The New Danville Police Station

Project Summary

Introduction

- The Town of Danville has indicated the need for a new Police Station based on the currently inadequate facilities
- The following information was developed to help provide clarity and insight regarding the overall planning and design process as well as background of this potential project in an effort to better inform the public

Background

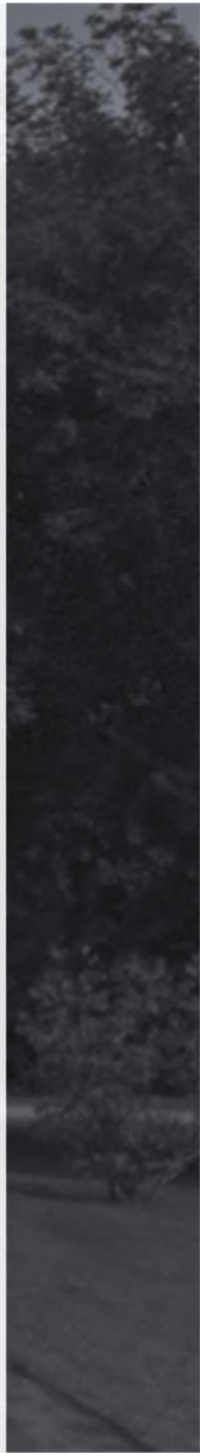
Current Accommodations

- The Danville Police Department currently exists in the rear of the Kimball Safety Complex located at 206 Main Street.
- The accommodations consist of four small rooms totaling approximately 700sf, the balance of the facility houses the Town's Fire Department.
- When the Kimball Safety Complex was constructed in 1988, a seven-year plan was presented to construct a new Police facility, separate from the Fire Department, with the intent to provide only temporary residence to the Police Department until their new facility was constructed.
- Over 30 years later, the Police Department still resides within the Kimball Safety Complex.
- The Police Department can no longer effectively or safely operate out of the current facility. These accommodations are in violation of state mandates and have proven to be a safety concern for the Officers. These inadequacies also present a danger to the Fire Department, town residents, and innocent bystanders.

Background (*Cont.*)

Current & Future Growth

- The police department is currently funded for (6) full-time officers (including a full-time Chief) and (2) part-time officers. At the present time, the PD is down (1) full-time officer but they are in the process of testing to fill that position.
- Per the *Office of Strategic Initiatives* (2018 population estimates), there shows a recent town population of 4,479. It is anticipated that 2020 statistics are slightly higher.
- Danville participated in a project with the Rockingham Planning Commission (RPC) to develop a buildout analysis for the Town. While different scenarios provided different results, the overall result was that Danville's population could exceed 7,500 people with potential as high as 9,000 when fully developed.
- The Police Department uses several factors to determine the number of officers needed per 1,000 residents. (Crime trends, neighboring communities, traffic, availability of mutual aid assistance, etc.) Generally, the recommended numbers run anywhere from 1.5 officers for every 1,000 residents, to as high as 3 officers for every 1,000 residents. It is the Police Chief's opinion that Danville would at full growth employ (10-12) full-time officers, (2) full-time support staff, and (2-3) full-time dispatchers. As the population in cities and towns grow, part-time positions are typically eliminated, and would likely hold true for Danville as well.



Background (*Cont.*)

- In the fall of 2019, Charters Brothers Construction was hired as a Construction Manager to aid in the design selection process and work with the selected design team to help develop the Schematic Design and Budget for the project
  - Upon being selected, the Construction Manager (CM) helped solicit proposals from multiple qualified design firms and presented the results to the Town for review and selection
  - The Town made a combined quality and cost-based selection of *Stone River Architects* to develop the building's Architectural, Structural, and MEP design, and *SEC & Associates* to develop the Civil Design documents
  - With the town's best interest at the forefront, it was decided to move forward with schematic design and budgeting. If and when the project is approved by town vote, the design team and Construction Manager will further develop the documents and budget through design development and ultimately produce construction documents at which point the CM will provide a Guaranteed Maximum Price (GMP) that this project would be constructed within
  - It will be the Construction Manager and Design Team's obligation to ensure the final design documents and GMP are within the parameters of the original Budget and meet the needs of the Police Department
  - The Construction Manager and Design Team will be required to present Value Engineering ideas and propose pricing alternatives to allow the Town to make informed decisions on what products are used on this project and the associated costs implications

Project Objective

- Design & Budget a new Police facility for the Town of Danville;
  - Facility to meet the basic needs of the Department as outlined under the Town's *New Police Facility Project* webpage found here: https://www.townofdanville.org/police-department/pages/new-police-facility-project
  - Consider both current and future Town growth requirements within overall design
  - Design should be cost effective, energy efficient, and provide low maintenance requirements
  - Verify the proposed Town-owned project site location of 67 Hersey Road will support this building at reasonable site development costs that don't outweigh purchasing any alternative potential properties

Schematic Design

Proposed Site Location

- Prior to engaging with the Design Team and Construction Manager, members of the Town and Police Department toured multiple potential site locations to help plan and determine the best location for the new facility
  - It was determined that a Town-Owned piece of property located at 67 Hersey Road was well suited from both a financial and proximity standpoint to support the new facility
  - Being centrally located, it's positioned to be an ideal location to service the Town and respond to emergencies in a timely fashion
  - There will not be a budget impact from a land acquisition standpoint since this property was donated by a local developer
  - The lot of land is conveniently located adjacent to the Town's DPW station

Schematic Design (*Cont.)*

Developing the Program

- The Design Team & CM met with the Town and Police Department on multiple occasions to become further educated on the Town's needs and desires in a new facility
- To better understand some of the necessities and potential pitfalls in a Police Facility constructed in this size town and demographic, the Team toured local neighboring facilities
- A program was developed based upon these interactions to address the "needs" as outlined by the Police Department and to avoid any of the pitfalls learned throughout the process
- Needs were addressed in an order of priority while considering overall project budget and the future growth of the community. Most but not all needs were able to be met; those that are highlighted have been included.

Schematic Design (*Cont.*) – Police Department *Needs*

CURRENT POLICE FACILITY SHORTCOMINGS & NEEDS

1. Garage Bays
Current: There is currently one bay accessible to the Police Department located at the rear of the Kimball Safety Complex. This leads to a common area shared by the Fire Department. It is projected as the Fire Department expands, we will lose our parking spot in the bay and all police vehicles will have to be stored outdoors.
Needed: It is anticipated that three bays are needed for: 1) Forensic Seizures (vehicles used in crimes), 2) Storage and maintenance of our OHRV, motorcycle and cruiser maintenance, 3) Sally port for unloading arrests in a secure area for both prisoner and officer safety.

2. Impound Yard
Current: There is no impound yard
Needed: An impound yard is needed to: 1) hold vehicles that have been used in crimes, including fatal and serious personal injury accidents that require processing, 2) hold other impounded property, including bicycles, etc.

3. Training Room/Conference Room
Current: There is no Training Room or Conference Room

Needed: An area is needed for departmental trainings and department meetings. Currently, the department uses the booking area for meetings. This area does not allow seating for everyone and is not conducive to meetings or training sessions

4. Booking Room/Holding Cells
Current: The current prisoner booking room is not a secure room. It gives unruly and combative prisoners access to the administrative areas and potentially to the rest of the PD. The room is not physically conducive to officer safety and it does not flow with proper and correct prisoner handling methods. There are no holding cells to detain violent offenders or prisoners for short-term periods. Also, by law a separate area to hold juveniles is needed since sight and sound separation is required.
Needed: A secure booking area is needed to process detainees. At least two adult cells and one separate holding cell for juveniles is needed.

5. Foyer/Lobby
Current: There current foyer/lobby is very small and there is no place to sit. If more than one visitor comes in at the same time, they are bumping into each other. There are also not enough rooms for forms and literature.
Needed: A larger lobby area is needed so that multiple visitors are able to sit comfortably. The lobby should also provide an area for visitors to fill out forms.

6. Breakroom/Kitchen
Current: There is no kitchen and no separate area for employees to eat meals. The refrigerator and microwave are in the booking area, which makes the area cramped.
Needed: A separate room is needed with a sink and a table and chairs for employees to eat meals.

7. Restrooms
Current: There is one generic restroom. This one bathroom is used by police department members, fire department members, civilians, and arrestees.
Needed: Separate men and women restrooms.

8. Parking Lot
Current: The current parking lot is not well defined. When the Town Hall is open for business and meetings, the parking lot can become cluttered with vehicles, making it difficult for traffic to enter and exit. Parking is cramped and potentially hazardous.
Needed: A larger area is needed for employee and visitor parking. This area should also be well lit at night and provide a secure area for employee parking.

9. Storage Areas
Current: There is one storage closet in the building. This closet is approximately 8' x 4' in diameter and is full. Because this is the only storage closet, office supplies and miscellaneous equipment are stored throughout the building in random areas.
Needed: Additional space is needed to organize and store uniforms, equipment, and office and computer supplies.

10. Officers' Report Room
Current: The current officers' room is 13' x 8' and is extremely cramped. It is the administrative area for 4 full-time and 1 part-time officer. It also houses all the department forms, employee bulletin boards, roll call information, and is the main area for information exchange and interviews.
Needed: Additional office space is needed to provide workstations for officers to write reports and conduct private interviews.

11. Records
Current: Department records are stored in file cabinets in the front office area, as well as in outside storage. Archived records, which must be kept in perpetuity by New Hampshire statues, are not easily accessed.
Needed: A clean and dry storage area that is easily accessible for proper record retention.

12. Locker Room
Current: There is no locker room.
Needed: Separate male and female locker rooms are needed for our officers.

13. Interview Room
Currently: There is no interview room
Needed: An Interview Room is needed for private conversations ranging from domestic violence issues, assaults, criminal investigations, etc.

14. Supervisors Office
Current: There is no Supervisors Office
Needed: A Supervisors Office is needed so that supervisors can conduct performance appraisals and have personal conversations with their subordinates.

15. Detectives Office
Current: There is no Detectives Office
Needed A Detectives Office is needed to provide a private room to handle confidential and case sensitive investigations.

16. Crime Scene Evidence Processing Room
Current: There is a 9' x 4' Evidence Storage Room only, which is filled.
Needed: A Crime Scene Evidence Processing Room is needed to process prints, casting, photographs, etc.

17. Exercise/Training Area
Current: There is no Exercise/Training area
Needed: The State of New Hampshire has an ongoing requirement for police officers to pass a physical fitness test. An exercise and physical training room would help officers to stay in compliance with the state.

= Items Included in Budget

Town of Danville NEW HAMPSHIRE

Schematic Design (*Cont.*)

Confirming Feasibility of the Proposed Site Location

- To confirm the proposed site is suitable to build on, the Town engaged a local Engineering Consultant to develop a Geotechnical Report, analyze the existing soil conditions, and make recommendations on how to construct the new facility
    - A geotechnical investigation was conducted by completing six test borings within the proposed building footprint
    - Based upon the results of the test borings, the report concluded that the subsurface conditions are suitable for supporting the proposed building atop shallow spread footings with a concrete slab-on – grade
        - The report went on to further caution that ledge and bedrock are present subsurface conditions however, they were found at depths that would likely have minimal to no impact on the project
- Based on the results of the Geotechnical Report, the team felt the risks and potential costs associated with the possibility of ledge, large rock, or unsuitable material being present would be far less than the added cost burden of purchasing a new piece of property
    - **The Budget was designed to engineer out any risk associated with cost overruns to the Town by assessing potential ledge and rock removal costs and including contingencies to cover these costs if they were to be encountered*

Schematic Design (*Cont.*)

Determining the appropriate Building Type and Structure

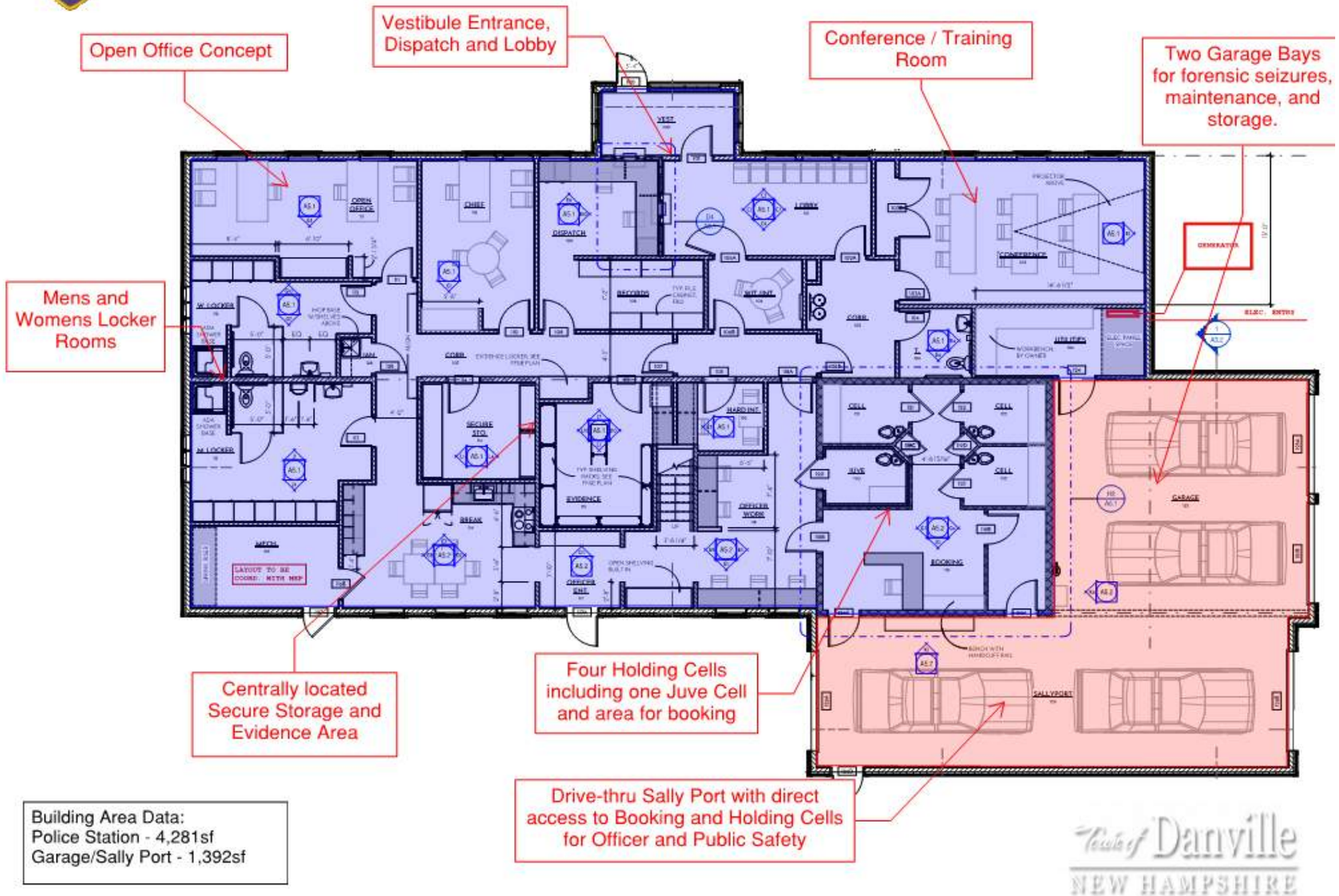
- Based upon current building code requirements, it was quickly concluded that a typical single-story, slab-on-grade, wood framed with a truss roof system, was the most economical building structure for this site location and type
- To help come to this conclusions, it was determined that if a multi-story building were constructed it would require an Elevator which far outweighed any potential cost savings of building “up” rather than “out”
- In addition, with the Team’s combined experience of designing and constructing similar building types, the Design Team and Construction Manager unanimously agreed to and recommended this approach as being the most cost effective while meeting local code and energy requirements

Design (*Cont.*)

Basic Design Inclusions

- Earthwork, septic, drainage structures, electrical & water services, site paving & landscaping
- Slab-on-Grade Construction with frost walls
- Wood framed construction, walk-up attic space designed into attic truss system
- Masonry CMU walls at holding cells and other locations
- Bulletproof provisions
- Millwork, cabinets & countertops
- Combination of loose cellulose & spray foam insulation for a tight envelope meeting energy codes
- Cementitious Siding and Asphalt Roofing
- Aluminum Clad windows and storefronts
- Resinous and resilient floor systems
- Soundproof systems where required
- Police Department specialty furnishings, fixtures & equipment
- Fire Suppression system with Pump and Cistern
- Plumbing systems including penal fixtures
- Energy efficient HVAC systems
- Electrical, Backup Generator, Fire Alarm, Intercom and Security Systems

Prospective Floor Plan for the New Danville Police Station



Schematic Design (*Cont.*)

- The design team used every effort to maximize space while incorporating many of the Police Departments “needs” into the overall plan and gave a conservative effort not to overdesign

For example;

  - Providing (1) private office for the Chief and an “open office” concept for the officers to maximize the amount of workspace while not consuming valuable space to make additional individual offices
  - Meet the need requirement of a locker-room but only include (1) shower and (1) toilet stall in each
  - Provide adequate storage requirements accounting for record, secure, and evidence storage areas while providing a walk-up attic area meeting the needs for mechanical space but also potential future storage requirements
  - Designing (3) adult and (1) juvenile holding cells to meet the needs of the PD without being excessive
  - Zero “dead” or “wasted” space

- To accomplish this, the “building” square footage is 4,281sf and the garage and sally port are an additional 1,392sf
  - The team felt that the building size was appropriate and proportionate to the current and future growth requirements
  - To reduce the size of the building in any way, the prioritized “needs” of the Police Department would likely have to be eliminated to provide a reduction in space and thus the team did not feel that removing any of these prioritized “needs” were in the best interest of the Police Department or Town

The Delivery Method

- The proposed delivery method for this project is *Construction Management* rather than the more traditional *General Contracting* method
  - With Construction Management the process is completely “open book” as opposed to a stipulated sum, “hard bid” General Contracting method
  - The Construction Manager delivers a “Guaranteed Maximum Price” that the project can be completed within based upon a final review and estimate of the Construction Documents prepared by the Design Team
  - The project will be completed <u>at cost</u> and <u>100% of the savings are returned to the owner</u> (Town) as opposed to the General Contractor reaping the benefits of any potential buyout or cost savings
  - A team friendly approach that involves the Owner, Design Team, and CM from the onset to help guide the process and ensure the project stays within budget throughout the various stages of the Pre-Construction and Construction process
    - As opposed to General Contracting where the Owner hires a design team to recommend a budget, then produce a set of bid documents and in turn, bid out the project to qualified GC’s with the risk that the project could come in over the recommended budget
  - Since it’s a conflict of interest, the CM does not self-perform any of the physical on-site trade work but rather manages the project with onsite personnel and an office support staff
    - To ensure project success, the CM on occasions will supplement manpower when needed and other options are exhausted
- Throughout the various stages of Pre-Construction and Design, the CM continues to prepare budgets all the while adding value by suggesting and estimating alternative construction methods and providing value engineering throughout
- To ensure competitiveness and best value, the CM solicits proposals from multiple qualified suppliers and subcontractors across each division of work; typically no less than three and up five or more proposals are requested and received
- The CM compiles scopes of work to ensure a complete bid package, then performs a rigorous qualifying process of the proposals received and develops bid tabulations of each division of work for the entire team to make an informed decision and, as a team, select the subcontractors and suppliers for the project
- Throughout the construction process, if unexpected issues arise, they are resolved in a collaborative effort to ensure the project and Owner’s best interest are at the forefront
- Contingencies and allowances are built into the budget to ensure the project “Guaranteed Maximum Price” is protected and there are no cost overruns
- The CM acts as the town’s fiduciary at all times and helps guide the project to a team oriented, non-adversarial approach

The Budget

- Background
  - The Budget recommended to the Town was based upon “Schematic” level design documents
    - Schematic design documents are developed by the design team to provide enough information about how the project is constructed and the various systems that will be incorporated however, they do not provide the level of detail that’s found in the next phases of design being, Design Development, and Construction Documents. The reason for this is to ensure the Owner (Town) does not invest in a complete set of Construction Documents until the project budget and funding is approved and in place
    - Upon approval of the budget, the design team, Town, and CM will work together to further develop the design and ensure the budget is in-line throughout the process
      - The CM will typically provide another budget based upon “design documents” and then perform a final review and estimate of the “construction documents” to develop a “Guaranteed Maximum Price” for the project to be completed within
  - To ensure the recommended budget is accurate, the CM requested at least (1) quote from qualified subcontractors and suppliers every division of work for the entire project, as the design continues to be developed throughout the pre-construction process additional quotes will be solicited to further refine the budget
  - In an effort to engineer risk out of the proposed budget, a “Design, Estimating, & Cost Escalation Contingency” has been included and in theory, as the design is developed and greater contribution of subcontractor and vendor quotes are solicited, the contingency becomes reassessed and adjusted based upon the amount of risk the project has
  - The Construction Manager was charged with not only developing the “Construction Budget” but also the “all-in” costs including soft costs and Owner responsible items
    - i.e., the budget is an all-inclusive amount accounting for all project costs including Owner furnishings, utility expenses, third party testing services, etc.

The Budget (*Cont.*)

The recommended “all-in” budget for this project is $2,600,990.

The project budget encompasses; *Architectural, Structural, MEP, & Civil Design Services, CM Pre-construction Services, Construction Administration Services, General Conditions, Field Engineering, Earthwork, Drainage Systems/Structures, Septic Systems, Utility Services, Retaining Walls, Pavements, Landscaping, Disposal and Clean-up, Concrete Foundations and Flatwork, Masonry, Rough Framing, Siding, Interior Finish Carpentry and Millwork, Temporary Protection, Building Insulation, Asphalt Roofing, Fire Stopping, Sealants, Doors-Frames & Hardware, Overhead Doors, Aluminum Clad Windows and Entrances, Drywall finishes, Acoustical Ceilings, Resilient and Resinous Flooring, Painting, Signage, Toilet Partitions and Bathroom Specialties, Fire Extinguishers, Flag Pole, Louvers, Appliances, Window Treatments, FF&E, Lockers and Specialty Police Furnishings, Fire Suppression Systems, Plumbing, HVAC, Electrical, Site Lighting, Generator, Fire Alarm, Access Control and Intercom, Security and Camera System, Insurances, Bonds, Contingencies, Utility Fees Owner FF&E & Administrative Costs*

Balance of costs that will be required for the Design Team and CM to complete the Design, Preconstruction Services, and Construction Administration (*CA by Design Team*)

All site development costs excluding ledge, unforeseen conditions and unsuitable materials. If encountered, a draw-down of the Contingency would be required.

"Building Costs" are $298.88/SF for this facility (excluding CM contingency, site development and Owner Soft Costs)

Construction Contingency helps engineer risk out of the overall budget and is used to account for any cost increases that could be encountered as the design documents are developed

Recommended Owner Contingency to account for any Change Orders that are a result of unforeseen conditions or Owner Requests.

DESIGN & CONSTRUCTION BUDGET FOR:
THE TOWN OF DANVILLE - NEW POLICE STATION
HERSEY ROAD, DANVILLE NH
DATED: January 13, 2020

Design Development, Preconstruction Services, & Construction Administration		
Schematic Design & Programming		*Complete*
Budget Development Based On Schematic Design Documents		*Complete*
A&E Design Development & Construction Documents		
Civil Design & Engineering		
Preconstruction Services *(Estimate DD's & Develop Guaranteed Maximum Price)*		
	$	**113,474.98**
Site Development		
Land Acquisition		*Town Owned - No Cost*
Site Survey, Site Preparation, Excavation & Backfill		
Septic		
Drainage Systems and Structures		
Water / Sprinkler Services		
Paving		
Retaining Walls		
Landscaping		
	$	**355,425.00**
General Construction		
General Conditions		
Disposal Fees, General Cleanup & Final Clean		
Concrete		
Masonry		
Misc. Metals		
Wood, Plastic, Composites		
Thermal & Moisture Protection		
Openings		
Finishes		
Specialties		
Furnishings		
Fire Protection		
Plumbing		
HVAC		
Electrical, Fire Alarm, Communications, Security		
Cost of Construction Insurances, Bonds, Permits, Fee		
	$	**1,695,546.38**
Utility Services*		
Utility Company Fees *(New 3-Phase Power & Secondaries to Bldg.)*		
Electrical Power Usage Fees		
	$	**42,488.00**
FF&E (Furniture, Fixtures & Equipment)*		
Furnishings *(Chairs, tables, desks, projector screens, computers, server, etc.)*		
Equipment *(Appliances)*		
	$	**51,381.00**
Administrative Costs*		
Geotechnical Report, Test Pits & Borings		*Complete*
Testing Services		
	$	**8,850.00**
Contingencies		
Construction Contingency - Design/Estimating/Escalation/Construction	$	166,912.50
Owner Contingency *(Recommended)**	$	166,912.50
	$	**333,825.00**
BUDGET TOTAL		
	$	**2,600,990.36**

** Denotes budgets for items Town will be directly responsible for*

Construction Cost Trends

- A cost index is an indicator of the average cost movement over time. The data presented in the Graph on the following page and the adjacent chart is from *RSMeans Data* and represents construction cost trends from 2000 – 2020
- Within the sample 20-year period, there were only (2) occasions when construction costs didn't increase, one of them being negligible
  - The only "significant" decrease occurred from 2009 – 2010 where there was decrease of 1% in the Cost Index

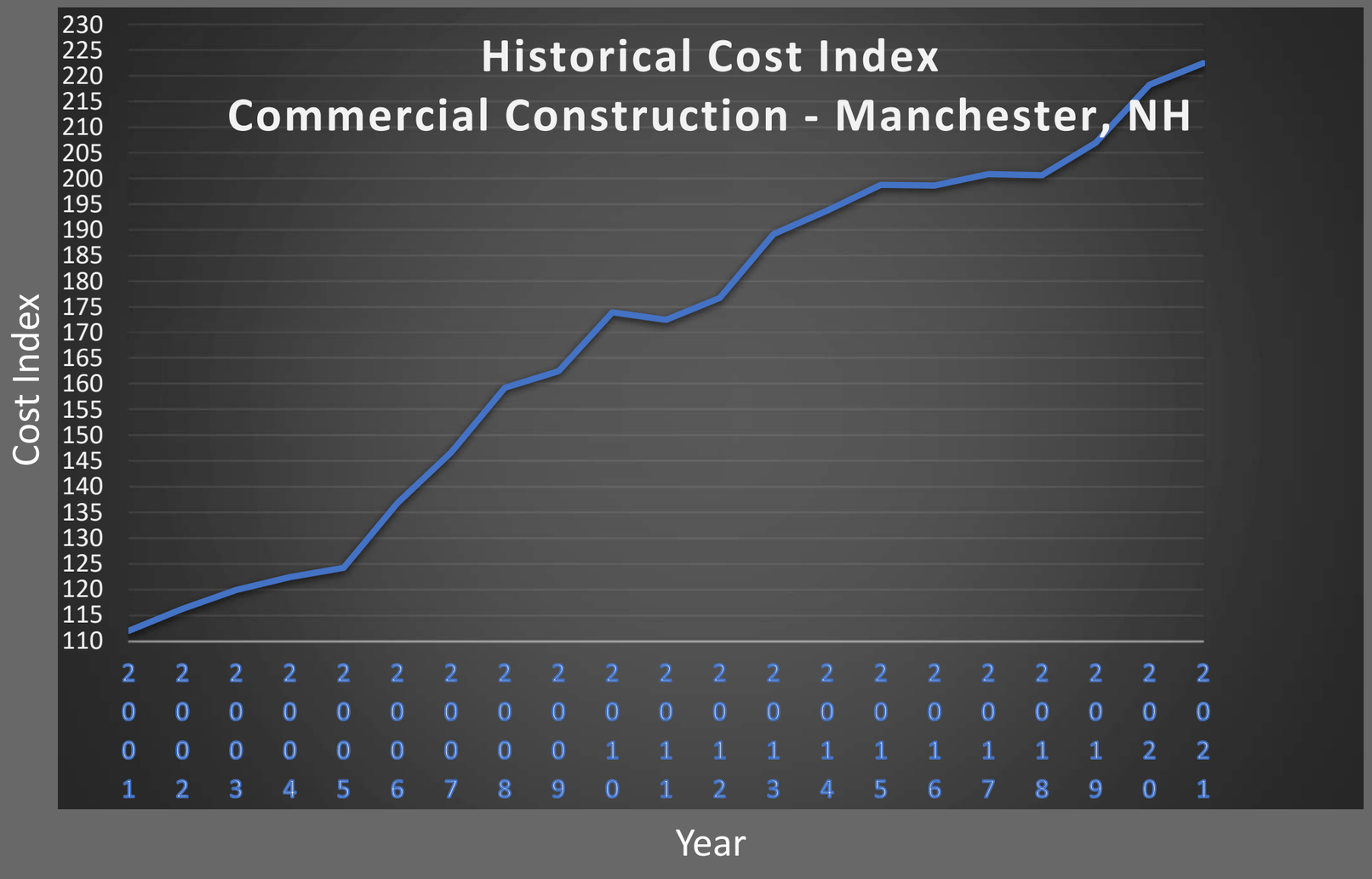
RSMeans
Cost Index Data

Year	New Hampshire	
	Man-chester	Nashua
Jan 2020	222.5E	221.8E
2019	218.3	217.6
2018	207.0	206.2
2017	200.7	200.0
2016	200.9	200.5
2015	198.7	197.8
2014	198.8	197.3
2013	193.8	192.5
2012	189.2	188.3
2011	176.8	176.1
2010	172.5	172.0
2009	174.0	173.5
2008	162.5	161.9
2007	159.3	158.7
2006	146.7	146.4
2005	136.8	136.5
2004	124.2	123.9
2003	122.4	122.2
2002	119.9	119.6
2001	116.2	116.2
2000	111.9	111.9

Negligible cost decrease

1% Decrease from 2009 - 2010

Except for (2) instances in sample period, Construction Costs increase every year



Commercial Construction Cost Index 2000-2020

Why Build Now?

- Commercial construction costs almost always go up over time
- The building was designed at the minimum square footage required to meet the needs of the Danville Police Department; any reduction in building size will require removing a key component to this building
- If the building were to be re-designed as a result of the vote not passing, it would add design and budgeting costs while being subject to natural construction cost increase
- While construction costs are high, future/redesign costs are likely to rise, however interest rates are at an all time low and are also likely to increase if the project were to be delayed by 1+ years