Agenda

1. Recap of Project Goals
2. Work Completed to date
3. Select Building Examples (Fire Station #1, SMS)
4. Overall Schedule
5. Expected Next Steps
Overarching Goals

Goal #1 - Create a comprehensive master plan for public buildings that will serve the Town’s needs for the next ten years.

Goal #2 - Assess the current use and space needs of public facilities (Town and Schools).

Goal #3 - Establish a priority, schedule, and budget for replacement, consolidation, or improvement.

Goal #4 - Create a framework for the Town’s Capital Plan and debt service in accordance with the Debt Management Policy.
BUILDING LIST ~ 11 TOTAL BUILDINGS

Town & Public Safety
- FD Station #1 (HQ)
- FD Station #2
- FD Station #3
- FD Station #4
- Police Department
- Town Hall Annex
- Senior Center

Schools
- A. Ward Spaulding School
- McAlister Intermediate School
- Suffield Middle School
- Suffield High School
4 ~ Components of Master Plan

1. Existing Conditions Analysis
2. Programming Needs & Demographics
3. Development of Master Planning Options
4. Refine Options & Selection of Preferred Option
WORK COMPLETED TO DATE

1. Collected and reviewed data & documents (plans, reports, warranties, utility bills)

2. Conducted walkthroughs of all 11 buildings, both inside & out, with representation from facilities

3. Held a series of preliminary programming discussions to understand space needs and adjacency relationships.

Town & Public Safety

- Building & site walkthroughs ~ 2/23/2021
- Programming sessions ~ 3/2/2021

Schools

- Information Technology 4/8/2021
- District Leadership on 4/8/2021 to recap programmatic findings.
Areas Studies

1. **Site** (Pavement, traffic circulation, signs, parking, curbs, sidewalks)

2. **Architectural Exterior** (Building envelope, roofs, windows, doors, masonry, trim, downspouts)

3. **Architectural Interior** (flooring, ceiling, lighting, wall finishes, doors, frames)

4. **Code ~ Accessibility / Life Safety** (accessible entrances, lifts/ramps, floor clearance, sprinklers, fire alarm)

5. **Building Systems** (plumbing, heating, ventilation, air conditioning, lighting, electrical systems, technology, fire protection, fire alarms)
OUR PROCESS ~ PROGRAMMING

1. Interviews of principals, facilities, and district leadership

2. Questions Included…
   a. What spaces get the most use? The least? What is missing?
   b. What affects quality of education of a daily basis?
   c. What works well, what doesn’t?
   d. How can this facility better support the staff and/or students?

3. Benchmarking existing space to industry standards.
SELECT BUILDING EXAMPLES

OUR ANALYSIS
Address: 73 Mountain Road
Building Area/Site: 4,200 sf / 3.49 acres
Age/Construction: 1962(59)

1962 Original Construction
2020 Additional Paving Added

As presented at Tri-Board Meeting (6.14.2021)
Site
1. Recent expansion to paved site area
2. Differential settlement and cracking in existing concrete sidewalks
3. Apparatus Bay apron is in good condition

Architectural Exterior
1. Masonry restoration required at chimney
2. Minor rot repair and repainting at wood trim work, railings, and louvers
3. Minor downspout repairs/replacement of downspout clips

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<tr>
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<td>Age/Construction</td>
<td>1962(61)</td>
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FD STATION #1 ~ EXISTING CONDITIONS

Architectural Interior
1. Vinyl asbestos tile present in the building
2. Wood fiber tile ceilings present throughout

Code ~ Accessibility/Life Safety
1. No accessible entrances
2. Non-accessible plumbing fixtures
3. Step at transition between apparatus bay and other program areas

Building Systems
1. All MEP Systems are old and past their useful life.
2. Needs full replacement of all systems

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1. No Public Lobby, Entry or restrooms
2. Insufficient Training Room, currently use Substation #2 for Training needs
3. Insufficient Administrative offices
4. Insufficient bunk and living quarters
5. Fitness equipment is currently in basement
6. Insufficient Apparatus Space and lacking physical training elements
7. Insufficient bay storage, decontamination, SCBA per NFPA standards
8. Lack of hot/cold transition zones
9. No segregated turnout gear storage

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## Fire Station #1 ~ Benchmarking

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<tr>
<th>System</th>
<th>Equipment Life Expectancy</th>
<th>Equipment Age</th>
<th>Useful Life Percentage</th>
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<tbody>
<tr>
<td>Fire Protection System</td>
<td>40 Years</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Plumbing Water Heater</td>
<td>25 Years</td>
<td>10 Years</td>
<td>40%</td>
</tr>
<tr>
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<td>40 Years</td>
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</tr>
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<td>10 Years</td>
<td>33%</td>
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<td>25 Years</td>
<td>20 Years</td>
<td>80%</td>
</tr>
<tr>
<td>Mechanical Controls</td>
<td>20 Years</td>
<td>N/A</td>
<td></td>
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<tr>
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<td>50%</td>
</tr>
<tr>
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<td>30 Years</td>
<td>40 Years</td>
<td>133%</td>
</tr>
<tr>
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<td>40 Years</td>
<td>25 Years</td>
<td>63%</td>
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As presented at Tri-Board Meeting (6.14.2021)
SUFFIELD MIDDLE SCHOOL
INITIAL FINDINGS

As presented at Tri-Board Meeting (6.14.2021)
SUFFIELD MIDDLE SCHOOL ~ EXISTING CONDITIONS

1964 Original Construction

1965 Vo-Ag

1972 Additions & Alterations

2002 Conversion from High School to Middle School

Grade Level | 6-8
---|---
Building Area/Site | 128,489 sf / 32.4 acres (shared)
Age/Construction | 1964, 1965 (Vo-Ag), 1972, 2002

* Property Card has 286,843 sf

As presented at Tri-Board Meeting (6.14.2021)
SUFFIELD MIDDLE SCHOOL ~ EXISTING CONDITIONS

Site
1. Site conditions are in fair to poor condition ~ sidewalks, curbs, paving, drainage issues,
2. Site traffic flow, parking, security major concerns. Unsecured perimeter access & parking a security concern.
3. Fields are remote from building with limited outdoor opportunities for education. Areas of poor drainage on west/southwest side of site.

Architectural Exterior
1. Consistent roof leaks, roof replaced in phases by different contractors, various warranties, other envelope concerns ~ pointing of masonry, doors, etc.
2. Majority of building contain brick veneer in fair to good condition with areas of isolated spalling at base of wall/ exposed concrete foundation wall. Existing lintels are in fair to poor condition.

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Architectural Interior

1. Overall, well maintained, original building well built, but many areas poorly constructed.

2. Observed significant inefficiencies due to additions/renovations over time.

3. Noise/Acoustical concerns in 70's additions renovations due to “modular” wall construction.

4. Various additions eliminated natural daylight to educational space creating poor conditions for educating students.

5. Overall condition of finishes are generally in poor condition. However yearly improvements have been made to isolated areas, science labs, finishes in media center, tech education planned.

6. Majority of toilet cores are in poor condition due to age and use. In some instances, are not used/obsolete

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SUFFIELD MIDDLE SCHOOL ~ EXISTING CONDITIONS

Code ~ Accessibility/Life Safety

1. While 2002 upgrades addressed some code issues, some accessibility compliance issues remain related to floor & push/pull clearances and reach requirements.

2. Egress stairwells appear to meet current codes for both guard and handrail requirements.

Structural

1. Structural system of original building steel frame superstructure with brick/block infill. Traditional slab on grade with concrete infill metal desk slab for second floor.

2. No observed structural conditions with building.

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Building Systems

1. Many renovations and varying vintages of systems. Some newer, some original.

2. No central domestic Hot Water Plant. Lots of distributed water heaters. Leads to more maintenance and repairs.

3. Electrical systems has many vintages. While service is newer it back feeds original vintage systems.

4. Most major mechanical systems past or at the end of their useful life.

5. No natural ventilation/windows to many classrooms/educational spaces.

6. Overall MEP systems need a complete overhaul.

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Programming Discussions

1. Classrooms are decent size throughout school although many of the specialized classrooms are not sized nor do the function correctly (ex. World language)

2. Flow of the overall building a concern, tough to implement team model, share spaces, promote collaboration ~ important for this demographic.

3. Specialized teaching rooms & core facilities biggest concern – band, cafeteria acoustics & queuing, media center, family & consumer science outdated, limited space for tech ed., many poorly located

4. Lack of efficiency in the layout affects quality of education, time in class, and programs offered.

5. Currently circulate through classroom to attend special education classes, would like to centralize and share, save on time & reinvest into student

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**What's Existing**

- Linear flow
- Divided Admin area
- Media Center not the heart of the school
- Specials are too far away from each other and general classrooms
- Special Education is too spread out and doesn’t work

**What's Desired**

- Improved flow
- Consolidated Admin area
- Media Center surrounded by neighborhoods
- Neighborhoods surrounded by Specials
- Special Education accessible to all
**State of CT ~ Max Allowable Area Analysis**

1. Take highest student enrollment from 8-year projection (2027-28 High Projections from MMI/SLR Updated April 2021)

2. Multiply by max allowable as per state standard Space Specifications by grade level & total size of school

3. Review for applicable allowances (older building inefficiencies)

Max Allowable ~ 78,128 GSF vs. Existing ~ 128,489 GSF*

*BOE Approx. ~ 4,207 sf

Existing building is nearly 40% larger than the Maximum Allowable!
**Media Center**

CT State Standard ~ SF area is based upon 10% of student population x 35 sf per student

- **1,631 gsf**  
  CT State Standard

- **4,734 gsf**  
  Existing Media Center

**Cafeteria**

CT State Standard ~ SF area is based upon 3 lunch periods at 17.5 sf per student

- **2,718 gsf**  
  CT State Standard

- **3,318 gsf**  
  Existing Cafeteria
The importance of Efficiency in a Building

Yellow Outline
Area ~ 128,489 SF

Blue Area
Grade Level ~ 36,134 SF
Upper Level ~ 4,437 SF
+ Chases, wall thickness, etc (3.5%)...

Blue Area (41,991 SF) → 32.6%
Yellow Outline (128,489 SF)

Typical Efficiency Factor ~ 25-30%
Loss of Education Space is 3,340 – 9,765 sf
Understanding the impact of your Building

1. Clearly oversized for current population

2. Suffers from severe inefficiency and multiple change in use.

3. The benefits and challenges of maintaining and operating an oversized school should be considered:
   a. Associated operational costs
   b. Loss of the benefit of oversize core spaces (Example Gymnasium)
   c. Challenges when reimagining space for a different use (Special Education located in original “shop” classes – or - Housing IT in the original VO-AG Building)

As presented at Tri-Board Meeting (6.14.2021)
## SUFFIELD MIDDLE SCHOOL ~ BENCHMARKING

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As presented at Tri-Board Meeting (6.14.2021)
Understanding the impact of your Building

"The gift of time"

Distance of Classroom to Media Center and/or Specialized Education Area...
Approximately 630 feet!

Average speed of a 5-year-old ~ 50 ft every 20-25 seconds

About a 5 min. walk!
Or... 10 minutes away from the classroom with each trip.
SUMMARY OF FINDINGS
INITIAL ASSESSMENT

As presented at Tri-Board Meeting (6.14.2021)
Summary of Findings ~ Town Buildings

1. Generally, buildings have been well maintained.

2. Accessibility concerns found in nearly every building.

3. Identified programmatic needs primarily at Fire Headquarters and Police (limited expansion for patrol officers, training)

4. Older buildings are in need of renovations primarily due to age, condition, end of useful life considerations, in particular MEP systems (Fire Station HQ, Police Station, Annex)

5. Long term ~ improvements to living corridors (substations) and apparatus expansion (station No.4)

6. Propose preventative maintenance of targeted improvements to remaining buildings to extend useful life.
1. Most buildings have been well maintained, added to and/or modified over their lifespan. **No building has received comprehensive, like new, renovations.**

2. Reuse, modification, and past adaptations have resulted in *poor* adjacency relationships, internal flow, and efficiencies.

3. Majority of building systems (MEP) are at or near end of useful life.

4. Accessibility concerns found in nearly every building, uneven compliance throughout the buildings.

5. Classroom space generally align with state sf standards. However, several programmatic needs have been identified for core spaces (STEAM), specialized education, lack flexible/adaptable space for 21st century learning.

6. Consider enhancements to site definition, security, and traffic flow/safety.
Communications Strategy & Support

1. Informational Fliers
2. Website
3. Surveys
4. Building Tours
5. Public Forums in Fall
6. Board Outreach – Progress Updates
7. Maintain/Update Overall Schedule

Goal ~ To provide clarity, transparency, and engagement in the process.

(As presented at Tri-Board Meeting (6.14.2021))
PROPOSED MILESTONE SCHEDULE

ACTION ITEM

1. KICKOFF MEETING
2. EXISTING CONDITIONS WALKTHROUGHS
3. PROGRAMMING SESSIONS & NEEDS ASSESSMENT
4. REVIEW FINDINGS ~ CONDITIONS & NEEDS
5. PRIORITIZE ~ FINDINGS & RECOMMENDATIONS
6. DEVELOP PLANNING OPTIONS FOR COMMUNITY
7. REVIEW AND DISCUSS PLANNING OPTIONS
8. REFINE OPTIONS
9. SELECTION OF PREFERRED OPTION
10. FINALIZE CONCEPTS, SCOPE, SCHEDULE, AND COSTS

COMMUNITY INTERACTION
- Regular Facilities Master Plan Committee
- Existing Building Tours & Presentation
- Public Forum No.1 ~ Review Master Planning Options
- Public Forum No.2 ~ Presentation of Proposed Master Plan
- Town Meeting Presentation
- Other Meetings ~ Review meetings with OSCG&R

Open House Walkthrough JUNE 26th

As presented at Tri-Board Meeting (6.14.2021)
Proposed Next Steps

1. Finalize conditions & programmatic needs report.

2. Engage community, boards, & users in meaningful conversation prior to development of options.

3. Discuss Planning Strategies
   a) Capital Plan ~ Identify year preventative maintenance plan in conjunction with major capital projects, sequence strategically.
   b) Explore both building an operational efficiencies.
   c) Consider consolidation and/or department/educational synergies in the planning options.
   d) Leverage existing assets, discard obsolete, and maximize reimbursement As presented at Tri-Board Meeting (6.14.2021)