

Business Incubator Flex Building

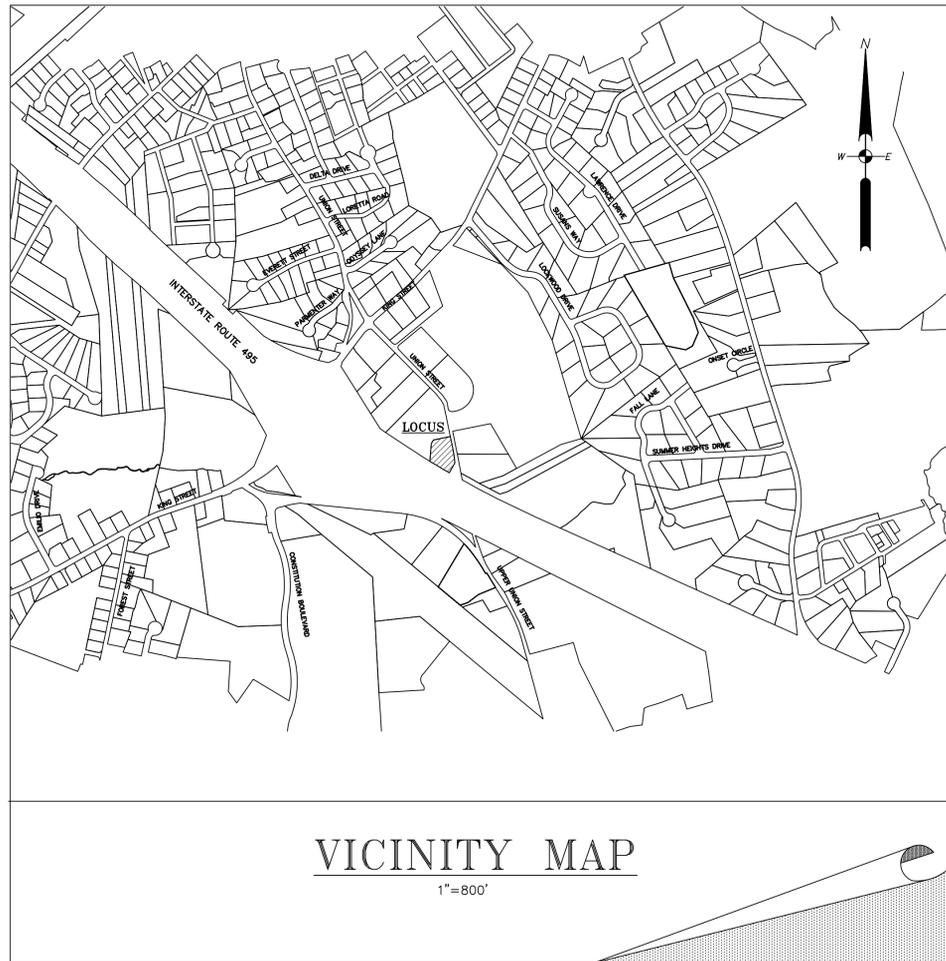
Site Plan
759 Union Street
Franklin, Massachusetts

Date: NOVEMBER 12, 2024

INDEX

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11. CONSTRUCTION DETAILS

ARCHITECTURAL PLANS (BY OTHERS)



F-4667

APPROVED DATE: _____

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

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OWNER

PVG ONE, LLC
164 WASHINGTON ST
PLAINVILLE, MA. 02762

DEED BOOK 35359 PAGE 485
PLAN No. 293 OF 1998 PLAN Bk. 456
A.M. 314 LOT 13

APPLICANT

CHARBEL SAGHBINI
346 WASHINGTON ST
STOUGHTON, MA 02072

**SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION STREET
FRANKLIN
MASSACHUSETTS**

COVER SHEET

NOVEMBER 12, 2024

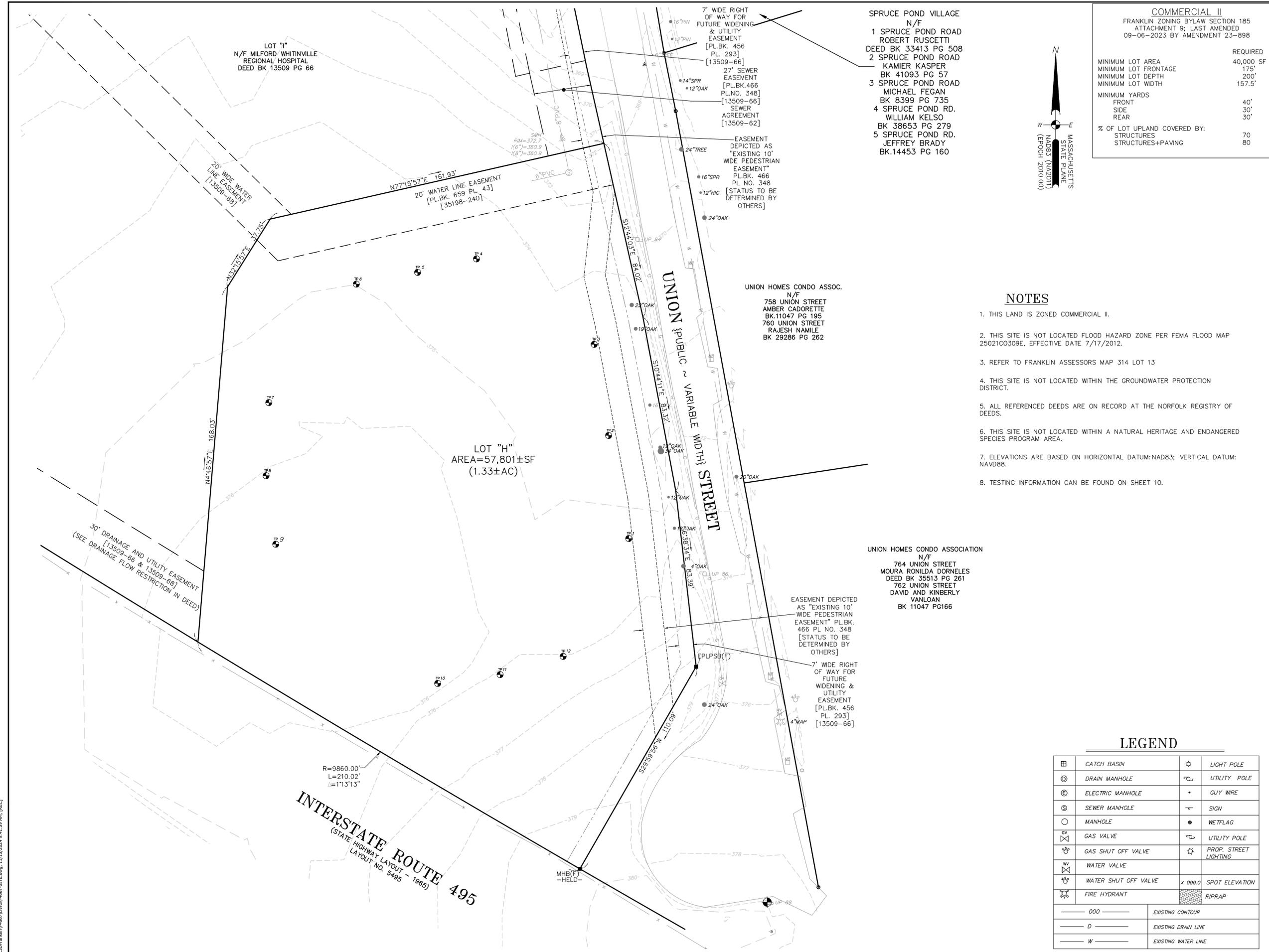
DATE	REVISION DESCRIPTION

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

SHEET 1 OF 11

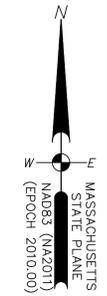
JOB NO. F-4667

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SPRUCE POND VILLAGE
N/F
1 SPRUCE POND ROAD
ROBERT RUSCETTI
DEED BK 33413 PG 508
2 SPRUCE POND ROAD
KAMIER KASPER
BK 41093 PG 57
3 SPRUCE POND ROAD
MICHAEL FEGAN
BK 8399 PG 735
4 SPRUCE POND RD.
WILLIAM KELSO
BK 38653 PG 279
5 SPRUCE POND RD.
JEFFREY BRADY
BK.14453 PG 160

COMMERCIAL II	
FRANKLIN ZONING BYLAW SECTION 185 ATTACHMENT 9: LAST AMENDED 09-06-2023 BY AMENDMENT 23-898	
MINIMUM LOT AREA	REQUIRED 40,000 SF
MINIMUM LOT FRONTAGE	175'
MINIMUM LOT DEPTH	200'
MINIMUM LOT WIDTH	157.5'
MINIMUM YARDS	
FRONT	40'
SIDE	30'
REAR	30'
% OF LOT UPLAND COVERED BY:	
STRUCTURES	70
STRUCTURES+PAVING	80



NOTES

1. THIS LAND IS ZONED COMMERCIAL II.
2. THIS SITE IS NOT LOCATED FLOOD HAZARD ZONE PER FEMA FLOOD MAP 25021C0309E, EFFECTIVE DATE 7/17/2012.
3. REFER TO FRANKLIN ASSESSORS MAP 314 LOT 13
4. THIS SITE IS NOT LOCATED WITHIN THE GROUNDWATER PROTECTION DISTRICT.
5. ALL REFERENCED DEEDS ARE ON RECORD AT THE NORFOLK REGISTRY OF DEEDS.
6. THIS SITE IS NOT LOCATED WITHIN A NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM AREA.
7. ELEVATIONS ARE BASED ON HORIZONTAL DATUM:NAD83; VERTICAL DATUM: NAVD88.
8. TESTING INFORMATION CAN BE FOUND ON SHEET 10.

11/14/2024

11/15/2024

F4667

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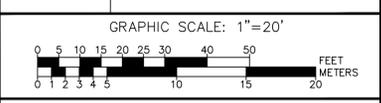
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346 WASHINGTON ST
STOUGHTON, MA 02072

SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION STREET
FRANKLIN
MASSACHUSETTS

EXISTING
CONDITIONS

NOVEMBER 12, 2024

DATE	REVISION	DESCRIPTION



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LEGEND

☐	CATCH BASIN	☆	LIGHT POLE
⊙	DRAIN MANHOLE	⊙	UTILITY POLE
⊙	ELECTRIC MANHOLE	•	GUY WIRE
⊙	SEWER MANHOLE	—	SIGN
○	MANHOLE	•	WETFLAG
⊙	GAS VALVE	⊙	UTILITY POLE
⊙	GAS SHUT OFF VALVE	☆	PROP. STREET LIGHTING
⊙	WATER VALVE		
⊙	WATER SHUT OFF VALVE	x 000.0	SPOT ELEVATION
⊙	FIRE HYDRANT	▨	RIPRAP
— 000 —	EXISTING CONTOUR		
— D —	EXISTING DRAIN LINE		
— W —	EXISTING WATER LINE		

N/F MILFORD WHITINVILLE
REGIONAL HOSPITAL
DEED BK 13509 PG 66

EXISTING SEWER MANHOLE AND
6" PVC PIPE TO BE REMOVED
SEE UTILITY PLAN FOR NEW LOCATION

MATERIAL
STOCK PILE

EROSION
CONTROL

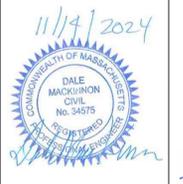
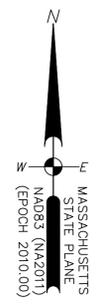
LOT "H"
AREA=57,801±SF
(1.33±AC)

UNION PUBLIC VARIABLE WIDTH STREET

UNION HOMES CONDO ASSOC.
N/F
758 UNION STREET
AMBER CADORETTE
BK.11047 PG 195
760 UNION STREET
RAJESH NAMILE
BK 29286 PG 262

UNION HOMES CONDO ASSOCIATION
N/F
764 UNION STREET
MOURA RONILDA DORNELES
DEED BK 35513 PG 261
762 UNION STREET
DAVID AND KINBERLY
VANLOAN
BK 11047 PG166

INTERSTATE ROUTE 495
(STATE HIGHWAY LAYOUT - 1965)
LAYOUT NO. 5495



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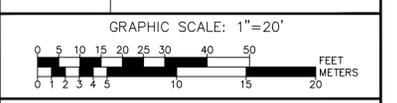
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BUSINESS INCUBATOR
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759 UNION STREET
FRANKLIN
MASSACHUSETTS

EROSION CONTROL

NOVEMBER 12, 2024
DATE REVISION DESCRIPTION

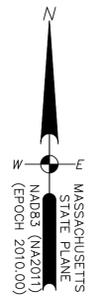


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NOTE:
SEE EROSION CONTROL NOTES AND DETAILS ON SHEET 9

LEGEND			
⊞	CATCH BASIN	☆	LIGHT POLE
⊙	DRAIN MANHOLE	⊕	UTILITY POLE
⊖	ELECTRIC MANHOLE	•	GUY WIRE
⊗	SEWER MANHOLE	—	SIGN
○	MANHOLE	—	WETFLAG
⊕	GAS VALVE	⊕	UTILITY POLE
⊕	GAS SHUT OFF VALVE	☆	PROP. STREET LIGHTING
⊕	WATER VALVE		
⊕	WATER SHUT OFF VALVE	x 000.0	SPOT ELEVATION
⊕	FIRE HYDRANT	⊞	RIPRAP
— 000 —	EXISTING CONTOUR		
— D —	EXISTING DRAIN LINE		
— W —	EXISTING WATER LINE		

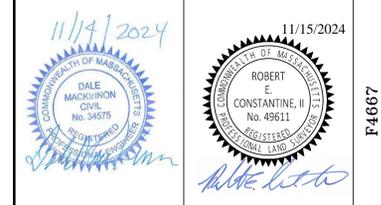
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COMMERCIAL II
FRANKLIN ZONING BYLAW SECTION 185
ATTACHMENT 9; LAST AMENDED
09-06-2023 BY AMENDMENT 23-898

	REQUIRED	PROPOSED
MINIMUM LOT AREA	40,000 SF	57,801 SF
MINIMUM LOT FRONTAGE	175'	360.82'
MINIMUM LOT DEPTH	200'	235'
MINIMUM LOT WIDTH	157.5'	342'
MINIMUM YARDS		
FRONT	40'	41.8'
SIDE	30'	40.0'
REAR	30'	N/A*
% OF LOT UPLAND COVERED BY:		
STRUCTURES	70	26.1%
STRUCTURES+PAVING	80	71.3%

* TREATED AS CORNER LOT



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PARKING REQUIREMENTS
FRANKLIN ZONING BYLAW SECTION 185-21
PARKING, LOADING AND DRIVEWAY REQUIREMENTS

SECTION B(3)(B)iii
OTHER OFFICES AND BANKS:
1 SPACE PER 250 SF
1 OFFICE @ 10% BAY = 1 PARKING SPACE PER BAY
TOTAL OF 8 PARKING SPACES REQUIRED FOR OFFICE

WAREHOUSE 1 SPACE PER 1000SF.
EACH BAY @ 90% = 2 PARKING SPACES
TOTAL OF 16 PARKING SPACES REQUIRED FOR WAREHOUSE

TOTAL SITE PARKING REQUIRED = 24 SPACES
TOTAL PARKING PROVIDED = 31 PARKING SPACES.

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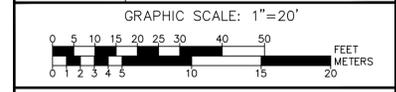
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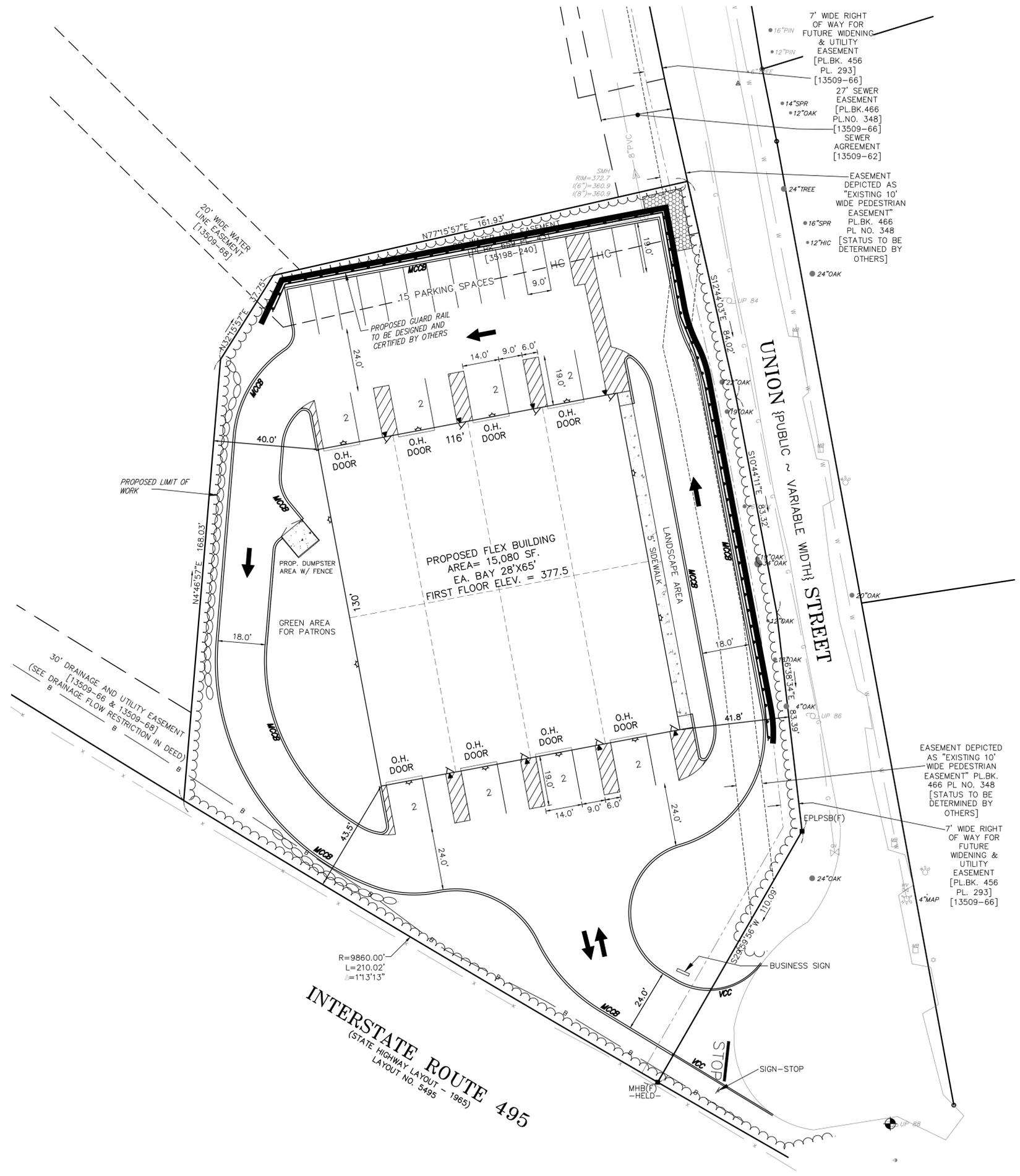
PROPOSED SITE LAYOUT

NOVEMBER 12, 2024

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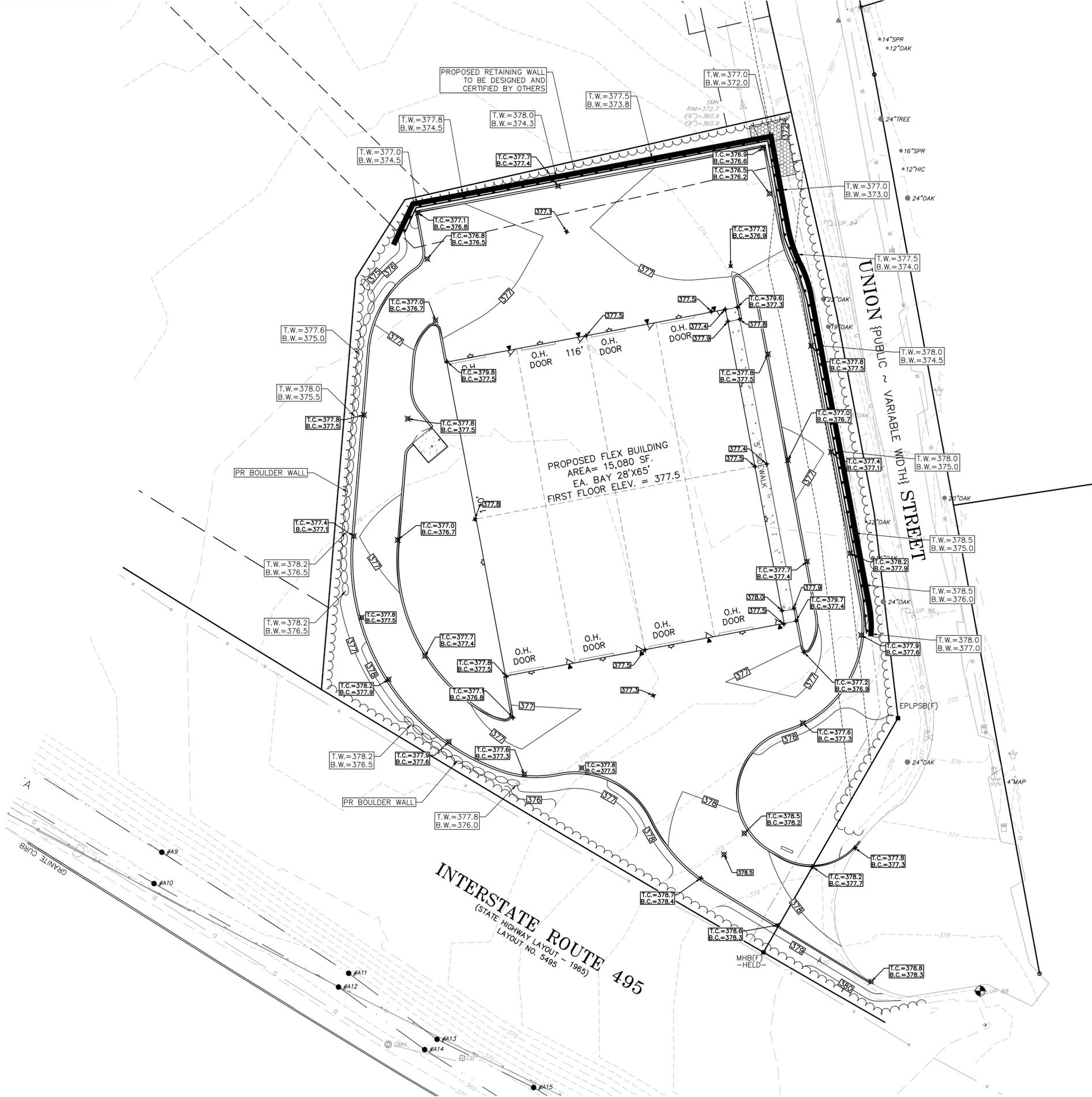
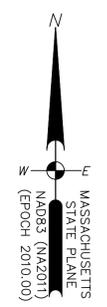


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LEGEND

⊠	CATCH BASIN	☆	LIGHT POLE
⊙	DRAIN MANHOLE	⊕	UTILITY POLE
⊖	ELECTRIC MANHOLE	•	GUY WIRE
⊗	SEWER MANHOLE	⊖	SIGN
○	MANHOLE	⊕	UTILITY POLE
⊗	GAS VALVE	☆	PROP. STREET LIGHTING
⊗	GAS SHUT OFF VALVE	MCCB	MODIFIED CAPE COD BERM
⊗	WATER VALVE	VCC	VERTICAL CONCRETE CURB
⊗	WATER SHUT OFF VALVE	x 000.0	SPOT ELEVATION
⊗	FIRE HYDRANT	⊗	RIPRAP
— 000 —	EXISTING CONTOUR		
— D —	EXISTING DRAIN LINE		
— W —	EXISTING WATER LINE		



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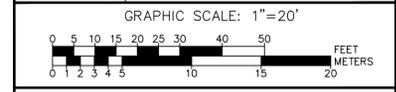
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GRADING PLAN

NOVEMBER 12, 2024

DATE	REVISION	DESCRIPTION



LEGEND

	CATCH BASIN		LIGHT POLE
	DRAIN MANHOLE		UTILITY POLE
	ELECTRIC MANHOLE		GUY WIRE
	SEWER MANHOLE		SIGN
	MANHOLE		WETFLAG
	GAS VALVE		UTILITY POLE
	GAS SHUT OFF VALVE		PROP. STREET LIGHTING
	WATER VALVE		TOP OF WALL
	WATER SHUT OFF VALVE		BTM OF WALL
	FIRE HYDRANT		SPOT ELEVATION
			RIPRAP
	EXISTING CONTOUR		
	EXISTING DRAIN LINE		
	EXISTING WATER LINE		

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PROPOSED CULTREC CHAMBER INFILTRATION SYSTEM #1
 112 CULTREC RECHARGER 300HD CHAMBERS
 MIN. REQUIRED COVER = 375.23
 TOP STONE = 373.90
 TOP CHAMBER = 373.40
 BOT. CHAMBER = 370.90
 BOT. STONE = 370.40
 G.W. ELEV = NONE OBSERVED @ 363.1 (TP #4)

PROPOSED CULTREC CHAMBER DETENTION SYSTEM #2
 66 CULTREC RECHARGER 300HD CHAMBERS
 MIN. REQUIRED COVER = 377.00
 TOP STONE = 375.66
 TOP CHAMBER = 375.16
 BOT. CHAMBER = 372.66
 BOT. STONE = 372.16
 G.W. ELEV = REDOX @ 373.00 (TP #11)
 BOTTOM AND SIDES OF EXCAVATION TO BE LINED WITH 30-MIL IMPERVIOUS BARRIER
 TOP OF IMPERVIOUS BARRIER ELEVATION = 374.00

STORM DRAINAGE NOTES

- ALL DRAINAGE PIPES TO BE 12" RCP UNLESS OTHERWISE NOTED. WHERE LESS THAN 3.5' OF COVER IS PROVIDED, CLASS V RCP SHALL BE USED.
- BOTH CULTREC RECHARGER 300HD CHAMBER SYSTEMS SHALL PROVIDE A MINIMUM OF 24" SURROUNDING STONE (SIDE AND ENDS).
- FILL MATERIAL BENEATH THE PROPOSED CULTREC CHAMBER SYSTEMS SHALL BE REMOVED TO THE DEPTH OF THE NATURALLY OCCURRING LOAMY SAND MATERIAL IDENTIFIED IN THE TEST PIT SOIL LOGS, AND THE SYSTEM BROUGHT TO GRADE WITH SAND, CRUSHED STONE, OR OTHER ACCEPTABLE MATERIAL, AS DETERMINED BY THE DESIGN ENGINEER AND THE TOWN OF FRANKLIN.

SPECIAL CONSIDERATION FOR INLET CONTROLS FOR EROSION COLLECTION BEFORE ENTERING DRAINAGE SYSTEM:

- INSTALL SILT SACKS.
- BARRIER AROUND CATCH BASIN, COMPOST SOCK OR EQUAL.
- INSTALL FILTER FABRIC ON ALL DRAIN MANHOLE OUTLETS DISCHARGING TO INFILTRATION SYSTEM.
- INSPECTIONS BEFORE AND AFTER STORM EVENTS ARE REQUIRED TO INSURE ADEQUACY OF EROSION CONTROL MEASURES.
- CONTRACTOR & ARCHITECT ARE TO VERIFY SITE UTILITIES PRIOR TO DESIGN & CONSTRUCTION.
- ALL PIPE GASKETS SHALL BE PRE-MOLDED NEOPRENE O-RING TYPE (300-11 B.(2)(A)).

SITE DRAINAGE INSTALLATIONS NOTES

- EACH SUBSURFACE CHAMBER WILL BE INSTALLED SEPARATELY TO DESIGN ELEVATION.
- INSTALL CONNECTIONS TO CATCH BASINS AND DRAIN MANHOLES.
- EXCAVATE AND INSTALL SUBSURFACE UNIT, BACKFILL W/ STONE MAINTAINING 18"-24" COVER AND AS-BUILT EACH SECTION.

UTILITY NOTES

ALL UTILITIES SHALL BE CONSTRUCTED AND TESTED ACCORDING TO STATE AND LOCAL REGULATIONS.

ALL WATER AND UTILITIES TO COMPLY WITH THE TOWN OF FRANKLIN DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS. WHERE CONFLICTS EXIST, THE TOWN'S SPECIFICATIONS SHALL CONTROL.

ALL UTILITY WORK WITHIN THE STREET OR SIDEWALK MUST UTILIZE FLOWABLE FILL TO THE SATISFACTION OF THE FRANKLIN DEPARTMENT OF PUBLIC WORKS.

THE PROPOSED ELECTRIC AND TELECOM UTILITY CONNECTIONS WILL BE INSTALLED FROM THE EXISTING UTILITY POLE TO THE BUILDING. ALL WORK SHALL BE COORDINATED WITH THE CORRESPONDING UTILITY PROVIDERS.

ALL UTILITIES SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE SHOWN ON THIS PLAN.

11/14/2024

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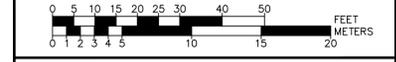
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UTILITY PLAN

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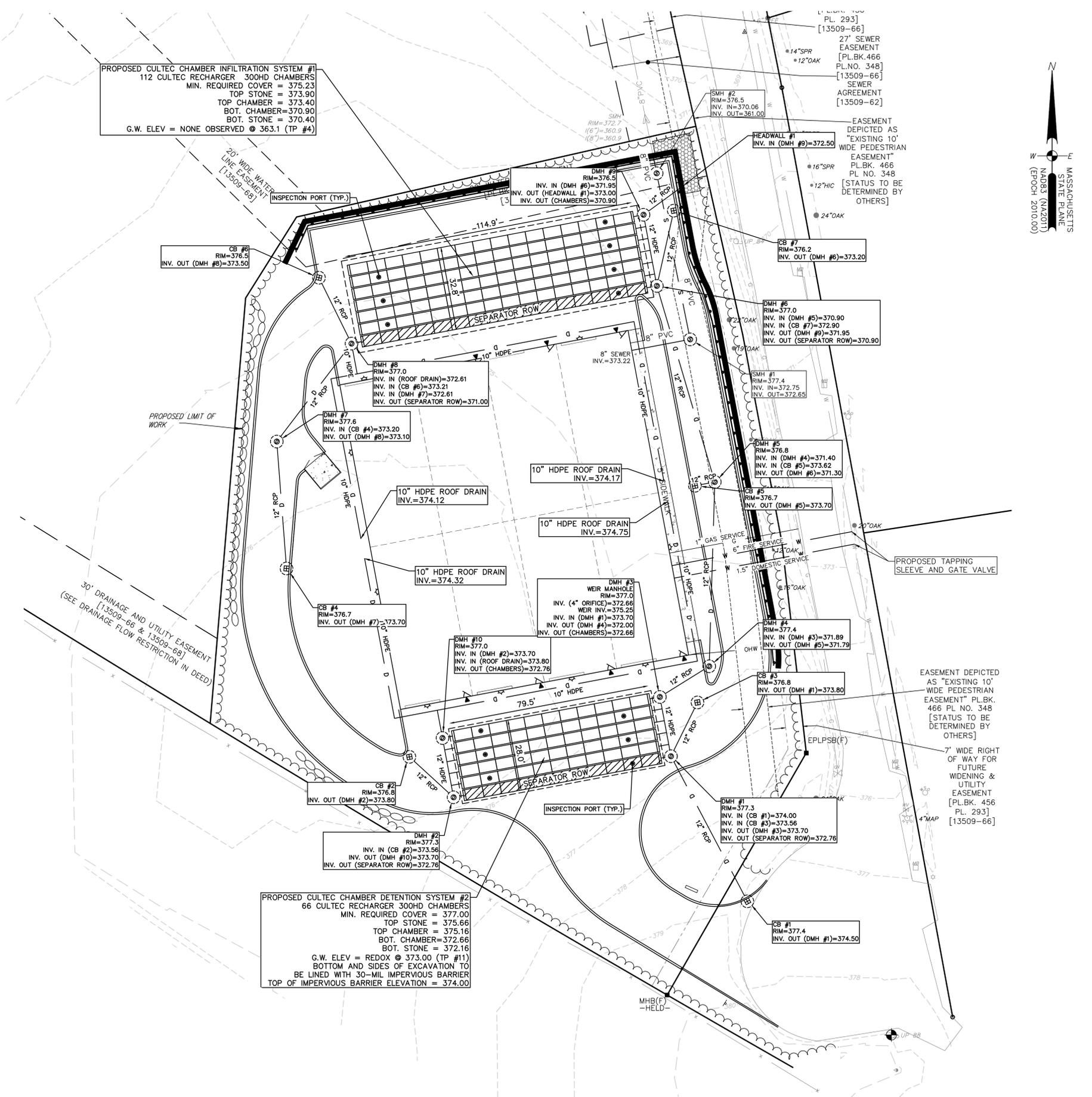
DATE	REVISION	DESCRIPTION

GRAPHIC SCALE: 1"=20'



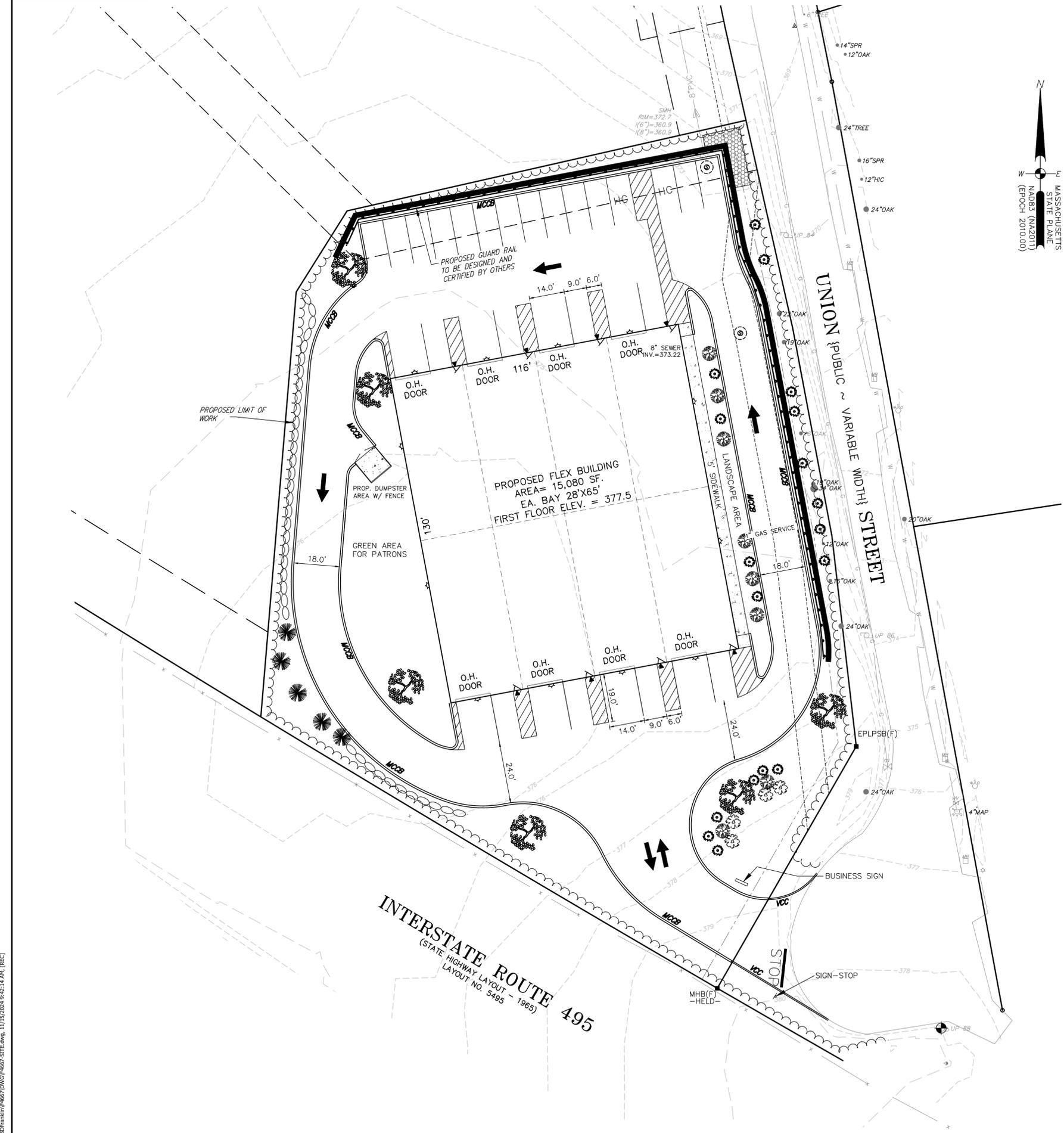
Guerriere & Halon, Inc.
 ENGINEERING & LAND SURVEYING
 55 WEST CENTRAL ST. PH. (508) 528-3221
 FRANKLIN, MA 02038 FX. (508) 528-7921
 www.gandhengineering.com

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LEGEND

	CATCH BASIN		LIGHT POLE
	DRAIN MANHOLE		UTILITY POLE
	ELECTRIC MANHOLE		GUY WIRE
	SEWER MANHOLE		SIGN
	MANHOLE		WETFLAG
	GAS VALVE		UTILITY POLE
	GAS SHUT OFF VALVE		PROP. STREET LIGHTING
	WATER VALVE		SPOT ELEVATION
	WATER SHUT OFF VALVE		RIPRAP
	FIRE HYDRANT		
	EXISTING CONTOUR		
	EXISTING DRAIN LINE		
	EXISTING WATER LINE		



PLANTING LEGEND			
SYMBOL	NAME	SIZE	QUANTITY
	RED MAPLE ACER RUBRUM	5' MIN. 2.5" CAL.	6
	NORWAY SPRUCE PICEA ABIES	6' HIGH MIN.	5
	EARLY AZALEA R. ROSEUM	3 GAL.	4
	CREeping JUNIPER JUNIPERUS HORIZONTALIS	3 GAL.	18
	DWARF MUGO PINE PINUS MUGO VAR. PUMILIO	3' GAL.	8

- NOTES**
1. THE CONTRACTOR SHALL VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
 2. PLANT MATERIALS SHALL CONFORM TO THE GUIDELINES BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
 3. ALL PLANTING SHALL BE PLACED ACCORDING TO THE APPROVED LANDSCAPING PLAN.
 4. AFTER PLANTING 4" OF MULCH SHALL BE PLACED WITHIN THE DESIGNATED AREAS.
 5. ALL PLANT MATERIAL SHALL INCLUDE A 1 YEAR GUARANTEE.
 6. THE CONTRACTOR/LANDSCAPER SHALL WATER NEWLY PLANTED MATERIAL FOR 90 DAYS.
 7. DAMAGED VEGETATION WILL BE REMOVED AND REPLACED IF NECESSARY.
 8. ALL PLANTING ARE TAKEN FROM THE TOWN OF FRANKLIN BEST DEVELOPMENT PRACTICE.

11/14/2024

11/15/2024

DALE MACKINNON
CIVIL
No. 34575

ROBERT E. CONSTANTINE, II
No. 49611

F4667

APPROVED DATE: _____

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENT MARKINGS AND OTHER OBSERVED EVIDENCE. FOR A VIEW OF THE UNDERGROUND UTILITIES AND SHOULD BE CONSIDERED APPROXIMATE. PRIOR TO ANY EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY COMPLETELY AND RELIABLY DEPICTED. CONTRACTORS OR OBSERVED PHYSICAL EVIDENCE. CONTRACTORS (IN ACCORDANCE WITH MASSACHUSETTS 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

PVG ONE, LLC
164 WASHINGTON ST
PLAINVILLE, MA. 02762

DEED BOOK 35359 PAGE 485
PLAN No. 293 OF 1998 PLAN Bk. 456
A.M. 314 LOT 13

APPLICANT

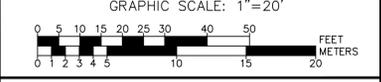
CHARBEL SAGHBINI
346 WASHINGTON ST
STOUGHTON, MA 02072

SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION STREET
FRANKLIN
MASSACHUSETTS

LANDSCAPING PLAN

NOVEMBER 12, 2024

DATE	REVISION	DESCRIPTION



LEGEND

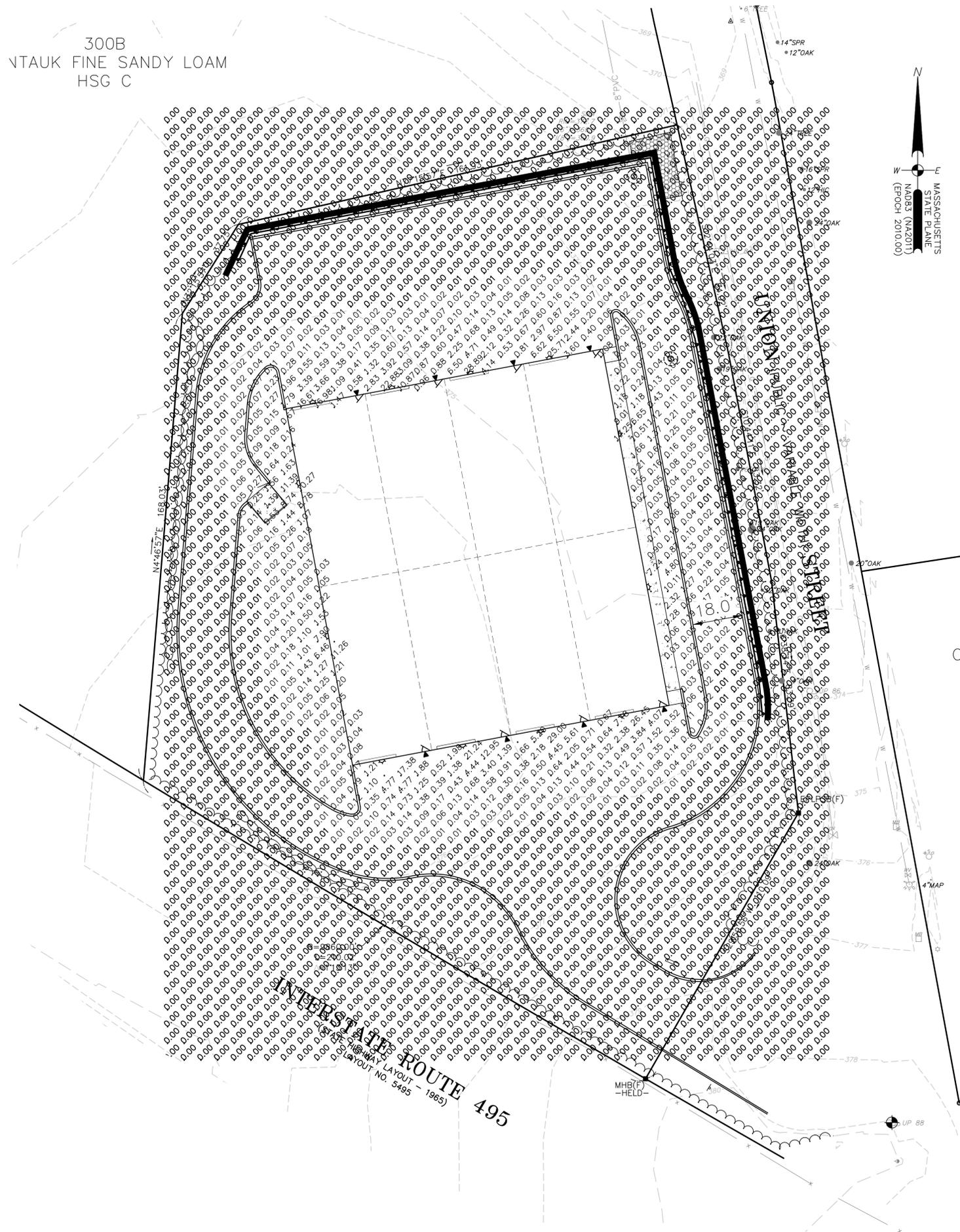
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	DRAIN MANHOLE		UTILITY POLE
	ELECTRIC MANHOLE		GUY WIRE
	SEWER MANHOLE		SIGN
	MANHOLE		WETFLAG
	GAS VALVE		UTILITY POLE
	GAS SHUT OFF VALVE		PROP. STREET LIGHTING
	WATER VALVE		SPOT ELEVATION
	WATER SHUT OFF VALVE		RIPRAP
	FIRE HYDRANT		
	EXISTING CONTOUR		
	EXISTING DRAIN LINE		
	EXISTING WATER LINE		

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300B
NTAUK FINE SANDY LOAM
HSG C



THIS PHOTOMETRIC PLAN IS BASED SOLELY UPON PROPRIETARY INFORMATION SUPPLIED BY THE LUMINAIRE MANUFACTURER AND CLIENT RECOMMENDATION.

LUMINAIRE LOCATIONS, LIGHTING PATTERNS, AND ILLUMINATION LEVELS WERE PREPARED UTILIZING INFORMATION SUPPLIED BY THE LUMINAIRE MANUFACTURER AND THE SOFTWARE PACKAGE SIMPLY OUTDOOR. ITS VALUES SHOULD BE CONSIDERED APPROXIMATE IN NATURE AND SHALL BE VERIFIED BY THE LUMIN MANUFACTURER PRIOR TO INSTALLATION.

ACTUAL PERFORMANCE OF LIGHTING PATTERNS AND/OR ILLUMINANCE VALUES MAY VARY DUE TO VARIATIONS IN LIGHT HEIGHT, ELECTRICAL VOLTAGE, LAMP WATTAGE, AND OTHER VARIABLE FIELD CONDITIONS, OR USING A LUMINAIRE OTHER THAN SPECIFICALLY NOTED HEREON.

GUERRIERE & HALNON, INC ASSUMES NO RESPONSIBILITY FOR ANY SAFETY AND/OR SECURITY RISKS DUE TO INADEQUATE LIGHT LEVELS WHICH MAY OCCUR AFTER INSTALLATION.

11/14/2024

11/15/2024

DALE MACKINNON
No. 54575

ROBERT E. CONSTANTINE, II
No. 49611

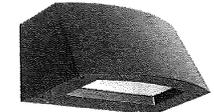
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APPROVED DATE: _____

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LITHONIA LIGHTING — OVERHEAD DOOR LIGHTING— DARK SKY COMPLIANT
ARC1 — 2,000 LUMENS— COLOR TEMPERATURE — 3000K



ARC1 LED Architectural Wall Luminaire

UL LISTED
ENERGY STAR
DLC
DLP

UNIFORM ILLUMINANCE TITLE 20

Specifications

Depth (D1): 6.5"
Depth (D2): 4.75"
Height: 5"
Width: 11"
Weight: 7 lbs (without options)

Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC1 delivers up to 3,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of ARC1, with its integrated emergency battery backup option, is ideal for over-the-door applications.

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stairways for safety and security.

CONSTRUCTION
Cast-aluminum housing with corrosion-resistant paint in either dark bronze or white finish.
ADA compliant.

OPTICS
www.r771.com

420C
CANTON FINE SANDY LOAM HSG F

420C art and other contaminants.
As initial lumens at 50,000 hour average LED life. See

MVLL driver operates on any line voltage from 120-277V
Operating temperature -30 C to 40 C.
10% surge protection standard.

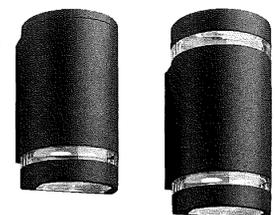
INSTALLATION
Surface mounts to universal junction box (provided by others).

LISTINGS
UL Listed to U.S. and Canadian safety standards for wet locations.
Tested in accordance with IESNA LM-79 and LM-80 standards.

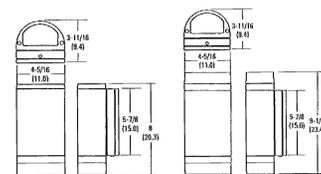
WARRANTY — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.aacilityproducts.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Outdoor General Purpose
OLLWD & OLLWU
LED WALL CYLINDER LIGHT



Specifications
All dimensions are inches (centimeters)



LITHONIA LIGHTING — PEDESTRIAN DOOR LIGHTING
DARK SKY COMPLIANT

OLLWD — DOWN LIGHTING — 2,000 LUMENS— COLOR TEMPERATURE — 4000K

LEGEND

⊞	CATCH BASIN	☆	LIGHT POLE
⊕	DRAIN MANHOLE	⊕	UTILITY POLE
⊖	ELECTRIC MANHOLE	•	GUY WIRE
⊗	SEWER MANHOLE	—	SIGN
○	MANHOLE	•	WETFLAG
⊗	GAS VALVE	⊕	UTILITY POLE
⊗	GAS SHUT OFF VALVE	☆	PROP. STREET LIGHTING
⊗	WATER VALVE		
⊗	WATER SHUT OFF VALVE	x 000.0	SPOT ELEVATION
⊗	FIRE HYDRANT		RIPRAP
— 000 —	EXISTING CONTOUR		
— D —	EXISTING DRAIN LINE		
— W —	EXISTING WATER LINE		

LEGAL NOTES

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PLAN No. 293 OF 1998 PLAN Bk. 456
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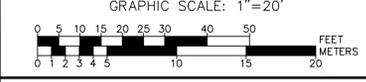
APPLICANT

CHARBEL SAGHBINI
346 WASHINGTON ST
STOUGHTON, MA 02072

SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION STREET
FRANKLIN
MASSACHUSETTS
PHOTOMETRIC
PLAN

NOVEMBER 12, 2024

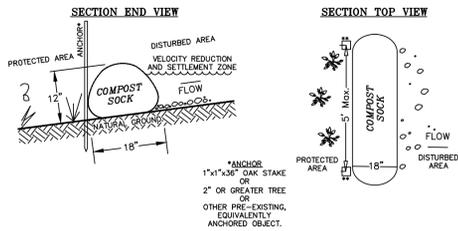
DATE	REVISION	DESCRIPTION



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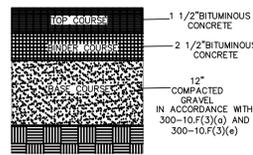
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COMPOST SOCK COMPONENTS:
 OUTSIDE CASING: 100% organic heather.
 FILLER INGREDIENT: FiberRoot Mulch™
 A blend of coarse and fine compost and shredded wood.
 Particle sizes: 100% passing a 3" screen; 90-100% passing a 1" screen; 70-100% passing a 0.75" screen; 30-75% passing a 0.25" screen.
 Weight: Approx. 850 lbs./cu.yd. (Ave. 30 lbs./ft.)

COMPOST SOCK INSTALLATION:
 With the newest technology and equipment, sections can be constructed on site in lengths from 1' to 100'.
 Sections can also be delivered to the site in lengths from 1' to 8'.
 The flexibility of COMPOST SOCK allows it to conform to any contour or terrain while holding a slightly oval shape at 12" high by 18" wide.
 Where section ends meet, there shall be an overlap of 6" or greater. Both sides shall be anchored (oak stakes, trees, etc.) to stabilize the union. No additional anchors are required on slopes less than 2:1. **Additional anchors are required at 5' intervals (max.) on the downslope or protected side on slopes greater than 2:1 to prevent movement.

COMPOST SOCK DETAIL
NOT TO SCALE



TYPICAL PAVEMENT SECTION
NOT TO SCALE

EROSION CONTROL AND DRAINAGE CONSTRUCTION PHASING

- A NPDES NOI SHALL BE FILED WITH THE EPA.
- RECORD ORDER OF CONDITIONS - THE SITE SUPERINTENDENT SHALL BE AWARE OF ALL THE CONDITIONS CONTAINED WITHIN THE ORDER INCLUDING INSPECTION SCHEDULES.
- INSTALL DEP FILE # SIGN PRIOR TO COMMENCEMENT OF WORK.
- PRIOR TO ANY WORK ON THE SITE INCLUDING TREE/BRUSH CLEARING, THE APPROVED LIMIT OF CLEARING AS WELL AS THE LOCATION OF THE PROPOSED EROSION CONTROL DEVICES (SUCH AS SILT FENCE/STRAW BALES, ETC.) MUST BE STAKED ON THE GROUND UNDER THE DIRECTION OF A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR.
- INSTALL EROSION CONTROL BARRIERS AT LOCATIONS DEPICTED ON THE PLANS.
- EROSION CONTROL TO BE INSPECTED BY EITHER THE DESIGN ENGINEER (OR AGENT) OR AN EROSION CONTROL MONITOR APPOINTED BY THE TOWN OF FRANKLIN.
- EXTRA EROSION CONTROL DEVICES (AT LEAST 10% OF THE LINEAR FOOTAGE REQUIRED FOR THE SITE) SHALL BE STORED ON THE SITE TO BE USED IN CASE OF AN EMERGENCY (LARGE STORM).
- PERFORM TREE/BRUSH REMOVAL.
- STRIP OFF TOP AND SUBSOIL. STOCKPILE MATERIAL TO BE REUSED AWAY FROM ANY DRAINAGE INLET OR PROTECTED WETLAND AREAS, REMOVE EXCESS MATERIAL FROM THE SITE. INSTALL AND MAINTAIN EROSION CONTROL BARRIER AROUND STOCKPILE.
- ROUGH GRADE SITE, MAINTAINING TEMPORARY LOW AREAS/SEDIMENT TRAPS FOR SEDIMENT ACCUMULATION AND AWAY FROM THE WETLANDS AND PREVENT SEDIMENTATION FROM MIGRATING FROM THE SITE.
- CONSTRUCT STORMWATER CHEDMENT SYSTEMS. INSTALL PIPES, MANHOLES AND CATCH BASINS. STABILIZE SIDE SLOPES WITH LOAM, SEED AND MULCH.
- INSTALL UNDERGROUND UTILITIES; PROTECT ALL OPEN DRAINAGE STRUCTURES WITH EROSION/SILTATION CONTROL DEVICES, AND ROPE OFF ANY AREAS SUSCEPTIBLE TO HEAVY VEHICLE DAMAGE.
- PREPARE COMPACTED PAVEMENT BASE.
- LOAM AND SEED (MULCH AS REQUIRED) DISTURBED AREAS OF SITE OTHER THAN IMMEDIATELY ADJACENT TO WORK AREA.
- UPON ALL CATCHMENT STRUCTURES AND MITIGATION FEATURES BECOMING OPERATIONAL, INSTALL PAVEMENT UP TO BINDER FINISH GRADE. STRAW BALES BACKED BY CRUSHED STONE TO BE PROVIDED ON DOWN GRADIENT SIDE OF CATCH BASINS TO DIRECT WATER TO TEMPORARY BASIN.
- INSTALL CURBING AND CATCH BASIN CURB INLETS.
- INSTALL FINAL PAVEMENT WEARING COURSE.
- FINISH GRADE - LOAM AND SEED (MULCH AS REQUIRED ADJACENT TO PARKING LOT).
- MAINTAIN ALL EROSION CONTROL DEVICES UNTIL SITE IS STABILIZED AND FINAL INSPECTIONS ARE PERFORMED.

GENERAL NOTES:

- SPECIAL CONSIDERATION FOR INLET CONTROLS FOR EROSION COLLECTION BEFORE ENTERING DRAINAGE SYSTEM.
- INSTALL SILT SACKS IN ALL EXISTING CATCH BASINS WITHIN THE AREA OF WORK.
- INSTALL BARRIER AROUND CATCH BASIN, COMPOST SOCK OR EQUAL.
- INSTALL FILTER FABRIC ON ALL DRAIN MANHOLE OUTLETS DISCHARGING TO INFILTRATION SYSTEM.
- INSPECTIONS BEFORE AND AFTER STORM EVENTS ARE REQUIRED TO INSURE ADEQUACY OF EROSION CONTROL MEASURES.
- STOCK PILE AREA TO BE CONTAINED USING EROSION CONTROL DEVICES
- DIRT BAG SHALL BE USED TO PERIODICALLY CLEAN THE TEMPORARY SEDIMENTATION BASINS DURING CONSTRUCTION.
- A CONSTRUCTION FENCE SHALL BE PLACED AROUND THE PERIMETER OF THE SITE.

DEBRIS NOTE:

- PRIOR TO ANY WORK COMMENCING THE PROPERTY, THE OWNER WILL 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 24 HOURS AFTER FIRST WRITTEN NOTIFICATION TO THE OWNER/APPLICANT BY THE BOARD OR ITS DESIGNEE.



F4667

APPROVED DATE:

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

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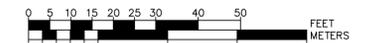
**SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION ST.
FRANKLIN
MASSACHUSETTS**

CONSTRUCTION DETAILS

NOVEMBER 12, 2024

DATE REVISION DESCRIPTION

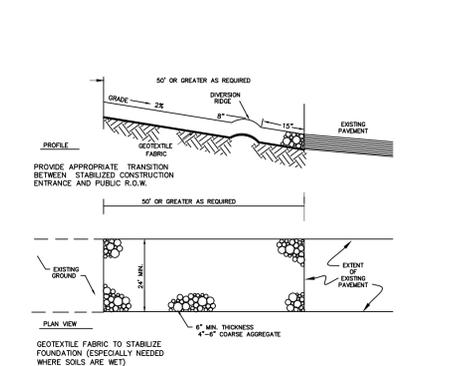
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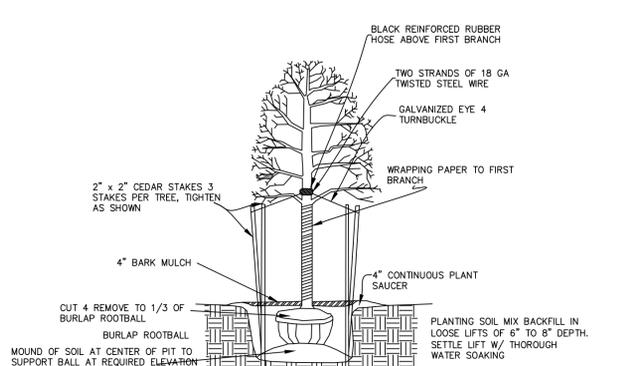
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SHEET 9 OF 11

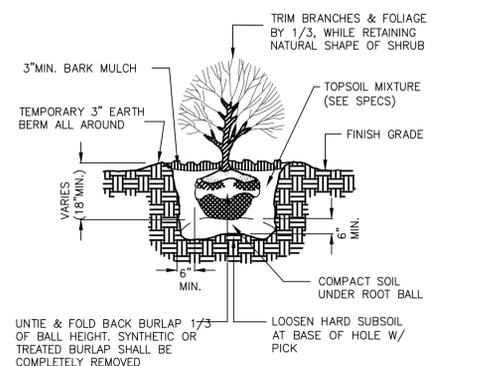
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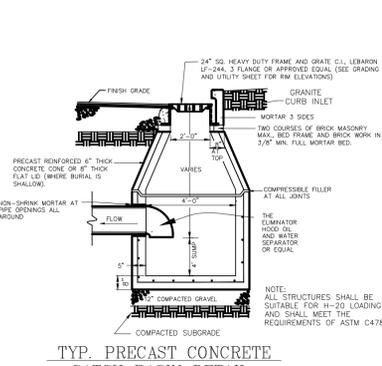
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



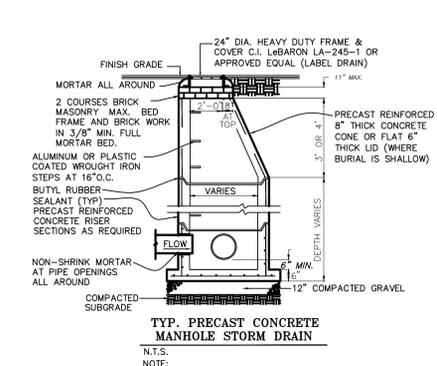
TREE DETAIL
N.T.S.



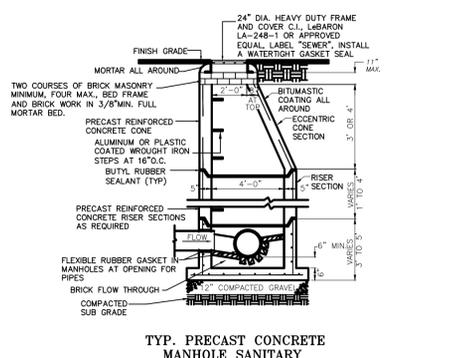
SHRUB PLANTING DETAIL
N.T.S.



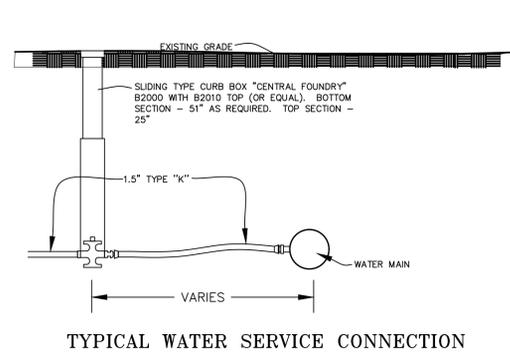
TYP. PRECAST CONCRETE CATCH BASIN DETAIL



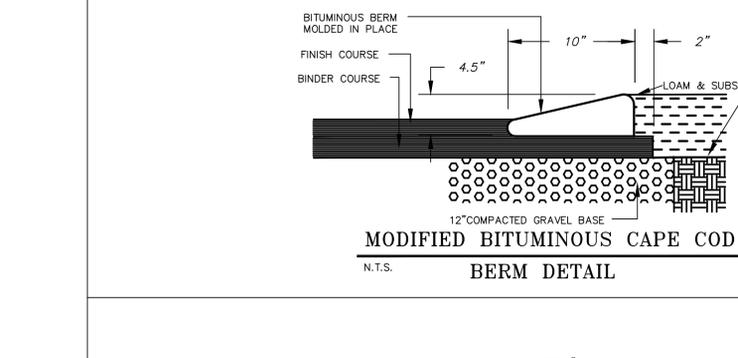
TYP. PRECAST CONCRETE MANHOLE STORM DRAIN



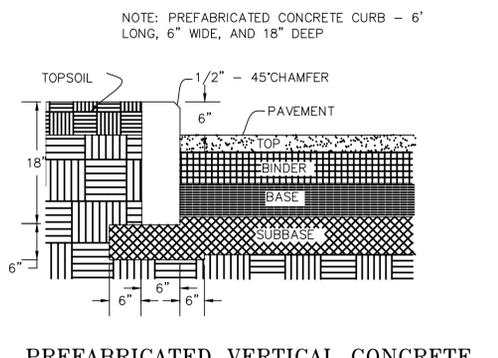
TYP. PRECAST CONCRETE MANHOLE SANITARY



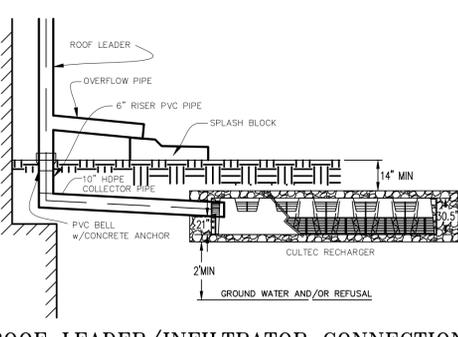
TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE



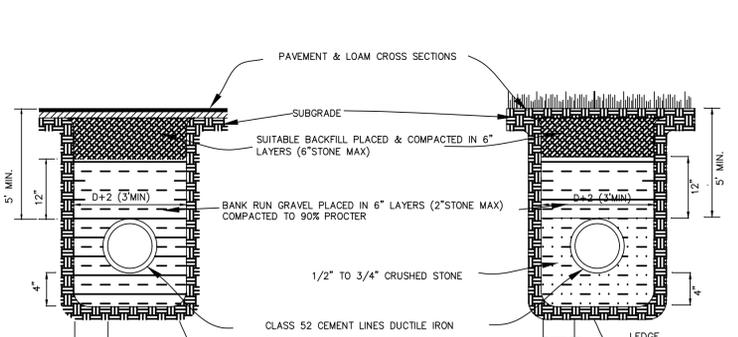
MODIFIED BITUMINOUS CAPE COD BERM DETAIL
N.T.S.



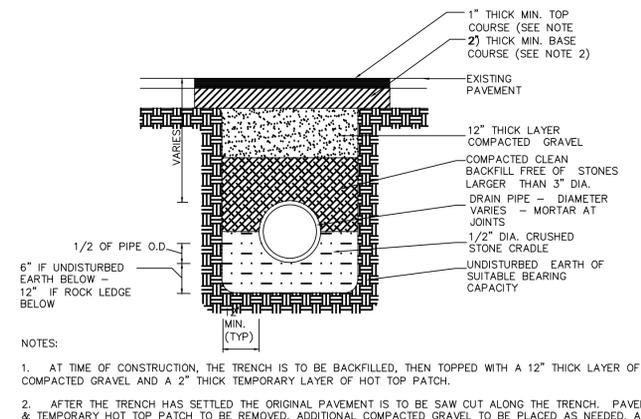
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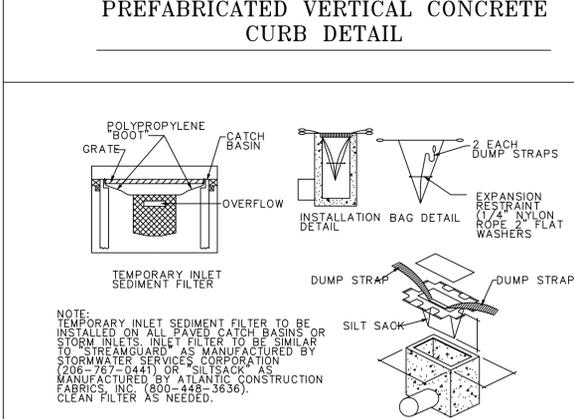
ROOF LEADER/INFILTRATOR CONNECTION
N.T.S.



TYPICAL TRENCH SECTION FOR D.I. WATER MAIN (TYPE 5 BEDDING AWWAC-600)

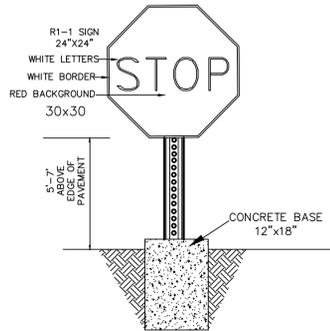


TYPICAL TRENCH SECTION FOR REINFORCED CONCRETE PIPE
NOT TO SCALE

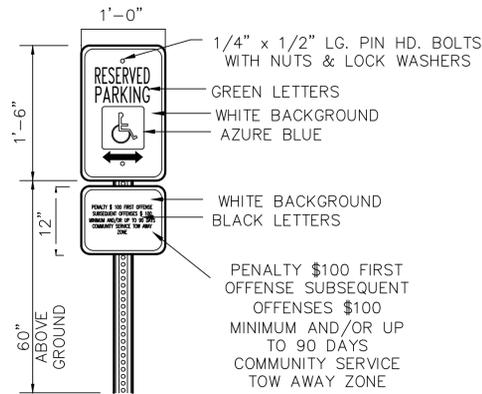


SILT SACK DETAIL
NO SCALE

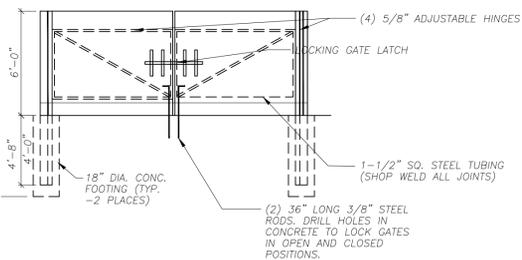
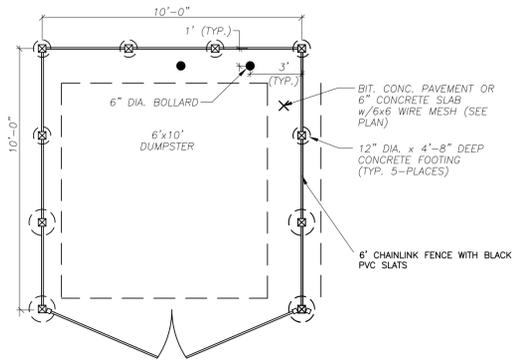
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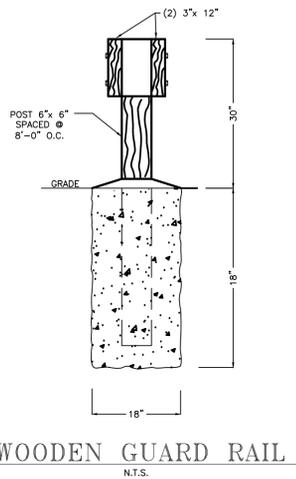
STOP SIGN DETAIL



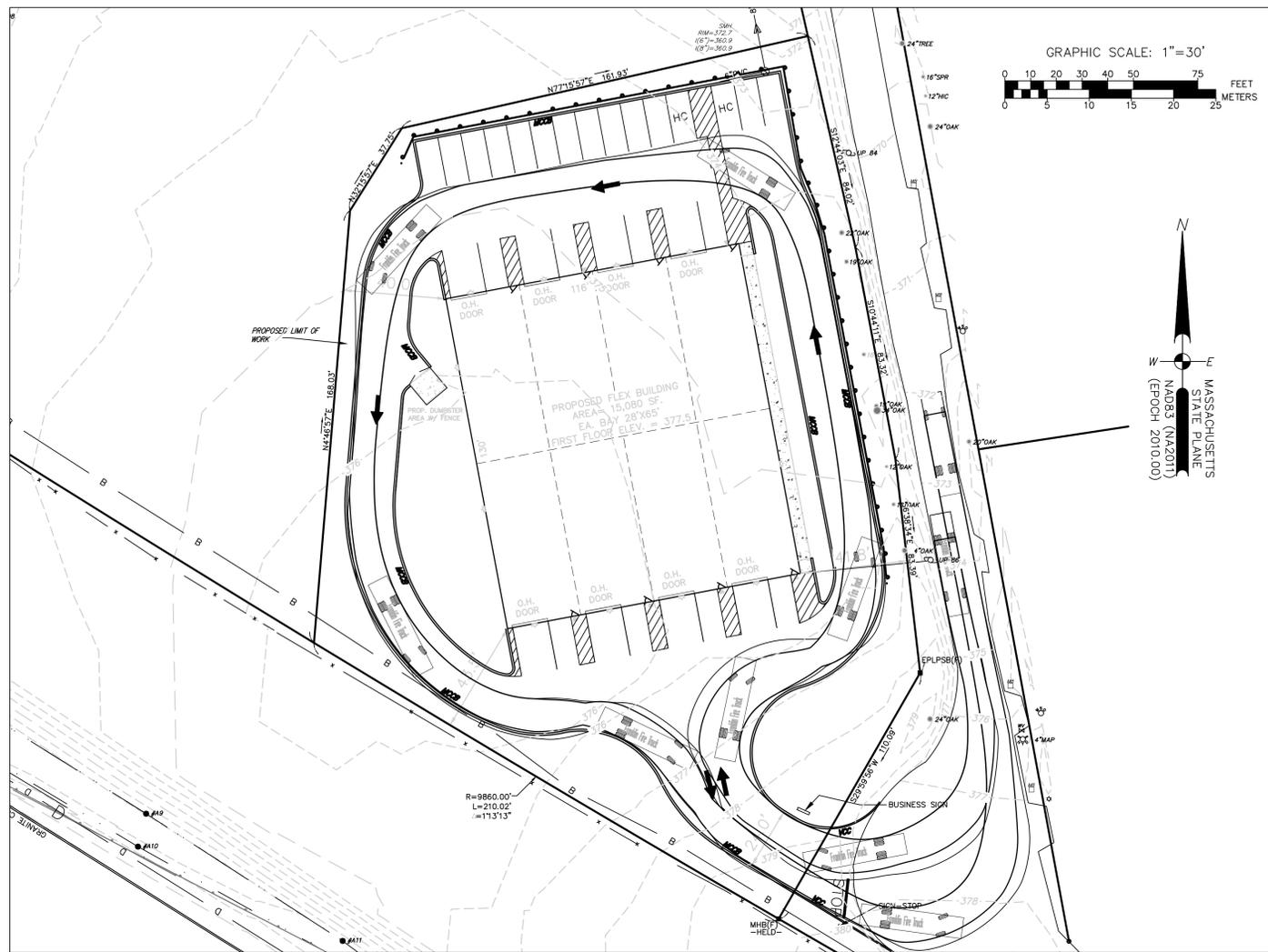
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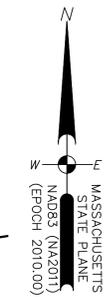
DUMPSTER ENCLOSURE
NOT TO SCALE



WOODEN GUARD RAIL
N.T.S.



TRUCK TURNING MOVEMENT EXHIBIT



APPROVED DATE: _____
FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENT MARKINGS AND OTHER OBSERVED EVIDENCE. FOR A VIEW OF THE UNDERGROUND UTILITIES, A VIEW SHOULD BE CONSIDERED APPROXIMATE. PRIOR TO ANY EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE KNOWN COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE, MAY BE OBSERVED BY CONTRACTORS (IN ACCORDANCE WITH MASS. GEN. LAWS, 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

PVG ONE, LLC
164 WASHINGTON ST
PLAINVILLE, MA. 02762
DEED BOOK 35359 PAGE 485
PLAN No. 293 OF 1998 PLAN Bk. 456
A.M. 314 LOT 13

APPLICANT

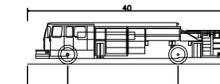
CHARBEL SAGHBINI
346 WASHINGTON ST
STOUGHTON, MA 02072

SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION ST.
FRANKLIN
MASSACHUSETTS

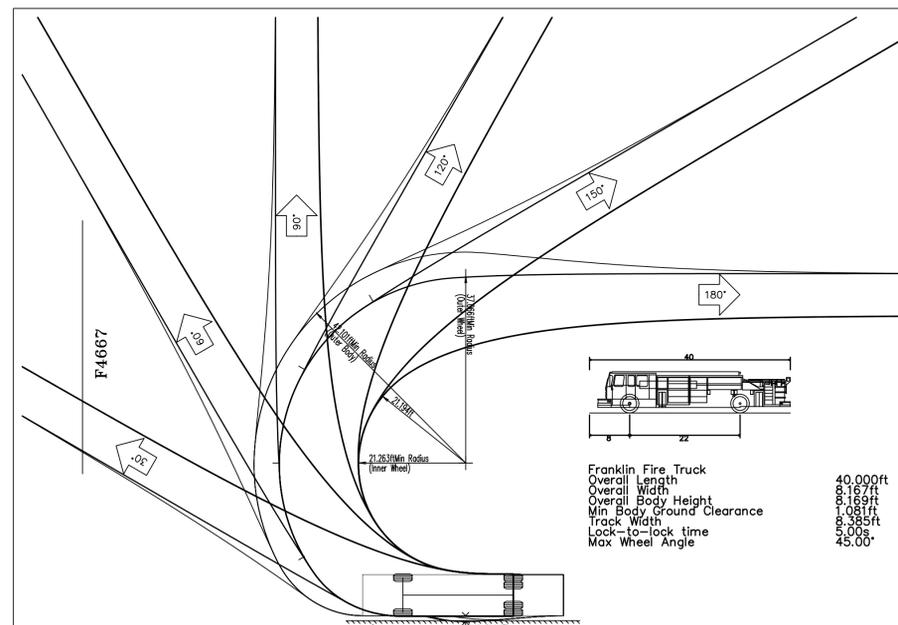
CONSTRUCTION DETAILS

NOVEMBER 12, 2024

DATE	REVISION DESCRIPTION



Franklin Fire Truck
Overall Length 40
Overall Width 8
Overall Body Height 8.167ft
Min Body Ground Clearance 1.081ft
Track Width 8.385ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°



Vehicle Tracking V22.01.35(20220823) (c) Autodesk, Inc. www.Autodesk.com
Notes:
Turn(s) based upon a design speed of 5.00mph.

Franklin Fire Truck

TESTING INFORMATION

TESTING DATE: JUNE 20, 2024 SOIL EVALUATOR: BRIAN HASSETT

TP 1 (115)	TP 2 (114)	TP 3 (113)	TP 4 (112)	TP 5 (111)	TP 6 (110)
375.2 SANDY LOAM A 6"	374.6 SANDY LOAM A 6"	374.5 SANDY LOAM A 6"	374.6 SANDY LOAM A 6"	374.7 SANDY LOAM A 6"	375.0 SANDY LOAM A 6"
374.7 LOAMY SAND B 6-24"	374.1 LOAMY SAND B 6-28"	374.0 LOAMY SAND B 6-26"	374.1 LOAMY SAND B 6-24"	374.2 LOAMY SAND B 6-24"	374.5 LOAMY SAND B 6-24"
373.2 LOAMY SAND C 24-96"	372.27 LOAMY SAND C 28-96"	372.33 LOAMY SAND C 26-108"	372.6 LOAMY SAND C 24-120"	372.7 LOAMY SAND C 24-96"	373.0 LOAMY SAND C 24-96"
367.2 REDOX @ 36"	366.6 NO REDOX	365.50 NO REDOX	364.6 NO REDOX	366.7 NO REDOX	367.0 NO REDOX
TP 7 (200)	TP 8 (201)	TP 9 (202)	TP 10 (118)	TP 11 (117)	TP 12 (116)
375.7 SANDY LOAM A 6"	376.0 SANDY LOAM A 6"	376.3 SANDY LOAM A 6"	376.0 SANDY LOAM A 6"	376.1 SANDY LOAM A 6"	376.0 SANDY LOAM A 6"
374.2 LOAMY SAND B 6-24"	375.5 LOAMY SAND B 6-24"	375.8 LOAMY SAND B 6-24"	375.5 LOAMY SAND B 6-24"	375.6 LOAMY SAND B 6-28"	375.5 LOAMY SAND B 6-28"
372.7 LOAMY SAND C 24-96"	374.0 LOAMY SAND C 24-108"	374.3 LOAMY SAND C 24-108"	374.0 LOAMY SAND C 24-108"	373.77 LOAMY SAND C 28-108"	373.67 LOAMY SAND C 28-96"
366.7 WEPPING @ 75" REDOX @ 36"	367.0 REDOX @ 36"	367.3 REDOX @ 42"	367.0 REDOX @ 40"	367.1 REDOX @ 36"	368.0 REDOX @ 40"

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

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CULTEC RECHARGER® 300HD SPECIFICATIONS
GENERAL
 CULTEC RECHARGER® 300HD CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

CHAMBER PARAMETERS
 1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, OF BROOKFIELD, CT (CULTEC.COM; 203-775-4416).
 2. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 A. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
 B. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
 C. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD

3. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 4. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 A. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F2418
 B. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
 C. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

5. THE INSTALLED CHAMBER SYSTEM SHALL BE STRUCTURALLY DESIGNED TO PROVIDE RESISTANCE TO LIVE LOADS AS DEFINED BY THE AASHTO H-20/HL-93 SPECIFICATION WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
 6. THE CHAMBER SHALL BE INJECTION MOLDED OF BLUE VIRGIN IMPACT-MODIFIED POLYPROPYLENE.
 7. THE CHAMBER SHALL BE ARCHED IN SHAPE.
 8. THE CHAMBER SHALL BE OPEN-BOTTOMED.
 9. THE CHAMBER SHALL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.

10. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC RECHARGER® 300HD SHALL BE 30 INCHES (762 MM) TALL, 51 INCHES (1295 MM) WIDE AND 90.5 INCHES (2299 MM) LONG. THE INSTALLED LENGTH OF A JOINED RECHARGER® 300HD SHALL BE 7.08 FEET (2.159 M).
 11. MULTIPLE CHAMBERS MAY BE CONNECTED TO FORM DIFFERENT LENGTH ROWS. EACH ROW SHALL BEGIN AND END WITH A SEPARATELY FORMED CULTEC RECHARGER® 300HD END CAP. MAXIMUM INLET OPENING ON THE END CAP IS 24 INCHES (600 MM) HDPE.

12. THE CHAMBER SHALL HAVE TWO SIDE PORTALS TO ACCEPT CULTEC HVLV™ FC-24 FEED CONNECTORS TO CREATE AN INTERNAL MANIFOLD. MAXIMUM ALLOWABLE PIPE SIZE IN THE SIDE PORTAL IS 10 INCHES (250 MM) HDPE AND 12 INCHES (300 MM) PVC.
 13. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV™ FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 24.2 INCHES (615 MM) LONG.

14. THE NOMINAL STORAGE VOLUME OF THE RECHARGER® 300HD CHAMBER SHALL BE 6.53 FT³ / FT (607 M³ / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF A JOINED RECHARGER® 300HD SHALL BE 46.27 FT³ / UNIT (1,310 M³ / UNIT) - WITHOUT STONE.
 15. THE RECHARGER 300HD CHAMBER SHALL HAVE 14 CORRUGATIONS.
 16. THE CHAMBER SHALL BE CAPABLE OF ACCEPTING A 6 INCH (150 MM) INSPECTION PORT OPENING AT THE TOP CENTER OF EACH CHAMBER, CENTERED ON THE CORRUGATION CREST.

17. THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES.
 18. MAXIMUM ALLOWABLE COVER OVER THE TOP OF THE CHAMBER SHALL BE 12.0 FEET (3.66 M).

END CAP PARAMETERS
 1. THE CULTEC RECHARGER® 300HD END CAP (REFERRED TO AS 'END CAP') SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, OF BROOKFIELD, CT (CULTEC.COM; 203-775-4416).
 2. THE END CAP SHALL BE INJECTION MOLDED OF BLUE VIRGIN IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
 3. THE END CAP SHALL BE ARCHED IN SHAPE.
 4. THE END CAP SHALL BE JOINED AT THE BEGINNING AND END OF EACH ROW OF CHAMBERS USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIBS, HAVING NO SEPARATE COUPLINGS.
 5. THE NOMINAL DIMENSIONS OF THE END CAP SHALL BE 29.3 INCHES (744 MM) TALL, 45.9 INCHES (1166 MM) WIDE AND 12.2 INCHES (310 MM) LONG. WHEN JOINED WITH A RECHARGER 300HD CHAMBER, THE INSTALLED LENGTH OF THE END CAP SHALL BE 9.6 INCHES (244 MM). THE NOMINAL STORAGE VOLUME OF THE END CAP SHALL BE 3.32 FT³ / FT (0.31 M³ / M) - WITHOUT STONE. THE NOMINAL STORAGE VOLUME OF AN INTERLOCKED END CAP SHALL BE 2.66 FT³ / UNIT (0.08 M³ / UNIT) - WITHOUT STONE.
 6. MAXIMUM INLET OPENING ON THE END CAP IS 24 INCHES (600 MM) HDPE.
 7. THE CHAMBER SHALL BE MANUFACTURED IN A FACILITY EMPLOYING CULTEC'S QUALITY CONTROL AND ASSURANCE PROCEDURES.
 8. THE END CAP SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12.

CULTEC HVLV FC-24 FEED CONNECTOR PRODUCT SPECIFICATIONS
GENERAL
 CULTEC HVLV FC-24 FEED CONNECTORS ARE DESIGNED TO CREATE AN INTERNAL MANIFOLD FOR CULTEC RECHARGER MODEL 300HD STORMWATER CHAMBERS.

CHAMBER PARAMETERS
 1. THE CHAMBERS SHALL BE MANUFACTURED IN THE U.S.A. BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
 2. THE CHAMBERS SHALL BE VACUUM THERMOFORMED OF HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HDPE) WITH A BLACK INTERIOR AND BLUE EXTERIOR.
 3. THE CHAMBER SHALL BE ARCHED IN SHAPE.
 4. THE CHAMBER SHALL BE OPEN-BOTTOMED.

5. THE NOMINAL CHAMBER DIMENSIONS OF THE CULTEC HVLV FC-24 FEED CONNECTOR SHALL BE 12 INCHES (305 MM) TALL, 16 INCHES (406 MM) WIDE AND 24.2 INCHES (615 MM) LONG.
 6. THE NOMINAL STORAGE VOLUME OF THE HVLV FC-24 FEED CONNECTOR SHALL BE 0.913 FT³ / FT (0.085 M³ / M) - WITHOUT STONE.
 7. THE HVLV FC-24 FEED CONNECTOR CHAMBER SHALL HAVE 2 CORRUGATIONS.

8. THE HVLV FC-24 FEED CONNECTOR MUST BE FORMED AS A WHOLE CHAMBER HAVING TWO OPEN END WALLS AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS. THE UNIT SHALL FIT INTO THE SIDE PORTALS OF THE CULTEC RECHARGER STORMWATER CHAMBER AND ACT AS CROSS FEED CONNECTIONS CREATING AN INTERNAL MANIFOLD.
 9. THE CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS.
 10. THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2015 CERTIFIED FACILITY.

CULTEC NO. 410™ NON-WOVEN GEOTEXTILE
 CULTEC NO. 410™ NON-WOVEN GEOTEXTILE MAY BE USED WITH CULTEC CONTACTOR® AND RECHARGER® STORMWATER INSTALLATIONS TO PROVIDE A BARRIER THAT PREVENTS SOIL INTRUSION INTO THE STONE.

GEOTEXTILE PARAMETERS
 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
 2. THE GEOTEXTILE SHALL BE BLACK IN APPEARANCE.
 3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 4.5 OZ/SY (142 G/M).
 4. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH VALUE OF 120 LBS (533 N) PER ASTM D4632 TESTING METHOD.
 5. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK VALUE OF 50% PER ASTM D4632 TESTING METHOD.

6. THE GEOTEXTILE SHALL HAVE A MULLEN BURST VALUE OF 225 PSI (1551 KPA) PER ASTM D3786 TESTING METHOD.
 7. THE GEOTEXTILE SHALL HAVE A PUNCTURE STRENGTH VALUE OF 65 LBS (289 N) PER ASTM D4833 TESTING METHOD.
 8. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE VALUE OF 340 LBS (1513 N) PER ASTM D6241 TESTING METHOD.

9. THE GEOTEXTILE SHALL HAVE A TRAPEZOID TEAR VALUE OF 50 LBS (222 N) PER ASTM D4533 TESTING METHOD.
 10. THE GEOTEXTILE SHALL HAVE A AOS VALUE OF 70 U.S. SIEVE (0.212 MM) PER ASTM D4751 TESTING METHOD.
 11. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY VALUE OF 1.7 SEC-1 PER ASTM D4491 TESTING METHOD.

12. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATE VALUE OF 15 GAL/MIN/SF (5500 L/MIN/SM) PER ASTM D4991 TESTING METHOD.
 13. THE GEOTEXTILE SHALL HAVE A UV STABILITY @ 500 HOURS VALUE OF 70% PER ASTM D4355 TESTING METHOD.

CULTEC AFAB-HPF™ WOVEN GEOTEXTILE
 CULTEC AFAB-HPF™ WOVEN GEOTEXTILE IS DESIGNED AS AN UNDERLAYMENT TO PREVENT SCOURING CAUSED BY WATER MOVEMENT WITHIN THE CULTEC CHAMBERS AND FEED CONNECTORS UTILIZING THE CULTEC MANIFOLD FEATURE. IT MAY ALSO BE USED AS A COMPONENT OF THE CULTEC SEPARATOR ROW TO ACT AS A BARRIER TO PREVENT SOIL/CONTAMINANT INTRUSION INTO THE STONE WHILE ALLOWING FOR MAINTENANCE AND TSS REMOVAL.

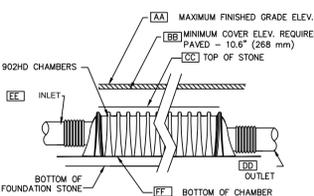
GEOTEXTILE PARAMETERS
 1. THE GEOTEXTILE SHALL BE PROVIDED BY CULTEC, OF BROOKFIELD, CT. (203-775-4416 OR 1-800-428-5832)
 2. THE GEOTEXTILE SHALL BE BLACK AND WHITE IN APPEARANCE.
 3. THE GEOTEXTILE SHALL HAVE A TENSILE STRENGTH OF 320 X 320 LBS (1,420 X 1,420 N) PER ASTM D4632 TESTING METHOD.
 4. THE GEOTEXTILE SHALL HAVE AN ELONGATION @ BREAK RESISTANCE OF 15 X 15% PER ASTM D4632 TESTING METHOD.
 5. THE GEOTEXTILE SHALL HAVE A WIDE WIDTH TENSILE RESISTANCE OF 3,563 X 3,563 LBS/FT (52 X 52 KVM) PER ASTM D4955 TESTING METHOD.
 6. THE GEOTEXTILE SHALL HAVE A CBR PUNCTURE RESISTANCE OF 1,500 LBS (6,670 N) PER ASTM D6241 TESTING METHOD.
 7. THE GEOTEXTILE SHALL HAVE A TRAPEZOIDAL TEAR RESISTANCE OF 120 X 120 LBS (540 X 540 N) PER ASTM D4533 TESTING METHOD.
 8. THE GEOTEXTILE SHALL HAVE AN APPARENT OPENING SIZE OF 30 US STD. SIEVE (0.60 MM) PER ASTM D4751 TESTING METHOD.
 9. THE GEOTEXTILE SHALL HAVE A PERMITTIVITY RATING OF 0.2 SEC-1 PER ASTM D4491 TESTING METHOD.
 10. THE GEOTEXTILE SHALL HAVE A WATER FLOW RATING OF 22 GPM/FT² (900 LPM/M²) PER ASTM D4991 TESTING METHOD.
 11. THE GEOTEXTILE SHALL HAVE A UV RESISTANCE OF 70% @ 500 HRS. PER ASTM D4355 TESTING METHOD.

GENERAL NOTES

PIPE	A	B
6" (150 mm)	18.50" (470 mm)	0.50" (13 mm)
8" (200 mm)	18.50" (470 mm)	0.75" (20 mm)
10" (250 mm)	14.50" (369 mm)	1.00" (26 mm)
12" (300 mm)	12.50" (318 mm)	1.25" (32 mm)
15" (375 mm)	9.00" (229 mm)	1.50" (38 mm)
18" (450 mm)	5.00" (127 mm)	1.75" (45 mm)
24" (600 mm)	N/A	2.50" (64 mm)

*THE TYPICAL INVERT TABLE ABOVE IS BASED ON THE INSIDE DIAMETER OF STANDARD CORRUGATED PLASTIC PIPE. THE HEAVY DUTY END CAP HAS PRE-MARKED TRIM LINES FOR PIPE DIAMETERS 6" (150mm), 8" (200mm), 10" (250mm), 12" (300mm), 15" (375mm), 18" (450mm) AND 24" (600mm). PIPES OF ANY SIZE AND MATERIAL UP TO 24" (600mm) MAY BE PLACED AT CUSTOM LOCATIONS AND CUSTOM INVERTS. THE CROWN OF THE PIPE MUST REMAIN A MINIMUM OF 3" (75mm) FROM THE EDGE OF THE HEAVY DUTY END CAP.

CULTEC RECHARGER 300HD TYPICAL PIPE INVERTS



NOTES:

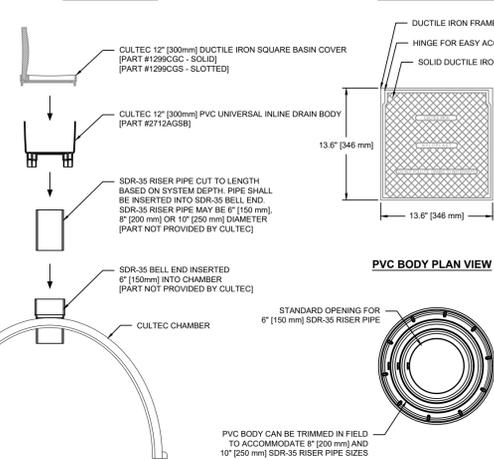
- CHAMBERS ARE TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. SEE STORMWATER REPORT FOR INSTALLATION INSTRUCTIONS AND DETAILS.

CULTEC 300HD CHAMBER SYSTEM ELEVATIONS

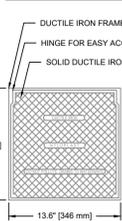
NOT TO SCALE

	SYSTEM #1	SYSTEM #2
AA MAXIMUM FINISHED GRADE ELEV.	385.40	387.16
BB MINIMUM COVER ELEV.	375.23	377.00
CC TOP OF STONE	373.90	375.66
DD 12" OUTLET	370.90	372.66
EE 12" INLET (SEPARATOR ROW)	370.90	372.66
EE 12" INLET (HEADER)	371.95	373.70
FF BOTTOM OF CHAMBER	370.90	372.66
GG BOTTOM OF FOUNDATION STONE	370.40	372.16
HH ESTIMATED GROUNDWATER	363.10	373.00

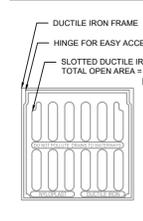
FINAL ASSEMBLY



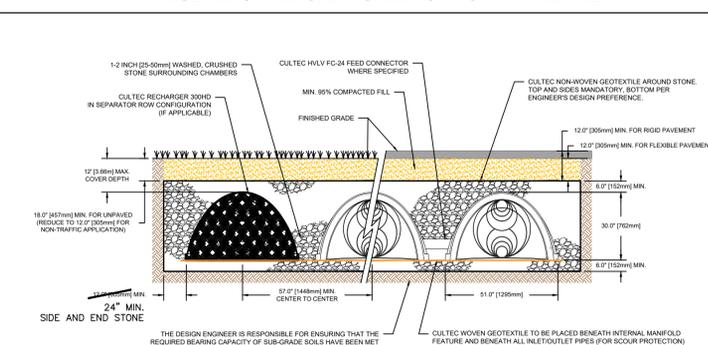
SOLID COVER OPTION



SLOTTED COVER OPTION



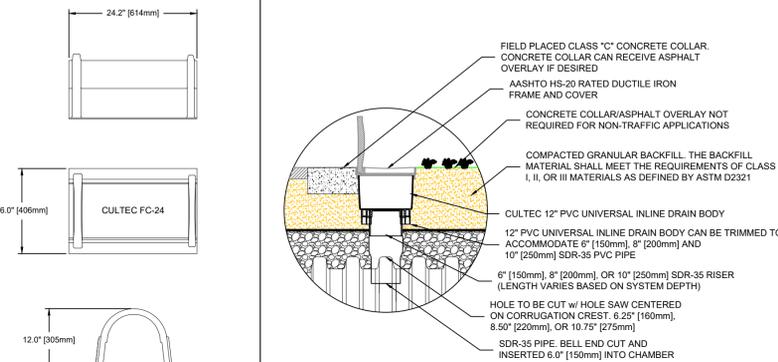
CULTEC UNIVERSAL INSPECTION PORT KIT DETAIL



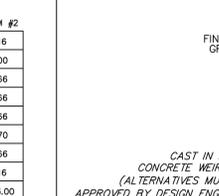
NOTES:

- THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 1.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
 1.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
 1.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
- THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 2.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
 2.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
 2.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
- THE CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F2418
 3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
 3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

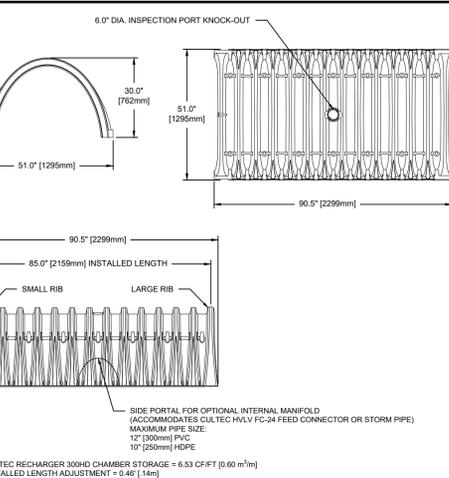
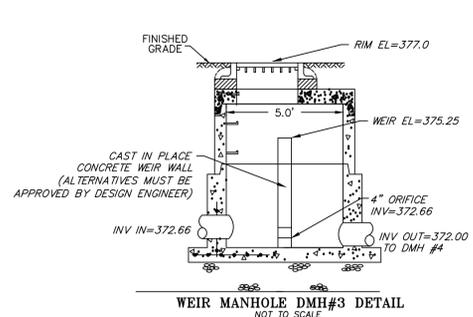
CULTEC RECHARGER 300HD HEAVY DUTY CROSS SECTION



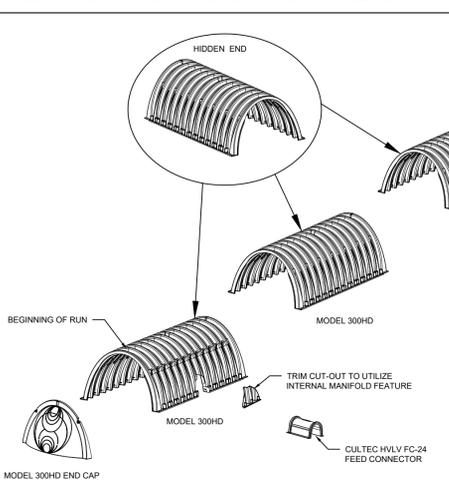
CULTEC HVLV FC-24 FEED CONNECTOR THREE VIEW



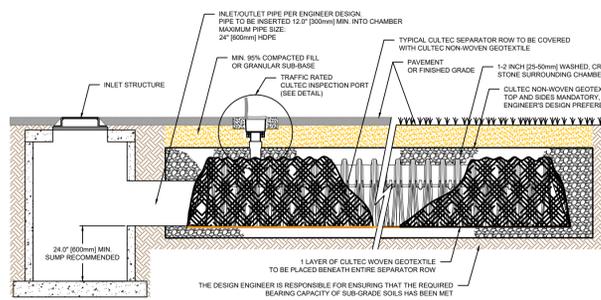
OPTIONAL CULTEC INSPECTION PORT - ZOOM DETAIL



CULTEC RECHARGER 300HD HEAVY DUTY THREE VIEW



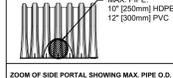
CULTEC RECHARGER 300HD HEAVY DUTY TYPICAL INTERLOCK



NOTES:

- THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 1.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
 1.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
 1.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
- THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". THE LOAD CONFIGURATION SHALL INCLUDE:
 2.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
 2.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
 2.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
- THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F2418
 3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
 3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

FIGURE 1



CULTEC SEPARATOR ROW - CULTEC INSPECTION PORT DETAIL (IF APPLICABLE)

11/14/2024
 11/15/2024
 DALE MAQUIGNON CIVIL No. 54575
 ROBERT E. CONSTANTINE, II No. 49611
 F4667

APPROVED DATE:

FRANKLIN PLANNING BOARD

BEING A MAJORITY

LEGAL NOTES

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENT MARKINGS AND OTHER OBSERVED EVIDENCE. FOR A VIEW OF THE UNDERGROUND UTILITIES, YOU SHOULD BE CONSIDERED APPROXIMATE. ANY EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE FULLY IDENTIFIED COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE, MAY BE ENCOUNTERED BY CONTRACTORS (IN ACCORDANCE WITH MASS REGS. 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

PVG ONE, LLC
 164 WASHINGTON ST
 PLAINVILLE, MA. 02762
 DEED BOOK 35359 PAGE 485
 PLAN No. 293 OF 1998 PLAN Bk. 456
 A.M. 314 LOT 13

APPLICANT

CHARBEL SAGHINI
 346 WASHINGTON ST
 STOUGHTON, MA 02072

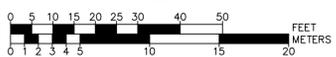
SITE PLAN
BUSINESS INCUBATOR
FLEX BUILDING
759 UNION ST.
FRANKLIN
MASSACHUSETTS

CONSTRUCTION DETAILS

NOVEMBER 12, 2024

DATE REVISION DESCRIPTION

GRAPHIC SCALE: 1"=20'



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 ENGINEERING & LAND SURVEYING
 55 WEST CENTRAL ST. PH. (508) 528-3221
 FRANKLIN, MA 02038 FX. (508) 528-7921
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SHEET

11 OF 11

JOB NO.

F4667