

Branford Police Department

REMEDIATION PROPOSAL



Overview

- Introduction
- Quick Facts
- Path to Proposal
- Choice of Direction
- Steps Taken
- Photo Walkthrough – existing conditions
- Conclusion
- Q&A

Introduction

- Chief Jonathan Mulhern / Deputy Chief John Alves
- Brian Humes, AIA, LEED AP
 - Jacunski Humes Architects, LLC
 - Produced a Feasibility Study (space needs assessment, site plan analysis, schematic design) – focused on addressing the major operational needs of the department
 - Extensive experience in the area of Public Safety Facility Design
 - Jacunski Humes Architects, LLC currently has more active Public Safety Projects than any other architectural firm within New England.
 - Planned and design of over ninety (90) municipal police / fire / EMS facilities
 - Established a national reputation in the field of Public Safety Facility Planning and Design

Downes Construction Company

- Chosen by the Public Building Commission on Nov. 18th, 2022
- Extensive experience in construction of public safety buildings
- Contract for:
 - Preconstruction services of a Construction Manager
 - Professional estimating services by the Construction Manager
 - Provide a detailed design development cost estimate
 - Constructability review of the documents
 - Development of an anticipated schedule

Police Building : Quick Facts

- 1995 – Police department – new construction/ occupancy – 27yrs ago
- Approx. 25,000 - Square foot building – Police and town's E-911 center
- Presently - 52 Officers, 10 telecommunicators, 1 police social worker, 4 part time Officers, 2 I.T., 1 Crime Analyst, 4 Records Clerks.
- 2008 – Lead remediation, HVAC and range upgrades to the range located on Harrison Ave - (14 YRS)
- 2013 – Communication upgrades to radio system
- 2017 – 10 Roof top gas fired units and one dedicated outdoor air unit replaced – HVAC issues to discuss

Background – Path to Proposal

- Historically, very high level of moisture within the building especially on lower level
- Short term attempts/ solutions to rectify moisture in lower level, to include running fans, and portable de-humidifiers.
- High levels of humidity resulted in lack of adhesion of flooring tiles to slab, bubbles, blisters and crack on areas that have epoxy coated floors, rust to lockers, rust on equipment stored inside (guns, cuffs, batons); moisture can compromise the integrity of the Officer's bullet proof vests; mold discovered underneath flooring; dirty duct work throughout building

• Background – Path to Proposal

2019- Slab Moisture Investigation performed by Hoffman Architects

- Report produced May 2020
- Specific tests related to concrete slab moisture were completed at selected locations throughout the lower level
- Findings – Moisture vapor transmission rate (MVER) between 8.6-13.7 pounds per 1000 square feet – As a comparison, sheet and tile manufactures don't allow their materials to be placed when MVER levels exceed 2-3 pounds per 1000 square feet.
- Typically, a vapor barrier membrane is placed on top of a compacted sub-base prior to the pouring of a concrete slab – Hoffman Architects professional opinion that the slab was cast without an effective vapor barrier – primary reason for the excessive water vapor transmission through the slab
- The fix – “negative side waterproofing” – all flooring is removed – shot blasted – and specific coating products applied to resist specific moisture transmission rates

Lower Level Floors



Lower Level Floors – continued

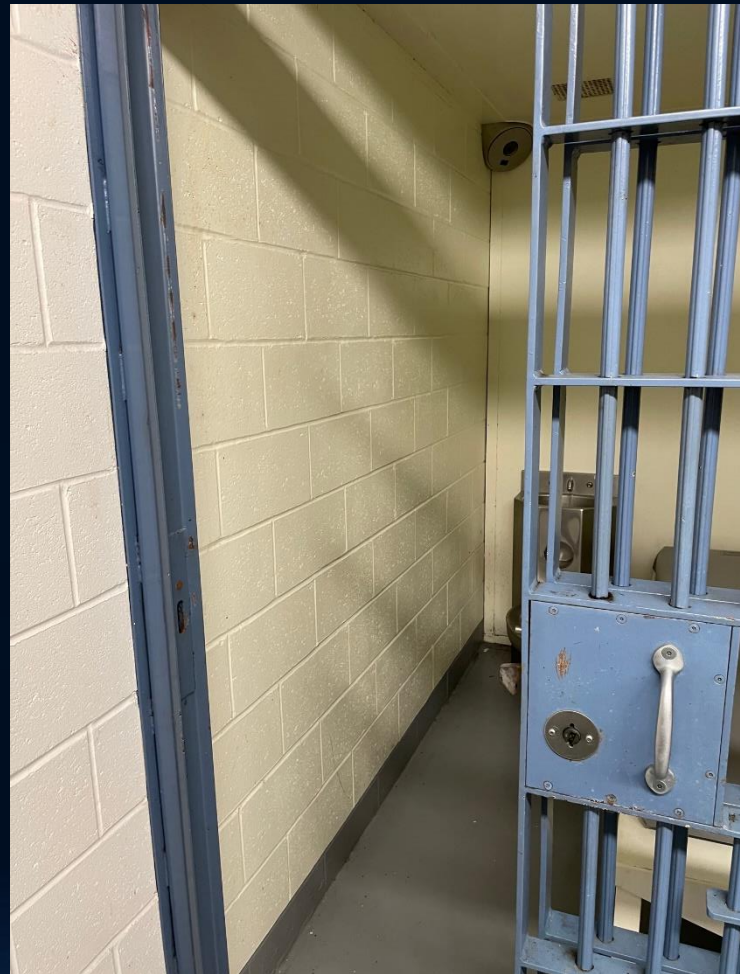


Background – Path to Proposal

Cell Blocks – Exposure

- Current cell blocks original to the Harrison Ave Police Department
- Old style bars – illegal in some states – need solid doors
- Susceptible to hanging – routinely have arrestees placing clothing around neck/bars
- Injuries sustained from banging head on bars
- Cells lack adequate ventilation / fresh air return
- No fire suppression
- Choke/ hanging points inside cell
- Entry/ egress – too small for extraction purposes
- 14 cells - Too many cells – wasted space
- Fixtures in cells are original to building and at end of useful life expectancy

Cell Block



“Bio- Hazard” Cell



- 2 Bio-hazard cells
- Solid door – now utilized as our main cell block
- Wider entry
- Lacks adequate ventilation
- Lacks fire suppression
- Fixtures at end of useful life
- Older design of fixtures allows hanging/choke points

Background – Path to Proposal

Female Locker Room – Space needs

- 1995- Two female Officers – 12 lockers
- 2022- have 10 female officers – represents 20% of Officers
- Need to increase space
- Running out of space/ lockers



HVAC

- HVAC Issues – difficult to control temperature throughout the building – too hot in the summer, too cold in the winter – space heaters throughout
- Been minor changes to the floor plan over the years which have affected the balance of the HVAC
- 10-Gas fired rooftop units currently service the building – RTUs are single zone, constant volume systems – comfort issues exist because temp control is based on the occupancy/ settings in the room that contains the thermostat (one thermostat controls multiple rooms)
- No dehumidification capabilities on current system
- Some clearance issues were identified as out of code (exhaust fans to dedicated outdoor air intake for cell block)

Physical fitness – space needs

- Mental health and wellness is a major focus and consideration of police leadership around the nation.
- The ability to provide an adequate space for physical fitness is a must in police agencies and is tied directly to the health and safety of officers.
- The current space is heavily used, inadequate to support its usage and must be expanded to meet the needs of the department.
- Quality of air concerns and mold growth has been experienced due to high vapor levels on the lower floor.

Report Writing –space needs

- Major increase in modern day policing in terms of reporting
- Small room with two stations serves the entire Patrol Division – 65% of Agency
- Often both stations are occupied



Evidence processing – space needs

- Area serves entire patrol division and detectives.
- Better utilization/ allocation of space in our proposal



Main Floor

- Windows – original to building



Dispatch – space needs

- 24/7/365 – operation
- Dispatchers are confined to the space during their shift
- Increase in technologies to monitor requiring more space
- Comforts needed – locker space/food storage
- Direct access to restrooms



Records – space needs

- Too much space currently allocated to records
- One full time clerk
- 3 part time staff
- Records increasingly becoming digital
- Officers type reports/ complete most records



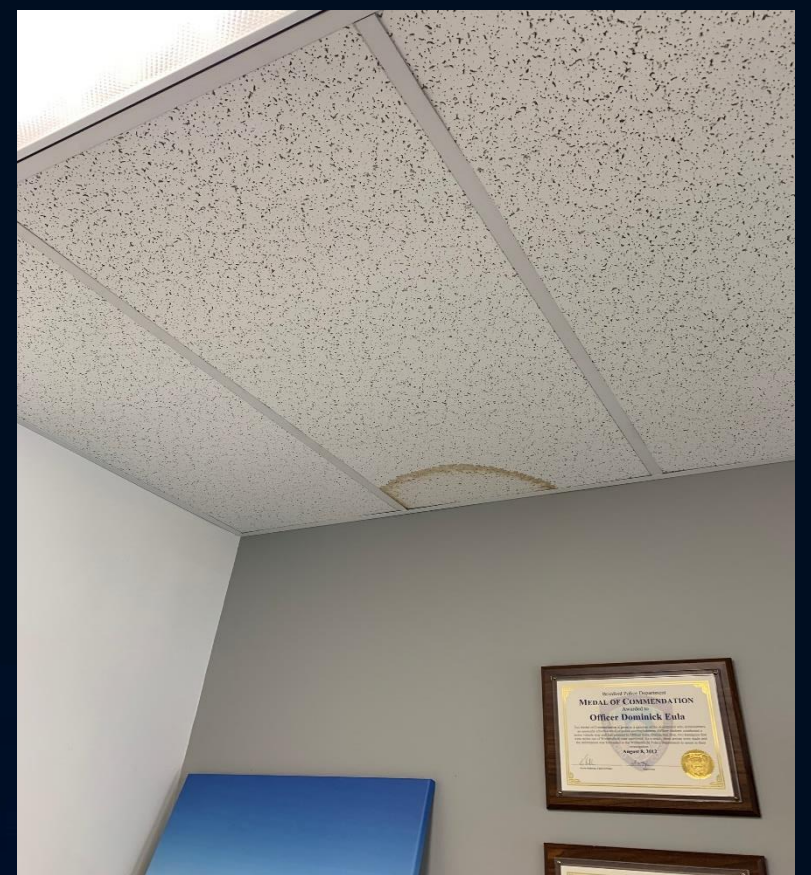
Offices - Main Floor – space needs

- Re-allocation (re-organization) of square footage is needed
 - Over the years, closets have been built, offices/walls added – HVAC balance
 - Growth -Police social worker = closet / 2 employees from I.T/ Crime Analyst



Exterior

- Roof – water leaks observed throughout the building



Exterior

- Public Parking – currently limited three spaces / one handicapped – forces public to park in back lot and walk up the side hill
- Lack of security (stalking, 1st amendment audits, damage to private vehicles, mental health issues)
- Lack of police parking
- Risk mitigation

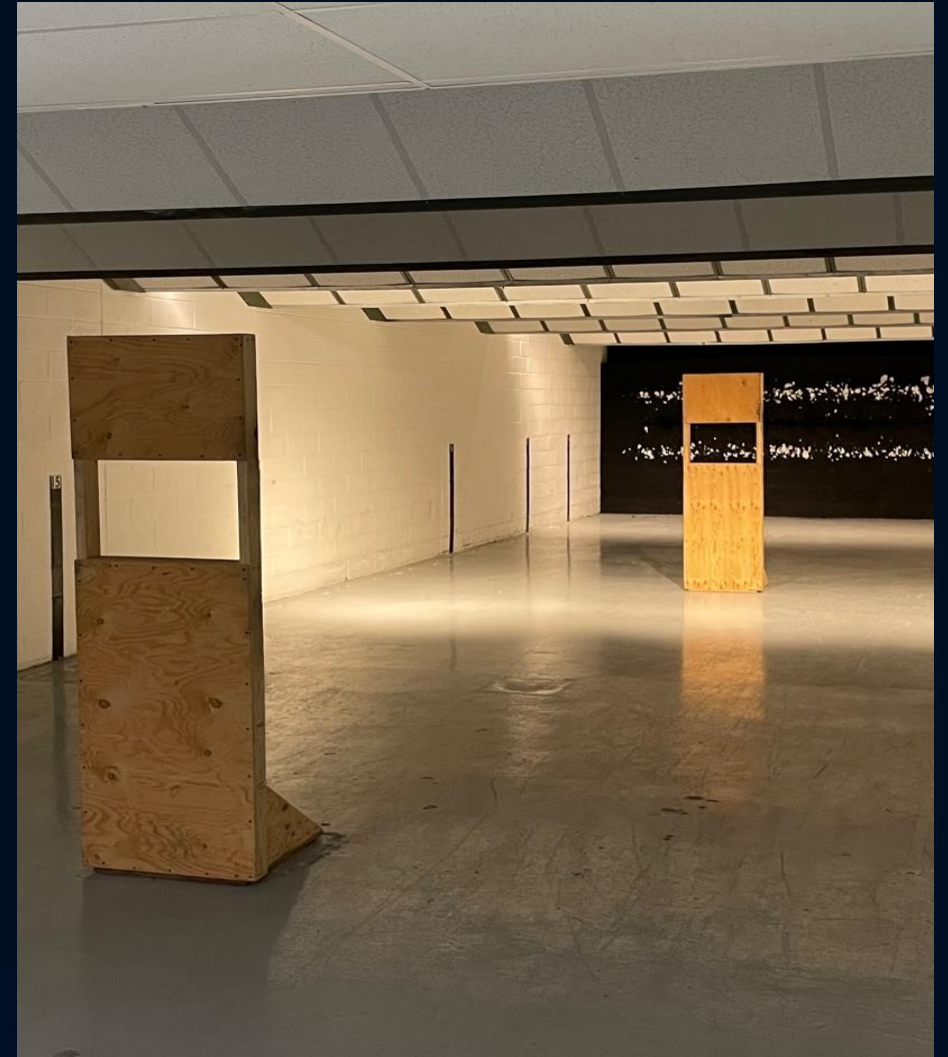


Rear Parking Lot



Firearms Range

- Located at garage of building – 45 Harrison Ave
- Extensive use – Officers mandated annual recertification training
- Range time is becoming more expensive/ less available to find off sight
- In-door facility can be used regardless of weather
- Unlimited access in the event an officer needs remedial training
- Current equipment – 5-8 years will reach its useful life expectancy



Energy Related Goals

- Project will be a major update and re-organization of the building as it approaches its 30th anniversary.
- Working with the Clean Energy Committee – scope of the project will include energy related enhancements
- Comply with the Branford Net Zero/ Zero carbon energy policy
 - Energy efficiency improvements
 - Electrification – solar power options
 - Take advantage of tax credits
 - Research economically sound energy-related investments that can be considered for inclusion in the project in the interest of financial and social responsibility

General

- Focus of the project is based on the operational needs of department
- Design incorporates a better use of existing space
- Project will be phased to limit disruption of a 24/7/365 operation one time
- This brief presentation just touches the surface of the scope of the project and the issues which led us to this proposal.
- Proposal is long term solution to update the building and prepare for another 30 years of service
- Renovate to meet goals of Branford's Clean Energy Plan