Can produce a digital video disk using an installed media recording drive that provides video viewable on any Windows PC;

iv. The ability to remain operational during a power outage;

v. Allow for the exporting of still images in standard image format;

vi. Archive of exported video to ensure authentication of video;

vii. Exported video shall have the ability to be saved in an industry standard format; and

viii. Allow recordings to be erased or destroyed prior to disposal.

The NVRs will record video signals from Network IP cameras that are connected to a dedicated LAN for the CCTV system and allow for video surveillance at the PC-based workstations throughout the Premise including in the security room. A local color high-resolution printer will be maintained and can be used to print a hard copy of any stored video camera image if necessary.

The VMS system will record at the full resolution of the Network IP cameras in high definition and will be designed to provide a minimum of 90 days of recording onsite on the NVR's. The VMS system will be integrated with the Access Control & Monitoring (ACMS) system to allow camera signals to be displayed upon alarm conditions. The VMS system will be configured to record at one frame per second 24 hours a day, 7 days a week and increase to 10 frames per second when motion is sensed.

In compliance with 935 CMR 500.110(5)(d), the NVR will be located in vertical racks in the Security Closet. The Security closet will be secured by an ACMS card reader, magnetic door contacts, and network IP dome cameras. The Security Closet is limited to persons that are essential to surveillance operations, law enforcement authorities, security system service personnel, and the Commission. A current list of authorized employees and service personnel that have access to the surveillance room will be available to the Commission upon request. The door to the Security Closet will remain locked at all times and the Security Closet will not be used for any other function.

3. Network IP Cameras and Camera Placement

The CCTV system will utilize fixed 3.0-megapixel Network IP (or similar) dome cameras with day/night and Wide Dynamic Range technology.

a. Fixed cameras will be installed to provide a consistent recorded image of all areas and avoid any physical obstructions;

b. High definition IP cameras are used in the Premise and provide usable video footage allowing true identification capabilities including high quality facial and body images;

c. Day/Night (D/N) and Wide Dynamic Range (WDR) technology will be included in camera locations that have low light levels or challenging lighting conditions in their field of views and will provide a minimum of 0.3 Lux to avoid backlighting;

d. Cameras will be angled to allow for facial recognition, the capture of clear and certain identification of any person entering or exiting the Marijuana Establishment or area; and

e. The inside of the Premise and the entire perimeter of the Premise will be under CCTV surveillance including but not limited to:

   i. All building entrances and exits;

   ii. All parking lot areas adjacent to the Premise to document activity;

   iii. All areas immediately adjacent to the Premise; and

   iv. The entire inside of the Premise, including all limited access areas and restricted areas where marijuana, MIPs, or marijuana by-products are prepared, stored, handled, packaged, or disposed including safes and vault locations.

4. Access to the Video Management System

Remote connection to the VMS for Campfire Cannabis management team and local law enforcement will be available 24 hours a day, 7 days a week via a Cable Modem that is connected to the internet and then connected to the NVRs. Authorized users will be able to access the VMS via: (i) a Windows computer with remote client software installed; (ii) a web-browser; or (iii) a mobile smart device including tablets and smartphones with remote client software installed.

5. System Backup, Testing and Maintenance

The CCTV system, NVR, and LAN switches will have battery backup to remain operational during a power outage. Our Management team will ensure that routine inspections and tests are performed at regular intervals (at least once every week) of the CCTV and VMS systems to ensure it is in good working order at all times. Any malfunction of any component of the CCTV system will be immediately reported to

the Premise Manager or designee and addressed. An archiving process will be implemented on a daily basis to ensure proper backup and storage of video. The CCTV system and its components will be under a 24 hour a day, 7 days a week maintenance agreement with a Licensed Commercial Security System contractor that will include monthly testing of all security systems.

Access Control & Monitoring System (ACMS)

A network-based, distributed database electronic access control and monitoring system (ACMS) will be installed at the Premise to serve as the engine of the integrated electronic security systems. Safety and security purposes for the ACMS include but are not limited to:

a. Supporting crime prevention and control objectives;
b. Ensuring a secure locked Premise for the manufacturing, processing and storage of marijuana;
c. Preventing the theft or diversion of marijuana;
d. Preventing unauthorized access;
e. Granting access based only on an authorized credential being presented;
f. Monitoring and documenting all requests for access;
g. Monitoring and alerts of alarm conditions based on alarm inputs including magnetic contacts;
h. Reducing the use of mechanical locks and keys that can be easily duplicated;
i. Integrating the various security systems including CCTV, SAS, etc. to allow for higher level functionality of all electronic security systems; and
j. Aiding in the investigation of criminal and disciplinary activity.

The ACMS for the Premise will be comprised of controllers, smart card readers, and smart cards that are connected to a communications server and then connected to PC-based workstation on the dedicated security LAN.

The ACMS will be cross connected with the security alarm system (SAS) so that communications with a central station that is listed by Underwriters Laboratories (UL) for alarm monitoring will take place automatically. Refer to the SAS narrative later in this security plan for further information about the SAS.

The ACMS combines point monitoring and access control with photo ID badging, network video recorder integration, alarm, and email/text message notification and threat level escalation. This is an enterprise level system. The system utilizes TCP/IP network communications to provide user interaction and real time monitoring to PC- based workstation located on the dedicated security LAN. This system integrates with the CCTV system and NVRs and allows NVR stored or live video to be accessed within the access control software. All video is transmitted across the security LAN connections. Any malfunction of any component or alarm input of the ACMS will be monitored using four (4) stage notifications that can provide an audible, text or visual notification of any failure in the system including alarm, trouble, ground, or open.

User groups will be configured within the ACMS to dictate what users will be granted access to specific locations and at what times. Advanced access control feature such as threat escalation and Mantrap door control will be implemented as follows:

a. Threat escalation – The ACMS will be programmed to update access control user groups and definitions real-time in the event of an alarm condition to further restrict or allow movement in the Premise.

The ACMS for the Premise will be listed by Underwriters Laboratories for access control (UL Standard 294) and proprietary alarm monitoring (UL Standard 1076). The ACMS will have battery backup to remain operational during a power outage. Doors and locks to restricted areas and limited access areas will be configured to remain locked and not release during a power outage unless required under fire/life safety standards. The CEO, COO or designee will ensure that management perform routine inspections and tests at regular intervals (at least once every week) of the ACMS to ensure it is in good working order at all times. The ACMS and its components will be under a 24 hour a day, 7 days a week maintenance agreement that will include monthly testing of all security devices.

1. Contactless Smart Card Reader

Select interior, and all exterior pedestrian doors will have contactless smart card readers to allow authorized individuals to access these areas. Presenting a contactless smart card credential to a reader will cause the system to unlock the door if the individual is authorized at that location and at that time.

These readers are powerfully secure with multi-layered security that ensures data authenticity and privacy and provides tamper-proof protection of keys/cryptographic operations. They are rated for an operating temperature range of -31 to 150 degrees Fahrenheit and have an environmental rating of IP65 therefore they can be surface mounted inside or outside. Higher security areas will have a combination contactless smart card reader and a keypad for a level two identification and authentication requiring an individual to present a credential (what you have) and a Personal Identification Number (what you know).

2. Employee Smart Card Credentials

All agents will be issued a contactless smart card. The HID iClass smart card will be attached to a neck lanyard holder that will also include the Marijuana Establishment Agent ID card. This will be worn by all agents at all times while on site. A Marijuana Establishment Agent must keep his or her identification card visible at all times when at the Premise.

Visitor Management

The Visitor Management log is located at the Reception Desk. When a visitor or contractor arrives, management will verify that the visitor was expected, and a visitor identification badge will be issued. The visitor's information, along with the time in, time out and escorting agents name will be written into the visitor logbook. This log shall be always available for inspection by the Commission. All visitor identification badges will be returned upon exit.

Security Alarm System (SAS)

The Campfire Cannabis SAS has been designed to ensure compliance with all the requirements outlined

in 935 CMR 500.110 including, but not limited to:

a. A perimeter alarm on all entry and exit points and perimeter windows;
b. A failure notification system that provides an audible, text, or visual notification of any failure in the surveillance system. The failure notification system shall provide an alert to designated employees within five minutes after the failure, either by telephone, email, or text message;
c. A duress alarm, panic alarm, or holdup alarm connected to local public safety or law enforcement authorities;

1. Overview of System

The previous described ACMS includes an intrusion alarm system and has a robust alarm monitoring capability including point monitoring and alarm email/text message notification.

The Security Alarm System (SAS) will be connected to outputs of the ACMS system

The SAS system is comprised of an alarm system control panel, zone expanders, alarm keypads, door contacts, motion sensors, glass break sensors and panic/hold up alarms.

2. System Components and Operation

The SAS will provide coverage of all entry points and perimeter windows in the Premise and all rooms with exteriors walls.

Both exterior doors and select interior doors will have magnetic door contacts installed to monitor the security of these doors. These contacts will be recessed mounted.

a. Motion Detectors

Every room with an exterior door, every room with an exterior wall, the vault and interior corridors will have motion installed to monitor the security of these areas. These motion detectors will have sensor data fusion technology which uses a sophisticated software algorithm to gather signals from five (5) sensors: two (2) pyro electric sensors, a range adaptive radar sensor, a room temperature sensor and a white light level sensor. The on-board microprocessor analyzes and compares the sensor data to make the most intelligent alarm decisions in the security industry. Detector design includes MANTIS (Multi-point Anti-mask with Integrated Spray detection) which uses patented prism lenses and active infrared detection to provide protection against all known forms of attack. MANTIS complies with the latest worldwide regulatory standard for detecting objects covering or placed in front of the detector. MANTIS is sensitive to materials regardless of texture or color, including fabric, paper, metal, plastic, tape and spray. When MANTIS identifies a masking material, the detector sends a supervision anti-masking signal to the control panel. Cover and wall tamper switches are included in this surface mounted detector.

b. SAS Control Panel

The SAS control panel is connected to the ACMS intrusion alarm zone programmed out so that communications with a UL listed remote central station takes place automatically. The SAS will provide authorized users with the ability to receive alerts from the panel to their cell phone, mobile device and/or email address including Arm/Disarm changes and all alarms. In addition to the primary alarm monitoring company, Campfire Cannabis will have a secondary SAS installed by a different security company to accomplish redundancy by utilizing a back-up alarm monitoring company that is not the

same company supplying the primary system. This back-up alarm monitoring company will have all the capabilities of the primary system. When an alarm is triggered, the monitoring company will notify the Salisbury Police Department of the alarm.

c. Alarm Keypad / Duress Alarm

Campfire Cannabis' Premise will have an alarm keypad installed to allow authorized arming/disarming and reporting the alarms of the SAS. This LCD display alarm keypad includes easy-to-use icons menus and distinct tones. A silent duress alarm will be sent to the central station if a duress code is entered in to the alarm keypad by an individual if they are forced to disarm this system.

d. Panic / Holdup Alarm

Campfire Cannabis will utilize wired Panic/Hold Up buttons that are installed on the wall in the vault, Security Room and at all POS stations so that they are convenient in the case of an emergency condition to allow for Agents to trigger a panic alarm. The Panic/Holdup alarm is an audible security alarm signal generated by the manual activation of the button intended to signal a life threatening or emergency situation requiring law enforcement response, or a holdup alarm, which means a silent alarm signal generated by the manual activation of the device intended to signal a robbery in progress.

3. SAS Testing and Maintenance

The SAS and all of its components have a battery backup to remain operational during a power outage (5 hours) and a contract with a local power supply company that will deliver a generator if the outage is expected to last more than 2 hours.

The COO, Premise Manager or designee will ensure that management perform routine inspections and tests at regular intervals (at least once every week) of the SAS to ensure it is always in good working order. The SAS and its components will be under a 24 hour a day, 7 days a week maintenance agreement that will include monthly testing of all security devices.

Power Outage

In the event of a power outage at the Premise a 12-volt battery backup system will supply at least 5 hours of power to all security systems. When a power interruption is detected a text and email message will be transmitted through the SAS system to the designated on-call emergency response team member. The power interruption will be investigated by the emergency response team member, and they will ensure that all security systems remain operational.

For an extended power outage, we have a contract with a local power supply company for a gas-powered generator to be delivered to ensure all security systems remain operational.

In the event of a catastrophic power failure, Campfire Cannabis executive management team will schedule and maintain 24 hours a day manned security at the Premise.

Vault/Safe

Campfire Cannabis has designed and built a secure vault in our Premise. The vault will be constructed of enhanced building materials that may include steel reinforced concrete block, steel plates, steel security mesh with cement board and/or other materials approved by the Commission. This vault will be used to

store all marijuana and marijuana products during all non-business hours and all marijuana and marijuana products that are not allocated to the POS stations during business hours. The interior and exterior of the vault will be under CCTV monitoring and access to the vault requires RFID card access. The vault will have a hardwired panic alarm install inside the vault.

Security Personnel

Campfire Cannabis will provide dedicated Security Agents for all of our Premises. We are hoping to hire recently retired local law enforcement officers to fill these positions. All Managers of Campfire Cannabis will also be also trained as security personnel. There will always be a Security Agent or Manger on site at all times that the Premise is open and manage the security room, visitor log, and monitor the CCTV and ACMS systems. They will also conduct video surveillance of the interior and exterior of the Premise and make physical rounds of the entire property.

Policies and Procedures

Along with this security plan, Campfire Cannabis will develop and implement additional policies and procedures regarding Safety and Security that will require compliance with all safety, security anti-diversion and administrative requirements that can help eliminate or reduce the chance of diversion, theft and loss from occurring. These policies and procedures include, but are not limited to:

1. Prevention of Diversion;
2. Opening and Closing Procedures;
3. Emergency Plan;
4. Robbery;
5. Prevention of Sales to Minors;
6. Inventory and Tracking Compliance;
7. Acceptable forms of Identification;
8. Compliance with Local and State Licensing and Enforcement;
9. Incident and notification requirements ;
10. Health and safety standards;
11. Maintenance of records;
12. Prohibited purchases and practices; and
13. Any other Policies and Procedures required or requested by the Commission, our host community's, or other regulatory authority.

Engagement with Local Law Enforcement

Campfire Cannabis has created a partnership with the Salisbury Police Department. We have met regularly with representatives of the Salisbury Police Department during the design and construction phase to ensure that the security infrastructure that we install is acceptable to the Police Departments.

We have engaged with local Police for their input in drafting our policies and procedures and request their input, guidance and approval.

Once operational, Campfire Cannabis will continue to engage the local Police Departments to discuss and amend our Policies and Procedures if required and to keep an open line of communication.

Emergency/After Hours Contact Information

Name	Phone Number
Anand H. Patel	516-776-2305
Neel Patel	203-885-8907
Nehar Patel	203-456-4359

Attachment 9

Emergency SOP

Campfire Cannabis

West Boylston, MA | Salisbury, MA

hello@campfirecannabis.com

Emergency SOP

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Emergency Procedure Plan

for

Campfire Cannabis

I. OBJECTIVE

The Campfire Cannabis Emergency Procedure Plan is designed to comply with the Occupational Safety and Health Administration's (OSHA) Emergency Action Plan Standard, 29 CFR 1910.38, by preparing staff to identify, and properly and reasonably react to emergency situations. This plan is aimed to minimize exposure to injurious situations, injury or loss of human life and company assets. This shall be achieved by training employees, procuring, and maintaining necessary equipment, and assigning responsibilities. This plan applies to all emergencies that may reasonably be expected to occur at a Campfire Cannabis facility.

Common sources of emergencies include - fires, explosions, floods, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances, and workplace violence.

II. ASSIGNMENT OF RESPONSIBILITY

A. Emergency Plan Manager

The Head of Security shall manage the Emergency Procedure Plan for Campfire Cannabis. The Head of Security or designee shall maintain all training records pertaining to this Plan. The plan manager is responsible for scheduling routine tests of the emergency notification system with the appropriate authorities.

The Head of Security of designees acting as the Emergency Plan Manager shall also coordinate with local public resources, such as police department, fire department and emergency medical personnel, to ensure that they are prepared to respond as detailed in this plan.

B. Emergency Plan Coordinators

Campfire Cannabis Emergency Team members:

Primary Name and Position	Primary Phone #
Anand Patel – CEO / Owner / Operator	516-776-2305
Neel Patel – COO / Operator	203-885-8907
Nehar Patel – CBO / Operator	203-456-4359

The Emergency Team members are responsible for executing the procedures in this plan in the event of an emergency.

A list of staff members that are disabled or may otherwise be in need of assistance during an emergency event shall be identifies and incorporated into the Plan. The following individuals shall be responsible for assisting employees who have disabilities or may require assistance during an evacuation:

Person requiring assistance	Work station phone	Assigned assistant phone	Alternate Assistant Phone	Misc. Information

C. **Management**

Campfire Cannabis will provide suitable equipment and training with that equipment that, when used properly, will minimize or eliminate risk of injury to employees in the event an emergency arises. Campfire Cannabis will ensure proper adherence to this Plan through regular reviews and trainings.

D. **Supervisors**

Supervisors shall follow and ensure that their employees shall follow the Plan and are trained in the procedures outlined in this plan.

E. **Employees**

Employees are responsible for understanding and following the procedures described in this Plan.

F. **Contractors**

Contract employees are responsible for complying with the Plan and shall be provided the training described herein by the Head of Security or designee.

III. PLAN IMPLEMENTATION

A. **Reporting Fire and other Emergency Situations**

All fires and emergency situations will be reported immediately to the appropriate emergency response personnel by **dialing 911**. After reporting the emergency to the 911 call center, the Head of Security or the Managing Guide must be notified by one of the following means:

1. verbally as soon as possible;
2. by telephone; or
3. any other means

Emergency Numbers

1.	Fire:	911
2.	Police:	911
3.	Ambulance/EMS:	911

No employee shall attempt to fight a fire that has passed the initial stage (that which can be put out with a fire extinguisher). No employee will attempt to enter a burning building to conduct search and rescue. These Procedures shall be left to emergency services professionals who have the necessary training, equipment, and experience (such as the fire department or emergency medical professionals).

B. **Informing Campfire Cannabis staff of Fires and Emergency Situations**

In the event of a fire or emergency situation, the Managing Guide shall ensure that all employees are notified as soon as possible using the building alarm system, portable radios and intercom systems. The Managing Guide shall provide special instructions to all employees via voice commands and/or the public address system.

All employees shall gather at the emergency assembly area to ensure that all employees are accounted for and that this information can be relayed to Emergency Responders.

If a fire or emergency situation occurs after normal business hours, The Head of Security or their designee shall contact all employees not on shift of future work status, as the situation requires

C. **Corporate Notification**

The Managing Guide shall as soon as reasonably possible contact the Head of Security, COO and CEO with information pertaining to the incident including but not limited to, employee injuries and/or loss of life, property damages, theft, or product losses and if media coverage of the situation is expected.

D. **Emergency Contact Information**

The Head of Security or designee in cooperation with Human Resources shall maintain a list of all employees' personal emergency contact information and shall keep a secure list for easy access in the event of an emergency.

E. **Evacuation Routes**

Emergency evacuation escape route plans are posted in designated areas throughout Campfire Cannabis facilities.

In the event that a fire/emergency alarm is sounded or instructions for evacuation are given, all employees (except those noted in Part III.F of this plan) shall immediately exit the building(s) at the nearest exits as shown in the escape route plans and shall meet as soon as possible at the Designated Assembly Area. Employees with offices shall close the doors (unlocked) as they exit the area.

Mobility impaired employees and their assigned assistants will gather at the Designated Area within the building to ensure safe evacuation in the pre-determined fashion.

F. **Securing Property and Equipment**

In the event that evacuation of the premises is necessary, some items may need to be secured to prevent further detriment to the facility and personnel on hand (such as securing confidential/irreplaceable records, or securing regulated products. Only the following individuals may remain in the building for the prescribed amount of time to secure the property and equipment to which they have been assigned

Name	**Property or Equipment to Secure**	**Location of Property or Equipment**	**Estimated time to complete security process**
Head of Security or Designee	Marijuana and MIP's and cash	TBD	5 Minutes
Dispensary Operations Manager	All customer and employee Information	POS Stations, Security office	5 minutes

All individuals remaining behind to shut down critical systems or utilities shall be capable of recognizing when to abandon the operation or task. The individuals shall exit the facility once the property and/or equipment has been secured, or the situation becomes too dangerous to remain, these individuals shall exit the building by the nearest escape route as soon as possible and meet the remainder of the employees at the Designated Assembly Area.

G. **Advanced Medical Care**

Under no circumstances shall an employee provide advanced medical care and treatment unless professionally trained to do so. These situations shall be left to emergency services professionals, who have the necessary training, equipment, and experience. Untrained individuals may endanger themselves and/or those they are trying to assist.

H. **Accounting for Employees/Visitors After Evacuation**

Once an evacuation has occurred, the Dispensary Operations Manager shall account for each employee/visitor assigned to them at the Designated Assembly Area. Each employee is responsible for reporting to the Managing Guide so an accurate head count can be made. All employee counts shall then be reported to the Plan Manager as soon as practicable.

I. **Re-entry**

Once the building has been evacuated, no one shall re-enter the building for any reason, except for designated and professionally trained rescue personnel (such as fire department or emergency medical professionals).

All employees shall remain at the Designated Assembly Area until the fire department or other emergency response agency notifies the Head of Security or the Managing Guide that either:

1. the building is safe for re-entry, in which case personnel shall return to their workstations; or
2. the building/assembly area is not safe, in which case personnel shall be instructed by Head of Security or designee on how/when to vacate the premises.

J. **Sheltering in Place**

If chemical, biological, or radiological contaminants are released into the environment in such quantity and/or proximity to a Campfire Cannabis facility, authorities may determine that is safer to remain indoors rather than to evacuate employees. The Head of Security or Managing Guide will announce Shelter in Place status by public address system or other means of immediate notification available at worksite.

1. The Managing Guide shall immediately close and secure the business. If there are customers, clients, or visitors in the facility, they shall be advised to stay in the building for their safety.

2. Unless there is an imminent threat, employees, customers, clients, and visitors shall call their emergency contacts to let them know where they are and that they are safe.

3. The Managing Guide or designee shall turn on call-forwarding or alternative telephone answering systems or services. The recording for voice mail or automated attendant shall be changed to indicate that the business is closed, and that staff and visitors will be remaining in the building until authorities advise that it is safe to leave.

4. The Managing Guide or designee shall quickly lock exterior doors and close windows, air vents, and fireplace dampers. Responsible Person(s) familiar with the building's mechanical systems shall turn off, seal, or disable all fans and heating and air conditioning systems especially those systems that automatically provide for exchange of inside air with outside air. If there is a danger of explosion, the Managing Guide shall close the window shades, blinds, or curtains.

5. The Managing Guide shall gather essential disaster supplies

    - bottled water
    - battery-powered radios
    - first-aid supplies
    - flashlights
    - batteries,
    - duct tape
    - plastic sheeting
    - plastic garbage bags

Each facility shall store the above items in the Managing Guide's office and shall take them to the Shelter in Place Location(s) within the building. Shelter in Place Locations shall be determined by factors specific to the facility. All employees, customers, and visitors shall move immediately to the Shelter in Place

Location(s) within the building. In the case of chemical, biological, or radiological contaminants all windows, doors, and vents shall be sealed with plastic sheeting and duct tape.

6. The Managing Guide shall write down the names of everyone in the room, and call the designated emergency contact outside of the building to report who is in the room, and their affiliations with Campfire Cannabis (employee, visitor, client, and customer).

7. The Managing Guide or their designee shall monitor telephone, radio, and television and Internet reports for further instructions from authorities to determine when it is safe to leave the building.

8. The Managing Guide shall remain in communication with the designated emergency contact and provide situation reports, at minimum, of thirty (30) minute intervals.

K. **Severe Weather**

The Head of Security or designee shall announce severe weather alerts (such as tornados) by public address system or other means of immediate notification available at the facility. All employees shall immediately retreat to the Shelter in Place location until the threat of severe weather has passed as communicated by the Head of Security or designee.

L. **Robbery**

Any Campfire Cannabis staff member who is confronted by an individual(s) that communicates to them by force or the threat of force their intent to take money or property shall;

1. Cooperate with the Robber
2. Give them exactly what they want
3. Weapons or implied weapons should be treated as real and loaded
4. Not make loud noises or sudden moves
5. Try to alert other employees
6. Activate silent “holdup” alarm (only if activation of the alarm will not be noticed by the robber)
7. Carefully observe the robber, make eye contact and mental notes on appearance
8. Look for accomplices
9. Make mental notes of weapon- type, size and size
10. Observe and identify vehicle and direction of travel
    a. Color
    b. Make
    c. Model
    d. Old or New
    e. License Plate (State, Color, Number)

f. Unusual Characteristics or Body Damage

After a robbery or attempted robbery, and after the individual(s) has exited the RMD:

1. The Managing Guide or their designee shall immediately call 911, even if the silent holdup alarm has been activated, and notify the 911 operator that:
    a. A robbery has just occurred at (RMD Address)
    b. Identify Yourself
    c. Stay on the Phone
    d. Answer Questions about the Robbery
    e. Descriptions of Robbers
    f. Weapons
    g. Injuries
    h. How long ago
    i. Vehicles
    j. Direction of travel
2. The Managing Guide shall;
    a. Lock all the doors
    b. Calmly tell customers a robbery has just occurred
    c. Stop all business transactions
    d. Ask all witnesses to stay until Police arrive
    e. Not touch anything in the robbery area
    f. Not allow customers, friends, media into business until Law Enforcement arrives
    g. Notify the Head of Security
    h. Have employees use Suspect ID Chart (Appendix B)

IV. TRAINING

A. **Employee Training**

All employees shall receive instruction on this Emergency Procedure Plan as part of New Employee Orientation upon hire. Additional training shall be provided:

1. when there are any changes to the plan and/or facility;
2. when an employee's responsibilities change; and
3. annually as refresher training.

Items to be reviewed during the training include:

1. proper housekeeping;
2. fire prevention practices;
3. fire extinguisher locations, usage, and limitations;
4. threats, hazards, and protective Procedures;

5. means of reporting fires and other emergencies;
6. names of Emergency Procedure Plan Manager and Coordinators;
7. individual responsibilities;
8. alarm systems;
9. escape routes and procedures;
10. emergency shut-down procedures;
11. procedures for accounting for employees and visitors;
12. closing doors;
13. sheltering in place;
14. severe weather procedures; and
15. Emergency Procedure Plan availability.
16. robbery prevention and procedures

B. **Fire/Evacuation Drills**

Fire/Evacuation drills shall be conducted at least annually, and shall be conducted in coordination with local police and fire departments. Additional drills shall be conducted if physical properties of the business change, processes change, or as otherwise deemed necessary.

C. **Training Records**

The Human Resources Manager shall document all training pertaining to this plan and shall maintain digital and paper copies for at least 2 years.

V. PLAN EVALUATION

This Plan shall be reviewed by the Head of Security annually, or as needed, if changes to a facility are made. Following each fire drill, the Head of Security shall evaluate the drill for effectiveness and weaknesses in the plan and shall implement changes to improve it.

Appendix A

Emergency Action Plan Checklist

Courtesy of the Occupational Safety and Health Administration (OSHA)

General Issues		
☐	Does the plan consider all natural or man-made emergencies that could disrupt your workplace?	Common sources of emergencies identified in emergency procedure plans include - fires, explosions, floods, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances, and workplace violence.
☐	Does the plan consider all potential internal sources of emergencies that could disrupt your workplace?	Conduct a hazard assessment of the workplace to identify any physical or chemical hazards that may exist and could cause an emergency.
☐	Does the plan consider the impact of these internal and external emergencies on the workplace's operations and is the response tailored to the workplace?	Brainstorm worst-case scenarios asking yourself what you would do and what would be the likely impact on your operation and device appropriate responses.
☐	Does the plan contain a list of key personnel with contact information as well as contact information for local emergency responders, agencies and contractors?	Keep your list of key contacts current and make provisions for an emergency communications system such as a cellular phone, a portable radio unit, or other means so that contact with local law enforcement, the fire department, and others can be swift.
☐	Does the plan contain the names, titles, departments, and telephone numbers of individuals to contact for additional information or an explanation of duties and responsibilities under the plan?	List names and contact information for individuals responsible for implementation of the plan.
☐	Does the plan address how rescue operations will be performed?	Unless you are a large employer handling hazardous materials and processes or have employees regularly working in hazardous situations, you will probably choose to rely on local public resources, such as the fire department, who are trained, equipped, and certified to conduct rescues. Make sure any external department or agency identified in your plan is prepared to respond as outlined in your plan. Untrained individuals may endanger themselves and those they are trying to rescue.

☐	Does the plan address how medical assistance will be provided?	Most small employers do not have a formal internal medical program and make arrangements with medical clinics or facilities close by to handle emergency. If an infirmary, clinic, or hospital is not close to your workplace, ensure that onsite person(s) have adequate training in first aid. The American Red Cross, some insurance providers, local safety councils, fire departments, or other resources may be able to provide this training. Treatment of a serious injury should begin within 3 to 4 minutes of the accident. Consult with a physician to order appropriate first-aid supplies for emergencies. Establish a relationship with a local ambulance service so transportation is readily available for emergencies.
☐	Does the plan identify how or where personal information on employees can be obtained in an emergency?	In the event of an emergency, it could be important to have ready access to important personal information about your employees. This includes their home telephone numbers, the names and telephone numbers of their next of kin, and medical information.
Evacuation Policy and Procedure		
☐	Does the plan identify the conditions under which an evacuation would be necessary?	The plan should identify the different types of situations that will require an evacuation of the workplace. This might include a fire, earthquake, or chemical spill. The extent of evacuation may be different for different types of hazards.
☐	Does the plan identify a clear chain of command and designate a person authorized to order an evacuation or shutdown of operations?	It is common practice to select a responsible individual to lead and coordinate your emergency plan and evacuation. It is critical that employees know who the coordinator is and understand that this person has the authority to make decisions during emergencies. The coordinator should be responsible for assessing the situation to determine whether an emergency exists requiring activation of the emergency procedures, overseeing emergency procedures, notifying and coordinating with outside emergency services, and directing shutdown of utilities or plant operations if necessary.
☐	Does the plan address the types of Procedures expected of different employees for the various types of potential emergencies?	The plan may specify different Procedures for employees depending on the emergency. For example, employers may want to have employees assemble in one area of the workplace if it is threatened by a tornado or earthquake but evacuate to an exterior location during a fire.
☐	Does the plan designate who, if anyone will stay to shut down critical operations during an evacuation?	You may want to include in your plan locations where utilities (such as electrical and gas utilities) can be shut down for all or part of the facility. All individuals remaining behind to shut down critical systems or utilities must be capable of recognizing when to abandon the operation or task and evacuate themselves.
☐	Does the plan outline specific evacuation routes and exits and are these posted in the workplace where they are easily accessible to all employees?	Most employers create maps from floor diagrams with arrows that designate the exit route assignments. These maps should include locations of exits, assembly points and equipment (such as fire extinguishers, first aid kits, spill kits) that may be needed in an emergency. Exit routes should be clearly marked and well lit, wide enough to accommodate the number

		of evacuating personnel, unobstructed and clear of debris at all times, and unlikely to expose evacuating personnel to additional hazards.
☐	Does the plan address procedures for assisting people during evacuations, particularly those with disabilities or who do not speak English?	Many employers designate individuals as evacuation wardens to help move employees from danger to safe areas during an emergency. Generally, one warden for every 20 employees should be adequate, and the appropriate number of wardens should be available at all times during working hours. Wardens may be responsible for checking offices and bathrooms before being the last person to exit an area as well as ensuring that fire doors are closed when exiting. Employees designated to assist in emergency evacuation procedures should be trained in the complete workplace layout and various alternative escape routes. Employees designated to assist in emergencies should be made aware of employees with special needs (who may require extra assistance during an evacuation), how to use the buddy system, and any hazardous areas to avoid during an emergency evacuation.
☐	Does the plan identify one or more assembly areas (as necessary for different types of emergencies) where employees will gather and a method for accounting for all employees?	Accounting for all employees following an evacuation is critical. Confusion in the assembly areas can lead to delays in rescuing anyone trapped in the building, or unnecessary and dangerous search-and-rescue operations. To ensure the fastest, most accurate accounting of your employees, consider taking a head count after the evacuation. The names and last known locations of anyone not accounted for should be passed on to the official in charge.
☐	Does the plan address how visitors will be assisted in evacuation and accounted for?	Some employers have all visitors and contractors sign in when entering the workplace. The hosts and/or area wardens, if established, are often tasked with assisting these individuals evacuate safely.

Reporting Emergencies and Alerting Employees in an Emergency		
☐	Does the plan identify a preferred method for reporting fires and other emergencies?	Dialing 911 is a common method for reporting emergencies if external responders are utilized. Internal numbers may be used. Internal numbers are sometimes connected to intercom systems so that coded announcements may be made. In some cases employees are requested to activate manual pull stations or other alarm systems.
☐	Does the plan describe the method to be used to alert employees, including disabled workers, to evacuate or take other Procedure?	Make sure alarms are distinctive and recognized by all employees as a signal to evacuate the work area or perform other Procedures identified in your plan. Sequences of horn blows or different types of alarms (bells, horns, etc.) can be used to signal different responses or Procedures from employees. Consider making available an emergency communications system, such as a public address system, for broadcasting emergency information to employees. Ideally alarms will be able to be heard, seen, or otherwise perceived by everyone in the workplace including those that may be blind or deaf. Otherwise floor wardens or others must be tasked with ensuring all employees are notified. You might want to consider providing an auxiliary power supply in the event of an electrical failure.

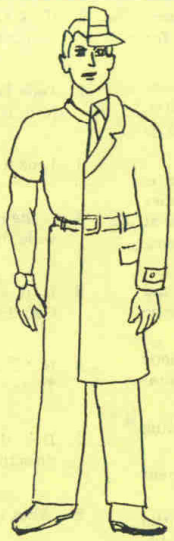
Employee Training and Drills		
☐	Does the plan identify how and when employees will be trained so that they understand the types of emergencies that may occur, their responsibilities, and Procedures as outlined in the plan?	Training should be offered to employees when you develop your initial plan and when new employees are hired. Employees should be retrained when your plan changes due to a change in the layout or design of the facility, when new equipment, hazardous materials, or processes are introduced that affect evacuation routes, or when new types of hazards are introduced that require special Procedures. General training for your employees should address the following: • individual roles and responsibilities; • threats, hazards, and protective Procedures; • notification, warning, and communications procedures; • emergency response procedures; • evacuation, shelter, and accountability procedures; • location and use of common emergency equipment; and • emergency shutdown procedures. You may also need to provide additional training to your employees (i.e. first aid procedures, portable fire extinguisher use, etc.) depending on the responsibilities allocated employees in your plan.

☐	Does the plan address how and when retraining will be conducted?	If training is not reinforced it will be forgotten. Consider retraining employees annually.
☐	Does the plan address if and how often drills will be conducted?	Once you have reviewed your emergency Procedure plan with your employees and everyone has had the proper training, it is a good idea to hold practice drills as often as necessary to keep employees prepared. Include outside resources such as fire and police departments when possible. After each drill, gather management and employees to evaluate the effectiveness of the drill. Identify the strengths and weaknesses of your plan and work to improve it.

Appendix B

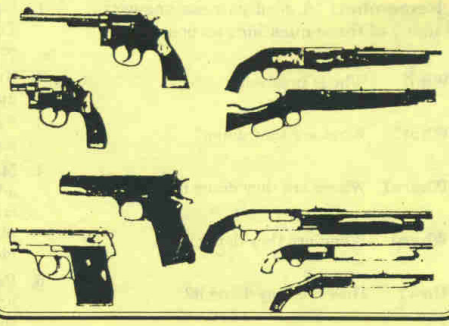
SUSPECT DESCRIPTION:

August 1995

Sex:	Tattoos/ Scars/ Marks:	Complexion:
Race:		Hat (Color & Type):
Age:		Jewelry:
Height:		
Weight:		Coat/ Jacket:
Build:		Shirt/ Blouse:
Hair Color:		Pants/ Dress/ Skirt:
Hair Length:		
Facial Hair:	Additional Information:	Shoes:
Eyes/ Glasses:		

WEAPONS:

Circle the Closest



VEHICLE:

Year:	License #:
Make:	State:
Model:	Additional Information:
Color (Top & Bottom):	

Attachment 10

Waste Disposal SOP

Campfire Cannabis

West Boylston, MA | Salisbury, MA

hello@campfirecannabis.com

Waste Disposal SOP

Policy: To provide clear and concise instructions for Campfire Cannabis employees who will be involved with the waste and waste disposal that are in compliance with the current Marijuana regulations set forth by the State of Massachusetts.

Requirements

1. Litter and waste will be properly removed, disposed of so as to minimize the development of odor, and minimize the potential for the waste attracting and harboring pests.
2. All waste, including waste composed of or containing finished marijuana, shall be stored, secured, and managed in accordance with state and local statues, ordinances, and regulations.
3. It is the responsibility of the CEO or designee to ensure that when marijuana is disposed of, that a written record of the date, the type and quantity disposed of, the manner of disposal, and the persons present during the disposal, with their signatures.
4. The Dispensary Manager is responsible for maintaining all waste records for a period of two years.
5. The Dispensary Manager and Inventory Personnel will ensure that marijuana waste and non-marijuana waste is kept and stored separately.
6. The Inventory Personnel will ensure all waste and marijuana waste that is rendered unusable is disposed of in a solid waste management facility that holds a valid permit issued by the DEP or by the appropriate state agency in the state of Massachusetts.
7. Our waste management system is compliant with 935 CMR 500.105(12)
8. Marijuana Waste Collection and Tracking
    a. The Dispensary Manager will ensure the collection of all marijuana waste is tracked and documented. We expect marijuana waste will only be generated by:
        i. Marijuana products that are returned by consumers
        ii. Expired Marijuana
        iii. Marijuana products which packages have been compromised
        iv. Marijuana products which have otherwise been determined to not be sold.
    b. Marijuana Waste will be determined by a Manager or designee.
    c. All marijuana that is determined to be marijuana waste:
        i. Will be placed into plastic or mylar bags and sealed
        ii. Be entered into the Seed to Sale system, and METRC if required
        iii. Labeled
        iv. Placed into a hermetically sealed container in the vault to await transportation or destruction
9. Marijuana Waste Disposal
    a. Waste is managed by the Inventory Personnel.
    b. All waste must be logged in the waste log prior to being placed into the waste bin
    c. Product can only be wasted when Inventory Personnel is on duty.
    d. The Inventory Personnel must schedule and coordinate the time of waste and destruction with the Dispensary Manager.
10. Products that can be stored in the Waste Bin for wasting/destruction:

a. Damaged Products
    i. Example: broken packaging, leaking cartridges
b. Contaminated Products
    i. Example: flower that does not meet quality control standards
c. Expired Products
    i. Example: Products that have been in stock or are returned past their expiration date
d. Returns
    i. Example: Unused, excess, contaminated, or MIP's from a customer.
e. Secret Shopper Program
    i. Unannounced Purchase for Purpose of Investigative nature.

11. Storage of Marijuana and MIP for the Wasting and Destruction Process.
    a. Marijuana or marijuana products identified as waste will be delivered from the Floor Supervisor to the Inventory Personnel.
    b. Marijuana or marijuana products identified as waste will be stored in the Waste Bin.
    c. Waste information is recorded on the Waste Log.
        i. Flower Waste:
            1. Weigh on a certified scale on camera.
            2. Record the weight in grams in the Waste Log.
        ii. Non-Flower Waste:
            1. Edibles, cartridges, topicals, etc.
    d. Remove product from packaging. If necessary, use a plastic bag to protect the scale from product contamination.
        i. Weigh on certified scale on camera.
        ii. Record the weight in grams in the Waste Log.
        iii. Record the number of units "each" on the Waste Log
    e. Waste is secured in the "marijuana waste" bin, logged in the waste log and stored until destruction by the Inventory Personnel and Inventory Assistant.
    f. At no time will the contents of marijuana or a MIP be combined with another marijuana or MIP. All marijuana and MIP will be stored individually throughout the storage and Wasting/Destruction process.
12. Wasting and Destruction Process:
    a. Two Campfire Cannabis Agents must witness and document any destruction of marijuana.
    b. Documentation will be made on the Waste Log
    c. Marijuana waste shall be ground and mixed with other organic material (310 CMR 16.02) rendering it unusable for original purpose.
    d. For flower and hard edibles (pucks, lozenges, hard candy, bars, confections and other products that can be ground) the Inventory Personnel or designee will use the Waste Grinder and grind the product so that it is unusable or unrecognizable.
        i. Once the products have been ground, the Inventory Personnel or designee will mix the waste product with at least an equal weight of inert material such as dirt, cat litter, or sand so that the resulting mixture renders any Marijuana unusable for its original purpose.

e. For edibles or other products that cannot be easily ground in the Waste Grinder (gummies, caramels, rosin, etc.), the Inventory Personnel or designee will place these products in a plastic bag and mix with an inert material such as dirt, cat litter or sand and kneed the marijuana products into the inert material so that it is unusable and unrecognizable.
    i. Once the products have been kneaded into the inert material, the Inventory Personnel or designee will mix the waste product with at least an equal weight of additional inert material such as dirt, cat litter, or sand so that the resulting mixture renders any Marijuana unusable for its original purpose.
f. For vape carts, the Inventory Personnel or designee will place each vape cart that is slated for destruction in one or more plastic bag and destroy the vape cart with a hammer or pliers making the vape cart unusable.
    i. Once the vape carts have been destroyed, the Inventory Personnel or designee will mix the waste product with at least an equal weight of inert material such as dirt, cat litter, or sand so that the resulting mixture renders any Marijuana unusable for its original purpose.
g. For liquid marijuana products, the Inventory Personnel will empty the liquid contents into a separate container and add an equal or greater amount of inert material such as dirt, cat litter, or sand so that the resulting mixture renders any Marijuana unusable for its original purpose.
h. After the product is rendered unusable and destroyed, the product will be secured into a plastic trash bag and placed within the dumpster. The dumpster must be locked at all times, except for time it takes to fill or empty.

13. The Destruction of marijuana waste must be tracked by the Inventory Personnel on the Waste Log and singed by the Inventory Personnel or designee and one other Campfire Cannabis Agent.
14. METRC Adjustment:
    a. Adjust only after waste has been destroyed and removed from the building.
    b. Include a note with the following information.
        i. Date
        ii. Type
        iii. Quantity
        iv. Manner of Wasting and Destruction
        v. Location of Wasting and Destruction
        vi. Agents' names present during destruction.

Attachment 11

Cannabis Control Commission
COMMONWEALTH OF MASSACHUSETTS

GANESH WELLNESS, INC.

MRN282740

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

   Ganesh Wellness, Inc.
   d/b/a Campfire Cannabis
   238 Lafayette Road, Salisbury, MA 01952

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

   Retail

   The application was reopened one (1) time for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Type	Status	Location
Product Manufacturing	Provisional License	West Boylston
Retail	Provisional License	West Boylston

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Anand Patel	Owner / Partner
Nehar Patel	Executive / Officer
Neel Patel	Executive / Officer
Alpa Patel	Owner / Partner
Mita Patel	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role

Ganesh Holdings, LLC	Parent Company

6. Applicant's priority status:

   Expedited Applicant (Minority-Owned Business, Woman-Owned Business)

7. The applicant and municipality executed a Host Community Agreement on May 13, 2019.

8. The applicant conducted a community outreach meeting on May 23, 2019 and provided documentation demonstrating compliance with Commission regulations.

9. The Commission received a municipal response from the municipality on June 29, 2020 stating the applicant was in compliance with all local ordinances or bylaws.

10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Give hiring preference to past or present residents of Worcester and Haverill; Commission-designated Economic Empowerment Priority applicants; Commission-designated Social Equity Program participants; Massachusetts residents who have past drug convictions; and Massachusetts residents with parents or spouses who have drug convictions.
2	Utilize at least 30% of suppliers, contractors and wholesale partners that are past or present residents of Worcester and Haverill; Commission-designated Economic Empowerment Priority applicants; Commission-designated Social Equity Program participants; Massachusetts residents who have past drug convictions; and Massachusetts residents with parents or spouses who have drug convictions.

SUITABILITY REVIEW

11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions

12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

13. The applicant states that it can be operational within three (3) months of receiving the provisional license(s).

14. The applicant's proposed hours of operation are the following:

Monday – Saturday: 10:00 a.m. – 9:00 p.m.
Sunday: 11:00 p.m. – 6:00 p.m.

15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.

16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit women (50%), minorities (25%-30%), veterans (5-10%), persons with a disability (5%-10%) and persons who are LGBTQ+ (5-10%) for its hiring initiatives.
2	Utilize and give priority to 30% of businesses that are minority, women, veteran, LGBTQ +, and persons with disabilities owned.

17. Summary of cultivation plan (if applicable):

    Not applicable.

18. Summary of products to be produced and/or sold (if applicable):

    Not applicable.

19. Plan for obtaining marijuana or marijuana products (if applicable):

    Ganesh Wellness, Inc. will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

1. Final license is subject to inspection to ascertain compliance with Commission regulations;
2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
3. The applicant shall cooperate with and provide information to Commission staff; and
4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.

Cannabis Control Commission
COMMONWEALTH OF MASSACHUSETTS

August 13, 2021

Ganesh Wellness, Inc.
MR282740
ganeshwellnessinc@gmail.com

NOTICE: MARIJUANA ESTABLISHMENT LICENSE RENEWAL APPROVED

WHY ARE YOU RECEIVING THIS NOTICE?

This letter provides notice that the Cannabis Control Commission approved the renewal of a license subject to the conditions listed below:

1. Upon renewal, the licensee shall submit a Plan to Positively Impact Disproportionately Harmed People that provides data from the licensed entity specific to this renewal, once operational.

If the licensee has yet to obtain or be approved for a final license, this notice shall serve as an updated license certificate. If the licensee has been approved for a final license previously, an updated license certificate will accompany this notice.

WHAT ARE YOUR NEXT STEPS?

The licensee is required to comply with the above conditions in the time frame indicated. If no time frame is indicated, the licensee is required to comply with the requirements within a reasonable time. Please send any documentation related to the requirements, via email, to licensing@cccmass.com. **In the subject line of the email, please indicate the following: "(Establishment Name) - (License Number) - Renewal Conditions". For example: "XYZ, Inc.-MR999900-Renewal Conditions".**

The licensee is required to remain in full compliance with the Commission's regulations on an ongoing basis. Please be advised that the Commission promulgated revised regulations effective as of November 1, 2019. The Commission's regulations can be found here: https://mass-cannabis-

control.com/wp-content/uploads/2019/11/935_CMR_500.000_Adult_Use_of_Marijuana_11.1.19.pdf. Additionally, please be advised that the licensee is subject to inspection, at any time without prior notice, to ensure full compliance with 935 CMR 500.000. 935 CMR 500.300(1).

As a reminder, licensees are required to renew their license annually. Licensees will receive an automated email notice 90 days prior, and 60 days prior, to the expiration of their license. License renewal applications shall be submitted 60 days prior to the expiration of the license. The Massachusetts Cannabis Industry Portal ("MassCIP") will show all licenses held and their respective expiration dates. For guidance on the requirements of the license renewal application, please visit: https://mass-cannabis-control.com/guidancedocuments/.

If there are any questions with regards to this notice, please contact the Commission's Enforcement staff at licensing@cccmass.com.

Sincerely,

Shawn Collins
Executive Director

Attachment 12

TOWN OF SALISBURY
AND GANESH WELLNESS, INC.
HOST COMMUNITY AGREEMENT

This HOST COMMUNITY AGREEMENT ("AGREEMENT") is entered into this 13th day of May 2019 by and between Ganesh Wellness, Inc., a Massachusetts corporation with a principal office address of 50 Congress St, Suite 420, Boston, MA 02109 ("the Company"), and the Town of Salisbury, a Massachusetts municipal corporation with a principal address of Town Hall, 5 Beach Road, Salisbury, MA 01952 ("the Town") (the Town and the Company, collectively, the "Parties" and individually, "Party").

WHEREAS, the Company wishes to locate a Recreational Marijuana Establishment for adult use dispensing facility at 238 Lafayette Road (but not a cultivation or processing facility) (the "Facility") in the Town in accordance with Chapter 55 of the Acts of 2017 and applicable regulations issued by the Massachusetts Cannabis Control Commission ("CCC"), 935 CMR 500.00, as such statute and regulations may be further amended and such approvals as may be issued by the Town in accordance with its Zoning Bylaw and other applicable local regulations; and

WHEREAS, the Company intends to provide certain benefits to the Town in the event that it receives the requisite license from the CCC or such other state licensing or monitoring authority, as the case may be, to operate a retail dispensing facility in Salisbury (the "License") and receives all required local permits and approvals from the Town; and

WHEREAS, the Parties intend by this Agreement to satisfy the provisions of G.L. c.94G, Section 3(d), applicable to the operation of a retail dispensary, such activities to be only done in accordance with the applicable state and local laws and regulations in the Town;

WHEREAS, notwithstanding the anticipated benefits to certain members of the community, the facility may impact Town resources in ways unique to its business and draw upon Town resources in a manner not shared by the general population.

NOW THEREFORE, in consideration of the mutual promises and covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Town agree as follows:

1. The Parties agree that the above Recitals are true and accurate and that they are incorporated herein and made a part hereof.

2. In the event that the Company obtains the requisite licenses and/or approvals as may be required for the operation of a retail dispensary, and receives any and all necessary and required permits and licenses of the Town, and at the expiration of any final appeal period related thereto, said matter not being appealed further, which permits and/or licenses allow the Company to locate, occupy and operate the facility in the Town, then the Company agrees to provide the following Annual Payments:

A. Community Impact Fee

The Company anticipates that the Town will incur additional expenses and impacts on the Town's road and other infrastructure systems, law enforcement, fire protection services, inspectional services, and permitting and consulting services, as well as unforeseen impacts on the Town. Accordingly, in order to mitigate the financial impact on the Town and use of Town resources, the Company agrees to pay an Annual Community Impact Fee to the Town, in the amount and under the terms provided herein.

1. Company shall annually pay an Annual Community Impact Fee in an amount equal to three percent (3%) of gross sales from adult-use marijuana and marijuana product sales at the Facility. The term "gross sales" shall mean the total of all sales transactions of the Facility without limitation, whether wholesale or retail, and shall include but not be limited to all sales occurring at the Facility, including the sale of marijuana and marijuana infused products sold by the Facility. In the event that the Facility is not allowed to operate 7 days per week, the percentage shall be two and a half percent (2.5%) of gross sales. The Company shall notify the Town in writing when the Company commences sales within the Town.

2. The Annual Community Impact Fee shall be made annually within sixty (60) days following the end of each twelve (12) months of operation and shall continue for a period of five (5) years.

3. In addition to the Annual Community Impact Fee, in the first year of operation the Company shall pay a total sum of two hundred thousand dollars ($200,000), paid over three (3) one-time payments after each of the following milestones: (1) twenty-five thousand dollars ($25,000) due upon execution of this Agreement by both Parties; (2) fifty thousand dollars ($50,000) due upon the receipt of all necessary permits, including, but not limited to, Special Permits and occupancy permits, issued by the Town and required to commence operation of a Retail Marijuana Establishment at the Facility; and (3) one-hundred and twenty-five thousand dollars ($125,000) due after the end of the first year of operation at the Facility. The three (3) payments referenced above shall be made within sixty (60) days following the end of each stated milestone.

4. The Town shall use the above referenced payments in its sole discretion, but shall make a good faith effort to allocate said payments to offset costs related to road and other infrastructure systems, law enforcement, fire protection services, inspectional services, public health and addiction services and permitting and consulting services, as well as unforeseen impacts upon the Town. While the purpose of these payments is to assist the Town in addressing any public health, safety and other effects or impacts the

dispensing facility may have on the Town, the Town may expend the above-referenced payments at its sole and absolute discretion.

B. Additional Costs, Payments and Reimbursements

1. Permit and Connection Fees: The Company hereby acknowledges and accepts, and waives all rights to challenge, contest or appeal, the Town's building permit fee and other permit application fees, sewer and water connection fees, and all other local charges and fees generally applicable to other commercial developments in the Town.

2. Late Payment Penalty: The Company acknowledges that time is of the essence with respect to their timely payment of all funds required under Section 2 of this Agreement. In the event that any such payments are not fully made with ten (10) days of the date they are due, the Company shall be required to pay the Town a late payment penalty equal to two percent (2%) per month of such required payments.

C. Annual Charitable/Non-Profit Contributions

The Company, in addition to any funds specified herein, shall annually contribute to public local charities/non-profit organizations in the Town an amount no less than thirty-five thousand dollars ($35,000), said charities/non-profit organizations to be determined at the discretion of the Company. The Annual Charitable Non/Profit Contribution shall be made annually beginning on the first anniversary following the commencement of the operations, and shall continue for the term of this Agreement.

D. Annual Reporting for Host Community Impact Fees

1. The Company shall submit annual financial statements to the Town within thirty (30) days after the payment of its Annual Community Impact Fee with a certification of its annual sales. The Company shall maintain books, financial records, and other compilations of data pertaining to the requirements of this Agreement in accordance with standard accounting practices and any applicable regulations or guidelines of the CCC. All records shall be kept for a period of at least seven (7) years. Upon request by the Town, the Company shall provide the Town with the same access to its financial records (to be treated as confidential, to the extent allowed by law) as it is required by the CCC and Department of Revenue for purposes of obtaining and maintaining a license for the Facility.

2. The terms of this Agreement shall be renegotiated by the Company and the Town in good faith following five (5) years of continuous operation of the retail dispensing facility. Any renegotiation of this Agreement shall include a review of positive and negative impacts upon the Town, its residents, and businesses resulting from operation of the Facility, including, without

limitation, community health, associated business growth, traffic, crime, use of Town resources, proximate property value impacts, and other documented impacts.

E. Other Provisions

1. The Company agrees to make good-faith and reasonable efforts, wherein such efforts are in the Company's control, to receive the requisite license(s) from the CCC and/or such other state licensing or monitoring authority, as the case may be, to operate the Facility in the Town. Accordingly, the Company agrees to submit an application for a license to operate a Marijuana Establishment at the Facility within thirty (30) days of execution of this Agreement by both Parties. Further, the Company agrees to make good-faith and reasonable efforts, wherein such efforts are in the Company's control, to commence construction at the Facility within thirty (30) days of receiving a provisional license from the CCC.

2. Except for senior management, and to the extent such practice and its implementation are consistent with federal, state, and municipal laws and regulations, the Company shall use good faith efforts to ensure local hiring of Town residents when such Town residents are properly qualified. The Company believes a fair wage makes good business, and thus, agrees to pay its employees at a rate of at least fifteen dollars ($15) an hour or at the state minimum wage, whichever is higher.

3. To the extent such practice and its implementation are consistent with federal, state, and municipal laws and regulations, the Company will make every effort in a legal and non-discriminatory manner to give priority to local businesses, suppliers, contractors, builders, and vendors in the provision of goods and services called for in the construction, maintenance, and continued operation of the Facility when such contractors and suppliers are properly qualified and price competitive and shall use good faith efforts to hire Town residents.

4. At all times during the term of this Agreement, the Company agrees that the value of both real and personal property owned or operated by the Company shall be treated as taxable, and all applicable real estate and personal property taxes for that property shall be paid directly by the Company and the Company shall not object to or otherwise challenge the taxability of such real property and shall not seek a non-profit or agricultural exemption or reduction with respect to such taxes. The Company shall pay all local, state, and federal taxes as required to be paid by the Company in accordance with applicable law, as now existing or as hereafter may from time to time be enacted, repealed, or modified. The Company, shall not request any tax credits or subsidy from the Town for the Facility, and shall not object or otherwise challenge the taxability of the

Facility, including real and personal property. Notwithstanding the foregoing, (i) if personal property of the Company is determined to be non-taxable or partially non-taxable, a determination of which the Company agrees not to seek at any time during this Agreement, or (ii) if the value of such personal property of the Company is abated with the effect of reducing or eliminating the tax which would otherwise be due from the Company if assessed at fair cash value as defined in G.L. c¢. 59, §38, or (iii) if the Company is determined to be entitled or subject to exemption with the effect of reducing or eliminating the tax which would otherwise be due from the Company if not so exempted, then the Company shall pay to the Town an amount which when added to the taxes, if any, paid on such property, shall be equal to the taxes which would have been payable on such property at fair cash value and at the otherwise applicable tax rate, if there had been no abatement or exemption; this payment shall be in addition to the Community Impact Fee.

5. Diversion Mitigation: In cooperation with and to the extent requested by the Town's Police Department, and consistent with the Regulations, the Company shall work with the Town's Police Department to implement a CCC compliant diversion prevention plan, a form of which plan to be in place prior to the Sales Commencement Date. Such plan will include, but is not limited to, (i) training employees to be aware of, observe, and report any unusual behavior in patients, caregivers, customers, authorized visitors, or other Facility employees that may indicate the potential for diversion; (ii) strictly adhering to certification amounts, time periods, and adult-use purchase limits as applicable; (iii) rigorous customer identification and verification procedures; (iv) utilizing seed-to-sale tracking software to closely track all inventory at the Facility; and (v) refusing to complete a transaction if the customer appears to be under the influence of drugs or alcohol.

6. Security: To the extent requested by the Town's Police Department, and subject to the security and architectural review requirements of the CCC, or such other state licensing or monitoring authority, the Company shall work with the Town's Police Department in determining the placement of interior and exterior security cameras, so that cameras are located to provide an unobstructed view in each direction of the public way(s) on which the Facility is located. The Company shall maintain a cooperative relationship with the Police Department, including but not limited to periodic meetings to review operational concerns, security, delivery schedule and procedures, cooperation in investigations, and communication to the Police Department of any suspicious activities on or in the immediate vicinity of the Facility and with regard to any anti-diversion procedures.

7. The production, handling, marketing, and sale of edible marijuana-infused products ("MIPs") by the Company shall be in accordance with the

Regulations, including the packaging and labeling requirements set forth in 935 CMR 500.150, which, among other things, provide that edible MIPs shall not bear a reasonable resemblance to any product available for consumption as a commercially available candy.

8. The on-site consumption of marijuana products shall be prohibited.

9. The obligations of the Company and the Town recited herein are specifically contingent upon the Company obtaining an Adult Use Retail License for operation of a retail dispensing Facility in the Town, and the Company's receipt of any and all necessary local approvals to locate, occupy, and operate a retail dispensing facility in the Town.

10. This Agreement does not affect, limit, or control the authority of Town boards, commissions, and departments to carry out their respective powers and duties to decide upon and to issue, or deny, applicable permits and other approvals under the statutes and regulations of the Commonwealth, the General and Zoning Bylaws of the Town, or applicable regulations of those boards, commissions, and departments, or to enforce said statutes, Bylaws, and regulations. The Town, by entering into this Agreement, is not thereby required or obligated to issue such permits and approvals as may be necessary for the Facility to operate in the Town, or to refrain from enforcement action against the Company and/or its Facility for violation of the terms of said permits and approvals or said statutes, Bylaws, and regulations.

11. This Agreement is binding upon the parties hereto, their successors, assigns and legal representatives. Neither the Town nor the Company shall assign, sublet, or otherwise transfer any interest in the Agreement without the written consent of the other. The Company shall not assign, sublet, or otherwise transfer its rights nor delegate its obligations under this Agreement, in whole or in part, without the prior written consent of the Town, and shall not assign any of the monies payable under this Agreement, except by and with the written consent of the Town and shall not assign or obligate any of the monies payable under this Agreement, except by and with the written consent of the Town.

12. The Company agrees to comply with all laws, rules, regulations and orders applicable to the Facility, such provisions being incorporated herein by reference, and shall be responsible for obtaining all necessary licenses, permits, and approvals required for the performance of such work. The Company agrees not to assert or seek exemption as an agricultural use under the provisions of G.L. c.40A, §3 from the requirements of the Town's Zoning Bylaws.

13. Any and all notices, consents, demands, requests, approvals, or other communications required or permitted under this Agreement, shall be in writing and delivered by hand or mailed postage prepaid, return receipt requested, by registered or certified mail or by other reputable delivery service, to the parties at the addresses set forth on Page 1 or furnished from time to time in writing hereafter by one party to the other party. Any such notice or correspondence shall be deemed given when so delivered by hand, if so mailed, when deposited with the U.S. Postal Service or, if sent by private overnight or other delivery service, when deposited with such delivery service.

14. If any term or condition of this Agreement or any application thereof shall to any extent be held invalid, illegal, or unenforceable by a court of competent jurisdiction or by the CCC, the validity, legality, and enforceability of the remaining terms and conditions of this Agreement shall not be deemed affected thereby unless one or both parties would be substantially or materially prejudiced. Further, the Company agrees it will not challenge, in any jurisdiction, the enforceability of any provision included in this Agreement; and to the extent the validity of this Agreement is challenged by the Company in a court of competent jurisdiction, the Company shall pay for all reasonable fees and costs incurred by the Town in enforcing this Agreement.

15. This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Massachusetts, and the Company submits to the jurisdiction of any of its appropriate courts for the adjudication of disputes arising out of this Agreement.

16. This Agreement, including all documents incorporated herein by reference, constitutes the entire integrated agreement between the Company and the Town with respect to the matters described herein. This Agreement supersedes all prior agreements, negotiations and representations, either written or oral, and it shall not be modified or amended except by a written document executed by the parties hereto. Amendments, or waivers of any term, condition, covenant, duty or obligation contained in this Agreement may be made only by written amendment executed by all signatories to the original Agreement.

17. This Agreement shall also be null and void in the event that the Company shall (1) not locate a retail dispensing facility in the Town; or (2) relocate such retail dispensing facility out of the Town. In the case of any relocation out of the Town, an adjustment of funds due to the Town hereunder shall be calculated based upon the period of occupation of the retail dispensing facility within the Town, but in no event shall the Town be responsible for the return of any funds already provided to it by the Company. If, however, such retail dispensing facility is relocated out of the Town prior to the

second anniversary of the date of this Agreement, the Company shall pay to the Town as liquidated damages an amount equal to $10,000 in consideration of the expenditure of resources by the Town in negotiating this Agreement.

18. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either Town or the Company.

19. The Parties agree that the Town is entitled to collect revenue from the Company pursuant to this agreement and will collect 3% of the tax imposed on the Company pursuant to Section 13 of Chapter 55 of the Acts of 2017, as codified in Section 3 of Chapter 64N of the General Laws of Massachusetts.

20. This Agreement may be signed in any number of counterparts all of which taken together, each of which is an original, and all of which shall constitute one and the same instrument, and any party hereto may execute this Agreement by signing one or more counterparts.

21. Facsimile signatures affixed to this Agreement shall have the same weight and authority as an original signature.

22. The Parties hereto agree that nothing contained in this Agreement or any other documents executed in connection herewith is intended or shall be construed to establish the Town, or the Town and any other successor, affiliate, or corporate entity as joint ventures or partners.

23. The Company shall indemnify, defend, and hold the Town harmless from and against any and all claims, demands, liabilities, actions, causes of actions, defenses, proceedings and/or costs and expenses, including attorney's fees, brought against the Town, their agents, departments, officials, employees, insurers and/or successors, by any third party arising from or relating to the development of the Property and/or Facility. Such indemnification shall include, but shall not be limited to, all reasonable fees and reasonable costs of attorneys and other reasonable consultant fees and all fees and costs (including but not limited to attorneys and consultant fees and costs) shall be at charged at regular and customary municipal rates, of the Town's choosing incurred in defending such claims, actions, proceedings or demands. The Company agrees, within thirty (30) days of written notice by the Town, to reimburse the Town for any and all costs and fees incurred in defending itself with respect to any such claim, action, proceeding or demand.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

TOWN OF SALISBURY
BOARD OF SELECTMEN

GANESH WELLNESS, INC.

Neel Patel

(Name)
Duly Authorized

AMENDMENT NO. 1
TO HOST COMMUNITY AGREEMENT
BY AND BETWEEN THE TOWN OF SALISBURY
AND GANESH WELLNESS, INC.

This Amendment No. 1 is made and entered into this 14th day of June, 2021, by and between the Town of Salisbury, acting by and through its Board of Selectmen (hereinafter referred to as the "Town"), with a usual place of business of Town Hall, 5 Beach Road, Salisbury, MA 01952, and Ganesh Wellness, a Massachusetts corporation with a usual place of business at 47 High Street, Suite 432, Medford, MA 02155 (hereinafter referred to as the "Company").

WHEREAS, on May 13, 2019 the Town and the Company entered into a Host Community Agreement (the "Agreement") regarding the operation of a Recreational Marijuana Establishment for adult use dispensing facility at 238 Lafayette Road (but not a cultivation or processing facility) (the "Facility") in the Town in accordance with Chapter 55 of the Acts of 2017 and applicable regulations issued by the Massachusetts Cannabis Control Commission ("CCC"); and

WHEREAS, the Company wishes to amend the Agreement to change the address of its proposed Recreational Marijuana Establishment to 191 Lafayette Road in the Town of Salisbury;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto mutually agree as follows:

1. The second paragraph of the Agreement shall be amended by deleting the words "238 Lafayette Road' and inserting in place thereof the following: "191 Lafayette Road."

The parties agree that all other provisions of the Agreement shall remain the same and shall continue in full force and effect.

This Amendment, together with the other components of the Agreement documents, constitutes the entire agreement between the parties, with no other agreements other than those incorporated herein.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the day and year first above written.

TOWN OF SALISBURY, by its
Board of Selectmen

GANESH WELLNESS, INC. by

Duly Authorized