



## Wetland Resource Delineation and Evaluation

Cabot Estates  
241 Perkins Street  
Jamaica Plain, MA  
November 11, 2016  
Rev April 11, 2019

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### Introduction and Methods

The project site includes the driveway and paved areas of the Cabot Estates condominium complex at 241 Perkins Street. Its location is indicated in Figure 1 below.

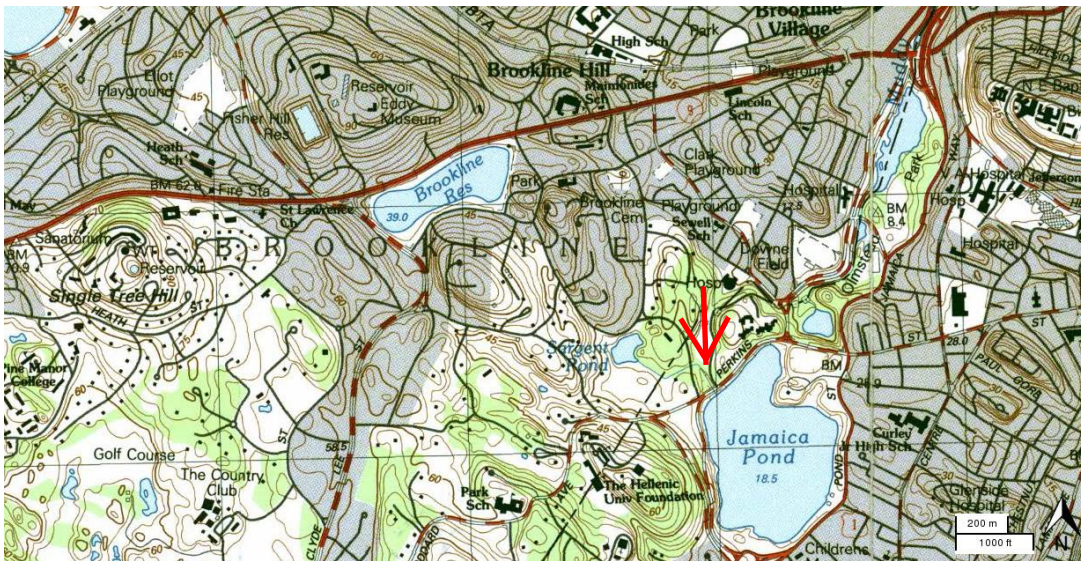


Fig. 1: USGS Site Locus

A site inspection of the project site was conducted by Rimmer Environmental Consulting, LLC (REC) on October 21, 2016 for the purposes of evaluating the location and extent of wetland resources subject to jurisdiction under the Massachusetts Wetlands Protection Act (MGL Ch. 131 s. 40). Due to the long interim between flagging and filing of the Notice of Intent, resources were re-inspected and delineated on April 9, 2019. Minor adjustments to the wetland flagging were made at that time.

Wetlands were delineated in accordance with the procedures established in the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). Numbered sequences of were placed in the field to identify the limit of wetland resource areas. Survey location of flags was provided by Samiotes Consultants.

## Findings

The following wetland resource areas were determined to be present on and adjacent to the project area:

### 1. Inland Bank/Land Under a Waterway

A stream connecting Sargent Pond to Jamaica Pond passes west of the access driveway. The stream is indicated on the USGS as an intermittent stream and was dry at the time of inspection on October 21, 2016. We note that this observation was made during a period of drought warning by the EOE Water Resources Commission Drought Management Task Force. At the time of inspection in April, the stream was flowing. No bordering wetland extends from its well-defined banks.

In the event that a stream is indicated on the USGS as intermittent, 310 CMR 10.58(2) provides a method for determining whether such a stream might qualify as a perennial stream based on watershed size using watershed size of at least 1 square mile. A stream with a watershed area of at least 0.5 square miles may also qualify as perennial if the predicted flow rate is greater than or equal to 0.01 cfs at the 99% flow duration using the USGS Stream Stats method.

The attached StreamStats report indicates the stream has a drainage area of 0.4 square miles upstream of the inlet to Jamaica Pond with a 99% flow duration value of .0102. While the watershed size is slightly smaller than the minimum threshold, the flow duration value is just above the minimum threshold. It is possible that the watershed area does not include other subsurface connections which would increase its effective size. Based on this information, while the stream technically does not meet the minimum threshold for jurisdiction as a perennial stream, practically speaking it may function as a perennial stream which would contain a 25-foot Riverfront Area extending from flags A1-A16. These flags represent both Bank and the Mean Annual High Water elevation.

### 2. Bordering Land Subject to Flooding

This resource includes land subject to inundation from floodwaters rising from streams, ponds and lakes up to and including the statistical 100-year frequency storm event. Its boundary is generally determined by reference to the most recently available flood maps from FEMA. Figure 2 below is the FEMA Flood Maps for this area indicating the stream exiting Sargent Pond is in a Zone X and therefore does not contain a 100-year flood plain.

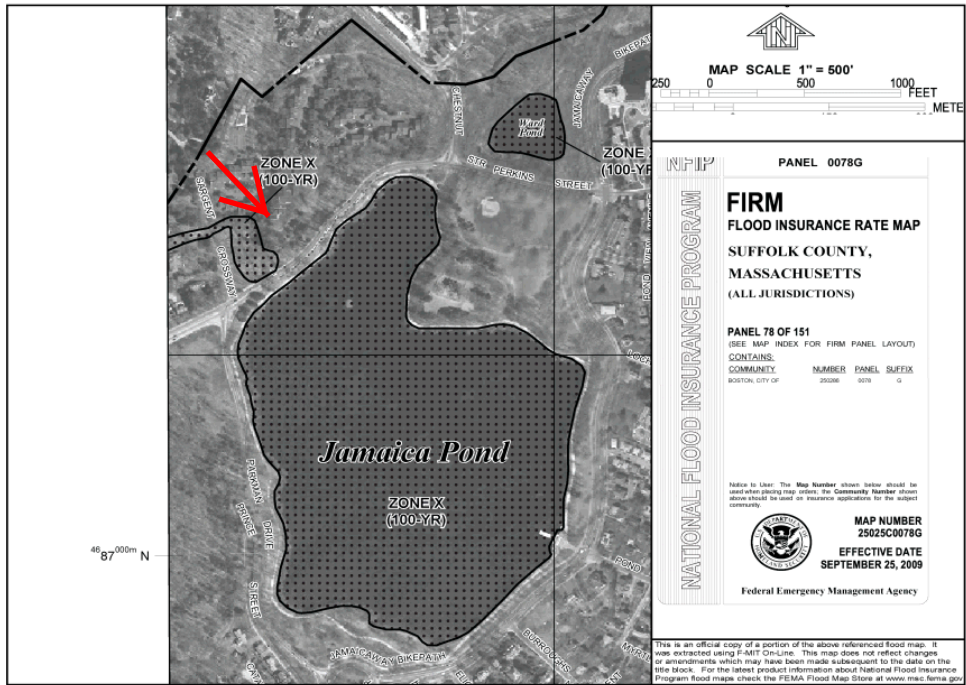


Fig. 2: FEMA Flood Map

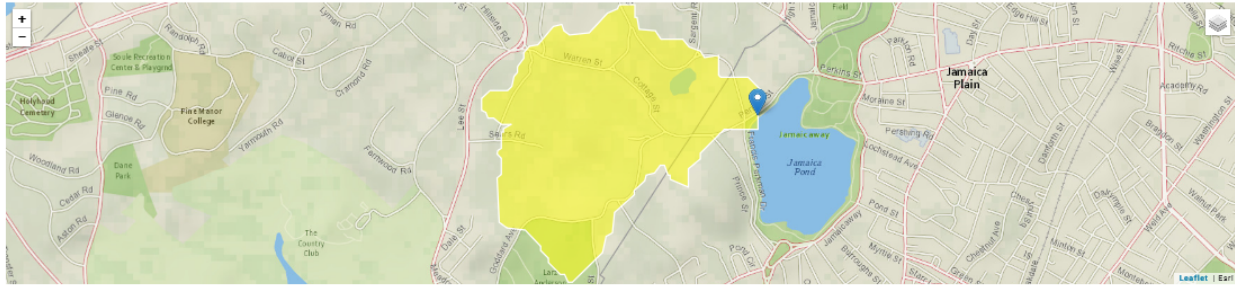
3. Other Resources

The site is not located within Estimated Habitat of Rare Wetlands Wildlife and Priority Habitat, as determined by reference to Massachusetts Division of Fisheries and Wildlife – Natural Heritage and Endangered Species Program (NHESP) data available on MassGIS.

# Cabot Estates StreamStats Report

Region ID:  
 Workspace ID:  
 Clicked Point (Latitude, Longitude):  
 Time:

MA  
 MA20190411165030036000  
 42.31951, -71.12311  
 2019-04-11 12:50:43 -0400



Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.4	square miles
ELEV	Mean Basin Elevation	162	feet
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	1.05	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.12	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless
BSLDEM250	Mean basin slope computed from 1:250K DEM	3.777	percent
ACRSDF	Area underlain by stratified drift	0.0361	square miles
BSLDEM10M	Mean basin slope computed from 10 m DEM	8.062	percent
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	230298.5	feet
CENTROIDY	Basin centroid vertical (y) location in state plane units	896558	feet
CRSDF	Percentage of area of coarse-grained stratified drift	9.44	percent
FOREST	Percentage of area covered by forest	13.36	percent
LAKEAREA	Percentage of Lakes and Ponds	1.25	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	61.5	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	15.4	percent
MAXTEMP	Mean annual maximum air temperature over basin area, in degrees Centigrade	14.9	feet per mi
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	231065	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	896625	feet
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	9.44	percent
PRECPRIS00	Basin average mean annual precipitation for 1971 to 2000 from PRISM	47.3	inches
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	0.31	miles
WETLAND	Percentage of Wetlands	0.35	percent

Flow-Duration Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
50 Percent Duration	0.375	ft <sup>3</sup> /s
60 Percent Duration	0.242	ft <sup>3</sup> /s
70 Percent Duration	0.133	ft <sup>3</sup> /s
75 Percent Duration	0.0984	ft <sup>3</sup> /s
80 Percent Duration	0.0866	ft <sup>3</sup> /s
85 Percent Duration	0.0615	ft <sup>3</sup> /s
90 Percent Duration	0.0466	ft <sup>3</sup> /s
95 Percent Duration	0.0248	ft <sup>3</sup> /s
98 Percent Duration	0.015	ft <sup>3</sup> /s
99 Percent Duration	0.0102	ft <sup>3</sup> /s

*Flow-Duration Statistics Citations*

[Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p.](#)

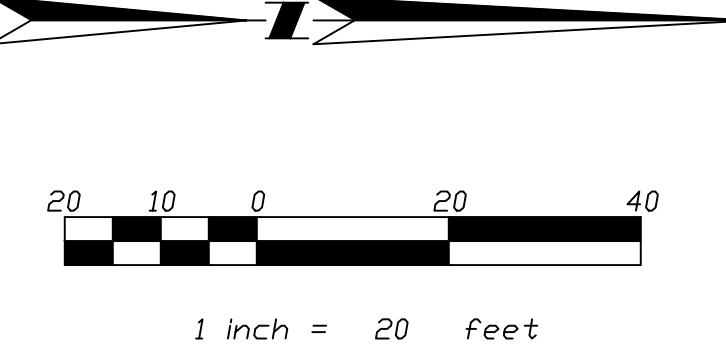
Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.4	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	3.777	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.12	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

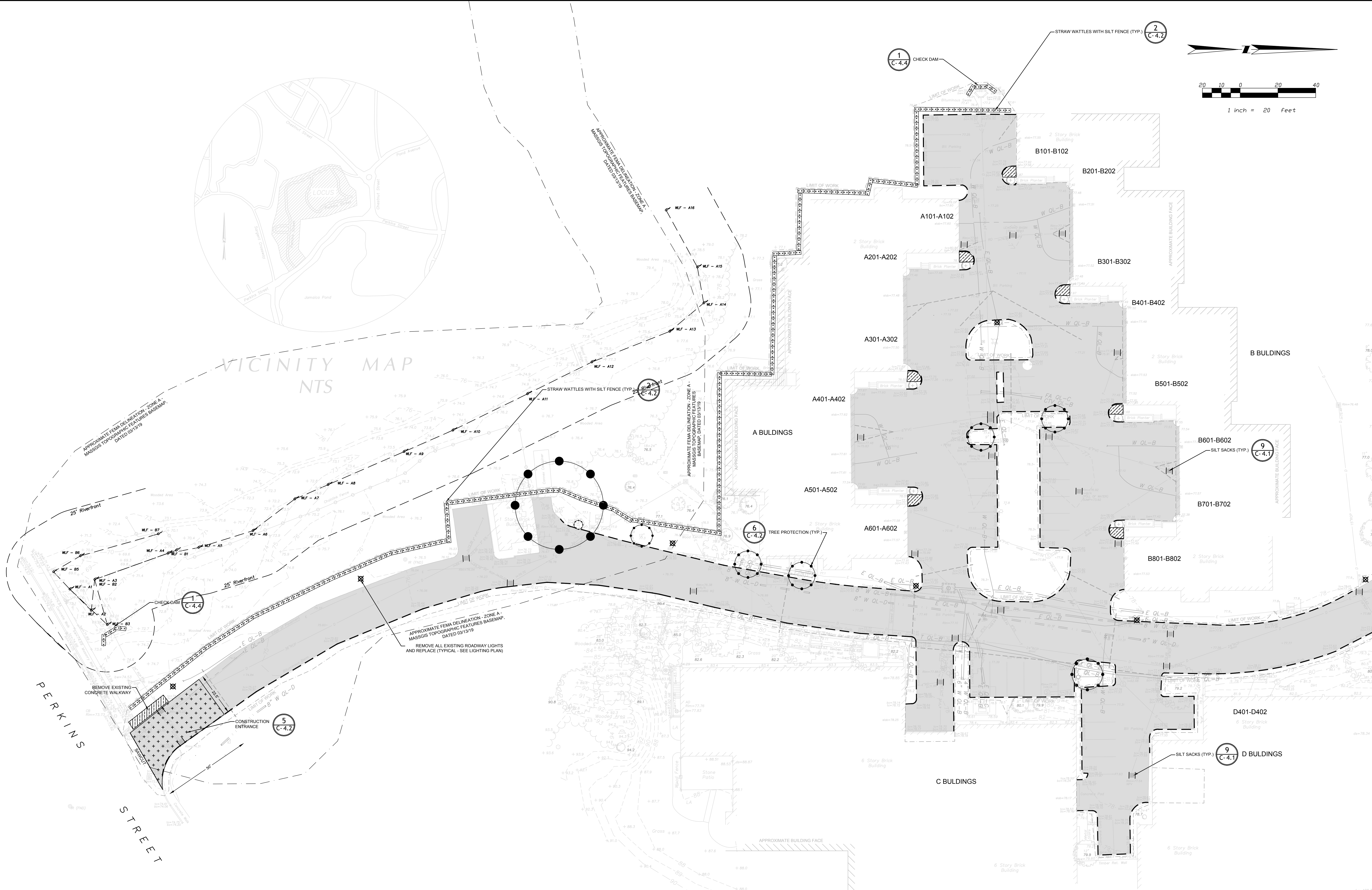


**NOTES**

1. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES AND PLANS AVAILABLE AT BWS, AND PUBLIC/PRIVATE UTILITY COMPANIES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE DIG-SAFE CALL CENTER SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION.
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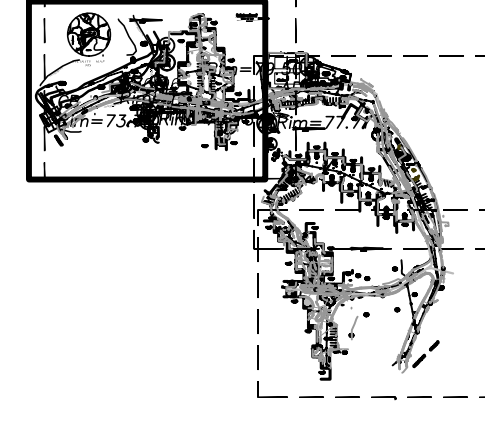


VICINITY MAP

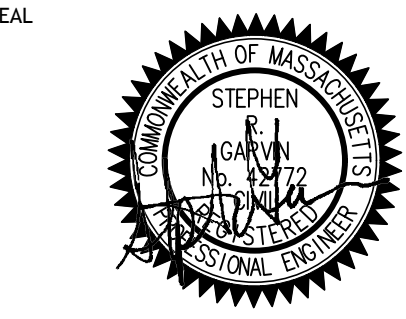


**DEMOLITION LEGEND:**

- BITUMINOUS CONCRETE TO BE REMOVED/PULVERIZED
- CEMENT CONCRETE TO BE REMOVED
- CURB REMOVAL
- LIMIT OF WORK
- STRAW WATTLES & SILT FENCE
- UTILITIES STRUCTURE TO BE REMOVED/REPLACED
- UTILITIES STRUCTURE TO BE ABANDONED IN PLACE
- LIGHT FIXTURES TO BE SALVAGED
- TREE TO BE REMOVED (INCLUDING STUMP)
- PROPOSED CATCHBASIN FILTER
- TREE PROTECTION



**CABOT ESTATE CONDOMINIUMS**  
241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



**REVISION**

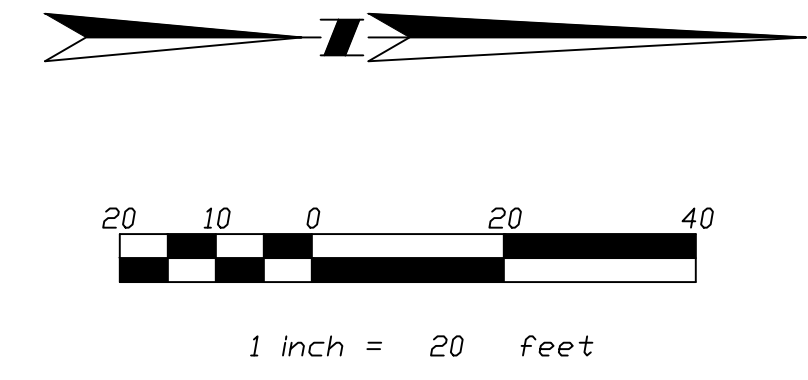
1	NOI Conservation Commission Submission	3/06
2	NOI Conservation Commission Submission	3/20
3	NOI Revisions to FEMA Delineation	3/22
4	Wetland Reevaluation	4/17
5	Wetland Highlighting	4/18

**SITE PREPARATION & EROSION CONTROL PLAN**

JOB #	26043.00
DATE	03/06/19
SCALE	1" = 20'
DRAWN BY	JP
APPROVED BY	SRG

D-1.1

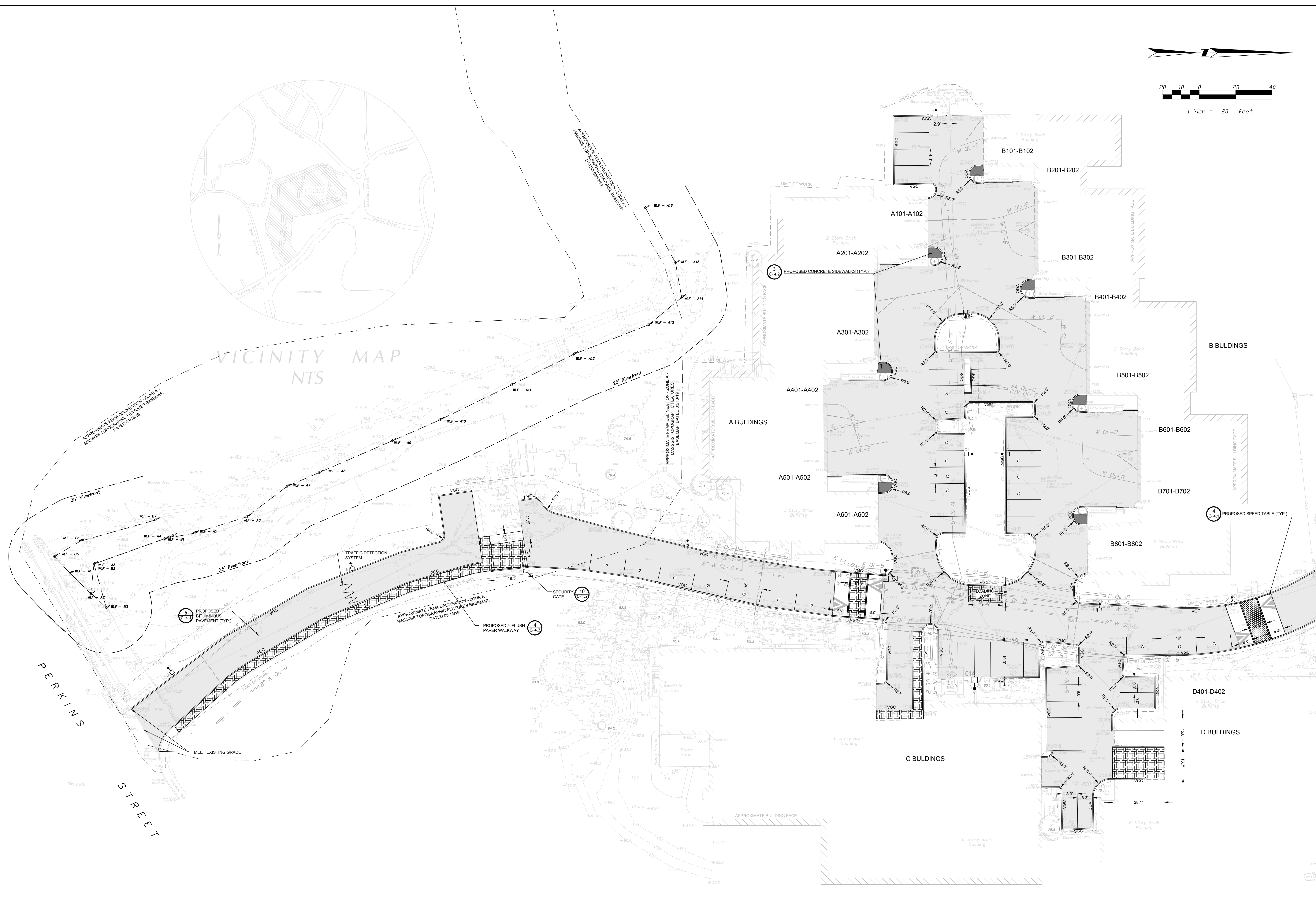




- NOTES**
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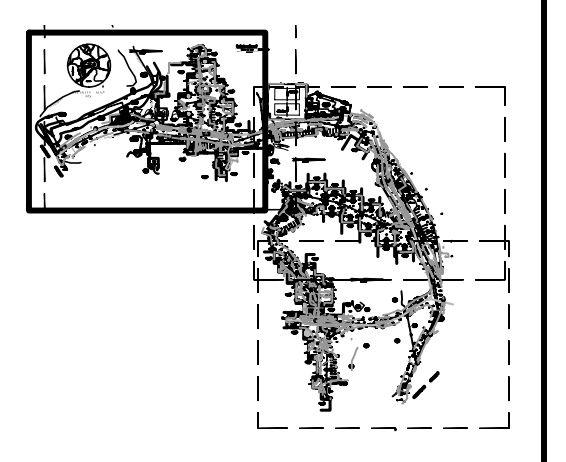


### VICINITY MAP NTS

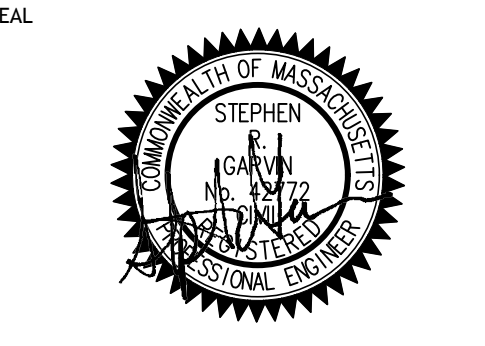


**LEGEND:**

	PROPOSED ASPHALT
	VGC PROPOSED VERTICAL GRANITE CURB
	PROPOSED FLUSH GRANITE CURB
	SGC PROPOSED SLOPED GRANITE CURB
	LIMIT OF WORK



## CABOT ESTATE CONDOMINIUMS 241 PERKINS STREET JAMAICA PLAIN, MA 02130



REVISION		
1	NOI Conservation Commission Submission	3/08
2	NOI Conservation Commission Submission	3/20
3	NOI Revisions to FEMA Delimitation	3/22
4	Wetland Reevaluation	4/17
5	Wetland Highlighting	4/18

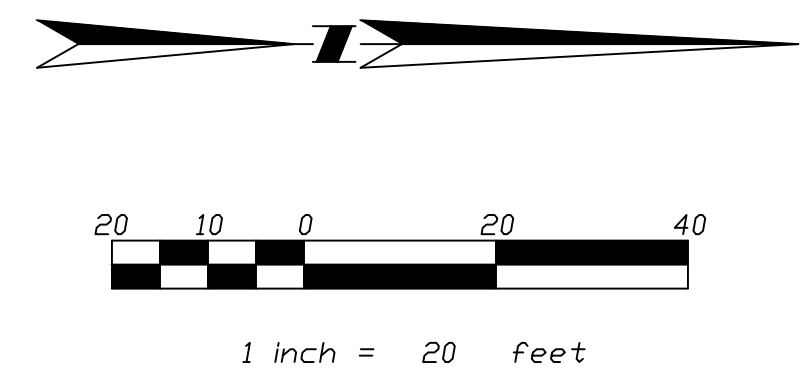
**LAYOUT & MATERIALS PLAN**

JOB # 26043.00  
DATE: 03/06/19  
SCALE: 1" = 20'  
DRAWN BY: JP  
APPROVED BY: SRG

**C-1.1**

FILE: \\SRV\SRV\GARY\DESIGN\1904\26043.DWG





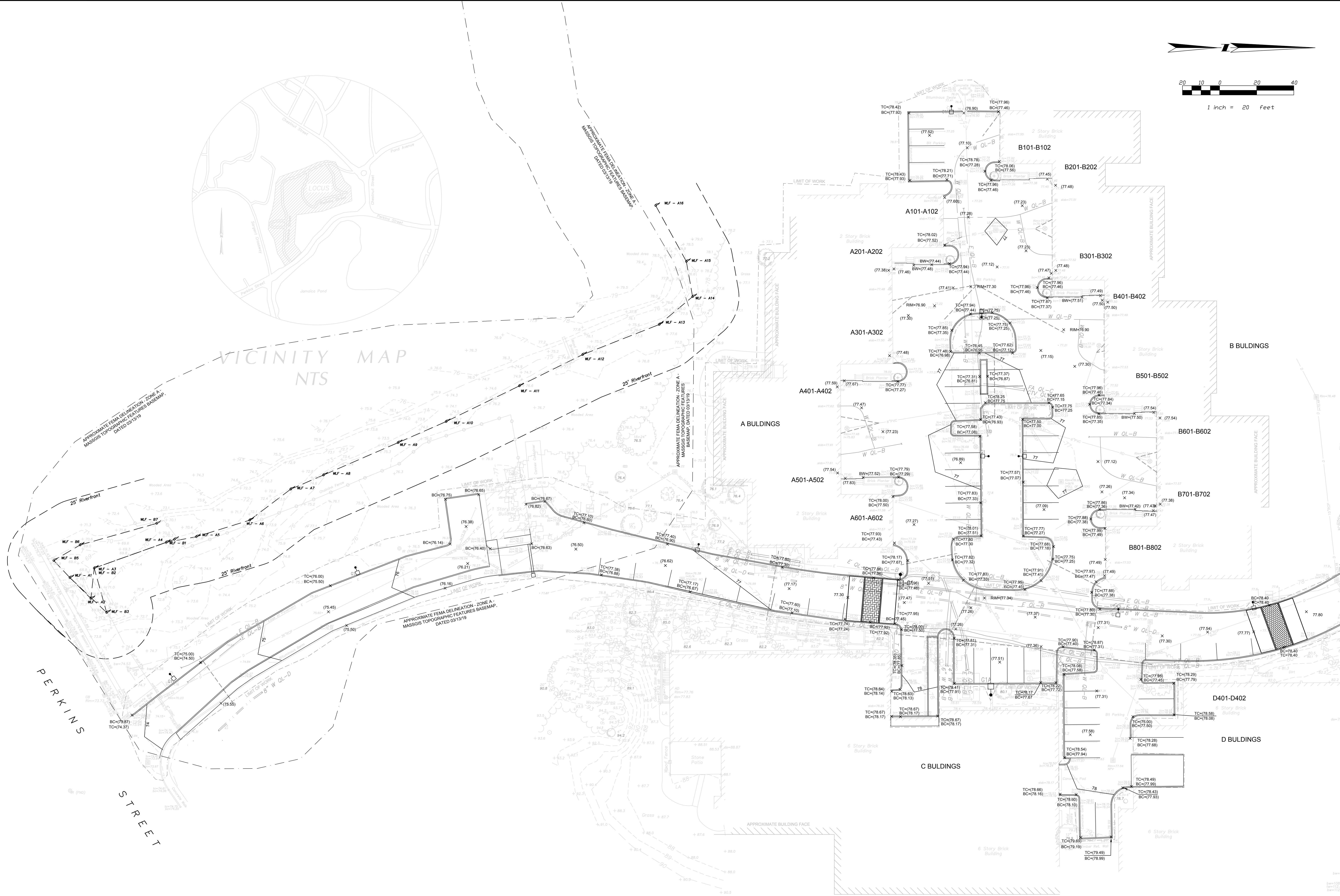
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### VICINITY MAP

APPROXIMATE FEMA DELINEATION - ZONE A - MASSGIS TOPOGRAPHIC FEATURES BASEMAP, DATED 03/10/19

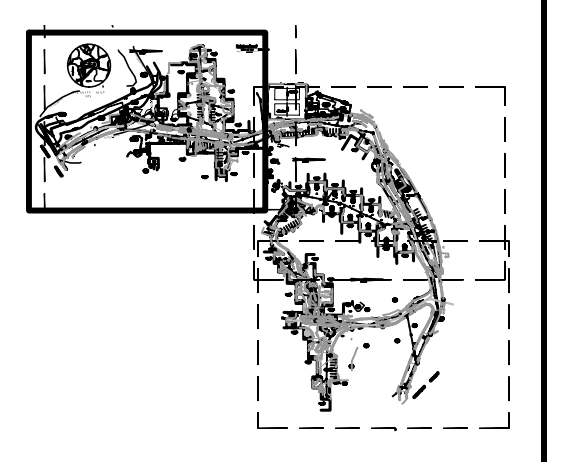
APPROXIMATE FEMA DELINEATION - ZONE A - MASSGIS TOPOGRAPHIC FEATURES BASEMAP, DATED 03/10/19

APPROXIMATE FEMA DELINEATION - ZONE A - MASSGIS TOPOGRAPHIC FEATURES BASEMAP, DATED 03/10/19



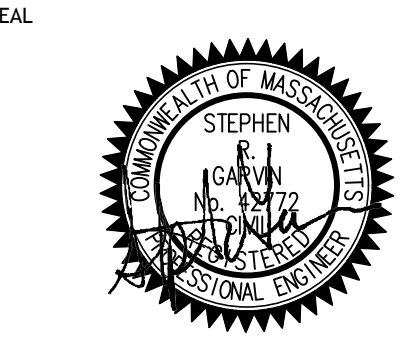
**LEGEND:**

129	PROPOSED INTERMEDIATE CONTOUR
130	PROPOSED INDEX CONTOUR
130.0 X	PROPOSED SPOT GRADE
(130.0) X	EXISTING GRADE TO REMAIN (V.I.F.)
TW=131.87	PROPOSED TOP/BOTTOM OF WALL (NOT FOUNDATION)
BC=130.50 X	PROPOSED TOP/BOTTOM OF CURB
TS=131.87 X	PROPOSED TOP/BOTTOM OF STEP
BS=130.50 X	PROPOSED RIM ELEVATION (TO FINAL GRADE)
RIM=130.20 X	V.I.F.



## CABOT ESTATE CONDOMINIUMS

241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



**REVISION**

1	NOI Conservation Commission Submission	3/06
2	NOI Conservation Commission Submission	3/20
3	NOI Revisions to FEMA Delineation	3/22
4	Wetland Reevaluation	4/17
5	Wetland Highlighting	4/18

### GRADING PLAN

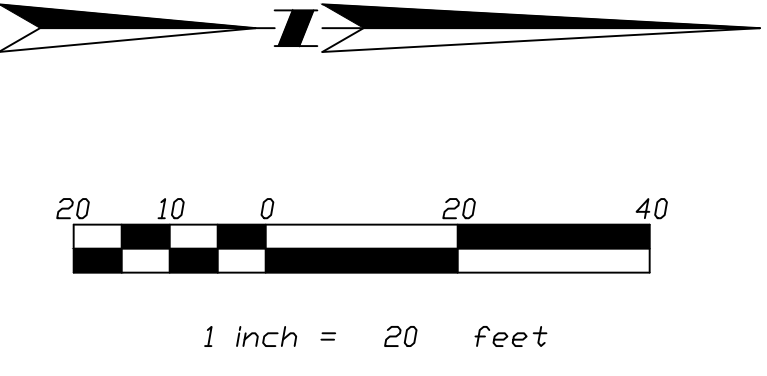
JOB # 26043.00	
DATE: 03/06/19	
SCALE: 1" = 20'	
DRAWN BY: JP	
APPROVED BY: SRG	

**C-2.1**

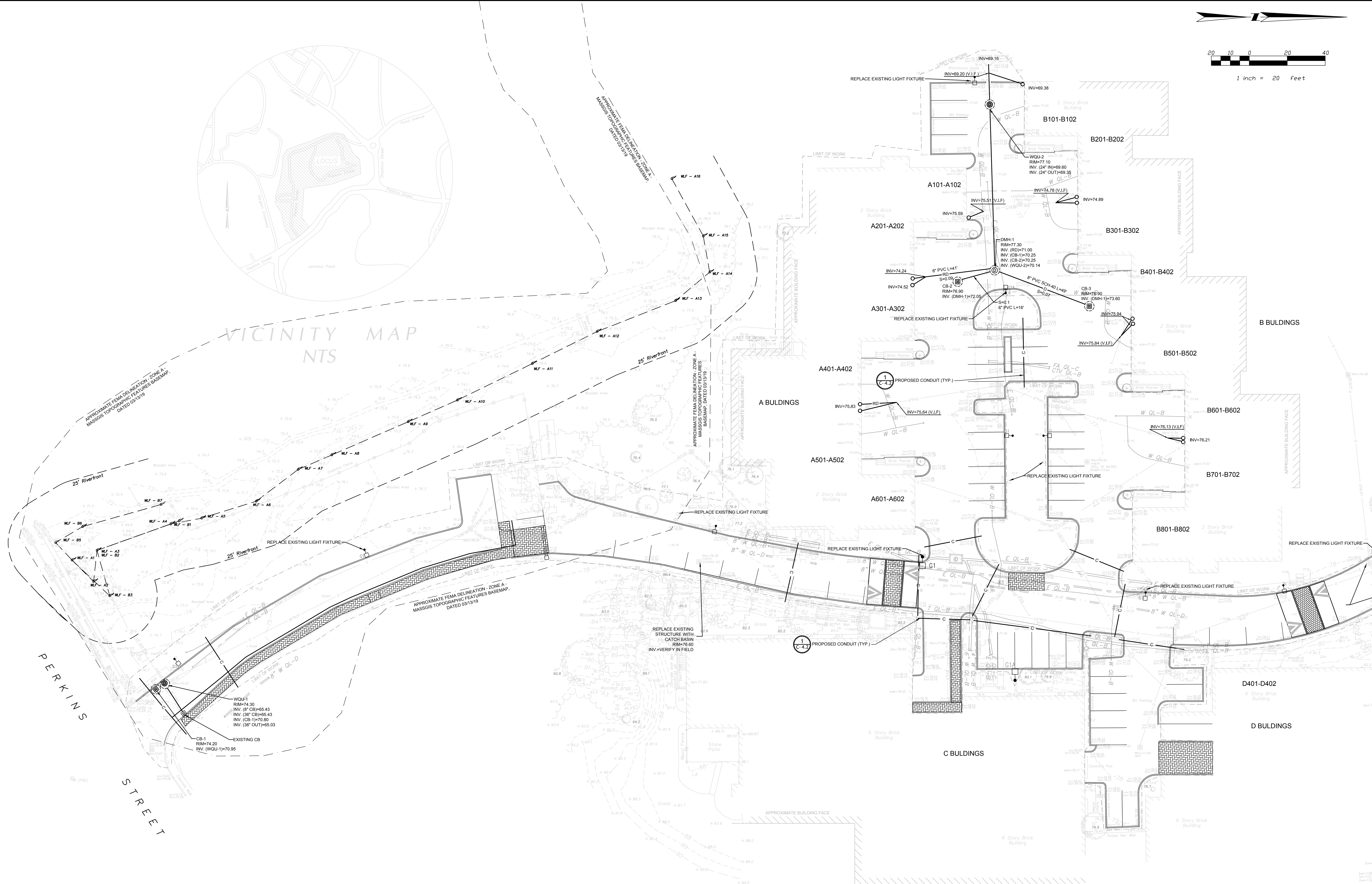


**NOTES**

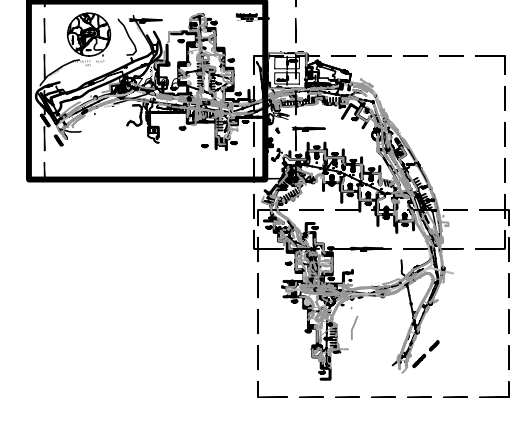
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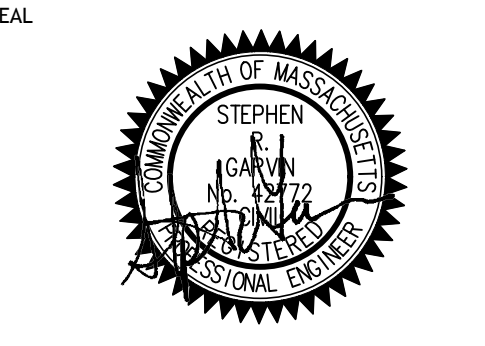
VICINITY MAP



- LEGEND:**
- RD PROPOSED ROOF-DRAIN LINE
  - D PROPOSED DRAINAGE LINE
  - C PROPOSED PVC CONDUITS
  - W PROPOSED WATER LINE
  - SS PROPOSED SANITARY SEWER LINE
  - DMH PROPOSED SANITARY SEWER MANHOLE
  - DMH PROPOSED STORM DRAINAGE MANHOLE
  - CB PROPOSED CATCH BASIN
  - DCB PROPOSED DOUBLE CATCH BASIN
  - RL PROPOSED PROPOSED ROOF-LEADER
  - CO PROPOSED CLEANOUT
  - WGV PROPOSED WATER GATE VALVE
  - T&SV PROPOSED TAP AND SLEEVE VALVE
  - DW PROPOSED DRYWELL W/ GRATE
  - DWC PROPOSED DRYWELL W/ COVER



**CABOT ESTATE CONDOMINIUMS**  
241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



**REVISION**

NO.	DESCRIPTION	DATE
1	NOI Conservation Commission Submission	3/08
2	NOI Conservation Commission Submission	3/20
3	NOI Revisions to FEMA Delineation	3/22
4	Wetland Reevaluation	4/17
5	Wetland Highlighting	4/18

**CIVIL UTILITIES PLAN**

JOB # 26043.00  
DATE: 03/06/19  
SCALE: 1" = 20'  
DRAWN BY: JP  
APPROVED BY: SRG

**C-3.1**

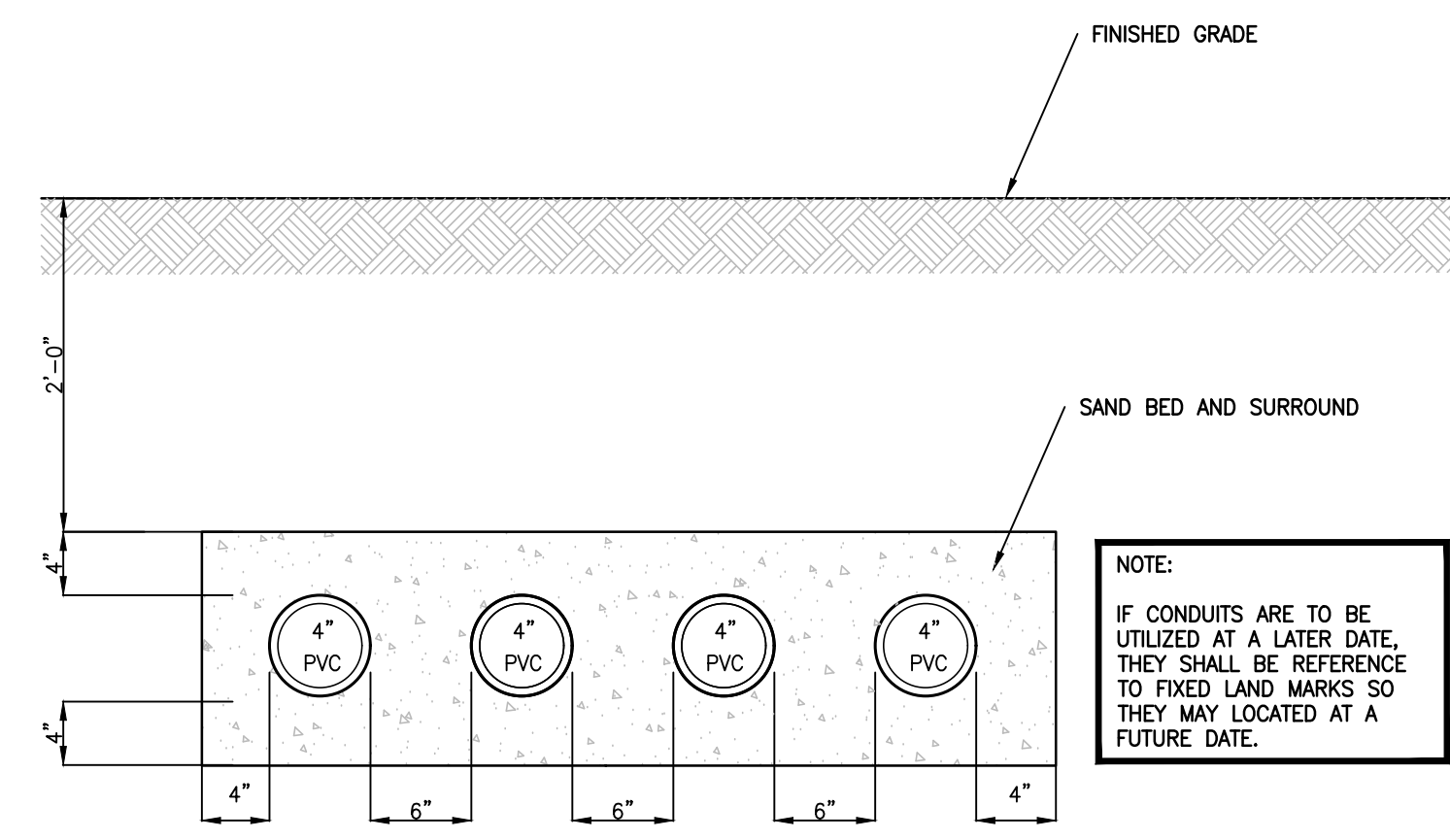
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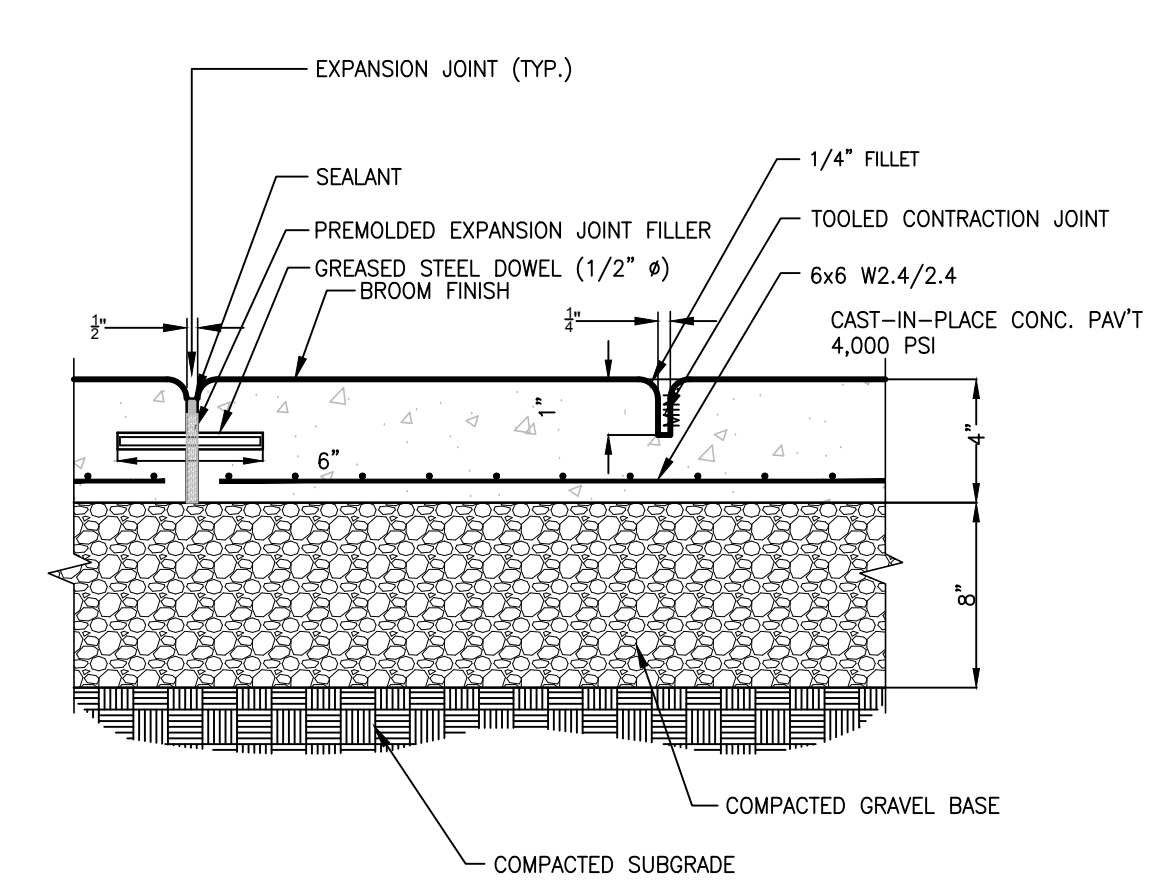


**NOTES**

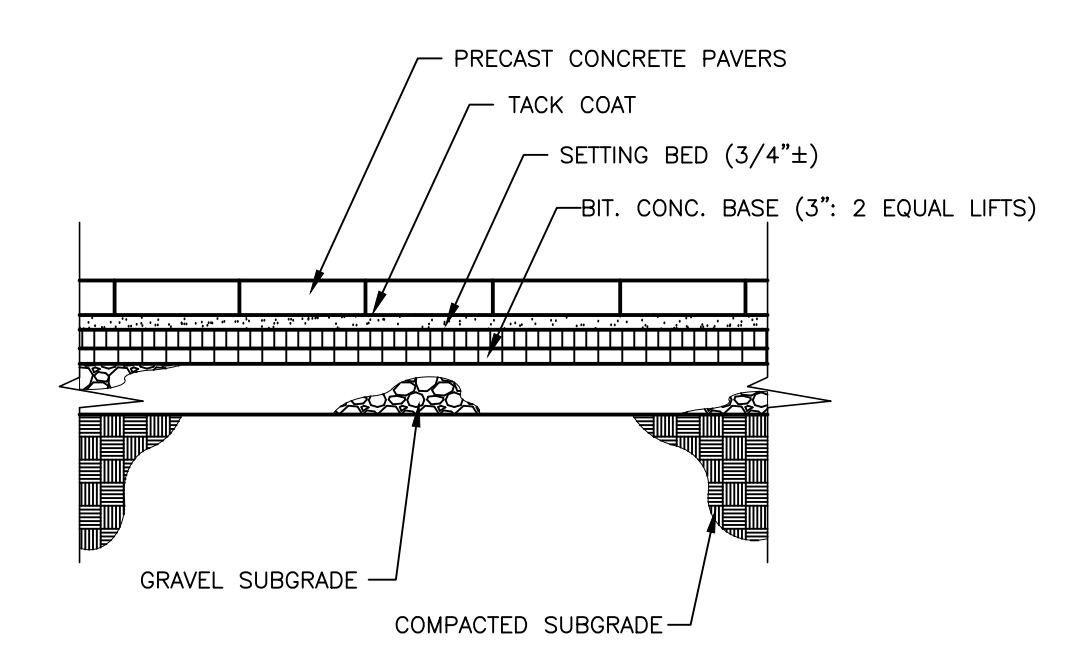
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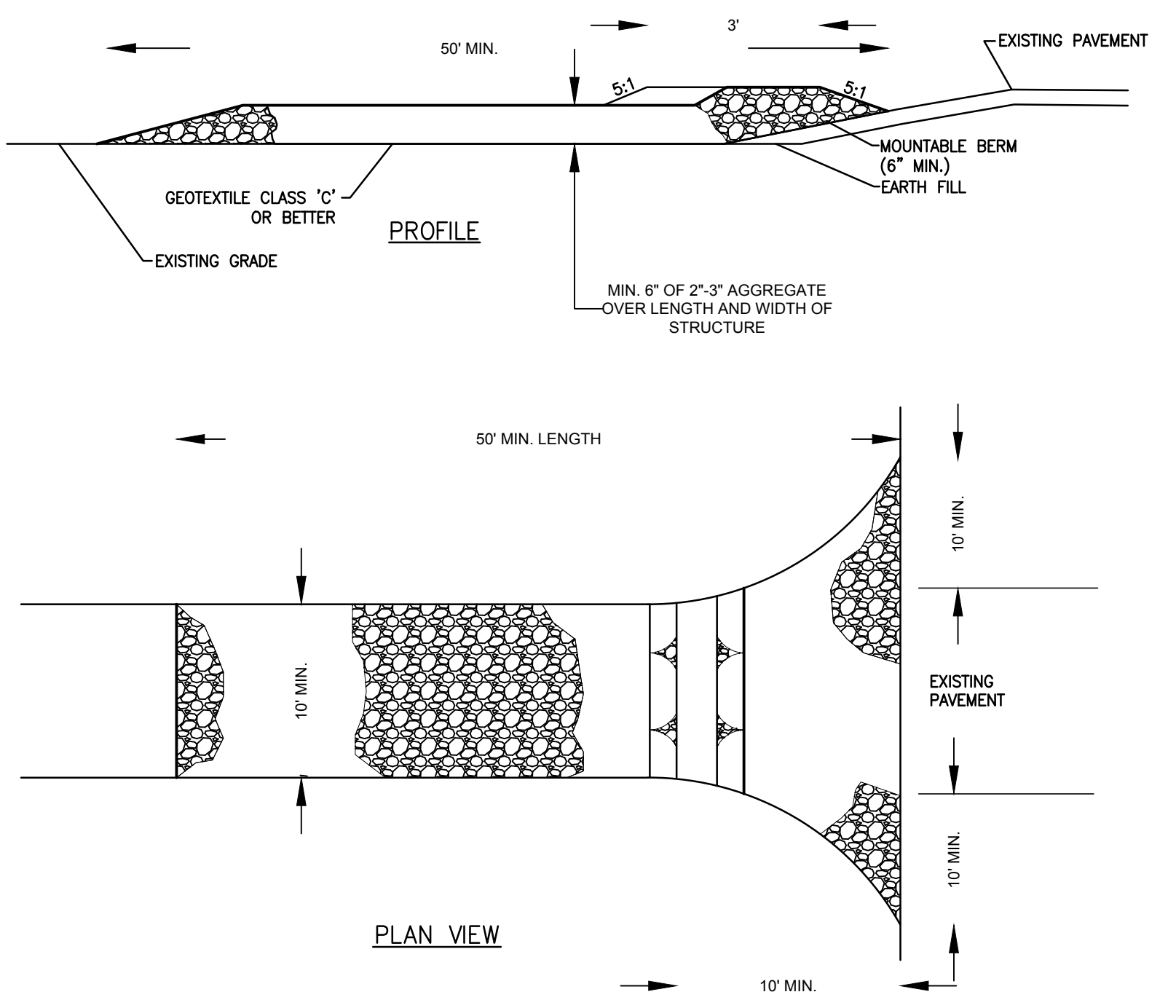
1 PVC CONDUITS  
NTS



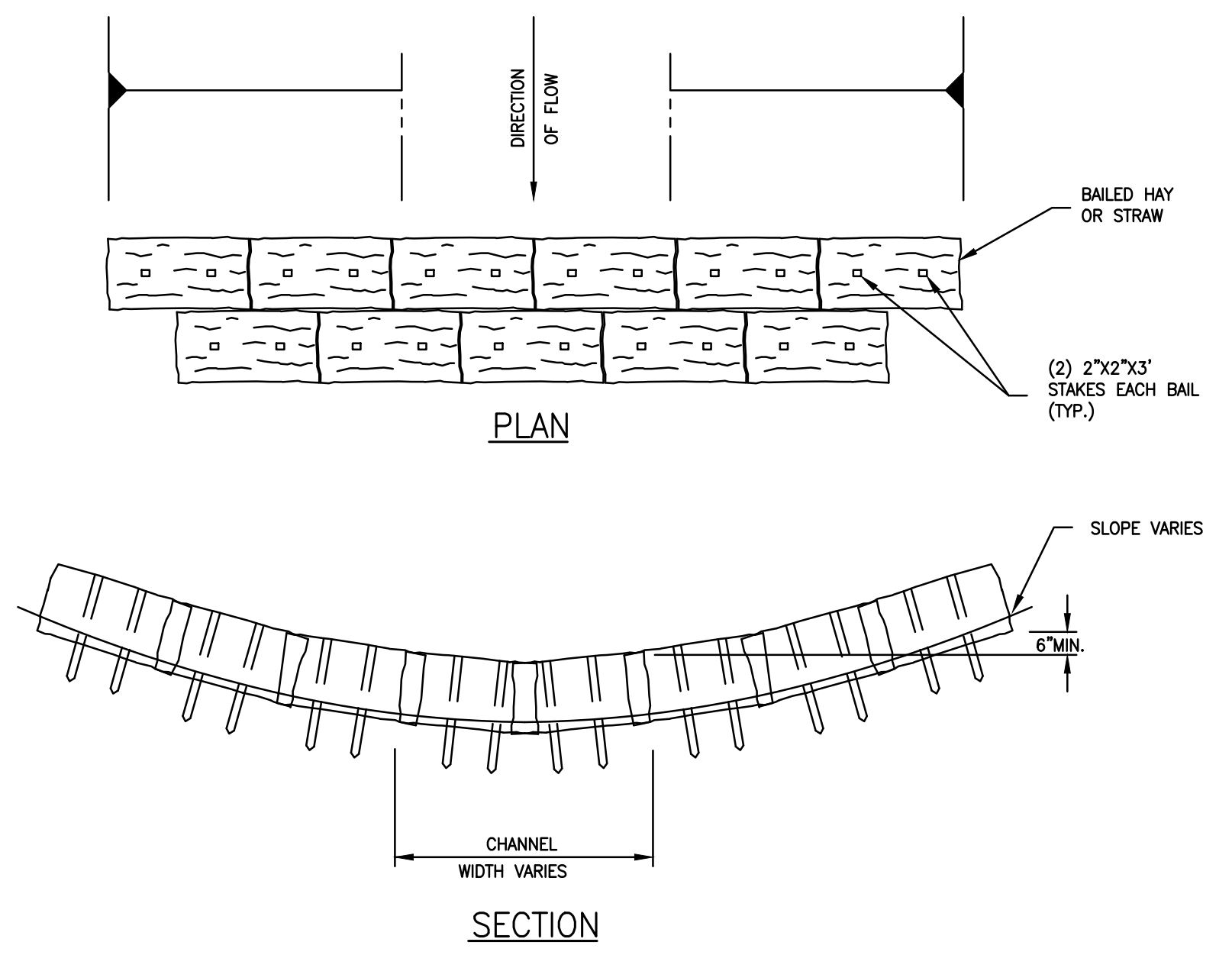
2 BROOM FINISH CONCRETE WALKWAY  
NTS



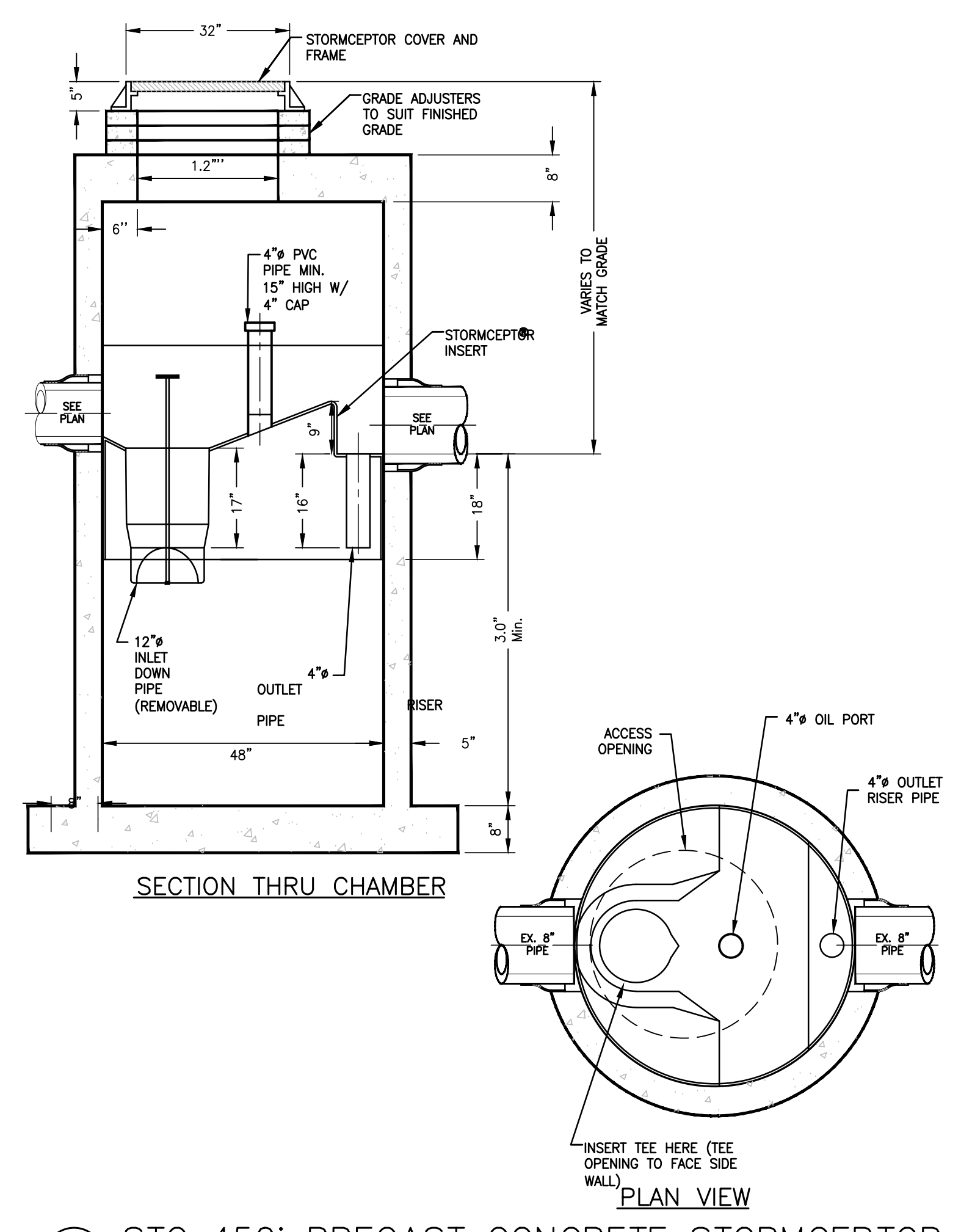
3 PRECAST CONCRETE PAVERS SET IN ASPHALT  
NTS



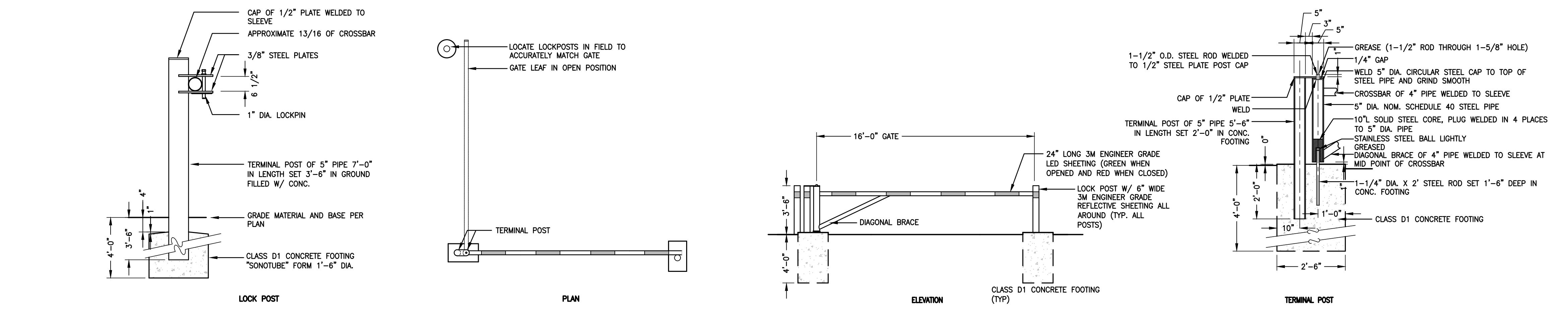
4 STABILIZED CONSTRUCTION ENTRANCE  
NTS



5 HAY BALE CHECK DAM  
NTS



7 STC 450i PRECAST CONCRETE STORMCEPTOR  
NTS



6 VEHICLE CONTROL GATE  
NTS

ALL EXPOSED SURFACES SHALL BE GALVANIZED WITH FACTORY-APPLIED ARCHITECTURAL FINISH - COLORGALV®

CABOT ESTATE CONDOMINIUMS  
241 PERKINS STREET  
JAMAICA PLAIN, MA 02130



REVISION		
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CIVIL  
DETAILS

JOB # 26043.00  
DATE: 03/06/19  
SCALE: 1" = 20'  
DRAWN BY: JP  
APPROVED BY: SRG  
**C-4.2**