

Town of Middleton

Master Development Planning Committee

Municipal Center Master Plan

Volume Two: Supplemental Material

Municipal Center Master Plan

Town of Middleton

Massachusetts

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Volume Two: Supplemental Material

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Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix A

Summary of Public Meetings

MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Kick-Off / Visioning Meeting: Meeting #1
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Meeting Minutes By: Janet M. Slemenda, HKT Architects
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Date: September 23, 2019

Time: 7:00pm

Location: Nathan Media Center, Fuller Middle School
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Attendees:	■ Amy Karas, MDPC, Chairperson (AK)	■ Janet M. Slemenda, HKT (JMS)
	■ George Dow, MDPC (GD)	■ Lance Hill, Pare Corp (LH)
	■ Frank Twiss, MDPC (FT)	■ David Pollack, Abacus (DP)
	■ Tom Schank, MDPC (TS)	■ David Eisen, Abacus (DE)
	■ Annette Wilton, MDPC (AW)	■ Nelson Hammer, Hammer Walsh (NH)
	Ken Lisiak, MDPC (KL)	■ Gerald Gove, Con Com, CoA Board Chair, MST
	■ Bill Renault, MDPC (BR)	■ Donna Bambury, MST
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	■ Glenn Bambury, MST
	Jim DiGianvittorio, Police Chief (JD)	■ Elizabeth Cameron, MST
	■ Tom Martinuk, Fire Chief (TM)	■ Pike Messenger, MST
	■ William Hammer, HKT (WRH)	■ Peter Goodwin, MST

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

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| 1.01 | The meeting consisted of three parts: Review of Study Process, Visioning and Review of Draft Schedule. |
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| 1.02 | Programming Process to date: HKT received questionnaire responses from both departments, met with each department for tours and space needs review, and met with the Chiefs together to discuss shared spaces. HKT will prepare programming summary data that will be sent to end users for editing. |
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| 1.03 | Visioning: The committee responded in writing to 7 questions posed by JMS, which were then individually summarized. The committee then joined in an open discussion of those responses. |
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| 1.04 | Question 1: What do you see as the best outcome for the Master Development Plan?
Responses: <ul style="list-style-type: none">• New Town Common |
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- A potential town center
 - A central meeting place
 - Area to be able to accommodate the many community events
 - Projects that will provide a new civic center/town center for Middleton
 - A plan for all 52 acres
 - Comprehensive site plan of all uses

 - A municipal complex that addresses the town's needs for the next 50 years

 - Clearly articulated plan
 - Use of site with everyone's input
 - Planning for the future. Organized construction.
 - A clear plan that will layout multiple phases of development meeting needs of PW, FD, PD. Town Hall & Open Spaces
 - A plan that accommodates all 4 buildings with an efficient use of land that allows for future expansion while protecting natural resources

 - Best use of funds without cutting corners
 - Least property tax impact on Middleton Community + the tax impact clearly communicated
 - Realistic Budget so this project could be accomplished on a reasonable time frame
 - A plan that is phased / thought out in such a way to minimize the impact on tax payers
 - A phased approach to ease the burden on tax payers

 - Large part of the property should be for passive conservation activities
 - More conservation open space involve CCC and Middleton Steam Team
 - Preserving as much of natural environmental as possible
 - Good use of the land
 - Well planned landscaping that doesn't need large water usage
 - Large area left to conservation
 - A representation of our towns buildings with extra space for rec/ walking grounds

 - Energy Efficiency
 - Self-sustaining & environmental buildings

 - Move bandstand

 - Fire station that will support Fire and EMS services for many years

 - Plenty of parking

 - Town meeting approval of consensus first phase of construction

1.05 Question 2: What do you see as the biggest challenges or obstacles as we begin our work? The more we can hear about them – the better.

Responses:

- Cost / taxpayer Impact
 - Obtaining funding at town meeting for each phase
 - Cost
 - Money
 - Keeping within a budget without major impact to taxpayers
 - Raising the money through town votes
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- Budget - Keeping costs down
 - Cost
 - Funding – Town Meeting
 - Who wants easiest, Cheapest, and most profitable for them
 - Who is going to pay for this? What will the financial impact be on citizens

 - Obtaining Town Support for the need of the project & subsequent phases
 - Community Support
 - Garnering public support / getting sufficient public input
 - How to build consensus
 - Getting everyone involved upfront. Reaching out to all citizens for input
 - Trying to please everyone
 - Making people understand the design for what will be built
 - The current community has lots of incorrect information about the project
 - Has such a large impact on community + need to try to get community input – really hearing from broad community

 - Wetlands
 - We need to shift to low impact development, protect wetlands and water
 - Maintaining as much of the natural environment unlike private developers
 - Agreement on the recreational / conservation factions in town some want ball fields, some want some want passive conservation

 - Being able to meet all the requirements for all the buildings
 - Meeting the needs for today + next in 50 years
 - Good size for Community Center and CoA
 - Over designing – being realistic to our town size
 - Future planning

 - Abutter support for changes in uses on the property. Fields / Town Common can potentially add noise / nuisances

 - Traffic on 114, traffic control & flow onto 114

 - Use of safe building materials

 - Choosing the best area on the property for the buildings

1.06 Question 3: Understanding that the Fire Station is the first project, what do you think the citizens of Middleton believe should be the next highest priority of the Plan?

Responses:

- Town Hall
 - Town Hall
 - Town Hall
 - Town Hall
 - Town Offices

 - A 9 hole golf course – keep the heritage alive

 - Police Station
 - Police Station
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- Police Station
 - Police Station

 - I think this should evaluate a combined police & fire to gain efficiency w/ training space

 - Would evaluate new P.W. facility as my 3rd priority w/ town hall replacement as 4th

 - Sr. / Community Center
 - Senior Center
 - Community Center C.O.A. Combined
 - #3 Senior Center
 - Senior Center
 - CoA / Community Center
 - Community Center, Senior Center, Youth Center Combined
 - Very large community area
 - Senior + Community Center
 - Senior Center should be next after fire station

 - Protection of environment + link to abutting wetlands
 - Natural landscape
 - Open space
 - Should look to add a town common space into the phase I project. Potential to salvage portions of parking areas?
 - The landscape and layout for the public
 - Landscape to make sure land is designated for buildings / walking space / privacy
 - Walking space so that the enviro. Is user friendly early on
 - A public space/town common

 - Road ways
 - Infrastructure of Surrounding Space

1.07 Question 4: What do you think could or should be included in the Community Building?

Responses:

- C.O.A.
 - Sr. Center
 - Senior Center
 - Senior Center
 - COA / food pantry, Senior Center
 - Comm Ctr – Council of Aging kitchen for seniors handicap accessibility
 - Senior Center

 - Section for young + old
 - Youth Center
 - Possibly a teen center

 - Parking

 - Recreation Dept
 - Small basketball court that could also host ping pong, floor hockey etc. different groups on different nights
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- Community Center should have: Recreation – including ping pong tables – pool tables – rooms for card playing
 - Athletic Spaces (Pool? Basketball Courts, Etc.)
 - Comm. Ctr. Outdoor – b'ball courts with lights

 - Kitchen & Dining area
 - Kitchen for community functions and meetings

 - Town wide events – Chief Will's Day, Pumpkin Festival, Vehicle Night, Earth Day, Concerts Early Voting, Town Meetings

 - Kiosk Bathrooms (Like Richardson's)
 - Computers / Internet for people to use

 - Office Space
 - Veterans Agent, Food Pantry
 - Food for needy people
 - Ability to use as a shelter during storms / disasters
 - Elections / Voting Space
 - Town Departments providing services like Board of Health Vets Agent
 - Potential for food pantry space (kitchen, storage, etc.)
 - Committee / Board meeting space
 - Public meeting space
 - Meeting space
 - Town meeting space (small & mid – size) for civic gatherings, girl scouts, etc. public mtgs.
 - Community space for meetings/functions
 - Room for people to use for clubs or groups
 - Large Rooms that can be divided comm. center

1.08 Question 5: What should the remaining public space be used for? Is there something that could be the identifying feature of this public space?

Responses:

- Privacy from streets and neighborhoods

 - Self – sustaining entity that can financially support upkeep + future development

 - Rain gardens, no curbs, permeable parking lots
 - Gardens / sculptures
 - Playground for kids
 - Recreation Fields / Courts
 - Athletic Fields (Softball, Baseball, Soccer) Complex
 - Sports Field
 - Extra land fenced in dog park
 - Community Center area
 - Town Common / Band Stand
 - Town Common / Gathering Space
 - Town Common Space. New Bandstand / Gazebo Area, Etc.
 - Public Garden
 - Fields / Parks
 - Passive Open Space
 - Lands without Lawns – Plant plants that birds like
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- Passive Recreation walking paths & buffer no disturb areas
 - Natural wildlife habitat
 - Leave as natural as possible
 - Nature Classroom to teach kids to get out in nature
 - Open space
 - Passive recreation
 - 9 hole golf course
 - Walking trails
 - Walking paths
 - Bike / walking paths with benches
 - Walking trails
 - Walking paths in a large park setting
 - Fitness trail in natural setting
 - Walking Trails
 - Recreational Trails / Passive open space
-

1.09 Question 6: What are some critical details that you believe we need to know about in order to complete this study to the satisfaction of the End Users, Community and Town Officials and Committees?

Responses:

- Critical Info. Preserve the wildness of the wetlands
 - The original intent of the Brown family was that much of the property would be left undisturbed or natural
 - Inventory plant + animal species, make parts outside of buildings readily available to public
 - The town is in transition from a rural community of locals to a bedroom community of people who expect more
 - Importance of building consensus as the townies / new move-ins don't always see eye to eye
 - This is one of the first times developing Town land purchase
 - Middleton has historically gotten by w/ "good enough" – This philosophy is deeply imprinted
 - Lay out for present + upcoming growth of the town
 - Lay out of buildings (where they will go) possible uses of the rest of the land
 - Showing that you can modify the building if needed
 - Provide a design that is harmonious w/ the streetscape of the section of 114. I.E. Richardson view shed enhancement
 - Neighborhood acceptance
 - Input from employees is important
 - Keeping the public informed
 - Lack of input
 - Critical info. Lack of full community input
 - Low + negative citizen participation
 - Strong social media presence
 - Rumors + lack of transparency within town
 - Town Meeting votes can shut everything down
 - Trends towards low voter turnout but strong social media presence
 - Traffic/ Impact on environment
 - Traffic?
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- Traffic
 - Cost
 - Cost effective and pragmatic approach
 - Cost
 - Cost to taxpayers
 - Critical Info. Don't stress our seniors with huge tax in-creases
 - Spending must be well thought out or will not be supported. Distrust / no to spending is default position
 - Clearly explain the ability of economy of scale with combining Buildings
 - Provide peer community costs for similar bldgs. / project to curtail "Sticker Shock"
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1.10 Question 7: What "Represents the Best of Middleton"?

Responses:

- Schools
 - Our Schools
 - Flint Library
 - Library
 - Best of Middleton, Flint Public Library
 - Library
 - Flint Library Architecture
 - Maintain rural character
 - We still have some rural character – needs to be maintained at any cost
 - We still have a white church steeple; classic New England
 - Middleton Green
 - Open Space / Farming Heritage
 - All the open space conservation and we have Ipswich River + tributaries
 - Open Space Character
 - Small Town feel Rural character
 - Location
 - Open Fields – Ipswich River
 - Ipswich River & Landings
 - Ipswich River
 - Riverview Estates
 - Citizens
 - Variety of citizenry
 - People who live here
 - The town has a close feeling with people
 - Volunteers built museum, maintain river landings, Earth Day
 - Fall & Summer Festivals – Pumpkin Festival (No real area now) – Chief Wills Day
 - Middleton Stream Team
 - Employees
 - Richardson's Ice Cream
 - Past History – Richardson's original settlers etc.
 - Richardson Farm
 - Pike Messenger & Paul Richardson
 - Richardson's Farm
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- Richardson's, Farmer Browns and other restaurants in town
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- 1.11 Schedule: In general, the schedule presented by the Design Team includes the following tasks:
- Visioning and Planning: meeting with the MDPC, town officials and the public to gather basic data on the building needs and site limitations plus initial feedback from the community.
 - Site Evaluation: gathering the physical characteristics of the site such as topography, vegetation (mainly trees), utilities, wetlands, traffic patterns, etc. which will influence the ultimate site design.
 - Preliminary Master Plan Development: assembling all of the information previously gathered and generating three options.
 - Community Outreach: holding a community workshop to invite the public and the MDPC to evaluate the plans to date and to work toward a preferred master plan; online survey.
 - Master Plan Development: refining preferred plan with details; looking at phasing; developing guidelines for subsequent buildings after the first building is constructed.
 - Development of Buildings: developing buildings concurrently with the master plan development; presenting conclusions at a public presentation; additional online survey to widen the feedback stream.
 - Finalize Master Plan: completion of document with feedback from the public presentations and survey; developing a cost estimate that also indexes inflation over the next ten years.
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- 1.12 Open Discussion:
- Expansion at Masconomet Regional HS 2024
 - Midway Between 2 Schools
 - Wetlands may come into play
 - Trails - wildlife refuge
 - Take care of river (monitor + advocate)
 - Boardwalk at SE Part of Site
 - K. Brown sold land to town
 - Rural Character
 - Passive Recreation for land
 - Plan for future – Fire Department
 - Apparatus: Special Order
 - Standards for FD
 - Traffic: Egress from FD
 - Combined Public Safety Building
 - Fiscal Responsibility
 - Infrastructure
 - Public Water Supply
 - No Public Sewer
 - Landscape : Restrictions in May Each Year
 - Most Efficient Plantings
 - Trees – Robust vs Dead
 - Save vs Removed
 - Can move trees: Cost? (Japanese Maple)
 - Buffer : 100' No Bldgs., Ballfields
 - No Traffic Plan
 - Right Turn Lane
 - Rte. 14 width
 - Alleviate Traffic Woes + Concerns
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- 1.13 Several other points were made during the discussion that followed:
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- The Special Town Meeting was scheduled for March 24 so that this warrant article would not be “swallowed up” by other annual town business warrants.
 - The Design Team plans to have a community-wide meeting on October 7th to introduce the project and our proposed tasks to the Middleton community at large. This is our first of several planned public outreach efforts to engage the entire town throughout the planning process.
 - Given that the site is midway between two grammar schools, there are teaching opportunities with carefully planned trails (and possibly a boardwalk) to explore wildlife, wetlands and other natural aspects of the conservation portion of the site.
 - It is important to maintain the Brown Family’s desire to maintain the unused portion of the site for passive recreation.
 - There was a discussion of whether or not the fire and police stations should be consolidated into a single public safety building. The Design Team responded that it was an option that we would discuss and that once the programming of each building is completed, we would explore the advantages/disadvantages of a combined facility.
 - There is public water available on the site, but no public sewer.
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Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next Meeting to be held: October 23, 2019 at 7:00pm Nathan Media Center, Fuller Meadow School.

MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Public Meeting: Meeting #2
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Meeting Minutes By: Janet M. Slemenda, HKT Architects
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Date: October 7, 2019

Time: 7:00pm

Location: Nathan Media Center, Fuller Meadow School
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Attendees:	■ Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
	■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
	■ Frank Twiss, MDPC (FT)	■ William Hammer, HKT (WRH)
	■ Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
	■ Annette Wilton, MDPC (AW)	■ David Eisen, Abacus (DE)
	■ Ken Lisiak, MDPC (KL)	Community Members
	Bill Renault, MDPC (BR)	
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item	
2.01	Andy Sheehan (AS) Introduction of Master Development Planning Committee, Public Officials and HKT Team
2.02	Process summary to date: Janet M. Slemenda (JMS) explained the overall process that is planned. <ul style="list-style-type: none">• Programming Confirmation for Building Programs + Site Use• Comprehensive Site Analysis• Development of Options• Development of Design Guidelines for Future Projects• Community Engagement, Support + Participation• Work underway includes visioning, programming with end users, and site analysis
2.03	Public Input: JMS described the goals for the meeting and asked for audience participation in open discussion form or in written form, JMS provide the following items to consider as the discussion began: <ul style="list-style-type: none">• The best outcome for the Master Development Plan.• The biggest challenges or obstacles.• The best use of the site not dedicated for use by buildings and their related site elements.• How could this site “Represents the Best of Middleton”.
2.04	Open discussion responses:

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- Municipal Facility Planning Principals developed 12 years ago. AS will provide a copy of those principals to team
 - Plan should set direction for future of site
 - Fire Department, Police Department, CoA/Community Building, Town Hall are the four major programs that will be planned for this site
 - Will consider use of site not needed for program
 - AS spoke of 10-20 years to complete all projects
 - Maintenance of site: Just took ownership and site has been mowed once and will be mowed to maintain
 - How will it be maintained and used is still to be determined
 - Can the site just go wild with plantings?
 - What will happen within setbacks? Mowed, planted, go wild?
 - ATV use of site currently is a big problem for neighbors; anticipate this becoming snowmobile use as winter moves on; Policing must happen now
 - "Kids" and ATV's are harming site
 - AS noted that Chief DiGianvittorio is aware of these issues and is working to address concerns
 - Level of music and other noise at events has to be considered with respect to neighbors
 - Long term use: Uses beyond the four named projects; Plan Ahead
 - JMS noted that the overall site is being considered as a fifth programmed element
 - Seniors – outside areas
 - Share with kids
 - Central gathering space as Town Center
 - Approximately 20 acres of site is to be left open
 - This portion will be planned so that it can be maintained and be kept safe
 - Will variances be required?
 - Lighting on site is important; consider neighbors
 - Walking paths at perimeter of site
 - Halloween parade and the like
 - Brick pathways – pay for sponsors
 - Swamp Walk- ZBA required at other site
 - Pike Messenger spoke of the green belt and grassland, the swamp and generally about preserving as much of the acreage as is possible
 - Wildlife refuge from Howe Manning to Fuller Meadow School
 - Connect to other open spaces; wildlife refuge, walking loop; board walk
 - Focus on "golf course" not improving current commons
 - Community gathering places
 - Move bandstand to new site
 - Possible activities in remaining "green space":
 - Food Festival
 - Food Truck Festival
 - Movie nights
 - Family nights
 - Playground for really young children
 - Rowley on Route 133 has site that includes parcel for FD/PD/Fields
 - Anything that generates revenue on a regular basis is not allowed.
 - Seniors and Youth together
 - Golf course
 - 100' setback from residential abutters has been promised; 50 setback shown on deed
 - Will viewshed be maintained?
 - Sustainable design; permeable pavings etc
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- Critter friendly
 - Can underground parking be planned? JMS answered that it is very expensive to build this kind of parking and that the team would work to lessen the impact of parking on site i.e. no huge expanses of parking
 - Should fit into Middleton
 - Energy efficient buildings and site
 - Consider the use of stone walls
 - Middleton style? JMS noted that the team has started to photograph buildings/sites in town and that there does not appear to be one style that defines public architecture; there are many different architectural styles in town including flat and pitched roof buildings, masonry, clapboard, shingle and metal sided buildings; stone walls etc.
 - Not NYC - Not steel and glass
 - Locations of proposed structure:
 - Keep buildings back from Route 114
 - Consider best location
 - How much infrastructure will be completed at the first phase?
 - Who will be responsible for “accepting” plan: AS answered that the Master Development Planning Committee will be accept the plan
 - AS noted that funding requires Town Meeting approval
 - Route 114:
 - Traffic congestion in Square
 - Right turn lanes
 - State road
 - Traffic issues
 - Possible traffic light at site for egress and to slow traffic
 - Some green space along Route 114
 - Improve walkways along Route 114
 - Consider snow removal on site and along Route 114
 - Connect to Route 62 is not possible
 - Fire Department apparatus access through town should be considered
 - Response times
 - Turning radius versus road activity
 - Protect Brigadoon neighborhood – Buffer
 - Costs of development
 - Cost analysis
 - Debt reduction - 2-3 year capacity to borrow money
 - Consider escalation
 - Cost control important
 - Bill Hammer (WRH) noted that a professional cost estimate, with escalation will be completed once the programming, planning and phasing options have been completed
 - Can CPA funds pay for anything recreational such as band stand, soccer field or playground?
 - Can PD and FD share building? JMS described programming process and that MDPC will decide if stand-alone or a combined facility will be recommended
 - Existing clubhouse status – can it be used? AS said that this has been discussed and the building probably does not meet any needs proposed and does not meet accessibility requirements.
 - What happens to existing buildings/sites:
 - AS noted that FD will probably become parking for library; Sell PD and Town Hall
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2.05 Written responses:

- A walk-thru of the site should be planned
- Signs and fines for trespassing on property should start now
- Traffic concern for getting into Brigadoon
- Town is not responding to complaints about kids on site; Concern that Town does not care
- Tennis courts
- Water fountain
- Indoor badminton and volleyball in the Community/CoA building
- Please ensure access to clean restrooms (not porta-potties) in common areas
- Dog park with good walking surfaces
- Please make community complex environmentally friendly. For example, install solar panels on roofs. Include recycling bins next to trash bins
- Traffic lights
- Keep stone walls
- Keep Colonial look
- Design with small town New England flair; Keep rustic small town feel
- Hold Winter Fest, Pumpkin Fest etc.
- Open space for the community to gather (Town Park); away from traffic
- How much will our property taxes be affected

2.06 Several community members have volunteered to work on committees. Names have been shared with AS.

2.07 The next public meeting will be a Community Workshop on Saturday November 16, 2019.

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: October 23, 2019 at 7:00pm Fuller Meadow School Media Room.

MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Public Meeting: Meeting #3
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Meeting Minutes By: Bill Hammer, HKT Architects
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Date: October 23, 2019

Time: 7:00pm

Location: Nathan Media Center, Fuller Meadow School
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Attendees:	■ Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
	■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
	■ Frank Twiss, MDPC (FT)	■ William Hammer, HKT (WRH)
	■ Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
	■ Annette Wilton, MDPC (AW)	■ David Pollak, Abacus (DP)
	■ Ken Lisiak, MDPC (KL)	■ Lance Hill, Pare Corp (LH)
	■ Bill Renault, MDPC (BR)	Guests
	Andrew Sheehan, Town Administrator, MDPC (AS)	

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

3.01 Amy Karas (AK) Introduction of Master Development Planning Committee, Public Officials and HKT Team.

Agenda included building and site programs, and site analysis.

- 3.02 JMS discussed the Programming Process to date including:
- Programming Confirmation for 4 Building Programs
 - Questionnaires to Fire + Police Departments, Town Hall Department
 - Conversation around possible uses of Community Building including Council on Aging + Recreation
 - Interviews with Key Personnel
 - Program Summaries
 - Review by End Users
 - Programming for Site Use

- 3.03 A breakdown of the program spatial summary was distributed
- The program broke down the spatial needs for a separate fire station, a separate police station, shared facilities, and a combined public safety building options.
 - A preliminary program for the Community Center was presented.
 - The program was completed without the input of the new CoA director.

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- A program for the town hall was presented.
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3.04 The Fire Department, not including shared spaces, gross square footage consisted of three main areas:

- Administration: 2,336 gsf
 - Staff Support: 3,945 gsf
 - Operations: 14,098 gsf
 - Total: 20,379 gsf
 - Parking for 23 vehicles
-

3.05 The Police Department, not including shared spaces, gross square footage consisted of four main areas:

- Administration: 3,025 gsf
- Operations: 2,583 gsf
- Staff Support: 2,163 gsf
- Detention: 4,445 gsf
- Total: 12,216 gsf

Carport Parking: 2,200 gsf for police vehicles
Parking for 43 vehicles

3.06 The Shared Spaces for the Fire and Police Departments, gross square footage consisted of four main areas:

- Entry: 3,844 gsf
- Communications: 288 gsf
- Staff Support: 1,078 gsf
- Building Support: 3,181 gsf
- Total: 8,391 gsf

Parking for 20 vehicles

3.07 Possible Options for Public Safety include:

- Combined Facility: 40,986 gsf
 - Parking for 86 vehicles + Carport
 - Stand-Alone Fire Station with Smaller Meeting Room used for Emergency Operations Center, FD Training + General Community Use. 26,714 gsf
 - Parking for 38 vehicles
 - Stand-Alone Police Station with Smaller Meeting Room used primarily for PD Training + General Community Use. 18,683 gsf
 - Parking for 58 vehicles + Carport
-

3.08 The Community Building gross square footage consisted of five main areas:

- Public: 1,481 gsf
- Offices: 1,071 gsf
- Office Support: 1,038 gsf
- Program Spaces: 16,836 gsf
- Building Support: 1,633 gsf
- Total: 22,059 gsf

Parking for 88 vehicles

Some discussion as to what programs should be considered ensued. Discussion included whether this should be considered a multi-generational center and what exterior activities should be provided, such as recreation for toddlers through senior citizens.

3.09 The Town Hall Building gross square footage consisted of four main areas:

-
- Public: 1,599 gsf
 - Business Offices Shared: 2,629 gsf
 - Business and Land Use Offices: 7,029 gsf
 - Building Support: 3,193 gsf
 - Total: 14,450 gsf

Parking for 69 vehicles

3.10 Site Uses were also discussed.

- Passive Recreation
- Support Areas for Community Building
- Public Gathering Places
- Dedicated Spaces
- Parking: Dedicated to Building Users + Visitor

3.11 Site Analysis for the 51,576 acres was presented by Lance Hill (LH). Site development issues included:

- Topography relatively easy to develop
- Assume soils in active area are not problematic
- Many significant specimen trees
- Several groves of trees
- Viewsheds
- Zoning Restrictions
- Emergency Access to Passive Recreation Area
- Light Spill impact to neighborhood
- Phase 1 Development Area - Plan for:
 - All Buildings
 - Roadways + Parking
 - Site Support Elements
- Future Passive Recreation Development Area
 - Preserve Landscape
 - Protect Wetlands
 - Town input for Passive Recreational Activities
 - Consider Maintaining this portion of the site

3.12 Conservation Restriction Area items:

- 50' from Property
- Additional Area as shown
- Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
- By Permission Only
 - Trails/Signs
 - Wildlife/Vegetation Management

Passive Recreation Area items:

- Total Area: 13.2 Acres
 - Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
-

-
- Allowable
 - Trails/Signs
 - Wildlife/Vegetation Management
-

3.13 Additional 50' buffer includes:

- Total Distance from Adjacent Property Lines = 100'
 - Similar Restrictions and Allowable Uses as adjacent Conservation Restriction Areas
 - Note:
 - Buffer near South Main Street may impact location of Fire Station
-

3.14 Regulatory Areas

- Wetlands
 - LH explained the 25' no build zone and the 100' development zone
- Public Drinking Water Wellhead Protection
- Town Building Setbacks

Topography/Drainage

- Golf Course undulation
 - Low spots with existing pipes
-

3.15 Traffic Analysis:

- Relatively Low Volume
 - Few Accidents, Low in Severity
- Sight Distance more than adequate for 85% speeds captured
- Trip Generation for the initial Fire Station expected to be minor, Full Traffic Impact Analysis (TIA) not anticipated
 - Full Build Option may meet MassDOT Thresholds for full TIA (TBD)
- Initial Assessment: South Main Street appears sufficient to handle existing traffic volumes

LH explained that the analysis was limited to the site and did not extend into the Town center. As for signaling, LH mentioned there may be a preemptive signal installed.

3.16 Other topics that were discussed included:

- If combined facilities are recommended should that include shell construction only?
 - Parking counts could be higher. A suggestion that a grass paver blocks and/or pervious paving be used in parking areas to reduce hard surfaces for storm management. Parking spaces should be accessible especially for vans for CoA.
 - Community Center topics included:
 - Storage Rooms
 - Floor for movement
 - Arts rooms
 - Music and sound studios
 - Sensory Gardens
 - Meeting spaces for town committees should not be remote. There was a suggestion to build more meeting rooms and multi-use spaces for up to 80 persons.
 - Another suggestion was to add a green landscaped buffer between the site and Route 114 as well as a sidewalk.
 - There was concern about traffic on Route 114. It was explained that a traffic study is part of the master plan scope of work.
-

3.17 Next Steps:

- Development of 3 Concepts
 - Review by Committee
 - Community Workshop
-



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Charlestown, MA 02129
T: 617.776.6545
F: 617.776.6678
www.hktarchitects.com

-
- Community Survey on Website
-

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: November 13, 2019 at 7:00pm Flint Library. In addition the Public Workshop is scheduled for Saturday November 16, 2019 at the Flint Library.

I:\HKT Projects\21921 Middleton Master Plan\Administration\Project Meeting\Meeting Minutes\21931 Public Meeting Minutes 19-10-23.docx



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA



AGENDA

- Building and Site Programs
- Site Analysis
- Next Steps



PROGRAMMING PROCESS: FIRE DEPARTMENT

Fire Department	Gross Square Footage
Administration: Offices, Fire Prevention, Conference, Supplies/Copy, Archive Document Storage	2,336
Staff Support: Day Room/Kitchen, Dorm Rooms, Locker Room, Toilet/Shower; Report Writing	3,945
Operations: Apparatus Bays, Hose/Gear Storage, Laundry, Workshop, Medical/Decontamination, Triage Room, Storage for Medical Supplies/SCBA/Oxygen/Haz Mat Supplies/Maintenance	14,098
TOTAL WITHOUT SHARED SPACE	20,379
Parking for 23 vehicles	

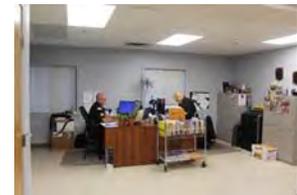


PROGRAMMING PROCESS: POLICE DEPARTMENT



PROGRAMMING PROCESS: POLICE DEPARTMENT

Police Department	Gross Square Footage
Administration: Offices, Detectives, Interview, Lab, Prosecutors, Conference, Supplies/Copy, Archive Document Storage	3,025
Operations: Sergeants, Officer Shared Workspace, Squad Room, Report Writing, IT, Evidence, Armory	2,583
Staff Support: Lunch/Break Room, Toilet/Shower Locker Room	2,163
Detention: Sally Port/Impound/ Vehicle Bays, Bulk Evidence/Recovered Property, Booking, Cells, Interrogation	4,445
TOTAL WITHOUT SHARED SPACE	12,216
Carpport Parking: 2,200 sf for police vehicles	
Parking for 43 vehicles	



PROGRAMMING PROCESS: SHARED – FIRE AND POLICE DEPARTMENTS

Shared Spaces	Gross Square Footage
Entry: Lobby for Walk-in Visitors with Secured Public Interview Room; Large Community Room used for Emergency Operations Center, FD + PD Training and General Community Use, Kitchenette, Office Area for EOC	3,844
Communications: Secondary PSAP	288
Staff Support: Fitness	1,078
Building Support Rooms: Server/911, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	3,181
TOTAL	8,391
Parking for 20 vehicles	

PROGRAMMING PROCESS: POSSIBLE OPTIONS FOR PUBLIC SAFETY

Public Safety Options	Approximate GSF
Combined Facility Parking for 86 vehicles + Carport	40,986
Stand-Alone Fire Station with Smaller Meeting Room used for Emergency Operations Center, FD Training + General Community Use. Parking for 38 vehicles	26,714
Stand-Alone Police Station with Smaller Meeting Room used primarily for PD Training + General Community Use. Parking for 58 vehicles + Carport	18,683

PROGRAMMING PROCESS: COMMUNITY BUILDING

Community Building	Gross Square Footage
Public: Entry Vestibule + Lobby, Reception/Counter Services, Public Toilets	1,481
Offices: CoA, Wellness, Counseling, Other, Open Shared	1,071
Office Support: Conference, Lunch/Break Room, Employee Toilets, Storage, Copy/Mail	1,038
Program Spaces: Kitchen, Lounge/Café, Multi-Purpose, Movement/Fitness, Activity Rooms, Activity/Classrooms, Small Meeting/Quiet, Teen Center, Game Room, Children's Play Area, Food Pantry	16,836
Building Support: Server, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	1,633
TOTAL	22,059
Parking for 88 vehicles	

PROGRAMMING PROCESS: TOWN HALL



PROGRAMMING PROCESS: TOWN HALL

Town Hall	Gross Square Footage
Public: Entry Vestibule and Lobby, Public Counters for Business + Land Use Departments	1,599
Business Offices Shared: Conference Rooms – Large + Standard, IT, Swing Space, Lunchroom, Storage, Copy/Mail, Archive Records	2,629
Business and Land Use Offices: Offices, Files Areas, Vault, Plan Storage	7,029
Building Support: Server, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	3,193
TOTAL	14,450
Parking for 69 vehicles	



PROGRAMMING PROCESS: SITE USE

- Committee and General Public
 - Passive Recreation
 - Support Areas for Community Building
 - Public Gathering Places
 - Dedicated Spaces
 - Parking: Dedicated to Building Users + Visitor



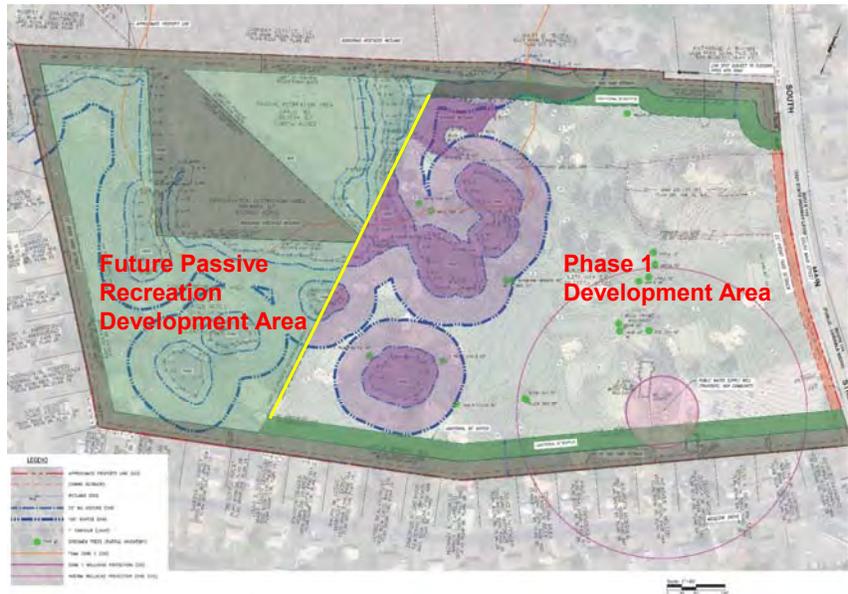
SITE ANALYSIS

- Site Development Issues
 - Topography relatively easy to develop
 - Assume soils in active area are not problematic
 - Many significant specimen trees
 - Several groves of trees
 - Viewsheds
 - Zoning Restrictions
 - Emergency Access to Passive Recreation Area
 - Light Spill impact to neighborhood

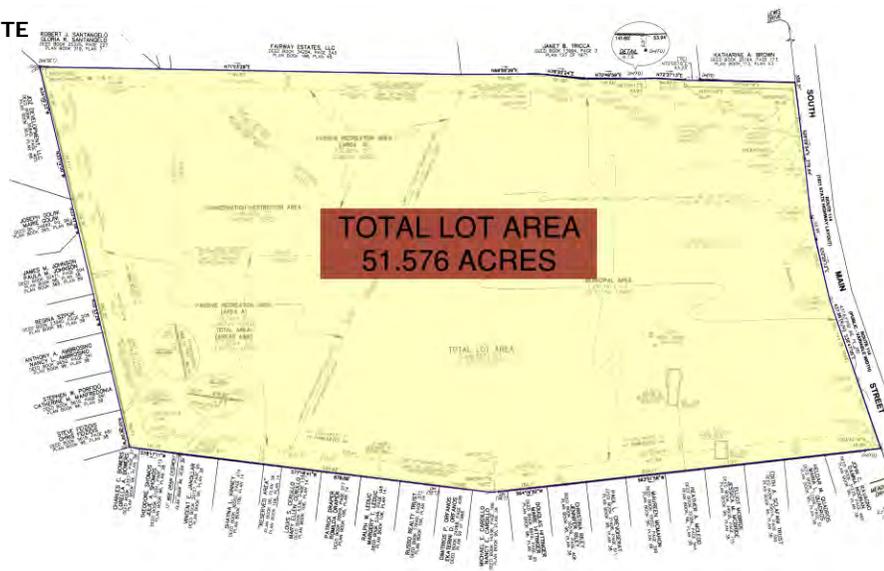


SITE ANALYSIS

- Phase 1 Development Area - Plan for:
 - All Buildings
 - Roadways + Parking
 - Site Support Elements
- Future Passive Recreation Development Area
 - Preserve Landscape
 - Protect Wetlands
 - Town input for Passive Recreational Activities
 - Consider Maintaining this portion of the site

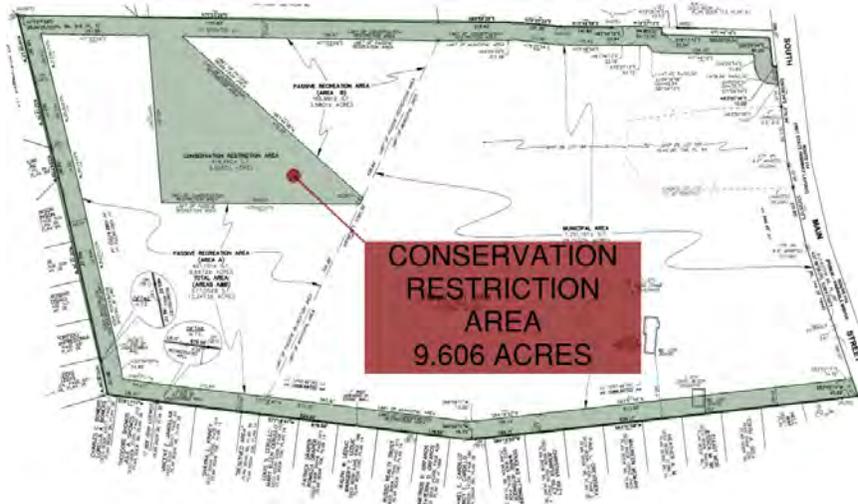


SITE ANALYSIS: EXISTING SITE



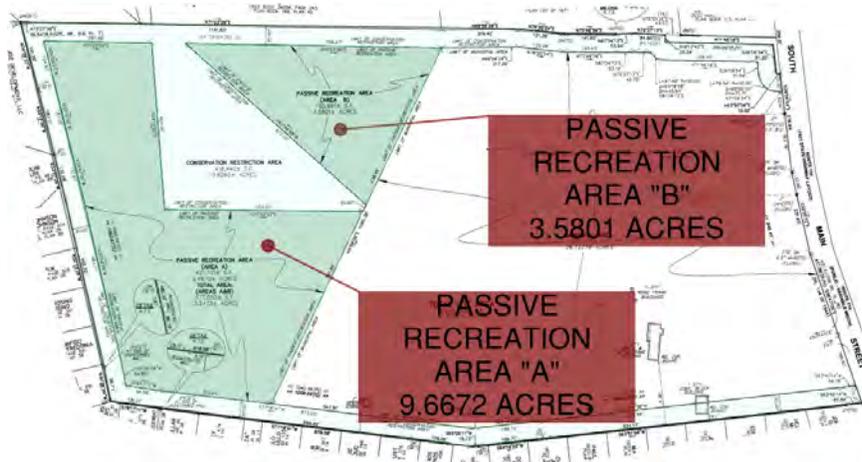
SITE ANALYSIS: CONSERVATION RESTRICTION AREA

- 50' from Property
- Additional Area as shown
- Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
- By Permission Only
 - Trails/Signs
 - Wildlife/Vegetation Management



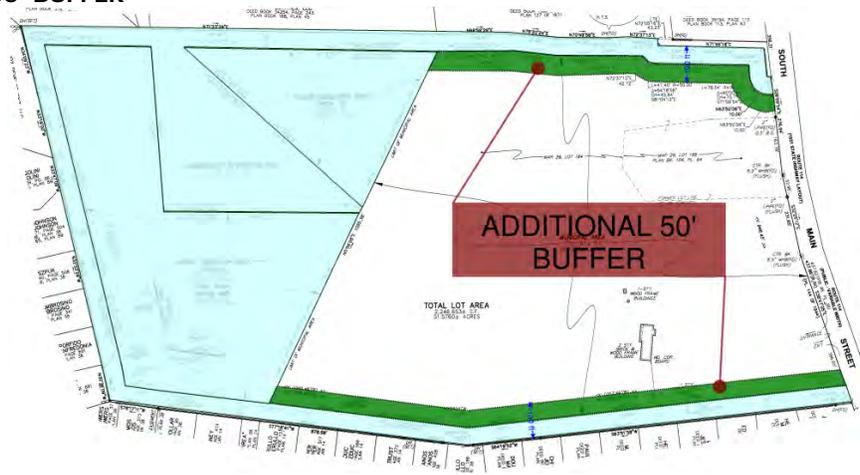
SITE ANALYSIS: PASSIVE RECREATION AREA

- Total Area: 13.2 Acres
- Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
- Allowable
 - Trails/Signs
 - Wildlife/Vegetation Management



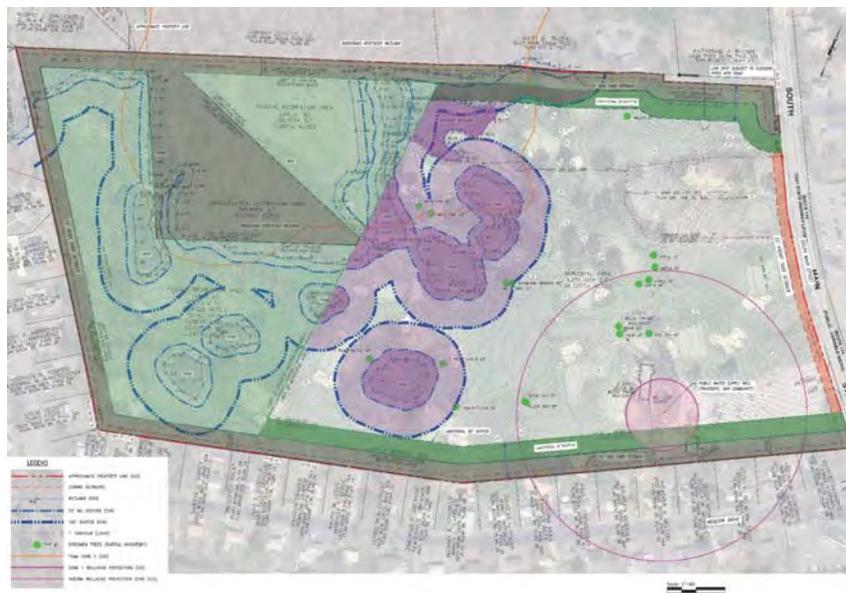
SITE ANALYSIS: ADDITIONAL 50' BUFFER

- Total Distance from Adjacent Property Lines = 100'
- Similar Restrictions and Allowable Uses as adjacent Conservation Restriction Areas
- Note:
 - Buffer near South Main Street may impact location of Fire Station



SITE ANALYSIS

- Regulatory Areas
 - Wetlands
 - Public Drinking Water Wellhead Protection
 - Town Building Setbacks
- Topography/Drainage
 - Golf Course undulation
 - Low spots with existing pipes



SITE ANALYSIS: TRAFFIC

- Relatively Low Volume
 - Few Accidents, Low in Severity
- Sight Distance more than adequate for 85% speeds captured
- Trip Generation for the initial Fire Station expected to be minor, Full Traffic Impact Analysis (TIA) not anticipated
 - Full Build Option may meet MassDOT Thresholds for full TIA (TBD)
- Initial Assessment: South Main Street appears sufficient to handle existing traffic volumes

**NEXT STEPS**

- Development of 3 Concepts
- Review by Committee
- Community Workshop
- Community Survey on Website



MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title:	Public Meeting: Meeting #4
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Meeting Minutes By:	Janet M. Slemenda, HKT Architects
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Date:	November 13, 2019
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Time:	7:00pm
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Location:	Flint Public Library
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Attendees:	Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
	■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
	■ Frank Twiss, MDPC (FT)	William Hammer, HKT (WRH)
	■ Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
	■ Annette Wilton, MDPC (AW)	■ David Pollock, Abacus (DP)
	Ken Lisiak, MDPC (KL)	■ Community Members
	■ Bill Renault, MDPC (BR)	
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	

Abbreviations:	MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team
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Item

- 4.01 The agenda consisted of 4 parts:
- Summary: Programs & Site Analysis
 - Concepts
 - Community Workshop
 - Next Steps

- 4.02 Process summary: Janet M. Slemenda (JMS) reviewed the programs and site analysis phase that has been completed. The one addition to the programming process was that the initial Council on Aging Meeting had occurred and the new director, Jillian Smith, was going to follow-up with comments after she had a meeting with her staff and Board.

The other idea that was discussed was the possibility of combining Town Hall and the Community Center into one structure, which could be built in phases. The design team had realized that there were overlapping spaces in these two buildings such as large meeting rooms and the lobby space (as well as the mechanical rooms) and that there were logical overlaps that would reduce the overall square footage that would be built. Similar logic were reviewed when the idea of a public safety facility was discussed.

- 4.03 Four Options were reviewed and discussed:
- Concept 1A - New England Village

-
- 3 structures: Public Safety, Community Building + Town Hall
 - Formal building placement around Central Common
 - Town Hall is prominent
 - Maximize Central Common
 - Maintain viewshed
 - Buildings furthest away from neighborhood
 - Parking largely behind green
 - Concept 1B – New England Village
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Maximize Central Common
 - Parking distributed
 - Concept 2 - Main Street
 - 4 structures: Fire Station, Police Station, Town Hall + Community Building
 - Formal building placement along main road; All buildings visible
 - Active but small green on Main Street
 - View to remaining site is between buildings
 - Rear green is connected to conservation area
 - Clear vehicular separation between Fire + Police Buildings and Town Hall + Community Center
 - All parking to rear of buildings
 - Concept 3 - Grand Common
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Large Central Common
 - View from 114 is of Common + all the way to the rear of the site
 - Parking distributed

4.04 Open discussion responses:

- Municipal Facility Planning Principals described in Master Plan Bylaw. AS will provide a copy of those principals to team
 - Plan should set direction for future of site
 - Fire Department, Police Department, CoA/Community Building, Town Hall are the four major programs that will be planned for this site
 - Will consider use of site not needed for program
 - AS spoke of 10-20 years to complete all projects
 - Maintenance of site: Just took ownership and site has been mowed once and will be mowed to maintain
 - How will it be maintained and used is still to be determined
 - Can the site just go wild with plantings?
 - What will happen within setbacks? Mowed, planted, or return to more natural state?
 - ATV use of site currently is a big problem for neighbors; anticipate this becoming snowmobile use as winter moves on; Policing must happen now.
 - “Kids” and ATV’s are harming site
 - AS noted that Chief DiGianvittorio is aware of these issues and is working to address concerns
 - Level of music and other noise at events has to be considered with respect to neighbors
 - Long term use: Uses beyond the four named projects; Plan Ahead
 - JMS noted that the overall site is being considered as a fifth programmed element
 - Seniors – outside areas
 - Share with kids
 - Central gathering space as Town Center
-

-
- Approximately 20 acres of site is to be left open
 - This portion will be planned so that it can be maintained and be kept safe
 - Will variances be required?
 - Lighting on site is important; consider neighbors
 - Walking paths at perimeter of site
 - Halloween parade and the like
 - Brick pathways – pay for sponsors
 - Swamp Walk- ZBA required at other site

4.05 Discussion ensued about the upcoming Community Workshop on Saturday November 16, 2019:

- Summary of Process to Date
 - Programming
 - Site Analysis
- Discussion Session
 - Use of Site
 - Combined Facilities versus Stand-Alone Facilities
 - Intergenerational Center
- Concept Review
 - Individual Stations
 - Review and Comment
 - Report of Findings

4.06 Next Steps:

- Community Workshop
- Community Survey on Website
- Prepare Preferred Master Plan with Phasing Options
- Develop Design Guidelines

4.07 The next public meeting will be a Community Workshop on Saturday November 16, 2019.

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: December 2, 2019 at 7:00pm Fuller Meadow School Media Room and December 4, 2019 which will be a Community meeting at the Flint Library.



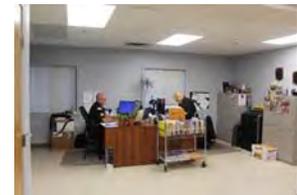
AGENDA

- Summary: Programs & Site Analysis
- Concepts
- Community Workshop
- Next Steps



PROGRAMMING PROCESS: POLICE DEPARTMENT

Police Department	Gross Square Footage
Administration: Offices, Detectives, Interview, Lab, Prosecutors, Conference, Supplies/Copy, Archive Document Storage	3,025
Operations: Sergeants, Officer Shared Workspace, Squad Room, Report Writing, IT, Evidence, Armory	2,583
Staff Support: Lunch/Break Room, Toilet/Shower Locker Room	2,163
Detention: Sally Port/Impound/ Vehicle Bays, Bulk Evidence/Recovered Property, Booking, Cells, Interrogation	4,445
TOTAL WITHOUT SHARED SPACE	12,216
Carpport Parking: 2,200 sf for police vehicles	
Parking for 43 vehicles	



PROGRAMMING PROCESS: SHARED – FIRE AND POLICE DEPARTMENTS

Shared Spaces	Gross Square Footage
Entry: Lobby for Walk-in Visitors with Secured Public Interview Room; Large Community Room used for Emergency Operations Center, FD + PD Training and General Community Use, Kitchenette, Office Area for EOC	3,844
Communications: Secondary PSAP	288
Staff Support: Fitness	1,078
Building Support Rooms: Server/911, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	3,181
TOTAL	8,391
Parking for 20 vehicles	

PROGRAMMING PROCESS: POSSIBLE OPTIONS FOR PUBLIC SAFETY

Public Safety Options	Approximate GSF
Combined Facility Parking for 86 vehicles + Carport	40,986
Stand-Alone Fire Station with Smaller Meeting Room used for Emergency Operations Center, FD Training + General Community Use. Parking for 38 vehicles	26,714
Stand-Alone Police Station with Smaller Meeting Room used primarily for PD Training + General Community Use. Parking for 58 vehicles + Carport	18,683

PROGRAMMING PROCESS: TOWN HALL

Town Hall	Gross Square Footage
Public: Entry Vestibule and Lobby, Public Counters for Business + Land Use Departments	1,599
Business Offices Shared: Conference Rooms – Large + Standard, IT, Swing Space, Lunchroom, Storage, Copy/Mail, Archive Records	2,629
Business and Land Use Offices: Offices, Files Areas, Vault, Plan Storage	7,029
Building Support: Server, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	3,193
TOTAL	14,450
Parking for 69 vehicles	



PROGRAMMING PROCESS: COMMUNITY BUILDING

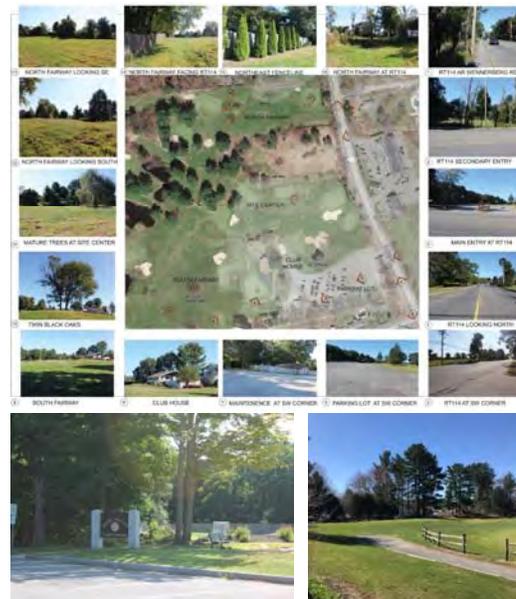
Community Building	Gross Square Footage
Public: Entry Vestibule + Lobby, Reception/Counter Services, Public Toilets	1,481
Offices: CoA, Wellness, Counseling, Other, Open Shared	1,071
Office Support: Conference, Lunch/Break Room, Employee Toilets, Storage, Copy/Mail	1,038
Program Spaces: Kitchen, Lounge/Café, Multi-Purpose, Movement/Fitness, Activity Rooms, Activity/Classrooms, Small Meeting/Quiet, Teen Center, Game Room, Children's Play Area, Food Pantry	16,836
Building Support: Server, Mechanical, Electrical, Plumbing/Fire Protection, Janitors, Vertical Circulation	1,633
TOTAL	22,059
Parking for 88 vehicles	

PROGRAMMING PROCESS: POSSIBLE OPTIONS FOR TOWN HALL + COMMUNITY BUILDING

Combined Town Hall and Community Building	Approximate GSF
Combined Facility with shared lobby with three service points, shared meeting rooms and shared building services. No duplication of elevators and stairs Parking for 147 vehicles	33,778
Stand-Alone Town Hall with one larger meeting room used for early voting, board meetings and elections trainings Parking for 69 vehicles	14,450
Stand-Alone Community Building with Kitchen, Lounge/Café, Multi-Purpose, Movement/Fitness, Activity Rooms, Activity/Classrooms, Small Meeting/Quiet, Teen Center, Game Room, Children's Play Area, Food Pantry Parking for 88 vehicles	22,059

SITE ANALYSIS

- Site Development Issues
 - Golf course undulation; Topography relatively easy to develop; Assume soils are not problematic
 - Many specimen trees; Several groves of trees
 - Viewsheds
 - Emergency Access to Passive Recreation Area
 - Light Spill impact to neighborhood
- Regulatory Areas
 - Wetlands
 - Public Drinking Water Wellhead Protection
 - Zoning Restrictions
 - Town Building Setbacks



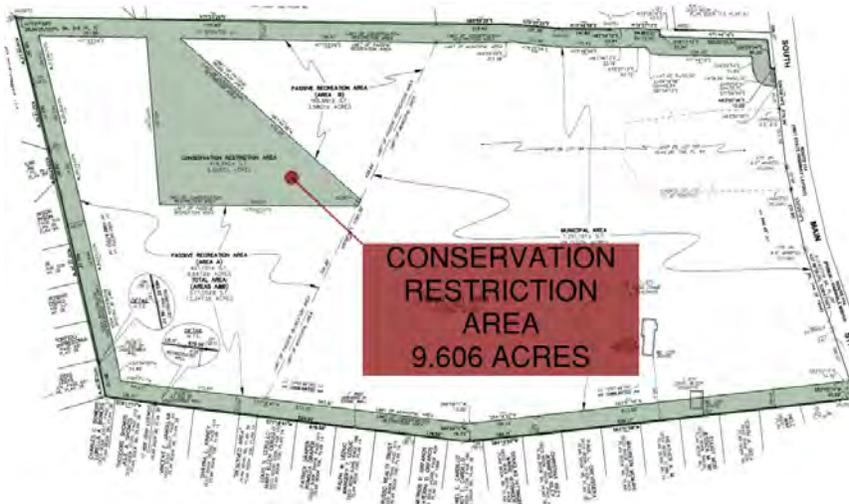
SITE ANALYSIS

- Phase 1 Development Area - Plan for:
 - All Buildings
 - Roadways + Parking
 - Site Support Elements
- Future Passive Recreation Development Area
 - Preserve Landscape
 - Protect Wetlands
 - Town input for Passive Recreational Activities
 - Consider Maintaining this portion of the site



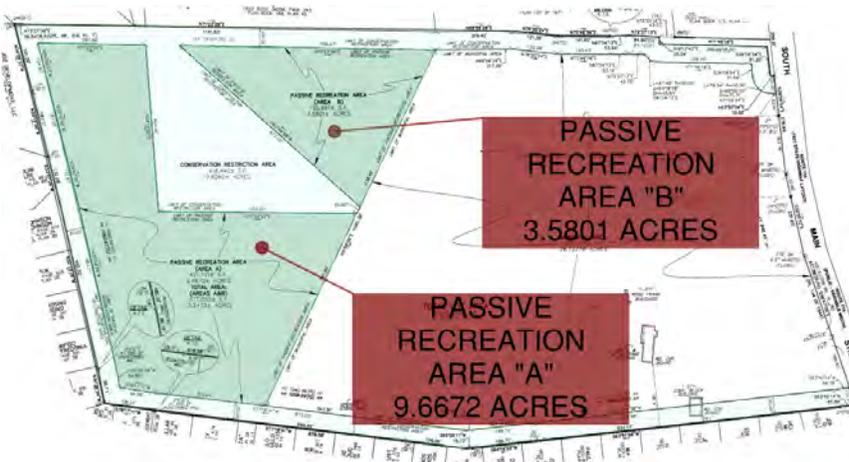
SITE ANALYSIS: CONSERVATION RESTRICTION AREA

- 50' from Property
- Additional Area as shown
- Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
- By Permission Only
 - Trails/Signs
 - Wildlife/Vegetation Management



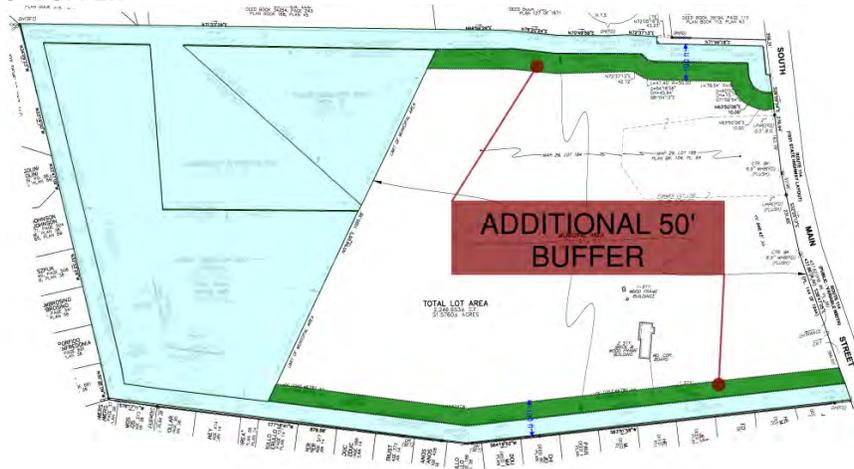
SITE ANALYSIS: PASSIVE RECREATION AREA

- Total Area: 13.2 Acres
- Restrictions
 - No Buildings
 - No Pavement/Parking
 - No Utilities
 - No Solar
- Allowable
 - Trails/Signs
 - Wildlife/Vegetation Management



SITE ANALYSIS: ADDITIONAL 50' BUFFER

- Total Distance from Adjacent Property Lines = 100'
- Similar Restrictions and Allowable Uses as adjacent Conservation Restriction Areas
- Note:
 - Buffer near South Main Street may impact location of Fire Station



SITE ANALYSIS: TRAFFIC

- Relatively Low Volume
 - Few Accidents, Low in Severity
- Sight Distance more than adequate for 85% speeds captured
- Trip Generation for the initial Fire Station expected to be minor, Full Traffic Impact Analysis (TIA) not anticipated
 - Full Build Option may meet MassDOT Thresholds for full TIA (TBD)
- Initial Assessment: South Main Street appears sufficient to handle existing traffic volumes



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**CONCEPT 1A**

- New England Village
 - 3 structures: Public Safety, Community Building + Town Hall
 - Formal building placement around Central Common
 - Town Hall is prominent
 - Maximize Central Common
 - Maintain viewshed
 - Buildings furthest away from neighborhood
 - Parking largely behind green



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**CONCEPT 1B**

- New England Village
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Maximize Central Common
 - Parking distributed



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**CONCEPT 2**

- Main Street
 - 4 structures: Fire Station, Police Station, Town Hall + Community Building
 - Formal building placement along main road; All buildings visible
 - Active but small green on Main Street
 - View to remaining site is between buildings
 - Rear green is connected to conservation area
 - Clear vehicular separation between Fire + Police Buildings and Town Hall + Community Center
 - All parking to rear of buildings



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**CONCEPT 3**

- Grand Common
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Large Central Common
 - View from 114 is of Common + all the way to the rear of the site
 - Parking distributed



COMMUNITY WORKSHOP

- Summary of Process to Date
 - Programming
 - Site Analysis
- Discussion Session
 - Use of Site
 - Combined Facilities versus Stand-Alone Facilities
 - Intergenerational Center
- Concept Review
 - Individual Stations
 - Review and Comment
 - Report of Findings

**NEXT STEPS**

- Community Workshop
- Community Survey on Website
- Prepare Preferred Master Plan with Phasing Options
- Develop Design Guidelines



MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Community Workshop: Meeting #5
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Meeting Minutes By: Janet M. Slemenda, HKT Architects
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Date: November 16, 2019

Time: 10:00am

Location: Flint Library

Attendees:	■ Amy Karas, MDPC, Chairperson (AK)	■ William Hammer, HKT (WRH)
	■ George Dow, MDPC (GD)	■ Janet M. Slemenda, HKT (JMS)
	■ Frank Twiss, MDPC (FT)	■ Lance Hill, Pare Corp (LH)
	Tom Schank, MDPC (TS)	■ David Pollack, Abacus (DP)
	■ Annette Wilton, MDPC (AW)	■ David Eisen, Abacus (DE)
	Ken Lisiak, MDPC (KL)	Nelson Hammer, Hammer Walsh (NH)
	■ Bill Renault, MDPC (BR)	■ David Walsh, Hammer Walsh (DW)
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	
	■ Jim DiGianvittorio, Police Chief (JD)	
	■ Tom Martinuk, Fire Chief (TM)	
	■ Jillian Smith, CoA (JS)	

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

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- 5.01 The meeting consisted of three parts: Review of Study Process, Concept Review and Discussion Session. JMS describe what a Master Plan was and why it was important for the town to complete the process.
- A Master Plan is a a dynamic long-term planning guide that summarizes goals and objectives of the community and recommends various decisions and actions that the Town can take to achieve their goals
 - The Plan will be based on Community input and priorities. The process will be collaborative, cooperative, and coordinated with the goal of achieving consensus and endorsement of the issues, goals, objectives and implementation strategies.
 - The Plan will provide vision and direction for use of the site, will lay the groundwork for future development and will guide the physical development of each proposed building project.
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-
- The Plan will include expansion and phasing options, implementation schedules and total project costs
 - It is critical to get the programs, site organization and layout right at the outset to assure good decision making going forward.
 - Our scope of work includes the Master Plan as well as schematics and cost estimate for the first building and related site development. Future processes will look inside each building in detail, particularly for the Community Center, and will occur once the Town is closer to moving ahead with each successive project.
-

5.02 Process to date:

Programming:

HKT received questionnaire responses from departments, met with each department for tours and to review space needs, and prepared programming summary data that was reviewed by end users.

Programming Results:

- Fire Department without shared spaces: 20,379 gsf and 23 vehicles
- Police Department without shared spaces: 12,216 gsf and carport parking of 2,200 sf and 43 vehicles
- Fire and Police Shared: 8,391 gsf and 20 vehicles
- Possible Public Safety Options:
 - Combined Facility: 40,986 gsf and carport parking of 2,2000 sf and 86 vehicles
 - Stand-Alone Fire Station: 26,714 gsf and 38 vehicles
 - Stand-Alone Police Station: 18,683 gsf and carport parking of 2,200 sf and 58 vehicles
- Town Hall: 14,450 gsf and 69 vehicles
- Community Center: 22,059 gsf and 88 vehicles
- Possible Option for a combined Town Hall and Community Center: 33,778 gsf and 147 vehicles
- Site Use:
 - Passive Recreation
 - Support Areas for Community Center
 - Public Gathering Places
 - Dedicated Spaces
 - Parking: Dedicated to Building Users + Visitor

Site Analysis: Site Development Issues

- Topography relatively easy to develop
- Assume soils in active area are not problematic
- Many significant specimen trees; Several groves of trees
- Viewsheds
- Zoning Restrictions
- Emergency Access to Passive Recreation Area
- Light Spill impact to neighborhood

Phase 1 Development Area - Plan for:

- All Buildings
 - Roadways + Parking
 - Site Support Elements
 - Future Passive Recreation Development Area
 - Preserve Landscape
 - Protect Wetlands
 - Town input for Passive Recreational Activities
 - Consider Maintaining this portion of the site
 - Regulatory Areas
-

-
- Wetlands
 - Public Drinking Water Wellhead Protection
 - Town Building Setbacks
 - Topography/Drainage
 - Golf Course undulation
 - Low spots with existing pipes

Traffic Analysis:

- Relatively Low Volume
- Few Accidents, Low in Severity
- Sight Distance more than adequate for 85% speeds captured
- Trip Generation for the initial Fire Station expected to be minor, Full Traffic Impact Analysis (TIA) not anticipated
- Full Build Option may meet MassDOT Thresholds for full TIA (TBD)
- Initial Assessment: South Main Street appears sufficient to handle existing traffic volumes

5.03 Concept Review:

- Break into Groups
 - Groups composed of overlapping community groups, neighbors, Committee Members + Town Officials and Design Team
- Review 4 Options
 - Use Green + Red dots to note areas that you see as positive + areas you see as a concern
 - List Pluses + Minuses of each Option
 - Record Comments
- New ideas: Tracing paper + markers
- Present + Review Comments

JMS briefly described the 4 Options.

Concept 1A:

- 3 Structures:
 - Public Safety
 - Fire apparatus with direct access to roadway
 - Community Center
 - Town Hall
 - Town Hall is prominent
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Buildings furthest away from neighborhood
- Parking largely behind buildings + green

Concept 1B:

- 2 structures:
 - Public Safety
 - Fire apparatus with direct access to roadway
 - Combined Town Hall + Community Center
 - Formal building placement around Central Common
 - Maximize Central Common
 - Parking distributed
-

Concept 2:

- 4 structures:
 - Fire Station
 - Police Station
 - Community Center
 - Town Hall
- Formal building placement along main road
- Active but small green possible on Main Street; Rear Central Common is adjacent to conservation area
- View to remaining site is minimal
- Clear vehicular separation between Fire + Police Buildings and Town Hall + Community Center
- All parking to rear or side of buildings

Concept 3:

- 2 structures:
 - Public Safety
 - Fire apparatus with direct access to roadway
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed

-
- 5.04 The attendees broke into 6 groups who met to discuss the pros and cons of each options, using red and green dots to indicate positive and negative aspects of each scheme. A scribe recorded comments. Following that each group worked collectively to prepare a scheme that represented their ideas for the site based on what they had discussed and agreed upon. Some teams produced more than one option.

The teams each then presented their ideas to the entire assembly. General comments were developed from the individual comments, as seen below, as well as comments written on drawings or described by participants. They include the following:

Positive Comments:

- Separation is desirable between Public Safety Building and Town Hall/Community Center
 - Maintain view shed from Route 114
 - Minimize impact of new development on Meadow Drive residents
 - General agreement to town green concept. It should be as large as possible
 - Single road access to town green to be remote from Meadow Drive to avoid accidents
 - Provide a physical buffer between Meadow Drive residents and the 100' setback
 - Explore a two level option for the Community Center for Option 1B
 - General support for a combined Town Hall/Community Center
 - Consider adding parking around the periphery of the town green
 - Provide a green buffer between the town green and Route 114
 - Consider for a one-way loop road
 - Scheme 1B should be located further north on the site.
 - Provide parking and van access for meals on wheels
 - Provide trails and footpaths around the property
 - Create overflow parking on grass area(s) to accommodate large or simultaneous functions
-

Concerns:

- Concerns with traffic on Route 114 and access from Meadow Drive
- No support for Option 2
- Avoid blocking view shed from Route 114
- Mitigate light pollution from cars, site lighting, etc.
- Consider a two-way drive with a turn-around at the end versus a loop road thus using in less asphalt
- Consider a free-formed town green
- Create green around buildings and move buildings closer together
- Locate building entries off of the town green, not at rear of buildings
- Parking associated with the Community Center must be as close as possible to the entry.
- Clear access by emergency vehicles to the Community Center is very important

Team 1: Notes and reporting

- Preferred to kept the buildings fairly close together to share parking and wrap the common while allowing the open space to continue back to the undeveloped part of the site
- Preferred non-orthogonal
- Development was kept away from homes to the south
- Views important – senior center looking at pond
- Parking could line the drive for convenience and to keep parking lots small, more parking overall
- A drive with a turnaround would minimize asphalt – with meals on wheels drop off on the end of the community center/COA building; accessible parking in front of buildings
- The space between the public safety building and the town hall/community center could be parking, and/or the existing grove of trees; Parking along green
- More tree protection
- On-site maintenance building
- Did not like Main Street Option 2
- Permeable paving
- Increase parking to more than 200

Team 2: Notes and reporting

- Want buildings separate – Public safety should be a distance away from Community Center & Town Hall
- The view from 114 is very important – open view scape
- Minimize impact on all neighbors – manage and mitigate impact on neighbors – focus on Meadow Drive area
 - Mature trees planted
 - More green around the edge of the property
- We like a large open space and want open space preserved
- We prefer one road access with parking along the road with a second “road” that can be used several times a year to leave the common area (fire lane)
- Access to leave property would be available occasionally throughout the year
- Other comments/ideas:
 - Traffic concerns about Meadow Drive and getting out to 114 at busy times
 - Did not like option 2 – too ‘mallish’ looking like much of 114 is now
 - Not town-like but strip mallish looking
 - Like 1B best with adjustments
- Parking along driveway

Team 3: Notes and reporting

-
- Police and fire chief were very outspoken about the need to keep the public facilities with as much separation as possible from the CC and town hall
 - The group did not like option 2 at all
 - Option 1A had the public safety facilities too close other building...it might work by moving the CC further into the site keeping in mind wetland restrictions
 - Option 1B was not well received as it blocked the view into the western end of the site
 - Option 3 was favored because of the building separation between public safety and CC/ town hall, also:
 - Liked an idea of exploring a two level option on the CC to have upper and lower access
 - Wanted to make the "Green" as big as possible and using a landscape berm to provide more perceived separation along the southern 100ft buffer
 - No light pollution from building or parking
 - Put some parking around ring road to minimize pods of parking lots
 - Provide a better visual connection between CC and western end of site
 - Possible tree in medium
 - Minimize impact on neighbors
 - One entry with Fire Lane

Team 4: Notes and reporting

- Preferred plan to be less formal
- More organic shape
- Move buildings back
- Move parking between CC and PS; provide good access from one building to another
- Start Common in phases for build-out
- Park along Town Common
- Like views of pond
- Concern about shifting Public Safety north –noise for Wennerberg residents
 - Benefit – could we get a light at Wennerberg?
- Parking for Town Common – depends on usage
- Sidewalk around common
- Paths and trails around property
- Funding to Town Common – benefit for selling to taxpayer

Team 5: Notes and reporting

- Look more town like and less commercial
 - Like Public Safety location
 - For whichever of 1A or 3 selected there are concerns with traffic along Rte. 114; This was a major focus by the participants
 - The other concern is that the current entry to the former golf course is too close to Meadow Road and has generated accidents in the past
 - Another comment was that perhaps the green is too close to Rte. 114; This resulted in a solution to close the second curb cut to the loop road and create a green buffer and only one entry/exit to the site, other than the access to the fire and police facilities
 - The combined entry/exit might be centered on the green making it more recognizable and facilitating a one-way road; Participants want the future developer of the Richardson-owned site to line up their new entry road with the entry/exit to the town green
 - Look at ways to disperse the parking and add green to the hard surfaced areas; Team should certainly consider parking around the periphery of the green
-

-
- If the loop road is one way, allow for diagonal parking around the green
 - The preferred schemes were 1) Scheme 1B and 2) Scheme 3; In any case, there was full support for a land berm with planting on top within the 100' buffer
 - All agreed that Scheme 1B should be located further north towards the buffer (approximately 60')
 - All agreed that the combined Town Hall/Community Center was a good solution
 - Possible aligning of roads in future

Team 6: Notes and reporting

- Widen green space in common
- Parking along green
- Focus on Town Hall location
- Improve viewshed
- Concern for abutters
- Did not like Main Street Option 2
- Like combined but phased buildings
- Accessible Visitor access to each building important
- Location of parking important – not too close to buildings, providing some green space adjacent to building
- Preserve trees
- Larger Common

-
- 5.05 Due to time limitations the team opted to share the open response questions as one collective question and ask for folks to respond as they could. The questions will be repeated in the Survey which will soon be released.
- This “post-it” activity asked the attendees to participate by writing individual responses to a series of questions.
 - We were seeking input on what should happen on the Phase 1 Development Area Site
 - The session did not include what will be programmed inside each possible structure but instead focused on what might draw the citizens of Middleton to this site for reasons other than what is happening inside a public safety building, or Town Hall, or a Community Building.

The questions were as follows:

Question 1: What two big outdoor uses or activities would activate the Town Center site and make you more likely to visit and participate?

- Examples: Town Green, Community Gardens, walking/running paths, sculpture park

Question 2: What two small outdoor uses or activities would activate the Town Center site and make you more likely to visit and participate?

- Examples: Tot lot, band stand, fountain

Question 3: What two outdoor uses or activities should be part of the Multi-generational Community Center and would make you more likely to visit and participate?

- Examples: Outdoor dining patio, exercise area, contemplation/zen garden, bocce/shuffleboard

Questions 4: What existing Middleton tradition do you think would be a successful fit for the Town Center? If you don't have an existing tradition you can propose a new one!

- Examples: Pumpkin Fest, 4th of July Fireworks, Food Truck Mondays

The answers were collected and are as follows:

Question 1:

- Town Green/Common (5)
- Walking Paths (8)
- Walking/running (3)
- Green area with paths for walking would draw me to this area
- Trees and natural greens
- Nature Trails with exercise items
- Community Garden (2)
- Vegetable Gardens
- Playground Equipment/Swings etc. (4)
- Skating area
- Drone Flying Field
- Picnic Tables
- Sports fields for recreational sports
- Tennis courts
- Pickleball courts (2)
- Basketball court
- Fields – soccer and baseball
- Fields for picnics etc.

Question 2:

- Band Stand (10)
- Dog Park (3)
- Trails, Trails with benches (2)
- Memorial and Veterans Day
- Tot lot (2)
- Farmers market (2)
- Interactive fountain
- Sledding
- Summer Camps

Question 3:

- Outdoor Dining/seating
 - Garden
 - Bocce; good to bring old and young together (4)
 - Dining Patio
 - Shuffle board
 - Gym
 - Tennis courts
 - Playground
 - Senior Program – Rec for Children
 - Exercise Area at CC (2)
 - Senior Activities
 - Real Senior Center: Home cooked meals, space for meetings, no charge
 - Veranda at CC
 - Intergenerational plays and theater
 - Outdoor dining/seating (2)
 - Heart walk
 - Field Days
-

Question 4:

- Food Trucks (5)
- Farmers Market (2)
- AG Day – Focus on history of Middleton – teach children about AG and how Middleton used to be a farm town (2)
- Milking Competitions
- Chef Wills (2)
- Pumpkin Festival (6)
- Winter Festival (6)
- Skating area – wintertime
- Christmas Events – Richardson's green is way too small (3)
- Tree lighting (2)
- Summer Concert Series (2)
- Seasonal Festivals
- Community: Concerts (3) and Movie Nights (2)
- Fourth of July celebration
- Fireworks
- Trick or Treat/Halloween (2)

Other Comments:

- Town Committee Meetings
- Adequate parking
- Get it built sooner rather than later, it will cost less in the long run. And the residents will be paying for it will be able to enjoy it.
- It would be a shame if (?) live for 20 years pay for it and don't get to enjoy it.
- Get it built sooner.
- Town Functions Yearly

5.05 Next Steps:

- Community Survey on Website
- December 4, 2019: Next Community Meeting
- Regularly Schedule MDCP Meetings: Check Town Website
- February 12, 2020: Presentation to Town Officials

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDCP Meeting to be held: December 2, 2019 at 7:00pm.

MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Public Meeting: Meeting #6
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Meeting Minutes By: Janet M. Slemenda, HKT Architects
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Date: December 4, 2019

Time: 7:00pm

Location: Flint Public Library

Attendees:	■ Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
	■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
	■ Frank Twiss, MDPC (FT)	■ William Hammer, HKT (WRH)
	■ Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
	■ Annette Wilton, MDPC (AW)	■ David Eisen, Abacus (DE)
	■ Ken Lisiak, MDPC (KL)	Community Members
	■ Bill Renault, MDPC (BR)	
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

- 6.01 Due to the snow storm, this meeting was designed to combine the initial meeting with the MDPC to discuss the options (scheduled for December 2nd) and tonight's meeting for public input. The agenda consisted of presenting the preferred options from the community workshop with the intent of selecting a single preferred design. The schemes that were presented were options 1B.1 and 3.1. The purpose of this meeting was to hear comments so that they could, where appropriate, be integrated into a final scheme. These schemes are attached to these minutes. In general, they described as:
- Scheme 1B.1: The Public Safety building (fire and police) are connected into one building that could be building in two stages or in one phase. The building is located on the northeast corner of the site with direct access to South Main Street. It is planned to be as close as possible to the northern 100' buffer setback. The Town Hall, combined with the Community Center (also could be built in two phases) is at the head of the town green west of the public safety building. The access road is a one-way drive located as far away as possible from Meadow Drive.
 - Scheme 3.1: The Public Safety building is located in the same position as Scheme 1B.1. This was agreed as the best location to start the development of the Municipal Center inasmuch as the fire and police would need direct and dedicated access to their respective facilities. The Town Hall/Community Center would be located on the south side of the site with a berm within

the buffer to reduce noise and lights from motor vehicles. The town green is less traditional in that the two-way drive wraps around it and creates a non-rectilinear space.

- 6.02 After the two schemes were presented, the floor was opened for questions and comments. Briefly, the discussion focused the following comments and where appropriate the corresponding responses:
- Andrew Sheehan (AS) stated that there are two decisions that needed to be made:
 - Which was the preferred option and,
 - Should the fire and police be located in a single public safety facility or should they be in separate buildings. The same was true for the town hall and community center.
 - AS also pointed out that a full buildout of the site could take 10 to 15 years.
 - Ken Lisiak (KL) asked why the Design Team had not considered a two-way drive with a traffic circle at the end as opposed to the loops shown on the two selected schemes. There could be a dirt road added as an additional way off the site. This concept had been one of the many solutions presented at the community workshop on November 16th.
 - Jim DiGianvittorio, Police Chief (JD) commented that a two-way drive would be less safe and the roadway would need a median and perhaps two lanes each way for drop-offs, emergency vehicle access, etc.
 - JD was strongly in favor of a one-way loop drive.
 - A community member noted that Scheme 1B.1 had the Town Hall facing South Main Street and considered that a desirable. Scheme 3.1 would simply show the ends of each building, thus diminishing their presence on South Main Street.
 - HKT noted that given the wide open green in both schemes, both buildings would be visible when approaching the site.
 - The CoA should have a covered drop-off for vans. This received a positive response. Also, they should be stored under cover.
 - JD suggested that the covered vehicle area for the Police Department could be expanded to accommodate the vans.
 - One comment reacted positively to the irregular shape of the town green in Scheme 3.1.
 - A community member asked why the master plan doesn't include a barn for social events, both public and private such as weddings or other community gatherings.
 - AS responded that no commercial activities, such as rentals for private events, are permitted. This is part of a deed restriction in place when the property was sold to the Town.
 - Also, the program was limited to the four functions of fire, police, community center and town hall.
 - There was a positive comment regarding the green space to the west of the community center in Scheme 3.1. The Design Team felt that a similar space could be provided in Scheme 1B.1.
 - One comment suggested visiting the North Andover Community Center.
 - A community member asked whether stone walls and sidewalks would be included.
 - HKT noted that these items will be added in once the scheme continues to be refined and are planned along South Main Street and within the site.
-
- 6.03 At the conclusion of the meeting, the MDPC was asked to vote on the following 2 issues:
- Which is the preferred scheme.
 - Scheme 1B.1 received 5 votes and Scheme 3.1 received 1 vote.
 - Should the Fire and Police Departments share one building or be constructed as two discrete buildings?
 - One building was the unanimous choice.
 - There was no vote to decide whether the building would be in one or two phases.
-

6.04 Next Steps:

- Community Survey on Website
- Prepare Preferred Master Plan with Phasing Options
- Develop Design Guidelines

6.05 The next meeting with the MDPC will be on Wednesday December 18, 2019.

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

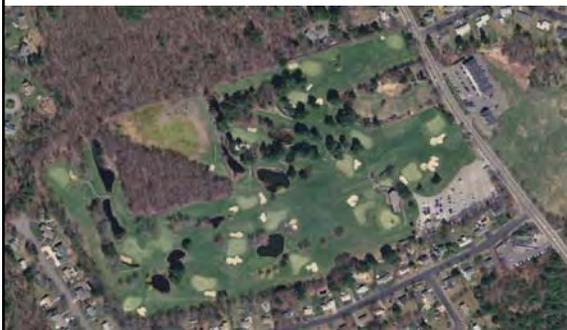
Attachments

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AGENDA

- Workshop Review
- Two Options
- Next Steps



WHAT IS A MASTER PLAN + WHY COMPLETE ONE

- The Master Plan for the municipal complex will be a dynamic long-term planning guide that summarizes goals/objectives + recommends decisions/actions that the Town can take to achieve their goals
 - The Plan will be based on Community input + priorities; The process strives to be collaborative, cooperative + coordinated with the goal of achieving consensus + endorsement of the issues, goals, objectives + implementation strategies
 - The Plan will provide vision + direction for use of the site, will lay the groundwork for future development + will guide the physical development of each proposed building project
 - The Plan will include expansion + phasing options, implementation schedules + total project costs

**CONCEPT 1A**

- 3 Structures:
 - Public Safety
 - Community Center
 - Town Hall
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Buildings furthest away from neighborhood
- Parking largely behind buildings + green



CONCEPT 1B

- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Parking distributed

**CONCEPT 2**

- 4 structures:
 - Fire Station
 - Police Station
 - Community Center
 - Town Hall
- Formal building placement along main road
- Small green on Main Street; Rear Central Common is adjacent to conservation area
- View into site is minimal
- Clear vehicular separation; All parking to rear or side of buildings



CONCEPT 3

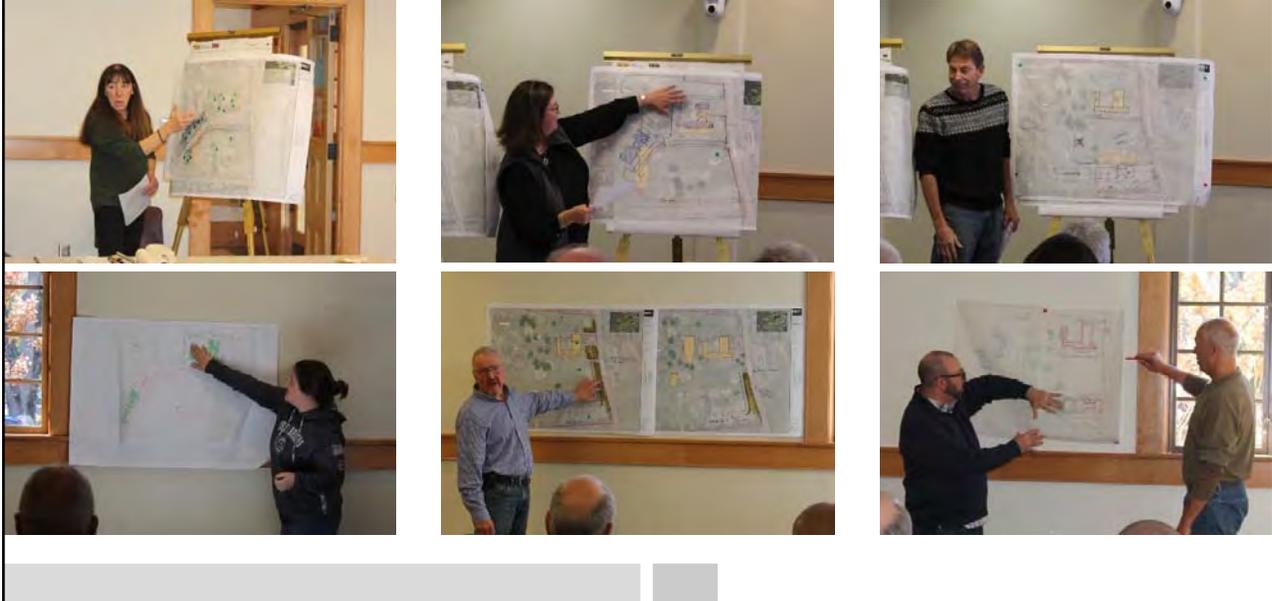
- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed



SATURDAY WORKSHOP



SATURDAY WORKSHOP



OPTION 1B.1

- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed



OPTION 3.1

- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed

**NEXT STEPS**

- Community Survey
- Regularly Schedule MDCP Meetings: Check Town Website
- February 12, 2020: Presentation to Town Officials



MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA**HKT Project No.: 21931**

Meeting Title: Public Meeting: Meeting #7**Meeting Minutes By:** Janet M. Slemenda, HKT Architects**Date:** December 18, 2019**Time:** 7:00pm**Location:** Nathan Media Center, Fuller Meadow School

Attendees:

- Amy Karas, MDPC, Chairperson (AK)
- George Dow, MDPC (GD)
- Frank Twiss, MDPC (FT)
- Tom Schank, MDPC (TS)
- Annette Wilton, MDPC (AW)
- Ken Lisiak, MDPC (KL)
- Bill Renault, MDPC (BR)
- Andrew Sheehan, Town Administrator, MDPC (AS)
- Jim DiGianvittorio, Police Chief (JD)
- Tom Martinuk, Fire Chief (TM)
- William Hammer, HKT (WRH)
- Janet M. Slemenda, HKT (JMS)
- David Eisen, Abacus (DP)
- Community Members

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

-
- 4.01 The agenda consisted of 4 parts:
- Summary: Programs & Site Analysis
 - Concepts
 - Community Workshop
 - Next Steps

-
- 4.02 Process summary: Janet M. Slemenda (JMS) reviewed the programs and site analysis phase that has been completed. The one addition to the programming process was that the initial Council on Aging Meeting had occurred and the new director, Jillian Smith, was going to follow-up with comments after she had a meeting with her staff and Board.

The other idea that was discussed was the possibility of combining Town Hall and the Community Center into one structure, which could be built in phases. The design team had realized that there were overlapping spaces in these two buildings such as large meeting rooms and the lobby space (as well as the mechanical rooms) and that there were logical overlaps that would reduce the overall square footage that would be built. Similar logic were reviewed when the idea of a public safety facility was discussed.

-
- 4.03 Four Options were reviewed and discussed:
- Concept 1A - New England Village
-

-
- 3 structures: Public Safety, Community Building + Town Hall
 - Formal building placement around Central Common
 - Town Hall is prominent
 - Maximize Central Common
 - Maintain viewshed
 - Buildings furthest away from neighborhood
 - Parking largely behind green
 - Concept 1B – New England Village
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Maximize Central Common
 - Parking distributed
 - Concept 2 - Main Street
 - 4 structures: Fire Station, Police Station, Town Hall + Community Building
 - Formal building placement along main road; All buildings visible
 - Active but small green on Main Street
 - View to remaining site is between buildings
 - Rear green is connected to conservation area
 - Clear vehicular separation between Fire + Police Buildings and Town Hall + Community Center
 - All parking to rear of buildings
 - Concept 3 - Grand Common
 - 2 structures: Public Safety, and Combined Town Hall + Community Building
 - Formal building placement around Central Common
 - Large Central Common
 - View from 114 is of Common + all the way to the rear of the site
 - Parking distributed

4.04 Open discussion responses:

- Municipal Facility Planning Principals described in Master Plan Bylaw. AS will provide a copy of those principals to team
 - Plan should set direction for future of site
 - Fire Department, Police Department, CoA/Community Building, Town Hall are the four major programs that will be planned for this site
 - Will consider use of site not needed for program
 - AS spoke of 10-20 years to complete all projects
 - Maintenance of site: Just took ownership and site has been mowed once and will be mowed to maintain
 - How will it be maintained and used is still to be determined
 - Can the site just go wild with plantings?
 - What will happen within setbacks? Mowed, planted, or return to more natural state?
 - ATV use of site currently is a big problem for neighbors; anticipate this becoming snowmobile use as winter moves on; Policing must happen now.
 - "Kids" and ATV's are harming site
 - AS noted that Chief DiGianvittorio is aware of these issues and is working to address concerns
 - Level of music and other noise at events has to be considered with respect to neighbors
 - Long term use: Uses beyond the four named projects; Plan Ahead
 - JMS noted that the overall site is being considered as a fifth programmed element
 - Seniors – outside areas
 - Share with kids
 - Central gathering space as Town Center
-

-
- Approximately 20 acres of site is to be left open
 - This portion will be planned so that it can be maintained and be kept safe
 - Will variances be required?
 - Lighting on site is important; consider neighbors
 - Walking paths at perimeter of site
 - Halloween parade and the like
 - Brick pathways – pay for sponsors
 - Swamp Walk- ZBA required at other site

4.05 Discussion ensued about the upcoming Community Workshop on Saturday November 16, 2019:

- Summary of Process to Date
 - Programming
 - Site Analysis
- Discussion Session
 - Use of Site
 - Combined Facilities versus Stand-Alone Facilities
 - Intergenerational Center
- Concept Review
 - Individual Stations
 - Review and Comment
 - Report of Findings

4.06 Next Steps:

- Community Workshop
- Community Survey on Website
- Prepare Preferred Master Plan with Phasing Options
- Develop Design Guidelines

4.07 The next public meeting will be a Community Workshop on Saturday November 16, 2019.

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: December 2, 2019 at 7:00pm Fuller Meadow School Media Room and December 4, 2019 which will be a Community meeting at the Flint Library.



AGENDA

- Review of Options; Civil Comments + Phasing
- Conceptual Floor Plan for Public Safety
- General Layout for Combined Town Hall + Community Center
- Draft Guidelines
- Next Steps



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**OPTION 1B.1**

- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**OPTION 3.1**

- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Formal building placement around Central Common
- Maximize Central Common
- Maintain viewshed
- Parking distributed



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA



OPTION 1B.1 - PREFERRED

- No challenging topography
- One large septic field to be shared by buildings
- BMP's swales
- Phase 1:
 - Possible traffic circle location – 120' diameter
 - 2 way drive recommended



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA



OPTION 3.1

- Smaller septic fields - per building
- Phase 1:
 - Possible traffic circle location – 120' diameter



TRAFFIC CIRCLE



BUILDING SIZES WITH PARKING

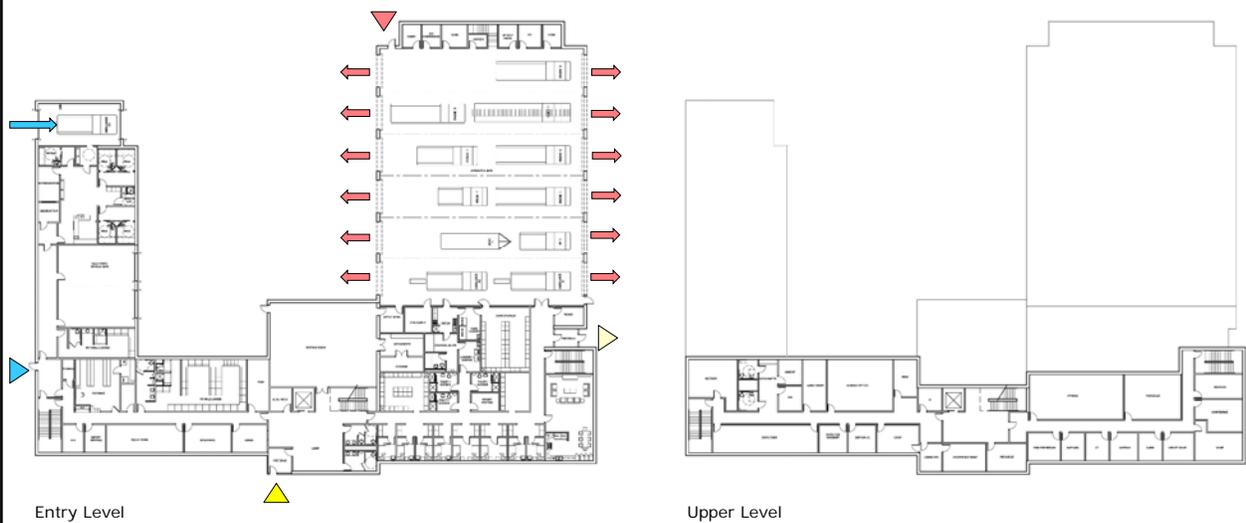
Public Safety Option	Approximate GSF Target
<p>Combined Fire + Police Facility with shared lobby, large meeting space and shared buildings services.</p> <p>Parking for 80 vehicles + Carport (including 2 spaces for CoA Vans)</p>	40,986
Combined Town Hall and Community Building	Approximate GSF Target
<p>Combined Facility with shared lobby with three service points, shared meeting rooms and shared building services. No duplication of elevators and stairs.</p> <p>Parking for 139 vehicles plus 25 vehicles around green</p>	33,778

OPTION 1B.1a

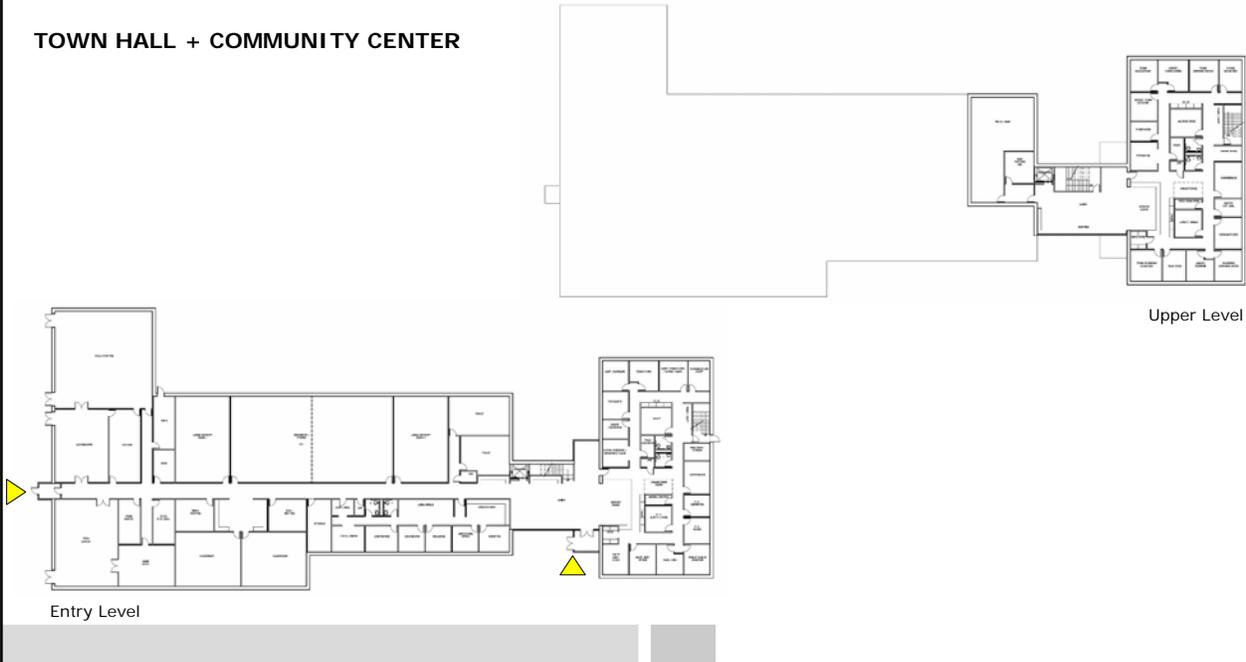
- No phasing shown
- 2 structures:
 - Public Safety
 - Combined Town Hall + Community Center
- Building placement around Central Common
- Large Central Common at +6 acres
- Maintain viewshed
- Parking distributed



PUBLIC SAFETY



TOWN HALL + COMMUNITY CENTER



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE

- Design Guidelines for Future Buildings + Site
 - Building Heights
 - Materials
 - Setbacks from South Main Street + from site roadway
 - Parking: Per building + overall site
 - Site Improvements
 - Landscaping Standards
 - Site Lighting
 - Signage
 - Viewpoints from Building to Building + Off-Site to On-Site



NEXT STEPS

- Final Plan Updates
- Draft of Guidelines
- Community Survey on Website
- Cost Estimate



MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Public Meeting: Meeting #8
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Meeting Minutes By: Janet M. Slemenda, HKT Architects
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Date: January 15, 2020

Time: 7:00pm

Location: Nathan Media Center, Fuller Meadow School
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Attendees:	Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
	■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
	■ Frank Twiss, MDPC (FT)	■ William Hammer, HKT (WRH)
	Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
	■ Annette Wilton, MDPC (AW)	■ David Eisen, Abacus (DP)
	■ Ken Lisiak, MDPC (KL)	■ Lance Hill, Pare (LH)
	■ Bill Renault, MDPC (BR)	■ Community Members
	■ Andrew Sheehan, Town Administrator, MDPC (AS)	

Abbreviations:	MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team
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Item

8.01 The agenda consisted of 5 parts:

- Review of Option 1B.1a
- Phasing
- Estimate Process
- Draft Guidelines
- Next Steps

8.02 Janet M. Slemenda (JMS) reviewed the preferred Option 1B.1 that shows two buildings in the final assessment. Features included no challenging topography, septic fields that could be shared by the buildings and BMP swales. Phase 1 includes a traffic circle and in Phases 2-4 that circle is eliminated as the loop road is developed.

The Public Safety Option included a combined Fire and Police Facility with parking for 80 vehicles and a carport. Total estimated size is approximately 40,986 gsf.

The combined Town Hall and Community Building included parking for 154 vehicles. Total estimated size is approximately 33,778 gsf.

Conceptual floor plans were included in the presentation.

8.03 The presentation included diagrams that showed the following:

- Final Build Out
 - 2 structures: Public Safety + Combined Town Hall / Community Center
 - Building placement creates Town Green + maintains viewshed
 - Paving includes:
 - Independent egress for emergency vehicles
 - Parking concentrated in two major zones
 - Loop Road
 - Service driveway to serve TH/CC
- Phase 1
 - Build Fire Station Only. Project includes:
 - FD building + site needs
 - Large public meeting space
 - Some parking for Town Green
 - No development of loop road or Green
 - Former golf course entry + parking lot remain to serve green2 structures: Public Safety, and Combined Town Hall + Community Building
- Phase 1A
 - Build full Public Safety Building. Project includes:
 - FD + PD building + site needs
 - Large public meeting space
 - Some parking for Town Green
 - No development of loop road or Green
 - Former golf course entry + parking lot remain to serve green
- Phase 2
 - Phase 1 already complete
 - Build Community Center Only: Project includes:
 - CC building + site needs
 - Full Development of loop road
 - Partial to full development of Green
- Phase 3
 - Phase 1 + Phase 2 already complete
 - Build remainder of Public Safety Building: Project includes:
 - PD building + site needs
 - Green development – Continues
- Phase 4
 - Phase 1, Phase 2 + Phase 3 already complete
 - Build remainder of Combined Town Hall/Community Center: Project includes:
 - TH building + site needs
 - Green development – Completed

8.04 The next part of the conversation centered on the development of design controls and included images of Town buildings and viewports, including the Library, the Fire and Police Stations, the schools, Town Hall, the Council on Aging and other town buildings.

We then showed images of work by HKT, public safety, and Abacus, community buildings, that we felt had some scale or material commonality with the structures we were discussing. And finally, we outlined some design control elements that might be included in the document such as building height, materials, setbacks, parking, site improvements, landscaping standards, site lighting, signage, and viewpoints.

8.05 Committee comments on the phased plans:

-
- There was a great deal of discussion regarding the loop road and how to phase it over the course of the full buildout.
 - There was concern that the cost and perhaps the additional paved surface to complete the road as shown might not be advisable when compared to the benefit. It does make sense if the Town decided that they must have a one-way road when completed. Without building the complete loop at the outset, the access road will have to be two-way.
 - In the early phases (prior to building the Community Center and Town Hall) there were several ideas about how to reverse direction when leaving the site. These included:
 - Locating a traffic circle at the west side of the Public Safety Building.
 - Use the parking lot that is west of the Public Safety Building as a turn-around loop.
 - Building the island shown as part of the drop-off area for the Community Center in the first phase as a turn-around loop.
 - As the discussion continued, there was support to eliminate the loop road and provide a traffic circle at the south west end of the Community Center. By doing so, we could eliminate the extra asphalt and open up much more area for the Town Green. Other solutions included:
 - Provide a circle at the west side of the Public Safety Building in the initial phase and keep it in place when the road is extended. When cars park at the Public Safety Building, they do not have to drive the extra distance to the second circle to reverse direction and exit the site.
 - For special events, extend the service road behind the Community Center around to the front side and loop back to the entry road to exit.
 - Access to special event overflow parking was discussed as well. One solution was to provide a gate at the entrance to the existing golf course parking for this purpose. Parking would be provided on the grass.
 - By the end of the discussion, it was agreed that HKT will look at these alternatives and make several alternate proposals for the Committee's next meeting.

8.06 Committee comments on the design guidelines or architectural style:

- JS explained that our estimator has given us some useful cost comparisons that could inform some of the design decisions:
 - A pitched roof is more expensive to construct than a flat roof
 - The cost of masonry (brick) compared to clapboard siding is about \$2 more per square foot
 - The cost of metal panels compared to brick masonry is \$10 more per square foot. This is due to new energy code requirements.
- GD felt that flat roofs were problematic since they leak and require considerable maintenance compared to a sloped roof. HKT's response was:
 - Contemporary single ply flat roofs do not have the tendency to fail as older built-up roof technology. HKT has not experienced any of these failures in single ply roofs after the initial one-year warranty period.
 - The apparatus bay is too large for a pitched roof, which would most certainly tower over any other structure and most likely require a variance.
- BR felt that the Planning board might require some pitched roofs in the design.
 - HKT agreed that we would explore pitched roofs as part of the design.
- BH offered that HKT had no preconceived ideas as to what the vision of this complex might be other than the fact that it is an opportunity to create something that will be the image of Middleton. Whatever we do, it should be a design that is timeless and elegant as a municipal center. There was general agreement with this approach.

8.07 Other Committee Comments:

- GD noted that the promise for projects was first FD, then CoA now called Community, PD and then TH.
-

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- AW noted that a listing of Pros and Cons to describe how the committee got to this decision may be warranted.
 - BR noted that would explain the combined versus single building approach.
 - FT noted that it would save money to build combined structures.
 - JD noted there is a cost to keeping the PD in operations every year including the roof and electrical systems. What happens if we push off improvements ten more years.
 - AW noted there may be grievance aired if they go combined.
 - AS noted that escalation over 9 years could see a 50% increase in costs.
 - AS also noted the Town was committed to a Senior Center as building #2. He also noted that combined structures was an attractive alternative.
 - KL noted that a cash flow analysis will help the decision process.
 - AW noted they need to build support.
 - AW asked what happens if we do nothing.

8.08 Next Steps:

- Draft Guidelines
- Community Survey
- Cost Estimate

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: February 12, 2020 at 7:00pm Fuller Meadow School Media Room.



AGENDA

- Review of Option 1B.1a
- Discuss Phasing
- Discuss Estimate Process
- Draft Guidelines
- Next Steps



OPTION 1B.1 - PREFERRED

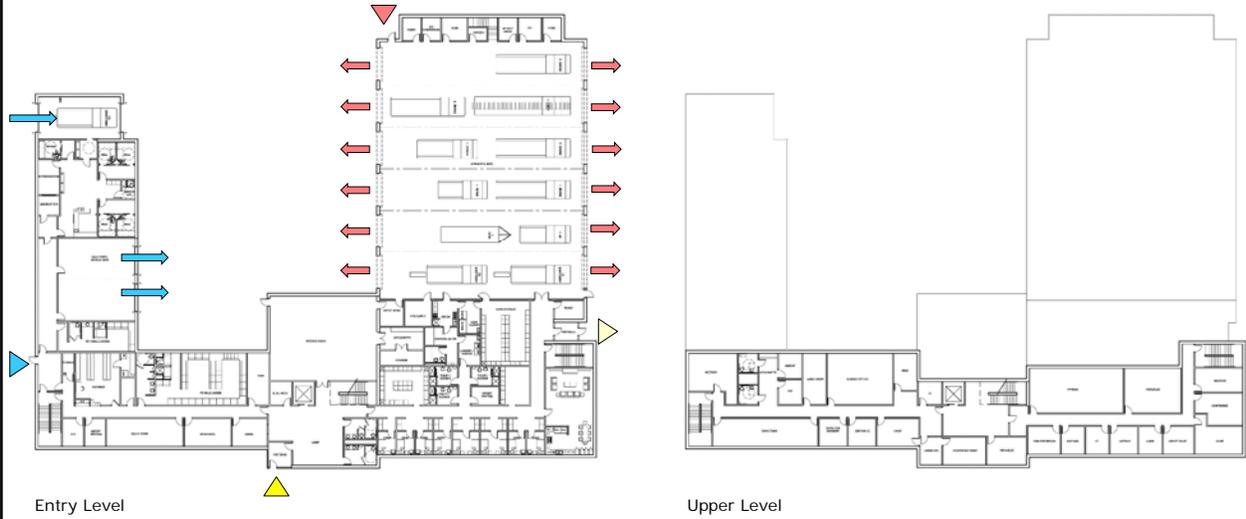
- No challenging topography
- Septic field can be shared by buildings
- BMP's swales
- Phase 1:
 - Traffic circle location – 120' diameter
- Phase 2-4: Traffic circle eliminated as loop road is developed



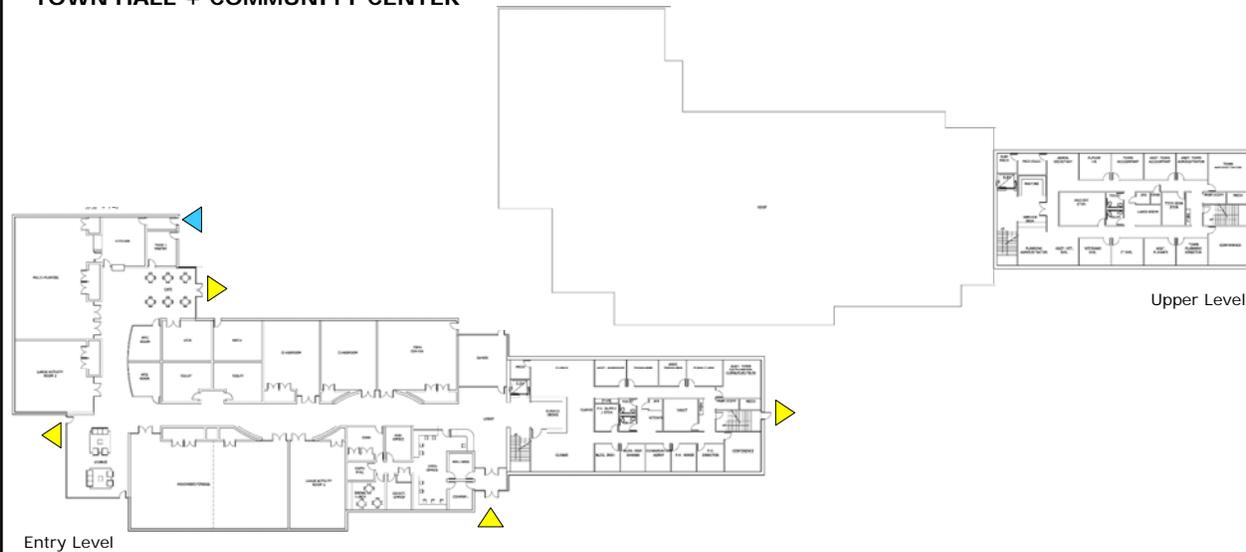
BUILDING SIZES WITH PARKING

Public Safety Option	Approximate GSF Target
<p>Combined Fire + Police Facility with shared lobby, large meeting space and shared buildings services.</p> <p>Parking for 80 vehicles + Carport (including 2 spaces for CoA Vans)</p>	40,986
Combined Town Hall and Community Building	Approximate GSF Target
<p>Combined Facility with shared lobby with three service points, shared meeting rooms and shared building services. No duplication of elevators and stairs.</p> <p>Parking for 154 vehicles</p>	33,778

PUBLIC SAFETY



TOWN HALL + COMMUNITY CENTER



OPTION 1B.1a – FINAL BUILD-OUT

- 2 structures: Public Safety + Combined Town Hall / Community Center
- Building placement creates Town Green + maintains viewshed
- Paving includes:
 - Independent egress for emergency vehicles
 - Parking concentrated in two major zones
 - Loop Road
 - Service driveway to serve TH/CC

**OPTION 1B.1a – Phase 1**

- Build Fire Station Only. Project includes:
 - FD building + site needs
 - Large public meeting space
 - Some parking for Town Green
- No development of loop road or Green
 - Former golf course entry + parking lot remain to serve green



OPTION 1B.1a – Phase 1A

- Build full Public Safety Building. Project includes:
 - FD + PD building + site needs
 - Large public meeting space
 - Some parking for Town Green
- No development of loop road or Green
 - Former golf course entry + parking lot remain to serve green

**OPTION 1B.1a – Phase 2**

- Phase 1 already complete
- Build Community Center Only: Project includes:
 - CC building + site needs
- Full Development of loop road
 - Partial to full development of Green



OPTION 1B.1a – Phase 3

- Phase 1 + Phase 2 already complete
- Build remainder of Public Safety Building: Project includes:
 - PD building + site needs
- Green development – Continues

**OPTION 1B.1a – Phase 4**

- Phase 1, Phase 2 + Phase 3 already complete
- Build remainder of Combined Town Hall/Community Center: Project includes:
 - TH building + site needs
- Green development – Completed



DEVELOPMENT OF DESIGN CONTROLS: GENERAL VIEWS



DEVELOPMENT OF DESIGN CONTROLS: LIBRARY AND FIRE STATION



DEVELOPMENT OF DESIGN CONTROLS: POLICE STATION



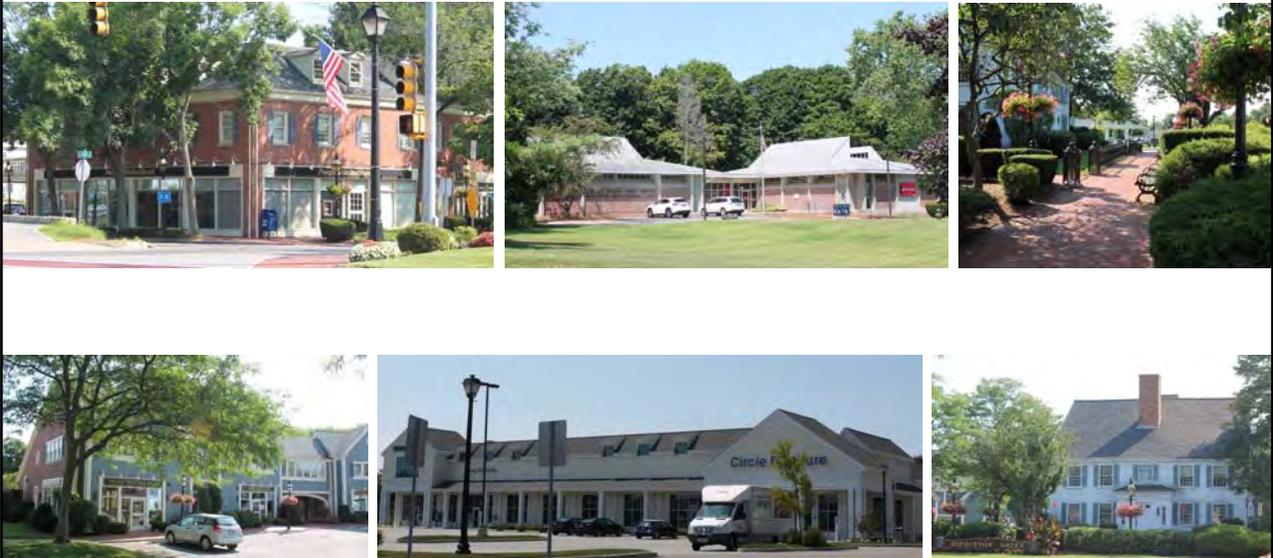
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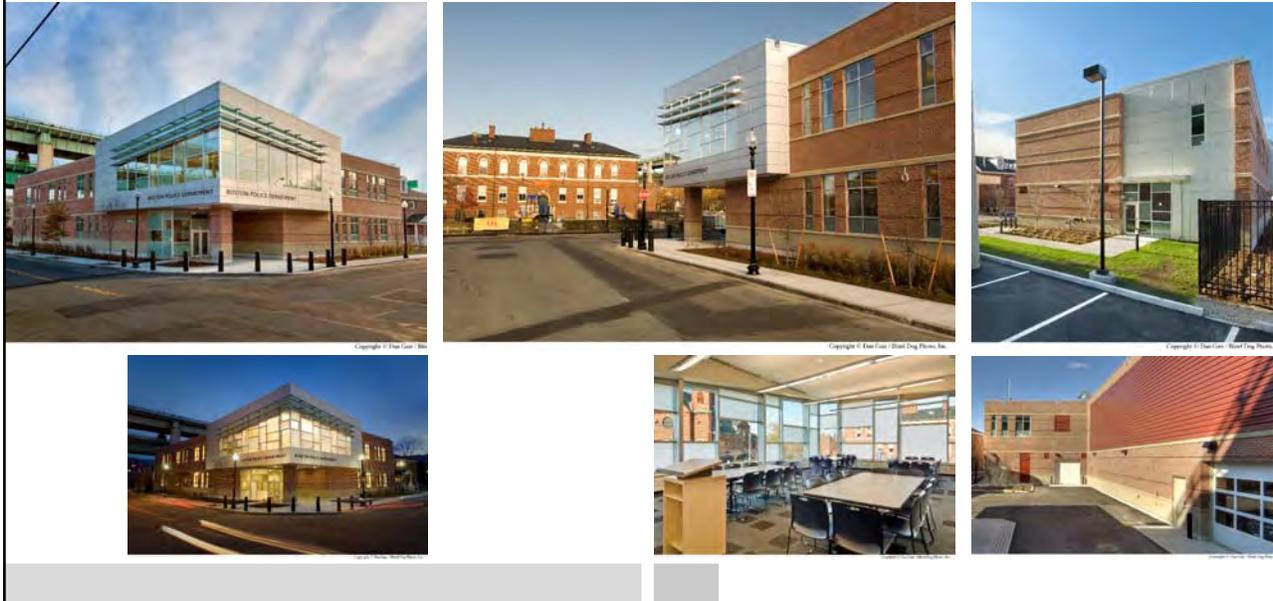
DEVELOPMENT OF DESIGN CONTROLS: TOWN HALL AND COUNCIL ON AGING



DEVELOPMENT OF DESIGN CONTROLS: OTHER TOWN BUILDINGS



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE



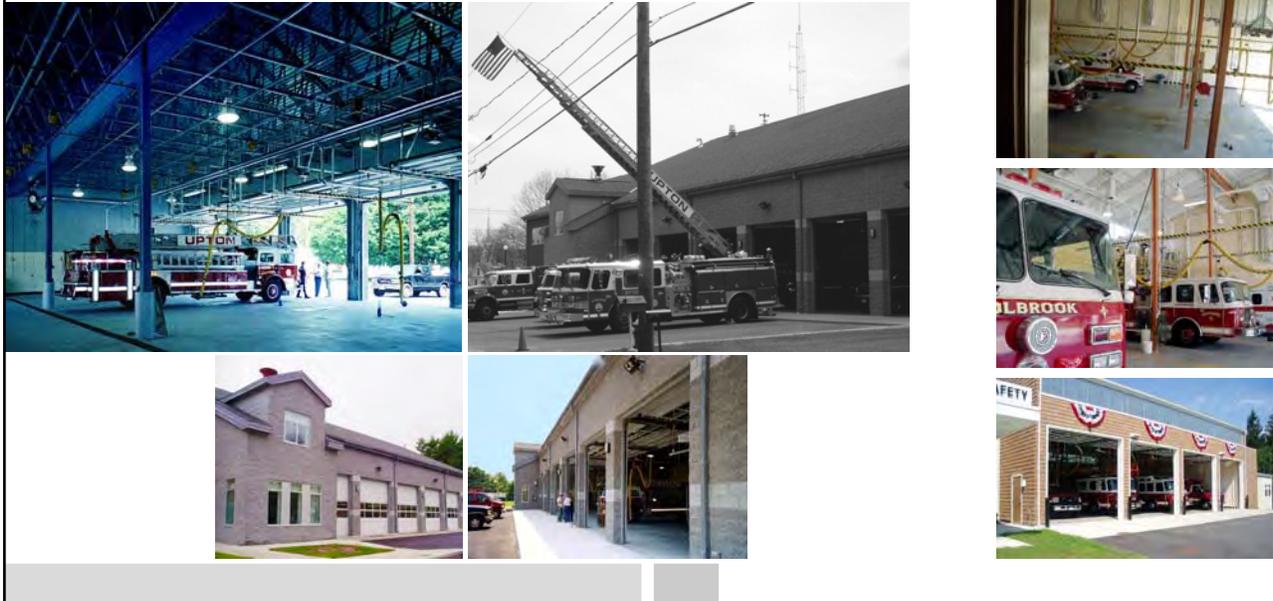
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DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE



DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE

- Design Guidelines for Future Buildings + Site
 - Building Heights
 - Materials
 - Setbacks from South Main Street + from site roadway
 - Parking: Per building + overall site
 - Site Improvements
 - Landscaping Standards
 - Site Lighting
 - Signage
 - Viewpoints from Building to Building + Off-Site to On-Site

**NEXT STEPS**

- Draft of Guidelines
- Community Survey on Website
- Cost Estimate



MEETING MINUTES

Master Development Planning Committee – Town of Middleton, MA	HKT Project No.: 21931
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Meeting Title: Public Meeting: Meeting #9

Meeting Minutes By: Janet M. Slemenda, HKT Architects

Date: February 12, 2020

Time: 7:00pm

Location: Nathan Media Center, Fuller Meadow School

Attendees:

■ Amy Karas, MDPC, Chairperson (AK)	■ Jim DiGianvittorio, Police Chief (JD)
■ George Dow, MDPC (GD)	■ Tom Martinuk, Fire Chief (TM)
■ Frank Twiss, MDPC (FT)	■ William Hammer, HKT (WRH)
■ Tom Schank, MDPC (TS)	■ Janet M. Slemenda, HKT (JMS)
■ Annette Wilton, MDPC (AW)	■ David Eisen, Abacus (DP)
■ Ken Lisiak, MDPC (KL)	■ Lance Hill, Pare (LH)
■ Bill Renault, MDPC (BR)	■ Nelson Hammer (NH)
■ Andrew Sheehan, Town Administrator, MDPC (AS)	■ Community Members

Abbreviations: MDPC - Master Development Planning Committee; ToM - Town of Middleton; HKT - HKT Architects Inc.; MST - Middleton Stream Team

Item

- 9.01 The agenda consisted of 4 parts:
- Discussion of Cost Estimates
 - Selection of Preferred Option
 - Discussion of Design Features
 - Next Steps

- 9.02 The information that was included in the estimate was described.

JMS presented the Final Build-Out including comments made by the Committee during an internal meeting:

- Build in 2 Phases: Public Safety + Combined Town Hall / Community Center
- Phase 1 build Public Safety Building plus:
 - All parking related to PS plus lot at north end of access road + lot that will be adjacent to the TH/CC – use as turn-around
 - Keep current parking near Rte. 114
- Phase 1A Green:
 - Regrade the green
 - Include underground utilities
- Phase 2 build combined Town Hall + Community Building:

-
- All remaining parking + roadway
-

9.03 JMS presented the Civil work in Phase 1 (9.5 acres) and 1A (6.3 Acres). Lance Hill (LH) answered questions and clarified details:

- Build Public Safety Building plus:
 - Utilities:
 - Water, Sewer + Septic Field, Gas
 - Drainage: Subsurface infiltration + bioretention areas
- Paving:
 - Lots, roadways, sidewalks + apron
- Landscaped areas
- Regrade green to smooth out golf course features; Loam + seed
- Demolition of clubhouse

JMS presented the Civil work in Phase 2 (3,2 acres). Lance Hill (LH) answered questions and clarified details:

- Build CC/TH Building plus:
 - Utilities:
 - Water, Sewer + Septic Field, Gas
 - Drainage: Subsurface infiltration + bioretention area
 - Paving:
 - Lots, roadways + sidewalks
 - Landscaped areas
 - Demolition of garage
 - Demolition of existing parking lot and regrade, loam and seed

9.04 JMS presented the floor plans which included mark-ups for the estimator. She also showed elevations of the two major structures that included information on height, materials, roofing, glazing and other items that would influence the estimate.

9.05 Development of Probable Costs was discussed and included:

- Current Costs: Shown in 2020 dollars
 - Buildings:
 - Fire + Police include take-offs based on plans + elevations
 - Community Building + Town Hall are estimated on a square foot basis
 - Sites: Include Phase 1, Phase 1A and Phase 2
 - Total Project Cost: Includes construction, 30% soft cost + contingency on buildings + 20% on sitework
- Soft Costs Include:
 - Design Fees, OPM Fees, Clerk-of-Works, Printing Costs, Advertising, Legal, Financing, Commissioning, Testing + Inspections, FFE, Communications, Permitting, Utility Company Backcharges, Moving Costs
- Escalated Costs: Start at 2021 escalated number since that is earliest bid frame
 - Costs are projected for 10 years
 - Costs projections are based on Total Project Costs
 - Escalation: 4% year average

9.06 The estimates were presented and were grouped by Item #, Phase, Description, Square Footage Building Construction Cost, Total Project Cost in 2020, and Total Project Costs in subsequent years using an average of 4% per year. The charts indicated individual work that could occur in any phase depending on the will of the town and available funds. The first chart represents the 10 individual projects that were defined as possible projects by the Committee. The charts that follow that show the various possible combinations for Phases 1- 4.

Estimate Breakdown:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2021 + 4 %
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,137,296
4	2	Community Center Stand-Alone	22,522	\$ 9,684,460	\$12,589,798	\$13,093,390
5	2	Sitework – Remaining		\$ 3,416,494	\$ 4,441,442	\$ 4,619,100
6	3	Police Department Addition to FD	12,216	\$ 6,816,762	\$ 8,861,791	\$ 9,216,263
7	4	Town Hall – Addition to CC	11,254	\$ 5,345,650	\$ 6,949,345	\$ 7,227,319
8	1	Combined Public Safety Building	40,986	\$20,288,070	\$26,374,491	\$27,429,471
9	2	Combined TH/CC	33,770	\$15,196,500	\$19,755,450	\$20,545,668
10	4	Town Hall - Stand Alone	14,450	\$ 7,008,250	\$ 9,110,725	\$ 9,475,154

Phase 1:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2021 + 4 %
8	1	Combined Public Safety Building	40,986	\$20,288,070	\$26,374,491	\$27,429,471
2	1	Sitework for Public Safety		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
		TOTALS		\$26,107,712	\$33,358,061	\$34,692,384
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
		TOTALS		\$19,399,081	\$24,636,841	\$25,622,315
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,137,296
		TOTALS		\$22,459,211	\$28,615,010	\$29,759,611

Phase 2:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2024 + 4 % per year
9	2	Combined Town Hall / Community Center	33,770	\$15,196,500	\$19,755,450	\$23,111,083
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,653,896
5	2	Sitework – Remaining		\$ 3,416,494	\$ 4,441,442	\$ 5,195,860
		TOTALS		\$21,673,124	\$28,175,061	\$32,960,839
4	2	Community Center - Stand-Alone	22,522	\$ 9,684,460	\$12,589,798	\$14,728,283
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,653,896
		TOTALS		\$12,744,590	\$16,567,967	\$19,382,179

Phase 3:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2027 + 4 % per year
6	3	Police Department - Addition to FD	12,216	\$ 6,816,762	\$ 8,861,791	\$11,661,514
	1	Sitework for PD - mostly completed during FD construction		TBD	TBD	TBD
		TOTALS		\$ 6,816,762	\$ 8,861,791	\$11,661,514

Phase 4:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2030 + 4 % per year
7	4	Town Hall - Addition to Community Center	11,254	\$ 5,345,650	\$ 6,949,345	\$ 10,286,729
	1	Sitework for Town Hall mostly completed during Community Center construction		TBD	TBD	TBD
		TOTALS		\$ 5,345,650	\$ 6,949,345	\$ 10,286,729
10	4	Town Hall - Stand Alone	14,450	\$ 7,008,250	\$ 9,110,725	\$13,486,098
	1	Sitework for Town Hall mostly completed during Community Center construction		TBD	TBD	TBD
		TOTALS		\$ 7,008,250	\$ 9,110,725	\$13,486,098

9.07 Committee Questions and Comments:

- Various member asked about recombining options in any phase. JMS explained that there are many options that could be considered but did note that each phase has escalation factors included that must be considered.
 - One combination considered was Items #8 plus #2 plus #3.
 - A second combined Items #8 plus #2 plus #3 plus #5.
 - A third was Items #8 plus #9 plus #2 plus# 3 plus #5, which is essentially the entire buildout.
- Benefits of each were discussed and the process for each was detailed.
 - Various members noted that this was a great deal of information to absorb and that many conversations would have to take place before a final recommendation would be made. Discussion focused on if would be possible to educate the community by a Spring Town Meeting.
- Conversation continued:
 - What was the simplest project, which might not include development of a park.
 - Or should a limited scope using Item #1A, a \$4 million dollar investment be important. It could be used right away, and members felt that would be a robust park.
 - Whatever site improvement are made in the first phase should prepare the site for future developments.
 - What if a little more work could be added to Item #2.

-
- Could a minimum amount of money could be set aside to develop the green or small chunks, say 2 acres, could be developed at a time.
 - Two Options were then highlighted, though no decision was made:
 - A full build-out including Items # 8 and 9; plus, a full site build-out combining sitework Items # 2, 3 and 5.
 - A second option was Item #8, the combined Public Safety Building, and sitework Items #2 and 1A.

9.08 Design Guidelines for Future Buildings + Site

- Building Heights: Program + Zoning
- Materials: Masonry, Stone + Panels
- Setbacks from South Main Street + from site roadway: FD Apparatus sets initial building placement; Some parking + drops-off areas sets buildings from roadways
- Parking: Per building + overall site
- Site Improvements: Landscaping, pavers, site lighting, seating + signage
- Viewpoints preserved

9.09 Next Steps:

- Finalize Guidelines
 - Results of Community Survey on Website
 - Draft Report
 - Presentation to Select Board
 - Town Meeting
-

Please notify HKT Architects within 48 hours if these minutes do not accurately reflect discussions.

Next MDPC Meeting to be held: TBD



AGENDA

- Discussion of Cost Estimates
- Selection of Preferred Option
- Discussion of Design Features
- Next Steps



OPTION 1B.1a – FINAL BUILD-OUT

- Build in 2 Phases: Public Safety + Combined Town Hall / Community Center
- Phase 1 build Public Safety Building plus:
 - All parking related to PS plus lot at north end of access road + lot that will be adjacent to the TH/CC – use as turn-around
 - Keep current parking near Rte. 114
- Phase 1A Green:
 - Regrade the green
 - Include underground utilities
- Phase 2 build combined Town Hall + Community Building:
 - All remaining parking + roadway



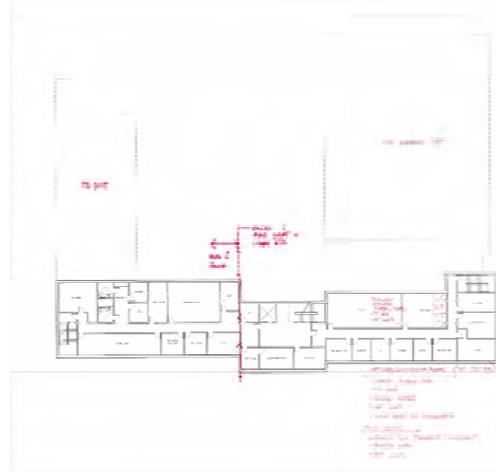
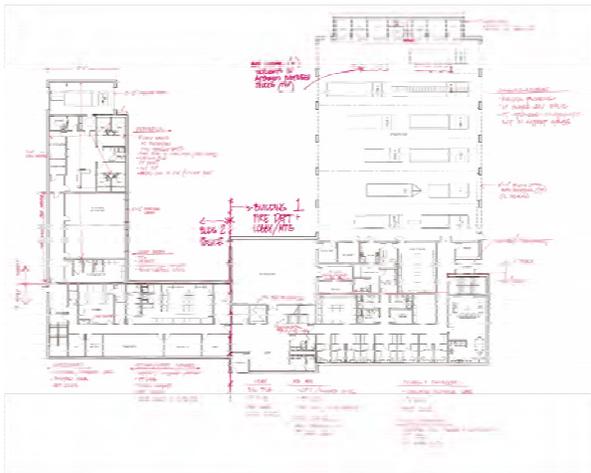
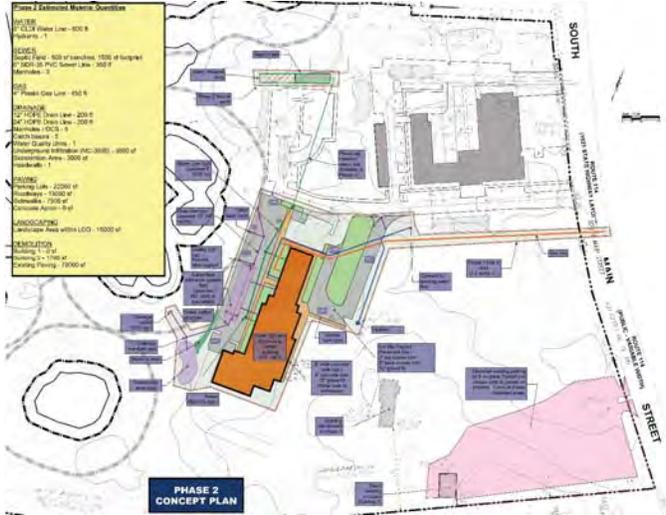
OPTION 1B.1a – CIVIL PHASES 1 (5.9 acres) and 1A (6.3 acres)

- Build Public Safety Building plus:
 - Utilities:
 - Water, Sewer + Septic Field, Gas
 - Drainage: Subsurface infiltration + bioretention areas
 - Paving:
 - Lots, roadways, sidewalks + apron
 - Landscaped areas
 - Regrade green to smooth out golf course features; Loam + seed
 - Demolition of clubhouse



OPTION 1B.1a – CIVIL PHASE 2 (3.2 acres)

- Build CC/TH Building plus:
 - Utilities:
 - Water, Sewer + Septic Field, Gas
 - Drainage: Subsurface infiltration + bioretention area
 - Paving:
 - Lots, roadways + sidewalks
 - Landscaped areas
 - Demolition of garage
 - Demolition of existing parking lot and regrade, loam and seed



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA



MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA



PLAN (001)



DEVELOPMENT OF PROBABLE COSTS

- Current Costs: Shown in 2020 dollars
 - Buildings:
 - Fire + Police include take-offs based on plans + elevations
 - Community Building + Town Hall are estimated on a square foot basis
 - Sites: Include Phase 1, Phase 1A and Phase 2
 - Total Project Cost: Includes construction, 30% soft cost + contingency on buildings + 20% on sitework
- Soft Costs Include:
 - Design Fees, OPM Fees, Clerk-of-Works, Printing Costs, Advertising, Legal, Financing, Commissioning, Testing + Inspections, FFE, Communications, Permitting, Utility Company Backcharges, Moving Costs
- Escalated Costs: Start at 2021 escalated number since that is earliest bid frame
 - Costs are projected for 10 years
 - Costs projections are based on Total Project Costs
 - Escalation: 4% year average

ESTIMATE BREAKDOWN:

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2021 + 4 %
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,137,296
4	2	Community Center Stand-Alone	22,522	\$ 9,684,460	\$12,589,798	\$13,093,390
5	2	Sitework – Remaining		\$ 3,416,494	\$ 4,441,442	\$ 4,619,100
6	3	Police Department Addition to FD	12,216	\$ 6,816,762	\$ 8,861,791	\$ 9,216,263
7	4	Town Hall – Addition to CC	11,254	\$ 5,345,650	\$ 6,949,345	\$ 7,227,319
8	1	Combined Public Safety Building	40,986	\$20,288,070	\$26,374,491	\$27,429,471
9	2	Combined TH/CC	33,770	\$15,196,500	\$19,755,450	\$20,545,668
10	4	Town Hall - Stand Alone	14,450	\$ 7,008,250	\$ 9,110,725	\$ 9,475,154

MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**ESTIMATE BREAKDOWN: PHASE 1**

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2021 + 4 %
8	1	Combined Public Safety Building	40,986	\$20,288,070	\$26,374,491	\$27,429,471
2	1	Sitework for Public Safety		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
		TOTALS		\$26,107,712	\$33,358,061	\$34,692,384
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
		TOTALS		\$19,399,081	\$24,636,841	\$25,622,315
1	1	Fire Department with Shared Spaces	28,770	\$13,579,439	\$17,653,271	\$18,359,402
2	1	Sitework for FD		\$ 5,819,642	\$ 6,983,570	\$ 7,262,913
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,137,296
		TOTALS		\$22,459,211	\$28,615,010	\$29,759,611

MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**ESTIMATE BREAKDOWN: PHASE 2**

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2024 + 4 % per year
9	2	Combined Town Hall / Community Center	33,770	\$15,196,500	\$19,755,450	\$23,111,083
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,653,896
5	2	Sitework – Remaining		\$ 3,416,494	\$ 4,441,442	\$ 5,195,860
		TOTALS		\$21,673,124	\$28,175,061	\$32,960,839
4	2	Community Center - Stand-Alone	22,522	\$ 9,684,460	\$12,589,798	\$14,728,283
3	1A	Sitework – Town Green		\$ 3,060,130	\$ 3,978,169	\$ 4,653,896
		TOTALS		\$12,744,590	\$16,567,967	\$19,382,179

MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**ESTIMATE BREAKDOWN: PHASE 3**

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2027 + 4 % per year
6	3	Police Department - Addition to FD	12,216	\$ 6,816,762	\$ 8,861,791	\$11,661,514
	1	Sitework for PD – mostly completed during FD construction		TBD	TBD	TBD
			TOTALS	\$ 6,816,762	\$ 8,861,791	\$11,661,514

MASTER FACILITIES DEVELOPMENT PLAN, MIDDLETON, MA

HKT
architects inc.**ESTIMATE BREAKDOWN: PHASE 4**

Item #	Phase	Description	SF	Building Construction Cost	Total Project Cost in 2020	Total Project Cost in 2030 + 4 % per year
7	4	Town Hall – Addition to Community Center	11,254	\$ 5,345,650	\$ 6,949,345	\$ 10,286,729
	1	Sitework for Town Hall mostly completed during Community Center construction		TBD	TBD	TBD
			TOTALS	\$ 5,345,650	\$ 6,949,345	\$ 10,286,729
10	4	Town Hall - Stand Alone	14,450	\$ 7,008,250	\$ 9,110,725	\$13,486,098
	1	Sitework for Town Hall mostly completed during Community Center construction		TBD	TBD	TBD
			TOTALS	\$ 7,008,250	\$ 9,110,725	\$13,486,098

DEVELOPMENT OF DESIGN CONTROLS: GENERAL VIEWS



DEVELOPMENT OF DESIGN CONTROLS: GENERAL VIEWS



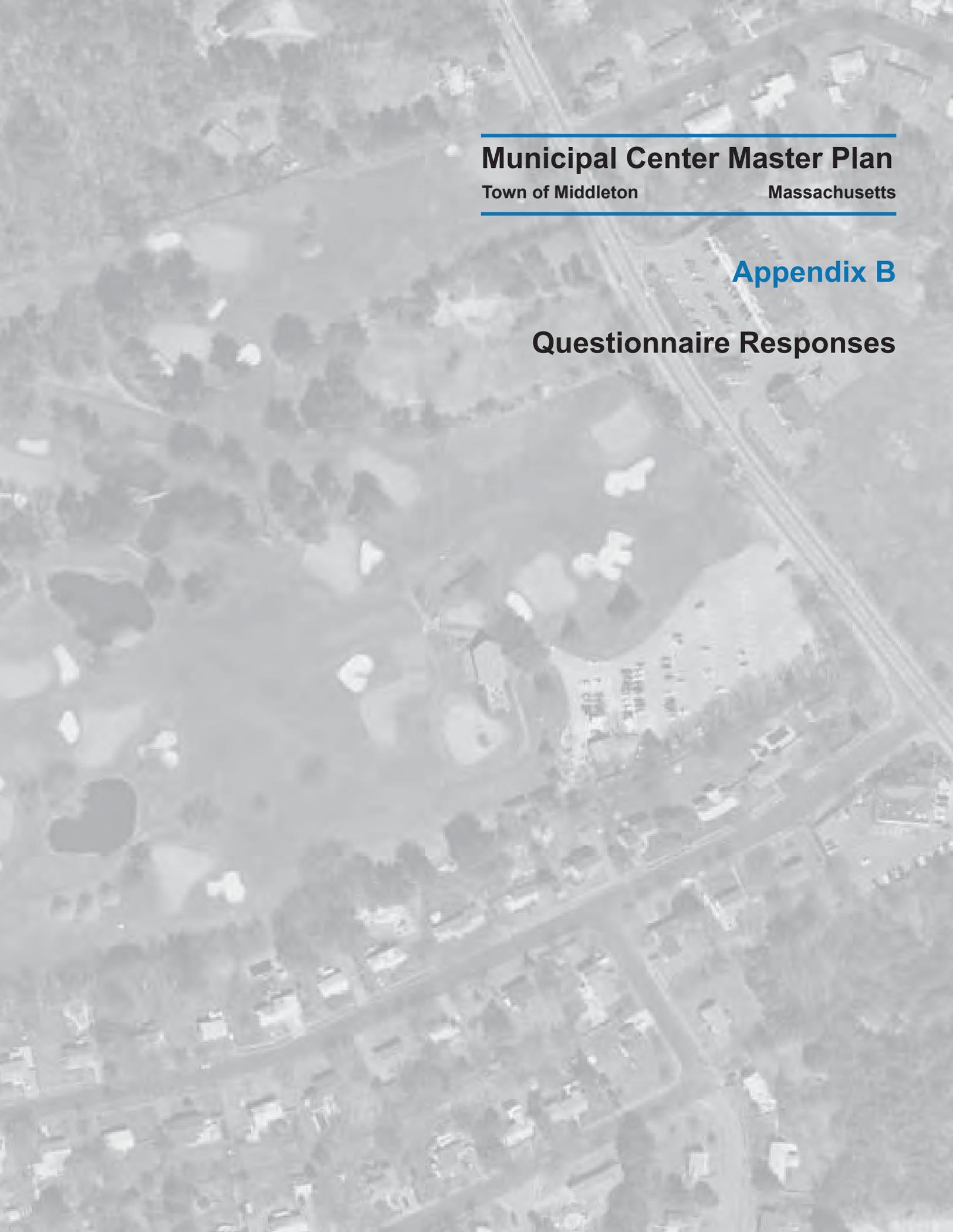
DEVELOPMENT OF DESIGN CONTROLS FOR BUILDINGS AND SITE

- Design Guidelines for Future Buildings + Site
 - Building Heights: Program + Zoning
 - Materials: Masonry, Stone + Panels
 - Setbacks from South Main Street + from site roadway: FD Apparatus sets initial building placement; Some parking + drop-off areas sets buildings from roadways
 - Parking: Per building + overall site
 - Site Improvements: Landscaping, pavers, site lighting, seating + signage
 - Viewpoints preserved

**NEXT STEPS**

- Finalize Guidelines
- Results of Community Survey on Website
- Draft Report
- Presentation to Select Board
- Town Meeting





Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix B

Questionnaire Responses

PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: Jillian Smith, Director of COA

Department / Division: Council on Aging

Phone / Email: Jillian.smith@middletonma.gov

Date of Completion:

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of the CoA in as much detail as possible.

Congregate and delivery of meals

meetings

Exercise classes

Socialization

Meetings

Bingo

Local errands

Transportation

Trips

Outreach programs

Resource for people in need

Support groups and counseling on a variety of topics

Support for caregivers and respite relief for caregivers of people with dementia

SNAP

SHINE

Speakers on a variety of topics and community resources

Events (holiday or not specific)

Computer classes

Fight loneliness and isolation
Behavioral health services
Men's groups
Memory café
Respite relief for caregivers
Grand times: programs for grandparents caring for children
Vegetable gardens both at the COA and the schools
Financial stress relief and support
Knitting
Painting classes
Blood pressure clinics
Food bank
Health care counseling
Legal counsel
Tax prep
Lunch outings
Hard of hearing
Commission for the blind
Fire department and police come and speak
Theater/arts

F2. Identify any functions / activities / duties that you would like to see the CoA perform now and in the future that are not currently being done and for whom?

Mental health counseling
Specialty recycling area (hearing aids etc, batteries and electronics)
Drop off site for toys for tots etc
Game rooms
Bring back tax counseling
Private space for types of counseling
Health cooking classes on a budget

Cultural fairs

Community resource fairs

Retired senior volunteer programs

Variety of classes, learning languages, environmental studies etc.

More exercise programs with a variety

More transportation

Services like podiatrists, eye checks/eye glasses adjustments, hearing aid adjustments/support)

Lip reading classes/ speech therapy

Bocce

Computer classes

Game classes

Health support (blood pressure, falls prevention, hearing, vision, podiatry)

Walking programs/trails that have stretching stations and benches for sitting and resting to be wheel chair and walker accessible

Outdoor games, bocce ball, driving range

Patio

bbq

We need more parking and better layout for parking

We want to bring back medical appointment transportation

Nursing services/counseling etc

More relationships with the local schools

Art, theater, dance classes

Music classes, chorus, band

Senior citizen prom (bands, dancing, meal, music/ support of local schools for meals and music, pictures)

Large room that can be used for multi-purpose

Therapy animal visits

Cook on site for meals have a chef and restaurant or café

Outdoor patio

Golf, putting practice, shooting range

Horseshoes

Outdoor trails

Community garden

Indoor pool

Gym

Outdoor playground

Fire pit

Dog park

Media studio (full service for live broadcasting) with different times and different ages having their own programs

Large room for meetings set up for recording

Theater for plays, music, show movies etc

Indoor/outdoor tai chi classes/ tai chi in the park

Park, shaded sitting areas, a pond/type of relaxing water source

F3. Please describe how the CoA communicates with other Town departments in the case of an emergency or extraordinary event.

We call them

Fire alarm sets off an alarm at the fire department

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? What periods "max out" your facilities and how long to they last? Please provide any daily or weekly schedules published by the CoA.

Summer and middle of winter are the slowest

Spring and fall are our busiest

40 people per day and at the congregational meal time is the busiest Mondays are busiest day of the week currently because of bingo

20 people approx. we serve off site per day

50 – 60 people reached per month for outreach

O2. What functions / activities / duties within your CoA do not have direct interaction with the public?

Grant writing and reporting

Payroll

Budget

Statistic and reporting

Newsletter productions (parts of it)

Staff meetings

Maintaining the vans

Trainings

Ordering meals

Internal meetings and planning

Shopping for food pantry

Logics of operations

O3. Are there any spaces you currently share with others? Do you envision sharing any spaces with others in the future?

We need support for folks with dementia (adult day or health day to provide support to caregivers and the people with dementia)

Congregational church

Library

Angelicas

American legion

Danvers fish and game

Space to keep our vans

We would use more space if there was more handicap accessibility at the buildings

O4. Does the COA have any special or specific security or safety concerns? Please explain.

Shootings

Vandalism

Stairs are closed/not safe

We have a lift and not an elevator

We do not have a handicap accessible entrance way

Parking lot is set up in a way that is dangerous and has a lot of potential for accidents

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

Needs space for an ambulance or fire truck to be able to access our parking lot in the case of an emergency when the parking lot is full.

Need a way for a gurney to get to the main hall. I do not think the lift could fit a gurney and emts

There is no ramp leading to the main hall area and definitely not to the third floor

Staffing Organization

Please provide an organizational chart for your department, if available, and complete the table below. Please include current staffing and possible projected staffing until the year 2040. Please include volunteer staff indicating duties and average times and duration of work.

Position	Staffing Projections				FTE	PTE	Comments
	2020	2025	2030	2040			
<i>Example: Director</i>	1	1	1	1	X		<i>Manages Division A</i>
<i>Example: Staff Title</i>	1	2	2	3	X		<i>Staff Member of Division B</i>

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Benefits:

Cozy

Always around people

Open

Large space

All staff is easily accessible

Cons:

Conflicts with sound, everything in the same room

Cannot have multiple opportunities at one time

Accessibility to the building for people with limited mobility

Parking lot is small and unsafely laid out

E2. What are your meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with others? What equipment is required in different meeting spaces?

Meetings occur multiple times a week

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving?

Town-Owned Vehicles

Vehicles: Please respond to the following questions regarding any vehicles that are assigned to the COA.

V1. Who performs light/heavy maintenance on your vehicles? Is it the DPW or a local service provider?

V2. Do any town owned vehicles go home with employees at night?

no

Vehicle Storage: Please provide as detailed of a list as you can. Parking counts are required by zoning and this list will help us confirm needs and special issues particularly as it relates to your specific department's vehicles and equipment. Please provide overall vehicle sizes: Small = 8 'x 10', Medium = 8 'x 20' (typical car), Large = 12' x 30', X-Large = 12' x 40' or larger. Please note if vehicle must be stored indoors or in an uncovered parking lot and other unique features (i.e. electric vehicles, accessible van, etc.).

Vehicle Type	Vehicle Projections				Size				Comments
	2020	2025	2030	2040	S	M	L	XL	
<i>Example: Assigned Vehicle</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>		<i>x</i>			<i>Parking lot</i>
<i>Ex: Van</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>x</i>			<i>Indoors</i>

Any group having “ownership” over the space

The balancing act

Shared space being cared for properly

Offices spaces and reception space be private

Staffing needs that may occur due to a shared facility

6. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

Energy preserving building model



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan	HKT Project No.: 21921
Name / Title: Thomas Martinuk/Fire Chief	
Department / Division: Fire Department	
Phone / Email: Cell-978-479-8154/tom.martinuk@midfire.com	
Date of Completion: 9/17/19	

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

The Middleton Fire Department has many functions. Fire suppression, Emergency medical services, Public education, Fire Training, EMS training, Fire alarm/Communications, Fire Prevention (Permits, plan review) apparatus maintenance/cleaning

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

We would like to be able to offer classes, such as CPR/First Aid etc., at the station but we cannot due to the accessibility restrictions of the current station.

F3. Please describe your current dispatch / communications situation and your preferred placement for this function.

The primary dispatch/911 answering point is the Regional dispatch center. The fire station acts as a back up for all functions except 911. The regional center also does not have all of our radio channels, so in a bigger incident we would man the console at the fire station. Within a matter of minutes, the fire station can perform all functions of dispatching, including police, electric light and DPW, and receiving alarms except for answering 911 calls.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you receive on an average day? Are there times of day / year that are busier than others? How many of these are medically related? Please explain.

On any given day the fire station receives approximately 6-10 visitors for permits, directions, visits for the chief or other officers to conduct fire department business. At the present time during burning season (Jan 15-May 1) people visit the fire station for burning permits. 0800-1600 is the time for most visits.

Occasionally we do get people who drive, walk or bike up with a medical issue. This happens approximately once a month.

O2. What functions / activities / duties within your department have direct interaction with the public?

The chief of Department, Fire Prevention, Emergency Medical Services and Administrative Clerk have the most interaction with the public.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future such as the Training Center?

Currently we do not share any space with the public (there is none to share). As mentioned earlier we would like to conduct training for the public and be able to hold events such as car seat classes and open houses etc. with the public.

O4. Does your department have any special or specific security or safety concerns? Please explain.

The station needs to be secure at all times. Post 9/11 this is imperative. We have had items stolen from the station by people walking in off the street, luckily, we have video surveillance and we were able to apprehend them. Access control and video surveillance is imperative.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include fuel, communication needs, outside assistance by other fire departments or changes to parking or queuing.

Fuel is obtained at local gas stations with agreements with local companies to deliver at an incident if needed. During large scale events in town we will have neighboring communities cover the town and they will be housed at our station. At the present time many of our neighboring communities apparatus will not fit in our station, especially ladder trucks. There would have to be adequate parking for off duty members to park their vehicles coming in off duty.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space your department occupies? Please comment on positive as well as negative attributes.

The space is inadequate, unhealthy and dangerous. The public access to the station is by the apparatus floor, which is extremely dangerous. The apparatus and gear are all in the same space. Even though there is a vehicle exhaust system the exhaust and noise from the apparatus emanates throughout the building. There is no space for administration, training, meetings or gear decontamination. The kitchen facilities are deplorable. The day room, sleeping quarters, and bathroom facilities are deplorable.

E2. What are your conference / meeting / training space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with others (such as the police department should a public safety building be proposed) or the public? What equipment is required in different meeting spaces?

There should be a conference/meeting room for the Chiefs office as well as a general meeting space. Meetings size depends on what the subject is. The number could range from 6-60 depending if it is a meeting with the Chief or a training session. Separate offices and meeting areas should be made available for Police and Fire. Often meetings are held at the same time in each department pertaining to each profession. A general, large meeting area could be made available for both departments for training needs etc. The equipment needed would be T.V, projectors, dry erase or electronic boards etc.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

The files are spread throughout the station. There are currently 40 +/- linear feet of files used every day. The bulk of the files are used for fire prevention and are set up by addresses in town. The rest of the files are in the Chiefs, EMS officers and clerk's office and are personnel files and bills payable, training records etc.

The files could be digitized but would take a lot of time and money.

Apparatus / Town-Owned Vehicles

Apparatus: Please respond to the following questions regarding your apparatus.

V1. Do you perform light maintenance on your vehicles in-house?

Yes, we do fluid checks, replace bulbs. We do not change oil or do any heavy maintenance.

V2. Do any department owned vehicles go home with employees at night?

Only the Chiefs car.

Apparatus Storage: Please provide as detailed of a list as you can. Parking counts are required by zoning and this list will help us confirm needs and special issues particularly as it relates to your specific department's vehicles and equipment. Please provide overall vehicle sizes: Small = 8' x 10', Medium = 8' x 20' (typical car), Large = 12' x 30', X-Large = 12' x 40' or larger. Please note if vehicle must be stored indoors or in an uncovered parking lot and other unique features (i.e. electric vehicles, etc.).

Vehicle Type	Vehicle Projections				Size				Comments
	2020	2025	2030	2040	S	M	L	XL	
<i>Example: Fire Truck</i>	4	4	5	6			x		<i>Indoors</i>
<i>Ex: Command Vehicle</i>	2	2	2	2		x			<i>Parking lot or...</i>
Car 1	1	1	1	1		X			All should be indoors.
Car 2	1	1	1	1		X			
Car 3	1	1	1	1		X			
Ambulance 1	1	1	1	1			X		
Ambulance 2	1	1	1	1			X		
Squad 5	1	1	1	1			X		
Engine 1	1	1	1	1				X	
Engine 2	1	1	1	1				X	
Engine 3	1	1	1	1				X	
Engine 4	1	1	1	1				X	
Engine 6	1	1	1	1				X	
Ladder 1	1	1	1	1				X	
Signal 1	1	1	1	1				X	
Boat	1	1	1	1		X			
Light tower	1	1	1	1	X				
Training trailer	1	1	1	1		X			

Other

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

Anything is better than we have now. We want to make sure it fits our needs for the next 50 years and there is adequate storage and space for all our equipment and personnel. The building would also serve as a shelter and Emergency operations center so it should be self-sustaining and able to stand up to any weather or natural disaster (to the extent possible)

PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: James Digianvittorio Chief of Police

Department / Division: Police Department

Phone / Email (978) 774-4424 Ext. 1404 chief@middletonpolice.com

Date of Completion:

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

- Protects citizens by preventing crime, enforcing laws, apprehending suspects, and monitoring traffic.
- Prevents crime by explaining and enforcing applicable federal, state, and local laws and ordinances; teaching preventive, protective, and defensive tactics; mediating disputes; patrolling assigned area; responding to notices of disturbances; conducting searches; observing suspicious activities; and detaining suspects.
- Apprehends suspects by responding to complaints and calls for help, observing violations, and making arrests.
- Conducts criminal investigations by gathering evidence, interviewing victims and witnesses, and interrogating suspects.
- Documents observations and actions by radioing information and completing reports.
- Reports observations and actions by testifying in court.
- Fulfills court orders by serving warrants and commitments.
- Maintains safe traffic conditions by monitoring and directing traffic, enforcing laws and ordinances, investigating accidents, providing escort, and reporting unsafe streets and facilities.
- Minimizes personal injury by rescuing and reviving victims and radioing for medical assistance.
- Maintains operations by following department policies and procedures and recommending changes.
- Ensures operation of equipment by practicing responsible use, completing preventive maintenance requirements, following manufacturer's instructions, troubleshooting malfunctions, notifying supervisor of needed repairs, and evaluating new equipment and techniques.

- Maintains professional and technical knowledge by studying applicable federal, state, and local laws and ordinances; attending educational workshops; reviewing professional publications; practicing skills; and participating in professional societies.
- Contributes to team effort by accomplishing related results as needed.
- Assisting the public in facilitating permits and certain licenses.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

Community Relations Officer

In this era of community policing, community relations officers play a key role in police departments. Sometimes called community liaison officers, these professionals build links between their departments and schools, youth organizations, charities and other nonprofits in the community and businesses to improve social conditions that engender criminal behavior.

Due to the size of our department we ask all of our Police officers to become involved in community relations, however, some may have no formalized training in the specialty; others have a degree in criminal justice or sociology, it would be a benefit to the community to have a dedicated officer to fulfill this position.

School Resource Officers (SROs)

Here in Middleton we have our detective wears many hats, one is the SRO. An SRO is a police officer who works in elementary, middle and high schools. They are responsible for working with school administrators, security staff and faculty on developing comprehensive safety plans to ensure schools are safe places for students to learn. I feel that we should have a full-time SRO who works solely with all the educational institutions both in Middleton and at Masco our regional school district.

Crime Scene Services Unit

"CSI" Unit for the Middleton Police Department. Though not as glamorous as today's popular television shows, the Crime Scene Services Unit can assist detectives in processing major crime scenes and evidence collected by Officers and Detectives. Crime Scene Services responds to major crime scenes to capture photographs of the scene, process the scene for fingerprints, and collect physical evidence for further analysis. We may collect such evidence as hairs, fibers, DNA, and firearm evidence and submit to the State Police or the FBI for further examination. Crime Scene Services' fingerprint examiner compares latent prints developed at the scene to fingerprints of known suspects. In

some cases, the staff of the Crime Scene Services Unit may be required to testify in court to findings recovered from the crime scene.

In addition, the Crime Scene Services Unit is responsible for archiving booking photographs, or "mug shots". The Unit also handles the fingerprinting services and photographing processes for License to Carry Firearms or FID cards, employment purposes and sex offender registry applications.

EOC- A true Emergency Operations Center

An **emergency operations center (EOC)** is a central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management functions at a strategic level during an emergency, and ensuring the continuity of operation of a company, political subdivision or other organization.

An EOC is responsible for strategic direction and operational decisions and does not normally directly control field assets, instead leaving tactical decisions to lower commands. The common functions of EOCs is to collect, gather and analyze data; make decisions that protect life and property, maintain continuity of the organization, within the scope of applicable laws; and disseminate those decisions to all concerned agencies and individuals.

Locker Rooms, Fitness area, and Kitchen

The Department will be looking for space in the new facility for male and female locker rooms something that we don't currently have, along with a fitness area, a kitchen area.

F3. Please describe your current dispatch / communications situation and your preferred placement for this function.

Currently the Town of Middleton is part of North Shore Regional 911 Center. - This center answers and fully process 9-1-1 calls for emergency assistance for five communities (Amesbury, Essex, Middleton, Topsfield, and Wenham, Massachusetts). This includes radio dispatching units for Middleton's police, fire, and EMS (emergency medical services) along with these other four communities. They also receive, direct, and otherwise process related nonemergency calls for our community. I do feel that the new police facility should have a secondary PSAP as a backup in case of emergency on a very small scale.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you receive on an average day? Are there times of day / year that are busier than others? Please explain.

On an average day we have approximately 15-20 walk-in visits to the police department. It seems that once school is open for the year the months of September and October we see an influx of visitors. During the daytime hours between 8AM-4Pm Monday through Friday they are met by one of the two secretaries working in the office. After 4PM the officers are out on patrol and the station is manned sporadically throughout the evening hours and then after midnight the lobby is open to the public and with the assistance of a video call system the dispatcher at the Regional Center can see and hear the visitors in the lobby and either instruct them to forms and information in the lobby or will contact officers on the road to return to the station to meet with the visitors.

We encourage our citizens to come to the station between the hours of 8AM-4PM Monday – Friday for reports, pistol permits, speak to the Detective for investigations and any other police related issues that needs to be addressed by the Chief of Police.

O2. What functions / activities / duties within your department have direct interaction with the public?

Being a public service entity 99.9 % of our functions, activities and duties are interactions with the public in one form or another.

The role and functions of the police in general are:

To uphold and enforce the law impartially, and to protect life, liberty, property, human rights, and dignity of the members of the public; to promote and preserve public order; to protect internal security, to prevent and control terrorist activities, breaches of communal harmony, militant activities and other situations affecting Internal Security.

To protect public properties including roads, railways, bridges, vital installations and establishments etc. against acts of vandalism, violence or any kind of attack.

To prevent crimes, and reduce the opportunities for the commission of crimes through their own preventive action and measures as well as by aiding and cooperating with other relevant agencies in implementing due measures for prevention of crimes.

To accurately register all complaints brought to them by a complainant or his representative, in person or received by post, e-mail or other means, and take prompt follow-up action thereon, after duly acknowledging the receipt of the complaint.

To register and investigate all cognizable offences coming to their notice through such complaints or otherwise, duly supplying a copy of the report to the complainant, and where appropriate, to apprehend offenders, and extend requisite assistance in the prosecution of offenders;

To create and maintain a feeling of security in the community and as far as possible prevent conflicts and promote amity.

To provide, as first responders, all possible help to people in situations arising out of natural or man-made disasters, and to provide active assistance to other agencies in relief and rehabilitation measures.

To aid individuals, who are in danger of physical harm to their person or property, and to provide necessary help and afford relief to people in distress situations.

To facilitate orderly movement of people and vehicles, and to control and regulate traffic on roads and highways to keep the motoring public safe from harm.

To assist the public with crash and police reports. To regulate and facilitate the public in obtaining certain permits afforded to them through the constitution.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

At this time the only space that we hypothetically share with the Community is the lobby of the police station. It has only been within the past few years that the police station was able to provide a unisex handicap accessible bathroom to the public at our facility. We currently have a training room on the second floor of the police station that we use for some non-police related activities, however, that space is not handicap compliant. It is our hope that a new facility would allow us the space to have a Community Room for training and meetings to allow us to work in unison with the public to provide open and a cohesive relationship. Also we would be looking for a some office spaces not within the confines of the restricted police only area to allow for officers, detectives, and the Chief to meet and sit with the Community for any wide variety of issues that they would like to discuss, and also a room that can be used for the issuance of permits and licensing not within the confines of the secured area of the police station.

O4. Does your department have any special or specific security or safety concerns? Please explain.

The Middleton Police Departments needs to have a comprehensive Emergency Management Plan in place. This is a living document that changes and conforms to each individual event. It addresses a wide spectrum of possible emergencies, ranging from medical events to natural disasters. The plan includes evacuation procedures for the Town depending on the type of emergency. This plan must encompass an annual training exercise that simulates a real event. During this exercise we test and evaluate most functions of our emergency management plan which includes a mass notification system.

This Comprehensive Emergency Management Plan is designed as a framework for mitigation, preparedness, response, and recovery activities. It details authorities, functions, and responsibilities to establish a coordinated and effective response to emergencies and disasters of all types.

This plan will be utilized to enhance emergency management capabilities, coordinate all phases of emergency management activities in order to minimize the impacts of emergencies and disasters, and to protect the people, property, economy, and environment of the Town of Middleton.

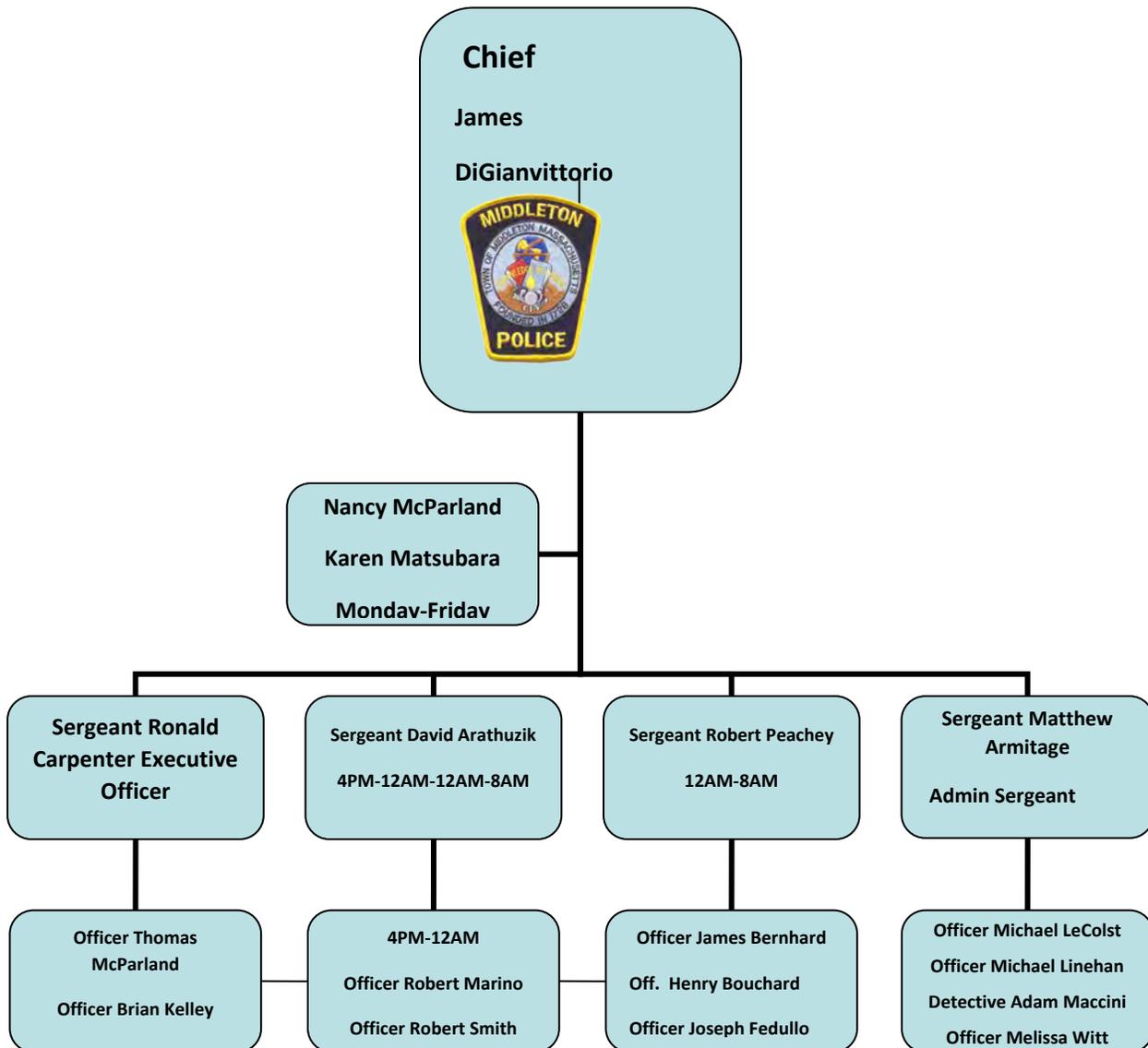
We also need to prepare and plan for faster, more efficient response, to be able to quickly deploy teams which are a critical component to the success of any response and keeping the officers informed in the field is even more critical. I would like to discuss the possibilities of having live connections to the officers in the field to allow those resources that you mentioned as examples. This will reduce wasted time and ensure that our officers can get where they are needed most, quickly.

The question on a fueling station for the police and fire will be a conversation to be had in the planning stages. The parking and queuing will need to be addressed in the initial stages of the pre-planning for the property and where each building will be situated.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include fuel, communication needs, outside assistance or changes to parking or queuing.

Staffing Organization

Please provide an organizational chart for your department, if available, and complete the table below. Please include current staffing and possible projected staffing until the year 2040.



Reserve Officers		
Officer John Griffith	Officer Richard Kassiotis	Officer Leonardo Jorge
Officer Richard Cardinale	Officer Jose Hernandez	(4) New Reserves TBA
Officer Wade Maribito	Officer Mark Finer	

Position	Staffing Projections				FTE	PTE	Comments
	2020	2025	2030	2040			
Chief of Police	1	1	1	1	X		(1) Current
Capt. Or Lieutenant	1	1	1	1	X		Projected
Sergeants	4	5	5	6	X		(4) Current + (2) projected
Detective Sergeant	0	1	1	1	X		(1) Projected
Detective	1	2	3	3	X		(1) Current No Projected
Community Officer	1	1	1	1	X		(0) Current +(1) Projected
School Resource	PT	1	1	2	X		PT-Current- (1+1) Projected
K-9	1	1	1	1	X		(1) Current (0) Projected
Patrol Officers	11	13	15	17	X		(11) - Current + (6) Projected
Civilians	2	2	3	4	X		(2) Current + (2) Projected

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space your department occupies? Please comment on positive as well as negative attributes.

- In 1984 On Petition of the Chief of Police the town voted to raise and appropriate the sum of not more than \$55,000 and to authorize the Board of Selectmen to purchase the “Old Danvers Police Station” on High Street, Danvers MA and have the building moved to

Middleton on town land and provide a foundation and other services and facilities for the purpose of a police station for the town, and to see if such funds will be provided by taxation, by transfer from available funds monies received from Federal Revenue Sharing, borrowing or by any combination thereof. This is how we have been operating for the past 35 years, in a building that was abandoned after the Town of Danvers sold it to build their new police station. One of the positive attributes for this building was that it was the only alternative at the time to allow us to have a building of our own. It has served its purpose, however, we outgrew this space after the first couple of years and in 2013 we retro-fitted the building with again old portable classrooms from the town in an effort to buy time until we built a new police facility.

- There are too many negatives to list; however, I will highlight some of the most serious faults that we are dealing with.
 - No dedicated toilet, shower and locker rooms for male and females.
 - Holding and Detention area not up to accreditation standards.
 - No detainee shower.
 - Inadequate office space.
 - Poor ventilation and poor heat and air-conditioning.
 - No egress from second floor for emergency.
 - No handicap accessible areas other than lobby.
 - Sub-par electrical and emergency electrical systems.
 - No dedicated telecommunication and data storage areas.
 - No dedicated Interview room.
 - Used and hand me down furnishings.
 - Poor active records storage area
 - Sub-par archival document storage.
 - No closet space.
 - Inadequate sally port and vehicle storage.
 - Inadequate bulk evidence storage.
 - Inadequate janitorial area, slop sink, storage.

E2. What are your conference / meeting / training space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with others (such as the fire department should a public safety building be proposed) or the public? What equipment is required in different meeting spaces?

Currently we have to selectively decide what type of trainings we can host here at the police station for both the department and the visiting public based on the fact that our training room is not handicap accessible. We use the training room for various in-house training at least once a month and we can have a maximum of 25-45 people in attendance.

If the Town decides to go with a combined police and fire public safety building we would need to make sure that all the necessary equipment and space could accommodate both departments. It would be our hope to have a training room that is large enough to allow us to host and sponsor training for outside agencies in an effort to capitalize on training for our officers in lieu of a rental fee. We would need smart

boards, audio-visual capabilities. I would like to incorporate our defensive tactics, a computerized firearms training program in the training room also. I would like to have a separate conference and meeting room available to allow smaller meetings for 6-10 people.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

Currently we utilize (4) four locking file cabinets on the first floor to allow access to current fiscal year and one year prior incident reports, arrest reports, and accident reports. This allows our records staff to have these files available during the day when needed. All older files are housed in a room constructed when we installed the portable classrooms in the basement. This area is also houses our fire suppression system and is NOT temperature controlled and is where our water sump pump is located.

Most files now are housed on the in-house computer system, however, we need to retain originals and copies for court proceedings and we must also adhere to public records retention laws.

The room that we are using has numerous used file cabinets that are in average condition. The room is approximately 20 X 30.

The question about if files and records can be maintained off-site and digitized will have to be researched I don't have that information at the time of this report being finalized.

General Space / Support Facility Requirements: Please provide a list of key spaces used by your department. If you have an idea of how large an existing space is or any distinguishing features, please note that.

Space	Size (L x W)	Quantity	Comments
Lobby	Current 8X16	1	Bullet proof Window, bench seat for (4) people. Rack for forms for public. Public take back drug box
Handicap Bathroom in Lobby	Current 8X7	1	Sink, toilet only.
Conference Room	Current 13X16	1	Also have Administrative Secretary and Sergeant Office Space in other half of room. Also 13X16
Lunch Room	Current 8X10	1	Kitchenette with sink, microwave, full size refrigerator, 4X5 Bathroom, toilet and sink. Not included in size. Gun cleaning system on bench.
Locker Rooms	0	0	No formal locker rooms for Officers have random lockers in unfinished basement.

Training Room	Current 23X30	1	Audio Visual components, 2 T.V's DVD Player Computer, No telephone.

Office and/or Workstation Requirements: Please list any specific individual needs for staff in your department.

Think about the work performed: Do they have private meetings during the day? If so, with how many people. Do they have multiple private phone or personal conversations during the day? How long are they at their desk each day? Could they share workspace with another individual on another shift? Could they work at a shared work surface assigned on a daily or even hourly basis?

Note any furniture, equipment or storage they may need. Do they need a work surface with a computer hookup only or one with file drawers? Do they need visual or acoustic privacy? Do they need quick access to printers / copiers?

Office (private) or Workstation (open)	Individual Needs for files, copiers etc.	Comments
Private Office for Chief	Desk with return, lateral files, bookcase, small table for 4, whiteboard, telephone, computer CATV, CCTV, Speaker system.	Acoustic privacy required. Access through admin assistant's area is preferred. Private Office, Meet with 2-4 People Central access to administrative offices. Near Conference Room.
Office for Admin Secretary	Desk with return, lateral files, copier/printer, Computer, CATV, CCTV 1 Office with 1 guest chair, bookshelves, tack board	Control point for visitors, Adjacent to Police Chief, Adjacent to active records storage. Monday-Friday 8AM-4PM
Office for Executive Secretary	Desk with return, lateral files, copier/printer, Computer, CATV, CCTV 1 Office with 1 guest chair, bookshelves, tack board	Control point for visitors, Adjacent to Administrative Secretary, Adjacent to active records storage. Monday – Friday 8AM-4PM
Dispatch Area Secondary PSAP	Receive and dispatch calls, Adjacent to lobby, close proximity to detention area, close proximity to staff toilet, insulate for noise control, bullet resistant panels at lobby walls, possibly raised or recessed for wiring, acoustic tile. Standard office environment. Direct/indirect with dimmers, consoles with radios, computer, data/phone, fax, printer CATV, CCTV. Shelving for equipment white board, tack board for maps, chairs.	
Capt. or lieutenant office space – Future Space.	Desk with return, lateral files, bookcase, small table for 4, whiteboard, telephone, computer, Monitor Cells CATV, CCTV, Speaker system.	Acoustic privacy required. Access through admin assistant's area is preferred. Private Office, Meet with 2-4 People Central access to

		administrative offices. Near Conference Room.
Sergeants Offices space X (4)	Desk with return, lateral files, bookcase whiteboard, telephone, computer CATV, CCTV, Speaker system. Monitor Cells, near squad room/roll call room.	Shared Space, Standard office Equipment. Near Lobby.
Detective office	Shared space for future Accessible to Interview room, Standard office equipment	(2-3) Desks Computers, CATV, CCTV, Seating 3 office with 2 guests, bookshelves, whiteboard, tack board,
Evidence	Deskwork-transfer of evidence. Secure Storage of Evidence. Computers, pass-thru evidence lockers, refrigerator. Safes Narcotics and Valuable Evidence also	Multi layers of security. Near prisoner processing. Accessible to Detectives and Sergeants. Secure Storage of drug related, cash, and jewelry.
Report Writing-Reserves	Standard office equipment, built-in workstations, CATV, Computers, adjacent to squad room and roll call room.	Workstations for reserve officers while working on duty.
Office Space for Fulltime Officers	Each fulltime officer to have cubicle space with desk, telephone, computer, file cabinet. Standard office equipment.	Workstations for the current (11) Fulltime officers with room for expansion over the course of the next (2) years.
Conference Room	Private enclosed conference area for use for meetings and presentations.	Standard Meeting room environment, computer/telephone, conference table seating for 10-12 white boards
Interview Room	Use for interviewing witnesses or detainees, and also for soft juvenile holding area.	Standard Office environment, One way glass mirror to AV surveillance, CCTV. Conference table Seating for 4-5 people.
AV Room	Off interview room, Audio and video surveillance of interview room	One way glass mirror to interview room, Work surface, seating for (2)
Prosecutors Office-Future	Office Space for future position, Standard Office	Files, Bookshelves, seating for 2 desk with return, Central access to administrative offices. Computer, CATV
Records Storage	Secure file storage, Near Administrative and Executive Secretaries.	File Cabinets, Computer
Archival Document Storage	Secure storage for records. Dry well-lit and secure. Remote location possible.	Shelving/ lateral or standard files. File Cabinets, Fire rated file cabinets, computer table.
Armory	Secure storage for weapons and ammunition. Secure location for cleaning and maintaining weapons	Weapons storage cabinet, full-size gun safe, shelving, Near Sergeants room.
Locker Room- Male	Toilet/shower/lockers Lockers 24"D X 24" W with slope tops, double doors, outlets, boot storage below and integral bench.	Multiple occupant spaces. Mirrors, standard bathroom fixtures. Current (16) with Chief (future to 25) Showers with bench seats. Speakers for radio monitoring.
Locker Room- Female	Toilet/shower/lockers.	Multiple occupant spaces. Mirrors, standard bathroom fixtures. Current

	Lockers 24"D X 24" W with slope tops, double doors, outlets, boot storage below and integral bench.	(2) with (3) Civilian staff. (Future to 6) Showers with bench seats. Speakers for radio monitoring.
Squad Room/Roll Call Room	Meet for roll call each shift 6-10 Officers. Room for shift training with video capabilities. Smart Board, CATV, video,	Tables and Chairs.
Lunch Room	Kitchenette, Sink, micro-wave, full-size refrigerator, vending machines, coffee machine, toaster oven. (Possible Stove)	Seating for 6-10 officers. Tables, Chairs Informal staff dining.
Training Room	Formal Training room. 50-75 Seating With video capabilities.	Computers, Audio-visual, Speakers for radio monitoring, smart boards, white boards, CATV, Standard either auditorium seating or slim table and chairs. Equipment for defensive tactics instructions mats.
Support Services Office space.	Traffic Safety, DARE, Domestic Violence, School Resource Officer, Crime Prevention Officer.	Standard Office equipment, Desks, Computers, Telephone, Shared officer space.
Emergency Operations Center (EOC)	Private Office and Storage for MEMA.	Standard Office equipment, Desks, Computers, Audio /Visual Capabilities, File Cabinet, Whiteboards, shelving for supplies and chargers. Hook ups for multiple phones and laptops.
Lobby	Welcoming to the public, accessible but no direct access to work areas.	Kiosk for educational pamphlets and brochures Bench Seating, Historical Document display, Transaction counter, Public restroom, kiosk for drug take back area.
Workout area	Workout room near locker rooms for officers to exercise.	Various equipment depending on size and scope of room

Storage Requirements: Please list any specific storage needs for your department.

Consider items currently stored on site and those that are stored elsewhere in Town. Consider whether current storage locations create any issues for access (i.e. *paper is stored in a locked room in an adjacent building or all equipment used in conference rooms needs to be moved from one floor to another x times a day/week*). Please list specific items stored. Please note if these items need special security (assume all doors can be locked).

Material - Items	Size or Weight	Security Needs Secure (S) Unsecured (US)	Comments
Paper, Office supplies	5X12 current storage area	Secured	Needs to be adjacent to admin offices

Janitorial Supplies. Cleaning supplies, paper products toilet items, trash bags, gloves,	Current 5X7	Secured	Slop sink, storage of brooms, mops, hazard materials. Shelving.
Office Equipment/copy, shredder's	Separate room for office equipment	Dedicated as required for equipment.	Plug strips, Computer, Copiers, Fax, Printers, Mailing Equipment, Counter top, shelves, separately ventilated. Good lighting, Counter space for sorting. Near Administrative Offices.
Sally port/Maintenance Bay	26X26 Currently (2) Bays would like to increase to (3) bays.	Secured.	Weapons locker, floor drains, eyewash, Emergency CO monitor and vent system, Overhead doors to have multiple systems for closing down doors. Air and Water lines, Wire mesh partitions with lockable gates
Car port	No current protected storage	Secured in fenced in area.	Carport for cruiser to be out of the weather.
Storage for other vehicles	Currently using an 18X20 Shed with no power and no security system.	Secured	Storage to ATV/ Motor Cycle, Bicycles
Bulk Evidence	Currently using wire cage in basement	Secured	Need Secured storage, for large evidence or found property
Tire and car part storage	Currently using wire cage in basement	Either secured or not.	Tires and car cleaning and parts storage, washer fluids.
Holding Facility	Secure holding of detainee for before and after processing.	Steel bench with handcuff rail	In booking area.
Booking	For processing of detainees, Fingerprinting, Photographing of mug shots, Breathalyzer testing	Secured area away from public.	Computer CCTV, Breathalyzer, cameras, base cabinets, locks with heavy duty hardware, pass thru window to holding. Steel Bench with handcuff rail. With one booking station.
Detainee Shower	None at this time	Secured area	Standard Penal Shower System. Suicide resistant, Sight/Sound separation between males/females and juveniles.
Detention Cell Area- Male	(3) Cells	Secured	Single Occupancy lock-up for male detainee, sight /sound separation between males/females/juveniles. Suicide resistant grills/registers, Standard cell doors/locks, video/

			audio monitoring, cell check outside. Adjacent to booking.
Detention Cell Area-Females	Cells	Secured	Single Occupancy lock-up for female detainee, sight /sound separation between males/females/juveniles. Suicide resistant grills/registers, Standard cell doors/locks, video/ audio monitoring, cell check outside. Adjacent to booking.
Detention Cell Area-Juveniles	Single Occupancy lock-up for Juvenile detainee Sight/Sound Separation	Secured	Single Occupancy lock-up for Juvenile detainee, sight /sound separation between males/females/juveniles. Suicide resistant grills/registers, Standard cell doors/locks, video/ audio monitoring, cell check outside. Adjacent to booking.
Juvenile Supervision	Sight/Sound Separation	Secured	Adjacent to Booking, Adjacent to Juvenile lock up. Desk, Chair. Suicide resistant.
Bail Commissioners Office	None at this time	Used by Attorneys, Used for Bail	Standard Office environment, Desk, Seating, 1 office with 2 guest chairs.
Mechanical Room	None at this time	Secured- Room for mechanical equipment	Walls- CMU or High impact GWB, Floors- Concrete with hardener or sealer. Dependent on the need.
Electrical	None at this time	Secured	Central to Building, Room for electrical service and panels. Close to generator. Dependent on equipment required.
Emergency Electrical	Generator	Secured	Generators to be determined by electrical usage in new facility.
Plumbing and Fire Protection	Building is currently covered at this time.	Secured	Room needed for plumbing and services and panels for new facility as required.
Data/IT	Closet at this time	Secured	Efficient Durable space needed to handle standard equipment dependent on equipment required.
Janitor	3X5 Space currently		Mop sink, Storage for janitorial s support, racks for mops, brooms, etc. shelving.
Egress Stairs	None currently		Final Stair design to be determined by the building layout.

Town-Owned Vehicles

Apparatus: Please respond to the following questions regarding your vehicles.

V1. Do you perform light maintenance on your vehicles in-house?

No, all maintenance is conducted by the staff at the Essex County Correctional Facility here in Middleton, we purchase parts and supplies and they do the general maintenance. Oil Changes and minor repairs, all cruisers are under warranty for major service issues.

V2. Does any department owned vehicles go home with employees at night?

Chief has take-home cruiser, as does K-9 officer and Detective and Executive Sergeant and Administrative Sergeant.

Vehicle/Equipment Storage: Please provide as detailed of a list as you can. Parking counts are required by zoning and this list will help us confirm needs and special issues particularly as it relates to your specific department’s vehicles and equipment. Please provide overall vehicle sizes: Small = 8 'x 10', Medium = 8 'x 20' (typical car), Large = 12' x 30', X-Large = 12' x 40' or larger. Please note if vehicle must be stored indoors or in an uncovered parking lot and other unique features (i.e. electric vehicles, handicap van, etc.).

During the Daytime hours we would have (8) Officers and Civilians working Monday – Friday and (6 Spare) cars on the lot.

4PM-12AM Shift (4) Officers working (6) Cruisers in Lot

12AM-8AM Shift (3) officers working (6) Cruisers on the lot.

Vehicle Type	Vehicle Projections				Size				Comments
	2020	2025	2030	2040	S	M	L	XL	
Cruiser/Truck/ Assigned Vehicle	12	14	16	18		3	9		Parking lot
Command vehicle	3	4	5	6					ATV, Motor Cycle, Antique, Bikes
ATV	1	1	1	1					Inside
Motorcycle	1	1	2	2					Inside
Antique	1	1	1	1					Inside during winters

The police station is also running out of space to store evidence. A long list of inadequacies with the current building forces officers to make do, or look for workarounds. If the electricity goes out, the building's generator can't power the whole station, just dispatch. The security camera system doesn't cover the whole station. And officers don't have a well-ventilated area to clean their firearms, which is done with an alcohol-based solvent. There's no locker room for employees — much less a shower — which means if officers stain their uniforms with blood or other biological or chemical hazards encountered on the job, they have to run home for a change of clothes. That's one of many inefficient-but-necessary workarounds. Temperature is hard to regulate within the building. The Secretarial staff has to rely on box heaters for warmth and in the summer, the building is either too hot or too cold in the summer. Ideally, in a new a facility we would have a more modern jail that would be less medieval, if you will.

Cells contain metal beds bolted to the floor and walls, and a metal toilet. All that's available is a blanket and generic pillow. This isn't up to modern standards and it fails the state inspections each year due to the general makeup of the units. I'm sure that the building was modern in 1960, but I don't know of too many jails cells that look like this anymore. But the jail is not equipped to house juveniles and keep them separated from adult offenders as required by law. Instead, they're handcuffed to a metal rail. The jail is also not equipped to care for individuals with mental impairments, who require specialized cell furniture to prevent injuries. It's also not adequate for anyone with physical disabilities. Although our jail cells here in Middleton are a temporary holding facility, people can find themselves behind bars here for many hours and in some cases days. "I understand jail isn't some place that needs to be a five-star hotel, but we need to have a cohesive working environment for both our staff and the occasional guest we house.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan	HKT Project No.: 21921
<hr/>	
Name / Title:	Andrew J. Sheehan, Town Administration
<hr/>	
Department / Division:	Town Hall - Administration
<hr/>	
Phone / Email	978-777-3617 andrew.sheehan@middletonma.gov
<hr/>	
Date of Completion:	9/23/19

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

Responsible for general operations, management, and oversight of municipal operations. The office handles licensing, appointments, and other duties in support of the Board of Selectmen. The office is responsible for administering all human resources functions for the Town.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

The Town currently lacks information technology support. IT is not well coordinated and is largely outsourced. Continued growth and reliance on technology will necessitate the creation of an IT function. The logical location would be in Town Hall.

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Primarily by phone, text, and email. Face to face department head meetings occur as needed, generally no more than about 6 times per year. More frequent smaller meetings take place as needed. These can be just a couple of people to 6-8.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

Generally fewer than 10, but it is variable. Our office can go days without the public dropping in and then be faced with what seems like constant interruptions at other times. Our location on the 2nd floor – out of the way – certainly plays a role in the number of

O2. What functions / activities / duties within your department have direct interaction with the public?

Interactions include people looking for general information/questions/complaints, businesses applying for licensing.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

We do not currently share spaces with the community; in the future it would be nice to have space the community can use.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Much of our work is confidential. Paper files, electronic files, and email need to be secured. We have frequent confidential conversations (employee matters, coaching, disciplinary matters, etc.), but the office is not sound-proof. This poses a danger for the organization as well as the employees.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

We need to maintain and reinforce our redundant IT. Electrical outages are rare and generally of short duration due to our location on a main feed, the municipal electric department's investment in system-wide maintenance, and its quick response to outages.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Our office is larger than is needed, but inefficiently laid out; offices are not sound-proof; conference space is within TA's office; TA's office is cavernous to a fault.

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces?

While not ideal, we manage with the current arrangement; HR cannot accommodate more than ~4 people; TA and HR spaces are not private (sound-proof)

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

The TA's Office has approximately 100 linear feet of file storage; annual generation is estimated at 6-10 linear feet. Most files are kept indefinitely/permanently; files could be kept digitally and those that need to be retained in paper stored off-site.

Office and/or Workstation Requirements: Please list any specific individual needs for staff in your department.

Think about the work performed: Do they have private meetings during the day? If so, with how many people. Do they have multiple private phone or personal conversations during the day? How long are they at their desk each day? Could they share workspace with another individual on another shift? Could they work at a shared work surface assigned on a daily or even hourly basis?

Note any furniture, equipment or storage they may need. Do they need a work surface with a computer hookup only or one with file drawers? Do they need visual or acoustic privacy? Do they need quick access to printers / copiers?

Office (private) or Workstation (open)	Individual Needs for files, copiers etc.	Comments
<i>Example: Private Office</i>	<i>Desk with return, lateral files, bookcase, seating for 2, whiteboard</i>	<i>Acoustic privacy required.</i>
<i>Example: Workstation</i>	<i>Desk with return, lateral files, copier/printer</i>	
TA: Private office	Desk with return, lateral files, bookcase(s), whiteboard, small conference table with seating for ~4	Acoustic privacy required
Assistant TA: Private office	Desk with return, lateral files, bookcase(s), whiteboard, small conference table with seating for ~4	Acoustic privacy required
Administrative Secretary	Desk with return, lateral files, seating for 2, wall calendar; waiting area if not elsewhere available	

Other

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

Currently the land use departments (Inspections, Health, Planning, and Conservation) are located at the DPW Facility. Ideally, they should be at Town Hall. Existing space cannot accommodate them. A future Town Hall should incorporate space for land use to provide easier integration and one-stop shopping for residents/customers.

IT should be programmed into the future Town Hall. Redundancy at either Police Station or Library.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan **HKT Project No.:** 21921

Name / Title:

Department / Division: **Town Hall – Board of Assessors**

Phone / Email 978-774-2099 bradford.swanson@middletonma.gov

Date of Completion: 9-23-2019

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

Valuation of all classes of property for Ad Valorem tax purposes, administration of databases, mapping/GIS, tax exemptions, motor vehicle excise and other various duties within our department's charge.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

None

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Text, email, and cellular devices.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

1 – 5 people daily consisting mainly of taxpayers.

Heavier volume during quarterly billing cycles and random excise billing.

O2. What functions / activities / duties within your department have direct interaction with the public?

Property inquiries, abatement and exemption applications, and motor vehicle excise inquiries.

More recent on-line access has drastically reduced our flow of public coming into our department. We even removed our counter terminal as it was not being utilized.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

No.

We would prefer to share a adjoining conference space with the Treasurer/Collector for short taxpayer, staff and board meetings, and employees. This could also be used for other departments as needed.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Not at this time. However, a panic button type system should be considered for safety of staff in our public area.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

I believe independent power supply would be important to maintain communications with taxpayers and security of computer systems in the event of catastrophe or emergency. I also believe off site storage of computer information is a necessity.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Public access is currently sufficient. Staff space is limited, should be doubled. Assistant Assessor's office is sufficient space. Meeting space is insufficient.

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces?

Limited to a 4' round table for our monthly meetings with 5-6 people. We lost our first floor conference area to the Town Clerk for their needs. We would prefer a shared conference room with the Treasurer/Tax Collector which could accommodate a dozen people with a table and chairs, screen, and projector capability. This could also be used for other departments as needed.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

We currently utilize 7 4 dr file cabinets, 3 2 dr files, 2 lateral files, 2 small bookcases, 2 5dr plan files, 2 large bookcases, 3 metal desks, 4' table, 4' round conference table, 13 chairs, and a counter with cabinet storage. Lateral files are used daily. Other files are accessed intermittently. All files are secured when office is locked. Linear feet of space for cabinets and bookcases is 34 officewide.

We also store many years of files, plans, and books in our basement storage area which is currently at maximum capacity.

We produce 2 ft of linear records. Some of these are permanent and some is temporary 3-5 years.

We have records dating back into the 1700's. Most of this archived material could be stored in a vault. Most our records now are digitized.

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

We prefer a quiet environment for staff to perform functions and meet with taxpayers. A public counter should be inside the office to provide that. Other staff need a quiet area to work without interruption.

A conference room would be preferred to meet with people to discuss confidential material. See attached plan to show what we would prefer.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title:

Department / Division: Town Hall – Building Inspector

Phone / Email 978-777-2850 / scott.fitzpatrick@middletonma.gov

Date of Completion:

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

The primary function of the Inspectional Services Department is enforcement of the State Building Code, Architectural Access Board Regulations and the Town of Middleton Zoning.

The department issues Building, Electrical, Plumbing, Gas and Mechanical Permits.

The department performs inspections on the permits issued as well as inspections related to reported Building Code and Zoning By- Law violations.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

n/a

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Telephone / Cell Phone

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

On average the department has approximately 12 to 18 visits to the office from the public. This number has been greatly reduced due to our online permitting system.

Phone calls and field inspections make up another 20 to 30 interactions.

In recent years the workflow has been fairly consistent with no one time of the year being busier than another.

O2. What functions / activities / duties within your department have direct interaction with the public?

Most if not all Inspectional Services tasks have direct interaction with the public

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

The front counter area is open to the public - we provide two computer terminals for customers to apply for permits using our online system.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Currently the department collects permit fees for the permits issued a secure area to store the funds collected is a necessity.

Currently the department has approximately 250 square feet of secure file and plan storage. This space needs to be expanded.

Emergency Events: Please describe any special requirements or needs during emergency events.

Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

When responding to emergency events the department needs access to fuel for the department vehicle and cell phone communication with other departments.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

The office area and front counter space are adequate for our needs. The existing plan and file storage at 250 square feet is inadequate.

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces? The department very rarely has a need for conference / meeting space. Most meetings the department participates in are hosted by other departments.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized? The department currently has approximately 73 lineal feet of record storage in about 250 square feet which is inadequate. These records are maintained for the life of a building and accessed frequently therefore offsite storage would not be feasible. Digitizing the records would be preferred and eliminate our need for additional storage.

Other

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*). The current configuration of the open front counter clerk's work area and the separate private inspector's office shared by the 5 inspectors works well.

The inadequate file and plan storage needs to be addressed.

PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: Sarah Wood, Town Accountant/CFO

Department / Division: Town Hall – Finance Department

Phone / Email: 978-777-4966, sarah.wood@middletonma.gov

Date of Completion: 9/17/19

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

This office provides the Town's accounting/finance oversight. It also provides all insurance (property & liability as well as worker's compensation) oversight to the Town. Works with the independent auditors to complete the financial audit of the Town. Processes bills payable and distributes checks.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

None applicable

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Primarily email & phone calls

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

None- we rarely deal with the public in person; phone calls are sporadic.

O2. What functions / activities / duties within your department have direct interaction with the public?

Accounts Payable – check inquiries

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

None and none in the future

O4. Does your department have any special or specific security or safety concerns? Please explain.

Confidential Ambulance billing records and confidential Workman's Compensation records

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

None

Other

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

It would be ideal to have a semi-private meeting space, as the office currently does not offer this. This can be either in office or in a shared conference room space. This Department utilizes numerous filing cabinets with CY, PY, and Permanent records within them so there needs to be ample room within the office to maintain these records.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: Derek Fullerton, Chief Health Strategist-Public Health Director

Department / Division: Town Hall – Health Department

Phone / Email 978-777-1869 / derek.fullerton@middletonma.gov

Date of Completion: September 23, 2019

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

Our mission is to improve public health through promoting an individual's well-being, preventing disease, and protection of an individual's health within the community. The Middleton Board of Health and Health Department work to support the 10 essential functions of public health as outlined:

Monitor health status to identify community health problems.

Diagnose and investigate health problems and health hazards in the community.

Inform, educate, and empower people about health issues.

Mobilize community partnerships to identify and solve health problems.

Develop policies and plans that support individual and community health efforts.

Enforce laws and regulations that protect health and ensure safety.

Link people to needed personal health services and assure the provision of health care when otherwise unavailable.

Assure a competent public health and personal healthcare workforce.

Evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Research for new insights and innovative solutions to health problem

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

Electronic file access and viewing for the public via the web/cloud to reduce disruptions to staff and the department by the public/realtors/builders, etc. An electronic system similar to the state registry of deeds where people can access information remotely without having to commute to the office and request to see paper files. This could allow increased efficiency 24/7 for the public and increased efficiency and less disruptions to clerical and management staff.



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F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

Our department has approximately 10 visits per day during regular season and 15-20 during peak seasons (March to July). We have a permit renewal cycle in July for all food establishments and spring season initiates an increase in building permit applications (which 90% all require Health Dept review), animal control complaints, public pool, recreational camps, and bathing beaches, etc. during this season.

O2. What functions / activities / duties within your department have direct interaction with the public?

Approximately 80% of our activities and duties interact with the public related to permitting, licensing, inspections, public health nursing, etc.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future? Clerical shared space (Multi Departmental Clerk) office space. Shared conference room, Shared Kitchen. Would expect to share the same spaces aforementioned.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Yes, Vaccine Refrigerator. Refrigerator must be kept in secured room along with Communicable Disease and Immunization Record Keeping.

Public Health Director and Public Health Nurse must not share common space with other departments and have private offices/rooms where confidential communicable disease, immunizations, HIPPA required functions are required to be followed.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

The Health Department currently has storage space for emergency preparedness (EP) supplies that support the Health Department EPs planning for response. For example, many supplies that support the annual flu immunization clinics and Point of Distribution Sites (PODS)/ Emergency Dispensing Sites (EDS). Many supplies are within our EDS Mobile Trailer, that will need parking space at this new town owned building. Additionally, we have an EP Supply Shed that houses 90% of our EP supplies. It would be ideal that our new building have interior secured storage space for the Health Departments EP supplies that exceed protection than our current EP supply shed.

It would be ideal that our building have auxiliary generator backup power to support departments who have EP functions, roles, and equipment. For instance, the Vaccine Refrigerator needs to be backed up to a generator. The Health Departments office space should entirely be backed up to a generator for emergency preparedness response capabilities.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Current office space is sufficient for current staff but not for staff growth. Public Health Director and Public Health Nurse need private office space for HIPPA compliance/security. Current private space is in effect.

Second floor meeting room is not ADA compliant; therefore, we can't hold public or posted business meetings there.

Current Kitchen space is adequate in needed in future space.

Public Lobby is adequate but future space should be placed with climate control barrier to keep climate appropriate for front staff and not exposed to extreme temperature changes in the front lobby area.

No workout space/area. Building does not have any area for exercise equipment or exercise space.

The Middleton Health Department would need the following spaces:

Private Office: Health Director

Private Office: Public Health Nurse

Private Office: Conservation Agent

Shared Space: Multi-Departmental Clerk

Shared Area/Individual Cubicle Space: Health Inspector

Shared Area/Individual Cubicle Space: Animal Control Officer

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces?

The Middleton Health Department and Middleton Conservation Department holds public board meetings each 1x month or every other month. Public meeting facility space is beneficial within the building proposed. Proper IT infrastructure is beneficial to support wireless, projection, audio and visual necessities for business meetings and hearings.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

The Middleton Health Department has a centralized file room with approximately 30 ft of standing wall file system. Records are accessed daily and commonly. We produce about 1-2 feet of linear files daily but that is decreasing due to our new online permitting and filing system. We maintain approx. 60-70 years of files. HIPPA related files need to be in a secure area. 90% of our files can be digitized and that is the preferred direction the department would like to go.

The Conservation Department has approximately 20 feet of standing bi-wall filing system. Records are accessed daily and commonly. We produce about 1-2 feet of linear files daily but that is decreasing due to our new online permitting and filing system. We maintain approx. 40 +- years of files. 90% of our files can be digitized and that is the preferred direction the department would like to go.



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Town-Owned Vehicles

Vehicles: Please respond to the following questions regarding any vehicles that are assigned to your department.

V1. Who performs light/heavy maintenance on your vehicles? Is it the DPW or a local service provider?

DPW contracted mechanic

V2. Do any department owned vehicles go home with employees at night?

Yes-Public Health Director

No-Animal Control and Conservation Agent Vehicle

Vehicle Storage: Please provide as detailed of a list as you can. Parking counts are required by zoning and this list will help us confirm needs and special issues particularly as it relates to your specific department's vehicles and equipment. Please provide overall vehicle sizes: Small = 8 'x 10', Medium = 8 'x 20' (typical car), Large = 12' x 30', X-Large = 12' x 40' or larger. Please note if vehicle must be stored indoors or in an uncovered parking lot and other unique features (i.e. electric vehicles, accessible van, etc.).

Vehicle Type	Vehicle Projections				Size				Comments
	2020	2025	2030	2040	S	M	L	XL	
<i>Example: Assigned Vehicle</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>		<i>x</i>			<i>Parking lot</i>
<i>Ex: Van</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>x</i>			<i>Indoors</i>
Ford Escape SUV	1	1	1	1		X			Parking lot
Ford Ranger Truck	1	1	1	1		X			Parking Lot
Inspector Vehicle	0	1	1	1		x			Parking lot

Other

Other Information: Please respond to the following questions:

1. Please provide additional information that you believe would provide a more complete picture of your needs with a focus on intangible ideas (such as: *we want to provide an open atmosphere, but our work is too sensitive because...*).

PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title:

Department / Division: Town Hall – Town Clerk

Phone / Email

Date of Completion:

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

The Town Clerk's Office serves as a central information point for local government. We respond to inquiries from the public as well as from other departments, boards and committees.

Elections-

The Town Clerk is the chief election official who oversees the polls and the conduct of all elections and election-related activity for federal, state, and local elections. We also conduct the annual census and maintain the street and voter lists.

Records-

As the Town's recording official, the Clerk keeps records of all births, marriages and deaths, all actions of Town Meeting and elections, zoning decisions, and Annual Reports.

Code-

The Clerk's Office maintains the municipal code, the official Town bulletin board, records of oaths of office, appointments and resignations of all Town Officials.

Licenses-

We also issue some state licenses and permits, including marriage licenses, business certificates and renewals, dog licenses, fuel storage licenses, raffle/bazaar permits and requests for public documents.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

The ability to have "EARLY VOTING" in the Town Hall and have the use of a conference/meeting room for various needs of our office.

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

Communication is via email, text and phone.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

On average our office encounters 15-20 members of the public. We are generally quite busy each day.

During Town Meeting and Election cycles, our activity and visits increase significantly. This is due to voter registration, absentee voting and general guidance understanding the process.

In addition to the above, the Annual Census which includes dog licensing in January creates a tremendous amount of activity. The members of the public often hand deliver this information and we issue the dog license while they are at the window.

O2. What functions / activities / duties within your department have direct interaction with the public?

Some of our functions / activities / duties within our department that have direct interaction with the public are as follows but are not limited to: Voter registration, Absentee Voting, Early Voting, Annual Census, Dog Licensing, Business Registration, Marriage Licensing, Vital Records requests, Public Records requests, Zoning/Planning Application filings and follow-up and municipal fines and hearings.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

We currently share the Library for Early Voting, Fuller Meadow School for our polling location for elections, the Howe-Manning School for all Town Meetings and the Town's permanent records are kept in the basement of Memorial Hall amongst all other department records, etc.

We hope to relocate our polling location out of the school building and offer Early Voting to the public within our offices in a new Town Hall.

We have the need for a conference/meeting room.

O4. Does your department have any special or specific security or safety concerns? Please explain.

On occasion, we are concerned that we have no protection from the public should a situation arise. Perhaps the installation of a "panic" button would be helpful.

Throughout the year, the Town Clerk's office is required to stay open beyond the building's normal hours. This raises concerns as we are often alone in the building and open to the public until later in the evenings.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

In the event of an emergency, our office would need various means of outside assistance and communication, due to the fact that our records could be severely compromised. The accessibility of necessary information for the function of our office would need to be a high priority in serving the needs of the public.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: Belinda Young

Department / Division: Town Hall – Treasurer / Collector

Phone / Email 978-774-8327

Date of Completion: 9/11/2019

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

Primary functions in tax collection and payroll processing. This requires filing cabinets for all payment batches and employee files.

Cash and checks are received in the Collectors office and requires a safe to store the cash between deposits.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

None

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

By Email

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

We interact with dozens of members of the public on a daily basis. When Real Estate Tax bills or Motor Vehicle tax bills are due, that number increases dramatically. This is between 5-8 times a year. In September, we sell transfer station stickers and upwards of 1000+ additional members of the public will come in to Town Hall in one month.

In addition, all new employees must come into our office to complete payroll paperwork.

O2. What functions / activities / duties within your department have direct interaction with the public?

All functions/activities/duties have direct interaction with the public.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

We currently do not share any space with the Community.

Perhaps we would need to share space with the HR department in the future? In addition, I would envision sharing a conference space with Accounting and/or Assessors office.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Yes. We deal with money on a daily basis and have to have locked doors and locked safe's. We currently do not have cameras and/or "panic" buttons, but some municipalities do. Something to think about for the future perhaps.

We would like the collections counter to have a built in safe with a money drawer which is always locked.

In addition, both our paper files and computer files contain every employees Social Security number. These also needs to be kept secure. We are required by law to NEVER dispose of payroll records, so these files will continue to grow and need to be kept secure.

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

Can't think of any special requirements this dept has.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Currently, the collection clerk is separated from the Treasurer and the Asst. Treasurer. This is the biggest space problem we currently have. In the future, we need these three positions in a common area.

The Asst. Treasurer/Collector does all payroll functions including benefit administration. This requires privacy for any employee that needs to speak about benefits or payroll issues. The current space for the Assistant T/C is too small and not private.

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces?

The only conference meeting space we need is for staff meetings and wellness committee meetings. Generally that is for 3-5 people. The current Collection Clerk space meet those needs. We would be open to a shared conference space.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving? How many years of files / records do you maintain? Can any files / records be maintained off-site or digitized?

We currently require approx. 127 linear feet of active filing cabinets and approx.. 36 ft of inactive filing cabinets. The inactive files could be in another part of the building if needed.

In addition, we need approx. 171 ft of archival space.

General Space / Support Facility Requirements: Please provide a list of key spaces used by your department. If you have an idea of how large an existing space is or any distinguishing features, please note that.

Space	Size (L x W)	Quantity	Comments
<i>Example: Conference Rm</i>	<i>Existing 14 x 18</i>	<i>2</i>	<i>Needs multiple lighting levels, flat screen monitor with computer hook-up</i>
<i>Example: Workstations</i>	<i>6 x 6</i>	<i>2</i>	<i>Spends a lot of time on phone so sound control is a concern</i>
Collection Office	17x14		This is sufficient space
Asst. T/C office	9x10		This space is too small
T/C office	9X12		This space could be slightly larger.



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PROGRAMMING QUESTIONNAIRE

Town of Middleton Master Plan

HKT Project No.: 21921

Name / Title: Gary Bent / Director

Department / Division: Town Hall – Veterans Services

Phone / Email 978-762-0611 / gary.bent@middletonma.gov

Date of Completion: 9/6/19

General Information

Function: Please respond to the following questions:

F1. Please describe the primary functions / activities / duties of your department in as much detail as possible.

Meet with Veterans and their families to assist with accessing benefits, file service-related VA claims, job hunt and any other assistance that I can provide.

F2. Identify any functions / activities / duties that you would like to see your department perform now and in the future that are not currently being done and for whom?

N/A

F3. Please describe how your department communicates with other Town departments in the case of an emergency or extraordinary event.

All communications are done through phone (cell & desk), email and face to face meetings.

Operations: Please respond to the following questions:

O1. How many visits by members of the public do you interact with on an average day? Are there times of day / year that are busier than others? Please explain.

This is difficult to honestly answer. Many Veterans currently do not visit this office as it isn't very accessible. The fall months are busier.

O2. What functions / activities / duties within your department have direct interaction with the public?

Almost all functions or duties cause this department to interact with the public.

O3. Are there any spaces you currently share with the Community? Do you envision sharing any spaces with the Community in the future?

Currently I use or share a very large and cluttered meeting room on the second floor of the town hall. This situation is not ideal as there is no privacy for a Veteran or family to openly speak with the true expectation of privacy.

O4. Does your department have any special or specific security or safety concerns? Please explain.

Only real concern is that current office isn't very secure. One door is a "Dutch door" (cut in half) and the other old door leads to the empty meeting area. Both doors are not very secure as well as both windows. Due to the large amount of personal information stored in this office I'd like to see it protected in a better

Emergency Events: Please describe any special requirements or needs during emergency events. Possible examples might include water, fuel or communication needs, outside assistance or changes to parking or queuing.

Major requirement would be the ability to rapidly egress with handicap accessible doors, hallways, etc.

Space Needs Requirements

The next section deals with space needs for your department. This section is divided into four parts. The first part deals with general questions regarding existing and future space needs. The second part deals with general space requirements for your department including things such as public, lobby, conference, locker rooms, lunch room and other support facilities. The third part is devoted to individual office and/or workstation requirements. Storage requirements will be covered in the fourth part. Parking or vehicle storage needs will be addressed in the next section.

Please provide as much detail as possible to the questions. Your responses will help to guide programming discussions with the Design Team.

Existing and Future Space Needs: Please respond to the following questions:

E1. What are your thoughts regarding the current space you occupy? Please comment on positive as well as negative attributes.

Unfortunately, there isn't any positives other than the common knowledge of where my office is located. It is too small, poorly lit, poorly furnished and proper heating/cooling is nonexistent. There is no safe accessibility for disabled or older Veterans and very limited privacy.

E2. What are your conference / meeting space needs? How often are meetings held? How many people attend your meetings? Can you share meeting facilities with the public? What equipment is required in different meeting spaces?

An office that can comfortably handle 5 people (to include wheelchair) w/a table would be ideal. This space also needs to be able to be secured for privacy concerns when speaking with Veterans about their medical complications or personal concerns.

E3. Describe centralized file, archived file and secure storage needs. How many linear feet of active files / records are accessed daily? How many linear feet of files / records do you produce in a year for archiving?

Town-Owned Vehicles

Vehicles: Please respond to the following questions regarding any vehicles that are assigned to your department.

V1. Who performs light/heavy maintenance on your vehicles? Is it the DPW or a local service provider?

N/A

V2. Do any department owned vehicles go home with employees at night?

N/A

Vehicle Storage: Please provide as detailed of a list as you can. Parking counts are required by zoning and this list will help us confirm needs and special issues particularly as it relates to your specific department's vehicles and equipment. Please provide overall vehicle sizes: Small = 8 'x 10', Medium = 8 'x 20' (typical car), Large = 12' x 30', X-Large = 12' x 40' or larger. Please note if vehicle must be stored indoors or in an uncovered parking lot and other unique features (i.e. electric vehicles, accessible van, etc.).

Vehicle Type	Vehicle Projections				Size				Comments
	2020	2025	2030	2040	S	M	L	XL	
<i>Example: Assigned Vehicle</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>		<i>x</i>			<i>Parking lot</i>
<i>Ex: Van</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>		<i>x</i>			<i>Indoors</i>



Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix C

Program

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
PUBLIC - SHARED					
Entry Vestibule and Lobby; Public Counter for Business Office and Public Counter for Land Use	0	0	0		Visitors per day: Admin @ 10; Treasurer @ 12; Clerk @ 20; Assessor @ 5; Public Health @ 10; Bldg. Insp. @18; Planning @ 2; all departments have peak visits at different times of the year; 2 public counters for Assessor; Treasurer; Clerk and Land Use; Service counter/reception for CoA
Public Toilet	0	0	0		3 set of 2
SUBTOTAL				0	
Gross area adjustment 15%				0	
Circulation adjustment at 25%				0	
TOTAL				0	
BUSINESS OFFICES - SHARED					
Conference Room- Large	0	30 at seats	0		Shared: Early Voting; PH Board Mtgs.; ConCom; Elections Training
Conference Room	12	0	400		Shared - 2 spaces
IT Office	1	0	100		Future
Swing Space Office	1	0	100		For auditors or others but shared by all
Lunchroom/Breakroom	6	0	144		
Storage	0	0	240		(2) 1 per floor; Paper Storage; Supplies; Tech peripherals
Copy/Mail Room	0	0	100		Small mailings-outsource larger ones
Archive Records Storage	0	0	400		Shared High Density Storage System; Secured area for HIPPA files
Business Offices Toilet	0	0	121		1 set of 2
SUBTOTAL				1,605	
Gross area adjustment 15%				241	
Circulation adjustment at 25%				461	
TOTAL				2,307	
BUSINESS OFFICES					
Town Administrator	1	4	208		Meet with 4 in office
Assistant Town Administrator	1	4	168		
Administrative Secretary to TA	1	1	80		
Current File area	0	0	100		
Waiting area	0	2	80		
Future HR	1	1	120		Possible Split???
Town Accountant Office	1	1	144		
Assistant Town Accountant Office	1	1	120		Current PTE possible FTE
Current File area	0	0	100		
Assistant Assessor (Chief Assessor) Office	1	4	168		First level preference; share area with Treasurer/Collector

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
Admin. Assessor (Assistant Assessor)	1	1	80		Open to Public Counter
Assessing Clerk (Admin. Assessor)	1	1	80		Open to Public Counter
Field Assessor	1	0	64		Future
Current File area	0	0	100		
Treasurer/Collector Office	1	4	168		First level preference; share area with Assessor
Assistant Treasurer/Collector Office	1	1	120		Payroll/Benefits
Collections Clerk	1	0	80		Open to Public Counter: Built in cash drawers - 2 computer locations
Current File area	0	0	100		
Veterans Services Office	1	4	168		PTE; Accessibility key issue
Administrative Assistant to VS	1	0	80		Future FTE
Town Clerk	1	2	168		Public Counter - night hours and security issue: Elections; Early Voting; Records; Municipal Code; Licenses; Application Filings
Assistant Town Clerk	1	1	80		
Administrative Clerk	1	0	80		PTE
Elections/Census Assistant	2	0	160		4 PTE (2 morning - 2 afternoon)
Current File area	0	0	50		
Vault	0	0	200		Includes voting materials and equipment
Printer/copier	0	0	40		
Land Use Offices					
Public Health Director Office	1	2	168		Confidential functions; mtgs with 4-6 persons; possible intern desk
Public Health Nurse Office	1	2	144		Confidential functions; sink and medical cabinets; Could move to Community Building
Public Health Secured Storage and Emergency Supplies	0	0	144		Vaccine refrigerator; records; supplies
Public Health Inspector	2	2	128		Open Plan; Proposed FTE and PTE
Animal Control Officer	1	0	64		Open Plan
Conservation Agent Office	1	1	144		
Multi Departmental Clerk	2	0	128		Open Plan; PH sees shared clerk possibilities - plan for 2
Building Inspector Office	1	1	144		
Building Inspector: Bldg, Elec, Plumb, Gas, Mech.	4	1	144		Inspectors do not overlap; 2 PTE
Plan Storage	0	0	120		
Town Planning Director Office	1	3	168		
Assistant Planner (PB Clerk)	1	1	80		Current PTE; Future FTE; Economic Development??
Planning Administrator (ZBA Clerk) with current only file storage	1	0	144		Current PTE; Future FTE for All Boards
Tech Gear Storage	0	0	64		

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
SUBTOTAL				4,890	
Gross area adjustment 15%				734	
Circulation adjustment at 25%				1,406	
TOTAL				7,029	
OFFICES - COA					
Director CoA	1	1	0		
Additional office	1	1	0		Ass't. Dir. or other dept.
Office for Wellness	1	1	0		
Office for Counseling	1	1	0		
Open Office	1	1	0		General, staff, SS volunteers
SUBTOTAL				0	
Gross area adjustment 15%				0	
Circulation adjustment at 20%				0	
TOTAL				0	
OFFICE SUPPORT - COA					
Conference Room	8	0	0		
Lunchroom/Breakroom	6	0	0		
Employee Toilet Rooms	0	0	0		1 set of 2
Storage	0	0	0		
Copy/Mail Room	0	0	0		
SUBTOTAL				0	
Gross area adjustment 15%				0	
Circulation adjustment at 20%				0	
TOTAL				0	
PROGRAM SPACES					
Kitchen	0	0	0		
Lounge/Café	0	0	0		Library/reading, greeting, etc.
Multi-Purpose Room (Subdividable)			0		Large meetings, dining, etc.
Movement/Fitness (Subdividable)			0		w/athletic floor, mirror, storage
Large Activity Room 1 (Subdividable)			0		Activity rooms can be open/flexible or specifically programmed for uses such as arts & crafts, music, computer, etc.
Large Activity Room 2 (Subdividable)			0		Shared: Early Voting; PH Board Mtgs.; ConCom; Elections Training
Activity Room/Classroom 3			0		
Activity Room/Classroom 4			0		
Sm. Meeting/Quiet Rooms (2@250 SF)			0		
Teen Center			0		
Game Room			0		
Children's Play Area			0		
Food Pantry			0		
SUBTOTAL				0	
Gross area adjustment 15%				0	
Circulation adjustment at 20%				0	
TOTAL				0	

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
BUILDING SUPPORT - SHARED					
General Building Storage	0	0	0		
Server	0	0	93		
Mechanical Room	0	0	0		
Main Electric Room	0	0	0		
Plumbing/Fire Protection Room	0	0	0		
Emergency Electrical Room	0	0	0		
Electrical Closet	0	0	72		1 per floor
Janitor's Closet	0	0	40		1 per floor
Stairs	0	0	880		
Elevator and Machine Room	0	0	249		
SUBTOTAL				1,334	
Gross area adjustment 15%				200	
Circulation adjustment at 25%				384	
TOTAL				1,918	
GRAND TOTAL - SHARED					
				11,254	
PARKING					
Staff				39	
Staff Vehicle - home with employee				7	PH = 3; Assessor = 4
Visitors				100	Variable Use seating in larger meeting room
EDS Mobile Trailer				1	
Total Parking Shared/Public				147	

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
ADMINISTRATION - FIRE					
Fire Chief Office	1	4	210		
Deputy Chief Office	1	2	144		Future
Clerk	1	1	120		
Captain Office	1 per shift	1	120		1 current 4 in future
Lieutenant Office	1 per shift	1	120		3 current 4 in future
Fire Prevention Office/Permitting	1	2	168		
Conference Room	10	0	216		
Office Supplies / Copy	0	0	80		
Archive Document Storage	0	0	288		
Coat Closet	0	0	13		
Kitchenette	0	0	25		Off corridor
Staff Toilet	0	0	121		
SUBTOTAL				1,625	
Gross area adjustment 15%				244	
Circulation adjustment at 25%				467	
TOTAL				2,336	
STAFF SUPPORT - FIRE					
Dorm Room - Officer	2	0	243		
Dorm Room - Single	4	0	432		
Dorm Room - Double	2	0	311		
Toilet / Shower Room	3	0	263		3 - 3 fixture bathrooms
Locker Room	0	0	455		By bathrooms - (40) 24" wide lockers
Kitchen	6	0	240		
Day Room	0	6	600		
Report Writing / On-Line Training	0	0	100		
Janitors Closet/Laundry	0	0	100		
SUBTOTAL				2,744	
Gross area adjustment 15%				412	
Circulation adjustment at 25%				789	
TOTAL				3,945	
OPERATIONS - FIRE					
Apparatus Bays	0	0	10,304		6 bays: 7 ladder/engines; 2 ambulances; Squad 5; 3 cars; boat; light tower; trailer
Hose Storage	0	0	64		
Gear Storage	40	0	588		40 gear lockers; call bags, hanging gear
Laundry	0	0	156		Gear and regular; ice machine, slop sink
Workshop	0	0	100		

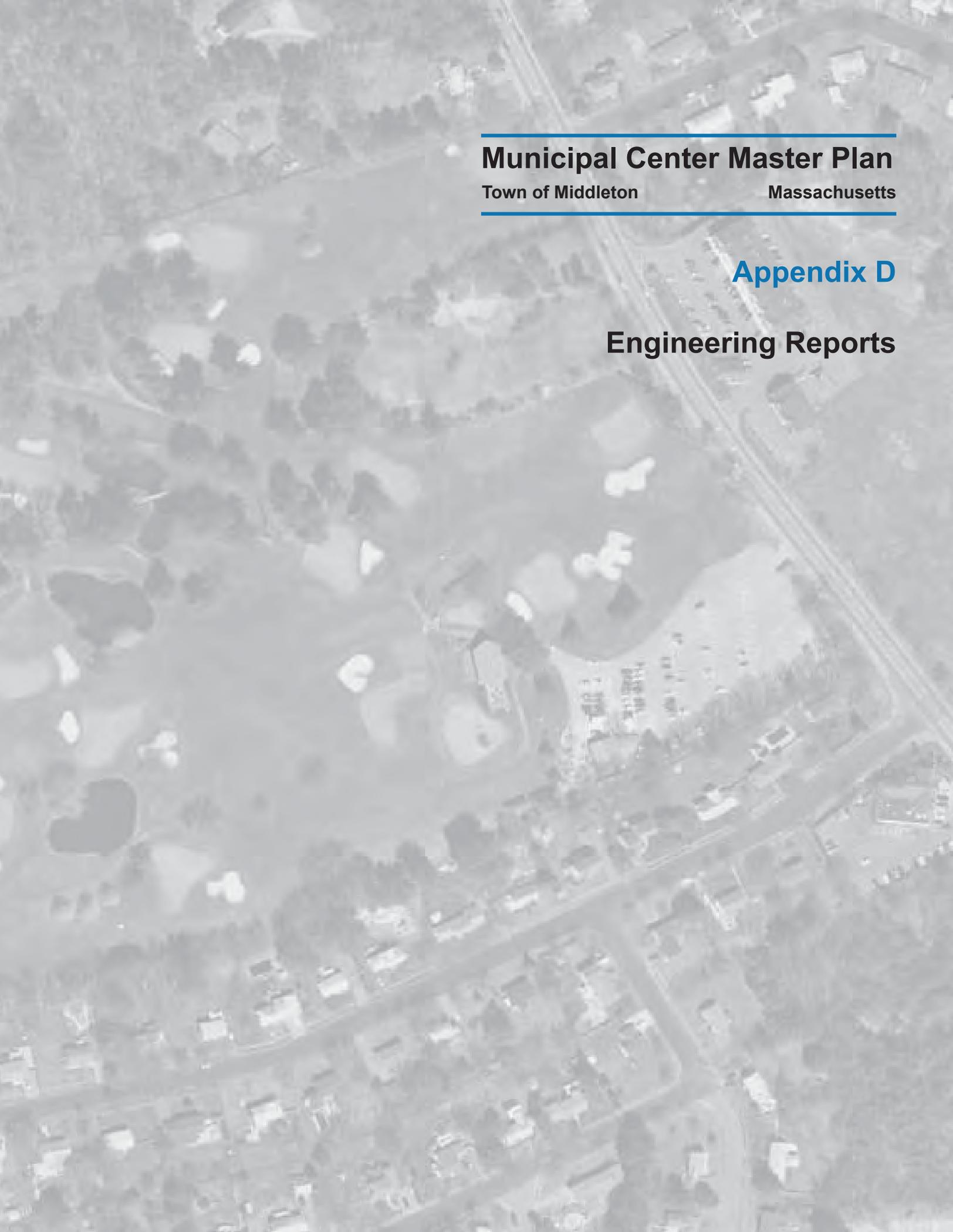
Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
Medical Cleaning / Decontamination	0	0	120		
SCBA Fill Room	0	0	108		
Air Compressor Room	0	0	64		
Oxygen Storage	0	0	32		
Haz Mat Supply Storage	0	0	120		
Medical Supply Storage	0	0	100		EMS Storage
Maintenance Storage	0	0	64		
Janitors Closet	0	0	25		
Electrical Closet	0	0	50		
Bulk Storage	0	0	266		Called "Emergency Equipment"
Triage Room	0	0	120		
Building Supply Storage	0	0	64		
Vehicle Part Storage	0	0	64		
Communications Equipment Room	0	0	80		
SUBTOTAL				12,489	
Gross area adjustment 15% (*)				1,358	* 10% for Apparatus Bays
Circulation adjustment at 10% (**)				251	** 0% for Apparatus Bays
TOTAL				14,098	
GRAND TOTAL - FIRE				20,379	
Parking					
Current Staff (Firefighters)				14	# of cars at shift change
Additional Future Staff (Firefigthers + Civilian)				8	# of cars at shift change
Administration staff				1	
Visitors				0	Shown in Shared Program
Total Parking Fire Dept				23	

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
ADMINISTRATION - POLICE					
Police Chief Office	1	4	210		
Second in Command Office (Cpt/Lt)	1	4	144		Future Position
Administrators Secretary	4	1	196		1 current with 3 projected
Executive Secretary	1	1	120		Private and near chief; 1 current
Interview Room - Detectives	0	4	120		
Detective Sergeant	1	2	120		1 projected
Detective Office	3	2	224		1 current with 2 projected
Process Room - Lab	2	0	120		CSI Unit; Sink, fume hood, lab surfaces
Prosecutors Office	1	1	120		Day Sergeant
Records / Archive Document Storage	0	0	288		Active and near admin; archive could be separated out
Conference Room	10	0	216		6-10 persons
Office Supplies / Copy	0	0	80		
Kitchenette	0	0	25		Off corridor
Staff Toilet	0	0	121		1 set of 2
SUBTOTAL				2,104	
Gross area adjustment 15%				316	
Circulation adjustment at 25%				605	
TOTAL				3,025	
OPERATIONS - POLICE					
Sergeants	6	1	225		4 current with 2 projected; shared space
Officer shared workspace: Includes Traffic Safety; DARE; Domestic Violence; SRO; Crime Prevention Officer; Community Relations Officer	17	0	336		Space for current and future officers
K9 Officer	1	0	100		
Squad Room	10	0	360		Use for shift training
Report Writing	2	0	100		Work area for reserves
IT Office	0	0	100		
Communications Equipment Room	0	0	80		
Evidence Room	1	0	324		
Valuable Evidence Room	0	0	60		Drugs and Guns
Evidence Prep Area	0	0	12		Off corridor
Armory/Weapons	1	0	100		Near Sergeants
SUBTOTAL				1,797	
Gross area adjustment 15%				270	
Circulation adjustment at 25%				517	
TOTAL				2,583	
STAFF SUPPORT - POLICE					
Lunch/Break Room	10	0	216		
Toilet / Shower / Locker Room Female	6	0	370		Planned for future: Officers and staff at 6 lockers
Toilet / Shower / Locker Room Male	32	0	819		Planned for future: Officers and staff at 32 lockers

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
Janitor	0	0	50		1 per floor, first floor near detention
Electrical Closet	0	0	50		
SUBTOTAL				1,505	
Gross area adjustment 15%				226	
Circulation adjustment at 25%				433	
TOTAL				2,163	
DETENTION - POLICE					
Sally Port / Impound Bay / Vehicle Bay	0	0	1,890		3 bays total; 35 feet deep to accommodate ambulance; rear of other two bays holds Bulk Evidence and Recovered Property
Bulk Evidence	0	0	0		In Bays
Recoverd Property Storage Room			0		In Bays
Booking Holding	0	2	72		
Booking	0	1	300		
Detainee Shower			40		
Detention Cells	5	0	600		2 / 2/ 1/ sight/sound separation; Includes circulation outside cell for separation
Interrogation Room with Observation Room	0	4	190		Soft cell; Interview/Bail Bond
SUBTOTAL				3,092	
Gross area adjustment 15%				464	
Circulation adjustment at 25%				889	
TOTAL				4,445	
GRAND TOTAL - POLICE				12,216	
PARKING					
Carport Parking			2,200		For ten (10) vehicles; Secured Area
Current Staff (Officers)	21	7			Second column is # of personal cars at shift change minus 5 vehicles that staff takes home
Future Staff (Officers)	12	4			
Current Administration	2	2			
Future Administration	2	2			
Current and Future		15			
Command Vehicles		6			Current and Future
Cruiser/truck/assigned vehicle		18			Current and Future
ATV		1			
Motorcycle		2			
Antique car		1			
Current and Future		28			
Total Parking Police Dept		43			

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
PUBLIC - SHARED					
Entry Vestible - Lobby	0	0	300		Police have 15-20 walk-ins per day who are met by administrative secretaries; Have Video Call System off hours to dispatch at Regional Center; Consider lock-down arrangement as safe haven; FD has 6-10 visitors a day met by staff as door enters directly onto apparatus bays
Public Toilet	1	0	242		2 sets of 2 @121 per set
Community Room	75	40	1,692		EOC (Current EOC is for 12 persons); Training; 45 seats for PD Training; 49 seats for FD Training; Combined Training at 72 persons; Community Space
Community Storage	0	0	100		
Office Space for EOC/MEMA			100		
Kitchenette	0	0	120		
Public Interview Room	0	4	120		Off lobby space to meet with public or do permitting or licensing
SUBTOTAL				2,674	
Gross area adjustment 15%				401	
Circulation adjustment at 25%				769	
TOTAL				3,844	
COMMUNICATIONS - SHARED					
Secondary PSAP (Public Safety Answering Point)	3	0	200		Near lobby and detention; Backup station in case of emergency; North Shore Regional 911 Center for 5 communities
SUBTOTAL				200	
Gross area adjustment 15%				30	
Circulation adjustment at 25%				58	
TOTAL				288	
STAFF SUPPORT - SHARED					
Fitness	0	0	750		Shared but near locker rooms
SUBTOTAL				750	
Gross area adjustment 15%				113	
Circulation adjustment at 25%				216	
TOTAL				1,078	
BUILDING SUPPORT - SHARED					
Server / E911 Room	0	0	192		
Mechanical Room	0	0	400		
Main Electrical Room	0	0	120		
Plumbing / Fire Protection Room	0	0	180		

Space	Occupants	Visitors	2019 Proposed SF	2019 Total SF	Notes:
Emergency Electrical Room	0	0	80		
Electrical Closet (1 per floor)	0	0	72		1 per floor
Janitor's Closet	0	0	40		1 per floor
Stairs	0	0	880		
Elevator and Machine Room	0	0	249		
SUBTOTAL				2,213	
Gross area adjustment 15%				332	
Circulation adjustment at 25%				636	
TOTAL				3,181	
GRAND TOTAL - SHARED				8,391	
PARKING					
Visitors				20	Variable 15-20
Total Parking Shared/Public				20	

An aerial photograph of a town center, showing a road, buildings, and green spaces. The image is in grayscale and serves as a background for the text.

Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix D

Engineering Reports



WETLAND FIELD REPORT

PROJECT TITLE: Middleton Town Complex

PARE JOB NO.: 19144.00

LOCATION: Middleton, Massachusetts

DELINEATION DATE: 9/24/2019

WEATHER: Partly Sunny, 75 degrees

REPORT DATE: 9/26/2019

PERFORMED BY: Lauren Gluck, P.W.S.,
Seaver Anderson

DISCUSSIONS AND COMMENTS

Wetland resource areas in the vicinity of the proposed Middleton Town Complex located at 105 South Main Street were defined and delineated in accordance with the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00, referred to as the WPA Regulations), and the methodology specified in the publications entitled Delineating Bordering Vegetated Wetlands under the Massachusetts Wetlands Protection Act (Jackson, 1995) and The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: North Central and Northeast Region (U.S. Army Corps of Engineers, 2012). Inspection and delineation of wetlands were completed on September 24, 2019.

The project site consists of the former Middleton Golf Course in Middleton, Massachusetts. The former use of the property is evident and appears to be semi-regularly maintained based on evidence of recent mowing. A wetland complex extends along the north and west sides of the property. The wetland consists primarily of Red Maple swamp, but also contains two of the site's nine golf course ponds and an area of peat bog at the north side of the golf course. Seven additional golf course ponds are located throughout the site, most of which are reportedly connected via a series of pipes that ultimately connect with the natural wetland.

According to the FEMA Flood Insurance Rate Map for the area (Map Number 25009C0384F, effective date July 3, 2012), no 100-year Floodplain is located on the property. The majority of the site is in Zone X (Area of Minimal Flood Hazard) and the northwestern portion of the site is within the 500-year floodplain (0.2% chance of flooding). According to the most recent available MassGIS data, no certified or potential vernal pools, Areas of Critical Environmental Concern, Outstanding Resource Waters, or mapped rare species habitats are located on or in the vicinity of the site.

Pink field flags were placed at appropriate intervals along the wetland/upland borders. Primary parameters evaluated in wetland delineation included vegetation, indicators of wetland hydrology, and hydric soil indicators. Banks of eight (8) unnamed golf course ponds were delineated according to the first observable break in slope. Observed wetland hydrologic indicators and soils are described in the following sections and within the attached Delineation Data Forms. Wetland resource areas within the vicinity of the site include the following: **Bank, Land Under Waterbodies, Bordering Vegetated Wetlands, and Isolated Land Subject to Flooding**. Wetland resource areas are discussed in the following sections.

WETLAND FIELD REPORT

WETLAND DESCRIPTIONS

Bordering Vegetated Wetland

A large area of wetland designated as Wetland A occupies the north and west portions of the project site. The wetland encompasses two golf course ponds and a peat bog, and also appears to contain stream channels offsite to the north and west; therefore, the area is classified as a **Bordering Vegetated Wetland**. The wetland has an associated **100-foot Buffer Zone** under the WPA Regulations as well as a municipal **25-foot No Disturb Zone**.

Flag series A-1 to A-114 delineates the edge of the wetland bordering the proposed development site. The series begins at the northeastern side of the site in the forested area to the rear of 85 S Main Street and extends west along the tree line for approximately 450 feet. The series then turns south to follow the edge of an oblong ponded area and continues south as the pond transitions to a narrow linear channel. The channel ends abruptly at a dirt footpath at its southern terminus, where an elevated pipe provides a hydrologic connection with the C-series golf course pond to the south, described in a later section. The series turns north to follow the west side of the channel and pond, reconnecting with the tree line for a short distance at the north end of the site. The series then turns south to follow the eastern edge of a peat bog that occupies a triangular-shaped area at the northwest end of the property. A forested wetland borders the bog immediately to the south, at which point the edge generally follows the tree line, continuing west for approximately 500 feet where it takes an almost 90 degree turn north, forming a triangle shape. The series then turns to follow the Bank of a second pond just west of the wooded area and extends southwest through the wooded area at the northwest corner of the site, ending near the terminus of Overbrook Drive.

The wetland area contains a variety of plant communities and hydrologic regimes. Most of the area consists of a seasonally flooded forested swamp dominated by Red Maple trees with a dense understory of native shrubs. In some locations where the wetland edge is located along the tree line, invasive species dominate the understory along the wetland/upland border. The peat bog portion of the wetland, which extends south from the tree line between flags A-46 to A-55, is dominated by herbaceous vegetation. The bog had been recently mowed at the time of delineation and vegetation was only a few inches high making most species unidentifiable; however, the presence of deep peat and Sphagnum Moss indicated the area functions as a bog. The two ponded areas, which are located between flags A-20 to A-42 and A-83 to A-96, consist of permanently flooded depressions which appear to have been excavated or enhanced as golf course features. Both ponds contained several feet of standing water and were colonized by emergent and floating wetland vegetation along the edges. Species of vegetation located along the Banks included, but was not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Maple	<i>Acer rubrum</i>	FAC
Pignut Hickory	<i>Carya glabra</i>	FACU
White Oak	<i>Quercus alba</i>	FACU
White Ash	<i>Fraxinus americana</i>	FACU
Sweet Pepperbush	<i>Clethra alnifolia</i>	FAC
Highbush Blueberry	<i>Vaccinium corymbosum</i>	FACW
Glossy Buckthorn	<i>Frangula alnus</i>	FAC
Greenbrier	<i>Smilax rotundifolia</i>	FAC
Jewelweed	<i>Impatiens capensis</i>	FACW

WETLAND FIELD REPORT

Poison Ivy	<i>Toxicodendron radicans</i>	FAC
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Cinnamon Fern	<i>Osmunda cinnamomea</i>	FACW
Royal Fern	<i>Osmunda regalis</i>	OBL

Golf Course Ponds

Ten small ponded areas are located throughout the site, primarily in the central and western portion of the property. Two of the ponds are contained within the A-series BVW described in the previous section. The remaining eight ponds are designated as Wetlands C through J and described in the following sections. According to information provided by the Middleton Conservation Commission obtained during consultation with the former owner, most of the ponds are connected by a series of underground pipes, which ultimately provide a hydrologic connection with the A-series wetland.

Five of the ponded areas (Wetlands C, D, E, F, and J) consist of open water with surface areas exceeding 10,000 square feet in size and are therefore classified as **Ponds** under the WPA Regulations. The edges of the Ponds are defined as **Bank** under section 10.54(2) of the Regulations, which were delineated according to first observable break in slope. According to 10.56 (2) of the Regulations, land below the Mean Low Water level of the Ponds is classified as **Land Under Waterways (LUW)**.

Four of the ponds (Wetlands C, D, E, and F) are bordered by vegetated wetland fringes which are defined in section 10.55 as **Bordering Vegetated Wetlands (BVWs)**. Three of the open water areas do not exceed 10,000 square feet (Wetlands G, H and I) and therefore do not qualify as Ponds; however these areas are connected via underground pipes and discussions with the Conservation Agent indicate that these areas would therefore be treated as BVW. All eight of these areas have associated **100-foot Buffer Zones** under the WPA Regulations, as well as a **25-foot No Disturb Zone** established by the Middleton Conservation Commission. Ponds with associated BVWs were delineated to the outer edge of the bank or BVW. Each of the delineated wetland areas are described briefly below.

Wetland C

Flag series C-1 to C-26 defines the perimeter of an oblong pond and fringe of BVW at the central portion of the property with a surface area of approximately 10,370 square feet. The wetland is connected to the A-series wetland by a pipe that runs underneath a maintained path at its northern end. The edge of the wetland is primarily a well-defined **Bank** that transitions to maintained grass upland, however a fringe of **BVW** is located at its southern end between flags C-12 to C-20. The pond appears to be relatively shallow throughout, with unconsolidated mucky bottom and maintained banks in areas not bordered by vegetated wetlands. The BVW which extends along the pond edge is dominated by shrubs and herbaceous vegetation. Hydrology along the BVW appears to be seasonally flooded and is fed by the bordering pond. Species of vegetation observed within the area included, but were not limited to, the following:

WETLAND FIELD REPORT

Common Name	Scientific Name	Indicator Status
Red Maple	<i>Acer rubrum</i>	FAC
Willow	<i>Salix sp.</i>	Assume FAC
Black Elderberry	<i>Sambucus nigra</i>	FACU
Jewelweed	<i>Impatiens capensis</i>	FACW
Poison Ivy	<i>Toxicodendron radicans</i>	FAC
Woolgrass	<i>Scirpus cyperinus</i>	FACW
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW

Wetland D

Flag series D-1 to D-21 defines the perimeter of a pond and fringe of BVW at the central portion of the property with a surface area of approximately 15,810 square feet. The edge of the wetland is primarily a well-defined **Bank** that transitions to maintained grass upland, however a fringe of **BVW** is located at its northwest end between flags D-6 and D-12. The Bank and BVW are primarily colonized by shrubs and herbaceous plants dominated by Jewelweed and Reed Canary Grass. The pond is relatively shallow and has an unconsolidated bottom of mucky soils. Most of the pond was unvegetated at the time of delineation, however emergent vegetation was present along the delineated edges. Species of vegetation observed within the area included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Black Elderberry	<i>Sambucus nigra</i>	FACU
Jewelweed	<i>Impatiens capensis</i>	FACW
Pokeweed	<i>Phytolacca americana</i>	FACU
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	UPL
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Reed Canary Grass	<i>Phalaris arundinacea</i>	FACW
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Common Rush	<i>Juncus effusus</i>	FACW
Cattail	<i>Typha latifolia</i>	OBL
Pickereel Weed	<i>Pontederia cordata</i>	OBL

Wetland E

Flag series E-1 to E-22 defines the perimeter of a pond and fringe of BVW at the central portion of the property with a surface area of approximately 15,140 square feet. The edge of the wetland is primarily a well-defined **Bank** that transitions to maintained grass upland, however a fringe of **BVW** is located at its more gradually sloping west end between flags E-3 to E-9. Bank vegetation is dominated by shrubs and herbaceous plants, with Cattail vegetating shallow areas at the pond edges. The BVW extends approximately 25+/- feet from the pond edge and is mostly forested except for a section dominated by herbaceous plants from flags E-3 to E-6. Hydrology appears to vary from saturated along the outer edges of the wetland and forested areas to seasonally flooded in the area dominated by herbaceous vegetation. Species of vegetation observed within the area included, but were not limited to, the following:

WETLAND FIELD REPORT

Common Name	Scientific Name	Indicator Status
Slippery Elm	<i>Ulmus rubra</i>	FAC
Red Maple	<i>Acer rubrum</i>	FAC
Sweet Pepperbush	<i>Clethra alnifolia</i>	FAC
Glossy Buckthorn	<i>Frangula alnus</i>	FAC
Fetterbush	<i>Eubotrys racemosa</i>	FACW
Jewelweed	<i>Impatiens capensis</i>	FACW
Pokeweed	<i>Phytolacca americana</i>	FACU
Oriental Bittersweet	<i>Celastrus orbiculatus</i>	UPL
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Reed Canary Grass	<i>Phalaris arundinacea</i>	FACW
Goldenrod	<i>Solidago spp.</i>	Assume FACU
Common Rush	<i>Juncus effusus</i>	FACW
Cattail	<i>Typha latifolia</i>	OBL
Pickereel Weed	<i>Pontederia cordata</i>	OBL

Wetland F

Flag series F-1 to F-22 defines the perimeter of a pond and fringe of BVW at the south side of the property with a surface area of approximately 13,880 square feet. The edge of the wetland is primarily a well-defined **Bank** that transitions to maintained grass upland, however a fringe of **BVW** is located at its more gradually sloping northeast end between flags F-9 to F-13. The BVW appears to exhibit a seasonally flooded hydrology. The Bank is colonized by herbaceous vegetation, and the BVW contains two Black Willow trees and a sparse shrub layer. Species of vegetation observed within the area included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Black Willow	<i>Salix nigra</i>	OBL
Red Maple	<i>Acer rubrum</i>	FAC
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Fireweed	<i>Erechtites hieraciifolius</i>	FACU
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW
Yellow Foxtail	<i>Setaria pumila</i>	FAC
Umbrella Flatsedge	<i>Cyperus diandrus</i>	OBL
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Common Rush	<i>Juncus effusus</i>	FACW
Cattail	<i>Typha latifolia</i>	OBL
Pickereel Weed	<i>Pontederia cordata</i>	OBL

Wetland G

Flag series G-1 to G-10 defines the perimeter of a small waterbody at the southwest side of the site with a surface area of approximately 3,420 square feet. While the area does not meet the size criteria of a Pond, it is reportedly connected via underground piping to the A-series BVW would be classified as **BVW**. The edges of the area consist of a defined break in slope colonized by low shrubs and herbaceous vegetation. The interior consists of shallow standing water colonized by Duckweed in some locations. Species of vegetation observed within the area included, but were not limited to, the following:

WETLAND FIELD REPORT

Common Name	Scientific Name	Indicator Status
Duckweed	<i>Lemna spp.</i>	OBL
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Purple Loosestrife	<i>Lythrum salicaria</i>	OBL
Smartweed	<i>Persicaria pensylvanica</i>	FACW
Stinging Nettle	<i>Urtica dioica</i>	FAC
Umbrella Flatsedge	<i>Cyperus diandrus</i>	OBL

Wetland H

Flag series H-1 to H-13 defines the perimeter of a small waterbody at the southwest side of the site with a surface area of approximately 5,250 square feet. While the area does not meet the size criteria of a Pond, it is reportedly connected via underground piping to the A-series BVW would be classified as **BVW**. The area consists of a shallow ponded area with edges dominated by Cattail. The wetland appeared to be fed by groundwater, overland runoff, and the adjacent wetlands by underground piping. Species of vegetation observed within the area included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Cattail	<i>Typha latifolia</i>	OBL
Common Dandelion	<i>Taraxacum officinale</i>	FACU
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Purple Loosestrife	<i>Lythrum salicaria</i>	OBL
Smartweed	<i>Persicaria pensylvanica</i>	FACW
Umbrella Flatsedge	<i>Cyperus diandrus</i>	OBL

Wetland I

Flag series I-1 to I-10 defines the perimeter of a small waterbody at the southwest side of the site with a surface area of approximately 8,860 square feet. While the area does not meet the size criteria of a Pond, it is reportedly connected via underground piping to the A-series BVW and would be classified as **BVW**. The edges consist of a well-defined by a break in slope colonized by herbaceous vegetation and sparse trees. Two pipes outlet into the pond at flag I-1 in front of a small shed and at flag I-5 from a small flexible pipe outlet. The BVW appears to be relatively shallow throughout with a mucky unconsolidated substrate. Species of vegetation located along the BVW edge included, but was not limited to, the following:

Common Name	Scientific Name	Indicator Status
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Umbrella Flatsedge	<i>Cyperus diandrus</i>	OBL
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Cattail	<i>Typha latifolia</i>	OBL
Black Willow	<i>Salix nigra</i>	OBL

WETLAND FIELD REPORT

Wetland J

Flag series J-1 to J-22 defines the perimeter of an oblong ponded area at the west side of the property with a surface area of approximately 11,840 square feet. The edges of the area consist of well-defined **Bank** colonized by herbaceous vegetation and shrubs, which transitions to maintained grass upland. Several shallow areas at the pond edges are colonized by emergent wetland vegetation, and algae was observed within the standing water. Species of vegetation observed within the area included, but were not limited to, the following:

Common Name	Scientific Name	Indicator Status
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Umbrella Flatsedge	<i>Cyperus diandrus</i>	OBL
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Cattail	<i>Typha latifolia</i>	OBL
Black Willow	<i>Salix nigra</i>	OBL
Smartweed	<i>Persicaria pensylvanica</i>	FACW
Sensitive Fern	<i>Onoclea sensibilis</i>	FACW

Isolated Land Subject to Flooding

The flag series B-1 to B-33 defines the edge of an isolated wetland located in the north-central portion of the site. The wetland is separated from the nearby A and E-series wetlands by maintained paths from the former golf course, and no hydrologic connections to the area were observed. The wetland has a surface area of approximately 26,550 square feet, and leaf staining in the interior indicates that portions of the wetland are flooded for a portion of the year. As such, the area appears likely to qualify as an **Isolated Land Subject to Flooding (ILSF)** under the WPA Regulations. The wetland also possesses the necessary vegetation, soils, and hydrologic indicators to qualify as a federal **Isolated Vegetated Wetland**. The wetland is dominated by Red Maple trees, and a dense shrub layer of Sweet Pepperbush dominates most of the understory. Invasive species have colonized the wetland edge. Hydrology of the B-series wetland appears to be saturated to seasonally flooded, and primarily fed by groundwater. Species of vegetation located within the wetland included, but was not limited to, the following:

Common Name	Scientific Name	Indicator Status
Red Maple	<i>Acer rubrum</i>	FAC
White Ash	<i>Fraxinus americana</i>	FACU
Canada Goldenrod	<i>Solidago canadensis</i>	FACU
Cinnamon Fern	<i>Osmunda cinnamomea</i>	FACW
Glossy Buckthorn	<i>Frangula alnus</i>	FAC
Jewelweed	<i>Impatiens capensis</i>	FACW
Poison Ivy	<i>Toxicodendron radicans</i>	FAC
Beggarticks	<i>Bidens sp.</i>	Assume FACW
Sweet Pepperbush	<i>Clethra alnifolia</i>	FAC

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Photo 1: Typical view of A-series BVW in wooded area at the north side of property.



Photo 2: Poned area within A-series BVW, facing north from flag A-29.





Photo 3: Linear channel between A-30 and A-36, providing a conveyance to Wetland C.



Photo 4: Typical view of peat bog area near flag A-49. Area was recently cut.





Photo 5: Wetland edge along tree line, facing northwest from flag A-58.



Photo 6: Typical view of A-series wetland edge at southwest end of the property near flag A-70.





Photo 7: Ponded area at southwest end of A-series BVW, facing north from flag A-88.



Photo 8: Seasonally flooded forested wetland area at northwest corner of Wetland A near flag A-105.





Photo 9: Typical view of Wetland B interior.



Photo 10: Pipe beneath dirt path, providing a hydrologic connection between Wetland A and Wetland C.





Photo 11: Wetland C, facing north from southeast end.



Photo 11: View of Wetland D, facing west from east end.





Photo 12: View of Wetland E, facing west from northeast end.



Photo 13: View of Wetland F, facing north from flag F-13.





Photo 14: View of Wetland G, facing east from pipe observed at west end.



Photo 15: View of Wetland H, facing southwest from northeast end.





Photo 16: View of Wetland I, facing west from flag I-10.



Photo 17: View of Wetland J, facing northwest from flag J-21.



DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 1		Transect Number: A (Wetland Station)		5' ± D/G WF A-7	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree					
Red Maple (<i>Acer rubrum</i>)	26-50 (38.0)	55	Y	FAC*	
White Ash (<i>Fraxinus americana</i>)	16-25 (20.5)	30	Y	FACU	
White Oak (<i>Quercus alba</i>)	6-15 (10.5)	15	N	FACU	
Total	69.0	100			
Sapling					
Red Maple (<i>Acer rubrum</i>)	6-15 (10.5)	50	Y	FAC*	
White Ash (<i>Fraxinus americana</i>)	6-15 (10.5)	50	Y	FACU	
Total	21				
Shrub					
Sweet Pepperbush (<i>Clethra alnifolia</i>)	26-50 (38.0)	78	Y	FAC*	
Greenbrier (<i>Smilax rotundifolia</i>)	6-15 (10.5)	22	Y	FAC*	
Total	48.5	100			
Herb					
Cinnamon Fern (<i>Osmunda cinnamomea</i>)	16-25 (20.5)	33	Y	FACW*	
Sweet Pepperbush (<i>Clethra alnifolia</i>)	16-25 (20.5)	33	Y	FAC*	
Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	17	N	FAC*	
Virginia Creeper (<i>Parthenocissus quinquefolia</i>)	6-15 (10.5)	17	N	FACU	
Total	63	100			

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 6

Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No
Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1"-0"	10YR 2/2	
A	0"- 8"	10YR 2/1	
B	8+"	10YR 4/1	10YR 2/1

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated:
 Depth to free water in observation hole:
 Depth to soil saturation in observation hole:
 Water Marks:
 Drift lines:
 Sediment deposits:
 Drainage patterns in BVW:
 Oxidized rhizospheres:
 Water-stained leaves:
 Recorded data (stream, lake, or tidal gauge; aerial photo; other):
 Other: Micro-topography

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present: hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
other indicators of hydrology present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: A	(Upland Station)	5 ± U/G WF A-7	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree					
Red Maple (<i>Acer rubrum</i>)	16-25 (20.5)	40	Y	FAC*	
White Ash (<i>Fraxinus Americana</i>)	16-25 (20.5)	40	Y	FACU	
White Oak (<i>Quercus alba</i>)	6-15 (10.5)	20	Y	FACU	
Total	51.5	100			
Sapling					
White Ash (<i>Fraxinus Americana</i>)	6-15 (10.5)	50	Y	FACU	
Crabapple (<i>Malus spp.</i>)	6-15 (10.5)	50	Y	Assume FACU	
Total	21	100			
Shrub					
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	6-15 (10.5)	100	Y	UPL	
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)	6-15 (10.5)				
Sweet Pepperbush (<i>Clethra alnifolia</i>)	6-15 (10.5)				
Total	42	100			
Herb					
Canada Goldenrod (<i>Solidago canadensis</i>)	16-25 (20.5)	61	Y	FACU	
Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	37	Y	FAC*	
Virginia Creeper (<i>Parthenocissus quinquefolia</i>)	6-15 (10.5)	3	N	FACU	
Total	41.5	101			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 0

Number of dominant non-wetland indicator plants: 4

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks: Located on upland slope immediately adjacent to wetland edge

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1/2"- 0"	10YR 3/2	
A	0" - 4"	10YR 3/2	
B	4+"	10YR 4/4	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
hydric soil present

Yes No

other indicators of hydrology
present

Yes No

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 3		Transect Number: A (Wetland Station)	5'± D/G WF A-49	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *
Tree	Total	0		
Sapling	Total	0		
Shrub	Total	0		
Herb				
Sphagnum Moss (<i>Sphagnum spp.</i>)	26-50 (38.0)	31	Y	OBL*
Waterhorehound (<i>Lycopus spp.</i>)	26-50 (38.0)	31	Y	Assume OBL*
Grasses	26-50 (38.0)	31	Y	Assume FACU
Common Rush (<i>Juncus effuses</i>)	6-15 (10.5)	8	N	FACW*
Total	124.5	101**		

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 2 Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Freetown muck, 0 to 1 percent slopes

Hydric Soil Inclusions: Whitman, Scarborough, Swansea

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	12+”	10YR 2/1	
A			
B			

Remarks: Sapric, organic horizon located on edge of Peat bog.

3. Other:

Conclusion: Is soil hydric? Yes No

- Site inundated:
- Depth to free water in observation hole:
- Depth to soil saturation in observation hole:
- Water Marks:
- Drift lines:
- Sediment deposits:
- Drainage patterns in BVW:
- Oxidized rhizospheres:
- Water-stained leaves:
- Recorded data (stream, lake, or tidal gauge; aerial photo; other):
- Other: Micro-topography, and thick organic horizon

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
 ≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
 hydric soil present

other indicators of hydrology
 present

Sample location is in a BVW

Submit this form with the Request for Determination of Applicability or Notice of Intent

Other Indicators of Hydrology: (check all that apply and describe)

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 4		Transect Number: A	(Upland Station)	5 ± U/G WF A-49	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree	0				
Sapling	0				
Shrub	0				
Herb					
Maintained Grasses	76-95 (85.5)	81	Y	Assume FACU	
White Clover (<i>Trifolium repens</i>)	16-25 (20.5)	19	N	FACU	
Total	106	100			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 0

Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Freetown muck, 0 to 1 percent slopes

Hydric Soil Inclusions: Whitman, Scarborough, Swansea

Are field observations consistent with soil survey? Yes No

Remarks: Located on upland slope immediately adjacent to wetland edge

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	2"- 0"	10YR 2/1	
A	0"- 4"	10YR 2/1	
B	4+"	10YR 4/2	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.

Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.

Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 5		Transect Number: A (Wetland Station)		5' ± D/G WF A-73		Date of Delineation: September 24, 2019	
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)			E. Wetland Indicator Category *	
Tree	Red Maple (<i>Acer rubrum</i>)	76-95 (85.5)	100	Y			FAC*
	Total	85.5	100				
Sapling	Red Maple (<i>Acer rubrum</i>)	1-5 (3.0)	25	Y			FAC*
	Norway Maple (<i>Acer platanoides</i>)	1-5 (3.0)	25	Y			UPL
	Crabapple (<i>Malus spp.</i>)	1-5 (3.0)	25	Y			Assume FACU
	Red Oak (<i>Quercus rubra</i>)	1-5 (3.0)	25	Y			FACU
	Total	12	100				
Shrub	Sweet Pepperbush (<i>Clethra alnifolia</i>)	26-50 (38.0)	65	Y			FAC*
	Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	16-25 (20.5)	35	Y			UPL
	Total	58.5	100				
Herb	Poison Ivy (<i>Toxicodendron radicans</i>)	16-25 (20.5)	66	Y			FAC*
	Sweet Pepperbush (<i>Clethra alnifolia</i>)	6-15 (10.5)	34	Y			FAC*
	Total	31	100				

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 5

Number of dominant non-wetland indicator plants: 4

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Freetown muck, 0 to 1 percent slopes

Hydric Soil Inclusions: Whitman, Scarborough, Swansea

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	4-0"	10YR 2/2	
A	0-12+"	10 YR 2/1	
B			

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves: Water stained leaves on wetland side

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other: Buttressed roots

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present: hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
other indicators of hydrology present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.

Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.

Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 6		Transect Number: A	(Upland Station)	5 ± U/G WF A-73	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree	Red Maple (<i>Acer rubrum</i>)	26-50 (38.0)	Y	FAC*	
	Total	38			
Sapling	Crabapple (<i>Malus spp.</i>)	1-5 (3.0)	Y	Assume FACU	
	Red Oak (<i>Quercus rubra</i>)	1-5 (3.0)	Y	FACU	
	Total	6			
Shrub	Tartarian Honeysuckle (<i>Lonicera tatarica</i>)	16-25 (20.5)	Y	FACU	
	Blackberry (<i>Rubus allegheniensis</i>)	6-15 (10.5)	Y	FACU	
	Total	31			
Herb	Pokeweed (<i>Phytolacca americana</i>)	26-50 (38.0)	Y	FACU	
	Canada Goldernod (<i>Solidago canadensis</i>)	16-25 (20.5)	Y	FACU	
	Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	N	FAC*	
	Virginia Creeper (<i>Parthenocissus quinquefolia</i>)	6-15 (10.5)	N	FACU	
	Total	79.5			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 1

Number of dominant non-wetland indicator plants: 6

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Freetown muck, 0 to 1 percent slopes

Hydric Soil Inclusions: Whitman, Scarborough, Swansea

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1"-0"	10YR 2/2	
A	0"-6"	10YR 2/2	
B	6+"	10YR 4/2	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: <u>1</u> Transect Number: <u>B</u> (Wetland Station) <u>5</u> ± D/G WF B-12 Date of Delineation: <u>September 24, 2019</u>	
A. Sample Layer and Plant Species (by common/ scientific name)	E. Wetland Indicator Category *
Tree Red Maple (<i>Acer rubrum</i>)	FAC*
White Ash (<i>Fraxinus americana</i>)	FACU
Total	
Sapling Red Maple (<i>Acer rubrum</i>)	FAC*
White Ash (<i>Fraxinus americana</i>)	FACU
Total	
Shrub Sweet Pepperbush (<i>Clethra alnifolia</i>)	FAC*
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	UPL
Glossy Buckthorn (<i>Frangula alnus</i>)	FAC*
Total	
Herb Jewelweed (<i>Impatiens capensis</i>)	FACW*
Beggarticks (<i>Bidens sp.</i>)	Assume FACW*
Poison Ivy (<i>Toxicodendron radicans</i>)	FAC*
Total	

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 6

Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents, smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	2-0"	7.5YR 2.5/2	
A	0-12+"	10 YR 2/1	
B			

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated:
- Depth to free water in observation hole:
- Depth to soil saturation in observation hole:
- Water Marks:
- Drift lines:
- Sediment deposits:
- Drainage patterns in BVW:
- Oxidized rhizospheres:
- Water-stained leaves: Water stained leaves on wetland side
- Recorded data (stream, lake, or tidal gauge; aerial photo; other):
- Other: Buttressed roots

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present: hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
other indicators of hydrology present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: B	(Upland Station)	5'± U/G WF B-12	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree Red Maple (<i>Acer rubrum</i>)	26-50 (38.0)	55	Y	FAC*	
White Pine (<i>Pinus strobus</i>)	16-25 (20.5)	30	Y	FACU	
White Ash (<i>Fraxinus americana</i>)	6-15 (10.5)	15	N	FACU	
Total	69	100			
Sapling					
Total	0				
Shrub Burdock (<i>Arctium minus</i>)	16-25 (20.5)	100	Y	FACU	
Total	20.5	100			
Herb Maintained Grasses	26-50 (38.0)	55	Y	Assume FACU	
Pokeweed (<i>Phytolacca americana</i>)	16-25 (20.5)	30	Y	FACU	
Purplestem Beggarticks (<i>Bidens connata</i>)	6-15 (10.5)	15	N	FACW*	
Total	69	100			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 1 Number of dominant non-wetland indicator plants: 6
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
 If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No
Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents, smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O			
A	0"- 2"	10YR 3/2	
B	2+"	10YR 4/3	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

- Site inundated:
 Depth to free water in observation hole:
 Depth to soil saturation in observation hole:
 Water Marks:
 Drift lines:
 Sediment deposits:
 Drainage patterns in BVW:
 Oxidized rhizospheres:
 Water-stained leaves:
 Recorded data (stream, lake, or tidal gauge; aerial photo; other):
 Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants ≥ number of non-wetland indicator plants	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 1		Transect Number: C (Wetland Station)	5'± D/G WF C-17	Date of Delineation: September 24, 2019	
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree	Red Maple (<i>Acer rubrum</i>)	16-25 (20.5)	100	Y	FAC*
	Total	20.5	100		
Sapling					
	Total	0			
Shrub	Jewelweed (<i>Impatiens capensis</i>)	26-50 (38.0)	65	Y	FAC*
	Black Elderberry (<i>Sambucus nigra</i>)	16-25 (20.5)	35	Y	FACW*
	Total	58.5	100		
Herb	Jewelweed (<i>Impatiens capensis</i>)	26-50 (38.0)	48	Y	FACW*
	Woolgrass (<i>Scirpus cyperinus</i>)	16-25 (20.5)	26	Y	OBL*
	Canada Goldenrod (<i>Solidago canadensis</i>)	6-15 (10.5)	13	N	FACU
	Sensitive Fern (<i>Onoclea sensibilis</i>)	6-15 (10.5)	13	N	FACW*
	Total	79.5	100		

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 5

Number of dominant non-wetland indicator plants: 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents, smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
A	0-12+”	10 YR 2/1	

Remarks: Gravelly A horizon

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves: Water stained leaves on wetland side

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other: Buttressed roots

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
hydric soil present

Yes No

other indicators of hydrology
present

Yes No

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: C	(Upland Station)	5'± U/G WF C-17	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree Red Maple (<i>Acer rubrum</i>)	16-25 (20.5)	100	Y	FAC*	
Total	20.5	100			
Sapling					
Total	0				
Shrub Black Elderberry (<i>Sambucus nigra</i>)	16-25 (20.5)	100	Y	FACW*	
Total	20.5	100			
Herb Maintained Grasses	51-75 (63.0)	60	Y	Assume FACU	
Red Clover (<i>Trifolium pratense</i>)	16-25 (20.5)	20	Y	FACU	
Canada Goldemrod (<i>Solidago canadensis</i>)	6-15 (10.5)	10	N	FACU	
Jewelweed (<i>Impatiens capensis</i>)	6-15 (10.5)	10	N	FACW*	
Total	104.5	100			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 2 Number of dominant non-wetland indicator plants: 2
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
 If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents, smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O			
A	0"- 3"	10YR 2/3	
Rock	3+''		

Remarks: Rock/ gravel restrictive layer at 3''.

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 1		Transect Number: D (Wetland Station)	5'± D/G WF D-4	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)				
Tree	None	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)
	Total			E. Wetland Indicator Category *
Sapling	None			
	Total			
Shrub	Pokeweed (<i>Phytolacca americana</i>)	16-25 (20.5)	66	Y
	Black Elderberry (<i>Sambucus nigra</i>)	6-15 (10.5)	34	Y
	Total	31	100	
Herb	Reed Canary Grass (<i>Phalaris arundinacea</i>)	51-75 (63.0)	60	Y
	Jewelweed (<i>Impatiens capensis</i>)	16-25 (20.5)	20	Y
	Common Rush (<i>Juncus effuses</i>)	6-15 (10.5)	10	N
	Common Goldenrod (<i>Solidago canadensis</i>)	6-15 (10.5)	10	N
	Total	104.5	100	

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 4

Number of dominant non-wetland indicator plants: 1

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1/2"-0"	10YR 3/2	
A	0"-4"	10YR 2/2	
B	4-16+"	10YR 3/1	7.5YR 3/4

Remarks: Prominent redox concentrations in B horizon beginning at 4".

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole: Saturated at 4"

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
hydric soil present

Yes No

other indicators of hydrology
present

Yes No

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: D	(Upland Station)	5'± U/G WF D-4	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree White Pine (<i>Pinus strobus</i>)	1-5 (3.0)	100	Y	FACU	
Total	3.0	100			
Sapling none					
Total					
Shrub Pokeweed (<i>Phytolacca americana</i>)	16-25 (20.5)	100	Y	FACU	
Total	20.5	100			
Herb White Clover (<i>Trifolium repens</i>)	51-75 (63.0)	61	Y	FACU	
Maintained Grasses	26-50 (38.0)	37	Y	Assume FACU	
Common Milkweed (<i>Asclepias syriaca</i>)	1-5 (3.0)	3	N	UPL	
Total	104.0	101			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 0 Number of dominant non-wetland indicator plants: 4
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
 If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks: Located on upland slope immediately adjacent to wetland edge

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
A	0"-16"+	10YR 3/14	

Remarks: Soils composed of fill material, uniform horizon from 0-16".

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion	Yes	No
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present: hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: E	(Upland Station)	5 ± U/G WF E-8	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree					
Red Maple (<i>Acer rubrum</i>)	51-75 (63.0)	62	Y	FAC*	
White Pine (<i>Pinus strobus</i>)	26-50 (38.0)	38	Y	FACU	
Total	101.0	100			
Sapling					
White Ash (<i>Fraxinus americana</i>)	6-15 (10.5)	100	Y	FACU	
Total	10.5	100			
Shrub					
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	16-25 (20.5)	28	Y	UPL	
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)	16-25 (20.5)	28	Y	FACU	
Glossy Buckthorn (<i>Frangula alnus</i>)	16-25 (20.5)	28	Y	FAC*	
Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	15	N	FAC*	
Total	72.0	99			
Herb					
Blackberry (<i>Rubus allegheniensis</i>)	6-15 (10.5)	64	Y	FACU	
Poison Ivy (<i>Toxicodendron radicans</i>)	0-5 (3.0)	18	N	FAC*	
White Pine (<i>Pinus strobus</i>) seedling	0-5 (3.0)	18	N	FACU	
Total	16.5	100			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 2

Number of dominant non-wetland indicator plants: 5

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks: Located on upland slope immediately adjacent to wetland edge

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1/2"-0"	7.5YR 3/3	
A	0"-5"	10YR 2/1	
B	5-18"	10YR 2/2	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
hydric soil present

Yes No

other indicators of hydrology
present

Yes No

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 1		Transect Number: E (Wetland Station)	5'± D/G WF E-8	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *
Tree				
Red Maple (<i>Acer rubrum</i>)	76-95 (85.5)	62	Y	FAC*
White Pine (<i>Pinus strobus</i>)	26-50 (38.0)	28	Y	FACU
Slippery Elm (<i>Ulmus rubra</i>)	6-15 (10.5)	8	N	FAC*
Black Oak (<i>Quercus velutina</i>)	1-5 (3.0)	2	N	FACU
Total	137.0	100		
Sapling				
White Oak (<i>Quercus alba</i>)	1-5 (3.0)	100	Y	FACU
Total	3.0	100		
Shrub				
Glossy Buckthorn (<i>Frangula alnus</i>)	16-25 (20.5)	33	Y	FAC*
Sweet Pepperbush (<i>Clethra alnifolia</i>)	6-15 (10.5)	17	N	FAC*
Fetterbush (<i>Eubotrys racemosus</i>)	6-15 (10.5)	17	N	FACW*
Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	17	N	FAC*
Oriental Bittersweet (<i>Celastrus orbiculatus</i>)	6-15 (10.5)	17	N	UPL
Total	62.5	101		
Herb				
Poison Ivy (<i>Toxicodendron radicans</i>)	6-15 (10.5)	50	Y	FAC*
Sweet Pepperbush (<i>Clethra alnifolia</i>)	6-15 (10.5)	50	Y	FAC*
Total	21.0	100		

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 4

Number of dominant non-wetland indicator plants: 2

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1"-0"	7.5YR 2.5/3	
A	0"-5"	10YR 2/2	
B	5-18+"	10YR 2/1	5YR 3/4

Remarks: Redox concentrations in B horizon beginning at 7".

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other: buttressed trunks on all trees

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
 ≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
 hydric soil present

other indicators of hydrology
 present

Sample location is in a BVW

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
- Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
- Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 1		Transect Number: F	(Wetland Station)	5 ± D/G WF F-10	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree	Red Maple (<i>Acer rubrum</i>)	26-50 (38.0)	Y	FAC*	
	Black Willow (<i>Salix nigra</i>)	26-50 (38.0)	Y	OBL*	
	Total	76.0			
Sapling	None				
	Total				
Shrub	None				
	Total				
Herb	Yellow Foxtail (<i>Setaria pumila</i>)	51-75 (63.0)	Y	FAC*	
	Beggarticks (<i>Bidens sp.</i>)	16-25 (20.5)	Y	Assume FACW*	
	Aster spp.	6-15 (10.5)	N	Assume FACU	
	Fireweed (<i>Erechtites hieracifolius</i>)	1-5 (3.0)	N	FACU	
	Total	97			

**total does not equal 100 due to rounding

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 4

Number of dominant non-wetland indicator plants: 0

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks:

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1"-0"	10YR 3/2	
A	0"-4"	10YR 2/1	
B	4-16+"	10YR 2/2	5YR 3/3 2.5Y 5/2

Remarks: Prominent redox concentrations and depletions in B horizon.

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole: Saturated at 4"

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
 ≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
 hydric soil present

Yes No

other indicators of hydrology
 present

Yes No

Sample location is in a BVW

Yes No

Submit this form with the Request for Determination of Applicability or Notice of Intent

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant: Town of Middleton **Prepared by:** Pare Corporation **Project location:** 105 South Main Street, Middleton **DEP File #:** None

L. Gluck, P.W.S.
S. Anderson

Check all that apply:

- Vegetation alone presumed adequate to delineate BVW boundary: fill out section I only.
 Vegetation and other indicators of hydrology used to delineate BVW boundary: fill out Sections I and II.
 Method other than dominance test used (attach additional information).

Section I. Observation Plot Number: 2		Transect Number: F	(Upland Station)	5' ± U/G WF F-10	Date of Delineation: September 24, 2019
A. Sample Layer and Plant Species (by common/ scientific name)	B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (Yes or No)	E. Wetland Indicator Category *	
Tree	26-50 (38.0)	78	Y	FAC*	
Red Maple (<i>Acer rubrum</i>)	6-15 (10.5)	22	Y	OBL*	
Black Willow (<i>Salix nigra</i>)	48.5	100			
Total					
Sapling					
none					
Total					
Shrub					
none					
Total					
Herb					
Maintained Grasses	51-75 (63.0)	86	Y	FACU	
Beggarticks (<i>Bidens sp.</i>)	6-15 (10.5)	14	N	Assume FACW*	
Total	73.5	100			

*Use an asterisk to mark wetland indicator plants species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus Sphagnum; plants listed as FAC, FAC+, FACW-, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological adaptations, describe the adaptation next to the asterisk.

Vegetation Conclusion:

Number of dominant wetland indicator plants: 2 Number of dominant non-wetland indicator plants: 1
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES NO
 If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? Yes No

Title/Date: Soil Survey of Essex County, Southern Part, 1978

Map Number: Accessed via Web Soil Survey
<http://websoilsurvey.nrcs.usda.gov/>

Soil type mapped: Udorthents smoothed

Hydric Soil Inclusions: None

Are field observations consistent with soil survey? Yes No

Remarks: Located on upland slope immediately adjacent to wetland edge

2. Soil Description

Horizon	Depth (in)	Matrix Color	Mottles Color
O	1"-0"	10YR 3/3	
A	0"-6"	10YR 3/2	
B	6"-14"	10YR 4/2	

Remarks:

3. Other:

Conclusion: Is soil hydric? Yes No

Other Indicators of Hydrology: (check all that apply and describe)

Site inundated:

Depth to free water in observation hole:

Depth to soil saturation in observation hole:

Water Marks:

Drift lines:

Sediment deposits:

Drainage patterns in BVW:

Oxidized rhizospheres:

Water-stained leaves:

Recorded data (stream, lake, or tidal gauge; aerial photo; other):

Other:

Vegetation and Hydrology Conclusion

Number of wetland indicator plants
 ≥ number of non-wetland indicator plants

Yes No

Wetland hydrology present:
 hydric soil present

other indicators of hydrology
 present

Sample location is in a BVW

Submit this form with the Request for Determination of Applicability or Notice of Intent

**INITIAL TRAFFIC ASSESSMENT FOR THE
MIDDLETON TOWN COMPLEX
MIDDLETON, MASSACHUSETTS**

SUBMITTED TO:

**MS. JANET SLEMENDA
HKT ARCHITECTS, INC.
24 ROLAND STREET, SUITE 301
CHARLESTOWN, MA 02129**

SUBMITTED BY:

**PARE CORPORATION
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865**

OCTOBER 2019



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APPENDICES

Appendix A	Crash Data
Appendix B	Speed Study
Appendix C	Trip Generation and Volumes



INTRODUCTION

The following represents the traffic study completed for the development of the Middleton Town Complex that will include the relocation of the Middleton Police Station, the Middleton Fire Station, and the Middleton Town Hall and the development of a community center and public park. The proposed facility will be located at 105 South Main Street (Route 114) previously



occupied by the Middleton Golf Course. The Middleton Fire Station is currently located at 4 Lake Street. The Middleton Police Station is located at 65 North Main Street (Route 114). The Middleton Town Hall is located at 48 South Main Street (Route 114). The proposed police station, fire station, town hall, and community center are expected to be between 10,000 and 20,000 square feet, to be conservative this study assumes all facilities will be 20,000 square feet. The public park is assumed to be 17 acres, approximately one-third of the total site.

The site currently has one driveway on South Main Street. The site for the proposed facility is approximately 51.5 acres.

Presented within are existing conditions in the vicinity of the project site, a safety analysis of the study area, and proposed mitigation measures and/or recommendations, as necessary. A locus map of the study area is provided in Figure 1 and the existing site conditions is shown in Figure 2.

This study evaluates the impact of the proposed development on the adjacent transportation network and any necessary mitigation.

DATA COLLECTION

Crash data for the roadway network in the vicinity of the project site was extracted from the MassDOT crash portal. This data encompasses the most recent three-year period available, from June 2016 through June 2019.

A field review of the study area was conducted, with geometric measurements and other field observations recorded at the significant intersections in the vicinity of the project site.



● = Study Intersection

Project No. 19144.00

Date: October 2019



PARE CORPORATION
 ENGINEERS - SCIENTISTS - PLANNERS
 8 BLACKSTONE VALLEY PLACE
 LINCOLN, RI 02865
 401-334-4100

Figure 1
 Locus Map
 Middleton Town Complex
 Middleton, Massachusetts

EXISTING ROADWAY CONDITIONS

The study area for the proposed Middleton Town Complex is defined as the significant roadways and intersections in the vicinity of the site that may be impacted by the construction of the new facility. Listed below are the roadways and intersections included in the study area.

Study Area Roadways:

1. South Main Street (Route 114)

Study Area Intersections:

1. South Main Street (Route 114) at Meadow Drive – Unsignalized
2. South Main Street (Route 114) at the Site Driveway – Unsignalized
3. South Main Road (Route 114) at Wennerberg Road – Unsignalized
4. South Main Street (Route 114) at Orchard Circle – Signalized

South Main Street (Route 114)

South Main Street (Route 114), which provides access to the proposed site, is classified as a principal arterial under the Massachusetts Department of Transportation (MassDOT) jurisdiction. South Main Street runs north/south and has an approximate curb-to-curb width of 46 feet with one 12-foot lane and four-foot shoulder per direction separated by a 14-foot two-way center left turn lane. A 6-foot wide sidewalk runs along the west side of South Main Street. The study area limits of South Main Street fall within a 40 mile per hour posted speed limit zone. Land use along South Main Street is primarily commercial with residential use along side streets.

South Main Street (Route 114) at Meadow Drive

The intersection of South Main Street (Route 114) at Meadow Drive operates as a three-legged unsignalized intersection. South Main Street forms the north and south legs of the intersection, Meadow Drive forms the west leg of the intersection. South Main Street operate freely while Meadow Drive is under stop control.



At the intersection, South Main Street has 12-foot travel lane in each direction with a 13-foot north bound left lane on the south leg. Meadow Drive has a curb-to-curb width of 48 feet with one travel lane in each direction. Sidewalks are present on the west side of South Main Street and along the north and south side of Meadow Drive. There is a crosswalk present across the western leg of the intersection.

South Main Street (Route 114) at the Site Driveway

The intersection of South Main Street (Route 114) at the existing site driveway forms a three-legged unsignalized intersection. South Main Street forms the north and south legs of the intersection and the site driveway forms the west leg. Both approaches along South Main Street operate freely while the site driveway is under stop control.



At the intersection, South Main Street has a 12-foot travel lane and a 4-foot shoulder in each direction with a 13-foot two-way center left turn lane. The site driveway consists of a 20-foot wide travel lane in each direction and a 10-foot curbed grassed median. Sidewalks are present on the west side of South Main Street. No crosswalks are present at the intersection.

South Main Street (Route 114) at Wennerberg Road

The intersection of South Main Street (Route 114) at Wennerberg Road forms a three-legged unsignalized intersection. South Main Street forms the north and south legs of the intersection and Wennerberg Road forms the east leg. Both approaches along South Main Street operate freely while Wennerberg Road is under stop control.

At the intersection, South Main Street has 12-foot travel lane and a 4-foot shoulder in each direction with a 13-foot two-way center left turn lane. Wennerberg Road has a 38-foot curb-to-curb width, the roadway is unstriped and accommodates one travel lane in each direction with on-street parking permitted. Sidewalks are present on the west side of South Main Street and along both sides of Wennerberg Street. No crosswalk is present across at the intersection.

South Main Street (Route 114) at Orchard Circle

The intersection of South Main Street (Route 114) at Orchard Circle forms a three-legged signalized intersection. South Main Street forms the north and south legs of the intersection and Orchard Circle forms the east leg.

At the intersection, South Main Street has 12-foot travel lane and a 4-foot shoulder in each direction with a 13-foot left turn lane in the north leg and a 13-foot lane in the south leg. Orchard Circle has a 24-foot curb-to-curb width with one travel lane in each direction. Sidewalks are present on the west side of South Main Street and on the south side of Orchard Circle. A crosswalk is present across the southern leg of the intersection.

SAFETY ANALYSIS

Crash Data

Crash data for the study area was extracted from the MassDOT crash portal for the most recent three (3) year period of July 2016 through June 2019. Crash data was reviewed to determine the presence of safety concerns within the study area.

According to the data reviewed there were 19 total incidents that occurred in the study area. Of these 19 total incidents, three (3) incidents occurred at the intersection of South Main Street (Route 114) and the site driveway, three (3) occurred at the intersection of South Main Street at Meadow Drive, three (3) occurred at the intersection of South Main Street at Orchard Circle, and ten (10) occurred on South Main Street between the intersections of Meadow Drive and Orchard Circle. Four (4) of these incidents resulted in a non-fatal injury and there were no fatalities. A breakdown of the incidents by type and number of injuries can be seen below in Table 1. The majority of incidents were angle or rear end collisions which are typically low severity incidents. There were no trends or intensities of incidents noticed that would require or lend themselves to mitigation. A summary table of all crash data reviewed is provided in Appendix A.

Table 1: Crash Summary

Roadway/ Intersection	Non-Fatal Injuries	Fatal Injuries	Angle	Object	Rear End	Side Swipe
South Main Street & Site Driveway	0	0	2	0	1	0
South Main Street & Meadow Drive	1	0	1	0	2	0
South Main Street & Orchard Circle	0	0	0	0	3	0
South Main Street	3	0	3	1	5	1

Site Circulation

Circulation to and from the proposed Middleton Town Complex is expected to mimic the existing traffic along the adjacent roadways. More specifically, all traffic will enter the site via the driveways on South Main Street (Route 114). The fire station, which is anticipated to be the first facility developed, will have a designated driveway to the north of the property. A central driveway will serve as access for the entire complex with the police station, town hall, and community center. At this time the exact location of these driveways has not been determined. Movements along the central drive of the Middleton Town Complex is expected to have little to no conflict. Therefore, the intersection of South Main Street with the central site driveway is considered the primary access point to the proposed facility from a traffic perspective.

Sight Distance

A speed study was conducted along South Main Street (Route 114) at Meadow Drive during the site visit on Wednesday October 15, 2019.

A summary of the speed data results is shown in Table 2. The complete speed data can be found in Appendix B.

Table 2: Speed Data Results for South Main Street (Route 114)

	Posted Speed	Average Speed	True Median (50 th Percentile)	85 th Percentile	10 MPH Pace	% over Posted
Northbound	40	32	32	37	28-37	37%
Southbound	40	33	34	40	27-36	40%

Based on the speed data obtained, a design speed of 40 miles per hour was selected for South Main Street (Route 114). According to the American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on the Geometric Design of Highways and Streets, Sixth Edition 2011*, the minimum safe stopping sight distance (SSD) for a 40 mile per hour speed is 305 feet. The minimum safe intersection sight distance (ISD) for turning vehicles from a minor street is 445 feet. A summary of the sight distance available at Centennial Drive can be seen below in Table 3.

Table 3: Sight Distance Summary

		Required SSD (ft)	Measured SSD (ft)	Required ISD (ft)	Measured ISD (ft)
Existing Site Driveway	To the North	305	>500	445	>500
	To the South	305	>500	445	>500
Proposed Fire Station Driveway	To the North	305	>500	445	>500
	To the South	305	>500	445	>500
Proposed Central Driveway	To the North	305	>500	445	>500
	To the South	305	>500	445	>500

Sight distance both north and south on South Main Street is limited by the horizontal and vertical curvature of the roadway. The available sight distance in both directions is adequate for stopping sight distance and the intersection sight distance from the existing and anticipated proposed driveway locations. As site design progresses and driveway locations are finalized, sight distance should be reassessed.

BUILD CONDITIONS

Two future build conditions were considered for this study. The first build condition is the development of the Middleton Town Complex inclusive of the Middleton Fire Station at the proposed site. The second build condition considered is the development of the Middleton Town Complex inclusive of the Middleton Police Station, the Middleton Fire Station, the Middleton Town Hall, and the Middleton Community Center as well as a 17-acre park. The final layouts of each of the proposed facilities has yet to be determined but for the purposes of this study each of the proposed facilities was assumed to be 20,000 square feet. As the site design progresses traffic counts should be performed to complete a more detailed analysis.

Trip Generation

Trip generation for the proposed development was completed using the industry standard Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition*¹. The proposed Middleton Fire

¹ Trip Generation, 10th Edition; Institute of Transportation Engineers; Washington, DC; 2017.

Station and Middleton Police Station were each analyzed with Land Use Code (LUC) 575: Fire and Rescue Station. LUC 575 is described as a building that houses emergency services equipment, firefighting apparatus, and the individuals that provide emergency firefighting services, was selected as being aligned with the proposed use of the Middleton Fire Station and the most similar use of the Middleton Police Station. ITE does not provide a trip generation for police station. For LUC 575 ITE only provides traffic generation for the weekday PM peak hour, it was assumed that the AM peak hour would operate in reverse; therefore, the same traffic volumes were generated for the AM peak hour with the entering and exiting volumes reversed. LUC 730: Government Office Building was selected for the Middleton Town Hall. The proposed community center was analyzed using LUC: Recreational Community Center. LUC 411: Public Park was used to generate volumes for the proposed park space. ITE used data from parks with an average size of 500 acres to create the trip generation models; therefore, due to the small size, 17 acres, of the proposed public park the average rate was used to generate trip volumes as opposed to the fitted curve equation. A summary of the proposed trip generation for the development is provided in Tables 4, 5, 6, 7, and 8 below. A summary of the total traffic volumes for the proposed development of just the police station and the proposed complex inclusive of the police station, fire station, town hall, community center, and public park are provided in Tables 9 and 10 below. Back up calculations are provided in Appendix C.

Table 4: Police Station Trip Generation Summary

Land Use	Vehicles Trips Generated During Each Peak Hour	
	Weekday, AM Peak Hour	Weekday, PM Peak Hour
LUC 575 – Fire and Rescue Station (20,000 sq. ft.)	Entering	3
	Exiting	7
	Total	10

Table 5: Fire Station Trip Generation Summary

Land Use	Vehicles Trips Generated During Each Peak Hour	
	Weekday, AM Peak Hour	Weekday, PM Peak Hour
LUC 575 – Fire and Rescue Station (20,000 sq. ft.)	Entering	3
	Exiting	7
	Total	10

Table 6: Town Hall Trip Generation Summary

Land Use	Vehicles Trips Generated During Each Peak Hour	
	Weekday, AM Peak Hour	Weekday, PM Peak Hour
LUC 730 – Government Office Building (20,000 sq. ft.)	Entering	50
	Exiting	17
	Total	67

Table 7: Community Center Trip Generation Summary

Land Use	Vehicles Trips Generated During Each Peak Hour			
	Weekday, AM Peak Hour	Weekday, PM Peak Hour	Saturday, Peak Hour	
LUC 495 – Recreational Community Center (20,000 sq. ft.)	Entering	51	34	10
	Exiting	26	38	11
	Total	77	72	21

Table 8: Public Park Trip Generation Summary

Land Use	Vehicles Trips Generated During Each Peak Hour			
	Weekday, AM Peak Hour	Weekday, PM Peak Hour	Saturday, Peak Hour	
LUC 411 – Public Park (17 acres.)	Entering	0	1	2
	Exiting	0	1	2
	Total	0	2	4

Table 9: Site Generated Traffic Volumes – Fire Station

	Fire Station Development								
	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total
Fire Station	3	7	10	7	3	10	0	0	0

Table 10: Site Generated Traffic Volumes – Middleton Town Complex

	Middleton Town Complex Development								
	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total	Site Gen. (Enter)	Site Gen. (Exit)	Site Gen. Total
Fire Station	3	7	10	7	3	10	0	0	0
Police Station	3	7	10	7	3	10	0	0	0
Town Hall	50	17	67	9	26	35	0	0	0
Community Center	51	26	77	34	38	72	11	10	21
Park	0	0	0	1	1	2	2	2	4
Total	107	57	164	58	71	129	13	12	25

CONCLUSIONS

The crash data reviewed and summarized from July 2016 through June 2019 for the study area revealed a low frequency of incidents (less than 2 per year) at all study area intersections. All study area incidents, including the intersections, were of low severity with four (4) reported injuries. There were no trends or concerns of incidents near the proposed facility that lend themselves to mitigation.

Sight distances reviewed along South Main Street (Route 114) at the existing and anticipated site driveways indicate that there is sufficient stopping sight distance in both directions, as well as adequate intersection sight distance for speeds up to 40 miles per hour.

In summary, the construction of the proposed Middleton Town Complex is expected to have minimal impact on the traffic and safety operations within the study area, and no mitigation is necessary.

Appendix A

Crash Data

Middleton Town Complex
 Middleton, MA
 June 2016 - June 2019
 Pare Project No. 19144.00
 October 16, 2019



Crash Ref No.	Report No.	Date	On Street	Intersecting Street	No. of Vehicles	Injuries	Fatalities	Weather Condition	Road Condition	Lighting	Crash Type
1	4237340	08/13/2016	South Main Street (Route 114)		2	1	0	Clear/Clear	Dry	Daylight	Rear-end
2	4262839	09/27/2016	South Main Street (Route 114)		1	1	0	Clear/Clear	Dry	Daylight	Rear-end
3	4278379	09/20/2016	South Main Street (Route 114)	Site Driveway	2	0	0	Cloudy/Cloudy	Dry	Daylight	Rear-to-rear
4	4350837	02/02/2017	South Main Street (Route 114)	Site Driveway	2	0	0	Clear/Clear	Dry	Dark - lighted	Angle
5	4369661	05/19/2017	South Main Street (Route 114)	Meadow Drive	2	0	0	Clear/Clear	Dry	Dusk	Rear-to-rear
6	4371856	05/30/2017	South Main Street (Route 114)	Site Driveway	2	0	0	Cloudy/Rain	Wet	Daylight	Angle
7	4373477	05/16/2017	South Main Street (Route 114)	Orchard Circle	2	0	0	Clear/Clear	Dry	Daylight	Rear-end
8	4373485	05/19/2017	South Main Street (Route 114)	Meadow Drive	2	0	0	Clear/Clear	Dry	Daylight	Angle
9	4373502	05/25/2017	South Main Street (Route 114)		2	1	0	Rain/Rain	Wet	Daylight	Sideswipe, same direction
10	4384323	06/04/2017	South Main Street (Route 114)	Meadow Drive	2	1	0	Clear/Clear	Dry	Daylight	Rear-end
11	4412048	07/26/2017	South Main Street (Route 114)	Orchard Circle	2	0	0	Clear	Dry	Daylight	Rear-end
12	4428431	09/13/2017	South Main Street (Route 114)		2	0	0	Clear/Clear	Dry	Daylight	Angle
13	442317	10/18/2017	South Main Street (Route 114)		2	0	0	Clear	Dry	Daylight	Rear-end
14	4447809	11/01/2017	South Main Street (Route 114)		2	0	0	Cloudy	Dry	Daylight	Angle
15	4450601	11/06/2017	South Main Street (Route 114)		3	0	0	Rain/Rain	Wet	Dark - lighted	Rear-end
16	4453427	11/13/2017	South Main Street (Route 114)	Orchard Circle	2	0	0	Rain	Wet	Daylight	Rear-end
17	4482724	01/10/2018	South Main Street (Route 114)		2	0	0	Clear	Dry	Daylight	Angle
18	4551926	06/11/2018	South Main Street (Route 114)		3	0	0	Clear	Dry	Daylight	Rear-end
19	4713409	06/11/2019	South Main Street (Route 114)		1	0	0	Clear/Clear	Dry	Daylight	Single vehicle crash

Appendix B

Speed Study

Pare Corporation

8 Blackstone Valley Place
Lincoln, RI 02865

www.parecorp.com

Middleton Town Complex
Taken By: KF
Weather: Sunny
South Main Street

File Name : South Main Road Speed Study
Site Code : 19144.00
Start Date : 10/18/2019
Page No : 1

#	Northbound	Southbound
1	24	23
2	28	31
3	33	29
4	35	34
5	43	39
6	38	40
7	33	40
8	23	36
9	37	32
10	32	36
11	36	40
12	29	28
13	37	29
14	28	36
15	29	28
16	36	38
17	26	35
18	37	31
19	35	34
20	32	42
21	29	40
22	22	39
23	25	37
24	29	29
25	31	27
26	30	23
27	32	28
28	33	30
29	27	31
30	36	40
31	26	37
32	38	29
33	34	26
34	36	27
35	31	35
36	32	33
37		

Class	Vehicle Count	85 Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	True Median (50th Percentile)	Average Speed	Number of Vehicles Over 40 MPH	Percent of Vehicles Over 40 MPH	85 Percentile
Northbound	36	37	28 - 37	26	72	32	32	1	3	37
Southbound	36	40	27 - 36	22	61	34	33	1	3	40
Summary	72	38	28 - 37	48	67	32	32	2	3	38

Appendix C
Trip Generation & Volumes

TRAFFIC VOLUME SUMMARY
 Future No-Build Growth Factor = 2.0%

Weekday AM Peak Hour
 7:00 AM - 8:00 AM

Fire Station Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	3	7	10

Weekday PM Peak Hour
 5:00 PM - 6:00 PM

Fire Station Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	7	3	10

Weekend Peak Hour
 11:00 AM - 12:00 PM

Fire Station Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	0	0	0

Town Complex Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	3	7	10
Police Station	3	7	10
Park	0	0	0
Community Center	51	26	77
Town Hall	50	17	67
Total	107	57	164

Town Complex Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	7	3	10
Police Station	7	3	10
Park	1	1	2
Community Center	34	38	72
Town Hall	9	26	35
Total	58	71	129

Town Complex Development			
	Site Gen. (Enter)	Site Gen. (Exit)	Site Generated
Fire Station	0	0	0
Police Station	0	0	0
Park	2	2	4
Community Center	11	10	21
Town Hall	0	0	0
Total	13	12	25

Middleton Town Complex
 Middleton, MA
 Trip Generation
 PARE Project No. 19144.00
 October 15, 2019



Police Station
Land Use Code 575: Fire and Rescue Station
Average Vehicle Trip Ends vs. 1,000 Sq. Feet Gross Floor Area
Proposed: 20,000 Sq. Feet

On a: Weekday, AM
 PM Peak Hour of Generator

Average Rate:	20*0.48	10
Fitted Curve Equation:	N/A	N/A
Trips Entering	29% * 10	3
Trips Exiting	71% * 10	7
		10

On a: Weekday, PM
 Peak Hour of Generator

Average Rate:	20*0.48	10
Fitted Curve Equation:	N/A	N/A
Trips Entering	29% * 10	3
Trips Exiting	71% * 10	7
		10

Middleton Town Complex
 Middleton, MA
 Trip Generation
 PARE Project No. 19144.00
 October 15, 2019



Fire and Rescue Station
Land Use Code 575: Fire and Rescue Station
Average Vehicle Trip Ends vs. 1,000 Sq. Feet Gross Floor Area
Proposed: 20,000 Sq. Feet

On a: Weekday, AM
 PM Peak Hour of Generator

Average Rate:	20*0.48	10
Fitted Curve Equation:	N/A	N/A
Trips Entering	29% * 10	3
Trips Exiting	71% * 10	7
		10

On a: Weekday, PM
 Peak Hour of Generator

Average Rate:	20*0.48	10
Fitted Curve Equation:	N/A	N/A
Trips Entering	29% * 10	3
Trips Exiting	71% * 10	7
		10



Community Center
Land Use Code 495: Recreational Community Center
Average Vehicle Trip Ends vs. 1,000 Sq. Feet Gross Floor Area
Proposed: 20,000 Sq. Feet

On a: Weekday

Average Rate:	20 * 28.82	58
Fitted Curve Equation:	N/A	N/A
Trips Entering	50% * 58	29
Trips Exiting	50% * 58	29
		58

On a: Weekday, AM
 PM Peak Hour of Generator

Average Rate:	20*1.76	35
Fitted Curve Equation:	$\ln(T)=0.54\ln(x)+2.73$	77
Trips Entering	66% * 77	51
Trips Exiting	34% * 77	26
		77

On a: Weekday, PM
 Peak Hour of Generator

Average Rate:	20*2.31	46
Fitted Curve Equation:	$\ln(T)=0.76\ln(x)+2$	72
Trips Entering	47% * 72	34
Trips Exiting	53% * 72	38
		72

On a: Saturday

Average Rate:	20 * 9.10	182
Fitted Curve Equation:	N/A	N/A
Trips Entering	50% * 182	91
Trips Exiting	50% * 182	91
		182

On a: Saturday
 Peak Hour of Generator

Average Rate:	20*1.07	21
Fitted Curve Equation:	N/A	N/A
Trips Entering	54% * 21	11
Trips Exiting	46% * 21	10
		21



Town Hall
Land Use Code 730: Government Office Building
Average Vehicle Trip Ends vs. 1,000 Sq. Feet Gross Floor Area
Proposed: 20,000 Sq. Feet

On a: Weekday

Average Rate:	20 * 22.59	452
Fitted Curve Equation:	N/A	N/A
Trips Entering	50% * 506	226
Trips Exiting	50% * 506	226
		452

On a: Weekday, AM
 PM Peak Hour of Generator

Average Rate:	20 * 3.34	67
Fitted Curve Equation:	N/A	N/A
Trips Entering	75% * 467	50
Trips Exiting	25% * 467	17
		67

On a: Weekday, PM
 PM Peak Hour of Generator

Average Rate:	20 * 1.71	35
Fitted Curve Equation:	$\ln(T) = 0.97 \ln(x) + 0.62$	34
Trips Entering	25% * 519	9
Trips Exiting	75% * 519	26
		35

Trips



Public Park
Land Use Code 411: Public Park
Average Vehicle Trip Ends vs. Acres
Proposed: 17 Acres

On a: Weekday

Average Rate:	$17 * 0.78$	14
Fitted Curve Equation:	$0.64(x)+88.46$	99
Trips Entering	$50\% * 506$	50
Trips Exiting	$50\% * 506$	50
		99

On a: Weekday, AM
 PM Peak Hour of Generator

Average Rate:	$17*0.02$	0
Fitted Curve Equation:	N/A	N/A
Trips Entering	$59\% * 44$	0
Trips Exiting	$41\% * 44$	0
		0

On a: Weekday, PM
 PM Peak Hour of Generator

Average Rate:	$17*0.11$	2
Fitted Curve Equation:	$0.06(x)+22.6$	24
Trips Entering	$55\% * 2$	1
Trips Exiting	$45\% * 2$	1
		2

On a: Saturday

Average Rate:	$17 * 1.96$	34
Fitted Curve Equation:	N/A	N/A
Trips Entering	$50\% * 34$	17
Trips Exiting	$50\% * 34$	17
		34

Trips

On a: Saturday
 Peak Hour of Generator

Average Rate:	$17 * 0.28$	4
Fitted Curve Equation:	$0.2(x)+26.4$	30
Trips Entering	$55\% * 4$	2
Trips Exiting	$45\% * 4$	2
		4

NARRATIVE FOR MIDDLETON MASTER SITE PLAN SITE INVENTORY AND ANALYSIS

It is rare for a municipality in need of multiple public buildings to have a site available that is centrally located, directly abutting a main thoroughfare, and with adequate space for the programming of all proposed buildings and site infrastructure. It is rarer still to have such a site with scenic views, mature vegetation that had been kept in excellent health, and topography that lends itself to development without excessive earthwork costs. The Town of Middleton is blessed with such a parcel!

The result of this good fortune is that the proposed development will have multiple options for building placement and infrastructural requirements with minimal hindrances from land that is too wet or otherwise beset by conservation restrictions, too rocky, too steep, or have restrictions that often limit cost-effective development, or development at all.

The parcel in question is a former golf course, and as such the majority of the acreage contains vegetation in much better condition than a typical “undeveloped” site that might be rife with dead and dying trees and shrubs, large areas of invasive species, or perhaps areas used for dumping; trees and shrub masses are .

The remaining portions will have environmental restrictions under conservation commission control, but will become view corridors to benefit the developable portions of the site and may at some future date become useful for passive recreation.

The land immediately west of South Main Street (State Route 114) is well-suited for the placement of new municipal offices that can be either prominently located adjacent to the highway, or set back a distance to draw visitors into a town center, or placed just behind a vegetative screen to minimize their impact in the event the rural ambience of the town wants to be reinforced.

Vestiges of the golf course such as sand traps and artificially created hillocks and depressions used to define tee boxes, greens or create elements that made the course more challenging or visually appealing can readily be removed without the often onerous issues of large volumes of cut to be removed or fill to be brought in. And since they were artificially molded in the first place, it is reasonable to assume that existing earth to be relocated is clean fill that can readily be compacted.

Large stands (or individual specimens) of healthy, mature trees can provide natural focal points that- if new construction is planned appropriately- will help proposed buildings immediately become an integrated partner into the new landscape.

As South Main Street flows north/south along the eastern edge of the parcel, it is largely straight and only slightly sloping, offering the ability to enter the site at almost any point along the 1,447’ right-of-way with good sight distances from any spot. Potential entry/exit points will most likely be selected based on the abutting uses or activities on the east side of South Main Street.

Existing trees along South Main Street can either be left in place as a screen, thinned out to allow for a filtered view to and from the property’s edge, or cleared entirely to make room for site access or unencumbered views of the new Municipal buildings.

The clubhouse is the largest structure on the property, and is neither distinctive enough in character or well-maintained enough to warrant its retention. Its removal will make development options in that portion of the site more flexible.



Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix E

Cost Estimate

Middleton Ma Masterplan

Study Cost Estimate

48 South Main Street
Town of Middleton, Ma

Prepared by:



165 Middlesex Turnpike Suite 106
Bedford, Ma 01730
www.tortoraconsulting.com

Prepared for:

HKT

February 11, 2020

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma

February 11, 2020



MAIN SUMMARY

Project	Project Cost (2021 dollars)
Phase 1 - Fire Department	\$18,359,402
Phase 1 - Sitework	\$7,262,913
Phase 1A - Sitework (includes Town Green)	\$4,137,296
Phase 2 - Community Center or Council on Aging	\$13,093,390
Phase 2 - Sitework	\$4,619,100
Phase 3 - Police Department Addition	\$9,216,263
Phase 4 - Town Hall Addition	\$7,227,319
Total	\$63,915,683
Combined Options	Project Cost (2021 dollars)
Combined Public Safety Building	\$27,429,471
Combined Town Hall/Community Center	\$20,545,668
Stand Alone Town Hall	\$9,475,154

This cost estimate was produced from January/February 2020 Study documents received provided by HKT Architects. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation per main summary.

Bidding conditions are expected to be public bidding utilizing chapter 149 filed sub bidding and DCAM qualified general contractors.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

- Land acquisition, feasibility, and financing costs
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
- Rock excavation; special foundations (unless indicated by design engineers)
- Contaminated or unsuitable soils removal or replacement
- Building Permits

Recommendations For Cost Control

TCI recommends that the Owner and Architect carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. Request for modifications of any apparent errors or omissions to this document must be made to TCI with in ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that TCI using bid documents produce a final update estimate, to determine overall costs changes which have occurred since the preparation of the estimate. The final update estimate will address changes and additions to the document, as well as addenda issued during bidding process. TCI cannot reconcile bid results to an estimate not produced from bid documents.

Statement Of Probable Cost

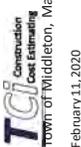
TCI has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. The opinion of construction is made on the basis of the experience, qualifications, and best judgment of the professional estimator familiar with the industry. TCI does not guarantee that bids will not vary from this estimate.

TCI staff of professional cost estimators has prepared this estimate in accordance with generally accepted principles and practices.

Acceptance of Report

With acceptance of this report, the holder shall indemnify and hold harmless Tortora Consulting from and against all claims, damages, losses and expenses, including but not limited to attorney fees and court costs arising out of or as a result of the performance of this work, including third party claims.

Middleton Ma Masterplan
Study Cost Estimate



Item #	Phase	Current Costs (2020 dollars)			10 year escalated costs - (4% average per year 2021 - 2031)											
		SF	Construction \$	\$/SF	Total Project Cost includes construction 30% soft costs & contingency on buildings & 20% on Sitemwork	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1	Phase 1 - Fire Department (2 story, elevator and shared spaces)	28,770	\$13,579,439	\$472	\$17,653,271	\$18,359,402	\$19,093,778	\$19,857,529	\$20,651,830	\$21,477,903	\$22,337,019	\$23,230,500	\$24,159,720	\$25,126,109	\$26,131,153	\$27,176,399
2	Phase 1 - Sitemwork		\$5,819,642		\$6,983,570	\$7,262,913	\$7,553,430	\$7,855,567	\$8,169,790	\$8,496,582	\$8,836,445	\$9,189,903	\$9,557,499	\$9,939,799	\$10,337,391	\$10,750,887
3	Phase 1A - Sitemwork (includes Town Green)		\$3,060,130		\$3,978,169	\$4,137,296	\$4,302,788	\$4,474,900	\$4,653,896	\$4,840,052	\$5,033,654	\$5,235,000	\$5,444,400	\$5,662,176	\$5,888,663	\$6,124,210
4	Phase 2 - Community Center or Council on Aging (1 story)	22,522	\$9,684,460	\$430	\$12,589,798	\$13,093,390	\$13,617,126	\$14,161,811	\$14,728,283	\$15,317,414	\$15,930,111	\$16,567,315	\$17,230,008	\$17,919,208	\$18,635,976	\$19,381,415
5	Phase 2 - Sitemwork		\$3,416,494		\$4,441,442	\$4,619,100	\$4,803,864	\$4,996,019	\$5,195,860	\$5,403,694	\$5,619,842	\$5,844,636	\$6,078,421	\$6,321,558	\$6,574,420	\$6,837,397
6	Phase 3 - Police Department Addition (2 story)	12,216	\$6,816,762	\$558	\$8,861,791	\$9,216,263	\$9,584,914	\$9,968,311	\$10,367,043	\$10,781,725	\$11,212,994	\$11,661,514	\$12,127,975	\$12,613,094	\$13,117,618	\$13,642,323
7	Phase 4 - Town Hall Addition (2 story, stairs, elevator)	11,254	\$5,345,650	\$475	\$6,949,345	\$7,227,319	\$7,516,412	\$7,817,068	\$8,129,751	\$8,454,941	\$8,793,139	\$9,144,865	\$9,510,660	\$9,891,086	\$10,286,729	\$10,698,198
8	Combined Public Safety Building	40,986	\$20,288,070	\$495	\$26,374,491	\$27,429,471	\$28,526,650	\$29,667,716	\$30,854,425	\$32,088,602	\$33,372,146	\$34,707,032	\$36,095,313	\$37,539,126	\$39,040,691	\$40,602,319
9	Combined Town Hall/Community Center	33,770	\$15,196,500	\$450	\$19,755,450	\$20,545,668	\$21,367,495	\$22,222,195	\$23,111,083	\$24,035,526	\$24,996,947	\$25,996,825	\$27,036,698	\$28,118,166	\$29,242,893	\$30,412,609
10	Stand Alone Town Hall (2 story, stairs, elevator)	14,450	\$7,008,250	\$485	\$9,110,725	\$9,475,154	\$9,854,160	\$10,248,326	\$10,658,259	\$11,084,589	\$11,527,973	\$11,989,092	\$12,468,656	\$12,967,402	\$13,486,098	\$14,025,542

* Building costs do not include sitemwork, these would need to be paired with site 1 and 2

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma



February 11, 2020

Phase 1 - Fire Department

UNIFORMAT CONSTRUCTION COST SUMMARY

28,770 sf

BUILDING SYSTEM

BUILDING

A10	FOUNDATIONS AND SLABS	\$643,930	\$22.38
B10	SUPERSTRUCTURE	\$1,415,996	\$49.22
B20	EXTERIOR CLOSURE	\$1,875,762	\$65.20
B30	ROOFING	\$809,585	\$28.14
C10	INTERIOR CONSTRUCTION	\$945,466	\$32.86
C20	STAIRCASES	\$104,650	\$3.64
C30	INTERIOR FINISHES	\$601,430	\$20.90
D10	CONVEYING SYSTEMS	\$202,100	\$7.02
D20	PLUMBING	\$395,000	\$13.73
D30	HVAC	\$1,461,784	\$50.81
D40	FIRE PROTECTION	\$218,890	\$7.61
D50	ELECTRICAL	\$952,903	\$33.12
E10	EQUIPMENT	\$35,700	\$1.24
E20	FURNISHINGS	\$36,288	\$1.26
F20	DEMOLITION		
G10	SITWORK	\$116,150	\$4.04

TOTAL DIRECT COST (Trade Costs)		\$9,815,634	\$341.18
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GENERAL CONDITIONS & REQUIREMENTS	12%	\$1,177,876
GL INSURANCE	1.3%	\$127,603
BONDS	2%	\$196,313
OVERHEAD	2.5%	\$245,391
PROFIT	2.5%	\$245,391
DESIGN AND PRICING CONTINGENCY	15%	\$1,771,231

TOTAL CONSTRUCTION COST (2020 Dollars)		\$13,579,439	\$472.00
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February 11, 2020

GSF 28,770

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

GROSS FLOOR AREA CALCULATION

First Floor	22,770
Second Floor	6,000

TOTAL GROSS FLOOR AREA (GFA)	28,770 GSF
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A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Building Strip footings

Formwork	1,380	sf	15.00	20,700
Re-bar	4,860	lbs	2.50	12,150
Concrete material	81	cy	160.00	12,960
Placing concrete	81	cy	40.00	3,240

Building Foundation walls

Formwork	9,660	sf	15.00	144,900
Re-bar	12,220	lbs	2.50	30,550
Concrete material	188	cy	160.00	30,080
Placing concrete	188	cy	40.00	7,520
Dampproofing	4,140	sf	6.00	24,840
Insulation to foundation walls; 2" thick	4,140	sf	4.50	18,630
Form shelf	690	lf	8.00	5,520

Building Interior column footings

Formwork	640	sf	15.00	9,600
Re-bar	1,875	lbs	2.50	4,688
Concrete material	25	cy	160.00	4,000
Placing concrete	25	cy	40.00	1,000
Set anchor bolts grout plates	20	ea	135.00	2,700

Building Exterior wall column footings

Formwork	480	sf	15.00	7,200
Re-bar	980	lbs	2.50	2,450
Concrete material	14	cy	160.00	2,240
Placing concrete	14	cy	40.00	560
Set anchor bolts grout plates	20	ea	135.00	2,700

Miscellaneous

Form key in footing	560	lf	10.00	5,600
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Piers/Pilasters

Formwork	960	sf	15.00	14,400
Re-bar	3,600	lbs	2.50	9,000
Concrete material	12	cy	160.00	1,920
Placing concrete	12	cy	40.00	480

379,628

A1030 LOWEST FLOOR CONSTRUCTION

New Slab on grade, 5" thick

Vapor barrier	11,270	sf	0.50	5,635
Mesh reinforcing 15% lap	12,961	sf	1.10	14,257
Concrete - 5" thick	219	cy	160.00	35,040
Placing concrete	219	cy	25.00	5,475
Finishing and curing concrete	11,270	sf	1.00	11,270
Control joints - saw cut	11,270	sf	0.10	1,127
Isolation joints at columns	176	lf	2.50	440

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 1 - Fire Department						
<u>New Slab on grade, 8" thick</u>						
Vapor barrier	11,500	sf	0.50	5,750		
Rebar	13,225	sf	2.00	26,450		
Concrete - 8" thick	309	cy	160.00	49,440		
Placing concrete	309	cy	25.00	7,725		
Finishing and curing concrete	11,500	sf	1.00	11,500		
Control joints - saw cut	11,500	sf	0.10	1,150		
Isolation joints at columns	423	lf	2.50	1,058		
<u>Elevator Pit</u>						
Elevator pit walls						
formwork	800	sf	15.00	12,000		
reinforcement	1,200	lbs	3.00	3,600		
concrete material	10	cy	16.00	160		
placing concrete	10	cy	45.00	450		
Slab						
formwork	200	sf	15.00	3,000		
reinforcement	880	lbs	3.00	2,640		
concrete material in slab	11	cy	160.00	1,760		
placing concrete	11	cy	45.00	495		
Bentonite waterstops	1	ls	1,500.00	1,500		
Cementitious waterproofing to elevator pit	1	ls	4,000.00	4,000		
<u>Miscellaneous</u>						
Rigid insulation at underslab to 4'	2,760	sf	4.50	12,420		
Thickened slabs	100	cy	165.00	16,500		
Moisture mitigation mix	549	cy	40.00	21,960		
Equipment pads and curbs	1	ls	7,500.00	7,500		
SUBTOTAL					264,302	

TOTAL - FOUNDATIONS

\$643,930

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

W beams, tube, columns, bracing and misc framing

members	64	tns	5,200.00	332,800		
Floor deck - 1 1/2" deck	6,675	sf	4.50	30,038		
WWF reinforcement	7,676	sf	1.50	11,514		
Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	135	cy	150.00	20,250		
Place and finish concrete	6,675	sf	1.25	8,344		

Miscellaneous

Fire stopping floors	2	flrs	5,000.00	10,000		
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SUBTOTAL

412,946

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

W beams, joist, columns, bracing and misc framing

members	171	tns	5,200.00	889,200		
Roof deck - 1 1/2" 20 ga deck	22,770	sf	5.00	113,850		

SUBTOTAL

1,003,050

TOTAL - SUPERSTRUCTURE

\$1,415,996

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

	Total Wall facade area	10,584	sf			
<u>Masonry Veneer</u>						
Interior paint	2,646	sf	1.75	4,631		
6" LGMF	2,646	sf	12.00	31,752		
GWB	2,646	sf	3.00	7,938		
CMU back-up at apparatus areas	2,646	sf	30.00	79,380		
Air/Vapor barrier	5,292	sf	6.75	35,721		
5" mineral fiber insulation	5,292	sf	5.75	30,429		
4" Brick / Precast trim	5,292	sf	48.00	254,016		
<u>Metal Panel</u>						
Interior paint	5,292	sf	1.75	9,261		
GWB	5,292	sf	3.00	15,876		
6" LGMF	5,292	sf	12.00	63,504		
GWB	5,292	sf	3.00	15,876		
Air/Vapor barrier	5,292	sf	6.75	35,721		
5" mineral fiber insulation	5,292	sf	5.75	30,429		
Metal panel system	5,292	sf	65.00	343,980		
<u>Miscellaneous</u>						
Entry canopy ceiling supports, framing and blocking	500	sf	25.00	12,500		
Canopy ceiling and fascia finish	500	sf	45.00	22,500		
Lintels/angles at masonry openings and relieving	10,584	sf	5.00	52,920		
SUBTOTAL						1,046,434

B2020 WINDOWS

	Total Window area	4,536	sf			
<u>Window systems</u>						
Storefront at entry	300	sf	90.00	27,000		
Window systems	4,236	sf	90.00	381,240		
Backer rod & double sealant	4,236	sf	5.00	21,180		
Wood blocking at openings	4,236	sf	3.00	12,708		
SUBTOTAL						442,128

B2030 EXTERIOR DOORS

Exterior door & frame 3x7	4	ea	1,350.00	5,400		
Hardware	4	ea	600.00	2,400		
Install	4	lvs	300.00	1,200		
3x7 Alum door/frame	2	ea	4,200.00	8,400		
BF 14x14	12	ea	30,000.00	360,000		
Louvers	1	ls	5,000.00	5,000		
Backer rod & double sealant	240	lf	12.00	2,880		
Wood blocking at openings	240	lf	8.00	1,920		
SUBTOTAL						387,200

TOTAL - EXTERIOR CLOSURE					\$1,875,762
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B30 ROOFING

B3010 ROOF COVERINGS

TPO Membrane roof	19,770	sf	12.00	237,240		
1/4" dens-deck protection board	19,770	sf	2.50	49,425		
6" Insulation	19,770	sf	9.00	177,930		
Reinforced vapor barrier	19,770	sf	2.85	56,345		
1/2" Sheathing	19,770	sf	3.50	69,195		
Sloped metal roof areas	2	ea	75,000.00	150,000		
<u>Flashing & Trim</u>						
Parapet cap and wall membrane/flashing	700	lf	28.00	19,600		
Misc wall and roof to roof flashings	200	lf	16.00	3,200		
<u>Accessories</u>						
Roof hatch	1	ea	4,800.00	4,800		
Roof to roof ladder	1	ea	1,850.00	1,850		
Walking pads	1	ls	5,000.00	5,000		
Skylights	10	ea	3,500.00	35,000		
SUBTOTAL						809,585

TOTAL - ROOFING					\$809,585
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 1 - Fire Department						
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
Interior CMU partitions	6,592	sf	25.00	164,800		
Interior GWB partitions	19,180	sf	16.00	306,880		
Sealants & caulking at partitions	28,770	sf	0.30	8,631		
Rough blocking	1,500	lf	8.00	12,000		
SUBTOTAL					492,311	
C1020 INTERIOR DOORS						
Interior single door & frame	54	ea	1,200.00	64,800		
Interior double door & frame	2	ea	2,500.00	5,000		
Interior windows/sidelights	30	lvs	750.00	22,500		
Ratings premium	12	lvs	500.00	6,000		
Hardware	56	lvs	400.00	22,400		
Install	56	lvs	285.00	15,960		
Paint HM doors and frames	56	ea	120.00	6,720		
Glazing	603	sf	40.00	24,120		
Sealants & caulking	56	ea	125.00	7,000		
Allowance for access doors	10	ea	250.00	2,500		
SUBTOTAL					177,000	
C1030 SPECIALTIES / MILLWORK						
Laundry folding counter and shelf	9	lf	350.00	3,150		
Wood display case	1	ls	1,500.00	1,500		
Mail slots	1	ea	1,500.00	1,500		
5 rows adjustable shelves	12	lf	225.00	2,700		
Janitor closet shelving	5	lf	110.00	550		
Kitchen base, wall cabinets and quartz counter	30	lf	450.00	13,500		
Kitchen full ht Plam cabinets	10	lf	400.00	4,000		
Kitchenette base, wall cabinets and quartz counter	14	lf	450.00	6,300		
Decon metal base and wall cabinet and quartz counter	4	lf	650.00	2,600		
Dorm cubbies	20	ea	650.00	13,000		
Allow for shelving and counters	100	lf	150.00	15,000		
Mirrors at fitness	300	sf	30.00	9,000		
<u>Restrooms and Lockers</u>						
Toilet partitions	3	ea	850.00	2,550		
Soap disp	12	ea	20.00	240		
Mirror	9	ea	265.00	2,385		
Robe hook	10	ea	25.00	250		
Grab bar	8	ea	125.00	1,000		
Towel dispenser/disposal	6	ea	275.00	1,650		
Napkin dispenser/disposal	4	ea	200.00	800		
TP holder	9	ea	60.00	540		
Shower curtain rod	4	ea	220.00	880		
Lockers/Gear storage	90	ea	550.00	49,500		
<u>Misc</u>						
Backer panels in electrical closets	1	ls	2,500.00	2,500		
Window sill/aprons	500	lf	45.00	22,500		
Interior and Exterior Signage	1	ls	15,000.00	15,000		
Fire extinguisher cabinets	10	ea	275.00	2,750		
Misc glass and glazing	1	ls	7,500.00	7,500		
Int bollards	14	ea	500.00	7,000		
Miscellaneous metals throughout building	28,770	sf	2.00	57,540		
Miscellaneous sealants throughout building	28,770	sf	1.00	28,770		
SUBTOTAL					276,155	
TOTAL - INTERIOR CONSTRUCTION						\$945,466

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 1 - Fire Department						
C20 STAIRCASES						
C2010 STAIR CONSTRUCTION						
Stair 1 - monumental	2	flt	15,000.00	30,000		
Stair 2 - egress	2	flt	12,500.00	25,000		
Mezzanine stair	1	flt	8,500.00	8,500		
Mezzanine railings	90	lf	165.00	14,850		
Concrete material in pan infill	5	fit	500.00	2,500		
SUBTOTAL						80,850
C2020 STAIR FINISHES						
Stair 1 - Porcelain treads/landings	2	flts	5,000.00	10,000		
Stair 2 - Rubber treads/landings	2	flts	2,500.00	5,000		
Paint to staircases	4	flt	2,200.00	8,800		
SUBTOTAL						23,800
TOTAL - STAIRCASES						\$104,650
C30 INTERIOR FINISHES						
C3010 WALL FINISHES						
Paint to GWB	31,554	sf	2.00	63,108		
Tile to walls	2,250	sf	24.00	54,000		
FRP wall panels	800	sf	10.00	8,000		
SS wall panels at decon sink	50	sf	50.00	2,500		
SUBTOTAL						127,608
C3020 FLOOR FINISHES						
Linoleum	3,755	sf	10.00	37,550		
Athletic flooring	730	sf	15.00	10,950		
Walk-off mat/frame	100	sf	35.00	3,500		
Carpet	4,850	sf	5.00	24,250		
Porcelain and base	1,550	sf	26.00	40,300		
Ceramic Tile and base	600	sf	24.00	14,400		
Sealed concrete	2,885	sf	2.00	5,770		
Resinous floor and base	11,800	sf	15.00	177,000		
Rubber base	2,850	lf	4.00	11,400		
SUBTOTAL						325,120
C3030 CEILING FINISHES						
ACT ceilings	12,947	sf	5.50	71,209		
GWB ceiling	1,500	sf	12.00	18,000		
MR GWB ceiling	600	sf	13.00	7,800		
1 hr rated GWB ceilings	600	sf	15.00	9,000		
L GWB soffits	20	lf	75.00	1,500		
Drop gwb soffits	60	lf	65.00	3,900		
Paint exposed structure	12,803	sf	2.50	32,008		
Paint to GWB ceilings and soffits	3,020	sf	1.75	5,285		
SUBTOTAL						148,702
TOTAL - INTERIOR FINISHES						601,430
D10 CONVEYING SYSTEMS						
D1010 ELEVATOR						
Passenger elevator	2	stp	95,000.00	190,000		
Pit ladders	1	ea	1,500.00	1,500		
Rail supports and hoist beam	1	ls	10,000.00	10,000		
Sill angles	24	lf	25.00	600		
SUBTOTAL						202,100
TOTAL - CONVEYING SYSTEMS						\$202,100

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

D20 PLUMBING

D20 PLUMBING, GENERALLY

Equipment

Gas, Oil, & Sand Interceptor	1	ea	\$15,000.00	\$15,000		
Water Meter	1	ea	\$2,000.00	\$2,000		
Domestic Water Heater	1	ea	\$9,500.00	\$9,500		
Main Backflow Preventor	1	ea	\$3,500.00	\$3,500		
Zone Backflow Preventor	3	ea	\$800.00	\$2,400		
Thermostatic Mixing Valve	1	ea	\$2,000.00	\$2,000		
Circulation Pump	1	ea	\$1,600.00	\$1,600		
Fixture and Equipment Hook Ups	37	ea	\$500.00	\$18,500		

Plumbing Fixtures including all supply, drain and venting

Water Closets	9	ea	4,800.00	\$43,200		
Urinal	4	ea	4,500.00	\$18,000		
Lavatories - wall hung	12	ea	4,000.00	\$48,000		
Janitors Sinks	2	ea	3,200.00	\$6,400		
Kitchen Sinks	2	ea	3,000.00	\$6,000		
Shower	3	ea	5,500.00	\$16,500		
Decon SS floor sink	1	ea	6,500.00	\$6,500		
Decon Deluge Shower	1	ea	6,800.00	\$6,800		
Emergency Eye Wash/Shower	1	ea	5,000.00	\$5,000		
Drinking Fountains	2	ea	5,500.00	\$11,000		
Roof Drains	8	ea	\$3,000.00	\$24,000		
Floor Drains	10	ea	\$3,000.00	\$30,000		
Hose Bibbs	8	ea	\$1,200.00	\$9,600		

Misc

Laundry room connections	1	ls	5,000.00	5,000		
Decon room connections	1	ls	5,000.00	5,000		
SCBA room connections	1	ls	5,000.00	5,000		
Compressed Air and misc apparatus utilities	1	ls	45,000.00	45,000		
Gas	600	lf	70.00	42,000		
Coordination	1	ls	7,500.00	7,500		

395,000

TOTAL - PLUMBING

\$395,000

D30 HVAC

D30 HVAC, GENERALLY

Systems

Boilers, pumps, VFDs and distribution	22,300	sf	\$5.00	111,500		
HVAC system	22,300	sf	\$40.00	892,000		
Central exhaust and make-up air	22,300	sf	\$5.00	111,500		
Split system AC units	1	ea	\$7,500.00	7,500		
Decon room exhaust	1	ls	\$15,000.00	15,000		
Vehicle exhaust	12	ea	\$6,500.00	78,000		
Kitchen exhaust	1	ea	\$7,500.00	7,500		

Controls

ATC	28,770	sf	\$5.00	143,850		
Alarming, Scheduling, Trending & Logging	28,770	sf	\$1.00	28,770		

Commissioning

Start up	28,770	sf	\$0.75	21,578		
Balancing	28,770	sf	\$0.65	18,701		
3rd Party Assist	28,770	sf	\$0.50	14,385		

Miscellaneous

Coordination	1	ls	\$10,000.00	10,000		
Crane and Rigging	1	ls	\$1,500.00	1,500		

1,461,784

TOTAL - HVAC

\$1,461,784

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 1 - Fire Department						
D40 FIRE PROTECTION						
D40 FIRE PROTECTION, GENERALLY						
Sprinkler system piping and heads	28,770	sf	7.00	201,390		
Service Equipment	1	ls	17,500.00	17,500		
Fire pump				NIC		
SUBTOTAL						218,890
TOTAL - FIRE PROTECTION						\$218,890
D50 ELECTRICAL						
D5010 SERVICE & DISTRIBUTION						
<u>Power Circuitry & Equipment</u>						
1200 amp service, main switchboard and panels	28,770	sf	6.50	187,005		
Feeders	28,770	sf	2.50	71,925		
SUBTOTAL						258,930
D5020 LIGHTING & POWER						
LED lighting and branch circuitry	28,770	sf	9.00	258,930		
Power and branch circuitry	28,770	sf	4.00	115,080		
SUBTOTAL						374,010
D5030 COMMUNICATION & SECURITY SYSTEMS						
<u>Telecommunications System</u>						
Full telecommunications	28,770	sf	2.75	79,118		
PA system	28,770	sf	1.50	43,155		
<u>Fire Alarm</u>						
Fire Alarm system	28,770	sf	4.00	115,080		
<u>Special Systems</u>						
Security roughin allowance	28,770	sf	1.00	28,770		
SUBTOTAL						266,123
D5040 OTHER ELECTRICAL SYSTEMS						
<u>Lightning protection</u>						
UL Master label lightning protection	28,770	sf	0.75	21,578		
<u>Miscellaneous</u>						
Temp services	28,770	sf	0.60	17,262		
Seismic restraints	1	ls	7,500.00	7,500		
Coring & firestopping	1	ls	7,500.00	7,500		
SUBTOTAL						53,840
TOTAL - ELECTRICAL						\$952,903
E10 EQUIPMENT						
E10 EQUIPMENT, GENERALLY						
<u>Kitchenette Appliances</u>						
Refrigerator	1	ea	1,800.00	1,800		
Microwave	1	ea	600.00	600		
<u>Dayroom kitchen Appliances</u>						
Refrigerator	2	ea	1,800.00	3,600		
Dishwasher	1	ea	1,000.00	1,000		
Microwave	2	ea	600.00	1,200		
Gas range	1	ea	4,500.00	4,500		
Hood	1	ea	3,000.00	3,000		
<u>Laundry</u>						
Commercial washer	2	ea	5,000.00	10,000		
Commercial dryer	2	ea	5,000.00	10,000		
SUBTOTAL						35,700
TOTAL - EQUIPMENT						\$35,700

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 1 - Fire Department						
E20 FURNISHINGS						
E2010 FIXED FURNISHINGS						
<i>Window Treatment</i>						
Roller shades	3,536	sf	8.00	28,288		
Training - elec room darkening shades	200	sf	15.00	3,000		
Bunk rooms - room darkening shades	500	sf	10.00	5,000		
SUBTOTAL					36,288	
E2020 MOVABLE FURNISHINGS						
All movable furnishings to be provided and installed by owner						NIC
SUBTOTAL						
TOTAL - FURNISHINGS						\$36,288
G10 SITEWORK						
G1010 SITEWORK						
<i>Structural excavation and backfill</i>						
Trench excavate and backfill foundation walls	1,227	cy	45.00	55,215		
Excavate and backfill column footings	40	ea	350.00	14,000		
Excavate and backfill elevator pit	300	cy	30.00	9,000		
Import underslab base for slabs	843	cy	45.00	37,935		
SUBTOTAL					116,150	
TOTAL - FURNISHINGS						\$116,150

Middleton Ma Masterplan

Study Cost Estimate
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Phase 1 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
G10 SITEWORK						
Earthwork						
Site Demolition						
Building 1 - clubhouse	7,000	sf	10.00	70,000		
Hazamat	7,000	sf	4.00	28,000		
Remove paving and walks	7,000	sf	1.00	7,000		
Site Prep						
Compost filter / Silt fence	2,800	lf	15.00	42,000		
Tracking pads	2	ea	6,500.00	13,000		
Tree removals, clear and grub	5.9	acre	10,000.00	59,000		
Topsoil strip and stock	6,500	cy	8.00	52,000		
Earthwork						
Site Cuts and Fills	35,000	cy	10.00	350,000		
15% Import/Export - TBD	5,250	cy	40.00	210,000		
Shape & Compact Subgrade for new grades and basins	35	dy	3,000.00	105,000		
Paving and walks prep						
Bitum. Paving 12" Dense Grade	3,704	cy	35.00	129,640		
Pedestrian Paving 12" Dense Grade	889	cy	35.00	31,115		
Paving & Curbing						
Paving and curbing						
Asphalt Parking Lots	80,000	sf	3.89	311,200		
Asphalt Roadways	20,000	sf	3.89	77,800		
Granite curbs	6,500	lf	45.00	292,500		
4' Concrete sidewalks	7,000	sf	8.00	56,000		
12" Concrete Apron	12,000	sf	12.00	144,000		
Decorative pavers	5,000	sf	15.00	75,000		
SUBTOTAL					2,053,255	
Utilities						
Drainage						
12" HDPE Drain Line	1,000	lf	65.00	65,000		
24" HDPE Drain Line	1,000	lf	75.00	75,000		
Manholes / OCS	24	ea	7,500.00	180,000		
Catch basins	24	ea	5,000.00	120,000		
Water Quality Units	4	sf	15,000.00	60,000		
Underground Infiltration (MC-3500)	8,000	sf	22.00	176,000		
Bioretention Area	4,500	sf	15.00	67,500		
Headwalls	2	ea	4,000.00	8,000		

Phase 1 - Sitework

<i>DESCRIPTION</i>	<i>QTY</i>	<i>UNIT</i>	<i>UNIT COST</i>	<i>EST'D COST</i>	<i>SUB TOTAL</i>	<i>TOTAL COST</i>
<u>Water</u>						
8" CLDI Water Line	1,500	lf	95.00	142,500		
Hydrants	2	ea	5,000.00	10,000		
Street connections	1	ls	5,000.00	5,000		
<u>Gas</u>						
4" Plastic Gas Line	450	lf	75.00	33,750		
Street connections	1	ls	5,000.00	5,000		
<u>Sewer</u>						
Septic Field - 450 sf trenched	1,450	sf	40.00	58,000		
6" SDR-35 PVC Sewer Line	800	lf	80.00	64,000		
Manholes	4	ea	5,500.00	22,000		
<u>Electrical</u>						
Primary and secondary services	1	ls	100,000.00	100,000		
Roadway and parking fixtures and circuitry	17	ea	6,500.00	110,500		
Walkway fixtures and circuitry	8	ea	4,000.00	32,000		
E&B Elec/communication duct banks	800	lf	150.00	120,000		
Encase duct banks in concrete	237	cy	400.00	94,800		
SUBTOTAL					1,549,050	

Site Improvements

Site Improvements

Flagpole	1	ea	4,000.00	4,000		
Benches	2	ea	2,800.00	5,600		
Trash receptacles	1	ea	2,500.00	2,500		
Bike racks	6	ea	400.00	2,400		
Signs	20	ea	200.00	4,000		
Parking space lines/symbols	1	ls	15,000.00	15,000		
Bollards	30	ea	575.00	17,250		
Dumpster pad and enclosure	2	ea	5,000.00	10,000		
Stone retaining walls at rt 114	390	lf	300.00	117,000		
Misc site improvements	1	ls	50,000.00	50,000		
SUBTOTAL					227,750	

Landscaping

Landscaping

Remove exist trees/shrubs	1	ls	12,000.00	12,000		
Pruning exist trees to remain	1	ls	5,000.00	5,000		
Screen and respread loam	2,500	cy	5.00	12,500		
Trees	13	ea	1,100.00	14,300		
Shrubs	40	ea	210.00	8,400		
Hydroseeded Lawn	60,000	sf	0.35	21,000		
Mulch	500	cy	60.00	30,000		
SUBTOTAL					103,200	

TOTAL - SITEWORK						3,933,255
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GENERAL CONDITIONS & REQUIREMENTS	15%	\$589,988
GL INSURANCE	1.3%	\$51,132
BONDS	2%	\$78,665
OVERHEAD	2.5%	\$98,331
PROFIT	2.5%	\$98,331
DESIGN AND PRICING CONTINGENCY	20%	\$969,940

TOTAL CONSTRUCTION COST (2020 Dollars)						\$5,819,642
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Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma



February 11, 2020

Phase 1A - Sitework (includes Town Green)

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
G10 SITEWORK						
Earthwork						
<u>Site Prep</u>						
Compost filter / Silt fence	2,200	lf	15.00	33,000		
Tracking pads	1	ea	6,500.00	6,500		
Tree removals, clear and grub	6.2	acre	10,000.00	62,000		
Topsoil strip and stock	6,500	cy	8.00	52,000		
Remove golf course elements	1	ls	15,000.00	15,000		
<u>Earthwork</u>						
Site Cuts and Fills	25,000	cy	10.00	250,000		
Shape & Compact Subgrade for new grades and basins	40	dy	3,000.00	120,000		
<u>Paving and walks prep</u>						
Pedestrian Paving 12" Dense Grade	119	cy	35.00	4,165		
Paving & Curbing						
<u>Paving and curbing</u>						
Granite curbs	390	lf	45.00	17,550		
Concrete sidewalks at Rt114	3,200	sf	8.00	25,600		
SUBTOTAL					585,815	
Utilities						
<u>Drainage - Town Green</u>						
Allowance for drainage systems	1	ls	750,000.00	750,000		
<u>Electrical - Town Green</u>						
Primary and secondary services	1	ls	25,000.00	25,000		
Walkway fixtures and circuitry	15	ea	4,000.00	60,000		
SUBTOTAL					835,000	
Site Improvements						
<u>Site Improvements</u>						
Stone retaining walls at rt 114	390	lf	300.00	117,000		
Misc site improvements	1	ls	10,000.00	10,000		
<u>Site Improvements - Town Green</u>						
Benches	1	ea	2,800.00	2,800		
Tables/4 seats	4	ea	4,500.00	18,000		
Trash receptacles	2	ea	2,500.00	5,000		
Bike racks	15	ea	400.00	6,000		
BBQ grills	12	ea	450.00	5,400		
Water fountain	4	ea	4,500.00	18,000		
Bocce court	1	ea	5,000.00	5,000		
Tot Lot	1	ls	200,000.00	200,000		
SUBTOTAL					387,200	
Landscaping						
<u>Landscaping - Town Green</u>						
Remove exist trees/shrubs	1	ls	5,000.00	5,000		
Pruning exist trees to remain	1	ls	2,500.00	2,500		
Screen and respread loam	7,500	cy	5.00	37,500		
Trees	50	ea	1,100.00	55,000		
Shrubs	120	ea	210.00	25,200		
Hydroseeded Lawn	300,000	sf	0.35	105,000		
Mulch	500	cy	60.00	30,000		
SUBTOTAL					260,200	
TOTAL - SITEWORK						2,068,215
GENERAL CONDITIONS & REQUIREMENTS					15%	\$310,232
GL INSURANCE					1.3%	\$26,887
BONDS					2%	\$41,364
OVERHEAD					2.5%	\$51,705
PROFIT					2.5%	\$51,705
DESIGN AND PRICING CONTINGENCY					20%	\$510,022
TOTAL CONSTRUCTION COST (2020 Dollars)						\$3,060,130

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma



February 11, 2020

Phase 2 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
G10 SITEWORK						
Earthwork						
<u>Site Demolition</u>						
Building 2	1,700	sf	10.00	17,000		
Hazamat	1,700	sf	4.00	6,800		
Remove paving and walks	7,900	sf	1.00	7,900		
<u>Site Prep</u>						
Compost filter / Silt fence	2,700	lf	15.00	40,500		
Tracking pads	1	ea	6,500.00	6,500		
Tree removals, clear and grub	3.2	acre	10,000.00	32,000		
Topsoil strip and stock	3,600	cy	8.00	28,800		
<u>Earthwork</u>						
Site Cuts and Fills	20,000	cy	10.00	200,000		
15% Import/Export - TBD	3,000	cy	40.00	120,000		
Shape & Compact Subgrade for new grades and basins	28	dy	3,000.00	84,000		
<u>Paving and walks prep</u>						
Bitum. Paving 12" Dense Grade	1,296	cy	35.00	45,360		
Pedestrian Paving 12" Dense Grade	463	cy	35.00	16,205		
Paving & Curbing						
<u>Paving and curbing</u>						
Asphalt Parking Lots	22,000	sf	3.89	85,580		
Asphalt Roadways	13,000	sf	3.89	50,570		
Granite curbs	3,400	lf	45.00	153,000		
Concrete sidewalks	7,500	sf	8.00	60,000		
Decorative pavers	5,000	sf	15.00	75,000		
SUBTOTAL						1,029,215
Utilities						
<u>Drainage</u>						
12" HDPE Drain Line	200	lf	65.00	13,000		
24" HDPE Drain Line	200	lf	75.00	15,000		
Manholes / OCS	5	ea	7,500.00	37,500		
Catch basins	5	ea	5,000.00	25,000		
Water Quality Units	1	sf	15,000.00	15,000		
Underground Infiltration (MC-3500)	3,500	sf	22.00	77,000		
Bioretention Area	3,000	sf	15.00	45,000		
Headwalls	1	ea	4,000.00	4,000		
<u>Water</u>						
8" CLDI Water Line	600	lf	100.00	60,000		
Hydrants - 1	1	ea	5,000.00	5,000		
Street connections	1	ls	5,000.00	5,000		
<u>Gas</u>						
4" Plastic Gas Line	450	lf	75.00	33,750		
Street connections	1	ls	5,000.00	5,000		

Phase 2 - Sitework

<i>DESCRIPTION</i>	<i>QTY</i>	<i>UNIT</i>	<i>UNIT COST</i>	<i>EST'D COST</i>	<i>SUB TOTAL</i>	<i>TOTAL COST</i>
<u>Sewer</u>						
Septic Field - 500 sf trenched	1,500	sf	40.00	60,000		
6" SDR-35 PVC Sewer Line	350	lf	80.00	28,000		
Manholes	3	ea	5,500.00	16,500		
<u>Electrical</u>						
Primary and secondary services	1	ls	150,000.00	150,000		
Roadway and parking fixtures and circuitry	13	ea	6,500.00	84,500		
Walkway fixtures and circuitry	10	ea	4,000.00	40,000		
E&B Elec/communication duct banks	1,000	lf	150.00	150,000		
Encase duct banks in concrete	296	cy	400.00	118,400		
SUBTOTAL					987,650	
Site Improvements						
<u>Site Improvements</u>						
Flagpole	1	ea	4,000.00	4,000		
Benches	4	ea	2,800.00	11,200		
Trash receptacles	2	ea	2,500.00	5,000		
Bike racks	15	ea	400.00	6,000		
Signs	12	ea	200.00	2,400		
Parking space lines/symbols	1	ls	7,500.00	7,500		
Bollards	24	ea	575.00	13,800		
Dumpster pad and enclosure	2	ea	5,000.00	10,000		
Stone retaining walls at rt 114	390	lf	300.00	117,000		
Misc site improvements	1	ls	30,000.00	30,000		
SUBTOTAL					206,900	
Landscaping						
<u>Landscaping</u>						
Remove exist trees/shrubs	1	ls	12,000.00	12,000		
Pruning exist trees to remain	1	ls	4,000.00	4,000		
Screen and respread loam	1,500	cy	5.00	7,500		
Trees	15	ea	1,100.00	16,500		
Shrubs	75	ea	210.00	15,750		
Hydroseeded Lawn	33,000	sf	0.35	11,550		
Mulch	300	cy	60.00	18,000		
SUBTOTAL					85,300	
TOTAL - SITEWORK					2,309,065	
<i>GENERAL CONDITIONS & REQUIREMENTS</i>					15%	\$346,360
<i>GL INSURANCE</i>					1.3%	\$30,018
<i>BONDS</i>					2%	\$46,181
<i>OVERHEAD</i>					2.5%	\$57,727
<i>PROFIT</i>					2.5%	\$57,727
<i>DESIGN AND PRICING CONTINGENCY</i>					20%	\$569,416
TOTAL CONSTRUCTION COST (2020 Dollars)						\$3,416,494

Middleton Ma MasterplanStudy Cost Estimate
Town of Middleton, Ma

February 11, 2020

Phase 3 - Police Department Addition**UNIFORMAT CONSTRUCTION COST SUMMARY**

12,216 sf

BUILDING SYSTEM**BUILDING**

A10	FOUNDATIONS AND SLABS	\$387,811	\$31.75
B10	SUPERSTRUCTURE	\$631,224	\$51.67
B20	EXTERIOR CLOSURE	\$1,041,857	\$85.29
B30	ROOFING	\$299,738	\$24.54
C10	INTERIOR CONSTRUCTION	\$756,132	\$61.90
C20	STAIRCASES	\$35,400	\$2.90
C30	INTERIOR FINISHES	\$273,438	\$22.38
D10	CONVEYING SYSTEMS	\$0	\$0.00
D20	PLUMBING	\$233,600	\$19.12
D30	HVAC	\$648,078	\$53.05
D40	FIRE PROTECTION	\$85,512	\$7.00
D50	ELECTRICAL	\$431,566	\$35.33
E10	EQUIPMENT	\$2,400	\$0.20
E20	FURNISHINGS	\$24,248	\$1.98
F20	DEMOLITION	\$15,000	\$1.23
G10	SITWORK	\$61,360	\$5.02

TOTAL DIRECT COST (Trade Costs)**\$4,927,364**

\$403.35

GENERAL CONDITIONS & REQUIREMENTS	12%	\$591,284
GL INSURANCE	1.3%	\$64,056
BONDS	2%	\$98,547
OVERHEAD	2.5%	\$123,184
PROFIT	2.5%	\$123,184
DESIGN AND PRICING CONTINGENCY	15%	\$889,143

TOTAL CONSTRUCTION COST (2020 Dollars)**\$6,816,762**

\$558.02

February 11, 2020

GSF 12,216

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

GROSS FLOOR AREA CALCULATION

First Floor				8,116		
Second Floor				4,100		

TOTAL GROSS FLOOR AREA (GFA)				12,216	GSF	
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A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Building Strip footings

Formwork	1,014	sf	15.00	15,210
Re-bar	3,540	lbs	2.50	8,850
Concrete material	59	cy	160.00	9,440
Placing concrete	59	cy	40.00	2,360

Building Foundation walls

Formwork	7,098	sf	15.00	106,470
Re-bar	8,970	lbs	2.50	22,425
Concrete material	138	cy	160.00	22,080
Placing concrete	138	cy	40.00	5,520
Dampproofing	3,042	sf	6.00	18,252
Insulation to foundation walls; 2" thick	3,042	sf	4.50	13,689
Form shelf	507	lf	8.00	4,056

Building Interior column footings

Formwork	480	sf	15.00	7,200
Re-bar	1,425	lbs	2.50	3,563
Concrete material	19	cy	160.00	3,040
Placing concrete	19	cy	40.00	760
Set anchor bolts grout plates	15	ea	135.00	2,025

Building Exterior wall column footings

Formwork	360	sf	15.00	5,400
Re-bar	770	lbs	2.50	1,925
Concrete material	11	cy	160.00	1,760
Placing concrete	11	cy	40.00	440
Set anchor bolts grout plates	15	ea	135.00	2,025

Miscellaneous

Form key in footing	560	lf	10.00	5,600
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Piers/Pilasters

Formwork	720	sf	15.00	10,800
Re-bar	2,700	lbs	2.50	6,750
Concrete material	9	cy	160.00	1,440
Placing concrete	9	cy	40.00	360

SUBTOTAL

281,440

A1030 LOWEST FLOOR CONSTRUCTION

New Slab on grade, 5" thick

Vapor barrier	6,116	sf	0.50	3,058
Mesh reinforcing 15% lap	7,033	sf	1.10	7,736
Concrete - 5" thick	119	cy	160.00	19,040
Placing concrete	119	cy	25.00	2,975
Finishing and curing concrete	6,116	sf	1.00	6,116
Control joints - saw cut	6,116	sf	0.10	612
Isolation joints at columns	176	lf	2.50	440

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

<u>New Slab on grade, 8" thick</u>						
Vapor barrier	2,000	sf	0.50	1,000		
Rebar	2,300	sf	2.00	4,600		
Concrete - 8" thick	54	cy	160.00	8,640		
Placing concrete	54	cy	25.00	1,350		
Finishing and curing concrete	2,000	sf	1.00	2,000		
Control joints - saw cut	2,000	sf	0.10	200		
Isolation joints at columns	423	lf	2.50	1,058		
<u>Miscellaneous</u>						
Rigid insulation at underslab to 4'	2,028	sf	4.50	9,126		
Thickened slabs	100	cy	165.00	16,500		
Detention beds	5	ea	1,500.00	7,500		
Moisture mitigation mix	173	cy	40.00	6,920		
Equipment pads and curbs	1	ls	7,500.00	7,500		
SUBTOTAL					106,371	

TOTAL - FOUNDATIONS

\$387,811

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

W beams, tube, columns, bracing and misc framing members	41	tns	5,200.00	213,200		
Floor deck - 1 1/2" deck	4,775	sf	4.50	21,488		
WWF reinforcement	5,491	sf	1.50	8,237		
Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	97	cy	150.00	14,550		
Place and finish concrete	4,775	sf	1.25	5,969		
<u>Miscellaneous</u>						
Fire stopping floors	2	flrs	5,000.00	10,000		
SUBTOTAL					273,444	

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

W beams, joist, columns, bracing and misc framing members	41	tns	5,200.00	317,200		
Roof deck - 1 1/2" 20 ga deck	8,116	sf	5.00	40,580		
SUBTOTAL					357,780	

TOTAL - SUPERSTRUCTURE

\$631,224

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

Total Wall facade area	7,071	sf				
<u>Masonry Veneer</u>						
Interior paint	2,283	sf	1.75	3,995		
6" LGMF	2,283	sf	12.00	27,396		
GWB	2,283	sf	3.00	6,849		
CMU back-up at detention/sally port/garage areas	2,590	sf	30.00	77,700		
Air/Vapor barrier	4,873	sf	6.75	32,893		
5" mineral fiber insulation	4,873	sf	5.75	28,020		
4" Brick / Precast trim	4,873	sf	48.00	233,904		

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

Metal Panel

Interior paint	2,198	sf	1.75	3,847		
GWB	2,198	sf	3.00	6,594		
6" LGMF	2,198	sf	12.00	26,376		
GWB	2,198	sf	3.00	6,594		
Air/Vapor barrier	2,198	sf	6.75	14,837		
5" mineral fiber insulation	2,198	sf	5.75	12,639		
Metal panel system	2,198	sf	65.00	142,870		

Miscellaneous

Entry canopy ceiling supports, framing and blocking	500	sf	25.00	12,500		
Canopy ceiling and fascia finish	500	sf	45.00	22,500		
Lintels/angles at masonry openings and relieving	7,071	sf	5.00	35,355		
SUBTOTAL					694,869	

B2020 WINDOWS

Total Window area 3,031 sf

Window systems

Window systems	3,031	sf	90.00	272,790		
Backer rod & double sealant	3,031	sf	5.00	15,155		
Wood blocking at openings	3,031	sf	3.00	9,093		
SUBTOTAL					297,038	

B2030 EXTERIOR DOORS

Exterior door & frame 3x7	1	ea	1,350.00	1,350		
Hardware	1	ea	600.00	600		
Install	1	lvs	300.00	300		
OH 12x12	4	ea	10,800.00	43,200		
Louvers	1	ls	2,500.00	2,500		
Backer rod & double sealant	100	lf	12.00	1,200		
Wood blocking at openings	100	lf	8.00	800		
SUBTOTAL					49,950	

TOTAL - EXTERIOR CLOSURE

\$1,041,857

B30 ROOFING

B3010 ROOF COVERINGS

TPO Membrane roof	6,616	sf	12.00	79,392		
1/4" dens-deck protection board	6,616	sf	2.50	16,540		
6" Insulation	6,616	sf	9.00	59,544		
Reinforced vapor barrier	6,616	sf	2.85	18,856		
1/2" Sheathing	6,616	sf	3.50	23,156		
Sloped metal roof areas	1	ea	75,000.00	75,000		
<u>Flashing & Trim</u>						
Parapet cap and wall membrane/flashing	500	lf	28.00	14,000		
Misc wall and roof to roof flashings	100	lf	16.00	1,600		
<u>Accessories</u>						
Roof hatch	1	ea	4,800.00	4,800		
Roof to roof ladder	1	ea	1,850.00	1,850		
Walking pads	1	ls	5,000.00	5,000		
SUBTOTAL					299,738	

TOTAL - ROOFING

\$299,738

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
Interior CMU partitions	5,096	sf	25.00	127,400		
Interior GWB partitions	11,984	sf	16.00	191,744		
Sealants & caulking at partitions	12,216	sf	0.30	3,665		
Rough blocking	1,000	lf	8.00	8,000		
SUBTOTAL						330,809
C1020 INTERIOR DOORS						
Interior single door & frame	51	ea	1,200.00	61,200		
Detention door units	6	ea	15,000.00	90,000		
Detention two way window	1	ea	2,500.00	2,500		
Interior windows/sidelights	15	lvs	750.00	11,250		
Ratings premium	12	lvs	500.00	6,000		
Hardware	51	lvs	400.00	20,400		
Install	51	lvs	285.00	14,535		
Paint HM doors and frames	51	ea	120.00	6,120		
Glazing	200	sf	40.00	8,000		
Sealants & caulking	51	ea	125.00	6,375		
Allowance for access doors	10	ea	250.00	2,500		
SUBTOTAL						228,880
C1030 SPECIALTIES / MILLWORK						
Evidence cabinets and counters	40	lf	600.00	24,000		
Detention cabinets and counters	40	lf	600.00	24,000		
Kitchenette base, wall cabinets and quartz counter	8	lf	450.00	3,600		
Evidence passthroughs	1	ls	5,000.00	5,000		
Kitchen full ht Plam cabinets	10	lf	400.00	4,000		
Kitchenette base, wall cabinets and quartz counter	14	lf	450.00	6,300		
Allow for shelving and counters	100	lf	150.00	15,000		
<u>Restrooms and Lockers</u>						
Toilet partitions	3	ea	850.00	2,550		
Soap disp	5	ea	20.00	100		
Mirror	5	ea	265.00	1,325		
Robe hook	8	ea	25.00	200		
Grab bar	8	ea	125.00	1,000		
Towel dispenser/disposal	4	ea	275.00	1,100		
Napkin dispenser/disposal	4	ea	200.00	800		
TP holder	9	ea	60.00	540		
Shower curtain rod	4	ea	220.00	880		
Lockers/benches	45	ea	650.00	29,250		
<u>Misc</u>						
Backer panels in electrical closets	1	ls	2,500.00	2,500		
Window sill/aprons	300	lf	45.00	13,500		
Interior and Exterior Signage	1	ls	10,000.00	10,000		
Fire extinguisher cabinets	6	ea	275.00	1,650		
Misc glass and glazing	1	ls	7,500.00	7,500		
Int bollards	10	ea	500.00	5,000		
Miscellaneous metals throughout building	12,216	sf	2.00	24,432		
Miscellaneous sealants throughout building	12,216	sf	1.00	12,216		
SUBTOTAL						196,443
TOTAL - INTERIOR CONSTRUCTION						\$756,132

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
C20 STAIRCASES						
C2010 STAIR CONSTRUCTION						
Stair - egress	2	flt	12,500.00	25,000		
Concrete material in pan infill	2	flt	500.00	1,000		
SUBTOTAL						26,000
C2020 STAIR FINISHES						
Stair - Rubber treads/landings	2	flts	2,500.00	5,000		
Paint to staircases	2	flt	2,200.00	4,400		
SUBTOTAL						9,400
TOTAL - STAIRCASES						\$35,400
C30 INTERIOR FINISHES						
C3010 WALLFINISHES						
Paint to GWB	12,717	sf	2.00	25,434		
Tile to walls	1,250	sf	24.00	30,000		
SUBTOTAL						55,434
C3020 FLOORFINISHES						
Linoleum	3,600	sf	10.00	36,000		
Carpet	3,500	sf	5.00	17,500		
Ceramic Tile and base	160	sf	24.00	3,840		
Sealed concrete	1,756	sf	2.00	3,512		
Resinous floor and base	3,200	sf	15.00	48,000		
Rubber base	1,250	lf	4.00	5,000		
SUBTOTAL						113,852
C3030 CEILINGFINISHES						
ACT ceilings	5,497	sf	5.50	30,234		
GWB ceiling	1,000	sf	12.00	12,000		
MR GWB ceiling	400	sf	13.00	5,200		
1 hr rated GWB ceilings	400	sf	15.00	6,000		
Steel plate ceilings at holding areas	825	sf	38.00	31,350		
L GWB soffits	20	lf	75.00	1,500		
Drop gwb soffits	40	lf	65.00	2,600		
Paint exposed structure	4,679	sf	2.50	11,698		
Paint to GWB ceilings and soffits	2,040	sf	1.75	3,570		
SUBTOTAL						104,152
TOTAL - INTERIOR FINISHES						273,438

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
D20 PLUMBING						
D20 PLUMBING, GENERALLY						
<u>Equipment</u>						
Water Meter					In phase 1	
Domestic Water Heater					In phase 1	
Main Backflow Preventor					In phase 1	
Zone Backflow Preventor	2	ea	\$800.00	\$1,600		
Thermostatic Mixing Valve	1	ea	\$2,000.00	\$2,000		
Circulation Pump	1	ea	\$1,600.00	\$1,600		
Fixture and Equipment Hook Ups	25	ea	\$500.00	\$12,500		
<u>Plumbing Fixtures including all supply, drain and venting</u>						
Water Closets	4	ea	4,800.00	\$19,200		
Urinal	2	ea	4,500.00	\$9,000		
Lavatories	5	ea	4,000.00	\$20,000		
Janitors Sinks	1	ea	3,200.00	\$3,200		
Kitchen Sinks	1	ea	3,000.00	\$3,000		
Shower	3	ea	5,500.00	\$16,500		
Detention sink/WC combo	5	ea	7,500.00	\$37,500		
Detention Shower	1	ea	6,800.00	\$6,800		
Emergency Eye Wash/Shower	1	ea	5,000.00	\$5,000		
Drinking Fountains	2	ea	5,500.00	\$11,000		
Roof Drains	6	ea	\$3,000.00	\$18,000		
Floor Drains	8	ea	\$3,000.00	\$24,000		
Hose Bibbs	6	ea	\$1,200.00	\$7,200		
<u>Misc</u>						
Gas	400	lf	70.00	28,000		
Coordination	1	ls	7,500.00	7,500		
SUBTOTAL						233,600

TOTAL - PLUMBING	\$233,600
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D30 HVAC

D30 HVAC, GENERALLY						
<u>Systems</u>						
Boilers, pumps, VFDs and misc equipment					In phase 1	
HVAC system	12,216	sf	\$38.00	464,208		
Central exhaust and make-up air	12,216	sf	\$4.00	48,864		
Vehicle exhaust	3	ea	\$6,500.00	19,500		
Kitchen exhaust	1	ea	\$7,500.00	7,500		
<u>Controls</u>						
ATC	12,216	sf	\$5.00	61,080		
Alarming, Scheduling, Trending & Logging	12,216	sf	\$1.00	12,216		
<u>Commissioning</u>						
Start up	12,216	sf	\$0.75	9,162		
Balancing	12,216	sf	\$0.65	7,940		
3rd Party Assist	12,216	sf	\$0.50	6,108		
<u>Miscellaneous</u>						
Coordination	1	ls	\$10,000.00	10,000		
Crane and Rigging	1	ls	\$1,500.00	1,500		
SUBTOTAL						648,078

TOTAL - HVAC	\$648,078
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
D40 FIREPROTECTION						
D40 FIRE PROTECTION, GENERALLY						
Sprinkler system piping and heads	12,216	sf	7.00	85,512		
Service Equipment				In phase 1		
Fire pump				NIC		
SUBTOTAL						85,512
TOTAL - FIRE PROTECTION						\$85,512
D50 ELECTRICAL						
D5010 SERVICE & DISTRIBUTION						
<u>Power Circuitry & Equipment</u>						
Subpanels	12,216	sf	5.00	61,080		
Feeders	12,216	sf	2.00	24,432		
SUBTOTAL						85,512
D5020 LIGHTING & POWER						
LED lighting and branch circuitry	12,216	sf	9.00	109,944		
Power and branch circuitry	12,216	sf	4.00	48,864		
SUBTOTAL						158,808
D5030 COMMUNICATION & SECURITY SYSTEMS						
<u>Telecommunications System</u>						
Full telecommunications	12,216	sf	2.75	33,594		
PA and special system	12,216	sf	5.00	61,080		
<u>Fire Alarm</u>						
Fire Alarm system	12,216	sf	4.00	48,864		
<u>Special Systems</u>						
Security roughin allowance	12,216	sf	1.00	12,216		
SUBTOTAL						155,754
D5040 OTHER ELECTRICAL SYSTEMS						
<u>Lightning protection</u>						
UL Master label lightning protection	12,216	sf	0.75	9,162		
<u>Miscellaneous</u>						
Temp services	12,216	sf	0.60	7,330		
Seismic restraints	1	ls	7,500.00	7,500		
Coring & firestopping	1	ls	7,500.00	7,500		
SUBTOTAL						31,492
TOTAL - ELECTRICAL						\$431,566
E10 EQUIPMENT						
E10 EQUIPMENT, GENERALLY						
<u>Kitchenette Appliances</u>						
Refrigerator	1	ea	1,800.00	1,800		
Microwave	1	ea	600.00	600		
SUBTOTAL						2,400
TOTAL - EQUIPMENT						\$2,400

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
E20 FURNISHINGS						
E2010 FIXED FURNISHINGS						
<i>Window Treatment</i>						
Roller shades	3,031	sf	8.00	24,248		
SUBTOTAL					24,248	
E2020 MOVABLE FURNISHINGS						
All movable furnishings to be provided and installed by owner						
SUBTOTAL						NIC
TOTAL - FURNISHINGS						\$24,248
G10 SITEWORK						
G1010 DEMOLITION						
<i>Demolition</i>						
Facade removals at Phase 1 FD	1,000	sf	15.00	15,000		
SUBTOTAL					15,000	
G1010 SITEWORK						
<i>Structural excavation and backfill</i>						
Trench excavate and backfill foundation walls	907	cy	45.00	40,815		
Excavate and backfill column footings	20	ea	350.00	7,000		
Import underslab base for slabs	301	cy	45.00	13,545		
SUBTOTAL					61,360	
TOTAL - SITEWORK						\$76,360



Municipal Center Master Plan

Town of Middleton

Massachusetts

Appendix F

Design Standards

MIDDLETON MUNICIPAL CENTER

Design Guidelines

Purpose

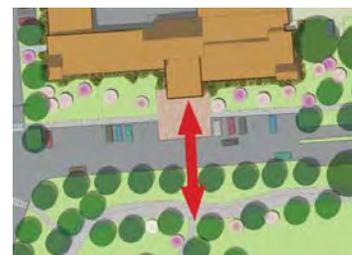
The purpose of these guidelines is to inform the subsequent development of this parcel of land in Middleton, that is devoted entirely to municipal uses. To date, the municipal uses that have been designated to this development include a new fire and police station, a new community center, a new town hall, a town common and a portion of the site that will be designated as conservation land. Currently, the 50+ acre site is a golf course with a clubhouse and maintenance shed as the only existing structures. Other than single family homes on the southern and western property lines, there are no immediately adjacent buildings of architectural significance that can suggest a style and design for the planned construction of this municipal center.

Although the site is just south of the town's center, there is no distinguishable "center" that is typical in many New England towns similar to Middleton. This is an enormous opportunity, to create a complex that can be identifiable as the "Middleton Town Center".

Consequently, the design guidelines below are meant to serve as a template to guide this complex and any future development. These guidelines are not intended to become zoning bylaws but are meant to supplement the existing zoning bylaw. The planning of the buildings is conceptual inasmuch as they are properly sized in order to locate them on the site and form the master plan. The architectural design will not fully emerge until the first building is conceived and becomes part of the municipal center fabric. Currently, this template is more proscriptive than prescriptive. It would be premature to make hard and fast design standards at this point until the plan is implemented and there is broad agreement to the efficacy of the standards themselves. As the design of the complex becomes a reality, it would make sense to review this preliminary list and modify it accordingly to maintain the Town's control over subsequent buildings.

Building Orientation

The master plan shows that each building is oriented to the new town green. While it is important to make the complex visible from Route 114, every vehicle will enter and depart at the same location to the site. Therefore, each primary building entry point will be opposite the green. There may be secondary building entries for staff, but the public will enter from the town green side.



Public Safety Building Facing Town Green



Community Center and Town Hall Building Facing Town Green

Parking and Circulation

A number of these issues are addressed by the Middleton Zoning Bylaws. Nevertheless, this site should improve any of the zoning requirements wherever possible.

It is crucial that parking areas are designed to avoid large asphalt patches wherever possible. Crosswalks and building entry plazas should use alternate paving materials such as brick or stone pavers. The rich vegetation and mature trees are to be maintained and integrated into the overall site. New plantings should enhance the existing landscape rather than detract from it. The current zoning requires that large parking areas of 20 cars or more should provide one shade tree per 10 cars. Other strategies might include breaking up parking into smaller discrete lots, provide areas of planting in addition to trees. Keep the hard parking areas to a minimum with overflow parking for larger community events to be provided on designated grass areas.



Raised Brick Crosswalk

Staff parking for the public safety functions are planned to be located on the north side of the site hidden from the green by the public safety building itself. The service areas for the community center and town hall should be screened from the town green side and obscured from the conservation land side to the west with planting, fencing and/or well-designed walls or other types of barriers.



Dedicated Bikepath

Circulation within the site should separate pedestrian, bicycling and vehicular traffic as much as possible. Speed mitigation techniques such as raised walkways, traffic bumps, etc. should be utilized to slow vehicular traffic. There should be one or more discrete bike lanes provided as well. Provisions for emergency vehicles should also be made part of the plan.



Birds Eye View of Parking at Public Safety Building

There is also a low stone wall in the master plan that separates the new sidewalk from the traffic on Route 114. This might be considered as a design element when planning site improvements within the site itself.

Building Scale and Proportion

The zoning bylaw has a maximum height of 35 feet and no more than three stories. This does not restrict any of the conceptual designs that have been generated in this master plan. There are exceptions to the height limitation for non-occupied elements such as hose towers, belfries, water tanks, etc. In general, the dimensional requirements of the current zoning can be met without limiting any of the functional uses of the buildings that have been proposed.

The massing of the buildings is important to address. Each building should have its own identity, but it is important that they work together visually as a group. Since each building has its own specific function, the potential for variety is and consistency is apparent. For example, the police station would have limited fenestration, whereas the community center and town hall might utilize glass to focus on the viewshed and town green.

Roof shapes and pitch often have an impact on the scale and proportion of buildings. While many have a preference for pitched roofs, some buildings simply do not lend themselves to a pitched roof, such as an apparatus bay in a fire station. The dimensions of an apparatus bay (or similar buildings with a large span) are such, that only a shallow pitched roof will work without adding a disproportional and out of scale height to the building. This does not replicate the pleasing proportions of historic buildings with pitched roofs.



Pitched roof as a design element

Viewsheds

The views from Route 114 and from the interior of the site are quite striking and any subsequent development should be complementary to this resource. This site and the surrounding landscape allow for a unique setting for a municipal complex. The passive area that is designated for passive recreation will eventually be designed to accommodate possible nature walks and other conservation initiatives. It should be seen from the civic center portion of the site and regarded as a special amenity.



View of Proposed Site

Site Amenities

The Town Green is an amenity whose potential has been a driver of this project. The area is approximately 7 acres and it has the potential to bring the residents of Middleton together for a variety of events that represent the fabric of the community. At this point in the master planning process, it remains to be seen exactly what will be added in terms of specific amenities to the new Town Green. It is likely that over time it will morph into a center for many uses that will inform the design of the space.

Among the things that have been considered are a gazebo or bandstand for musical performance, an amphitheater (the contours can accommodate a sloped seating area) for dramatic performances. These activities and others can be supported by seating areas, picnic areas for residents and town employees, etc.



Formal amphitheater



Natural slope functions as amphitheater



Typical gazebo

The site can accommodate bicycling with designated paths and bike storage. Parking shall be limited and overflow parking for town-wide events can be accommodated in designated grass fields designed for that purpose.



Bike path separates cyclists from pedestrians and cars



Playground potential

Materials

This complex is the municipal center of Middleton. Accordingly, the buildings are designed to last for many decades and should be constructed of substantial materials. There isn't any specific architectural style that defines Middleton, but the most architecturally successful public building is the Flint Library built in 1891. The building is an elegant brick structure in the Richardsonian Romanesque revival style. The proposed buildings in this master plan should not copy the Flint Library, but rather take its cues from this timeless public edifice. The Design Team has suggested that the new buildings might use similar brick masonry, stone trim, etc. for at least parts of the buildings.



Brick example at Flint Public Library



Stone wall to define paths and particular exterior spaces and the edge of the site along South Main Street.

Other elements that should be considered are the possible use of stone walls that are scattered throughout the town and often hark back to the days that Middleton was a rural farming community. The master plan has endeavored to reduce asphalt roadways and large parking areas as well as providing paving materials in strategic locations.



Traditional Slate Roof



Typical Metal Roof