Tel: (508) 520-4907 Fax: (508) 520 4906

Town of Franklin

Planning Board

Due to the continued concerns regarding the COVID-19 virus, we will be conducting a remote/virtual Planning Board Meeting. In an effort to ensure citizen engagement and comply with open meeting law regulations, citizens will be able to dial into the meeting using the provided phone number (Cell phone or Landline Required) OR citizens can participate by copying the link (Phone, Computer, or Tablet required).

Please click on the link https://us02web.zoom.us/j/88445139263 **or call on your phone at 312-626-6799, meeting # 88445139263.**

August 24, 2020

7:00 PM	**Commencement/General Business**	
7:05 PM	**PUBLIC HEARING** **Zoning By-Law Amendment 20-858** Map Amendment	***Adv.:*** *Aug. 10 & Aug. 17, 2020* *Abuts: Aug. 10, 2020*
7:05 PM	**PUBLIC HEARING** = *Continued* **340 East Central Street** Special Permit & Site Plan	***Adv.:*** *June 8 & June 15, 2020* *Abuts: June 8, 2020*
7:05 PM	**PUBLIC HEARING** – *TO BE CONTINUED* **164 Grove Street** Special Permit & Site Plan	***Adv.:*** *July 13 & July 20, 2020* *Abuts: July 13, 2020*
7:05 PM	**PUBLIC HEARING** – *Continued* **162 Grove Street** Special Permit & Site Plan	***Adv.:*** *June 15 & June 22, 2020* *Abuts: June 15, 2020*

GENERAL BUSINESS:

A. Discussion: 5 Fisher Street
B. Endorsement: 303 East Central St – Pet Supply Plus
C. Endorsement: 158 Grove St – brewery
D. Endorsement: 160 Grove St

This agenda is subject to change. Last updated: August 18, 2020
The next meeting of the Planning Board is scheduled for September 14, 2020.

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET, ROOM 120
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907

MEMORANDUM

DATE: **August 19, 2020**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **5 Fisher Street and 29 Hayward St**
Site Plan Modification

The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, August 24, 2020 Planning Board meeting and offers the following commentary:

General:

1. The proposed Site Plan is located at 5 Fisher Street and 29 Hayward St in the Mixed Innovation Business District; Assessor's Map 278 Lot 016.
2. The applicant has filed a Site Plan Modification for manufacturing use at 29 Hayward St.
3. The Planning Board voted to close the hearing on August 17, 2020.
4. The Planning Board voted in favor for the Change in Use at 29 Hayward Street.

Comments:

1. The Board had questions about the Site Plan Application on how the project was filed.
    a. DPCD has since followed up with the Town Attorney, who has indicated that the Site Plan Modification (Form P) has been filed correctly.
2. The Board also inquired about the Site Plan including both 5 Fisher Street and 29 Hayward.
    a. The Planning Board has conditioned the decision for 29 Hayward Change in Use.
    b. The Planning Board has also conditioned that any future Use at 5 Fisher Street, will requiring filing a Site Plan Modification.
    c. The Applicant has provided a letter agreeing to the conditions listed above, which will be included in the Planning Board signed Certificate of Vote.
    d. DPCD and Town Attorney agrees the conditions are adequate to address the concerns of the Board.

Doherty, Dugan, Cannon,
Raymond & Weil, P.C.

124 Grove Street, Suite 220
Franklin, MA 02038
Tel. (508) 541-3000
Fax (508) 541-3008
www.ddcrwlaw.com

Edward V. Cannon, Jr., Esq.
evc@ddcrwlaw.com

August 12, 2020

Planning Board
Town of Franklin

RE: 5 Fisher Street
Aka: 1, 3, 5 Fisher Street and 29 Hayward Street
Agreement for Full Site Plan Review

Dear Board:

In consideration of the Town of Franklin Planning Board ("Board") allowing occupancy of 29 Hayward Street for a Manufacturing & Processing, Light & Medium use by Mass Standard Materials, the owner/applicant, K Fisher Street LLC and its successor and/or assigns ("K Fisher") agrees that no other tenants/occupants shall be permitted within any area of Locus without K Fisher first obtaining an approval from the Board for a full Site Plan Review of all of Locus.

Furthermore, K Fisher agrees to install a physical barrier subject to Fire Department approval between the buildings identified as 29 Hayward Street and 5 Fisher Street.

Thank you for your cooperation.

Respectfully,

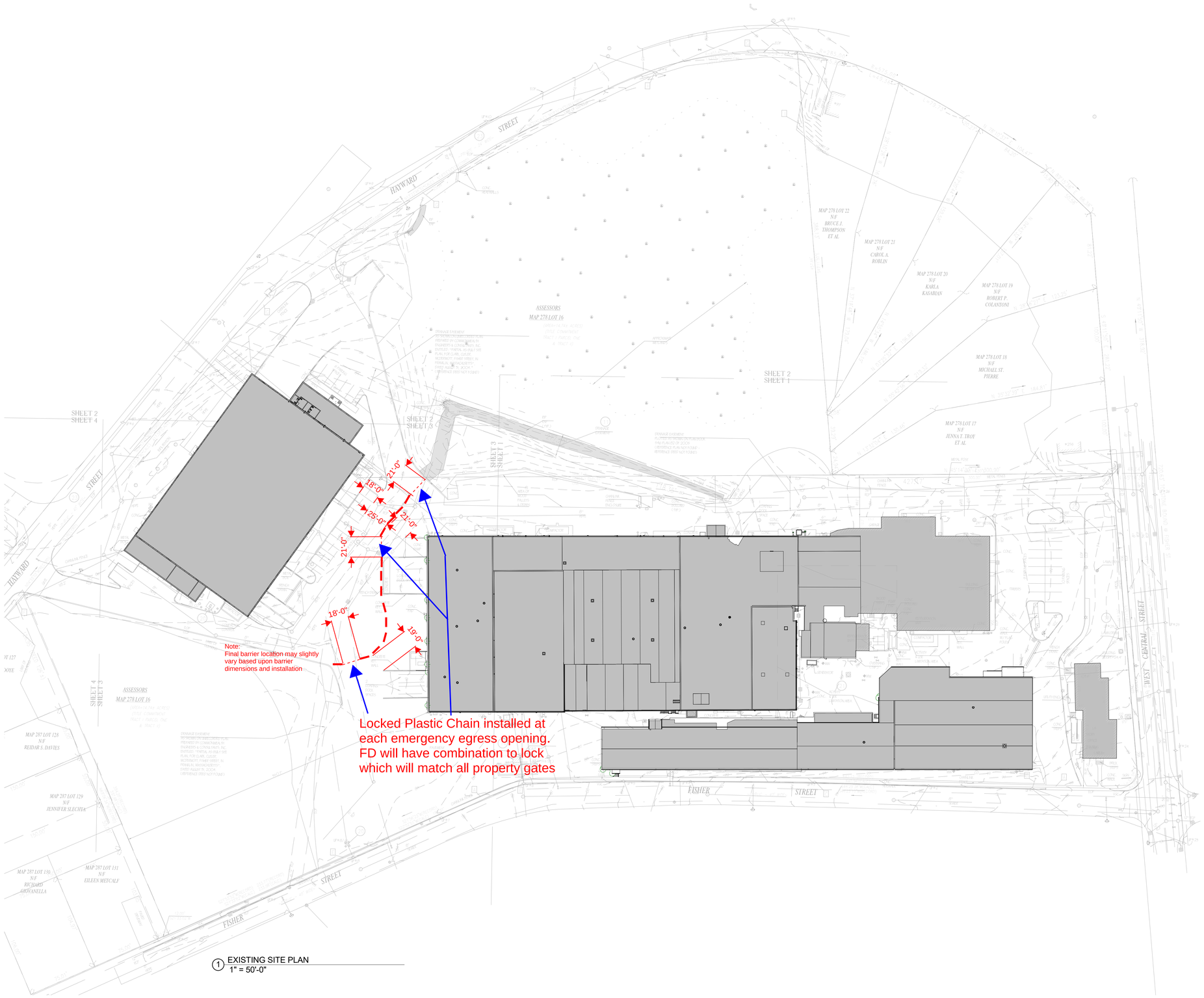
Edward V. Cannon, Jr.

Agreed this 12th day of August, 2020

K Fisher Street LLC

By: _____
Frederick Kaplan, Manager

By: _____
Casey Killam, Manager



1 EXISTING SITE PLAN
1" = 50'-0"

For Information

consultant / contractor information:

stamp:

revision	revision description	date

project title:
FISHER STREET SITE SELECTIVE DEMOLITION

5 FISHER STREET, FRANKLIN, MA

client information:
K COMMERCIAL REAL ESTATE SERVICES, LLC DBA K FISHER STREET LLC

1 FISHER STREET, FRANKLIN, MA, 02038

J t A
JOE THE ARCHITECT
343 Medford Street, Suite 4C Somerville, MA 02145
t: +1(617) 764-3593 e: askjoe@joethearchitect.com
www.joethearchitect.com

drawing title
EXISTING SITE PLAN

project number	drawing scale	approver
261	1" = 50'-0"	AS

drawing number
A020

revision

4/1/2020 11:34:10 AM

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907
FAX: 508-520-4906

MEMORANDUM

DATE: **August 19, 2020**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **303 East Central Street**
Limited Site Plan - Endorsement

General:

- The Planning Board approved on July 27, 2020 a Limited Site Plan for a tenant known as Pet Supply Plus, which have indicated will occupy Tenant 3 Area.
- The Applicant has submitted the Limited Site Plan for endorsement.

Comments:

- The Applicant has added to the plans for Endorsement:
  - Shows Pet Supply Plus for Tenant 3.
  - Included the Certificate of Vote on the front page.
  - Plan Purpose states it is for Tenant 3.

Town of Franklin

Planning Board

August 3, 2020

Teresa M. Burr, Town Clerk
Town of Franklin
355 East Central Street
Franklin, MA 02038

CERTIFICATE OF VOTE
LIMITED SITE PLAN MODIFICATION
273-303 EAST CENTRAL STREET

Site Plan: "Horace Mann Plaza – Change in Use, 265-303 East Central Street, Franklin Massachusetts"

Applicant: Franklin Shoppers Fair, Inc.
273 East Central Street
Franklin, MA 02038

Owner: Marcia Alevizos
396 Washington Street #325
Wellesley, MA 02481

Prepared By:
Surveyor/ Engineer: Guerriere & Halnon, Franklin, MA
Dated: September 23, 2019
Property Location: 265-303 East Central Street
Assessors Map 285, Lot 107

Dear Mrs. Burr:

Please be advised that at its meeting on Monday, July 27, 2020 upon motion duly made and seconded, the Planning Board voted (5-0) to **APPROVE**, the following Tenant at 265-303 East Central Street: Pet Supply Plus (Tenant 3) on the Site Plan. Prior to endorsement, Limited Site Plan for Tenant 3 shall be labeled Pet Supply Plus.

Sincerely,

Anthony Padula
Chairman

SITE PLAN LEGEND	
GRAPHIC	DESCRIPTION
	PROPERTY LINE
	HANDICAP PARKING
	SHAW'S CART STALL

PARKING OVERVIEW	
OVERALL PARKING COUNT	891 (INCLUDING 27 HANDICAP)
SHAW'S CART STALLS	12
AUBUCHON DISPLAY	5
CURRENT USABLE TOTAL	**874**

EXISTING HANDICAP PARKING REQUIREMENTS	
PREVIOUSLY REQUIRED	18 (15 STANDARD, 3 VAN)
PREVIOUSLY PROVIDED	25 (17 STANDARD, 8 VAN)

BUSINESS

FRANKLIN ZONING BYLAW SECTION 185
ATTACHMENT 9; LAST AMENDED
01-22-2014 BY AMENDMENT 13-726

MINIMUM LOT AREA	20,000 SF
MINIMUM LOT FRONTAGE	125'
MINIMUM LOT DEPTH	160'
MINIMUM LOT WIDTH	112.5'
MINIMUM YARDS	
FRONT	40'
SIDE	20'
REAR	30'
% OF LOT UPLAND COVERED BY:	
STRUCTURES	50
STRUCTURES+PAVING	60

NOTES:

1. THIS PLAN IS ZONED BUSINESS
2. THIS PLAN REFERS TO FRANKLIN ASSESSORS MAP 285 PARCEL 107
3. THIS PLAN REFERS TO BK 32167 PAGE 583 RECORD AT THE NORFOLK REGISTRY OF DEEDS.
4. THIS IS WITHIN THE TOWN OF FRANKLIN WATER RESOURCE DISTRICT.
5. REQUEST FOR DETERMINATION OF PARKING SECTION 185-21(B)(3)(V).

SEE PLANS BY PHASE ZERO DESIGN ENTITLED ' REDEMISE AND EXTERIOR RENOVATIONS 303 EAST CENTRAL STREET FRANKLIN, MA.

THE BASE PLAN WAS PREPARED BY PRECISION LAND SURVEYING, INC. ENTITLED 'HORRACE MANN PLAZA TOPOGRAPHICAL PLAN' DATED SEPTEMBER 9, 2019.

EXISTING PARKING OVERVIEW	
TOTAL	**895**
ALTITUDE	475 OCCUPANT LOAD PARKING USE = 50% OCC LOAD 238 x 0.8 = 191
SHAW	57,715 / 200 = 289
BIG LOTS	25,158 / 200 = 126
AUBUCHON HARDWARE	13,800 / 200 = 69
PAPA GINOS	2,630 / 60 = 44
COST CUTTERS	1,910 / 200 = 10
POSTAL CENTER USA	1,200 / 200 = 6
CURTAIN STORE	2,316 / 200 = 12
WAH SING RESTAURANT	2, 067 / 60 = 35
JOSEPH FINE JEWELRY	1,000 / 200 = 5
WEIGHT WATCHERS	1,800 / 200 = 9
KUMON MAT & READING	1,800 / 200 = 9
CITIZENS BANK	2,500 / 250 = 10
DOLLAR TREE	10,238 / 200 = 52
FABRIC STORE	5,499 / 200 = 28

PROPOSED PARKING OVERVIEW	
TOTAL	**942**
ALTITUDE	475 OCCUPANT LOAD PARKING USE = 50% OCC LOAD 238 x 0.8 = 191
DOLLAR TREE	10,238 SF / 200 = 52
TENANT 3(PET SUPPLYS PLUS)	**7,000 SF / 200 = 35**
TENANT 4	**2,335 SF / 200 = 12**
FABRIC STORE	5,499 SF / 200 = 28
SHAW	57,715 / 200 = 289
BIG LOTS	25,158 / 200 = 126
AUBUCHON HARDWARE	13,800 / 200 = 69
PAPA GINOS	2,630 / 60 = 44
COST CUTTERS	1,910 / 200 = 10
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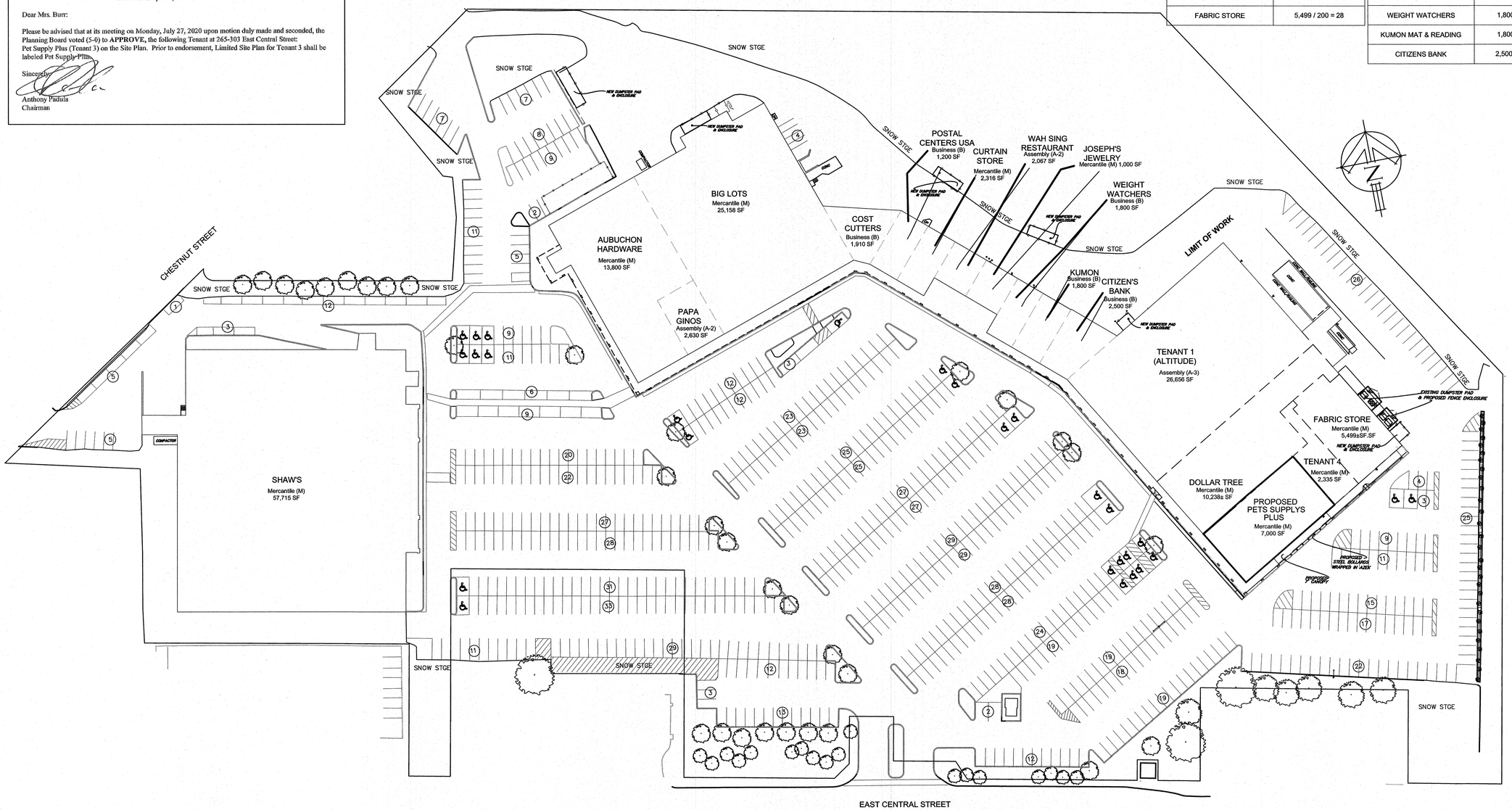


NOTES

1. CONSTRUCTION ON THIS LOT IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.
2. "WARNING" EXISTING UTILITY LINES INDICATED OR NOTED ON THESE DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR SHALL TAKE CAUTION IN THESE AREAS TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL ENGAGED IN WORKING IN THESE AREAS. CALL "DIG SAFE" 1-888-DIG-SAFE (1-888-344-7233). EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

PURPOSE OF THIS PLAN

1. CHANGE OF USE FROM VACANT RETAIL (TENANT 3) TO PET SUPPLYS PLUS.
2. ADD 7' CANOPY FOR PETS SUPPLY PLUS
3. ADJUSTED THE AREAS AND PARKING REQUIREMENTS FOR PETS SUPPLY PLUS AND TENANT 4.
4. ADDED BOLLARD LOCATIONS

SPECIAL NOTE:
NO SNOW TO BE STORED IN PARKING SPACES

APPLICANT

FRANKLIN SHOPPERS FAIR, INC.
273 EAST CENTRAL ST.
FRANKLIN, MA. 02038

HORACE MANN PLAZA

LIMITED
SITE PLAN MODIFICATION
CHANGE OF USE

265 -303 EAST CENTRAL STREET

IN

FRANKLIN, MA.

00	7/24/20	LIMITED SITE PLAN	DB
01	7/27/20	ADDED CERTIFICATE OF VOTE	DB

0 25 50 FEET 100 150
0 5 10 20 METERS 40

Guerriere & Halnon, Inc.
ENGINEERING & LAND SURVEYING
55 WEST CENTRAL ST. PH. (508) 473-6630
FRANKLIN, MA. 02038 FX. (508) 473-8243
www.gandhengineering.com

SHEET 1 OF 1 | F-4275

COMMONWEALTH OF MASSACHUSETTS
ELIZABETH A. MANNI-SANCHIONI
No. 48096
REGISTERED PROFESSIONAL ENGINEER

DATE: 8-10-20

APPROVED DATE:
FRANKLIN PLANNING BOARD

SIGNATURE DATE:
BEING A MAJORITY

LOT ### G-####

G:\C-30Franklin\F4275\DWG\2019-03-28 Drawings from Architect\F4275-base-LIMITED SITE PLAN 2020-cert of vote.dwg 2020-08-10 dburlingame
G:\C-30Franklin\F4275\DWG\2019-03-28 Drawings from Architect\F4275-base-LIMITED SITE PLAN 2020-cert of vote.dwg, 8/10/2020 11:08:13 AM, DAB

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET, ROOM 120
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907

MEMORANDUM

DATE: **August 20, 2020**

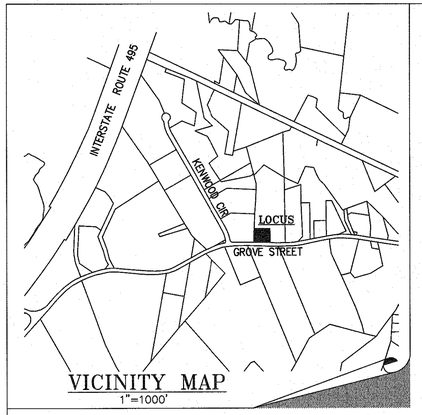
TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **158 Grove Street**
Special Permit & Site Plan Modification
Endorsement

General:

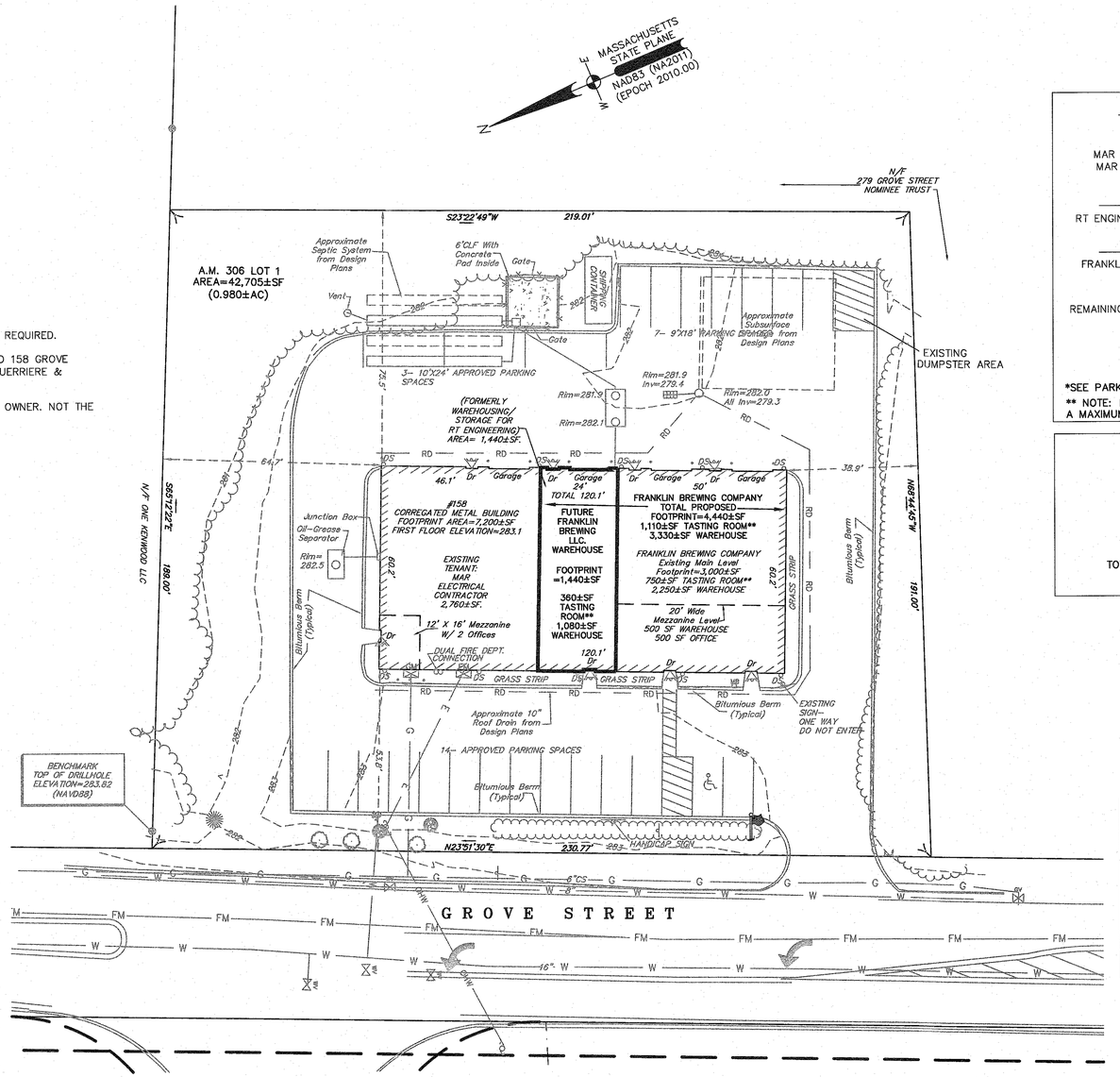
- The Planning Board approved, on May 11, 2020, a Special Permit and Site Plan Modification to expand the Brewery and Tasting room at 158 Grove Street.
- The Applicant has submitted plans for endorsement.
- The Special Permit has been filed at the Registry of Deeds, and there was no appeal.



VICINITY MAP
1"=1000'

NOTES

1. THIS SITE IS NOT IN A FLOOD HAZARD ZONE.
2. REFER TO FRANKLIN ASSESSORS MAP 306 LOT 001.
3. THIS SITE IS NOT IN A WATER RESOURCE DISTRICT.
4. THE ARCHITECT WILL PROVIDE PLANS AND CALCULATIONS FOR FIRE PROTECTION IF REQUIRED.
5. SEE PLAN ENTITLED ' FRANKLIN BREWING COMPANY CHANGE IN USE PLAN OF LAND 158 GROVE STREET, FRANKLIN, MASS.' DATED APRIL 23, 2019, LAST REVISED JULY 8, 2019 BY GUERRIERE & HALNON AND ENDORSED BY THE PLANNING BOARD AUGUST 5, 2019.
6. EXISTING AND PROPOSED INTERIOR DIMENSIONS PROVIDED BY APPLICANT AND/ OR OWNER. NOT THE RESULT OF THIS ON-GROUND SURVEY BY GUERRIERE & HALNON, INC.
7. THERE ARE CURRENTLY 24 PARKING SPACES WITH DIMENSIONS SHOWN HEREON.



INDUSTRIAL

FRANKLIN ZONING BYLAW SECTION 185
ATTACHMENT 9; LAST AMENDED
11-16-2016 BY AMENDMENT 16-771

	REQUIRED	EXISTING
MINIMUM LOT AREA	40,000 SF	42,705 SF
MINIMUM LOT FRONTAGE	175'	230.77'
MINIMUM LOT DEPTH	200'	190.80'
MINIMUM LOT WIDTH	157.5'	189.80'
MINIMUM YARDS		
FRONT	40'	53.8'
SIDE	30'[5]	38.9'
REAR	30'[5]	75.5'
% OF LOT UPLAND COVERED BY:		
STRUCTURES	70	16.9
STRUCTURES+PAVING	80	60.1

[5]INCREASE BY THE COMMON BUILDING HEIGHT OF THE STRUCTURE, WHEN ABUTTING A RESIDENTIAL DISTRICT OR USE.

EXISTING REQUIRED PARKING AND USES NOTES

MAR ELECTRICAL CONTRACTORS AREA= 2760±SF.
MAR ELECTRICAL CONTRACTORS- INDUSTRIAL 1 SPACE/400SF=7 SPACES
OFFICE MEZZ.-16' X 12'=192±SF 1/250 =1 SPACE
TOTAL FOR MAR ELECTRICAL=8 SPACES

RT ENGINEERING AREA=1440±SF- WAREHOUSE 1 SPACE/1000SF= 2 SPACES
TOTAL FOR RT ENGINEERING=2 SPACES

FRANKLIN BREWING COMPANY

EXISTING MAIN LEVEL (3,000±SF)
TASTING ROOM-750± **SEE NOTE BELOW = 13 SPACES
REMAINING MAIN FLOOR SPACE-2,250±SF WAREHOUSE 1/1000 = 3 SPACES

EXISTING MEZZANINE LEVEL(1,000±SF)
500±SF OFFICE SPACE 1/250 = 2 SPACES
500±SF WAREHOUSE 1/1000 = 1 SPACES
TOTAL FOR FRANKLIN BREWING COMPANY = 19 SPACES

***SEE PARKING DETERMINATION ALLOWING 24 PARKING SPACES**

**** NOTE: PER THE BOARD OF HEALTH, THE TASTING ROOM IS RESTRICTED TO A MAXIMUM OF 39 SEATS.**

PROPOSED PARKING NOTES

FRANKLIN BREWING COMPANY
(SPACE FORMERLY OCCUPIED BY RT ENGINEERING)
(1,440±SF)

FUTURE FRANKLIN BREWING TOTAL WAREHOUSE AREA= 1,080±SF.
FUTURE FRANKLIN BREWING TOTAL TASTING ROOM AREA=360± SF.

TOTAL PROPOSED SPACES REQUIRED BY FRANKLIN BREWING 2 SPACES

TOTAL PARKING APPROVED 2019 FOR EXISTING USES= 24 SPACES
TOTAL PARKING PROVIDED= 24 SPACES

LEASE AGREEMENT FOR UP TO 13 SPACES FROM MONDAY - FRIDAY. ADDITIONAL SPACES AVAILABLE ON WEEKENDS.

PREVIOUSLY APPROVED BREWERY HOURS OF OPERATION:

MONDAY & TUESDAY - CLOSED
WEDNESDAY THRU FRIDAY - 4:30PM TO 10:00PM
SATURDAY - 12:00PM TO 10:00PM
SUNDAY - 12:00PM TO 7:00PM

NOTE:
A SPECIAL PERMIT FOR A BREWERY WITH TASTING ROOM UNDER 185 ATTACHMENT 4 USE REGULATIONS SCHEDULE PART III3.13 WAS APPROVED BY THE PLANNING BOARD JULY 8, 2019.

PURPOSE OF THIS PLAN

REQUEST A CHANGE OF USE AND AMEND THE SPECIAL PERMIT FROM THE PLANNING BOARD:

1. TO EXPAND FOOTPRINT OF SPACE TO INCLUDE AN ADDITIONAL 1,440±SF. , COMPLYING WITH A MAXIMUM SEAT LIMIT OF 39 PER THE BOARD OF HEALTH.
2. TO EXTEND THE HOURS OF OPERATIONS BY ADDING TUESDAY EVENINGS OPEN FROM 4:30PM-10:00PM.
3. TO ALLOW LIVE ENTERTAINMENT.

LEGEND

	CATCH BASIN		UTILITY POLE
D	DRAIN MANHOLE		GUY WIRE
E	ELECTRIC MANHOLE		SIGN
S	SEWER MANHOLE	S	SEWER LINE
GV	GAS VALVE	D	DRAIN LINE
GSOV	GAS SHUT OFF VALVE	W	WATER LINE
WG	WATERGATE	G	GAS LINE
WSOV	WATER SHUT OFF VALVE	E	UNDERGROUND ELECTRIC
FH	FIRE HYDRANT	OHW	OVERHEAD WIRES
	SHRUB	EM	ELECTRIC METER
	TREE	Dr	DOOR
	EXISTING WALL PAC		

2/28/2020
COMMONWEALTH OF MASSACHUSETTS
ROBERT E. CONSTANTINE, II
No. 49611
REGISTERED PROFESSIONAL LAND SURVEYOR

F4280

APPROVED DATE:

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENTS, MARKINGS AND OTHER OBSERVED EVIDENCE TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES AND SHOULD BE CONSIDERED APPROXIMATE. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE MAY EXIST. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING AND CALL DIGSAFE AT 1(888)DIG-SAFE(7233).

CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

OWNER

GROVE STREET REALTY TRUST
ALBERT G. LEWIS, TRUSTEE
7 UNCAS BROOK ROW
FRANKLIN, MA 02038

DEED BOOK 10619 PAGE 541
PLAN NO. 495 OF 1994 PLAN BK. 423
A.M. 306 LOT 1

APPLICANT

OLIVIER EDOUARD
8 BRIAN ROAD
FRANKLIN, MA 02038

FRANKLIN BREWING COMPANY LIMITED SITE AND SPECIAL PERMIT PLAN 158 GROVE STREET FRANKLIN MASSACHUSETTS

FEBRUARY 21, 2020

DATE	REVISION DESCRIPTION

GRAPHIC SCALE: 1"=20'

0 5 10 15 20 25 30 40 50 FEET
0 1 2 3 4 5 10 15 20 METERS

Guerriere & Halnon, Inc.
ENGINEERING & LAND SURVEYING
55 WEST CENTRAL ST. PH. (508) 528-3221
FRANKLIN, MA 02038 FX. (508) 528-7921
www.gandhengineering.com

SHEET 1 OF 1 | JOB NO. F4280

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET, ROOM 120
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907

MEMORANDUM

DATE: **August 4, 2020**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **160 Grove Street**
Special Permit & Site Plan
Endorsement

General:

- The site is approximately 8.55 acres and is located at 160 Grove Street. The property is within the Industrial Zoning District - Marijuana Overlay District, Assessor's Map 306 Lot 002.
- The applicant seeks approval to construct a 121,000 sq/ft facility for the cultivation, processing, and distribution of Marijuana and Marijuana related products and office space.
- The Planning Board approved the Special Permit and Site Plan on August 10, 2020.
- The Applicant has submitted plans for endorsement.
- The Certificate of Vote and Conditions are included in the plans to be endorsed.

Site Development Plan

Hennep Cultivation & Production Facility

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	SITE INDEX PLAN
4	UTILITY & GRADING PLAN
5	UTILITY & GRADING PLAN
6	SITE LAYOUT PLAN
7	SITE LAYOUT PLAN
8	DRIVEWAY PLAN & PROFILE
9	DRIVEWAY PLAN & PROFILE
10	DRIVEWAY PLAN & PROFILE
11	SEDIMENT & EROSION CONTROL PLAN
12	LANDSCAPE PLAN
13	DETAILS PLAN - STORMWATER
14	DETAILS PLAN - UTILITIES
15	DETAILS PLAN
16	DETAILS PLAN - RETAINING WALLS
17	CERTIFICATE OF VOTE & CONDITIONS OF APPROVAL
18	LANE MARKING & TRAFFIC SIGN PLAN

LEGAL REFERENCES

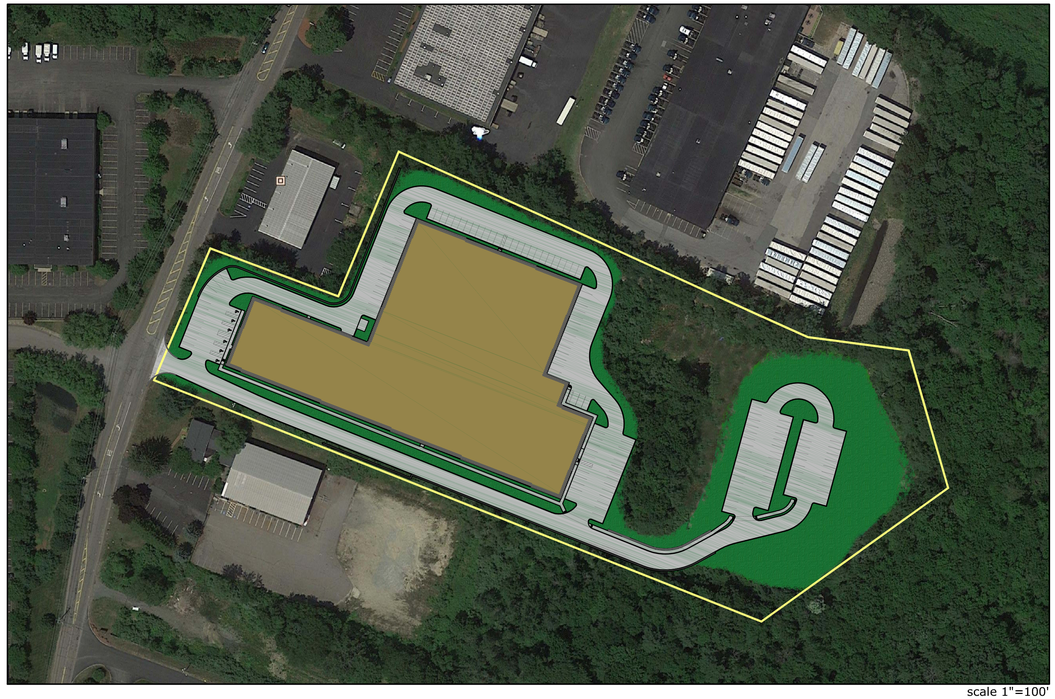
ASSESSORS: PARCEL 306-002-000
DEED: DEED BOOK 37525 PAGE 499
PLAN: PLAN BOOK 688 PAGE 38

ZONING SUMMARY

Zone: Industrial

	Required	Proposed
Frontage:	175 ft	200.21 ft
Area:	40,000 ft²	372,249 ft²
Front Yard:	40 ft	80.8 ft
Side Yard:	30 ft	55.6 ft
Rear Yard:	30 ft	328.6 ft
Bldg. Coverage:	70%	28.5% of upland
Lot Coverage:	80%	57.0% of upland
Height:	3 Stories	3 Stories

Note: Portions of the locus is located within the Water Resource District.



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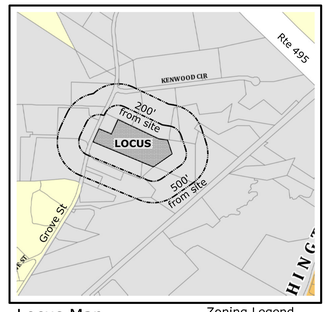


Locus Map
scale 1"=1000'

Zoning Legend
Industrial
Rural Residential I

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.

Located at
160 Grove Street
Franklin, MA

APPROVED
FRANKLIN PLANNING BOARD

DATE:
BEING A MAJORITY

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 100'
Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
	BOUND TO BE SET
	BOUND FOUND
	DRAIN MANHOLE
	CATCH BASIN
	UTILITY POLE
100	EXISTING CONTOUR
100	PROPOSED CONTOUR
581x5	PROPOSED SPOT GRADE
	LIGHT - WALL MOUNTED
	LIGHT - POLE MOUNTED
	SIGN
ETC	ELECT., TEL. & CABLE
W	WATER LINE
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD WIRE
	FENCE
	GUARD RAIL
x WF-#	WETLAND FLAG

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, PE
Date: 6/16/20
Norman G. Hill, PE #31887

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

Bellingham
167 Hartord Ave.
Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
508-839-9526

Hanson
1115 Main Street
Hanson, MA 02341
781-294-4144

www.landplanninginc.com

Scale
1" = 100'
Date
February 14, 2020
Job No.
B2521
Sheet No.
1

Soil Logs

DH-1 3/3/2020
0"-30" Fill
30"-120" C horizon, med. sand
No mottles
Standing water @ 78"
Elevation = 264.2
Groundwater = 257.7

DH-2 3/3/2020
0"-10" A horizon, loamy sand
10"-32" B horizon, loamy sand
32"-60" C1 horizon, med. sand
60"-156" C2 horizon, loamy sand
Mottles @ 108"
No standing water
Elevation = 267.8
Groundwater = 258.8

TP-1 11/4/2019
0"-6" A horizon, loamy sand
6"-26" B horizon, loamy sand
26"-144" C horizon, med. sand w/ gravel
No mottles
No standing water
Elevation = 270.7
Groundwater = <258.7

TP-2 11/4/2019
0"-132" C horizon, med. sand w/ gravel
No mottles
Weeping water @ 125"
Elevation = 266.5
Groundwater = 256.1

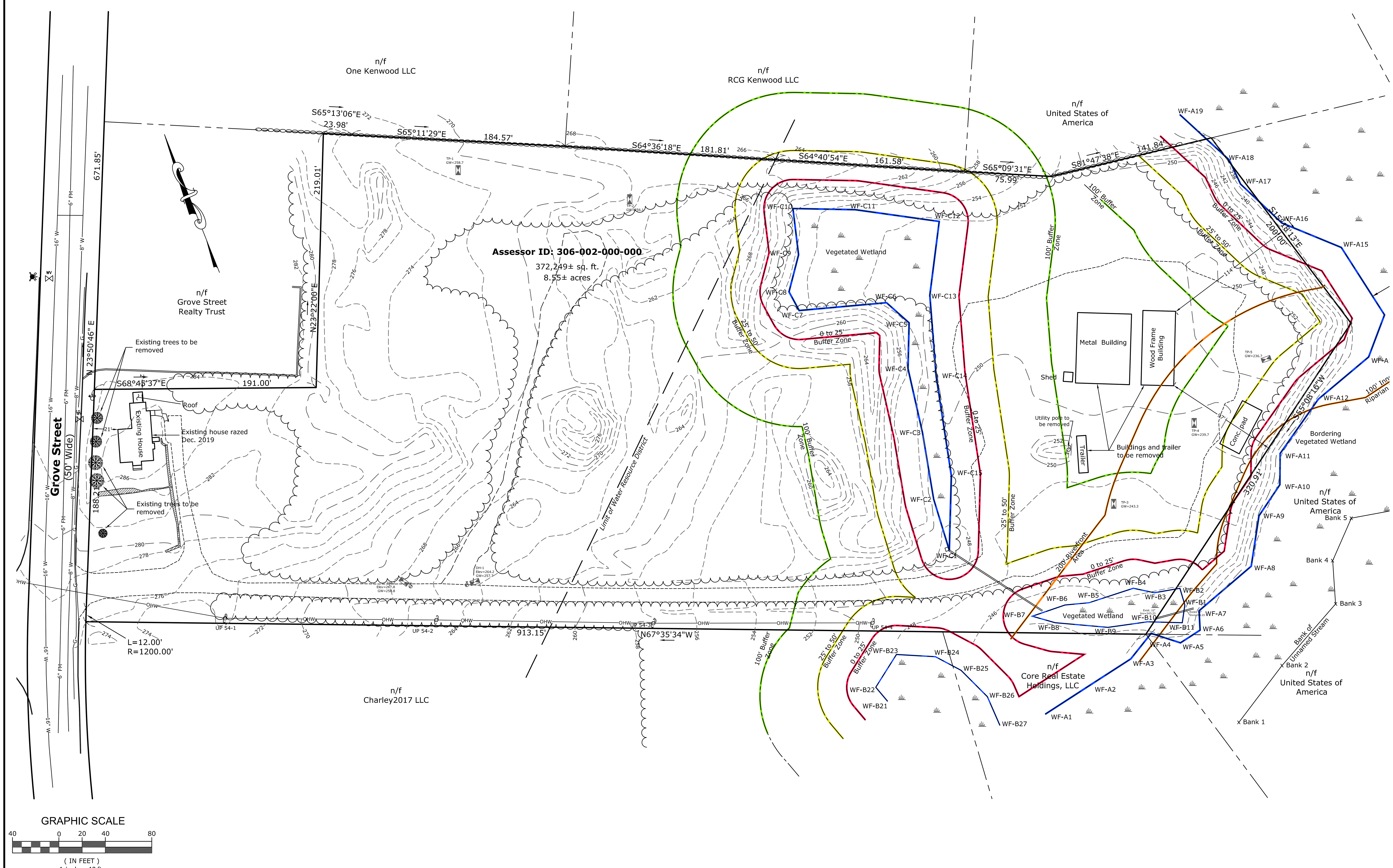
TP-3 11/4/2019
0"-10" Fill
10"-134" C horizon, med. sand w/ gravel
Mottles @ 54"
Weeping water @ 95"
Standing water @ 118"
Elevation = 247.8
Groundwater = 243.3

TP-4 11/4/2019
0"-90 Fill
90"-150" C horizon, med. sand w/ gravel
Mottles @ 120"
No standing water
Elevation = 249.7
Groundwater = 239.7

TP-5 3/3/2020
0"-156" Fill
156"-168" C horizon, loamy sand
Mottles = none
Weeping water @ 156"
Elevation = 249.7
Groundwater = 236.7

General Notes

1. Topography determined by an on-the-ground survey by Land Planning, Inc. All elevations refer to NAVD 1988 datum.
2. No portion of the site is located within the limits of the 100 yr flood zone as shown on the FIRM Map #25021C0308E dated 07/17/12
3. Property lines shown are based upon an on-the-ground retracement survey performed by Land Planning, Inc.
4. Wetland resource boundaries were flagged by Northeast Ecological Services and located by Land Planning, Inc.



Existing Conditions Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 40'
Revised June 16, 2020

LEGEND

SW	STONE WALL	
IPF	IRON PIN FOUND	
DHF	DRILL HOLE FOUND	
	BOUND TO BE SET	
	BOUND FOUND	
	DRAIN MANHOLE	
	CATCH BASIN	
	UTILITY POLE	
100	EXISTING CONTOUR	
100	PROPOSED CONTOUR	
581x5	PROPOSED SPOT GRADE	
	LIGHT - WALL MOUNTED	
	LIGHT - POLE MOUNTED	
	SIGN	
ETC	ELECT., TEL. & CABLE	
W	WATER LINE	
S	SEWER LINE	
G	GAS LINE	
OHW	OVERHEAD WIRE	
	FENCE	
	GUARD RAIL	
x WF-#	WETLAND FLAG	

COMMONWEALTH OF MASSACHUSETTS NORMAN G. HILL CIVIL No. 31887 REGISTERED PROFESSIONAL ENGINEER

Date: 6/16/20
Norman G. Hill, PE #31887

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Date February 14, 2020
Job No. B2521
Sheet No. 2

Zoning Summary

Zone: Industrial

	Required	Proposed
Frontage:	175 ft	200.21 ft
Area:	40,000 ft²	372,249 ft²
Front Yard:	40 ft	80.8 ft
Side Yard:	30 ft	55.6 ft
Rear Yard:	30 ft	328.6 ft
Bldg. Coverage:	70%	28.5% of upland
Lot Coverage:	80%	57.0% of upland
Height:	3 Stories	3 Stories

Note: Portions of the locus is located within the Water Resource District.

Parking Summary

Use	Regulation	Area	Required Spaces
Industrial	1 per 400 ft²	17250 ft²	44 spaces
Warehouse	1 per 1000 ft²	100841 ft²	101 spaces
Office	1 per 250 ft²	4211 ft²	17 spaces

Total Parking Required = 162 spaces

Total proposed parking = 162 spaces

Earthwork Summary

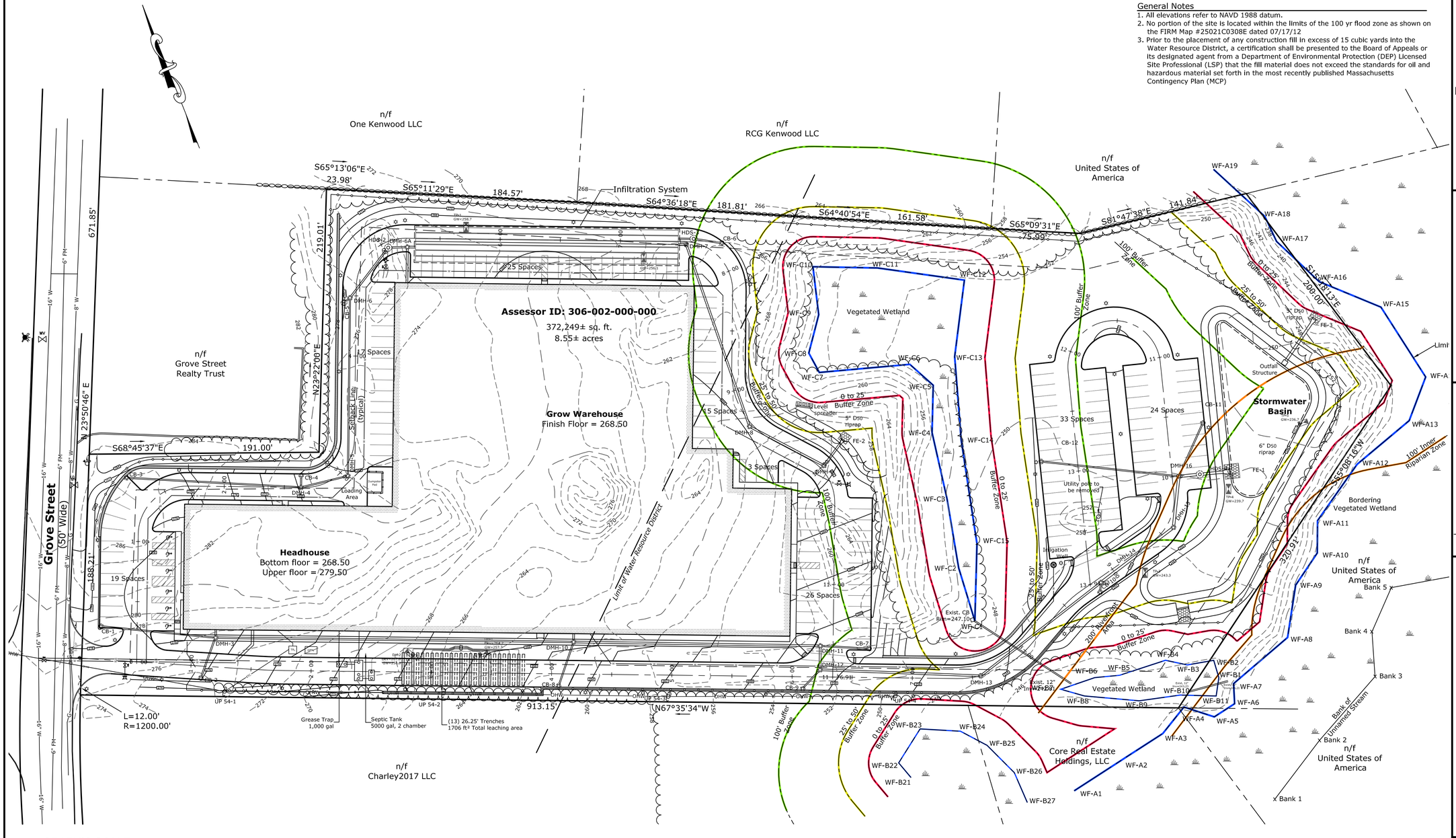
Cut	49,402 yd³
Fill	21,905 yd³
Net	27,496 yd³ cut

Utility Notes

1. Place 6" Loam and seed all disturbed areas of the project not otherwise improved.
2. All underground utility locations shown are based on field evidence and records provided to Land Planning, Inc.. These locations should be considered approximate. Other utilities may exist which are not evident or for which record information was not found. The contractor must contact all utility companies and "Dig Safe" before excavation begins. We assume no responsibility for damages incurred as a result of utilities omitted or inaccurately shown.
3. It is the responsibility of the contractor to review all of the drawings and specifications associated with this project work and project scope prior to the initiation of construction. Should the contractor find a conflict with the documents, relative to the specifications or applicable codes, it is the contractor's responsibility to notify the project engineer of record in writing prior to the start of construction. Failure by the contractor to notify the project engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.
4. All work shall conform to Town of Franklin requirements and Massachusetts Highway Department construction standards as applicable.
5. Where any utility installation detail conflicts with the Town of Franklin Department of Public Works Standards for Sewer and Water Materials and Installation, the Town Standards shall govern.

General Notes

1. All elevations refer to NAVD 1988 datum.
2. No portion of the site is located within the limits of the 100 yr flood zone as shown on the FIRM Map #25021C0308E dated 07/17/12
3. Prior to the placement of any construction fill in excess of 15 cubic yards into the Water Resource District, a certification shall be presented to the Board of Appeals or its designated agent from a Department of Environmental Protection (DEP) Licensed Site Professional (LSP) that the fill material does not exceed the standards for oil and hazardous material set forth in the most recently published Massachusetts Contingency Plan (MCP)



Site Index Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 40'
Revised June 16, 2020

LEGEND

○○○○○○	SW STONE WALL
○	IPF IRON PIN FOUND
◉	DHF DRILL HOLE FOUND
⊡	BOUND TO BE SET
■	BOUND FOUND
◎	DRAIN MANHOLE
⊡	CATCH BASIN
⊸	UTILITY POLE
——100——	EXISTING CONTOUR
—[100]—	PROPOSED CONTOUR
581x5	PROPOSED SPOT GRADE
◀	LIGHT - WALL MOUNTED
☼	LIGHT - POLE MOUNTED
—o—	SIGN
—— ETC ——	ELECT., TEL. & CABLE
—— W ——	WATER LINE
—— S ——	SEWER LINE
—— G ——	GAS LINE
—— OHW ——	OVERHEAD WIRE
—•—•—•—	FENCE
o———o———o	GUARD RAIL
x WF-#	WETLAND FLAG

NORMAN G. HILL
CIVIL
No. 31887

Norm G Hill, PE
Date: 6/16/20

Norman G. Hill, PE #31887

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Environmental Consultants

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Scale
1" = 40'

Date
February 14, 2020

Job No.
B2521

Sheet No.
3

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

Zoning Summary

Zone: Industrial

	Required	Proposed
Frontage:	175 ft	200.21 ft
Area:	40,000 ft²	372,249 ft²
Front Yard:	40 ft	80.8 ft
Side Yard:	30 ft	55.6 ft
Rear Yard:	30 ft	328.6 ft
Bldg. Coverage:	70%	26.9%
Lot Coverage:	80%	52.2%
Height:	3 Stories	3 Stories

Note: Portions of the locus is located within the Water Resource District.

Utility Notes

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General Notes

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Infiltration System
6-rows of 31 Cultec R-330XLHD chambers in 25.67'x 220.50' washed stone field

TP-1
GW<258.7

TP-2
GW=256.1

25 Spaces

17 Spaces

15 Spaces

19 Spaces

Assessor ID: 306-002-000-000

372,249± sq. ft.
8.55± acres

Retaining Wall #1
Proposed segmental block wall
(design by others)

Setback Line (typical)

Grove Street
(50' Wide)

Headhouse
Bottom floor = 268.50
Upper floor = 278.75

See architectural plans for building mounted light fixture locations and details

Grow Warehouse
Finish Floor = 268.50

See architectural plans for building mounted light fixture locations and details

Loading Area

Dumpster Pad

Gate w/ knox box

Approximate location of transformer & generator. Design by others.

Limit of Water Resource District

Proposed gas service

Service saddle

2" Type K waterline

8" CLDI Fire protection waterline

8" Gate valve

16x8 Tapping saddle

Existing utility pole to be retained

Grease Trap
1,000 gal

Septic Tank
5000 gal, 2 chamber

Pump Chamber
1000 gal

(13) 26.25' Trenches
1706 ft² Total leaching area

DH-1
Elev=264.2
GW=257.7

DH-2
Elev=267.8
GW=258.8

1" PE Water

Utility & Grading Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 20'
Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
	BOUND TO BE SET
	BOUND FOUND
	DRAIN MANHOLE
	CATCH BASIN
	UTILITY POLE
100	EXISTING CONTOUR
100	PROPOSED CONTOUR
581x5	PROPOSED SPOT GRADE
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	LIGHT - POLE MOUNTED
	SIGN
ETC	ELECT., TEL. & CABLE
W	WATER LINE
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD WIRE
	FENCE
	GUARD RAIL
x WF-#	WETLAND FLAG

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Norman G. Hill, PE

Date: 6/16/20

Norman G. Hill, PE #31887

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Environmental Consultants

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Hanson, MA 02341
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1" = 20'

Date
February 14, 2020

Job No.
B2521

Sheet No.
4

Utility & Grading Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
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Boston, MA

Prepared for
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Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
	BOUND TO BE SET
	BOUND FOUND
	DRAIN MANHOLE
	CATCH BASIN
	UTILITY POLE
100	EXISTING CONTOUR
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581x5	PROPOSED SPOT GRADE
	LIGHT - WALL MOUNTED
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ETC	ELECT., TEL. & CABLE
W	WATER LINE
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	GUARD RAIL
x WF-#	WETLAND FLAG

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
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Date: 6/16/20
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Scale
1" = 20'

Date
February 14, 2020

Job No.
B2521

Sheet No.
5

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

Grow Warehouse
Finish Floor = 268.50
See architectural plans for building mounted light fixture locations and details

Zoning Summary
Zone: Industrial

	Required	Proposed
Frontage:	175 ft	200.21 ft
Area:	40,000 ft²	372,249 ft²
Front Yard:	40 ft	80.8 ft
Side Yard:	30 ft	55.6 ft
Rear Yard:	30 ft	328.6 ft
Bldg. Coverage:	70%	26.9%
Lot Coverage:	80%	52.2%
Height:	3 Stories	3 Stories

Note: Portions of the locus is located within the Water Resource District.

Site Layout Plan

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Boston, MA

Prepared for
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1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 40'
Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
	BOUND TO BE SET
	BOUND FOUND
	DRAIN MANHOLE
	CATCH BASIN
	UTILITY POLE
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Infiltration System
6 rows of 31 Cultec R-330XLHD chambers in 25.67'x 220.50' washed stone field

Assessor ID: 306-002-000-000

372,249± sq. ft.
8.55± acres

25 Spaces
17 Spaces
19 Spaces
15 Spaces

Loading Area
Dumpster Pad

Headhouse
Bottom floor = 268.50
Upper floor = 278.75

See architectural plans for building mounted light fixture locations and details

Grow Warehouse
Finish Floor = 268.50

See architectural plans for building mounted light fixture locations and details

Grove Street (50' Wide)

Limit of Water Resource District

Setback Line (typical)

Snow storage area

Wheel stop (typical)

Provide accessible parking signs for each space, mounted on wall of building

Vert. precast conc. curb (typical)

Conc. walk flush with pavement

5' Conc. sidewalk

Stop sign

Proposed gas service

Service saddle

8" Gate valve

16x8 Tapping saddle

2" Type K waterline

8" CLDI Fire protection waterline

Vertical granite curb at roundings to Grove Street

Gate w/ knox box

Existing utility pole to be retained

Approximate location of transformer & generator. Design by others.

TR. Snow GEN.

Grease Trap 1,000 gal

Septic Tank 5000 gal, 2 chamber

Pump Chamber 1000 gal

(13) 26.25' Trenches 1706 ft² Total leaching area

913.15'

N67°35'34"W

Date: 6/16/20
Norman G. Hill, PE #31887

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Scale **1" = 20'**
Date **February 14, 2020**
Job No. **B2521**
Sheet No. **6**

Site Layout Plan

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LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
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	BOUND TO BE SET
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COMMONWEALTH OF MASSACHUSETTS
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Scale: **1" = 20'**

Date: **February 14, 2020**

Job No.: **B2521**

Sheet No.: **7**

Grow Warehouse
Finish Floor = 268.50

See architectural plans for building mounted light fixture locations and details

Driveway Plan & Profile

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
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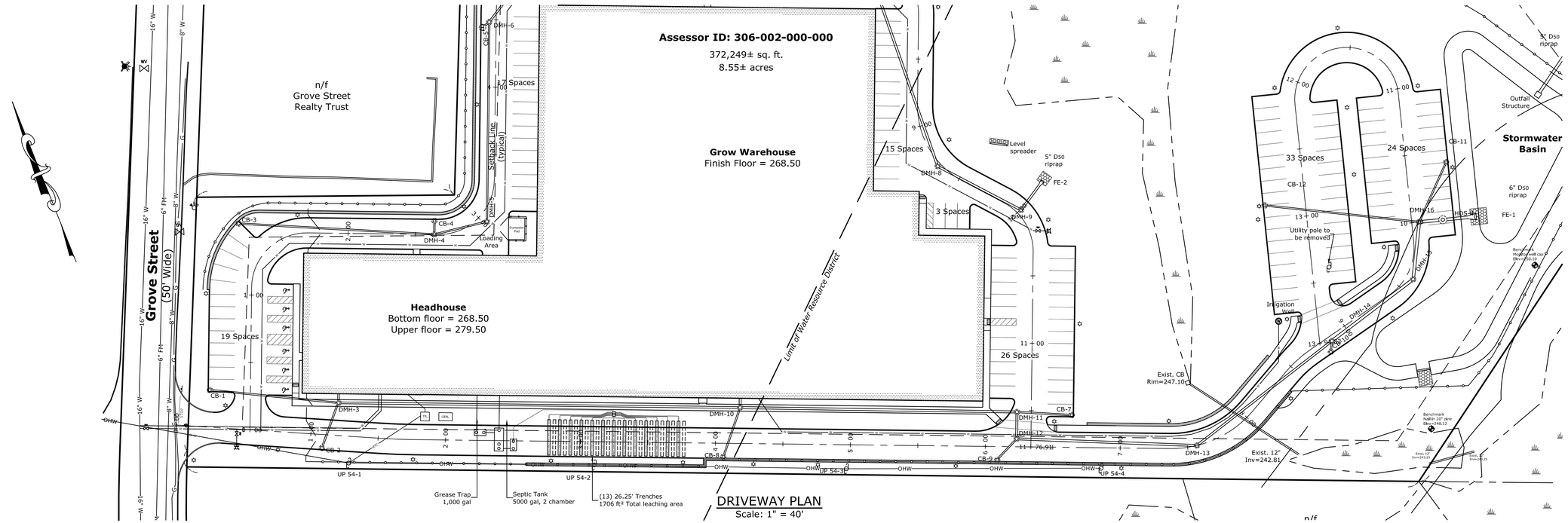
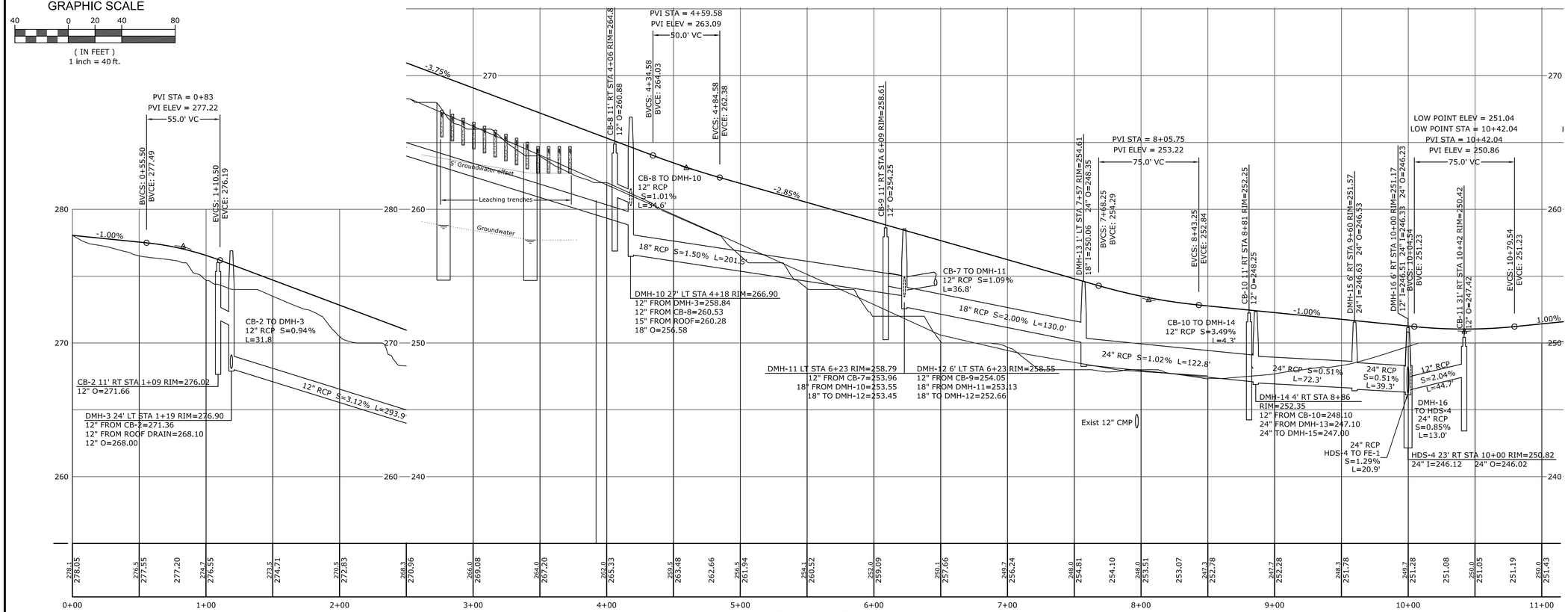
Scale: 1" = 40'
Revised June 16, 2020



DRIVEWAY PLAN
Scale: 1" = 40'

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



Note: All RCP drain pipes are to be Class V pipe

DRIVEWAY PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
BOUND TO BE SET	
BOUND FOUND	
DRAIN MANHOLE	
CATCH BASIN	
UTILITY POLE	
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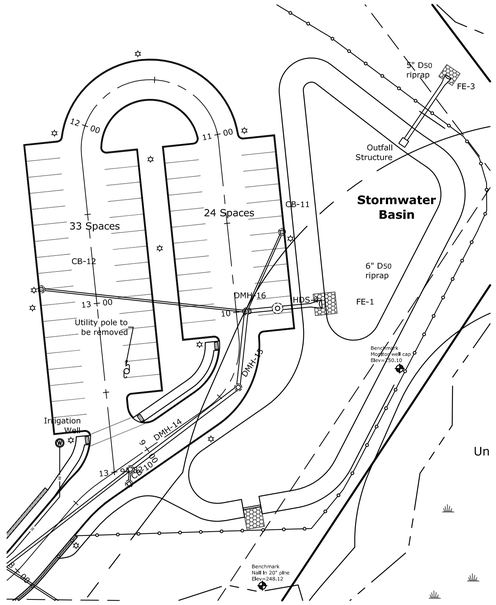
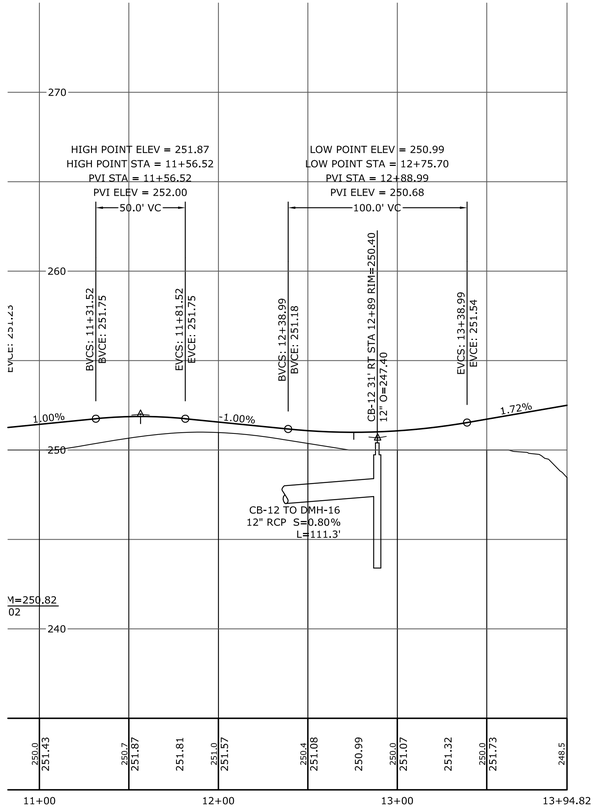
Scale	1" = 40'
Date	February 14, 2020
Job No.	B2521
Sheet No.	8



DRIVEWAY PLAN
Scale: 1" = 40'



Note: All RCP drain pipes are to be Class V pipe

DRIVEWAY PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'

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

Driveway Plan & Profile

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LEGEND

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	CATCH BASIN
	UTILITY POLE
100	EXISTING CONTOUR
100	PROPOSED CONTOUR
581x5	PROPOSED SPOT GRADE
	LIGHT - WALL MOUNTED
	LIGHT - POLE MOUNTED
	SIGN
ETC	ELECT., TEL. & CABLE
W	WATER LINE
S	SEWER LINE
G	GAS LINE
OHW	OVERHEAD WIRE
	FENCE
	GUARD RAIL
x WF-#	WETLAND FLAG

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Date: 6/16/20
Norman G. Hill, PE #31887

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

Bellingham
167 Hartord Ave.
Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
508-839-9526

Hanson
1115 Main Street
Hanson, MA 02341
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Scale
1" = 40'

Date
February 14, 2020

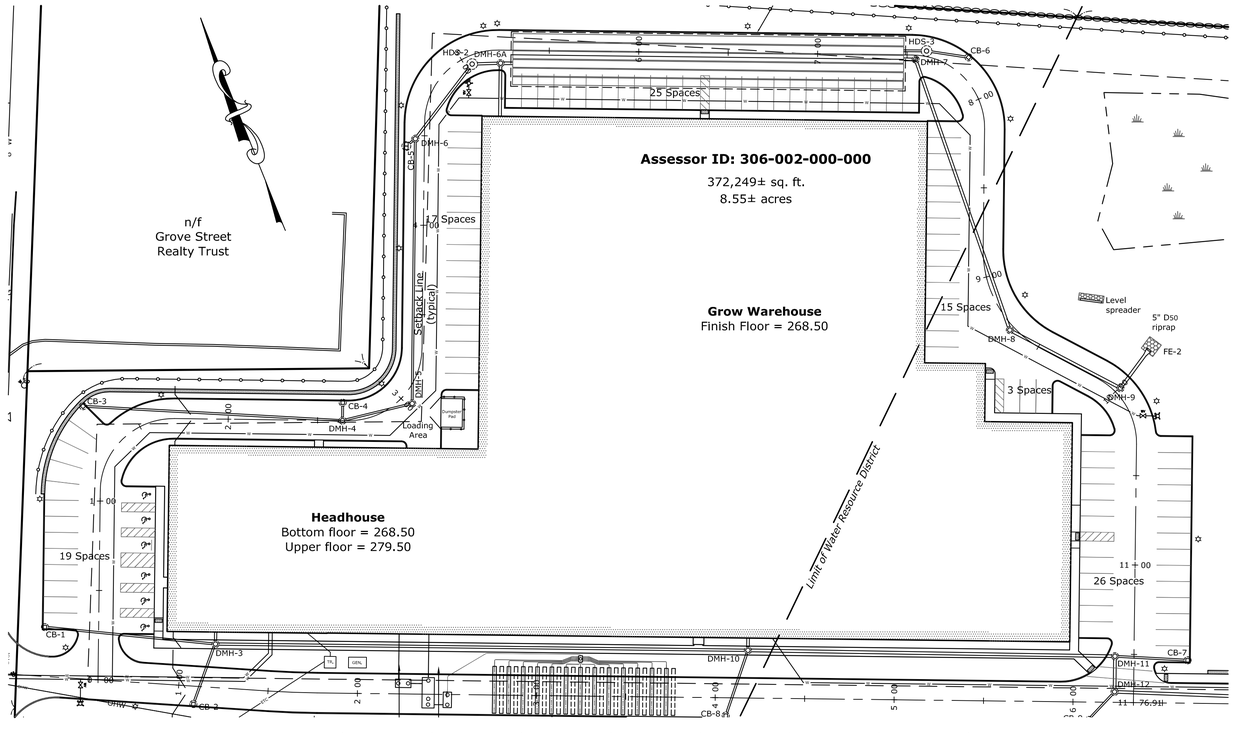
Job No.
B2521

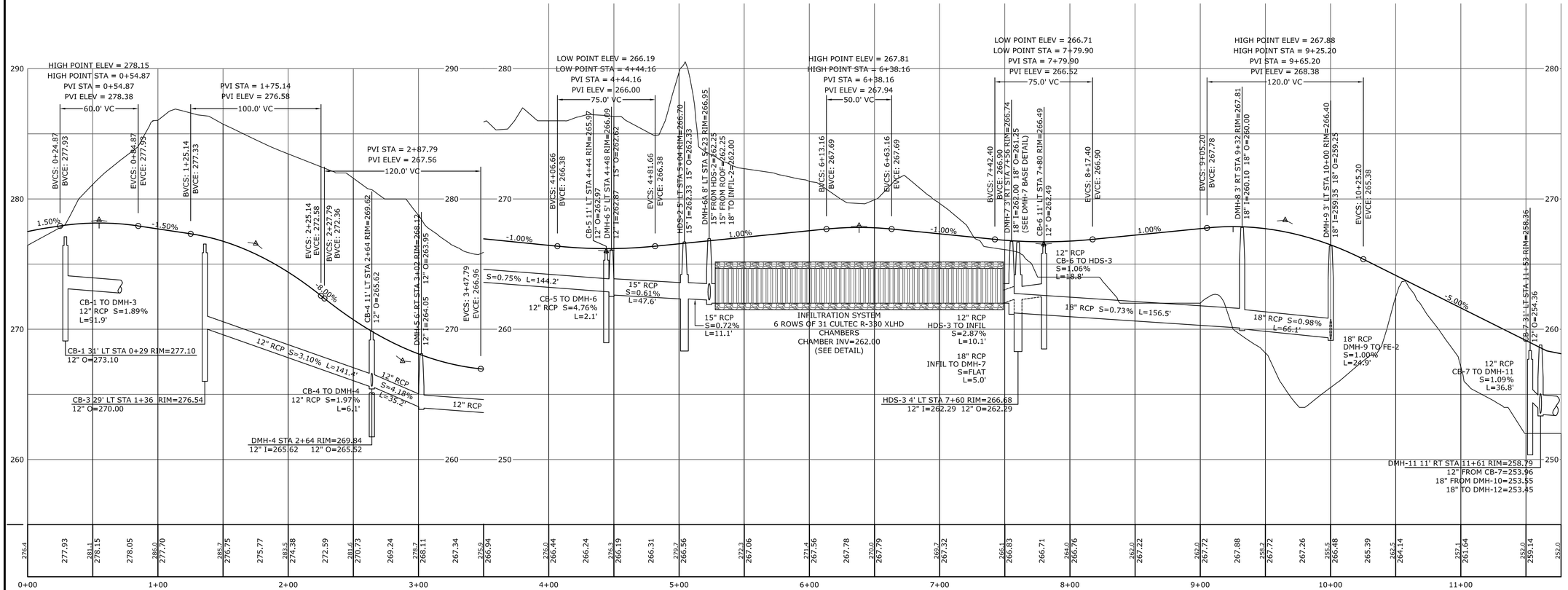
Sheet No.
9

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.





Note: All RCP drain pipes are to be Class V pipe

DRIVEWAY PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'

Driveway Plan & Profile

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 40'
Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
	BOUND TO BE SET
	BOUND FOUND
	DRAIN MANHOLE
	CATCH BASIN
	UTILITY POLE
100	EXISTING CONTOUR
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Date: February 14, 2020
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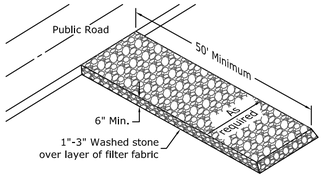
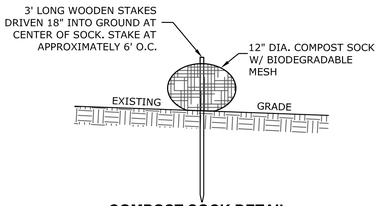
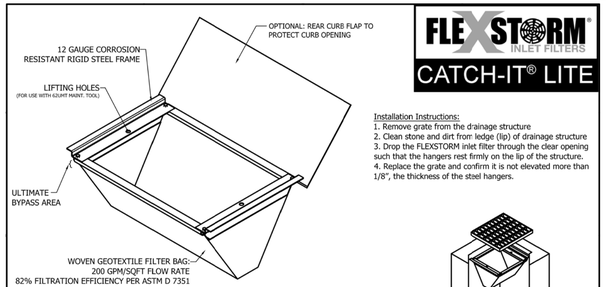
Sheet No.: 10



CONSTRUCTION ENTRANCE ANTI-TRACKING PAD DETAIL
Not to Scale



COMPOST SOCK DETAIL
Not to Scale



FLEXSTORM® INLET FILTERS
CATCH-IT® LITE

Installation Instructions:
1. Remove grate from the drainage structure
2. Clean stone and dirt from ledge (lip) of drainage structure
3. Drop the FLEXSTORM inlet filter through the clear opening such that the hangers rest firmly on the lip of the structure.
4. Replace the grate and confirm it is not elevated more than 1/8", the thickness of the steel hangers.

Meets ASTM D8057 standards

FLEXSTORM FX FABRIC SPECS

(Woven Geotextile Fills Bag Properties (Minimum Average Roll Values))			
PROPERTY	TEST METHOD	ENGLISH	METRIC
MECHANICAL			
TENSILE STRENGTH	ASTM D4632	350 x 225 lbs	1557 x 1001 N
ELONGATION	ASTM D4632	20% x 15%	20% x 15%
CBR PUNCTURE	ASTM D6241	1000 lbs	4448 N
TRAPEZOIDAL TEAR	ASTM D4533	135 x 75 lbs	489 x 334 N
ENDURANCE			
UV RESISTANCE % RETAINED AT 500 HRS	ASTM D4355	90%	90%
HYDRAULIC			
APPARENT OPENING SIZE (AOS)	ASTM D4751	20 US STD SIEVE	.850 mm
PERCENT OPEN AREA (POA)	CW-02215 MOD*	17%	17%
PERMITTIVITY	ASTM D4491	1.5 Sec^{-1}	1.5 Sec^{-1}
WATER FLOW RATE	ASTM D4491	200 gal/min/ft^2	8145 l/min/m^2

Product Features
-Rigid frame and removable geosynthetic bag
-Sized to meet treatment flow rate.
-Bag maintains shape to be extracted when completely filled with sediment
-Rigid frame capable of supporting full load of sediment without deforming.
-Does not interfere or elevate grate by more than 1/8"
-Bypass flow exceeds design flow of drainage location
-Filter bag achieves +80% gross removal efficiency per ASTM D7351.

FLEXSTORM CATCH-IT LITE ASTM D8057

CATCH BASIN FILTER BAG DETAIL
(not to scale)

Erosion & Sediment Control Notes

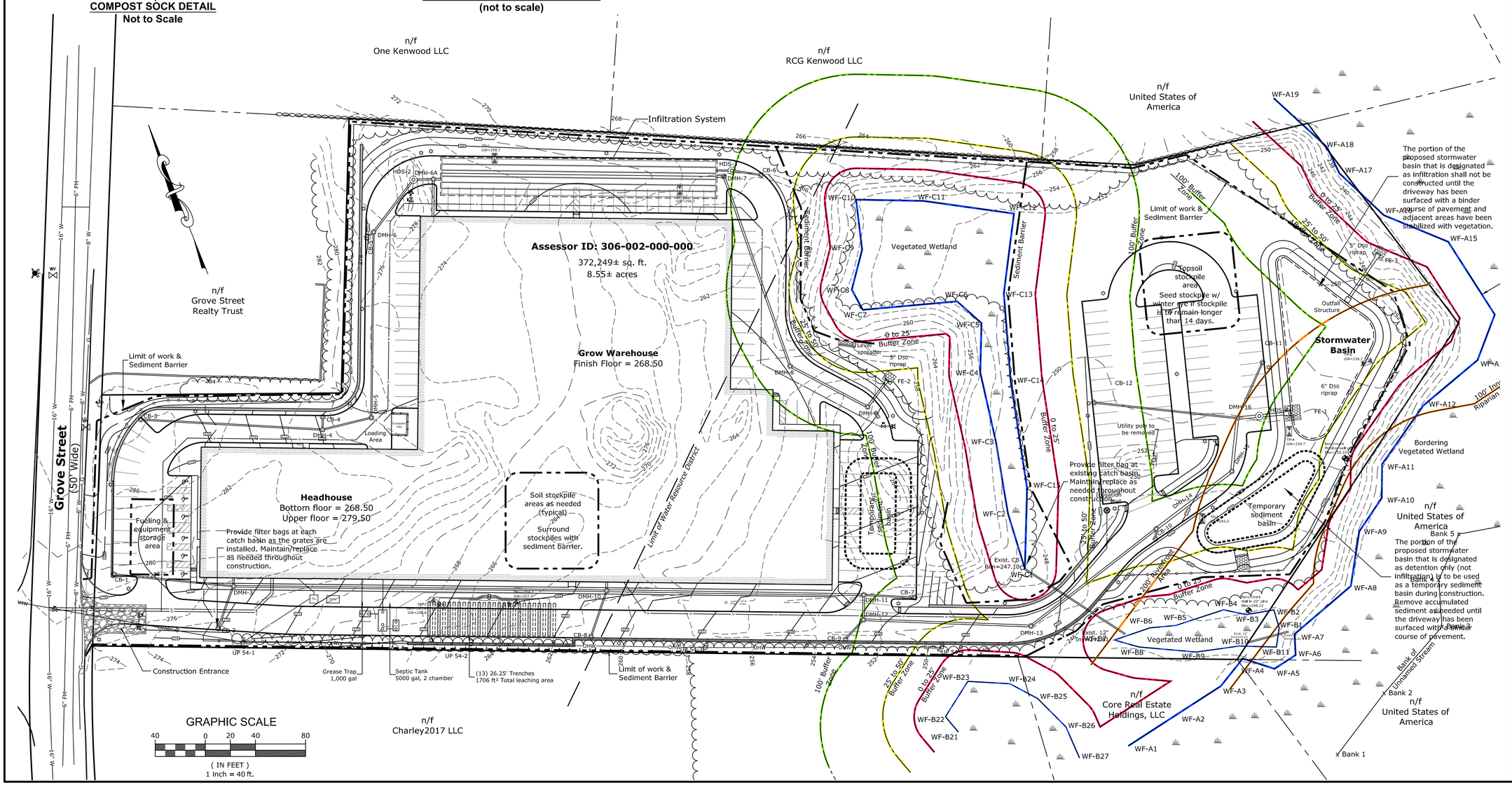
1. Sediment barriers are to be installed where shown on this plan. The contractor and the owner are responsible for the proper maintenance of the sediment barriers and to identify and correct all sources of erosion. Extra sediment barrier materials are to be stored on site in order to quickly repair erosion prone areas. Periodic maintenance of the erosion control structures is required in order to insure the proper protection of the resource areas.
2. Rough grading and pavement construction are to be confined to areas as shown on these plans. Any stockpiled material that is subject to erosion shall be protected at its base on the down-slope side with a silt fence.
3. Temporary stabilization of disturbed areas is required to limit erosion toward abutting properties and public ways. All graded slopes are to be stabilized on a daily basis with special care taken to avoid routing rainfall through gullies toward the resource areas. Areas of erosion are to be repaired on a daily basis.
4. The contractor is to use proper judgment relative to construction practices during adverse weather conditions or periods of high groundwater. No work is to be performed near the wetland areas during periods of heavy rainfall. Inspection is required after more than 1/2" of rainfall in 24 hours.
5. All graded areas are to be loamed and seeded as soon as possible in order to insure the rapid stabilization of the erosion prone areas. A grass seed mixture of 20% Red Top, 60% Chewings Fescue and 20% Kentucky Bluegrass is recommended. "Hydroseed" with high fiber content.
6. The Sediment barriers shall remain in place until all upgradient areas have been stabilized.
7. During periods of heavy rainfall, it will be expected to experience erosion of the unstabilized slopes. Immediate attention to the maintenance of these eroded areas will further insure the successful stabilization of the exposed slopes while limiting the impacts to nearby resource areas.
8. See the Construction Stormwater Pollution Prevention Plan for additional practices and controls.

Utility Notes

1. Place 4" Loam and seed all disturbed areas of the project not otherwise improved.
2. All underground utility locations shown are based on field evidence and records provided to Land Planning, Inc.. These locations should be considered approximate. Other utilities may exist which are not evident or for which record information was not found. The contractor must contact all utility companies and "Dig Safe" before excavation begins. We assume no responsibility for damages incurred as a result of utilities omitted or inaccurately shown.
3. It is the responsibility of the contractor to review all of the drawings and specifications associated with this project work and project scope prior to the initiation of construction. Should the contractor find a conflict with the documents, relative to the specifications or applicable codes, it is the contractor's responsibility to notify the project engineer of record in writing prior to the start of construction. Failure by the contractor to notify the project engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.
4. All work shall conform to Town of Franklin requirements and Massachusetts Highway Department construction standards as applicable.

General Notes

1. All elevations refer to NAVD 1988 datum.
2. No portion of the site is located within the limits of the 100 yr flood zone as shown on the FIRM Map #25021C0308E dated 07/17/12



Sediment & Erosion Control Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
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Franklin, MA

Owned By
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200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: 1" = 40'
Revised June 16, 2020

LEGEND

SW	STONE WALL
IPF	IRON PIN FOUND
DHF	DRILL HOLE FOUND
BOUND TO BE SET	
BOUND FOUND	
DRAIN MANHOLE	
CATCH BASIN	
UTILITY POLE	
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COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
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Date: 6/16/20
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Date	February 14, 2020
Job No.	B2521
Sheet No.	11

Landscape Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
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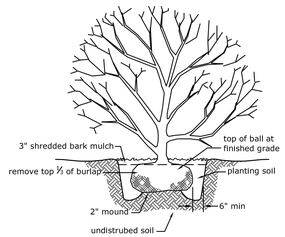
PLANTING LEGEND

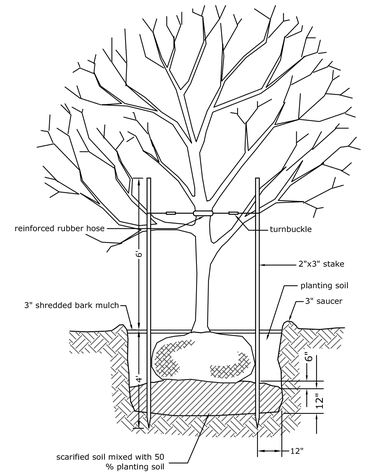
❀	TREE - 2" MIN. CALIPER
🟩	TURF GRASS
🟨	BUFFER ZONE & RIVERFRONT AREA RESTORATION TREES - 30' SPACING E. RED CEDAR & CHOKEBERRY SHRUBS - 25' SPACING GRAY DOGWOOD, BAYBERRY, STAGHORN SUMAC HERBACEOUS - THROUGHOUT @ 1 LB/1750 FT² NEW ENGLAND CONSERVATION/WILDLIFE MIX
🟦	DETENTION BASIN BOTTOM AND INNER BERM - EROSION CONTROL/RESTORATION MIX @ 35 LB/ACRE
🟧	BOTTOM OF INFILTRATION STAGE OF STORMWATER BASIN - 6" OF C33 SAND

PLANTING NOTES

1. ALL OTHER DISTURBED AREAS NOT DESIGNATED AS TURF GRASS TO BE MULCHED
2. TREES TO BE SELECTED FROM THE TOWN OF FRANKLIN BEST DEVELOPMENT PRACTICES GUIDEBOOK

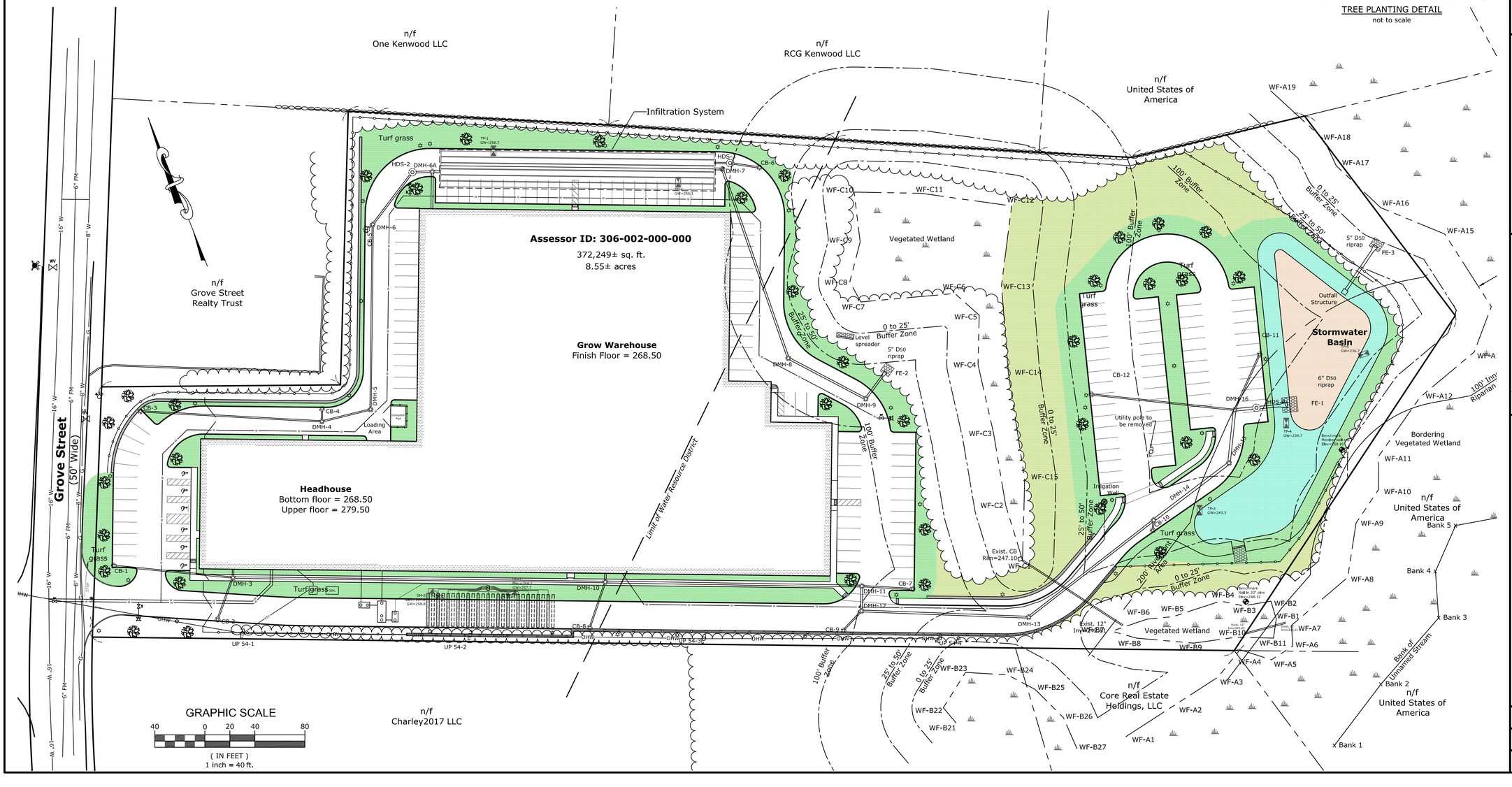


SHRUB PLANTING DETAIL
not to scale



note: guying systems employing buckles & cables shall be brought to tension & turnbuckle threads be flattened to prevent loosening.

TREE PLANTING DETAIL
not to scale



LEGEND

⚬⚬⚬⚬⚬⚬	SW	STONE WALL
○	IPF	IRON PIN FOUND
◉	DHF	DRILL HOLE FOUND
⊡		BOUND TO BE SET
▣		BOUND FOUND
◎		DRAIN MANHOLE
⊚		CATCH BASIN
☌		UTILITY POLE
— —100— —		EXISTING CONTOUR
—[100]—		PROPOSED CONTOUR
581x5		PROPOSED SPOT GRADE
◀		LIGHT - WALL MOUNTED
☼		LIGHT - POLE MOUNTED
—o—		SIGN
——ETC——		ELECT., TEL. & CABLE
—— W ——		WATER LINE
—— S ——		SEWER LINE
—— G ——		GAS LINE
—— OHW ——		OVERHEAD WIRE
-o-o-o-o-		FENCE
o——o——o		GUARD RAIL
x WF-#		WETLAND FLAG

NORMAN G. HILL
CIVIL
No. 31887

Date: 6/16/20
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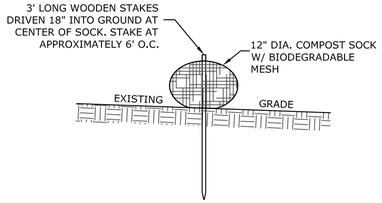
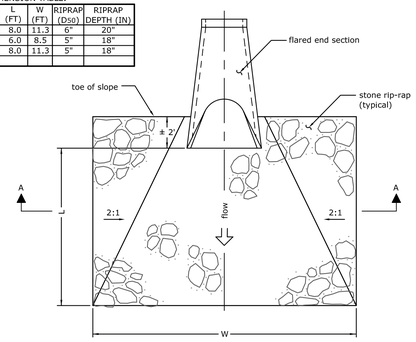


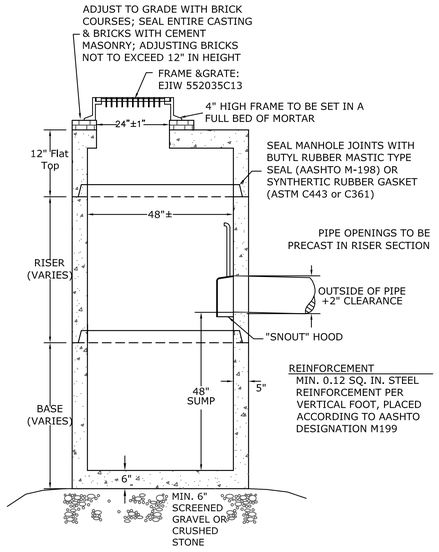
COMPOST SOCK DETAIL
(not to scale)

DIMENSION TABLE:

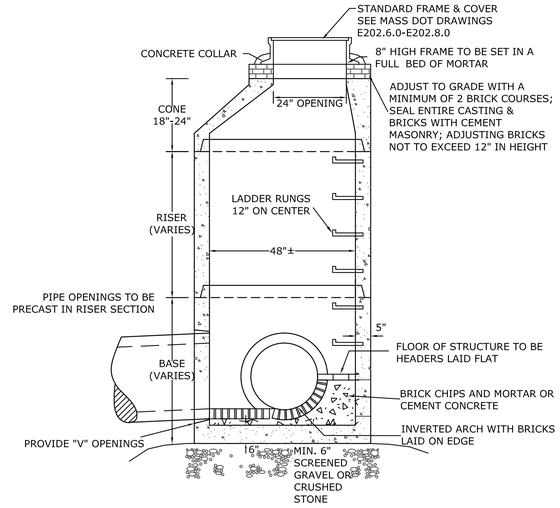
FLARED END	PIPE DIA.	L (FT)	W (FT)	RIPRAP (D50)	RIPRAP DEPTH (IN)
FE-1	24"	8.0	11.3	6"	20"
FE-2	18"	6.0	8.5	5"	18"
FE-3	24"	8.0	11.3	5"	18"



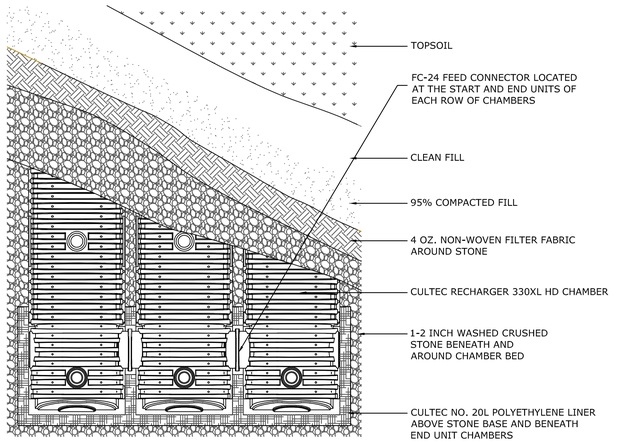
FLARED END EROSION PROTECTION DETAIL
not to scale



PRECAST CONCRETE CATCH BASIN DETAIL
(not to scale)

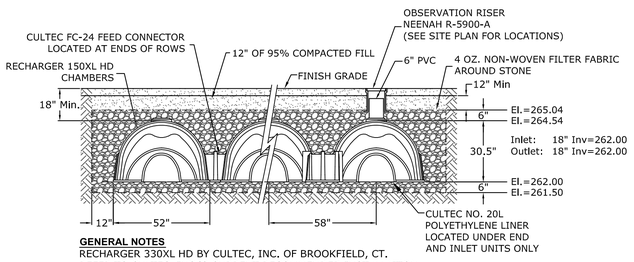


PRECAST CONCRETE MANHOLE DETAIL
(not to scale)



INFILTRATION SYSTEMS - PLAN VIEW
(not to scale)

Infiltration system consists of 6 rows of 31 Recharger 330XL HD units. All rows to be connected with FC-24 Feed Connectors between the end units of each row.



GENERAL NOTES
RECHARGER 330XL HD BY CULTEC, INC. OF BROOKFIELD, CT. REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.

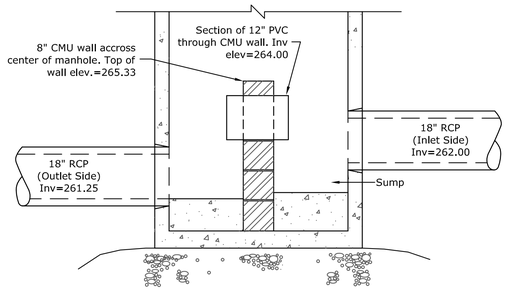
INFILTRATION SYSTEMS - CROSS SECTION
(not to scale)

INFILTRATION SYSTEM FILL SPECIFICATIONS:

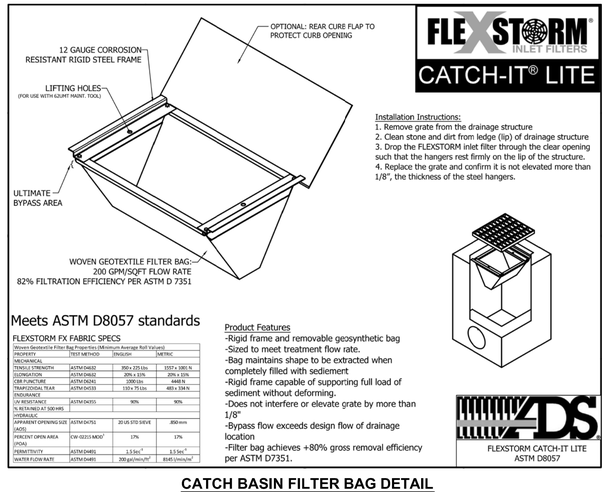
Fill material required beneath the infiltration system shall consist of select on-site or imported soil material. The fill shall be comprised of clean granular sand, be free from organic matter and deleterious substances, and shall not contain Remediation Waste as that term is defined in 310 CMR 40.0000. Mixtures and layers of different classes of soil shall not be used. The fill shall not contain any material larger than two inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45 % by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets each of the following specifications:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 mm	100%
# 50	0.30 mm	10% - 100%
#100	0.15 mm	0% - 20%
#200	0.075 mm	0% - 5%

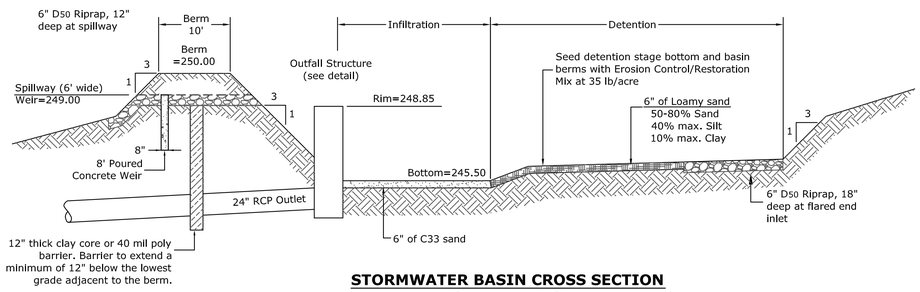
Any fill required to replace unsuitable or impermeable soils, the excavation of the unsuitable material shall extend a minimum of five feet laterally in all directions beyond the outer perimeter of the infiltration system to the depth of naturally occurring pervious material, and replaced with suitable fill material.



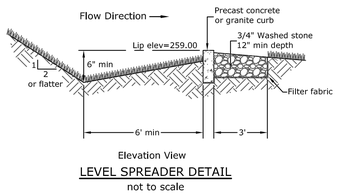
DMH-7 MANHOLE BASE
(not to scale)



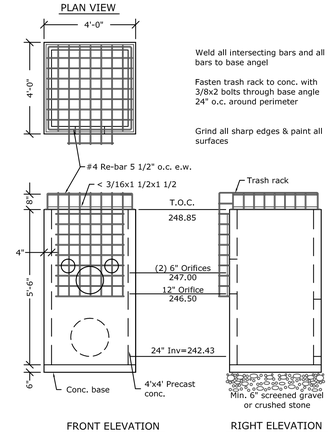
CATCH BASIN FILTER BAG DETAIL
(not to scale)



STORMWATER BASIN CROSS SECTION
(not to scale)



LEVEL SPREADER DETAIL
not to scale



OUTFALL STRUCTURE DETAIL
(not to scale)

Details Plan

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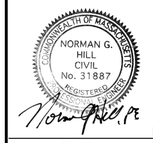

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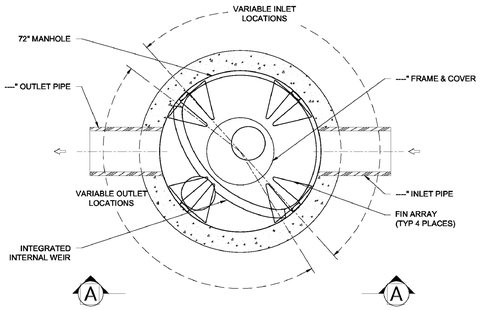
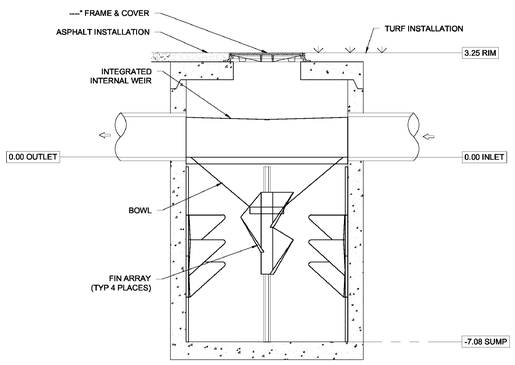
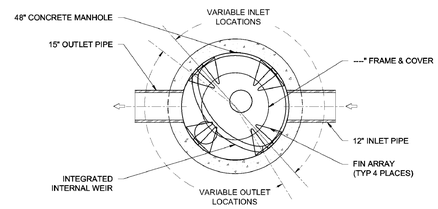


PLAN VIEW
NTS

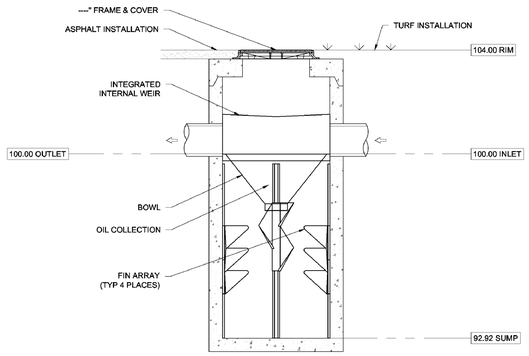


SECTION VIEW A-A
NTS

BARRACUDA S6 DETAIL
(not to scale)
Use S6 unit at HDS-4

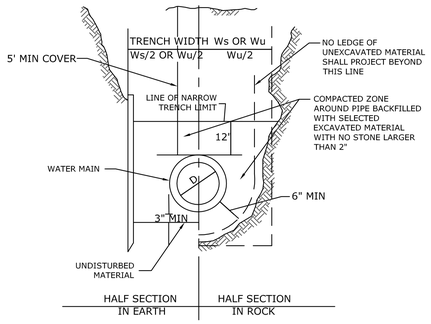


PLAN VIEW
NTS



SECTION VIEW A-A
NTS

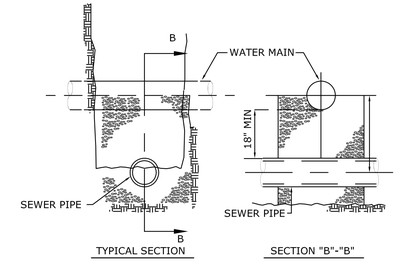
BARRACUDA S4 DETAIL
(not to scale)
Use S4 unit at HDS-2 and HDS-3



FOR SHEETED TRENCH Ws=4/D + 32" OR 50", WHICHEVER IS GREATER.
FOR UNSHEETED TRENCH Wu=4/3 D + 18" OR 36", WHICHEVER IS GREATER.

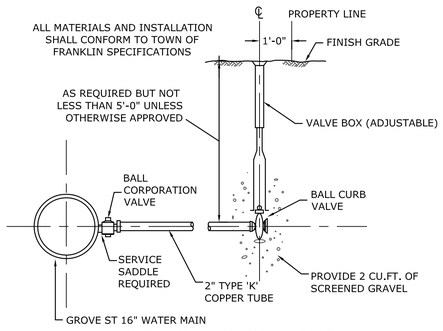
NOTES:
1. TRENCHES MAY BE EXCAVATED WIDER THAN THE TRENCH WIDTH Ws ABOVE THE "LINE OF NARROW TRENCH LIMIT.
2. BELOW THE "LINE OF NARROW TRENCH LIMIT" THE TRENCH SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH Ws.
3. SHEETING, IF USED, IN ALL CASES SHALL BE LEFT IN PLACE BELOW A LINE ONE FOOT ABOVE THE TOP OF THE PIPE, UNLESS OTHERWISE INDICATED OR DIRECTED.
4. "COVER" AT ANY POINT SHALL BE DEFINED AS THE VERTICAL DISTANCE FROM THE UPPERMOST POINT OF THE PIPE TO A LINE WHICH CONNECTS THE SURFACE OF UNDISTURBED GROUND AT EITHER SIDE OF THE TRENCH AND IS AT RIGHT ANGLES TO THE DIRECTION OF THE PIPE.
5. WHERE FUTURE EXTENSION OF A PLUGGED PIPE OR PLUGGED BRANCH WILL ENTAIL ROCK EXCAVATION, TRENCH EXCAVATION IN ROCK SHALL BE EXTENDED FOR A DISTANCE OF FIVE FEET BEYOND THE PLUG.

WATER MAIN TRENCH DETAIL
NOT TO SCALE

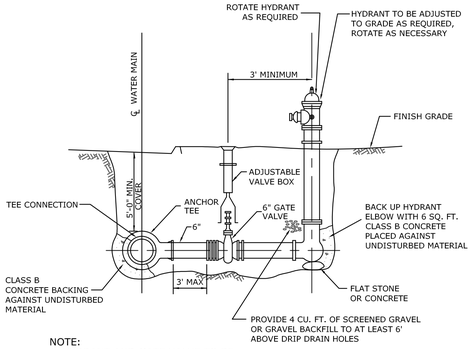


NOTE: IN THE EVENT OF A SEWER MAIN OR SEWER SERVICE CROSSING A WATER MAIN OR WATER SERVICE CLOSER THAN 10', THE SEWER MAIN OR SERVICE SHALL BE COMPLETELY ENCASED IN 6" OF 3,000 P.S.I. CONCRETE FOR A DISTANCE OF 10' ON EACH SIDE OF THE CROSSING.

UTILITY CROSSING DETAIL
N.T.S.

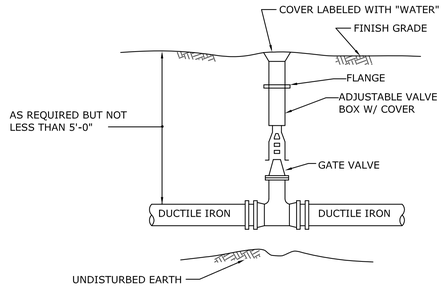


TYPICAL SERVICE CONNECTION
NOT TO SCALE

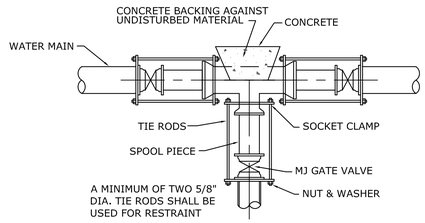


NOTE:
1. HYDRANT AND GATE VALVE TO BE RODDED TO ANCHOR TEE.
2. SEE FORCE MAIN THRUST BLOCK DETAIL FOR THE AREA OF CONCRETE REQUIRED

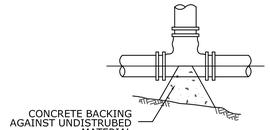
TYPICAL HYDRANT AND VALVE DETAIL
NOT TO SCALE



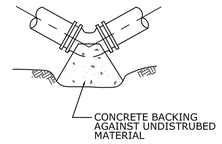
TYPICAL GATE VALVE
NOT TO SCALE



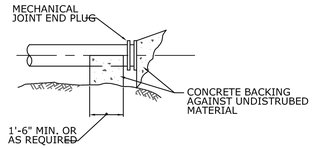
TYPICAL VALVE CONNECTION
RESTRAINED JOINT TEE
NOT TO SCALE



TYPICAL TEE



TYPICAL BEND



TYPICAL PLUG

Details Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: As Noted
Revised June 16, 2020

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Date: 6/16/20
Norman G. Hill, PE #31887

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

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Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
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Hanson
1115 Main Street
Hanson, MA 02341
781-294-4144

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Scale: **1" = As Noted**
Date: **February 14, 2020**
Job No.: **B2521**
Sheet No.: **14**

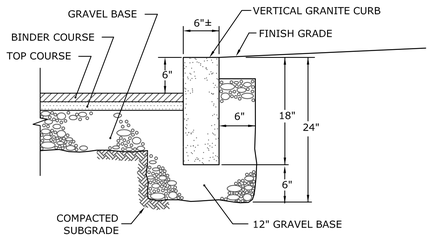
Sign to be mounted on post at 7' height to bottom of sign

Sign to be mounted on building wall at the head of standard accessible parking spaces

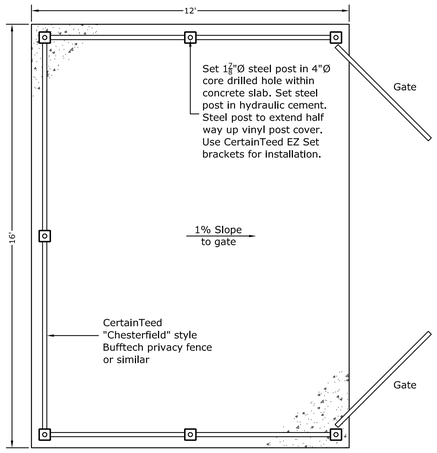
Sign to be mounted on building wall at the head of van accessible parking spaces

Mount signs 5' min. to 8' max. to top of sign

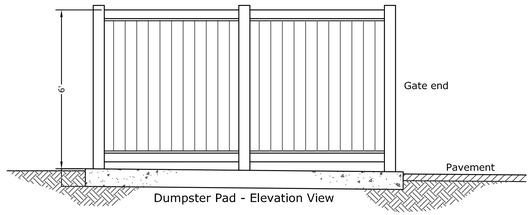
SIGN DETAILS
(not to scale)



VERTICAL GRANITE CURB DETAIL
(not to scale)

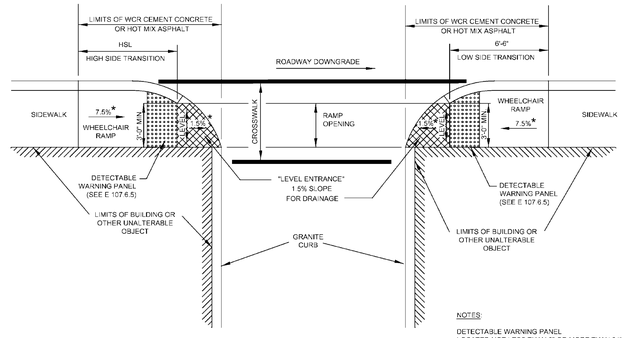


Dumpster Pad - Plan View



Dumpster Pad - Elevation View

Dumpster Pad and Fence Detail
not to scale



LEGEND

HSL = HIGH SIDE TRANSITION LENGTH (SEE E 107.9.0)

★ = TOLERANCE FOR CONSTRUCTION ±0.5%

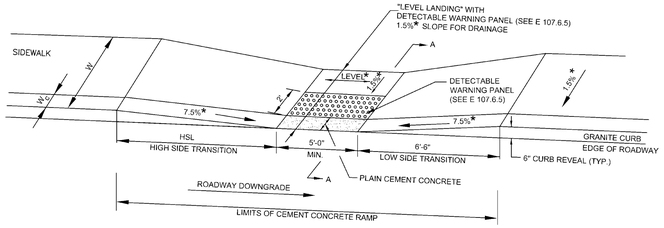
NOTES:

DETECTABLE WARNING PANEL LOCATED NOT LESS THAN 6" OR MORE THAN 24" FROM ROADWAY EDGE (GUTTER LINE). TRUNCATED DOMES TO BE ALIGNED WITH DIRECTION OF TRAVEL.

FOR DETAILS OF TRUNCATED DOMES SEE DRAWING E 107.6.5.

ROADWAY, GUTTER AND FIRST 6" OF SIDEWALK TO BE ADJUSTED FOR FIELD CONDITIONS.

MassDOT Highway Division — CONSTRUCTION STANDARDS	WHEELCHAIR RAMP FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN TRAVEL	DATE OF ISSUE: OCTOBER 2017
		DRAWING NUMBER: E 107.6.0

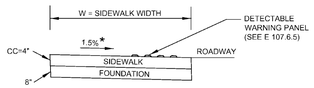


LEGEND

HSL = HIGH SIDE TRANSITION LENGTH (SEE E 107.9.0)
W = SIDEWALK WIDTH
W_C = CURB WIDTH
CC = CEMENT CONCRETE
★ = TOLERANCE FOR CONSTRUCTION ±0.5%

USABLE SIDEWALK WIDTH PER AAB = W-Wc
USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'0"
SEE E 107.6.5 FOR DETAILS OF DETECTABLE WARNING PANEL

NOTE:
ROADWAY, GUTTER, AND FIRST 6" OF SIDEWALK TO BE ADJUSTED FOR FIELD CONDITIONS



SECTION A-A

MassDOT Highway Division — CONSTRUCTION STANDARDS	WHEELCHAIR RAMP ON NARROW SIDEWALK WITH DETECTABLE WARNING PANEL	DATE OF ISSUE: OCTOBER 2017
		DRAWING NUMBER: E 107.2.1

VERTICAL PRECAST CONCRETE CURB DETAIL
not to scale

MONOLITHIC CONCRETE SIDEWALK/CURB DETAIL
not to scale

BITUMINOUS CONCRETE PAVING DETAIL
not to scale

Setback Dimension From
Curb 24"
Sidewalk 24"
Wall 30"

PRECAST CONCRETE WHEEL STOP DETAIL
not to scale

Details Plan

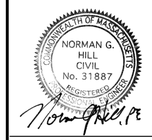
HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: As Noted
Revised June 16, 2020



Date: 6/16/20
Norman G. Hill, PE #31887

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Civil Engineers • Land Surveyors
Environmental Consultants

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Bellingham, MA 02019
508-966-4130

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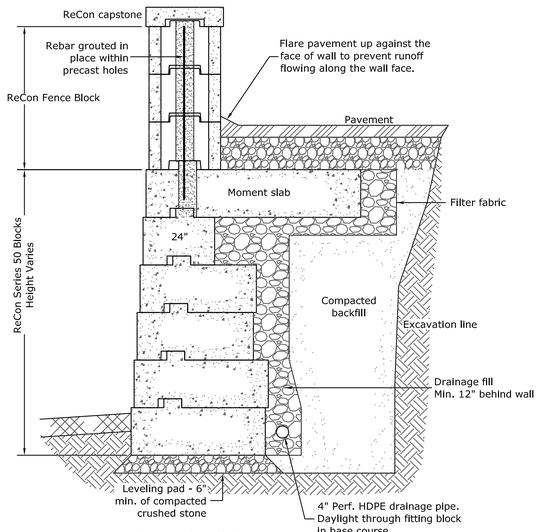
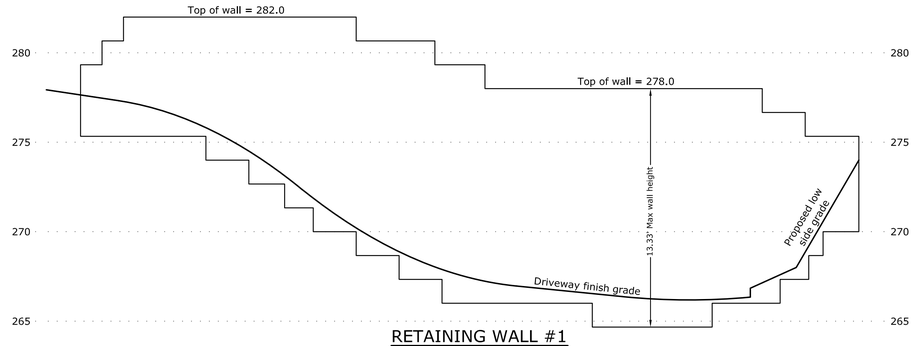
Scale: **1" = As Noted**
Date: **February 14, 2020**
Job No.: **B2521**
Sheet No.: **15**

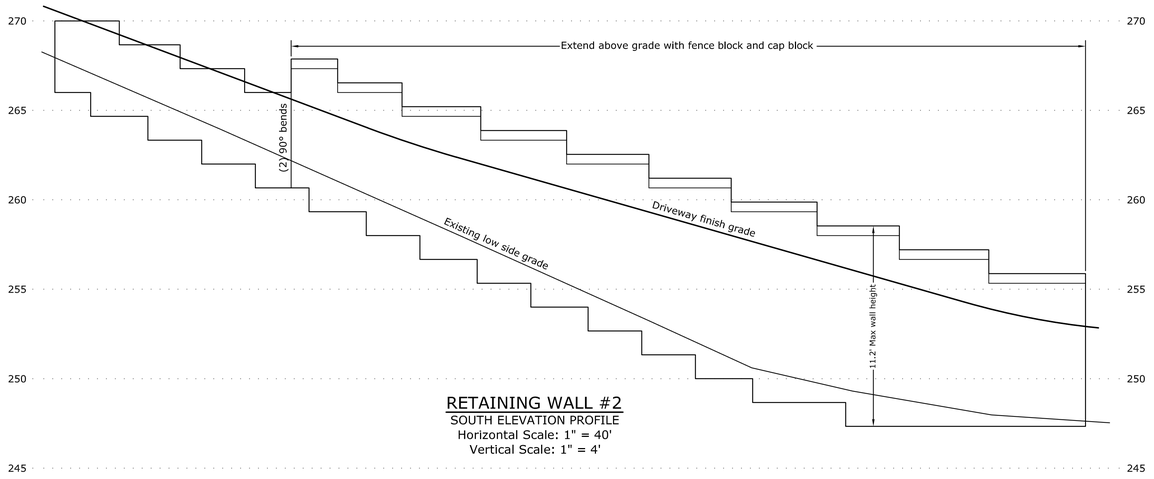
Note: Wall details depict the general requirements for the proposed segmental block gravity walls. Structural analysis and design, construction details, and specifications to be provided by others.



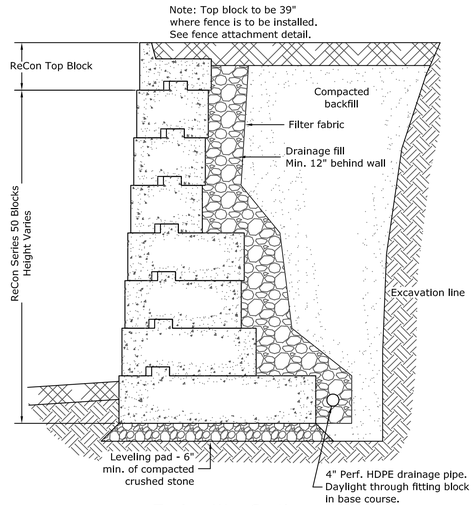
Typical Wall Section
(Wall Adjacent to Pavement)
Scale: 1/2" = 1'-0"



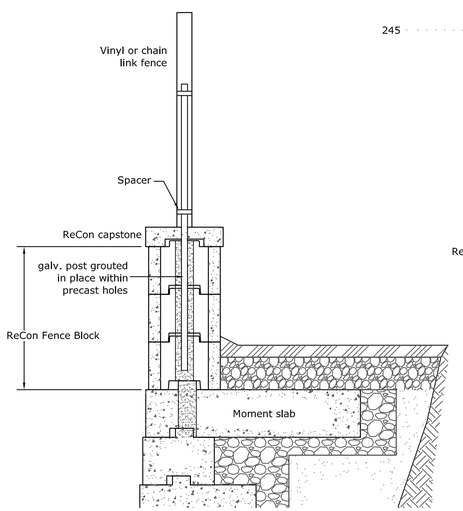
RETAINING WALL #1
SOUTH/EAST ELEVATION PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'



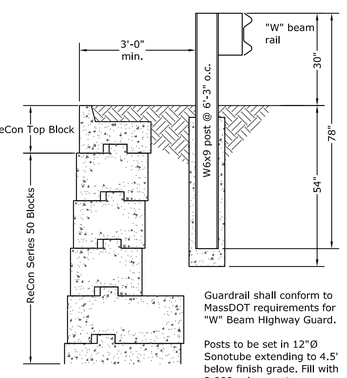
RETAINING WALL #2
SOUTH ELEVATION PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'



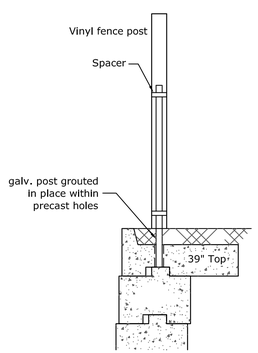
Typical Wall Section
(Wall Adjacent to Landscape Area)
Scale: 1/2" = 1'-0"



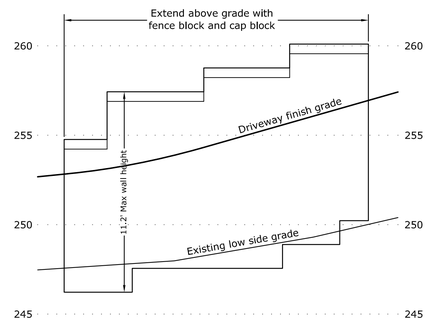
Fence Attachment Detail
(Wall Adjacent to Pavement)
Scale: 1/2" = 1'-0"



Guard Rail Placement Detail
Scale: 1/2" = 1'-0"



Fence Attachment Detail
(Wall Adjacent to Landscape Area)
Scale: 1/2" = 1'-0"



RETAINING WALL #3
NORTH ELEVATION PROFILE
Horizontal Scale: 1" = 40'
Vertical Scale: 1" = 4'

Details Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
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200 Brookline Ave, #508
Boston, MA

Prepared for
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1330 Boylston St Unit 202
Boston, MA 02215

Scale: As Noted
Revised June 16, 2020

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED ENGINEER

Date: 6/16/20
Norman G. Hill, PE #31887

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Scale	
1" = As Noted	
Date: February 14, 2020	Sheet No. 16
Job No. B2521	

Town of Franklin

Planning Board

August 11, 2020

Teresa M. Burr, Town Clerk
Town of Franklin
355 East Central Street
Franklin, MA 02038

CERTIFICATE OF VOTE
SPECIAL PERMIT/SITE PLAN
160 Grove Street

Applicant: Hennep Cultivation LLC
c/0 Prince Lobel Tye
One International Place
Boston, MA 02110

Owner: Hennep Properties LLC
200 Brookline Ave #508
Boston, MA 02215

Prepared By;
Surveyor/Engineer: Land Use Planning,167 Hartford Ave, Bellingham, MA 02019

Plan Date: February 14, 2020
Property Location: 160 Grove Street
Map 306 Lot 002

Dear Mrs. Burr:

Please be advised that at its meeting on Monday, August 10, 2020 the Planning Board upon motion duly made and seconded, voted (5-0) to **APPROVE, with standard and special conditions** (1) one Special Permit and Site Plan for 160 Grove Street for Use Regulation Schedule §185 Attachment 3 Section 2.23, Non-Medical Marijuana Facility. A brief description of the proceeding, the outcome of a roll call vote, the Standard and Special Conditions of Approval, and Waivers granted, are presented on pages 2 - 8 attached hereto.

Sincerely,

Anthony Padula, Chairman
Franklin Planning Board

cc: Owners/Applicant/Applicant's Engineer/Applicant's Attorney
Building Commissioner/DPW/Engineering/BETA Group, Inc.

PROJECT DESCRIPTION
SPECIAL PERMIT/SITE PLAN
160 Grove Street

The existing site consists of a single parcel of undeveloped land totaling approximately 8.55 acres, located at 160 Grove Street, in the Industrial Zoning District and Marijuana Overlay District. The project proposes to remove existing structures and construct a 121,000 +/- SF structure for use as a recreational cultivation and production manufacturing marijuana establishment. Associated site improvements include tree clearing, re-grading, the installation of paved parking areas and driveways, loading areas, a septic system, domestic and fire protection water services, odor abatement technologies, and security/safety measures. Stormwater management is proposed to be accomplished through a closed drainage system with catch basin and manhole conveyance, two subsurface infiltration systems, and a stormwater basin. Work is proposed within wetland buffer zones, but no alterations are proposed within wetland resource areas.

PUBLIC HEARING
SPECIAL PERMIT/SITE PLAN
160 Grove Street

A proper and complete notice of the December 16, 2019 public hearing was posted in the Franklin Municipal Building and in the appropriate local newspaper in accordance with the Franklin Zoning Code and Massachusetts General Laws. A proper and complete notice was also sent to all persons and parties required by law to receive such notice. The Planning Board continued to hold public hearings on January 6, 2020, January 27, 2020, February 10, 2020, February 24, 2020, March 23, 2020, May 4, 2020, May 18, 2020, June 1, 2020, and July 13, 2020.

Incorporated as part of the record are the following:

The Planning Board reviewed (1) the applicant's detailed written application including answers to Special Permit Findings (a) through (g), and (2) comments and review letters from various Town Departments, including but not limited to, Department of Planning & Community Development, Department of Public Works' Engineering and Franklin Fire Department. The Planning Board also reviewed engineering reports and traffic study from their peer review Consultant.

The Planning Board upon motion duly made and seconded, voted (5-0-0) to close the public hearing on July 13, 2020 for the Site Plan and Special Permit for (1) Use Regulation Schedule §185 Attachment 3 Section2.23, Non-Medical Marijuana Facility

PRESENTATION
SPECIAL PERMIT/SITE PLAN
160 Grove Street

Mr. Adam Braillard, Attorney of Prince Lobel Tye LLP, on behalf of applicant Hennep Cultivation LLC; Mr. Tom Noel of Noel Law; and Mr. Bill Halsing of Land Planning, Inc. addressed the Planning Board for approval to construct a 121,000 sq. ft. facility for the cultivation, processing, and distribution of marijuana and marijuana related products and office space. Mr. Braillard stated this site is located in the Industrial Zoning District and within the Marijuana Use Overlay District.

The parcel is approximately 8 acres surrounded by industrial and commercial uses. The facility will consist of approximately 100,000 sq. ft. grow/warehouse and 21,000 sq. ft. office and processing space. The facility will not be open to the public. The proposed site plan is to install 138 parking spaces.

Mr. Stukel reviewed the provided Site Development Plans for the cultivation and production facility. He noted they went through many iterations regarding the parking. He explained the size and proposed structure of the facility. He stated this will be a fully enclosed hybrid-style greenhouse facility and the natural sunlight will be used to grow the product.

Mr. Braillard discussed the proposed waivers for the number of parking spaces and the distance of the parking spaces from the building entrance. The total number of required parking spaces is 159. Based on the challenges of the wetlands and setbacks, the maximum number of parking spaces that can fit is 138. This is a 13 percent reduction. The second waiver regards the 68 spaces in the rear parking area that are greater than 300 ft. from the entrance of the building due to the wetland concerns. He stated that based on the business model, they forecast that at any given time there will be between 35 and 40 employees working. He noted there will be two shifts with approximately 70 employees in total. Therefore, they do not expect the parking lot in the rear to be utilized.

Mr. Knoll discussed differences between the type of cultivation of this proposed facility and that of other marijuana cultivation facilities. He stated Hennep is a passive cultivation because of the translucent roof providing the natural daylight to grow rather than a process growing of non-natural light sources.

Mr. Braillard discussed the proposed odor control mitigation plan filed with the application. It is a vapor system with active carbon charcoal filters. They do not expect there to be a marijuana odor from the facility. He discussed benefits to the Town including the Host Community Agreement. He stated they propose to hire locally and want to work with local charitable and community initiatives. He stated that this is the only cultivation facility Hennep Cultivation will have.

Mr. Maglio stated a traffic analysis should be provided to determine if modifications to the existing turn lane striping is warranted. He stated the plan calls for three retaining walls, one at the front of the property near Grove Street and two carrying the access drive to the rear parking lot. Elevations for the top and bottom of the walls should be shown on the grading plan. In addition to the pre- and post-development runoff rates, total runoff volumes also need to be evaluated to ensure there is no increase due to the post-development condition. As well, soil logs for the test pits shown on the plan need to be submitted.

Ms. Love stated if there has been a change in ownership since the filing of the Site Plan and Special Permit, a new submittal of the application with the correct information should be submitted. They must file with Design Review if they are proposing any signage.

Mr. Braillard stated they have gone before the Conservation Commission, and they have filed with the Cannabis Control Commission.

Mr. Seward reviewed the specifics of the odor control plan. He explained the location of the carbon filters and how it is exhausted. He noted that the carbon filters run whenever there are odor emitting activities; they will likely run 24/7. Mr. Halligan asked about the chemical being used to disintegrate the odor, how many gallons of the chemical would be stored at the site at one time, and what kind of permit will they need to store these chemicals in a Water Resource area. Mr. Seward said the chemical has been tested by several agencies for hazardous components. He referred to the safety data sheet. He stated that there should be very little reside of the chemical's use. He discussed the number of gallons of chemicals and how long those chemicals would be stored. Mr. Maglio stated it needs to be verified how much of the chemical will be stored at the site at one time. Mr. Stukel stated the head house is not in the Water Resource District which is the front part of the building; however, it is all on the same floor. He suggested a containment zone could be installed in case of spillage.

Mr. Rondeau asked if this odor mitigation system has been tried and used in this area, and what kind of noise and decibel level is made by the fans. Mr. Seward stated this is the first time this system has been done in Massachusetts; it has been done in the West Coast with success. He stated they use 54 in. fans; he does not have the decibel level. Mr. Braillard stated the system is being used in Freetown, MA. He will get information to the Planning Board.

Mr. Joe Sabato of Epsilon Associates, Inc., stated they are the third-party reviewer for the odor mitigation; they do this type of consulting for noise and odor. He discussed that noise is measured using a decibel scale. Both the Town and MassDEP regulate the amount of noise that can be on a property. He reviewed his PowerPoint presentation and discussed the noise requirements of the MassDEP noise policy and the Town Nuisance Bylaw. Based on this, they evaluated the noise of the fans and the potential noise impacts from the fans. They do not see a concern with the noise generated to the closest residents. He stated that deliveries should be limited to daytime periods, and the facility should avoid nighttime deliveries. He stated that cannabis odor has been described as skunk-like and if left uncontrolled, depending on the magnitude and weather, it can travel over one-half mile. He reviewed the MassDEP odor policy and the Town Nuisance Bylaw. He stated the applicant did a good job describing the Fogco Odor Control System using an odor neutralizer which alters the odor molecule to render it odorless. He recommended the Fogco system be optimized to make it work. The applicant should describe any heat tracing on the system in order to ensure the odor mitigation system remains operational during winter periods. He described a few concerns not yet addressed by the applicant and stated that among other concerns, he is not clear if there is a backup odor mitigation plan.

Mr. Halligan asked questions including how the system works if it freezes. He requested information regarding if anyone in this area has this system. He asked if a wind study was done or if the direction of the prevailing wind was reviewed. He asked if the air could be vented to the back of the building to keep odor away from residents. He noted that there is another facility in Franklin where the odor is very prevalent. He asked if there is an alarm system that can detect the odor to make sure the carbon and fluids are maintained and working properly, or does an employee just have to decide when to maintain the system.

Mr. Seward stated there is a heat trace system that keeps it from freezing. He would find additional information regarding the freezing in the air concern. He stated this is a very simple system. Mr. Sabato stated that the higher the exhaust can be launched into the air, the faster it can be disbursed. Mr. Seward explained the common time period for replacing filters, and stated there is not an alarm or test that can be done. He stated there are different stages of growing and different stages of weather that can change the odor; he confirmed they will be growing 24 hours per day.

Ms. Love asked if the Planning Board wanted BETA to do a review and analysis of the traffic study. Chair Padula confirmed there are no retail sales at the site. Mr. Braillard said they think the average number of employees per shift would be 35 with the possibility of 100 employees combined for all shifts. Mr. Maglio stated his biggest concern was the turn lane; he suggested a cursory review of the traffic study. Chair Padula stated agreement. He stated he does not want to see shipments going in and out at night and trucks backing in and out with beepers going. Mr. Rondeau suggested the traffic study be looked at with regard to public safety. Mr. Braillard stated they will not do nighttime deliveries. Generally, small vans are used which may have a backup beeping signal.

FINDINGS OF FACTS
SPECIAL PERMIT/SITE PLAN
160 Grove Street

The applicant submitted their proposed findings with the original application on May 24, 2019 and are on record.

DECISION
SPECIAL PERMIT/SITE PLAN
160 Grove Street

(1) Special Permit: (1) §185 Attachment 3, Section 2.23 – Non-Medical Marijuana Facility.

(a) Proposed project addresses or is consistent with neighborhood or Town need.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(b) Vehicular traffic flow, access and parking and pedestrian safety are properly addressed.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(c) Public roadways, drainage, utilities and other infrastructure are adequate or will be upgraded to accommodate development.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(d) Neighborhood character and social structure will not be negatively impacted.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(e) Project will not destroy or cause substantial damage to any environmentally-significant natural resource, habitat, or feature or, if it will, proposed mitigation, remediation, replication or compensatory measures are adequate.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(f) Number, height, bulk, location and siting of building(s) and structure(s) will not result in abutting properties being deprived of light or fresh air circulation or being exposed to flooding or subjected to excessive noise, odor, light, vibrations, or airborne particulates.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

(g) Water consumption and sewer use, taking into consideration current and projected future local water supply and demand and wastewater treatment capacity, will not be excessive.

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

Based upon the information submitted during the public hearings, Planning Board's specific findings, the Planning Board specifically determines that allowing Site Plan and Special Permit (1) §185 Attachment 3, Section 2.23 – Non-Medical Marijuana Facility at 160 Grove Street will not have adverse effects which overbalance its beneficial effects on either the neighborhood or the Town, in view of the particular characteristics of the site and of the proposal in relation to that site.

Accordingly, at the Planning Board meeting on August 10, 2020 the Planning Board, upon motion duly made and seconded, voted (5-0) to ***approve*** the applicant's request to allow the Site Plan and Special Permit at 160 Grove Street.

The following members of the Planning Board were present at the hearing and voted as follows:

Anthony Padula	YES	Gregory Rondeau	YES
Joseph Halligan Jr.	YES	Rick Power	YES
William David	YES		

Any person aggrieved by the above decision of the Franklin Planning Board may file an appeal pursuant to Massachusetts General Laws Chapter 40A, Section 17. Such appeal must be filed within twenty (20) days after the filing of the notice of the Board's decision with the Town Clerk.

This Certificate of Vote shall become effective only upon the recording of a copy certified by the Town Clerk with the Norfolk County Registry of Deeds. A copy of the recorded Certificate of Vote shall be submitted to the Board within thirty (30) days of recording.

STANDARD CONDITIONS OF APPROVAL
160 Grove Street

1. This Special Permit shall not be construed to run with the land and shall run with the Site Plan as endorsed by the Planning Board. A new Special Permit shall be required from the Planning Board if any major change of use or major change to the site plan is proposed.
2. This Special Permit shall lapse if a substantial use or construction has not begun, except for good cause, within twenty four (24) months of approval, unless the Board grants an extension. No final Certificate of Occupancy shall be issued until all requirements of the Special Permit have been completed to the satisfaction of the Board unless the applicant has submitted a Partial Certificate of Completion for the remainder of the required improvements and received approval by the Planning Board. The applicant's engineer or surveyor, upon completion of all required improvements, shall submit a Certificate of Completion. The Board or its agent(s) shall complete a final inspection of the site upon filing of the Certificate of Completion by the applicant. Said inspection is further outlined in condition #4.
3. Construction or operations under this Special Permit shall conform to any subsequent amendment of the Town of Franklin Zoning Bylaw (§185) unless the use or construction is commenced within a period of six (6) months after the issuance of this Special Permit and, in cases involving construction, unless such construction is continued through to completion as continuously and expeditiously as is reasonable.
4. **The Planning Board will use outside consultant services to complete construction inspections upon the commencement of construction.** The Franklin Department of Public Works Director, directly and through employees of the Department of Public Works and outside consultant services shall act as the Planning Board's inspector to assist the Board with inspections necessary to ensure compliance with all relevant laws, regulations and Planning Board approved plan specifications. Such consultants shall be selected and retained upon a majority vote of the Board.
5. Actual and reasonable costs of inspection consulting services shall be paid by the owner/applicant before or at the time of the pre-construction meeting. Should additional inspections be required beyond the original scope of work, the owner/applicant shall be required to submit fees prior to the issuance of a Final Certificate of Completion by the Planning Board (Form H). Said inspection is further outlined in condition #4.
6. No alteration of the Special Permit and the plans associated with it shall be made or affected other that by an affirmative vote of the members of the Board at a duly posted meeting and upon the issuance of a written amended decision.
7. All applicable laws, by-laws, rules, regulations, and codes shall be complied with, and all necessary licenses, permits and approvals shall be obtained by the owner/applicant.
8. Prior to the endorsement of the site plan, the following shall be done:
   - The owner/applicant shall make a notation on the site plan that references the Special Permit and the conditions and dates of this Certificate of Vote.
   - A notation shall be made on the plans that all erosion mitigation measures shall be in place prior to major construction or soil disturbance commencing on the site.
   - All outstanding invoices for services rendered by the Town's Engineers and other reviewing Departments of the Town relative to their review of the owner/applicant's application and plans shall have been paid in full.
   - The owner/applicant shall submit a minimum of six copies of the approved version of the plan.
9. Prior to any work commencing on the subject property, the owner/applicant shall provide plans to limit construction debris and materials on the site. In the event that debris is carried onto any public way, the owner/applicant and his assigns shall be responsible for all cleanup of the roadway. All cleanups shall occur within twenty-four (24) hours after first written notification to the owner/applicant by the Board or its designee. Failure to complete such cleanup may result in suspension of construction of the site until such public way is clear of debris.
10. The owner/applicant shall install erosion control devices as necessary and as directed by the Town's Construction Inspector.
11. **Prior to construction activities, there shall be a pre-construction meeting with the owner/applicant, and his contractor(s), the Department of Public Works and the Planning Board's Inspector.**
12. Any signage requires the Applicant to file with the Design Review Commission.
13. Prior to the endorsement, the Certificate of Vote and Order of Conditions shall be added to the Site Plans.

SPECIAL CONDITIONS OF APPROVAL
SPECIAL PERMIT/SITE PLAN
160 Grove Street

1. A plan for the proposed Grove Street turning lane pavement marking modifications should be included in the final plan set to be endorsed by the Board.
2. Existing soil conditions are to be evaluated by the design engineer during construction to verify field conditions.
3. To minimize noise, there will be no deliveries after 10:00PM and before 7:00AM, 7 days a week.
4. Road improvements on Grove Street shall be complete prior to any Occupancy Permit.

ODOR MITIGATION
SPECIAL PERMIT/SITE PLAN
160 Grove Street

1. Provide mitigation of a fan and similar continuous noise sources if those sounds are perceptible without instruments more than 400 feet from the boundaries of the property.
2. Installation of a weather station, capable of logging wind speed, wind direction and temperature to assist in identification of odor complaint tracking.
3. The Applicant shall install the odor control system as proposed and designed on the Plans. In the event the system does not operate in accordance with the design, the Applicant will work with the Town to further mitigate the odor provided such actions are reasonably practicable and are not in violation of MGL 94G(3).
4. Notwithstanding, the odor system shall not be in violation of any DEP and MASS EPA air quality regulations related to odor.
5. Prior to endorsement, the Applicant should provide the Board with an Odor Complaint Tracking system.

WAIVERS GRANTED
SPECIAL PERMIT/SITE PLAN
160 Grove Street

1. §185-21(B)(2) - To allow 138 parking spaces where 159 parking spaces are required.
2. §185-21(C)(6) - To allow 68 of the 138 Parking spaces, that are located more than 300' feet from the building entrance.

Certificate of Vote & Conditions of Approval

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: As Noted
Revised June 16, 2020

COMMONWEALTH OF MASSACHUSETTS
NORMAN G. HILL
CIVIL
No. 31887
REGISTERED PROFESSIONAL ENGINEER

Date: 6/16/20
Norman G. Hill, PE #31887

Land Planning, Inc.
Civil Engineers • Land Surveyors
Environmental Consultants

Bellingham
167 Hartord Ave.
Bellingham, MA 02019
508-966-4130

North Grafton
214 Worcester St.
N. Grafton, MA 01536
508-839-9526

Hanson
1115 Main Street
Hanson, MA 02341
781-294-4144

www.landplanninginc.com

Scale
1" = As Noted

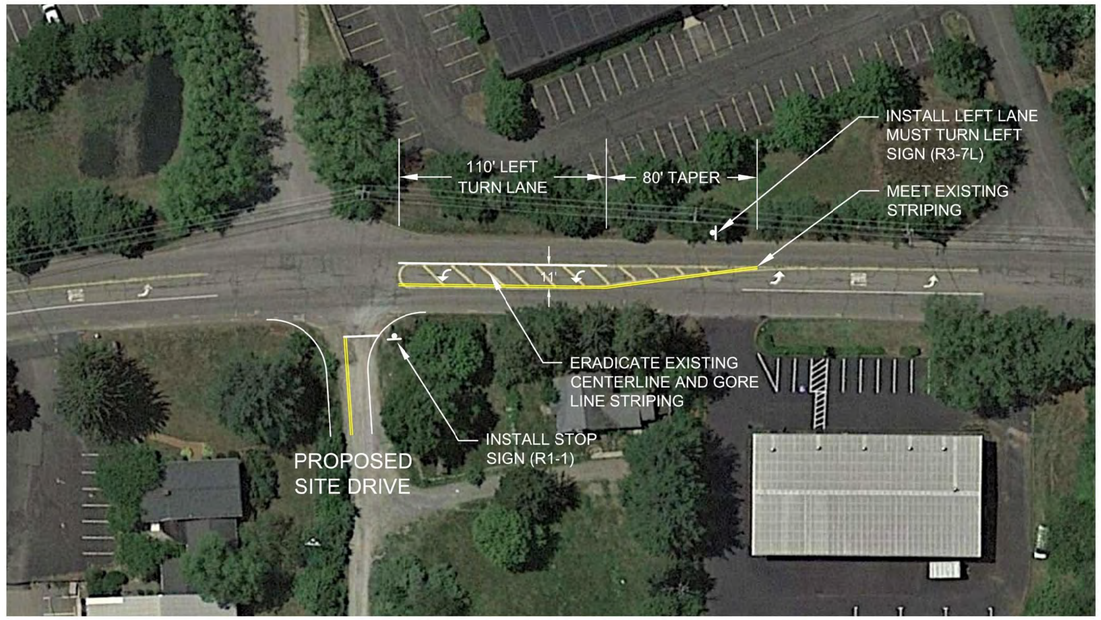
Date
February 14, 2020

Job No.
B2521

Sheet No.
17

Ron Müller & Associates
Traffic Engineering and Consulting Services

Conceptual Improvement Plan
Proposed Left-Turn Lane, Grove Street at Site Drive



Lane Marking & Traffic Sign Plan

HENNEP CULTIVATION & PRODUCTION FACILITY

located at
160 Grove Street
Franklin, MA

Owned By
Hennep Properties, LLC
200 Brookline Ave, #508
Boston, MA

Prepared for
HENNEP CULTIVATION LLC
1330 Boylston St Unit 202
Boston, MA 02215

Scale: As Noted
Revised June 16, 2020

Scale
1" = 40'±

Date
February 14, 2020

Job No.
B2521

Sheet No.
18

hennep

Memorandum

To: Anthony Padula, Chairman, Franklin Planning Board

From: Hennep Cultivation, LLC

cc: Town of Franklin Planning Board

Date: August 13, 2020

Re: Odor Complaint Tracking System – Hennep Cultivation, LLC – 160 Grove St

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As part of its Odor Complaint Tracking System, Hennep Cultivation, LLC ("**Hennep**") will set up an automated answering service for members of the Town of Franklin (the "**Town**") community to submit complaints in the event that they smell an offensive odor emanating from the cultivation facility (the "**Facility**") on the property located at 160 Grove Street (the "**Property**").

The answering service will request the following information from the caller:

- Date and time of the complaint.
- Approximate location/address where the odor was detected.

Within a reasonable timeframe from when the complaint is received, an employee or agent of Hennep shall conduct an olfactory test at the Property.

Hennep shall then determine what odor-emitting activities were occurring at the time of the complaint, and shall take the necessary steps to mitigate the odor, including:

- Ensure the FogCo odor mitigation system is functioning properly; visual confirmation all nozzles are operational; confirmation the neutralizing solution was mixed with the proper ratio.
- Ensure the activated carbon odor mitigation system is functioning properly; ensuring all fans are turned on; ensuring the carbon filters are not depleted.

If Hennep finds any components of the odor mitigation systems to be out-of-service upon inspection, the necessary steps will be taken to bring those systems back online immediately.

In addition to the above, Hennep will install a weather station at the Facility to record wind speeds and direction, temperature, relative humidity, and any other environmental conditions that can affect how and where odor could spread. Complaints will be analyzed against the recorded environmental conditions data to aid in production planning and odor mitigation.

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET, ROOM 120
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907
FAX: 508-520-4906

MEMORANDUM

TO: **JAMIE HELLEN, TOWN ADMINISTRATOR**

FROM: **BRYAN W. TABERNER, AICP, DIRECTOR**

RE: **ZONING BYLAW AMENDMENT 20-858, ZONING MAP CHANGES TO BETTER DEFINE THE TOWN OF FRANKLIN'S ZONING DISTRICTS**

CC: **MARK G. CEREL, TOWN ATTORNEY; AMY LOVE, TOWN PLANNER; CHRISSY WHELTON, ASSISTANT TO THE TOWN ADMINISTRATOR**

DATE: **JULY 15, 2020**

As you know the Department of Planning and Community Development (DPCD) and other Town staff are undergoing a multi-year project to better define the Town's zoning districts by following parcel lines. Where parcels are within two or more zoning districts, the Zoning District line is moved so each parcel is only in one zoning district, in most cases based on the current land use. Attached is a proposed Zoning Map Amendment that would change the Town's existing Zoning Map (Chapter 185, Section 5, of Franklin Town Code).

Zoning Bylaw Amendment 18-858: Zoning Map Changes from Rural Residential II and Single Family Residential III, Rural Residential II and Single Family Residential IV, Single Family Residential III, or Rural Residential II and Single Family Residential III, and Single Family Residential IV, to Rural Residential II, Single Family Residential III, or Single Family Residential IV, an area on or near Beaver and Oak Streets.

The attached Zoning Map Amendment includes the amendment document, a list of parcels proposed for rezoning, and a diagram with two maps: one showing the current zoning, and one showing proposed Zoning Map changes.

At their meeting on June 10, 2020 the Town Council's Economic Development Subcommittee voted to send the proposed Zoning Map Amendment to the full Council for further consideration. If Council members support the proposed zoning map changes, I request the Town Council vote to refer Zoning Bylaw Amendment 20-858 to the Planning Board for a Public Hearing.

The proposed Zoning Map Amendment is a small part of the larger Town-wide project. Let me know if you have questions or require additional information.

Proposed Zoning Map Changes

An Area On Or Near Beaver Street and Oak Street

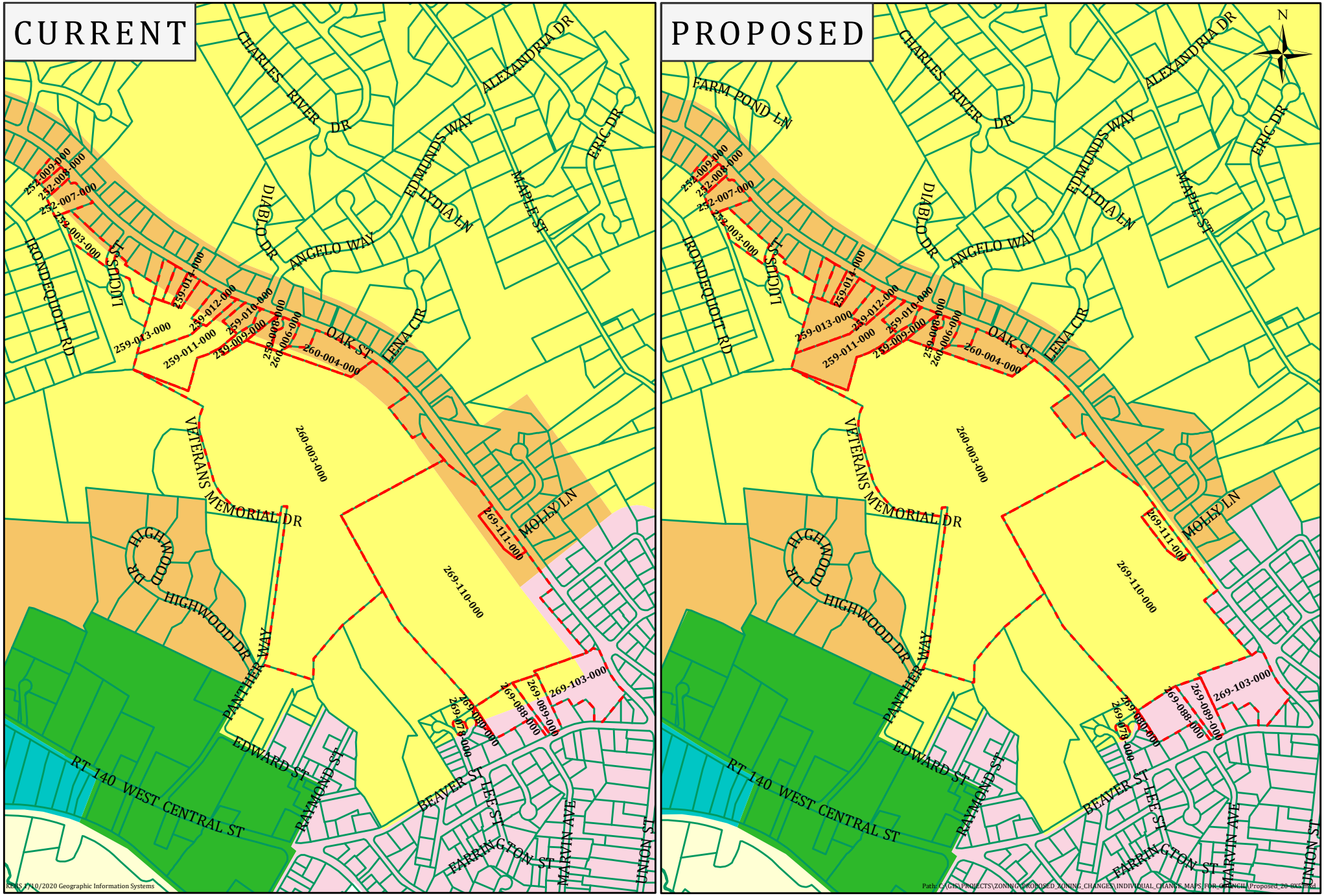
From Rural Residential II & Single Family Residential III, Rural Residential II & Single Family Residential IV, Single Family Residential III, or Rural Residential II, Single Family Residential III & Single Family Residential IV, To Rural Residential II, Single Family Residential III, or Single Family Residential IV

0 600 1,200 2,400 Feet

Business
Commercial II
Rural Residential I
Rural Residential II
Single-Family III
Single-Family IV

Area of Proposed Change
Parcel Line

20-858



SPONSOR: *Town Administration*

Town of Franklin

Planning Board

The following notice will be published in the Milford Daily Newspaper on
Monday, August 10, 2020 and again on Monday, August 17, 2020

In accordance with the provisions of M.G.L. Chapter 40A, Section 5, notice is hereby given that the Planning Board will hold a Public Hearing on August 24, 2020 at 7:05 PM and the Town Council will hold a Public Hearing on September 2, 2020 at 7:10 PM to consider amending Chapter 185, Section 5, Zoning Map of the Code of the Town of Franklin. Please refer to the Town website, franklinma.gov for location information.

ZONING BY-LAW AMENDMENT 20-858

That the Zoning Map of the Town of Franklin be amended by changing from Rural Residential II and Single Family Residential III to Rural Residential II an area containing **52.328± acres** comprising the following parcels of land on or near Beaver and Oak Streets, as shown on the Town of Franklin's Assessor's Maps:

Parcel Numbers

252-003-000	**259-018-000**	**260-003-000**

That the Zoning Map of the Town of Franklin be amended by changing from Rural Residential II and Single Family Residential III to Single Family Residential III an area containing **16.001± acres** comprising the following parcels of land as shown on the Town of Franklin's Assessor's Maps:

Parcel Numbers

252-007-000	**259-010-000**	**259-015-000**
252-008-000	**259-011-000**	**259-016-000**
252-009-000	**259-012-000**	**260-004-000**
259-008-000	**259-013-000**	**260-006-000**
259-009-000	**259-014-000**	

That the Zoning Map of the Town of Franklin be amended by changing from Single Family Residential III to Rural Residential II 1**.043± acres** comprising the following parcel of land as shown on the Town of Franklin's Assessors' Maps:

Parcel Number

269-111-000

That the Zoning Map of the Town of Franklin be amended by changing from Rural Residential II and Single Family Residential IV to Rural Residential II **0.168± acres** comprising the following parcel of land as shown on the Town of Franklin's Assessors' Maps:

Parcel Number
269-078-000

That the Zoning Map of the Town of Franklin be amended by changing from Rural Residential II and Single Family Residential IV to Single Family Residential IV an area containing **7.952± acres** comprising the following parcels of land as shown on the Town of Franklin's Assessor's Maps:

Parcel Numbers
269-080-000 **269-089-000** **269-103-000**
269-088-000

And the Zoning Map of the Town of Franklin be amended by changing from Rural Residential II, Single Family Residential III and Single Family Residential IV to Rural Residential II **35.027± acres** comprising the following parcel of land as shown on the Town of Franklin's Assessors' Maps:

Parcel Number
269-110-000

Please contact the Department of Planning & Community Development at 508-520-4907 if you require further information or if you need to make arrangements to provide translation services for the hearing impaired or for persons with language barriers.

Anthony Padula, Chairman
Franklin Planning Board

Tom Mercer, Chairman
Franklin Town Council

JONES&BEACH
ENGINEERS INC.
85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885
603.772.4746 - JonesandBeach.com

July 29, 2020

City of Franklin
Attn. Mr. Anthony Padula, Chairman
355 East Central Street
Franklin, MA 02038

RE: Response Letter – BETA Group, Inc.
340 East Central Street, Franklin, MA
Tax Map 285, Lot 009
JBE Project No. 13153.2

Dear Mr. Padula,

We are in receipt of comments from Matthew Crowley, PE and Stephen Borgatti of BETA Group, Inc. dated June 17, 2020. Review comments are listed below with our responses in bold.

GENERAL COMMENTS

G1. *The existing easement for utilities and access will be partially blocked by proposed curbing, reducing the usable access width to 15 feet and will be located in a one-way traffic area. Provide accommodations or additional easement area for egress from the site.*
RESPONSE: An easement will be provided to ensure the town has access to and from the site. A proposed access easement can be seen on Sheet C4. The existing 20' easement for the existing waterline is being proposed to be shifted to better align with the drive lane.

G2. *Clarify if there will be any easements or rights of entry granted for the proposed connection to the parcel to the east.*
RESPONSE: As part of the town approval, an easement will be developed with the abutter to utilize the proposed cross connection.

G3. *Provide typical details for proposed light poles and luminaires.*
RESPONSE: The light pole detail is located on Sheet D1, and the light fixture details have been added to Sheet D3.

ZONING

Z1. *Provide the estimated water consumption for retail and coffee shop uses to confirm a special permit by the Board of Appeals is not required.*
RESPONSE: Per Chapter 185 Attachment 3 "Use Regulations Schedule" Retail and restaurant uses are permitted by right in the CII district, provided they do not result in an increase of more than 15,000 GPD, otherwise a special permit is required.

Water consumption calculation per 310 CMR 15.000: Title 5:

Section 15.203: System Sewage Flow Design Criteria

Retail Stores (except supermarkets): 50 GPD / 1000 sq.ft.
15,219 sq.ft. / 1000 sq.ft. = 15.219 (50 GPD) = 761 GPD

Restaurant (Fast Food): 20 GPD / seat
60 seats (20 GPD) = 1,200 GPD

We are anticipating an approximate GPD for the retail and restaurant uses on site to be 1,961 GPD.

SCHEDULE OF LOT, AREA, FRONTAGE, YARD AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

SCH1. *Clarify the proposed building height, noted as 50' on the Site Plan and as 51' – 2" on the Architectural Plans. Buildings greater than 50' in height are not permitted in the CII Zoning District. Also confirm that the exterior wall height at the gable does not exceed the permitted building height by more than 10 feet in accordance with the Building Height definition (§185-3).*
RESPONSE: These items will be reflected on the architectural drawings.

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

P1. *Clarify how many separate enterprises are proposed within the retail buildings. Each enterprise must be provided one additional parking space.*
RESPONSE: The Two retail buildings will be separated into 6 separate enterprises; these additional parking spaces have been added to the calculations.

P2. *Clarify if the parking calculations include the outdoor patio area associated with the restaurant.*
RESPONSE: An additional 20 seats have been added to the restaurant parking calculation to accommodate the patio seating.

P3. *Confirm that a waste collection vehicle can adequately access the most northerly restaurant-use dumpster.*
RESPONSE: A waste collection vehicle can adequately access the most northerly restaurant-use dumpster. A truck turning plan (Sheet T1) has been included with our resubmission package.

P4. *Clarify where residential parking will be provided. Plans indicate 117 spaces located to the north of the residential buildings; however, the Waiver Request Letter indicates that 1.5 spaces per unit (150 total) will be sufficient for site operations.*
RESPONSE: The sections of parking to the East of the residential buildings have been given adequate signage indicating they are for residential parking only. A sufficient

amount of parking has been allocated for residential units to comply with the parking requested within the waiver.

P5. *Provide background information and/or empirical data to confirm that the proposed parking, including shared-use, and visitor parking is adequate for the site and is justified to be below that required by the Bylaw.*
RESPONSE: Commercial Zone I is located 600' West of our site and allows parking at 1.5 spaces / unit. The Downtown Commercial District to the West also allows for 1.5 spaces / unit. We feel these districts are of similar character to our site and this reduction in parking is sufficient to serve the site. In addition, we have integrated a bus stop into the design which will provide a further reduction to parking needs on site. A waiver is before the planning board to allow for this reduction.

P6. Confirm that all residential parking spaces will be located within 300 feet of the building entrances (§185-21.C.(6)).
RESPONSE: All parking that is designated as residential parking is located within 300' of either of the entrances on the residential buildings.

P7. Clarify if any of the dwelling units will be accessible. Per 521 CMR 10.3, parking spaces for dwelling unit occupants must be capable of complying with 521 CMR 23.2 through 521 CMR 23.8. Demonstrate that additional accessible spaces can be provided for occupants, if necessary.
RESPONSE: Following approval of the waiver request for the parking of residential units to be 1.5 spaces/unit, there will be an excess of 8 spaces on site. Therefore, in the event accessible units are constructed, accommodations can be made to provide parking spaces.

P8. Although the number of trees proposed throughout the site exceeds that required by (§185-21.C(5)), consideration should be given to relocating or adding trees in the parking lot serving the residential units.
RESPONSE: A 6' high screening fence has been proposed along the west property line.

P9. Recommend revising the location of or eliminating the first several parking spaces west of the one-way residential entrance. The spaces will require vehicles to back into them and their view will be obstructed by the proposed transformer and landscaping adjacent to East Central Street, creating a potential conflict with entering vehicles.
RESPONSE: A stripped turn around space has been added to each row of parking to allow space to turn. Landscaping in the Northwest corner will be reduced to ground cover species only so as to not interfere will sight lines for traffic. The transformer has been relocated to the other side of the entrance road to provide addition sight lines to traffic.

P10. Additional comments regarding site circulation, parking layout, signing/striping, and pedestrian accommodations will be provided under separate cover as part of the traffic review.
RESPONSE: We have coordinated with Vanasse & Associates Inc. regarding these comments.

CURBING (§185-29)

C1. *Clarify proposed location of Type "F" granite curb depicted on Mountable Stamped Concrete Detail.*
RESPONSE: This detail is no longer needed and has been removed.

SITE PLAN REVIEW (§185-31)

S1. *Include abutting land uses and zoning information on the Locus Map (§185-31.C.(3)(d)).*
RESPONSE: The locus map has been updated to the required scale, and zoning information has been included.

S2. *Indicate proposed snow storage locations on the plans (§185-31.C.(3)(i)).*
RESPONSE: Snow storage is depicted on the site plan.

S3. *Provide note indicating that all proposed plantings shall come from the Best Development Practices Guidebook (§185-31.C.(3)(k)).*
RESPONSE: The landscaping plans have been updated accordingly.

S4. *Provide sight line information, including intersection sight distance, at the proposed driveway egress (§185-31.C.(3)(t)).*
RESPONSE: A site distance plan has been included with the submission documents. See Sheet H1.

S5. *Evaluate if there will be any odor issues resulting from the two restaurant dumpsters proposed approximately 5 to 10 feet from the easterly property line.*
RESPONSE: The dumpster is proposed to be enclosed and emptied on a regular basis. The dumpsters are located near parking fields only, and are not anticipated to cause odor issues to any structures.

WATER RESOURCES DISTRICT (§185-40)

WR1. *Section §185-40.D.(1)(l)(ii)) requires that the proposed groundwater recharge efforts must be approved by a hydrogeologist; however, provided that the stormwater management system is revised to fully comply with the Massachusetts Stormwater Management Standards no adverse impacts to groundwater are anticipated as a result of the project. BETA defers to the preference of the Board to require approval by a hydrogeologist.*
RESPONSE: We also defer to the preference of the board to require approval by a hydrogeologist.

WR2. *Note that any fill placed in quantity greater than 15 yards must be certified in accordance with §185-40.E.(5).*
RESPONSE: Note 31 on Sheet C3-1 has been added to comply with this regulation.

UTILITIES

U1. *Provide sizing calculations for proposed grease traps in accordance with Title V regulations per DPW policy. If tenants/uses are unknown at this time, calculation must be provided prior to construction.*
RESPONSE: Sizing for proposed grease traps will be provided to the town prior to construction.

U2. *Clarify the need for a grease trap at Building D, which is labeled for retail use.*
RESPONSE: Although the current use is intended to be retail, the developer wants the flexibility to change to a restaurant use at some time in the future. If this were to occur the developer would have to return to the town for review.

U3. *Provide a note that all water and sewer utility installations shall be done in accordance with the Town of Franklin Department of Public Works Standards for Sewer and Water Materials and Installation (Town Standards). Also note that where utility installation details conflict with the Town Standards that the Town Standards shall govern.*
RESPONSE: Note 40 on Sheet C4 has been added to this affect.

U4. *Consult the DPW to determine if the proposed water system should be looped back to an existing water main.*
RESPONSE: The Water / Sewer Division of the town of Franklin has requested that we loop the water main back to East Central Street. This has been done, and is depicted on Sheet C4.

U5. *Recommend to provide the size and material of the existing water and sewer lines.*
RESPONSE: The size and type of existing utilities have been added to Sheet C4.

U6. *Consult the DPW to confirm that the proposed 4" sewer services from Buildings C and D are of acceptable size.*
RESPONSE: After consultation with the DPW, the sewer services have been increased to 6" sewer services.

U7. *Clarify if any easements are needed for the new fire hydrant and utility pole located just east of the proposed site entrance.*
RESPONSE: An easement is proposed for the hydrant to the benefit of the town of Franklin. Coordination with National Grid will take place prior to construction.

U8. *Revise note 2 on Hydrant Installation Detail to indicate that hydrant shall be factory painted in Town colors. Also remove references to "non-draining" and "hydrant drain to be plugged" unless confirmed to be acceptable by the DPW.*
RESPONSE: The Detail has been updated per DPW standards, see Sheet D8. A note has been added to the detail requiring the hydrant comply with DPW standards, per request by the DPW.

U9. *Resolve discrepancy of sewer force main material between Utility Plan and Force Main Sewer Trench detail. Town Specifications require SDR 21 PVC, DR11 HDPE, or ductile iron.*
RESPONSE: The detail has been updated to require DR11 HDPE, see Sheet D4.

U10. *Coordinate with the DPW and indicate how the existing utility services will be capped. Water services are typically required to be capped at the main.*
RESPONSE: Per direction from the DPW, the sewers are to be capped at the property line and the water service are to be capped at the main. This is reflected on the demo plan, Sheet C1-1.

STORMWATER MANAGEMENT

GENERAL

SW1. *Provide a stamped Stormwater Management Checklist.*
RESPONSE: A Stormwater Management Checklist has been provided in the updated Drainage Analysis.

SW2. *Recommend replacing the curb break, rip rap, swale, and sidewalk scupper with a conventional catch basin and pipe.*
RESPONSE: The curb brake system has been modified to a conventional catch basin.

SW3. *Provide an easement for the relocated drainage line that carries flow from East Central Street. Since this portion of East Central Street is a State Highway, confirm that required coordination with MassDOT is being conducted.*
RESPONSE: We are in communication with MassDOT regarding this drainage pipe and are working with them to provide an easement for the related pipe.

SW4. *Review structure rim, weir, and outlet elevations (e.g. DMHs 517, 518, and 525, etc.) to ensure consistency between plans, details, and HydroCAD model.*
RESPONSE: The plans and drainage analysis have been reviewed for consistency following the updates.

SW5. *Revise drain manhole detail to specify clay brick for invert in accordance with Subdivision Regulations.*
RESPONSE: The drain manhole detail on Sheet D2 has been updated to use clay brick.

SW6. *Remove reference to "hook lock grates" on Catch Basin (MA) detail.*
RESPONSE: This has been removed per your request.

SW7. *Request waiver to allow the installation of PVC pipe as part of the drainage systems at oil/water separators.*
RESPONSE: The previously provided waiver letter has been updated to include a waiver for the use of PVC pipe.

SW8. *Provide a detail for rip rap outlet protection and note required dimensions at each outfall. Recommend including a layer of filter fabric for permanent erosion control beneath stone.*
RESPONSE: A rip rap outlet protection detail has been added to Sheet D1. Dimensional information has been added to the plans for each outfall.

SW9. *Revise HydroCAD model (i.e. finer routing) to eliminate oscillations, which may render the output data invalid.*
RESPONSE: The hydraulic analysis has been reviewed, and the system has been revised to the best extent practical to reduce oscillations. Oscillations are found to be in acceptable tolerances for the analysis to be valid.

SW10. *Clarify use of HSG D for areas located in areas mapped by NRCS as HSG A/D in the existing conditions model. There is an approximate 0.82-acre reduction in Woods Good HSG D in the proposed conditions and is presumed to be new impervious area. While it is anticipated that some of the soils in proximity to the wetlands will be saturated HSG D soils, it is also anticipated there will be upland areas located in unsaturated HSG A soils.*
RESPONSE: After review of the test pits done within this area, we have reduced the HSG D soils to the boundary of the wetland to the rear of the property. The remaining soil area will be classified as HSG A.

SW11. *Revise Time of Concentration to a minimum of 5 minutes for subwatersheds where the grass portion is minimal in comparison to the paved area (e.g. 210S and 219S).*
RESPONSE: The watersheds with minimal grass areas have been updated to a minimum 5-minute time of concentration.

SW12. *Remove Reaches 1, 2, and 3 from the proposed conditions model, which appear to significantly reduce peak flow rate from the outfalls. These reaches are not included in the existing conditions model.*

RESPONSE: The hydrocad models have been modified to use the wetland line as the analysis point. This adjustment will allow the discharge to the analysis point in both the existing and proposed conditions to happen immediately and remove the need for the reach.

SW13. *Recommend providing pipe sizing calculations utilizing the rational method.*
RESPONSE: A pipe sizing table has been provided with this submission.

SW14. *Review calculations for required recharge volume. The on-site impervious areas used in these calculations are significantly lower than the total impervious area of the post-development site. The stormwater narrative indicates the project is being designed as a new development.*
RESPONSE: There is an increase of 1.73 acres of impervious area due to the proposed development. The proposed infiltration systems treat a total of 4.38 acres of impervious area.

SW15. *Depict location of hydraulic conductivity tests on the plans.*
RESPONSE: The locations of the amoozemeter tests done on site are located on the existing conditions plan, and are designated at PT-P#.

SW16. *Provide test pit logs for TP #1-04 and TP #18-15, which are in the footprints of Chamber Systems #1 and #3, respectively.*
RESPONSE: The requested test pit logs have been added to the test pit logs within the drainage report.

SW17. *Identify basis for using HSG D in recharge calculations. It appears the project can easily meet the required recharge volume assuming the more conservative HSG A soils.*
RESPONSE: Per on site test pit data, the HSG D soils on site has been reduced to the wetland line. The recharge calculations have been updated to account for the additional HSG A soils.

SW18. *Revise subsurface recharge systems to provide the minimum required 2' separation to groundwater. Details provided on Sheet D5 generally indicate approximately 1.5' of separation. A mounding analysis will be required where separation to groundwater is less than 4 feet.*
RESPONSE: The separation of ground water for the underground systems on site have been modified to provide 2'.

There are typically two main concerns regarding groundwater mounding. The impact of groundwater mounding on basements and its adverse effects on drawdown time. The state requires drawdown to occur within 72 hours. As all structures on site are slab on grade there are no anticipated issues regarding groundwater impacts to basements.

The drawdown times for the three systems per stormwater handbook calculations are between 3-12 hours. A mounding analysis was conducted on a previous design in 2016 (see attached mounding report). Within that analysis Pond #2 was reviewed. This pond has very

similar soil characteristics and is of far greater size then the ponds currently proposed. This pond saw a drawdown of approximately 30 hours while accounting for groundwater mounding. Given this information, Jones and Beach believes there is sufficient evidence to conclude that groundwater mounding will not adversely affect the site or the ponds from functioning properly.

SW19. *Evaluate the estimated seasonal high groundwater elevation at Chamber System 2. TP #2-15 (appox. Elevation 279.5) indicates mottling 78" below the surface (elevation 273) and is only 0.5'± below the system bottom.*
RESPONSE: The test pit logs attached did not have Don Neilson notes which provide vital additional information. These logs have been attached to the resubmission drainage analysis. These logs indicate the elevation at the location of the test pit site. All underground systems onsite have been updated to provide a minimum of 2' of separation to the bottom of gavel.

SW20. *In consideration that only a single test pit has been conducted within the limits of Chamber System 2, provide an additional test pit near the southeast corner of system to confirm soil texture and groundwater elevations. BETA notes that if loamy sand is confirmed an increased exfiltration rate to 2.41 in/hr would be justified.*
RESPONSE: Additional test pits have been provided within the drainage report for this location. There are loamy sands present, but there is a mix of construction fill as well, given our close proximity to the existing building. We feel that holding to the current infiltration rate of 1.020" is an appropriate rate in order to be conservative.

SW21. *Review calculations for required water quality volume. The on-site impervious areas used in these calculations are significantly lower than the total impervious area of the post-development site. The stormwater narrative indicates the project is being designed as a new development.*
RESPONSE: The proposed site causes an increase in impervious of 1.730 acres. The three proposed infiltration storm-tech units treat a total of 4.378 acres. This is less than the total impervious area in the proposed hydro-cad model due to the fact that there is some off-site watershed that were modeled. These watersheds are off site and are not going to be disturbed by the proposed project. Thus, no treatment is proposed. For example, the watersheds associated with the drainage pipe that currently discharges to the rear of the property. We are rerouting that pipe, but are not planning to provide treatment. All proposed impervious will be treated prior to discharge.

The detention basin at the outfall of the existing pipe has 942 cu. ft. of storage. The proposed storm volume to the wetland system is sufficiently less then the existing conditions to account for the loss of the existing storage.

SW22. *Revise oil/water separator to pass the 2-year storm without interference, as indicated in the Stormwater Handbook. Currently, the 1" storm calculations show bypass over the weir in the upstream DMH.*
RESPONSE: The oil/water separators have been modified to pass a 2-year storm without interference.

SW23. *Provide detailed long-term pollution prevention plan (LTPPP), including measures outlined in the Stormwater Handbook. Recommend incorporating the LTPPP into the Operation and Maintenance Plan.*
RESPONSE: Spill prevention information is included in the operation and maintenance manual. Sheet E2 has been added to the plan set which provided additional erosion control information. Prior to the start of construction, a SWPPP Manual will be submitted to the town. These additions to the submission materials we feel constitute an adequate LTPPP.

SW24. *Recommend replacing the block and gravel catch basin inlet protection with a filter insert, such as a silt sack.*
RESPONSE: An inlet protection detail has been added to Sheet E2.

SW25. *Depict location of construction entrance and inlet protection on the plans.*
RESPONSE: The construction entrance has been added to the plans, see Sheet C1-1. Note 30 has been added to Sheet C3-1 indicating inlet protection must be used on all catch basins.

SW26. *Revise location of proposed erosion controls to be coincident with limits of clearing and work (e.g. rip rap for flared end sections), as applicable.*
RESPONSE: The limit of clearing has been reviewed and complies with rip rap and FES sections.

SW27. *Provide an estimated O&M budget.*
RESPONSE: This has been provided in the Operation and Maintenance Manual.

SW28. *Revise inspection/maintenance frequency of catch basins and oil/water separators to a minimum of twice per year.*
RESPONSE: The inspection frequency of these features has been updated on the operation and maintenance manual.

SW29. *Provide a signed Illicit Discharge Compliance statement.*
RESPONSE: Within our stamped and signed Drainage Analysis Report included section 2.5.10; "No illicit discharges are proposed for this project".

Thank you very much for your time. If you have any questions, or need further assistance, please contact our office.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Erik Poulin, EIT, CPESC-IT
Project Engineer

cc: Matthew Crowley, PE, BETA Group, Inc. (via email)
Stephen Borgatti, BETA Group, Inc. (via email)
Jeffrey Gove, 340 East Central Street LLC (via email)

JONES&BEACH
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603.772.4746 - JonesandBeach.com

July 31, 2020

City of Franklin
Attn. Mr. Anthony Padula, Chairman
355 East Central Street
Franklin, MA 02038

RE: Response Letter – Planning Board Comments
340 East Central Street, Franklin, MA
Tax Map 285, Lot 009
JBE Project No. 13153.2

Dear Mr. Padula,

Comments from members of the planning board, dated June 22, 2020. Review comments are listed below with our responses in bold. Comments are a summary from the verbal discussion which took place during the meeting and are not verbatim from the members of the board.

Board Comments:

Does not appear to be enough snow storage on site. Not enough snow storage by residential units.

RESPONSE: Snow is proposed to be stockpiled on the East side of the site. Snow will be collected by the residential units and following the conclusion of the snow event will be moved to the East side stockpile location. Following the requested waiver of the parking requirement from 2 spaces per unit to 1.5 spaces, there will be an excess of 8 spaces on site. These additional spaces will be utilized for snow storage a not effect the required parking for each use under the waiver condition.

How many units within residential buildings are 1 bedroom, 2-bedroom, 3 bedroom etc.

RESPONSE: All units within the residential apartment buildings will be 2-bedroom units.

Mechanical's on roof must be screened

RESPONSE: Note 39 has been added to the C4 Sheet requiring screening on all rooftop mechanical units on commercial buildings.

Landscape

- No screening on east/west property lines
  RESPONSE: a black 6' chain link fence with black slat lattice will be provided on the west side of the property line. As the abutter to the west is a similar use with a large parking field which we are connecting to, Jones and Beach believes this property line does not need additional screening and landscape has been provided between the commercial uses.
- No screening on drive thru
  Response: Several shade trees are provided along the drive thru, and the 10' green buffer is being observed to the property line. It is also important for the drive thru business to have sufficient visibility to the road.

Truck access on Building "D"

RESPONSE: A truck turning plan has been provided with our submission package to show adequate truck access to this building, see Sheet T2.

Department Public Works:

Access out of site for the town to maintain water line

RESPONSE: A proposed access easement has been added to ensure the town can enter and exit the site to service the existing water line and the town owned property to the rear.

Existing monitoring well on-site

RESPONSE: The existing monitoring wells on site will be capped and removed for DEP requirements.

Cast iron for inspection port for infiltration pond

RESPONSE: Advanced Drainage Systems was contacted and confirmed that a cast iron port can be used. The detail on Sheet D5 has been updated.

Oscillations on hydrocad model

RESPONSE: The hydraulic analysis has been reviewed, and the system has been revised to the best extent practical to reduce oscillations. Oscillations are found to be in acceptable tolerances for the analysis to be valid.

Can pervious pavers be plowed that are being used for fire lane.

RESPONSE: After conferring with the manufacturer, the pervious pavers being utilized for the fire lane can be plowed.

Possible DOT easement for pipe through site

RESPONSE: We are in communication with MassDOT regarding this drainage pipe and are working with them to provide an easement for the related pipe. This document to be finalized following approval of the project and a copy of the easement plan will be submitted to the Town for their records.

Thank you very much for your time. If you have any questions, or need further assistance, please contact our office.

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Erik Poulin, EIT, CPESC-IT
Project Engineer

cc: Matthew Crowley, PE, BETA Group, Inc. (via email)
Stephen Borgatti, BETA Group, Inc. (via email)
Jeffrey Gove, 340 East Central Street LLC (via email)

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July 31, 2020

Franklin Planning Board
Attn. Amy Love, Planner
355 East Central Street
Franklin, MA 02038

RE: Waiver Request Letter
340 East Central Street, Franklin, MA
Tax Map 285, Lot 009
JBE Project No. 13153.2

Dear Ms. Love,

On behalf of project applicant, 340 East Central Street LLC, Jones & Beach Engineers, Inc. respectfully requests a waiver from the following requirements from the Franklin By Laws:

Chapter 300 - Subdivision of Land, Section 11 - Stormwater Management (B) Construction (2) Piping (a) "... 42" minimum cover over drain pipe.

Reason the waiver is requested:
RESPONSE: We request a waiver to allow minimum cover of 1.5' over drainage pipe, rather then the required minimum of 42". Given the flat nature of the site it is difficult to maintain the required cover and still discharge the proposed drainage system. Per the American Concrete Pipe Association recommendations, a minimum of 12" of cover is acceptable for Class 5 RCP. The site observes a minimum cover of 1.5'.

Alternatives to granting the waiver:
RESPONSE: In order to provide the required cover additional fill would be required over the majority of the site.

Impact of the waiver denial on the project:
RESPONSE: A regarding and design of the drainage would need to take place. This would require an increase in elevation of the site, and would cause a large increase of fill needed for the site.

Reason this waiver is in the best interests of the town and consistence with the intent and purpose of the subdivision control law:
RESPONSE: Per ACPA standards, sufficient cover is being provided so to not adversely affect he lifespan or safety of the drainage system.

Chapter 185, Section 21 (B)... Parking Schedule

Reason the waiver is requested:
RESPONSE: We request a waiver to allow for 268 parking spaces when a minimum of 301 spaces are required. The site has multiple uses which have varying peak traffic times which will allow for shared parking. In addition, it is our opinion a residential requirement of 1.5 spaces per unit will be adequate for an apartment complex of this size. This requirement is used within two other zones in town (Downtown Commercial Zoning District and Commercial I Zoning District), and it is reasonable to assume that this parking density would also be sufficient for this site. The site will also be installing a bus stop to promote public transportation alternatives to the tenants and retail customers. This waiver to the parking requirement would result in a lower total spaces required 249 spaces.

Alternatives to granting the waiver:
RESPONSE: Reduce the parking need on site by either reducing retail space or the number of residential units.

Impact of the waiver denial on the project:
RESPONSE: The lose of retail space or residential units on site would jeopardize the financial viability of the project.

Reason this waiver is in the best interests of the town and consistence with the intent and purpose of the subdivision control law:
RESPONSE: It is our opinion the proposed development will be a benefit to the community, and the parking on site is sufficient to adequately service the site.

Chapter 300 - Subdivision of Land, Section 11 - Stormwater Management (B) Construction (2) Piping (a) ... "The drainage pipe shall be reinforced concrete, with bell and spigot gasketed joints. The pipe shall be Class III in accordance with ASTM C-76. The gaskets shall be O-ring type in accordance with ASTM C-443. The minimum diameter shall be 12 inches".

Reason the waiver is requested:
RESPONSE: We request a waiver to allow for HDPE pipe to be utilized for the oil/water separators. This type and size of pipe is needed for the proper function of the oil/water separators. These connections with the oil/water separators are the only location on site where HDPE is used, all other on site piping will utilize concrete pipe.

Alternatives to granting the waiver:
RESPONSE: The oil/water separators are designed for HDPE inlet and outlet pipes. If concrete pipe were to be required, we would need to find an alternative pretreatment system. As this is one of the most effective and recommended systems for a LUHPPL that the Stormwater Handbook offers, Jones and Beach believes this to be the best fit.

Impact of the waiver denial on the project:
RESPONSE: An alternative treatment system would need to be selected, and most likely would be a proprietary separator these systems although possible, typically have limited data on their effectiveness, while oil/water separators are included in the States BMP Handbook.

Reason this waiver is in the best interests of the town and consistence with the intent and purpose of the subdivision control law:
RESPONSE: Sufficient cover is being provide for the HDPE pipe, and this type of pipe is critical to the proper function of the oil/water separators so we can provide adequate treatment for the site.

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

Very truly yours,
JONES & BEACH ENGINEERS, INC.

Erik Poulin
Project Engineer

cc: Jeff Gove, 340 East Central Street, LLC (application and plans via email)
Matthew Crowley, P.E, BETA Group, Inc (application and plans via U.S. Mail)

Vanasse & Associates inc
Transportation Engineers & Planners

35 New England Business Center Drive
Suite 140
Andover, MA 01810

Ref: 6641

July 6, 2020

Mr. Anthony Padula, Chairman
Franklin Planning Board
Franklin Town Hall
355 East Central Street
Franklin, MA 02038

Re: Response to Traffic Peer Review
Central Square Mixed-Use Development – 340 East Central Street (Route 140)
Franklin, Massachusetts

Dear Chairman Padula and Members of the Planning Board:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the June 22, 2020 Traffic Peer Review letter prepared by BETA Group, Inc. (BETA) on behalf of the Planning Board in reference to their review of the May 2020 *Transportation Impact Assessment* (the "May 2020 TIA") prepared by VAI in support of the proposed Central Square mixed-use development that is to be located at 340 East Central Street (Route 140) in Franklin, Massachusetts (hereafter referred to as the "Project"). Listed below are the comments that were identified by BETA in the subject review letter followed by our response on behalf of the Applicant.

Comment T1.: *BETA concurs that the project program will generate internal trip activity, though it is unclear how internal trip percentages were estimated in the TIA. Clarify the methodology of estimating internal trip capture.*

Response: The internal trip calculations for the Project were derrived using the multi-use trip-generation calculation methodology promulgated by the Institute of Transportation Engineers (ITE).[1] The detailed internal trip calculations for the Project are attached.

Comment T2.: *Provide the estimated Saturday daily trips.*

Response: Table 5R summarizes the trip-generation calculations for the Project and has been expended (from Table 5 of the May 2020 TIA) to include the Saturday daily trip calculations.

Comment T3.: *Verify the sight lines will be sufficient under proposed conditions.*

Response: As documented in the May 2020 TIA, the existing sight lines to and from the Project site driveway intersections with Route 140 exceed 650 feet, which exceeds the recommended minimum distance for the driveways to function in a safe and efficient manner based on a

[1]Trip Generation Handbook, 3rd Edition, A Recommended Practice of the Institute of Transportation Engineers; Institute of Transportation Engineers; Washington, D.C.; September 2017.

40 mile per hour (mph) approach speed along Route 140 (consistent with the posted speed limit 40 mph and 6 to11 mph above the measured 85th percentile vehicle travel speeds approaching the driveways (34/29 mph)). As recommended in the May 2020 TIA, the sight triangle areas of the Project site driveways will be kept clear of signs, landscaping or other features that would inhibit sight lines.

Comment T4.: *A traffic monitoring program is proposed post-development. In addition to what is proposed as part of the monitoring program BETA recommends that signal warrant analysis should be performed for the main site driveway to determine whether or not the main site driveway meets traffic signal warrants for signalization.*

Response: The Traffic Monitoring Program presented in the May 2020 TIA will be expanded to include the following:

v) Performing a detailed Traffic Signal Warrants Analysis (TSA) at the full access Project site roadway intersection with Route 140 and Glen Meadow Road in accordance with methodology defined in the MUCTD, including performing a 12-hour (7 AM – 7 PM) manual turning movement count at the intersection on an average weekday (i.e., Tuesday, Wednesday or Thursday).

Comment T5.: *Visitor parking is provided on the southwest corner of the site adjacent to Building "B". Clarify if separate visitor spaces will be provided closer to Building "A."*

Response: Visitor parking spaces will be added closer to Building "A".

Comment T6.: *One-way signs were provided in the Sign Legend on sheet D4 and also mentioned in the TIA but they were not shown on the Site Plan. Show proposed locations of the one-way signs on the plans.*

Response: The one-way signs will be added to the Site Plan.

Comment T7.: *The parking aisle on the west side of Building "D" would provide a "dead-end" when the circled parking spaces are occupied (See image). Consider removing the spaces circled to provide a connection, improve circulation, and eliminate the "Dead-end."*

Response: This section of the parking lot will be reserved for resident parking only and is conducive to the current parking layout.

Comment T8.: *It appears that the aisle to the west of Building "A" is bi-directional. Clarify how vehicles would turnaround heading northbound towards the right-turn in only access.*

Response: A turnaround area will be provided for vehicles approaching Route 140.

Comment T9.: *Clarify where the additional residential parking spaces will be provided within the commercial parking.*

Response: Residential parking areas will be indicated on the Site Plan and signs will be added to indicate the location of resident parking.

Comment T10.: *Provide centerline pavement markings along the 30-foot-wide main entrance between Building "A" and Building "C" to delineate the bi-directional movement more clearly.*

Response: A double-yellow centerline will be added as requested.

Comment T11.: *Consider providing a pedestrian path from Building "B" to the commercial parking area, especially if the additional residential parking will be located in that parking area.*

Response: The main entrances to the residential buildings are located along the west side of the buildings. A marled crosswalk and ADA compliant wheelchair ramps are proposed for the residents of Building "B" to access the path provided along Building "A" which leads to the commercial uses.

Comment T12.: *The TIA recommends a minimum of six Electric Vehicle (EV) charging stations or outlets, four of which should be installed within the residential area and two within the commercial area. In addition, six spaces should be "EV ready." The plans show four EV stations. Either provide additional EV spaces or clarify the reduction in EV spaces as recommended in the TIA.*

Response: An additional EV charging station will be added to the residential parking area and two (2) additional EV charging stations will be provided in the commercial parking area.

We trust that this information is responsive to the comments that were raised in the June 22, 2020 Traffic Peer Review letter prepared by BETA in reference to the Project. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

Jeffrey S. Dirk, P.E., PTOE, FITE
Partner

Professional Engineer in CT, MA, ME, NH, RI and VA

Attachments

cc: J. Centracchio, P.E., PTOE – BETA Group, Inc. (via email)
J. Gove, J. Halsey – (via email)
Erik Poulin, EIT, CPESC-IT – Jones & Beach Engineers, Inc. (via email)

Table 5R
TRIP GENERATION SUMMARY

	Retail Space					Coffee Shop					Multifamily Residential Community			
Time Period/Direction	(A) Retail (15,219 sf)[a]	(B) Internal Trips[b]	(C = A - B) Net Trips	(D) Pass-By Trips[c]	(E = C - D) Primary Trips	(F) Coffee Shop With Drive-Through (2,250 sf)[d]	(G) Internal Trips[e]	(H = F - G) Net Trips	(I) Pass-By Trips[f]	(J = H - I) Primary Trips	(K) Multifamily Housing (104 units)[g]	(L) Internal Trips[h]	(M = K - L) Primary Trips	(N = E + J + M) Total Primary Trips
Average Weekday Daily														
Entering	836	48	788	268	520	923	53	870	774	96	283	101	182	798
Exiting	836	48	788	268	520	923	53	870	774	96	283	101	182	798
Total	1,672	96	1,576	536	1,040	1,846	106	1,740	1,548	192	566	202	364	1,596
Weekday Morning Peak Hour														
Entering	99	6	93	27	72	102	10	92	80	12	9	0	9	93
Exiting	60	0	60	27	33	98	10	88	80	8	27	0	27	68
Total	159	0	159	54	105	200	20	180	160	20	36	0	36	161
Weekday Evening Peak Hour														
Entering	65	6	59	21	38	49	5	44	39	5	28	11	17	60
Exiting	70	6	64	21	43	49	5	44	39	5	18	11	7	55
Total	135	12	123	42	81	98	10	88	78	10	46	22	24	115
Saturday Daily														
Entering	1,388	50	1,338	348	990	770	41	729	649	80	256	91	165	1,235
Exiting	1,388	50	1,338	348	990	770	41	729	649	80	256	91	165	1,235
Total	2,776	100	2,676	696	1,980	1,540	82	1,458	1,298	160	512	182	330	2,470
Saturday Midday Peak Hour														
Entering	73	4	69	17	52	98	6	92	83	9	22	10	12	73
Exiting	67	4	63	17	46	99	6	93	83	10	24	10	14	70
Total	140	8	132	34	98	197	12	185	166	19	46	20	26	143

[a]Based on ITE LUC 820, *ITE LUC 820: Shopping Center*.
[b]Internal trips: weekday daily – 5.7 percent; weekday morning peak-hour– 0.0 percent; weekday evening peak hour - 9.2 percent; Saturday daily – 3.6 percent and Saturday midday peak hour – 5.5 percent.
[c]A pass-by trip rate was applied to the traffic volumes associated with the retail use as follows: average weekday daily, weekday morning and evening peak hours - 34 percent; Saturday daily and Saturday midday peak-hour - 26 percent.
[d]Based on ITE LUC 937, *Coffee Shop with Drive-Through Window*.
[e]Internal trips: weekday daily – 5.7 percent; weekday morning and evening peak-hour– 10.2 percent; and Saturday Daily – 5.3 percent and Saturday midday peak hour – 6.1 percent.
[f]A pass-by trip rate was applied to the traffic volumes associated with the coffee shop use as follows: average weekday daily, weekday morning, weekday evening, Saturday daily and Saturday midday peak hours - 89 percent.
[g]Based on ITE LUC 221, *Multifamily Housing (Mid-Rise)*.
[h]Internal trips: weekday daily – 35.8 percent; weekday morning peak-hour – 0.0 percent; weekday evening peak-hour - 47.8 percent, Saturday daily – 35.6 percent and Saturday midday peak-hour – 45.0 percent.

ATTACHMENTS

INTERNAL TRIP CALCULATIONS
TRIP-GENERATION CALCULATIONS

INTERNAL TRIP CALCULATIONS

Proposed Mixed-Use Development - Franklin, MA

Analyst: RE
Date: 4/23/2020

Job No. 66-41
Time Period: Weekday Daily

Land Use A	General Office		
ITE LUC	710		
Size		ksf	
	Total	Internal	External
Enter		0	0
Exit		0	0
Total		0	0

A to B			B to A			A to C			C to A		
% Demand	Trips	Balanced	% Demand	Trips	Balanced	% Demand	Trips	Balanced	% Demand	Trips	Balanced
22%	0	0	3%	0	0	2%	0	0	0%	0	0
% Demand	Trips		% Demand	Trips		% Demand	Trips		% Demand	Trips	
4%			15%			3%			0%	0	

Land Use B	Retail/Coffee Shop		
ITE LUC	820/937	rates	
Size	17.500	ksf	
	Total	Internal	External
Enter	1759	108	1651
Exit	1759	93	1666
Total	3518	201	3317

B to C		
% Demand	Trips	Balanced
11%	193.49	93
% Demand	Trips	
33%	93.39	

C to B		
% Demand	Trips	Balanced
38%	107.54	108
% Demand	Trips	
9%	158.31	

Land Use C	Residential		
ITE LUC	221		
Size	104		
	Total	Internal	External
Enter	283	93	190
Exit	283	108	175
Total	566	201	365

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	0	1651	190	1841	
Exit	0	1666	175	1841	
Total	0	3317	365	3682	Internal Capture Rate
Single-Use Trip Gen Est.	0	3518	566	4084	10%

* from ITE Trip Generation Handbook, 3rd Edition, 2017.

Trip Origins

		AM Peak Hour	PM Peak Hour	Daily
From Office	to Office	n/a	n/a	2%
	to Retail	28%	**20%**	22%
	to Residential	1%	**2%**	2%
From Retail	to Office	29%	**2%**	3%
	to Retail	n/a	**n/a**	30%
	to Residential	14%	**26%**	11%
From Residential	to Office	2%	**4%**	n/a
	to Retail	1%	**42%**	38%
	to Residential	n/a	**n/a**	n/a

Trip Destinations

		AM Peak Hour	PM Peak Hour	Daily
To Office	from Office	n/a	**n/a**	2%
	From Retail	4%	**31%**	15%
	From Residential	3%	**57%**	n/a
to Retail	From Office	32%	**8%**	4%
	From Retail	n/a	n/a	28%
	From Residential	17%	**10%**	9%
to Residential	From Office	0%	**4%**	3%
	From Retail	2%	**46%**	33%
	From Residential	n/a	**n/a**	n/a

* from ITE Trip Generation Handbook, 3rd Edition, 2014.

Proposed Mixed-Use Development - Franklin, MA

Analyst: RE
Date: 4/23/2020

Job No 6641
Time Period: Weekday Morning Pk Hr

Land Use A	General Office Building		
ITE LUC	710		
Size		ksf	
	Total	Internal	External
Enter		0	0
Exit		0	0
Total	0	0	0

A to B

% Demand	Trips	Balanced
28%	0	0
% Demand	Trips	
4%	8.04	

B to A

% Demand	Trips	Balanced
29%	0	0
% Demand	Trips	
33%	50.56	

A to C

% Demand	Trips	Balanced
1%	0	0
% Demand	Trips	
3%	0.27	

C to A

% Demand	Trips	Balanced
0%	0	0
% Demand	Trips	
0%	0	

B to C

% Demand	Trips	Balanced
14%	22.12	0
% Demand	Trips	
2%	0.18	

C to B

% Demand	Trips	Balanced
1%	0.27	0
% Demand	Trips	
17%	34.17	

Land Use B	Retail/Coffee Shop		
ITE LUC	820/937	rates	
Size	17.500	ksf	
	Total	Internal	External
Enter	201	0	201
Exit	158	0	158
Total	359	0	359

Land Use C	Residential		
ITE LUC	224		
Size	104		
	Total	Internal	External
Enter	9	0	9
Exit	27	0	27
Total	36	0	36

Trip Origins

		AM Peak Hour	PM Peak Hour	Daily
From Office	to Office	n/a	n/a	2%
	to Retail	28%	20%	22%
	to Residential	1%	2%	2%
From Retail	to Office	29%	2%	3%
	to Retail	n/a	n/a	30%
	to Residential	14%	26%	11%
From Residential	to Office	2%	4%	n/a
	to Retail	1%	42%	38%
	to Residential	n/a	n/a	n/a

Trip Destinations

		AM Peak Hour	PM Peak Hour	Daily
To Office	From Office	n/a	n/a	2%
	From Retail	4%	31%	15%
	From Residential	3%	57%	n/a
to Retail	From Office	32%	8%	4%
	From Retail	n/a	n/a	28%
	From Residential	17%	10%	9%
to Residential	From Office	0%	4%	3%
	From Retail	2%	46%	33%
	From Residential	n/a	n/a	n/a

* from ITE Trip Generation Handbook, 3rd Edition, 2014.

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	0	201	9	210	
Exit	0	158	27	185	
Total	0	359	36	395	Internal Capture Rate
Single-Use Trip Gen Est	0	359	36	395	0%

* from ITE Trip Generation Handbook, 3rd Edition, 2017.

Internal trip considered for coffee shop because of the existance of residential componenet

Proposed Mixed-Use Development - Franklin, MA

Analyst: RE
Date: 5/16/2018

Job No 6641
Time Period Weekday Evening Pk Hr

Land Use A	General Office Building		
ITE LUC	710		
Size		ksf	
	Total	Internal	External
Enter		0	0
Exit		0	0
Total	0	0	0

A to B			B to A			A to C			C to A		
% Demand	Trips	Balanced	% Demand	Trips	Balanced	% Demand	Trips	Balanced	% Demand	Trips	Balanced
20%	0	0	2%	0	0	2%	0	0	0%	0	0
% Demand	Trips		% Demand	Trips		% Demand	Trips		% Demand	Trips	
31%	35.34		8%	9.52		57%	15.96		4%	0.72	

Land Use B	Retail/Coffee Shop		
ITE LUC	820/937	rates	
Size	17.500	ksf	
	Total	Internal	External
Enter	114	8	106
Exit	119	13	106
Total	233	21	212

B to C		
% Demand	Trips	Balanced
26%	30.94	13
% Demand	Trips	
46%	12.88	

C to B		
% Demand	Trips	Balanced
42%	7.56	8
% Demand	Trips	
10%	11.4	

Land Use C	Residential		
ITE LUC	221		
Size	104		
	Total	Internal	External
Enter	28	13	15
Exit	18	8	10
Total	46	21	25

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	0	106	15	121	
Exit	0	106	10	116	
Total	0	212	25	237	Internal Capture Rate
Single-Use Trip Gen Est	0	233	46	279	15%

* from ITE Trip Generation Handbook, 3rd Edition, 2017.

Trip Origins

		AM Peak Hour	PM Peak Hour	Daily
From Office	to Office	n/a	n/a	2%
	to Retail	28%	20%	22%
	to Residential	1%	2%	2%
From Retail	to Office	29%	2%	3%
	to Retail	n/a	n/a	30%
	to Residential	14%	26%	11%
From Residential	to Office	2%	4%	n/a
	to Retail	1%	42%	38%
	to Residential	n/a	n/a	n/a

Trip Destinations

		AM Peak Hour	PM Peak Hour	Daily
To Office	from Office	n/a	n/a	2%
	From Retail	4%	31%	15%
	From Residential	3%	5%	n/a
to Retail	From Office	32%	8%	4%
	From Retail	n/a	n/a	28%
	From Residential	17%	10%	9%
to Residential	From Office	0%	4%	3%
	From Retail	2%	46%	33%
	From Residential	n/a	n/a	n/a

* from ITE Trip Generation Handbook, 3rd Edition, 2014.

Proposed Mixed-Use Development - Franklin, MA

Analyst: RE
Date: 5/16/2018

Job No. 6641
Time Period: Saturday

Land Use A	General Office		
ITE LUC	710		
Size		ksf	
	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0

A to B

% Demand	Trips	Balanced
22%	0	0
% Demand	Trips	
4%	86.32	

B to A

% Demand	Trips	Balanced
3%	0	0
% Demand	Trips	
15%	323.7	

A to C

% Demand	Trips	Balanced
2%	0	0
% Demand	Trips	
3%	7.68	

C to A

% Demand	Trips	Balanced
0%	0	0
% Demand	Trips	
0%	0	

B to C

% Demand	Trips	Balanced
11%	237.38	84
% Demand	Trips	
33%	84.48	

C to B

% Demand	Trips	Balanced
38%	97.28	97
% Demand	Trips	
9%	194.22	

Land Use	Retail/Coffe Shop		
ITE LUC	820/937	rates	
Size	17.500	ksf	
	Total	Internal	External
Enter	2158	97	2061
Exit	2158	84	2074
Total	4316	181	4135

Land Use	Residential		
ITE LUC	221		
Size	104		
	Total	Internal	External
Enter	256	84	172
Exit	256	97	159
Total	512	181	331

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	0	2061	172	2233	
Exit	0	2074	159	2233	
Total	0	4135	331	4466	Internal Capture Rate
Single-Use Trip Gen	0	4316	512	4828	7%

* from ITE Trip Generation Handbook, 3rd Edition, 2017.

Trip Origins

		AM Peak Hour	PM Peak Hour	Daily
From Offi	to Office	n/a	n/a	2%
	to Retail	28%	20%	22%
	to Residential	1%	2%	2%
From Reta	to Office	29%	2%	3%
	to Retail	n/a	n/a	30%
	to Residential	14%	26%	11%
From Resi	to Office	2%	4%	n/a
	to Retail	1%	42%	38%
	to Residential	n/a	n/a	n/a

Trip Destinations

		AM Peak Hour	PM Peak Hour	Daily
To Office	from Office	n/a	n/a	2%
	From Retail	4%	31%	15%
	From Resident	3%	57%	n/a
to Retail	From Office	32%	8%	4%
	From Retail	n/a	n/a	28%
	From Resident	17%	10%	9%
to Residen	From Office	0%	4%	3%
	From Retail	2%	46%	33%
	From Resident	n/a	n/a	n/a

* from ITE Trip Generation Handbook, 3rd Edition, 2014.

Proposed Mixed-Use Development - Franklin, MA

Analyst: RE
Date: 4/23/2020

Job No: 6641
Time Period: Saturday Midday Peak

Land Use A	General Office Building		
ITE LUC	710		
Size		ksf	
	Total	Internal	External
Enter		0	0
Exit		0	0
Total	0	0	0

A to B

% Demand	Trips	Balanced
20%	0	0
% Demand	Trips	
31%	53.01	

B to A

% Demand	Trips	Balanced
2%	0	0
% Demand	Trips	
8%	13.28	

A to C

% Demand	Trips	Balanced
2%	0	0
% Demand	Trips	
5%	12.54	

C to A

% Demand	Trips	Balanced
0%	0	0
% Demand	Trips	
4%	0.96	

B to C

% Demand	Trips	Balanced
26%	43.16	10
% Demand	Trips	
46%	10.12	

C to B

% Demand	Trips	Balanced
42%	10.08	10
% Demand	Trips	
10%	17.1	

Land Use B	Retail/Coffee Shop		
ITE LUC	820/937	rates	
Size	17.500	ksf	
	Total	Internal	External
Enter	171	10	161
Exit	166	10	156
Total	337	20	317

Land Use C	Residential		
ITE LUC	221		
Size	104		
	Total	Internal	External
Enter	22	10	12
Exit	24	10	14
Total	46	20	26

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	0	161	12	173	
Exit	0	156	14	170	
Total	0	317	26	343	Internal Capture Rate
Single-Use Trip Gen	0	337	46	383	10%

*from ITE Trip Generation Handbook, 3rd Edition, 2017

Trip Origins

		AM Peak Hour	PM Peak Hour	Daily
From Office	to Office	n/a	n/a	2%
	to Retail	28%	20%	22%
	to Residential	1%	2%	2%
From Retail	to Office	29%	2%	3%
	to Retail	n/a	n/a	30%
	to Residential	14%	26%	11%
From Resi	to Office	2%	4%	n/a
	to Retail	1%	42%	38%
	to Residential	n/a	n/a	n/a

Trip Destinations

		AM Peak Hour	PM Peak Hour	Daily
To Office	from Office	n/a	n/a	2%
	From Retail	4%	31%	15%
	From Residen	3%	5%	n/a
to Retail	From Office	32%	8%	4%
	From Retail	n/a	n/a	28%
	From Residen	17%	10%	9%
to Residen	From Office	0%	4%	3%
	From Retail	2%	46%	33%
	From Residen	n/a	n/a	n/a

* from ITE Trip Generation Handbook, 3rd Edition, 2014 (use weekday evening peak-hour)

TRIP GENERATION CALCULATIONS

Shopping Center
(820)

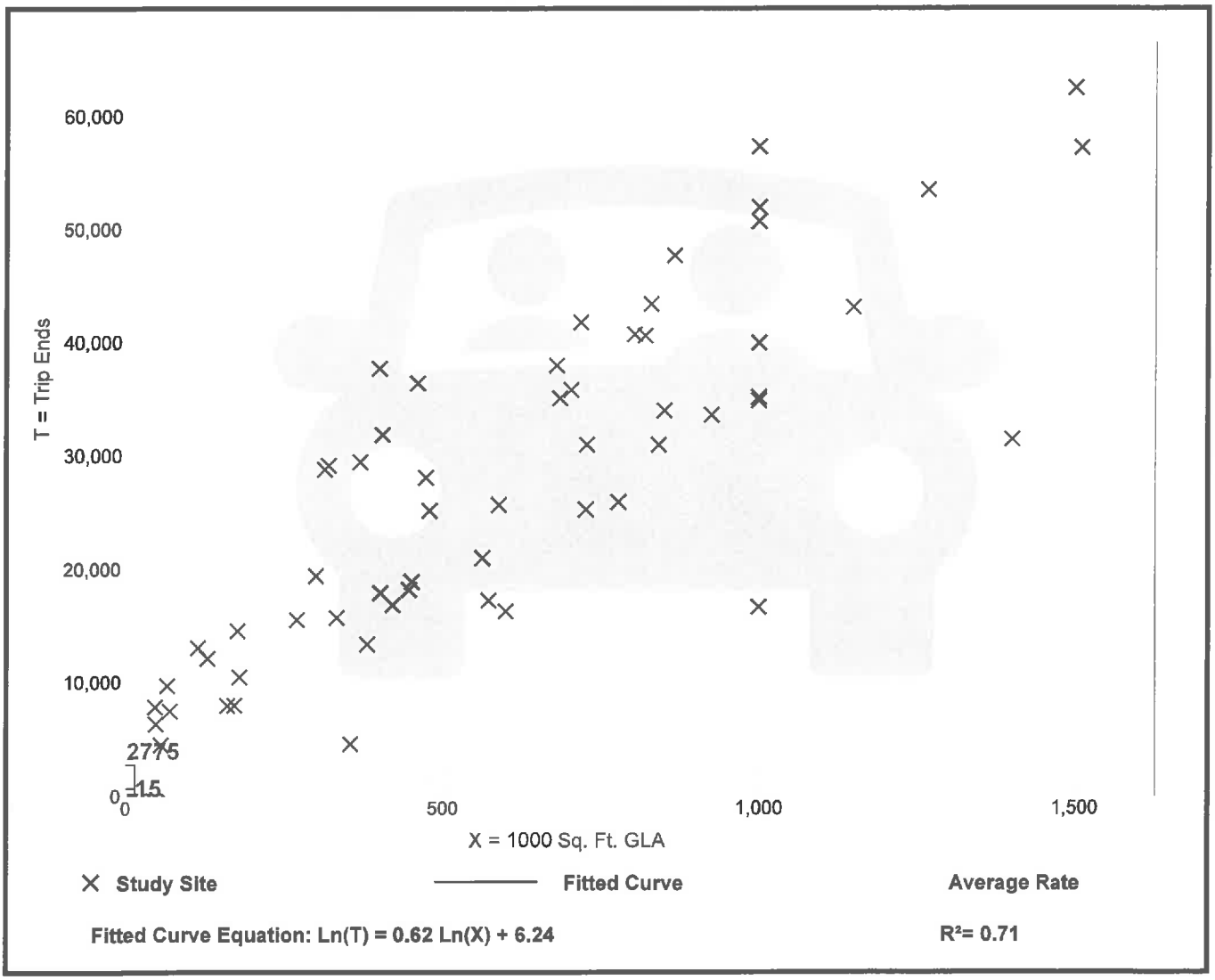
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Saturday

Setting/Location: General Urban/Suburban
Number of Studies: 58
Avg. 1000 Sq. Ft. GLA: 602
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
46.12	13.01 - 167.89	17.91

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.62 Ln(X) + 6.24

R^2= 0.71

Multifamily Housing (Mid-Rise)
(221)

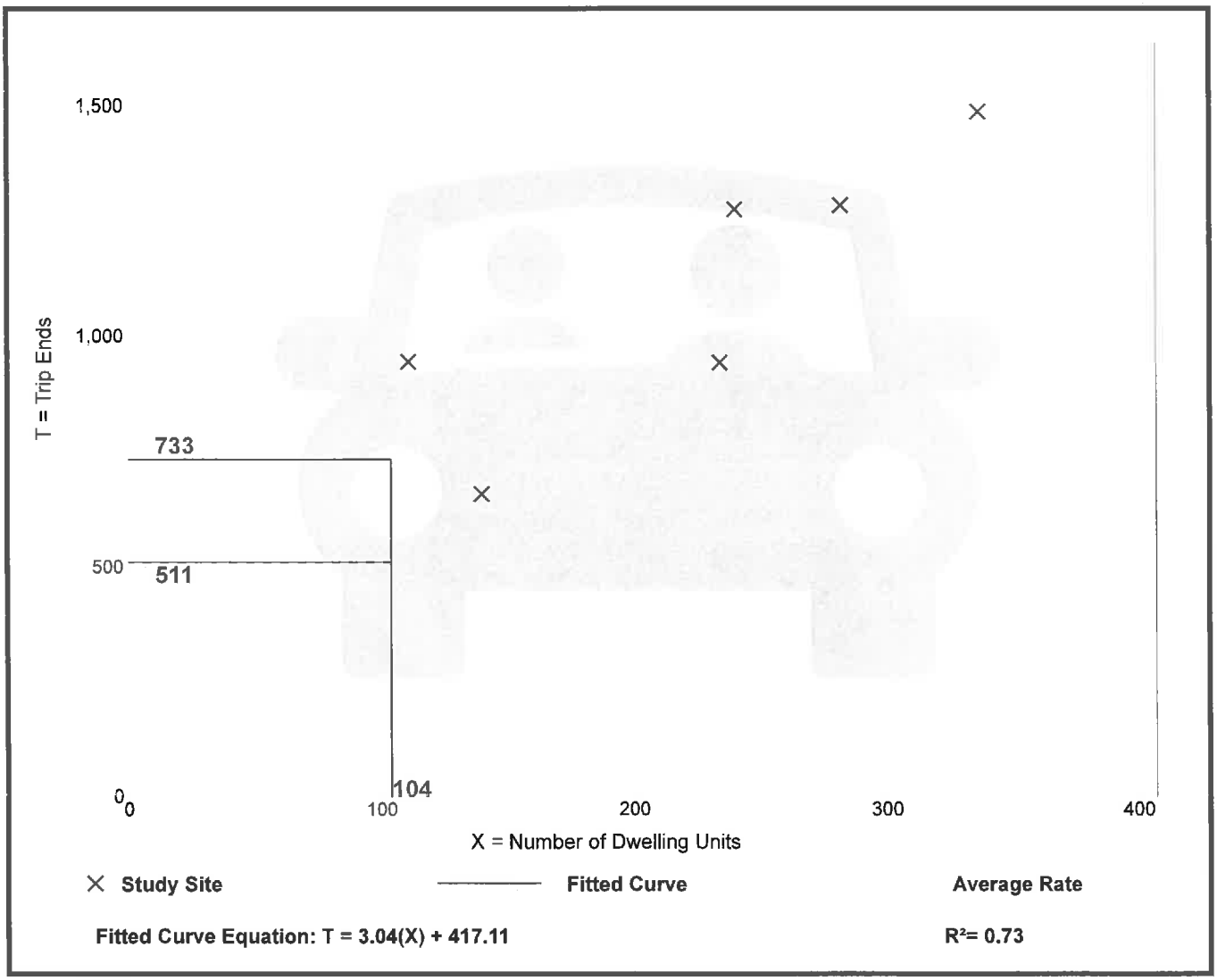
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Saturday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 6
Avg. Num. of Dwelling Units: 224
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.91	4.03 - 8.51	1.26

Data Plot and Equation



Saturday Daily Estimation for Coffee shop with Drive-Through

LUC 937 LUC 936

$$\frac{\text{Sat. Peak hour}}{X} = \frac{\text{Sat. peak hour}^*}{\text{Sat. Daily}^*}$$

$$\frac{87.7}{X} = \frac{86.36}{673.64} \Rightarrow 86.36(X) = 87.70(673.64)$$

$$X = \frac{87.70 \times 673.64}{86.36}$$

$$= 684.09 \text{ (Sat. Daily)}$$

$$684.09 \times 2.25 \approx 1,540$$

* Trip Generation Manual 10th Edition, 2017

August 20, 2020

Mr. Anthony Padula, Chairman
355 East Central Street
Franklin, MA 02038

Re: 340 East Central Street
Site Plan Peer Review Update

Dear Mr. Padula:

BETA Group, Inc. has reviewed revised documents for the proposed Site Plan Approval application, ***"Proposed Development Central Square" located at 340 East Central Street Franklin, Massachusetts.*** This letter is provided to update findings, comments, and recommendations.

BASIS OF REVIEW

BETA received the following items:

- ***Site Plan & Special Permit Application***, including the following:
  - *Cover Letter*
  - *Form P*
  - *Certificate of Ownership*
  - *Memorandum in support of application within the Commercial II District*
  - *Waiver Request Letter*
  - *Abutter Information*
- Site Planset (26 Sheets) entitled ***Proposed Development Central Square***, revised July 31, 2020 and prepared by Jones & Beach Engineers, Inc. of Stratham, NH.
- ***Drainage Analysis***, revised July 29, 2020 and prepared by Jones & Beach Engineers, Inc. of Stratham, NH.
- ***Transportation Impact Assessment Central Square Mixed-Use Development 340 East Central Street (Route 140) Franklin, Massachusetts,*** *dated May 2020, prepared by Vanasse & Associates, Inc., Andover, MA*

Review by BETA included the above items along with the following, as applicable:

- Site Visit
- ***Zoning Chapter 185 From the Code of the Town of Franklin,*** current through October 2019
- ***Zoning Map of the Town of Franklin, Massachusetts,*** attested to April 30, 2019
- ***Stormwater Management Chapter 153 From the Code of the Town of Franklin,*** Adopted May 2, 2007
- ***Subdivision Regulations Chapter 300 From the Code of the Town of Franklin,*** current through January 1, 2016
- ***Wetlands Protection Chapter 181 From the Code of the Town of Franklin,*** dated August 20, 1997
- ***Town of Franklin Best Development Practices Guidebook***, dated September 2016

INTRODUCTION

The project site consists of 340 East Central Street, a previously developed parcel formerly used as an auto service facility (the "Site"). The parcel contains an area of 6.506 Acres and is located along the southern side of East Central Street. The Town of Franklin Assessor's Office identifies the parcel as Map 285 Lot 9. The Site is located within the Commercial II Zoning District. Properties to the north, east, and west are also within this district, while parcels to the south are within the Rural Residential I district.

The existing Site includes a 116,475± sq. ft. 1-story building and a 9,800± sq. ft. garage. Associated site features include paved parking areas, utilities (drainage, water, sewer, and electric). The western portion of the Site includes a 20' wide easement used for access and utilities. A paved driveway within this easement begins at East Central Street and continues south beyond the Site.

Topography at the Site generally slopes towards the south. Grades within the paved areas are typically 3% - 5%. The southern portion of the parcel is an area of vegetated wetlands.

The applicant proposes to demolish the existing buildings and redevelop the Site with two retail buildings and two residential buildings. Associated site developments will include paved parking areas and driveways, lighting, utilities, and landscaping. Stormwater management is proposed through deep sump catch basins, oil/water separators, and several subsurface infiltration systems.

The project is located within an approved wellhead protection area (Zone II) and the Water Resource District. Wetland resource areas are located within the project limits and work is proposed within the buffer zone which will require obtaining an Order of Conditions from the Franklin Conservation Commission. The project is not located within a FEMA mapped 100-year flood zone or a NHESP mapped estimated habitat of rare or endangered species. NRCS maps indicate the presence of Merrimac fine sandy loam, rated in hydrologic soil group (HSG) A, Scarboro and Birdsall soils (HSG A/D), and Urban Land (unrated).

FINDINGS, COMMENTS AND RECOMMENDATIONS

GENERAL COMMENTS

G1. The existing easement for utilities and access will be partially blocked by proposed curbing, reducing the usable access width to 15 feet and will be located in a one-way traffic area. Provide accommodations or additional easement area for egress from the site. *JBE: An easement will be provided to ensure the town has access to and from the site. A proposed access easement can be seen on Sheet C4. The existing 20' easement for the existing waterline is being proposed to be shifted to better align with the drive lane.* **BETA2: Easement provided. BETA defers any additional comment to the DPW.**

G2. Clarify if there will be any easements or rights of entry granted for the proposed connection to the parcel to the east. *JBE: As part of the town approval, an easement will be developed with the abutter to utilize the proposed cross connection*. **BETA2: Information provided – issue resolved.**

G3. Provide typical details for proposed light poles and luminaires. *JBE: The light pole detail is located on Sheet D1, and the light fixture details have been added to sheet D3.* **BETA2: Details provided – issue resolved.**

ZONING

The Site is located within the Commercial II (CII) Zoning District. The proposed use of the Site is identified as residential, retail, and a coffee shop with associated vehicle service establishment. General retail uses and coffee shops (restaurant) are permitted as of right and require a special permit from the Board of Appeals only if the project results in an increase in estimated water consumption of more than 15,000 gallons per day. The proposed vehicle service establishment associated with coffee shop also requires a special permit, which has been requested. Multi-family residential uses are not permitted within the district; however, the project narrative indicates the Board of Appeals has granted a variance, dated January 9, 2020, for this proposed use.

Z1. Provide the estimated water consumption for retail and coffee shop uses to confirm a special permit by the Board of Appeals is not required. *JBE: Per Chapter 185 Attachment 3 "Use Regulations Schedule" Retail and restaurant uses are permitted by right in the CH district, provided they do not result in an increase of more than 15,000 GPD, otherwise a special permit is required.* **BETA2: Information provided confirming that no special permit is required – issue resolved.**

SCHEDULE OF LOT, AREA, FRONTAGE, YARD AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

The project site will meet the requirements for lot area, frontage, lot depth, lot width, front and side yards, and impervious coverage. The project does not comply with the requirement for rear yard; however, the narrative indicates the Board of Appeals has granted a variance, dated January 9, 2020, for the proposed 26' rear yard setback. The project does not comply with building height requirements by right (40') and the applicant has submitted a special permit requesting a height of up to 50' as outlined in §185 Attachment 9. Greater than one principal building is permitted on a single lot in accordance with §185-11.

SCH1. Clarify the proposed building height, noted as 50' on the Site Plan and as 51' – 2" on the Architectural Plans. Buildings greater than 50' in height are not permitted in the CII Zoning District. Also confirm that the exterior wall height at the gable does not exceed the permitted building height by more than 10 feet in accordance with the Building Height definition (§185-3). *JBE: These items will be reflected on the architectural drawings.* **BETA2: Information provided. BETA defers final interpretation of the building height to the Building Commissioner at the time a building permit is filed.**

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

The existing Site includes three paved access driveways. The project proposes to modify the westerly access drive (to a one-way entrance) and remove the easterly access driveways. A new curb cut will also be provided directly across from Glen Meadow Road and will service as the entrance for the non-residential uses and will be the primary egress from the site. An additional connection will be made to the commercial parcel to the east.

Section §185-21.B.(2) describes the number of parking spaces required for residential and nonresidential buildings in the CII Zoning District. For residential buildings, two spaces are required for each dwelling unit. For retail, one space is required per 200 feet of gross floor area (GFA), plus one space per separate enterprise. For restaurants, one space is required per 2.5 fixed seats or one space per 60 square feet if seats are not fixed. According to provided parking calculations, 104 dwelling units are proposed and require 208 spaces; 15,219 sq. ft. of retail GFA is proposed and requires 76 spaces; and 40 restaurant seats are proposed and require 16 spaces. A total of 301 parking spaces are required for the site where 268 are

proposed and the applicant has requested that the Planning Board reduce the required number of parking spaces as outlined in §185-21.D.(4).

Proposed parking spaces are depicted as 19' long and 9' wide, except for accessible parking spaces which are 8' in width in accordance with Massachusetts Architectural Access Board (MAAB) requirements. Associated parking area aisles are a minimum of 24' wide. Twelve spaces are designated as accessible and meet MAAB requirements for number, markings, and signage.

It is anticipated that the Fire Chief will review turning movements for fire equipment throughout the site as well as the proposed materials for the fire lane

P1. Clarify how many separate enterprises are proposed within the retail buildings. Each enterprise must be provided one additional parking space. *JBE: The Two retail buildings will be separated into 6 separate enterprises; these additional parking spaces have been added to the calculations.* **BETA2: Calculation revised – issue resolved.**

P2. Clarify if the parking calculations include the outdoor patio area associated with the restaurant. *JBE: An additional 20 seats have been added to the restaurant parking calculation to accommodate the patio seating.* **BETA2: Calculation revised – issue resolved.**

P3. Confirm that a waste collection vehicle can adequately access the most northerly restaurant-use dumpster. *JBE: A waste collection vehicle can adequately access the most northerly restaurant-use dumpster. A truck turning plan (Sheet T1) has been included with our resubmission package.* **BETA2: A turning movement plan has been provided and shows access to the dumpster area in general but not the most northerly dumpster. Unless the dumpsters are intended to the roll out type it does not appear the truck can access it.** *JBE2: Truck Turning Plan #3 has been included with this response packing depicting these turning movements.* **BETA3: Following discussion with the design engineer, minor adjustments are being made to the dumpster area, which will allow adequate access to the dumpsters and will be incorporated into the final plan set – issue resolved.**

P4. Clarify where residential parking will be provided. Plans indicate 117 spaces located to the north of the residential buildings; however, the Waiver Request Letter indicates that 1.5 spaces per unit (150 total) will be sufficient for site operations. *JBE: The sections of parking to the East of the residential buildings have been given adequate signage indicating they are for residential parking only. A sufficient amount of parking has been allocated for residential units to comply with the parking requested within the waiver.* **BETA2: Residential parking designated – issue resolved.**

P5. Provide background information and/or empirical data to confirm that the proposed parking, including shared-use, and visitor parking is adequate for the site and is justified to be below that required by the Bylaw. *JBE: Commercial Zone I is located 600' West of our site and allows parking at 1.5 spaces / unit. The Downtown Commercial District to the West also allows for 1.5 spaces / unit. We feel these districts are of similar character to our site and this reduction in parking is sufficient to serve the site. In addition, we have integrated a bus stop into the design which will provide a further reduction to parking needs on site. A waiver is before the planning board to allow for this reduction.* **BETA2: Given the project's proximity to the Commercial Zone I district this waiver request is not unreasonable. BETA notes that on-street parking is not available in this area and ultimately the residential development will be responsible for allocating spaces for individual units as needed.**

P6. Confirm that all residential parking spaces will be located within 300 feet of the building entrances (§185-21.C.(6)). *JBE: All parking that is designated as residential parking is located within 300' of either of the entrances on the residential buildings.* **BETA2: Information provided – issue resolved.**

P7. Clarify if any of the dwelling units will be accessible. Per 521 CMR 10.3, parking spaces for dwelling unit occupants must be capable of complying with 521 CMR 23.2 through 521 CMR 23.8. Demonstrate that additional accessible spaces can be provided for occupants, if necessary. *JBE: Following approval of the waiver request for the parking of residential units to be 1.5 spaces / unit, there will be an excess of 8 spaces on site. Therefore, in the event accessible units are constructed, accommodations can he made to provide parking spaces.* **BETA2: Information provided – issue resolved.**

P8. Although the number of trees proposed throughout the site exceeds that required by (§185-21.C(5)), consideration should be given to relocating or adding trees in the parking lot serving the residential units. *JBE: A 6' high screening fence has been proposed along the west property line.* **BETA2: Fence provided. BETA defers to the preference of the Board to determine if this meets their preference for screening.**

P9. Recommend revising the location of or eliminating the first several parking spaces west of the one-way residential entrance. The spaces will require vehicles to back into them and their view will be obstructed by the proposed transformer and landscaping adjacent to East Central Street, creating a potential conflict with entering vehicles. *JBE: A stripped turn around space has been added to each row of parking to allow space to turn. Landscaping in the Northwest corner will be reduced to ground cover species only so as to not interfere will sight lines for traffic. The transformer has been relocated to the other side of the entrance road to provide addition sight lines to traffic.* **BETA2: Spaces eliminated – issue resolved.**

P10. Additional comments regarding site circulation, parking layout, signing/striping, and pedestrian accommodations will be provided under separate cover as part of the traffic review. *JBE: We have coordinated with Vanasse & Associates Inc. regarding these comments.* **BETA2: No further comment.**

SIDEWALKS (§185-28)

The project is located within the Commercial II l Zoning District and is required to provide 6' wide sidewalks along the street frontage. An existing 5' wide sidewalk, located within the State right-of-way, is present along the frontage's length. The applicant proposes to retain this sidewalk and provide handicap ramps at proposed and retained driveways.

CURBING (§185-29)

The project proposes the use of vertical granite curbing within the East Central Street right-of-way and along the majority of parking areas. Monolithic concrete curb is proposed along sidewalks in front of new buildings.

C1. Clarify proposed location of Type "F" granite curb depicted on Mountable Stamped Concrete Detail. *JBE: This detail is no longer needed and has been removed.* **BETA2: Detail removed – issue resolved.**

SITE PLAN REVIEW (§185-31)

The proposed development is subject to Site Plan Review and must comply with the requirements of this section.

S1. Include abutting land uses and zoning information on the Locus Map (§185-31.C.(3)(d)). *JBE: The locus map has been updated to the required scale, and zoning information has been included.* **BETA2: Information provided – issue resolved.**

S2. Indicate proposed snow storage locations on the plans (§185-31.C.(3)(i)). *JBE: Snow storage is depicted on the site plan.* **BETA2: Snow storage locations provided; however, they are limited and are primarily coincident with heavily landscaped areas. Mechanical removal of snow from the site will be required during snow events.** *JBE2: In the event no further snow can be stored on site, snow will either be trucked off site or a snow-melter will be used. Landscaping on site has been chosen by the landscape architect to be urban tolerant. It has been reviewed by the landscape architect and they find these areas to be acceptable.* **BETA3: Information provided on landscaped areas. BETA defers to the preference of the Board on general snow operations.**

S3. Provide note indicating that all proposed plantings shall come from the Best Development Practices Guidebook (§185-31.C.(3)(k)). *JBE: The landscaping plans have been updated accordingly.* **BETA2: Note provided – issue resolved.**

S4. Provide sight line information, including intersection sight distance, at the proposed driveway egress (§185-31.C.(3)(t)). *JBE: A site distance plan has been included with the submission documents. See Sheet H1.* **BETA2: Information provided. Adequacy of sight distance will be evaluated as part of traffic review to be provided under separate cover.**

S5. Evaluate if there will be any odor issues resulting from the two restaurant dumpsters proposed approximately 5 to 10 feet from the easterly property line. *JBE: The dumpster is proposed to be enclosed and emptied on a regular basis. The dumpsters are located near parking fields only, and are not anticipated to cause odor issues to any structures.* **BETA2: Information provided – issue dismissed.**

SCREENING (§185-35)

The project proposes outdoor parking for 10 or more cars, which must be screened from adjacent residential districts or uses from which they would otherwise be visible. Although the abutting parcel to the south is within the Rural Residential 1 Zoning District, it is a Town-owned lot that is unlikely to be developed due to the presence of a well head; therefore, screening appears to be unnecessary.

WATER RESOURCES DISTRICT (§185-40)

The Site is located within the Water Resources District due to the presence of a Zone II Wellhead Protection Area. All new impervious surfaces are directed to on-site recharge systems, as required by §185-40.E.(4) and will recharge a volume in excess of that required by DEP.

WR1. Section §185-40.D.(1)(l)(ii)) requires that the proposed groundwater recharge efforts must be approved by a hydrogeologist; however, provided that the stormwater management system is revised to fully comply with the Massachusetts Stormwater Management Standards no adverse impacts to groundwater are anticipated as a result of the project. BETA defers to the preference of the Board to require approval by a hydrogeologist. *JBE: We also defer to the preference of the board to require approval by a hydrologist.* **BETA2: No further comment.**

WR2. Note that any fill placed in quantity greater than 15 yards must be certified in accordance with §185-40.E.(5). *JBE: Note 31 on Sheet C3-1 has been added to comply with this regulation.* **BETA2: Note provided – issue resolved.**

UTILITIES

Proposed utilities include sewer, electric, gas, and domestic and fire water services. Detailed review of water and sewer utilities is anticipated to be provided by the DPW and Fire Chief (e.g. for fire hydrants), as applicable.

U1. Provide sizing calculations for proposed grease traps in accordance with Title V regulations per DPW policy. If tenants/uses are unknown at this time, calculation must be provided prior to construction. *JBE: Sizing for the proposed grease traps will be provided to the town prior to construction.* **BETA2: BETA finds this acceptable.**

U2. Clarify the need for a grease trap at Building D, which is labeled for retail use. *JBE: Although the current use is intended to be retail, the developer wants the flexibility to change to a restaurant use at some time in the future. If this were to occur the developer would have to return to the town for review.* **BETA2: Information provided – issue resolved.**

U3. Provide a note that all water and sewer utility installations shall be done in accordance with the Town of Franklin Department of Public Works Standards for Sewer and Water Materials and Installation (Town Standards). Also note that where utility installation details conflict with the Town Standards that the Town Standards shall govern. *JBE: Note 40 on Sheet C4 has been added to this affect.* **BETA2: Note provided – issue resolved.**

U4. Consult the DPW to determine if the proposed water system should be looped back to an existing water main. *JBE: The Water / Sewer Division of the town of Franklin has requested that we loop the water main back to East Central Street. This has been done, and is depicted on Sheet C4.* **BETA2: Loop provided. BETA defers to the DPW for any additional comment.**

U5. Recommend to provide the size and material of the existing water and sewer lines. *JBE: The size and type of the existing utilities have been added to Sheet C4.* **BETA2: Information provided – issue resolved.**

U6. Consult the DPW to confirm that the proposed 4" sewer services from Buildings C and D are of acceptable size. *JBE: After consultation with the DPW, the sewer services have been increased to 6" sewer services.* **BETA2: Information provided – issue resolved.**

U7. Clarify if any easements are needed for the new fire hydrant and utility pole located just east of the proposed site entrance. *JBE: An easement is proposed for the hydrant to the benefit of the town of Franklin. Coordination with National Grid will take place prior to construction.* **BETA2: Easement provided – issue resolved.**

U8. Revise note 2 on Hydrant Installation Detail to indicate that hydrant shall be factory painted in Town colors. Also remove references to "non-draining" and "hydrant drain to be plugged" unless confirmed to be acceptable by the DPW. *JBE: The Detail has been updated per DPW standards, see Sheet D8. A note has been added to the detail requiring the hydrant comply with DPW standards, per request by the DPW.* **BETA2: Remove reference to American Darling model. This is no longer the Town standard.** *JBE2: The detail has been updated per DPW standards, see Sheet D8. A note has been added to the detail requiring the hydrant comply with DPW standards per request by the DPW.* **BETA3: Reference removed – issue resolved.**

U9. Resolve discrepancy of sewer force main material between Utility Plan and Force Main Sewer Trench detail. Town Specifications require SDR 21 PVC, DR11 HDPE, or ductile iron. *JBE: The detail has been updated to require DR11 HDPE, see Sheet D4.* **BETA2: Material updated. Remove reference to Town of Exeter testing requirements.** *JBE2: This note has been removed from the detail.* **BETA3: Note removed – issue resolved.**

U10. Coordinate with the DPW and indicate how the existing utility services will be capped. Water services are typically required to be capped at the main. *JBE: Per direction from the DPW, the sewers are to be capped at the property line and the water service are to be capped at the main. This is reflected on the demo plan, Sheet Cl-l.* **BETA2: Information provided – issue resolved.**

STORMWATER MANAGEMENT

The project proposes to direct runoff from impervious areas into new closed drainage systems comprised of roof leaders, deep sump catch basins with hoods, oil/water separators, and subsurface infiltration systems. Runoff from impervious surfaces will be directed to one of three new subsurface infiltration systems. Overflows from the proposed systems will be directed into the wetland buffer zone in the southern portion of the Site.

GENERAL

SW1. Provide a stamped Stormwater Management Checklist. *JBE: A Stormwater Management Checklist has been provided in the updated Drainage Analysis.* **BETA2: Checklist provided – issue resolved.**

SW2. Recommend replacing the curb break, rip rap, swale, and sidewalk scupper with a conventional catch basin and pipe. *JBE: The curb brake system has been modified to a conventional catch basin.* **BETA2: Design modified as recommended – issue resolved.**

SW3. Provide an easement for the relocated drainage line that carries flow from East Central Street. Since this portion of East Central Street is a State Highway, confirm that required coordination with MassDOT is being conducted. *JBE: We are in communication with MassDOT regarding this drainage pipe and are working with them to provide an easement for the related pipe.* **BETA2: Information provided – issue resolved.**

SW4. Review structure rim, weir, and outlet elevations (e.g. DMHs 517, 518, and 525, etc.) to ensure consistency between plans, details, and HydroCAD model. *JBE: The plans and drainage analysis have been reviewed for consistency following the updates.* **BETA2: BETA spot checked several of drainage structures for consistency and found them to be correct – issue resolved.**

SW5. Revise drain manhole detail to specify clay brick for invert in accordance with Subdivision Regulations. *JBE: The drain manhole detail on Sheet D2 has been updated to use clay bricks.* **BETA2: The drain manhole detail proposes a concrete invert. BETA finds this acceptable; however, we note that the Board may require brick in accordance with Town regulations.** *JBE2: Noted.* **BETA3: Note further comment.**

SW6. Remove reference to "hook lock grates" on Catch Basin (MA) detail. JBE: *This has been removed per your request.* **BETA2: Note removed – issue resolved.**

SW7. Request waiver to allow the installation of PVC pipe as part of the drainage systems at oil/water separators. *The previously provided waiver letter has been updated to include a waiver for the use of PVC pipe.* **BETA2: BETA defers to the preference of the Board to grant this waiver.**

Recommend providing cleanouts at bends. *JBE2: These proposed pipes have been increased to 12" PVC to reduce the chance of clogging.* **BETA3: The combination of pipe size and bend angles limited to 45° are anticipated to be sufficient to minimize clogging potential – issue resolved.**

SW8. Provide a detail for rip rap outlet protection and note required dimensions at each outfall. Recommend including a layer of filter fabric for permanent erosion control beneath stone. *JBE: A rip rap outlet protection detail has been to Sheet D1. Dimensional information has been added to the plans for each outfall.* **BETA2: Detail provided – issue resolved.**

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS:

The proposed development will disturb greater than one acre and is located in proximity to wetland resources; therefore, the project is subject to Chapter 153: Stormwater Management of the Town of Franklin Bylaws and MassDEP Stormwater Management Standards.

No untreated stormwater (Standard Number 1): *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.*

The project does not propose any new untreated stormwater discharges to wetlands. Four new outfalls are proposed which discharge into wetland buffer zones. Riprap aprons are proposed at the end of these outfalls to mitigate erosion potential.

Post-development peak discharge rates (Standard Number 2): *Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.*

The project proposes an increase in impervious area and will use subsurface infiltration systems to mitigate increases in post-development peak discharge rates and total runoff volumes.

SW9. Revise HydroCAD model (i.e. finer routing) to eliminate oscillations, which may render the output data invalid. *JBE: The hydraulic analysis has been reviewed, and the system has been revised to the best extent practical to reduce oscillations. Oscillations are found to be in acceptable tolerances for the analysis to be valid.* **BETA2: Following discussion with the designer, supplemental information has been provided to resolve oscillations in the chamber systems – issue resolved.**

SW10. Clarify use of HSG D for areas located in areas mapped by NRCS as HSG A/D in the existing conditions model. There is an approximate 0.82-acre reduction in Woods Good HSG D in the proposed conditions and is presumed to be new impervious area. While it is anticipated that some of the soils in proximity to the wetlands will be saturated HSG D soils, it is also anticipated there will be upland areas located in unsaturated HSG A soils. *JBE: After review of the test pits done within this area, we have reduced the HSG D soils to the boundary of the wetland to the rear of the property. The remaining soil area will be classified as HSG A.* **BETA2: HSG revised – issue resolved.**

SW11. Revise Time of Concentration (TOC) to a minimum of 5 minutes for subwatersheds where the grass portion is minimal in comparison to the paved area (e.g. 210S and 219S). *JBE: The watersheds with minimal grass areas have been updated to a minimum 5-minute time of concentration.* **BETA2: TOC revised – issue resolved.**

SW12. Remove Reaches 1, 2, and 3 from the proposed conditions model, which appear to significantly reduce peak flow rate from the outfalls. These reaches are not included in the existing conditions

model. *JBE: The hydrocad models have been modified to use the wetland line as the analysis point. This adjustment will allow the discharge to the analysis point in both the existing and proposed conditions to happen immediately and remove the need for the reach.* **BETA2: Reaches removed – issue resolved.**

SW13. Recommend providing pipe sizing calculations utilizing the rational method. *JBE: A pipe sizing table has been provided with this submission.* **BETA2: Calculations provided – issue resolved.**

SW13A. Confirm the area of "Wetland Pond Area" P2 used in the HydroCAD model. Also, clarify who will be responsible for maintenance (site owner or MassDOT) and if the pond is intended to be a constructed stormwater wetland, detention basin, or wetland replication area. Wetland replication will be provided under separate cover as part of the NOI review; however, it is BETA's general understanding that wetlands are typically not used for the control of stormwater. *JBE: The Constructed Wetland Area (Node P2) was added with coordination from Goddard Consulting LLC as a part of our NOI submission to the Conservation Commission. It was designed with their guidance. Although this area is designed as a pond, the detention provided is not needed to meet pre/post conditions from stormflow. A summary for Analysis Point #1 from a version of the model with the Constructed Wetland Area not apart of the design is included.* **BETA2: Information provided confirming that the constructed wetland is not required for stormwater control. BETA defers additional commentary to the wetlands reviewer; however, operation and maintenance procedures and construction details must be included in the final stormwater report and plans.**

Recharge to groundwater (Standard Number 3): *Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.*

NRCS soil maps indicate the presence of Merrimac fine sandy loam with a Hydrologic Soil Group (HSG) rating of A (high infiltration potential), Scarboro and Birdsail soils with HSG A/D (very low infiltration potential when saturated) and Urban Land, with no associated HSG rating. Test pit logs indicate the presence of sand, loamy sand, and sandy loam throughout the Site. The infiltration systems have been designed to provide a recharge volume in excess of that required and will drain within 72 hrs.

SW14. Review calculations for required recharge volume. The on-site impervious areas used in these calculations are significantly lower than the total impervious area of the post-development site. The stormwater narrative indicates the project is being designed as a new development. *JBE: There is an increase of 1.73 acres of impervious area due to the proposed development. The proposed infiltration systems treat a total of 4.38 acres of impervious area.* **BETA2: Calculation revised – issue resolved.**

SW15. Depict location of hydraulic conductivity tests on the plans. *JBE: The locations of the amoozemeter tests done on site are located on the existing conditions plan, and are designed at PT-P#.* **BETA2: Information provided – issue resolved.**

SW16. Provide test pit logs for TP #1-04 and TP #18-15, which are in the footprints of Chamber Systems #1 and #3, respectively. *JBE: The requested test pit logs have been added to the test pit logs within the drainage report.* **BETA2: Information provided – issue resolved.**

SW17. Identify basis for using HSG D in recharge calculations. It appears the project can easily meet the required recharge volume assuming the more conservative HSG A soils. *JBE: Per on site test pit data, the HSG D soils on site has been reduced to the wetland line. The recharge calculations have*

been updated to account for the additional HSG A soils. **BETA2: Calculation revised – issue resolved.**

SW18. Revise subsurface recharge systems to provide the minimum required 2' separation to groundwater. Details provided on Sheet D5 generally indicate approximately 1.5' of separation. A mounding analysis will be required where separation to groundwater is less than 4 feet. *JBE: The separation of ground water for the underground systems on site have been modified to provide 2'.*

There are typically two main concerns regarding groundwater mounding. The impact of groundwater mounding on basements and its adverse effects on drawdown time. The state requires drawdown to occur within 72 hours. As all structures on site are slab on grade there are no anticipated issues regarding groundwater impacts to basements.

The draw down times for the three systems per stormwater handbook calculations are between 3-12 hours. A mounding analysis is as conducted on a previous design in 2016 (see attached mounding report). Within that analysis Pond #2 was reviewed. This pond has very similar soil characteristics and is of far greater size then the ponds currently proposed. This pond saw a drawdown of approximately 30 hours while accounting for groundwater mounding. Given this information, Jones and Beach believes there is sufficient evidence to conclude that groundwater mounding will not adversely affect the site or the ponds from functioning properly. **BETA2: Required separation provided – issue resolved.**

SW19. Evaluate the estimated seasonal high groundwater elevation at Chamber System 2. TP #2-15 (appox. Elevation 279.5) indicates mottling 78" below the surface (elevation 273) and is only 0.5'± below the system bottom. *JBE: The test pit logs attached did not have Don Neilson notes which provide vital additional information. These logs have been attached to the resubmission drainage analysis. These logs indicate the elevation at the location of the test pit site. All underground systems onsite have been updated to provide a minimum of 2' of separation to the bottom of gravel.* **BETA2: Information provided – issue resolved.**

SW20. In consideration that only a single test pit has been conducted within the limits of Chamber System 2, provide an additional test pit near the southeast corner of system to confirm soil texture and groundwater elevations. BETA notes that if loamy sand is confirmed an increased exfiltration rate to 2.41 in/hr would be justified. *JBE: Additional test pits have been provided within the drainage report for this location. There are loamy sands present, but there is a mix of construction fill as well, given our close proximity to the existing building. We feel that holding to the current infiltration rate of 1.020" is an appropriate rate in order to be conservative.* **BETA2: Information provided – issue resolved.**

80% TSS Removal (Standard Number 4): *For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids.*

The project proposes to direct runoff from roofs and new parking areas to new subsurface infiltration systems. The proposed treatment train typically includes deep sump catch basins, oil water separators, and subsurface isolator row prior to infiltration. As the Site is within a Zone II Wellhead Protection Area and qualifies as a Land Use with Higher Potential Pollutant Load, 44% pretreatment has been provided prior to infiltration.

SW21. Review calculations for required water quality volume. The on-site impervious areas used in these calculations are significantly lower than the total impervious area of the post-development site. The stormwater narrative indicates the project is being designed as a new development. *JBE: The*

proposed site causes an increase in impervious 011.730 acres. The three proposed infiltration storm—tech units treat a total of 4.378 acres. This is less than the total impervious area in the proposed hydro-cad model due to the fact that there is some off—site watershed that were modeled. These watersheds are off site and are not going to be disturbed by the proposed project. Thus, no treatment is proposed. For example, the watersheds associated with the drainage pipe that currently discharges to the rear of the property. We are rerouting that pipe, but are not planning to provide treatment. All proposed impervious will be treated prior to discharge.

The detention basin at the outfall oi the existing pipe has 942 cu. ft. of storage. The proposed storm volume to the wetland system is sufficiently less then the existing conditions to account for the loss of the existing storage. **BETA2: Information provided – issue resolved.**

SW22. Revise oil/water separator to pass the 2-year storm without interference, as indicated in the Stormwater Handbook. Currently, the 1" storm calculations show bypass over the weir in the upstream DMH. *JBE: The oil/water seperators have been modified to pass a 2-year storm without interference.* **BETA2: Design revised – issue resolved.**

SW23. Provide detailed long-term pollution prevention plan (LTPPP), including measures outlined in the Stormwater Handbook. Recommend incorporating the LTPPP into the Operation and Maintenance Plan. *JBE: Spill prevention information is included in the operation and maintenance manual. Sheet E2. has been added to the plan set which provided additional erosion control information. Prior to the start of construction, a SW'PPP Manual will be submitted to the town. These additions to the submission materials we feel constitute an adequate LTPPP.* **BETA2: In consideration of the project's proximity to the Town's well and the residential use, the LTPPP should be updated to include management of pet waste, use of fertilizers, and vehicle washing.** *JBE2: Management information regarding pet waste, fertilizers, and vehicle washing has been added to the Operations and Maintenance Manual.* **BETA3: Include provisions for the use of fertilizers (e.g. frequency and slow release). Although provisions regarding vehicle washing have been provided the practice should be prohibited for any commercial vehicles or equipment, as runoff would be considered an illicit discharge. It is also recommended to prohibit residential vehicle washing to minimize pollutants within the water resource district. A commercial vehicle wash is available in immediate proximity to the project site.**

Higher Potential Pollutant Loads (Standard Number 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads require the use of specific stormwater management BMPs*.

The project qualifies as a Land Use with Higher Potential Pollutant Load (LUHPPL) under the definition of a parking lot with high-intensity use (1,000 vehicle trips per day or more). The proposed treatment trains are consistent with the recommendations of MassDEP for LUHPPL areas, including the use of oil/grit separators for areas subject to higher pollutant loads of oil and grease and providing 44% TSS pretreatment prior to infiltration.

Critical Areas (Standard Number 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.*

The project includes discharges to a Zone II Wellhead Protection Area, a critical area. The proposed treatment trains are consistent with the recommendations of MassDEP for discharges to Zone II wellhead protection areas. The required 44% pretreatment prior to discharge to infiltration structures is also provided.

Redevelopment (Standard Number 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.*

The project has been designed as a new development – not applicable.

Construction Period Erosion and Sediment Controls (Standard Number 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.*

The project as currently depicted will disturb in excess of one acre of land; therefore, a Notice of Intent with EPA and a Stormwater Pollution Prevention Plan (SWPPP) are required. The project plans indicate the use of perimeter compost filter tube, stabilized construction entrance, catch basin inlet protection, and temporary seeding/stabilization. A basic spill / pollution prevention plan narrative has been provided.

SW24. Recommend replacing the block and gravel catch basin inlet protection with a filter insert, such as a silt sack. *JBE: An inlet protection detail has been added to Sheet E2.* **BETA2: Detail revised – issue resolved.**

SW25. Depict location of construction entrance and inlet protection on the plans. *JBE: The construction entrance has been added to the plans, see Sheet C1-1. Note 30 has been added to Sheet C3-1 indicating inlet protection must be used on all catch basins.* **BETA2: Locations/notes provided – issue resolved.**

SW26. Revise location of proposed erosion controls to be coincident with limits of clearing and work (e.g. rip rap for flared end sections), as applicable. *JBE: The limit of clearing has been reviewed and complies with rip rap and FES sections.* **BETA2: Location revised – issue resolved.**

Operations/maintenance plan (Standard Number 9): *A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.*

A Long-Term Operation and Maintenance (O&M) Plan has been provided.

SW27. Provide an estimated O&M budget. *JBE: This has been provided in the Operation and Maintenance Manual.* **BETA2: Budget provided – issue resolved.**

SW28. Revise inspection/maintenance frequency of catch basins and oil/water separators to a minimum of twice per year. *JBE: The inspection frequency of these features has been updated on the operation and maintenance manual.* **BETA2: CB maintenance has not been updated – issue remains outstanding.** *JBE2: Catch Basin and Drain Manholes have been updated within the narrative to be inspected twice per year.* **BETA3: Maintenance frequency revised – issue resolved.**

Illicit Discharges (Standard Number 10): *All illicit discharges to the stormwater management systems are prohibited.*

The Stormwater Management Report indicates that no illicit discharges are proposed.

SW29. Provide a signed Illicit Discharge Compliance statement. *JBE: Within our stamped and signed Drainage Analysis Report included section 2.5.10; "No illicit discharges are proposed for this project.* **BETA2: Information provided – issue resolved.**

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Matthew J. Crowley, PE
Project Manager

Stephen Borgatti
Staff Engineer

cc: Amy Love, Planner

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
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MEMORANDUM

DATE: **August 20, 2020**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **340 East Central St**
Special Permit & Site Plan

The DPCD has reviewed the above referenced Site Plan application for the Monday, August 24, 2020 Planning Board meeting and offers the following commentary:

General:

- The site is approximately 6.5 acres and is located at 340 East Central Street. The property is within the Commercial II Zoning District and Water Resource District, Assessor's Map 285 Lot 009.
- The applicant seeks approval to construct a 42,080+/- sq/ft of residential, 15,219+/-sq/ft of retail and 2,250+/- for a coffee shop.
- The Applicant is seeking the following Special Permits: Four stories and fifty feet building height under the Chapter 185 Attachment 9, Maximum Height of Building and Chapter 185 Attachment 3, Part II 2.16 to allow the use of a Vehicle Service Establishment.
- Applicant has their first public hearing with the Conservation Commission on August 27, 2020.

ZBA Variances Granted

1. Minimum rear yard setback of 26 feet where 30 feet is required 185 Attachment 9

2. Allow for Multi-Family or apartment residential use in the Commercial II district which is otherwise prohibited 185 Attachment7

Waiver Request:

1. Chapter 185-21 (B) – To Allow 268 parking spaces where as 301 is required
2. Chapter 300 Section 11(B)(2)(a) – Minimum cover is 42 inches above the top of the pipe
3. Chapter 300 Section 11(B)(2)(a) – To allow HDPE be allowed for oil/water seperator

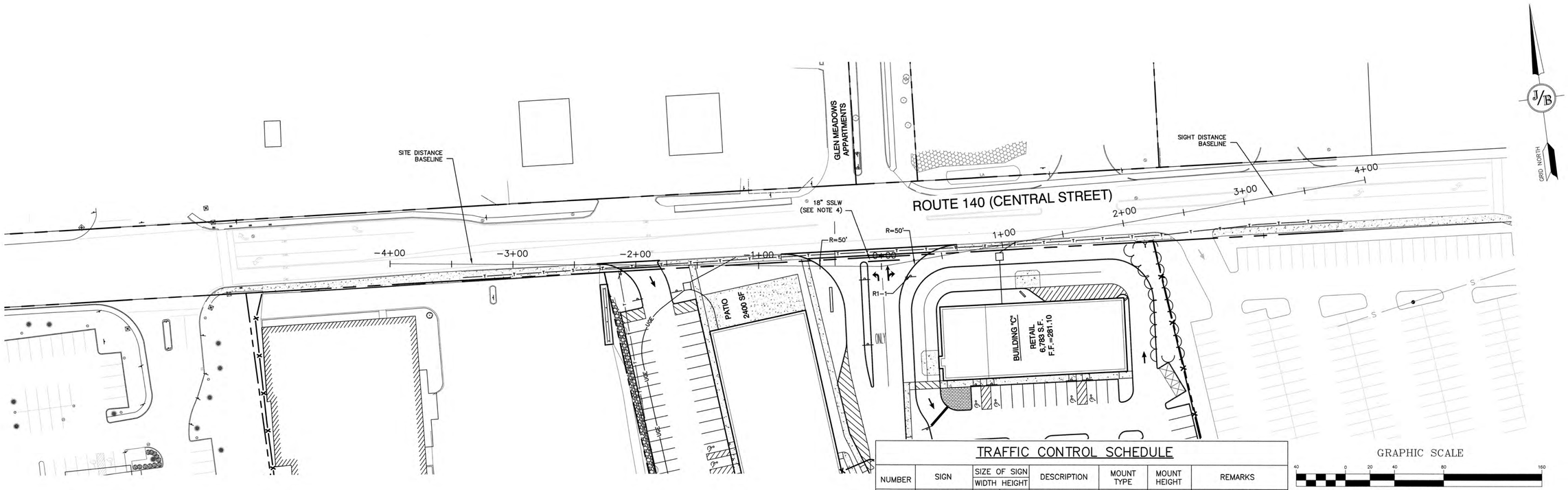
Comments from the June 22, 2020 meeting:

1. The Board request more screening, with landscaping, between the property abutting to the West. *The Applicant has proposed a 6' chain link fence. DPCD recommends a white vinyl fence and plantings.*

2. The Board request additional landscaping and screening in front of the site and around the drive-thru. *Applicant has provided additional landscaping in these areas.*
3. The Board inquired about deliveries and access around the Building D. *Issue not addressed.*
4. Access around the residential building in the winter. *Applicant has provided a turning truck route around the building.*
5. The Planning Board requires vertical granite or reinforced concrete curbing.
6. The Applicant is currently meeting with Design Review for the colors of the buildings. *Applicant has received Design Review recommendation. DPCD recommends the color renderings be added to the plans.*
7. If the applicant is adding any signage, they must file with the Design Review Commission.
8. Applicant submitted a Traffic Study. BETA is currently reviewing the traffic study. *BETA will provide a response to the traffic after the discussion on August 24.*

Records on File:

1. Application for Site Plan and Special Permit
2. Certificate of Ownership
3. Special Permit Criteria
4. Abutters certified mailing
5. Overview of Proposed project and Special Permit Findings
6. Site Plans
7. Traffic Study
8. Stormwater Management Plans



TRAFFIC CONTROL SCHEDULE

NUMBER	SIGN	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"	REFLECTORIZED SIGN

GRAPHIC SCALE

40 0 20 40 80 160

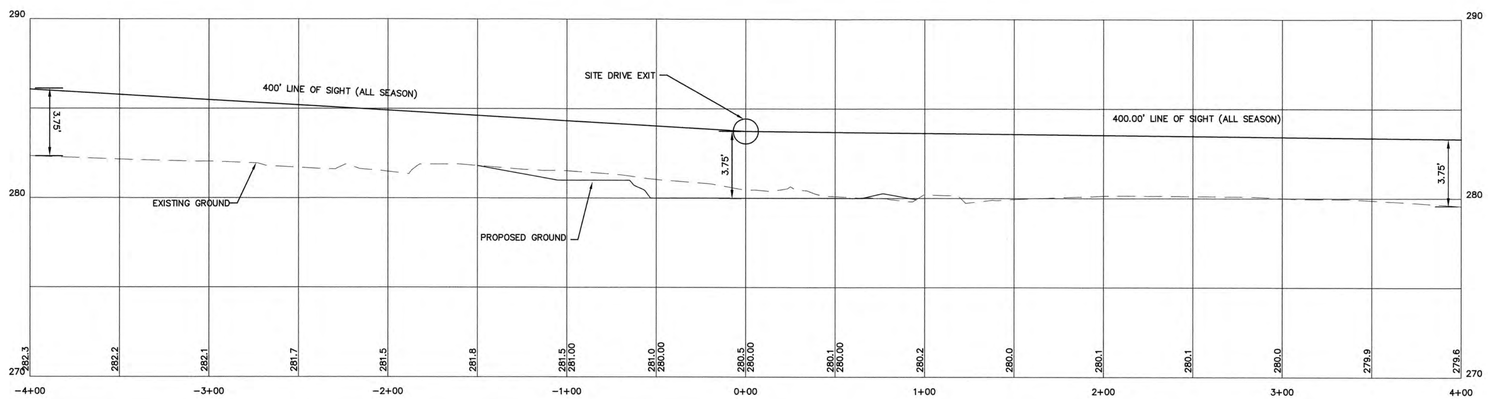
(IN FEET)
1 inch = 40 ft.

LEGEND

EXISTING	DESCRIPTION
	PROPERTY LINES
--- 200 ---	MAJOR CONTOUR
------ 201 ------	MINOR CONTOUR
	EDGE OF PAVEMENT
SWL	SINGLE WHITE LINE
DYL	DOUBLE YELLOW LINE
	STONEWALL
	TREELINE
	IRON PIPE/IRON ROD
	DRILL HOLE
	STONE/GRANITE BOUND
	FRESHWATER WETLANDS
	UTILITY POLE

NOTES:

1. POSTED SPEED LIMIT= 40 MPH
2. STOP SIGN SHALL BE TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND MASSDOT STANDARDS.
3. SIGN, HARDWARE, AND INSTALLATION TO CONFORM TO MASSDOT STANDARD SPECIFICATIONS
4. STOP BAR TO CONFORM TO MASSDOT DETAILS



GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft Horiz.
1 inch = 4 ft Vert.
8 4 0
0 40 80

0	07/30/20	ISSUED FOR REVIEW	EMP
REV.	DATE	REVISION	BY

Design: BWG	Draft: BWG	Date: 01/23/20
Checked: BWG	Scale: AS-NOTED	Project No.: 13153
Drawing Name: 13153-DESIGN.dwg		

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

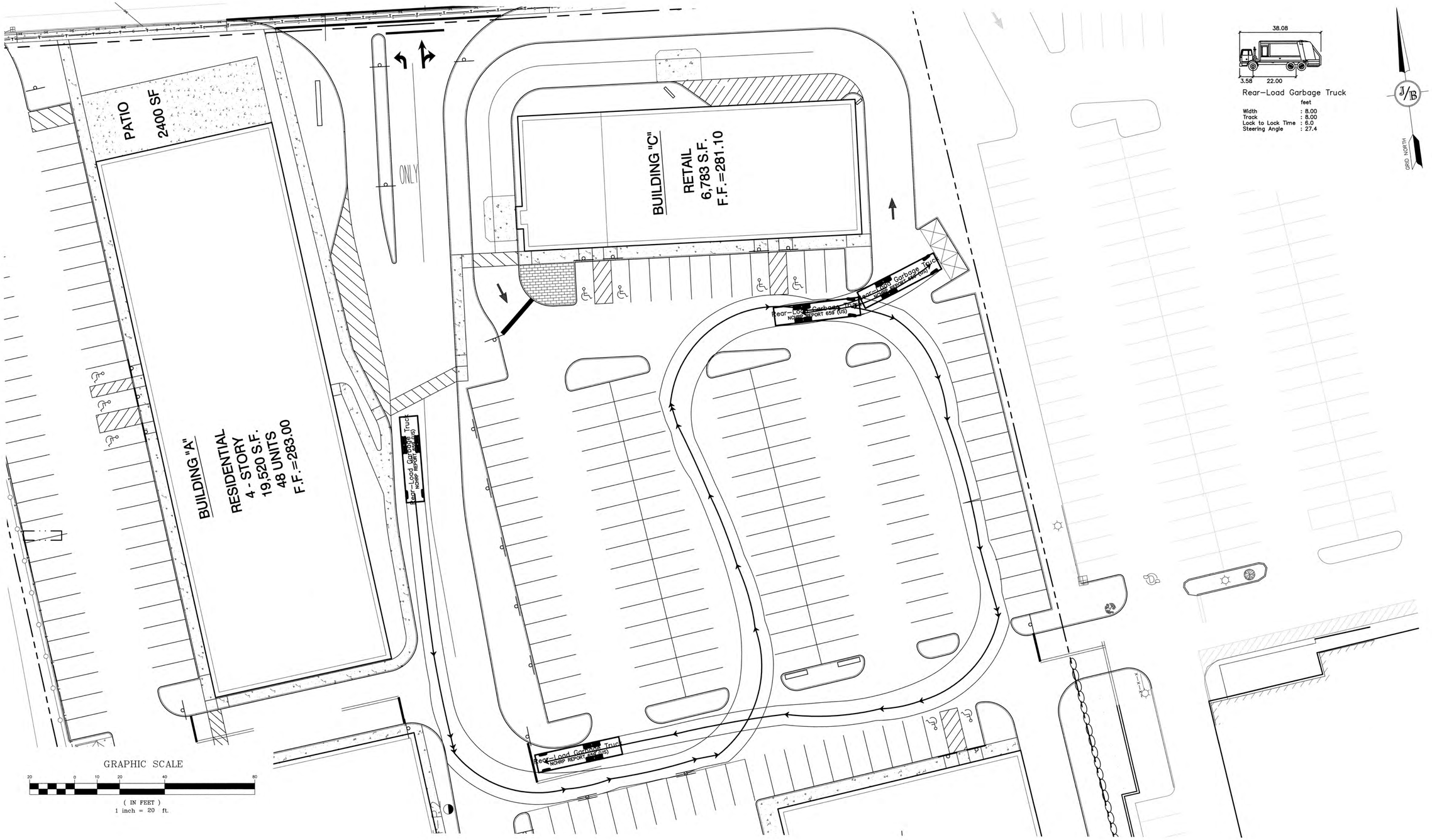
Plan Name: HIGHWAY SIGHT DISTANCE PLAN

Project: PROPOSED CENTRAL SQUARE
340 E CENTRAL STREET, FRANKLIN, MA

Owner of Record: 340 EAST CENTRAL. EPK PROPERTIES, LLC. LAND COURT CERTIFICATE 190576

DRAWING No.
H1
SHEET 1 OF 3
JBE PROJECT NO. 13153

F:\Land Projects 3\13153-FRANKLIN-300-EAST-CENTRAL-STREET-TOPSFIELD-ASSOCIATES\CONCEPTS\Concept Kiegan\13153-CONCEPT8-KIEGAN.dwg 12/13/2018 16:43:30 EST



Rear–Load Garbage Truck

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 27.4

F:\Land Projects 3\13153-FRANKLIN-300-EAST-CENTRAL-STREET-TOPSFIELD-ASSOCIATES\CONCEPTS\Concept Kiegan\13153-CONCEPT8-KIEGAN.dwg 12/13/2018 16:43:30 EST

Design: BWG	Draft: BWG	Date: 01/23/20
Checked: BWG	Scale: AS-NOTED	Project No.: 13153
Drawing Name: 13153-DESIGN.dwg		

REV.	DATE	REVISION	BY
0	07/30/20	ISSUED FOR REVIEW	EMP

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

Plan Name:	TRUCK TURNING PLAN #1
Project:	PROPOSED CENTRAL SQUARE 340 E CENTRAL STREET, FRANKLIN, MA
Owner of Record:	340 EAST CENTRAL. EPK PROPERTIES, LLC. LAND COURT CERTIFICATE 190576

DRAWING No.

T1

SHEET 2 OF 3
JBE PROJECT NO. 13153

F:\Long Projects 3\13153-FRANKLIN-300-EAST-CENTRAL-STREET-TOPSFIELD-ASSOCIATES\CONCEPTS\Concept Kiegan\13153-CONCEPT8-KIEGAN.dwg 12/13/2018 16:43:30 EST

Design: BWG	Draft: BWG	Date: 01/23/20
Checked: BWG	Scale: AS-NOTED	Project No.: 13153
Drawing Name: 13153-DESIGN.dwg		

REV.	DATE	REVISION	BY
0	07/30/20	ISSUED FOR REVIEW	EMP

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

Plan Name: TRUCK TURNING PLAN #2

Project: PROPOSED CENTRAL SQUARE
340 E CENTRAL STREET, FRANKLIN, MA

Owner of Record: 340 EAST CENTRAL. EPK PROPERTIES, LLC. LAND COURT CERTIFICATE 190576

DRAWING No.
T2
SHEET 3 OF 3
JBE PROJECT NO. 13153

TETRA TECH

August 14, 2020

Mr. Anthony Padula, Chairman
Franklin Planning Board
355 East Central Street
Franklin, MA 02038

Re: 162 Grove Street
Response to Traffic Peer Review

Dear Chairman Padula:

Tetra Tech has prepared this letter in response to comments raised by BETA Group, Inc. (BETA) in their traffic peer review letter of August 10, 2020. Since the previous Planning Board hearing, the proponent has made a change to their proposed operations on site that will result in a significant reduction in project impacts from a transportation perspective. The change is discussed below, along with responses to comments raised by BETA.

Comment T1: *Additional intersections, including the intersections of Grove Street at Washington Street and Grove Street at Route 140, should be added to the study area.* ***BETA2: Information provided – issue resolved.***

No Response Required.

Comment T2: *Verify that office space is included within the NETA Northampton facility and the associated square footage.* ***BETA2: Information provided – issue resolved.***

No Response Required.

Comment T3: *The travel splits shown in Table 1 significantly differ from those used in the study, especially for Saturday. Verify the distribution splits applied to the new trips.* ***BETA2: Additional information has been provided. Although the 10% distribution to/from the north of West Central Street should be closer to 5% and the 25% to/from the east on West Central Street should be closer to 30% instead of 25%, the percentages are generally reasonable and BETA finds them acceptable.***

No Response Required.

Comment T4: *The Board has expressed concern about the number of developments contributing to existing traffic and safety issues along Grove Street. The following standard traffic study components were not included as part of the submission and should be included to understand the full impacts of this project to the surrounding infrastructure:*

- *Sight distance analysis Based on field observations, there is limited sight distance approaching the site from the south.*
- *Background development-related traffic growth that may increase traffic within the study area was not identified.*
- *Growth rate was not included because the Build analysis was performed using the year 2020 and not a seven-year horizon. A one percent growth has been applied for other recently proposed developments in Franklin.*
- *No-Build analysis.*
- *Crash data for the most recent three years.*

Tetra Tech
Marlborough Technology Park, 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

BETA2: The above-mentioned traffic study components have been provided. See below for comments related to the additional data provided in the Traffic Impact Study (TIS).

No Response Required. Additional comments and responses noted below.

Comment T5: *If available, empirical data of 15-minute interval parking demands for a similar facility, not near public transit and with an on-site parking lot, should be provided to further support the proposed parking supply.* ***BETA2: The additional information was provided. The data was collected on a non-peak weekday after July 4th. BETA's understanding is that the week leading up to July 4th is one of the busiest time periods of the entire year for dispensaries which would mean that parking demands are lower the week immediately after July 4th. Additionally, sales have been down during the pandemic so empirical data pre-pandemic would provide the most applicable data. However, it is understood that additional pre-COVID-19 data may not be available, therefore, based on all data provided and the additional similar types of facilities proposed within the site's vicinity, BETA finds the proposed parking spaces to be adequate.***

No Response Required.

TRAFFIC IMPACT STUDY

Comment T6: *Provide a sight triangle on the plans depicting the line of sight and label the "roadside vegetation and limiting on-site objects" to be removed to provide the required sight distance to meet AASHTO standards.*

Response: A sight triangle has been added to the plans. See attached figures.

Comment T7: Resolve the discrepancy between the available SSD noted in the TIS and on the plan set.

Response: BETA has requested we disregard this comment. No response required.

Comment T8: *As noted in the TIS, a southbound exclusive left-turn lane is proposed as part of the 160 Grove Street development. With this in mind verify that the sight distances approaching and exiting the driveway would continue to be adequate, especially during the AM peak period when 160 Grove Street employees would be entering and close to 200 vehicles would be entering and exiting the site driveway.*

Response: As shown on the attached Figure 1, a vehicle waiting to turn left into 160 Grove Street does fal within the sight triangle and could block the sight line for a driver looking right from the site to a vehicle traveling southbound along Grove Street past the proposed left-turn lane 160 Grove site driveway for a short distance (approximately 70 feet). However, there are only 42 vehicles expected to turn left into 160 Grove Street during the morning peak hour. Under the proposed 2027 Build conditions, the capacity analysis indicates that the southbound left-turn lane at 160 Grove Street is expected to be queue free 95 percent of the time during the weekday morning peak hour, with a 95th percentile queue length of 0.2 vehicles. Additionally, the number of vehicles exiting the site during the morning peak hour is now expected to be significantly reduced based on NETA's currently proposed operation of the facility.

Comment T9: *Provide a detailed post-occupancy traffic monitoring program outline including metrics to determine the impacts related specifically to the project site.*

Response: A detailed post-occupancy monitoring program is outlined in the project's Transportation Demand Management plan. If the project exceeds the metrics described in the plan, remedial actions will be implemented with a follow-up monitoring study to confirm the effectiveness of the remedial measures. See attached.

Comment T10: *Elaborate on what is the anticipated "geometric and/or traffic control improvements."*

Response: As noted above, NETA heard the concerns from the Board and has committed to changing its proposed facility to operate as a Reserve Ahead-only dispensary, which would require customers and patients to place an order in advance and select a scheduled pick up time to retrieve it. The proposed

change in operations will significantly reduce project impacts, especially during weekday commuter peak hours. Further details on the revised trip generation and project impacts to reflect this change in operations are included in the August 14, 2020 Traffic Summary Letter, included in this submission. With this proposed reduction in project-related trips, it is not anticipated that any off-site geometric or traffic control improvements will be necessary to mitigate the impacts of the project.

Comment T11: *BETA recommends that the Board discuss the adequacy of what appears to be solely post-occupancy off-site mitigation contributions.*

Response: As noted above, NETA has committed to changing its proposed facility to operate as a Reserve Ahead-only dispensary. This change in proposed operations will significantly reduce potential traffic increases associated with the project, especially during weekday commuter peak hours. Further details on the revised trip generation and project impacts to reflect this change in operations are included in the August 14, 2020 traffic summary letter, included in this submission. The proponent will also implement a comprehensive Transportation Demand Management Plan to further reduce potential project-related impacts.

We trust this letter provides clarification on the comments noted by BETA. Please do not hesitate to contact us if you have any questions.

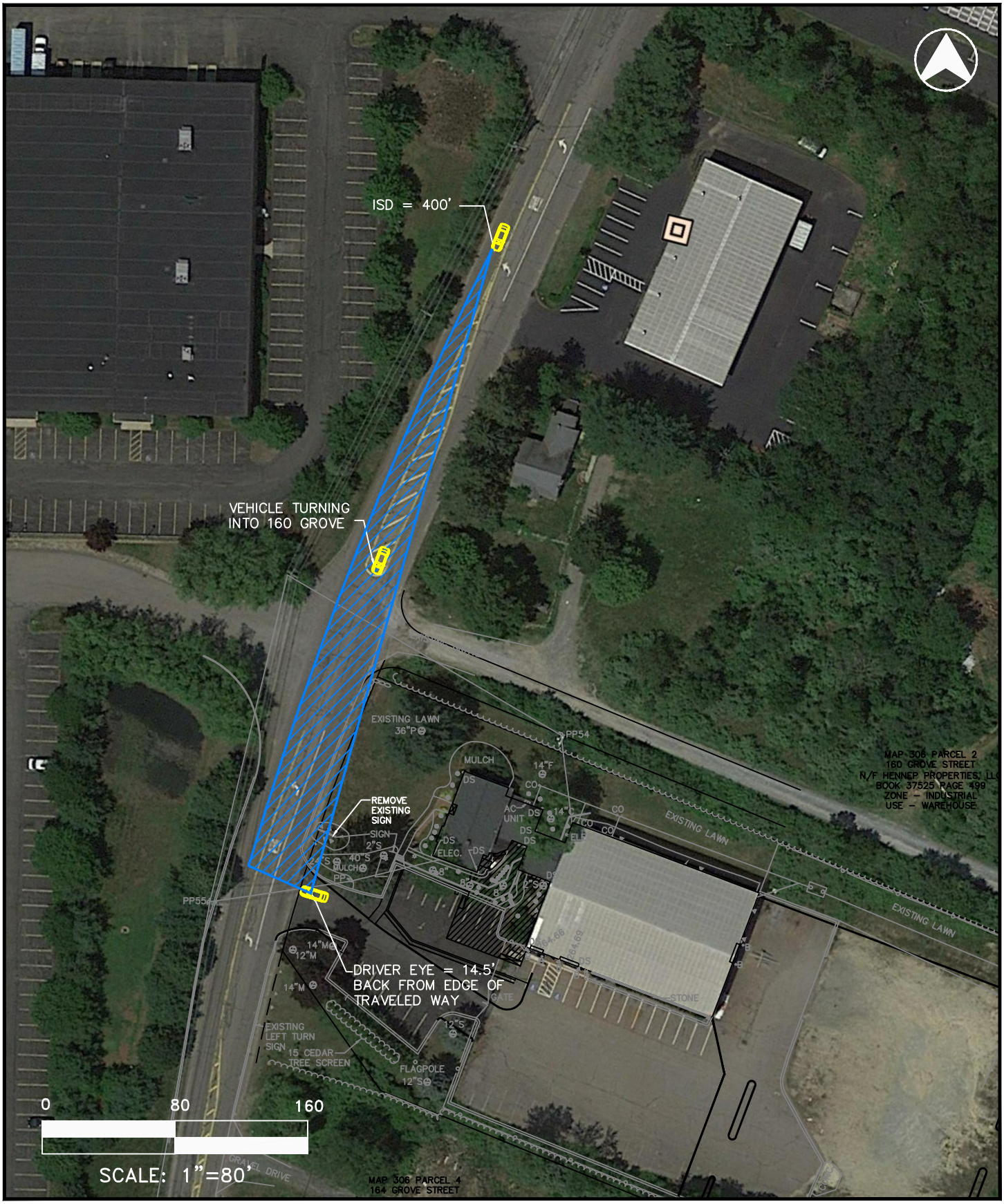
Very truly yours,

Sasha L. Wood, PE

Attachments: Site Plan with Sight Triangle Figures, Capacity Analysis Results for 160 Grove, Traffic Summary Letter, Transportation Demand Management Plan

P:\276845\143-276845-20002\DOCS\REPORTS\2020-08-14-RESPONSE TO BETA COMMENTS2.DOCX

Sight Distance Figures

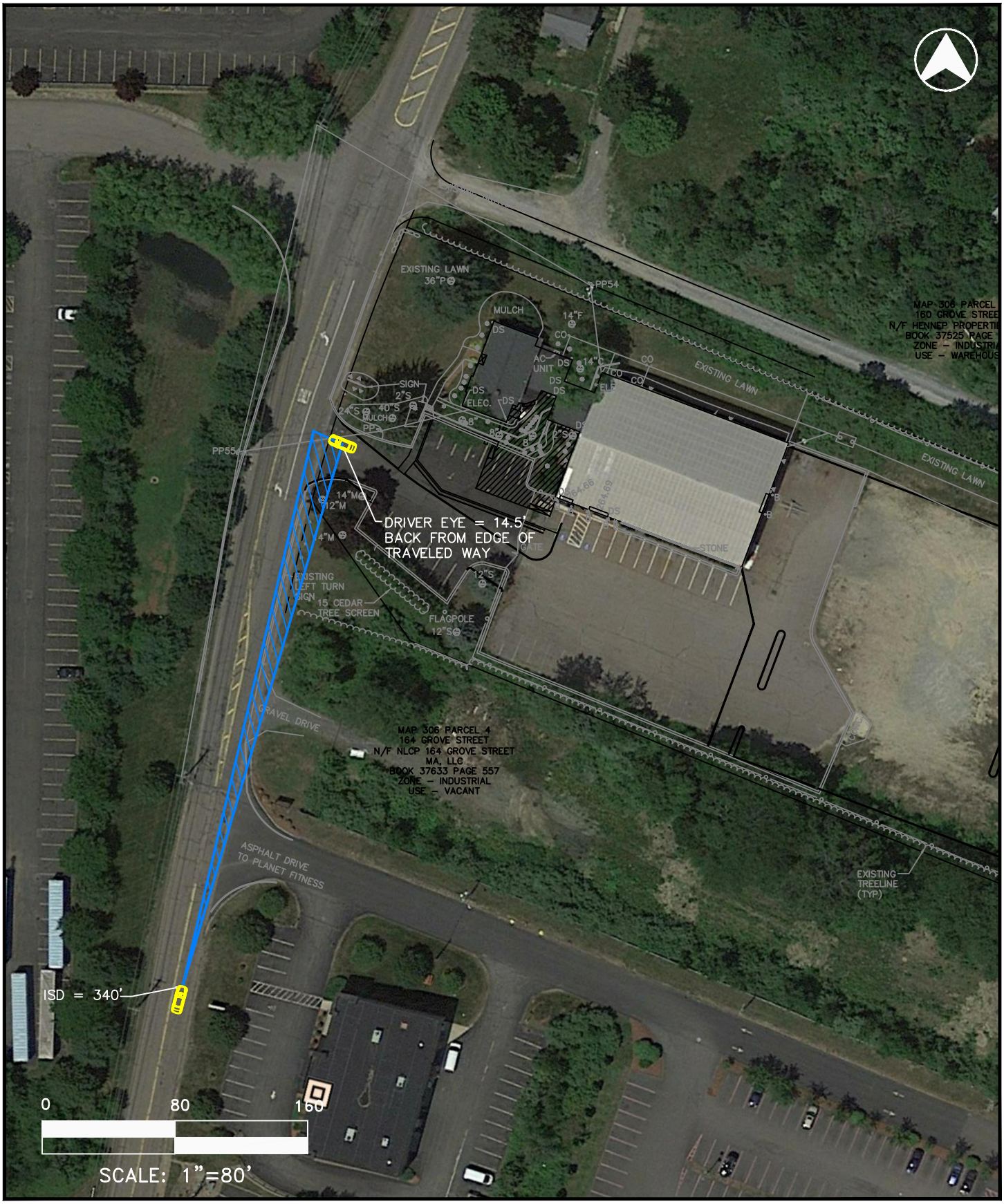


TETRA TECH

Proposed Marijuana Dispensary
162 Grove Street
Franklin, Massachusetts

Intersection Sight Distance
Looking to the North

FIGURE
1



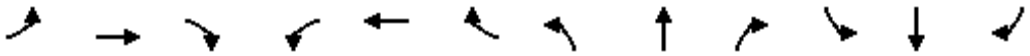
TETRA TECH

Proposed Marijuana Dispensary
162 Grove Street
Franklin, Massachusetts

Intersection Sight Distance
Looking to the South

FIGURE
2

160 Grove Street Queue Free Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	1	13	0	16	11	609	35	42	201	18
Future Volume (Veh/h)	5	0	1	13	0	16	11	609	35	42	201	18
Sign Control		Stop			Stop			Free			Free	
Grade		-4%			4%			2%			-3%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	5	0	1	14	0	17	12	648	37	45	214	19
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1002	1022	224	996	1014	666	233			685		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1002	1022	224	996	1014	666	233			685		
tC, single (s)	7.5	6.5	6.2	7.1	6.5	6.2	4.2			4.1		
tC, 2 stage (s)												
tF (s)	3.9	4.0	3.3	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	97	100	100	93	100	96	99			95		
cM capacity (veh/h)	174	224	821	215	226	462	1289			918		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	31	12	685	45	233
Volume Left	5	14	12	0	45	0
Volume Right	1	17	0	37	0	19
cSH	200	304	1289	1700	918	1700
Volume to Capacity	0.03	0.10	0.01	0.40	0.05	0.14
Queue Length 95th (ft)	2	8	1	0	4	0
Control Delay (s)	23.5	18.2	7.8	0.0	9.1	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	23.5	18.2	0.1		1.5	
Approach LOS	C	C				

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	44.9%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	9	19	0	24	2	358	2	3	588	3
Future Volume (Veh/h)	10	0	9	19	0	24	2	358	2	3	588	3
Sign Control		Stop			Stop			Free			Free	
Grade		-4%			4%			2%			-3%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	0	9	20	0	25	2	377	2	3	619	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1032	1010	620	1016	1010	378	622			379		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1032	1010	620	1016	1010	378	622			379		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.6			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.7			2.2		
p0 queue free %	95	100	98	91	100	96	100			100		
cM capacity (veh/h)	204	241	492	213	240	673	765			1191		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	45	2	379	3	622
Volume Left	11	20	2	0	3	0
Volume Right	9	25	0	2	0	3
cSH	277	343	765	1700	1191	1700
Volume to Capacity	0.07	0.13	0.00	0.22	0.00	0.37
Queue Length 95th (ft)	6	11	0	0	0	0
Control Delay (s)	19.0	17.1	9.7	0.0	8.0	0.0
Lane LOS	C	C	A		A	
Approach Delay (s)	19.0	17.1	0.1		0.0	
Approach LOS	C	C				

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	41.1%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	11	0	14	2	274	1	2	355	3
Future Volume (Veh/h)	0	0	0	11	0	14	2	274	1	2	355	3
Sign Control		Stop			Stop			Free			Free	
Grade		-4%			4%			2%			-3%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	0	0	12	0	15	2	301	1	2	390	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	716	702	392	701	702	302	393			302		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	716	702	392	701	702	302	393			302		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.6			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.7			2.2		
p0 queue free %	100	100	100	97	100	98	100			100		
cM capacity (veh/h)	341	364	662	354	363	743	947			1270		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	0	27	2	302	395
Volume Left	0	12	2	0	2
Volume Right	0	15	0	1	3
cSH	1700	499	947	1700	1270
Volume to Capacity	0.00	0.05	0.00	0.18	0.00
Queue Length 95th (ft)	0	4	0	0	0
Control Delay (s)	0.0	12.6	8.8	0.0	0.1
Lane LOS	A	B	A		A
Approach Delay (s)	0.0	12.6	0.1		0.1
Approach LOS	A	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	30.5%	ICU Level of Service		A
Analysis Period (min)	15			

Traffic Summary Letter

TETRA TECH

August 14, 2020

Ms. Amanda Rositano, President
NETA, LLC
5 Forge Parkway
Franklin MA 02038

Re: Updated Traffic Summary
Proposed Marijuana Dispensary
162 Grove Street, Franklin

Dear Ms. Rositano:

This letter provides an update to our Traffic Impact Study (TIS), dated July 13, 2020, based on recent changes to the proposed operations of the dispensary to be located at 162 Grove Street in Franklin, Massachusetts. In response to comments made by the Planning Board at the Planning Board hearing on July 27, 2020, NETA is voluntarily changing its proposed operations at the site to a Reserve Ahead-only facility instead of the previously proposed full walk-in service in addition to reserve ahead. The Reserve Ahead-only operations will significantly reduce potential traffic increases and parking demands associated with the proposed project. This letter documents our findings based on the newly proposed operations.

Site Operations

Since reopening after the initial COVID-19 shutdown, NETA has been operating on a reserve ahead (RA) only basis at two other locations to limit the number of customers at any one time in the facilities to meet social distancing guidelines. In the process, NETA has developed an online ordering platform that limits the number of orders that can be picked up during every available time window. When a pick up time window is full (its order capacity has been met), the pick up window is then unavailable for customers to select. NETA has the ability to set the number of orders during each individual pick up window over the course of the day. While originally planning to operate Franklin as a walk-in and reserve ahead facility, NETA is now committing to operate as a reserve ahead only facility in order to limit impacts to the area roadways by controlling the number of pick up times available throughout the day.

To reflect the latest change to operations, NETA has provided a daily breakdown of the Reserve Ahead 30-minute pick up windows for a weekday and Saturday. NETA intends to limit pick up times to 950 customers on a daily basis, setting a maximum capacity of 45 transactions in a 30-minute pick up window on a weekday and 40 transactions per 30-minute pick up window on a Saturday. NETA is committed to reducing the impacts of the site on the adjacent roadway network during peak commuter hours, allowing only 15 available pick up slots during each of the 30-minute windows during the weekday peak hours. The proposed breakdown of available pick up times is shown in Table 1. As shown in Table 1, NETA plans to limit the number of customer pick ups during the weekday morning peak hour (8:00 to 9:00 AM) and during the entire weekday afternoon peak commuter period (from 3:30 to 6:00 PM), not only the peak hour.

Tetra Tech
Marlborough Technology Park, 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

Table 1 NETA Customer Order Limit

Customer Pick Up Window Time	Order Capacity	
	Weekday	Saturday
8:00-8:30 AM	15	25
8:30-9:00 AM	15	25
9:00-9:30 AM	30	30
9:30-10:00 AM	35	30
10:00-10:30 AM	40	35
10:30-11:00 AM	40	35
11:00-11:30 AM	40	40
11:30 AM-12:00 PM	40	40
12:00-12:30 PM	40	40
12:30-1:00 PM	40	40
1:00-1:30 PM	45	40
1:30-2:00 PM	45	40
2:00-2:30 PM	45	40
2:30-3:00 PM	45	20
3:00-3:30 PM	45	20
3:30-4:00 PM	15	20
4:00-4:30 PM	15	40
4:30-5:00 PM	15	40
5:00-5:30 PM	15	35
5:30-6:00 PM	15	35
6:00-6:30 PM	15	35
6:30-7:00 PM	45	35
7:00-7:30 PM	45	35
7:30-8:00 PM	45	35
8:00-8:30 PM	45	35
8:30-9:00 PM	40	35
9:00-9:30 PM	40	35
9:30-10:00 PM	40	35
Total	**950**	**950**

Source: Customer Order Limits Proposed by NETA for 162 Grove

Project Trip Generation

Trip generation estimates from the previous report were developed based on data presented in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition with Supplement* (2020) and empirical data from an existing site for the previously proposed walk-in/reserve ahead model. The project trip generation estimates have been revised based on the projected number of customer slots available during each 30-minute pick-up window, assuming one entering and exiting trip for each customer. The employee trips were also added to the customer trips, again assuming one entering and exiting trip per employee. A comparison of the trip generation for previously proposed full walk-in and Reserve Ahead facility and the currently proposed Reserve Ahead-only facility is provided in Table 2.

Table 2 Project Trip Generation Summary

Time Period	Previously Proposed Full Walk-in/Reserve Ahead Operations[1]	Currently Proposed Reserve Ahead Only Operations[2]	Difference
Weekday Daily			
Enter	1,708	996	-712
Exit	1,708	996	-712
Total	3,416	*1,992*	*-1,424*
Weekday Morning Peak Hour			
Enter	101	45	-56
Exit	86	30	-56
Total	187	*75*	*-112*
Weekday Evening Peak Hour			
Enter	160	30	-130
Exit	175	45	-130
Total	335	*75*	*-260*
Saturday Daily			
Enter	1,825	990	-835
Exit	1,825	990	-835
Total	3,650	*1,980*	*-1,670*
Saturday Peak Hour			
Enter	194	80	-114
Exit	209	95	-114
Total	403	*175*	*-228*

[1]Based on Northampton data, adjusted to reflect Franklin site presented in July 13, 2020 Traffic Impact Study
[2]Based on NETA's projections for order capacity for a total of 950 customers per day plus employees (10 fewer than previously proposed – now up to 46 employees on a weekday, up to 40 employees on a Saturday)

As shown in Table 2, the project is expected to generate approximately 1,992 trips on a weekday, including 75 trips during each of the morning and afternoon peak hours. On a Saturday, the site is expected to generate 1,980 vehicle trips, including 175 during the afternoon peak hour. The revised projected trip generation estimates are significantly lower than those presented in the previous study for the full walk-in and reserve ahead operations. The revised project trips were then distributed to the study area intersections based on the trip distribution patterns described included in the July 13, 2020 Traffic Impact Study (TIS), as shown in the revised Figures 9, 10, and 11 (attached).

2027 Build

The new trips associated with the proposed project were then added to the 2027 No-Build traffic volumes. The resulting 2027 Build (With Project) weekday morning, weekday afternoon and Saturday peak hour traffic volumes are presented in the attached figures, revised Figures 12, 13, and 14.

Traffic Operations Analysis

The operations analysis was completed for the revised 2027 Build traffic volumes, using the same methodology presented in the July 13, 2020 TIS. The results of the intersection capacity analyses for the weekday morning, weekday evening, and Saturday afternoon peak hour conditions are summarized in Tables 3 and 4 for the signalized and unsignalized intersections, respectively. The tables include the 2020 Existing and 2027 No-Build conditions from the TIS, for comparison purposes. Detailed intersection capacity analysis worksheets are provided in the attachments. As shown in Table 3, Grove Street at Route 140 operates at overall LOS C during the weekday morning and Saturday afternoon peak hours and LOS D during the weekday evening peak hour for all scenarios. The project is not expected to have a noticeable impact on overall operations at the signalized intersection.

As shown in Table 4, all of the unsignalized intersection movements for the projected Build (with project) conditions are expected to remain the same as the 2027 No-Build conditions, with one exception. The capacity analysis indicates that the southbound right turn from Grove Street onto Washington Street is expected to degrade from LOS B to LOS C during the Saturday afternoon peak hour, although the delay is only expected to increase by approximately one second for that movement, from approximately 15 to 16 seconds. The site driveway westbound approach is expected to operate at LOS C during all three peak hours under Build conditions, operating well under capacity with queues less than one vehicle length.

Mitigation

NETA is committed to limiting their impacts on the surrounding area roadways and has changed its operating plan for this proposed site to reserve ahead pick up times only to control the number of customers on site at any one time. As noted previously, NETA is proposing to limit their customers to 950 pick up times on a daily basis, including only 30 customer pick up time slots during the weekday morning and afternoon peak hours. This proposed change in operations is expected to significantly reduce the potential traffic increases associated with the proposed project.

To further reduce potential traffic impacts associated with the proposed project, NETA will implement a comprehensive Transportation Demand Management (TDM) plan. The TDM measures include:

- **Client Initiatives:** Offer reserve-ahead online ordering platform to minimize customer visit times and meter flow to the facility, particularly during peak commuter hours.
- **Bicycle Storage:** The project site will provide outdoor bicycle storage racks within the parking lot.
- **Transportation Coordinator:** NETA will designate a transportation coordinator for the site who will be responsible for promoting the use of alternative modes, encouraging carpools, and coordinating with the Town on transportation matters, including the planned traffic monitoring program.
- **Employee Incentives:** Provide a subsidy for employee transit (including commuter rail) passes, offer a guaranteed ride home under unexpected emergency conditions to employees who choose not to drive to work.

As part of the TDMP, NETA will conduct regular monitoring of site operations as outlines in the attached TDMP. Upon implementation of the proposed TDMP, the potential traffic increases associated with the proposed project can be effectively managed with no noticeable impact to future peak hour traffic operations on the surrounding area roadways. As a result, no additional off-site traffic mitigation measures are warranted or recommended.

Table 3 Signalized Intersection Capacity Analysis Summary

		2020 Existing					2027 No-Build					2027 Build				
Intersection/Peak Hour	**Movement**	**v/c[1]**	**Delay[2]**	**LOS[3]**	**50th Q[4]**	**95thQ[5]**	**v/c**	**Delay**	**LOS**	**50thQ**	**95thQ**	**v/c**	**Delay**	**LOS**	**50thQ**	**95thQ**
Grove Street & Route 140 & West Central Street																
AM Peak Hour	EB L	0.00	0.0	A	0	0	0.00	0.0	A	0	0	0.00	0.0	A	0	0
	EB TR	0.76	27.8	C	201	282	0.80	30.5	C	222	302	0.81	31.1	C	225	304
	WB L	0.74	36.8	D	72	108	0.76	36.9	D	83	128	0.77	37.1	D	88	133
	WB T	0.44	12.0	B	116	143	0.42	11.8	B	115	154	0.42	11.7	B	116	154
	WB R	0.23	10.5	B	0	20	0.22	10.4	B	0	26	0.22	10.3	B	0	26
	SE L	0.43	23.8	C	56	112	0.48	24.6	C	64	120	0.49	24.8	C	66	120
	SE TR	0.02	18.0	B	4	17	0.04	18.4	B	9	29	0.05	18.6	B	12	33
	NW LT	0.35	30.3	C	54	113	0.39	31.1	D	63	#132	0.41	31.4	C	68	#141
	NW R	0.83	39.4	D	92	181	0.89	47.1	D	114	208	0.90	48.3	D	122	215
	Intersection		**24.2**	**C**				**22.6**	**C**				**27.1**	**C**		
PM Peak Hour	EB L	0.35	52.9	D	4	17	0.35	53.4	D	4	18	0.35	53.5	D	4	18
	EB TR	0.93	47.2	D	327	#417	0.93	48.3	D	324	#461	0.93	48.8	D	324	#461
	WB L	0.80	45.8	D	92	#146	0.83	48.6	D	103	#172	0.83	49.3	D	106	#177
	WB T	0.42	16.5	B	103	187	0.44	16.5	B	110	198	0.44	16.4	B	110	198
	WB R	0.50	17.6	B	0	51	0.52	17.8	B	0	53	0.52	17.7	B	0	53
	SE L	0.97	69.5	E	185	#296	0.95	64.8	E	167	#357	0.97	69.7	E	167	#362
	SE TR	0.14	20.4	C	39	67	0.14	20.9	C	38	78	0.15	21.0	C	40	80
	NW LT	0.39	36.2	D	56	#118	0.48	37.7	D	69	#150	0.51	38.4	D	73	#162
	NW R	0.92	58.4	E	121	211	1.02	82.1	F	152	254	1.08	102.2	F	166	#285
	Intersection		**40.7**	**D**				**43.5**	**D**				**46.7**	**D**		
Saturday Peak Hour	EB L	0.35	36.4	D	3	14	0.36	44.6	D	5	22	0.36	45.8	D	5	22
	EB TR	0.73	28.9	C	85	131	0.63	27.7	C	129	192	0.64	29.0	C	132	193
	WB L	0.59	27.8	C	37	#68	0.72	36.1	D	60	107	0.74	38.0	D	68	115
	WB T	0.59	19.5	B	71	#170	0.54	21.9	C	105	201	0.54	22.4	C	107	201
	WB R	0.82	31.7	C	0	60	0.75	28.3	C	0	64	0.75	29.0	C	0	64
	SE L	0.76	23.2	C	113	#161	0.66	20.9	C	135	230	0.67	21.4	C	136	230
	SE TR	0.07	10.6	B	12	28	0.07	12.6	B	17	45	0.08	12.9	B	20	49
	NW LT	0.32	25.5	C	29	53	0.27	29.0	C	42	89	0.31	29.5	C	50	103
	NW R	0.71	28.6	C	19	42	0.56	25.9	C	32	89	0.58	26.6	C	42	104
	Intersection		**25.6**	**C**				**25.8**	**C**				**26.8**	**C**		

[1]v/c = Volume to capacity ratio [2]Delay = Average delay per vehicle (seconds) [3]LOS = Level of Service [4]50th percentile queue (feet) [5]95th percentile queue (feet)

Table 4 Unsignalized Intersection Capacity Analysis Summary

		2020 Existing				2027 No-Build				2027 Build			
Intersection	**Movement**	**v/c[1]**	**Delay[2]**	**LOS[3]**	**95th Q[4]**	**v/c**	**Delay**	**LOS**	**95th Q**	**v/c**	**Delay**	**LOS**	**95th Q**
Grove Street & Beaver Street													
AM Peak Hour	SB L	0.05	8.6	A	0.2	0.06	8.8	A	0.2	0.06	8.9	A	0.2
	WB Ln1	0.37	19.0	C	1.7	0.53	27.4	D	3.0	0.59	31.3	D	3.5
PM Peak Hour	SB L	0.07	8.6	A	0.2	0.08	9.0	A	0.3	0.09	9.1	A	0.3
	WB Ln1	0.74	41.9	E	5.5	1.03	107	F	10.4	1.12	137	F	11.9
Saturday Peak Hour	SB L	0.05	7.8	A	0.1	0.05	8.0	A	0.2	0.06	8.2	A	0.2
	WB Ln1	0.29	13.9	B	1.2	0.41	18.0	C	2.0	0.50	22.4	C	2.7
Grove Street & Business Park													
AM Peak Hour	NB L	0.01	7.7	A	0	0.01	7.8	A	0	0.01	7.8	A	0
	EB Ln1	0.02	14.9	B	0.1	0.03	19.2	C	0.1	0.03	20.2	C	0.1
	WB Ln1	0.00	0.0	A	0	0.11	20.0	C	0.4	0.12	21.1	C	0.4
	SB L	0.00	0.0	A	0	0.05	9.1	A	0.2	0.05	9.1	A	0.2
PM Peak Hour	NB L	0.00	9.3	A	0	0.00	9.6	A	0	0.00	9.7	A	0
	EB Ln1	0.04	3.7	B	0.1	0.06	15.6	C	0.2	0.06	16.2	C	0.2
	WB Ln1	0.00	0.0	A	0	0.15	18.4	C	0.5	0.16	19.7	C	0.5
	SB L	0.00	0.0	A	0	0.00	0.0	A	0	0.00	8.0	A	0
Saturday Peak Hour	NB L	0.00	8.4	A	0	0.00	8.6	A	0	0.00	8.8	A	0
	EB Ln1	0.00	0.0	A	0	0.00	0.0	A	0	0.00	0.0	A	0
	WB Ln1	0.00	0.0	A	0	0.05	12.3	B	0.2	0.06	13.6	B	0.2
	SB L	0.00	0.0	A	0	0.00	7.7	A	0	0.00	7.8	A	0
Grove Street & Washington Street													
AM Peak Hour	EB L	0.36	9.6	A	1.7	0.43	10.3	B	2.2	0.45	10.5	B	2.4
	SB Ln1	0.64	>120	F	2.3	>1.25	>120	F	4.3	>1.25	>120	F	4.8
	SB Ln2	0.12	10.4	B	0.4	0.16	10.8	B	0.6	0.18	11.0	B	0.6
PM Peak Hour	EB L	0.20	10.7	B	0.7	0.25	11.5	B	1.0	0.26	11.6	B	1.1
	SB Ln1	0.67	81.9	F	3.6	1.12	>120	F	6.9	1.22	>120	F	7.6
	SB Ln2	0.94	65.0	F	10.1	1.19	>120	F	17.1	1.23	>120	F	18.6
Saturday Peak Hour	EB L	0.09	8.6	A	0.3	0.12	8.9	A	0.4	0.15	9.0	A	0.5
	SB Ln1	0.16	20.9	C	0.6	0.27	27.6	D	1.1	0.36	33.9	D	1.5
	SB Ln2	0.29	13.1	B	1.2	0.38	14.8	B	1.8	0.44	15.9	C	2.3
Grove Street & Site Drive													
AM Peak Hour	SB L	-	-	-	-	-	-	-	-	0.03	9.1	A	0.1
	WB Ln1	-	-	-	-	-	-	-	-	0.12	19.4	C	0.4
PM Peak Hour	SB L	-	-	-	-	-	-	-	-	0.02	8.1	A	0
	WB Ln1	-	-	-	-	-	-	-	-	0.16	19.3	C	0.6
Saturday Peak Hour	SB L	-	-	-	-	-	-	-	-	0.04	7.9	A	0.1
	WB Ln1	-	-	-	-	-	-	-	-	0.23	15.6	C	0.9

[1]v/c = Volume to capacity ratio [2]Delay = Average delay per vehicle (seconds) [3]LOS = Level of Service [4]95th percentile queue (vehicles)

Parking

As part of the proposed project, the existing parking lot will be expanded to accommodate the total number of employees and customers at the site at any given time. In order to determine the total number of spaces needed to accommodate the marijuana facility operations, parking projections for the proposed employees and customers have been developed based on NETA's shift schedule and the anticipated hourly customer volume and duration of visit.

The addition of retail marijuana to the site will introduce up to 40 retail/office employees and up to six warehouse employees on site during a weekday and up to 40 retail/office employees on a Saturday. The number of customer parking spaces needed is based on hourly projections for the Franklin dispensary, with an assumed turnover of 20 minutes per space. An assumed parking turnover of 20 minutes per space would allow for each parking space to be used by three separate customers within an hour. Based on the maximum number of transactions per hour (90 on a weekday and 80 on a Saturday) and the 20 minute turnover, a maximum of 30 customer parking spaces is anticipated.

The total hourly parking demand is shown for a weekday and Saturday in Charts 1 and 2, respectively. As shown in the charts, the maximum projected parking demand is 76 parking spaces on a weekday and 67 parking spaces on a Saturday. The proposed parking supply of 141 spaces is more than sufficient to support the projected parking demands. The supporting parking calculations are included in the attachments.

Conclusions

Based on the analysis presented in this report, the projected traffic increases associated with the currently proposed project operating as a reserve ahead only facility can be accommodated at the proposed site driveway with no noticeable impact on the future traffic operations at the adjacent study area intersections. NETA is taking proactive steps to reduce the number of customer trips to and from the site throughout the day, particularly during the weekday commuter peak periods when traffic on the adjacent roadways is highest. A comprehensive Transportation Demand Management plan is proposed which aims to reduce trips to and from the site and calls for a monitoring program after the project opens. Remedial actions would be implemented if the project exceeds the thresholds set in the TDM plan.

We trust that this information will prove useful in the Town's review of the proposed project. If you have any questions or require any further information, please feel free to call.

Very truly yours,

Sasha L. Wood, PE

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Chart 1 - NETA Franklin
Weekday Parking Demand (Up to 40 Retail Employees)

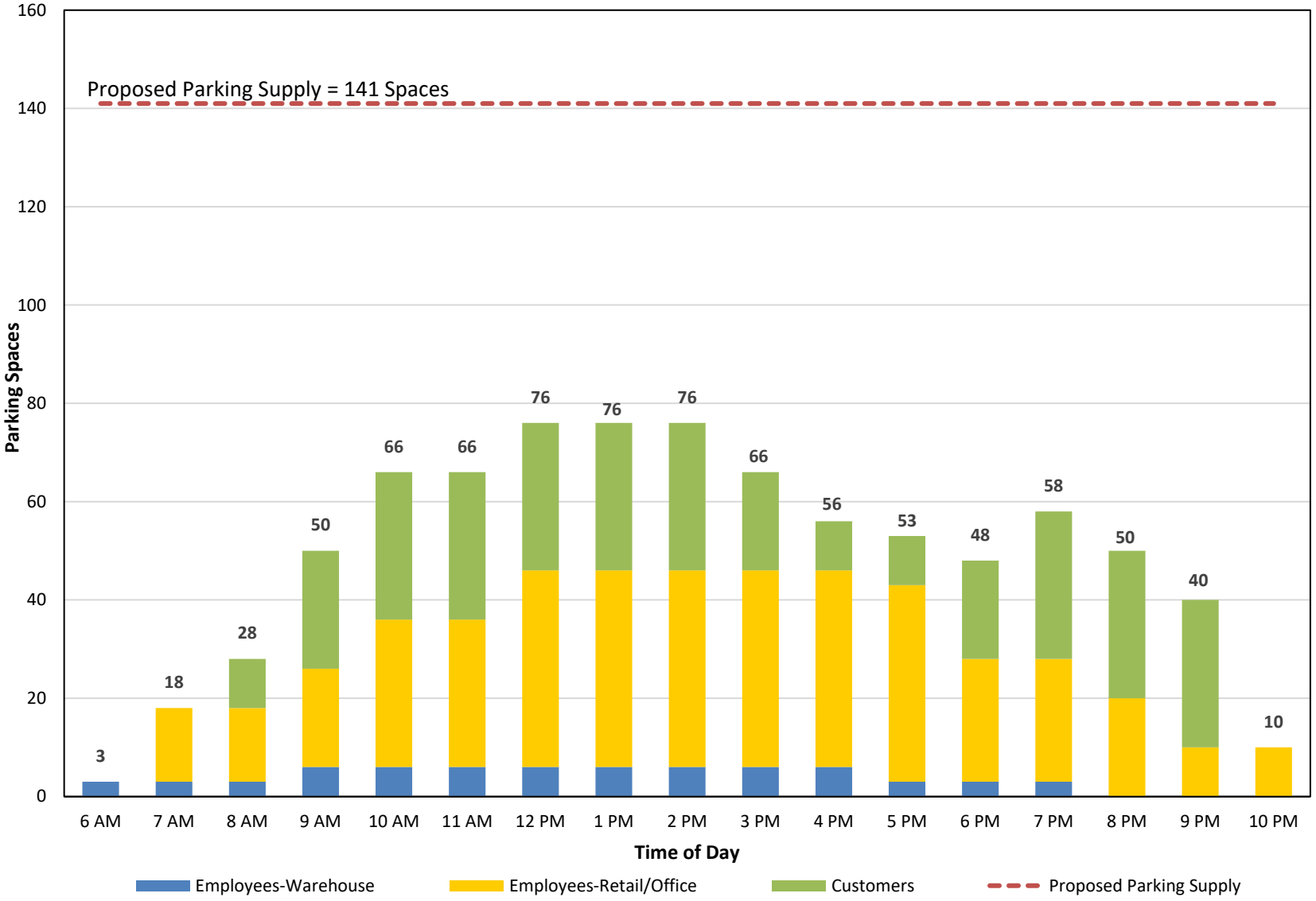
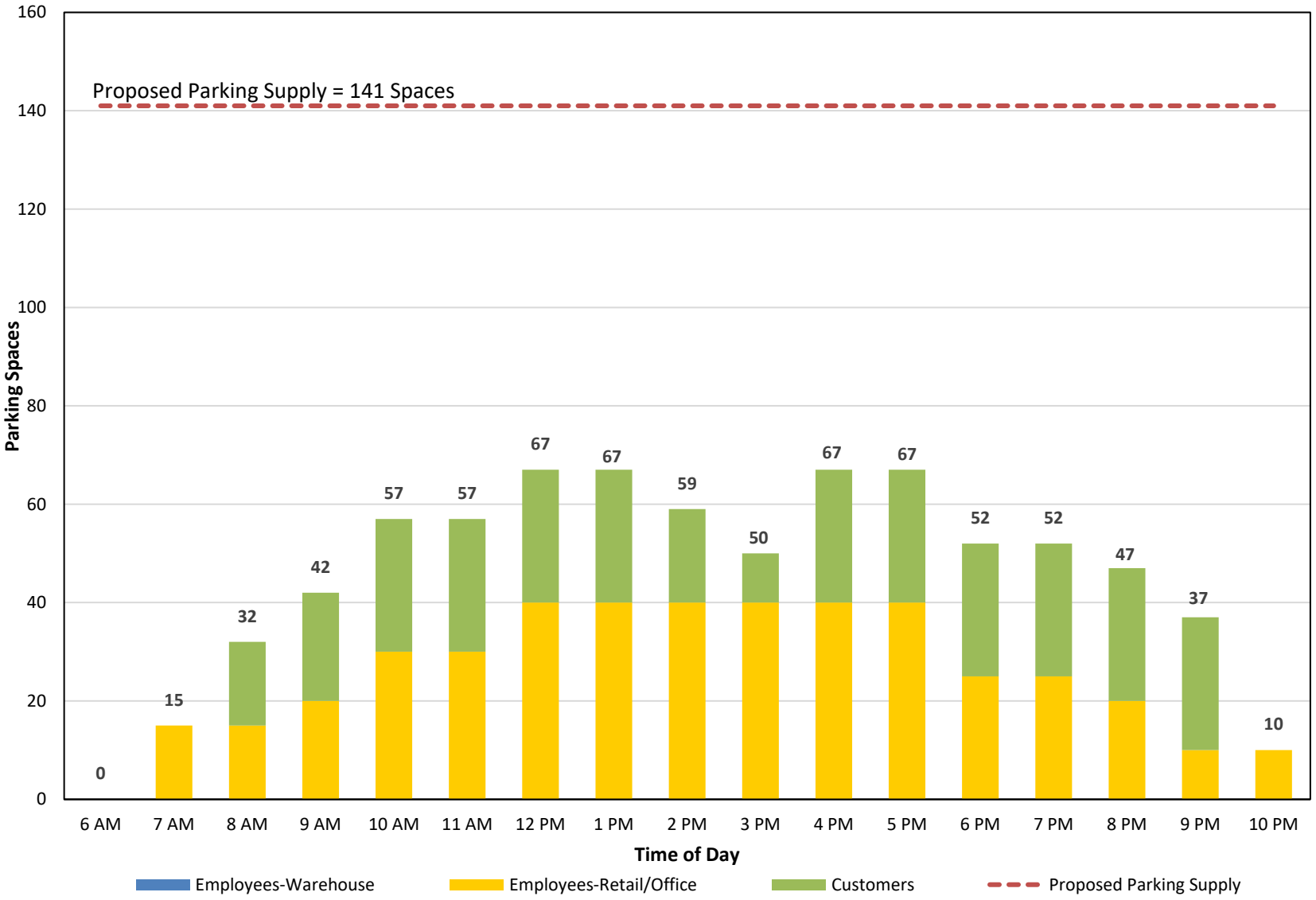


Chart 2 - NETA Franklin
Saturday Parking Demand (Up to 40 Retail Employees)



Revised Parking Calculations

NETA Franklin

Projected Weekday Hourly Parking Demand

	Time of Day																
	6 AM	**7 AM**	**8 AM**	**9 AM**	**10 AM**	**11 AM**	**12 PM**	**1 PM**	**2 PM**	**3 PM**	**4 PM**	**5 PM**	**6 PM**	**7 PM**	**8 PM**	**9 PM**	**10 PM**
Warehouse	3	3	3	6	6	6	6	6	6	6	6	3	3	3	0	0	0
Retail	0	15	15	20	30	30	40	40	40	40	40	40	25	25	20	10	10
Total	3	18	18	26	36	36	46	46	46	46	46	43	28	28	20	10	10
Employees-Warehouse	3	3	3	6	6	6	6	6	6	6	6	3	3	3	0	0	0
Employees-Retail/Office	0	15	15	20	30	30	40	40	40	40	40	40	25	25	20	10	10
Customers	0	0	10	24	30	30	30	30	30	20	10	10	20	30	30	30	0
Total Parking Demand	3	18	28	50	66	66	76	76	76	66	56	53	48	58	50	40	10
Proposed Parking Supply	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141
Surplus Parking	138	123	113	91	75	75	65	65	65	75	85	88	93	83	91	101	131

NETA Franklin - Projected Weekday Staffing Levels					
	6-4:30	**7-5:30**	**8:30-7:00**	**10:00-8:30**	**12:00-10:30**
Warehouse	3	0	3	0	0
Retail/Office	0	15	5	10	10
Total	**3**	**15**	**8**	**10**	**10**

NETA Franklin

Projected Saturday Hourly Parking Demand

	Time of Day																
	6 AM	**7 AM**	**8 AM**	**9 AM**	**10 AM**	**11 AM**	**12 PM**	**1 PM**	**2 PM**	**3 PM**	**4 PM**	**5 PM**	**6 PM**	**7 PM**	**8 PM**	**9 PM**	**10 PM**
Warehouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail	0	15	15	20	30	30	40	40	40	40	40	40	25	25	20	10	10
Total	0	15	15	20	30	30	40	40	40	40	40	40	25	25	20	10	10
Employees-Warehouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Employees-Retail/Office	0	15	15	20	30	30	40	40	40	40	40	40	25	25	20	10	10
Customers	0	0	17	22	27	27	27	27	19	10	27	27	27	27	27	27	0
Total Parking Demand	0	15	32	42	57	57	67	67	59	50	67	67	52	52	47	37	10
Proposed Parking Supply	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141	141
Surplus Parking	141	126	109	99	84	84	74	74	82	91	74	74	89	89	94	104	131

NETA Franklin - Projected Weekday Staffing Levels					
	6-4:30	**7-5:30**	**8:30-7:00**	**10:00-8:30**	**12:00-10:30**
Warehouse	0	0	0	0	0
Retail/Office	0	15	5	10	10
Total	**0**	**15**	**5**	**10**	**10**

Transportation Demand Management Plan

Transportation Demand Management Plan

New England Treatment Access
162 Grove Street
Franklin, Massachusetts

Submitted August 14, 2020

Purpose

The purpose of this Transportation Demand Management Plan (TDMP) is to reduce vehicle trips associated with the proposed New England Treatment Access (NETA) co-located medical and adult use marijuana dispensary to be located at 162 Grove Street. This TDMP defines transportation-related performance goals for the project and describes measures that NETA will implement as part of the project to meet these goals. The TDMP includes a traffic monitoring program that describes how the performance goals will be measured. Remedial actions to be taken by NETA should the project fail to meet its performance goals are also identified. The plan outlines an iterative process of implementing management strategies, measuring results, and proposing new strategies, as warranted, that NETA will undertake to meet the transportation performance goals.

Project Description

The project involves the redevelopment of the former Doering Equipment Company, located at 162 Grove Street in Franklin, Massachusetts. The project site had previously supported the former commercial vehicle design and fabrication facility, which is currently vacant. The project site currently includes a house and a 9,640 square foot (sf) rear warehouse previously used to accommodate the Doering Equipment operations. The proposed project calls for the reuse of the existing buildings with a 2,583 sf infill expansion for a total of 16,087 square feet (including 3,856 sf of retail space, 4,647 sf of office space, and 7,584 sf of warehouse space related to the sale of medical and adult-use marijuana products).

Access to the site will be provided by reuse of the existing driveway located on the east side of Grove Street, approximately 160 feet south of the Grove Street Business Park. The anticipated parking demands associated with the proposed project will be accommodated by 141 on-site parking spaces.

The proposed hours of operation for the dispensary are 8:00 AM to 10:00 PM, seven days a week.

Tetra Tech
Marlborough Technology Park, 100 Nickerson Road, Marlborough, MA 01752
Tel 508.786.2200 Fax 508.786.2201 tetratech.com

Transportation Demand Management Plan

NETA seeks to limit the number of vehicle trips generated to and from the project site while still providing an appropriate level of service and convenience for patrons. Independent of the environmental and health benefits associated with travel by alternative modes, limiting the number of vehicle trips generated will help ensure that:

- Potential project-related impacts on area traffic operations and traffic safety are reduced; and
- The 141 parking spaces at the site adequately serve employees and patrons.

NETA is committed to limiting vehicle trip generation associated with the project by:

- Operating under a "reserve ahead" only online ordering platform that minimizes patron visit times and staggers visits throughout the day, with a proposed schedule to minimize transactions during the weekday commuter peak hours;
- Communicating with clients regarding transportation options using “Traveling to NETA" guides, a website, signage, and other methods;
- Designating a transportation coordinator for the site who will be responsible for promoting the use of alternative travel modes, communicating with the Town on transportation matters, and implementing this TDMP;
- Providing preferential parking for employees and customers who carpool to the site;
- Providing incentives for employees to use public transportation, including but not limited to, a 100 percent subsidy for employee transit passes and 100 percent parking subsidy at MBTA lots to encourage the use of public transportation; and,
- Offering a guaranteed ride home under unexpected emergency conditions to employees who choose not to drive to work.

NETA has already implemented some of the above strategies at their other existing facilities, which have proven to be extremely effective in minimizing site generated traffic.

Performance Goals

Performance goals for the facility from a transportation perspective relate to vehicle trip generation and parking demand. The goals are based on forecasts prepared for the project in the latest traffic summary letter, dated August 14, 2020. Traffic forecasts and goals for the project include:

- 75 total vehicle trips generated to or from the site during the weekday morning peak hour;
- 75 total vehicle trips generated to or from the site during the weekday evening peak hour;
- 175 total vehicle trips generated to or from the site during the Saturday afternoon peak hour;
- Peak parking demand of 76 vehicles on a weekday; and,
- Peak parking demand of 67 vehicles on a Saturday.

The latest (August 2020) traffic summary letter indicates that upon achieving these goals the project will have a nominal impact on area traffic operations and the proposed 141-space on-site parking lot will be more than sufficient to accommodate the anticipated parking demand.

Performance Monitoring

The performance of the facility from a transportation perspective will be monitored periodically to determine if the above referenced goals are being met. Monitoring will be conducted by a qualified transportation engineering consultant and will include the following:

- A count of vehicles entering and exiting the site by 15-minute intervals; and
- A count of the number of vehicles parked or circulating on site at 15-minute intervals.

The count program will be conducted on two typical weekdays and a Saturday, from 15 minutes prior to opening until 15 minutes after closing, on dates to be approved by the Town in advance of the study. The study data and findings will be presented in a letter report to be submitted to the Town within 30 days of completing the study. In the event that the project is found to not be meeting the performance goals, the study shall describe additional remedial actions to be taken to meet the goals as described in greater detail below.

The first traffic monitoring study will be conducted three months after opening of the business. A follow-up monitoring program is scheduled to be conducted a year later, approximately 15 months following the opening of the business.

In addition to the traffic monitoring, the following information will be submitted to the Town on an annual basis:

- Number of annual on-site transactions (an indication of the number of client visits);
- Number of annual off-site transactions (deliveries);
- Number of monthly MBTA passes purchased or subsidized for employees.

The site's transportation coordinator will be responsible for submitting this information to the Town. The current transportation coordinator's name and contact information are provided below. The Town will be notified within 30 days of any change in the site's transportation coordinator.

Angela Cheek
NETA
Phone: (413) 230-1978
Email: acheek@liveparallel.com

Remedial Actions

If any subsequent monitoring study indicates that the performance goals are not being met, NETA will take additional remedial actions, as needed, to manage site traffic and parking conditions. The transportation related thresholds requiring further action include:

- The average number of vehicle trips generated during the adjacent street AM and PM

commuter peak hours exceeds the stated goal by more than 25 percent;

- The average number of vehicle trips generated during the Saturday PM peak hour exceeds the stated goal by more than 25 percent; and,
- The number of patron vehicles parked or circulating on the site exceeds the stated goal by more than ten percent for more than ten percent of the time (84 or more cars are observed or reported for at least 12 of the 118 “15-minute” observations made over the two-day weekday observations or 74 or more cars are observed for at least six of the 59 “15-minute” Saturday observations).

Additional actions that may be implemented if the performance criteria are not met may include but are not limited to:

- Developing additional incentives to encourage customers patients to use public transportation or carpool; and
- Further restriction on the number of pick up times.

If required, the additional remedial actions will be implemented within 30 days of submittal of the traffic monitoring report to the Town that indicated that one or more performance measures were not met. A follow-up traffic study will be completed and submitted to the Town within 60 days of implementing the remedial actions. If the follow-up study indicates that the remedial measures have been effective and that none of the above triggers are met, then a second follow-up study will be conducted approximately six months following completion of the first follow-up study. Should the second follow-up study indicate that none of the above triggers are met then this will be the last study prepared until such time that any significant change in the use or operation of the site is proposed.

August 20, 2020

Mr. Anthony Padula, Chairman
355 East Central Street
Franklin, MA 02038

Re: 162 Grove Street
Traffic Peer Review

Dear Mr. Padula:

BETA Group, Inc. (BETA) has reviewed the revised and additional traffic related documents provided by the applicant for proposed Site Plan Approval application, "Site Layout Plan – 162 Grove Street, Franklin, Massachusetts." This letter is provided to outline findings, comments, and recommendations.

Basis of Review

The following documents were received by BETA and formed the basis of the review:

- Traffic Summary, dated May 22, 2020 and prepared by Tetra Tech of Marlborough, MA.
- Site Plan set (10 Sheets) entitled Site Plan 162 Grove Street dated May 21, 2020 and prepared by United Consultants, Inc. of Wrentham, MA.
- Response to Traffic Peer Review, dated July 13, 2020 and prepared by Tetra Tech of Marlborough, MA.
- Traffic Impact Study, dated July 13, 2020 and prepared by Tetra Tech of Marlborough, MA.
- Response to Traffic Peer Review, dated August 14, 2020 and prepared by Tetra Tech of Marlborough, MA.
- Updated Traffic Summary, dated August 14, 2020 and prepared by Tetra Tech of Marlborough, MA.
- Transportation Demand Management Plan, dated August 14, 2020 and prepared by Tetra Tech of Marlborough, MA.

Compiled Review Letter Key

BETA reviewed this project previously and provided review comments in letters to the Board dated June 25, 2020 and August 10, 2020 (original comments in standard text), Tetra Tech (TT) provided responses (responses in italic text), and BETA has provided comments on the status of each (status in standard bold text).

Introduction

The project site consists of 162 Grove Street, a vacant, developed parcel formerly used as a truck terminal (the "Site"). The parcel contains an area of 4.003 Acres and is located along the eastern side of Grove Street. The Site and all surrounding properties are located within the Industrial Zoning District. The parcel is also within the Marijuana Use Overlay District.

The existing Site includes a house and a warehouse. The applicant proposes to retain the existing building for conversion into a Medical Marijuana Treatment Center and Non-Medical Marijuana Retail Establishment. Associated site developments will include expansion of the existing parking area, and a 2,583 sq. ft. new addition to the existing building.

FINDINGS, COMMENTS AND RECOMMENDATIONS

Access to the site will be provided via the existing driveway.

The study area includes the following intersections.

- Grove Street at 162 Grove Street driveway (unsignalized)
- Grove Street at Business Park (unsignalized)

The study area was found to be inadequate due to the number of vehicles trips generated by this project.

T1. Additional intersections, including the intersections of Grove Street at Washington Street and Grove Street and Route 140, should be added to the study area. TT: A full Traffic Impact and Access Study has been prepared for this project, attached. The intersections of Grove Street at Washington Street and Grove Street at Route 140 have been added to the study area. BETA2: Information provided – issue resolved.

Manual turning movement counts (TMCs) were collected on Thursday, February 6th, 2020 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, and Saturday, February 8th, 2020 from 3:00 PM to 6:00 PM. These time periods were chosen because they are representative of the peak traffic volume period for the development. Traffic volume data were also collected via automatic traffic recorder (ATR) on Grove Street, south of 162 Grove Street, over a 72-hour period between Thursday, February 6th, 2020 and Saturday, February 8th, 2020. These volumes are consistent with data recently collected as part of another project. and the collection occurred prior to the decrease in traffic patterns related to COVID-19. BETA concurs with the traffic data collection time periods.

Historical traffic count data collected by MassDOT were reviewed to determine the need for a seasonal adjustment. Traffic volumes in February were found to be average-month conditions. As a result, no seasonal adjustment was added to the existing volumes. BETA finds this methodology acceptable.

Vehicle speeds were measured via ATR along Grove Street. The posted speed limit on Grove Street is 40 miles per hour (mph). The 85th percentile speeds were measured at 40 mph northbound and 41 mph southbound, which are acceptable for a posted 40 mph roadway.

Project-generated traffic volumes were determined by utilizing trip-generation statistics published by the Institute of Transportation Engineers (ITE) for land use code (LUC) 150 - Warehouse, LUC 882 – Marijuana Dispensary, and LUC 710 General Office Building.

Based on the Institute of Transportation Engineers (ITE) for land use code (LUC) 150 - Warehouse, LUC 882 – Marijuana Dispensary, and LUC 710 General Office Building the project site would generate a total of 1,032 new trips on an average weekday and with 46 (27 entering, 19 exiting) during the weekday morning peak hour and 90 (43 entering, 47 exiting) during the weekday afternoon peak hour. The Saturday daily trips of 1,011 and mid-day peak trips are 142 (71 entering, 71 exiting).

Additionally, empirical trip data collected at a similar NETA facility in Northampton from October 13, 2019 to November 11, 2019 was provided. The Northampton facility consists of 25 registers while the proposed facility would have 19 registers.

The trips from both resources were compared, and it was determined that the empirical data was higher than the ITE data, and therefore, the empirical data was utilized for the marijuana dispensary trip generation and factored down to represent 19 registers. A maximum number of 56 employees between the retail and warehouse will be onsite during the weekday afternoon peak, and 50 during the Saturday peak, which was not included as part of the NETA empirical data. A portion of those employees will be entering and exiting during the peak periods.

The 4,647 square feet of office does not appear to be included in the trip generation calculations.

T2. Verify that office space is included within the NETA Northampton facility and the associated square footage. TT: Office space is included within the NETA Northampton facility. The Northampton facility is approximately 7,300 square feet (sf) and includes approximately 2,000 square feet of business space (offices, hallways, and breakroom space). The office space was accounted for in the site trip generation, as the office/retail employees were included as part of the maximum daily count of 50 employees that was used as a basis for the traffic and parking analysis. BETA2: Information provided – issue resolved.

Next, based on customer surveys conducted at the NETA facility in Brookline, it was determined that the vehicle occupancy rate (VOR) for that facility was 1.25 persons per vehicle. To provide a more conservative estimate a VOR of 1.20 persons per vehicle was used for the project site. BETA finds this methodology reasonable.

Based on the described methodology, the project site would generate a total of 3,416 new trips on an average weekday and with 187 (101 entering, 86 exiting) during the weekday morning peak hour and 335 (160 entering, 175 exiting) during the weekday afternoon peak hour. The Saturday daily trips of 3,638 and mid-day peak trips are 403 (194 entering, 209 exiting).

New trips were distributed based on existing traffic patterns with approximately 35 percent of traffic heading to and from Washington Street and the remaining 65 percent heading to and from Route 140.

T3. The travel splits shown in Table 1 significantly differ those used in the study., especially for Saturday. Verify the distribution splits applied to the new trips. TT: The travel splits for the project site trips were based on the entering and exiting driveway traffic counts at the Grove Street Business Center using the AM, PM, and Saturday peak hour volumes, instead of the ATR data. The observed travel splits at the Grove Street Business Center were used to determine the project trip distribution in our initial traffic study. With the preparation of a more detailed traffic study, additional traffic count data from the proposed warehouse project at 176-210 Grove Street study was obtained from the Town Planner. The driveway counts at the 176-210 Grove Street site, in addition to those at the Grove Street Business Center were used to develop a new trip distribution for the proposed marijuana dispensary. The new distribution includes approximately 45 percent of traffic entering and exiting the site to and from the south and 55 percent of traffic entering to and from the north. The splits at each of the intersections was based on the peak hour splits observed at the study intersections. The full trip distribution write-up is included in the full study, attached.

BETA2: Additional information has been provided. Although the 10% distribution to/from north of West Central Street should be closer to 5% and the 25% to/from the east on West Central Street should be closer to 30% instead of 25%, the percentages are generally reasonable and BETA finds them acceptable.

Traffic operations analysis was performed with Synchro software based on the 2010 Highway Capacity Manual methodologies. Most movements during the 2020 Build condition would continue to operate at LOS C or better. The site driveway left-turn movement would operate at LOS E. Based on this study, the project appears to have minimal impacts to Level of Service (LOS) when compared to the Existing conditions, however, the study area only consists of the unsignalized intersections of Grove Street at the site driveway and Grove Street at Business Park intersections and does not include a seven-year horizon analysis.

T4. The Board has expressed concern about the number of developments contributing to existing traffic and safety issues along Grove Street. The following standard traffic study components were not included as part of the submission and should be included to understand the full impacts of this project to the surrounding infrastructure:

- Sight distance analysis. Based on field observations, there is limited sight distance approaching the site from the south.
- Background development-related traffic growth that may increase traffic within the study area was not identified.
- Growth rate was not included because the Build analysis was performed using the year 2020 and not a seven-year horizon. A 1 percent growth has been applied for other recently proposed developments in Franklin.
- No-Build analysis.
- Crash data for the most recent three years.

TT: The above-mentioned components are included in the full traffic study, submitted along with this letter. BETA2: The above-mentioned traffic study components have been provided. See below for comments related to the additional data provided in the Traffic Impact Study (TIS). TT: Additional comments and responses noted below. BETA3: Information provided – issue resolved.

The parking demand was determined by providing up to 56 employee parking spaces during the weekday and 50 spaces during the Saturday highest peak hours and assuming a turnover rate of three vehicles per hour (every 20 minutes). The highest peak is anticipated on Saturday from 3:00 PM – 4:00 PM. The study indicated that the parking anticipated for the peak is anticipated to be 50 employee spaces and 78 additional spaces, for a total of 128 parking spaces needed during the highest peak hour. Based on BETA's experience, and as would be expected, patrons are processed at a faster rate with the larger number of registers at a facility, and therefore the turnover rate would be higher. However, the anticipated 128 parking space demand during the highest peak periods would be very close to the proposed parking supply of 141 spaces.

T5. If available, empirical data of 15-minute interval parking demands for a similar facility, not near public transit and with an on-site parking lot, should be provided to further support the proposed parking supply. TT: As requested, Tetra Tech conducted parking accumulation observations at a similar facility, not near public transit and with an on-site parking lot on

Tuesday, July 7, 2020. The Millis CommCan dispensary was selected for study as it offers both medical and adult use options and allows for walk-in customers. The site is located along Route 109 in Millis, with an on-site parking supply of 27 parking spaces and an off-site, unpaved lot adjacent to the site that can accommodate an estimated 46 vehicles, for a total parking supply of 73 parking spaces. It is our understanding that this facility is approximately 4,000 square feet with 13 registers. Observations were made every 15 minutes, starting 30 minutes prior to opening of the facility until closing time. The maximum observed parking demand was 35 vehicles, at 3:30 PM and 5:15 PM. These totals included at least 10 employee vehicles, as the same 10 vehicles were observed parked in the overflow lot all day. This implies a maximum customer parking demand of approximately 25 vehicles at any given time. The observed parking demands at the Millis CommCan facility are presented in a graph.
Adjusting the observed peak parking demand of 25 customer spaces at the CommCan dispensary upwardly to reflect the 19 proposed registers at the proposed Grove Street facility in Franklin would indicate a maximum parking demand of approximately 37 customer parking spaces. This is significantly lower than the projections used in the traffic study. The parking demands presented in the traffic study are conservative and the currently proposed 141 parking spaces is expected to be adequate. BETA2: The additional information was provided. The data was collected on a non-peak weekday after July 4th. BETA's understanding is that the week leading up to July 4th is one of the busiest time periods of the entire year for dispensaries which would mean that parking demands are lower the week immediately after July 4th. Additionally, sales have been down during the pandemic so empirical data pre-pandemic would provide the most applicable data. However, it is understood that additional pre-COVID-19 data may not be available, therefore, based on all data provided and the additional similar types of facilities proposed within the site's vicinity, BETA finds the proposed parking spaces to be adequate.

TRAFFIC IMPACT STUDY

BETA has provided a review and comments for a few topics included in the comprehensive Traffic Impact Study (TIS) which was submitted after the initial BETA comments dated June 25, 2020. The comments below will highlight key items related to the additional data provided in the TIS.

The study area was revised to include the following intersections.

- Grove Street at Route 140/West Central Street (signalized)
- Grove Street at Beaver Street (unsignalized)
- Grove Street at 162 Grove Street driveway (unsignalized)
- Grove Street at 160 Grove Street/Business Park (unsignalized)
- Grove Street at Washington Street (unsignalized)

BETA finds the study area to be acceptable.

Background development-related traffic growth that may increase traffic within the study area was identified. The following proposed projects were included in the background development:

- 160 Grove Street
- 164 Grove Street
- 176-210 Grove Street

BETA finds the background developments to be acceptable.

At the time of this study, a traffic report was not submitted for the 164 Grove Street project, therefore, the Institute of Transportation Engineers (ITE) data was utilized to determine the background trips for the 164 Grove Street marijuana dispensary development and was included in the analysis. This is standard procedure, however, as the TIS noted, marijuana dispensary sites are anticipated to generate higher trip volumes than identified in the ITE manual. BETA anticipates a greater number of trips would be generated by the 164 Grove Street development than determined using the ITE data, however, the trips utilized in this analysis are acceptable for the planning purposes of this study since a traffic study has not been provided to date and is subsequent to this project submission.

Traffic operation analyses were performed with Synchro software based on the 2010 Highway Capacity Manual methodologies. Capacity analysis results show that the Grove Street and Route 140/West Central Street currently operates at and would continue to operate during the Build condition at acceptable Level of Service (LOS), with an overall intersection LOS D or better during the peak hours, with a few individual movements operating at LOS D and LOS F.

During the AM Peak Hour, the Beaver Street approach to Grove Street would degrade from a LOS C during the Existing conditions to LOS E during the Build conditions. During the PM peak, the Beaver Street approach to Grove Street would degrade from a LOS E during the Existing conditions to LOS F during the Build conditions.

The site driveway would experience a LOS F during the PM peak.

The analysis results indicate that the Grove Street southbound movement at Washington Street would experience increased LOS F delays during the Build condition. The Synchro analysis modeled the Grove Street southbound approach to Washington Street as a two-lane approach which included a 50-foot-long right-turn lane, which does not accurately reflect the Grove Street lane configuration at the intersection. If the intersection were reanalyzed to accurately reflect the field conditions, the results would reveal even more significant delays and queue lengths.

Signal warrant analyses were performed for the Grove Street at Washington Street and Grove Street at Beaver Street intersections. Both intersections meet the peak hour warrants during the No-Build and Build conditions. The Grove Street at Washington Street intersection also meets the peak hour warrant under Existing conditions.

Figure 1: Looking to the south from site driveway

The available stopping sight distance (SSD) at the site driveway was measured and found to exceed the minimum required SSD based on measured vehicle speeds. The available SSD assumes the “selective removal of roadside vegetation and limiting on-site objects.”

T6. Provide a sight triangle on the plans depicting the line of sight and label the "roadside vegetation and limiting on-site objects" to be removed to provide the required sight distance to meet AASHTO standards. TT: *A sight triangle has been added to the plans. See attached figures.* BETA 2: Information provided – issue resolved.

T7. Resolve the discrepancy between the available SSD noted in the TIS and on the plan set. TT: *BETA has requested we disregard this comment. No response required.*

Figure 2: Looking to the north from site driveway.

T8. As noted in the TIS, a southbound exclusive left-turn lane is proposed as part of the 160 Grove Street development. With this in mind verify that the sight distances approaching and exiting the driveway would continue to be adequate, especially during the AM peak period when 160 Grove Street employees would be entering 160 Grove Street and close to 200 vehicles would be entering and exiting the site driveway. TT: *As shown on the attached Figure 1, a vehicle waiting to turn left into 160 Grove Street does fall within the sight triangle and could block the sight line for a driver looking right from the site to a vehicle traveling southbound along Grove Street past the proposed left-turn lane 160 Grove site driveway for a short distance (approximately 70 feet). However, there are only 42 vehicles expected to turn left into 160 Grove Street during the morning peak hour. Under the proposed 2027 Build conditions, the capacity analysis indicates that the southbound left-turn lane at 160 Grove Street is expected to be queue free 95 percent of the time during the weekday morning peak hour, with a 95th percentile queue length of 0.2 vehicles. Additionally, the number of vehicles exiting the site during the morning peak hour is now expected to be significantly reduced based on NETA's currently proposed operation of the facility.* BETA 2: Information provided – issue resolved.

The TIS indicates that the proponent proposes to conduct a post-occupancy traffic monitoring program to determine if the project-related impacts outlined in the TIS are realized once the facility is open. If the traffic data collected during the monitoring indicates a traffic signal is indeed warranted at the intersections of Grove Street at Washington Street and Grove Street at Beaver Street then the proponent would provide a police detail in the interim until a traffic signal is designed and installed. The proponent is also committed to providing a "fair share contribution toward geometric and/or traffic control improvements" at study area intersections. In addition, a "fair share contribution toward local roadway improvements" would be made if the traffic monitoring shows that "traffic volumes have risen back to pre-COVID levels and the site is generating traffic volumes similar to those projected in this study."

T9. Provide a detailed post-occupancy traffic monitoring program outline including the metrics to determine the impacts related specifically to the project site. TT: *A detailed post-occupancy monitoring program is outlined in the project's Transportation Demand Management plan. If the project exceeds the metrics described in the plan, remedial actions will be implemented with a follow-up monitoring study to confirm the effectiveness of the remedial measures. See attached.* BETA 2: The post occupancy traffic monitoring program and metrics to determine project impacts are reasonable. Information provided – issue resolved.

T10. Elaborate on what is the anticipated "geometric and/or traffic control improvements." TT: *As noted above, NETA heard the concerns from the Board and has committed to changing its proposed facility to operate as a Reserve Ahead-only dispensary, which would require customers and patients to place an order in advance and select a scheduled pick up time to retrieve it. The proposed change in operations will significantly reduce project impacts, especially during weekday commuter peak hours. Further details on the revised trip generation and project impacts to reflect this change in operations are included in the August 14, 2020 Traffic Summary Letter, included in this submission. With this proposed reduction in project-related trips, it is not anticipated that any off-site geometric or traffic control improvements will be necessary to mitigate the impacts of the project.* BETA 2: As noted, the proponent changed the proposed facility to a "Reserve Ahead Only" model which significantly decreases the number of trips generated specifically during the crucial peak hours of roadway operation. This model also decreases the impacts to the adjacent intersections, including the site driveway, although some movements would continue to operate at or degrade to LOS F. Information provided – issue resolved.

T11. BETA recommends that the Board discuss the adequacy of what appears to be solely post-occupancy off-site mitigation contributions. TT: *As noted above, NETA has committed to changing its proposed facility to operate as a Reserve Ahead-only dispensary. This change in proposed operations will significantly reduce potential traffic increases associated with the project, especially during weekday commuter peak hours. Further details on the revised trip generation and project impacts to reflect this change in operations are included in the August 14, 2020 traffic summary letter, included in this submission. The proponent will also implement a comprehensive Transportation Demand Management Plan to further reduce potential project-related impacts.* **BETA:** Based on the discussion at the August 17, 2020 Planning Board meeting, the Board is satisfied with the contributions proposed by the proponent – issue resolved.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.

Jaklyn Centracchio

Jaklyn Centracchio, PE, PTOE
Senior Project Engineer

cc: Amy Love, Planner
Job No: 4830-64

FRANKLIN PLANNING & COMMUNITY DEVELOPMENT
355 EAST CENTRAL STREET, ROOM 120
FRANKLIN, MA 02038-1352
TELEPHONE: 508-520-4907

MEMORANDUM

DATE: **August 20, 2020**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **162 Grove Street – NETA**
Special Permit & Site Plan Modification

The DPCD has reviewed the above referenced Special Permit & Site Plan Modification application for the Monday, August 24, 2020 Planning Board meeting and offers the following commentary:

General:

1. The site is approximately 4 acres and is located at 162 Grove Street in the Industrial Zoning and Marijuana Overlay District; Assessor's Map 306 Lot 003.
2. Applicant has filed for a Special Permit: To allow Non-medical marijuana facility under 185 Attachment 3, Part II Section 2.23
3. The footprint of the existing buildings is approximately 12,421 square feet. NETA proposes to expand the existing buildings, as shown on the proposed Site Plans and to convert the existing buildings into approximately 3,856 square feet of retail space, approximately 4,647 square feet of office space, and approximately 7,584 square feet of warehouse space. There will be no product manufacturing, testing or research operations at the Facility.
4. Letters were received from the Fire Department, Town Engineer and BETA.
5. Applicant has been approved by the Conservation Commission.
6. Applicant has received recommendation from Design Review.

Comments from the August 17 Meeting:

1. The Planning Board requested that the Town or Applicant commit to off –site improvements. The Board requests that something be proposed at this meeting.

Suggested Special Conditions based on the last Meeting:

1. The proposed facility will operate as a Reserve Ahead-only dispensary, which would require customers and patients to place an order in advance and select a scheduled pick up time to retrieve the product.
2. The Transportation Demand Management Plan, submitted by the applicant, shall be included with the Certificate of Vote.
3. Design Review color recommendations shall be included in the endorsed set of plans.

Records on File:

1. Application for Site Plan and Special Permit
2. Certificate of Ownership
3. Special Permit Criteria
4. Abutters certified mailing
5. Overview of Proposed project and Special Permit Findings
6. Site Plans
7. Traffic Study
8. Stormwater Management Plans

ROLE CALL VOTE:

This determination shall be in addition to the following specific findings:

If you vote NO on any of the following, please state reason why you are voting NO:

(1) Special Permit: To allow retail marijuana in the Marijuana use overlay district.

(a) Proposed project addresses or is consistent with neighborhood or Town need.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

(b) Vehicular traffic flow, access and parking and pedestrian safety are properly addressed.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

(c) Public roadways, drainage, utilities and other infrastructure are adequate or will be upgraded to accommodate development.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

(d) Neighborhood character and social structure will not be negatively impacted.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

(e) Project will not destroy or cause substantial damage to any environmentally-significant natural resource, habitat, or feature or, if it will, proposed mitigation, remediation, replication or compensatory measures are adequate.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

(f) Number, height, bulk, location and siting of building(s) and structure(s) will not result in abutting properties being deprived of light or fresh air circulation or being exposed to flooding or subjected to excessive noise, odor, light, vibrations, or airborne particulates.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO

William David	YES	NO

(g) Water consumption and sewer use, taking into consideration current and projected future local water supply and demand and wastewater treatment capacity, will not be excessive.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

The proposed use will not have adverse effects which overbalance its beneficial effects on either the neighborhood or the Town, in view of the particular characteristics of the site and of the proposal in relation to that site.

Anthony Padula	YES	NO	Joseph Halligan	YES	NO
Rick Power	YES	NO	Gregory Rondeau	YES	NO
William David	YES	NO			

STANDARD CONDITIONS OF APPROVAL

1. This Special Permit shall not be construed to run with the land and shall run with the Site Plan as endorsed by the Planning Board. A new Special Permit shall be required from the Planning Board if any major change of use or major change to the site plan is proposed.
2. This Special Permit shall lapse if a substantial use or construction has not begun, except for good cause, within twenty four (24) months of approval, unless the Board grants an extension. No final Certificate of Occupancy shall be issued until all requirements of the Special Permit have been completed to the satisfaction of the Board unless the applicant has submitted a Partial Certificate of Completion for the remainder of the required improvements and received approval by the Planning Board. The applicant's engineer or surveyor, upon completion of all required improvements, shall submit a Certificate of Completion. The Board or its agent(s) shall complete a final inspection of the site upon filing of the Certificate of Completion by the applicant. Said inspection is further outlined in condition #4.
3. Construction or operations under this Special Permit shall conform to any subsequent amendment of the Town of Franklin Zoning Bylaw (§185) unless the use or construction is commenced within a period of six (6) months after the issuance of this Special Permit and, in cases involving construction, unless such construction is continued through to completion as continuously and expeditiously as is reasonable.
4. **The Planning Board will use outside consultant services to complete construction inspections upon the commencement of construction.** The Franklin Department of Public Works Director, directly and through employees of the Department of Public Works and outside consultant services shall act as the Planning Board's inspector to assist the Board with inspections necessary to ensure compliance with all relevant laws, regulations and Planning Board approved plan specifications. Such consultants shall be selected and retained upon a majority vote of the Board.
5. Actual and reasonable costs of inspection consulting services shall be paid by the owner/applicant before or at the time of the pre-construction meeting. Should additional inspections be required beyond the original scope of work, the owner/applicant shall be required to submit fees prior to the issuance of a Final Certificate of Completion by the Planning Board (Form H). Said inspection is further outlined in condition #4.

6. No alteration of the Special Permit and the plans associated with it shall be made or affected other that by an affirmative vote of the members of the Board at a duly posted meeting and upon the issuance of a written amended decision.

7. All applicable laws, by-laws, rules, regulations, and codes shall be complied with, and all necessary licenses, permits and approvals shall be obtained by the owner/applicant.

8. Prior to the endorsement of the site plan, the following shall be done:

   - The owner/applicant shall make a notation on the site plan that references the Special Permit and the conditions and dates of this Certificate of Vote.
   - A notation shall be made on the plans that all erosion mitigation measures shall be in place prior to major construction or soil disturbance commencing on the site.
   - All outstanding invoices for services rendered by the Town's Engineers and other reviewing Departments of the Town relative to their review of the owner/applicant's application and plans shall have been paid in full.
   - The owner/applicant shall submit a minimum of six copies of the approved version of the plan.

9. Prior to any work commencing on the subject property, the owner/applicant shall provide plans to limit construction debris and materials on the site. In the event that debris is carried onto any public way, the owner/applicant and his assigns shall be responsible for all cleanup of the roadway. All cleanups shall occur within twenty-four (24) hours after first written notification to the owner/applicant by the Board or its designee. Failure to complete such cleanup may result in suspension of construction of the site until such public way is clear of debris.

10. The owner/applicant shall install erosion control devices as necessary and as directed by the Town's Construction Inspector.

11. **Prior to construction activities, there shall be a pre-construction meeting with the owner/applicant, and his contractor(s), the Department of Public Works and the Planning Board's Inspector.**

12. Any signage requires the Applicant to file with the Design Review Commission.

13. Prior to the endorsement, the Certificate of Vote and Order of Conditions shall be added to the Site Plans.

PLAN 348 OF 1987

SITE PLAN
162 GROVE STREET

ZONING:

162 GROVE STREET SITE IS LOCATED WITHIN AN INDUSTRIAL ZONE.

	REQUIREMENTS:	EXISTING	PROPOSED
INDUSTRIAL ZONE			
AREA:	40,000 S.F.	174,351± S.F.	174,351± S.F.
FRONTAGE:	175'	175.00'	175.00'
DEPTH:	200'	757'	757'
HEIGHT:	3 STORIES *6	2 STORIES	2 STORIES
WIDTH:	157.5'	220'	220'
COVERAGE –			
STRUCTURES:	70%	8.1%	9.8%
STRUC. & PAVING:	80%	31.5%	50.0%
SETBACKS–			
FRONT:	40'	69.1'	69.1'
RIGHT SIDE:	30' *5	107.1'	85.3'
LEFT SIDE	30' *5	31.7'	31.7'
REAR:	30' *5	476.9'	476.9'

*5 – INCREASE BY THE COMMON BUILDING HEIGHT OF THE STRUCTURE, WHEN ABUTTING A RESIDENTIAL USE
*6 – BUILDINGS UP TO 60 FEET IN HEIGHT MAY BE PERMITTED BY A SPECIAL PERMIT FROM THE PLANNING BOARD.

LOT COVERAGE CALCULATION AREA BASED ON UPLAND AREA

A PORTION OF THE PROPERTY IS LOCATED WITHIN A FRANKLIN WATER RESOURCE DISTRICT.
THE SITE AREA PROPOSED FOR DEVELOPMENT IS LOCATED IN A ZONE X BASED ON FEMA FIRM MAP 25021C0308E DATED JULY 17, 2012.

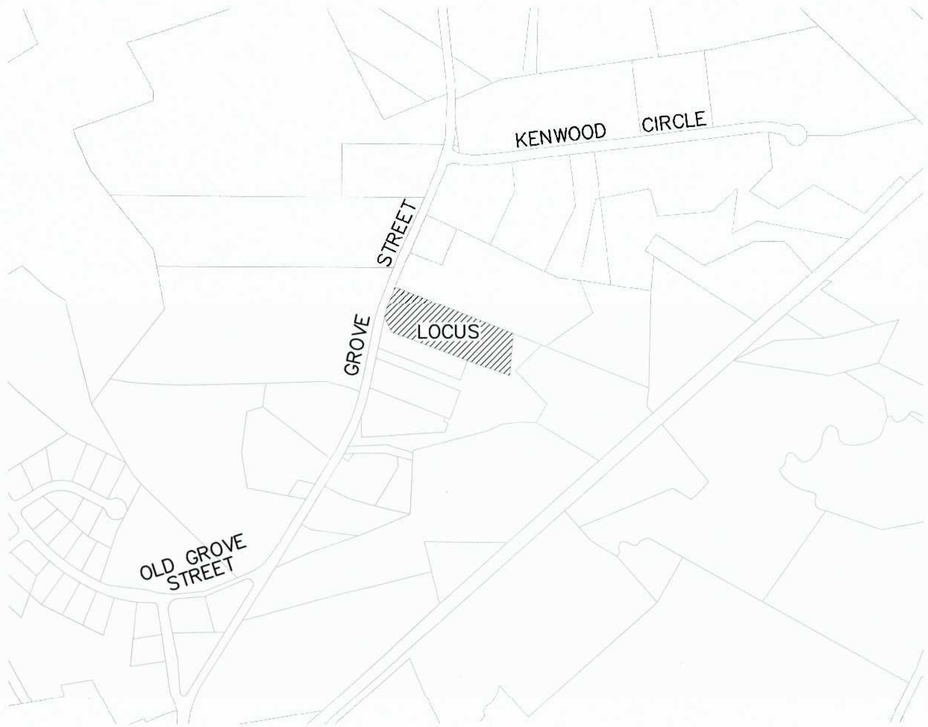
AREA WITHIN THE WATER RESOURCE DISTRICT – 94,477± SQ. FT.
UPLAND AREA WITHIN THE WATER RESOURCE DISTRICT – 72,907± SQ. FT.
IMPERVIOUS AREA WITHIN THE WATER RESOURCE DISTRICT – 21,764± SQ. FT.
COVERAGE WITHIN THE WATER RESOURCE DISTRICT – 21,764 / 72,907 = 29.9%

162 GROVE STREET:
EXISTING BUILDING USE TRUCK TERMINAL.
PROPOSED BUILDING USE MEDICAL AND NON MEDICAL MARIJUANA DISPENSARY.

DRAWING INDEX:

1. COVER SHEET
2. EXISTING CONDITIONS PLAN
3. SITE LAYOUT PLAN
4. SITE GRADING AND UTILITY PLAN
5. SITE PLANTING PLAN
6. EROSION CONTROL PLAN
7. CONSTRUCTION DETAILS – 1
8. CONSTRUCTION DETAILS – 2
9. CONSTRUCTION DETAILS – 3

SITE LIGHTING–LIGHTING PLAN, PHOTOMETRICS AND SCHEDULES BY SK & ASSOCIATES



LOCUS MAP
SCALE: 1" = 400'

VICINITY MAP
SCALE: 1" = 100'

CARLOS A. QUINTAL
CIVIL
No. 30812
REGISTERED PROFESSIONAL ENGINEER
CARLOS A. QUINTAL P.E. #30812

REFERENCES:
ASSESSORS MAP 306 PARCEL 3
DEED BOOK 35681 PAGE 179
PLAN 348 OF 1987
PLAN 1364 OF 1987
PLAN 516 OF 1996
PLANS 620 – 622 OF 1940
SITE PLAN MODIFICATION AND CHANGE OF USE SITE PLAN BY GUERRIERE AND HALNON, INC LAST REVISED OCTOBER 18, 2018

WAIVER REQUESTS:
1. TO ALLOW LESS THAN 42" OF COVER OVER THE RCP DRAIN PIPE. PROPOSED CLASS V RCP.
2. TO ALLOW THE USE OF HDPE PIPE FOR THE MANIFOLDS AND POND 10 AND POND 11. EXISTING ROOF PIPING IS 8" PVC.
3. TO ALLOW MINIMAL LIGHT SPILLAGE ONTO THE ABUTTING PROPERTIES.

– ALL EROSION CONTROL MITIGATION MEASURES SHALL BE IN PLACE PRIOR TO MAJOR CONSTRUCTION OR SOIL DISTURBANCE COMMENCING ON THE SITE.

SITE PLAN
COVER SHEET
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 400'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

GRAPHIC SCALE
400 0 200 400 800 1600
(IN FEET)
1 inch = 400 ft.

NO.	DATE	DESCRIPTION	BY
2	8/5/20	REVIEW COMMENTS	RRG
1	7/8/20	REVIEW COMMENTS	RRG

DATE		INT.
4/20	FIELD BY:	BL
BK#	FIELD BOOK	PG#
5/20	CALCS BY:	RRG
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

UNITED CONSULTANTS INC.
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508-384-6560 FAX 508-384-6566

DATE: MAY 21, 2020
SCALE: 1" = 400'
PROJECT: UC1435
SHEET: 1 of 9

NOTES:
1. ELEVATIONS DATUM NAVD 1988.
2. EXISTING CONDITIONS SURVEY WAS COMPLETED BETWEEN APRIL 6, 2020 AND APRIL 16, 2020.
3. SOIL TYPES TAKEN FROM SOILS MAP OF NORFOLK COUNTY.

EXISTING DRAINAGE STRUCTURE SCHEDULE

XCB-1
RIM=265.1
INV=262.4

XCB-2
RIM=265.1
INV=263.0

XCB-3
RIM=261.7
INV=257.3

XCB-4
RIM=263.4
INV=259.9

XCB-5
RIM=259.9
INV=254.2

XDMH-1
RIM = 264.3
INV IN = 261.3
INV OUT = 260.9

XDMH-2
RIM = 261.4
INV IN = 256.4
INV OUT = 255.9

XDMH-3
RIM = 264.1
INV IN = 259.5 CB
INV IN = 259.3 8" PVC
INV OUT = 259.0

XDMH-4
RIM = 259.8
INV IN = 253.8
INV OUT = 253.55

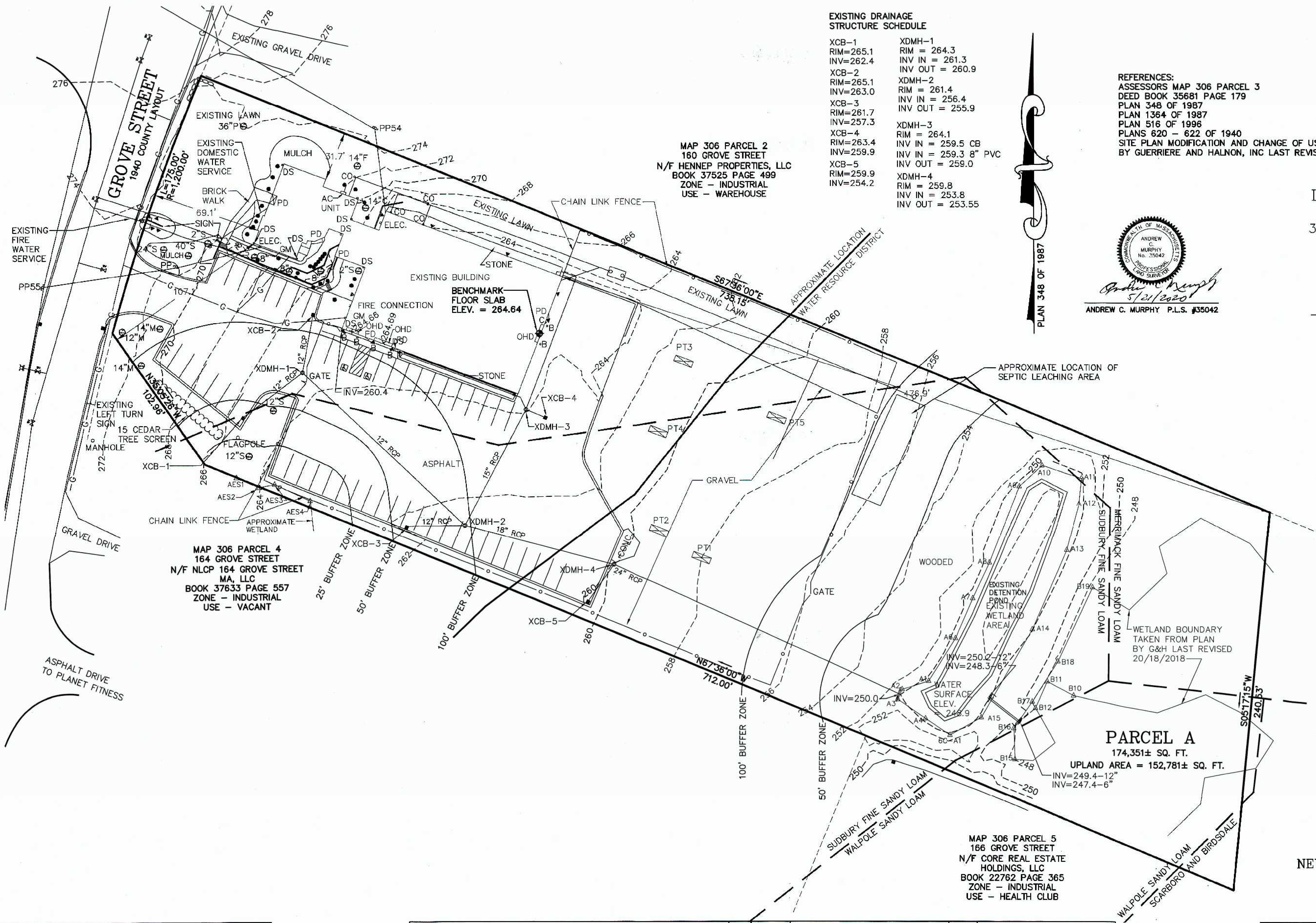
REFERENCES:
ASSESSORS MAP 306 PARCEL 3
DEED BOOK 35681 PAGE 179
PLAN 348 OF 1987
PLAN 1364 OF 1987
PLAN 516 OF 1996
PLANS 620 – 622 OF 1940
SITE PLAN MODIFICATION AND CHANGE OF USE SITE PLAN BY GUERRIERE AND HALNON, INC LAST REVISED OCTOBER 18, 2018

COMMONWEALTH OF MASSACHUSETTS
ANDREW C. MURPHY
No. 35042
PROFESSIONAL LAND SURVEYOR

5/21/2020
ANDREW C. MURPHY P.L.S. #35042

LEGEND:

DHSB	DRILL HOLE STONE BOUND
300	EXISTING COUNTOUR
297	PROPOSED COUNTOUR
x274.3	SPOT GRADE – PROPOSED
x274.3EX.	SPOT GRADE – EXISTING
48M	EXIST. TREE – DIAMETER – SPECIES
WB	PROPOSED. TREE – SPECIES
UP4–1	UTILITY POLE
OHW	OVERHEAD WIRES
	GAS GATE
	WATER CURB STOP
	WATER GATE
	FIRE HYDRANT
	DRAIN MANHOLE
	CATCH BASIN
	SEWER MANHOLE
D	DUMPSTER
VCC	VERTICAL CONCRETE CURBING
CCB	CAPE COD BERM
	HANDICAP PARKING SPACE
	BUILDING MOUNTED LIGHT
	POLE MOUNTED LIGHT
	EXISTING POST LIGHT
	EXISTING BUILDING MOUNTED LIGHT
B	BOLLARD
CO	CLEANOUT
DS	DOWNSPOUT
PD	PERSON DOOR
OHD	OVERHEAD DOOR



OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

SITE PLAN
EXISTING CONDITIONS PLAN
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

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

NO.	DATE	DESCRIPTION	BY

DATE		INT.
4/20	FIELD BY:	BL
BK#	FIELD BOOK	PG#
5/20	CALCS BY:	RRG
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

UNITED CONSULTANTS INC.
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508-384-6560 FAX 508-384-6566

DATE	MAY 21, 2020
SCALE	1" = 30'
PROJECT	UC1435
SHEET	2 of 9

PARKING CALCULATIONS:
ZONING BYLAW SECTION 185-21B.(3)(b)ii - RETAILING, MEDICAL, LEGAL AND REAL ESTATE OFFICES - 1 SPACE PER 200 SQUARE FEET OF GROSS FLOOR AREA, PLUS ONE SPACE PER SEPARATE ENTERPRISE.
8,503 SQ. FT. / 200 = 43 + 1 = 44 SPACES
ZONING BYLAW SECTION 185-21B.(3)(b)vi - WAREHOUSE - 1 SPACE PER 1,000 SQUARE FEET OF GROSS FLOOR AREA
7,584 SQ. FT. / 1,000 = 8 SPACES

52 TOTAL SPACES REQUIRED.
141 SPACES PROPOSED INCLUDING 5 HANDICAP SPACES.

PARKING SPACE DESIGNATION:
SPACES 1-7, 45-62, 82-93, 114-119 AND 120-128 WILL BE EMPLOYEE SPACES.
REMAINING 89 SPACES TO BE FOR RETAIL CUSTOMERS

NOTE:
THE SITE USES ARE NOT ANTICIPATED TO REQUIRE A LOADING AREA HOWEVER THE FOLLOWING PROVISIONS HAVE BEEN LISTED.

A SU-30 TRUCK (LARGEST DELIVERY VEHICLE TO ACCESS THE SITE) WILL BE ABLE TO PARK IN THE DESIGNATED LOADING AREA.

LEGEND:

□DHSB	DRILL HOLE STONE BOUND
300----	EXISTING COUNTOUR
-297-	PROPOSED COUNTOUR
x274.3	SPOT GRADE - PROPOSED
x274.3EX.	SPOT GRADE - EXISTING
48M	EXIST. TREE - DIAMETER - SPECIES
WB	PROPOSED. TREE - SPECIES
UP4-1	UTILITY POLE
OHW	OVERHEAD WIRES
GG	GAS GATE
WCS	WATER CURB STOP
WG	WATER GATE
FH	FIRE HYDRANT
D	DRAIN MANHOLE
CB	CATCH BASIN
S	SEWER MANHOLE
D	DUMPSTER
VCC	VERTICAL CONCRETE CURBING
VGC	VERTICAL GRANITE CURBING
CCB	CAPE COD BERM
VGC	VERTICAL GRANITE CURBING
	HANDICAP PARKING SPACE
	BUILDING MOUNTED LIGHT
□-□	POLE MOUNTED LIGHT
	EXISTING POST LIGHT
	EXISTING BUILDING MOUNTED LIGHT
B	BOLLARD
CO	CLEANOUT
DS	DOWNSPOUT
PD	PERSON DOOR
OHD	OVERHEAD DOOR

CURBING NOTES:
1. CURB LABELED CCB IS CAPE COD BERM PROPOSED TO REMAIN.
2. CURB LABELED VCC IS VERTICAL CONCRETE CURB TO BE INSTALLED.

DIMENSION NOTES:
1. ALL PARKIING SPACES ARE TO BE 9' x 19'
2. ALL ACCESS AISLES ARE TO BE A MINIMUM OF 24' WIDE.

CARLOS A. QUINTAL P.E. #30812 8/6/2020

OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

SITE PLAN
SITE LAYOUT PLAN
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD
DATE

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

NO.	DATE	DESCRIPTION	BY
2	8/5/20	REVIEW COMMENTS	RRG
1	7/8/20	REVIEW COMMENTS	RRG

DATE		INT.
4/20	FIELD BY:	BL
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UNITED CONSULTANTS INC.
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DATE: MAY 21, 2020
SCALE: 1" = 30'
PROJECT: UC1435
SHEET: 3 of 9

ACCESSIBLE ROUTE SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2% OR A RUNNING SLOPE GREATER THAN 5% SEE 521 CMR 20.9.

COMMONWEALTH OF MASSACHUSETTS
CARLOS A. QUINTAL
CIVIL
No. 30812
REGISTERED PROFESSIONAL ENGINEER

CARLOS A. QUINTAL P.E. #30812

MAP 306 PARCEL 2
160 GROVE STREET
N/F HENNEP PROPERTIES, LLC
BOOK 37525 PAGE 499
ZONE – INDUSTRIAL
USE – WAREHOUSE

EXISTING DRAINAGE STRUCTURE SCHEDULE

XCB–1
RIM=265.1
INV=262.4

XCB–2
RIM=265.1
INV=263.0

XCB–3
RIM=261.7
INV=257.3

XCB–4
RIM=263.4
INV=259.9

XCB–5
RIM=259.9
INV=254.2

XDMH–1
RIM = 264.3
INV IN = 261.3
INV OUT = 260.9

XDMH–2
RIM = 261.4
INV IN = 256.4
INV OUT = 255.9

XDMH–3
RIM = 264.1
INV IN = 259.5 CB
INV IN = 259.3 8" PVC
INV OUT = 259.0

XDMH–4
RIM = 259.8
INV IN = 253.8
INV OUT = 253.55

FILL NOTE:
FILL PLACED IN QUANTITY GREATER THAN 15 CUBIC YARDS MUST BE CERTIFIED IN ACCORDANCE WITH BYLAW SECTION 185–40.E.(5)

PROPOSED DRAINAGE STRUCTURE SCHEDULE

CB–10
RIM=264.0
INV=261.24

CB–11
STORMCEPTOR 450I
RIM=259.3
INV=256.3

CB–12
DOUBLE GRATE
RIM=258.0
INV=253.9

XDMH–1
RIM = 264.3
INV IN = 261.3
INV IN = 261.0 CB 10
INV OUT = 260.9

XDMH–3
RIM = 264.1
INV IN = 259.5 CB
INV IN = 259.3 8" PVC
INV OUT = 259.2 12" RCP AT LOCATION OF EXISTING 12" RCP IN FROM XCB–4

DMH 10
CONTECH
CASCADE SEPARATOR CS–6
RIM = 258.3
12" IN = 252.68 PROP.
24" IN = 251.68 EXIST.
24" OUT = 251.58 EXIST.

DMH 11
RIM = 260.4
12" IN = 255.44
12" OUT = 255.34

PLAN 348 OF 1987

NOTES:
1. CONTRACTOR TO CONTACT DIGSAFE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES ANY REPORT ANY DISCREPANCIES TO UNITED CONSULTANTS, INC.
3. ALL WORK SHALL CONFORM TO THE TOWN OF FRANKLIN DPW STANDARDS.
4. MAINTAIN A MINIMUM OF 10' SEPARATION FROM THE WATER SERVICE TO THE SEWER SERVICE.

UTILITY NOTES:
1. DOMESTIC WATER SUPPLY SHALL BE BASED ON PLUMBING ENGINEERS CALCULATIONS. USE EXISTING WATER SERVICE OR REPLACE AS MAY BE NECESSARY IN SAME LOCATION.
2. FIRE CONNECTION TO BE RELOCATED AS SHOWN. FINAL LOCATIONS TO BE DESIGNED BY PLUMING ENGINEER AND APPROVED BY FIRE DEPARTMENT.
3. ELECTRIC, TELEPHONE AND CABLE TV LOCATIONS TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANIES.
4. GAS SERVICE TO BE RELOCATED AS SHOWN. FINAL LOCATION TO BE APPROVED BY THE GAS COMPANY.
5. THE DESIGN ENGINEER SHALL INSPECT THE EXCAVATION OF THE STORMWATER INFILTRATON POND PRIOR TO ANY FILL OR STONE BEING PLACED.

SEPTIC SYSTEM NOTES:
REFERENCE A PLAN ENTITLED " DOERING EQUIPMENT COMPANY SEWERAGE DISPOSAL SYSTEM" DATED MAY 20, 1987.
PLAN INDICATES A DESIGN FLOW OF 750 GALLONS PER DAY.

PROPOSED USE OF 162 GROVE STREET BUILDING INCLUDING ADDITION
RETAIL – 3,856 SQ. FT. @ 50 GALLONS PER DAY (GPD) PER 1,000 SQ. FT.
OFFICE – 4,647 SQ. FT. @ 75 GALLONS PER DAY PER 1,000 SQ. FT.
WAREHOUSE – 7,584 SQ. FT. @ 15 GALLONS PER DAY PER EMPLOYEE

3,856 / 1,000 x 50 = 192.8 GPD
4,647 / 1,000 X 75 = 348.6 GPD
10 WAREHOUSE EMPLOYEES x 15 = 150 GPD

TOTAL PROPOSED FLOW IS 691.4 GPD
WATER RESOURCE DISTRICT: 185–40.D(1)(I) PROHIBITS FLOW FROM EXCEEDING 110 GALLONS PER 10,000 SQ. FT.
EXISTING DESIGN FLOW = 750 GALLONS
LAND AREA = 174,351 SQ. FT
750 / 110 = 6.818 x 10,000 = 68,181 SQ. FT OF LAND AREA REQUIRED

NOTE: RETAIL AREA INCLUDES ROOM 101 – 109 AND 115–116.

SNOW AND ICE NOTE:
NO DISPOSAL AND OR STOCKPILING OF SNOW AND ICE THAT CONTAINS DEICING CHEMICALS SHALL BE BROUGHT TO THE SITE FORM OUTSIDE THE DISTRICT. SEE ZONING BYLAW SECTION 185–40.D.(1)(f)

STORMWATER SYSTEM CONSTRUCTION NOTES:
1. EXISTING CATCH BASIN 2 TO BE REMOVED AND THE 12" INLET OPENING INTO EXISTING DRAIN MANHOLE 1 SHALL BE BRICKED AND MORTARED.
2. EXISTING CATCH BASIN 4 TO BE REMOVED.
3. THE 15" DRAIN PIPE FROM X–DMH 3 TO X–DMH 2 SHALL BE ABANDONED AND BRICK AND MORTARED AT EACH END WITHIN THE DRAIN MANHOLES.
4. FOR CONNECTIONS OF 12" RCP PIPE TO 12" HDPE PIPE USE A MARMAC COUPLER.
5. ALL EXISTING CATCH BASINS TO BE CLEANED AND THE OIL SEPARATOR HOODS SHALL BE INSPECTED AND REPAIRED OR REPLACED AS NECESSARY
6. ALL PROPOSED 12" RCP PIPE TO BE CLASS V.
7. INSTALL TWO ROOF LEADERS (SOUTH SIDE OF BUILDING) AND CONNECT TO THE EXISTING 8" PVC DRAIN PIPE.
8. CONTRACTOR TO EXCAVATE 3 TEST PITS IN THE EXISTING STONE TRENCH TO A DEPTH OF THE EXISTING PIPE AT LOCATIONS TO BE DETERMINED AND IN THE PRESENCE OF THE DESIGN ENGINEER. IF THE STONE IS DEEMED UNSUITABLE CONTRACTOR TO EXCAVATE A 3' WIDE TRENCH TO THE BOTTOM OF THE EXISTING PIPE FOR THE ENTIRE LENGTH OF THE NORTH SIDE OF THE BUILDING (120± FEET) AND INSTALL FILTER FABRIC AND DOUBLE WASHED STONE.

WETLAND BUFFER ZONE DISTURBANCES:
0 – 25' BUFFER ZONE = 0 SQ. FT.
25' – 50' BUFFER ZONE = 32 SQ. FT.
50' – 100' BUFFER ZONE = 6,662 SQ. FT.

THERE ARE NOT ANY VERNAL POOLS WITHIN 100 FEET OF ANY PROPOSED WORK.

OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

MAP 306 PARCEL 4
164 GROVE STREET
N/F NLCP 164 GROVE STREET MA, LLC
BOOK 37633 PAGE 557
ZONE – INDUSTRIAL
USE – VACANT

MAP 306 PARCEL 5
166 GROVE STREET
N/F CORE REAL ESTATE HOLDINGS, LLC
BOOK 22762 PAGE 365
ZONE – INDUSTRIAL
USE – HEALTH CLUB

PARCEL A
174,351± SQ. FT.
UPLAND AREA = 152,781± SQ. FT.

LEGEND:

- DHSB DRILL HOLE STONE BOUND
- 300 EXISTING COUNTOUR
- 297 PROPOSED COUNTOUR
- x274.3 SPOT GRADE – PROPOSED
- x274.3EX. SPOT GRADE – EXISTING
- 48M EXIST. TREE – DIAMETER – SPECIES
- WB PROPOSED. TREE – SPECIES
- UP4–1 UTILITY POLE
- OHW OVERHEAD WIRES
- GAS GATE
- WATER CURB STOP
- WATER GATE
- FIRE HYDRANT
- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- D DUMPSTER

FENCE REMOVAL NOTES:
1. THE EXISTING FENCE AND GATE LOCATED WITHIN THE PARKING AREA SHALL BE REMOVED FROM THE SOUTHERLY CORNER TO THE BUILDING.
2. THE EASTERLY EXISTING FENCE SHALL BE REMOVED FROM THE SOUTHERLY CORNER TO THE NORTHERLY CORNER.
3. THE FENCE LOCATE NEAR THE NORTH EAST CORNER OF THE EXISTING BUILDING SHALL BE REMOVED FROM THE BUILDING NORTHERLY TO THE CORNER.

NOTE:
ALL VERTICAL CONCRETE CURBING TO BE REINFORCED.

- VCC VERTICAL CONCRETE CURBING
- VGC VERTICAL GRANITE CURBING
- CCB CAPE COD BERM
- VGC VERTICAL GRANITE CURBING
- HANDICAP PARKING SPACE
- BUILDING MOUNTED LIGHT
- POLE MOUNTED LIGHT
- EXISTING POST LIGHT
- EXISTING BUILDING MOUNTED LIGHT
- B BOLLARD
- CO CLEANOUT
- DS DOWNSPOUT
- PD PERSON DOOR
- OHD OVERHEAD DOOR

APRIL 17, 2020

PERFORMED BY:
CARLOS A. QUINTAL, P.E., SOIL EVALUATOR
RICHARD GOODREAU

PT 3 ELEV. = 261.12
0 – 32" MIXED FILL
32" – 102" C1 SAND AND GRAVEL
WATER WEEPING AT 82" ELEV. = 254.29
FRIMPTER ADJUSTED ESHGW = 256.2
PERMEABILITY RATE = 46.26 IN/HR

PT 4 ELEV. = 260.77
0 – 32" MIXED FILL
32" – 80" C1 SAND AND GRAVEL
60" – 113" C2 SILTY SAND AND GRAVEL
WATER WEEPING AT 80" ELEV. = 254.10
PERMEABILITY RATE = 17.28 IN/HR
FRIMPTER ADJUSTED ESHGW = 256.0

PT 5 ELEV. = 258.89
0 – 48" MIXED FILL
48" – 96" C1 SAND AND GRAVEL
96" – 113" C2 2 SILTY SAND AND GRAVEL
WATER WEEPING AT 96" ELEV. = 250.89
PERMEABILITY RATE = 73.8 IN/HR
FRIMPTER ADJUSTED ESHGW = 252.8

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

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

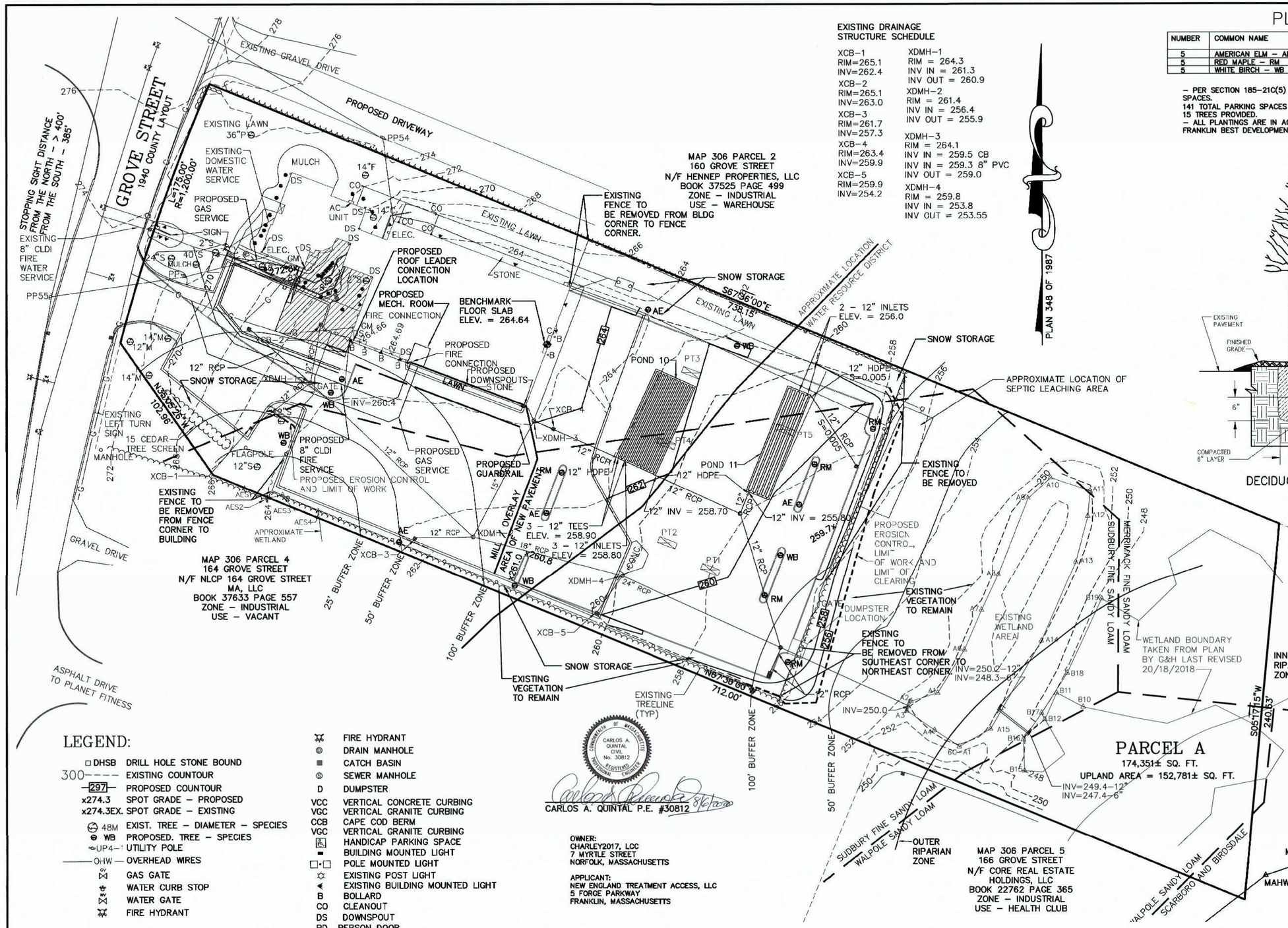
NO.	DATE	DESCRIPTION	BY
2	8/5/20	REVIEW COMMENTS	RRG
1	7/8/20	REVIEW COMMENTS	RRG

DATE		INT.
4/20	FIELD BY:	BL
BK#	FIELD BOOK	PG# 63
5/20	CALCS BY:	RRG
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

UNITED CONSULTANTS INC.
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508–384–6560 FAX 508–384–6566

DATE: MAY 21, 2020
SCALE: 1" = 30'
PROJECT: UC1435
SHEET: 4 of 9

SITE PLAN
GRADING & UTILITY PLAN
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'



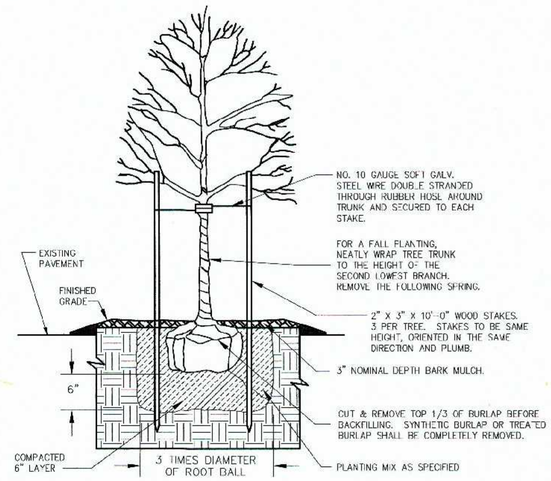
EXISTING DRAINAGE STRUCTURE SCHEDULE

XCB-1 RIM=265.1 INV=262.4	XDMH-1 RIM = 264.3 INV IN = 261.3 INV OUT = 260.9
XCB-2 RIM=265.1 INV=263.0	XDMH-2 RIM = 261.4 INV IN = 256.4 INV OUT = 255.9
XCB-3 RIM=261.7 INV=257.3	XDMH-3 RIM = 264.1 INV IN = 259.5 CB INV IN = 259.3 8" PVC INV OUT = 259.0
XCB-4 RIM=263.4 INV=259.9	XDMH-4 RIM = 259.8 INV IN = 253.8 INV OUT = 253.55
XCB-5 RIM=259.9 INV=254.2	

PLANTING SCHEDULE

NUMBER	COMMON NAME	SCIENTIFIC NAME	SIZE	CONDITION
5	AMERICAN ELM - AE	ULMUS AMERICANA	3"	B&B
5	RED MAPLE - RM	ACER RUBRUM	3"	B&B
5	WHITE BIRCH - WB	BETULA PAPYRIFERA	4 - 6 FEET	B&B

- PER SECTION 185-21C(5) PROVIDE 1 TREE PER 10 PARKING SPACES.
141 TOTAL PARKING SPACES / 10 = 15 TREES
15 TREES PROVIDED.
- ALL PLANTINGS ARE IN ACCORDANCE WITH THE TOWN OF FRANKLIN BEST DEVELOPMENT PRACTICES GUIDEBOOK.



DECIDUOUS TREE PLANTING

GENERAL NOTES

1. PLANTING HOLE SHALL BE THREE TIMES ROOT BALL DIAMETER.
2. ALL INSTALLED PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE (TOP OF PLANTING SOIL MIX), AS IT BORE TO THE NURSERY OR FIELD GRADE.
3. THE PLANTING HOLE DEPTH SHALL PROVIDE FOR A SIX INCH DEPTH OF PLANTING SOIL MIX BELOW THE ANTICIPATED ROOT BALL BOTTOM.
4. NOTWITHSTANDING THE REQUIREMENTS OF NOTES 1 & 3 ABOVE, NO PLANTING HOLE FOR TREES SHALL HAVE LESS THAN ONE CUBIC YARD OF PLANTING SOIL MIX.
5. PLANTING SOIL MIX SHALL BE A LOAM OR SANDY LOAM, AS DEFINED BY THE U.S.D.A. THE FIRST (BOTTOM) SIX INCH LAYER IN THE PRE-EXCAVATED PLANTING HOLE SHALL BE FIRMLY TAMPED TO PREVENT SETTLEMENT OF THE ROOT BALL POSITIONED THEREON. SUBSEQUENT LIFTS TO FINISH GRADE SHALL BE IN SIX INCH LOOSE LIFTS, EACH SETTLED BY THOROUGH SOAKING.
6. UPON ATTAINMENT OF FINISH GRADE WITHIN EACH PLANTING BED, THE GROUND SURFACE SHALL RECEIVE AN EVEN APPLICATION OF ORGANIC NON-PHOSPHORUS FERTILIZER APPLIED PER THE MANUFACTURERS RECOMENDATIONS.
7. COVERED WITH A THREE INCH NOMINAL DEPTH OF SHREDDED CEDAR BARK (OR APPROVED EQUIVALENT), MAINTAINING A ONE INCH MINIMUM DEPTH AT THE BERM EDGE, AND IMMEDIATELY RISING TO A THREE INCH DEPTH ACROSS THE PLANTING BED OR LANDSCAPE ISLAND. (SEE DETAIL)

LEGEND:

□ DHSB	DRILL HOLE STONE BOUND
300----	EXISTING COUNTOUR
-297-	PROPOSED COUNTOUR
x274.3	SPOT GRADE - PROPOSED
x274.3EX.	SPOT GRADE - EXISTING
48M	EXIST. TREE - DIAMETER - SPECIES
WB	PROPOSED. TREE - SPECIES
UP4	UTILITY POLE
OHW	OVERHEAD WIRES
GG	GAS GATE
WG	WATER GATE
	FIRE HYDRANT
	DRAIN MANHOLE
	CATCH BASIN
S	SEWER MANHOLE
D	DUMPSTER
VCC	VERTICAL CONCRETE CURBING
VGC	VERTICAL GRANITE CURBING
CCB	CAPE COD BERM
VGC	VERTICAL GRANITE CURBING
	HANDICAP PARKING SPACE
	BUILDING MOUNTED LIGHT
	POLE MOUNTED LIGHT
	EXISTING POST LIGHT
	EXISTING BUILDING MOUNTED LIGHT
B	BOLLARD
CO	CLEANOUT
DS	DOWNSPOUT
PD	PERSON DOOR
OHD	OVERHEAD DOOR

CARLOS A. QUINTAL P.E. #30812

OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

SITE PLAN
PLANTING PLAN
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

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

NO.	DATE	DESCRIPTION	BY
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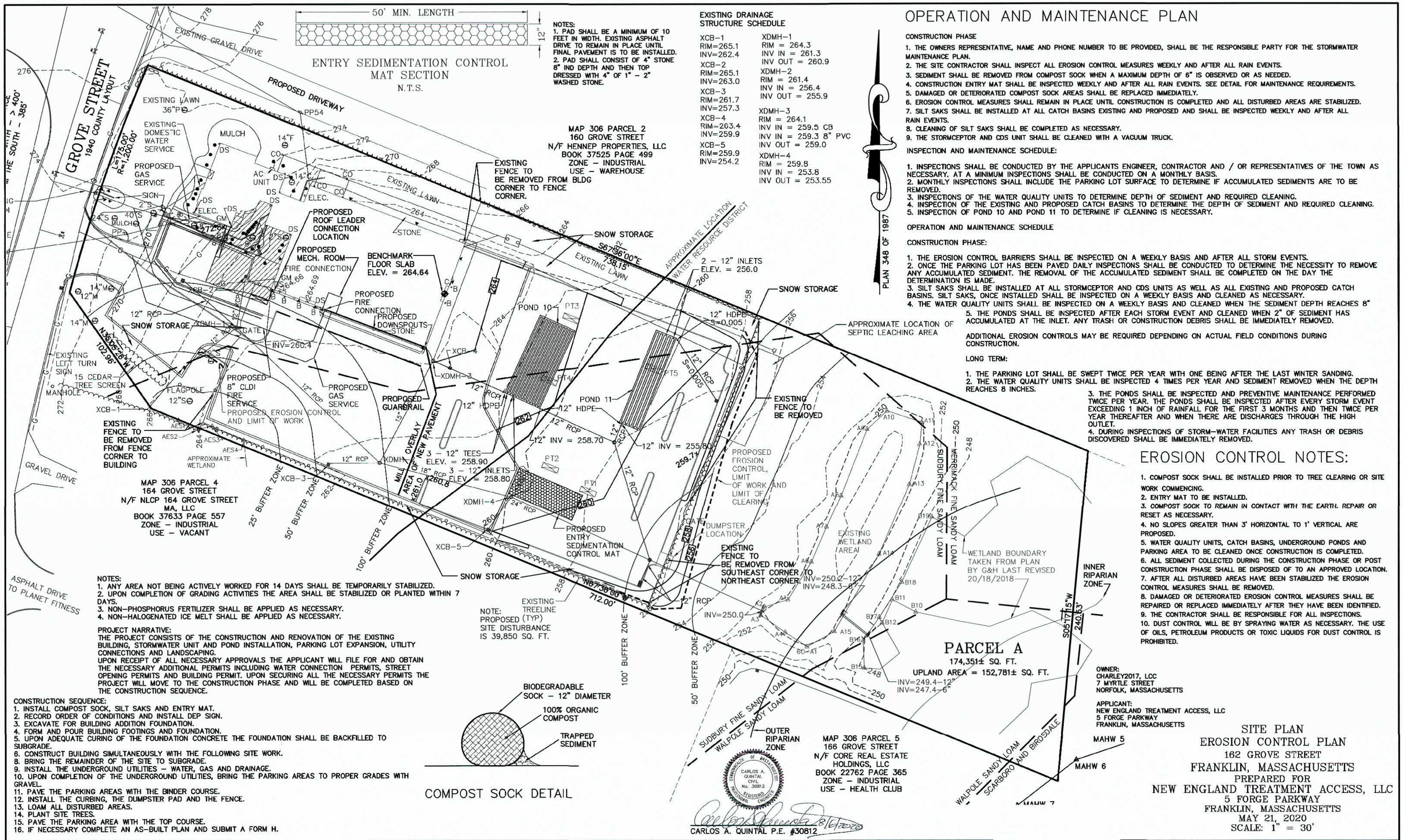
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

UNITED CONSULTANTS INC.
350 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508-384-6560 FAX 508-384-6566

DATE: MAY 21, 2020
SCALE: 1" = 30'
PROJECT: UC1435
SHEET: 5 of 9



NOTES:
1. ANY AREA NOT BEING ACTIVELY WORKED FOR 14 DAYS SHALL BE TEMPORARILY STABILIZED.
2. UPON COMPLETION OF GRADING ACTIVITIES THE AREA SHALL BE STABILIZED OR PLANTED WITHIN 7 DAYS.
3. NON–PHOSPHORUS FERTILIZER SHALL BE APPLIED AS NECESSARY.
4. NON–HALOGENATED ICE MELT SHALL BE APPLIED AS NECESSARY.

PROJECT NARRATIVE:
THE PROJECT CONSISTS OF THE CONSTRUCTION AND RENOVATION OF THE EXISTING BUILDING, STORMWATER UNIT AND POND INSTALLATION, PARKING LOT EXPANSION, UTILITY CONNECTIONS AND LANDSCAPING.
UPON RECEIPT OF ALL NECESSARY APPROVALS THE APPLICANT WILL FILE FOR AND OBTAIN THE NECESSARY ADDITIONAL PERMITS INCLUDING WATER CONNECTION PERMITS, STREET OPENING PERMITS AND BUILDING PERMIT. UPON SECURING ALL THE NECESSARY PERMITS THE PROJECT WILL MOVE TO THE CONSTRUCTION PHASE AND WILL BE COMPLETED BASED ON THE CONSTRUCTION SEQUENCE.

CONSTRUCTION SEQUENCE:
1. INSTALL COMPOST SOCK, SILT SAKS AND ENTRY MAT.
2. RECORD ORDER OF CONDITIONS AND INSTALL DEP SIGN.
3. EXCAVATE FOR BUILDING ADDITION FOUNDATION.
4. FORM AND POUR BUILDING FOOTINGS AND FOUNDATION.
5. UPON ADEQUATE CURING OF THE FOUNDATION CONCRETE THE FOUNDATION SHALL BE BACKFILLED TO SUBGRADE.
6. CONSTRUCT BUILDING SIMULTANEOUSLY WITH THE FOLLOWING SITE WORK.
8. BRING THE REMAINDER OF THE SITE TO SUBGRADE.
9. INSTALL THE UNDERGROUND UTILITIES – WATER, GAS AND DRAINAGE.
10. UPON COMPLETION OF THE UNDERGROUND UTILITIES, BRING THE PARKING AREAS TO PROPER GRADES WITH GRAVEL.
11. PAVE THE PARKING AREAS WITH THE BINDER COURSE.
12. INSTALL THE CURBING, THE DUMPSTER PAD AND THE FENCE.
13. LOAM ALL DISTURBED AREAS.
14. PLANT SITE TREES.
15. PAVE THE PARKING AREA WITH THE TOP COURSE.
16. IF NECESSARY COMPLETE AN AS–BUILT PLAN AND SUBMIT A FORM H.

COMPOST SOCK DETAIL

OPERATION AND MAINTENANCE PLAN

CONSTRUCTION PHASE
1. THE OWNERS REPRESENTATIVE, NAME AND PHONE NUMBER TO BE PROVIDED, SHALL BE THE RESPONSIBLE PARTY FOR THE STORMWATER MAINTENANCE PLAN.
2. THE SITE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES WEEKLY AND AFTER ALL RAIN EVENTS.
3. SEDIMENT SHALL BE REMOVED FROM COMPOST SOCK WHEN A MAXIMUM DEPTH OF 6" IS OBSERVED OR AS NEEDED.
4. CONSTRUCTION ENTRY MAT SHALL BE INSPECTED WEEKLY AND AFTER ALL RAIN EVENTS. SEE DETAIL FOR MAINTENANCE REQUIREMENTS.
5. DAMAGED OR DETERIORATED COMPOST SOCK AREAS SHALL BE REPLACED IMMEDIATELY.
6. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND ALL DISTURBED AREAS ARE STABILIZED.
7. SILT SAKS SHALL BE INSTALLED AT ALL CATCH BASINS EXISTING AND PROPOSED AND SHALL BE INSPECTED WEEKLY AND AFTER ALL RAIN EVENTS.
8. CLEANING OF SILT SAKS SHALL BE COMPLETED AS NECESSARY.
9. THE STORMCEPTOR AND CDS UNIT SHALL BE CLEANED WITH A VACUUM TRUCK.

INSPECTION AND MAINTENANCE SCHEDULE:
1. INSPECTIONS SHALL BE CONDUCTED BY THE APPLICANTS ENGINEER, CONTRACTOR AND / OR REPRESENTATIVES OF THE TOWN AS NECESSARY. AT A MINIMUM INSPECTIONS SHALL BE CONDUCTED ON A MONTHLY BASIS.
2. MONTHLY INSPECTIONS SHALL INCLUDE THE PARKING LOT SURFACE TO DETERMINE IF ACCUMULATED SEDIMENTS ARE TO BE REMOVED.
3. INSPECTIONS OF THE WATER QUALITY UNITS TO DETERMINE DEPTH OF SEDIMENT AND REQUIRED CLEANING.
4. INSPECTION OF THE EXISTING AND PROPOSED CATCH BASINS TO DETERMINE THE DEPTH OF SEDIMENT AND REQUIRED CLEANING.
5. INSPECTION OF POND 10 AND POND 11 TO DETERMINE IF CLEANING IS NECESSARY.

OPERATION AND MAINTENANCE SCHEDULE

CONSTRUCTION PHASE:
1. THE EROSION CONTROL BARRIERS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER ALL STORM EVENTS.
2. ONCE THE PARKING LOT HAS BEEN PAVED DAILY INSPECTIONS SHALL BE CONDUCTED TO DETERMINE THE NECESSITY TO REMOVE ANY ACCUMULATED SEDIMENT. THE REMOVAL OF THE ACCUMULATED SEDIMENT SHALL BE COMPLETED ON THE DAY THE DETERMINATION IS MADE.
3. SILT SAKS SHALL BE INSTALLED AT ALL STORMCEPTOR AND CDS UNITS AS WELL AS ALL EXISTING AND PROPOSED CATCH BASINS. SILT SAKS, ONCE INSTALLED SHALL BE INSPECTED ON A WEEKLY BASIS AND CLEANED AS NECESSARY.
4. THE WATER QUALITY UNITS SHALL BE INSPECTED ON A WEEKLY BASIS AND CLEANED WHEN THE SEDIMENT DEPTH REACHES 8"
5. THE PONDS SHALL BE INSPECTED AFTER EACH STORM EVENT AND CLEANED WHEN 2" OF SEDIMENT HAS ACCUMULATED AT THE INLET. ANY TRASH OR CONSTRUCTION DEBRIS SHALL BE IMMEDIATELY REMOVED.

ADDITIONAL EROSION CONTROLS MAY BE REQUIRED DEPENDING ON ACTUAL FIELD CONDITIONS DURING CONSTRUCTION.

LONG TERM:
1. THE PARKING LOT SHALL BE SWEPT TWICE PER YEAR WITH ONE BEING AFTER THE LAST WINTER SANDING.
2. THE WATER QUALITY UNITS SHALL BE INSPECTED 4 TIMES PER YEAR AND SEDIMENT REMOVED WHEN THE DEPTH REACHES 8 INCHES.
3. THE PONDS SHALL BE INSPECTED AND PREVENTIVE MAINTENANCE PERFORMED TWICE PER YEAR. THE PONDS SHALL BE INSPECTED AFTER EVERY STORM EVENT EXCEEDING 1 INCH OF RAINFALL FOR THE FIRST 3 MONTHS AND THEN TWICE PER YEAR THEREAFTER AND WHEN THERE ARE DISCHARGES THROUGH THE HIGH OUTLET.
4. DURING INSPECTIONS OF STORM–WATER FACILITIES ANY TRASH OR DEBRIS DISCOVERED SHALL BE IMMEDIATELY REMOVED.

EROSION CONTROL NOTES:

1. COMPOST SOCK SHALL BE INSTALLED PRIOR TO TREE CLEARING OR SITE WORK COMMENCING.
2. ENTRY MAT TO BE INSTALLED.
3. COMPOST SOCK TO REMAIN IN CONTACT WITH THE EARTH. REPAIR OR RESET AS NECESSARY.
4. NO SLOPES GREATER THAN 3' HORIZONTAL TO 1' VERTICAL ARE PROPOSED.
5. WATER QUALITY UNITS, CATCH BASINS, UNDERGROUND PONDS AND PARKING AREA TO BE CLEANED ONCE CONSTRUCTION IS COMPLETED.
6. ALL SEDIMENT COLLECTED DURING THE CONSTRUCTION PHASE OR POST CONSTRUCTION PHASE SHALL BE DISPOSED OF TO AN APPROVED LOCATION.
7. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE EROSION CONTROL MEASURES SHALL BE REMOVED.
8. DAMAGED OR DETERIORATED EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY AFTER THEY HAVE BEEN IDENTIFIED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSPECTIONS.
10. DUST CONTROL WILL BE BY SPRAYING WATER AS NECESSARY. THE USE OF OILS, PETROLEUM PRODUCTS OR TOXIC LIQUIDS FOR DUST CONTROL IS PROHIBITED.

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NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

PLAN 348 OF 1987

CARLOS A. QUINTAL P.E. #30812

SITE PLAN
EROSION CONTROL PLAN
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD
DATE

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

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1	7/8/20	REVIEW COMMENTS	RRG

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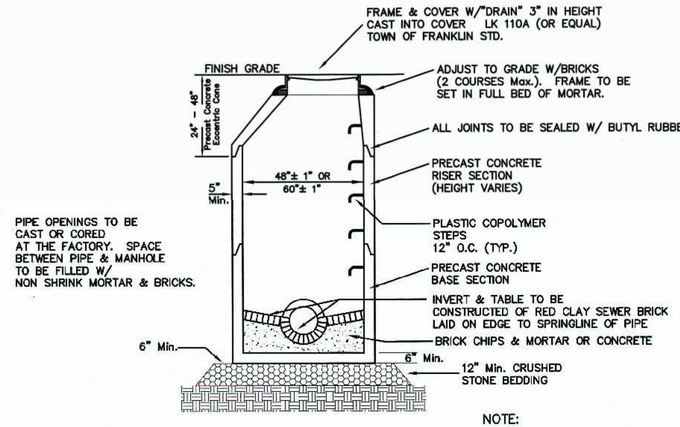
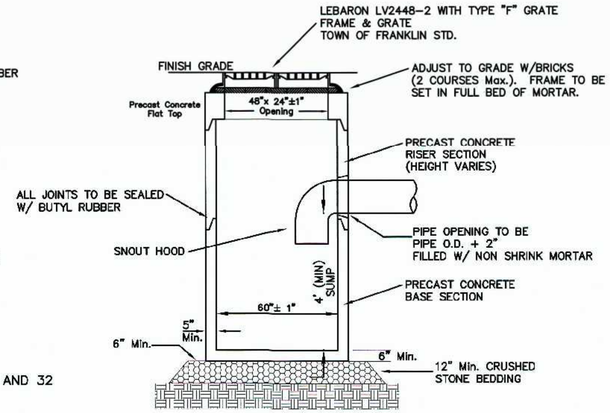
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508–384–6560 FAX 508–384–6566

DATE MAY 21, 2020
SCALE 1" = 30'
PROJECT UC1435
SHEET 6 of 9

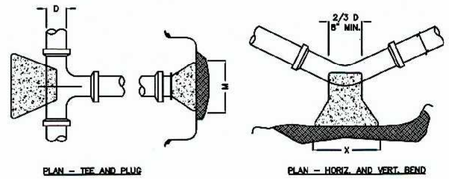


NOTE:
DMH'S 2, 4, 21, 22, 23, 31 AND 32 SHALL BE 5' DIAMETER

PRECAST DRAIN MANHOLE



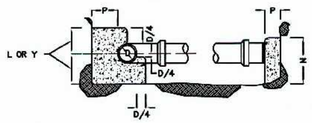
DOUBLE GRATE
PRECAST CATCH BASIN
W/ DEEP SUMP



PLAN – TEE AND PLUG

PLAN – HORIZ. AND VERT. BEND

NOTES:
1. CONTRACTOR TO CONTACT DIGSAFE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES ANY REPORT ANY DISCREPANCIES TO UNITED CONSULTANTS, INC.
3. ALL WORK SHALL CONFORM TO THE TOWN OF FRANKLIN DPW STANDARDS.
4. MAINTAIN A MINIMUM OF 10' SEPARATION FROM THE WATER SERVICE TO THE SEWER SERVICE.



TYPICAL SECTION TEES, BENDS AND PLUGS

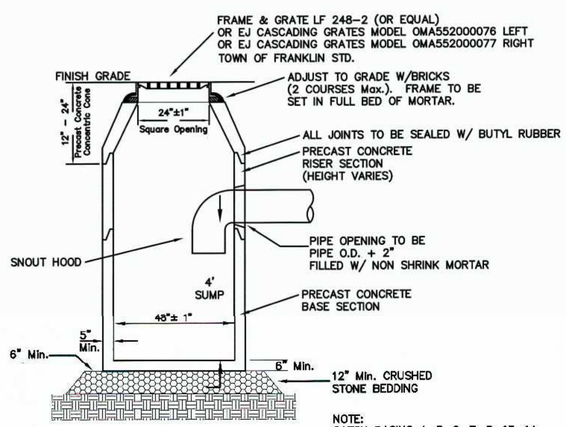
SIZE OF BRANCH	J	K	L	M	N	O
4" TO 8"	10"	10"	1'-0"	2'-0"	1'-6"	10"
10" TO 18"	1'-0"	1'-6"	1'-8"	3'-10"	2'-10"	1'-6"
24"	1'-4"	2'-0"	2'-6"	5'-0"	3'-6"	1'-8"

TEES AND PLUGS

	90 & 45 BENDS			22 1/2 & 11 1/4		
D	4" TO 8"	10" TO 16"	24"	4"TO 8"	10" TO 16"	24"
X	1'-8"	3'-4"	3'-6"	1'-4"	2'-0"	3'-6"
Y	1'-2"	1'-8"	2'-4"	1'-0"	1'-2"	2'-4"

BENDS

THRUST BLOCK DETAILS



NOTE:
CATCH BASINS 4, 5, 6, 7, 8, 13, 14, 15 AND 16 SHALL HAVE CASCADING GRATES.

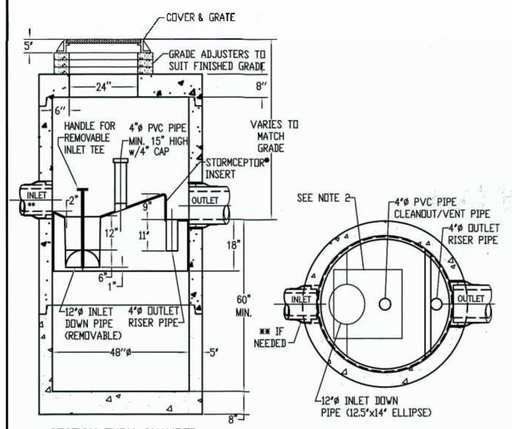
PRECAST CATCH BASIN

CSR Hydro Conduit

STC 4501 Precast Concrete Stormceptor® (459 US Gallon Capacity)

PROJECT LOCATION

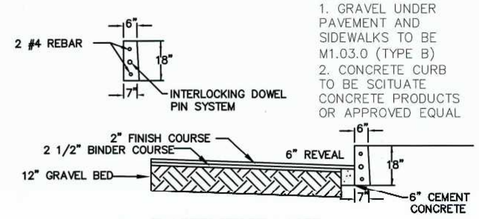
DR. BY:
CK. BY:
DATE:
SCALE: N.T.S.
DWG.#



SECTION THRU CHAMBER

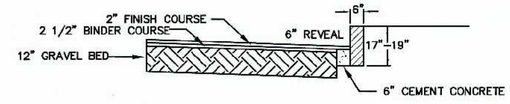
SECTION THRU PLAN VIEW

NOTE :
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE CLEANOUT/ VENT PIPE.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OFF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.

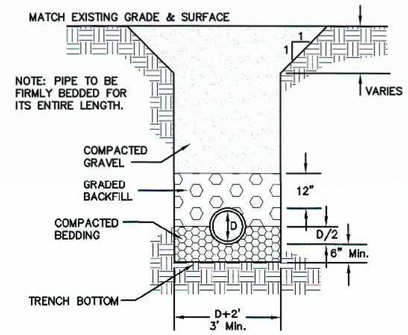


NOTES:
1. GRAVEL UNDER PAVEMENT AND SIDEWALKS TO BE M1.03.0 (TYPE B)
2. CONCRETE CURB TO BE SCITUATE CONCRETE PRODUCTS OR APPROVED EQUAL

PAVEMENT AND
VERTICAL CONCRETE CURBING

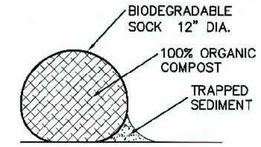


PAVEMENT AND VA-4
VERTICAL GRANITE CURBING



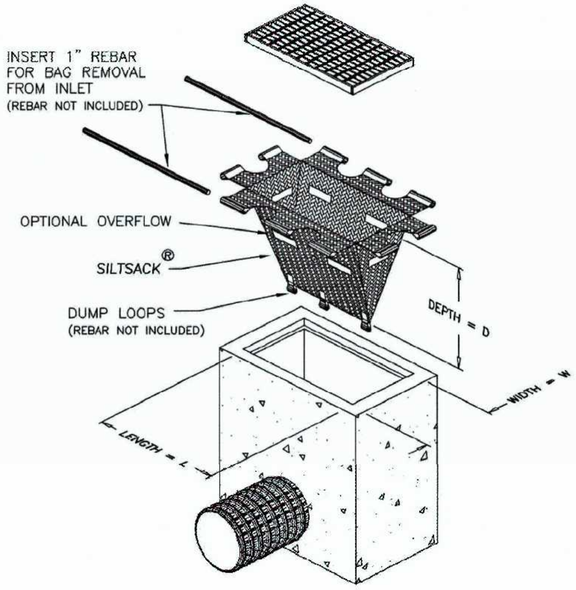
TYPE OF PIPE	RCP DRAIN	CLDI WATER	PVC SEWER	D.I. SEWER
BEDDING MATERIAL	PROC. GRAVEL	SAND	3/4" STONE	3/8" STONE
BACKFILL MATERIAL	ORD. FILL	SAND	3/4" STONE	3/8" STONE

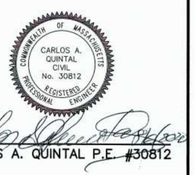
UTILITY TRENCH DETAIL



COMPOST SOCK DETAIL

Typical Siltsack® Construction - Type B





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5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

SITE PLAN
CONSTRUCTION DETAIL – 1
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

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(IN FEET)
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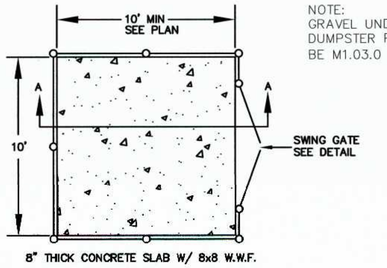
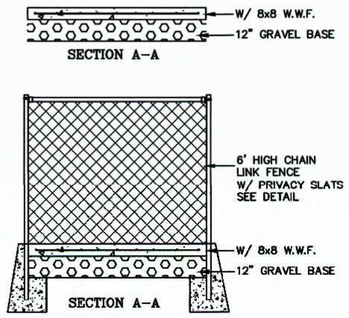


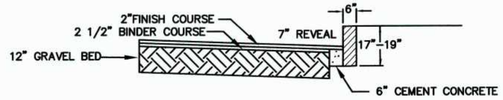
NOTE:
GRAVEL UNDER DUMPSTER PAD TO BE M1.03.0 (TYPE B)

CONCRETE DUMPSTER PAD

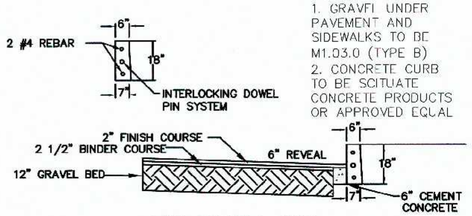
NOTE: DUMPSTER PAD AT BUILDING 1 WILL HAVE THE FENCE CONNECT TO THE RETAINING WALL. NO FENCE IS PROPOSED TO THE REAR OF THE DUMPSTER PAD.



DUMPSTER AREA FENCE



PAVEMENT AND VA-4 VERTICAL GRANITE CURBING



NOTES:
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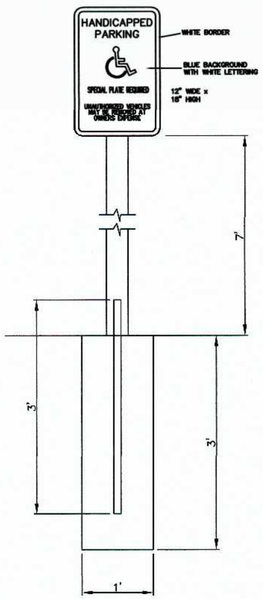
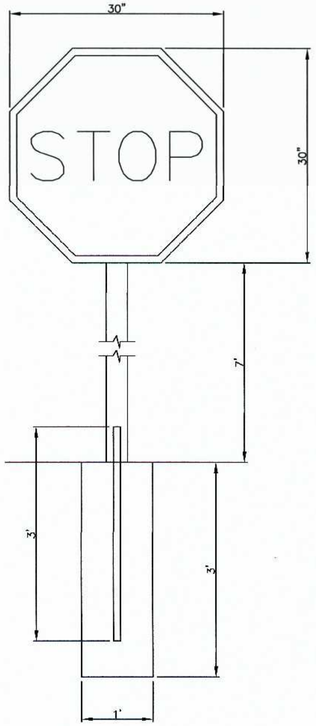
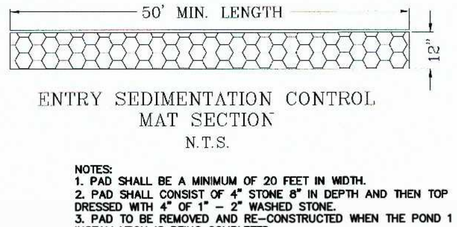
PAVEMENT AND VERTICAL CONCRETE CURBING



HANDICAP SIGN DETAIL
N.T.S

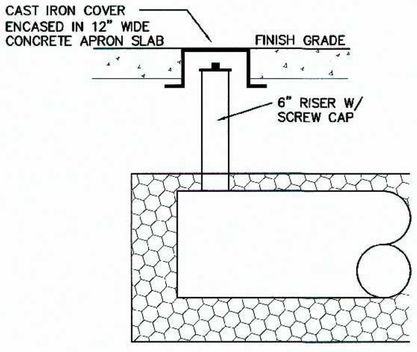


STOP SIGN DETAIL
N.T.S

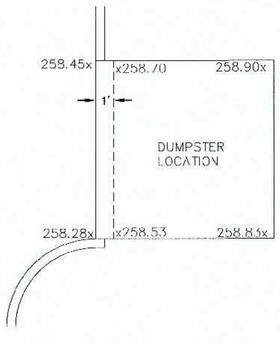


ENTRY SEDIMENTATION CONTROL MAT SECTION
N.T.S.

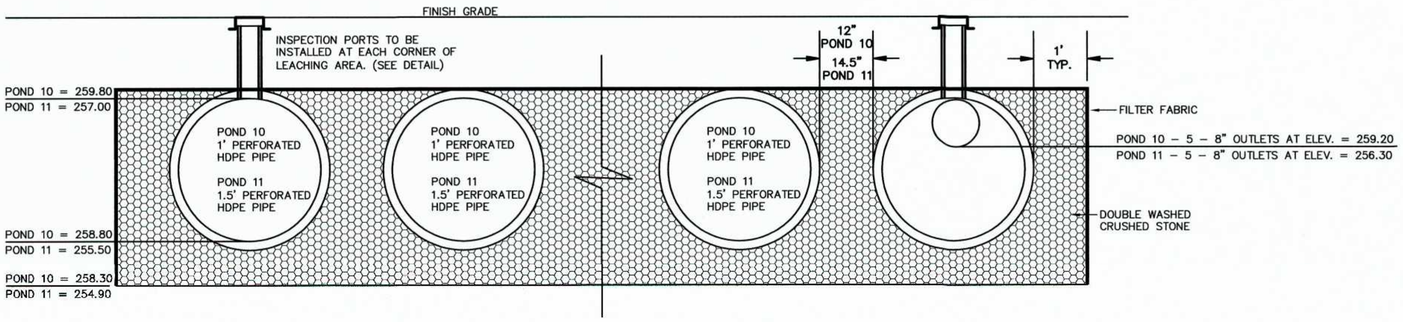
NOTES:
1. PAD SHALL BE A MINIMUM OF 20 FEET IN WIDTH.
2. PAD SHALL CONSIST OF 4" STONE 8" IN DEPTH AND THEN TOP DRESSED WITH 4" OF 1" – 2" WASHED STONE.
3. PAD TO BE REMOVED AND RE-CONSTRUCTED WHEN THE POND 1 INSTALLATION IS BEING COMPLETED.



INSPECTION PORT DETAIL DRAINAGE INFILTRATION AREAS
N.T.S.



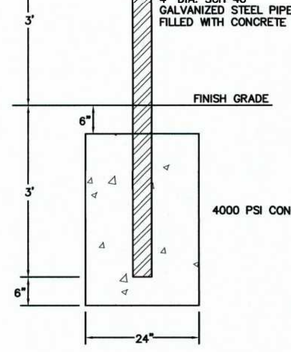
DUMPSTER AREA GRADING DETAIL
N.T.S.



NOTE:
INFILTRATION POND 10 CONSISTS OF 12 ROWS OF 1' DIAMETER PERFORATED HDPE PIPE 60' IN LENGTH.
STONE ENVELOPE
= 29.75' x 62'

NOTE:
INFILTRATION POND 11 CONSISTS OF 5 ROWS OF 1.5' DIAMETER PERFORATED HDPE PIPE 70' IN LENGTH.
STONE ENVELOPE
= 15.6' x 72'

INFILTRATION PONDS 10 AND 11



BOLLARD DETAIL

CARLOS A. QUINTAL P.E. #30812

OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS

SITE PLAN
CONSTRUCTION DETAIL – 2
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

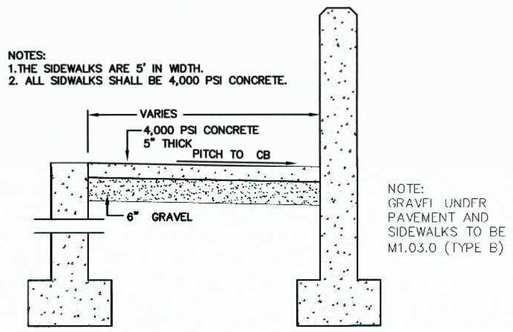
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

NO.	DATE	DESCRIPTION	BY
2	8/5/20	REVIEW COMMENTS	RRG
1	7/8/20	REVIEW COMMENTS	RRG

DATE		INT.
4/20	FIELD BY:	BL
BK#	FIELD BOOK	PG#
5/20	CALCS BY:	RRG
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

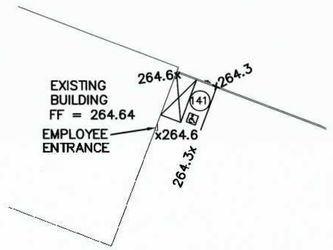
UNITED CONSULTANTS INC.
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508-384-6560 FAX 508-384-6566

DATE	MAY 21, 2020
SCALE	1" = 30'
PROJECT	UC1435
SHEET	8 of 9

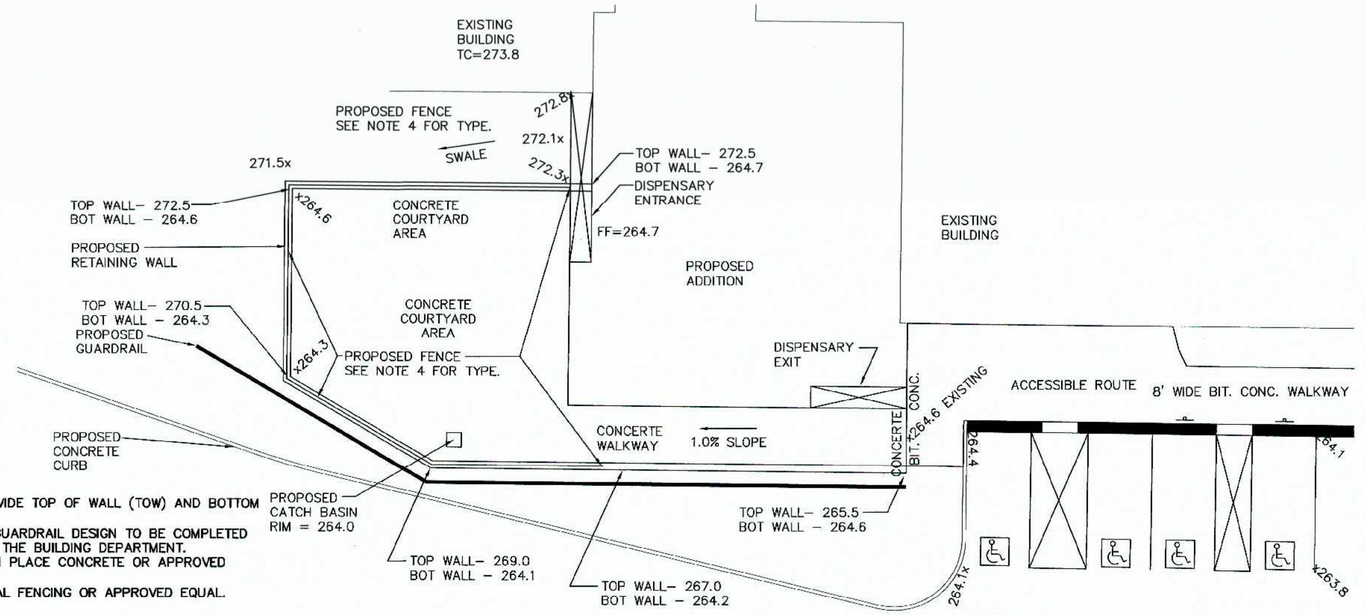


COURTYARD AREA DETAIL

N.T.S.



ACCESSIBLE ROUTE GRADING
UPPER LEVEL
SCALE: 1" = 40'

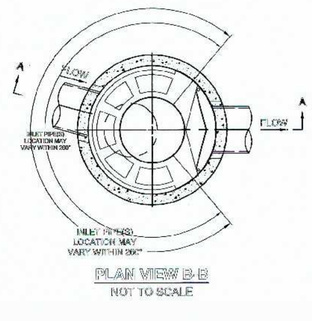


PROPOSED RETAINING WALL NOTES:
1. PROPOSED RETAINNG WALL SHOWN TO PROVIDE TOP OF WALL (TOW) AND BOTTOM OF WALL (BOW) ELEVATIONS.
2. FINAL WALL DESIGNS, FENCE DESIGN AND GUARDRAIL DESIGN TO BE COMPLETED BY A STRUCTURAL ENGINEER AND FILED WITH THE BUILDING DEPARTMENT.
3. PROPOSED RETAINING WALLS TO POURED IN PLACE CONCRETE OR APPROVED EQUAL.
4. FENCE TO BE WAYFAIR 4' x 6' TEXAS METAL FENCING OR APPROVED EQUAL.

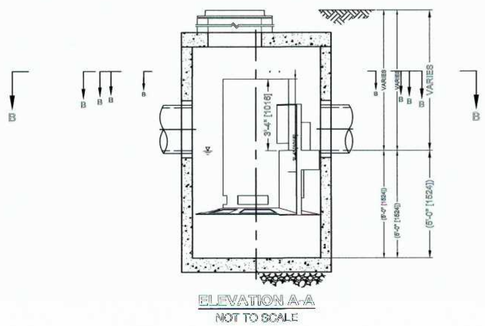
NOTE:
GRIND AND SHIM EXISTING PAVEMENT AS NECESSARY TO PROVIDE A MAXIMUM SLOE OF 2 PERCENT WITHIN THE HANDICAP PARKING SPACES AND ACCESS ISLES.

ADDITION ENTRY AND ACCESSIBLE ROUTE DETAIL

SCALE: 1" = 10'



PLAN VIEW B-B
NOT TO SCALE

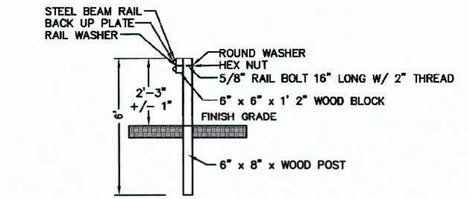


ELEVATION A-A
NOT TO SCALE

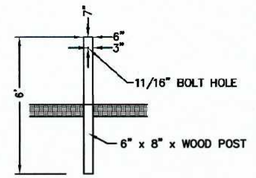
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

CONTECH CASCADE SEPARATOR DETAIL

N.T.S.



GUARDRAIL DETAIL
N.T.S.

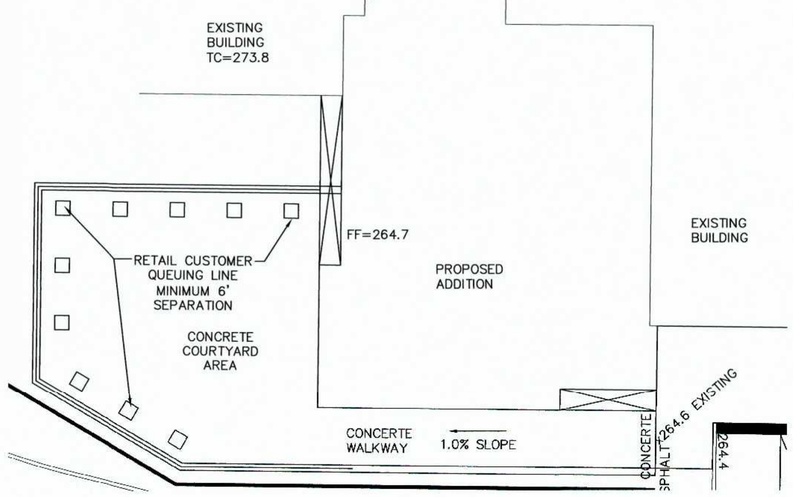


POST DETAIL
N.T.S.

GUARDRAIL NOTES:
1. POST TO BE SPACED 6' 3" ON CENTER.
2. ALL NUTS, BOLTS AND WASHERS TO BE GALVANIZED.
3. ALL SPLICES ARE TO BE MADE AT A POST.
4. BACK UP PLATE IS PLACED BEHIND RAIL ELEMENTS AT INTERMEDIATE POSTS i.e.: NON SPLICE LOCATIONS.
5. REFER TO MASSDOT STANDARDS FOR DIMENSIONS OF FITTINGS THAT ARE NOT SHOWN.

OWNER:
CHARLEY2017, LCC
7 MYRTLE STREET
NORFOLK, MASSACHUSETTS

APPLICANT:
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS



ENTRY QUEUING DETAIL

SCALE: 1" = 10'

CARLOS A. QUINTAL P.E. #30812

SITE PLAN
CONSTRUCTION DETAIL – 3
162 GROVE STREET
FRANKLIN, MASSACHUSETTS
PREPARED FOR
NEW ENGLAND TREATMENT ACCESS, LLC
5 FORGE PARKWAY
FRANKLIN, MASSACHUSETTS
MAY 21, 2020
SCALE: 1" = 30'

SITE PLAN APPROVAL
REQUIRED
FRANKLIN PLANNING BOARD

DATE

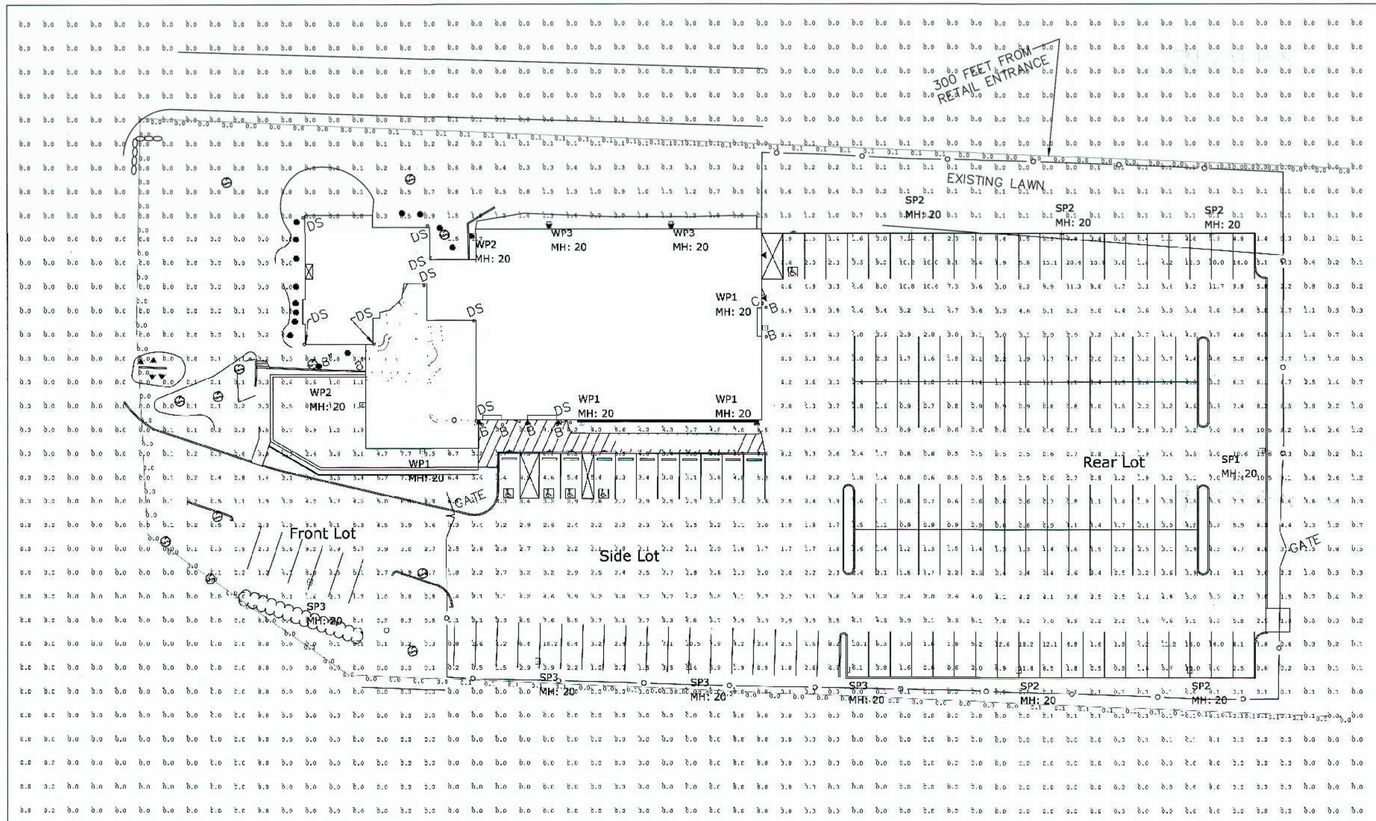
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

NO.	DATE	DESCRIPTION	BY
2	8/5/20	REVIEW COMMENTS	RRG
1	7/8/20	REVIEW COMMENTS	RRG

DATE		INT.
4/20	FIELD BY:	BL
BK#	FIELD BOOK	PG#
5/20	CALCS BY:	RRG
5/20	DESIGNED BY:	RRG
5/20	DRAWN BY:	COMP
5/20	CHECKED BY:	CAQ

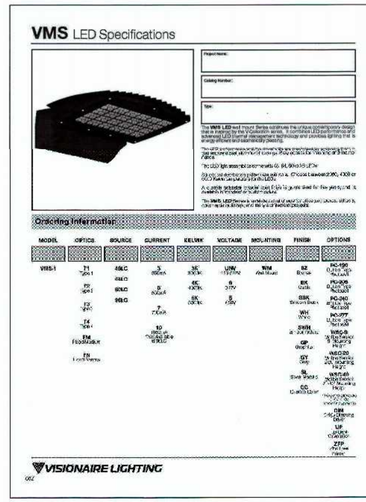
UNITED CONSULTANTS INC.
850 FRANKLIN STREET SUITE 11D
WRENTHAM, MASSACHUSETTS 02093
508-384-6560 FAX 508-384-6566

DATE: MAY 21, 2020
SCALE: 1" = 30'
PROJECT: UC1435
SHEET: 9 of 9

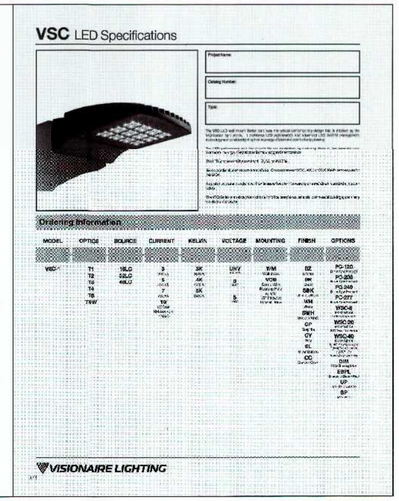


1 Photometric Layout and Calculations

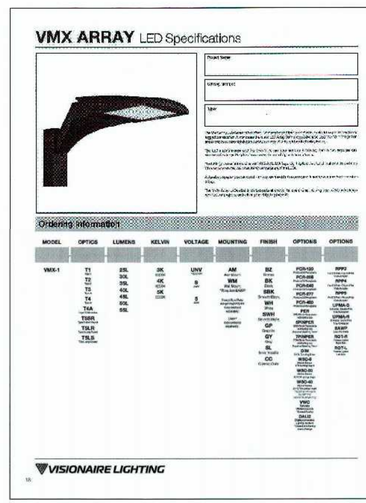
SCALE: 1:30



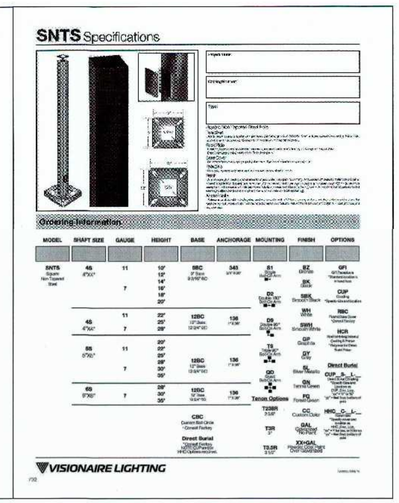
2 Fixture Specification- Visionaire VMS



3 Fixture Specification- Visionaire VSC



4 Fixture Specification- Visionaire VMX



5 Fixture Specification- Visionaire SNTS

Luminaire Schedule						
Symbol	Qty	Label	Description	LLF	Lum. Lumens	Lum. Watts
	1	SP1	Visionaire - VMX-II-T4-55L-4K-UNV-AM-BZ-DIM ON -SNTS-4S-11-20-9BC-343-S1-BZ POLE	0.900	49881	400
	5	SP2	Visionaire - VMX-II-T4-55L-4K-UNV-AM-BZ-DIM-HS ON -SNTS-4S-11-20-9BC-343-S1-BZ POLE	0.900	21756	400
	4	SP3	Visionaire - VMX-II-T5LS-55L-4K-UNV-AM-BZ-DIM-HS ON -SNTS-4S-11-20-9BC-343-S1-BZ POLE	0.900	15400	400
	4	WP1	Visionaire - VMS-1-T4-96LC-5-4K-BZ-DIM-BP	0.900	19653	157
	2	WP2	Visionaire VSC-II-T4-16LC-5-4K-UNV-WM-BZ-DIM-BP	0.900	3093	26
	2	WP3	Visionaire VSC-II-T2-16LC-5-4K-UNV-WM-BZ-DIM-BP	0.900	3135	26

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Property Line	Illuminance	Fc	0.03	0.1	0.0	N.A.	N.A.
Site Calculations	Illuminance	Fc	0.96	20.8	0.0	N.A.	N.A.
Front Lot	Illuminance	Fc	4.02	9.2	0.9	4.47	10.22
Rear Lot	Illuminance	Fc	3.92	20.8	0.4	9.80	52.00
Side Lot	Illuminance	Fc	3.37	10.5	0.5	6.74	21.00

NOTES:

A. A LIGHT LOSS FACTOR OF 0.900 HAS BEEN APPLIED TO FIXTURES UNLESS OTHERWISE NOTED. REFER TO LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR AND LUMEN INFORMATION.

B. SEE "MH" ON LIGHTING FIXTURE TAG LOCATED ON PLAN FOR MOUNTING HEIGHT INFORMATION.

C. CALCULATION POINTS ARE TAKEN AT GRADE.

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

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

37 E Central St
Franklin, MA 02038

162 Grove Street

Photometric Layout Calculations and Schedules

DATE: May 20, 2020	REVISIONS	DESCRIPTION	DATE
PROJECT NUMBER: 20084	1		
DRAWN BY: AM	2		
CHECKED BY: TJ	3		
APPROVED BY: GD	4		
SCALE: AS NOTED	5		
	6		
	7		

SL1