HANOVER FIRE DEPARTMENT

SITE SELECTION STUDY

DRAFT REPORT

A Report to: Town of Hanover

December 4, 2014

Prepared by:
CDR Maguire Inc.
211 Congress Street, 11th Floor
Boston, MA 02110

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EXECUTIVE SUMMARY

CDR Maguire Inc. performed a needs analysis and site selection study to identity functional needs important for the continued successful operations at North Hanover substation. The assessments contained herein are intended to provide the necessary background to support the design and recommendations presented and to provide information to decision makers that could impact the status of the North Hanover Station and any ensuing projects.

To date the existing North Hanover Station has adequately served the Town. However, technical advances in firefighting advances in firefighting equipment, the expansion of the quantity of firefighters from on-call to career and population growth in this portion of Hanover have severely strained the ability of the existing building to perform its obligation to the Town.

Based on the programmatic needs of the department, the current station needs to be expanded or replaced. Due to the existing lot size expansion of the facility to meet the department's needs is not possible.

CDR Maguire analyzed and evaluated three adjacent sites in addition to the existing to determine the feasibility on constructing a new substation and the impact to the facilities response time. The sites being;

1. 1160 Main Street (existing station)
2. 848 Main Street
3. 611 Webster Street
4. 59 Old Webster Street

Based on our research each site has its advantages and disadvantages. Out of the four sites two of them, 1160 Main Street and 59 Old Webster Street are too small and cannot accommodate the programmatic needs of the department and consequently fall short of being the ideal location. The remaining two sites, 848 Main Street and 611 Webster Street are both sized appropriately to meet the department's needs. The two factors that separate these sites are;

1. The response time from the Webster site is slightly better than the Main Street site.
2. The baseball field in the rear of the Main Street mixes fire station operations with the ball field users. This creates a vehicular bottle neck with a possible dangerous outcome for responding firefighters and events at the field.

Based on these and other factors contained within this report, we recommend that the best site for a new Hanover substation is on 611 Webster Street. The ultimate decision where to locate the station is up to the Town, but the Webster site is the closest to the ideal site in size and location to meet the fire departments current and future needs.

INTRODUCTION

Objective

The Town of Hanover commissioned CDR Maguire to perform a site evaluation for a potential North Hanover substation for the Hanover Fire Department. The resulting objective would;

A. Analyze the existing facility and site as to its deficiencies and its ability to accept renovations and repairs required for continued and future use.

B. Work with the Fire Department to develop a long-term needs program to accommodate equipment/ personnel/technology and physical environment for a period not less than 25 years.

C. Analyze available nearby properties to determine the feasibility and benefits of constructing a new substation and the impact on the facility's response time.

Existing Building

CDR Maguire's evaluation of the existing North Hanover Substation, as compared to the Station's Space Needs Program identified in Section II, revealed that the existing facility is extremely inadequate for meeting the current and future station requirements.

The current station:

- Is not adequate to house a 21st century fire department sub-station.
- Is beyond capacity for all storage needs.
- The apparatus bay doors are narrow and too low for today's apparatus preventing the procurement of state-of-the-art firefighting apparatus and emergency equipment.
- Does not comply with building codes and is not handicap accessible.
- Has structural deficiencies that inhibit the enlargement of the apparatus bays.
- Has no space for a decontamination area.
- Has minimal firefighters accommodations.
- Has no separate accommodations for female firefighters.
- Has no separate gear storage area.
- The existing site is limited and has insufficient space for vehicle parking.
- Has limited ability to adapt to changing department needs.
- Provides no capability for ongoing training of personnel.
- Has no space for classroom training for fire department personnel or the public.

Space Needs Program

To identify the criteria for the needed sub-station, a space needs study was performed. CDR Maguire personnel interviewed members of the Fire Department, investigating issues such as staffing and equipment levels, personnel flow, public spaces, staff spaces, logistical consideration and anticipated

future growth. To validate the identified required spaces, they were compared to NFPA standards as well as communities of similar size and with comparable fire department operations.

Each component of the Program was considered as to its security level, mechanical/electrical requirement and adjacency to other spaces. All areas must comply with the applicable A.D.A., NFPA as well as State and Federal regulatory requirements. (See appendix A for Space Needs Program)

The result of the Space Needs Program study determined that the needed total building square footage, is approximately 14,968 S.F., of which the building footprint should occupy 10,730 S.F. Typically the usable site required to accommodate a fire station is three times the buildings footprint. In this case the minimum usable site would be approximately 32,200 S.F. However, when considering sites one needs to factor not only the lot size but shape and site contours

The existing sub-station facility is only 1,264 S.F and with a site area of approximately 15,600 S.F. and very little opportunity for expansion. The added square footage would relieve some of the overcrowding presently occurring in the Fire Headquarters.

Site Selection

CDR Maguire performed an initial site evaluation of the following four sites:

1160 Main Street (Existing Fire Sub-Station)
848 Main Street
611 Webster Street
59 Old Webster Street.

Based on our evaluation on the following pages, it is our conclusion that two of these sites are suitable for a new sub-station. The existing site is too small and the Old Webster Street facility would require too many concessions to be viable. Ultimately, the final site selection decision will need to be performed by the Town of Hanover as response times, land acquisition costs, construction costs and station displacement will weigh heavily on the final selection.

Site Response Time

This is one of the most critical factors in the site selection process. Chief Blanchard supplied the information required to properly analyze the response time with an awareness of the station's response time and cognizant of areas where they would like an increase in coverage.

To further analyze this aspect, we performed a response time based on minutes rather than distance. The time was based on the National Fire Prevention Agency (NFPA 1710), which recommends that firefighters arrive at an emergency scene within 4 minutes from leaving the station. (Refer to Appendix D for response time studies for the four sites).

Budget, New Facility

Construction costs for fire stations range from $280 to over $360 per square foot. This range is dependent on the size of the facility as well as the construction type and finishes utilized. In addition to

these hard costs, the town should anticipate an additional 33% for "soft costs" such as engineering, F.F.E., and other associated costs. These figures do not include site acquisition or any environmental cleanup costs. Construction costs for the renovations at 59 Old Webster Street would be less but there is also less building to renovate and update.

These figures are based on today's dollars. Currently, the economic data for construction projects Is projected to increase between 3% and 5% yearly.

Schedule

The Town should anticipate a minimum of 24-months for design, bid and construction for this type of project. In addition to the actual work months, the Schedule will need to be adjusted for items such as Town funding process, site acquisition and preparation, as well as moving to a temporary location if the existing North Hanover Station site is selected.

SITE EVALUATIONS

Based on the needs assessment performed, we have concluded that the existing site in its current configuration cannot accommodate the renovations and additions required to meet the fire department's current and future needs. As it currently stands too many concessions to the fire department's programmatic needs would be required to maintain an active fire station on this site.

The initial site evaluation portion of this study assesses appropriately sized sites in the vicinity of the existing North Hanover sub-station based on response time criteria prescribed in NFPA 1710 for delivery of fire and rescue services.

CDR Maguire performed an initial site evaluation for four sites including the existing. Three of the four are town owned properties, the last one being a recently developed commercial structure. The sites considered for the initial evaluation were:

Site No. 1 -1160 Main Street (Existing Fire Sub-Station Site)

No possible expansion is available without the acquisition of adjacent residential properties. To expand the existing station would require the demolition of the station and construction of a new larger two story facility. However, due to lot size limitations this new facility could only house two pumpers.

Site No. 2 – 848 Main Street

This parcel was the previous site of the Curtis School which has since been demolished. However the ball field in the rear of the site is still utilized. The size is suitable for a new facility; the main drawback is the vehicular circulation in proximity to the ball field.

Site No. 3 – 611 Webster Street

Currently an undeveloped wooded lot owned by the town.

Site No. 4 – 59 Old Webster Street

This site is currently developed and houses a two story structure with a large vehicle bay on the first floor. Apparatus access in and out of the facility is an issue as well as the lack of parking and size of existing building.

Evaluation Process

The process of site selection requires a two-stage evaluation to determine a parcel's usability as an emergency response facility.

Stage 1 – Site Factors

The first stage in this process involves identifying site features that are applicable to any parcel of land for the intended usage. This portion of the site analysis is analytical and focuses on the congruent features of the parcels. These features include the following:

Parcel Size – Site should be sufficiently sized and shaped to accommodate the programmed spaces as well as staff parking, public parking, green space parking and vehicle circulation. Some lots may have the appropriate total square footage; however, their shape may render them inappropriate.

Road Frontage and Access – Fire Stations require appropriate road frontage for the apparatus to easily roll out into the main road and should also have sufficient view of other vehicles as they exit. Additionally, the road frontage will have impact on the number of apparatus bays that can be constructed on a parcel.

Topography Cut and Fill – Topography of the site is very important. Due to the nature of fire stations, the apparatus trucks need to exit onto the street at approximately the same grade. In certain cases, the station can be constructed into higher contours; however, this typically requires additional excavation and/or fill to make the site suitable.

Accessibility – A study of public traffic patterns around the proposed parcel of land as well as restrictions. For example, parcels exiting onto a main street would receive a higher ranking than those exiting onto a secondary street, additionally parcels near active schools, railroad crossings, low bridges and playgrounds would receive a lower ranking.

Available Utilities – Sites should be evaluated based on the availability of utilities found at the street. Parcels without the appropriate natural gas, electrical service, sanitary sewer, water, telephone, cable would be ranked appropriately lower. At this stage, the capacity of the specific utilities are not evaluated; however if it is known that a particular utility is undersized, then the rating would be adjusted accordingly.

Storm Water Drainage – This category identifies potential problems associated with storm water collection and drainage. The presence of drainage swales, collection basins and associated natural features currently present are evaluated. Features such as soil permeability, water flow, vernal pools and runoff are taken into consideration, especially if no storm drainage system is present.

Wetlands – This issue takes into consideration location and size of wetlands. Each site should be analyzed to evaluate the impact of the wetland on the size of the site. Additionally, wetland reclamation and relocation would be considered if the site size is permitted. However, the ranking would be adjusted accordingly.

Other Detrimental Features – This category takes into consideration natural features that may impact the overall size of the site. The site may have easements, rivers and streams, ledge out cropping and setbacks that will negatively impact the size of the parcel or limit the size of the proposed structure.

Demolition Hazards – This category deals with sites that will require building demolition to prepare the site for construction. Typically, before a building is demolished, it needs to be evaluated for the presence of asbestos-containing materials which would need to be properly abated and disposed of prior to demolition. Any site that has a building to be removed will receive a lower rating than a clean site. Additionally, paved areas will also receive a lower rating since they also will require paving removal.

Underground Waste or Hazardous Materials – Unless the site is known to be contaminated, there is really no way of determining the presence of underground hazardous materials without performing test pits. Consequently, if the presence of contaminates is known, the parcels are ranked according to their levels and anticipated effort to remove the contaminants. If the site is known to be heavily contaminated, it will automatically be considered as unsuitable and ranked as such. Typically, if no information is available on any of the sites, they are all ranked at the same score.

Stage 2 – Building Factors

The second stage of this evaluation is to determine how the same parcel of land fares based on criteria specifically dedicated to an emergency response facility. This stage is more subjective than Stage 1 and takes into consideration the following items:

Traffic Separation – Vehicular and pedestrian circulation around fire stations is particularly important to maintain safety and not impede response time. It is extremely important that separate circulation can be provided for vehicles, apparatus and pedestrians and should not cross or impede the exiting of emergency response vehicles.

Parking – Typically, this category includes parking for firefighters as well as for visitors including handicap parking. However, in the case of the North Hanover Station, there is very little requirement for visitors' parking spaces. Parking should be located so that it is readily available to the firefighters and, as mentioned in the traffic separation, should not impede on the exiting of emergency vehicles. Parking should be maximized to take into consideration shift changes, training and future station growth.

Ease of Apparatus Exiting and Entering - It is important that the front apron of the station be sufficiently sized to accommodate a parked fire truck. This allows the vehicle to pull out of the station in a straight line and have complete visibility of the street prior to turning. Once out on the street, the fire apparatus needs an appropriate turning radius to safely turn and maximize the ease onto the street.

Drive-Through Capabilities – This is an increasingly popular design element of state-of-the-art fire facilities. The typical way to return to an apparatus back into the station is to back it in from

the frontage street. If the front apron is sufficiently sized and depending on the size of the apparatus, it is possible to back an apparatus without blocking the frontage street. However, the better and preferred way is to have a drive-through bay approach from the rear of the building. The drive-through bay requires additional vehicular access and a rear apron which adds a significant amount of required land.

Build Ability – This category evaluates the parcel of land on the ability for the station to be properly constructed on the site while fulfilling all of its programmatic needs. In an existing facility, phasing of the facility would be taken into consideration as not to disrupt the operations of the facility.

Response Time to Potential Events – As previously mentioned this is one of the most critical factors in the site selection process. Sites were ranked based on the response time studies in appendix D. Response times were analyzed from each of the four sites including the fire headquarters. Sites providing more coverage within the Town were given a higher ranking than those that left areas of the town exposed.

Acquisition Costs –Town owned properties normally have a higher ranking as there are no purchase costs.

Potential Negative Reaction – This category attempts to identify the probable level of objections that could be raised by neighbors, advocacy groups or other parties. For example, Town-owned school properties, playgrounds and historical buildings involve other government agencies. Consequently, based on this information, all school properties and parkland were given a lower ranking.

The four sites were assessed through direct observation, discussions with appropriate personnel, and evaluations of the 18 categories identified above. After Stage 1 was completed, a matrix was produced. A numerical score between 0-10 was given for each attribute (0 being the lowest score and 10 being highest). Each site's score was tallied, resulting in a Phase 1 subtotal for each.

Completing Stage 2, a similar matrix was developed resulting in a Phase 2 subtotal. The total score based on the sum of the two subtotals resulted in a hierarchy ranking of the four sites.

STAGE 1 Site Issues	Site 1 1160 Main Street (Existing Sub-Station)	Site 2 848 Main Street	Site 3 611 Webster Street	Site 4 59 Old Webster Street
Parcel Size	1	8	9	2
Road Frontage and Access	2	8	9	2
Topography Cut and Fill	8	8	8	6
Accessibility	8	8	8	4
Available Utilities	9	9	9	9
Storm Water Drainage	8	8	8	6
Wetlands and Site Impacts	8	8	8	6
Other Detrimental Features	6	6	8	6
Demolition Hazards	8	10	10	10
Underground Waste and Hazardous Materials	5	5	5	10
Total Stage 1 Points	63	78	82	61

Ranking	0	lowest
	10	Highest

STAGE 2 Building Issues	Site 1 1160 Main Street (Existing Sub-Station)	Site 2 848 Main Street	Site 3 611 Webster Street	Site 4 59 OLD Webster Street
Traffic Separation	6	8	8	6
Parking	4	8	8	4
Ease of Apparatus Departing/Returning	5	9	9	2
Drive Through Capability	0	9	9	0
Build Ability	0	9	9	6
Land Available Around Building	4	4	6	4
Response Time	4	6	8	2
Acquisition Costs	10	10	10	2
Potential Negative Reaction	9	6	8	9
Building Programmatic Needs	4	10	10	4
Stage 2 Total Points	46	79	85	39
Stage 1 Total Points	63	78	82	61
Total Points	**109**	**157**	**167**	**100**
Final Ranking	3	2	1	4

The rankings for the four sites ranged between 167 and 100. Since an underground waste and hazmat evaluation was not performed on three of the sites, this could shuffle the third and forth ranking but would not be sufficient in rearranging all of the rankings.

Based on the available information the sites in the order of their final ranking are as follows:

Final Ranking	*Score*	*Site*
1	167	611 Webster Street
2	157	848 Main Street
3	109	1160 Main Street (Existing Sub-Station)
4	100	59 Old Webster Street

Attached is a brief summary for each site indicating advantages and disadvantages including associated conceptual site plans and response times. Refer to Appendix D for site plans, conceptual layouts and response time studies.

SITE DESCRIPTIONS

611 Webster Street Site

The site is awkwardly shaped, Town owned parcel of land. The frontage to Webster Street can accommodate all of the programmatic needs of the department without encroaching on the portions of the site located within the wetlands or the 100 foot setback.

The site is an undeveloped wooded field with a slight slope towards the back. No major site issues are anticipated.

All applicable utilities are located on Webster Street and there would not be any major utility relocation associated with the development of this site. An on-site septic system would be required since there is no sewer line in the street.

This site is very compatible to the ideal site.

Advantages

1. Construction on new site without impacting site operations of the existing station.
2. Improves the current response time.
3. Turn key operation from contractor.
4. All utilities are available at site.
5. All of the station's programmatic needs can be fulfilled.
6. Portions of site can be used for training
7. Excellent site lines along Webster Street.
8. Town owned property.
9. Sale of current station property can offset cost.

Disadvantages

1. Possible neighborhood issues
2. The current station would become surplus property

848 Main Street

This parcel was previously utilized as a school. The structure has since been demolished, with the outline of the building foundation still present. Additionally the rear of the site is still used as a baseball field.

The site is sufficiently sized to accommodate all of the programmatic needs of the department without encroaching on baseball field.

All applicable utilities are located on Main Street and there would not be any major utility relocation associated with the development of this site.

Advantages

1. This parcel allows for a new station to be constructed without impacting on the operations of the existing station.
2. Improves the current response time.
3. Turn key operation from contractor
4. All utilities are on site.
5. All of the stations programmatic needs can be fulfilled
6. Town owned site
7. Sale of current station property can offset cost.

Disadvantages

1. The current station would become surplus property.
2. Possible neighborhood issues
3. Additional costs are required to remove the existing foundation walls
4. Additional parking is required for the ball field
5. Play grounds and fire stations are typically not the best neighbors. Especially on a tight site such as this one. For these two elements to work together separate vehicular entrances to the site are needed so that responding firefighters do not need to be concerned with other vehicles either entering or exiting their parking area. The other option would be to eliminate the ball field.

1160 Main Street (Existing Sub-Station Site)

At only 15,600 SF the existing sub-station site is extremely small with a street frontage onMain Street of only 120 feet. Based on this information and the building setbacks, the maximum size facility could only accommodate a two bay station. To try and meet some of the living quarter's requirements the station would have to be two stories. The maximum size of the facility would be in the 5,600 sf range and it would require numerous programmatic concessions, including parking and continued interference with traffic on Main Street.

Since the station is currently utilized, the apparatus currently stationed there would need to be relocated during construction. This would require space to relocate the equipment and it could temporarily negatively impact the response time in North Hanover.

All applicable utilities are located on Main Street and there would not be any major utility relocation associated with the development of this site.

Advantages

1. Response time remains unchanged
2. Town owned property
3. No apparent issues with neighborhood

Disadvantages

1. The existing station and site are too small
2. Not all of the programmatic needs of the department can be met
3. Required parking cannot be achieved
4. Need temporary location for station to be relocated during construction
5. Front apron cannot accommodate vehicles backing up without blocking road
6. No possibility of a drive through station

59 Old Webster Street

This parcel has been recently developed by a commercial owner and includes a two story pre-engineered metal building. There are significant negative issues with this building and site.

Building

The size of the building is established and, due to the tight site restrictions, there is no possibility of expansion. The fire department would need to make numerous concessions to its program to fit within these spaces. Some of these concessions would directly impact the station's operations. For example, the circulation around the apparatus would be very tight, specifically around the ambulances. Some of the required storage areas on the apparatus bays cannot be achieved.

The interior of the facility would need to be gutted and building systems updated for use as a fire station.

The level of the second floor varies, which would require a multi stop lift to provide accessibility to all levels. As part of this renovation the entire facility would need to be brought up to current accessibility standards. The one exception would be the area relegated to use by able bodied fire fighters.

Site

The site is very small and has insufficient vehicular turning space in front of the facility for returning apparatus. Responding vehicles need to fully pull out of the building before making their turn. However, at this site this cannot be achieved, the distance from the building to the edge of the street asphalt is barely 35 feet and it reduces to close to 25 feet.

Parking is very limited and consists of a parking area to the front of the facility which would interfere with the deployment of the apparatus and a small area on the side of the facility. While theparking could be expanded to the West on town owned property it would require reworking all of the storm water detention basins and possibly building underground storm water recharging tanks.

<u>Advantages</u>

1. Existing building
2. Reduced construction cost
3. No apparent neighborhood issues
4. Sale of current station property can offset cost.

<u>Disadvantages</u>

1. The existing building and site are too small
2. Not all of the programmatic needs of the department are met
3. Required parking cannot be achieved
4. Front apron is too small
5. No possibility of a drive through station
6. Purchase cost
7. The current station would become surplus property
8. Negatively impacts the response time to the South and East_____.
9. Departing fire apparatus must make several maneuvers into street before commencing turn

CONSTRUCTION COST CONSIDERATIONS

To properly evaluate the selected sites, we have created a template which compares all of the sites to a control site. The purpose for this control site is to establish a benchmark for comparison to the other sites. The control site assumes the site is undeveloped and town-owned; consequently it does not take into consideration acquisition costs or associated building demolition.

Based on the construction cost chart, we can compare and analyze the project costs at two different stages.

a. Construction "hard costs"
b. Construction costs including "soft costs"

The construction "hard cost" refers to the money required to prepare the site and construct the actual building with associated construction contingencies, i.e. the "brick and mortar" of the building.

The project "soft costs" include all costs required for the design and associated support. This includes engineering and design fees, furniture and equipment, owner's project management fees, testing and associated costs, legal fees, surveying, etc.

At this stage there are potential unknowns which could impact the project costs such as unsuitable soil conditions, septic system, hazardous materials and site acquisition.

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NORTH HANOVER SUB-STATION - CONSTRUCTION COSTS Oct-14

	Variables	Control Site	Site #1 1160 Main Street	Site #2 848 Main Street	Site #3 Webster Street	Site #4 59 Old Webster Street
Building Square Footage						
New Construction sf		14,968	5,600	14,968	14,968	0
Existing Building sf		0	1,264	0	0	5,205
Construction Costs						
Demolition	$ 15.00	$ -	$ 18,960	$ -	$ -	$ -
Building Construction	$ 320.00	$ 4,789,760	$ 1,792,000	$ 4,789,760	$ 4,789,760	$ -
Existing Building Renovation	$ 180.00	$ -	$ -	$ -	$ -	$ 936,900
Existing Building Structural Upgrades	$ 25.00	$ -	$ -	$ -	$ -	$ 130,125
Site Upgrades (modifications to existing- Allowance)		$ -	$ -	$ 120,000	$ -	$ 200,000
Communication Technologies (Allowance)		$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Construction Contingencies	10%	$ 478,976	$ 179,200	$ 478,976	$ 478,976	$ 106,703
Sub-Total		$ 5,368,736	$ 2,090,160	$ 5,488,736	$ 5,368,736	$ 1,473,728
Station Displacement Cost		$ -	$ 120,000	$ -	$ -	$ -
Design Engineering Fees	8%	$ 429,499	$ 167,213	$ 439,099	$ 429,499	$ 117,898
Project Management	4%	$ 214,749	$ 83,606	$ 219,549	$ 214,749	$ 58,949
Furniture And Equipment (Allowance)		$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000
Additional Project Costs	3.8%	$ 204,012	$ 79,426	$ 208,572	$ 204,012	$ 56,002
Bonding	0.4%	$ 21,475	$ 8,361	$ 21,955	$ 21,475	$ 5,895
Sub-Total		$ 6,378,471	$ 2,688,766	$ 6,517,911	$ 6,378,471	$ 1,852,471
Construction Escalation to 2016 (4% per year)	8%	$ 510,278	$ 215,101	$ 521,433	$ 510,278	$ 148,198
Land Acquisition (estimated value)		$ -	$ -	$ -	$ -	$ 400,000
GRAND TOTAL		$ 6,888,749	$ 2,903,867	$ 7,039,344	$ 6,888,749	$ 2,400,669
COSTS PER SQUARE FOOT		$ 460	$ 519	$ 470	$ 460	$ 461

APPENDIX A- SPACE NEEDS PROGRAM

SPACE NEEDS PROGRAM EVALUATION

For

North Hanover Fire Station

Hanover Fire Department

DRAFT

September 5, 2014

CDR | MAGUIRE

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	Present		Future (2035)	
Personnel, Day Shift	Per Shift	Total	Per Shift	Total
Fire Chief	0	0	0	0
Deputy Fire Chief	0	0	0	0
Captain/Shift Commander	1	1	1	1
EMS Officer	0	0	1	1
Firefighters –Career	3	12	4	16
Firefighters –On Call		28		32
Dispatch	0		0	
Training Officer	0		0	
Fire Prevention	0		0	
Administration	1	1	1	1
Total	5	42	6	51

	Present	Future
	Parking per Shift	Parking per Shift
Staff	28	32
Public	0	0

Site Features

Provide space for dumpster, A/C condenser, emergency diesel generator (48 hour service for entire building), and future communications tower.

Provide gated parking for staff
Heated approach slabs
Drive-thru

Interior Features

- All wall clocks inter wired
- Multiple data and outlet locations in each room

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	ITEM	PROPOSED SF	Two Story	
			1ST	2ND
APPARATUS AND SUPPORT				
APPARATUS ROOM	I-4	4,320	4,320	
EQUIPMENT STORAGE	I-6	140	140	
TURNOUT GEAR ROOM	I-7	320	320	
FIREFIGHTER'S TOILET	I-8	60	60	
DELUGE SHOWER	I-9	36	36	
AIR SUPPLY ROOM	I-10	216	216	
WASHER/DRYER	I-11	64	64	
"CONTAMINATED" WASHER EXTRACTOR	I-12	80	80	
BIOHAZARD/DECON ROOM	I-13	128	128	
FIRST AID STORAGE	I-14	64	64	
FIRST AID TRIAGE	I-15	144	144	
HOSE TOWER	I-16	144	144	
READY ROOM/BATTERY CHARGING	I-17	36	36	
PUBLIC/LOBBY/DISPATCH				
WATCH ROOM	I-18	200	200	
PUBLIC LOBBY/VESTIBULE/RECEPTION	I-19	196	196	
PUBLIC TOILETS	I-20	100	100	
ADMINISTRATION				
EMS OFFICE	I-21	177	177	
CAPTAIN'S OFFICE	I-22	120	120	
STUDY ROOM	I-23	120		120
SUPPLY CLOSET	I-24	36	36	
SERVER CLOSET	I-25	64	64	
INDOOR TRAINING				
TRAINING EQUIPMENT STORAGE	I-26	80	80	
TRAINING ROOM	I-27	800	800	
FITNESS	I-28	580		580
FIREFIGHTER'S QUARTERS				
FIREFIGHTER'S ROOMS (8)	I-29	1152		1152
LINEN WASHER AND DRYER	I-30	64		64
TOILET AND SHOWER	I-31	180		180
DAY ROOM	I-32	400		400
KITCHEN/DINING	I-33	468		468
PANTRY	I-34	80		80

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	ITEM	PROPOSED SF	Two Story	
			1ST	2ND
BUILDING SUPPORT AND SYSTEMS				
JANITOR'S CLOSET	I-35	108	72	36
BUILDING SUPPLIES ROOM/STORAGE	I-36	100		100
MAINTENANCE AND STORAGE	I-37	100	100	
ELEVATOR		160	80	80
ELEVATOR MACHINE ROOM		80	80	
MECHANICAL ROOM		277	277	
ELECTRICAL/TEL ROOM		120	120	
SUBTOTAL		11,514	8,254	3,260
WALLS, CIRCULATION, STAIRS, CHASES @30%		3,454	4,476	978
TOTAL GROSS FIRST FLOOR			10,730	
TOTAL GROSS SECOND FLOOR				4,238
TOTAL BUILDING GROSS		14,968	14,968	

.

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APPARATUS ROOM

FLOOR AREA NEEDED	3 bays @ 18' x 80' = 4,320 SF
ADJACENCY REQUIREMENTS	Adjacent to firefighters' quarters and to support spaces. Drive thru bays
PUBLIC ACCESS	Controlled by public lobby
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Eye wash, area for printer and radio charging (Ready Room), Storage for hose coils – 1,500 LF of 4” 1,500 LF of 2½” 1,500 LF of 1½”
FRONT LINE RESPONSE	2 Engines @ 38' 1 Forest @ 18’ 1 Ambulance @ 28’
SPECIAL NEEDS	Electric cord reel. Overhead doors 14' x 14', R-19 Insulation Overhead power, Overhead water fill, compressed air. Overhead door operations: At door jamb, at office, and on apparatus vehicles, safety signals beside door jams and light curtain door stops Wide trench drains. Mop sink In-slab radiant heat for the apparatus bay and approach slabs Acoustic considerations Sand/oil separator Heavy-duty overhead door operators Zetron speakers and lights Vehicle exhaust system
FLOOR MATERIALS AND FINISHES	Hardener and sealer concrete slab
WALL MATERIALS AND FINISHES	CMU with epoxy paint
CEILING MATERIALS AND FINISHES	Painted exposed/GWB

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LIGHTING	Low-level night lighting, LED dimmable
HVAC	No A/C, provide vehicle exhaust system, ceiling fans

DRAFT

EQUIPMENT STORAGE

FLOOR AREA NEEDED	10' x 14'' = 140 SF
ADJACENCY REQUIREMENTS	Next to apparatus room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Storage for hand tools, ropes, portable generator, ice sled, 2 rows of 18" deep metal mesh shelving on one wall
FLOOR MATERIALS AND FINISHES	Concrete with hardener
WALL MATERIALS AND FINISHES	CMU-epoxy paint
CEILING MATERIALS AND FINISHES	Painted exposed structure/GWB
LIGHTING	LED
HVAC	No A/C

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TURN-OUT GEAR ROOM

FLOOR AREA NEEDED	10 SF for each locker (32) = 320 SF
ADJACENCY REQUIREMENTS	Next to apparatus room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	32 steel mesh cubicles 24" x 24" with top and bottom shelves Zetron speakers
SPECIAL NEEDS	Zetron speakers Floor drains Electrical outlets in each cubicle Multiple entrances into gear room and multiple exits into apparatus bay.
FLOOR MATERIALS AND FINISHES	Concrete with hardener/or rubber flooring
WALL MATERIALS AND FINISHES	CMU with epoxy paint
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C, very good ventilation – Maintain gear room under negative pressure

DRAFT

FIREFIGHTER'S TOILETS

FLOOR AREA NEEDED	Unisex toilet (1 @ 80 SF) 80 SF
ADJACENCY REQUIREMENTS	Next to apparatus room
PUBLIC ACCESS	None
FURNITURE, FIXTURES & EQUIPMENT	toilet, sink,
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	CMU with ceramic tile wainscot
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	A/C, good ventilation

DRAFT

DELUGE SHOWER

FLOOR AREA NEEDED	6' x 6' = 36 SF
ADJACENCY REQUIREMENTS	Adjacent to Biohazard/Decon Room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	None
FURNITURE, FIXTURES & EQUIPMENT	Overhead, large diameter emergency shower head with pull chain, and eyewash device
FLOOR MATERIALS AND FINISHES	Ceramic tile Recessed slab with curb
WALL MATERIALS AND FINISHES	CMU with ceramic tile
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED, vaporproof
HVAC	No A/C, good exhaust

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AIR SUPPLY ROOM

FLOOR AREA NEEDED	12' x 20' = 240 SF
ADJACENCY REQUIREMENTS	Off of apparatus room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	Rack for storage of air tanks, 6' long workbench, tool storage, SCBA air tanks, dive gear storage, SCBA compressor 4' x 10'
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Concrete with hardener
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C, good ventilation

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WASHER/DRYER

FLOOR AREA NEEDED	8' x 8' = 64 SF
ADJACENCY REQUIREMENTS	Adjacent to Decon Room and "Contaminated" washer extractor
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	None
FURNITURE, FIXTURES & EQUIPMENT	Washer and dryer with shelving above and folding counter
SPECIAL NEEDS	Zetron speakers Floor drain
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C, good ventilation, dryer vent

DRAFT

"CONTAMINATED" WASHER/DRYER

FLOOR AREA NEEDED	8' x 10' = 80 SF
ADJACENCY REQUIREMENTS	Near Decontamination Room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	None
FURNITURE, FIXTURES & EQUIPMENT	Heavy-duty, stainless steel, 45 lb. capacity washer extractor and dehydrator with shelving above
SPECIAL NEEDS	Floor drain Thickened floor slab Gravity drain from extractor with air gap
FLOOR MATERIALS AND FINISHES	Concrete with hardener/ or rubber flooring
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C, good ventilation, dryer vent

DRAFT

BIOHAZARD/DECON ROOM

FLOOR AREA NEEDED	8' x 16' = 128 SF
ADJACENCY REQUIREMENTS	Near deluge shower accessible from the exterior and the apparatus bay
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	3' x 4' floor sink, hose with spray, sink with eye wash device, large/deep wall-mounted stainless steel sink with foot controls
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	CMU with ceramic tile wainscot
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	Good ventilation

DRAFT

FIRST AID STORAGE

FLOOR AREA NEEDED	8' x 8' = 64 SF
ADJACENCY REQUIREMENTS	Near apparatus room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	12" metal shelving, spaced at 12" apart on three sides of room. Lockable narcotics cabinet.
FLOOR MATERIALS AND FINISHES	Sealed concrete
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	Good ventilation, A/C

DRAFT

FIRST AID TRIAGE

FLOOR AREA NEEDED	10' x 12' = 120 SF
ADJACENCY REQUIREMENTS	Near apparatus room Adjacent to main entrance and accessible from the exterior
PUBLIC ACCESS	Limited (controlled)
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	Base and wall cabinets on one wall with sink and 2 chairs
SPECIAL NEEDS	Able to accommodate ambulance gurney Zetron speakers
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	Good ventilation, A/C

DRAFT

TRAINING/HOSE TOWER

FLOOR AREA NEEDED	12’ x 12’ = 144 SF
ADJACENCY REQUIREMENTS	Near apparatus bay
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	None
FURNITURE, FIXTURES & EQUIPMENT	3' x 4' floor sink, hose washing equipment (dept. to confirm equipment space)
SPECIAL NEEDS	Floor drain Hose pulley system to drip dry hoses Incorporate training elements within tower
FLOOR MATERIALS AND FINISHES	Concrete with sealer
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	Exposed structure/GWB
LIGHTING	LED
HVAC	No A/C

DRAFT

READY ROOM/BATTERY CHARGING

FLOOR AREA NEEDED	3' x 12' = 36 SF
ADJACENCY REQUIREMENTS	Alcove adjacent to Apparatus Room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Counter with storage cabinets and shelving
SPECIAL NEEDS	Electrical wire mold outlets and data jacks
FLOOR MATERIALS AND FINISHES	Sealed concrete.
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED Task lighting
HVAC	No A/C

DRAFT

WATCH ROOM

FLOOR AREA NEEDED	200 SF
ADJACENCY REQUIREMENTS	Direct view to Public/Lobby entrance, view into Apparatus Room. Adjacent to Triage Room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	2 desks for report writing, 2 chairs, wall space for maps, counter with storage for forms under at window to Public Lobby, 20 LF shelving, white board, cable TV.
SPECIAL NEEDS	Window with pass-through and counter to Public Lobby/Reception Controls for VOC-ALARM or ZETRON. CCTV Room darkening shades.
FLOOR MATERIALS AND FINISHES	Resilient Tile
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED, 2 level lighting, task lighting
HVAC	A/C

DRAFT

PUBLIC LOBBY/VESTIBULE/RECEPTION

FLOOR AREA NEEDED	14' x 14' = 196 SF
ADJACENCY REQUIREMENTS	Next to Watch Room; Speak-thru and paper slot to watch room.
PUBLIC ACCESS	Full access
SECURITY REQUIREMENTS	Moderate; controlled exit from Lobby to the rest of the building. All public must check in at watch room first.
FURNITURE, FIXTURES & EQUIPMENT	
SPECIAL NEEDS	Surveillance from Watch room, automatic door operators
FLOOR MATERIALS AND FINISHES	Porcelain pavers
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED plus accept lighting
HVAC	A/C

DRAFT

PUBLIC TOILETS

FLOOR AREA NEEDED	2 @ 6.5' x 7.5' = 100 SF
ADJACENCY REQUIREMENTS	Access from Public Lobby but not visible
PUBLIC ACCESS	High
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Toilet and sink
SPECIAL NEEDS	Handicapped accessible Floor drain
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	Ceramic tile wainscot
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C, good exhaust tied to light switch

DRAFT

EMS OFFICE

FLOOR AREA NEEDED	11' x 15' = 165 SF 2' x 6' Lockable storage closet 177 SF TOTAL
ADJACENCY REQUIREMENTS	Captain's Office
PUBLIC ACCESS	Limited, controlled
FURNITURE, FIXTURES & EQUIPMENT	30" x 6' desk with return and credenza, desk chair, with 2 file lateral file drawers, TV/VCR Closet with adjustable metal shelving
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

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CAPTAIN'S OFFICE (duty officer)

FLOOR AREA NEEDED	10' x 12' = 120 SF
ADJACENCY REQUIREMENTS	Near EMS and Watch room
PUBLIC ACCESS	Limited, controlled
FURNITURE, FIXTURES & EQUIPMENT	(1) 30" x 6' desk and return, 1 desk chair, 1 guest chair, 4 LF book shelves, (1) 3' storage cabinets, (1) 3-drawer lateral files with top
SPECIAL NEEDS	Coat closet Zetron speakers
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

DRAFT

STUDY ROOM

FLOOR AREA NEEDED	120 SF
ADJACENCY REQUIREMENTS	Adjacent to sleeping quarters
PUBLIC ACCESS	Controlled
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Table and chairs to accommodate 4, credenza
SPECIAL NEEDS	6' white board, tackable surface Cable, data/phone
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

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SUPPLY CLOSET

FLOOR AREA NEEDED	6' x 6' = 36 SF
ADJACENCY REQUIREMENTS	Adjacent to Administrative Workroom
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	4 rows of 24" adjustable metal shelving on two walls
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

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SERVER CLOSET

FLOOR AREA NEEDED	8' x 8' = 64 SF
ADJACENCY REQUIREMENTS	Off Administrative offices
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	
SPECIAL NEEDS	UPS system, 4 data ports at desk, 1 filing cabinet
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB/exposed structure painted
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

DRAFT

TRAINING EQUIPMENT STORAGE

FLOOR AREA NEEDED	8' x 10' = 80 SF
ADJACENCY REQUIREMENTS	Access from training room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	High
FURNITURE, FIXTURES & EQUIPMENT	Shelving, 1½' deep for the storage of training equipment; VCR, TV monitor, slide projector, training tapes, CPR training equipment such as mannequins. Area to store tables and chairs.
FLOOR MATERIALS AND FINISHES	Carpet
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	No A/C

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TRAINING ROOM

FLOOR AREA NEEDED	40 people @ 20 SF/person = 800 SF
ADJACENCY REQUIREMENTS	Accessible from lobby and adjacent to Training Equipment Storage
PUBLIC ACCESS	Yes
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Table and chairs to accommodate 40; podium, stand with wheels for VCR, video monitor, and video and slide projectors. White board, fabric covered tackable surfaces. Room darkening shades. Cable data outlets.
SPECIAL NEEDS	Alcove for coffee prep to include small refrigerator, microwave, sink, coffeemaker, and cabinets above. Zetron speakers Sound control to adjacent spaces Exterior access
FLOOR MATERIALS AND FINISHES	Carpet
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED with dimmers
HVAC	A/C with good exhaust system

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FITNESS

STAFF	All
FLOOR AREA NEEDED	580SF
ADJACENCY REQUIREMENTS	Direct access to showers
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Treadmill, stationary bicycle, universal weight machines. Equipment will be furnished with FF&E.
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Clock, wall-mounted TV, cable, mirrored wall. Sport flooring on concrete slab, sound insulation
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C, good ventilation, separate control

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FIREFIGHTER'S ROOMS

FLOOR AREA NEEDED	8 @ 8' x 18' = 1152 SF
ADJACENCY REQUIREMENTS	Good access to Apparatus Room Adjacent to toilet rooms Lockers outside of sleeping area
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Each room to have a chair, extra long twin bed, small built-in desk, (4) 2' x 2' full size lockers. Provide 2 power, 2 data and 2 cable TV outlets on all walls. Room darkening shades.
SPECIAL NEEDS	Zetron speakers Sound attenuation in walls
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED, 2 light levels Task lighting
HVAC	A/C

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"LINEN" WASHER/DRYER

FLOOR AREA NEEDED	8' x 8' = 64 SF
ADJACENCY REQUIREMENTS	Near firefighters' quarters
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	None
FURNITURE, FIXTURES & EQUIPMENT	Stacked washer/dryer with shelving, folding counter and cabinets for accessories.
SPECIAL NEEDS	Floor drain and drain pan. Zetron speakers. Wash sink in cabinet
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	No A/C, good ventilation, dryer vent

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TOILET & SHOWER

FLOOR AREA NEEDED	3 Unisex Toilet Rooms 3 at 10’ x 6’ = 180 SF
ADJACENCY REQUIREMENTS	Near Firefighters Rooms
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Sink, toilet, shower with drying area.
SPECIAL NEEDS	1 full-length mirror, Zetron speakers.
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	GWB with ceramic wainscoting
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	A/C

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DAY ROOM

FLOOR AREA NEEDED	400 SF
ADJACENCY REQUIREMENTS	Good access to Apparatus Room near Kitchen/Dining
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Recliners, couch and seating for 8. Provide power and cable TV outlets on all walls.
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Carpet
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED, multiple TV jacks, task
HVAC	A/C

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KITCHEN/DINING

FLOOR AREA NEEDED	Kitchen 18 x 12 = 216 SF Dining 18’ x 14’ = 252 SF TOTAL = 468 SF
ADJACENCY REQUIREMENTS	Near Day Room and pantry
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Commercial appliances; 6 burner range with oven and hood, microwave, 20 CF refrigerator 20 CF freezer/ large deep sink, dishwasher, water tap at range, solid-surface countertop, tables to accommodate 16 plumbed coffeemaker
SPECIAL NEEDS	Zetron speakers
FLOOR MATERIALS AND FINISHES	Ceramic tile, quarry tile
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C, range exhaust

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PANTRY

FLOOR AREA NEEDED	10' x 8'' = 80 SF
ADJACENCY REQUIREMENTS	Alcove off of Kitchen
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	(4) 24" x 24" lockable storage closets, (1 per shift) keyed individually with locks, 1 50-lb. ice maker, shelving elsewhere
FLOOR MATERIALS AND FINISHES	Ceramic tile, quarry tile
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	A/C

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JANITOR'S CLOSETS

FLOOR AREA NEEDED	(1 on each floor) @ 6' x 6' = 36 SF 36 x 3 = 108 SF TOTAL
ADJACENCY REQUIREMENTS	Centrally located
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Floor sink, mop racks, shelving
FLOOR MATERIALS AND FINISHES	Ceramic tile
WALL MATERIALS AND FINISHES	GWB with ceramic tile wainscoting
CEILING MATERIALS AND FINISHES	GWB
LIGHTING	LED
HVAC	No A/C

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BUILDING SUPPLIES ROOM/STORAGE

FLOOR AREA NEEDED	10' x 10' = 100 SF
ADJACENCY REQUIREMENTS	None
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	Three rows of adjustable 24" deep shelves on two walls and 12" deep shelves on one wall
FLOOR MATERIALS AND FINISHES	VCT
WALL MATERIALS AND FINISHES	GWB
CEILING MATERIALS AND FINISHES	ACT
LIGHTING	LED
HVAC	No A/C

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MAINTENANCE & STORAGE

FLOOR AREA NEEDED	10' x 10' maintenance, 100 SF
ADJACENCY REQUIREMENTS	First floor, good access to exterior and Apparatus Room
PUBLIC ACCESS	None
SECURITY REQUIREMENTS	Moderate
FURNITURE, FIXTURES & EQUIPMENT	6' workbench with stool and tool rack above, 30 LF shelving
FLOOR MATERIALS AND FINISHES	Concrete with hardener
WALL MATERIALS AND FINISHES	CMU
CEILING MATERIALS AND FINISHES	GWB or exposed
LIGHTING	LED
HVAC	No A/C, ventilation

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APPENDIX B- CONCEPTUAL PLANS AND ELEVATIONS

FRONT ELEVATION

Revisions :

Approved :

CDR MAGUIRE

Architects / Engineers / Planners

211 Congress Street, 11th Floor
Boston, Massachusetts 02110
TEL. (617) 778-1440

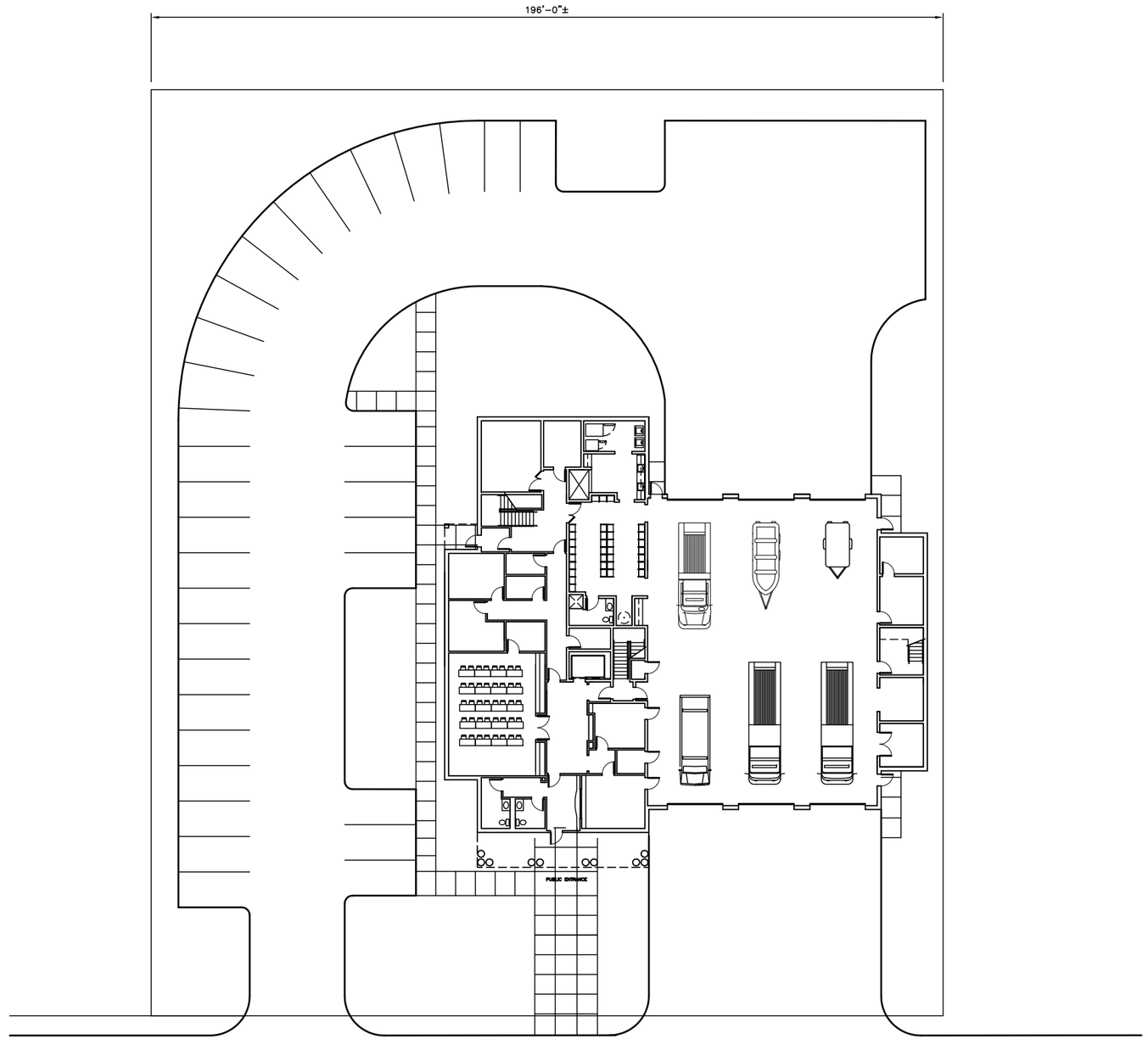
Proj. Mgr.: F.C.
Designed : F.C.
Drawn :
Checked :
Scale : AS NOTED
Date : 9-4-2014

HANOVER F.D.
STATION #1

Proj. No.

Dwg. No.

SK.A1



SITE PLAN

SCALE: 1/32" = 1'-0"

Revisions :

Approved :

CDR MAGUIRE

Architects / Engineers / Planners

211 Congress Street, 11th Floor
Boston, Massachusetts 02110
TEL. (617) 778-1440

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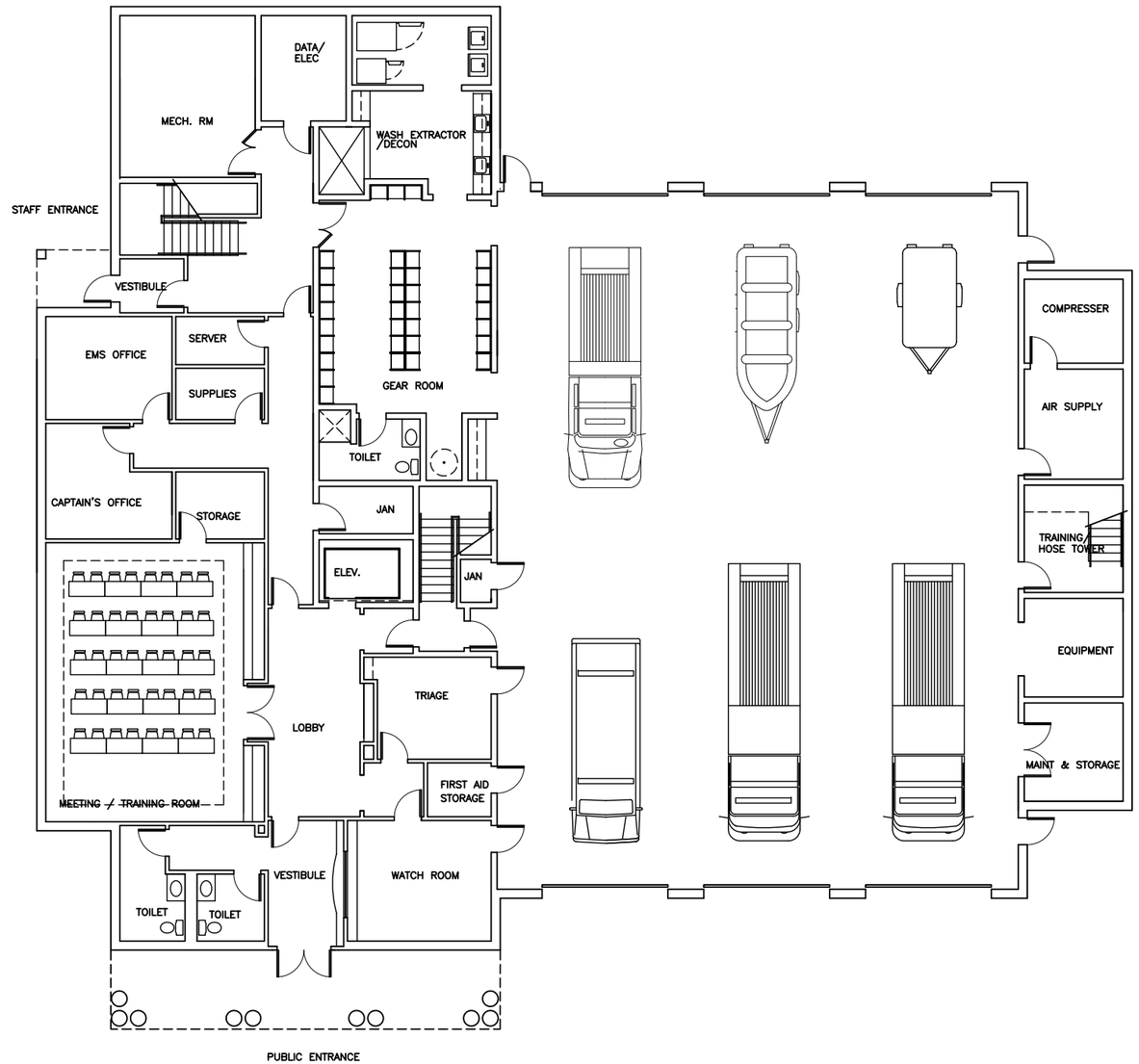
Designed : F.C.
Drawn :
Checked :
Scale : AS NOTED
Date : 9-4-2014

HANOVER F.D.
STATION #1

Proj. No.

Dwg. No.

SK.A2



FIRST FLOOR PLAN

SCALE: 1/16" = 1'-0"

FIRST FLOOR 10,447

Revisions :

Approved :

CDR MAGUIRE

Architects / Engineers / Planners

211 Congress Street, 11th Floor
Boston, Massachusetts 02110
TEL (617) 778-1440

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Designed : F.C.
Drawn :
Checked :
Scale : AS NOTED
Date : 9-4-2014

HANOVER F.D.
STATION #1

Proj. No.

Dwg. No.

SK.A3

SECOND FLOOR PLAN

SCALE: 1/16" = 1'-0"

SECOND FLOOR 4,992

Revisions :

Approved :

CDR MAGUIRE

Architects / Engineers / Planners

211 Congress Street, 11th Floor
Boston, Massachusetts 02110
TEL (617) 778-1440

Proj. Mgr.: F.C.
Designed : F.C.
Drawn :
Checked :
Scale : AS NOTED
Date : 9-4-2014

HANOVER F.D.
STATION #1

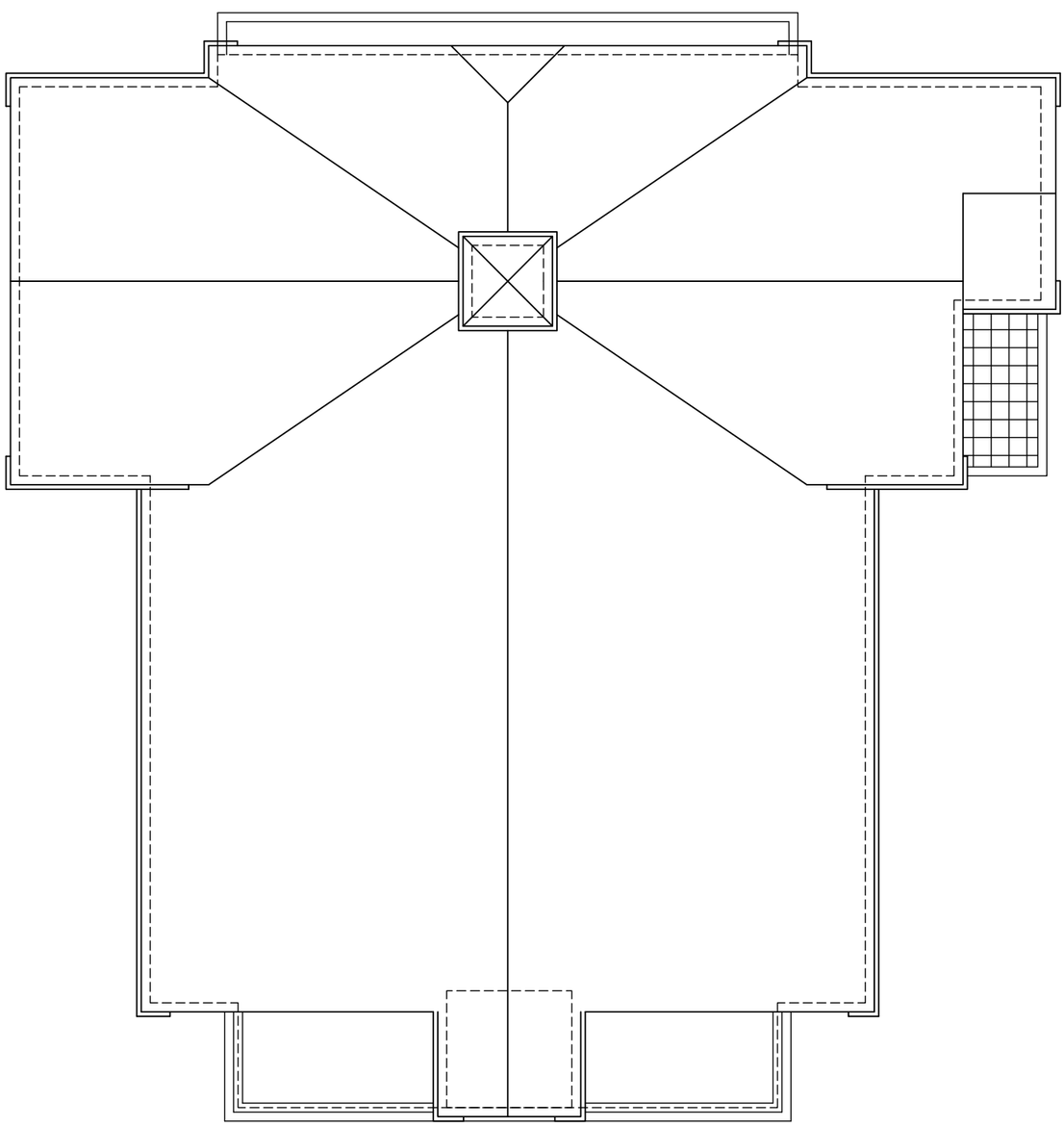
Proj. No.

Dwg. No.

SK.A4

ROOF PLAN

SCALE: 1/16" = 1'-0"



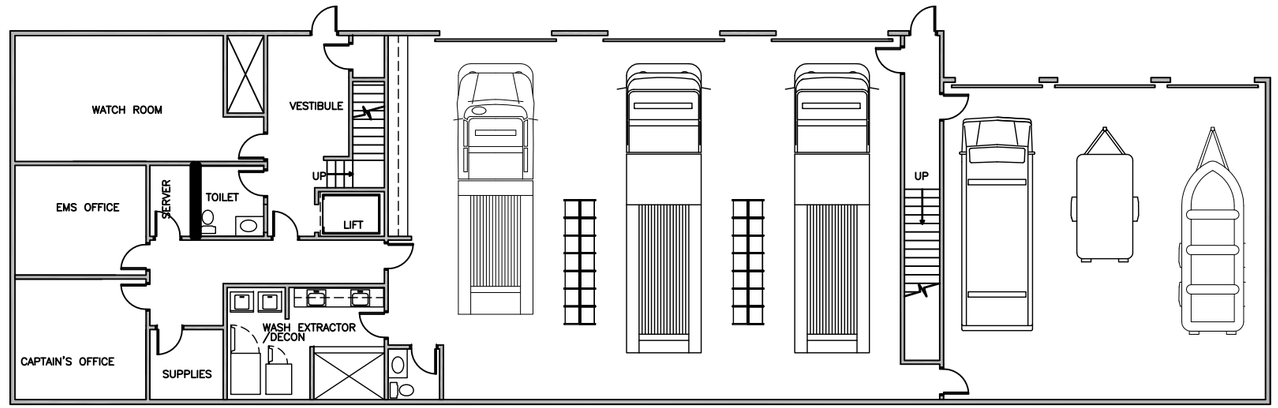
Dwg. No. SK.A5	Proj. No.	HANOVER F.D. STATION #1	Proj. Mgr.: Designed : F.C. Drawn : F.C. Checked : Scale : AS NOTED Date : 9-4-2014	CDR MAGUIRE Architects / Engineers / Planners 211 Congress Street, 11th Floor Boston, Massachusetts 02110 TEL. (617) 778-1440

Revisions :

Approved :

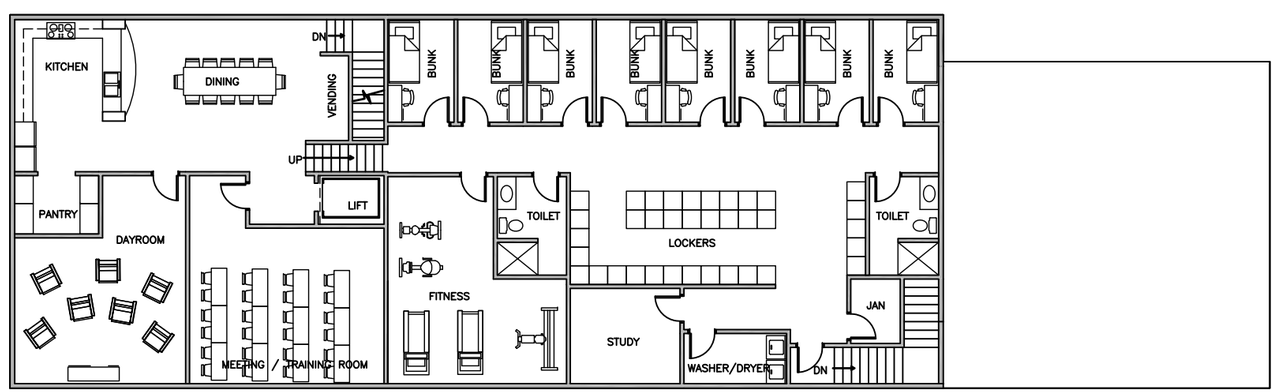
APPENDIX C- CONCEPTUAL PLAN

59 OLD WEBSTER STREET



FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

Revisions :

Approved :

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Proj. Mgr.: F.C.
Designed : F.C.
Drawn :
Checked :
Scale : AS NOTED
Date : 9-4-2014

NORTH HANOVER
SUB-STATION

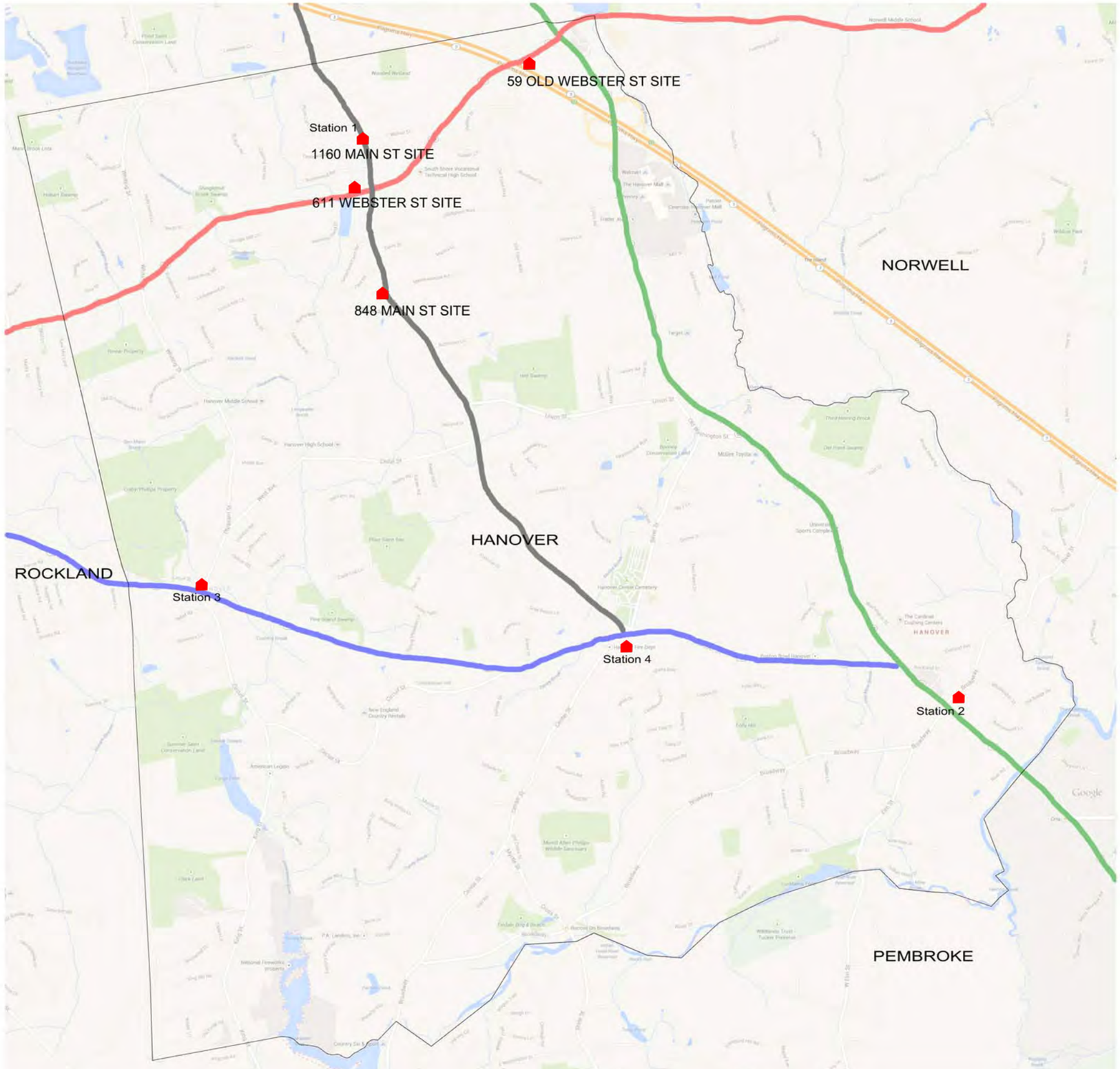
59 OLD WEBSTER STREET

Proj. No.

Dwg. No.

SK.A6

APPENDIX D- SITE PLANS



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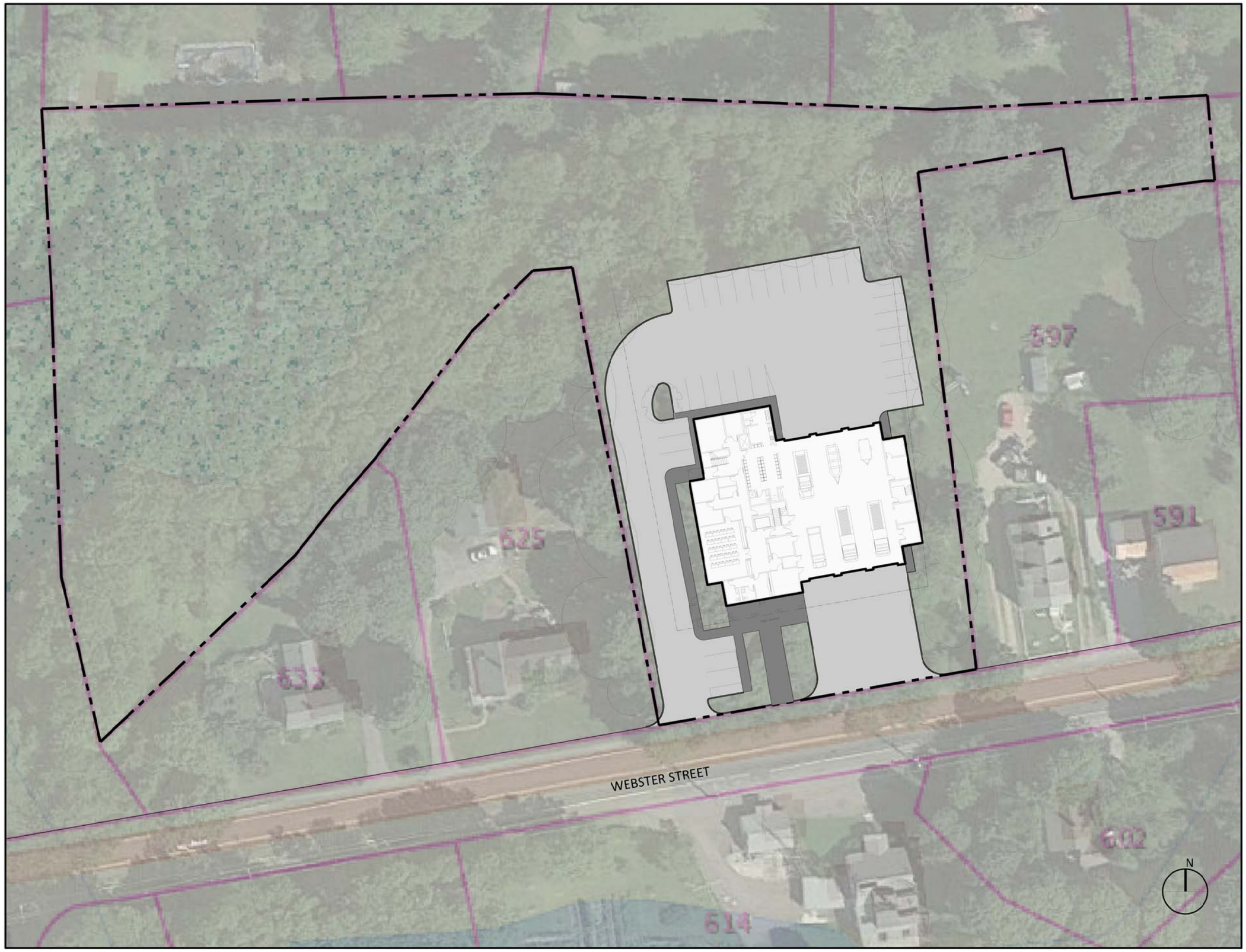
TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

SITE LOCUS

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: N.T.S.

SHEET NUMBER:

A-01



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TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

611 WEBSTER STREET
HANOVER, MA

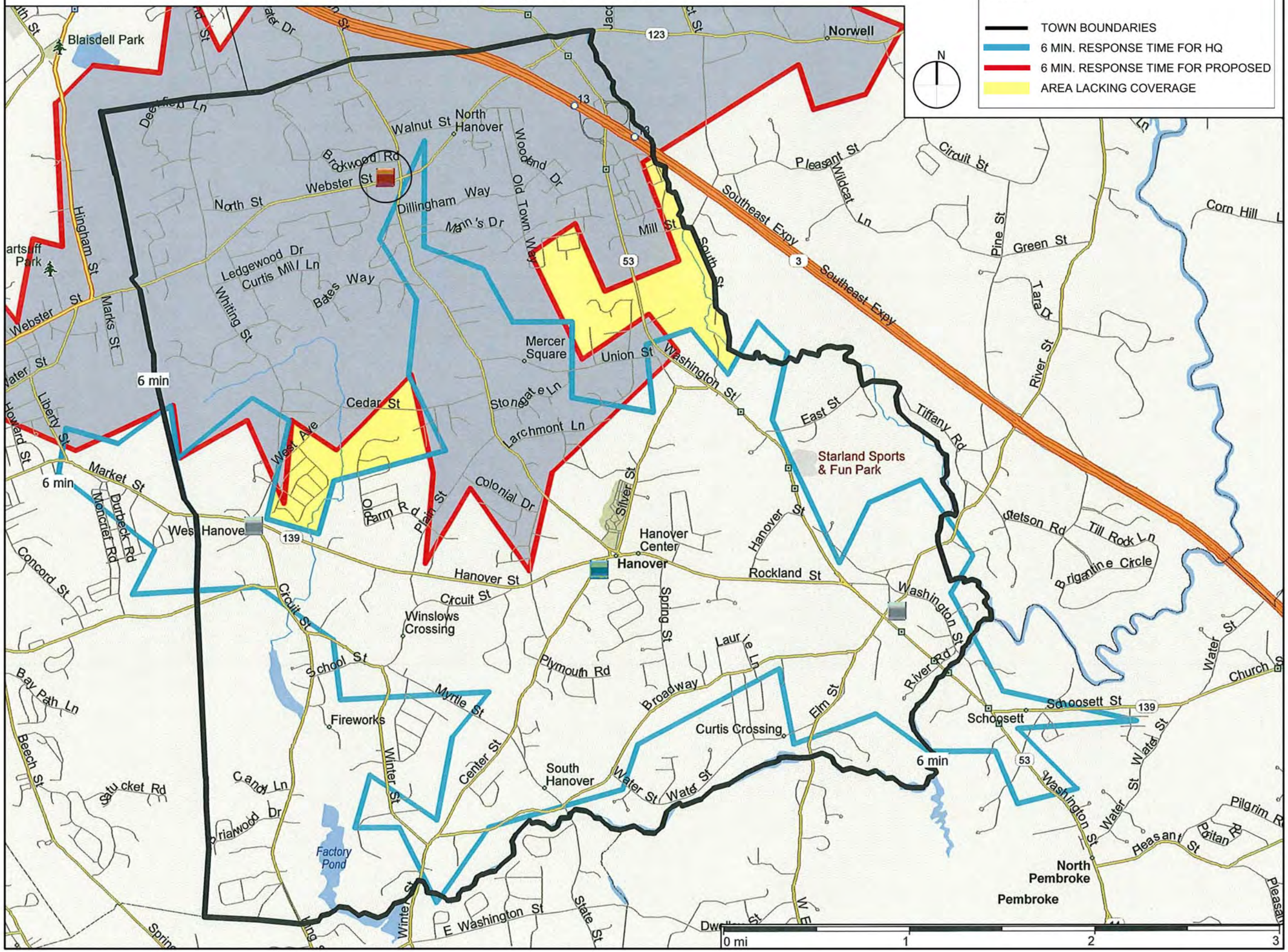
SCHEMATIC SITE LAYOUT

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: 1" = 50'-0"

SHEET NUMBER:

A-02

611 Webster Street Site - 6 Minute Response Area



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TOWN OF HANOVER
FIRE DEPARTMENT
SITE SELECTION

WEBSTER STREET
HANOVER, MA

RESPONSE
TIME LOCUS

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: N.T.S.

SHEET NUMBER:

A-02b

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TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

848 MAIN STREET
HANOVER, MA

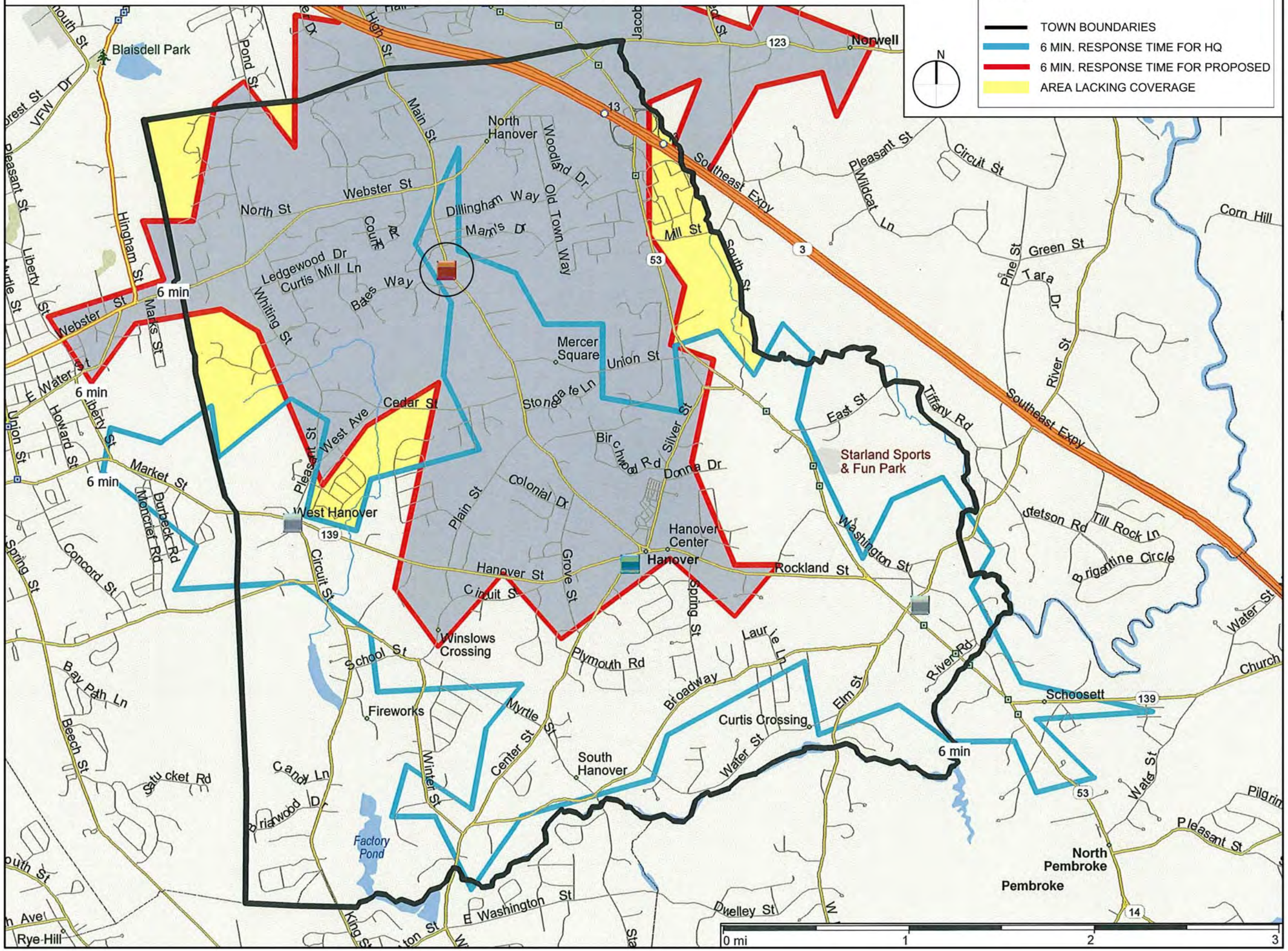
SCHEMATIC SITE LAYOUT

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: 1" = 50'-0"

SHEET NUMBER:

A-03

848 Main Street Site - 6 Minute Response Area



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TOWN OF HANOVER
FIRE DEPARTMENT
SITE SELECTION

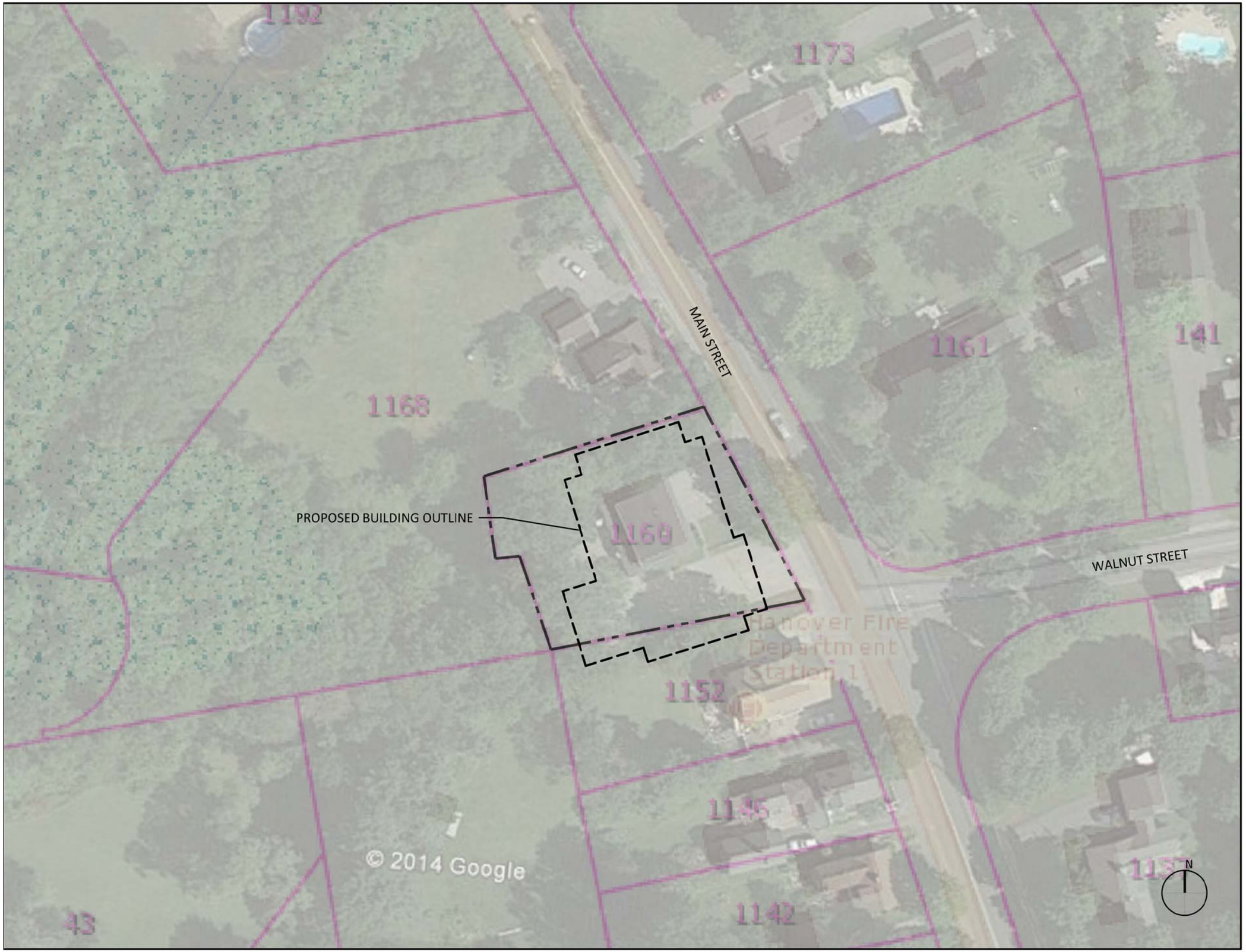
848 MAIN STREET
HANOVER, MA

RESPONSE
TIME LOCUS

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: N.T.S.

SHEET NUMBER:

A-03b



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TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

1160 MAIN STREET
EXISTING FIRE STATION SITE
HANOVER, MA

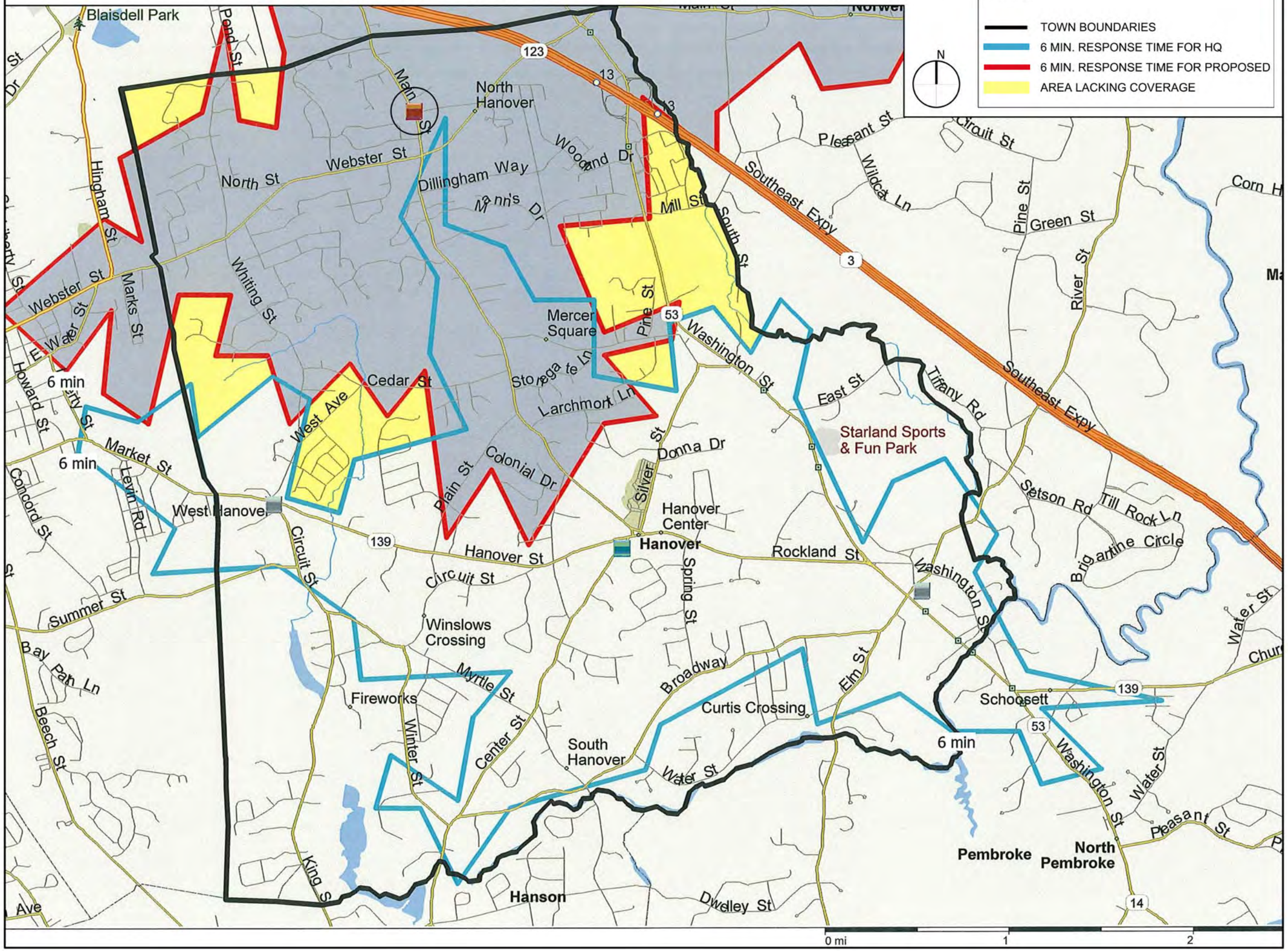
PROPOSED SITE

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: 1" = 50'-0"

SHEET NUMBER:

A-04

1160 Main Street - Existing Fire Station Site - 6 Minute Response Area



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TOWN OF HANOVER
FIRE DEPARTMENT
SITE SELECTION

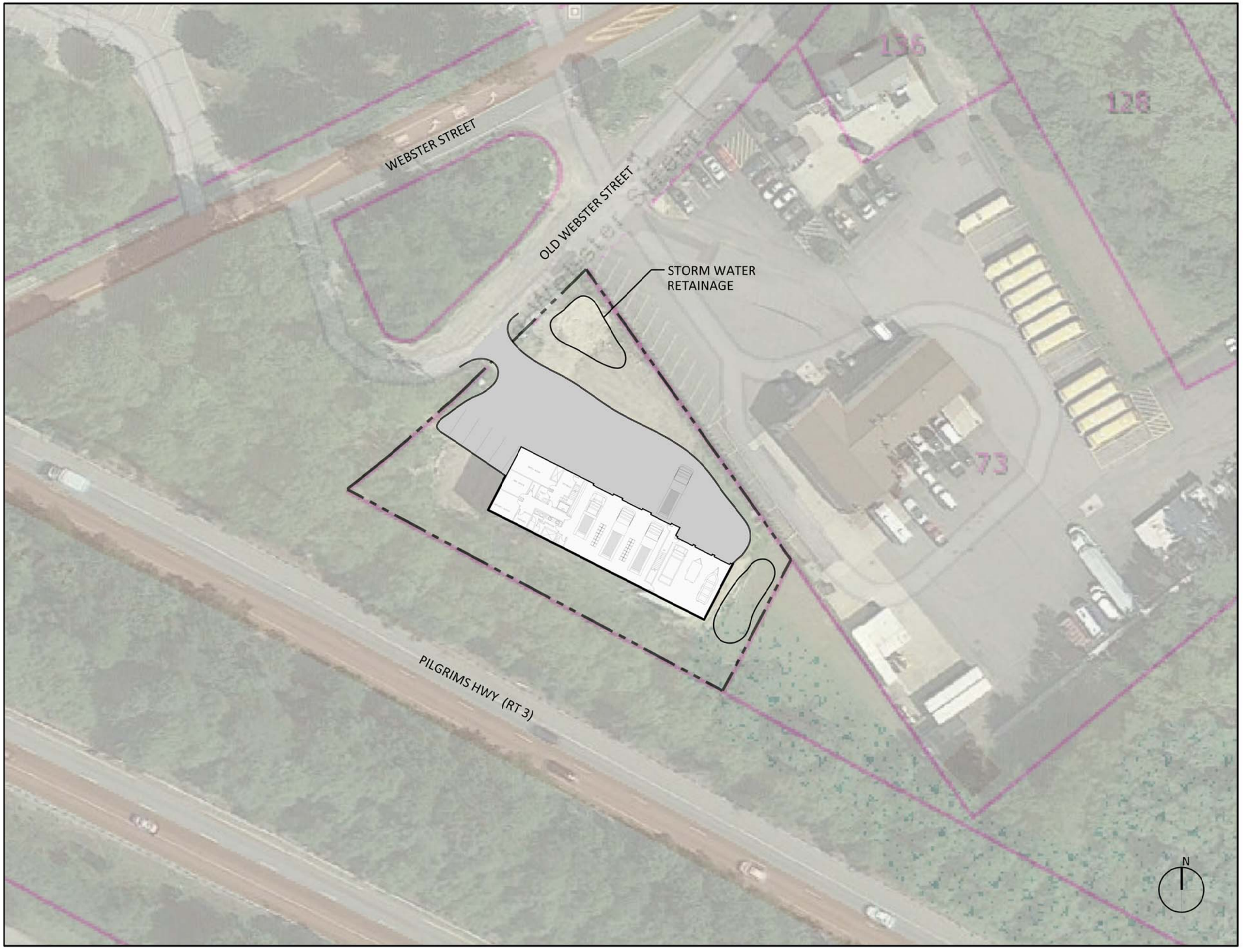
1160 MAIN STREET
EXISTING FIRE STATION SITE
HANOVER, MA

RESPONSE
TIME LOCUS

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: N.T.S.

SHEET NUMBER:

A-04b



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TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

59 OLD WEBSTER STREET
HANOVER, MA

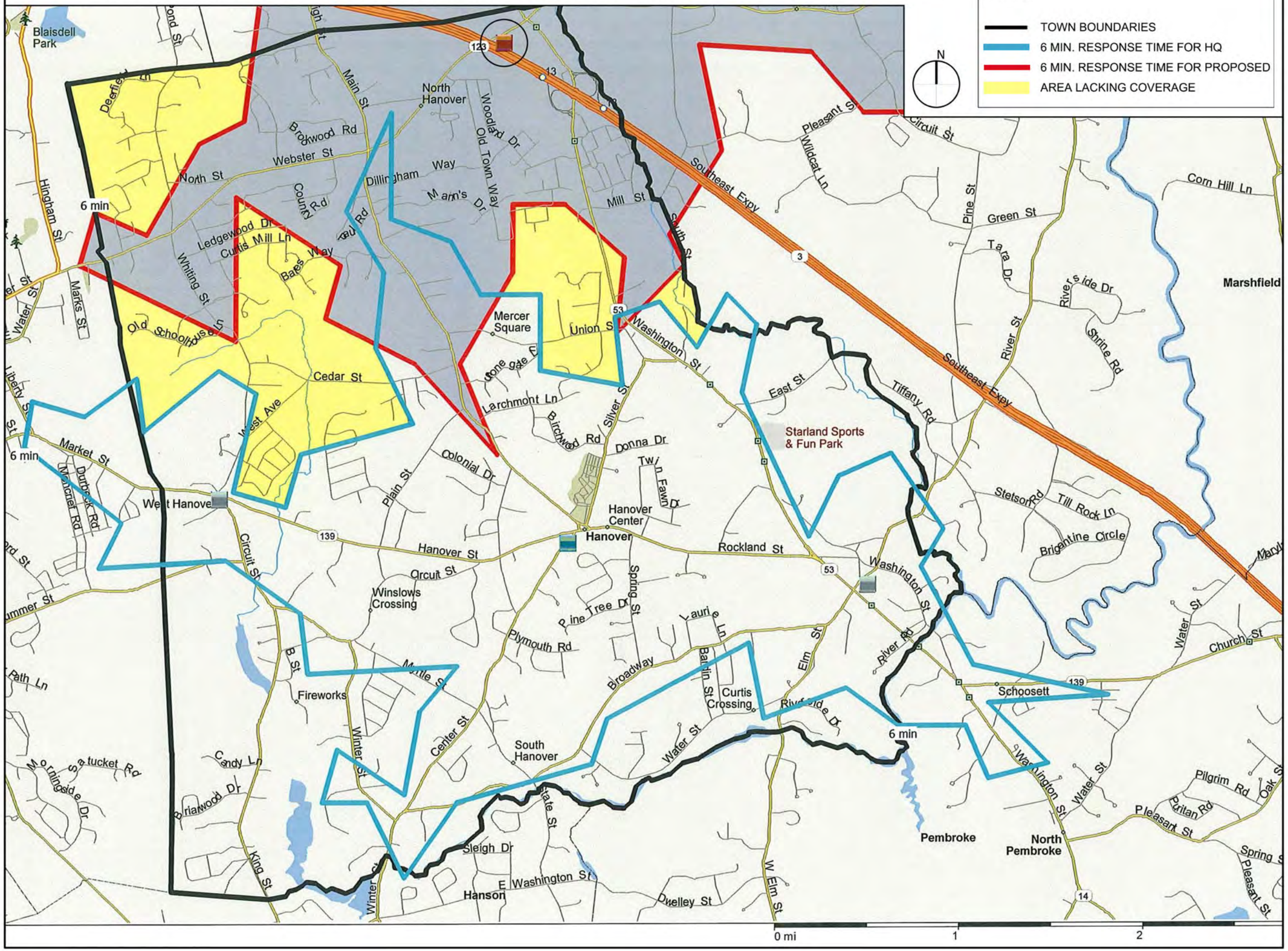
PROPOSED SITE

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: 1" = 50'-0"

SHEET NUMBER:

A-05

59 Old Webster Street Site - 6 Minute Response Area



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TOWN OF HANOVER FIRE DEPARTMENT SITE SELECTION

59 OLD WEBSTER STREET
HANOVER, MA

RESPONSE TIME LOCUS

PROJECT NUMBER: 19548
DESIGNED BY: JR
DRAWN BY: JR
CHECKED BY: FC
DATE: 09/11/2014
SCALE: N.T.S.

SHEET NUMBER:

A-05b

APPENDIX E- GLOSSARY OF ACRONYMS AND TERMS

Glossary of Acronyms and Terms

ACT	Acoustical Ceiling Tile
ADA	Americans with Disabilities Act
ACM's	Asbestos Containing Materials
MAAB	Massachusetts Architectural Access Board
IEBC	International Existing Building Code
IBC	International Building Code
OPM	Owner's Project Manager
DX	Direct Expansion
EPDM	Ethylene Propylene Diene Monomer
PVC	Polyvinyl-Chloride
VCT	Vinyl Composition Tile
CMU	Concrete Masonry Unit
VAV	Variable Air Volume
H&V	Heating and Ventilation
PCB	Polychlorinated Biphenyls
LED	Light Emitting Diode