

**April 25, 2017**  
**Medway Planning and Economic Development Board**  
**155 Village Street**  
**Medway, MA 02053**

<b>Members</b>	<b>Andy Rodenhiser</b>	<b>Bob Tucker</b>	<b>Tom Gay</b>	<b>Matt Hayes</b>	<b>Rich Di Iulio</b>
<b>Attendance</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

**ALSO PRESENT:**

Susy Affleck-Childs, Planning and Economic Development Coordinator  
Gino Carlucci, Planning Consultant  
Amy Sutherland, Recording Secretary

There were no Citizen Comments.

**Appointments to Open Space and Recreation Plan Update Task Force:**

The members are in receipt of a memorandum dated April 25, 2017 from Susy Affleck-Childs regarding appointments to the Open Space and Recreation Plan Task Force. (See Attached)

**On a motion made by Bob Tucker and seconded by Rich Di Iulio, the Board voted unanimously to appoint PEDB member Matt Hayes and Parks Commissioner Paul Mahoney to the Open Space and Recreation Plan Update Task Force.**

**PEDB Meeting Minutes - April 11, 2017:**

**On a motion made by Matt Hayes and seconded by Tom Gay, the Board voted unanimously to approve the minutes from the April 11, 2017 meeting.**

**Medway Green Multifamily Housing Development – Plan Endorsement**

The Board is in receipt of the following documents: (See Attached)

- Certificate of No Appeal
- Tetra Tech review letter dated April 20, 2017
- Revised plan dated March 31, 2017

**On a motion made by Bob Tucker and seconded by Matt Hayes, the Board voted unanimously to endorse the plan for the Medway Green.**

**PUBLIC HEARING CONTINUATION - Merrimack Building Supply Expansion SITE PLAN**

The Board is in receipt of the following document (See Attached)

- Email from Peter Lavoie dated April 25, 2017 requesting a continuation of the hearing.

**On a motion made by Matt Hayes and seconded by Bob Tucker, the Board voted unanimously to continue the public hearing for Merrimack Building Supply to Tuesday, May 23, 2017 at 7:15 pm.**

**Stormwater Bylaw Presentation:**

The members are in receipt of the following documents (**See Attached**)

- 4/5/2017 outline of proposed stormwater bylaw
- 3/24/17 proposed stormwater bylaw – prepared by Gino Carlucci in consultation with Bridget Graziano, Tom Holder/Dave D’Amico, Stephanie Mercandetti and Susy Affleck-Childs.

Consultant Carlucci and DPS Director Dave D’Amico were present.

Consultant Carlucci provided an overheard presentation which included giving the historical context of stormwater regulations in the US. In 1999, the EPA phase II regulations required general stormwater permits. In 2003, the first general permit for MA was issued for a five year term. In 2014, there was the first draft of the replacement permit and many comments were received. In 20016, the final MS4 general permit for MA was issued on 7-1-2016.

There are six areas addressed in the permit: public education, public involvement, illicit discharges, construction site run off, post – construction run off, and pollution prevention. The implementation timeline begins July 1, 2017 and the Town has to file notice of intent with the DPA by September 29, 2017. The Town’s stormwater management plan is due July 1, 2018. The areas which need to be addressed primarily are the illicit discharges to the stormwater management system and the land disturbance and construction activities. Illicit discharge detection and elimination is under the purview of the DPS. What is proposed is a replacement bylaw. The disturbance of 20,000 feet or more would require a permit from PEDB or ConCom. There could also be an administrative review. The project requirements for new construction would include erosion and sediment control plan. The post construction plan would need to be followed and there would need to be a long term operations and management plan.

Dave Damico explained that the town would be the applicant. The Notice of Intent would be reviewed by the EPA and not Mass DEP. Towns which choose to not comply will face heavy fines. Medway is ahead of the timetable in regards to task completion.

The funding of the stormwater management facilities will vary from town to town. Some have chosen to establish a stormwater utility. The cost may become more than the current budget allows and the funding of this will need to be discussed further.

The Board is in support of this bylaw.

**On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted unanimously to support the proposed stormwater management bylaw warrant article at Town Meeting.**

**Other Business:**

Susy suggested that the colored maps of the proposed zoning changes be handed out at the town meeting. The Board agreed.

**Adjourn:**

**On a motion made by Rich Di Iulio and seconded by Matt Hayes, the Board voted unanimously to adjourn the meeting.**

The meeting was adjourned at 7:53 pm.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Amy Sutherland".

Amy Sutherland  
Recording Secretary

Reviewed and edited by,

A handwritten signature in black ink that reads "Susan E. Affleck-Childs".

Susan E. Affleck-Childs  
Planning and Economic Development Coordinator



**TOWN OF MEDWAY**  
**Planning & Economic Development**  
155 Village Street  
Medway, Massachusetts 02053

***MEMORANDUM***

April 25, 2017

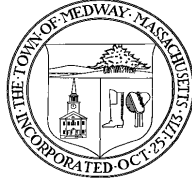
TO: Planning and Economic Development Board  
FROM: Susy Affleck-Childs, Planning and Economic Development Coordinator  
RE: Appointments to the Open Space and Recreation Plan Update Task Force

It is the Planning and Economic Development Board's responsibility to appoint members of the Task Force to update the Town's Open Space and Recreation Plan.

The Task Force is to consist of representative from the Open Space Committee, Conservation Commission, Board of Parks Commissioners, Planning and Economic Development Board, School Committee, Board of Selectmen or their designees, and an unaffiliated resident. Key Town staff involved in planning, conservation, and public facilities operations/maintenance will provide staff support and guidance. The Task Force will function for approximately 6-8 months to work with the selected consultant and Town staff.

At this time, I recommend the PEDB appoint Matt Hayes as its representative. Parks Commissioner Paul Mahoney has volunteered and I recommend you appoint him as well.

The Conservation Commission and the School Committee will choose one of their members at their meetings on Thursday, April 27<sup>th</sup>. The Open Space Committee will select someone at its May 2<sup>nd</sup> meeting. The Board can make those appointments at its next meeting on May 9<sup>th</sup>. I will contact the BOS and ask if one of them would like to participate on the Task Force or if they wish to designate someone from the administrative staff to do so.



**April 25, 2017**  
**Medway Planning & Economic Development Board**  
**Meeting**

**Medway Green – Plan Endorsement**

- Certificate of No Appeal
- Tetra Tech Review Letter dated 4-20-17
- Revised Plan dated 3-31-17

Taxes are paid. The Construction Services invoice has been paid. The Plan Review account balance is fine. The Town Clerk has issued a Certificate of No Appeal. Project engineer Ron Tiberi has revised the plan per the Board's decision. Tetra Tech has reviewed that plan and provided a review letter noting a few items that need attention before the Board's endorsement. Ron Tiberi will make those changes and bring a further revised plan to the meeting Tuesday night for you to endorse. I expect a letter from the applicant's attorney by the end of Friday to acknowledge various requirements and conditions of the decision that will need to be included or referenced in the condo documents.

# MEDWAY TOWN CLERK

155 VILLAGE STREET  
MEDWAY, MASSACHUSETTS 02053  
(508) 533-3204 • Fax: (508) 533-3287  
[mwhite@townofmedway.org](mailto:mwhite@townofmedway.org)

**MARYJANE WHITE, CMMC**

CERTIFIED MASSACHUSETTS MUNICIPAL CLERK

JUSTICE OF THE PEACE

NOTARY PUBLIC

## CERTIFICATE

*I, Town Clerk of the Town of Medway, hereby certify that the notice of the decision of the Medway Planning and Economic Development Board has been received in the matter of*

**MULTIFAMILY HOUSING SPECIAL PERMIT AND SITE PLAN  
176 MEDWAY LLC FOR MEDWAY GREENS  
176-178 MAIN ST**

*It was received and filed in this office on the following:*

**March 23, 2017**

*And no appeal was received during the next twenty days after such receipt and recording of said decision.*

*Dated at Medway, MA April 14, 2017*

A true copy

ATTEST.....

**Town Clerk**


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**To:** Susan Affleck-Childs – Medway Planning and Economic Development Board Coordinator

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**Cc:**

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**From:** Steven Bouley, EIT – Tetra Tech 

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**Date:** April 19, 2017

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**Subject:** Medway Greens Final Plan Review

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Tetra Tech has performed a review of the draft set of final plans titled “Medway Greens, Multifamily Housing Special Permit Site Plan, 176 & 178 Main Street, Medway, Massachusetts”, dated December 18, 2016 and revised March 31, 2017. The plans were reviewed against *Section B, C and D of Section VIII. Conditions of the “Multifamily Housing Special Permit and Site Plan Decision”* (Decision) dated March 21, 2017. The following is a list of items which the applicant should address prior to final plan endorsement:

1. Approved waivers as shown in *Section VII. Waivers* of the Decision should be the only waivers shown on the plans.
2. Adaptive Use Overlay District (AUOD) remains on the list of waivers on the Title Sheet and as a reference to the existing property on the site plans. All zoning should be shown as “Village Residential District” as provided in the Decision.
3. Notes should be added to the site plans where appropriate stating that all installation of granite curb and sidewalk shall be installed in the same means and methods as the Route 109 work.

These comments are offered as guides for use during the Town’s review. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

P:\21583\143-21583-17002 (MEDWAY GREENS SITE REVIEW)\DOCS\MEMO\_MEDWAY GREENS\_FINAL PLAN REVIEW\_2017-04-19.DOCX

# MEDWAY GREENS

## MULTIFAMILY HOUSING SPECIAL PERMIT SITE PLAN 176 & 178 MAIN STREET MEDWAY, MASSACHUSETTS

APPROVED BY PLANNING BOARD

DATE: \_\_\_\_\_

OWNER:

176 MAIN STREET REALTY TRUST  
57 DRAPER ROAD  
DOVER, MA 02030

APPLICANT/DEVELOPER:

176 MEDWAY LLC  
57 DRAPER ROAD  
DOVER MA 02030

ARCHITECT:

SFG STUDIOS  
278 ELM STREET  
SUITE 226  
SOMERVILLE MA 02144

LANDSCAPE DESIGN:

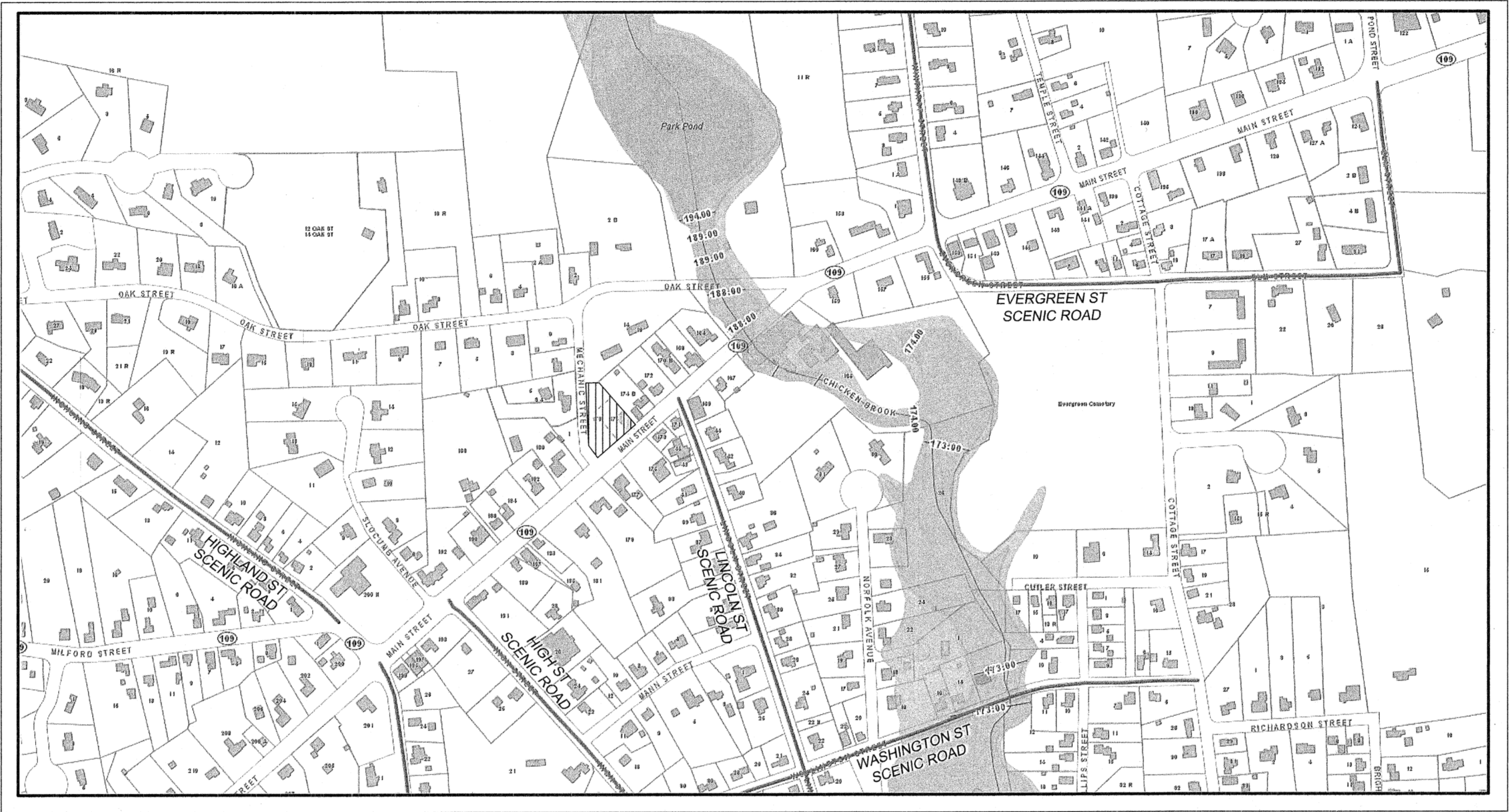
HAMMER+WALSH DESIGN INC.  
281 SUMMER STREET  
BOSTON MA 02210

SURVEY:

CHENEY ENGINEERING CO, INC.  
53 MELLEEN STREET  
NEEDHAM MA 02494

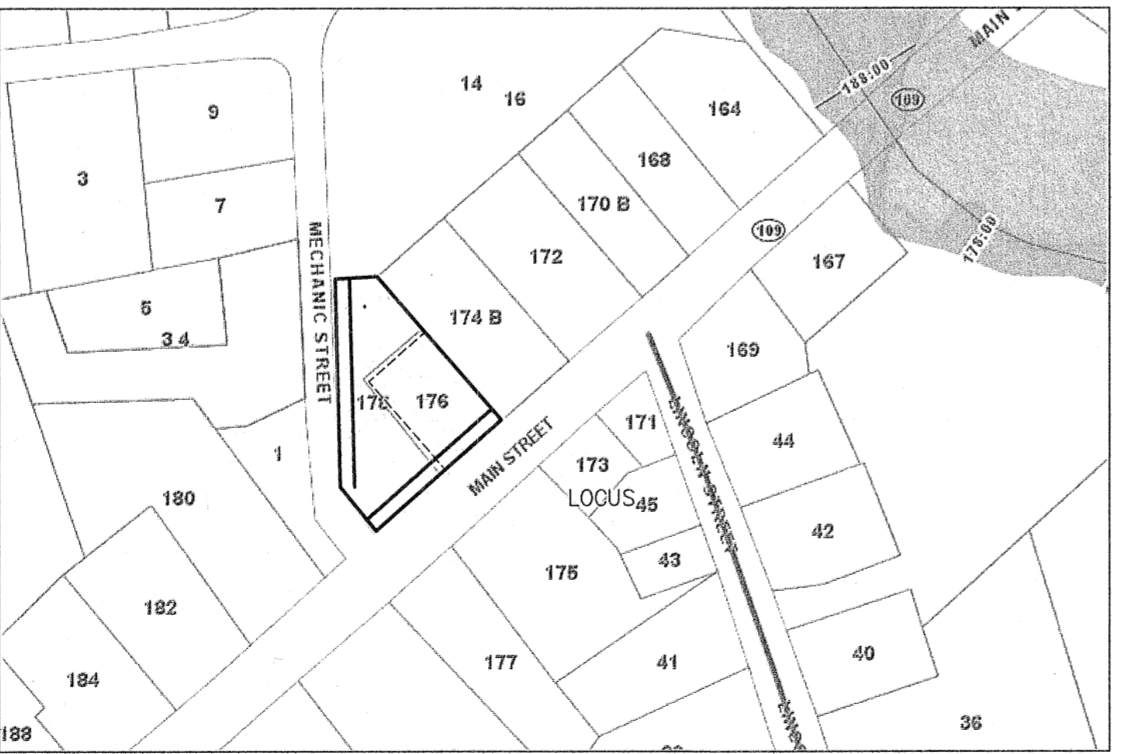
ENGINEER:

RONALD TIBERI P.E.  
9 MASSACHUSETTS AVE.  
NATICK MA 01760



LOCUS MAP  
1" = 400'

PARCELS ONE & TWO  
176 & 178 MAIN STREET  
ASSESSING ID: 47 - 34 & 36  
ZONE: VILLAGE RESIDENTIAL  
DISTRICT  
0.6+ ACRES



ABUTTERS LOCUS MAP  
1" = 200'

### MULTIFAMILY HOUSING TABLE

	REQUIRED	PROPOSED
LOT AREA	22500	26136
LOT FRONTAGE	50	274+
UNIT DENSITY	8	8
AFFORDABLE UNITS	1	1
BLDG. HT.	40'	33'
OPEN SPACE	15%	24%
PARKING SPACES	16	16

### ZONING TABLE-VILLAGE RESIDENTAIL DISTRICT

	REQUIRED	PROPOSED
LOT AREA	22500	26136
LOT FRONTAGE	150	274+
LOT WIDTH	NA	220+
FRONT SETBACK	35	15.8
SIDE SETBACK	15	30
REAR SETBACK	15	34
BLDG. HT.	NA	--
LOT COVERAGE (BUILDINGS)	30%	22.1%
LOT COVERAGE (IMPERVIOUS)	40%	58.2%
PARKING	1.5/UNIT	2/UNIT

### PLAN INDEX

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### AUOD - Waivers APPROVED -

#### AUOD Section 5.6.2 Thirty-five foot setback requirement

Subsection 5.6.4 B. - The requirement of renovating the existing building on site. Layout and proposed use will not sustain existing building

Section 504-4E - Requirement for bicycle parking. Bicycle parking is anticipated to be within the unit garages.

#### Site Plan Regulations

Section 204-5 C (3) Existing landscape inventory. Existing landscaping not inventoried.

Section 205-3 C (1) Requirement for 2% grade for 25' at entrance. The existing curb cut at mechanic street is constrained by the existing grades and therefore is requested as a One Way entrance only

Section 205-6 H Granite Curbing requirement. Proposed curbing is concrete and drainage is predicated as sheet flow to vegetated trench in parking area without curbing

Section 205-6 I Travel Lanes 24' wide, due to tight site conditions, travel lanes are reduced to 20', and parking located only on one side on the travel lane.

Section 205-9 Parking Shade trees- due to site constraints and drainage swale at parking areas Shade trees will not fit.

DATE ISSUED:

December 18, 2016

DATE REVISED:

JANUARY 23, 2017

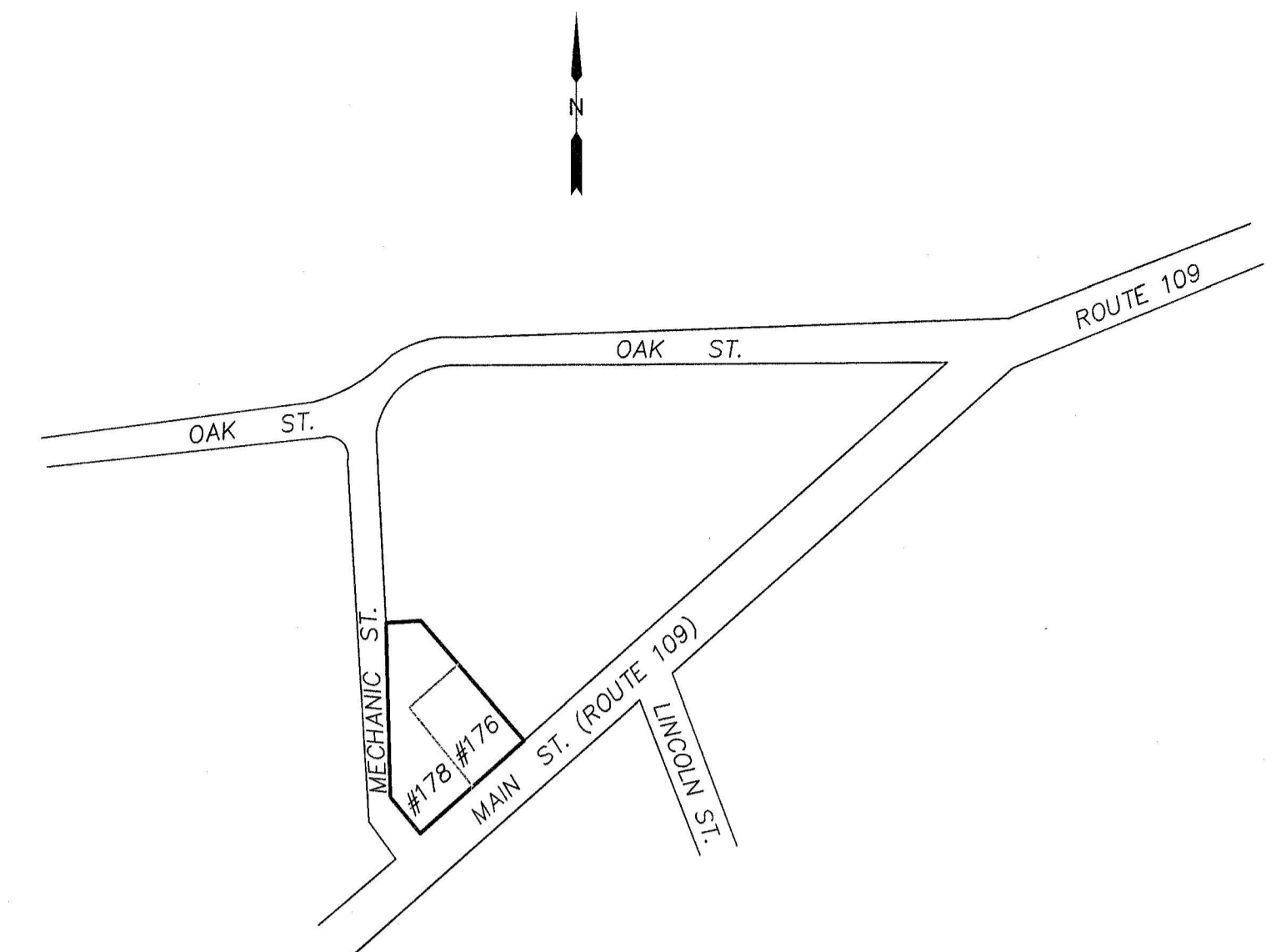
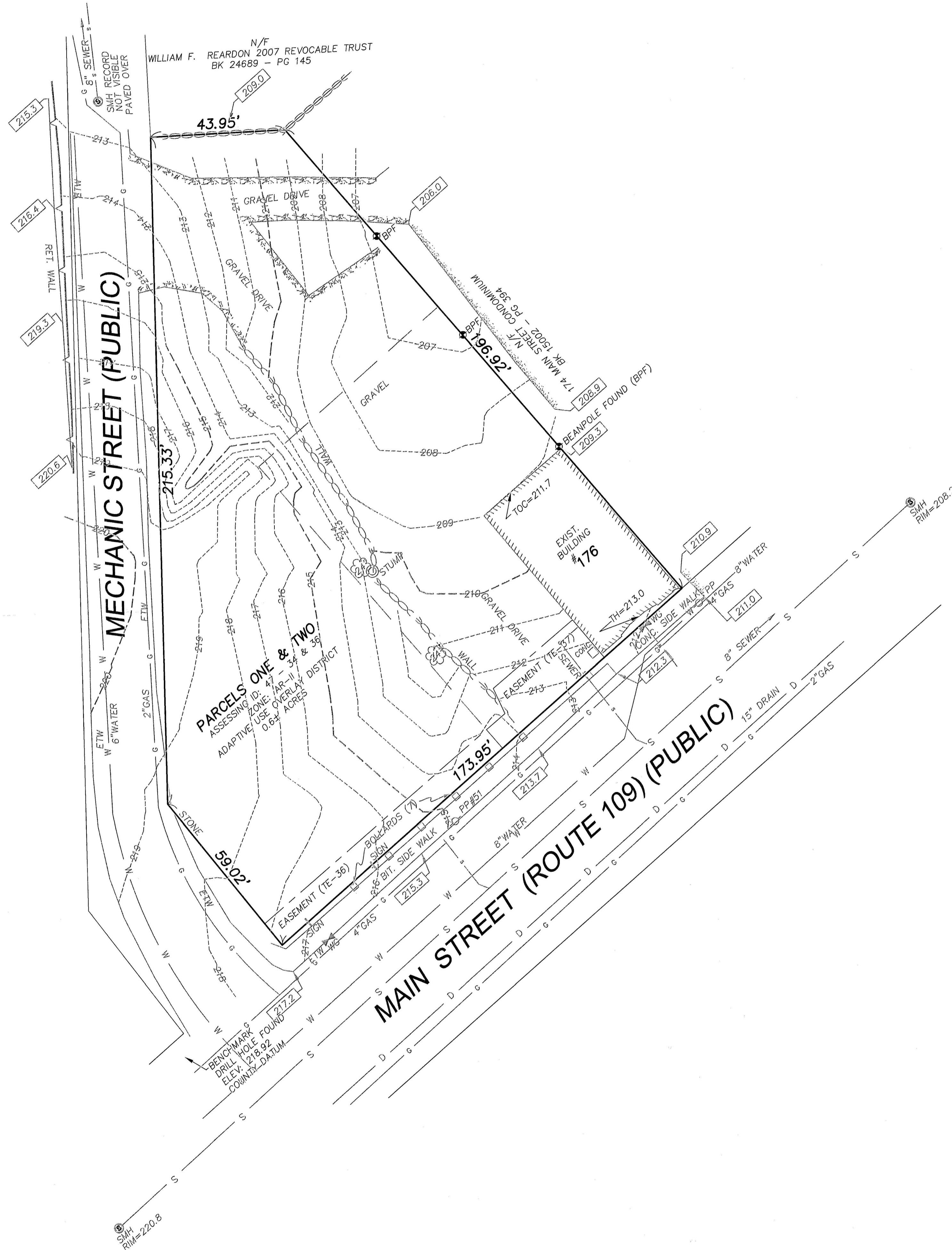
MARCH 7, 2017

MARCH 31, 2017

# LEGEND

BIT. BITUMINOUS  
ETW EDGE OF TRAVELED WAY  
F.F. FINISHED FLOOR  
G.G. GAS GATE  
INV. INVERT  
PP POWER POLE  
SMH SEWER MANHOLE  
GAR. GARAGE  
TH THRESHOLD  
T.O.C. TOP OF CONCRETE  
-100- EXISTING CONTOUR

PLBK 598 - PLNO. 57



## LOCUS PLAN

SCALE: 1"=200'±

APPROVED BY PLANING BOARD

DATE: \_\_\_\_\_

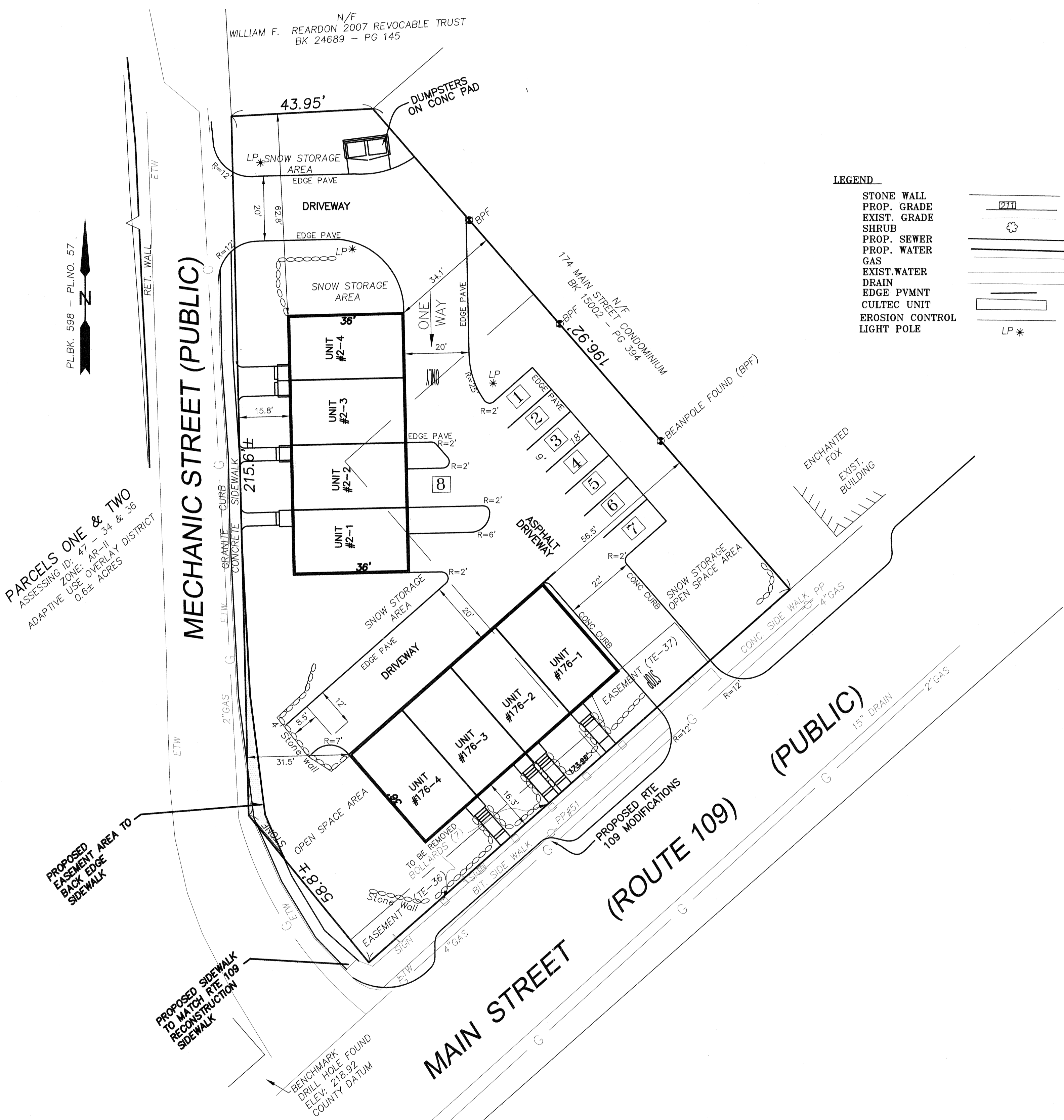
### NOTES:

- SUBJECT TO ANY STATEMENT OF FACT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.
- SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD.
- UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES, IF ANY, HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY AND RECORD LOCATIONS. THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UTILITIES WHICH THE EXISTENCE OF ARE NOT KNOWN, SIZE, TYPE AND LOCATION OF ALL UTILITIES AND STRUCTURES MUST BE VERIFIED BY PROPER AUTHORITIES PRIOR TO ANY AND ALL CONSTRUCTION. CALL TOLL FREE, DIG SAFE CALL CENTER AT 1-888-3444-7233 SEVENTY-TWO HOURS PRIOR TO ANY EXCAVATION.

I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY BY: "CHENEY ENGINEERING CO., INC" AND THE LATEST PLANS AND DEEDS OF RECORD.



REVISIONS		
No.	DATE	DESCRIPTION
1.	2/1/2017	TOWN COMMENTS
EXISTING CONDITIONS SITE PLAN		
IN MEDWAY, MASSACHUSETTS		
176 MAIN STREET		
PREPARED FOR: 176 MAIN STREET LLC 12 HAVEN STREET DOVER MA		
DRAWING SCALE: 1 inch = 20 feet		
PROJECT NUMBER: 2316		
DATE: DECEMBER 18, 2016		



- GENERAL SITE NOTES
1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORKSCOPE 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.
  2. ALL WORK SHALL CONFORM TO LOCAL, COMMONWEALTH OF MASSACHUSETTS, AND OSHA STANDARDS AND GUIDELINES.
  3. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
  4. ALL UTILITY LOCATIONS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE CONDUITS, PRODUCT PIPING, ETC. PRIOR TO COMMENCEMENT OF EXCAVATION OF ANY TYPE.
  5. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
  6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "DIG SAFE" (1-888-344-7233) 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY THE LOCAL DEPARTMENT OF PUBLIC WORKS TO MARK OUT THEIR UTILITIES.
  7. THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.
  8. ALL CONCRETE AND BITUMINOUS PATCH AREAS TO MATCH EXISTING GRADES.
  9. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
  10. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION TO BE PERFORMED IN ACCORDANCE WITH CURRENT STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES.
  11. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS.

**DIG SAFE NOTE:**  
UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 52 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO, CALL "DIG-SAFE" AT 1(888)344-7233 1(888)DIG-SAFE.

THE OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION UNLESS SAID CONSTRUCTION IS SHOWN HEREON.

THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE AND PURPOSE FOR THE PARTY STATED HEREON AND SHALL NOT BE USED BY ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RONALD TIBERI P.E.

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.

APPROVED BY PLANNING BOARD

DATE: \_\_\_\_\_

REVISIONS		
No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017
2.	3-7-2017	REVIEW COMMENTS 2-18-17

**PROPOSED**

**SITE LAYOUT PLAN**

IN  
MEDWAY, MASSACHUSETTS

**176 MAIN STREET**

PREPARED FOR: **176 MAIN STREET LLC**  
**12 HAVEN STREET**  
**DOVER MA**

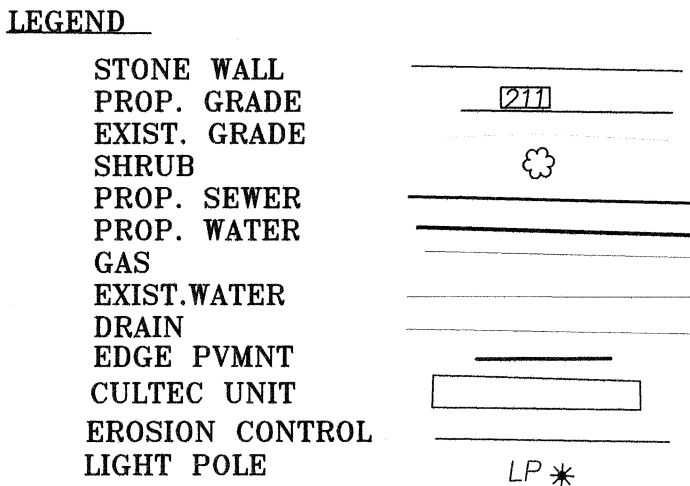
PREPARED By: **RONALD TIBERI P.E.**  
**9 MASSACHUSETTS AVE.**  
**NATICK MA 01760**

DRAWING SCALE: 1 inch = 20 feet

PROJECT NUMBER: 2316

DATE: DEC. 18, 2016

S-2



NOTE: WITHIN THE ENTIRE STORMWATER MANAGEMENT SYSTEM AND FOR 5- FEET BEYOND, REMOVE ALL SOIL TO THE TOP OF THE C LAYER (ELEVATION VARIES) AND REPLACE WITH TITLE 5 MATERIAL PER 310 CMR 15.255 (3).

SEE DETAIL SHEET  
STORMWATER MANAGEMENT SYSTEM PR-2  
USING 8 ADS STORMTECH SC-310 CHAMBERS

BOTTOM OF STONE EL.=206.5  
BOTTOM OF CHAMBER EL.=207.0  
TOP OF STONE EL.=208.8

STONE BED=8.2' X 30.9' X 0.5'

CONNECT ROOF DOWNSPOUTS WITH 6" ADS DRAIN @ S=0.010 (MIN) I=208.0 AT CHAMBER

SEE DETAIL SHEET  
STORMWATER MANAGEMENT SYSTEM PR-3  
USING 8 ADS STORMTECH SC-310 CHAMBERS

BOTTOM OF STONE EL.=207.5  
BOTTOM OF CHAMBER EL.=208.0  
TOP OF STONE EL.=209.8

STONE BED=8.2' X 30.9' X 0.5'

SEE DETAIL SHEET  
STORMWATER MANAGEMENT SYSTEM PR-1  
USING 8 ADS STORMTECH SC-740 CHAMBERS

BOTTOM OF STONE EL.=213.0  
BOTTOM OF CHAMBER EL.=213.5  
TOP OF STONE EL.=216.5

STONE BED=11.0' X 30.9' X 0.5'

CONNECT ROOF DOWNSPOUTS WITH 6" ADS DRAIN @ S=0.010 (MIN) I=213.5 AT CHAMBER

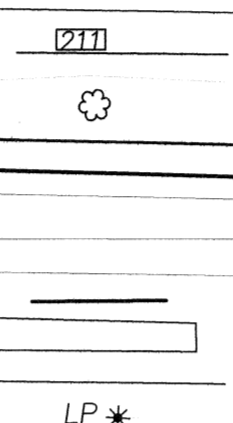
MECHANIC STREET (PUBLIC)

MAIN STREET (PUBLIC)

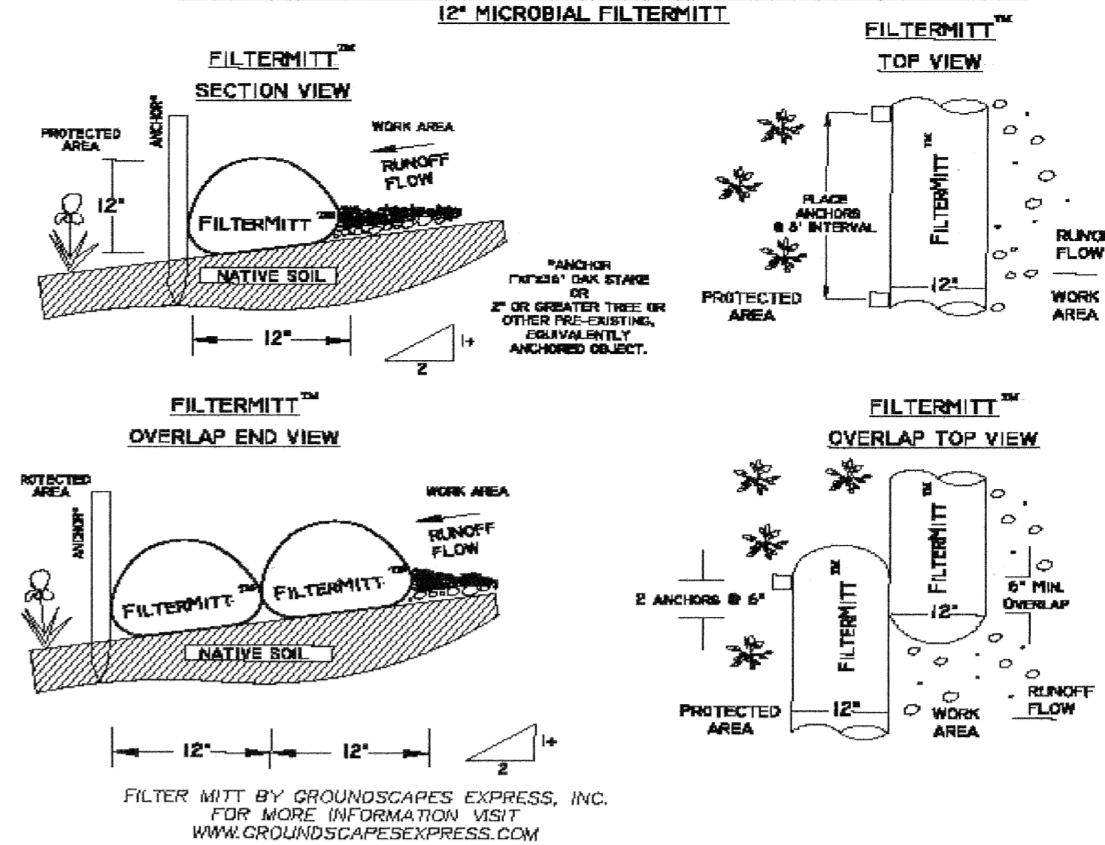
(ROUTE 109)

#### LEGEND

STONE WALL  
PROP. GRADE  
EXIST. GRADE  
SHRUB  
PROP. SEWER  
PROP. WATER  
GAS  
EXIST. WATER  
DRAIN  
EDGE PVMNT  
CULTEC UNIT  
EROSION CONTROL  
LIGHT POLE



#### EROSION CONTROL BARRIER



#### GENERAL SITE NOTES

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APPROVED BY PLANNING BOARD

DATE:

#### REVISIONS

No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017
2.	3-7-2017	REVIEW COMMENTS 2-18-17

## PROPOSED SITE DRAINAGE & EROSION PLAN IN MEDWAY, MASSACHUSETTS

176 MAIN STREET

PREPARED FOR: 176 MAIN STREET LLC  
12 HAVEN STREET  
DOVER MA

PREPARED By: RONALD TIBERI P.E.  
9 MASSACHUSETTS AVE.  
NATICK MA 01760

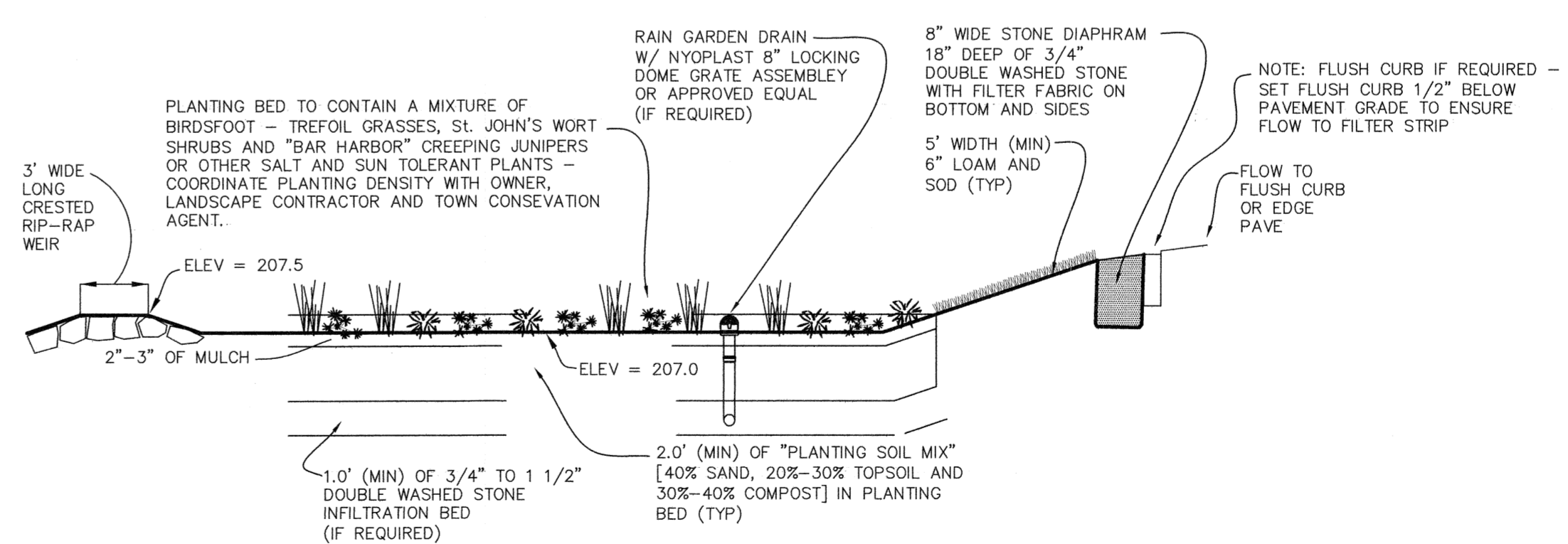
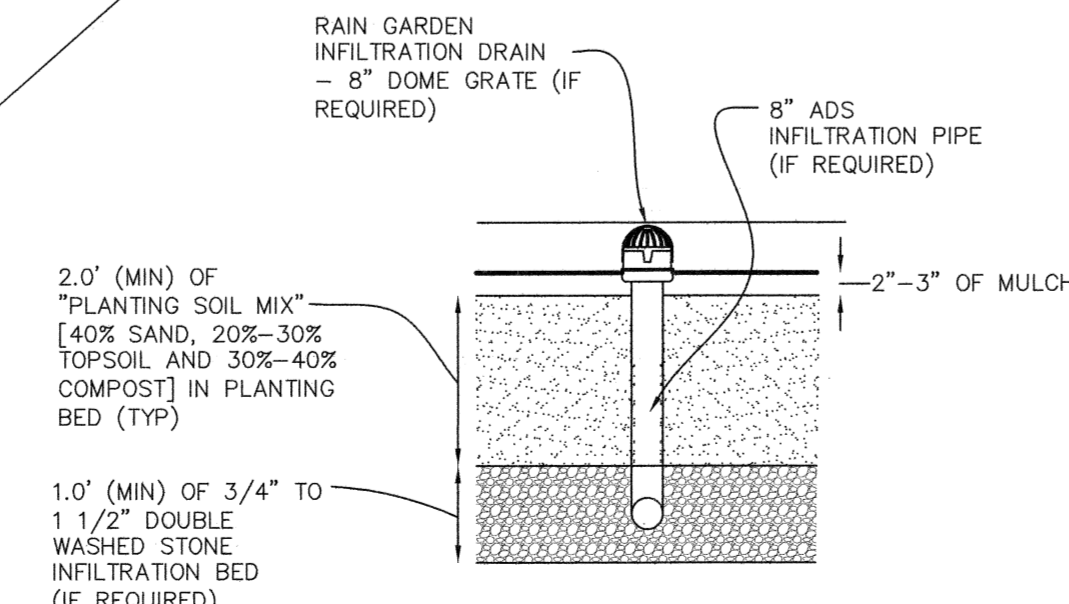
DRAWING SCALE: 1 inch = 20 feet

PROJECT NUMBER: 2316

DATE: DEC. 18, 2016

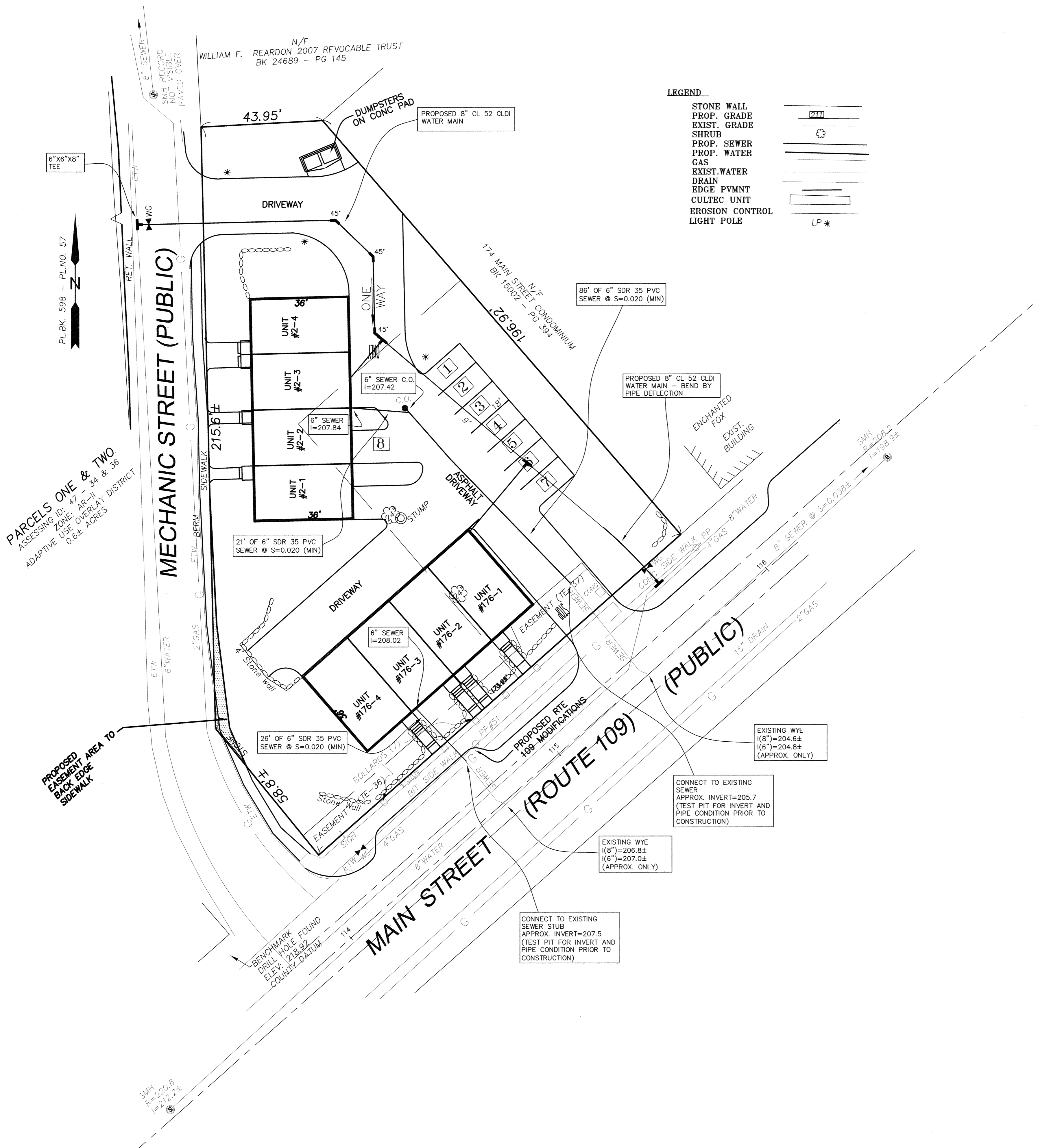
S-4

#### RAIN GARDEN TYPICAL SECTION NOT TO SCALE



#### TYPICAL RAIN GARDEN SCHEMATIC SECTION & PLANTINGS NOT TO SCALE

NOTE:  
PLANTING BED SOIL MIX AND PLANT SPECIES TO BE AS SPECIFIED IN THE STRUCTURAL BMP MASSACHUSETTS STORMWATER HAND BOOK CHAPTER 2 VOLUME 2 PAGES 23-35.



GENERAL SITE NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT. WORKSHEET 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.
2. ALL WORK SHALL CONFORM TO LOCAL, COMMONWEALTH OF MASSACHUSETTS, AND OSHA STANDARDS AND GUIDELINES.
3. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
4. ALL UTILITY LOCATIONS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, CONDUITS, PRODUCT PIPING, ETC. PRIOR TO COMMENCEMENT OF EXCAVATION OF ANY TYPE.
5. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "DIG SAFE" (1-888-344-7233) 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY THE LOCAL DEPARTMENT OF PUBLIC WORKS TO MARK OUT THEIR UTILITIES.
7. THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.
8. ALL CONCRETE AND BITUMINOUS PATCH AREAS TO MATCH EXISTING GRADES.
9. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
10. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION TO BE PERFORMED IN ACCORDANCE WITH CURRENT STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES.
11. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERSEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS.

DIG SAFE NOTE:

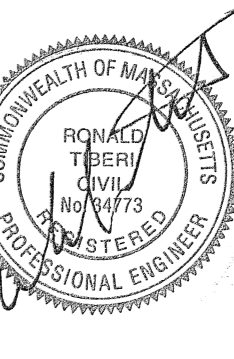
UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO, CALL "DIG-SAFE" AT 1(888)344-7233 1(888)DIG-SAFE.

THE OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION UNLESS SAID CONSTRUCTION IS SHOWN HEREON.

THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE AND PURPOSE FOR THE PARTY STATED HEREON AND SHALL NOT BE USED BY ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RONALD TIBERI P.E.

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.

APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_



REVISIONS

No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017
2.	3-7-2017	REVIEW COMMENTS 2-18-17

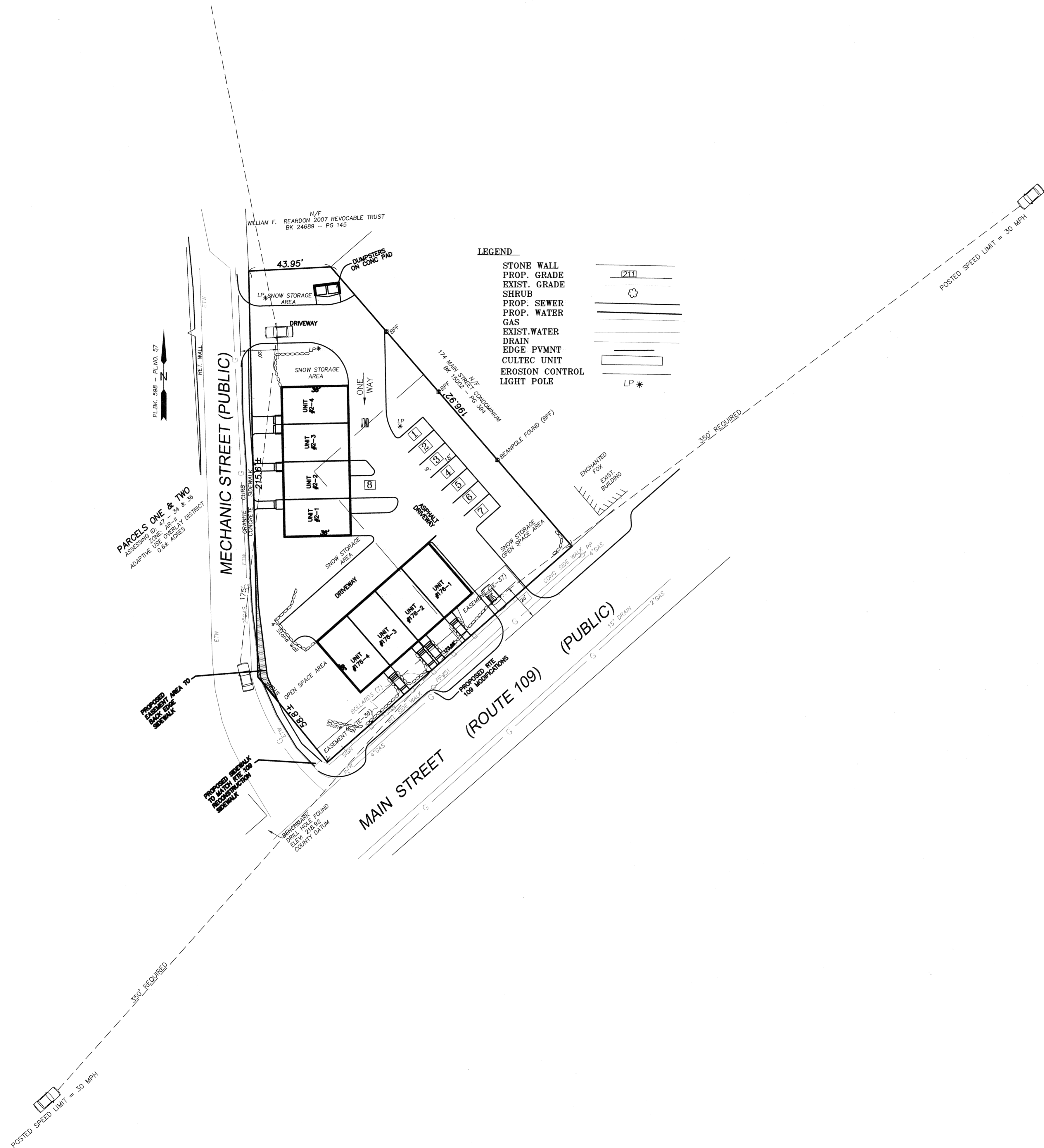
PROPOSED  
SITE UTILITIES  
IN  
MEDWAY, MASSACHUSETTS

176 MAIN STREET

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12 HAVEN STREET  
DOVER MA

PREPARED By: RONALD TIBERI P.E.  
9 MASSACHUSETTS AVE.  
NATICK MA 01760

DRAWING SCALE: 1 inch = 20 feet  
PROJECT NUMBER: 2316  
DATE: DEC. 18, 2016



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APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_

REVISIONS		
No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017
2.	3-7-2017	REVIEW COMMENTS 2-18-17

PROPOSED  
SIGHT DISTANCE PLAN  
IN  
MEDWAY, MASSACHUSETTS

176 MAIN STREET

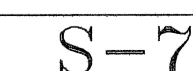
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12 HAVEN STREET  
DOVER MA

PREPARED By: RONALD TIBERI P.E.  
9 MASSACHUSETTS AVE.  
NATICK MA 01760

DRAWING SCALE: 1 inch = 30 feet

PROJECT NUMBER: 2316

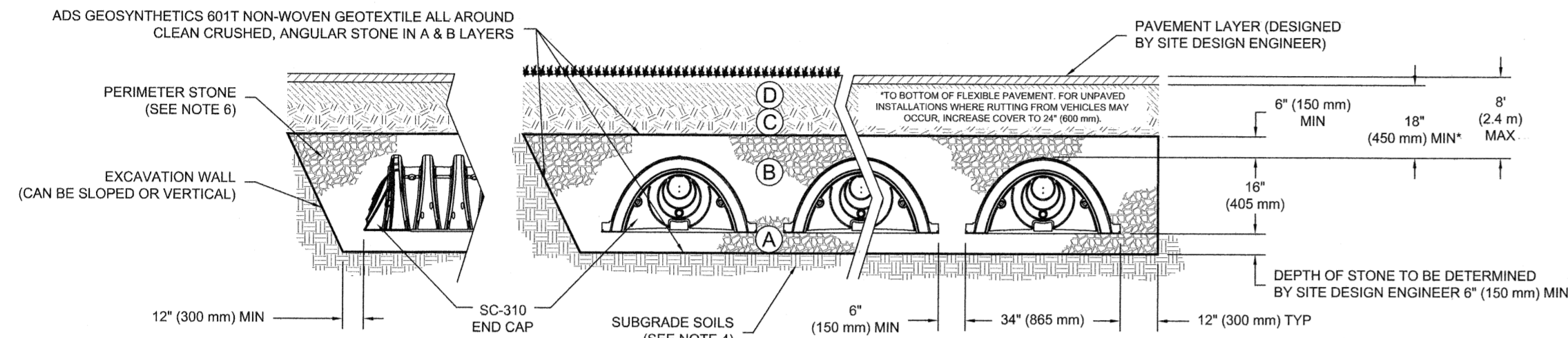
DATE: DEC. 18, 2016



ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2.4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>1,2</sup>

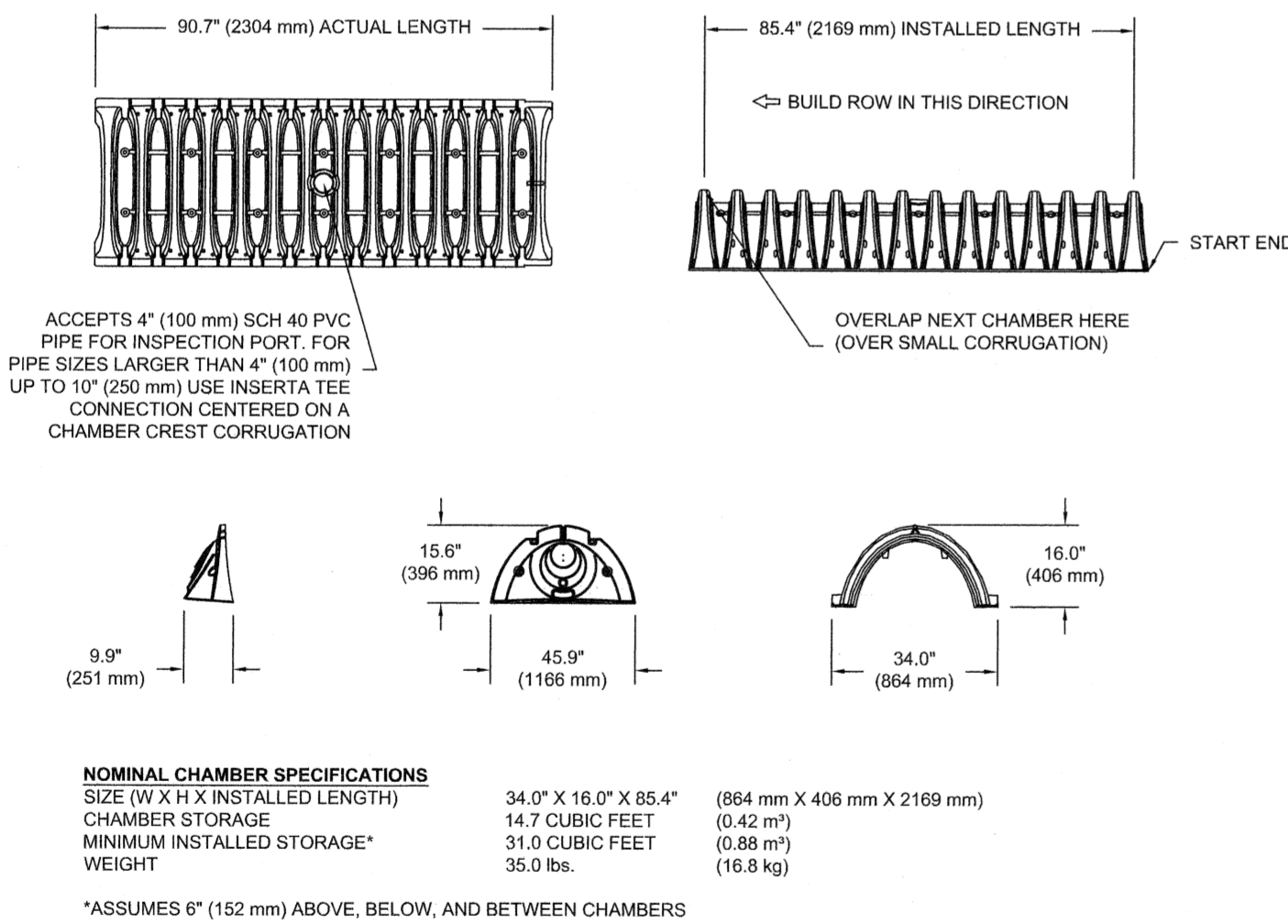
- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

- SC-310 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SC-310 TECHNICAL SPECIFICATION

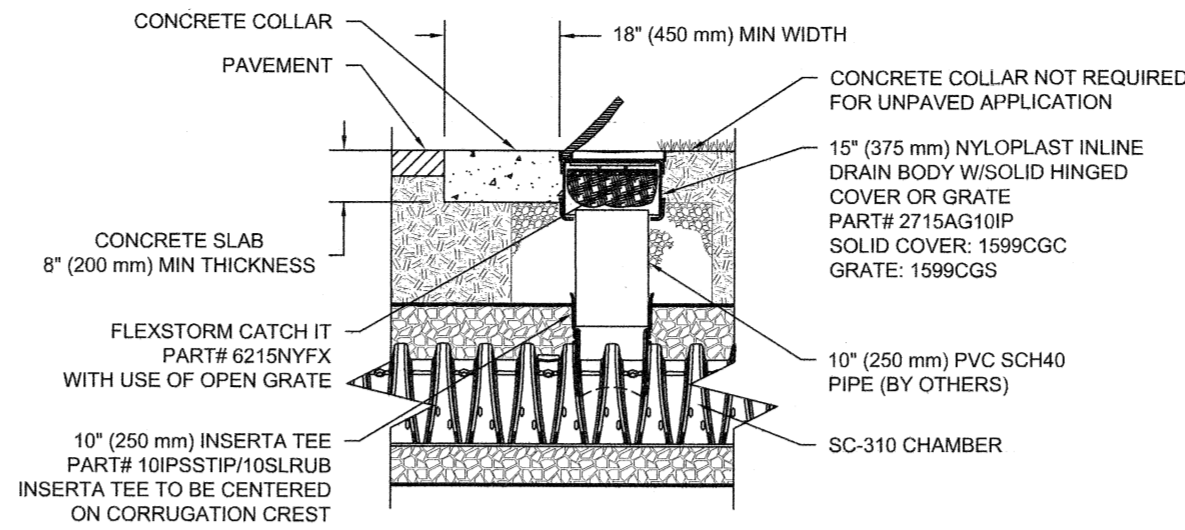


PART #	STUB	A	B	C
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	0.7" (18 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

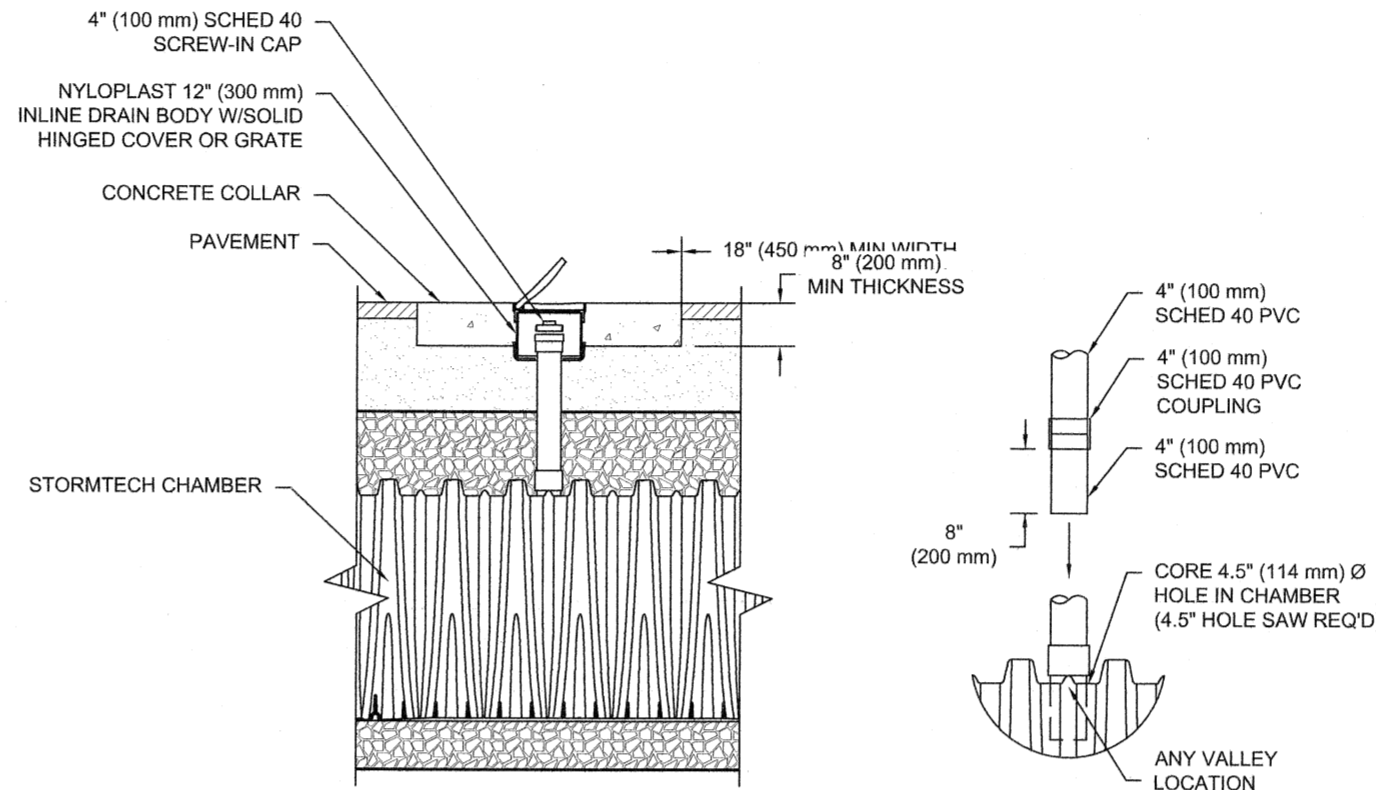
ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

\* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

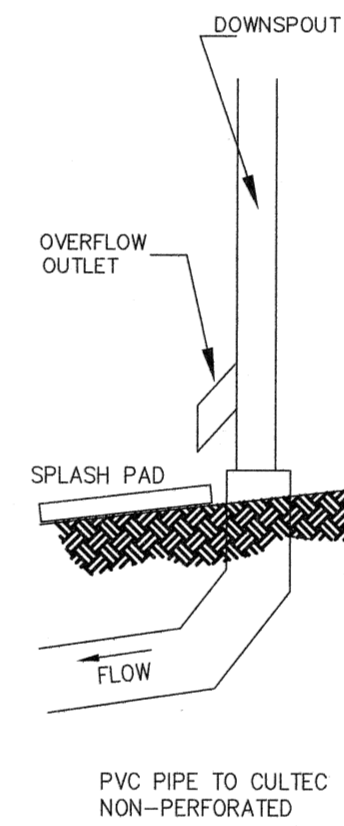


SC-310 10" INSPECTION PORT DETAIL

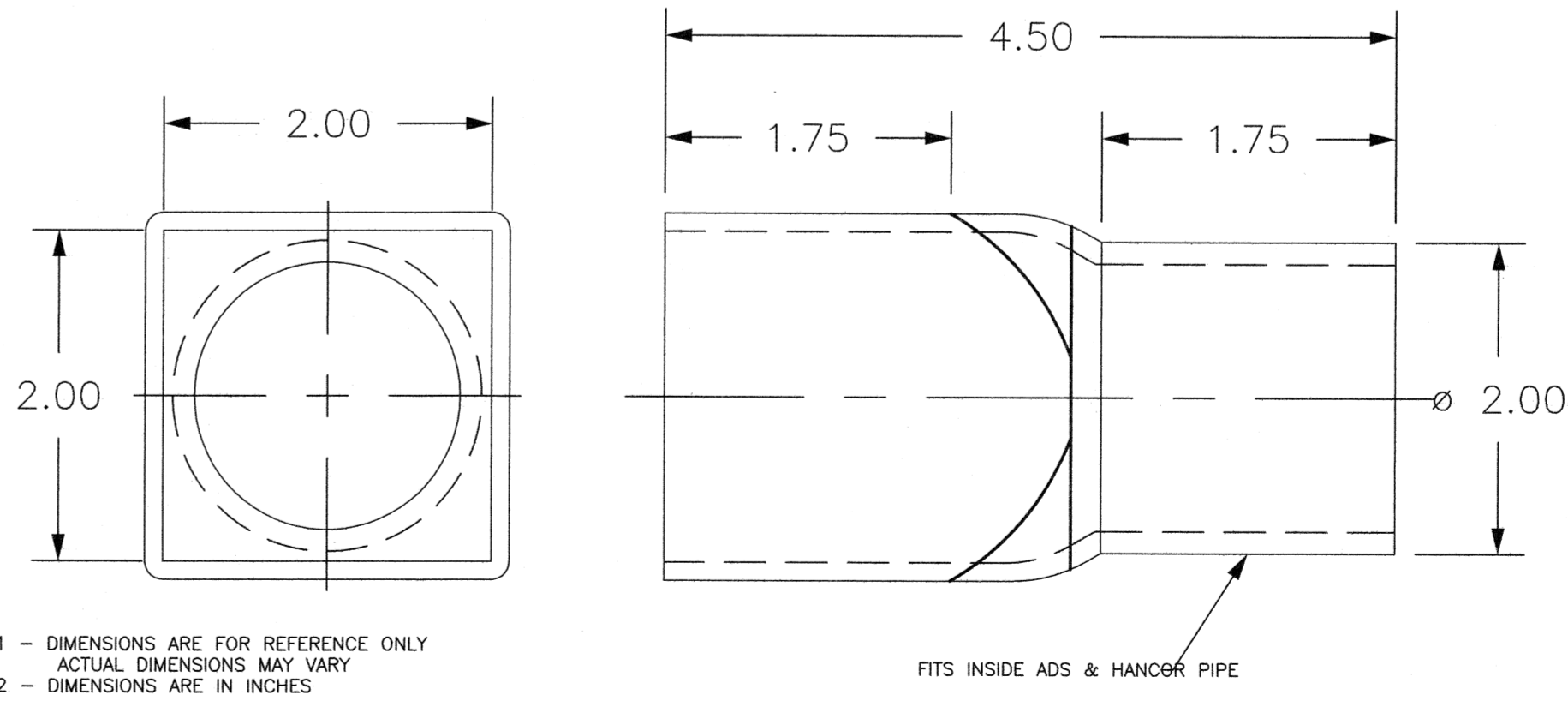


- NOTES:
- INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY
  - ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED.

CONNECTION DETAIL



DOWNSPOUT



- 1 - DIMENSIONS ARE FOR REFERENCE ONLY  
ACTUAL DIMENSIONS MAY VARY  
2 - DIMENSIONS ARE IN INCHES

4 X 4 X 4 DOWNSPOUT ADAPTER

REVISIONS		
No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017

DRAINAGE DETAILS  
IN  
MEDWAY, MASSACHUSETTS

176 MAIN STREET

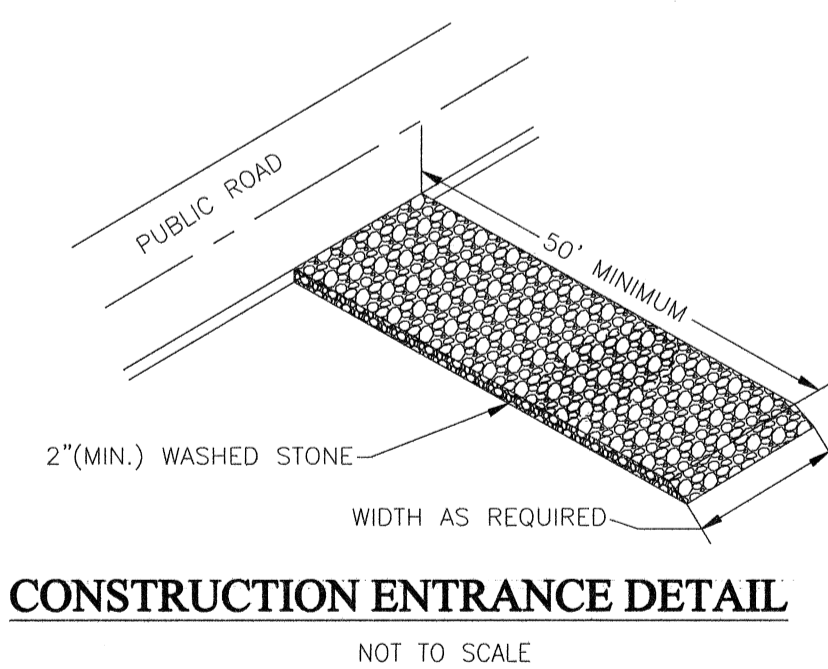
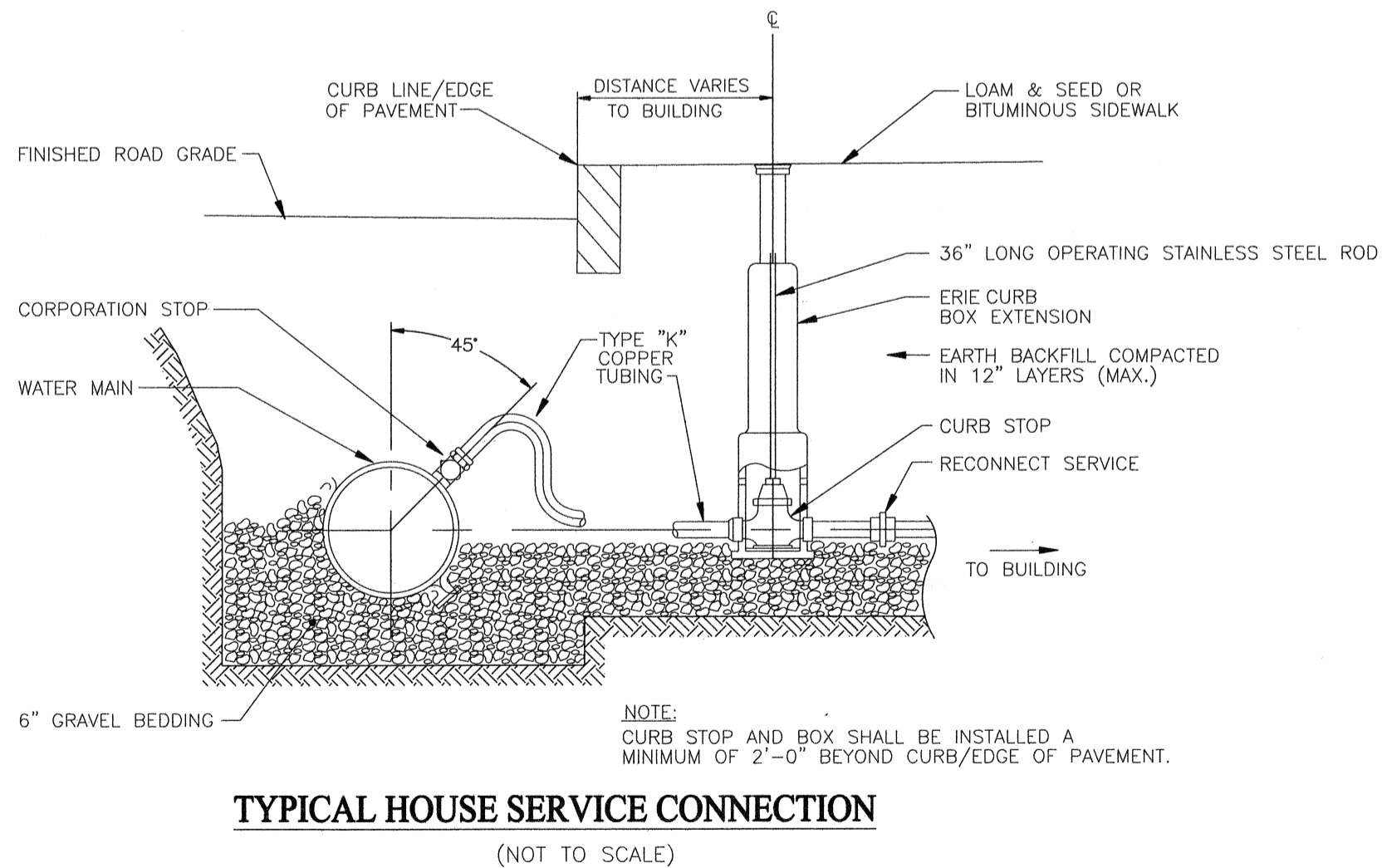
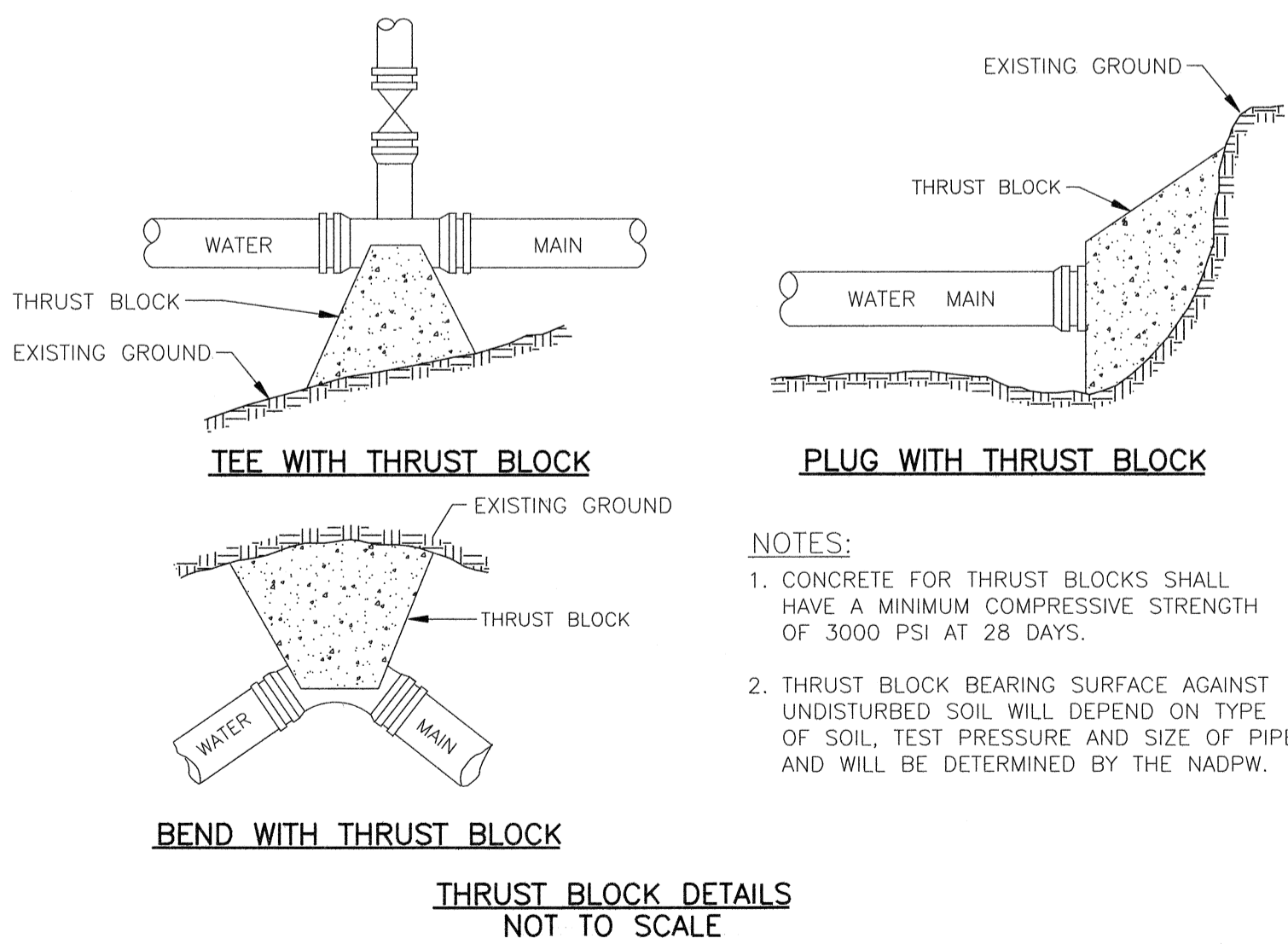
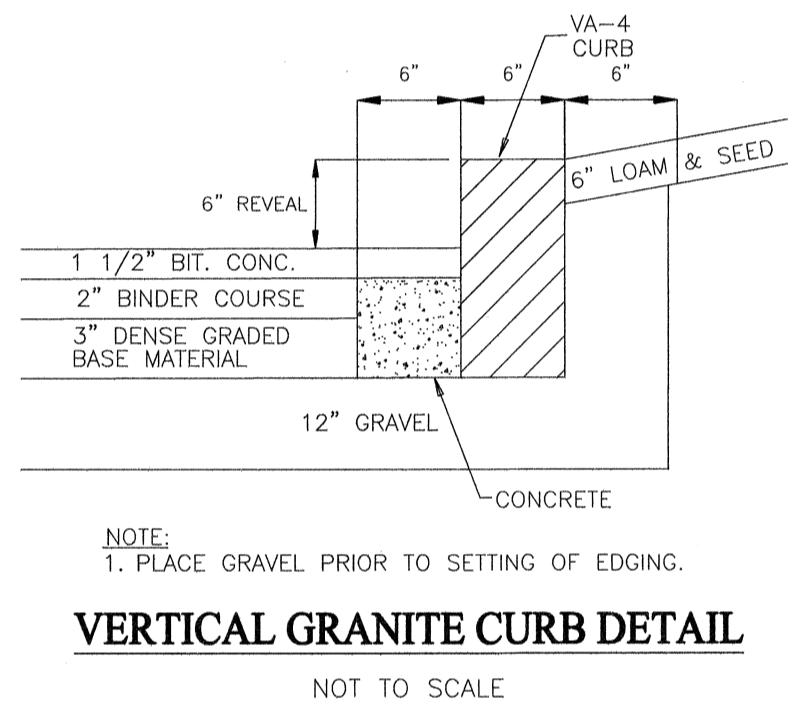
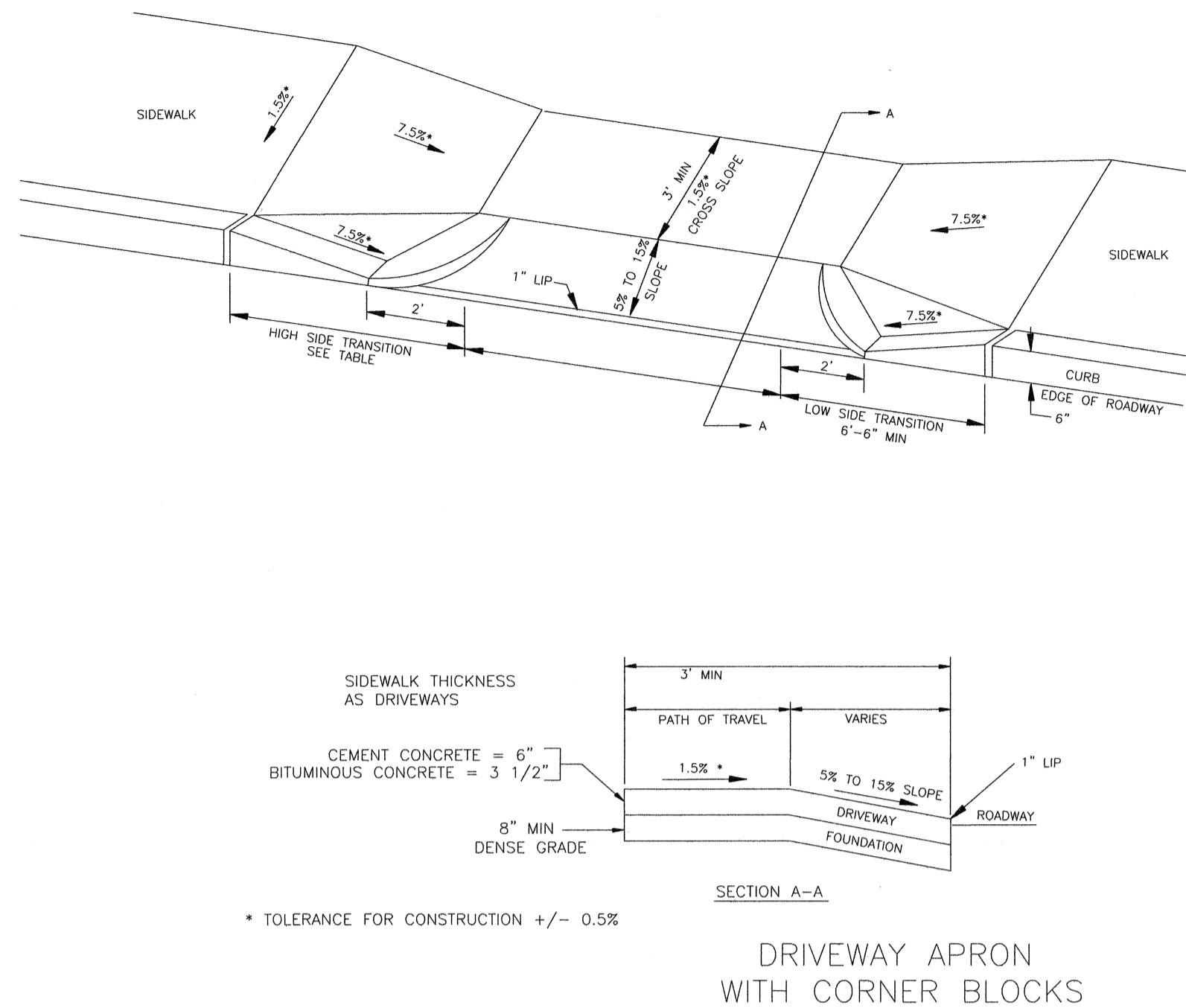
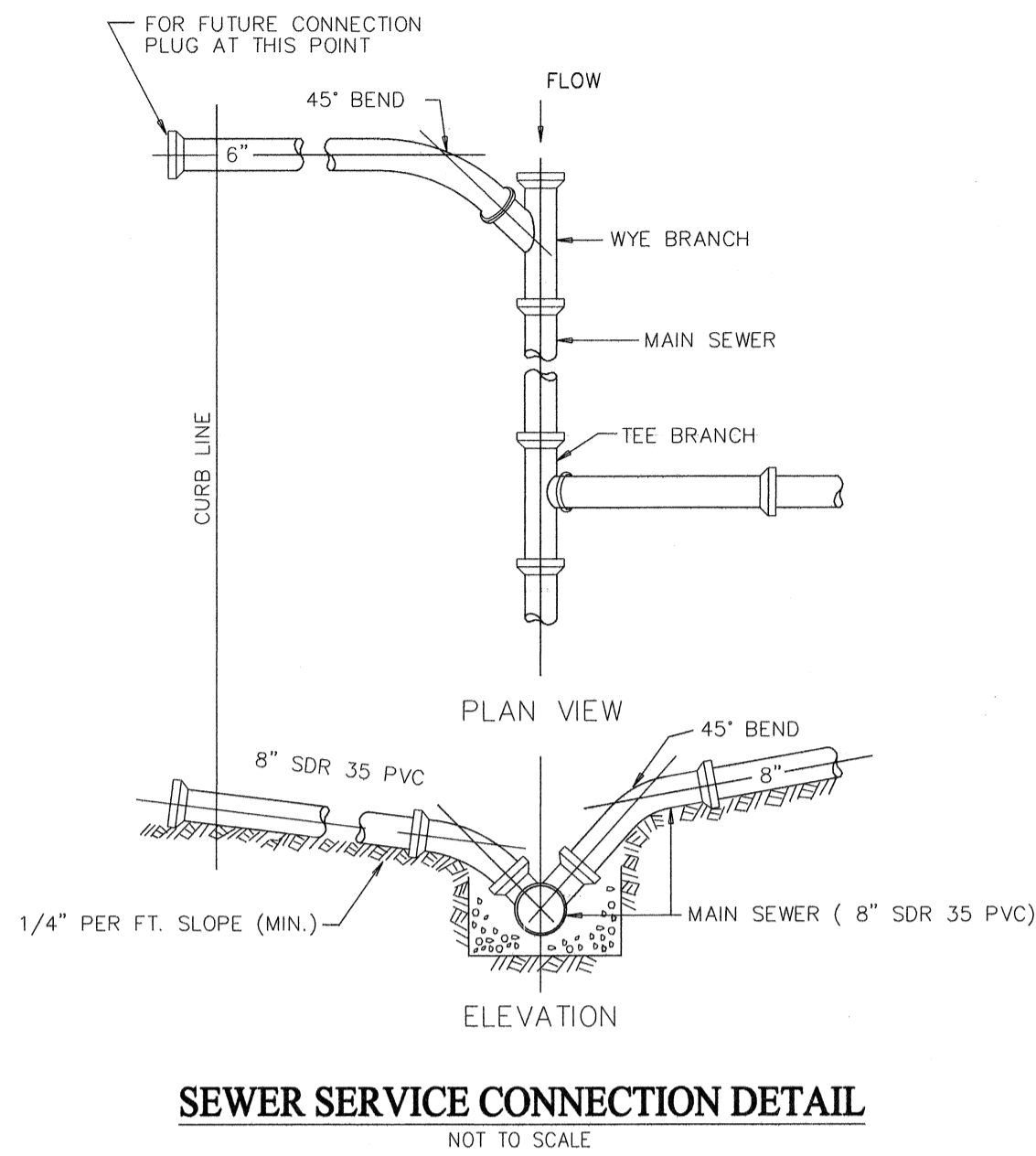
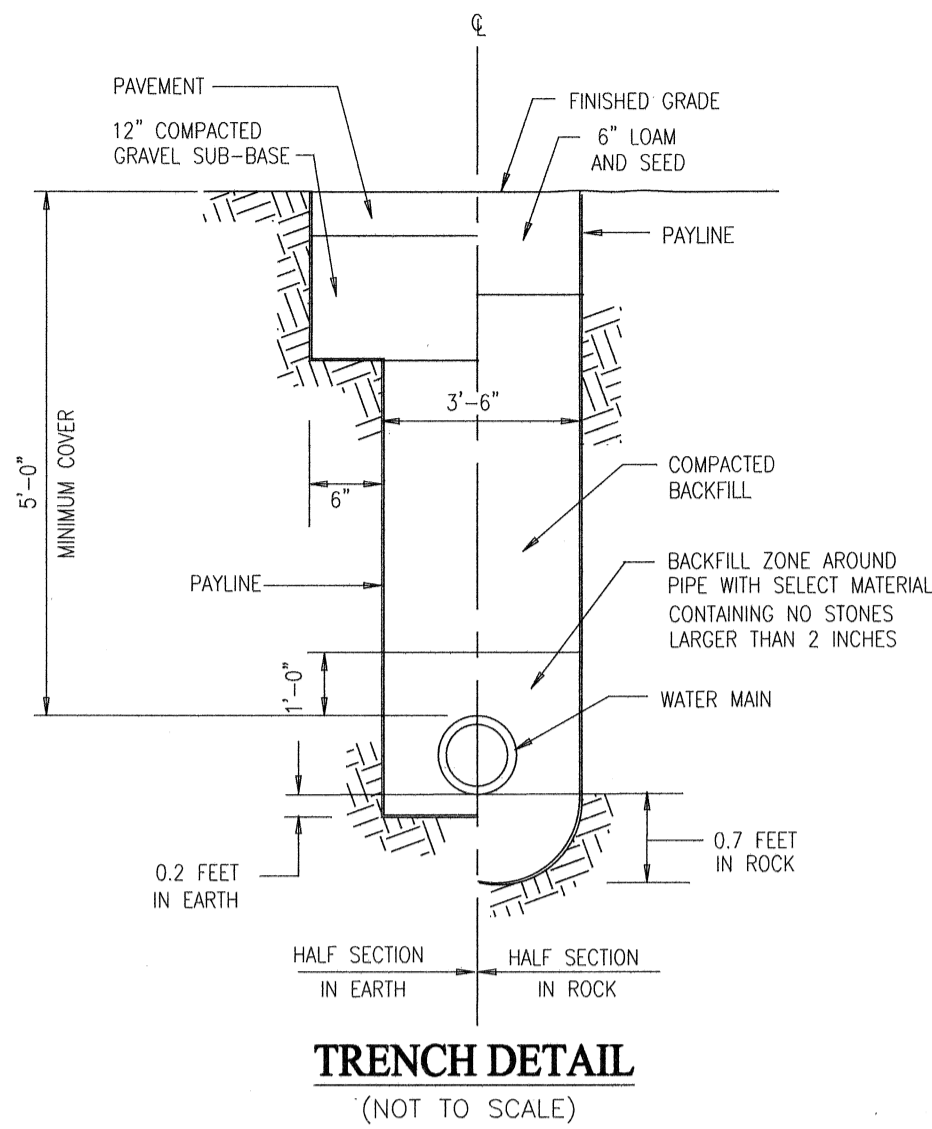
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REVISIONS		
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2.	3-7-2017	REVIEW LETTER 12-28-17

## SITE DETAILS IN MEDWAY, MASSACHUSETTS

176 MAIN STREET

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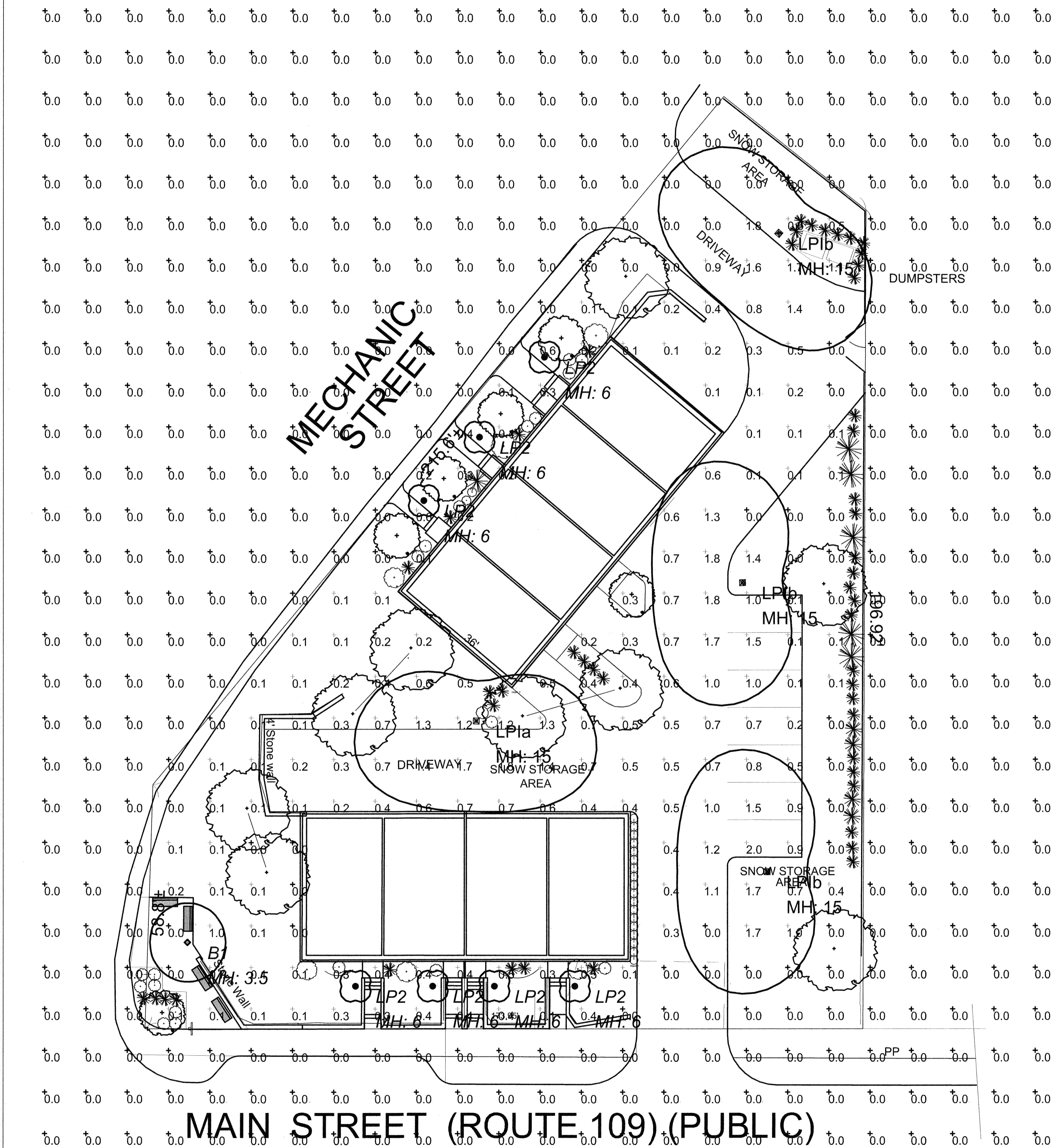
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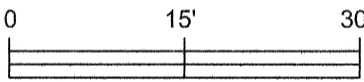


CalcPts\_1

Outdoor Luminaire Schedule						
Symbol	Qty	Label	Description	Lum. Lumens	LLF	Filename
	1	LPIa	6130LED-4ARC45T2-MDL03-SV2	5522	0.700	6130LED-4ARC45T2-MDL03-SV2.IES
	3	LPIb	6130LED-4ARC45T2-MDL03-SV2 HHS	5522	0.700	6130LED-4ARC45T2-MDL03-SV2.IES
	7	LP2	25 W J.J	1633	0.250	Vcx11gc.ies
	1	B1	3901 MH 70W	1588	0.900	3901LB-70MH.IES

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	LPIb	64.75	108	15	228.976	0
2	LP2	8	78.25	6	0	0
3	LP2	-7.75	59	6	0	0
4	LP2	-21.25	43.75	6	0	0
5	LPIb	56	24	15	181.87	0
6	LPIa	-8.5	-9.25	15	268.21	0
7	LPIb	62	-45.5	15	180	0
8	B1	-78.445	-62.48	3.5	0	0
9	LP2	-37.75	-73	6	0	0
10	LP2	-19.046	-73	6	0	0
11	LP2	-4.083	-73	6	0	0
12	LP2	15.411	-73	6	0	0

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	Illuminance	Fc	0.14	2.0	0.0	N.A.	N.A.



PHOTOMETRIC DATA PROVIDED BY:

**OMNI-LITE, INC.**  
263 WINN STREET BURLINGTON, MA. 01803  
PH # 781-272-2300, FAX # 781-272-0759 www.omnilight.com

NOTE:  
LIGHT SHIELDS SHALL BE INSTALLED TO COMPLY  
WITH LIGHT SPILLAGE LEVELS OF THE MEDWAY ZONING BYLAW

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- IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS.

DIG SAFE NOTE:

UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO, CALL "DIG-SAFE" AT 1(888)344-7233 1(888)DIG-SAFE.



THE OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION UNLESS SAID CONSTRUCTION IS SHOWN HEREON.

THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE AND PURPOSE FOR THE PARTY STATED HEREON AND SHALL NOT BE USED BY ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RONALD TIBERI P.E.

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.

APPROVED BY PLANNING BOARD

DATE: \_\_\_\_\_

REVISIONS

No.	DATE	DESCRIPTION
1.	1-23-2017	PER REVIEW LETTER 1-9-2017
2.	3-7-2017	PER REVIEW LETTER 2-23-2017
3.	3-31-2017	NOTE PER CONDITIONAL APPROVAL

**PROPOSED  
LIGHTING PLAN**  
IN  
MEDWAY, MASSACHUSETTS

**176 MAIN STREET**

PREPARED FOR: **176 MAIN STREET LLC  
12 HAVEN STREET  
DOVER MA**

PREPARED By: **RONALD TIBERI P.E.  
9 MASSACHUSETTS AVE.  
NATICK MA 01760**

DRAWING SCALE: 1 inch = 30 feet

PROJECT NUMBER: 2316

DATE: DEC. 18, 2016

# SFGstudios

Architectural Design Services  
278 Elm Street, Suite 226  
Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_

PROJECT  
*Medway Green*  
*176 Main Street*  
*Medway, Massachusetts*

## Building Code Information

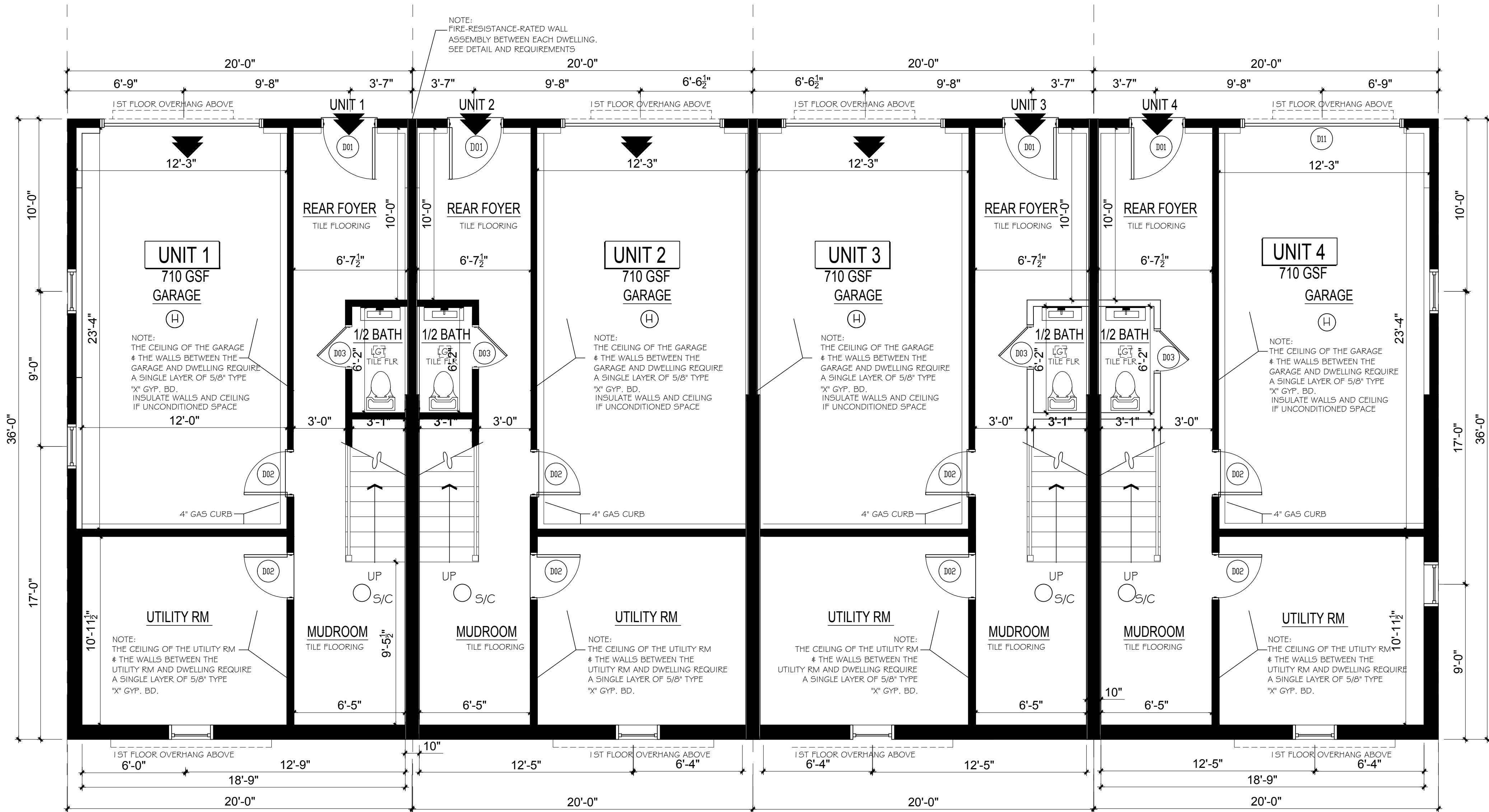
Occupancy / Use : RESIDENTIAL USE GROUP R-3: TOWNHOUSES  
Climate: 5a  
Ground Snow Live Load (Pg) : 40  
Basic Wind Speed (V): 100

All alterations, repairs and construction methods are to comply with:  
International Residential Code 2009 (IRC) with MA Amendments (780 CMR 51.00)  
International Fire Code 2009 (IFC)  
International Mechanical Code 2009 (IMC)  
International Fuel & Gas Code 2009 (IFGC)  
International Electrical Code 2009 (IEC)  
International Energy Efficiency Code 2012 (IEEC)

OWNER  
*176 Main St, LLC*  
*12 Haven Street*  
*Dover, Massachusetts*

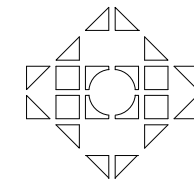


APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_



BASEMENT FLOOR PLAN

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ARCHITECTURAL DESIGN SERVICES  
278 Elm Street, Suite 226  
Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com



DESIGNERS • PLANNERS • ILLUSTRATORS

MEDWAY GREEN  
NEW TOWNHOMES  
176 MAIN STREET  
MEDWAY, MA  
BASEMENT FLOOR PLAN

REVISIONS		1	2	3	4	5
		10/17/16	01/09/17	01/23/17		
		9 4-UNIT STRUCTURES	DRC SUBMIT II	DRC APPROVED W/ REVISIONS		

OWNER  
  
176 Main LLC  
12 Haven Street  
Dover, MA

DRAWN BY  
SFG

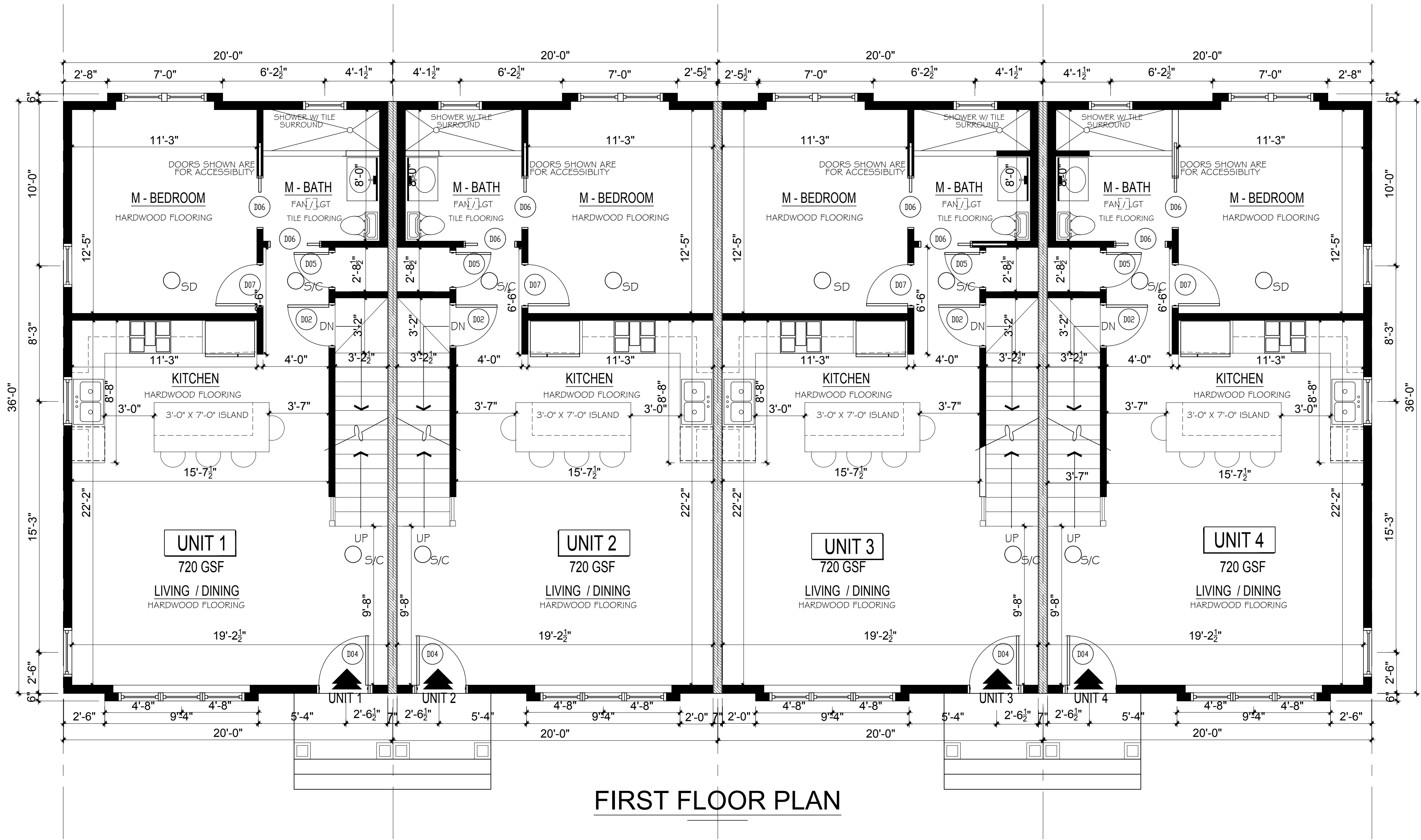
DATE  
07/02/2016

PROJECT  
No.

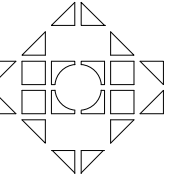
SCALE  
1/4" = 1'-0"

DRAWING  
No.  
A 1.0

APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_



**SFGstudios**  
ARCHITECTURAL DESIGN SERVICES  
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Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com



DESIGNERS • PLANNERS • ILLUSTRATORS

**MEDWAY GREEN  
NEW TOWNHOMES**  
176 MAIN STREET  
MEDWAY, MA

**FIRST FLOOR PLAN**

REVISIONS	
1.	10/17/16 2 4-UNIT STRUCTURES
2.	01/09/17 DRC - SUBMIT II
3.	01/23/17 DRC - APPROVED W/ REVISIONS
4.	
5.	

OWNER

176 Main LLC  
12 Haven Street  
Dover, MA

DRAWN BY

SFG

DATE

07/02/2016

PROJECT  
No.

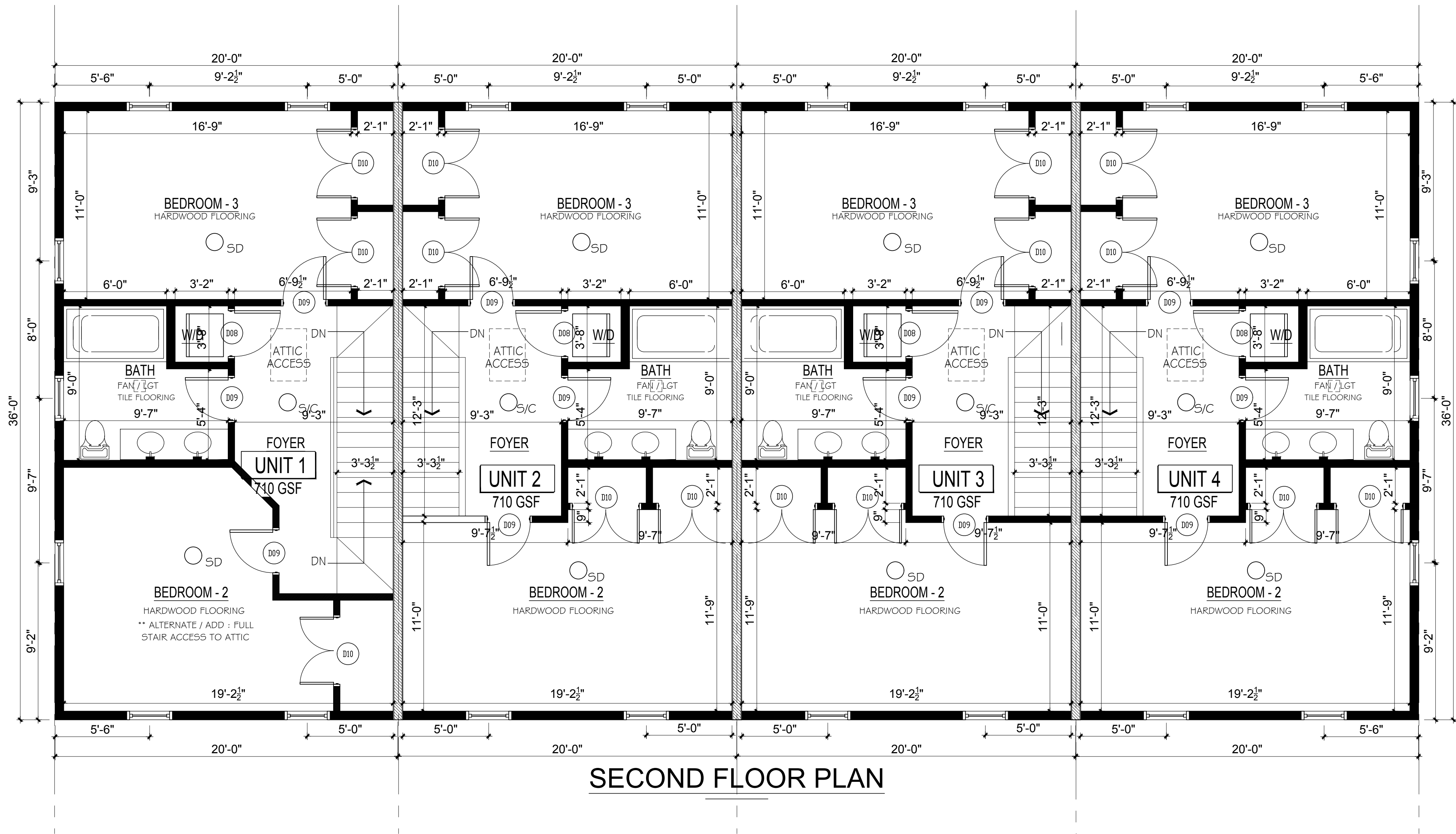
SCALE

1/4" = 1'-0"

DRAWING  
No.

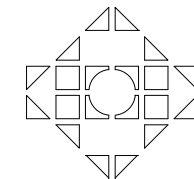
A 1.1

APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_



SECOND FLOOR PLAN

**SFGstudios**  
ARCHITECTURAL DESIGN SERVICES  
278 Elm Street, Suite 226  
Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com



DESIGNERS • PLANNERS • ILLUSTRATORS

**MEDWAY GREEN  
NEW TOWNHOMES**  
176 MAIN STREET  
MEDWAY, MA

**SECOND FLOOR PLAN**

REVISIONS	
1.	10/17/16 2 4-UNIT STRUCTURES
2.	01/09/17 DRC SUBMIT II
3.	01/23/17 DRC APPROVED W/ REVISIONS
4.	
5.	

OWNER  
  
176 Main LLC  
12 Haven Street  
Dover, MA

DRAWN BY  
**SFG**

DATE **07/02/2016**

PROJECT  
No.

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

DRAWING  
No.  
**A 1.2**

04/03/2017 DRC APPROVED - MYLAR FOR RECORDING

APPROVED BY PLANNING BOARD  
DATE: \_\_\_\_\_



Proposed Front (West) Elevation - Mechanic Street  
Units 1 - 4



Proposed Front (Southeast) Elevation - Main Street Rt 109  
Units 5 - 8

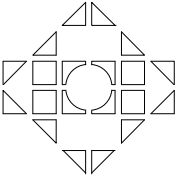
**ROOF**

30 YR ARCHITECTURAL SHINGLES  
5/8" CDX ROOF SHEATHING  
ICE & WARRIOR BARRIER  
2X12 ROOF RAFTERS  
AT 16" O.C., TYPICAL

**EXTERIOR WALL**

2X6 STUDS @ 16" OC.  
R-21 INSULATION VALUE REQ'D  
1/2" BLUEBOARD & PLASTER  
1/2" CDX WALL SHEATHING & PAPER  
HARDI PLANK LAP SIDING & TRIM  
SIDING COLORS ON EACH SET OF 4:  
COUNTRYLANE RED  
EVENING BLUE  
ARCTIC WHITE  
AGED PEWTER

**SFGstudios**  
ARCHITECTURAL DESIGN SERVICES  
278 Elm Street, Suite 226  
Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com



DESIGNERS • PLANNERS • ILLUSTRATORS

MEDWAY GREEN  
NEW TOWNHOMES  
176 MAIN STREET  
MEDWAY, MA  
ELEVATIONS I

REVISONS	4-UNIT STRUCTURES				
	1.	2.	3.	4.	5.
	10/17/16	DRC SUBMIT I	01/09/17	DRC SUBMIT II	
			01/23/17	DRC APPROVED W/ REVISIONS	

OWNER

176 Main LLC  
19 Haven Street  
Dover, MA

DRAWN BY

SFG

DATE 07/02/2016

PROJECT  
No.

SCALE

3/16" = 1'-0"

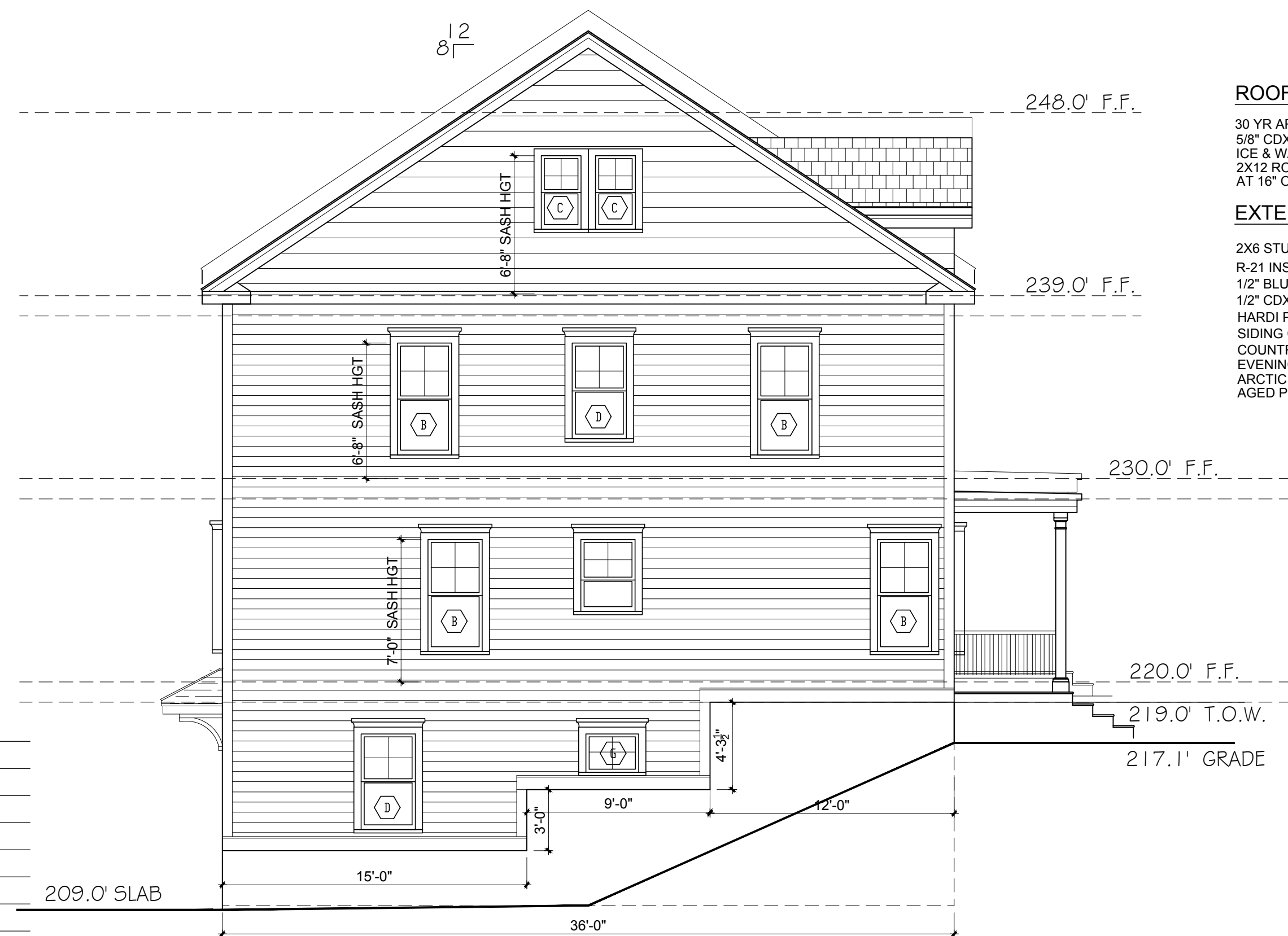
DRAWING  
No.

A 2.0

REAR ENTRIES

9'-0" X 8'-0" O.H.D. WITH 2'-8" X 7'-0" STL/GLASS ENTRY DOOR  
COPPER OR SHINGLED ROOF OVERHANG WITH  
STRUCTURAL BRACKETS, INSTALL AS PER  
MANUF SPECS, BY OWNER

Rear Elevation - East  
Units 1 - 4



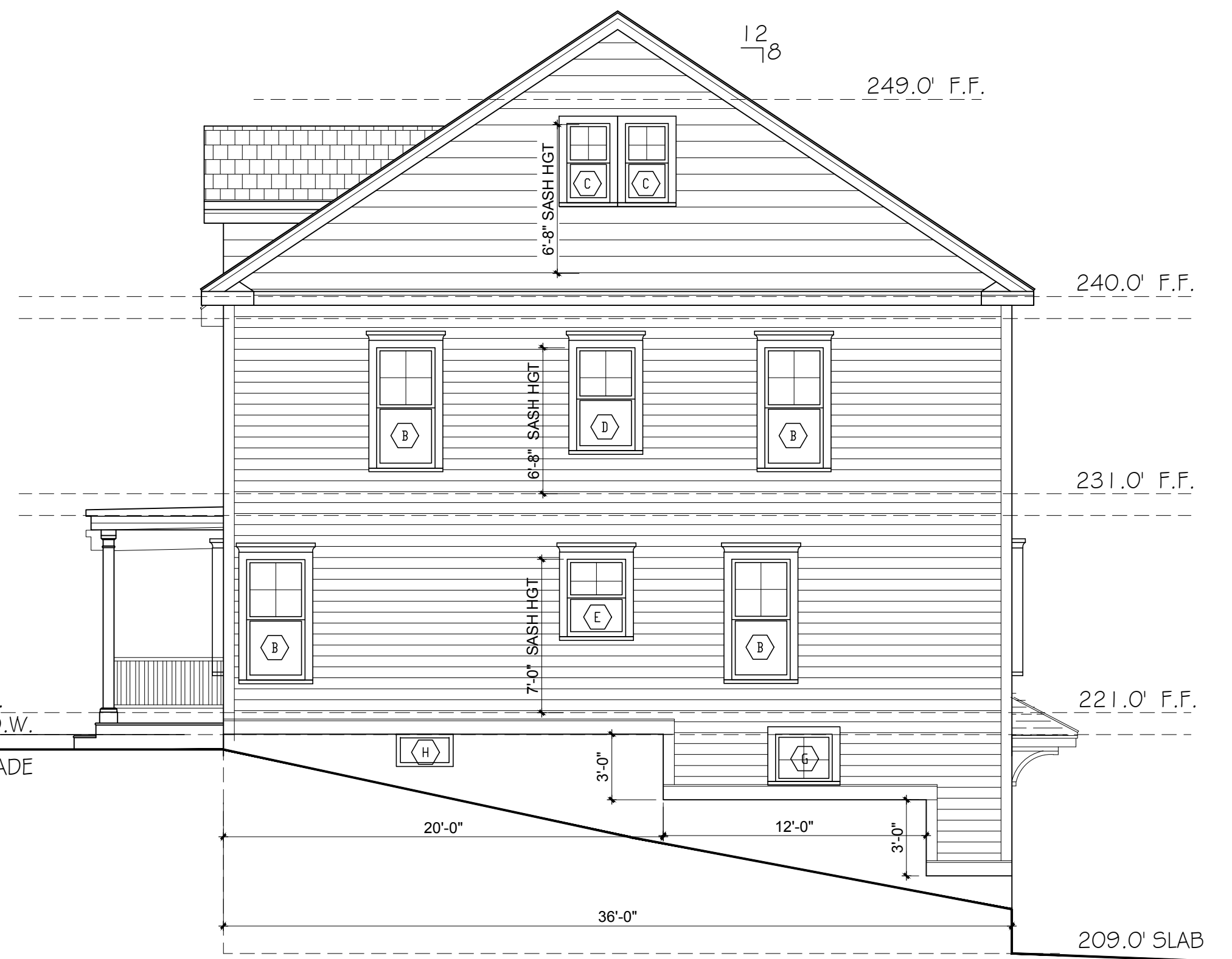
Side Elevation - North

ROOF

30 YR ARCHITECTURAL SHINGLES  
5/8" CDX ROOF SHEATHING  
ICE & WARRIOR BARRIER  
2X12 ROOF RAFTERS  
AT 16" O.C., TYPICAL

EXTERIOR WALL

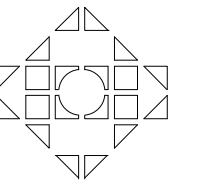
2X6 STUDS @ 16" OC.  
R-21 INSULATION VALUE REQ'D  
1/2" BLUEBOARD & PLASTER  
1/2" CDX WALL SHEATHING & PAPER  
HARDI PLANK LAP SIDING & TRIM  
SIDING COLORS ON EACH SET OF 4:  
COUNTRYLANE RED  
EVENING BLUE  
ARCTIC WHITE  
AGED PEWTER



Side Elevation - South

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278 Elm Street, Suite 226  
Somerville, MA 02144  
781.956.9773 cell  
SFGstudios@msn.com



DESIGNERS - PLANNERS - ILLUSTRATORS

MEDWAY GREEN  
NEW TOWNHOMES  
176 MAIN STREET  
MEDWAY, MA  
ELEVATIONS II

REVISIONS

NO.	DATE	DESCRIPTION
1.	10/17/16	2 4-UNIT STRUCTURES
2.	01/09/17	DRC SUBMIT II
3.	01/23/17	DRC APPROVED W/ REVISIONS
4.		
5.		

OWNER

176 Main LLC  
192 Haven Street  
Dover, MA

DRAWN BY

SFG

DATE

07/02/2016

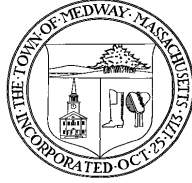
PROJECT  
No.

SCALE

3/32" = 1'-0"

DRAWING  
No.

A 2.1



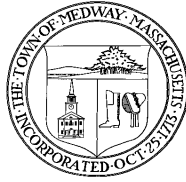
**April 25, 2017**  
**Medway Planning & Economic Development Board**  
**Meeting**

**Public Hearing Continuation –**  
**Merrimack Building Supply Expansion –**  
**Site Plan and Groundwater Protection**  
**District Special Permit**

- Public Hearing Continuation Notice dated April 12, 2017
- Tetra Tech Review Letter dated April 20, 2017
- Waiver Requests (4) dated March 4, 2017
- Site Plan dated March 10, 2017

NOTE – I expect a review letter from Sergeant Jeff Watson on Monday. I will either forward that to you electronically or provide it to you Tuesday night. I checked with the Board of Health and there is a permit process for abandoning a septic system. I have forwarded that information to project engineer Peter Lavoie.





**TOWN OF MEDWAY**  
**Planning & Economic Development Board**  
155 Village Street  
Medway, Massachusetts 02053

*Andy Rodenhiser, Chairman*  
*Robert K. Tucker, Vice-Chairman*  
*Thomas A. Gay, Clerk*  
*Matthew Hayes, P.E.*  
*Richard Di Iulio*

**MEMORANDUM**

April 12, 2017

TO: Maryjane White, Town Clerk  
Town of Medway Departments, Boards and Committees

FROM: Susy Affleck-Childs, Planning & Economic Development Coordinator

RE: **Public Hearing Continuation: Merrimack Building Supply (20 Trotter Drive)**  
**Major Site Plan & Groundwater Protection Special Permit**

**CONTINUATION DATE: Tuesday, April 25, 2017 at 7:15 p.m.**

**LOCATION: Medway Town Hall – Sanford Hall, 155 Village Street**

At its meeting on April 11, 2017, the Planning and Economic Development Board voted to continue the public hearing on the applications of Merrimack Building Supply of Medway, MA for major site plan approval and a groundwater protection special permit for a proposed building expansion project at its facility at 20 Trotter Drive to Tuesday, April 25, 2017 at 7:15 p.m. in Sanford Hall at Medway Town Hall, 155 Village Street.

The subject property is 10.73 acres and is located at the southwest end of Trotter Drive in the Industrial III zoning district (Map 64 - Parcel 002). It is owned by Medway Trotter, LLC. The site includes wetland resources, a small portion of Stall Brook, and is located within the groundwater protection district.

The applicant proposes to construct a 19,500 sq. ft. addition to the existing 10,000 sq. ft. building, a new customer entrance, expanded parking, a new loading dock and paved area for truck access to the loading dock, installation and relocation of utilities to accommodate the new addition, abandonment of the existing septic system and connection to Town sewer, installation of a stormwater drainage system for the entire site, and site landscaping and lighting. The plan is titled *Merrimack Building Supply Site Plan for 20 Trotter Drive*, is dated March 10, 2017, and was prepared by Guerriere and Halnon of Milford, MA and Cubic Architects Inc. of Plymouth, MA.

The applications, site plan, stormwater report, and other documents are on file with the Medway Town Clerk and at the office of the Planning and Economic Development Board at Medway Town Hall, 155 Village Street and may be reviewed during regular business hours. The application, plan, report and other documents are also posted at the Planning and Economic Development Board's web page at:  
<http://www.townofmedway.org/planning-economic-development-board/pages/merrimack-building-supply-expansion-%E2%80%93-major-site-plan-gpd>

***If you have not yet reviewed the proposed development and wish to provide comments, please forward them to me by April 20<sup>th</sup>*** so that I can share them with the Board and applicant.

Please contact me if you have any questions. Thanks.



April 20, 2017

Ms. Susan E. Affleck-Childs  
Medway Planning and Economic Development Coordinator  
Medway Town Hall  
155 Village Street  
Medway, MA 02053

**Re: Merrimack Building Supply  
Major Site Plan Review  
Medway, Massachusetts**

Dear Ms. Affleck-Childs:

Tetra Tech (TT) has performed a review of the proposed Site Plan for the above-mentioned Project at the request of the Town of Medway Planning and Economic Development Board (PEDB). The proposed Project is located at 20 Trotter Drive in Medway, MA on a 10.73 acre parcel located within the groundwater protection district. Proposed construction includes a 19,500 s.f. building addition, proposed parking to accommodate the addition, new utilities and proposed stormwater infrastructure to support the increase in impervious area at the site.

TT is in receipt of the following materials:

- A plan (Plans) set titled "Merrimack Building Supply Site Plan for 20 Trotter Drive in Medway, Massachusetts", dated March 10, 2017, prepared by Guerrier & Halnon, Inc. (GHI).
- A stormwater management report (Stormwater Report) titled "Hydrologic & Hydraulic Report, 20 Trotter Drive" dated March 10, 2017, prepared by GHI.
- A Project Description detailing the proposed project dated March 10, 2017, prepared by GHI.
- A list of requested waivers from the Medway PEDB Rules and Regulations.
- A Major Site Plan Approval application form dated March 14, 2017, prepared by GHI

The Plans, Stormwater Report and accompanying materials were reviewed for conformance with Chapter 200 of the Town of Medway PEDB Rules and Regulations (Regulations), MA DEP Stormwater Management Standards (Standards) and good engineering practice. Review of the project for zoning and wetland related issues was not completed as these reviews are conducted by separate consultants/town agencies.

**The following items were found to be inconsistent with current Town of Medway PEDB Site Plan Review Regulations (Chapter 200). Reference to applicable regulation requirement is given in parentheses following each comment.**

- 1) The proposed Project requires an Environmental Impact Assessment (EIA) since the proposed addition is greater than fifteen thousand (15,000) square feet. Disturbance to the site also appears to be greater than thirty thousand (30,000) square feet. A waiver has been requested from this regulation by the applicant. Due to the location of the site within the Zone II area, we recommend the applicant provide the Board with the EIA. (Ch. 200 §204-3.A.7.b)
- 2) Site plans are required to be drawn at a scale of 1"=40', Plans provided are at a scale of 1"=30' and do not show the entire site. We appreciate the level of detail and clarity provided by the 1"=30' scale but recommend the plans be reformatted to show the entire site (Ch. 200 §204-4.B)

- 3) The applicant has not provided existing landscape inventory at the site. A waiver from this regulation has been requested. (Ch. 200 §204-5.C.3)
- 4) The plans do not show setback lines. (Ch. 200 §204-5.D.1)
- 5) The plans do not show proposed curb radii for parking areas. (Ch. 200 §204-5.D.2)
- 6) Existing/Proposed dumpster location and screening are not shown on the plans. (Ch. 200 §204-5.D.6)
- 7) A color rendering of the project has not been provided. (Ch. 200 §204-5.D.9)
- 8) Proposed lighting/photometric plan has not been provided. (Ch. 200 §204-5.D.13)
- 9) We recommend the applicant speak with the Medway Fire Chief to confirm additional hydrants are not needed to meet demands of the new building. Nearest hydrant to the building is located in the cul-de-sac area of Trotter Drive. (Ch. 200 §204-5.D.16)
- 10) We recommend the applicant provide statement regarding any proposed on-site generation of noise and/or odors which may result from the expanded development of the site. (Ch. 200 §204-5.D.17)
- 11) It appears the proposed internal site driveway is located within 15' from a side lot line. (Ch. 200 §205-3.B.2)
- 12) The applicant has not provided vertical granite curb throughout the limit of the internal site driveway. If the applicant wishes to use Modified Cape Cod Berm, a waiver must be requested. (Ch. 200 §205-3.B.6)
- 13) The plans do not distinguish between employee parking and customer parking areas. (Ch. 200 §205-6.C)
- 14) It appears the applicant is providing greater than the required parking for the site. We recommend the applicant limit parking to only what is required, if possible, in order to reduce impervious area. (Ch. 200 §205-6.G.2)
- 15) Proposed parking stalls are designed at 9' x 18' and include a "+/-" designation. The regulations require stalls be no smaller than 10' x 20'. (Ch. 200 §205-6.G.3.a)
- 16) Wheel stops are required at the head of parking stalls that abut pedestrian sidewalk. (Ch. 200 §205-6.G.3.b)
- 17) It appears the parking area to the east of the proposed building is located within 15' of a side lot line. (Ch. 200 §205-6.G.4.b)
- 18) The applicant is proposing to use Modified Cape Cod Berm along the parking area instead of Vertical Granite Curb as specified in the regulation. A waiver has been requested from this regulation. (Ch. 200 §205-6.H)
- 19) Snow removal areas have not been shown on the plans. (Ch. 200 §205-7)
- 20) Proposed lighting at the site has not been provided. (Ch. 200 §205-8)

**The following items were found to not be in conformance with MA DEP Storm Water Management Standards and/or Town stormwater standards.**

MA DEP Stormwater Management Standards

- 21) Site is located in the Zone II area and requires 44% TSS removal prior to discharge to the proposed infiltration basin. The applicant proposed the use of an Infiltration Basin coupled with a Sediment Forebay which achieves 80% TSS removal credit. However, the proposed Sediment Forebay cannot be double counted as shown on the TSS removal spreadsheet, additional pre-treatment is required to meet the standard. (Standard 3)
- 22) Metal roofs are not permitted for use in Zone II areas unless roof runoff is properly pre-treated prior to discharge to an infiltration BMP. The applicant proposes use of a rain garden in order to pre-treat roof runoff for the existing building and proposed addition. Information provided does not adequately address how this requirement is met. Additional information is needed to confirm anticipated roof drain routing and size of proposed BMP.
- 23) The existing storage shed, which is designated to remain, has a metal roof which does not appear to be receiving any treatment prior to discharge. The applicant should confirm existing and proposed roof type and amount of roof runoff discharging to the rain garden. (Standard 3)
- 24) We recommend the applicant provide a list of materials being stored at the site to determine if site meets criteria for LUHPPL. (Standard 5)
- 25) The proposed Project results in a net increase in impervious area and as such does not meet the Redevelopment Standard. (Standard 7)

Town Stormwater Regulations (Ch. 200 §205-4)

- 26) It appears the paved area north of the proposed building is pitching toward the drainage swale located on the adjacent property. The applicant should confirm grading at the rear of the building and/or provide documentation for drainage easement on the abutting property. (Ch. 200 §205-4.A)
- 27) The stormwater report should be stamped and signed by a Registered Professional Engineer. (Ch. 200 §205-4.B)
- 28) Pipe sizing calculations should be provided for the 25-year storm event. Please include sizing information for roof drain laterals. (Ch. 200 §205-4.E.1)

General Stormwater Comments

- 29) Test pits are required to confirm groundwater depths at the proposed infiltration basin location. None have been provided and basins are proposed in areas where groundwater can be reasonably expected within two feet of the proposed bottom of infiltration basin. We recommend test pits be conducted in each of the infiltration areas and design reflect minimum offsets required.
- 30) We recommend the applicant model the rain garden as a pond in order to determine stage storage elevations since the rain garden is also receiving flows from the adjacent parking lot and areas offsite. Provide calculations for drawdown within the 72 hour required period.
- 31) A stormwater checklist should be provided and stamped by Professional Engineer.

- 32) Total study area between existing and proposed analyses do not match. Existing study area is 7.7 acres and proposed study area is 8.46 acres. Please address.
- 33) One-foot of freeboard is required in the proposed infiltration basin. Furthermore, it appears the grades are labeled incorrectly on the basin as the contour offsets appear similar but increase by different values (el. 235 to 236 is same contour offset as el. 236 to 238). Please address.

**The following is a list of general items that TT recommends the applicant take into consideration prior to the next submission:**

- 34) Content of Locus Map on Cover Sheet is not consistent and does not provide clear coverage of area. We request the Locus Map be compiled from a single source.
- 35) Lot Detail on Cover Sheet indicates additional existing site improvements (material handling area) in the southern portion of the site and in very close proximity to wetland resources. This area is excluded from subsequent site plan sheets. We suggest the Site Plans include the entire parcel and show all site activities.
- 36) Scale bars should be provided on the plans to confirm drawing/plot scales,
- 37) Work is proposed within several easements. We request confirmation that easements do not restrict development improvements shown.
- 38) The driveway appears to narrow as it approaches Trotter Drive. We request the applicant provide additional detail showing how driveway and sidewalk transition to existing conditions and how required widths for two-way circulation are maintained.
- 39) The northerly edge of driveway, as it approaches the first parking lot, does not show any edge treatment (curb). It does not appear this was intended. Please address.
- 40) The summary table provided on the Cover Sheet indicates only "1" accessible space is required and provided. Applicable guidelines require two accessible spaces for parking areas of 26-50 spaces, of which, one must be van accessible. Additionally, the table indicates 48 spaces are provided however the Site Plan only shows 46. Please amend the table to show the correct information.
- 41) We request the applicant provide the industrial classification (SIC Code) for the site and what, if any, NPDES stormwater permits are required for the use and/or construction.
- 42) The limits of pavement demolition/reclamation/repaving are unclear. Please provide additional detail to clearly indicate limits.
- 43) Erosion/Sediment control measures should extend along the northern limit of the property to control runoff along the edge of new construction.
- 44) Please show calculation confirming proposed 6" roof drain connections are sufficient to handle runoff from roof.
- 45) The Erosion Control Plan indicates construction runoff will be directed to the proposed infiltration basin using "Proposed Cross Trench". Accumulation of sediments from construction is likely to negatively impact infiltrative capacity needed for proper function of the basin. This practice is specifically prohibited in the Mass DEP Stormwater Handbook (Volume 2) which states "Never use infiltration basins as temporary sediment traps for construction activities". Please provide detail on

how Mass DEP design standards will be met including how basin will be treated to restore infiltration rates or provide alternate location for construction controls.

- 46) The Planting Plan and the Site Plan show different treatment of driveway entrance. Please coordinate the two plans to show consistent treatment of the site.
- 47) Bollard detail should be added to plans.
- 48) Site driveway traffic flow arrow markings are shown backwards on the plans.

These comments are offered as guides for use during the Town's review and additional comments are likely to be generated during the course of review. If you have any questions or comments, please feel free to contact us at (508) 786-2200.

Very truly yours,



Sean P. Reardon, P.E.  
Vice President



Steven M. Bouley, EIT  
Senior Project Engineer

P:\21583\143-21583-17004 (MERRIMACK BLD SUPPLY)\DOCS\MERRIMACK-PEDBREV(2017-04-20).DOCX

**Medway Planning and Economic Development Board**  
**FORM Q - Request for Waiver from Rules and Regulations**  
 Complete 1 form for each waiver request

<b>Project Name:</b>	Merrimack Building Supplies Expansion
<b>Property Location:</b>	20 Trotter Drive
<b>Type of Project/Permit:</b>	Major Site Plan Project
<b>Identify the number and title of the relevant Section of the applicable Rules and Regulations from which a waiver is sought.</b>	Section 204-5(C)(3): Existing Landscape Inventory
<b>Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.</b>	Inventory prepared by a Prof. Landscape Architect to include a mapped overview of existing landscape features & specific ID of trees.
<b>What aspect of the Regulation do you propose be waived?</b>	Waive Existing Landscape Inventory
<b>What do you propose instead?</b>	Proposing to install landscaping in islands
<b>Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.</b>	There are no trees or landscape in the proposed work area
<b>What is the estimated value/cost savings to the applicant if the waiver is granted?</b>	Landscape Architect fees
<b>How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?</b>	The area of the proposed development currently is pre-disturbed with no existing landscaping. Approval of this waiver has no effect on the design as there is no existing landscaping.
<b>What is the impact on the development if this waiver is denied?</b>	None
<b>What are the design alternatives to granting this waiver?</b>	None
<b>Why is granting this waiver in the Town's best interest?</b>	It will not affect the Town.
<b>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</b>	None
<b>What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?</b>	Proposed plantings in the parking islands as shown on the plans
<b>What is the estimated value of the proposed mitigation measures?</b>	None
<b>Other Information?</b>	
<b>Waiver Request Prepared By:</b>	Peter M Lavoie, Proj Engineer Guerriere & Halnon, Inc.
<b>Date:</b>	3-14-2017

**Questions?? - Please contact the Medway PED office at 508-533-3291.**

**Medway Planning and Economic Development Board**  
**FORM Q - Request for Waiver from Rules and Regulations**  
 Complete 1 form for each waiver request

<b>Project Name:</b>	Merrimack Building Supplies Expansion
<b>Property Location:</b>	20 Trotter Drive
<b>Type of Project/Permit:</b>	Major Site Plan Project
<b>Identify the number and title of the relevant Section of the applicable Rules and Regulations from which a waiver is sought.</b>	Section 205-6(H): Vertical Granite Curb
<b>Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.</b>	Parking area shall be bounded with vertical granite curb or similar type of edge treatment
<b>What aspect of the Regulation do you propose be waived?</b>	Waive the installation of vertical granite curb & allow installation of cape cod berm
<b>What do you propose instead?</b>	Installation of cape cod berm
<b>Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.</b>	Currently, there is no curbing on the site this will allow for the "similar type of edge treatment" which will improve the site.
<b>What is the estimated value/cost savings to the applicant if the waiver is granted?</b>	Cost savings of difference between cost of vertical granite & cape cod berm
<b>How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?</b>	None
<b>What is the impact on the development if this waiver is denied?</b>	None
<b>What are the design alternatives to granting this waiver?</b>	None
<b>Why is granting this waiver in the Town's best interest?</b>	This waiver does not affect the Town
<b>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</b>	None
<b>What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?</b>	Propose to install cape cod berm where no curbing currently exists
<b>What is the estimated value of the proposed mitigation measures?</b>	
<b>Other Information?</b>	
<b>Waiver Request Prepared By:</b>	Peter M Lavoie, Proj Engineer Guerriere & Halnon, Inc
<b>Date:</b>	3-14-2017

**Questions?? - Please contact the Medway PED office at 508-533-3291.**

**Medway Planning and Economic Development Board**  
**FORM Q - Request for Waiver from Rules and Regulations**  
 Complete 1 form for each waiver request

<b>Project Name:</b>	Merrimack Building Supplies Expansion
<b>Property Location:</b>	20 Trotter Drive
<b>Type of Project/Permit:</b>	Major Site Plan Project
<b>Identify the number and title of the relevant Section of the applicable Rules and Regulations from which a waiver is sought.</b>	Section 204-3 Planning Board Submittals Sub-section A. 7) Development Impact Statement
<b>Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.</b>	Due to the type of development, location of of the site & nature of the business, we feel the Impact Statement is not needed.
<b>What aspect of the Regulation do you propose be waived?</b>	Waive submittal of a Development Impact Stmt
<b>What do you propose Instead?</b>	Impacts are reflected on Proposed Site Plan
<b>Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.</b>	The site is located in an Industrial Park. The proposed work will be in a pre-disturbed area of the site. The nature of business is not changing from the exist. bldg supply company
<b>What is the estimated value/cost savings to the applicant if the waiver is granted?</b>	Engineering Fees
<b>How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?</b>	This site is pre-disturbed due to the exist. use & the construction of Town cross-country sewer. The site was designed following stormwater mgmt practices (BMPs) and will be reviewed by DEP & Medway Conservation.
<b>What is the Impact on the development if this waiver is denied?</b>	No impact on development.
<b>What are the design alternatives to granting this waiver?</b>	None
<b>Why is granting this waiver in the Town's best interest?</b>	It will not affect the Town
<b>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</b>	None
<b>What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?</b>	No mitigation measures are required
<b>What is the estimated value of the proposed mitigation measures?</b>	None
<b>Other Information?</b>	
<b>Waiver Request Prepared By:</b>	Peter M Lavoie, Proj Engineer Guerriere & Halnon, Inc.
<b>Date:</b>	3-14-2017
<b>Questions?? - Please contact the Medway PED office at 508-533-3291.</b>	

**Medway Planning and Economic Development Board**  
**FORM Q - Request for Waiver from Rules and Regulations**  
 Complete 1 form for each waiver request

<b>Project Name:</b>	Merrimack Building Supplies Expansion
<b>Property Location:</b>	20 Trotter Drive
<b>Type of Project/Permit:</b>	Major Site Plan Project
<b>Identify the number and title of the relevant Section of the applicable Rules and Regulations from which a waiver is sought.</b>	Section 204-3(A)(7)(a) - Traffic Impact
<b>Summarize the text of the relevant Section of the Rules and Regulations from which a waiver is requested.</b>	Brief Analysis of traffic safety & capacity or full traffic impact assessment
<b>What aspect of the Regulation do you propose be waived?</b>	Waive submittal of Traffic Impact
<b>What do you propose instead?</b>	Impacts are reflected on Proposed Site Plan
<b>Explanation/justification for the waiver request. Why is the waiver needed? Describe the extenuating circumstances that necessitate the waiver request.</b>	The proposed work consists of additional warehouse storage space. This addition will not generate any additional traffic to/from the site.
<b>What is the estimated value/cost savings to the applicant if the waiver is granted?</b>	Engineering Fees / Traffic Consulting Fees
<b>How would approval of this waiver request result in a superior design or provide a clear and significant improvement to the quality of this development?</b>	No impact on development
<b>What is the impact on the development if this waiver is denied?</b>	No impact on development
<b>What are the design alternatives to granting this waiver?</b>	None
<b>Why is granting this waiver in the Town's best interest?</b>	It will not affect the Town
<b>If this waiver is granted, what is the estimated cost savings and/or cost avoidance to the Town?</b>	None
<b>What mitigation measures do you propose to offset not complying with the particular Rule/Regulation?</b>	No mitigation measures are required
<b>What is the estimated value of the proposed mitigation measures?</b>	None
<b>Other Information?</b>	
<b>Waiver Request Prepared By:</b>	Peter M Lavoie, Project Engineer Guerriere & Halnon, Inc.
<b>Date:</b>	301402017
<b>Questions?? - Please contact the Medway PED office at 508-533-3291.</b>	

WAIVER REQUESTS:

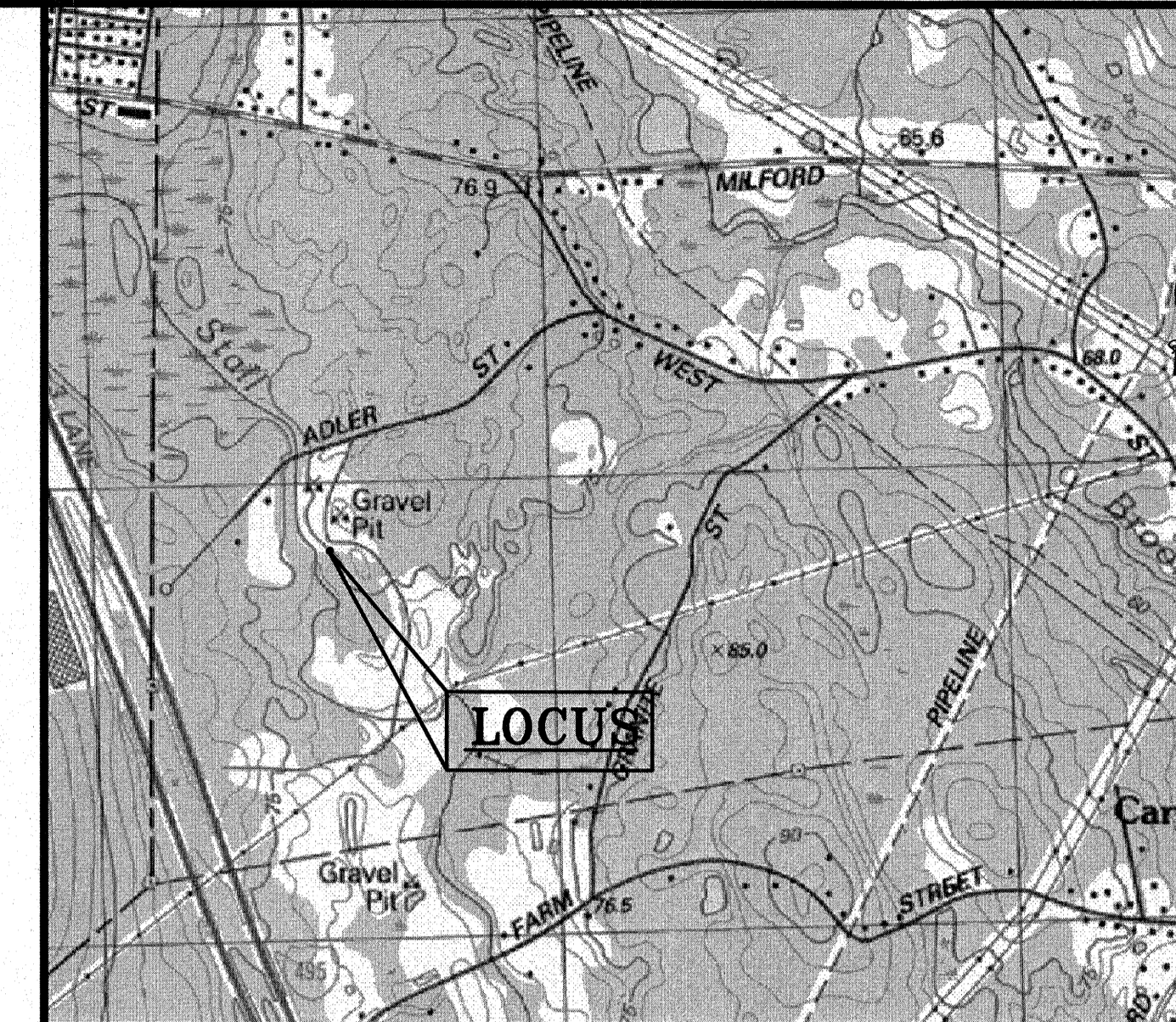
- 1) WAIVER REQUESTING NOT REQUIRING THE WRITTEN DEVELOPMENT IMPACT STATEMENT, FROM SECTION 204-3 PLANNING BOARD SUBMITTALS SUBSECTION A. 7) A WRITTEN DEVELOPMENT IMPACT STATEMENT.
- 2) WAIVER REQUESTING THE USE OF MODIFIED CAPE COD BERM THROUGHOUT THE SITE EXCEPT AT THE ENTRANCE, FROM SECTION 205-6(H) VERTICAL GRANITE CURB.
- 3) WAIVER NOT REQUIRING AN INVENTORY OF THE EXISTING LANDSCAPING AT THE SITE, SECTION 204-5(C)(3) EXISTING LANDSCAPE INVENTORY.
- 4) WAIVER REQUESTING NOT CREATING PEDESTRIAN WAYS ALONG THE FRONT OF SITE, FROM SECTION 205-3 PEDESTRIAN & BICYCLE ACCESS.
- 5) WAIVER 205-9(F) TREE REPLACEMENT.

NOTES:

1. SEE DEED BOOK 12567 PAGE 424 AND PLAN 233 OF 1998 IN PLAN BOOK 455 AT THE NORFOLK REGISTRY OF DEEDS.
2. ALL ELEVATIONS ARE BASED OFF OF THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
3. ZONING DISTRICT INDUSTRIAL III  
MIN. AREA = 40,000 S.F.  
MAX. COVERAGE = 40%  
MIN. WIDTH = 100 FT.  
MIN. FRONT, REAR SETBACK = 30 FT  
MIN. SIDE SETBACK = 20 FT

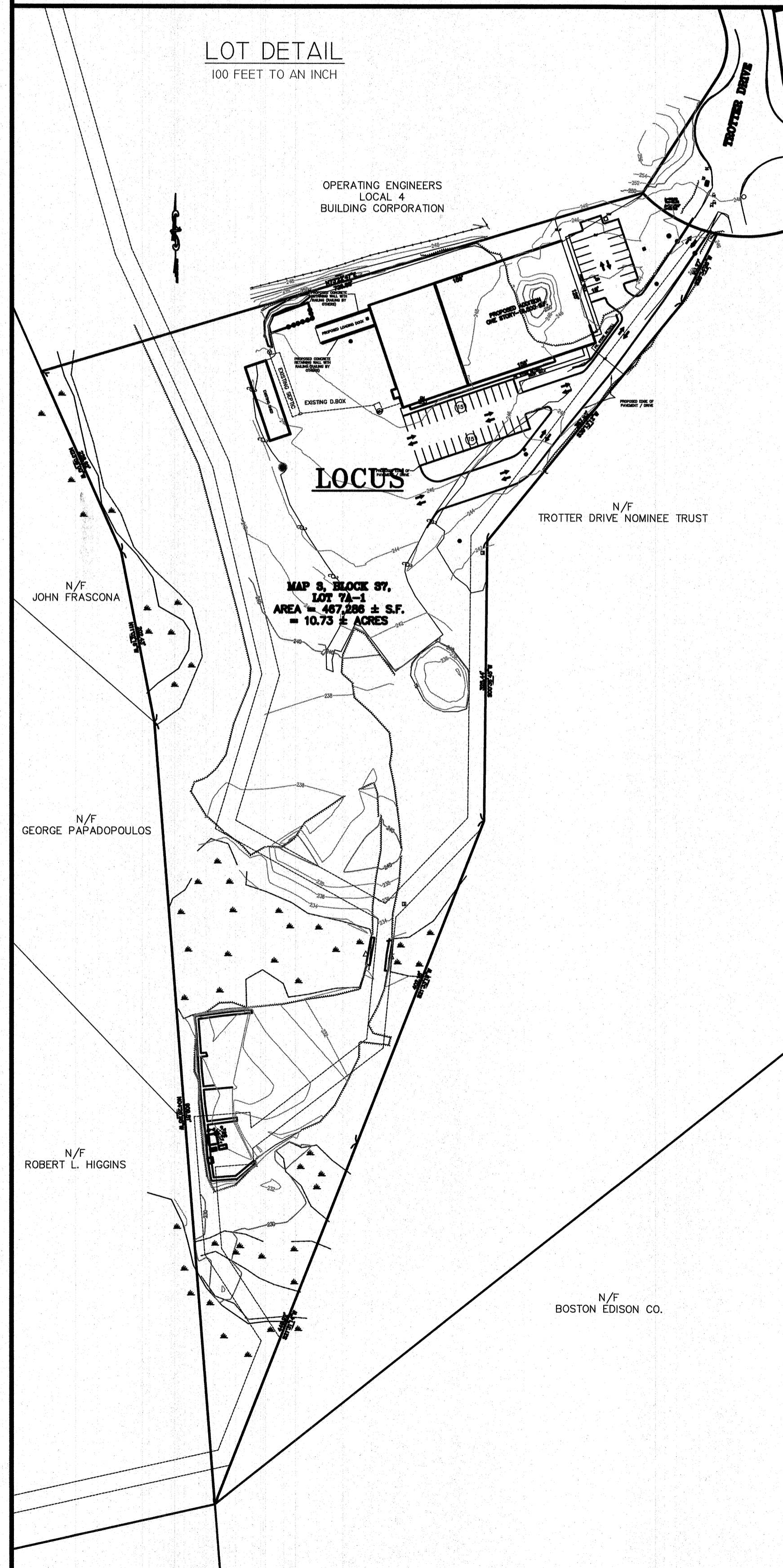
# MERRIMACK BUILDING SUPPLY SITE PLAN FOR 20 TROTTER DRIVE IN MEDWAY, MASSACHUSETTS

OWNER/APPLICANT:  
MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA  
DATE MARCH 10, 2017



LOCUS MAP USGS  
1,000 FEET TO AN INCH

DATE: \_\_\_\_\_  
MEDWAY PLANNING AND ECONOMIC  
DEVELOPMENT BOARD APPROVAL  
DATE: \_\_\_\_\_  
SIGNATURE DATE: \_\_\_\_\_  
BEING A MAJORITY



LOCUS MAP  
300 FEET TO AN INCH

ZONE DESCRIPTION:	MIN. REQ'D/ MAX. ALLOWED	EXISTING	PROPOSED
ZONE - INDUSTRIAL III	INDUSTRIAL III		
LOT REQUIREMENTS:			
MIN. AREA (S.F.)	40,000 S.F.	10,73± ACRES	10,73± ACRES
MIN. WIDTH (FT.)	100'	100'	100'
MIN. FRONTAGE (FT.)	100'	100'	100'
YARD REQUIREMENTS:			
MIN. FRONT SETBACK (FT.)	30'	109'	109'
MIN. SIDE SETBACK (FT.)	20'	26.6'	26.6'
MIN. REAR SETBACK (FT.)	30'	380'	380'
BUILDING			
MAX % COVERAGE	40%	10%	27%
OPEN SPACE			
MIN % OF LOT AREA	-	78%	73%
BUILDING HEIGHT (FT.)	-	30'	30'
MAX. HEIGHT (FT.)	60'	30'	30'
PARKING			
MIN. NUMBER OF SPACES	**40	**28	**48
MIN. HANDICAPPED SPACES	1	1	1
PARKING REQUIREMENT: ** INCLUDES NUMBER OF HANDICAP SPACES.			
OFFICE/WAREHOUSE FACILITY:			
1 SPACE PER EACH 2 PERSONS EMPLOYED ON LARGEST SHIFT			
20 EMPLOYEES ON LARGEST SHIFT = 10 SPACES			
1 SPACE PER 1,000 S.F. OF FLOOR SPACE.			
29,610 S.F./1,000 S.F. = 29.61 SPACES			
TOTAL SPACES REQUIRED= 40 SPACES			

## INDEX

- COVER SHEET
- 1. EXISTING CONDITIONS
- 2. DEMOLITION PLAN
- 3. SITE PLAN
- 4. GRADING & UTILITY PLAN
- 5. EROSION CONTROL
- 6. LIGHTING PLAN
- 7. DETAIL SHEET#1
- 8. DETAIL SHEET#2
- 9. L1.1 PLANTING PLAN
- 10. A2.02 FIRST FLOOR PLAN
- 11. A2.03 MEZZANINE FLOOR PLAN
- 12. A3.01 BUILDING ELEVATION
- 13. A3.02 BUILDING ELEVATION



**Guerriere  
&  
Halnon, Inc.**

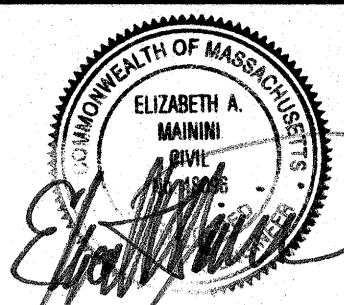
Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243

**cubic architects, inc.**

33 BOWSPRIT LANE  
PLYMOUTH, MA 02360  
PHONE 617-314-7330, FAX 781-658-2381

G-8542

G-8542



G-8542

DATE: 3-10-17  
APPROVED DATE: PLANNING BOARD

SIGNATURE DATE: BEING A MAJORITY

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.

"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.

### NOTES

1. WETLANDS AND RIVER FRONT FLAGGED BY JUDITH SCHMITZ.
2. SITE IS LOCATED WITHIN THE GROUNDWATER PROTECTION DISTRICT.

#	DATE	DESCRIPTION	INIT

OWNER  
MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA

20 TROTTER DRIVE

"MERRIMACK BUILDING  
SUPPLY"

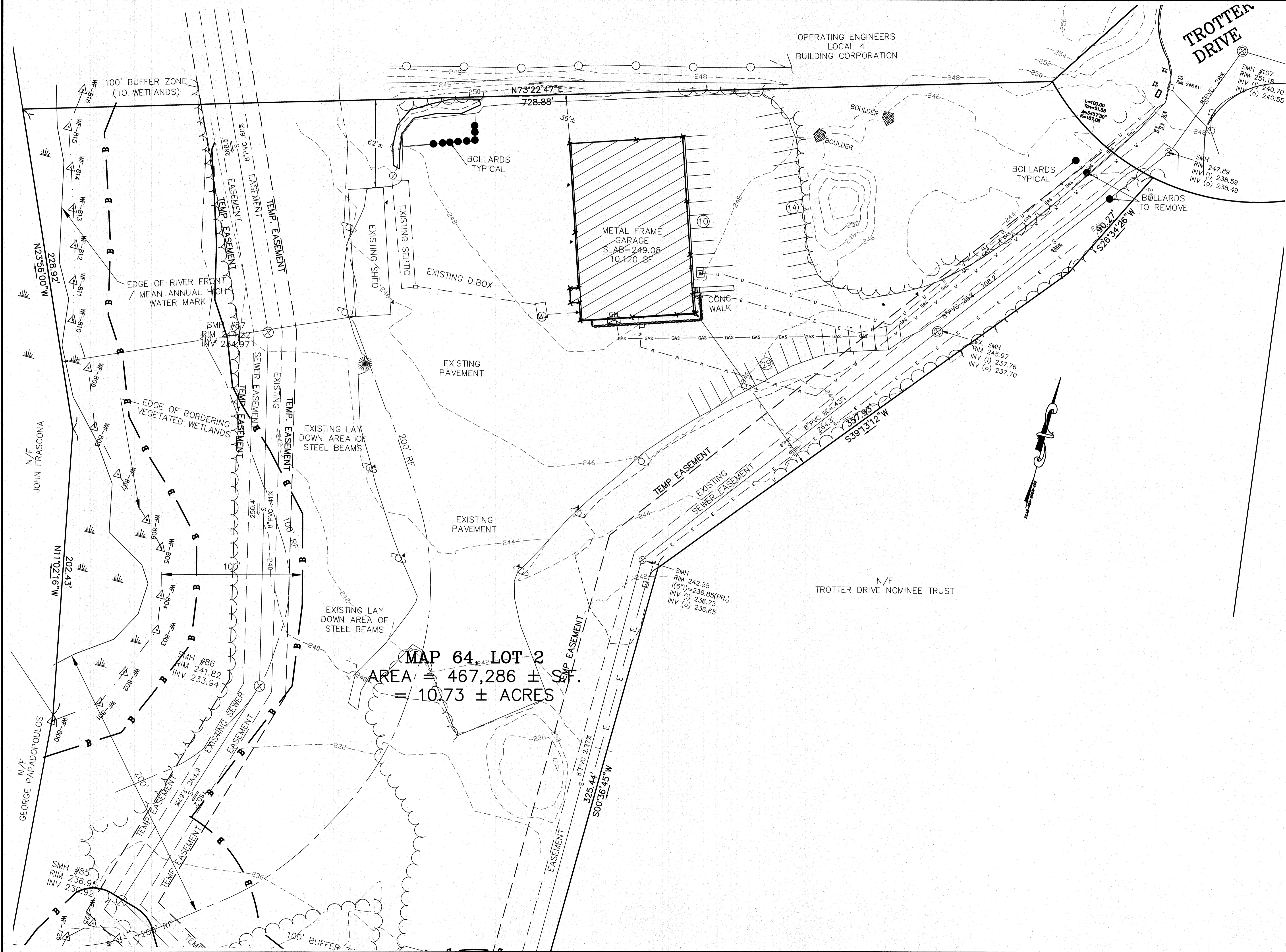
EXISTING CONDITIONS  
PLAN OF LAND  
IN  
MEDWAY, MA  
SCALE: ONE INCH EQUALS 30 FEET  
DATE: MARCH 10, 2017



**Guerriere  
& Halon, Inc.**  
Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
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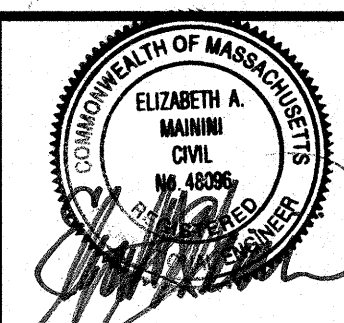
SHEET  
C-1  
PMI

G-8542



MAP 64, LOT 2  
AREA = 467,286 ± SQ. FT.  
= 10.73 ± ACRES

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G-8542

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NOTES

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##	DATE	DESCRIPTION	INIT

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20 TROTTER DRIVE  
MEDWAY MA

20 TROTTER DRIVE

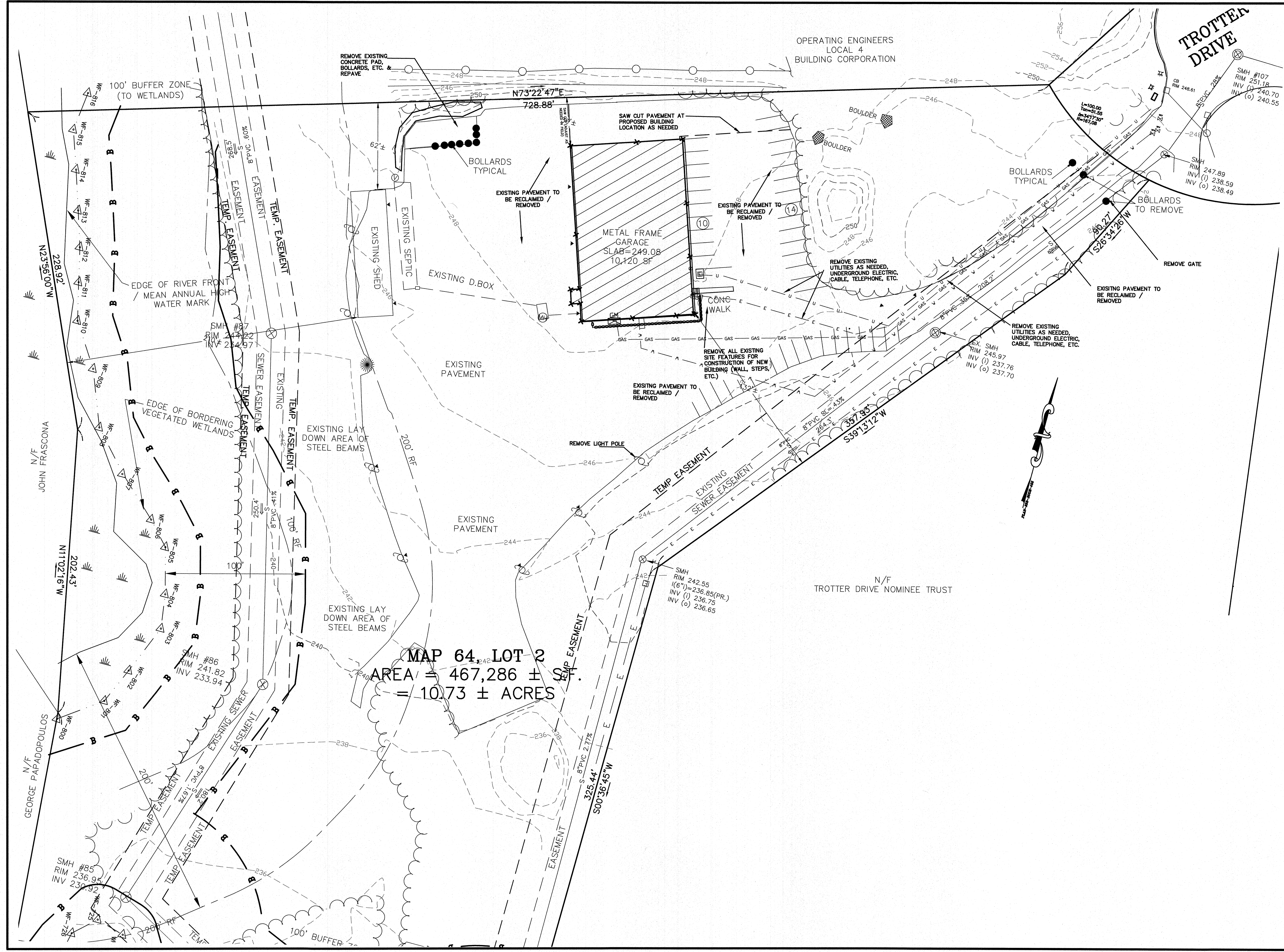
"MERRIMACK BUILDING SUPPLY"

DEMOLITION  
PLAN OF LAND  
IN  
MEDWAY, MA  
SCALE: ONE INCH EQUALS 30 FEET  
DATE: MARCH 10, 2017

 **Guerriere & Halon, Inc.**  
Engineering & Land Surveying  
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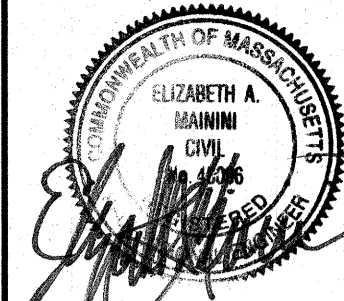
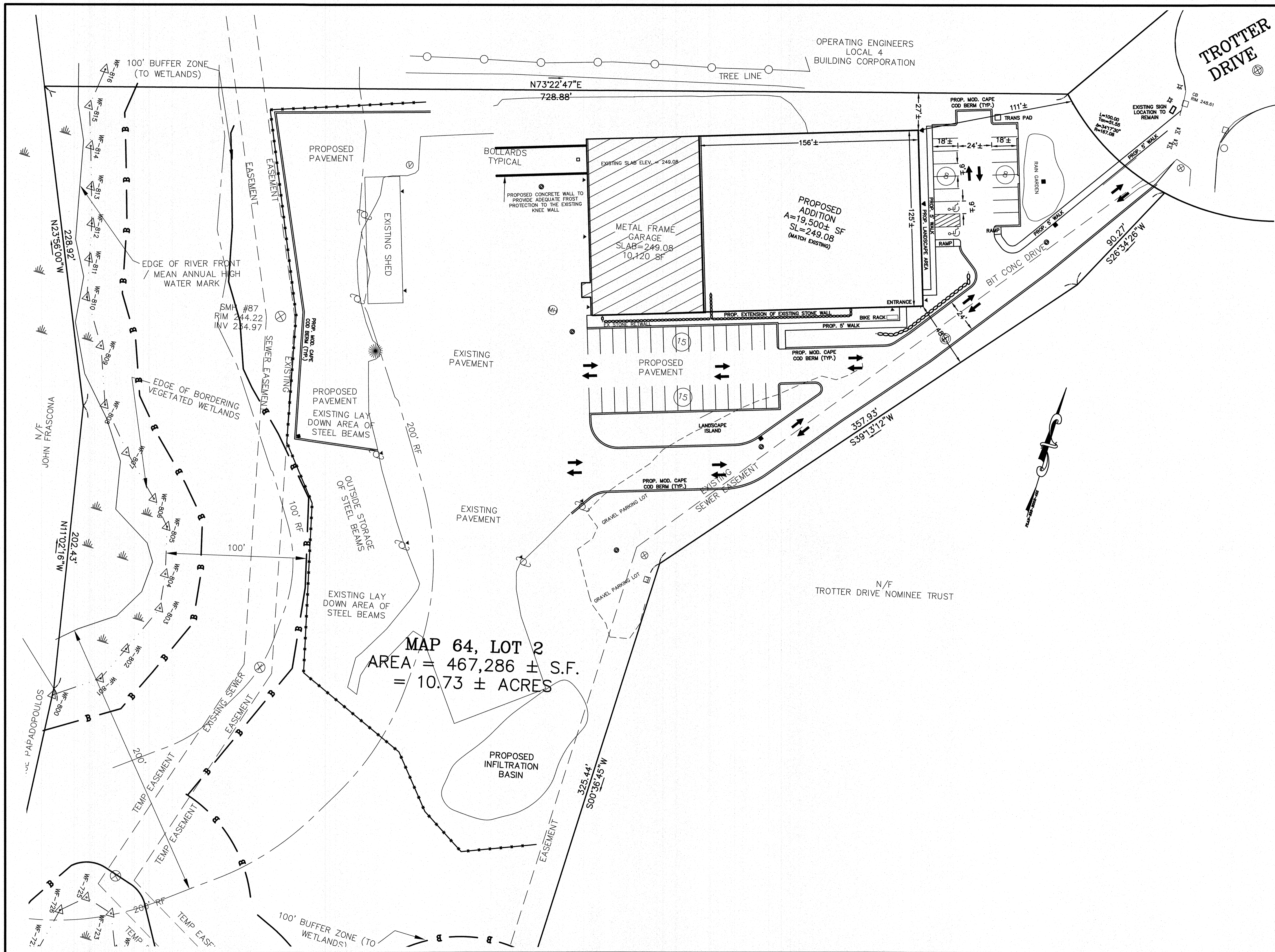
SHEET  
C-2  
PVI

G-8542



MAP 64, LOT 2  
AREA = 467,286 ± S.F.  
= 10.73 ± ACRES

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DATE: \_\_\_\_\_ DATE: 3-10-11

APPROVED DATE: \_\_\_\_\_  
PLANNING BOARD

SIGNATURE DATE: \_\_\_\_\_  
BEING A MAJORITY

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LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF  
THE TITLE

**"WARNING"**  
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DRAWINGS ARE SHOWN AS OBTAINED FROM EXISTING INFORMATION  
AND ARE ONLY APPROXIMATE IN LOCATION. THE CONTRACTOR  
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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).

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## NOTES

##	DATE	DESCRIPTION	IN

**OWNER**

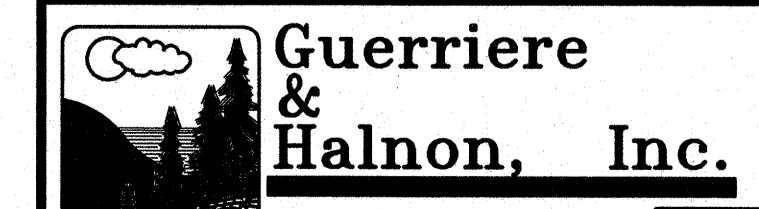
MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA

**20 TROTTER DRIVE**

"MERRIMACK BUILDING  
SUPPLY"

SITE  
PLAN OF LAND  
IN  
**MEDWAY, MA**

SCALE: ONE INCH EQUALS 30 FEET  
DATE: MARCH 10, 2017



Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243

SHEET  
C-3



G-8542

DATE: 3-10-17  
APPROVED DATE: PLANNING BOARD

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NOTES

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OWNER  
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20 TROTTER DRIVE  
MEDWAY MA

20 TROTTER DRIVE

"MERRIMACK BUILDING SUPPLY"

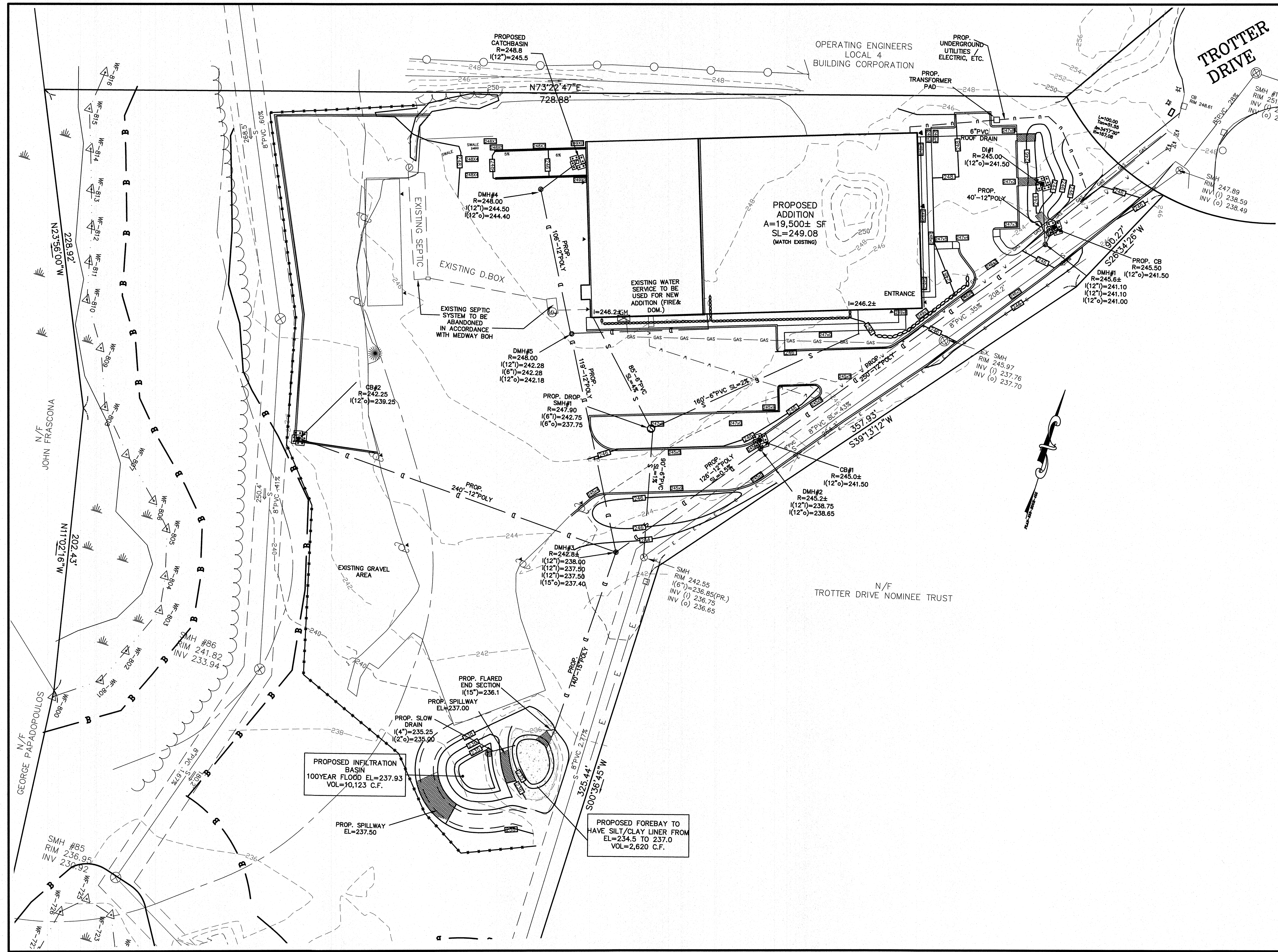
GRADING & UTILITIES  
SITE  
PLAN OF LAND  
IN  
MEDWAY, MA

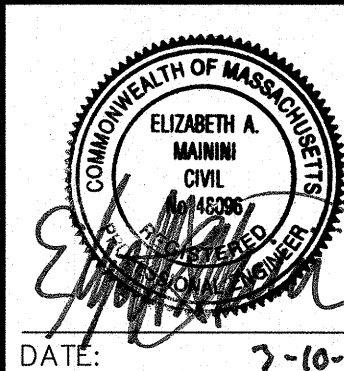
SCALE: ONE INCH EQUALS 30 FEET  
DATE MARCH 10, 2017

Guerriere & Halnon, Inc.  
Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243

SHEET  
C-4  
PML

G-8542





G-8542

DATE: 7-10-17  
APPROVED DATE: PLANNING BOARD

SIGNATURE DATE: BEING A MAJORITY

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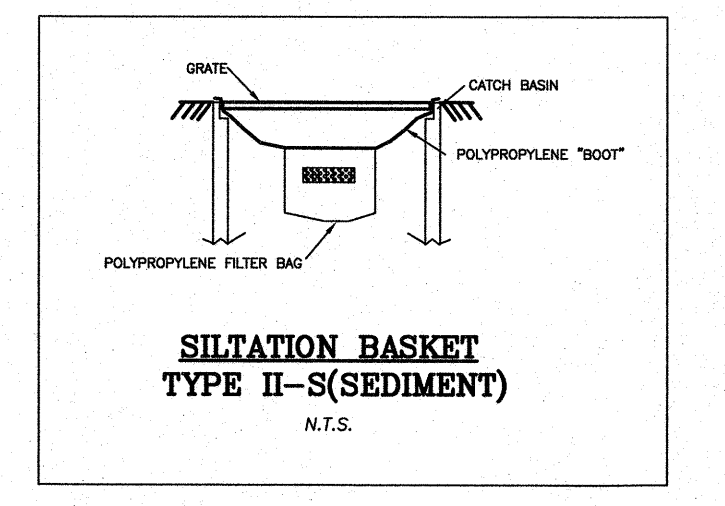
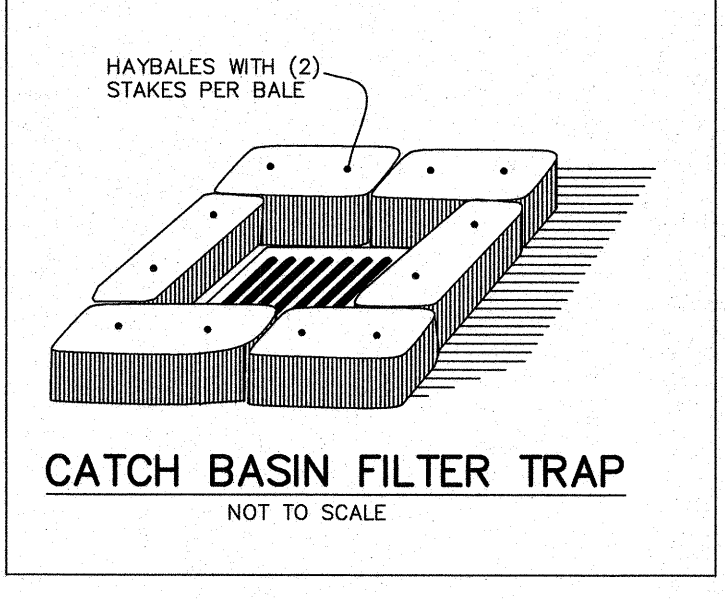
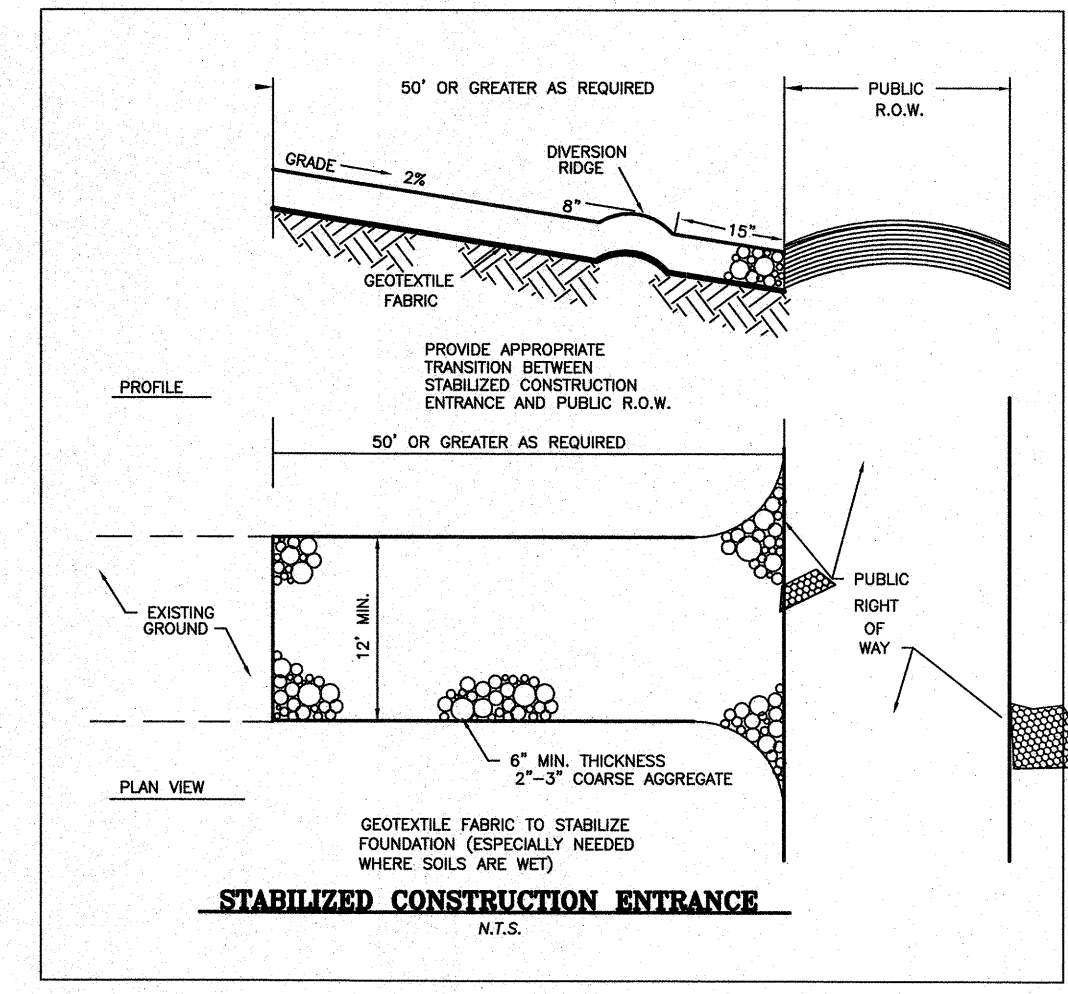
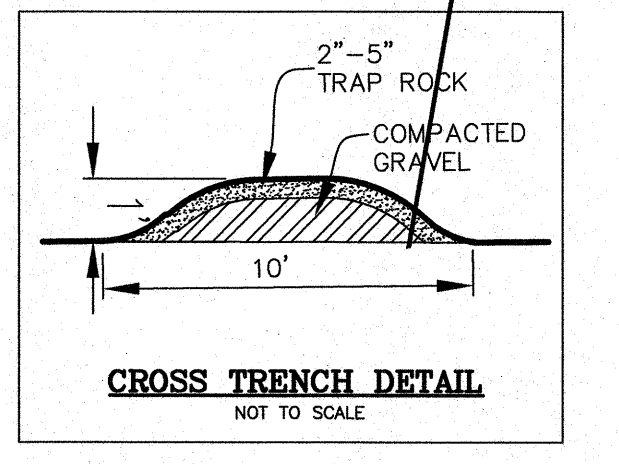
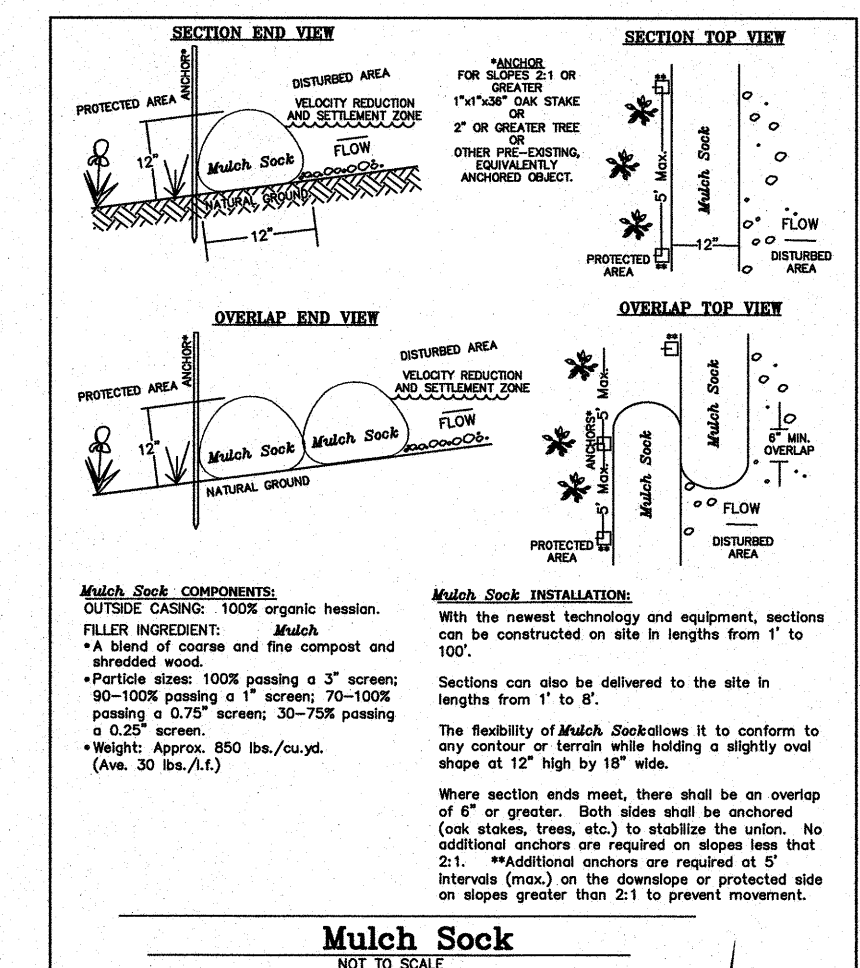
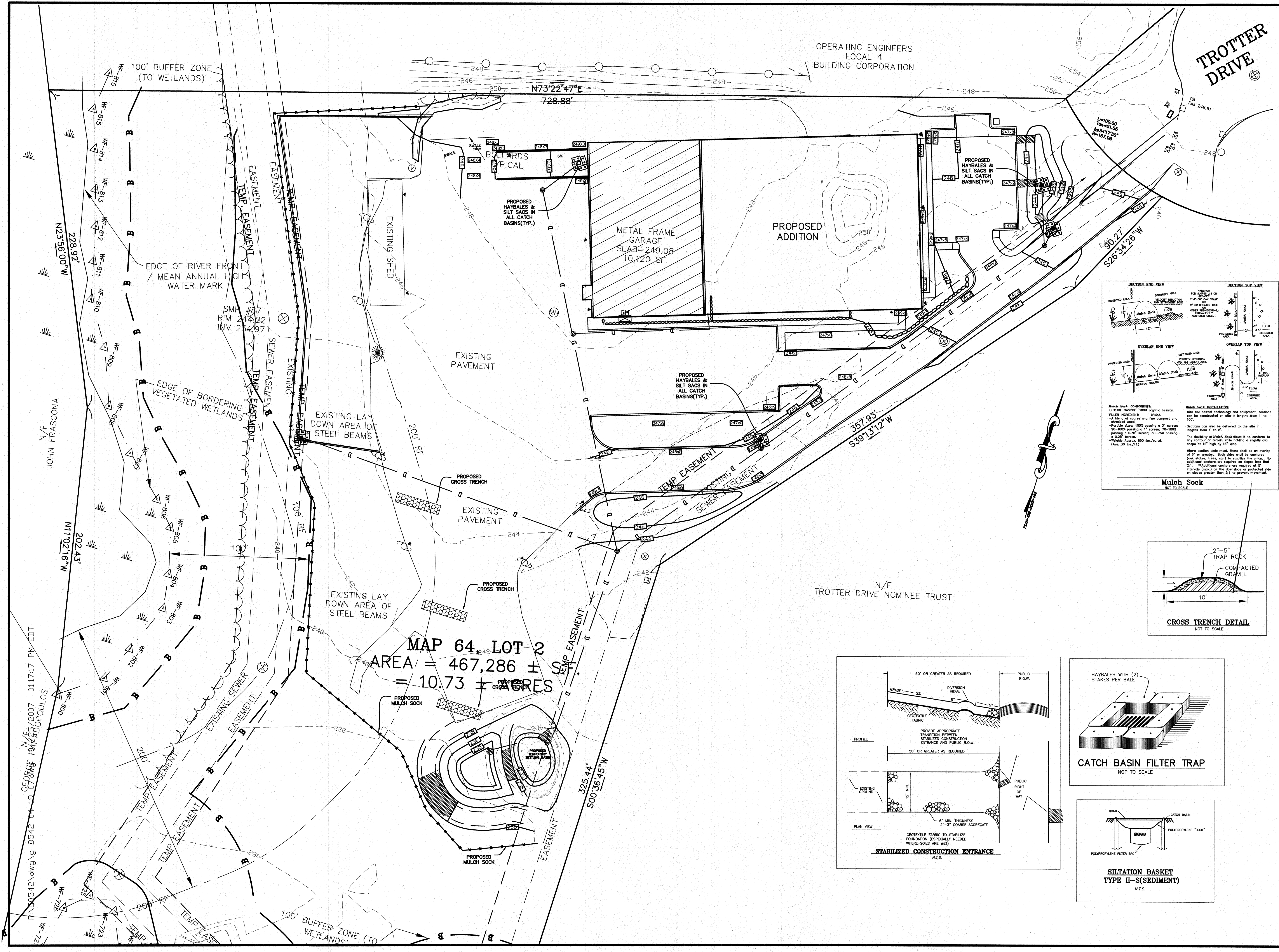
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SITE  
PLAN OF LAND  
IN  
**MEDWAY, MA**

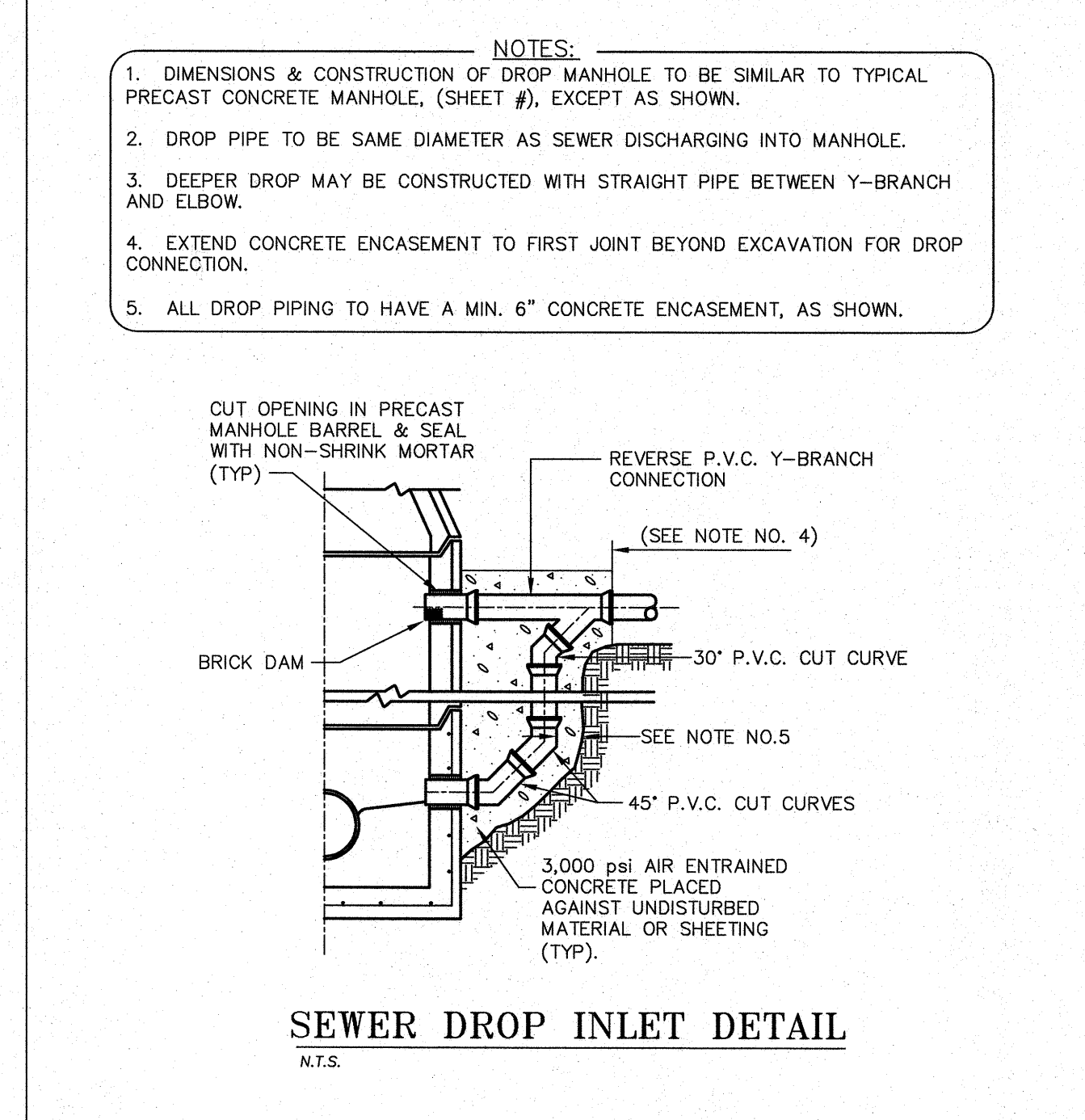
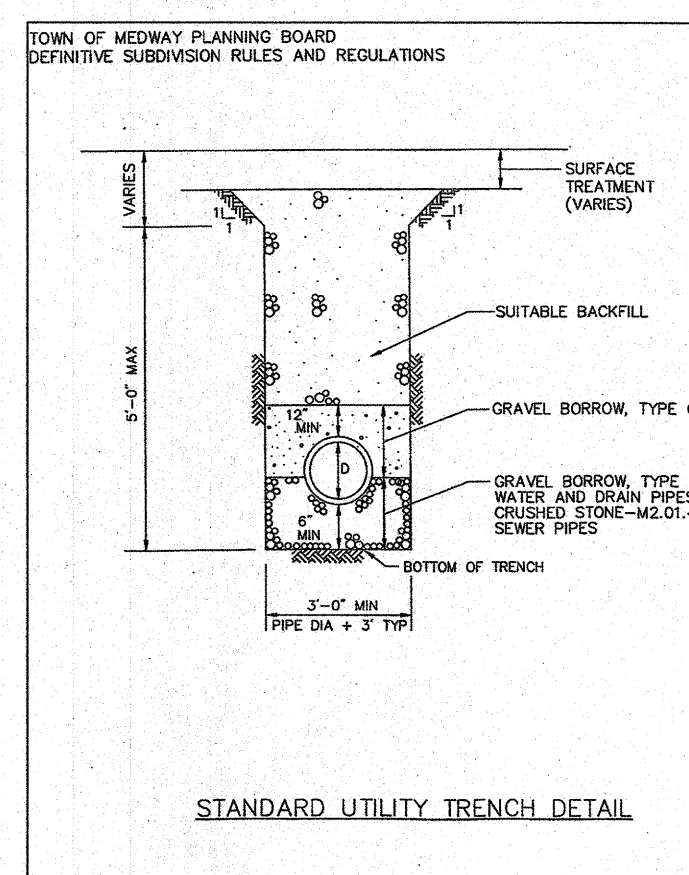
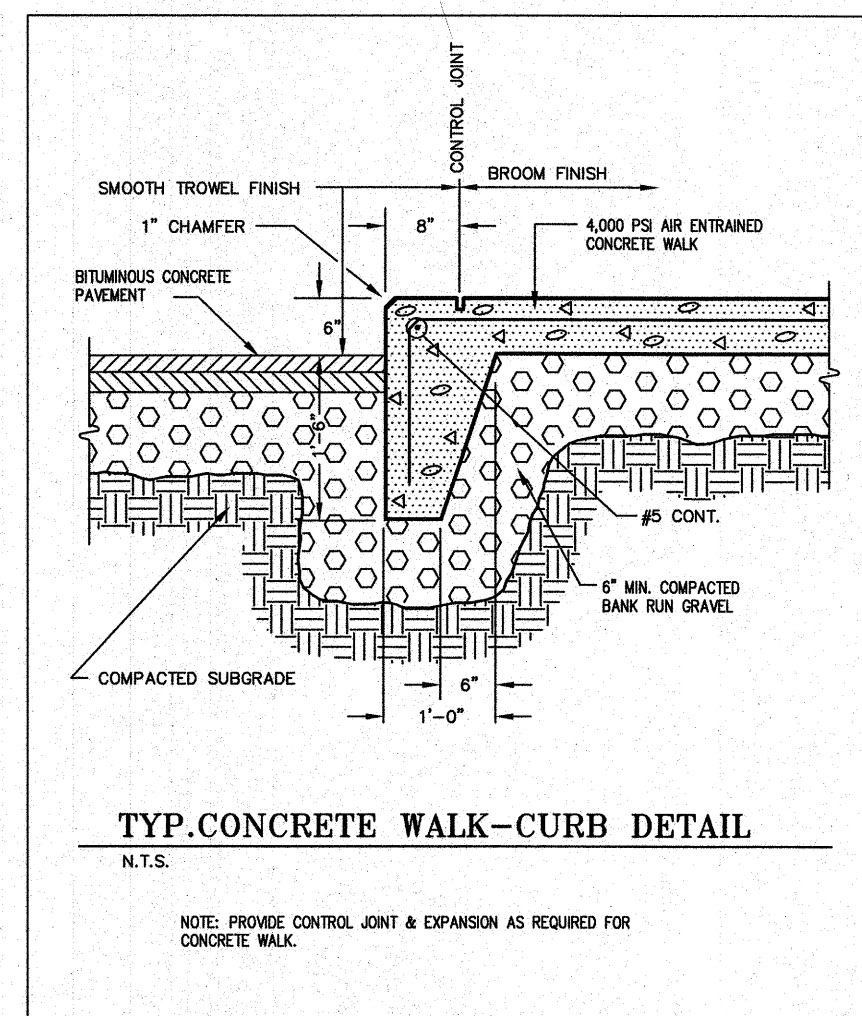
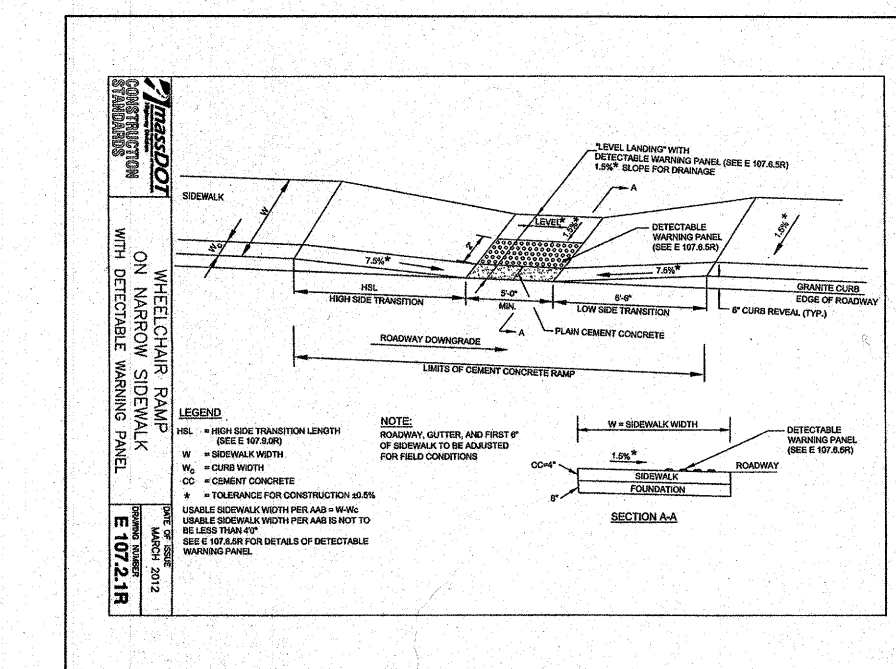
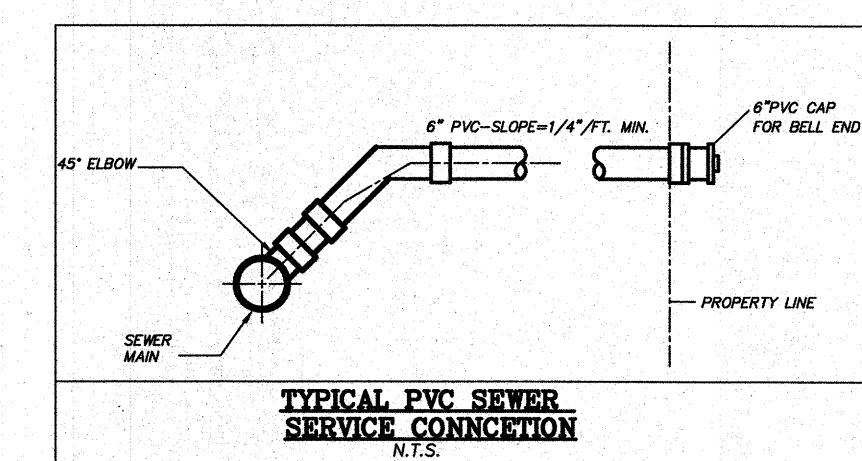
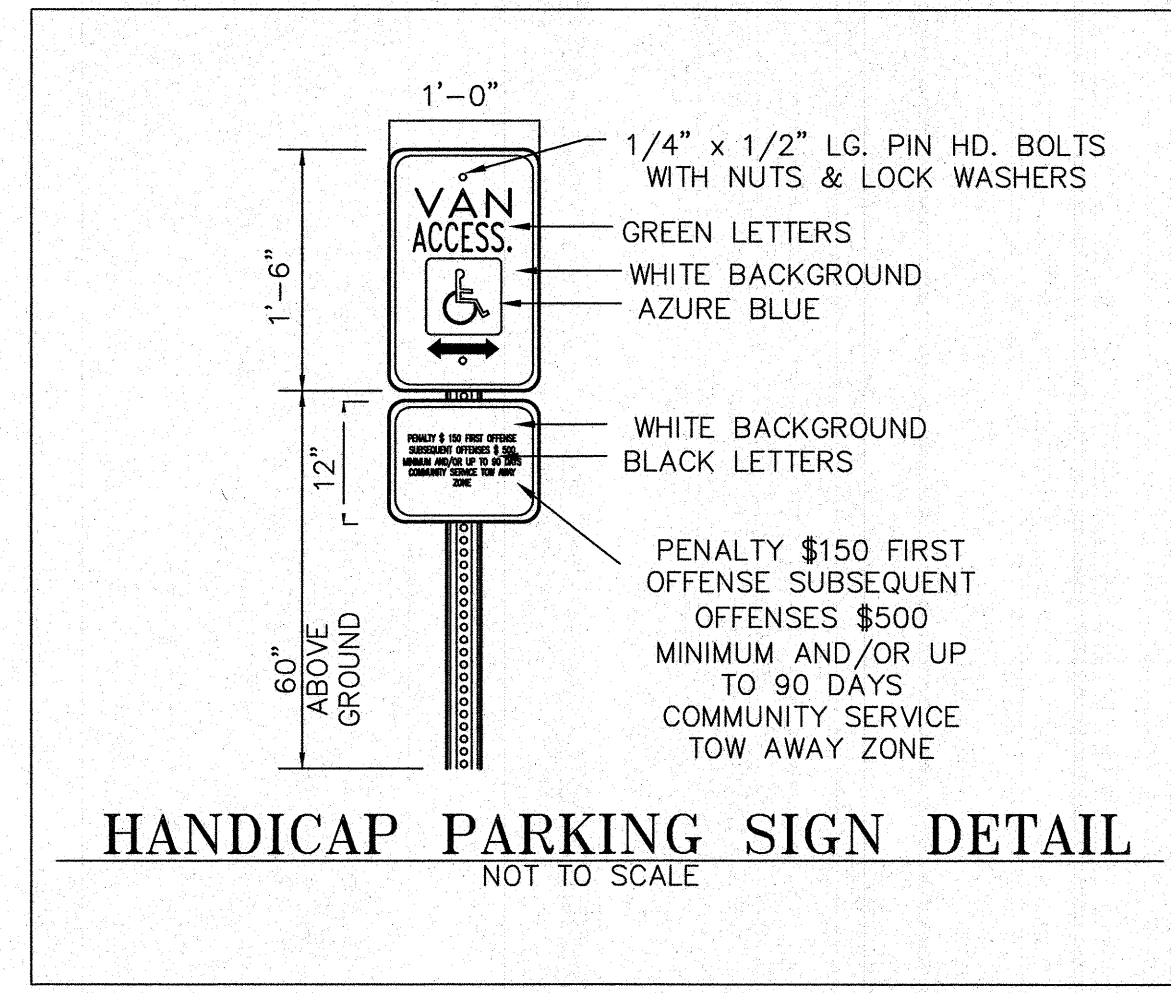
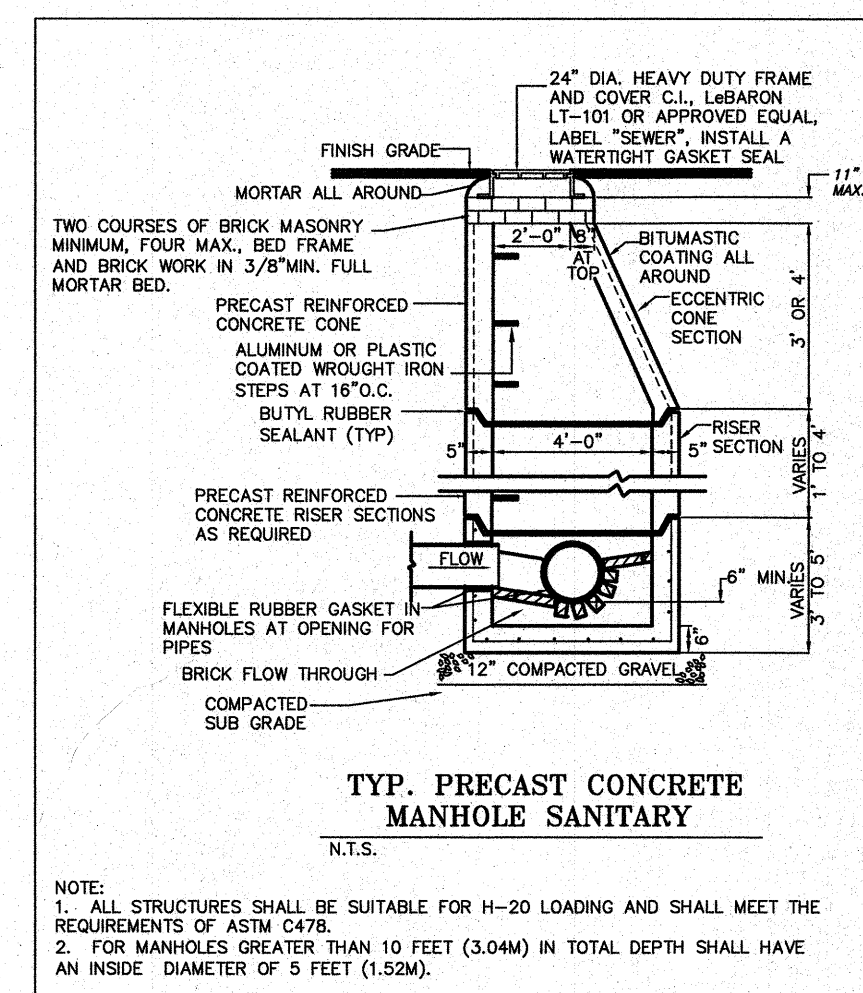
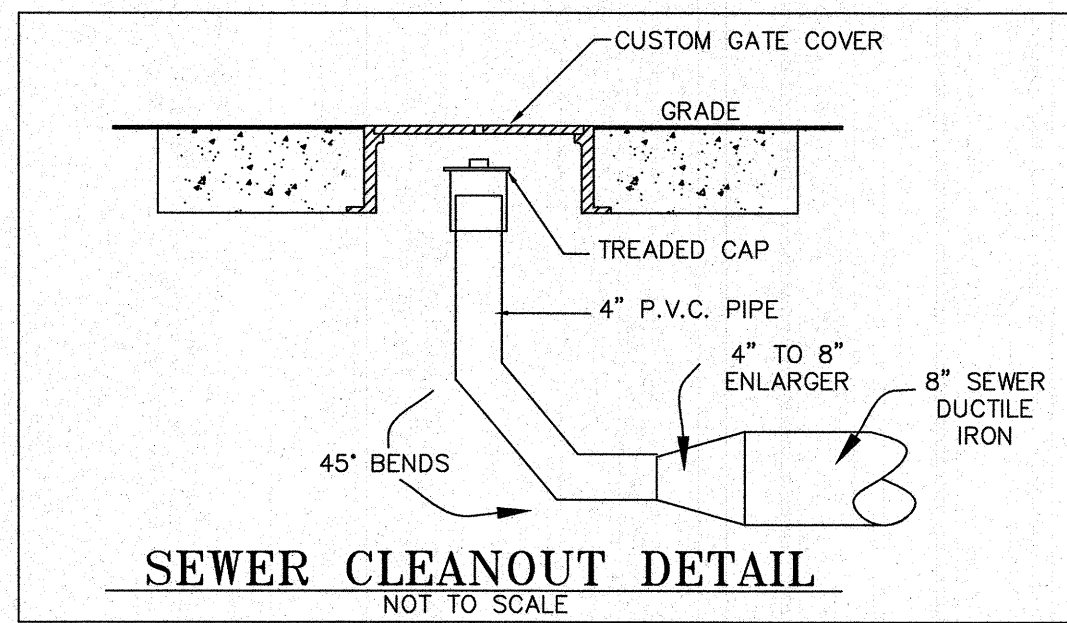
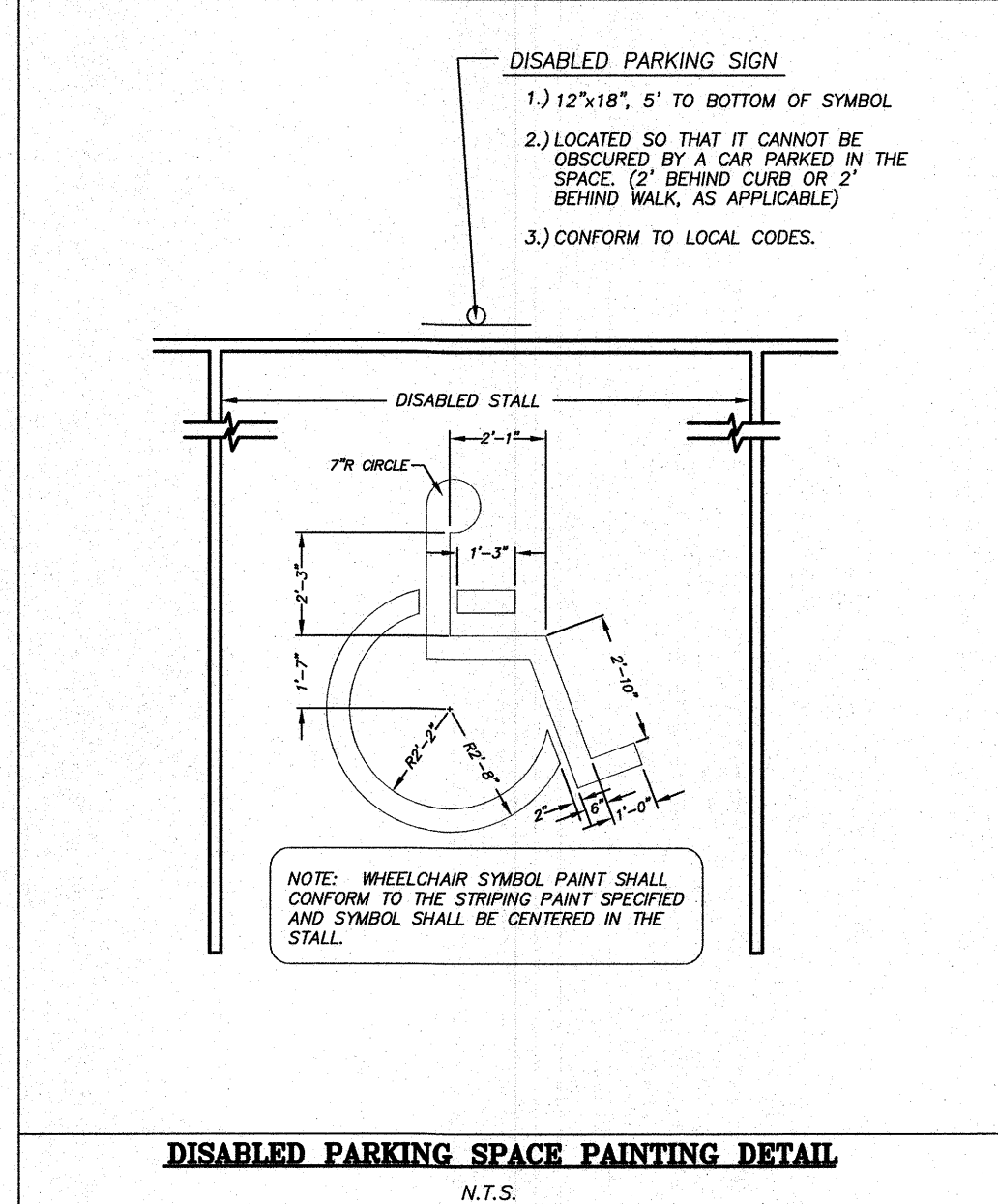
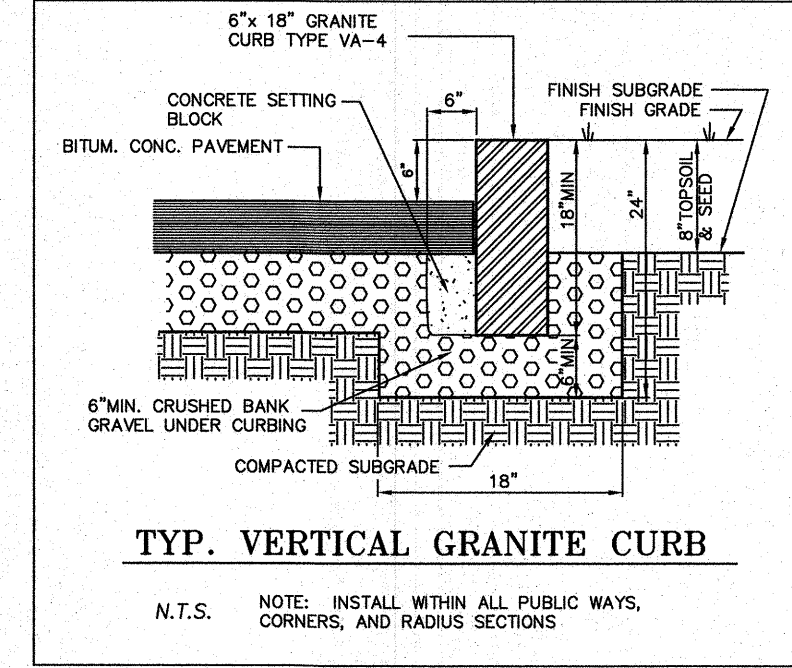
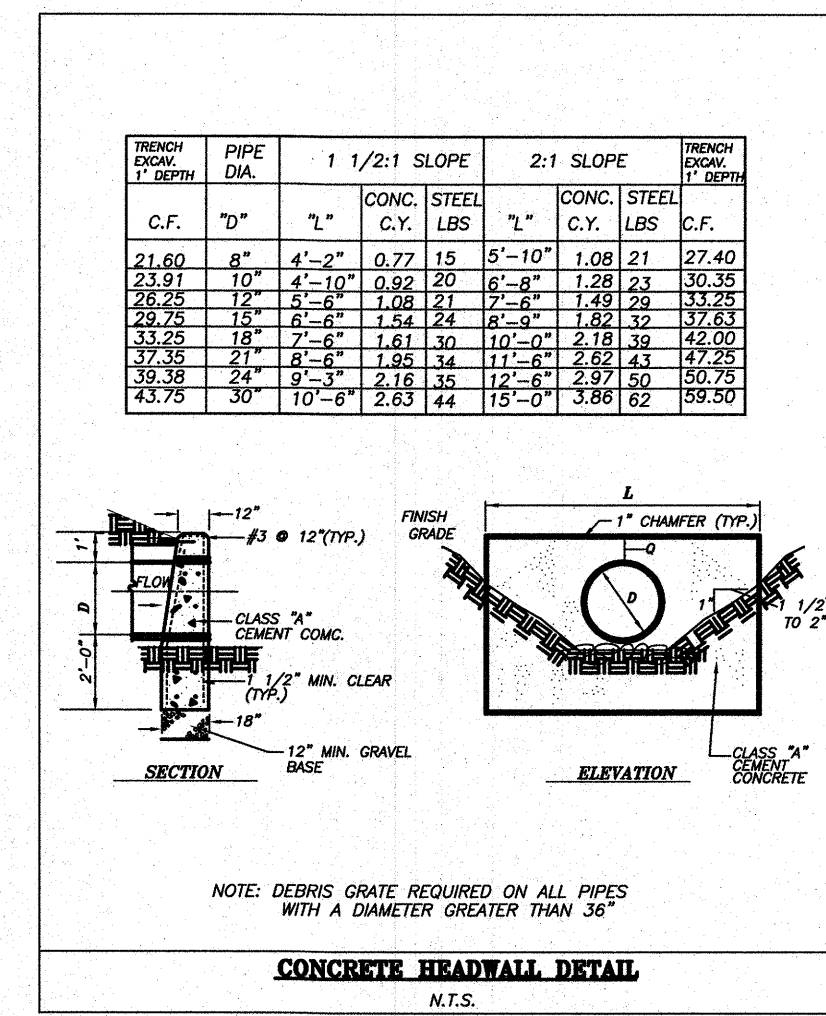
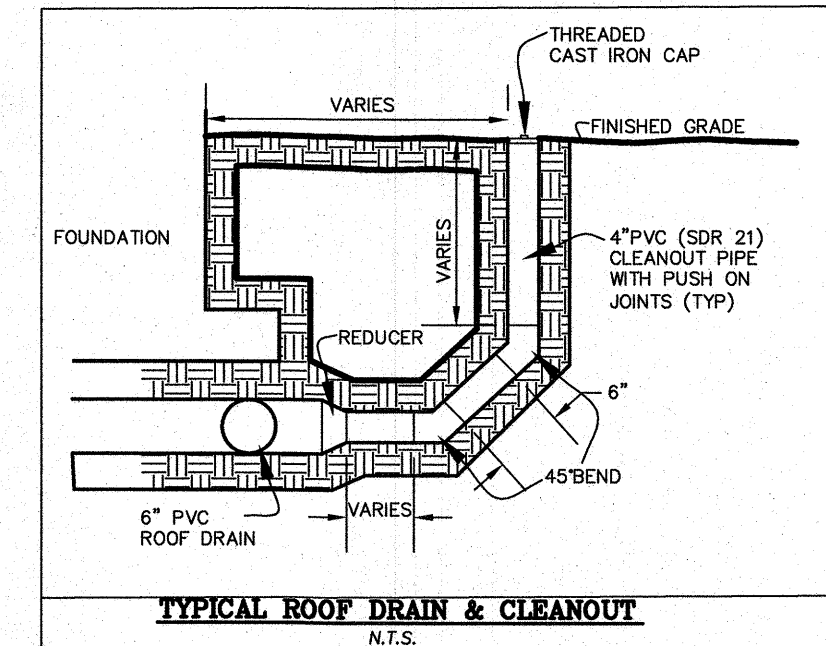
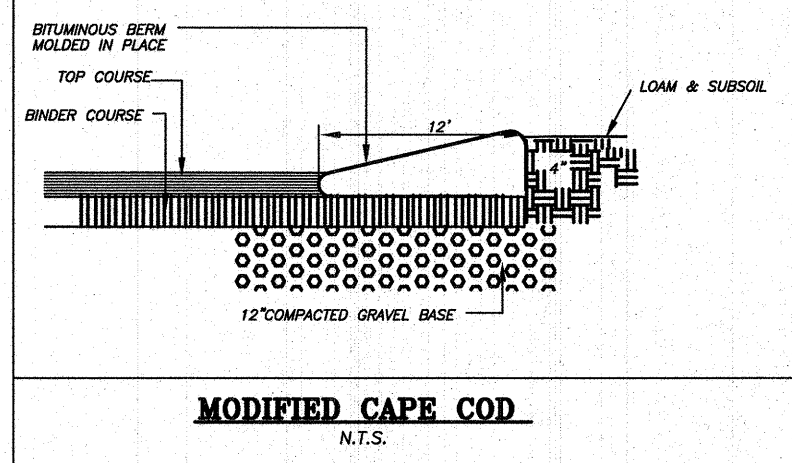
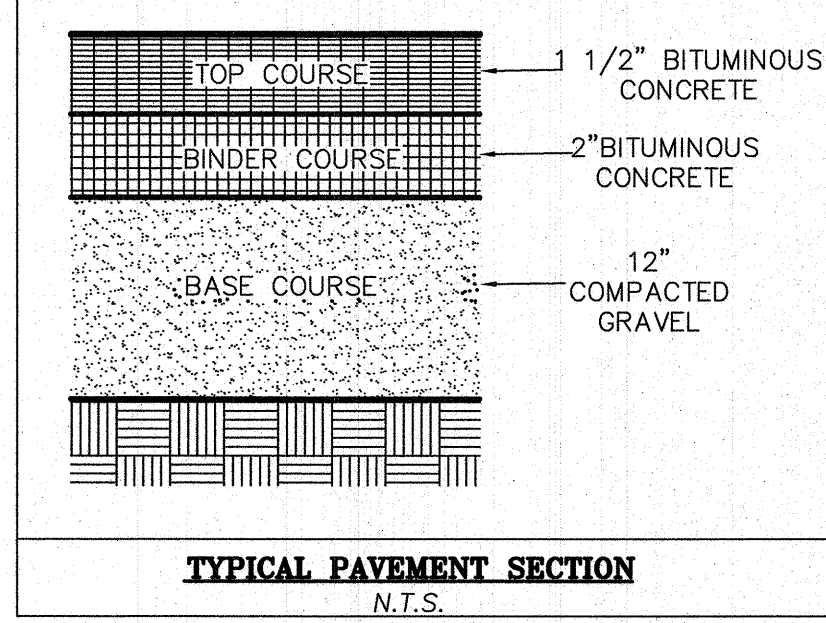
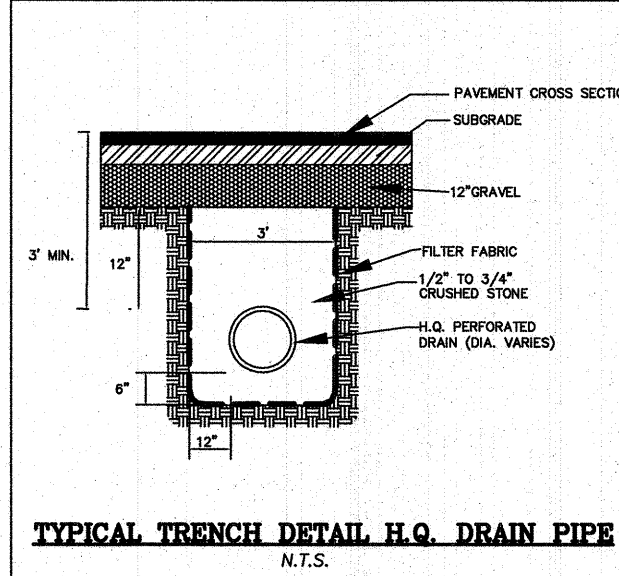
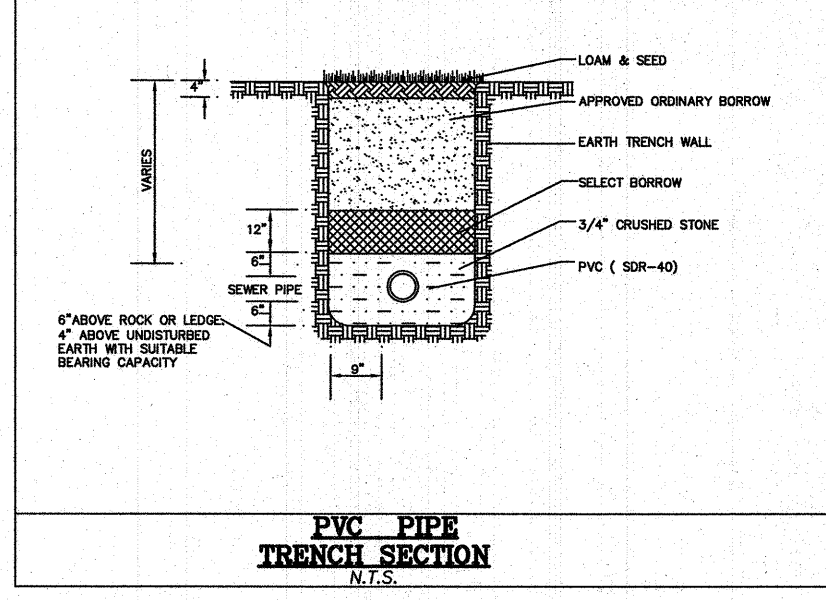
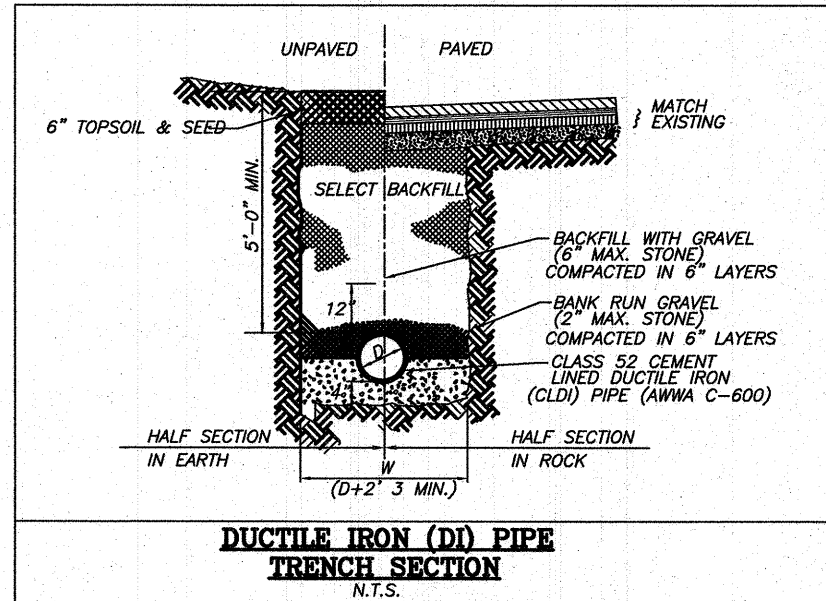
SCALE: ONE INCH EQUALS 30 FEET  
DATE MARCH 10, 2017

**Guerriere & Halnon, Inc.**  
Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243

SHEET  
C-5  
P.M.

G-8542





LEGEND			
WET	EDGE OF WETLANDS		
256	EXISTING TREELINE		
256	EXISTING CONTOUR		
OH	PROPOSED CONTOUR		
D	DRAIN LINE		
S	SEWER LINE		
W	WATER LINE		
UE	UNDERGROUND ELECTRIC		
RD	ROOF DRAIN		
X X X	PROPOSED FENCE		
B	100' BUFFER ZONE		
⊗	EXISTING SEWER MANHOLE		
⊙	EXISTING DRAIN MANHOLE		
⊠	EXISTING CATCH BASIN		
⊞	EXISTING UTILITY POLE		
⊞	PROPOSED DRAINAGE MANHOLE		
⊞	PROPOSED UTILITY POLE		
⊞	PROPOSED CATCH BASIN		
⊞	WETLANDS		
⊞	HANDICAP SPACE		
⊞	TRAFFIC FLOW		
⊞	PROPOSED BUILDINGS		
⊞	MOUNTED LIGHT		
REV.	DATE	DESCRIPTION	INIT

DATE: \_\_\_\_\_

MEDWAY PLANNING AND ECONOMIC DEVELOPMENT BOARD APPROVAL

DATE: \_\_\_\_\_

SIGNATURE DATE: \_\_\_\_\_

BEING A MAJORITY

NOTES

1. THIS PLAN REFERS TO THE MEDWAY ASSESSORS ATLAS SHEET 64 LOT 2.
2. ALL UTILITIES, STRUCTURES AND SITE FEATURES SHOWN ARE PROPOSED UNLESS NOTED OR OTHERWISE INDICATED AS EXISTING.
3. ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. TRAFFIC GENERATION IS 600 VEHICLES PER DAY.
5. SEWAGE FLOW: 75 GPD/1,000 S.F. WAREHOUSE/OFFICE SPACE=30\*75=2,250 GPD
6. TOPOGRAPHIC INFORMATION COLLECTED ON THE GROUND BY GUERRIERE AND HALNON, INC.
7. FIRE LANES SHALL BE BUILT TO ACCOMMODATE 20 TON FIRE APPARATUS DURING CONSTRUCTION.
8. FIRE LANES TO BE POSTED AND APPROVED BY THE MEDWAY FIRE AND POLICE DEPARTMENTS.
9. EXTERIOR LIGHTS SHALL BE 200 WATT METAL HALIDE BULBS AND SHALL BE ORIENTED SO AS NOT TO GLARE ONTO ADJOINING PROPERTIES.
10. SILTATION BARRIERS AND DEVICES TO BE IN PRIOR TO ALL CONSTRUCTION.
11. NO EQUIPMENT SHALL BE STORED IN THE FIRE LANES. ALL FIRE LANES SHALL BE KEPT CLEAR AND PASSABLE AT ALL TIMES.
12. NO COMBUSTIBLES CONSTRUCTION SHALL BE ALLOWED UNTIL ALL HYDRANTS ARE INSTALLED TO GRADE, TESTED AND IN SERVICE.
13. ALL LOADING AREAS SHALL BE DESIGNED AND CONSTRUCTED SO THAT VEHICLES LOADING OR UNLOADING DO NOT OBSTRUCT THE FIRE LANE.
14. ALL CURBING TO BE BITUMINOUS CONCRETE BERM UNLESS OTHERWISE NOTED.
15. ALL DUMPSTERS TO BE ON CONCRETE PADS AND TO BE PROPERLY SCREENED.
16. KNOX BOXES TO BE REQUIRED ON ALL BUILDINGS.
17. ALL DRAINAGE PIPE TO BE SMOOTH BORE CORRUGATED POLYETHYLENE SIMILAR TO HIO PIPE AND FITTINGS AS MANUFACTURED BY HANCOF FUNDLAY, OHIO, OR EQUIVALENT UNLESS OTHERWISE NOTED.
18. ALL SEWER PIPE TO BE SDR 35 POLYVINYL CHLORIDE (PVC), UNLESS NOTED.
19. ALL WATER PIPE TO BE 8" DUCTILE IRON(CLDI)CLASS 52 UNLESS NOTED.
20. DOMESTIC WATER SERVICE TO BE 2" COPPER TYPE K.
21. ALL MATERIAL AND INSTALLATION SHALL FOLLOW MEDWAY WATER SPECIFICATIONS.
22. ALL WATER LINE TO BE INSTALLED MINIMUM OF 4.5' BELOW EXISTING ROAD GRADE.
23. GAS LINE SPECIFICATIONS BY UTILITY PROVIDER.
24. PROPOSED FREE STANDING SIGNS TO COMPLY WITH THE TOWN OF MEDWAY ZONING BYLAW SECTION.
25. ALL ENTRANCES TO BE HANDICAPPED ACCESSIBLE.

OWNER / APPLICANT

MERRIMACK BUILDING SUPPLY

20 TROTTER DRIVE

MEDWAY MA

20 TROTTER DRIVE

"DETAIL SHEET#1"

PLAN OF LAND

IN

MEDWAY, MA

SCALE: NOT TO SCALE

DATE: MARCH 10, 2017

**Guerriere & Halnon, Inc.**

Engineering & Land Surveying

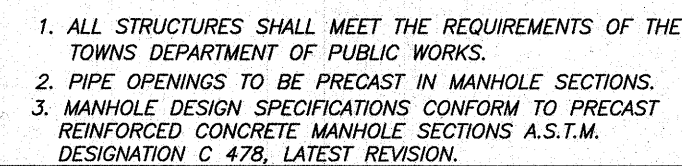
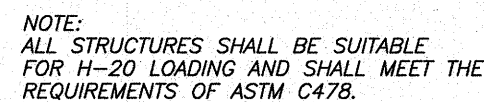
333 WEST STREET, MILFORD, MASS. 01757

(508) 473-6630 FAX: (508) 473-8243

SHEET C-7

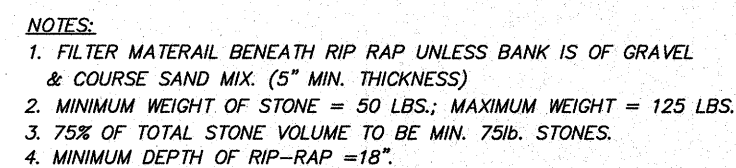


NOTE: DEBRIS GRATE REQUIRED ON ALL PIPES  
WITH A DIAMETER GREATER THAN 36"



NOTES:

1. ALL WORK IS TO BE STAKED AND INSPECTED BY THE DESIGN ENGINEER.
2. AREAS UNDER THE EMBANKMENT AND ANY STRUCTURAL WORKS SHALL BE CLEARED.
3. NO PIPE SHALL BE LAID ON ROCK. ALL ROCK SHALL BE OVERCAULGATED TO A MINIMUM OF 18" BELOW THE PROPOSED INVERT AND BE REPLACED BY COMPACTED LDW PERMEABILITY FILL.
4. ALL STRUCTURES TO MEET A.S.T.M.D. C 478 TEST REVISION.
5. COMPACTED LDW PERMEABILITY FILL MATERIAL SHALL BE WELL GRADED, SILTY, GRAVELLY SAND WITH A MINIMUM OF 15% PASSING SIEVE #200, AND SHALL BE FREE OF STONES GREATER THAN 6" IN DIA., ORGANIC MATTER CONSTRUCTION DEBRIS, SNOW, OR FROZEN SOIL. MATERIAL SHALL BE REPLACED IN LAYERS NOT EXCEEDING 8" IN THICKNESS, AND SHALL BE COMPACTED BY CONTINUOUS PASSES WITH COMPACTORS. MINIMUM DEGREE OF COMPACTION SHALL BE 95% OF MAXIMUM DRY DENSITY AS SPECIFIED BY A.S.T.M. D1557C.
6. 10 FOOT WIDE EMERGENCY SPILLWAY TO BE RIP-RAPPED WITH 24 SIZE SLOPES.
7. THE EMBANKMENT SHALL BE CONSTRUCTED TO THE DESIGN ELEVATION PLUS 0.5 FEET TO ALLOW FOR SETTLEMENT.
8. A MINIMUM OF 2 FEET OF COMPACTED BACKFILL SHALL BE PLACED OVER THE CONDUIT BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
9. S.C.S. APPROVED SEED MIX TO BE SPREAD AS SOON AS PRACTICAL TO MINIMIZE EROSION.



DATE: 3-10-1

BEING A MAJORITY

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.

## NOTES

##	DATE	DESCRIPTION	IN
		OWNER	

MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA

**20 TROTTER DRIVE**

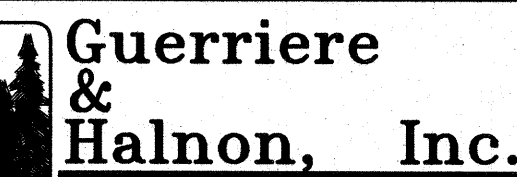
"MERRIMACK BUILDING  
SUPPLY"

DETAIL SHEET #2

SITE  
PLAN OF LAND  
IN

**MEDWAY, MA**

SCALE: NOT TO SCALE  
DATE: MARCH 10, 2017

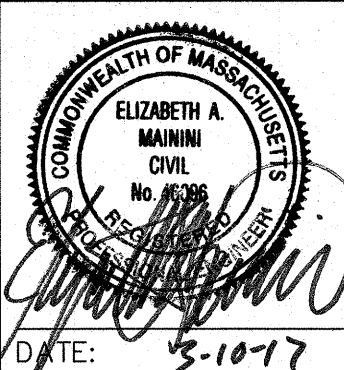


Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243

SHEET  
C-8  
BML

G-8542

P:\G8542\dwg\g-8542-04-19-07.dwg 04/25/2007 01:17:17 PM EDT



DATE: 5-10-17  
APPROVED DATE: PLANNING BOARD  
SIGNATURE DATE: BEING A MAJORITY

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.

"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.

### NOTES

##	DATE	DESCRIPTION	INIT

OWNER


MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA

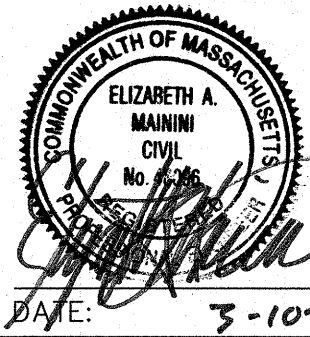
20 TROTTER DRIVE

"MERRIMACK BUILDING  
SUPPLY"

POST DEVELOPMENT  
SITE  
PLAN OF LAND  
IN  
MEDWAY, MA

SCALE: ONE INCH EQUALS 40 FEET  
DATE MARCH 8, 2017

 **Guerriere  
& Halnon, Inc.**  
Engineering & Land Surveying  
333 WEST STREET, MILFORD, MASS. 01757  
(508) 473-6630 FAX: (508) 473-8243



DATE: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
PLANNING BOARD

SIGNATURE DATE: \_\_\_\_\_  
BEING A MAJORITY

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.

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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.

NOTES

##	DATE	DESCRIPTION	INIT

MERRIMACK BUILDING SUPPLY  
20 TROTTER DRIVE  
MEDWAY MA

20 TROTTER DRIVE

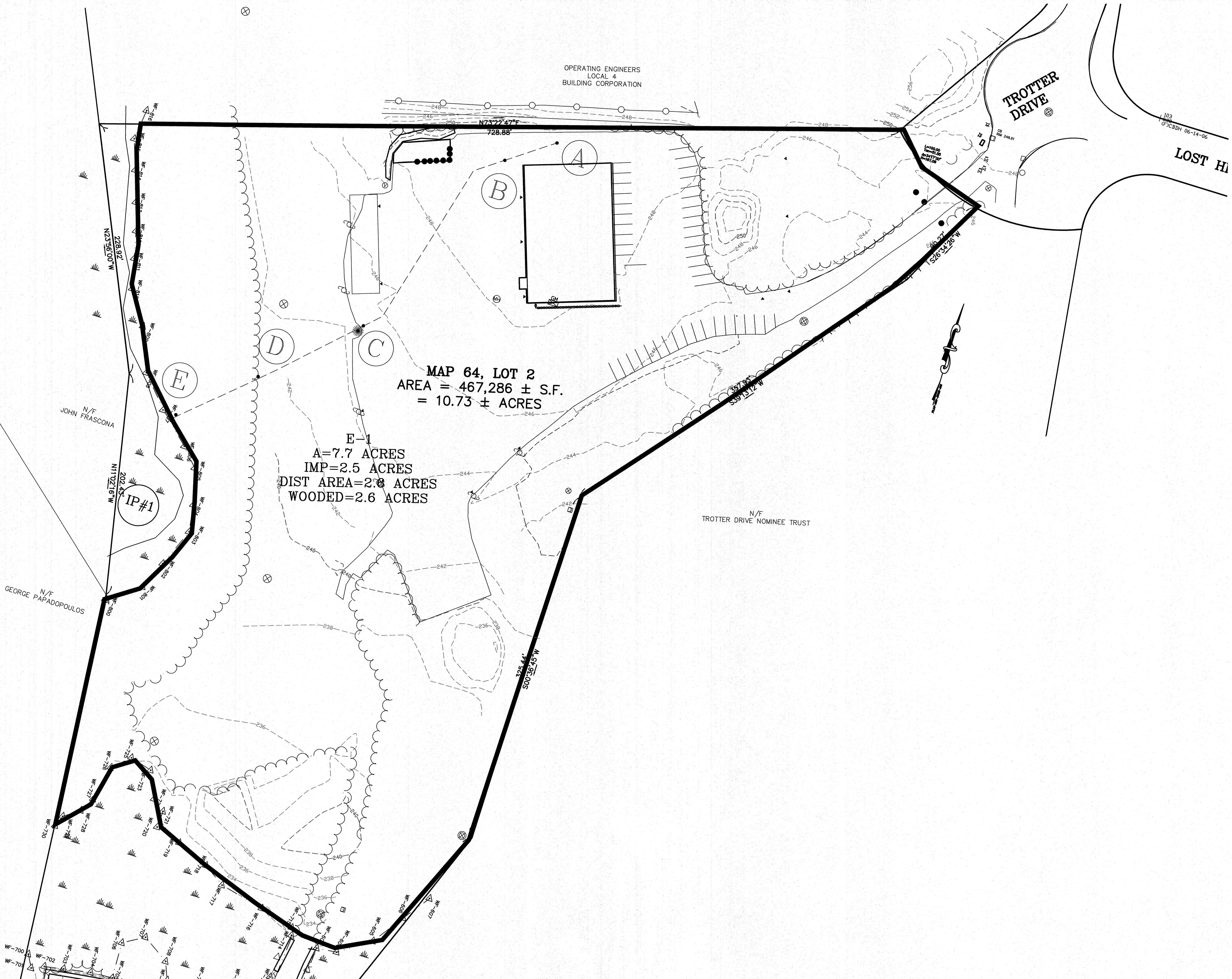
"MERRIMACK BUILDING  
SUPPLY"

PRE-DEVELOPMENT

PLAN OF LAND

IN  
MEDWAY, MA

SCALE: ONE INCH EQUALS 40 FEET  
DATE: MARCH 6, 2016



MAP 64, LOT 2  
AREA = 467,286 ± S.F.  
= 10.73 ± ACRES

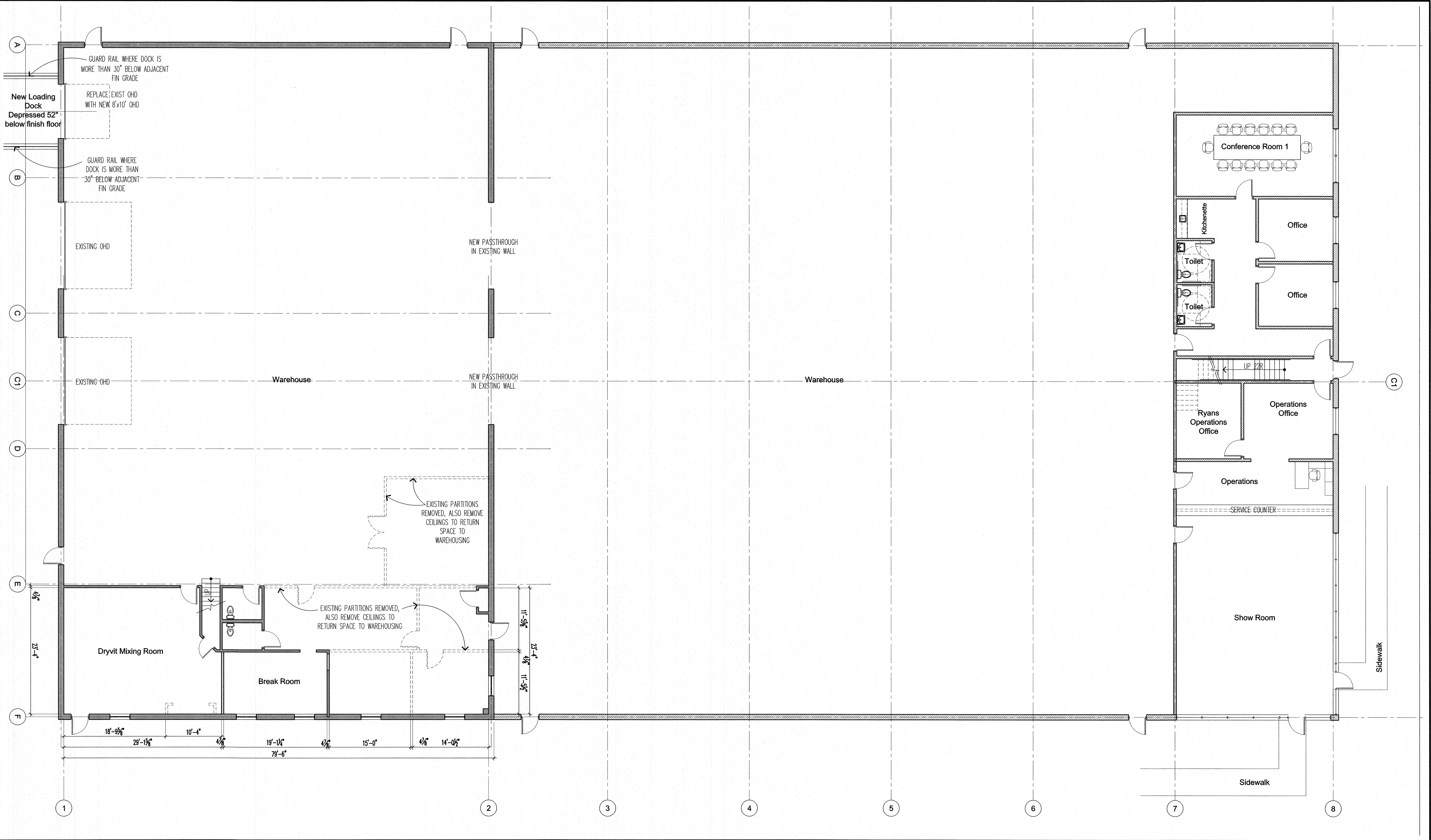
E-1  
A=7.7 ACRES  
IMP=2.5 ACRES  
DIST AREA=2.6 ACRES  
WOODED=2.6 ACRES

1. Contractor shall secure all permits and approvals that may be required from all jurisdictions regulating this project and site.
2. The Contractor shall exercise extreme care in excavating and working near existing utilities. The Contractor should verify the location and condition of all utilities and shall be responsible for all damages.
3. The Contractor is responsible for all damage due to operations inside and outside the Limit of Work. The Contractor shall be responsible for all damage to existing trees and areas outside the Limit of Work that are damaged and shall be restored to their original condition at no cost to the Owner. The Contractor shall meet line and grade of existing conditions at Limit of Work.
4. All points of construction ingress and egress shall be protected to prevent tracking of debris onto public ways. Any debris on public ways or draining from the job site shall be cleaned by the Contractor at no additional cost to the Owner.
5. Before any shrubs are removed, the Contractor shall arrange a conference on site with the Landscape Architect to identify shrubs which are to be removed, as well as those which are to be protected. Do not begin clearing without a clear understanding of existing vegetation to be preserved.
6. All items requiring removal shall be removed to full depth to include base material and footings or foundations as applicable, and be properly disposed of off-site by the Contractor or reused as directed by the Owner.
7. Contractor shall strip and stockpile existing planting soil to full depth within the Limit of Work. Loam or planting soil shall not be removed from the site without the Owner's approval.
8. At all locations where existing pavement about new construction, the edge of the existing pavement shall be sawcut to a clean, smooth edge.
9. Storage areas for the Contractor's equipment and materials shall be located within the Limit of Work and/or staging area and shall be approved by the Landscape Architect.

[illegible]

## Planting Plan (1)

Plant Species	Size	Quantity
<i>Trees &amp; Shrubs</i>		
AR Acer rubrum 'October Glory'	3-3.5'	7
CS Cornus sericea 'Arctic Fire'	#3	820
IG Ilex glabra	3-4'	34
MV Magnolia virginiana	8-10' MULTI-STEM	1
<i>Perennials, Grasses, Seed Mixes</i>		
Conservation Seed Mix (NEWP)	Seed mix	69,000 SF APPX
Pennisetum alopecuroides 'Hameln'	#3	820



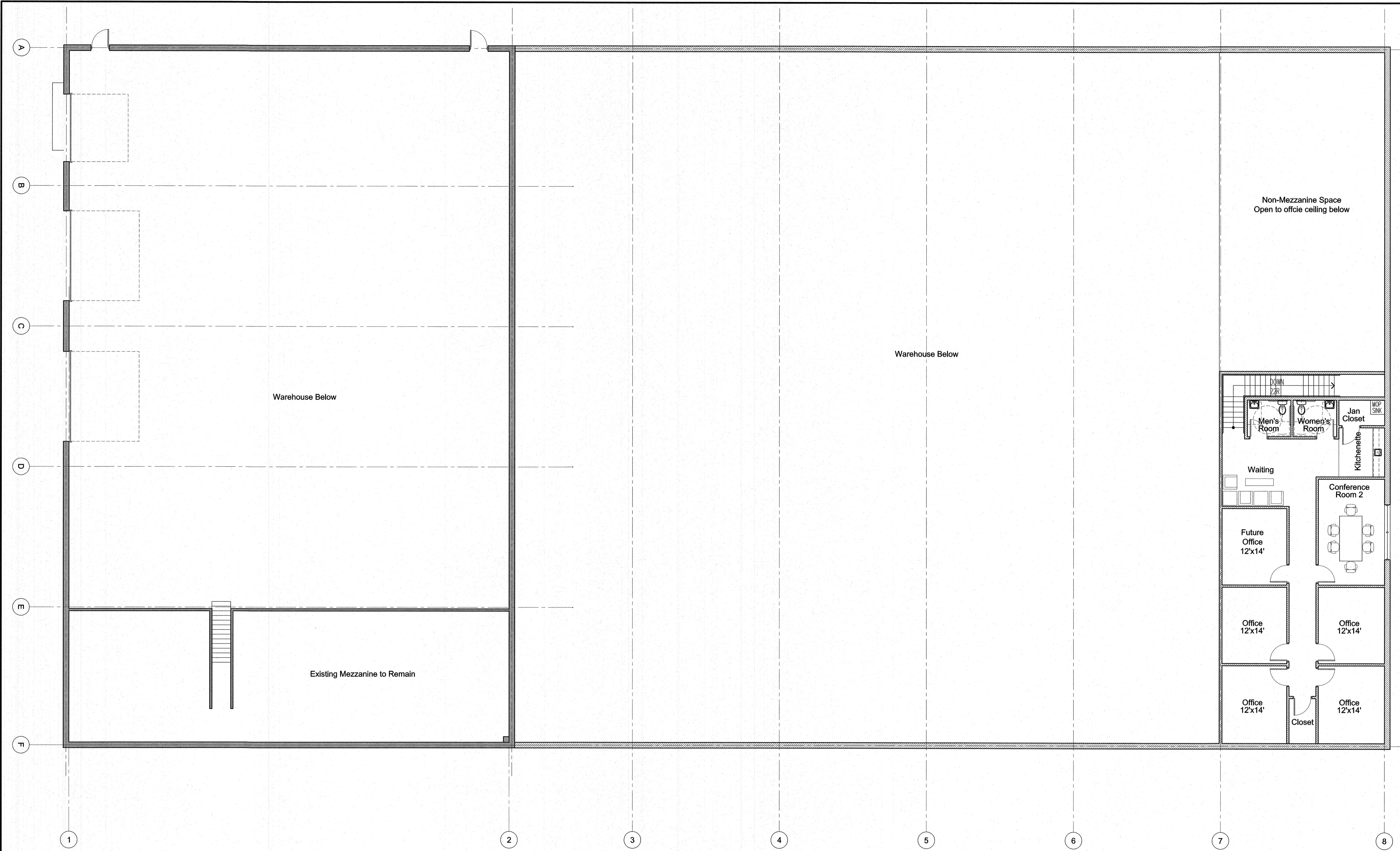
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A202

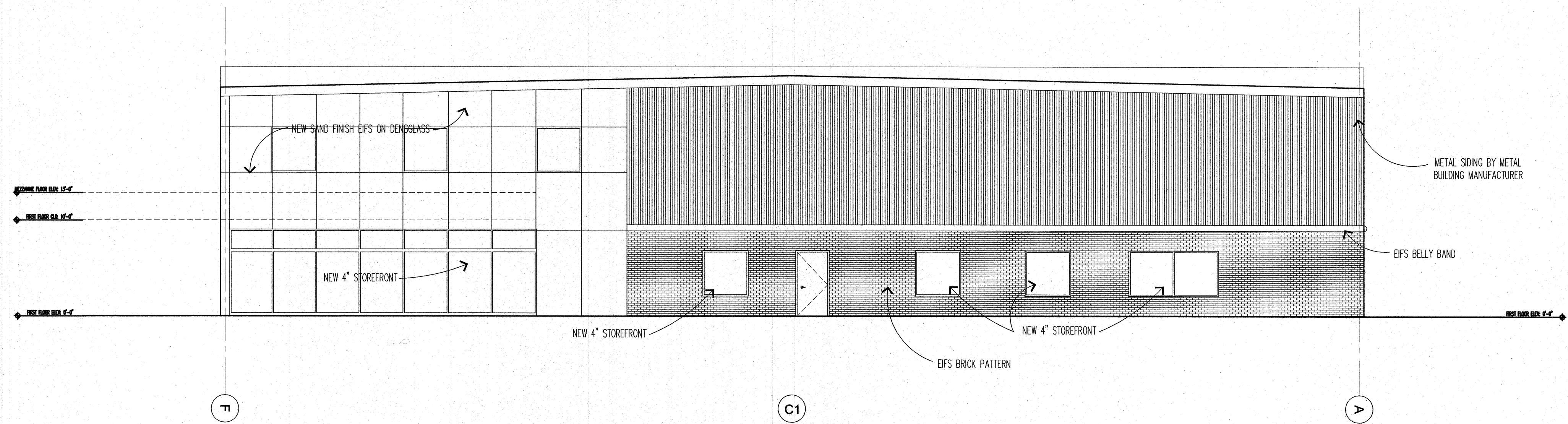
Proposed First Floor Plan

1/8"

1/8"



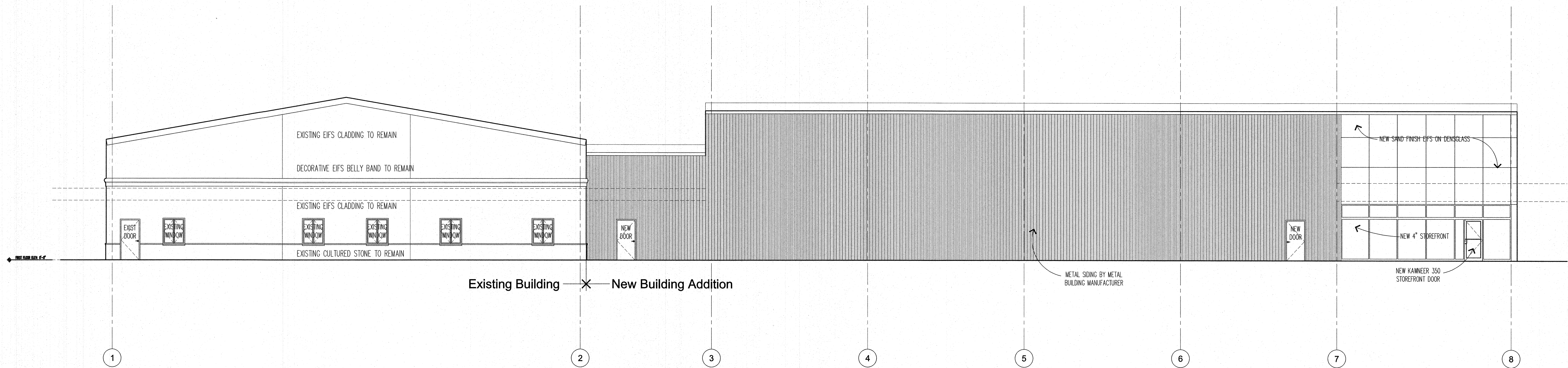
Proposed Mezzanine Plan



Sheet  
A301

East Elevation

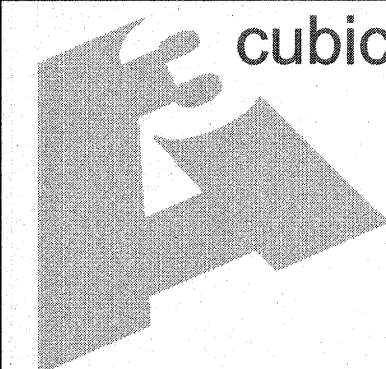
1/8\"/>



Sheet  
A301

South Elevation

1/8\"/>



**cubic architects, inc**  
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Plymouth, Massachusetts 02360  
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FAX: 781-668-2381  
wfuller@cubicarchitects.com

**Merrimack Building Supply  
Building Addition**

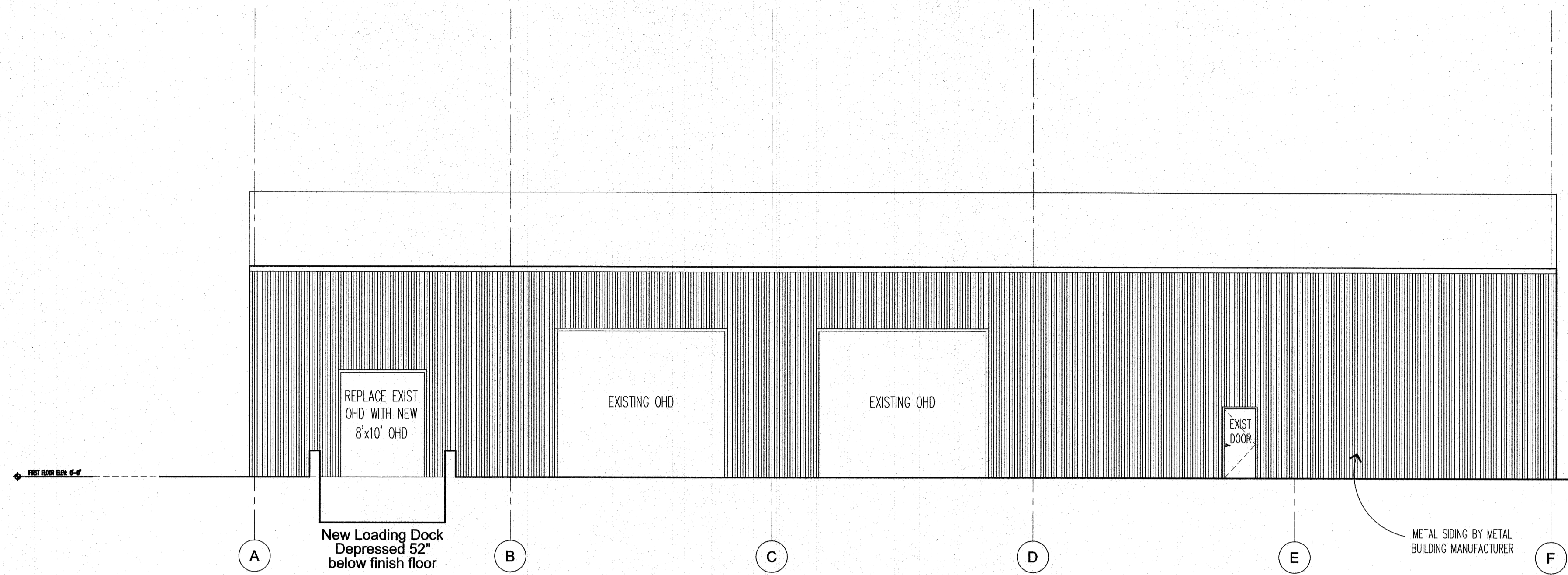
Street Address Anytown, Massachusetts

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Proposed Mezzanine

DATE: 11/10/16 BY: WAF CA JOB NO: 2016-042

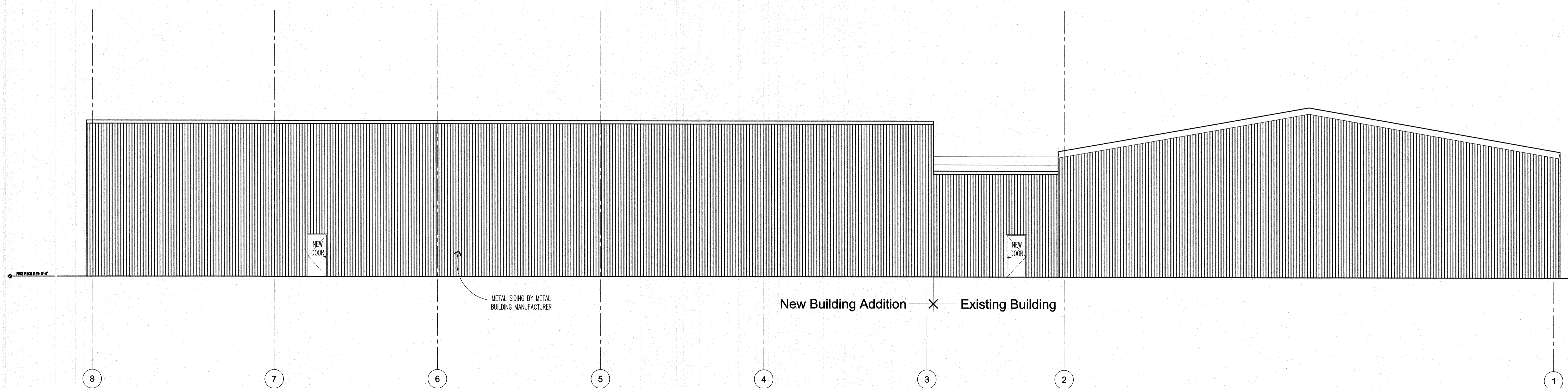
**A3.01**



Sheet 1  
A302

West Elevation

Scale  
1/8" = 1'-0"



Sheet 2  
A302

North Elevation

Scale  
1/8" = 1'-0"

**cubic architects, inc**  
 33 Bowsprit Lane  
 Plymouth, Massachusetts 02360  
 TEL: 617-314-7330  
 FAX: 781-658-2381  
 wfuller@cubicarchitects.com

**Merrimack Building Supply  
Building Addition**

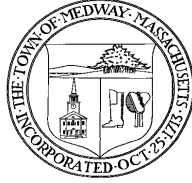
Street Address Anytown, Massachusetts

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Proposed Mezzanine

DATE: 11/10/16 BY: WAF CA JOB NO: 2016-042

**A3.02**



**April 25, 2017**  
**Medway Planning & Economic Development Board**  
**Meeting**

**Proposed Stormwater and Land**  
**Disturbance Bylaw**

- 4/5/17 Outline of Bylaw
- 3/24/17 Proposed Bylaw – Prepared by Gino Carlucci in consultation with Bridget Graziano, Tom Holder/Dave D'Amico, Stephanie Mercandetti and Susy Affleck-Childs

NOTE – Gino will make a presentation on the proposed new stormwater and land disturbance bylaw. Dave D'Amico will also be present.

# **Medway Stormwater Bylaw – Outline (updated 4-5-17)**

## **26.1 Authority**

## **26.2 Purpose**

## **26.3 Definitions**

## **26.4 Illicit Discharges**

26.4.1 Prohibited Activities

26.4.2 Pre-Existing Illicit Discharges

26.4.3 Non-Stormwater Discharges

26.4.4 Permitted Non-Stormwater Discharges

26.4.5 Prohibited Non-Stormwater Discharges

26.4.6 Notification of Spills

26.4.7 Enforcement

## **26.5 Land Disturbance and Construction Activities**

26.5.1 Applicability

26.5.2 Land Disturbance Permit

26.5.3 Coordinated Permitting

26.5.4 Application

## **26.6 Administrative Review**

26.6.1 Applicability

26.6.2 Entry

26.6.3 Other Boards

26.6.4 Administrative Team Meeting

26.6.5 Information Requests

26.6.6 Waivers

26.6.7 Action

26.6.8 Failure to Take Final Action

26.6.9 Appeals

26.6.10 Fee Structure

26.6.11 Project Changes

## **26.7 Erosion and Sediment Control Plan**

26.7.1 Applicability

26.7.2 Design Requirements

26.7.3 Erosion and Sediment Control Plan Content

## **26.8 Post Construction Stormwater Management Plan**

26.8.1 Application

26.8.2 Plan Contents

26.8.3 Stormwater Design Requirements

26.8.4 Recording

26.8.5 Long-Term Operations and Maintenance Plan

## **26.9 Inspection and Site Supervision**

26.9.1 Pre-Construction Meeting

26.9.2 Construction Inspection

26.9.3 Permittee Inspections and Reporting

26.9.4 Access Permission

## **26.10 Surety**

## **26.11 Final Reports**

## **26.12 Project Completion**

## **26.13 Enforcement**

26.13.1 Applicability

26.13.2 Orders

26.13.3 Non-Criminal Disposition

26.13.4 Criminal Penalty

26.13.5 Appeals

26.13.6 Remedies/Not Exclusive

## **26.14 Severability**

# **PROPOSED Replacement General Bylaw For Town Meeting Consideration – May 8, 2017**

## **Article XXVI**

### **Stormwater Management and Land Disturbance**

#### **SECTION 26.1 AUTHORITY**

This bylaw is adopted in accordance with the authority granted by M.G.L. Chapter 43B, Section 13.

#### **SECTION 26.2 PURPOSE**

The purpose and intent of this bylaw is to fulfill the Town's obligations under the Clean Water Act (33 U.S.C 1251 & seq.) (the "Act") and under the Town's National Pollution Discharge Elimination System ("NPDES") permit. More specifically, its purpose is the following:

1. To protect the waters of the U.S. as defined in the Act and implementing regulations from uncontrolled Discharges of Storm Water or discharges of contaminated water which have a negative impact on the receiving waters by changing the physical, biological and chemical composition of those waters resulting in an unhealthy environment for aquatic organisms, wildlife and people;
2. To establish a comprehensive and fair system of regulation of discharges to the Town's Municipal Separate Storm Sewer System (MS4);
3. To prohibit illicit connections and unauthorized discharges to the MS4;
4. To require the removal of all such illicit discharges;
5. To comply with Town, state and federal regulations related to storm water discharges, including but not limited to point sources, construction or industrial activities, and post-construction runoff by establishing provisions for the long-term responsibility for and maintenance of structural stormwater control facilities; and
6. To establish legal authority to ensure compliance with the provisions of this bylaw through inspection, monitoring and enforcement.

#### **SECTION 26.3 DEFINITIONS**

Except as listed below, words, all terms, abbreviations and acronyms that appear in this bylaw and are also defined in Appendix A of the Final 2016 Massachusetts Small MS4 General Permit ("Appendix A") signed April 4, 2016 with an effective date of July 1, 2017, (MS4 General Permit) or as most recently amended, shall be construed to have the meaning presented in Appendix A.

**Common Plan of Development** - A "larger common plan of development or sale" is a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. This Bylaw shall apply to land or parcels of land that are held in common ownership (including ownership by related or jointly-controlled persons or entities) as of the effective date of this Bylaw. A development shall not be segmented or phased in a manner to avoid compliance with this Bylaw. For example, if a developer buys a 20-acre lot and builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures sometime in the future, this would be considered a larger common plan of development or sale. If the land is parceled off or sold, and construction occurs on plots that are less than one acre by separate, independent builders, this activity still would be subject to stormwater permitting requirements if the smaller plots were included on the original site plan.

**Illicit Connection** -- A surface or subsurface drain or conveyance, which allows an illicit discharge into the municipal storm drain system, including without limitation sewage, process wastewater, or wash water and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed or approved before the effective date of this Bylaw.

**New Development** – Any construction activities or land alteration resulting in total earth disturbances greater than 1 acre (or activities that are part of a larger common plan of development disturbing greater than 1 acre) on an area that has not previously been developed to include impervious cover.

**Redevelopment** – Any construction, land alteration, or improvement of impervious surfaces resulting in total earth disturbances greater than 1 acre (or activities that are part of a larger common plan of development disturbing greater than 1 acre) that does not meet the definition of New Development (see above).

**Small Project** – Any construction activities or land alteration resulting in total earth disturbances greater than 20,000 square feet but less than 1 acre whether or not such area has previously been developed to include impervious cover.

## **SECTION 26.4 ILLICIT DISCHARGES**

### **Section 26.4.1. Prohibited Activities:**

- a. Illicit Discharges – no person shall dump, discharge, cause or allow to be discharged any pollutant, unauthorized stormwater or non-stormwater discharge into the municipal separate storm sewer system (MS4) and/or Town right-of-way.
- b. Illicit Connections – No person shall construct, use, allow, maintain or continue any illicit connection to the municipal separate storm sewer system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of connection.
- c. Obstruction of MS4 – No person shall obstruct or interfere with the normal flow of storm water into or out of the MS4 without prior written approval from the Enforcement Authority.

- d. Yard Wastes – No person shall dump or dispose of yard waste (leaves, grass clippings, etc.) into the MS4, or into catch basins, retention/detention basins or any other component of a stormwater management system which discharges to the MS4.

#### **Section 26.4.2. Pre-existing Illicit Discharges.**

Illicit discharges in existence prior to the adoption of this bylaw shall be addressed in compliance with the Town's Illicit Discharge Detection and Elimination ("IDDE") program.

**Section 26.4.3. Non-Stormwater Discharges** -- The following categories of non-stormwater discharges are allowed unless the Town, the United States Environmental Protection Agency ("EPA"), or the Massachusetts Department of Environmental Protection ("MassDEP") identifies any category or individual discharge of non-stormwater discharge as a significant contributor of pollutants to the MS4, then that category or individual discharge is not allowed but rather shall be deemed an "illicit discharge" and the Town shall address that category or individual discharge as part of its IDDE Program:

- a. Water line flushing
- b. Landscape irrigation
- c. Diverted stream flows
- d. Discharge from potable water sources
- e. Air conditioning condensation
- f. Irrigation water, springs
- g. Lawn watering
- h. Individual resident car washing
- i. Flows from riparian habitats and wetlands
- j. Street wash waters
- k. Residential building wash waters without detergents
- l. Fire-fighting activities

#### **Section 26.4.4. Permitted Non-Stormwater Discharges**

A limited category of non-stormwater discharges are only allowed with a permit from the Department of Public Services ("DPS"). Such permits may be granted only following an examination of potential alternatives and a finding by DPS that there is no viable alternative. These categories are:

- a. Uncontaminated pumped ground water
- b. Foundation drains
- c. Water from crawl space pumps
- d. Footing drains

#### **Section 26.4.5. Prohibited Non-Stormwater Discharges**

The following non-stormwater discharges are strictly prohibited:

- a. De-chlorinated swimming pool discharges
- b. Discharging water from any source into the street

#### **Section 26.4.6. Notification of Spills**

Notwithstanding other requirements of local, state or federal law, as soon as a person responsible for a facility or operation, or responsible for emergency response for a facility

or operation has information of or suspects a release of materials at that facility or operation resulting in or which may result in discharge of pollutants to the municipal drainage system or waters of the Commonwealth, the person shall take all necessary steps to ensure containment, and cleanup of the release. In the event of a release of oil or hazardous materials, the person shall immediately notify the Fire Department and the Department of Public Services (DPS). In the event of a release of non-hazardous material, the reporting person shall notify DPS no later than the next business day. The reporting person shall provide to DPS written confirmation of all telephone, electronic or in-person notifications within three business days thereafter. If the discharge of prohibited materials is from a commercial or industrial facility, the facility owner or operator of the facility shall retain on-site a written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

**Section 26.4.7. Enforcement** – The Department of Public Services or an authorized agent of DPS shall enforce Section 26.4 of this by-law, including associated regulations, and may issue orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

## **SECTION 26.5 LAND DISTURBANCE AND CONSTRUCTION ACTIVITY**

**Section 26.5.1. Applicability.** This section shall apply to all activities in which the limit of work results in disturbance of:

- a. at least 20,000 square feet but less than 1 acre (for administrative review) or
- b. one or more acres (or less if the activity is part of a larger common plan of development that exceeds one acre of land disturbance within a 5-year period) for review by the applicable permit granting authority.

**Section 26.5.2. Land Disturbance Permit.** Except as authorized by the applicable board, commission, department, administrative team or its agent, as specified in Section 26.5.3 and hereafter known as *the “permitting authority,”* no person shall perform any applicable land disturbance activity without a Land Disturbance Permit. Normal maintenance and improvement of land in agricultural or aquacultural use, as defined by the Wetlands Protection Act regulations 310 CMR 10.04, are exempt. Roadway and utilities improvement and maintenance undertaken by the Town are also exempt from permitting but such road work that involves increasing impervious surface by more than a single lane width shall comply with MS4 General Permit requirements as specified in Section 26.8.2 (3)(d).

### **Section 26.5.3. Coordinated Permitting.**

**26.5.3.1** In the case of activities requiring an Order of Conditions from the Conservation Commission or subdivision, site plan or special permit approval from the Planning and Economic Development Board (“PEDB”), Land Disturbance Permits shall be reviewed and issued as a component of those other permits, including the fees, regulations, timing, notice and hearing requirements of those other permits. In cases where activities are subject to Conservation Commission jurisdiction under the Wetlands Protection Act for part of a site and activities on another part of the site are subject to the jurisdiction of the PEDB, the Conservation Commission shall have sole jurisdiction for issuing a Land

Disturbance Permit for the entire site. For activities outside the jurisdiction of the Conservation Commission and that do not require subdivision, site plan or special permit approval from the PEDB (e.g. construction of a house and associated facilities on an existing lot), including Small Projects, a Land Disturbance Permit pursuant to Section 26.5.1 shall be required from an administrative team consisting of the Building Inspector, DPS Director, Community and Economic Development Director, Planning and Economic Development Coordinator and Conservation Commission Agent, and may include other Town staff or the designee of any of the preceding as appropriate depending on the nature of the project..

**26.5.3.2** Section 26.6 specifies procedures for administrative review. Sections 26.7 through 26.14 shall be applicable in all cases.

**26.5.4 Application.** A completed application for a Land Disturbance Permit shall be filed with the applicable permitting authority as established in Section 25.5.3. A permit must be obtained prior to the commencement of any applicable land disturbing activity. The Land Disturbance Permit Application package shall include:

- a. a completed Application Form with original signatures of all owners;
- b. three (3) copies of the Erosion and Sediment Control Plan as specified in Section 26.7 of this bylaw;
- c. three (3) copies of the Post-Construction Stormwater Management Plan as specified in Section 26.8 of this bylaw;
- d. three (3) copies of the Stormwater Operations and Maintenance Plan for both during construction and post-construction as specified in Section 26.9 of this bylaw
- e. payment of the application and review fees; and,
- f. one (1) copy of the Application Form filed with the Town Clerk.
- g. an electronic copy of all materials submitted.

## **SECTION 26.6 ADMINISTRATIVE REVIEW**

**26.6.1. Applicability.** Administrative review is provided to address those land disturbance activities that fall outside the jurisdiction of any other reviewing authority as defined in Section 26.5.3.1, including Small Projects.

**26.6.2. Entry.** Filing an application for a permit grants the administrative team or its designee, permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.

**26.6.3. Other Boards.** The administrative team shall notify the Town Clerk of receipt of the application, and shall give one copy of the application package to and may seek input from the Planning and Economic Development Board, the Conservation Commission, Department of Public Services and/or other Town departments or boards as needed or appropriate.

**26.6.4. Administrative Team Meeting.** The Land Disturbance Permit application shall be made available for inspection by the public at Town Hall during its normal business hours. The applicant shall be invited to a review meeting which shall be held within 14 days of the receipt of a complete application and final action shall be taken within 14 days of the review meeting unless such time is extended by agreement between the applicant and the administrative team.

**26.6.5. Information requests.** The applicant shall submit all additional information requested by the administrative team in order to issue a decision on the application.

**26.6.6. Waivers**

**26.6.6.1.** The administrative team may waive strict compliance with any requirement of this by-law or the rules and regulations promulgated hereunder, where:

- a. such action is allowed by federal, state and local statutes and/or regulations,
- b. is in the public interest, and
- c. is not inconsistent with the purpose and intent of this by-law.

**26.6.6.2.** Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the by-law does not further the purposes or objectives of this bylaw.

**26.6.6.3.** All waiver requests shall be discussed and voted on at the review meeting for the project.

**26.6.6.4.** If in the opinion of the administrative team, additional time or information is required for review of a waiver request, it may continue the review to a date certain announced at the meeting. In the event the applicant objects to a continuance, or fails to provide requested information, the waiver request shall be denied.

**26.6.7. Action**

The administrative team may:

- a. Approve the Land Disturbance Permit Application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this by-law;
- b. Approve the Land Disturbance Permit Application and issue a permit with conditions, modifications or restrictions that it determines are required to ensure that the project will protect water resources and meets the objectives and requirements of this by-law;
- c. Disapprove the Land Disturbance Permit Application and deny the permit if it finds that the proposed plan will not protect water resources or fails to meet the objectives and requirements of this by-law.

**26.6.8. Failure to take final action.** Failure of the administrative team to take final action upon an Application within the time specified above shall be deemed to be approval of said Application. Upon certification by the Town Clerk that the allowed time has passed without action, the Land Disturbance Permit shall be issued by the administrative team.

**26.6.9. Appeals.** Decisions of the administrative team may be appealed to the Conservation Commission within 20 days of filing the decision with the Town Clerk. The Conservation Commission may adopt rules and regulations for hearing such appeals but shall consider the appeal at a public meeting held within 30 days of receipt.

**26.6.10. Fee Structure.** Each application must be accompanied by the appropriate application fee as established by the Department of Community and Economic Development. Applicants shall pay review fees as determined by the administrative team sufficient to cover any expenses connected with the review of the Land Disturbance Permit Application before the review process commences. The administrative team is authorized to retain a Registered Professional Engineer or other professional consultant to advise it on any or all aspects of the Application.

**26.6.11. Project Changes.** The permittee, or their agent, must notify the Department of Community and Economic Development in writing of any change or alteration of a land-disturbing activity authorized in a Land Disturbance Permit before any change or alteration occurs. If the administrative team determines that the change or alteration is significant, based on the design requirements listed in Section 26.7.2 and accepted construction practices, the administrative team may require that an amended Land Disturbance Permit application be filed and a new review meeting be held. If any change or alteration from the Land Disturbance Permit occurs during any land disturbing activities, the administrative team may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

## **SECTION 26.7. EROSION AND SEDIMENT CONTROL PLAN**

**26.7.1. Applicability.** An Erosion and Sediment Control Plan (ESCP) is required of all construction site operators performing land disturbance activities under the jurisdiction of this by-law. The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed in Section 26.7.2. below.

**26.7.2. Design Requirements.** The design requirements of the Erosion and Sediment Control Plan are:

- a. Minimize total area of disturbance and protect natural resources;
- b. Sequence activities to minimize simultaneous areas of disturbance;
- c. Minimize soil erosion and control sedimentation during construction and document that proposed measures can handle a 100-year storm, recognizing that prevention of erosion is preferred over sedimentation control;

- d. Protect slopes on the construction site;
- e. Protect all storm drain inlets and armor all newly constructed outlets;
- f. Divert uncontaminated water around disturbed areas;
- g. Install and maintain all Erosion and Sediment Control measures in accordance with the manufacturers specifications and good engineering practices;
- h. Use perimeter controls to prevent off-site transport of sediment;
- i. Stabilize construction site entrances and exits to prevent off-site vehicle tracking of sediment;
- j. Inspect and report stormwater controls at consistent intervals.
- k. Protect and manage on and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project);
- l. Comply with applicable Federal, State and local laws and regulations including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;
- m. Prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or Of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species from the proposed activities;
- n. Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site;
- o. Properly manage on-site construction and waste materials; including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes. These wastes may not be discharged to the MS4.

**26.7.3. Erosion and Sedimentation Control Plan Content.** The Plan shall contain the following information:

- a. Names, addresses, and telephone numbers of the owner, applicant, and person(s) or firm(s) preparing the plan;
- b. Title, date, north arrow, names of abutters, scale, legend, and locus map;
- c. Location and description of natural features including:
  - 1) Watercourses and water bodies, wetland resource areas and all floodplain information, including the 100-year flood elevation based upon the most recent Flood Insurance Rate Map, or as calculated by a professional engineer for areas not assessed on these maps;
  - 2) Existing vegetation including tree lines, canopy layer, shrub layer, and ground

cover, and trees with a caliper twelve (12) inches or larger, noting specimen trees and forest communities; and

- 3) Habitats mapped by the Massachusetts Natural Heritage & Endangered Species Program as Endangered, Threatened or of Special Concern, Estimated Habitats of Rare Wildlife and Certified Vernal Pools, and Priority Habitats of Rare Species within five hundred (500) feet of any construction activity.
- d. Lines of existing abutting streets showing drainage and driveway locations and curb cuts;
- e. Existing soils, volume and nature of imported soil materials;
- f. Topographical features including existing and proposed contours at intervals no greater than two (2) feet with spot elevations provided when needed;
- g. Surveyed property lines showing distances and monument locations, all existing and proposed easements, rights-of-way, and other encumbrances, the size of the entire parcel, and the delineation and number of square feet of the land area to be disturbed;
- h. Drainage patterns and approximate slopes anticipated after major grading activities (Construction Phase Grading Plans);
- i. A plan showing the limit of work with a calculation indicating its area.
- j. Location and details of erosion and sediment control measures with a narrative of the construction sequence/phasing of the project, including both operation and maintenance for structural and non-structural measures, interim grading, and material stockpiling areas;
- k. Path and mechanism to divert uncontaminated water around disturbed areas, to the maximum extent practicable;
- l. Location and description of industrial discharges, including stormwater discharges from dedicated asphalt plants and dedicated concrete plants, which are covered by this permit;
- m. Stormwater runoff calculations in accordance with the Department of Environmental Protection's Stormwater Management Policy;
- n. Location and description of and implementation schedule for temporary and permanent seeding, vegetative controls, and other stabilization measures;
- o. A description of construction and waste materials expected to be stored on-site. The Plan shall include a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response;
- p. A description of provisions for phasing the project where one acre of area or greater is to be altered or disturbed;
- q. Timing, schedules, and sequence of development including clearing, stripping,

rough grading, construction, final grading, and vegetative stabilization,

- r. A maintenance schedule for the period of construction,
- s. Plans must be stamped and certified by a qualified Professional Engineer registered in Massachusetts or a Certified Professional in Erosion and Sediment Control; and
- t. Such other relevant information as is required by the applicable permitting authority.

## **SECTION 26.8. POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN**

**26.8.1. Application.** The application for a Land Disturbance Permit shall include a Post-Construction Stormwater Management Plan, including a Long-Term Operations and Management Plan. This Post-Construction Stormwater Management Plan shall contain sufficient information for the applicable reviewing authority to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The Plan shall be designed to meet the most current Massachusetts Stormwater Management Standards as set forth in Section 26.8.3 and DEP Stormwater Management Handbook Volumes I and II.

**26.8.2 Plan Contents.** The Stormwater Management Plan shall fully describe the project in drawings, and narrative. It shall include:

- a. A locus map,
- b. The existing zoning, and land use at the site,
- c. The proposed land use,
- d. The location(s) of existing and proposed easements,
- e. The location of existing and proposed utilities,
- f. The site's existing & proposed topography with contours at 2 foot intervals,
- g. The existing site hydrology,
- h. A description & delineation of existing stormwater conveyances, impoundments, and wetlands on or adjacent to the site or into which stormwater flows,
- i. A delineation of 100-year flood plains, if applicable,
- j. Estimated seasonal high groundwater elevation (November to April) in areas to be used for stormwater retention, detention, or infiltration,
- k. The existing and proposed vegetation and ground surfaces with runoff coefficients for each,
- l. A drainage area map showing pre and post construction watershed boundaries, drainage area and stormwater flow paths,
- m. A description and drawings of all components of the proposed drainage system including:
  - 1) locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization,
  - 2) all measures for the detention, retention or infiltration of water,
  - 3) all measures for the protection of water quality,
  - 4) the structural details for all components of the proposed drainage systems and stormwater management facilities,
  - 5) notes on drawings specifying materials to be used, construction specifications,

- and typicals, and
- 6) expected hydrology with supporting calculations.
- n. Proposed improvements including location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable,
- o. Timing, schedules, and procedures to ensure proper functioning and operation of the system'
- p. A maintenance schedule,
- q. Documentation of consideration of the use of low impact design and green infrastructure,
- r. A final (and for longer term projects an annual) report documenting compliance with the plan, including receipts as applicable, and
- s. Any other relevant information requested by the applicable permitting authority.

### **26.8.3. Stormwater Design Requirements**

Projects shall use Low Impact Development (LID) site planning and design strategies to the maximum extent feasible and shall comply with the following requirements

- a. No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.
- b. For new development, stormwater management systems must be designed to:
  - 1) Not allow new stormwater conveyances to discharge untreated stormwater in accordance with Massachusetts Stormwater Handbook Standard 1;
  - 2) Control peak runoff rates in accordance with Massachusetts Stormwater Handbook Standard;
  - 3) Recharge groundwater in accordance with Massachusetts Stormwater Handbook Standard;
  - 4) Eliminate or reduce the discharge of pollutants from land uses with higher pollutant loads as defined in the Massachusetts Stormwater Handbook in accordance with Massachusetts Stormwater Handbook Standard 5;
  - 5) Protect Zone II or Interim Wellhead Protection Areas of public water supplies in accordance with Massachusetts Stormwater Handbook Standard 6;
  - 6) Implement long term maintenance practices in accordance with Massachusetts Stormwater Handbook Standard 9; and
  - 7) Require that all stormwater management systems be designed to:
    - a) Retain the volume of runoff equivalent to, or greater than, one (1.0) inch multiplied by the total post-construction impervious surface area on the site AND/OR
    - b) Remove 90% of the average annual load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 60% of the average annual load of Total Phosphorus (TP) generated from the total post-construction impervious surface area on the site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool provided by EPA Region 1, where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to

calculate BMP performance. The required removal percentage is not required for each storm, it is the average removal over a year that is required.

c. For redevelopment sites:

- 1) Stormwater management systems on Redevelopment sites shall meet the following sections of part 2.3.6.a.ii.3 of the MS4 General Permit as most recently amended, to the maximum extent feasible:
  - a) Part 2.3.6.a.ii.3(a) (Massachusetts Stormwater Standard 1);
  - b) Part 2.3.6.a.ii.3(b) (Massachusetts Stormwater Standard 2)
  - c) Part 2.3.6.a.ii.3(c) (Massachusetts Stormwater Standard 3); and
  - d) The pretreatment and structural best management practices requirements of 2.3.6.a.ii.3(d) and 2.3.6.a.ii.3(e) (Massachusetts Stormwater Standards 5 and 6).
- 2) Stormwater management systems on Redevelopment sites shall also improve existing conditions by requiring that stormwater management systems be designed to:
  - a) Retain the volume of runoff equivalent to, or greater than, 0.80 inch multiplied by the total post-construction impervious surface area on the site AND/OR
  - b) Remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) generated from the total post-construction impervious area on the site AND 50% of the average annual load of Total Phosphorus (TP) generated from the total post construction impervious surface area on the site. Pollutant removal shall be calculated consistent with EPA Region 1's BMP Performance Extrapolation Tool or other BMP performance evaluation tool provided by EPA Region 1 where available. If EPA Region 1 tools do not address the planned or installed BMP performance any federally or State approved BMP design guidance or performance standards (e.g. State stormwater handbooks and design guidance manuals) may be used to calculate BMP performance.
- 3) Stormwater management systems on redevelopment sites may utilize offsite mitigation within the same USGS HUC10 as the redevelopment site to meet the equivalent retention or pollutant removal requirements in part 2.3.6.a.ii.4(b) of the [MS4 General Permit](#), as most recently amended,.
- 4) Redevelopment activities that are exclusively limited to maintenance and improvement of existing roadways, (including widening less than a single lane, adding shoulders, correcting substandard intersections, improving existing drainage systems, and repaving projects) shall improve existing conditions where feasible and are exempt from the MS4 General Permit part 2.3.6.a.ii.4(a), part 2.3.6.a.ii.4(b) and part 2.3.6.a.ii.4(c). Roadway widening or improvements that increase the amount of impervious area on the redevelopment site by greater than or equal to a single lane width shall meet the requirements of part 2.3.6.a.ii.4(a) – (c) of MS4 General Permit as most recently amended fully.

- d. All stormwater management systems must have a Long-Term Operation and Maintenance plan prepared in accordance with 26.8.5 to ensure that systems function as designed.

When one or more of the Standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

**26.8.4. Recording.** The Post-Construction Stormwater Management Plan shall be recorded at the Registry of Deeds along with the decision of the applicable permitting authority.

**26.8.5. Long-Term Operation and Maintenance Plans**

A Long-Term Operation and Maintenance plan (O&M Plan) is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with the Permit, this Bylaw and the Massachusetts Stormwater Standards are met in all seasons and throughout the life of the system. The applicable permitting authority shall make the final decision of what maintenance option is appropriate in a given situation. The applicable permitting authority will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. The Operation and Maintenance Plan shall remain on file with the applicable permitting authority and shall be an ongoing requirement. The O&M Plan shall include:

**26.8.5.1.** The name(s) of the owner(s) for all components of the system

**26.8.5.2.** Maintenance agreements that specify:

1. The names and addresses of the person(s) responsible for operation and maintenance
2. The person(s) responsible for financing maintenance and emergency repairs.
3. A Maintenance Schedule for all drainage structures, including swales and ponds.
4. A list of easements to the town with the purpose and location of each.
5. The signature(s) of the owner(s).

**26.8.5.3.** Stormwater Management Easement(s).

1. Stormwater management easements may be required for areas used for off-site stormwater control, unless a waiver is granted by the applicable permitting authority.
2. Stormwater management easements shall be provided to the Town by the property owner(s) as necessary to comply with the Post Construction and Long-Term Operation and Maintenance Plans for:
  - a. access for facility inspections and maintenance,
  - b. preservation of stormwater runoff conveyance, infiltration, and detention

areas and facilities, including flood routes for the 100-year storm event.

- c. direct maintenance access by heavy equipment to structures requiring regular cleanout.
3. The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.
4. Easements along with a plan illustrating their location shall be recorded with the Norfolk County Registry of Deeds prior to issuance of a Certificate of Completion by the applicable permitting authority.

#### **26.8.5.4. Changes to Operation and Maintenance Plans**

1. The owner(s) of the stormwater management system must notify the Department of Public Services of changes in ownership or assignment of financial responsibility.
2. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this by-law by mutual agreement of the Department of Public Services and the Responsible Parties. Proposed amendments must be in writing and signed by all Responsible Parties. Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility. Proposed amendments must be described in detail along with reasons why the Town should consider them. Amendments will not be considered until at least three years after Project Completion as defined in Section 26.12.
3. A report shall be provided annually to the Department of Public Services on the anniversary date of the permit. The Report shall include documentation of compliance with the Plan, including photographs, and receipts as applicable.

### **SECTION 26.9. INSPECTION AND SITE SUPERVISION**

**26.9.1. Pre-construction Meeting.** Prior to starting clearing, excavation, construction, or land disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with appropriate Town staff and/or designated agents, to review the permitted plans and their implementation.

**26.9.2. Construction Inspection.** The applicable Town staff or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the land disturbance permit as approved. The Permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of applicable permitting authority, shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify applicable permitting authority at least two (2) working days before each of the following events:

- a. Erosion and sediment control measures are in place and stabilized;
- b. Site Clearing has been substantially completed;

- c. Rough Grading has been substantially completed;
- d. Installation of physical control measures;
- e. Final Grading has been substantially completed;
- f. Close of the Construction Season; and
- g. Final Landscaping (permanent stabilization) and project final completion.

A written report of these inspections shall be provided to both the permittee and the applicable permitting authority. Such inspections may be combined with other inspections required under any other permits issued to authorize the project.

**26.9.3. Permittee Inspections and Reporting.** The permittee or his/her agent shall conduct and document inspections of all control measures no less than weekly during construction or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the control plan, and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to the applicable permitting authority or designated agent in a format approved by it.

**26.9.4. Access Permission.** To the extent permitted by state law, or if authorized by the owner/permittee or other party in control of the property, the applicable permitting authority its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this by-law and may make or cause to be made such examinations, surveys or sampling as the applicable permitting authority deems reasonably necessary to determine compliance with the permit.

## **SECTION 26.10. SURETY**

Unless otherwise provided for through a concurrent coordinated permitting process per Section 26.5.3, the applicable permitting authority or administrative team may require the permittee to post a performance guarantee in a form acceptable to Town Counsel and the Town Treasurer before the start of land disturbance activity. The form of the bond shall be in an amount deemed sufficient by the applicable permitting authority to ensure that the work will be completed in accordance with the permit. If the project is phased, **the** applicable permitting authority may release part of the bond as each phase is completed in compliance with the permit but the bond may not be fully released until the applicable permitting authority has received the final report as required by Section 26.9 and has issued a certificate of completion. The amount of the bond shall be sufficient to ensure that the site may be stabilized, including a minimum of 6" of loam seeded over any disturbed area along with erosion controls plus 25% contingency.

## **SECTION 26.11. FINAL REPORTS**

Upon completion of the work, the permittee shall submit to the applicable permitting authority or administrative team a report (including certified as-built construction plans in accordance with Section 2.3.6.a.iii of the of the MS4 General Permit, as most recently amended) from a Professional Engineer (P.E.), surveyor, or Certified Professional in Erosion and Sediment Control (CPESC), certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance

with the conditions of the approved permit. Any deviations should be noted in the cover letter.

## **SECTION 26.12. PROJECT COMPLETION**

The issuing authority will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this bylaw. Such certification may be a component of Conservation Commission Certificate of Compliance or a PEDB Certificate of Completion. A copy of the letter and Final Report shall be submitted by the issuing authority to the Department of Public Services.

## **SECTION 26.13. ENFORCEMENT**

**26.13.1 Applicability.** The applicable permitting authority or an authorized agent shall enforce Sections 26.5 -26.13 of this by-law, including associated regulations, and may issue orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

### **26.13.2. Orders**

- a. The applicable permitting authority or an authorized agent may issue a written order to enforce the provisions of this by-law or the regulations thereunder, which may include:
  - 1) a requirement to cease and desist from the land-disturbing activity until there is compliance with the bylaw and provisions of the land-disturbance permit;
  - 2) maintenance, installation or performance of additional erosion and sediment control measures;
  - 3) monitoring, analyses, and reporting
  - 4) remediation of erosion and sedimentation resulting directly or indirectly from the land-disturbing activity.
- b. If the enforcing person determines that abatement or remediation of erosion and sedimentation is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town may, at its option, undertake such work, and the property owner shall reimburse the Town expenses.
- c. Within thirty (30) days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner shall be notified of the costs incurred by the Town. The violator or property owner may file a written protest objecting to the amount or basis of costs with the Town Administrator within thirty (30) days of receipt of the notification of the costs incurred. If the amount due is not received by the expiration of the time in which to file a protest or within thirty (30) days following a decision of the Town Administrator affirming or reducing the costs, or from a final decision of a court of

competent jurisdiction, the costs shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said costs. Interest shall begin to accrue on any unpaid costs at the statutory rate, as provided in G.L. Ch. 59, § 57, after the thirty-first day following the day on which the costs were due.

**26.13.3 Non-Criminal Disposition.** As an alternative to criminal prosecution or civil action, the Town may elect to utilize the non-criminal disposition procedure set forth in G.L. Ch. 40, §21D and Article XX of the Town of Medway General Bylaws, in which case the authorized agent of the applicable permitting authority] shall be the enforcing person. The penalty for the 1st violation shall be a written warning. The penalty for the 2nd violation shall be \$100. The penalty for the 3rd and subsequent violations shall be \$300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

**26.13.4. Criminal Penalty.** Any person who violates any provision of this by-law, regulation, order or permit issued there under, and does not comply with any non-criminal disposition order, shall be punished by a fine of not more than \$300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

**26.13.5. Appeals.** The decisions or orders of the PEDB or Conservation Commission shall be final. Further relief shall be to a court of competent jurisdiction. Decisions of the administrative team may be appealed to the Conservation Commission.

**26.13.6 Remedies Not Exclusive.** The remedies listed in this by-law are not exclusive of any other remedies available under any applicable federal, state or local law.

## **SECTION 26.14. SEVERABILITY**

If any provision, paragraph, sentence, or clause of this by-law shall be held invalid for any reason, all other provisions shall continue in full force and effect.

The background is a solid light blue color. It is decorated with numerous water droplets of various sizes. Some droplets are in the top left corner, some are in the bottom right corner, and others are scattered in the center. The droplets have a realistic 3D effect with highlights and shadows.

# PROPOSED NEW STORMWATER MANAGEMENT BYLAW

APRIL 25, 2017

## HISTORY/CONTEXT

- 1983 – Study found high levels of pollutants in urban runoff
- 1987 - Amendment to Clean Water Act of 1970 required stormwater to be regulated under NPDES
- 1999 – Phase II regulations required these general permits
- 2003 – First General Permit for Massachusetts issued (5 year term)
- 2014 – First draft of replacement permit issued (many comments)
- 2016 – Final MS4 General Permit for MA issued on 7-1-16

# 2016 GENERAL PERMIT FOR MASSACHUSETTS

## Six Areas Addressed

- Public Education
- Public Involvement
- *Illicit Discharges*
- *Construction Site Runoff*
- *Post-Construction Runoff*
- Pollution Prevention

## Implementation Timeline

Effective Date: 7/1/2017

Notice of Intent Due: 9/29/2017

Stormwater Management Plan  
Due: 7/1/2018



## ARTICLE XXVI: STORMWATER MANAGEMENT AND LAND DISTURBANCE

Two Primary Activities Are Addressed:

Illicit Discharges to Stormwater Management System

Land Disturbance and Construction Activities

# ILLICIT DISCHARGE DETECTION & ELIMINATION

- Under Purview of Department of Public Services (DPS)
- Generally Prohibits Direct or Indirect Discharges into MS4
- Existing connections must be removed
- Certain activities are exempt

# LAND DISTURBANCE AND CONSTRUCTION ACTIVITIES

- Threshold: Disturbance Of 20,000 Square Feet or More
- Coordinated Permitting:
  1. Activities subject to a PEDB or ConCom Permit are addressed through those other permits
  2. Where PEDB and ConCom both have jurisdiction, ConCom will address stormwater under bylaw
  3. Administrative Review – When project falls outside PEDB and ConCom jurisdiction

# PRIMARY CHANGES

- Tightens Illicit Discharge Requirements
- Streamlines Stormwater Management Review Process for Most Projects
- Establishes an Administrative Review Process for Projects Outside Planning and Economic Development Board and Conservation Commission jurisdiction

# PROJECT REQUIREMENTS

- Pre-existing illicit discharges will be addressed in DPS Illicit Discharge Detection and Elimination (IDDE) program
- New construction/Land disturbance activities (20,000 square feet or more) will require:
  1. Erosion and Sediment Control Plan
  2. Post Construction Stormwater Management Plan (PCSMP)
    - a. Retain runoff equivalent to 1" rain (.8" for redevelopment)
    - b. Remove 90% Total Suspended Solids, 60% of Total Phosphorus (80% and 50% for redevelopment)
    - c. PCSMP must be recorded at Registry of Deeds
  3. Long Term Operations and Management Plan

## OTHER PROVISIONS

- Pre-construction Meeting
- Inspections (both permittee and Town)
- Progress Reports (by permittee)
- Performance Guarantees
- Final Report (by permittee)
- Certificate of Completion (by Town)