Facility Condition Assessment

Granby Memorial Middle School FCA

321 Salmon Brook Street

Granby, Grand County, CT

May 12, 2025 | Project Number: FR256003

Prepared for:

Granby Public Schools 15-B North Granby Road Granby, CT





FacilitiesEnvironmentalGeotechnical

■ Materials





May 12, 2025 Granby Public Schools 15-B North Granby Road Granby, CT

Attn: Mr. Christopher DeGray

Phone: 860-844-5256

Email: degrayc@granbyschools.org

Re: Facility Condition Assessment

Granby Memorial Middle School FCA 321 Salmon Brook Street Granby, CT Terracon Project No. FR256003

Dear Mr. DeGray:

Terracon Consultants, Inc. has completed a Facility Condition Assessment and Report of the Granby Memorial Middle School, located in Granby, CT for Granby Public Schools. A Terracon team comprised of Les Mendlovic conducted the visual observations. The site observation took place on April 15, 2025 and the walk-through incorporated a visual assessment of the site improvements, building structural components (as observable), building shell components, fire and life safety systems, plumbing, HVAC, electrical systems, and interior spaces, as well as a cursory review of barriers to accessibility for the disabled.

This work was performed in general accordance with the scope of services outlined in the Terracon Proposal Number PFR256003 dated February 19, 2025, as identified in the scope section of this Report. The sole purpose of this Report is to document the condition of the assessed building systems at the property per the American University System, Board of Regents, and ASTM E2018-15 standards. It is not the intent of this Report to assume any part of the design responsibility, but rather to report the findings to the Client.

If you have any questions concerning this Report, or if we may be of further service, please contact us.

Sincerely,

Terracon Consultants, Inc.

Les Mendlovic Senior Facilities Professional Facilities Services Doug Baum National Director Facilities Services

Attached: Facility Condition Assessment



Project Summary

Construction System	Good	Fair	Poor	Action	Accessibility	Immediate	Over Term Years 1-10
3.1 Site Improvements		Х		Repair			\$239,690
3.2 Amenities		Χ		Refurbish			\$24,000
3.3 Building Exterior		Χ		Repair			\$81,260
<u>3.4</u> Roof	X	Χ		Replace			\$210,000
3.5 Structural System	X			None			
3.6 Interior Components		X	Х	Replace			\$1,620,000
3.7 Mechanical and HVAC Systems		Χ	x	Replace		\$1,000	\$527,100
3.8 Electrical Systems		Χ		None			\$4,000
3.9 Plumbing Systems	Х			None			
3.10 Utilities	Х	Χ		Refurbish			\$6,000
3.11 Vertical Transportation		Х	Х	Refurbish			\$120,000
3.12 Fire and Life Safety Systems		NA		None		\$5,000	\$75,000
3.13 Accessibility	X	X		Missing van-accessible parking space.	\$850		
3.14 Furniture, Fixtures, and Equipment		NA		None			
Totals					\$850	\$6,000	\$2,907,050

Summary	Today's Dollars	\$/Square Feet
Accessibility Repairs	\$850	\$0.01



Summary	Today's Dollars	\$/Square Feet
Immediate Repairs	\$6,000	\$0.08

	Today's Dollars	\$/Square Feet	\$/Square Feet/Year
Replacement Reserves, today's dollars	\$2,907,050.00	\$38.76	\$3.88
Replacement Reserves, w/10, 3.0% escalation	\$3,109,930.98	\$41.47	\$4.15



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1.0 DIVISION I EXECUTIVE REPORT



Granby Memorial Middle School FCA

Granby Memorial Middle School 321 Salmon Brook Street Granby, CT 06035

Terracon Consultants, Inc.

May 12, 2025

Prepared by: Les Mendlovic



General Description

Item	Description
Property Name	Granby Memorial Middle School
Property Address	321 Salmon Brook Street, CT, 06035
Type of Facility	Education
Total Parking Spaces	95
Number of Buildings	1
Number of Stories	2
Building Area (SF)	75,000
Year(s) Constructed	1958/1992
Renovation Notes	The general renovation was in 1992.
General Construction	The building is supported by shallow concrete footings. The structure is steel-framed supporting concrete floor and metal roof decks. Exterior components include brick veneer. The roofs are single-ply membrane and standing-seam metal. Exterior components include brick veneer. Cooling and heating to the building are provided by VAV-AHUs with HHW coils and DX-split systems. Electrical service provided to the building is 480/277-volt, three-phase, four-wire service. The main switchboard is rated for 1,600-amp service. Domestic water piping within the building is copper. Domestic hot water is provided by electric, tank-type and/or gas-fired, tankless domestic water heaters. The building is partially-covered by a wet-pipe, an automatic fire sprinkler system, and monitored by an off-site fire alarm system. Utilities, including potable water, sanitary sewer, gas and electricity, are provided to the site by local municipalities or private companies.
Site Visit Performed By	Les Mendlovic and Andrea Castaneda
Site Visit Date	April 15, 2025

General Physical Condition

Most of the building components and systems for Granby Memorial Middle School are in fair condition. Deficiencies were found in the building's interior finishes, TPO roof membrane and MEP systems. It is Terracon's opinion that the most critical deficiencies are the performance of the HVAC systems.

Terracon estimates a total repair and replacement cost of \$3,109,930.98 over the next 10 years.



It is Terracon's opinion that Granby Memorial Middle School is in generally fair condition.

1.3 Recent Capital Improvements

According to management, the following items have been previously completed at this property.

Reported Capital Expenditures	Year Completed	Approximate Costs/Comments
Replacement of the boilers and HHW pumps.	2024	None reported.
Replacement of three electric, tank-type water heaters.	2018	None reported.
Replacement of two propane-fired, tankless water heaters.	2018	None reported.
Replacement of metal roof.	2019	None reported.
Replacement of EPDM roof membrane.	2019	None reported.

1.4 Work-in-Progress Capital Improvements

No capital improvements to this property are either under construction or under contract to begin within the next six months.

1.5 Planned Capital Improvements

No planned capital improvements are currently being considered by Ownership.

1.6 Recommended Additional Evaluation

Engage a code specialist to determine the applicable requirements of the fire suppression sprinkler system.

1.7 Current Replacement Value

Based on current RSMeans square foot models, the estimated unit cost for replacement of the building is \$262.10 per square foot. Based on the unit cost, the estimated Current Replacement Value (CRV) of the building (75,000 square feet) is approximately \$19,657,500.

1.8 Facility Condition Index

The Facility Condition Index (FCI) scores are summarized below. The scores are based on the modeled replacement value for the building and the anticipated capital repairs during the evaluation period. General industry guidelines are: 0-5% is good; 5.01-10% is fair; and greater than 10% is poor.

Facility Condition Index



Current Replacement Value of the Facility (CRV)	\$19,657,500
Immediate + ADA + Year 1	\$1,259,140
Facility Condition Index (FCI)	0.06





2.0 DIVISION II - TECHNICAL REPORT



Granby Memorial Middle School FCA

Granby Memorial Middle School 321 Salmon Brook Street Granby, CT 06035

Terracon Consultants, Inc.

May 12, 2025

Prepared by: Les Mendlovic



2.1 Executive Summary

2.1.1 General Description

Terracon completed this Facility Condition Assessment of the Granby Memorial Middle School FCA located at 321 Salmon Brook Street in Granby, CT. The property consists of one, 2-story building containing approximately 75,000 square-feet of building area. The building was constructed in 1958/1992 on a 27.95-acre parcel of land with approximately 88 parking spaces. The buildings are occupied by and predominantly used for campus administration or student services.

Parking is provided on an asphaltic concrete surface parking lot. The remainder of the site is improved with landscaped areas. The site has been graded to promote drainage to curb inlets and localized catch basins in the paved and landscaped areas. Stormwater flows into the municipal system. A detention/retention basin is not utilized to regulate the outflow from the site.

The building is a conventional steel-framed and masonry structure supported by concrete footings. The floors are grade-supported concrete slabs. The exterior of the building consists of brick veneer with metal stud back-up. The steel structure supports open-web steel joists and the metal roof deck. The window and door systems are conventional storefront units with double-glazing set-in mill-finished aluminum frames. The low-slope roofs consist of a EPDM and TPO single-ply roofing membrane system. The field of the steep-sloped roofs consist of standing-seam metal.

Cooling is provided to select areas by a variable air volume-air handling units (VAV-AHUs) with direct expansion (DX)-split system roof-mounted, condensing systems . Heating is provided by VAV-AHUs with heating hot-water (HHW) coils. Conditioned air is delivered through VAV terminal units and distributed by insulated rigid, sheet metal, and flexible ductwork. Returns are collected via ceiling plenum.

Electrical service is provided by a pad-mounted, utility-owned, electrical transformer that provides 480/277-volt, three-phase, four-wire service to the building. The main switchboard is rated for 1,600-amp service. Exterior lighting is provided by façade-mounted, pole-mounted, and recessed lighting fixtures with fluorescent or LED bulbs controlled by photocell. Interior lighting is primarily T-8 fluorescent light fixtures controlled by manual light switches and/or occupancy sensors.

Domestic water piping within the building is copper. Domestic hot water is provided by three, electric, tank-type and two, gas-fired, tankless domestic water heaters. A backflow prevention device was observed in the exterior mechanical room. The observable sanitary and vent piping materials are PVC.

The building is partially-covered by a wet-pipe, automatic, fire sprinkler system, and monitored by an off-site fire alarm system. A diesel-engine driven generator supplies the entire building with emergency power. An automatic transfer switch (ATS) is provided in the main electrical room on the first floor. The generator is provided with a belly tank.

Utilities, including potable water, sanitary sewer, gas and electricity, are provided to the site by local municipalities or private companies.



Item	Comment
Zoning Classification	Zoned School M-94 per the Town of Granby Zoning Map, viewed on May 5, 2025.
Certificate of Occupancy	Requested, but not provided.
Flood Classification	This property is in Zone X of the FEMA flood plain map and panel #09003C0183F, dated 9/26/2008.
Flood Zone Description	Zone X: Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.
Seismic Zone	Zone 2A , per the 1997 UBC, defined as an area of low-to-moderate probability of damaging ground motion.

2.1.2 General Physical Condition

The Property is in generally good to locally fair condition. Maintenance appears to be consistent with similar properties.

The building is approximately 33 years old with some renewals and replacements of major equipment or building systems since construction. Some major equipment and building systems have reached and/or will likely reach their estimated useful life (EUL) during this evaluation period. These capital reserve items consist of predictable or cyclical replacement.

In addition, some immediate repair items have been identified that will require remedial work early in the evaluation period.

2.1.3 Opinions of Cost

Immediate Repairs Summary

	Total Cost
Time Period for Repair	0 to 1 YR
Total Immediate Repair Cost	\$6,000

Replacement Reserve Summary

	Total Cost
Evaluation Term	10
Square Feet	75,000



	Total Cost
Total Replacement Reserve Cost	\$2,907,050
Total Inflated Replacement Reserve Cost	\$3,109,931
Inflation Factor	3%
Total Replacement Reserve (per Square Feet per Year)	\$3.88
Total Inflated Replacement Reserve (per Square Feet per Year)	\$4.15

ADA Related Cost Summary

		Total Cost
ADA Improvement Cost		\$850.00

2.1.4 Recommendations and Discussion

2.2 Purpose and Scope

The purpose of this Facility Condition Assessment was to observe and document readily visible material and building system conditions, which might significantly affect the value of the property; and determine if conditions exist, which may have a significant impact on the continued operation of the facility during the evaluation period. This work is being completed in anticipation of a planned asset management of the property.

The Scope of Work was developed in general conformance with ASTM E2018-24, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process and Terracon Proposal Number PFR256003 dated February 19, 2025. The scope included a site visit, limited interviews with property management personnel; and a review of readily available construction documents (drawings and specifications) provided by the client. The site assessment includes visual observations of the following system components: site development, building exterior and interior, building structure, mechanical, electrical and plumbing systems; conveyance systems, life safety/fire protection, and general ADA issues. Repair/replacement items of less than \$3,000 may not be identified, or be designated as routine maintenance in the narrative of the Report if mentioned.

This Report does not confirm the presence or absence of items such as mold, asbestos, environmental conditions or hazardous substances on this property.

Item	Comment
Zoning Classification	Zoned School M-94 per the Town of Granby Zoning Map, viewed on May 1, 2025.
Certificate of Occupancy	Requested, but not provided.



Item	Comment
Flood Classification	This property is in Zone X of the FEMA flood plain map and panel #09003C0183F, dated 9/26/2008.
Flood Zone Description	Zone X: Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.
Seismic Zone	Zone 2A , per the 1997 UBC, defined as an area of low-to-moderate probability of damaging ground motion.

2.3 Personnel Interviewed

In conjunction with our on-site visit and while attempting to gather pertinent information on this property, the following personnel were interviewed or have provided information, which we have relied upon in the assembly of this Report. These individuals were designated as knowledgeable about the site and related improvements.

Name	Title	Telephone / Email
Dale Kittelson	Facilities Manager	860-209-4780
Chris DeGray	Director of Facilities	413-222-4731

2.4 Reliance

This Report was prepared pursuant to the contract Terracon has with Granby Public Schools. This Report is for the exclusive use and benefit of, and may be relied upon by Granby Public Schools and no other party shall have any right to rely on any service provided by Terracon Consultants, Inc. without prior written consent.

The FCA Report may be relied upon by you as a description of the observed current conditions of the building and site improvements, only as of the date of this Report, and with the knowledge that there are certain limitations and exceptions within the Report that are reflective of the scope of services as defined in our contract. Any unauthorized reliance on or use of the Report, including any of its information or conclusions, will be at the third party's sole risk. For the same reasons, no warranties or representation, express or implied in this Report, are made to any such third party. Reliance on the Report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the contract Terms and Conditions. The limitation of liability defined in the Terms and Conditions is the aggregate limit of Terracon's liability to the Client and all relying parties.



3.0 SYSTEM DESCRIPTION AND OBSERVATIONS

3.1 Site Improvements

Site Systems					
Item		Description			
Site Access	Direct vehicular access via driveway entrances to the adjacent public street.				
Topography	Generally level.				
Retaining Walls	None observed.	None observed.			
Site Lighting	Exterior lighting is provided by facade-mounted, pole-mounted, and recessed lighting fixtures with fluorescent or LED bulbs. Fixtures are controlled by photocell.				
Parking Type	Surface parking is property.	Surface parking is provided in designated parking areas on the west side of the property.			
Vehicular Pavements	Asphaltic and concrete pavements.				
Curbs	Concrete				
Bollards	Painted plastic covered bollards are located adjacent to the loading dock.				
Truck Court	The truck court depth is approximately 75-feet and the concrete truck dock apron depth is approximately 40-feet. Maneuvering space appears to be generally adequate for truck traffic.				
Parking Structure	Parking structures were not observed.				
Parking Space Count	Parking count total	s are from cou	ints in the field.		
No. of Parking Spaces	Parking Structure	Surface Lot	Standard – Accessible	Van – Accessible	TOTAL
	0	83	4	1	88
EV Charging Stations	None observed.				
Walkways	Typically broom-finished concrete along the front portions of the building. Asphalt along the side and rear portions of the building. There are limited areas of brick pavers adjacent to the main building entrance.				
Signage	Property identification signage is provided by monument signage adjacent to the main entrance drive.				
Landscaping	Lawn turf, mature trees, shrubs.				



Irrigation	An automatic underground irrigation system is installed at the landscaped areas. The system is reportedly functional and under a service agreement. Irrigation water is provided by the municipality. Backflow prevention was observed.
Fences	A 6-foot high chain-link fence with metal posts and a gate that encloses the emergency generator and natural gas service.

Site Improvements Conditions and Recommendations

The following recent capital projects were reported:

None reported.

The site components appear to be in a condition consistent with the age and use with no significant issues except as noted below:

- The asphalt paving is in generally fair condition, with faded striping, linear cracking, alligator cracking, and potholes. Crack sealing, sealcoating and restriping of the paving, with limited full-depth patching of deteriorated areas of the asphalt paving is anticipated during the evaluation period and a cost is included in the Replacement Reserves.
- The concrete paving is in generally fair condition, with limited cracking and deteriorated areas in the truck court. Based on the observed condition of the concrete paving, localized full-depth replacement and sealing of linear cracks is anticipated during the evaluation period and a cost is included in the Replacement Reserves.
- Brick pavers are installed at the front entrance and a patio area at the rear of the building and are in generally fair condition. The pavers are cracked and deteriorated. Terracon anticipates partial replacement of the pavers during the evaluation period and a cost is included in the Replacement Reserves.
- Asphalt walkways at the rear of the building are in generally fair condition with areas of linear cracking and general deterioration. Repair of the asphalt sidewalks is anticipated during the evaluation period and a cost is included in the Replacement Reserves.

Immediate Repairs:

None identified.

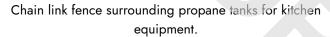
Replacement Reserves:

- Limited full-depth repair of asphalt paving.
- Crackseal, sealcoat, and restripe asphalt paving.
- Limited concrete paving replacement.
- Partial replacement of brick pavers.



Photographs







Chain link fence surrounding propane tank at the loading dock area.



Loading dock area.



Loading dock steel overhead door.







Dumpster at the loading dock area.

Painted plastic covered bollards located adjacent to the loading dock.





Signage.

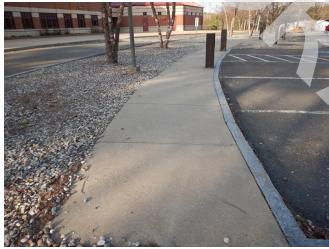
Property entrance.

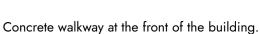




Typical allegator type cracking at the asphalt parking lot.

Concrete curb.







Concrete walkway at the main entrance to the building.





Site drainage.

Overview of the main parking lot at the rear of the building.



Linear cracking at the parking lot.



Asphalt walkway.





Outdoor rest area at the rear of the building.

Brick pavers at the outdoor rest area.

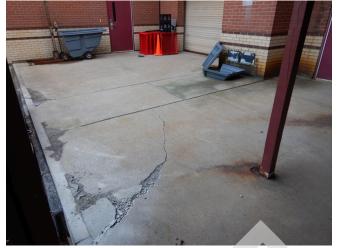


Asphalt vehicular pavement damage.



Evidence of previous repairs of asphalt vehicular pavement.





Damaged concrete pavement at the loading dock area. Typical of concrete pavement damage throughout.

Landscaping - Stone covering at a landscape island.



Landscaping - Mature trees.

3.2 Amenities

Amenities		
Item Descriptions		
Site Amenities	The property is provided with the following amenities: Gym	



Item	Sport	Quantity	Indoor/Outdoor	Surface
Gym	Multi-function	1	Indoor	Wood
Carport	Not Observed.			
Picnic Structures	Not Observed.			
Trash Enclosures	Dumpsters were located within the loading dock area. This area includes an asphalt pad and is not screened.			
Stairs, Landings, Rails, and Bollards	Cast-in-place concrete steps and ramps with painted metal handrails are provided at grade changes.			
Swimming Pools and Water Features	Not Observed.			
Playgrounds	Not observed.			

Amenities Conditions and Recommendations

The following recent capital projects were reported:

None reported.

The site components appear to be in a condition consistent with the age and use with no significant issues except as noted below:

The gymnasium's wood flooring is in generally fair condition with areas of general deterioration. Based on the observed conditions, refinishing of the wood flooring is anticipated during the evaluation period and a cost is included in the Replacement Reserves.

Immediate Repairs:

None identified.

Replacement Reserves:

Refinish the gym wood floor.



Photographs





Overview of the Gymnasium.

Overview of the Gymnasium.



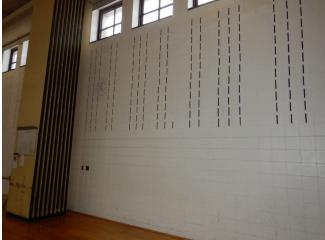




Gymnasium wood floor. Note the damaged spot.

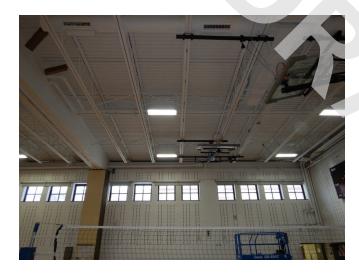






Gymnasium bleachers.

Gymnasium wall finish.



Ceiling finishes.

3.3 Building Exterior

Building Envelope		
Item	Description	
Exterior Walls	The exterior of the building consists of brick veneer.	
Windows / Doors	The main entry doors are manual, swing-type doors that are part of the storefront system. Secondary doors are glazed units set in anodized frames. Service doors are painted hollow metal in metal frames.	



Building Envelope			
Item	Description		
Exterior Building Stairs / Steps	None observed.		
Balconies	None observed.		
Sealants	Elastomeric sealants are located at control joints in the brick veneer and around window and door penetrations.		
Loading Docks	The building has a drive-in and recessed loading dock area located at the northeast elevation. Docks are generally equipped with upward-acting coiling, metal, overhead doors. There is one berth with dock bumpers.		
	Dock High	1 Total 12'x14'	
Overhead Doors	Rail Doors	O Total	
	Drive-In Doors	1 Total 12'x14'	
Dock Stairs	Dock stairs are concrete with painted metal handrails.		
Dock Canopies	None observed.		

Building Envelope Conditions and Recommendations

The following recent capital projects were reported:

None reported.

The building components appear to be in a condition consistent with the age and use with no significant issues except as noted below:

- The concrete floor is in generally good condition. Based on the limited observed conditions, repairs are not anticipated during the evaluation period.
- The brick veneer is in generally fair condition. The brick veneer throughout has efflorescence. Cleaning the brick veneer and repointing the mortar joints is anticipated during the evaluation period and a cost is included in the Replacement Reserves.
- The elastomeric sealants are in generally fair condition with cohesive and adhesive failure in localized areas throughout. Replacement of the sealant is anticipated during the evaluation period and a cost is included in the Replacement Reserves.



The coiling overhead doors are in generally fair condition. Based on the expected useful life and the observed condition of the overhead doors, replacement of the overhead doors is anticipated during the evaluation period and a cost is included in the Replacement Reserves.

Immediate Repairs:

None identified.

Replacement Reserves:

- Apply a penetrating masonry sealer.
- Remove and replace deteriorated sealants at the perimeter of the window and door assemblies and penetrations.
- Replace loading dock manual, steel, overhead doors.
- Repoint exterior masonry.

Photographs





South (front) elevation of the building.

Partial west elevation of the building.

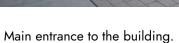




North elevation of the building.

Loading dock steel overhead door.







main entrance doors.







First floor window.

Elastomeric sealant.





Elastomeric sealant.

Upper level windows.







Concrete foundation.

Site steps.





Sevice door.

Typical windows.







Drive-in loading dock door.

Brick veneer bellow windows.





View of elastomeric sealant around the door.

Concrete slab-on-grade.







Metal roof deck.

Typical roll-up door.



Corrosion on base of roll-up door in maintenance room.

3.4 Roof

Roof				
Item	Description			
Field of Roof	The field of the low-sloped roofs consists of a fully-adhered, single-ply EPDM and TPO membrane over an unspecified rigid insulation. The field of the steep-sloped roofs consist of standing-seam metal.			
Roof Deck	The roof deck is metal. See Advisory Note in Section 4.4 of this Report.			



Roof					
Item	Description				
Flashing / Coping	Field of roof extends to the metal roof edge flashing along the perimeter of the building and standing-seam metal roof. Step flashing and kick-out flashing were apparent at transitions from the steep-sloped roofing to sidewalls.				
Expansion Joints	None observed.				
Equipment Screen Wall	The rooftop equipment is partially screened by the parapet walls.				
Skylights	Translucent panels are installed in the field of the standing seam metal roof.				
Drainage	The roof drains to primary, internal drains that are piped to the underground storm drainage system. Sheet flow to the roof edge is collected by metal gutters and downspouts that are piped into the underground storm drainage system.				
Reported Leaks	The Site Contact did not report active roof leaks at the time of the site visit.				

Building or Section	Roof Area (SF)	Roof System	Date Installed	General Condition	Estimated Remaining Service Life (Years)
Low slopped sections	5800	Single-ply EPDM	2019	Good	14
Low slopped sections	14000	Single-ply TPO	1995	Poor	1
Steep slopped sections.	47000	Standing-seam metal	2019	Good	36
Warranty in Place A copy of the roof warranty was requested, but not provided.					d.

Roof Conditions and Recommendations

Our evaluation was visual and did not include moisture surveys to evaluate the condition of unexposed roof components. Terracon recommends that the roofs be evaluated on an annual basis to determine the specific need and timing to replace them. Ongoing repairs and annual maintenance should be anticipated as part of routine operating maintenance, the cost of which will likely increase as the roofing ages. Specific timing and costs of maintenance repairs cannot be determined but should be anticipated based on the type of roof system. Making recommendations concerning specific roof replacement type and design requires in-depth testing and evaluation that is not a part of this report's scope of services. Note that some costs might be budget- or allowance-only



Roof Conditions and Recommendations

amounts, since additional funds may be needed for hidden conditions or environmental factors for removal of existing materials. The presence of additional layers of roofing and/or asbestos containing materials could significantly increase estimated replacement costs.

The following recent capital projects were reported:

- Steeped sloped standing-seam metal roof was installed in 2019.
- Low sloped EPDM membrane roof was installed in 2019.

The roof components appear to be in a condition consistent with the age and use with no significant issues except as noted below:

- The fully-adhered, single-ply EPDM membrane is in generally good condition. The roof membrane was installed in 2019. Replacement of the roof is not anticipated during the evaluation period.
- The fully-adhered, single-ply TPO membrane is in generally fair to poor condition. Terracon observed tenting and ponding. Replacement of the TPO roof is anticipated during the evaluation period and a cost is included in the Replacement Reserves..
- Terracon observed ponding throughout the TPO roof. The Site Contact did not report ongoing roof leaks; however, ponding water increases the likelihood of future roof leaks. Adjusting the slope of the roof covering in the area of ponding is anticipated prior to roof replacement and a separate costs are not included in the Cost Tables.
- The standing seam metal roof is in generally good condition. Terracon anticipates replacing the fasteners during the evaluation period as a part of routine maintenance.

The level of maintenance and the related maintenance costs will continue to increase as the system ages.

Immediate Repairs:

None identified.

Replacement Reserves:

Replace single-ply TPO roof membrane assembly.



Photographs





Roof access.

EDPM roof membrane over cafeteria..







Evidence of previous repair of the EPDM roof membrane.







EDPM roof membrane.

Close up of EPDM roof membrane.





Parapet wall.

Gym: Roof hatch to the lower roof.







Gym: Lower roof overview.

Gym: TPO membrane.





Ponding at the gym TPO membrane.

Gym: Evidence of TPO membrane repair.





Gym: Roof overview facing northwest.

TPO membrane





Gym: internal drain.

Gym: Roof overview facing southeast.







TPO membrane patch.

Metal roof.





Skylight, Metal roof.

3.5 Structural System

Building Structure		
Item Description		
Foundation	The foundation systems were not observed, and drawings were not available for reference; however, buildings of this type are typically founded on continuous reinforced concrete wall footings at the perimeter and isolated spread footings at the interior columns.	
Basement	None observed.	



Building Structure		
Item	Description	
Ground Floor	Based on limited visual observation the ground floor consists of concrete slab-on-grade.	
Superstructure	The building is a conventional steel-framed structure with steel columns and beams, steel open-web joists and metal decks with concrete topping at upper floors.	
Building Structure Conditions and Recommendations		

The following recent capital projects were reported:

None reported.

The building components appear to be in a condition consistent with the age and use with no significant issues except as noted below:

None observed.

Immediate Repairs:

None identified.

Replacement Reserves:

None identified.



Photographs





Concrete foundation.

Concrete slab-on-grade.

3.6 Interior Components

Interior Components			
Item	Description		
General Occupancy	The building is fully occupied.		
General Common Areas	All occupants enter the ground floor lobby via the main entrance or from secondary entrances through interior corridors. The upper floors are accessed either from elevators in the main entrance lobby on the ground floor or by stairs at several locations. An elevator lobby and a set of restrooms are located on each floor.		
	Floors	Sheet vinyl	
Ground Floor Entry and Elevator Lobby	Walls	Painted CMU	
	Ceilings	Suspended acoustical ceiling tile	
	Floors	Sheet vinyl	
Upper Level Elevator Lobbies	Walls	Painted CMU	
	Ceilings	Suspended acoustical ceiling tile	
Corridors	Floors	Sheet vinyl	
	Walls	Painted CMU	



	Ceilings	Suspended acoustical ceiling tile	
Offices	Floors	Carpet	
	Walls	Painted drywall/CMU	
	Ceilings	Suspended acoustical ceiling tile	
	Floors	VCT	
Classrooms	Walls	Painted drywall/CMU	
	Ceilings	Suspended acoustical ceiling tile	
	Floors	Concrete or VCT	
Service Areas	Walls	Painted CMU	
	Ceilings	Exposed structure	
	Floors	Ceramic tile	
	Walls	Painted drywall and ceramic tile.	
Restroom Finishes	Ceilings	Suspended acoustical ceiling tile	
	Counters	Cultured stone with vitreous china lavatories	
	Partitions	Powder coated steel	
Stairs	Egress stairs at emergency exits and to the upper level are metal-framed with closed risers, poured concrete and metal railing.		

Interior Components Conditions and Recommendations

The following recent capital projects were reported:

None reported.

The interior finishes appear to be in a condition consistent with the age and use with no significant issues except as noted below:

The interior finishes in common areas, offices, classrooms and cafeteria are in generally poor condition. Based on the expected useful life of floor coverings, wall and ceiling finishes, replacement is anticipated during the evaluation period and a cost is included in the Replacement Reserves.



The interior finishes in restrooms and locker rooms are in generally fair condition. Based on the expected useful life of floor coverings, wall and ceiling finishes, replacement is anticipated during the evaluation period and a cost is included in the Replacement Reserves.

Immediate Repairs:

None identified.

Replacement Reserves:

- General renovation of interior finishes in common areas, offices, classrooms and cafeteria.
- Phased renovation of locker rooms and restrooms interior finishes and fixtures.

Photographs





Dining Room

Dining room VCT flooring.







Dining room ceramic tile flooring.







Dishwasher.

Main entrance lobby.







Corridor leading from the main entrance lobby.

Acoustical ceiling finish.





First floor corridor.

School office.

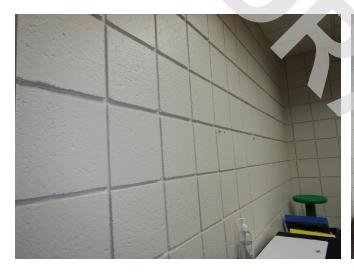






Carpet flooring.

Break room.







Secondary entrance lobby.





Overview of the Gymnasium.

Gymnasium wood floor. Note the damaged spot.





Gymnasium bleachers.

Gymnasium restroom.







Gymnasium toilet.

Entry door to the Boys locker room.





Boys locker room.

Boys locker room lockers.





Boys locker room urinals.

Boys locker room toilet.







Girls locker room toilet and sink.





Girls locker room showers.

Locker room shower flooring.

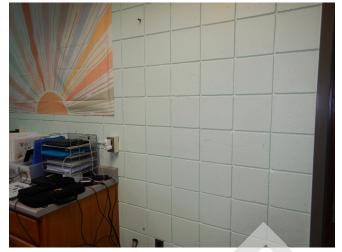




Conference Room C.

Classroom S8.







Typical painted CMU wall finish.

Custodian room.







Typical 1st floor restroom toilet.





Typical 1st floor restroom sink.

Typical 1st floor restroom wall and ceiling finishes.

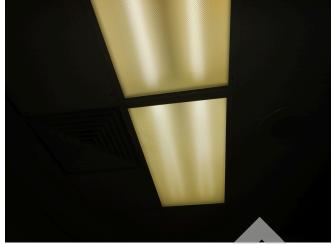






Typical 1st floor restroom flooring.





Typical florescent ceiling lighting.

Corridor fire doors.







Overview of classroom 61.







Overview of classroom 68.

Overview of classroom 62.





Overview of classroom 67.

Detail of classroom casework.







Overview of classroom 65.

Emergency exit door leading to the egress stairway.







View of steel egress stairs.



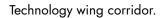




Typical egress stairway steps.

Typical corridor lockers.







Technology wing corridor floor finish.





Overview of Technology Lab A1.

Technology Lab ceiling finish.







Stairwell railing.





Painted CMU wall finishes.









Home economics classroom flooring finish.



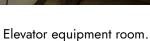




Boiler room.

Metal roof deck.







Elevator equipment room flooring.







Overview of the Clinic.

Clinic flooring finish.







Clinic case work.



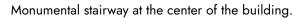




Clinic restroom toilet.Clinick r

Clinic restroom wall and ceiling finishes.







Monumental stairs.







Upper level corridor wall finishes.

2nd floor classroom corridor.





Corridor viny sheet goods flooring.

Overview of classroom 81.





Classroom 81 ceiling finishes.

Overview of classroom 86.







Second floor mechanical room.







Concrete slab-on-grade.

Roof access.







Overview of classroom 77.







Media room. Computer lab.

Item	Description
Water Intrusion / Suspect Mold	Representative observations revealed no representative observations revealed no obvious visual indications of the presence of excessive moisture or suspect mold activity. The Site Contact did not report existing moisture issues or reported complaints from occupants.

3.7 Mechanical and HVAC Systems

Mechanical and HVAC Systems		
Item	Description	
Heating and Cooling	Heating is provided by three, gas-fired boilers and four heating hot water (HHW) circulation pumps. HHW is provided by three, gas-fired condensing water boilers located in the main mechanical room in the maintenance office. All the boilers are rated for 2,000 MBH. The units were manufactured by <i>Cleaver Brooks</i> in approximately 2024. Four, in-line, circulation pumps are located in the main mechanical room in the maintenance office. The pump are supplied with electrical motors ranging from 4.4- to 8.2-HP. The pump motors are manufactured by <i>Wilo</i> and are equipped with <i>Wilo</i> variable frequency drive (VFD). Heating to the building is provided by water-heated AHUs. Five, water-heated, VAV-AHUs with HHW coils are provided in the second floor mechanical room. The units are each driven by an <i>ABB</i> VFD. Seven, roof-mounted, water-heated VAV-AHUs with HHW coils are provided throughout the roofs. All units were manufactured by <i>McQuay</i> in 1992.	



Mechanical and HVAC Systems					
Item		Description			
	Cooling is provided to select areas by VAV-AHUs provided with DX-split systems. Four, air-cooled condensing units are located on the roofs, associated evaporator coils are located in the VAV-AHUs. The units were manufactured by <i>McQuay</i> in 1992 and utilize R-22 refrigerant. The units provide cooling to the chorus room, band room, cafeteria, and main office and library. Conditioned air is delivered through VAV terminal units. Per the designated site contact (DSC), the units were generally manufactured by <i>Enviro-tec</i> in 1992 and 2002. The number of units was unknown by the DSC. Conditioned air is distributed by insulated rigid, sheet metal, and flexible ductwork. Returns are collected via ceiling plenum.				
Equipment Type	QTY	Nominal Cooling Capacity, Tons	Manufacturer	Refrigerant	
VAV-AHU - heating only	8		McQuay		
VAV-AHU - heating and cooling	4		McQuay	R-22	
Condensing unit	2	7.5 tons	McQuay	R-22	
Condensing unit	1	6.5 tons	McQuay	R-22	
Condensing unit	1	2.5 tons	McQuay	R-22	
Supplemental Heating	A ceiling-mounted, <i>McQuay</i> unit heater with HHW coils is provided for localized heating of the custodial office. Ceiling-mounted, <i>Vulcan</i> FPTUs with HHW coils are provided for localized heating of each gym. Finned tube baseboard radiators supplied with HHW are provided for localized heating of the classrooms. Wall-mounted, electric unit heaters are provided for localized heating of the locker rooms. Wall-mounted, <i>McQuay</i> unit heaters with HHW coils are provided for localized heating of each stairwell.				
Supplemental Cooling	A 1.5-ton, DX-cooling only mini-split system is provided for localized cooling of the server room. The system was manufactured by <i>Mitsubishi Electric</i> in 2017 and utilizes R-410A refrigerant. A 3-ton, DX-cooling only split-system is provided for localized cooling of the technology lab. The system was manufactured by <i>Mitsubishi Electric</i> in 2000 and utilizes R-22 refrigerant.				



Refrigeration Systems	Two, roof-mounted, refrigeration system condensing units were provided for the kitchen refrigerators. One unit was manufactured by <i>Heatcraft</i> in 2023. The second unit was not observed with a label. The type of refrigerant utilized by the units in unknown.
Ventilation	A McQuay dedicated outside air system (DOAS) with HHW coils provides pre-conditioned, outside air (OA) for ventilation of the locker rooms. The unit was manufactured in 1992. Restrooms and janitor's closets are provided with roof-mounted exhaust fans vented to the exterior. The kitchen is provided with a kitchen exhaust fan for the stoves. The three, gas-fired boilers are each provided with a flue vent to exhaust combustion by-products. The vents discharge through the east exterior wall up to the roof. A dust collector was observed in the shop room. The unit was manufactured by Donaldson Torit and utilizes a 10-HP motor. The age of the unit was not observed.
Building Automation System (BAS)	A <i>Niagara Frame</i> BAS monitors and schedules building HVAC equipment. The BAS is provided with a typical level of control and instrumentation for a building of this age. The heating and cooling equipment is monitored including supply, return, and zone temperatures, OA damper position, HHW valve position, and DX staging status.

Mechanical and HVAC Conditions and Recommendations

The following recent capital projects were reported:

Replacement of the boilers and HHW pumps.

The MEP system appear to be in a condition consistent with the age and use with no significant issues except as noted below:

- The condensing units for the AHUs and DX split-system were observed in generally poor condition and at the end of their expected useful life (EUL). The majority of the condensing units utilize R-22 refrigerant. The Energy Policy Act of August 2005 and Energy Independence Act of 2007 identifies R-22 as a potential ozone depleting agent and has been phased out of production. Reference Section 4.4 for additional information. It is recommended to procure enough R-22 to refill the system in the event of a coil failure for continued operation of the units. A cost for procurement of spare charge of R-22 is included in the immediate Cost Tables. Replacement of 27-tons of condensing units is anticipated early in the evaluation period. A cost is included in the Costs Tables.
- The DX mini-split system was observed in generally fair condition and at the expected mid-stage of its EUL. The unit was observed with damage to the fins, deteriorated insulation, and localized surface corrosion on the enclosure. Typical EUL of DX mini-split systems is 15-years. Based on the age and condition of the unit, replacement is anticipated during the evaluation system. A cost is included in the Cost Tables.



- The interior AHUs were observed in generally poor condition and at the end of the expected EUL. The AHUs were observed with deteriorated HHW piping and insulation, corroded vibration isolators, and uninsulated refrigerant piping. No replacements or refurbishments of the units were reported by the designated site contact (DSC). Refurbishment and/or replacement of a portion of the AHUs is recommended early in the evaluation period. A cost is included in the Costs Tables.
- The exterior AHUs were observed in generally fair to poor condition and at the end of the expected EUL. The AHUs were observed with surface corrosion on the enclosures and disconnect switches, non-sealing access doors when in the latched position, broken exterior service lights, and deteriorated refrigerant piping. No replacements or refurbishments of the units were reported by the DSC. Refurbishment and/or replacement of a portion of the AHUs is recommended early in the evaluation period. A cost is included in the Costs Tables.
- The exterior ductwork of RTU-7 was observed in poor condition. The insulation was observed with portions of the sealant detached and insulation exposed. Additionally, the DSC reported previous occurrences of leaks associated with the ductwork. Replacement of the exterior ductwork is recommended as part of routine maintenance. No cost is included in the Costs Tables.
- The VAV terminal units were observed in fair condition and at the end of their expected EUL. The EUL for VAVs is 20 years. Refurbishment of a portion the VAVs is recommended during the evaluation period. A cost is included in the Costs Tables.
- The HHW unit heaters were observed generally in fair condition and at the end of their expected EUL. The units appear to be original to the building. The EUL for unit heaters with HHW coils is 15-20 years. Replacement of the unit heaters HHW coils is recommended during the evaluation period. A cost is included in the Costs Tables.
- The baseboard radiators were observed generally in fair condition and at the end of their expected EUL. The radiators appear to be original to the building. The EUL for finned tube baseboard radiators is 25 years. Replacement of the baseboard radiators is recommended during the evaluation period. A cost is included in the Costs Tables.
- The electric unit heaters in the locker rooms were observed generally in fair condition and at the end of their expected EUL. The units appear to be original to the building. The EUL for electric unit heaters is 15 years. Replacement of the electric unit heaters is recommended during the evaluation period. A cost is included in the Costs Tables.
- The DOAS was observed in generally fair condition and at the end of the expected EUL. The DOAS was observed with surface corrosion on the enclosures and disconnect switches and non-sealing access doors when closed. Replacement of the OAHU is recommended early in the evaluation period. A cost is included in the Costs Tables.
- The second refrigeration condensing unit was observed in poor condition. The unit enclosure was observed with significant surface corrosion. Typical EUL of refrigeration condensing units is 10-15 years. Based on the estimated age and observed condition, replacement of the unit is recommended as routine maintenance. No cost is included in the Costs Tables.
- The HHW piping was observed generally in fair to poor condition. Select areas of the piping was observed with torn/missing insulation and surface corrosion. The piping appears to be original to the main building. Typical steel piping has an EUL of about 50-years. Replacement of localized areas of HHW piping and fittings is recommended during the evaluation period.

Immediate Repairs:



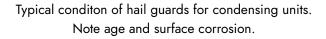
Allowance for the procurement of a spare charge of R-22.

Replacement Reserves:

- Replacement of 1.5-tons of DX-split systems.
- Replacement of 16.5-tons of condensing units.
- Refurbishment of a portion of the interior and exterior AHUs.
- Replacement of a portion of the interior and exterior AHUs.
- Replacement of the exterior ductwork.
- Refurbishment of the VAV-terminal units.
- Replacement of the unit heaters with HHW coils.
- Replacement of the finned tube baseboard radiators.
- Replacement of the electric unit heaters.
- Anticipated replacement of the DX-cooling only mini-split system.
- Replacement of the DOAS.

Photographs







Typical condition of exterior ductwork.





Typical condition of exterior ductwork, note deterioration of external coating/insulation.



HHW Circulation pumps.



Typical condensing water boilers.



Typical roof-mounted equipment. Note surface corrosion on natural gas piping.







Typical condition of condensing unit fins.

DX mini-split condensing unit.





Typical new wall-mounted thermostat.

Typical HHW unit heater for gym.





Typical roof-mounted VAV-AHU with heating only.

DX mini-split-system cassette unit.





Typical older thermostat and temperature sensor.

Typical HHW unit heater for stairwell.



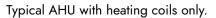




Typical Interior AHU with heating and cooling coils.

Typical VFD for interior AHU.







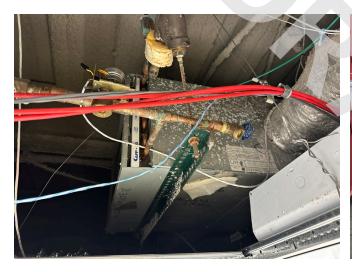
Typical condition of HHW piping, connections, and insulation.





DX mini-split fan coil unit.

DX split-system condensing unit.



Typical VAV terminal units.



Typical roof-mounted condensing unit. Note corroded fan guards.







Typical HHW baseboard unit heater.

Typical roof-mounted AHU with heating and cooling coils.





DOAS. Dust collector.

3.8 Electrical Systems

Electrical Systems						
Item Description						
Transformer(s)	Transformers are provided in the electrical and mechanical rooms throughout the building. dry-type, step-down transformers provide 208/120-volt, 1-phase, 3-wire service for general power, lighting, and receptacles. Transformers ranged in capacity from 45-kVa to 150-kVa.					
Substation	None observed.					



Electrical Systems						
Item	Description					
Standby Power	None observed. Refer to Section 3.12 for information on the emergency generator system.					
Main Electrical Distribution	The main switchboard was manufactured by <i>Siemens</i> in 1992 and has a rating of 1600-amps, 480/277-volts, 3-phase, 4-wire service. The switchboard is located in main electrical room on the first floor. Electrical and mechanical rooms generally contain both 480/277-volt, 3-phase, 4-wire for equipment load and dry-type, step-down transformers that feed the 208/120-volt panels. The panels were generally manufactured by <i>Siemens</i> and <i>Eaton</i> .					
Branch Wiring	Copper per Site Contact. No aluminum branch wiring was observed or reported.					
Interior Lighting	Interior lighting primarily consists of recessed, incandescent and T-8 fluorescent tube light fixtures controlled by manual switching and occupancy sensors.					
Security Systems	Building entry is controlled by a card reader access system. All other areas are accessible through standard key entry.					
	Electrical System Condition and Recommendations					

The following recent capital projects were reported:

None reported.

The electrical system appears to be in a condition consistent with the age and use with no significant issues except as noted below:

The electrical system was observed in generally fair condition. Given the age of the system, infrared (IR) thermal scans of all electrical panelboards and the main switchboard is recommended. A cost is included in the Cost Tables. Subsequent annual scans are recommended as part of routine maintenance. No costs is included in the Cost Tables.

Immediate Repairs:

None identified.

Replacement Reserves:

IR thermal scans of all electrical panelboards and the main switchboard.



Photographs





Main Electrical Switchboard.

Utility owned, pad-mounted transformer.

3.9 Plumbing Systems

Plumbing System						
Item	Description					
Domestic Water Distribution	Domestic hot and cold water is supplied for the restroom and classroom plumbing fixtures, showers, kitchen, and janitorial sinks. All water distribution was observed as copper where visible. A domestic water building loop pump (BLP) package is located in the exterior mechanical room. Two pumps with 5-HP <i>Baldor</i> motors and <i>ABB</i> variable frequency drives (VFDs) supply domestic water to upper floors of the building. The system was packaged by <i>Canariis</i> . Backflow prevention was observed for the domestic hot and cold water in the exterior mechanical room.					
Domestic Water Heaters	Three electric, tank-type water heaters provide domestic hot water to the building. They are located in the main mechanical room in the custodial office. The water heaters were manufactured by <i>A.O Smith</i> in 2018 and have a capacity of 120-gallons. Two propane-fired, tankless water heaters provide domestic hot water to the kitchen. They are located in the exterior mechanical room. The water heaters were manufactured by <i>A.O. Smith</i> in 2018.					
Sanitary	PVC per observations. No ABS piping was observed or reported.					



Plumbing System Condition and Recommendations

The following recent capital projects were reported:

- Replacement of three electric, tank-type water heaters.
- Replacement of two propane-fired, tankless water heaters.

The plumbing system appears to be in a condition consistent with the age and use with no significant issues except as noted below:

The water heaters appeared to be in generally good condition. Water heaters have an expected useful life of 12 to 15 years. Based on the EUL, replacement is anticipated during the evaluation period as a part of routine maintenance.

Immediate Repairs:

None identified.

Replacement Reserves:

None identified.

Photographs







Tankless water heaters and domestic water backflow preventer.





BLPs and controls cabinet.

3.10 Utilities

Utilities							
	The following is a list of the utility providers for the project:						
	Sanitary Sewer:	Simsbury Sewer Treatment Facility					
Site Utilities	Domestic Water:	City of Granby					
Sile Offitties	Storm Sewer:	Town of Granby					
	Gas Service:	Eversource Energy					
	Electric Service:	Eversource Energy					
İtem		Description					
Sanitary Sewer Service	· ·	rided by gravity to subsurface piping and on to the ype of piping for the sanitary sewer was unknown by the ed a hidden condition.					
Water Service	irrigation, and fire suppress Underground piping was no Domestic water piping was	rovide separate supplies for potable domestic water, ion water to site. t observed and is considered a hidden condition. not observed and is considered a hidden condition. were observed in the exterior mechanical room.					
Site Drainage (Storm Sewer)		The site has been graded to promote surface drainage to localized catch basins and surb cuts discharging to municipal storm water drains.					



Item	Description
Site Gas Service	Gas service is provided to the site and serves gas-fired, HHW boilers in the main mechanical room in the custodial office.
Fuel Tanks	Two, 1,000-gallon propane tanks were observed on the northeast exterior elevation of the property. The tanks are used for the kitchen equipment. One propane tank was observed on the north exterior elevation of the building. The tank was approximately 10-gallons and is used for the home economics equipment.

Utilities Condition and Recommendations

The following recent capital projects were reported:

None reported.

The utilities appear to be in a condition consistent with the age and use with no significant issues except as noted below:

None identified.

Immediate Repairs:

None identified.

Replacement Reserves:

The roof-mounted natural gas piping was observed in fair to locally poor condition. The piping was observed with localized areas surface corrosion. It is recommended the piping be sanded and repainted during the evaluation period. An allowance for the sanding and repainting of a portion of the natural gas piping is included in the Costs Tables.



Photographs



Typical roof-mounted equipment. Note surface corrosion on natural gas piping.

3.11 Vertical Transportation

	Vertical Transportation					
Item	D	Description				
Vertical Transportation	One hydraulic, passenger elevator provides access to all levels. The observed condition of the elevator cab finishes and equipment is consistent with building age.					
İtem	Passenger Elevator					
Manufacturer	Montgomery					
# of Units / Age	# of Units	1	Age	33		
Туре	Hydraulic					
Capacity	2,500-pounds					
Cab Finishes	Metal ceiling with recessed, incandescent light fixtures, plastic laminate wall paneling, and CVT flooring.					
Under Service Agreement	The elevator is under a service agreement with Otis.					
Last Inspection Date	An up-to-date inspection record was no in the elevator cab, the last inspection			ficate posted		



Modernization

Cab: Not Reported.
Controls: Not reported.

Vertical Transportation Conditions and Recommendations

The following recent capital projects were reported:

None reported.

The elevator appeared to be in a condition consistent with the age and use with no significant issues except as noted below:

The typical estimated useful life (EUL) for hydraulic elevator controls and finishes is 20-years. Based on the estimated age of the elevator, modernization of the elevator controls and finishes are recommended early in in the evaluation period. A cost is included in the Cost Tables.

Immediate Repairs:

None identified.

Replacement Reserves:

Modernization of the elevator controls and finishes.



Photographs





Elevator cab interior.

Elevator equipment.

3.12 Fire and Life Safety Systems

	Fire Protection / Life Safety							
Item	Descriptions							
Automatic Sprinklers	The building is partially covered with a wet pipe, automatic fire suppression sprinkler system supplied by municipal water pressure. No fire-suppression water pumps were reported or observed. Per the DSC, approximately one-third of the building is covered. The location of the standpipe riser was unknown by the DSC. A backflow prevention device was observed in the exterior mechanical room. The most recent inspection was completed by <i>Fire Protection</i> in October 2024.							
Fire Department Connection	None observed.							
Fire Alarm Control Panel (FACP)	The building FACP is located in the main electrical room on the first floor. The FACP was manufactured by <i>Honeywell</i> model <i>MS-9600UDLS</i> . No installation tag was observed; however, a manufacture date of November 2014 was observed. No inspection tag was observed. An annunciator panel is located in the entrance vestibule. The installation date of this panel was unknown by the DSC.							
Alarm Devices	Visual strobes and audible alarms were observed throughout the building.							



	Fire Protection / Life Safety
Item	Descriptions
Smoke / Heat Detectors	Hard-wired smoke detectors were observed in select areas of the building. Duct-mounted smoke/heat protectors were observed in the return ductwork of the five AHUs in the second floor mechanical room. Visual confirmation of protectors in above ceiling ductwork for all other units was not observed by Terracon during the site visit.
Pull Stations	Pull stations were observed throughout the building, primarily at the emergency exits.
Fire Extinguishers - Portable	Portable type fire extinguishers were observed throughout the building, The most recent inspections were completed by <i>Fire Equipment Inc.</i> in August 2024.
Fire Hydrants	A fire hydrant is located in a landscaped area at the southwest exterior elevation of the property.
Emergency Lighting / Signs	Exit lights were generally observed along paths of egress and adjacent to the exit doors.
Emergency Engine / Generator Set	The building is provided with a <i>Generac</i> diesel-engine driven emergency generator located on the northeast exterior elevation of the property. Reportedly, the generator is run every Tuesday. The power output and run time was unknown by the DSC. Run time hours are considered a hidden condition. Reportedly, the generator is supplied with diesel fuel from a 500-gallon belly tank. An <i>Asco</i> automatic transfer switch (ATS) supplies emergency power to selected electrical panelboards located in the main electrical room on the first floor. The generator provides emergency power to the entire building.

Fire Protection/Life Safety Conditions and Recommendations

No testing was performed by Terracon for this assessment; however, the fire protection systems appear to be functional and are routinely inspected. Terracon observed spare sprinkler heads in the fire protection equipment rooms to identify if there were heads that have been recalled due to high failure rates. Spare sprinkler heads observed included *Rasco* model *R1715* and *R1725*. Recalled *Central*, *Gem*, *Omega* or *Star* glass bulb fire sprinkler heads were not identified among the spare heads stored on-site or were reported. A detailed study of in-place heads is beyond the scope of this assessment and should be performed by the company responsible for maintaining the system. **See Advisory Note in** Section 4.4 of this Report.

The following recent capital projects were reported:

None reported.

The fire suppression and life safety equipment and systems appear to be in a condition consistent with the age and use with no significant issues except as noted below:



- Typically, a building of this type and size is fully covered with a wet-pipe, automatic fire-suppression sprinkler system. Determination of the prevailing fire code requirements are outside of the project scope, but is recommended to be performed by a licensed professional. An allowance for the services of a code specialist to determine the applicable requirements is included in the Costs Tables.
- The FACP was observed in generally good condition and in the mid-stage of its EUL. Typical EUL for FACPs is 20-years. Based on the age of the panel, replacement of the FACP and a portion of the supporting devices and wiring is anticipated during the evaluation. A cost is included in the Costs Tables.

Immediate Repairs:

 Allowance for the services of a code specialist to determine the applicable requirements of the fire suppression sprinkler system.

Replacement Reserves:

Anticipated replacement of the FACP and a portion of the associated devices.

Photographs



FACP.

Typical portable fire extinguisher in cabinet.







Typical exit door with exit sign and pull station.

Emergency generator.



Fire suppression backflow preventer.

3.13 Accessibility

At facilities with multiple buildings, each building should have at least one accessible space located near an accessible entrance, more if the number of parking spaces designated for such building requires additional accessible spaces. If only one space is required for any building, it should be van-accessible.

Accessibility Related Issues

During our site visit, a limited visual assessment for accessibility was made. This Report identifies physical barriers to accessibility that we observed. Our cursory review is not to be considered a full accessibility survey. A full accessibility compliance survey may reveal further aspects of the facility, which are not accessible. Since compliance can have legal consequences we recommend that the Owner consult with legal counsel prior to taking any action.



Our Opinions of Cost present budget-level values to remove observed Owner-responsible physical barriers are included in the ADA Cost Table of this Report. Modifications that are the tenant's responsibility are not included our assessment. If client requires that Tenant-responsible items be identified, Client should immediately contact Terracon and request additional services.

If Federal Government funds assisted in acquisition or development, or provide rental subsidies, or if the US-General Services Administration is a Lessee, then Uniform Federal Accessibility Standards (UFAS) apply to this facility. Terracon's scope of services did not include evaluating this facility for UFAS compliance.

Some states and municipalities have adopted building codes similar to the Americans with Disabilities Act (ADA) of 1990. In some instances, these code requirements are more restrictive than the ADA. Terracon's evaluation considered only the ADA, as applicable to the subject facility.

ADA Compliance

The ADA is civil rights legislation enacted by the United States Congress enacted July 26, 1990. The ADA is not a building code. The United States Department of Justice published revised regulations for the 1990 ADA on September 15, 2010. The regulations adopted revised accessibility standards called the 2010 ADA Standards for Accessible Design that replaced the 1991 Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Facilities Constructed or Altered before March 15, 2012 that are COMPLIANT with the 1991 ADAAG are not required to make further modifications to bring the facility into compliance with the 2010 ADA Standard. Other Facilities that are NOT COMPLIANT with the 2010 ADA Standard shall be made accessible using the 2010 ADA Standard. The 2010 ADA Standard "does NOT address existing facilities unless altered at the discretion of a covered entity". The 2010 ADA Standard defines alteration as "remodeling, renovation, structural changes, wall changes, reconstruction, historic restoration". Alterations on or after March 15, 2012 in buildings constructed before March 15, 2012 are required to be made compliant to the "maximum extent feasible".

Determination of which standard (1991 ADAAG or 2010 ADA Standard) is applicable to this facility and the "maximum extent feasible" is beyond Terracon's scope of work. We recommend consultation with legal counsel and, if determined necessary, the development and implementation of a plan for physical barrier removal that satisfies the requirements of the ADA.

Terracon evaluated the Common Areas of the facility for general compliance with Title III of the ADA utilizing the 2010 ADA Standards. Title III ("Public Accommodations") of the ADA, divides private buildings and facilities into two categories: "Public Accommodations" and "Commercial Facilities". Public Accommodations are intended for the general public's use. A Commercial Facility is intended for a private business and its employees. "Common" areas at this facility are considered areas of Public Accommodation. Administrative and service areas can be classified as a Commercial Facility, and there is no obligation under the ADA to remove barriers, except as needed for the landlord's compliance with Title I of the ADA (Employment).

At this Education property (considered a "Public Accommodation"), the areas the Owner is responsible for ADA compliance are considered to be:

- An accessible route connecting adjacent public transportation stops from adjacent public sidewalks and streets to the accessible building entrances,
- Parking available to the public,
- Exterior route from accessible parking to accessible building entrances,



- Building Entrances,
- Interior public common area accessible route,
- Building common areas (if any) open to public, including restrooms, meeting areas and elevators.

Based upon our site visit and in reference to the below ASTM Uniform Abbreviated Screening Checklist for the 2010 ADA, Terracon makes the following recommendations:

Accessibility Recommendations:

Create new van-accessible parking space.

Photographs





Accessible parking at the front elevation of the building.

Accessible parking at the front elevation of the building.







Route to an accessible building entrance.

Accessible entrance doors in a series.

Uniform Abbreviated Screening Checklist for the 2010 ADA						
Section	Item	Yes	No	N/A	Comments	
	A. Building His	tory				
1.	Has an ADA survey previously been completed for this property?		Х		Per designated site contact.	
2.	Have any ADA improvements been made to the property since original construction?		Х		Per designated site contact.	
3.	Has building ownership/management reported any ADA complaints or litigation?		x		Per designated site contact.	
	B. Parking					
1.	Does the required number of standard ADA-designated spaces appear to be provided?	X			Required: 4 Provided: 4	
2.	Does the required number of van-accessible designated spaces appear to be provided?		X		Required: 1 Provided: 0 1 additional van space should be provided.	
3.	Are accessible spaces part of the shortest accessible route to an accessible building entrance?	X				
4.	Is a sign with the International Symbol of Accessibility at the head of each space?	X				



	Uniform Abbreviated Screening Checklist for the 2010 ADA					
Section	ltem	Yes	No	N/A	Comments	
5.	Does each accessible space have an adjacent access aisle?	X				
6.	Do parking spaces and access aisles appear to be relatively level and without obstruction?	Х				
	C. Exterior Accessib	ole Rout	te			
1.	Is an accessible route present from public transportation stops and municipal sidewalks on the property?	X				
2.	Are curb-cut ramps present at transitions through curbs on an accessible route?	Х				
3.	Do the curb cut ramps appear to have the proper slope for all components?			X	Exterior ramps were not present.	
4.	Do ramps on an accessible route appear to have a compliant slope?			Х		
5.	Do ramps on an accessible route appear to have a compliant length and width?			X		
6.	Do ramps on an accessible route appear to have compliant end and intermediate landings?			X		
7.	Do ramps on an accessible route appear to have compliant handrails?			Х		
	D. Building Entr	ances				
1.	Do a sufficient number of accessible entrances appear to be provided?	Х				
2.	If the main entrance is not accessible, is an alternate accessible entrance provided?			X		
3.	Is signage provided indicating the location of alternate accessible entrances?			X		
4.	Do doors on an accessible route appear to have compliant clear floor area on both sides?	Х				



	Uniform Abbreviated Screening Checklist for the 2010 ADA					
Section	Item	Yes	No	N/A	Comments	
5.	Do doors on an accessible route appear to have compliant hardware?	Х				
6.	Do doors on an accessible route appear to have compliant clear opening width?	Х				
7.	Do pairs of accessible entrance doors in a series appear to have the minimum clear space between them?	X				
3.	Do thresholds at accessible entrances appear to have a compliant height?	Х				
	E. Interior Accessible Route	es and A	Ameniti	es		
The tenar	t's interior common areas are generally observed, as fo	ollows:				
1.	Does an accessible route appear to connect with all public areas inside the building?	X				
2.	Do accessible routes appear free of obstructions and/or protruding objects?	X				
3.	Do ramps on an accessible route appear to have a compliant slope?			Х	Interior ramps were no present.	
1.	Do ramps on an accessible route appear to have a compliant length and width?			Х		
5.	Do ramps on an accessible route appear to have compliant end and intermediate landings?			Х		
.	Do ramps on an accessible route appear to have compliant handrails?			Х		
7 .	Are adjoining public areas and areas of egress identified with accessible signage?	Х				
3.	Do public transaction areas have an accessible, lowered counter section?	Х				
> .	Do public telephones appear mounted with an accessible height and location?			Х		



	Uniform Abbreviated Screening Ch	ecklist f	Uniform Abbreviated Screening Checklist for the 2010 ADA					
Section	Item	Yes	No	N/A	Comments			
10.	Are publicly-accessible swimming pools equipped with an entrance lift?			X				
	F. Interior Do	ors						
The tenan	t's interior doors are generally observed, as follows:							
1.	Do doors at interior accessible routes appear to have compliant clear floor area on both sides?	Х						
2.	Do doors at interior accessible routes appear to have compliant hardware?	Х						
3.	Do doors at interior accessible routes appear to have compliant opening force?	Х						
4.	Do doors at interior accessible routes appear to have compliant clear opening width?	X						
	G. Elevator	s						
Elevators	were observed as follows:							
1.	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	Х						
2.	Is accessible floor identification signage present on the hoistway sidewalls?	Х						
3.	Do the elevators have audible and visual arrival indicators at the entrances?	X						
4.	Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area?	X						
5.	Do the elevator and car doors have automatic re-opening devices to prevent closure on obstructions?	X						
6.	Do elevator car control buttons appear to be mounted at a compliant height?	Х						
7.	Are tactile and Braille characters mounted to the left of each elevator car control button?	Х						



Uniform Abbreviated Screening Checklist for the 2010 ADA								
Section	ltem	Yes	No	N/A	Comments			
8.	Are audible and visual floor position indicators provided in the elevator car?	Х						
9.	Is the emergency call system at the base of the control panel and not require voice communication?	X						
	H. Toilet Roon	ns						
The tenan	t's toilet rooms are generally observed, as follows:							
1.	Do publicly-accessible toilet rooms appear to have a minimum compliant floor area?	X						
2.	Does the lavatory appear to be mounted at a compliant height and with compliant knee area?	X						
3.	Does the lavatory faucet have compliant handles?	X						
4.	Is the plumbing piping under lavatories configured to protect against contact?	X						
5.	Are grab bars provided at compliant locations around the toilet?	X						
6.	Do toilet stall doors appear to provide the minimum compliant clear width?	Х						
7.	Do toilet stalls appear to provide the minimum compliant clear floor area?	Х						
8.	Do urinals appear to be mounted at a compliant height and with compliant approach width?	Х						
9.	Do accessories and mirrors appear to be mounted at a compliant height?	Χ						

3.14 Furniture, Fixtures, and Equipment

Excluded from the authorized scope based on the Client's request.

3.15 Additional Considerations



Limitations

The services Terracon performed were general in scope and in nature. This Report is intended to provide a general overview of the building systems and our opinion of their overall condition based solely on our visual assessment. It has been performed using that degree of skill and care normally exercised by reputable consultants performing similar work. The activities of this survey included observations of visible and readily accessible areas. The observations were performed without removing or damaging components of the existing building systems. Consequently, certain assumptions have been made regarding conditions and operating performance. Comprehensive studies to identify, document, and evaluate every existing defect or deficiency, were not conducted. In some cases, additional studies may be warranted to fully evaluate concerns noted. In addition, system checks or testing of the equipment in the operating mode is beyond the scope of this assessment. It is recommended that contractor's bids be obtained for items that may represent significant expenditures.

Costs for normal maintenance activities have not been included in this Report.

The observations, findings, and conclusions within this Report are based on our professional judgment and information obtained during the course of this assessment based on the scope of work authorized. The opinions and recommendations presented herein are based on our observations, evaluation of the information provided, and interviews with personnel familiar with the property. No calculations have been performed to determine the adequacy of the facility's original design. It is possible that defects and/or deficiencies exist that were not readily accessible or visible. Problems may develop with time, which were not evident at the time of this assessment. The opinions and recommendations in this Report should not be construed in any way to constitute a warranty or guarantee regarding the current or future performance of any system identified.

The representations regarding the status of ADA Title III compliance were determined based on visual observation and without any physical measuring and, thus, are intended to be a good faith effort to assist the Client by noting nonconforming conditions along with estimates of costs to correct and are not to be considered to be based on a detailed study.

Costs and information contained in Draft Reports may be subject to additional input or further analysis prior to the issuance of the final report. This ongoing activity could ultimately alter the conclusions and data contained in the Draft Report. Draft-status information or partial release of a Report should only be utilized by interested parties with the knowledge that minor or substantial changes in the evaluations or recommendations could occur before the final Report is issued. Decisions and actions by the Client based on information contained in a Draft Report, prior to issuance of the final report should be undertaken only after careful review of this cautionary advisory.

Condition Evaluation Definitions

Average to above-average condition for the building system or materials assessed, with consideration of its

Good: age, design, and geographical location. Generally, other than normal maintenance, no work is recommended or required.

Fair: Average condition for the building system evaluated. Some work is required or recommended, primarily due to normal aging and wear of the building system, to return the system to a good condition.

Poor:Below average condition for the building system evaluated. Significant work should be anticipated to restore the building system or material to an acceptable condition.



Definitions of Cost Type

Immediate Repair Work

The Immediate Repair Cost Analysis Table is an analysis of the estimated cost for immediate repair work defined as 'one time' costs estimated for repairs or replacements; the repairs or replacements needed immediately to bring the property to a sound, safe, and fully habitable condition. The list includes i) any items which pose potential danger to the health, safety, or well-being of building occupants, visitors, or passersby such as structural deterioration and failures, inoperable fire alarm systems, significant tripping hazards, building code violations; ii) items affecting tenancy or marketability such as lack of running water, out of service units, extensive damage caused by storm, fire or earthquake; iii) significant deferred maintenance items or non-working building systems such as HVAC systems, parking area repairs, broken windows and/or doors, leaking roofs, pest or rodent infestations; iv) building systems or system components that have far exceeded their expected useful life and require replacement or upgrade.

Replacement Reserves (Years 1 Through Assessed Term)

The Replacement Reserve is an analysis of the estimated cost for normally anticipated replacement for the major components of the improvements during the evaluation period. Reserve costs are typically defined as predictable and in some instances to be recurring within a specified future period. Items anticipated to be less than the threshold amount to repair or replace are generally considered to be part of routine maintenance and are generally omitted from the Replacement Reserve. Unless specifically required, these costs are not intended to represent enhancements or upgrades to the existing property. The analysis is based on the physical assessment of the property, a review of maintenance logs and historical capital expenditures as well as any scheduled or in-progress capital improvement programs. The remaining life values are based on published historical performance data for comparable items with consideration for the present condition and reported service history. The cost estimates are provided in present day values. The annual costs are summed up in both present-day values and the inflated amount. The actual inflation rate may vary over the length of the term.

General Opinion of Costs

The opinions of costs presented are for the repair/replacement of readily visible materials and building system defects identified that might significantly affect the value of the property during the evaluation period. These opinions are based on approximate quantities and values. They do not constitute a warranty that all items, which may require repair or replacement, are included. Estimated cost opinions presented in this Report are from a combination of sources. The primary sources are from Means Repair and Remodeling Cost Data and Means Facilities Maintenance and Repair Cost Data; past invoices or bid documents provided by site management; as well as Terracon's experience with costs for similar projects and city cost indexes.

Actual costs may vary significantly depending on such matters as type and design of remedy; quality of materials and installation; manufacturer of the equipment or system selected; field conditions; whether a physical deficiency is repaired or replaced in whole; phasing of the work; quality of the contractor(s); project management exercised; and the availability of time to thoroughly solicit competitive pricing. In view of these limitations, the costs presented herein should be considered "order of magnitude" and used for budgeting purposes only. Detailed design and contractor bidding is recommended to determine actual cost.



These opinions should not be interpreted as a bid or offer to perform the work. All costs are stated in present value. The recommendations and opinions of cost provided herein are based on the understanding that the facility will continue operating in its present occupancy classification and general quality level unless otherwise stated. Information furnished by site personnel or the property management, if presented, is assumed by Terracon to be reliable. A detailed inventory of quantities for cost estimating is not a part of the scope of this Report.

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Advisory Notes

The following advisory notes are provided to discuss potential issues associated with budgeting practices, presence of potential hazardous materials, constructions products that may be defective or have a shorter useful life than anticipated for similar or alternative products used for the same purpose. The list of items addressed is not intended to list all such products, but includes some that could be present at this type of development.

Occupant-Responsible Expenses and Condominium Association-Type Costs

Since the subject portion of the building is located within an overall building that is a condominium, it should be recognized that Terracon was not provided with the information concerning apportionment of costs or assignment of responsibilities of shared capital expenses outside of the subject space. Additional costs or supplemental responsibilities for maintenance and replacement of certain equipment or systems and components of the overall building were not reported to Terracon; therefore, situations can occur where the occupant or lease-holder of the subject space might be required to bear potential costs of repairs or replacement. Terracon has not included these costs in this Report and recommends that such potential costs to be further verified.



Tenant-Responsible Expenses

It should be recognized that, even if a tenant is responsible for maintenance and replacement of certain equipment, such as their HVAC equipment according to their lease, situations can occur where the Owner may still be required to bear the cost of the replacement. Terracon has not included these potential costs in this Report unless specifically stated.

Product and Material Recalls

The Consumer Product Safety Commission, as well as some manufacturers, will issue alerts or recalls on products or materials that are under review or have been determined to be defective or potentially dangerous under certain conditions. From time to time, we recommend that multi-family-type occupancies, in particular, check safety and recall information that is released from agencies and testing agencies about kitchen appliances, electrical components, as well as other building components and systems typically used at low-to-mid-rise residential and hotel occupancies.

Hazardous Materials

This Report does not confirm or deny the presence or absence of items such as mold, asbestos, environmental conditions, or hazardous substances on this property.

Existing Roof Warranties

It is recommended that the Client investigate the transferability of the any in-place roof warranties to the new Ownership prior to any property transaction.

Water Intrusion - Present of excessive moisture and visible evidence of suspect mold development

Limited interior areas of the buildings to which access was provided, and where building elements were readily observable, were visually observed for the presence of excessive moisture and visible evidence of suspect mold development, if included as part of the authorized scope of work. No observations were conducted within concealed locations (behind wall and ceiling finishes, and other building components considered to be hidden conditions). No sampling or testing was performed in this assessment. In addition to our visual observation efforts, our questionnaire requested information from property personnel regarding their disclosure of any known excessive moisture or mold issues. The scope of this work should not be construed as a mold assessment.

Flashing and Sheathing - Exterior Wall Coverings

An exterior wall's underlying substrate and flashing materials are usually a hidden condition that indicates problems only well after storm water intrusion failures have caused damage to interior finishes. Wall siding products on typical residential or low-rise commercial structures ultimately rely on the integrity of the underlying sheathing and flashing materials to shed water. When these cladding/sheathing assemblies lack a drainage plane for storm water to migrate out of the wall assembly, the wrapping membranes and flashing components become even more critical to water resistance. Other types of membranes such as asphaltic felts and building papers can vary in type, but should not be considered true moisture barriers. Where moisture cannot escape from behind the felt or paper, rotting of the felt/paper can occur, as well as degrading of sheathing materials.



Installation procedures greatly affect the water shedding ability of a wall. Substandard workmanship can include poorly taped joints of wrap membranes, of sheathing and insulation panels, overdriven fasteners (automatic staple gun) that tear the membrane, holes from ladder damage, missing or badly installed flashing membranes at openings, at terminations of adjacent materials, and at wall/roof plane locations.

Manufacturer's recommendations should be followed regarding installation during extremes of outdoor temperature, which can affect quality and therefore the performance of buildings wraps and felts/building paper. Disintegration of building wrap products can occur when the wrapping membrane is exposed to sun and wind for greater than recommended by the wrap's manufacturer, such as longer than four months for certain products.

Wall openings require flashing to further protect against water migration. Treated sheet metals are traditional flashing materials, but different types of flexible flashings have become more common, such as a flexible peel and stick membrane stripping along the edges of the opening over the wrap. Sills and threshold locations require particular attention to flashing that is turned up and sealed to create a dam against water traveling back into the wall.

Some flashing materials favor installation at opposite temperature extremes; usage of asphaltic flashing membranes should be avoided in extreme heat and direct sun that can have almost immediate detrimental impact. Sun exposure for greater than 30 to 120 days (product dependent) on other flexible flashing membranes or building tapes is not recommended.

Wall assemblies that omit drainage planes have a greater potential for storm water to penetrate beyond the sheathing into insulation and finish materials, especially for Exterior Insulation Finish Systems (EIFS) products. Stucco-type materials should not be applied directly on a wrap membrane without using an intervening building felt/paper layer or other approved detail.

Wood or wood composite siding products should not be applied without an intervening space over the sheathing to allow an exit path for moisture. Cedar and redwood siding also have the potential to degrade membrane wraps, including felts, if the wood has not been sealed on the in-facing side (back-primed).

Where a wall assembly's water resistance is of specific concern, we recommend that localized destructive testing be performed to discover the underlying materials installed and its current moisture condition. Sampling locations should include openings and penetrations to determine actual sheathing, flashing, and sealant usage. Such testing work will not necessarily determine effectiveness of the envelope's air barrier or thermal performance of the wall assembly.

Precast and Prestressed Concrete Products

Precast concrete assemblies, such as tilt-up walls and prestressed floor or wall components, typically have relatively thin concrete face shells containing metal reinforcement. Where used for walls, these pre-manufactured assemblies can have integral cavities filled with insulation or other materials, or remain hollow such as for a structural floor. While the integrity of these concrete assemblies is well established, including site-cast concrete tilt-up components, their service life can be shortened when insufficient concrete encasement of reinforcement within a panel's shell leads to rusting, or if manufacturer's fill materials are substantially incompatible with the concrete material itself. Corrosion of reinforcement might also occur within an insulated sandwich wall panel because of internal condensation if persistently exposed to a building interior's thermal and humidity conditions more extreme than were intended by the design for the panel. Although such design/manufacturing defects might be infrequent, hairline concrete cracking could commence but not be readily apparent until numerous years after installation when the cracks widen due to progressing rust or by exposure to freeze/thaw cycles, or by unsuitable characteristics of mix materials that affect cementitious durability. Internal distress, considered to be a hidden condition, might be underway without significant



visual indication during some years of good performance by the precast product. Hairline defects can be masked by a panel's variegated concrete surface, its painted finish, particularly textured-type paints, and by stains from excess water deposits as from roof-related leakage. We recommend prompt attention be given to frequent paint adherence problems or to the sudden appearance of spalls and cracks, particularly repetitive pattern-type cracks. To help minimize potential moisture-related damage, building ownership should maintain the proper range of interior environmental conditions for which a panel was designed, repaint at reasonable intervals (if already painted), prevent on-going water deposits from gutter leaks or roof overflows and other discharges, replace sealants as needed, and perform routine repairs at joints, openings, and cracks or spalls. Prompt maintenance and obtaining timely professional advice for repairs of concrete assemblies are essential for achieving a normal service life.

Prior to repainting precast concrete walls, cracks should be locally sealed in an approved manner and with a concrete sealant. Cracking may need localized repairs to prevent crack migration from repair locations, which should be monitored on an annual basis. The selected repair materials and the paint type should have a capacity to cover localized hairline crack repairs in the underlying concrete surface. In order to prevent moisture intrusion, repainting of precast concrete sandwich panels might be advisable on a more frequent basis and require paints with increased capacities for adherence and ability to cover surficial concrete characteristics.

Roofing Replacement Costs

Costs for replacement are based on using the same construction-type as the currently in place roofing, unless otherwise noted. Making recommendations concerning specific roof replacement type and design requires in-depth testing and evaluation that are not part of this Report's scope. Where an overlay-type system is already in place, or when a property's owner/management considers using a recovery-type overlay system in lieu of a complete tear-off to expose the structural deck, the existing underlying substrate and conditions cannot be evaluated visually or within the scope of this Report. For purposes of confirming underlying conditions to accommodate an overlay-type system or replacement of only the membrane portion of an existing overlay system, additional testing is necessary, as well as verification by a manufacturer that it will accept the underlying substrate and conditions in order to fulfill Warranty requirements, achieve an estimated service life, as well as deliver performance characteristics.

For the purpose of estimating a replacement dollar amount, a type of re-roofing system and its cost have been assumed, although confirmation that the system will be compatible with underlying conditions at the time of actual replacement will be required. The selected re-roofing type, along with its cost assumed by this Report, may no longer apply when unacceptable conditions are later found, with consequential additional costs not included in this Report such as for significant remediation of underlying components or when a complete tear-off procedure is then deemed necessary.

Costs for roofing recommendations necessarily assume that the building and roof superstructures will accommodate the roofing's loads or change in load patterns, if any; supplemental structural engineering verification may be needed at additional cost beyond this Report. All roofing recommendations or costs are intended to be confirmed by the property's Owner/management's roofing advisors and roofing installer at time of the roofing proposal. Applicable roof design requirements (storm drainage criteria, fire ratings, Code requirements, insurance company ratings, energy criteria, zoning, etc.) need to be further verified while soliciting proposals and prior to installation, which are beyond the scope of this Report. Note that overlay systems can have a shortened service life or voided warranties where installed over existing roof conditions that do not allow rapid storm water drainage or other localized situations, and which should be understood by Owner/property management as being an acceptable economic choice between cost and long-term performance.



Premature Failure of TPO Roofing

TPO (ThermoPlastic Olefin) low-slope roof membranes have been used since the mid-1990s. Some TPO manufacturers have experienced problems with the longevity of their specific product, whereby membranes produced prior to approximately 2002 have undergone accelerated aging such that the membrane becomes brittle, seams lose their adhesion, and the membrane cannot be repaired using typically expected means. A manufacturer's proprietary selection of chemical additives to its TPO formulation can be critical to premature failure. Some black-colored TPO membranes may even be more failure-prone than the usual white. ASTM standards for TPO roofing materials have since been developed. Some American manufacturers have gone out of business because of their unsuccessful TPO formulations, while other manufacturers now have different chemical compositions that can permit warranties of 20-years. European-made TPO products appear to have been unaffected, but are usually installed as 60-mil membranes.

The most problematic TPO usage reportedly has been a 45-mil thick, unbacked (no fleece-backing), membrane that is fully adhered to the substrate and manufactured prior to 2002. Different applications of TPO, such as being mechanically attached, may perform somewhat better by allowing the membrane to stretch slightly before tearing or pulling away from flashing. Regardless of installation method, including ballasted, TPO membranes can undergo premature aging and shrinkage due to a manufacturer's chemical formulation, such as lack of UV stabilizers in their composition. 60-mil thick membranes reportedly have had less overall susceptibility to premature aging, especially if the membrane had been purchased with a fleece backing, and possibly because there is greater thickness to deteriorate before significant failure. Visual indications of premature aging and failure may not be readily evident early in the roof's age or even for some years. The membrane may rapidly deteriorate shortly before significant failure, and resulting in an unpredictably shorter service life. We understand that, in some early failure cases, a shortened service life has been less than 10-years; potential failure should generally be assumed to occur in a range of 10-to-15 years, especially for pre-2002 products. Since 2002, newer TPO formulations will likely have a more normal expected service life, but no long-term track record has yet been established proving an estimated useful life of about 15-plus years for an American TPO product. In an overlay/recovery application, TPO may be more prone to premature failure, regardless of year manufactured or formulation, if the substrate was in poorer condition than required by a manufacturer or than prudent to have been overlaid without complete tear-off. We recommend an aggressive preventative maintenance program for all TPO membranes throughout the year, prompt repair, and annual professional inspections to better determine actual roof replacement timing, which may be significantly sooner than the year indicated by the Cost Table, or required to be replaced even if not anticipated by this report.

Batt Insulation on Underside of Metal Roofing

Some types of insulation batts with integral vapor barriers, especially metal foil-type barriers, have been known to cause deterioration of roof decks and rusting of metal roof connectors when attached securely to the roof framing. This situation can create a dead air space above the insulation, potentially trapping moisture from condensation or roof leaks. As part of the ongoing maintenance of buildings that have this type of insulation, Terracon recommends a random inspection of the roof framing to verify that no current damage exists and that the insulation be vented to prevent future condensation buildup and damage to the assembly. Where insulation batts lack this barrier, the underside of a metal roof deck or panel is still considered a hidden condition that should be randomly monitored on a routine basis.



Roof Skylights & Fall Protection

Evaluation of the safety measures for all personnel accessing roofs and while upon roof areas is wholly the responsibility of property ownership/management. Certain roof locations and conditions may require that fall protection has been installed at roof skylights, and which are further identified by OSHA (Occupational Safety and Health Act) standards and model building codes. Determining a roof's fall protection need or specific safety measure to be installed is not within Terracon's scope of work. Safety-type inspections of the fall protection provided at skylights or other roof areas, including their adequacy or current physical condition, are outside of Terracon's responsibility or its Report.

If a cost for fall protection at skylights is cited by Terracon, the cost shall be considered a budget-only amount and to be understood as Terracon's recommendation for property ownership/management to promptly commence and complete a professional analysis of the possible need and implementation of fall protection. Additional roof areas and conditions might need further evaluation than discussed in this Report. Analysis of all structural-type loads or loading conditions for skylights and their fall protection is beyond the scope of Terracon's Report.

Although fall protection at skylights and other roof areas can usually be accomplished by various means, selecting a method is the responsibility of the property ownership/management. If, in the judgment of property ownership/management, certain safety measures are needed or otherwise required by such agencies as OSHA (29 CFR Section 1910.23), or by a building code, the type and sufficiency of the specific safety measures shall be determined by a qualified party designing and installing the safety equipment as directed by property ownership/management. Websites for OSHA, roof skylight manufacturers, and the local code jurisdictions should be consulted for additional information concerning roof fall protection.

Fire Retardant Treated (FRT) Sheathing

In lieu of constructing a parapet above the roof, usage of fire retardant treated plywood (FRT) as roof sheathing 4-feet to either side of a tenant separation wall or fire separation wall was required in some jurisdictions. Typical installations occurred on medium- or steep-slope roofs in low-rise multi-family/townhouse buildings. A stamp on the attic side of the sheathing would indicate fire-retardant-treated materials. Although earlier usage may have occurred, the treatment method used between 1981 into the 1990s was prone to failure, causing the FRT plywood material to degrade when simultaneously exposed to high temperature, poor ventilation, and high humidity. Loss of structural strength, of fire protection capability, corrosion of fasteners, and possible deformation of roof shingles are characteristic in extreme cases, which could occur after 3 to 8 years of severe combined exposure. Lesser degradation occurs where attic ventilation is much greater and temperatures are lower. The affected plywood becomes darkened, brittle to the touch, and has a crumbly surface.

Roofs should not be walked where FRT plywood may have been used. Attic spaces should be properly ventilated to mitigate conditions that can cause FRT plywood to deteriorate. All areas should be monitored regularly for possible deterioration. We recommend that FRT plywood be replaced when the roofing is replaced. If a fire rating of the specific assembly is required, an alternative method of accomplishing this should be determined and approved by the building and fire departments. The cost of replacing suspect FRT plywood, as well as an estimated cost of accomplishing the required fire-rating, is not included in any cost table.



Energy Policy Act of August 2005 and Energy Independence Act of 2007

Federal legislation has mandated that direct expansion (DX) cooling equipment, sized 1- through 5.5-nominal tons, single- and three-phase electric service, manufactured after June 19, 2008 shall have a minimum Seasonal Energy Efficiency Ratio (SEER) of 13. Within the next five years, it is speculated that minimum SEER ratings may be raised to 18 or 20. Further, due to the required reduction in the manufacture of refrigerant HCFC-22 since 2004, manufacturers began to provide SEER 13 and higher rated units in 2007 based on using refrigerant HFC-410A, the replacement for HCFC-22. Manufacturing of refrigerant HCFC-22 in 2015 will be limited to 10-percent of pre-2003 levels until final phase-out in 2020.

Air conditioning systems that use HFC-410A operate at much higher pressures than with HCFC-22. Direct conversion of in-place HCFC-22 equipment may not be practical. Consideration must be given to the age, efficiency, condition and pressure rating of the existing evaporator coils, condition of the air handlers or furnaces, length and diameter of refrigerant piping, and configuration of the mechanical ductwork and plenums. Prior to replacing an individual system, or implementing a broader replacement program, a registered professional engineer or licensed air conditioning contractor should be consulted.

Terracon's cost estimates provided in this Report assume that replacement condensing units compatible with the existing systems will remain available through 2011 or longer, however, the date that the client may realize the cost impact of these regulations may be sooner or later than can be estimated. Unless stated differently elsewhere in this Report, Terracon has based replacement and conversion costs on utilizing existing refrigerant piping and evaporator coils for use with refrigerant HFC-410A. Depending on equipment in place, replacement and conversion may also require evacuation of HCFC-22 refrigerant, flushing and cleaning the existing refrigerant piping of refrigerant and oils, installing a filter-dryer, replacing the thermal expansion device if required, and charging the system with R-410A. These costs are not included in our cost estimate.

Terracon recognizes that replacement or conversion strategies may differ at each property based on equipment ages, economics, availability of HCFC-22 refrigerant, and the extent of costs associated with consequential building alterations due to air conditioning equipment and system modifications. Actual costs of maintenance, replacement, conversion, or of collateral physical renovations to unspecified building components may vary over the next several years and be additional to the cost tables; hence Terracon recommends that a client consider establishing a contingency fund within its operating budget beyond any costs already reserved in the evaluation term. Complete replacement of the split DX systems, if required, could range from \$3,000 to \$5,000 per system.

Piping/Duct Insulation

Gaps, splits, and vapor barrier failure in various types of pipe insulation has been known to cause corrosion of metallic piping and ductwork within hydronic systems where the insulation either absorbs moisture or allows condensation to form on the piping and ductwork. Since condensation and related corrosion can potentially cause long-term deterioration and damage to piping and ductwork within hidden spaces, as part of the ongoing maintenance of buildings that have this type of piping and insulation, Terracon recommends a random inspection of the piping and ductwork and its insulation to verify that damage has not occurred. This condition can be latent and may require Ownership to open enclosed/sealed chase spaces.



Building Electrical Systems

Recognizing that a property's electrical distribution components are a mostly hidden condition, and that these systems must be maintained on a regular basis as part of an operating budget, property owners/managers should utilize a licensed electrician to routinely monitor electrical connections, grounding systems, and fault protection devices for signs of metallic corrosion, for overheating, such as softened, distorted, or charred insulation on a wire or of a component's casing, and for cracking of pre-1965 rubber-type wire insulation.

Reusing salvaged electrical components can require extensive prior examination and refurbishing since they may contain aluminum parts or other corroded or degraded materials that must be reconditioned or be wholly rejected by a licensed electrician; testing agency-approved/listed new replacement parts are recommended. From time to time, property owners/managers should check recall announcements from the United States CPSC (Consumer Product Safety Commission) for in-place electrical equipment, including HVAC equipment.

When electrical equipment manufacturers go out of business, or when equipment becomes obsolete though still functional, or is being phased-out by manufacturers due to regulatory requirements, such as for T12 fluorescent lamps since July 2005 and T12 magnetic ballasts since March 2006, part shortages can occur for in-place equipment that may lead to replacing entire assemblies rather than a single component. In the case of T12 lamps and magnetic ballasts, retrofitting of existing lamp sockets and using electronic ballasts might be an option, but which would require a property's owners/manager to determine their most cost-efficient conversion or replacement strategy.

Selecting a conversion or upgrade strategy for electrical equipment and fixtures is beyond the scope of this Report. Our cost opinions, or our assumptions of costs being a part of an annual operating budget or of a tenant's build-out activities cannot anticipate or direct a property owners/managers' strategy to incorporate new equipment, or when to participate in utility or manufacturer incentive and tax programs.

Aluminum Wiring

Certain properties of aluminum and aluminum-alloy wiring can cause deterioration of connections, possibly presenting a fire hazard even after years of service. The hazard lies in the overheating of connections, typically after carrying a heavy electrical load, such as a hair dryer or portable heater, for a sustained period of time. Increased loads are more typical today than in the 1960's and 70's when aluminum branch wiring was used. An aluminum version of type NM non-metallic sheathed cable (the common house wiring cable) became widely used through the 1960's and until around 1972. Facilities that have branch circuit wiring installed using aluminum, aluminum-alloy, and tin-plated aluminum (SINIPAL brand) wiring directly to fixtures should be considered a significant risk; such aluminum wiring types are prohibited for branch circuit wiring in new installations. Note that no corrective action to copper-coated aluminum wire connections is required since there is no known history reported of overheated connections associated with copper-clad aluminum wiring. Plated copper wire is also an approved wire-type requiring no corrective action. Note that approved aluminum-type wiring is permitted on the service-entry side of the main service breaker panel.

It was gradually recognized that certain properties of aluminum were causing problems with connections, and occasional electrical fires resulted from overheating of those connections. Aluminum is relatively soft, and as temperature increases, expands more than the metals from which connectors are made. When current flows through a connection, the connection becomes warmer. The expansion of the aluminum, confined under a screw terminal, generates tremendous pressure, so that the metal "flows" into the empty spaces in the connector. When the electrical



load is removed, the aluminum cools and contracts, and a gap forms between the wire and the connector. The resulting loosely-fit connection results in a higher electrical resistance at the location that can result in arcing of the current, the formation of corrosion in the gap, and ultimately a further increase of the electrical resistance.

The industry recognizes the most sure and permanent solution is to rewire with copper. The use of a COPALUM crimp, which is a type of pigtail connection whereby copper is "crimped" (a full compression crimp connection) with the existing aluminum, is recommended by the National Fire Protection Association, UL and the US Consumer Products Safety Commission as the next best repair method. Two other repair methods are often recommended by electricians, (pig-tailing and the use of CO/ALR devices) but both have been proven to fail and while these repair methods are less expensive than COPALUM crimp connectors, neither of these repairs are considered acceptable by CPSC. It is our position, as stated by the CPSC that though it is believed that the use of CO/ALR approved devices can greatly reduce the most frequent failures, it is considered a less permanent repair than rewiring or the COPALUM crimp and that CO/ALR devices must be considered to be, at best, an incomplete repair and a temporary fix.

Aluminum wiring requires aggressive maintenance procedures such as checking of connections, checking main service panels, abrading the wiring at the connections and re-tightening annually, including the neutral bus. Besides checking aluminum-type wiring to receptacles and switches, inspection and maintenance or repair may be required of wire splices, and connections to built-in appliances as dishwasher, hot water heater, and HVAC equipment. Where approved repairs have already been done, the work should be re-inspected annually. Signs of an overheated device or connection should prompt immediate repair, including removal of cosmetic finishes that protrude over or into a receptacle box, like wall paper or any combustible material such as a non-metal cover plate. All repairs are considered to be dependent on the skill level and diligence of those conducting the work, which we cannot verify. Regardless of the method chosen for dealing with existing aluminum wiring conditions, outlets and switches, the connections in the circuit breaker panel and at all junction boxes should be checked and aggressive maintenance procedures be required by the Borrower/Owner and their Certified Electrician to assure the safety of the occupants of this facility going forward.

Corrosion in Potable / Non-Potable Water Distribution and Drainage Systems

Various corrosive conditions, including destructive Microbial Induced Corrosion (MIC) activity, can be present in both potable and non-potable water distribution systems, such as in space heating/chilled water piping, as well as a building's sanitary plumbing system. Over time, this corrosion can result in chronic leaking of piping. Some piping installations may be more prone to accelerated degradation or blockage, such as low-sloped waste drainage piping, low-usage supply piping, exceedingly high-flow velocities in undersized pipe, or installations with numerous bends/irregular lay-out geometries. Poor initial installation practices may also promote corrosion. Particular defects, such as pinholes in copper, may exist without discovery until substantial damage has occurred. Such piping is considered a hidden condition, including insulated or wrapped or embedded piping, and will prevent adequate visual observation and therefore need to be part of preventative maintenance programs that could consist of flushing or videoing of these systems at recommended intervals. If testing identifies MIC, the treatment will vary depending upon the organism. Treatments include removal of microbial nutrient; providing accessibility for frequent cleaning; changes to the pH of the water; the use of suitable protective coatings; and the use of more-resistant materials.

No costs were included in this Report for significant testing or piping replacement unless otherwise specifically noted in the Cost Tables. Terracon did not perform any testing as part of our scope of work for this PCR. Although we did interview available persons knowledgeable with the property to determine whether historical chronic leaking has occurred, Terracon recommends regular testing and proactive maintenance to address this potential condition as part of an operating budget cost.



Fire Sprinkler System Microbial Induced Corrosion - (MIC)

Destructive microbial activity has been found to be a contributing factor in the corrosion of wet fire protection sprinkler systems. Symptoms of MIC include pinhole leaks, smelly water, black water and tubercles forming inside the piping. The corrosion is seen more often in lower (numerical) Schedule steel piping than with higher Schedule piping and appears to happen more at pipe seams. The National Fire Protection Agency (NFPA) is currently addressing the MIC problem with changes in NFPA 13 and 25.

Over time if left untreated, this corrosion can result in chronic leaking of the sprinkler piping. The presence of these organisms can only be confirmed using analytical tests. If the testing identifies MIC, the treatment will vary depending upon the organism. Treatments include removal of microbial nutrient; providing accessibility for frequent cleaning; changes to the pH of the water; the use of suitable protective coatings; the use of more-resistant materials; and possible cathodic protection. For some species, the use of biocides has been effective. A dry-pipe sprinkler system could also be affected because wet testing can allow residual moisture to be retained in piping low spots; this moisture, coupled with oxygen available in the compressed air within the pipe can potentially increase internal wall corrosion rates and possibly lead to leaks.

Terracon did not perform any testing as part of our scope of work for this PCR. Although we did interview available persons knowledgeable with the property to determine whether historical chronic leaking has occurred, Terraconrecommends regular testing and proactive maintenance to address this potential condition of the fire sprinkler piping as normal preventative maintenance as part of an operating budget cost. No costs were included in this Report for significant piping replacement unless otherwise specifically noted in the Cost Tables.

Recalled Fire Sprinkler Heads

Our site observations may have noted the presence of fire suppression sprinklers within this/these structure(s). There have been several national recalls of various defective sprinkler heads. These manufacturers include *Omega* and recalled heads from *Central*, *Star* or *Gem*. The national recall of *Central*, *Star* or *Gem* sprinkler heads was due to the degradation failure of the O-rings. Other manufacturer-related reasons for non-functioning sprinkler heads also exist. If the presence of fire suppression sprinklers at the subject site was observed, we noted the type of spare heads stored on-site in the spare sprinkler head cabinet by observing the manufacturer's name of the heads; however, the same sprinkler head type may not be in actual service throughout the subject site. Because of manufacturer recalls, we therefore recommend that property owner(s) or their management firm(s) promptly contact the licensed fire suppression contractor that inspects and services their system in order to confirm the in-place head-types, and to verify if they are part of any manufacturer's recall or service bulletin. The time for a manufacturer's offer of partial dollar compensation for recall-related work may have expired; however, the work must still be performed promptly.

3.16 Documents Reviewed

Terracon was provided with the following documentation for this property, which we have relied upon in the assembly of this Report.

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3.17 Out of Scope Considerations

No out of scope considerations are included in this Report.



3.18 Opinions of Cost





Immediate Repair Cost Table

Item	Quantity	Unit	Unit Cost	Immediate Total
3.7 Mechanical and HVAC Systems				
Allowance for the procurement of a spare charge of R-22.	1	Allow	\$1,000	\$1,000
3.12 Fire and Life Safety Systems				
Allowance for the services of a code specialist to determine the applicable requirements of the fire suppression sprinkler system.	1	EA	\$5,000	\$5,000
Total Repair Cost				\$6,000



Capital Reserve Schedule

Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost
3.1 Site Improvements																		
Limited full-depth repair of asphalt paving.	10	9	1	35,000	SF	\$8.00	\$280,000	\$140,000										\$140,000
Crackseal, sealcoat, and restripe asphalt paving.	5	4	1	35,000	SF	\$0.65	\$22,750	\$22,750					\$22,750				\$22,750	\$68,250
Limited concrete paving replacement.	30	29	1	8,550	SF	\$7.00	\$59,850	\$23,940										\$23,940
Partial replacement of brick pavers.	20	19	1	1,200	SF	\$25.00	\$30,000	\$7,500										\$7,500
3.2 Amenities																		
Refinish gym wood floor.	10	9	1	6,000	SF	\$4.00	\$24,000	\$24,000										\$24,000
3.3 Building Exterior																		
Apply a penetrating masonry sealer.	10	8	2	14,000	SF	\$3.00	\$42,000		\$42,000									\$42,000
Remove and replace deteriorated sealants at the perimeter of the window and door assemblies and penetrations.	15	10	5	900	LF	\$10.00	\$9,000					\$9,000						\$9,000
Replace loading dock manual, steel, overhead doors.	35	30	5	320	SF	\$18.00	\$5,760					\$5,760						\$5,760
Repoint exterior masonry.	25	20	5	14,000	SF	\$7.00	\$98,000					\$24,500						\$24,500
3.4 Roof																		
Replace single-ply TPO roof membrane assembly.	20	16	4	14,000	SF	\$15.00	\$210,000				\$210,000							\$210,000
3.6 Interior Components																		
General renovation of interior finishes in common areas, offices, classrooms and cafeteria.	10	9	1	60,000	SF	\$13.00	\$780,000	\$390,000	\$390,000									\$780,000
Phased renovation of locker rooms and restrooms interior finishes and fixtures.	30	25	5	12,000	SF	\$70.00	\$840,000					\$280,000	\$280,000	\$280,000				\$840,000
3.7 Mechanical and HVAC Systems																		
Replacement of 16.5-tons of condensing units.	20	33	0	17	TON	\$1,800.00	\$30,600	\$30,600										\$30,600
Replacement of 1.5-tons of DX-split systems.	20	25	0	3	TON	\$2,000.00	\$6,000	\$6,000										\$6,000
Refurbishment of a portion of the interior and exterior AHUs.	25	33	0	7	EA	\$20,000.00	\$140,000	\$140,000										\$140,000



Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost
Replacement of a portion of the interior and exterior AHUs.	25	33	0	6	EA	\$40,000.00	\$240,000	\$240,000										\$240,000
Refurbishment of a portion of the VAV-terminal units.	20	33	0	33	EA	\$500.00	\$16,500	\$16,500										\$16,500
Replacement of the unit heaters with HHW coils.	20	33	0	3	EA	\$1,000.00	\$3,000	\$3,000										\$3,000
Replacement of the finned tube baseboard radiators.	25	33	0	400	LF	\$50.00	\$20,000	\$20,000										\$20,000
Replacement of the electric unit heaters in locker rooms.	15	33	0	4	EA	\$2,000.00	\$8,000	\$8,000										\$8,000
Anticipated replacement of the DX-cooling only mini-split system.	15	8	7	2	TON	\$1,500.00	\$3,000							\$3,000				\$3,000
Replacement of the DOAS.	25	33	0	1	EA	\$40,000.00	\$40,000	\$40,000										\$40,000
Replacement of localized areas of HHW piping and fittings.	50	67	0	40	LF	\$500.00	\$20,000	\$10,000	\$10,000									\$20,000
3.8 Electrical Systems																		
IR thermal scans of all electrical panelboards and the main switchboard.				1	EA	\$4,000.00	\$4,000	\$4,000										\$4,000
3.10 Utilities																		
Allowance for the sanding and repainting of a portion of the natural gas piping.	0	0	0	600	LF	\$10.00	\$6,000	\$6,000										\$6,000
3.11 Vertical Transportation																		
Modernization of elevator controls.	20	33	0	1	EA	\$100,000.00	\$100,000	\$100,000										\$100,000
Modernization of elevator cab finishes.	20	33	0	1	EA	\$20,000.00	\$20,000	\$20,000										\$20,000
3.12 Fire and Life Safety Systems																		
Anticipated replacement of the FACP and a portion of the associated devices.	20	11	9	1	EA	\$75,000.00	\$75,000									\$75,000		\$75,000
Total (Uninflated)								\$1,252,290.00	\$442,000.00	\$0.00	\$210,000.00	\$319,260.00	\$302,750.00	\$283,000.00	\$0.00	\$75,000.00	\$22,750.00	\$2,907,050.00
Inflation Factor (3.0%)								1.0	1.03	1.061	1.093	1.126	1.159	1.194	1.23	1.267	1.305	
Total (inflated)								\$1,252,290.00	\$455,260.00	\$0.00	\$229,472.67	\$359,329.94	\$350,970.23	\$337,916.80	\$0.00	\$95,007.76	\$29,683.59	\$3,109,930.98
Evaluation Period:								10										
# of Square Feet:								75,000										



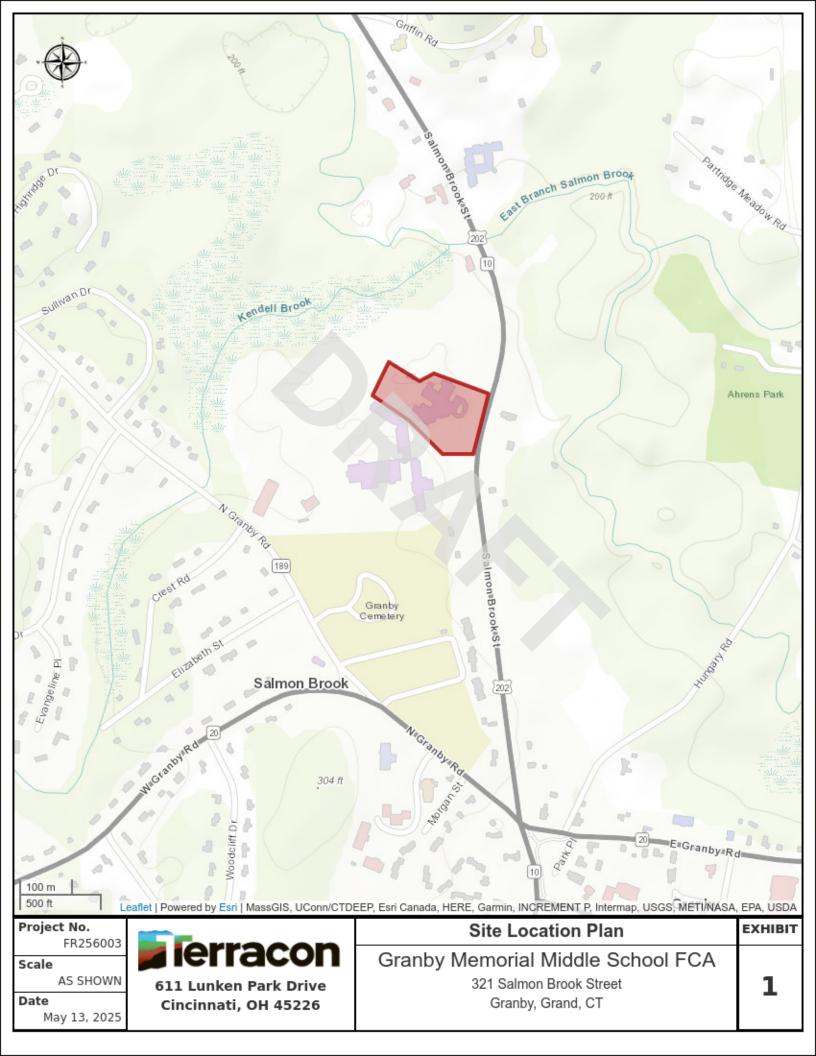
Item	EIII	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost
Reserve per Square Feet per year (Uninflated)								\$3.88										
Reserve per Square Feet per year (Inflated)								\$4.15										



ADA Cost Table

Project:	Granby Memorial Middle School FCA			Square Feet:	75,000	
Location	321 Salmon Brook Street, Granby, CT 06035			No. of buildings:	1	
Type of Facility:	Education			Reserve Term:	10	years
No. Stories:	2			Property Age:	33	years
	Item Description	Quantity	U	Cost	A-Total\$	Comments
A-1	Item Description Create new van-accessible parking space.	Quantity	EA	Cost \$850.00	A-Total\$ \$850.00	Comments
A-1	Create new van-accessible parking space.	Quantity 1			\$850.00	Comments
A-1		Quantity 1				Comments

APPENDIX A SITE LOCATION PLAN



APPENDIX B AERIAL IMAGERY



Scale

AS SHOWN

Date

May 13, 2025



611 Lunken Park Drive Cincinnati, OH 45226 Granby Memorial Middle School FCA

321 Salmon Brook Street Granby, Grand, CT 2

APPENDIX C FLOOD RESEARCH

National Flood Hazard Layer FIRMette



Legend SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD **HAZARD AREAS** Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary **Coastal Transect Baseline** OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped The pin displayed on the map is an approximate point selected by the user and does not represent

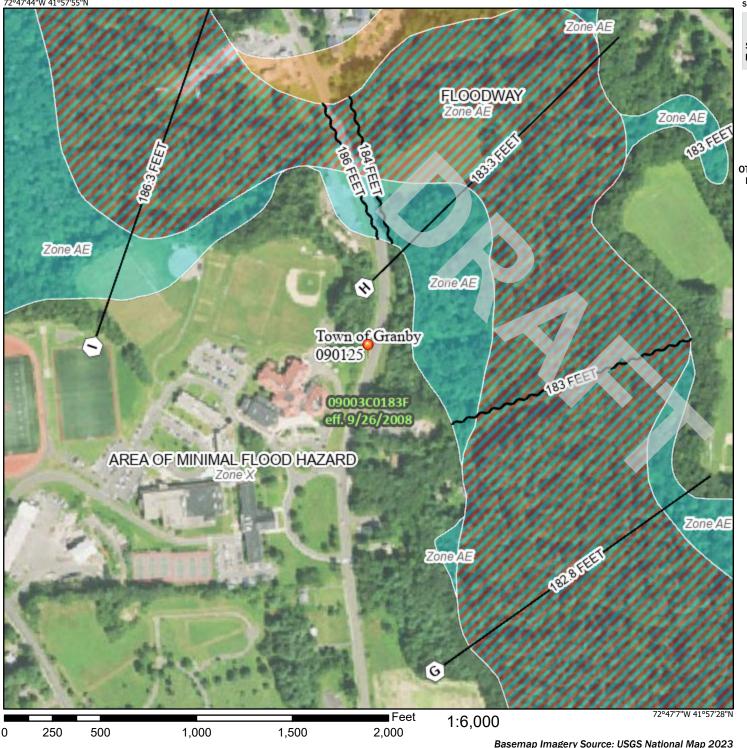
The pin displayed on the map is an approximation point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/5/2025 at 1:08 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



APPENDIX D PHOTOGRAPHIC DOCUMENTATION





Photo 1: Chain link fence surrounding propane tanks for kitchen equipment.

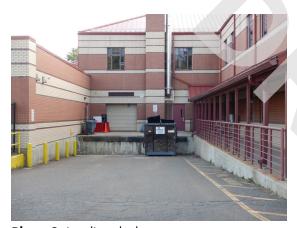


Photo 3: Loading dock area.



Photo 5: Dumpster at the loading dock area.



Photo 2: Chain link fence surrounding propane tank at the loading dock area.



Photo 4: Loading dock steel overhead door.



Photo 6: Painted plastic covered bollards located adjacent to the loading dock.



Photo 7: Signage.



Photo 9: Typical allegator type cracking at the asphalt parking lot.



Photo 11: Concrete walkway at the front of the building.



Photo 8: Property entrance.



Photo 10: Concrete curb.



Photo 12: Concrete walkway at the main entrance to the building.





Photo 13: Site drainage.



Photo 15: Linear cracking at the parking lot.



Photo 17: Outdoor rest area at the rear of the building.



Photo 14: Overview of the main parking lot at the rear of the building.



Photo 16: Asphalt walkway.



Photo 18: Brick pavers at the outdoor rest area.





Photo 19: Asphalt vehicular pavement damage.



Photo 21: Damaged concrete pavement at the loading dock area. Typical of concrete pavement damage throughout.



Photo 23: Landscaping - Mature trees.



Photo 20: Evidence of previous repairs of asphalt vehicular pavement.



Photo 22: Landscaping - Stone covering at a landscape island.



Photo 24: Overview of the Gymnasium.



Photo 25: Overview of the Gymnasium.



Photo 26: Wood flooring.



Photo 27: Gymnasium wood floor. Note the damaged spot.



Photo 28: Gymnasium bleachers.

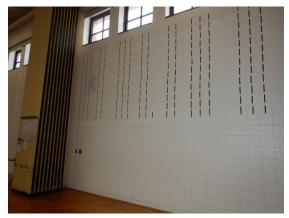


Photo 29: Gymnasium wall finish.



Photo 30: Ceiling finishes.



Photo 31: South (front) elevation of the building.



Photo 32: Partial west elevation of the building.



Photo 33: North elevation of the building.



Photo 34: Main entrance to the building.



Photo 35: main entrance doors.



Photo 36: First floor window.





Photo 37: Elastomeric sealant.





Photo 39: Upper level windows.



Photo 40: Concrete foundation.

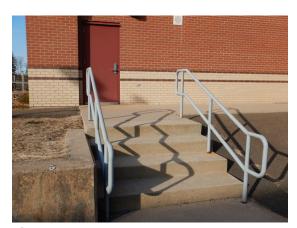


Photo 41: Site steps.



Photo 42: Sevice door.



Photo 43: Typical windows.



Photo 45: Brick veneer bellow windows.



Photo 47: Concrete slab-on-grade.



Photo 44: Drive-in loading dock door.



Photo 46: View of elastomeric sealant around the door.



Photo 48: Metal roof deck.



Photo 49: Typical roll-up door.



Photo 50: Roof access.



Photo 51: EDPM roof membrane over cafeteria..



Photo 52: Internal drain.



Photo 53: Evidence of previous repair of the EPDM roof membrane.



Photo 54: EDPM roof membrane.





Photo 55: Close up of EPDM roof membrane.



Photo 56: Parapet wall.



Photo 57: Gym: Roof hatch to the lower roof.



Photo 58: Gym: Lower roof overview.



Photo 59: Gym: TPO membrane.



Photo 60: Ponding at the gym TPO membrane.



Photo 61: Gym: Evidence of TPO membrane repair.



Photo 62: Gym: Roof overview facing northwest.



Photo 63: TPO membrane



Photo 64: Gym: internal drain.



Photo 65: Gym: Roof overview facing southeast.



Photo 66: TPO membrane patch.





Photo 67: Metal roof.



Photo 68: Metal roof.



Photo 69: Skylight,

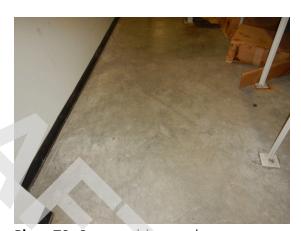


Photo 70: Concrete slab-on-grade.



Photo 71: Dining Room



Photo 72: Dining room VCT flooring.



Photo 73: Dining room ceramic tile flooring.



Photo 74: Kitchen Equipment.



Photo 75: Dishwasher.



Photo 76: Main entrance lobby.



Photo 77: Corridor leading from the main entrance lobby.



Photo 78: Acoustical ceiling finish.



Photo 79: First floor corridor.



Photo 80: School office.



Photo 81: Carpet flooring.



Photo 82: Break room.

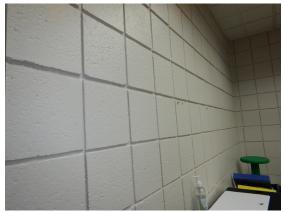


Photo 83: CMU wall finish.



Photo 84: Secondary entrance lobby.



Photo 85: Gymnasium restroom.





Photo 87: Entry door to the Boys locker room.



Photo 88: Boys locker room.



Photo 89: Boys locker room lockers.



Photo 90: Boys locker room urinals.



Photo 91: Boys locker room toilet.



Photo 92: Girls locker room.



Photo 93: Girls locker room toilet and sink.



Photo 94: Girls locker room showers.



Photo 95: Locker room shower flooring.



Photo 96: Conference Room C.



Photo 97: Classroom S8.

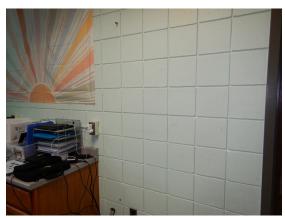


Photo 98: Typical painted CMU wall finish.



Photo 99: Custodian room.



Photo 100: Custodian room. VCT flooring.



Photo 101: Typical 1st floor restroom toilet.



Photo 102: Typical 1st floor restroom sink.



Photo 103: Typical 1st floor restroom wall and ceiling finishes.



Photo 104: Typical 1st floor restroom toilet partitions.



Photo 105: Typical 1st floor restroom flooring.



Photo 106: Typical florescent ceiling lighting.



Photo 107: Corridor fire doors.



Photo 108: 8th grade classrooms corridor.



Photo 109: Overview of classroom 61.



Photo 110: Overview of classroom 68.



Photo 111: Overview of classroom 62.



Photo 112: Overview of classroom 67.



Photo 113: Detail of classroom casework.



Photo 114: Overview of classroom 65.





Photo 115: Emergency exit door leading to the egress stairway.

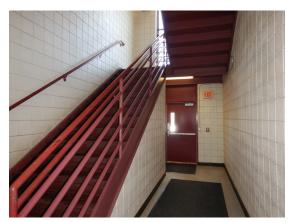


Photo 116: Typical egress stairway.



Photo 117: View of steel egress stairs.

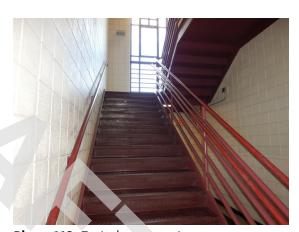


Photo 118: Typical egress stairway steps.



Photo 119: Typical corridor lockers.



Photo 120: Technology wing corridor.



Photo 121: Technology wing corridor floor finish.



Photo 122: Overview of Technology Lab A1.



Photo 123: Technology Lab ceiling finish.



Photo 124: Overview of Technology Lab A2.



Photo 125: Stairwell railing.



Photo 126: Painted CMU wall finishes.





Photo 127: Home economics wing corridor.



Photo 128: Home economics classroom.



Photo 129: Home economics classroom flooring finish.

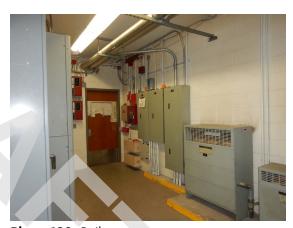


Photo 130: Boiler room.



Photo 131: Elevator equipment room.



Photo 132: Elevator equipment room flooring.



Photo 133: Overview of the Clinic.



Photo 134: Clinic flooring finish.



Photo 135: Clinic ceiling finishes.



Photo 136: Clinic case work.



Photo 137: Clinic restroom toilet.Clinick r



Photo 138: Clinic restroom wall and ceiling finishes.



Photo 139: Monumental stairway at the center of the building.



Photo 140: Monumental stairs.



Photo 141: Upper level corridor wall finishes.



Photo 142: 2nd floor classroom corridor.



Photo 143: Corridor viny sheet goods flooring.



Photo 144: Overview of classroom 81.





Photo 145: Classroom 81 ceiling finishes.



Photo 146: Overview of classroom 86.



Photo 147: Overview of classroom 84.



Photo 148: Second floor mechanical room.



Photo 149: Roof access.



Photo 150: Overview of classroom 73.





Photo 151: Overview of classroom 77.



Photo 153: Media room.



Photo 155: Typical condition of exterior ductwork.



Photo 152: Computer lab.



Photo 154: Typical condition of hail guards for condensing units. Note age and surface corrosion.



Photo 156: Typical condition of exterior ductwork, note deterioration of external coating/insulation.



Photo 157: HHW Circulation pumps.



Photo 158: Typical condensing water boilers.



Photo 159: Typical roof-mounted equipment. Note surface corrosion on natural gas piping.



Photo 160: Typical condition of condensing unit fins



Photo 161: DX mini-split condensing unit.



Photo 162: Typical new wall-mounted thermostat.





Photo 163: Typical HHW unit heater for gym.



Photo 165: DX mini-split-system cassette unit.



Photo 167: Typical HHW unit heater for stairwell.



Photo 164: Typical roof-mounted VAV-AHU with heating only.



Photo 166: Typical older thermostat and temperature sensor.



Photo 168: Typical Interior AHU with heating and cooling coils.



Photo 169: Typical VFD for interior AHU.



Photo 170: Typical AHU with heating coils only.



Photo 171: Typical condition of HHW piping, connections, and insulation.



Photo 172: DX mini-split fan coil unit.



Photo 173: DX split-system condensing unit.



Photo 174: Typical VAV terminal units.



Photo 175: Typical roof-mounted condensing unit. Note corroded fan guards.



Photo 176: Typical HHW baseboard unit heater.



Photo 177: Typical roof-mounted AHU with heating and cooling coils.



Photo 178: DOAS.



Photo 179: Dust collector.



Photo 180: Main Electrical Switchboard.





Photo 181: Utility owned, pad-mounted transformer.



Photo 182: Tank-type water heaters.



Photo 183: Tankless water heaters and domestic water backflow preventer.

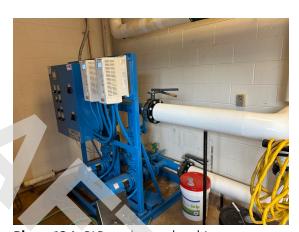


Photo 184: BLPs and controls cabinet.



Photo 185: Elevator cab interior.



Photo 186: Elevator equipment.



Photo 187: FACP.



Photo 189: Typical exit door with exit sign and pull station.



Photo 191: Fire suppression backflow preventer.



Photo 188: Typical portable fire extinguisher in cabinet.



Photo 190: Emergency generator.



Photo 192: Accessible parking at the front elevation of the building.





Photo 193: Accessible parking at the front elevation of the building.



Photo 195: Accessible entrance doors in a series.



Photo 194: Route to an accessible building entrance.

APPENDIX E PRE-SURVEY QUESTIONNAIRE

PCA PRE-SURVEY QUESTIONNAIRE



Today's Date:	2/3	15/2025						
Subject Property Name:				Mipple S	school			
Property Addre					Granby, CT	06035		
Property Parcel	Property Parcel ID #s: Assessor's Info Attacher							
Your Name / Company / Title:								
Your Contact Email/Phone: degray & granby schools org 860-844-5256(0) 413-222-4731(
Length of Time with Property: 5 months								
Date of Site Visit:								
Comments:								
Return to:	Melis	sa.garver@te	erracon.con	ը; Ronnie.ch	oi@terracon.com			
 Please provide dates/in Person most knowledge ALL "down" (unlettable) Pre-arrange entry into a locations in all buildings We need to view ALL m We need to view ALL sp Roofs (low-slope): Terras needed, OR arrange Attic - Ceiling Areas: A Check the box of document Site schematic plan (small prior engineering studies Fire sprinkler tests Elevator/escalator/lift insperior engineering certification Violations against Codes Fire pump test NONE Emergency electric general 	eable al spaces approximents all scales performations/patterns.	mately 10% or asonably possuipment such locked rooms eeds SAFE afing contracted able number that will be affected be certificates permits (swimming / ADA	erty MUST a essed. Make r more of unitatible. ADA fa as but not li garages, or ccess to low or to be on-si of attic space Gurnished to	ccompany us e prior arrang ts / rooms— a cilities must b mited to: HVA rawl spaces, b /-sloped roofs te. es need to be ous: PLEASI icate of Occup recent fire / bu llarm test tests spection/servi warranties (2)	throughout the site ements if necessary arrange choices by de included. AC, Electrical, Plumb assements, under-sid. Provide OSHA-app accessed during out E PROVIDE ALL AVOIDE	visit. different design & ping, Fire Sprinklers, etc. dewalk vaults, etc. proved portable ladders ir visit. /AILABLE DOCUMENTS rtment inspections.		
	Archited ir/replademprovents ts for outside the Mold te	ctural drawing cement work ements with a n-going & pro sts	s ⊠ MEP such as: par pproximate i posed capita ⊠ Roof	/ Civil Engined king garage re ndividual dolla al improvemer surveys (infra	epairs, MEP equipm ar amounts for next nts work red, etc.)	☐ Geotechnical report ent maintenance one-to-five years		

PCA Pre-Survey Questionnaire



	PROPERTY DES	CRIPTION	
Original Construction Date:		Total land acres:	
Renovation Date(s):	Sea attached assessors info	By phase:	
	assassoies info		
Building Square Footages:		# of stories:	
# of Buildings:		Parking garage stories:	
# of Units:		Total # of Parking Spaces	
Unit Type Mix and # of		# of ADA Accessible	
each type:		Parking Spaces	
	LIST ALL OTHER STRUCTU	JRES & AMENITIES:	
<u>UTILITIES</u>	Provider Name/Service		
Electric Power:	Eversource	Separate Tenant Meters?	Y /Ø
Natural or Propane Gas:	Stateline	Separate Tenant Meters?	3 0/5
Domestic Water:	City of Granby	Separate Tenant Meters?	1 1 1 1
Storm Sewer:	Town of Granty	Grease Traps?	Y / N
Sanitary Sewer:	1)		
Sanitary Lift Stations:	None		
Waste Removal:	es with any utilities / suppliers? Y / N	Private? / M (if Yes, describe)	unicipal?
	INSPECTIONAL A	AGENCIES	
County of Jurisdiction	Hartforo		
Building Department	Town of Granby	Outstanding Violations? Yes	
Zoning Department	,	Outstanding Violations? Yes	
Fire Department	17	Outstanding Violations? Yes	
Health Department	17 //	Outstanding Violations? Yes	No 🖹
	REPAIRS/CAPITAL IMPRO	OVEMENTS HISTORY	
List ALL major physical improvements for the PAST 5 YEARS.	Roof Borlers		
improvements for the			
improvements for the PAST 5 YEARS. any in-progress or planned	Roof IBOILERS		
improvements for the PAST 5 YEARS. In yin-progress or planned capital improvements? Identify your most common	Roof IBOILERS NO		

Triple Net Lease?

PCA Pre-Survey Questionnaire



GENERAL		No	Yes	Describe Specific Quantities & AGES
Any recent damage caused by: floor earthquake, fires, hail, high winds, 0 building-related lawsuit / lien etc.?				
Is the site or portion thereof in a 100-year or more frequent floodplain? Other geological hazards?				
Any flooding on the site during your Into any building or onto a parking lo				
Are you currently required to modify any item in order to meet Codes / Zoning / Seismic or other regulation. Any liens against the Property?		Ø		
Are you experiencing or aware of ar damage? Previous remediation?	ny <i>mold</i> OR			MUSIC/ChokUs ROOMS 08/2024
Are you experiencing or aware of ar pest conditions & damage? Any Bo				
Constant or recurring Indoor Air Qualissues/tenant complaints?			1	union grievances
Loud or unusual noise sources on n	eighboring			3
oroperties or on-site?		No	Yes	
Has an ADA survey previously been completed		7		
for this property? Have any ADA improvements been	made to this			
property? Does a Barrier Removal Plan exist f	for the			
oroperty? Has the Barrier Removal Plan been				
reviewed/approved by a third-party?)			
Has building management received complaints that have not been resol				
Are you in the process of implementing ADA compliance, or have an ADA-related complaint/lawsuit filed against the Property?				
Is any litigation pending related to A				
PAVEMENTS & DRIVES	3	No	Yes	Describe Specific Quantities & AGES
Number of ADA compliant spaces? number?	Sufficient			(if NO describe)
Asphalt Paving? / Age?	23425	Alligatoring?	Potholes? O	verlay? Seal Coat? Re-striping?
Concrete Paving? Age?		Cracking?, S	oalling? Rep	airs or Replacement? Re-striping?
Sidewalks? i/ Age?	Z3yks			
SITE & DRAINAGE		No	Yes	Describe Specific Quantities & AGES
Municipal or On-site? Erosion / pon problems?	nding			
Basements / crawl space / Below grade areas?				
	ide?			
Any known water intrusion or seepa Storm water lift stations / pond aera				
Any known water intrusion or seepa Storm water lift stations / pond aera filtration?	tors /			Baseball Isoccerficios
Any known water intrusion or seepa Storm water lift stations / pond aera filtration? Irrigation? Timers? Backflow preve	tors / ention?			Baseball Isoccerficios
Any known water intrusion or seepa Storm water lift stations / pond aera filtration? Irrigation? Timers? Backflow preversite Lighting? Timers or photocells?	tors / ention? ?		Yes	Baseball Isoccerficios IF yes - Describe SPECIFIC Quantities & AGES
Any known water intrusion or seepa Storm water lift stations / pond aera filtration? Irrigation? Timers? Backflow prevenue. Site Lighting? Timers or photocells?	ention? ATION	No		

CA Pre-Survey Questionnaire			ierracon
Piles, piers, beams, matt or foundation? Differential movement, cracking?	V		
Termite damage or wood rot? Last inspection?	w/		
BUILDING ENVELOPE	No	Yes	IF yes - Describe SPECIFIC Quantities & AGES
Masonry, Glass/Spandrel, EIFS, Concrete, Wood Siding?			Repairs? Replacements?
Water infiltration problems?			
Exterior last painted?		П	never
Masonry repairs / tuckpointing?	7		
Siding replacement?			
Sealant / caulking replacement?	V		
Balconies?			Repairs? Replacements?
Windows?			Replacements?
Doors?	W		Replacements?
Loading docks at dock height, quantity? Bumpers?	70		
Loading docks with truck wells, quantity? Bumpers?			
Loading docks with dock equipment?			
Overhead doors, quantity?		V	
ROOFING	No	Yes	Describe Specific Ages and Locations
Low Slope: Built-up, Modified Bitumen, EPDM, PVC, Metal? Overlay-type re-roof systems?		V	EPOM
Steep-slope: Asphalt shingles, masonry, wood shingles or shakes, metal panels?			Meta/
Any active roof leaks?			
Any current roof warranties in place? Transferable?		i)	25yk warranty
Fire-retardant treated (FRT) plywood roof deck?			
Any roof insulation with <u>phenolic-</u> related properties? Major areas of metal deck rust?	V		
lce dams or damage at attic soffits during winter?			
Name & phone number of roofing maintenance contractor:	V	W	
HEATING	No	Yes	Describe Quantities, Locations & Ages
Boilers?		E E	Gas? Electric? Propane 8 months olo
Furnaces?			
Rooftop packaged? 7			Gas? Electric? electric alloriginal to blg. 199
Heat Pump?			<u> </u>
Base board?		4	Original to bldg throughout 1992 Gas? Electric? Original to bldg 1992
Ceiling or duct mounted? a few			Gas? Electric? Original To bldg 1992
PTAC? Z			J J
Tenant responsibility? Owned/maintained?			Facilities pept maintained
COOLING & VENTILATION	No	Yes	Describe Quantities, Locations & AGES
Chillers?	P		Refrigerant type? Tons?

Cooling Towers?	V		
Central air system? Split-systems?	4	V	Quantity? Tons? Refrigerant type? Tons?
Rooftop packaged?		por	Quantity? Refrigerant type? Tons?
Heat Pump?	i		
PTAC?			
Piping? Steel, Copper, PVC?			copper
Building or tenant owned?			11
Outside air ventilation? Dedicated system?			45
Energy Management System? Pneumatic or DDC controls?			DDC control
Name & phone number of HVAC maintenance contractor:			ConsSeru, Steve Goldberg, 860-930-28
ELECTRICAL	No	Yes	Describe Specific Quantities & AGES
Building service capacity? Volts? Amps, 1 or 3-phase?		V	480, 277/120, single 83 phase
Primary transformers utility owned?			
Size and location of typical service panels? 480/277-volt? 208/2120-volt?			Circuit breaker or screw-base fuses? Arc-fault breakers?
Step-down transformers? Size and location?		V	J. J. J. J. J. J. J. J. J. J. J. J. J. J
Any known Aluminum wiring? CO/ALR devices used?			
Fluorescent or incandescent lighting? T-8 or T- 12 lamps? Lighting controls?			throughout bldg.
Infrared Thermal Scans?			
Emergency generator? Natural gas, diesel or propane? Size of fuel tank?			How often tested? Powers during an emergency? iges Diesel, 500g allon, testeo weakly
Name & phone number of electrical maintenance contractor:			Huntington Power, 203-924-3203
PLUMBING	No	Yes	Describe Specific Quantities & Ages
Municipal or public domestic water service? Booster pumps? Pressure tanks?		V	original loving
Type of domestic water piping:			Copper Galvanized Steel, Polybutylene (PB), Polyvinyl Chloride (PVC), ABS?
Type of sanitary drain piping: Cast iron, PVC?			Castiren apuc
Domestic water heaters? Number and location? Natural gas or electric?		U	Tank size? Drip tubes replaced (electric)?
Domestic water treatment?			,
Fountains?		V	8+
Gravel or Oil Separators?			
FIRE / LIFE SAFETY SYSTEMS	No	Yes	Describe Specific Quantities & Ages
Type of Fire Suppression Sprinklers: Wet, Dry, Pre-action, None?		Ø	Last Inspected (month/year) Wel 08/2025
Fire Alarm Control Panel (FACP)? Zoned or Addressable? Age of FACP?		1	Last Inspected (month/year) 2 over 08/2025
Fire Alarm remotely monitored? Municipality?		V	Advanced Alaxm/Affiliated Monitoring
EXPLORE WITH U		A	1800 434 4000 Page 5 of 6

PCA Pre-Survey Question	naire				ا س	erraco
Any microbiologically influence deterioration of the sprinkler s						
Sprinkler head <i>manufacturer</i> Omega / Central recalls?				Duknown		
Fire Pump? Size? Age?			П			
Fire Sprinkler maintenance cor Name & phone number	ntract in-place?			Fre Equi	oment luc	
Smoke Detectors in common spaces?	areas? Tenant		Ø	Fre Equip Last Inspected (month/year) 08/2025	
Fire extinguisher inspections	current?		V	Loot Inanastad /	month/year) supleted mouth month/year)	ly
Smoke Evacuation Systems?			V	Last Inspected (month/year)	
Pressurized Stairwells?				Last Inspected (month/year)	
ADA Strobe lighting in commo			Describe – Qua	ntity		
ELEVATORS & ESC	CALATORS	No	Yes	Describ	oe Specific Quanti	ties & AGES
Electric traction? Hydraulic? Escalators?			W	1		
Quantity and ages?			V	Original	to bldg.	
Capacities (Lbs.) and Velocity?				600/bs		
List recent elevator upgrades / repairs?				Seal 3/4 yeurs ago		
Most recent inspection dates?				Within past year		
Maintenance contract in place? Name & phone number of contractor? Length of Contract?				Service only ☐ Parts AND service? ☑		
Are elevators equipped with Alprovisions?	DA accessible		W			
Item or System	Age in years Elevator 1	Age in y				Age in years Elevator 5
Elevator finishes and doors	23					
Elevator machinery and controls	23					
Escalator finishes	23					
Escalator machinery and controls	23					
FINISHES - COMM	ION AREAS	No	Yes	<u>Describ</u>	oe Specific Quanti	ties & AGES
Restrooms; quantity, location, a	ages of fixtures?		V	original to	bldg. 9+ bth	2145
Corridors; finishes, ages?					inal to bldg	
Carpet; type, ages?					two 15 you of	d
Γile; type, ages?			V		ougheret origin	. 2001 . 30 1 1 1 2 2 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Primary entrances; finishes, ages?				originalto	bidg, carpet	0
Other:				Describe what re	eplacement is expected	in next 10-years & Co
erson Completing Que	estionnaire			2/26/2		
RINT name: Chris	Decreay		Company	: Granb	y CT school	s, facilities
XPLORE WIT	,					Page 6 of 6

321 SALMON BROOK ST

Location 321 SALMON BROOK ST

Mblu F-44/51/61//

Acct# 1-6-315

Owner GRANBY TOWN OF

Assessment \$22,165,570

Appraisal \$31,665,100

PID 4382

Building Count 3

Current Value

		Appraisal		
Valuation Year	Improvements		Land	Total
2022		\$28,759,700	\$2,905,400	\$31,665,100
	As	ssessment	commission and an accident of SECO SECO Approximation of the Province of Second	
Valuation Year	Improvements		Land	Total
2022		\$20,131,790	\$2,033,780	\$22,165,570

Owner of Record

Owner

GRANBY TOWN OF

Co-Owner MEMORIAL MIDDLE + SENIOR HIGH

Address

54 NORTH GRANBY RD

GRANBY, CT 06035-1804

Sale Price \$0

Certificate

Book & Page 0055/0642

Sale Date

07/30/1957

Instrument

Ownership History

Ownership History						
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date	
GRANBY TOWN OF	\$0		0055/0642		07/30/1957	

Building Information

Building 1: Section 1

Year Built:

1992

Living Area:

73,987

Replacement Cost:

\$13,026,231

Building Percent Good:

81

Replacement Cost

Less Depreciation:

\$10,551,200

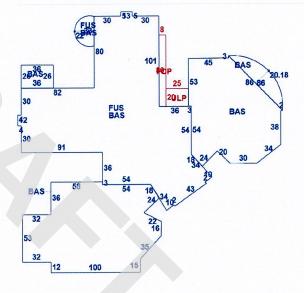
В	uilding Attributes
Field	Description
Style:	Schools-Public
Model	Commercial
Grade	Good +
Stories:	2
Occupancy	1.00
Exterior Wall 1	Brick/Masonry
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Metal
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	Carpet
Heating Fuel	Gas
Heating Type	Forced Air-Duc
АС Туре	Partial AC
Bldg Use	SCHOOL M94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903C
Heat/AC	HEAT/AC PKGS
Frame Type	MASONRY
Baths/Plumbing	AVERAGE
Ceiling/Wall	SUS-CEIL & WL
Rooms/Prtns	AVERAGE
Wall Height	14.00
% Comn Wall	0.00

Building Photo



(https://images.vgsi.com/photos2/GranbyCTPhotos/\00\01\34\27.jpg)

Building Layout



(ParcelSketch.ashx?pid=4382&bid=4382)

	<u>Legend</u>		
Code	Description	Gross Area	Living Area
BAS	First Floor	49,461	49,461
FUS	Upper Story, Finished	24,526	24,526
FOP	Porch, Open	640	0
ULP	Uncov Loading Platform	500	0
		75,127	73,987

Building 2: Section 1

Year Built:

1958

Living Area:

209,625

Replacement Cost:

\$27,288,361

Building Percent Good:

64

Replacement Cost

Less Depreciation:

\$17,464,600

Building Attributes : Bldg 2 of 3			
Field	Description		
Style:	Schools-Public		
Model	Commercial		
Grade	Average		
Stories:	2		
Occupancy	1.00		
Exterior Wall 1	Brick/Masonry		
Exterior Wall 2			
Roof Structure	Flat		
Roof Cover	Rubber		
Interior Wall 1	Minimum		
Interior Wall 2	Drywall		
Interior Floor 1	Vinyl/Asphalt		
Interior Floor 2			
Heating Fuel	Gas		
Heating Type	Hot Air-no Duc		
АС Туре	Partial AC		
Bldg Use	SCHOOL M94		
Total Rooms			
Total Bedrms	00		
Total Baths	0		
1st Floor Use:	903C		
Heat/AC	NONE		
Frame Type	MASONRY		
Baths/Plumbing	AVERAGE		
Ceiling/Wall	SUS-CEIL & WL		
Rooms/Prtns	AVERAGE		
Wall Height	12.00		
% Comn Wall	0.00		

Building 3: Section 1

Year Built:

2012

Living Area:

1,568

Replacement Cost:

\$321,048

Building Percent Good:

90

Replacement Cost

Less Depreciation:

\$288,900

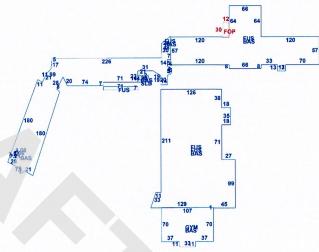
Building Attributes: Bldg 3 of 3

Building Photo



(https://images.vgsi.com/photos2/GranbyCTPhotos/\00\01\56\47.jpg)

Building Layout



(ParcelSketch.ashx?pid=4382&bid=4555)

	Building Sub-Areas (sq ft)			
Code	Description	Gross Area	Living Area	
FUS	Upper Story, Finished	114,189	114,189	
BAS	First Floor	87,583	87,583	
GYM	Gymnasium	7,853	7,853	
FOP	Porch, Open	360	0	
SLB	Slab	315	0	
		210,300	209,625	

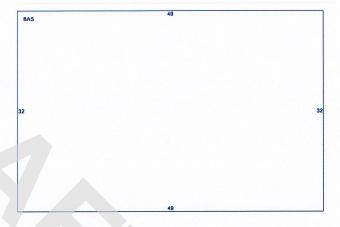
Field	Description	
Style:	Schools-Public	
Model	Commercial	
Grade	Average	
Stories:	1	
Occupancy	1.00	
Exterior Wall 1	Brick/Masonry	
Exterior Wall 2		
Roof Structure	Gable	
Roof Cover	Asphalt / Arch	
Interior Wall 1	Minimum	
Interior Wall 2		
Interior Floor 1	Concrete	
Interior Floor 2		
Heating Fuel	Gas	
Heating Type	Forced Air-Duc	
АС Туре	None	
Bldg Use	SCHOOL M94	
Total Rooms		
Total Bedrms		
Total Baths		
1st Floor Use:		
Heat/AC	HEAT/AC PKGS	
Frame Type	MASONRY	
Baths/Plumbing	AVERAGE	
Ceiling/Wall	CEIL & MIN WL	
Rooms/Prtns	LIGHT	
Wall Height	14.00	
% Comn Wall		

Building Photo



(https://images.vgsi.com/photos2/GranbyCTPhotos/\00\01\34\29.jpg)

Building Layout



(ParcelSketch.ashx?pid=4382&bid=102894)

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	1,568	1,568
		1,568	1,568

Extra Features

Extra Features <u>Legend</u>				
Code	Description	Size	Value	Bldg#
SPR1	SPRINKLERS-WET	216470.00 S.F.	\$138,500	2
ELEV	ELEVATOR COMM	2.00 STOPS	\$15,000	1
ELEV	ELEVATOR COMM	2.00 STOPS	\$19,200	2
ELEV	ELEVATOR COMM	2.00 STOPS	\$19,200	2

Land

Land Use

903C

Use Code Description

SCHOOL M94

Zone

CC

Neighborhood Alt Land Appr

No

Category

Land Line Valuation

Size (Acres)

27.95

Frontage

Depth

0 0

Assessed Value

\$2,033,780

Appraised Value \$2,905,400

Outbuildings

Outbuildings <u>Leg</u>					<u>Legend</u>	
Code	Description	Sub Code	Sub Description	Size	Value	Bldg#
PAV1	PAVING-ASPHALT			80000.00 S.F.	\$120,000	1
LT1	LIGHTS-IN W/PL			38.00 UNITS	\$13,100	1
SHP4	W/IMPROV AVE			288.00 S.F.	\$7,200	2
TEN	TENNIS COURT			43200.00 S.F.	\$81,000	1
LT12	W/FOUR LIGHTS			2.00 UNITS	\$7,400	2
LT4	W/FOUR LIGHTS			2.00 UNITS	\$3,800	2
SHD1	SHED FRAME			80.00 S.F.	\$900	1
SHD1	SHED FRAME			80.00 S.F.	\$500	1
SBD	SCOREBOARD - DIGITAL			1.00 UNIT	\$5,000	2
LT2	W/DOUBLE LIGHT			7.00 UNITS	\$3,900	3
SHD1	SHED FRAME			192.00 S.F.	\$1,200	3
SHD1	SHED FRAME			504.00 S.F.	\$3,000	3
SHD1	SHED FRAME			504.00 S.F.	\$3,000	3
LNT	LEAN-TO			192.00 S.F.	\$300	3
LNT	LEAN-TO			192.00 S.F.	\$300	3
LNT	LEAN-TO			192.00 S.F.	\$300	3
LNT	LEAN-TO			192.00 S.F.	\$300	3
РМН	PUMP HOUSE			192.00 S.F.	\$4,800	3
PTCI	PATIO-CONCRETE			5700.00 S.F.	\$7,100	3

Valuation History

Appraisal				
Valuation Year	Improvements	Land	Total	
2023	\$28,759,700	\$2,905,400	\$31,665,100	
2022	\$28,759,700	\$2,905,400	\$31,665,100	
2021	\$18,284,200	\$2,767,100	\$21,051,300	

Assessment				
Valuation Year	Improvements	Land	Total	
2023	\$20,131,790	\$2,033,780	\$22,165,570	
2022	\$20,131,790	\$2,033,780	\$22,165,570	

2021 \$12,798,940 \$1,936,970 \$14,735,910

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