BOARD OF SELECTMEN &
BUILDING, PLANNING AND CONSTRUCTION COMMITTEE (BPCC)
JOINT MEETING



**Feasibility Study** 

# NORTHBRIDGE FIRE DEPARTMENT





# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS ALA MATARIAN ASSOCIATES, INC. MATARIAN ARCHITECTS



#### **INTRODUCTION**

- ADAM GAUDETTE TOWN MANAGER
- **BOARD OF SELECTMEN** 
  - JAMES ATHANAS CHAIRMAN
    - ALICIA CANNON VICE CHAIRMAN
    - **DANIEL NOLAN CLERK**
    - THOMAS MELIA MEMBER
    - CHARLES AMPAGOOMIAN, JR. MEMBER

- DAVID WHITE FIRE CHIEF
- BUILDING, PLANNING AND CONSTRUCTION COMMITTEE (BPCC)
  - MICHAEL BEAUDOIN CHAIRMAN
    - PAUL BEDIGIAN VICE CHAIRMAN
    - **BRIAN PAULHUS MEMBER**
    - STEVEN NYE MEMBER
    - JASON RONDEAU MEMBER

#### **FEASIBILITY STUDY OVERVIEW**

BRENT ARTHAUD, CARDINAL CONSTRUCTION INC. – OWNERS PROJECT MANAGER (OPM)

#### **FEASIBILITY STUDY UPDATE**

LUKE MCCOY, KAESTLE BOOS ASSOCIATES (KBA) – PROJECT DESIGN CONSULTANT

#### **NEXT STEPS**

- BRENT ARTHAUD, CARDINAL CONSTRUCTION INC. OWNERS PROJECT MANAGER (OPM)
- **ADAM GAUDETTE TOWN MANAGER**



#### TOWN OF NORTHBRIDGE FIRE DEPARTMENT

#### **CURRENT STATIONS BACKGROUND**

- (17) FULL-TIME FIREFIGHTERS & (17) ON-CALL FIREFIGHTERS
- THE DEPARTMENT'S CURRENT FLEET OF VEHICLES INCLUDES:
  - 3 ENGINE COMPANIES
- 3 BRUSH TRUCKS

1 AERIAL LADDER

2 AMBULANCES

1 HEAVY RESCUE

- 3 UTILITY VEHICLES
- THE DEPARTMENT COVERS APPROXIMATELY 19 SQUARE MILES
- STATION INHERITED FROM THE FORMER MILLS
  - TOWN HAS NEVER CONSTRUCTED A FIRE STATION
- FIRE STATION NO. 1 (VILLAGE OF WHITINSVILLE HEADQUARTERS)
  - CONSTRUCTED CIRCA 1923
  - MANNED AND APPARATUS STATION
- FIRE STATION NO. 2 (VILLAGE OF ROCKDALE)
  - CONSTRUCTED CIRCA 1950'S
  - APPARATUS STATION (UNOCCUPIED STATION)

#### **SITE SELECTION**

- INITIALLY 21 SITES
  - SUBCOMMITTEE REDUCED TO 11 SITES:
    - 193 MAIN STREET
- 644 PROVIDENCE RD

180 MAIN STREET

- 1681 PROVIDENCE RD
- WEST OF 253 MAIN ST
- 1868 PROVIDENCE RD

44 CROSS STREET

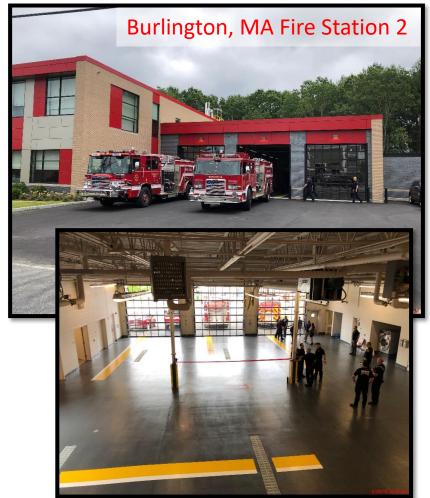
- 198 CHURCH AVENUE
- 260 PROVIDENCE RD
- 14 HILL STREET
- ACROSS 546 PROVIDENCE RD

#### **OWNERS PROJECT MANAGER (OPM) SELECTION**

REQUEST FOR QUALIFICATIONS (RFQ)

#### FEASIBILITY STUDY OVERVIEW

BRENT ARTHAUD, CARDINAL CONSTRUCTION INC. – OWNERS PROJECT MANAGER (OPM)



# Cardinal

- PUBLIC AND PRIVATE CONSTRUCTION
  MANAGEMENT IN MA SINCE 1989
- RECENT PUBLIC SAFETY PROJECTS:
  - BURLINGTON, MA FIRE STATION
  - NORTHBRIDGE DPW BUILDING
- CONSTRUCTION MANAGERS AS WELL AS OWNER PROJECT MANAGERS





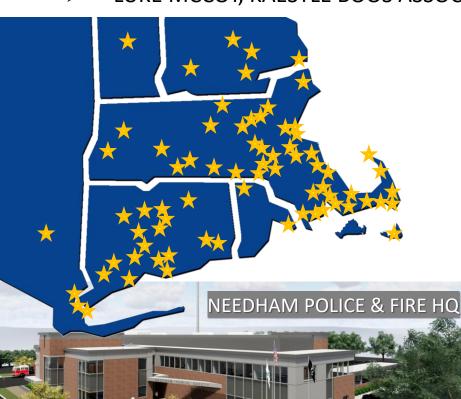


- DESIGNER SELECTION PROCESS
- > ANALYZE THE TOWN'S NEEDS FOR ONE OR MORE FIRE STATION FACILITIES
  - > ASSESS THE EXISTING CONDITIONS OF FIRE STATION NO. 1 (HEADQUARTERS) & STATION NO. 2
  - UNDERSTAND THE EXISTING AND FUTURE DEVELOPMENT GROWTH PATTERNS.
  - CONDUCT A RESPONSE TIME STUDY FOR THE CURRENT FACILITIES
  - DEVELOPMENT OF THE FIRE STATION'S PROGRAM REQUIREMENTS
- ➤ DETERMINE THE SITE LOCATION(S) FOR THE NEW FIRE STATION FACILITIES 11 SITES SELECTED
  - ➤ COMPARE EXISTING STATION RESPONSE TIME TO PROPOSED SITE LOCATION(S)
  - REVIEW PROPOSED SITES FOR SUITABILITY FOR NEW FIRE STATION FACILITIES
  - DEVELOP CRITERIA FOR SITE SELECTION WITH BPCC
  - > DETERMINE THE SITE MOST ADVANTAGEOUS TO THE TOWN FOR THE NEW FIRE STATION FACILITY
- PREPARE CONCEPTUAL DESIGN PLANS FOR THE PROPOSED FACILITY ON THE CHOSEN SITE
- DEVELOP A PROJECT BUDGET FOR THE NEW STATION FACILITY BASED ON THE SELECTED OPTION



## > FEASIBILITY STUDY UPDATE

LUKE MCCOY, KAESTLE BOOS ASSOCIATES (KBA) – PROJECT DESIGN CONSULTANT







NANTUCKET PUBLIC SAFETY



# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal

#### FEASIBILITY STUDY UPDATE

- EXISTING FIRE STATION NO. 1 (HEADQUARTERS) CONDITIONS (193 MAIN STREET)
  - **BUILDING COMPLETED CIRCA 1923**
  - **BUILDING EXTERIOR** 
    - CONCRETE FOUNDATION INTEGRITY NEEDS TO BE EVALUATED
    - BRICK FAÇADE EXHIBITS EXTENSIVE DISCOLORATION
    - WINDOW AND STEEL LINTELS REPLACEMENT
    - STEEL DOOR FRAMES, DOORS, AND APPARATUS BAY DOORS REQUIRE REPLACEMENT
    - ROOF LEAKING, STANDING WATER, AND BUBBLING
    - ROOF DRAINAGE SYSTEM BACKFLOWS THROUGH BUILDING FLOOR DRAINS

















## FEASIBILITY STUDY UPDATE (CONTINUED)

- > EXISTING FIRE STATION NO. 1 (HEADQUARTERS) CONDITIONS (193 MAIN STREET)
  - BUILDING INTERIOR
    - > EXTENSIVE WATER AND/OR MOISTURE INFILTRATION ON SURFACES
    - CEILINGS FLAKING AND CHALKING (CONTAMINATING EQUIPMENT)
    - BASEMENT STORAGE AREAS EXPERIENCE CONTINUAL STANDING WATER
    - > INABILITY FOR WATER TO DRAIN THROUGH APPARATUS BAY FLOOR DRAINS
    - STEEL DOOR FRAMES, DOORS, AND APPARATUS BAY DOORS REQUIRE REPLACEMENT
    - ROOF LEAKING, STANDING WATER, AND BUBBLING
    - ROOF DRAINAGE SYSTEM BACKFLOWS THROUGH BUILDING FLOOR DRAINS















## FEASIBILITY STUDY UPDATE (CONTINUED)

- > EXISTING FIRE STATION NO. 1 (HEADQUARTERS) CONDITIONS (193 MAIN STREET)
  - LIFE SAFETY
    - ➢ EGRESS STAIRS DO NOT MEET CURRENT CODE REQUIREMENTS
    - EGRESS STAIRWAY DOES NOT MEET REQUIRED TWO-HOUR FIRE RATING
    - EGRESS DOORS ARE NOT FIRE RATED AS REQUIRED
    - EXIT SIGNAGE AND REQUIRED EXIT DOOR HARDWARE IS NOT PRESENT
    - FREIGHT ELEVATOR STAIRS DO NOT MEET CURRENT CODE REQUIREMENTS.
    - NO ACCESSIBLE ENTRANCE PROVIDED INTO THE FACILITY
    - ➢ NO ELEVATOR ACCESS TO OFFICES LOCATED ON 3<sup>RD</sup> FLOOR
    - NO ACCESSIBLE TOILET ROOMS
    - DOORS, WALL MOUNTED ITEMS, AND INTERIOR SIGNAGE DO NOT MEET CURRENT CODE











# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS

## FEASIBILITY STUDY UPDATE (CONTINUED)

- EXISTING FIRE STATION NO. 2 CONDITIONS
  - BUILDING COMPLETED CIRCA 1950'S
  - BUILDING EXTERIOR
    - EXTERIOR WALLS SHOW EXTENSIVE STRUCTURAL DAMAGE DUE TO DIFFERENTIAL SETTLING
    - VEHICLE APRON ALSO SHOWS EXTENSIVE DAMAGE
    - VEHICLE EXITS ARE UNDERSIZED FOR MODERN APPARATUS
  - BUILDING INTERIOR
    - BASEMENT FLOODS REGULARLY
  - LIFE SAFETY
    - CURRENT STAIRS DO NOT MEET LIFE SAFETY CODE
    - BUILDING IS NOT ACCESSIBLE













# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal



## > FEASIBILITY STUDY UPDATE (continued)

#### FACILITY PROGRAMMING WITH THE FIRE DEPARTMENT

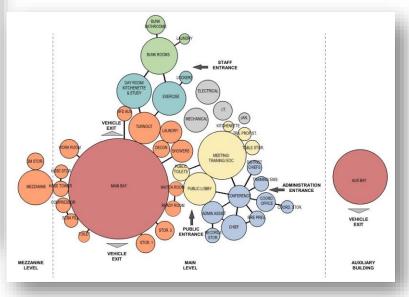
#### 1. STAFF INTERVIEWS



#### 2. SPACE USE SUMMARY

Program Item	Room Name	1st Floor	Mezz	2nd Floor Area	Upper	Remote	Total Area	Program Item	Room Name	1st Floor Area	Mezz	2nd Floor Area	Upper Tower	Remote Structure	Total Area
Attin	Apparatus Bay	Aire	14.62	Atta	10/10	Structuse	Arta	155.00	Firefighters	Aires	.03522	Aita	Tomes	Siructure	Altea
1	Apparatus Bay	7,164					7,164	41	Day Room	635					63
2	Secondary Appuratus Bay	2,340					2,340	42	Study Room	163		1 3			16
3	Remote Apparatus Bay	2,240			_	2,112	2,112	43	Firefighter's ADA Rest Rooms	78		1 3		-	3
-	Subtotal - Apparatus	9,504		-	_	2,112	11,616	44	Farreise	800		1 3			80
	Firematic Support	9,504		-		2,112	11,010	45	Single Occupant Changing Room	112		- 3			11
4	Mezzanine		859				859	4.5	Subtotal - Firefighters	1,788		1 3	-		1.78
-	Mezzanine		827				839		Bunking	1,700		- 4			8,78
5	Storage Room #1	216			_		216	46	Bunkers/Bedrooms w/cot (8/if 118)	944					- 94
6	Storage Room #1 Storage Room #2	216					216	47	Bunker's Bathrooms (2) @ 73 & (1) @ 94	240		1 3			24
7	Ouartermaster Storage Room	216	152	-			153	48	Bunker's Area Laundry Room	240 82		9	_		24
8	Hose Storage	166	132		_		155	48	Bunker's Area Laundry Room Subtotal - Bunking	1.266		9			1,26
9	Turnout Gear Storage Room		_				661		Public Spaces	1,266					1,20
		661			-					750				_	
10	Decon/Laundry	502					502	49	Public Entry Area			9			7.
11	Hot Side Shower(s)	276					276	50	Coat Recess	30		9			
12	EMS Storage Room	297					297	51	Meeting/Training/EOC	1591		9		2	1,59
13	Apparatus Floor Rest Room	76				9	76	52	Table & Chair Storage	156		. 0			- 1
14	SCBA Compressor		156				156	53	Training Props Storage	130		0			- 1
15	SCBA Fill Station	120					120	54	A/V Equipment	24		. 0		- 3	
16	Work Room	307					307	55	Kitchenette	86		0			
17	Utility Recess	32					32	56	Public Rest Rooms M & F	256		9		- 3	2
18	NFD Auxiliary Storage	156					156		Subtotal - Public Spaces	3,023		0		9	3,07
19	Yard Storage					249	249		Miscellaneous Space						
20	Huzardous Waste Storage	12					12	57	(2) Entry Vestibules	160				8	. 16
21	Janitor's Closet	64				5	64	58	Delivery Room	100		0		- 3	10
22	Ready Room	176					176	59	Housekeeping Storage (1) @ 50 & (1) @ 10	60		0			
23	Radio/Watch Room	136					136	60	Janitors Closet (1 each floor)	156		78			
24	Tower	144	135		135		549	61	File Server & Communications	123		9		- 2	. 13
	Subtotal - Firematic Support	3,557	444	135	135	249	4,520	62	Mechanical/Electrical	350		9			35
	Administration		_		_			63	Sprinkler	70		9			
25	Staff Lobby	60		0		-	60	64	(2) Stairwells (area per floor)	356		364		-	72
26	Conference Room	330		.0			330	65	Elevator (area per floor)	58		58			- 1
27	Chief's Office	426		. 0			426	66	Elevator Equipment Room	52		. 0	1 1		
28	Administrative Assistant's Office	270		. 0			270	67	Elevator Foyer	80		0			- 1
29	Training Officer/EMS Office	140		0		8	140		Subtotal - Miscellaneous Spaces	1,565		500		100	2,00
30	Deputy Chief's Office	158		- 0			158		Area Subtotals			2			
31	Coordinator's Office	247		0			247		Bay	9,504				2,112	11,61
32	Fire Prevention Office	175		0			175		Firematic Support	3,557	44		135	249	4,53
33	Building Inspector	345		.0			345		Mezzunine		85				8
34	Board of Health	455		.0			455		Office & Living	9,771		500		- 3	10,2
35	Fire Prevention Records Storage	396		- 0			396		Walls & Circulation					- 3	8
36	Office Area Support Recess	57		- 0			57		Apparatus Bay Walls (ii) 8%	760				169	9.
37	Office Area ADA Compliant Rest Room	78		0		2	78		Firematic Support Walls (it 15%	534	6	20	20	37	6
38	Fire Education Storage	100		0			100		Firematic Support Circulation @ 15%	534					5
39	Fire Department Records Storage	150		0			150		Office Area Walls @ 16%	1,563		80			1,64
40	High Value Storage Closet	8		0			8		Office Area Circulation (ii) 15%	1.466		75		- 23	1,5
	Subtotal - Administration	3,395		0			3,395		Subtotal - Walls & Circulation	4.856	- 6		20	206	5,37
									Total >>	27,688	1.37		155		32.59
							- 1		Footprint>>	27,688	1,37	810	100	2,307	27.60

#### 3. PLANNING DIAGRAMS

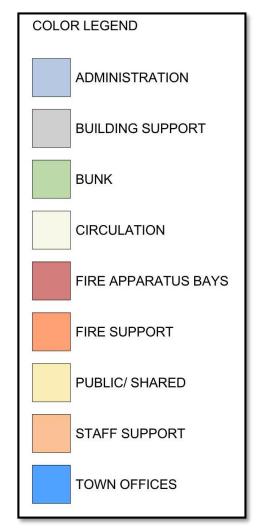


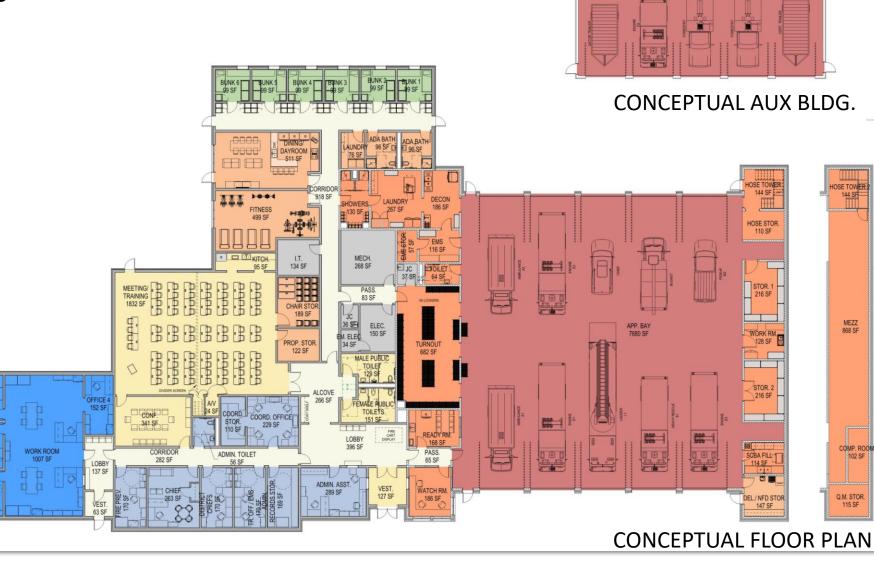




# FEASIBILITY STUDY UPDATE (continued)

Facility Programming



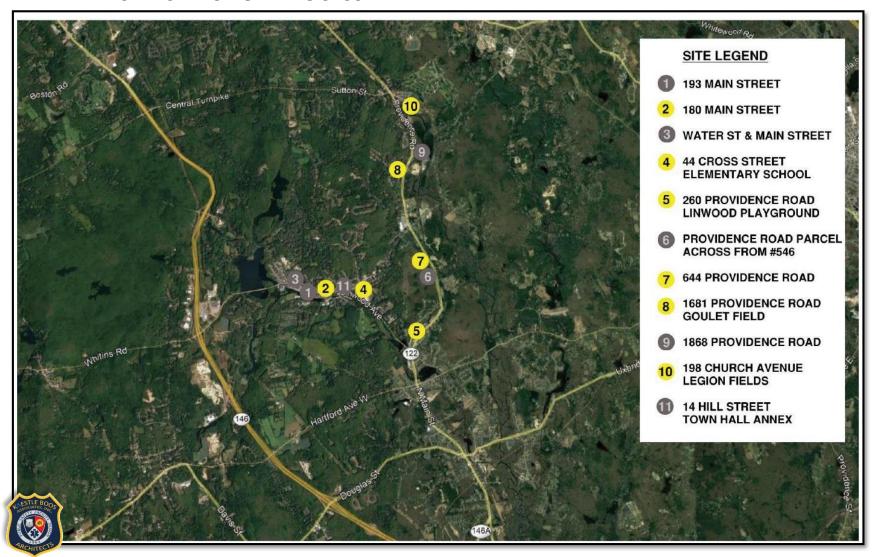






## FEASIBILITY STUDY UPDATE (CONTINUED)

SITE SELECTION PROCESS



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leftent.	Trimed about cook dance (17)	Street.	thand	Microsoft about Drawn Street of the or private provider	Timer .	TOTAL TRICK SHOULD STREET PROPERTY STREET, SALES SALES STREET, SALES SAL	NOS y dispositores series frection, lesso sal responsi-	or tour of fulfile 25 higher than accomplished	Destroy blosse	Company No.	historia No.

#### **INITIAL SITE ELIMINATED**

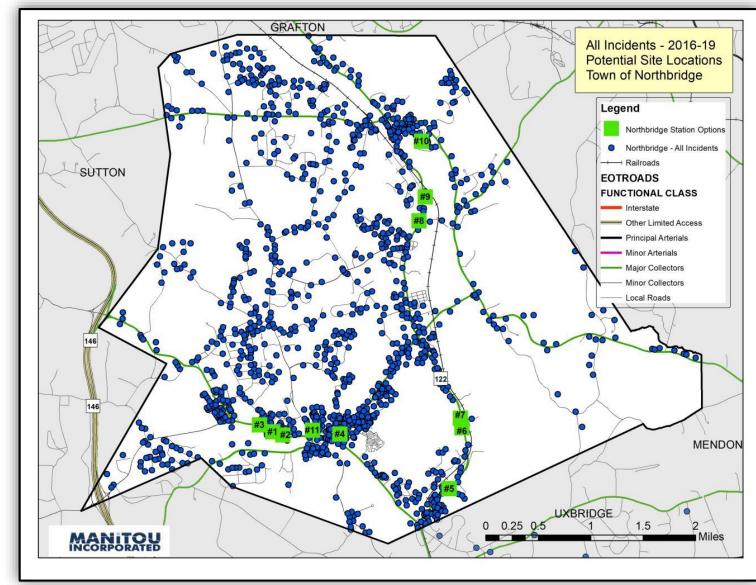
- SITE #1 193 MAIN STREET
  - PARCEL TOO SMALL
- SITE #3 WEST OF 253 MAIN ST
  - PARCEL TOO SMALL
- SITE #6 ACROSS 546 PROVIDENCE RD
- PRIVATELY OWNED
- SITE #9 1868 PROVIDENCE RD
  - SOLD, PARCEL TOO SMALL
- SITE #11 14 HILL STREET
  - PARCEL TOO SMALL
  - NATIONAL REGISTER OF HISTORICAL PLACES



# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal associates, inc

## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
  - **RESPONSE STUDY** 
    - **ALL INCIDENTS 2016-2019**
- **EXISTING HEADQUARTERS** 
  - OCCUPIED STATION
  - APPARATUS STORAGE
- **SUB-STATION** 
  - **UNOCCUPIED STATION**
  - APPARATUS STORAGE
  - NO IMPACT ON RESPONSE TIME









## FEASIBILITY STUDY UPDATE (continued)

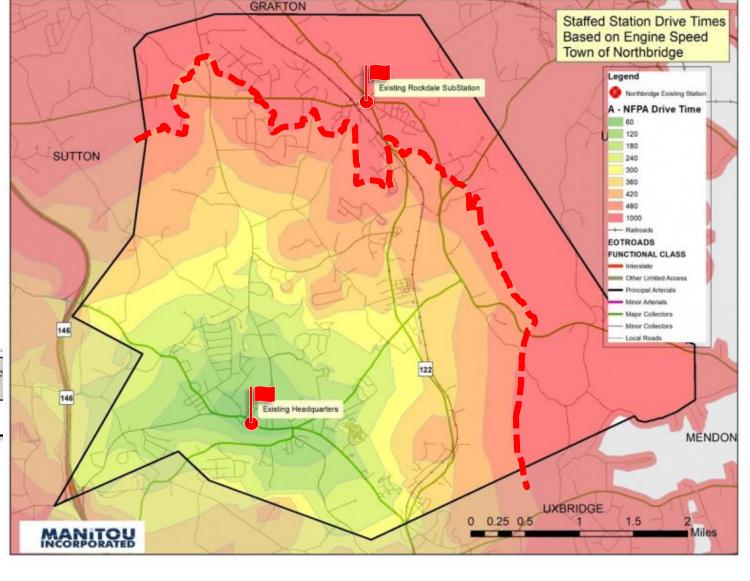
- SITE SELECTION PROCESS
  - RESPONSE STUDY
    - RESPONSE TIME

#### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- > STANDARD 1720 (2014)
  - > STANDARD FOR THE ORGANIZATION AND DEPLOYMENT OF FIRE SUPPRESSION OPERATIONS, EMERGENCY MEDICAL OPERATIONS, AND SPECIAL OPERATIONS TO THE PUBLIC BY VOLUNTEER FIRE DEPARTMENTS.

Demand Zone a	Population Density	Minimum Staff to Respond <sup>b</sup>	Response Time (minutes) <sup>c</sup>	Me
Suburban area	500–1000 people per sq. ml.	10	10	

**№ 80% IN 10 MINUTES OR LESS** 







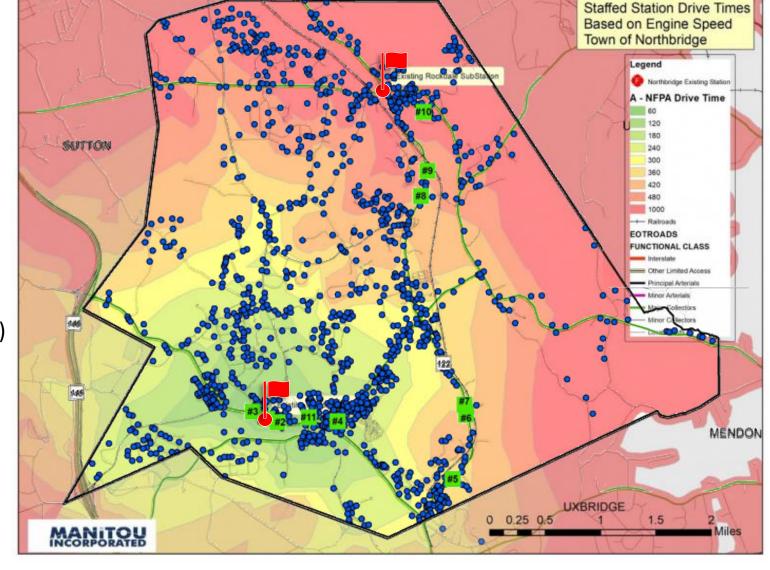
# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal

## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
  - **RESPONSE STUDY** 
    - **RESPONSE TIME**
- **EXISTING HEADQUARTERS**
- **SUB-STATION** 
  - **UNOCCUPIED STATION**
  - NO IMPACT ON RESPONSE TIME

#### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

- > STANDARD 1720 (2014)
  - > 80% IN 10 MINUTES OR LESS
  - > CURRENT STATION:
    - > 78.3% IN EIGHT MINUTES OR LESS







# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS MA ASSOCIATES | Cardinal



RATING SCALE: - SOMEWHAT IMPORTANT 2- IMPORTANT B- VERY IMPORTANT

- FEASIBILITY STUDY UPDATE (CONTINUED)
  - > SITE SELECTION PROCESS
    - SITE FEASIBILITY EVALUATION

Site Selection Ratio	ng Criteria
Northbridge Fire Study	Wednesday, September 1
Northbridge, Massachusetts	
CRITERIA	RATING SCALE
Lot size to accommodate entire program	3
***	
2. Critical/unobstructed sightlines from site	2
*B X	,,,
3. Building visibility from the road	1
I. Permitted zoning use	1
5. Acquisition/temporary relocation costs	3
5. Site development and building impact costs	3

#### PRELIMINARY SITE EVALUATION MATRIX

CRITERIA					SCHOOL SECTION SECTION									SITE #7 644 Providence Road				SITE #8 1681 Providence Road				SITE #10 198 Church Av				
SITE CONSIDERATIONS		100 Maiii Sileei		44 Closs sileer			200 Flovidelice Rodd				644 Flovidelice Rodd				1661 Frovidence Rodd				176 Church AV							
Technical Criteria	score.	20. Heids	Total	Contracts	score	80. No	adn't Total	Comments	score	861. No	ight Total	Contrients	- score	Rel. 46	dri Total	Comments	scote	Rel. 46	ight Total	Comments	- scote	Rel. Hei	dri Total	Contrants		
Lot size to accommodate entire program		3				3				3				3				3				3				
Critical/unobstructed sightlines from site		2				2				2				2				2				2				
3. Building visibility from the road		1				1				1				1				1				1				
4. Permitted zoning use		1				1				1				1				1				1				
5. Acquisition/temporary relocation costs		3				3				3				3				3				3				
6. Site development and building impact costs		3				3				3				3				3				3				
7. Environmental/regulatory restrictions		1				1		*		1				1				1				1				
8. Town departments relocated within station		2				2				2				2				2				2				
Ability for future expansion		3				3		0		3				3				3				3				
Technical Score SUBTOTAL	0	19			0	19			0	19			0	19			0	19			0	19				
Subjective Criteria						2																				
10. Department support		3				3				3				3				3				3				
11. Community support	1	3				3				3				3				3				3				
12. Site location to provide equal or better response time		3				3				3				3				3				3				
Subjective score SUBTOTAL	0	9		1	0	9			0	9			0	9			0	9			0	9				
								2							(A)	2										

SCORE X RELATIVE WEIGHT = TOTAL

RELATIVE WEIGHT:

1- SOMEWHAT IMPORTANT

2- IMPORTANT

3- VERY IMPORTANT



## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #10 198 CHURCH AVENUE
- > PROS
  - SIGHTLINES FROM SITE
  - BUILDING VISIBILITY FROM ROAD

#### > CONS

- PARCEL TOO SMALL FOR FULL BUILDING PROGRAM
- LACK OF DEPARTMENT SUPPORT
- NO ADDITIONAL SPACE FOR TRAINING ON-SITE





➤ SCORE: 42



# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal

## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #5 260 PROVIDENCE ROAD
- **PROS** 
  - RESPONSE TIME: 82.2%
  - **BUILDING VISIBILITY FROM ROAD**
  - ADDITIONAL SPACE FOR TRAINING ON-SITE

#### CONS

- LACK OF DEPARTMENT **SUPPORT**
- **DEVELOPMENT COSTS**
- **ONLY SLIGHTLY IMPROVES RESPONSE TIME TO NORTH**







## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #2 180 MAIN STREET
- > PROS
  - ➤ RESPONSE TIME: 78.9%
  - DEVELOPMENT COSTS
  - SIGHTLINES FROM SITE

#### > CONS

- PARCEL TOO SMALL FOR FULL BUILDING PROGRAM
- DOES NOT IMPROVE RESPONSE TIME TO NORTH
- NO ADDITIONAL SPACE FOR TRAINING ON-SITE







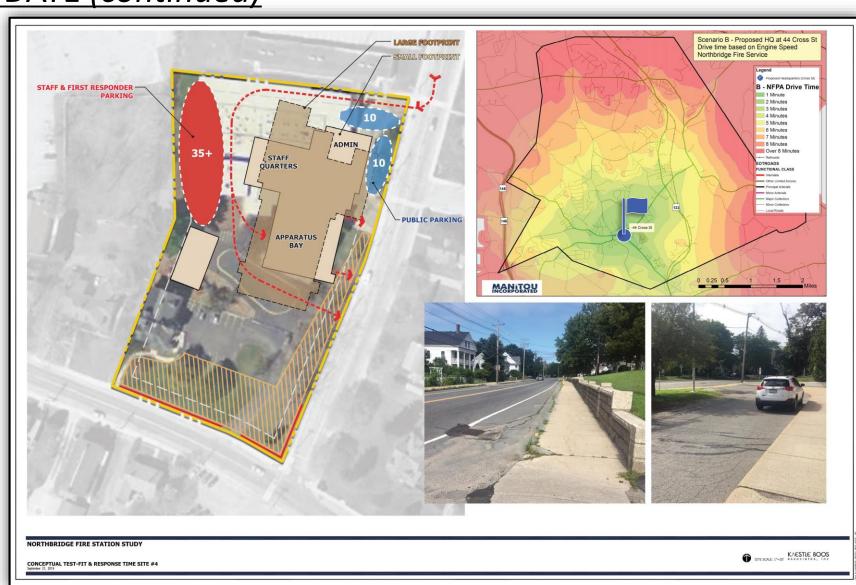
# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal associates, inc | MA ASSOCIATES | Cardinal

## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #4 44 CROSS STREET
- **PROS** 
  - RESPONSE TIME: 88.0%
  - SIGHTLINES FROM SITE
  - **BUILDING VISIBILITY FROM ROAD**

#### CONS

- DEVELOPMENT COSTS
- LACK OF DEPARTMENT **SUPPORT**
- ➤ ONLY SLIGHTLY IMPROVES **RESPONSE TIME TO NORTH**
- NO ADDITIONAL SPACE FOR TRAINING ON-SITE



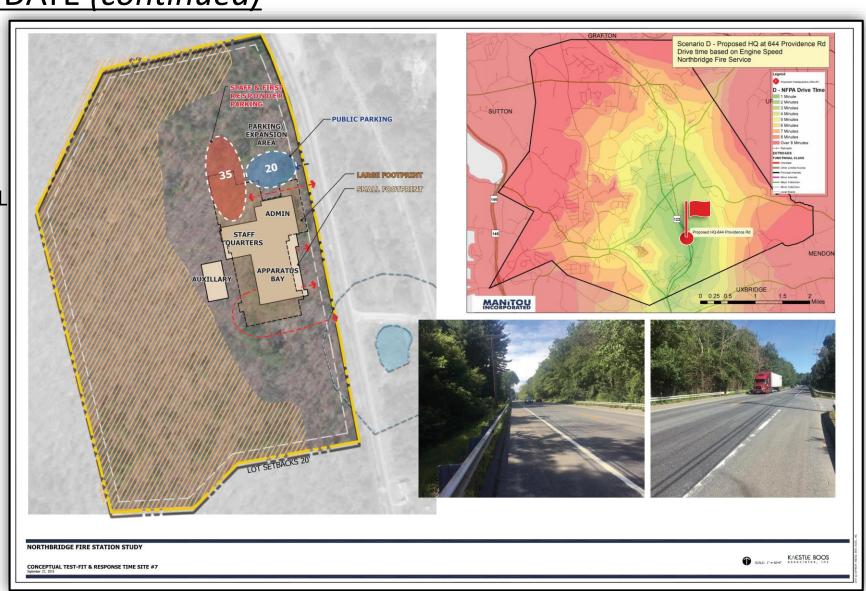
#### FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #7 644 PROVIDENCE ROAD
- > PROS
  - PARCEL ACCOMMODATES FULL BUILDING PROGRAM
  - MODERATE SITE DEVELOPMENT COSTS
  - ADDITIONAL SPACE FOR TRAINING ON-SITE

#### > CONS

- LACK OF DEPARTMENT SUPPORT
- RESPONSE TIME: 57.2%

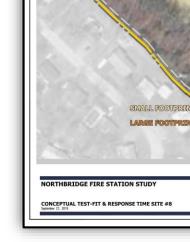


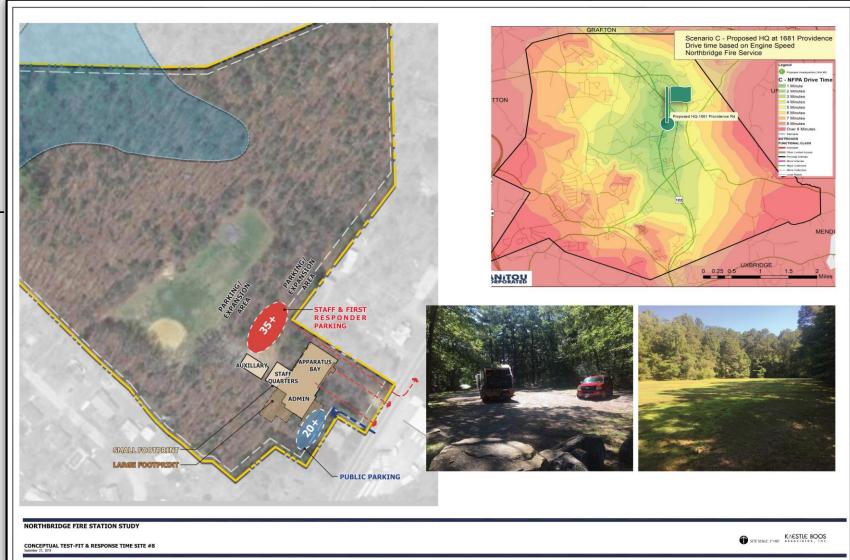




## FEASIBILITY STUDY UPDATE (continued)

- SITE SELECTION PROCESS
- SITE #8 1681 PROVIDENCE ROAD
- **PROS** 
  - ➤ RESPONSE TIME: 94.5%
  - PARCEL ACCOMMODATES FULL **BUILDING PROGRAM**
  - SITE DEVELOPMENT COSTS
  - ADDITIONAL SPACE FOR TRAINING ON-SITE
- > CONS
  - BUILDING VISIBILITY FROM **ROAD**
  - POTENTIAL REGULATORY **RESTRICTIONS** (OUTSIDE OF PROPOSED **DEVELOPMENT AREA)**





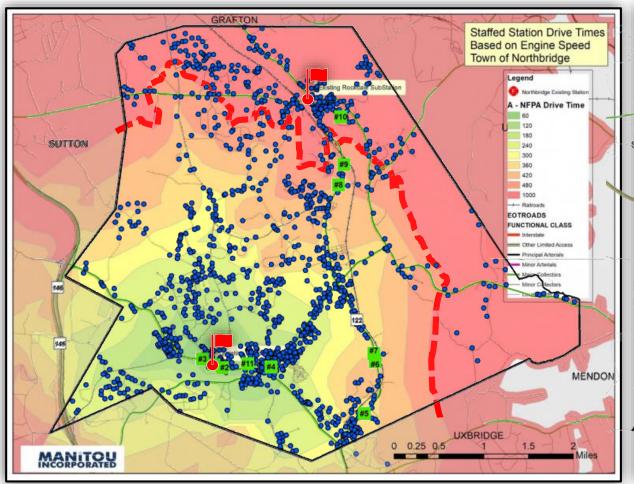


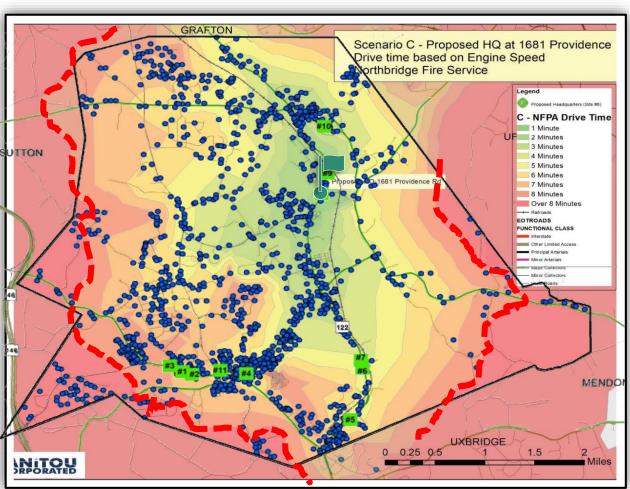


# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal



## > FEASIBILITY STUDY UPDATE (continued)







#### **EXISTING STATION LOCATION**

**SELECTED STATION LOCATION** 

8 MINUTE CUMULATIVE PERCENTAGE: 78.3%

8 MINUTE CUMULATIVE PERCENTAGE: 94.5%



# NORTHBRIDGE FIRE STATION STUDY KAESTLE BOOS | MA ASSOCIATES | Cardinal associates, inc

## FEASIBILITY STUDY UPDATE (continued)

**SELECTED SITE** 

SITE #8 – 1681 PROVIDENCE ROAD

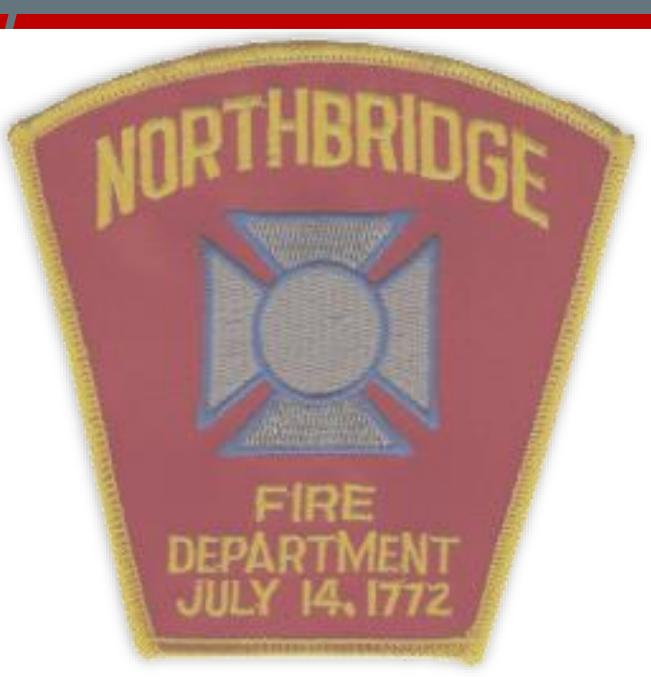
- CONTINUE TO REVIEW LAYOUT WITHIN SITE
  - BUILDING TO ACCOMMODATE FULL PROGRAM
  - ABILITY FOR ON-SITE TRAINING
  - APPARATUS STORAGE
  - PUBLIC AND STATION PARKING
  - FUTURE EXPANSION POTENTIAL





## > NEXT STEPS

- FEASIBILITY STUDY
  - FINALIZE PROGRAMMING
  - FINALIZE CONCEPTUAL DESIGN
  - > PROJECT ESTIMATING/BUDGETING
  - FINAL REPORT
    - JANUARY 2020
- VOTER APPROVAL PROCESS
  - MAY 2020



# QUESTIONS



