



FLOOD INSURANCE RATE MAP NO. 25005C0333G, PANEL 333 OF 550;
 MAP REVISED JULY 16, 2014; MAP NO. 25005C0341G, PANEL 341 OF 550;
 MAP REVISED JULY 16, 2014 OBTAINED FROM
 FEDERAL EMERGENCY MANAGEMENT AGENCY

1" = 500'
 0" 1"



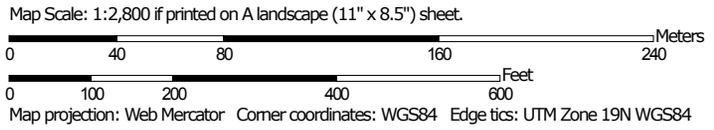
DURO MILLS
 206 GLOBE MILLS AVENUE
 110 CHASE STREET
 FALL RIVER, MASSACHUSETTS

**FEMA
 FLOOD
 PLAN**
 MARCH 2017 FIGURE 4

Map Unit Name—Bristol County, Massachusetts, Southern Part



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 Urban land
 Not rated or not available

Soil Rating Lines

 Urban land
 Not rated or not available

Soil Rating Points

 Urban land
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bristol County, Massachusetts, Southern Part
Survey Area Data: Version 10, Sep 14, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 8, 2011—Apr 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Name

Map Unit Name— Summary by Map Unit — Bristol County, Massachusetts, Southern Part (MA603)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
602	Urban land	Urban land	29.9	100.0%
Totals for Area of Interest			29.9	100.0%

Description

A soil map unit is a collection of soil areas or nonsoil areas (miscellaneous areas) delineated in a soil survey. Each map unit is given a name that uniquely identifies the unit in a particular soil survey area.

Rating Options

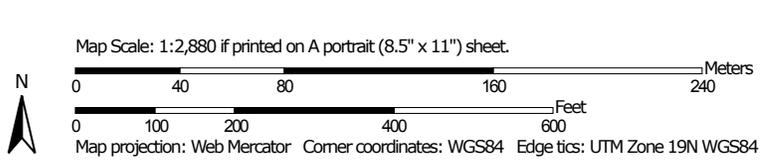
Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Map Unit Name—Bristol County, Massachusetts, Southern Part



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 Urban land
 Not rated or not available

Soil Rating Lines

 Urban land
 Not rated or not available

Soil Rating Points

 Urban land
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

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 Aerial Photography

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Web Soil Survey URL:
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The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Name

Map Unit Name— Summary by Map Unit — Bristol County, Massachusetts, Southern Part (MA603)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
602	Urban land	Urban land	36.0	100.0%
Totals for Area of Interest			36.0	100.0%

Description

A soil map unit is a collection of soil areas or nonsoil areas (miscellaneous areas) delineated in a soil survey. Each map unit is given a name that uniquely identifies the unit in a particular soil survey area.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



PROPERTY LOCATION

No. 206 Alt No. GLOBE MILLS AVE, FALL RIVER Direction/Street/City

OWNERSHIP

Owner 1: DURO INDUSTRIES INC
 Owner 2:
 Owner 3:
 Street 1: PO BOX A
 Street 2:
 Town/City: FALL RIVER
 S/P/Prov: MA
 Postal: 02724

PREVIOUS OWNER

Owner 1:
 Owner 2:
 Street 1:
 Town/City:
 S/P/Prov:
 Postal:

NARRATIVE DESCRIPTION

This Parcel contains 177,289 SQ FT of land mainly classified as INDUSTRIAL with a(n) MILL- PROCES Building Built about 1900, Having Primarily BRICK Exterior and TAR+GRAVEL Roof Cover, with 1 Units, 0 Baths, 6 HalfBaths, 0 3/4 Baths, 0 Rooms Total, and 0 Batrms.

OTHER ASSESSMENTS

Code	Description	Amount	Com. Int.

PROPERTY FACTORS

Item Code	Descrp	%	Item	Code	Descrp
Z	IND	100	U	C	ALL UTIL
0			1		
0			1		
h					
Census:					
Exmpt					
Flood Haz:					
D			Topo	1	LEVEL
s			Street	7	SIDEWALK
1			Traffic		

LAND SECTION (First 7 lines only)

Use Code	Description	LUC	No of Units	Depth / PricedUnits	Unit Type	Land Type	LT	Base Value	Unit Price	Adj	Neigh	Neigh Infru	Neigh Mod	Inf 1 %	Inf 2 %	Inf 3 %	Appraised Value	Alt Class	%	Spec Land Code	Fact Use Value	Notes
400	INDUSTRIAL		177289		SQ FT	SITE		0	3.43	0.800	8203						486,481			KNDV	486,500	CI SITE

Total AC/H/A:	4.07000	Total SF/SW:	177289.00	Parcel LUC:	400	INDUSTRIAL	Prime NB Desc:	CI 03 SF	Total:	486,481	Spl Credit:	Total:	486,500
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IN PROCESS APPRAISAL SUMMARY

Use Code	Building Value	Yard Items	Land Size	Land Value	Total Value	Legal Description	
400	662,300	41,400	177,289.000	486,500	1,190,200		
Total Card	662,300	41,400	4.070	486,500	1,190,200	Entered Lot Size	
Total Parcel	662,300	41,400	4.070	486,500	1,190,200	Total Land:	
Source:	Market Adj Cost	Total Value per SQ unit /Card:		6.98	Parcel:	6.98	Land Unit Type:

PREVIOUS ASSESSMENT

Tax Yr	Use	Cal	Bldg Value	Yrd Items	Land Size	Land Value	Total Value	Assesd Value	Notes
2017	400	FV	662,300	41,400	177,289	486,500	1,190,200	1,190,200	Year End Roll
2016	400	FV	662,300	41,400	177,289	486,500	1,190,200	1,190,200	YEAR END
2015	400	FV	662,300	42,700	177,289	486,500	1,191,500	1,191,500	Year End Roll
2014	400	FV	662,300	42,700	177,289	486,500	1,191,500	1,191,500	Year end
2013	400	FV	662,300	42,700	177,289	486,400	1,201,400	1,201,400	Year End Roll
2013	400	PR	662,300	43,700	177,289	496,400	1,202,400	1,202,400	Prelim Bill file
2012	400	EX	662,300	43,700	177,289	496,400	1,202,400	1,202,400	Year End Roll

SALES INFORMATION

Grantor	Legal Ref	Type	Date	Sale Code	Sale Price	V	Tst	Verif	Assoc PCL Value	PAT ACCT.
GRAY TEXTILE CO	1766-29	N/A	1/1/1901		1,000,000	No	No	No		6401

TAX DISTRICT

Date	Number	Descrp	Amount	C/O	Last Visit	Fed Code	F. Descrp	Comment
9/29/2006	1112	REHAB	60,000	C	7/5/2007			RAISE ROOF 16 X 3

BUILDING PERMITS

Date	Number	Descrp	Amount	C/O	Last Visit	Fed Code	F. Descrp	Comment
9/29/2006	1112	REHAB	60,000	C	7/5/2007			RAISE ROOF 16 X 3

ACTIVITY INFORMATION

Date	Result	By	Name
7/25/2015	FIELD REV NO	DR	Doug Rebello
7/5/2007	PERMIT VISIT	7	

Sign: VERIFICATION OF VISIT NOT DATA

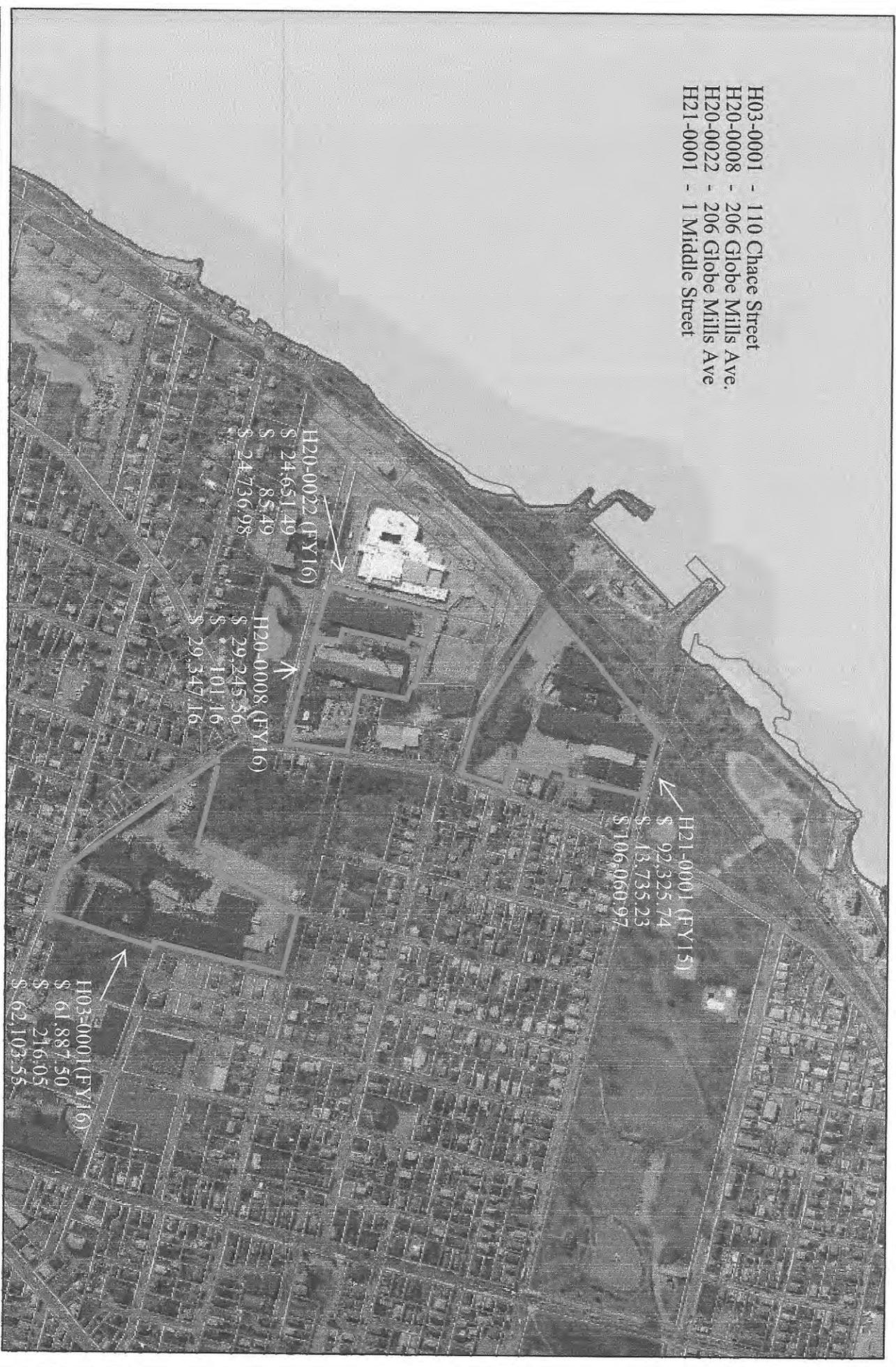
User Acct	GIS Ref	GIS Ref	Insp Date
			07/05/07

USER DEFINED

Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
House:	
Prior Id # 2:	
Prior Id # 3:	
Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
ASR Map:	
Fact Dist:	
Reval Dist:	
Year:	
Land Reason:	
Bid Reason:	

Use Code	Description	LUC	No of Units	Depth / PricedUnits	Unit Type	Land Type	LT	Base Value	Unit Price	Adj	Neigh	Neigh Infru	Neigh Mod	Inf 1 %	Inf 2 %	Inf 3 %	Appraised Value	Alt Class	%	Spec Land Code	Fact Use Value	Notes
400	INDUSTRIAL		177289		SQ FT	SITE		0	3.43	0.800	8203						486,481			KNDV	486,500	CI SITE

- H03-0001 - 110 Chace Street
- H20-0008 - 206 Globe Mills Ave.
- H20-0022 - 206 Globe Mills Ave
- H21-0001 - 1 Middle Street

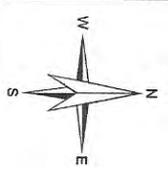


H20-0022 (FY16)
 \$ 24,651.49
 \$ 85,49
 \$ 24,736.98

H20-0008 (FY16)
 \$ 29,245.56
 \$ 101.16
 \$ 29,347.16

H21-0001 (FY15)
 \$ 92,325.74
 \$ 13,735.23
 \$ 106,060.97

H03-0001 (FY16)
 \$ 61,887.50
 \$ 216.05
 \$ 62,103.55



Chace Street Inc/Duro Properties



SITE 3: INDUSTRIAL PARK

Site Development Requirements

The Fall River Industrial Park is a block of properties totaling over 425 acres of land. The park is governed by the Fall River Industrial Park Association. Undeveloped parcels are currently owned by the Greater Fall River Development Corp. The Park includes many various industrial developments including HLB Homeland Builders Inc., P.D.K Worldwide Enterprises Inc., and Lightolier Philips. The park is located near the northern border of the City of Fall River. According to the Park Upgrades – Master Plan map prepared by the Fall River Industrial Park Association, there are 19 available parcels ranging in size from 1.1 acres to 22.3 acres (with the second largest at 15.1 acres). Eleven of the available parcels are under consideration for this study including parcels Z-3-16, Z-3-18, Z-3-19, Z-3-28, Z-3-54, Z-3-99, Z-3-109, Z-3-110, Z-3-112, Z-3-113, and Z-3-114 eight of which are developed with existing buildings, and parking facilities. Parcels Z-3-18, Z-3-112, and Z-3-113 are undeveloped woodlands. The park is accessible from Industrial Park Rd to the west from exit 8A & B off of Rt 24 and N. Main St. The park is also accessible from Wilson Rd to the South.

The park is bounded by residential properties to the south, Rt 24 to the west, a landfill and other industrial properties to the north, and conservation forest land to the east.

Zoning Regulations

According to the “Zoning Map of the City of Fall River” updated March, 1 2013, the Site is located in an area zoned Industrial Park District (IP) and the Research and Development Overlay

District (RDOD). Educational facilities are noted to be allowed within a zone IP and overly RDOD according to “the Revised Ordinances of the City of Fall River: Chapter 86” with Amendments through July, 2013. The Zoning Ordinance indicates the following would control the development on this Site:

IP – Industrial Park District:

- 10,000 square feet minimum area
- 100 feet minimum lot frontage
- 50 feet minimum front yard setback
- 40 feet minimum side yard setback
- 40 feet minimum rear yard setback
- 6 stories or 80-foot maximum building height (whichever is greater)
- 70% maximum lot area coverage*

*defined as all impervious area

The parking capacity requirement for an educational facility are one (1) space for each employee per shift and one (1) loading space each building. The Institute for Transportation Engineers (ITE) develops a Parking Generation informational report provides data for estimated parking demand at various land uses. The 4th edition of the Parking Generation report suggests 0.23 vehicles per student for High Schools in Suburban Areas (Land Use 530).

Natural Environment

Topography: The topography of the park generally pitches gradually downgradient from the west to the east. The eight developed of the eleven total properties have a relatively flat slope at approximately elevation 200 with a grade change of 5-10 feet across the sites. The undeveloped sites with wooded cover slope downgradient from west to east between 1 and 8 percent. The highest elevation in the Park, excluding the landfill, appears to be at the south of the property at elevation 225ft. The lowest elevation appears to be along the north eastern corner of the easternmost opportunity site at elevation 160ft. There are a number of steep slopes throughout the site. Record topographic maps (dated 1888) indicate that a low lying wetland area southeast of the industrial park in the location of the current pond swamp (Figures 2 and 3).

Soils: Existing soils were evaluated based on the USDA Natural Resource Conservation Services Web Soil Survey. Below is a

description of the soils that are shown throughout the site as shown on the web soil survey (attached NRCS Soil Survey).

The soils range dramatically across the park including well and drained natural soils to urban fill. Based on the web soil survey information it is anticipated that the presence of urban fill may limit infiltration for stormwater in regards to future development. Stormwater detention will likely be considered for these sites. However, we would recommend a thorough geotechnical program be conducted on each site upon selection which would provide soil information necessary to confirm if infiltration could be provided.

For purposes of building foundations and future site improvements, we would recommend additional site specific soil boring and test pit investigation program.

Wetlands: After review of the Massachusetts GIS data layers (MassGIS) it does appear that there are several wetlands located throughout the park. If determined to be jurisdictional wetlands, these areas will have a minimum 100-foot regulatory buffer zone. Nine of the eleven sites have wetlands or wetland buffer zones overlapping the property. There is a priority habitat east of the industrial park and an unnamed stream running through the northeastern property to the priority habitat area. This stream is protected as an Outstanding Resource Water (314 CMR 4.05(3) (a)) and has a 200-foot regulatory buffer. Additionally, the site is largely within the Zone C Surface Water Supply Protection Area and therefore stormwater is required to be treated and attenuated prior to discharge. Both the wetland and the stream do not prohibit proposed work, however will require a permit and request for determination through the Conservation Commission.

After review of the MassGIS layers, the Site does appear to have several Critical Resources including potential or certified vernal pools as defined by the Natural Heritage and Endangered Species Program (NHESP). If it is determined in an environmental review that a vernal pool exists on the site the local regulations require a 100-foot No-Disturbance Zone around the upland area edge or the wetland area edge that encompasses the vernal pool.

According to the Flood Insurance Rate Maps available through FEMA (Federal Emergency Management Agency), this Site is located entirely outside of the 0.2% annual chance flood (Figure 4). There are no restrictions for development.

Rare Species & Cultural Resources: Information regarding rare species was obtained from the MassGIS Rare Species and Priority Habitat data layer showing data recorded by the NHESP in the State Registry. Review of this information indicates that there is a potential significant habitat areas east of the park.

Infrastructure

Roadways and Parking Lots: The Park is accessible from Industrial Park Rd to the west from exit 8A & B off of Route 24 and N. Main St. The Park is also accessible from Wilson Rd to the South. Route 24 considered a state road under Massachusetts DOT jurisdiction and therefore any future development would require a MassDOT Access Permit. All other adjacent streets including North Main Street, Airport Road and Riggerbach Road are under the city's jurisdiction and therefore will require only local approval for future modifications.

The developed sites are furnished with the existing buildings, and parking facilities. The existing paved parking and drives are in fair to good condition with minor surface cracks throughout. We would recommend a traffic impact analysis to further assess existing traffic patterns, existing roadways, and the future development.

Utilities: The existing conditions utility information was collected through site visits, communications with the Engineering Department, and the Water Department. Future development options would require that the existing utilities be located and included in design plans.

Sewer: Sheets 4-6 of a record As-Built titled "Fall River Airport Industrial Park; Airport Road; Plan & Profile" by "Anderson Nichols Consulting Engineers" dated May 17, 1996 was available at the City to review. The record drawing shows an 8-inch vitrified clay pipe in Airport Road, Sykes Road, and Graham Road. There are not available record drawings for Currant Road, Robb Way, and Innovation Way. The record drawing shows an 8-inch vitrified clay pipe in Riggerbach Road flowing north to Airport Road and a 10-inch vitrified clay pipe north of airport

road.

During design, the capacity of the existing sewer line will need to be evaluated to determine if it can handle the increased use or the need to provide an additional connection to the sewer main in Globe Mills Avenue. Future development would require PVC sewer services and the installation of an exterior grease trap to service cafeteria functions.

Water: A record drawing of Fall River Section 3 was available at the Fall River Water Works for review. The sites are located on Currant Road, Sykes Road, Graham Road, Robb Way, Riggerbach Road, and Innovation Way. There are 12-inch water mains is located in Currant Road, Sykes Road, Graham Road, Riggerbach Road. There are not available record drawings for Robb Way, and Innovation Way.

There appear to be fire hydrants approximately every 200-feet along the roads in the industrial park. There is one fire hydrant each along Currant Road, Sykes Road, Graham Road, Robb Way, Riggerbach Road, and Innovation Way along the frontage of the available properties. There are not visible hydrants on the properties themselves.

During design, a hydrant flow test will be required to determine available flow for fire suppression system design. The existing service should be evaluated for use in the proposed system as well as need for an additional service for fire suppression. If future developments plans include that the building is to be demolished and relocated, the service could be evaluated for feasibility for reuse. However, it is likely that it would require replacement.

Drainage: Record drainage plans were not available at the City to review and Fall River GIS does not provide utility

information. However, it appears that the on-site drainage systems throughout the park tie into the municipal drainage system in the road. Stormwater ultimately discharges west into Watuppa Pond.

On site drainage throughout the park properties appears to be collected from impervious and pervious surfaces via catch basins and conveyed via a closed drainage system. It appears that the stormwater system is receiving little treatment in regards to TSS removal. During design, it should be evaluated if the current drainage pattern should be maintained or rerouted. This would also include review of an existing conditions plan that will be provided by a surveyor in a later phase of this project. The existing on-site drainage system should be evaluated for integrity and for re-use in future development conditions.

The future development drainage design will need to be re-designed to meet the Massachusetts Department of Environmental Protection stormwater standards, the City of Fall River Stormwater and Construction Site Management Ordinance and will require quantity and quality mitigation measures.

Gas: Liberty Utilities is the supplier of natural gas to the City of Fall River. Record drawings depicting the gas connections were not available. Future development options would require that the existing system be located and analyzed for capacity. Coordination should occur with Liberty Utilities regarding any service improvements.

Electric: National Grid is the supplier of electricity to the City of Fall River. Record drawings depicting the gas connections were not available. Future development options would require that the existing system be located and analyzed for capacity. Coordination should occur with National Grid regarding any service improvements.

Summary

This site is located in the northeast corner of the city. This location is remote and does not provide desired access for city residents. The abutting properties are zoned Industrial Park and are used for industrial purposes, which does not provide a strong benefit or connection to the school being constructed at this site.

Most of the available properties have a total area of less than 9 acres and are developed with industrial building; the largest property is about 22 acres. These sites are not adequately sized to effectively house a new high school with all the necessary facilities. Total, the available sites make up 67.8 acres; however, the sites are distributed throughout the park with only a few sites adjacent which would make for a disjointed campus separated by industrial uses which is not ideal for a school site.

Although this property is currently under ownership of the City, the intent of the Research and Development Overlay District is to encourage and attract industry by allowing flexibility for industrial development and encouraging compatible development within the overlay district. Dedicating land within the industrial park for a school use would eliminate a parcel or parcels with current potential for industrial development which would benefit the City.

In addition to the special constraints, design considerations should include stormwater practices for treatment and attenuation which are consistent with onsite soils and water supply protection zone requirements. Development should include recognition of the wetland resource areas and potential vernal pools with consideration for their buffer zones in regards to development. We would recommend these considerations be made part of future development options. However, we do not believe this is a viable site for future school development.



USGS ORTHOPHOTO FROM OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MASSGIS), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS

1"=1000'
0" 1"



FALL RIVER INDUSTRIAL PARK
AIRPORT ROAD, RIGGENBACH ROAD,
CURRANT ROAD
FALL RIVER, MASSACHUSETTS

AERIAL PLAN

MARCH 2017

FIGURE 2

**EXISTING CONDITIONS
FALL RIVER INDUSTRIAL PARK**
AIRPORT ROAD, RIGGENBACH ROAD, CURRANT ROAD
FALL RIVER, MA. 02720
PARE PROPOSAL No. CQ409.16 JANUARY 2017



LEGEND

-  AVAILABLE PROPERTY LIMIT
-  ABUTTING PROPERTIES
-  DEP WETLANDS
-  100-FOOT WETLAND BUFFER
-  SURFACE WATER SUPPLY PROTECTION AREAS
-  PRIORITY HABITAT
-  RIVERS AND STREAMS
-  VERNAL POOL (POTENTIAL)
-  ACTIVITY AND USE LIMITATIONS

NOTE:

TOTAL AREA OF PROPERTY LIMIT IS 67.8± ACRES
(INCLUDES LOTS Z-3-16, Z-3-18, Z-3-19, Z-3-28, Z-3-54,
Z-3-99, Z-3-109, Z-3-110, Z-3-112, Z-3-113, Z-3-114)

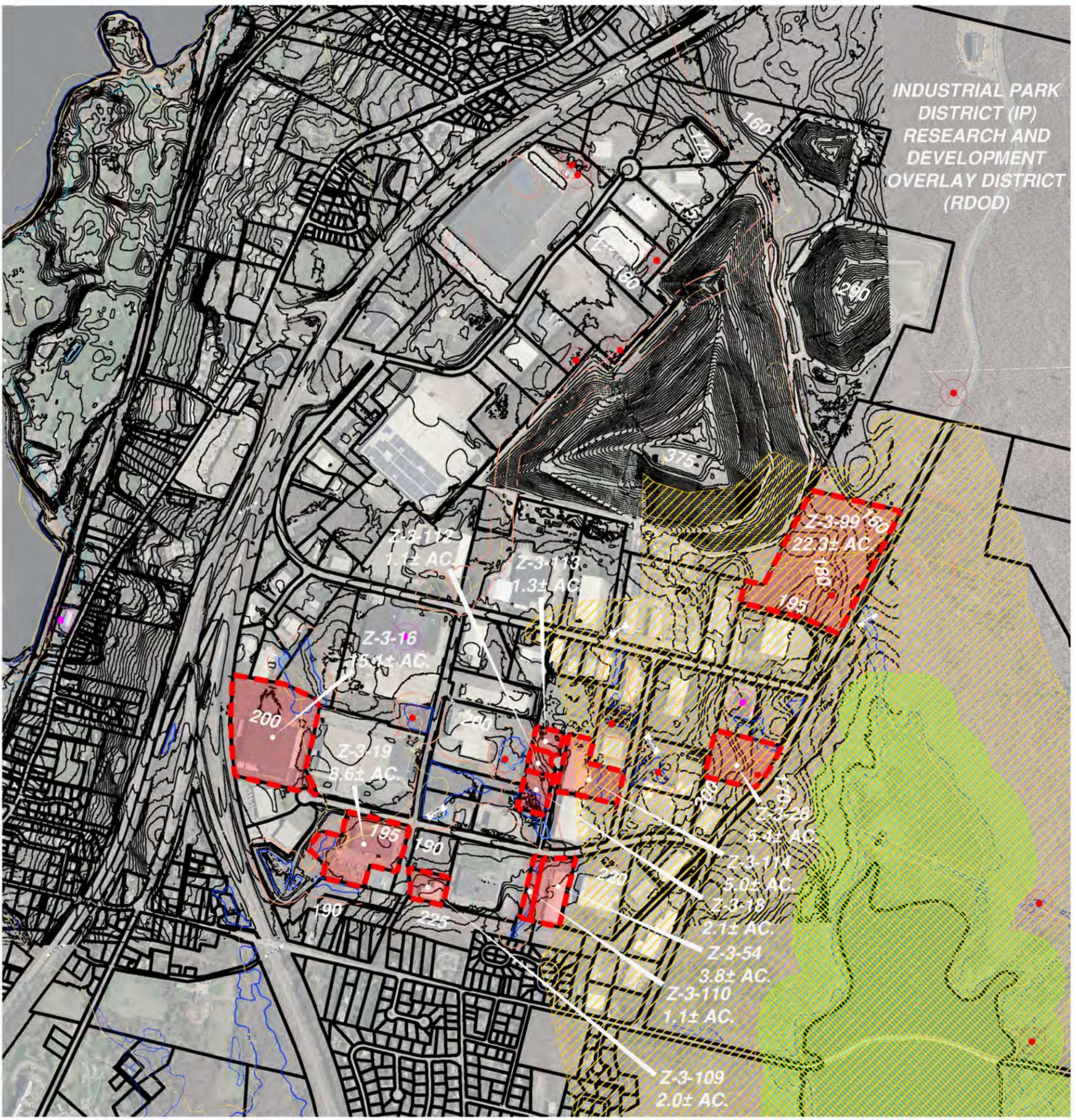
ZONING:

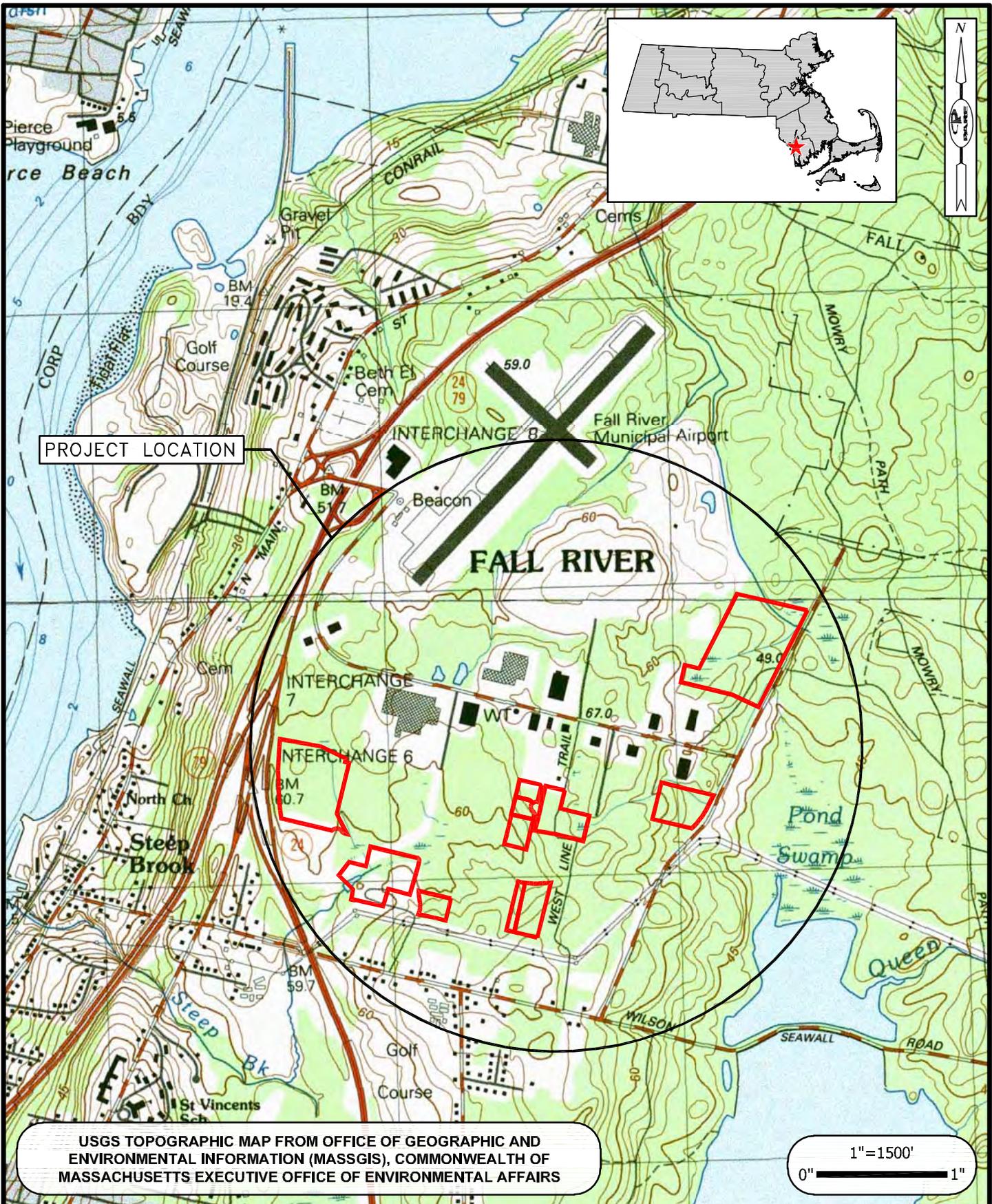
FRONT SETBACK	50 FEET
SIDE SETBACK	40 FEET
REAR SETBACK	40 FEET

1000' 500' 0 1000'



Scale: 1"=1000'





FALL RIVER INDUSTRIAL PARK
 AIRPORT ROAD, RIGGENBACH ROAD,
 CURRANT ROAD
 FALL RIVER, MASSACHUSETTS

LOCUS PLAN

MARCH 2017

FIGURE 1