

Facility Study and Master Plan

Vernon Public School Central Administration

30 Park Street, Vernon CT 06066



SUMMER 2023



DRAFT

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Section 1 : Introduction

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Introduction

Background

Friar Architecture Inc. was engaged by Vernon Public Schools to prepare a facilities study for several district maintained buildings in Vernon Connecticut. The buildings included in the study are:

- Rockville High School
- Vernon Center Middle School
- Center Road School
- Lake Street School
- Maple Street School
- Northeast School
- Skinner Road School
- **Vernon Public School Central Administration Building**
- Next Step Building
- Maintenance Building, 166 Union Street

Purpose of this Study

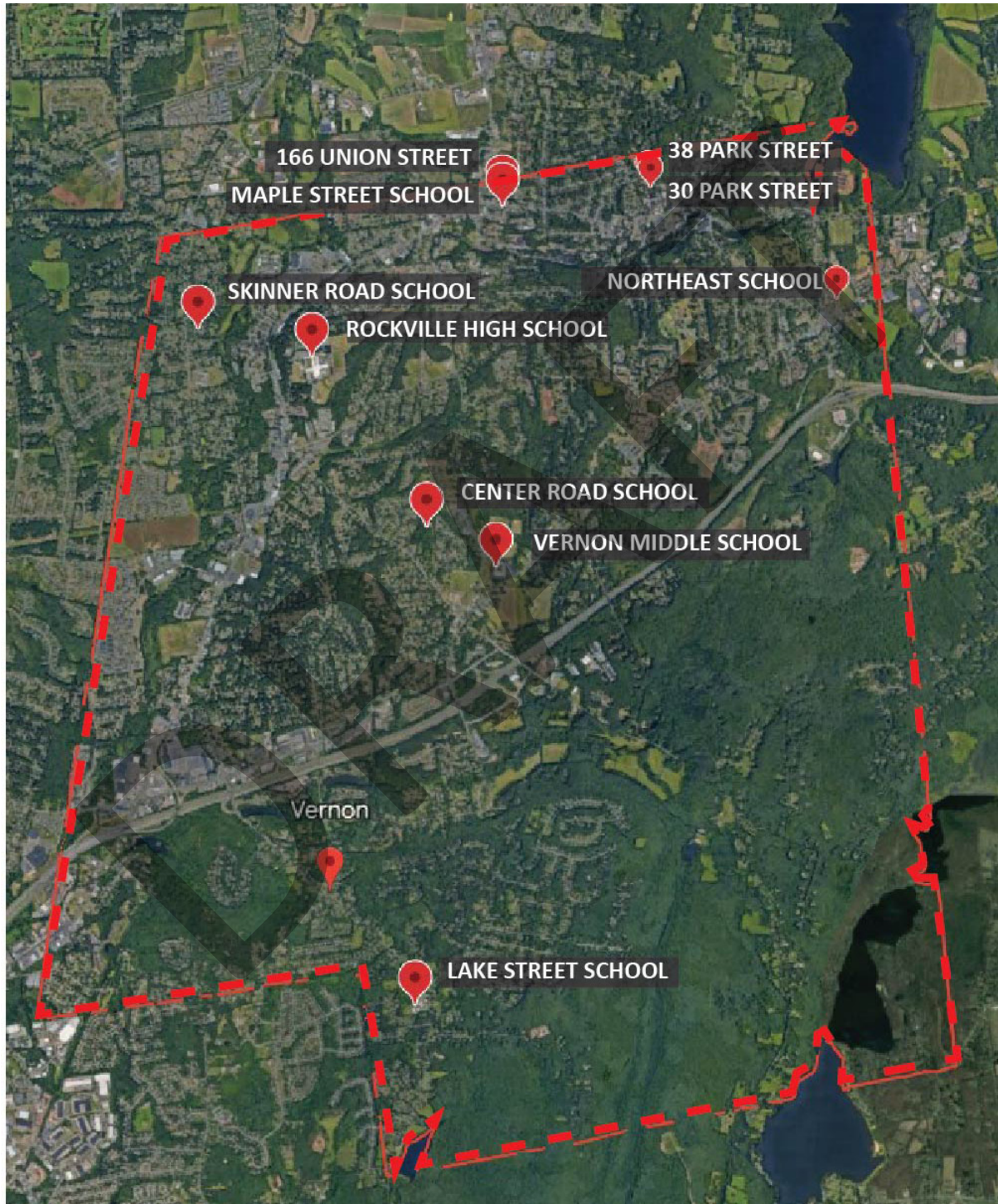
The purpose of this study is to provide the client with an understanding of the current challenges and in the near future, a comprehensive view of the range of possible options with cost implications, and a means to reach consensus on the best possible solution to those challenges.

The intent of the facility study process is:

- To offer a transparent process to move the community toward consensus
- To present information clearly to decision makers
- To present the final recommendations as foundation for future actions

Building Location Plan

A plan of the area is provided below, identifying the location of each building evaluated under this Existing Conditions Survey.



Map Data: Google Earth

Section 2 : Executive Summary

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Building Information

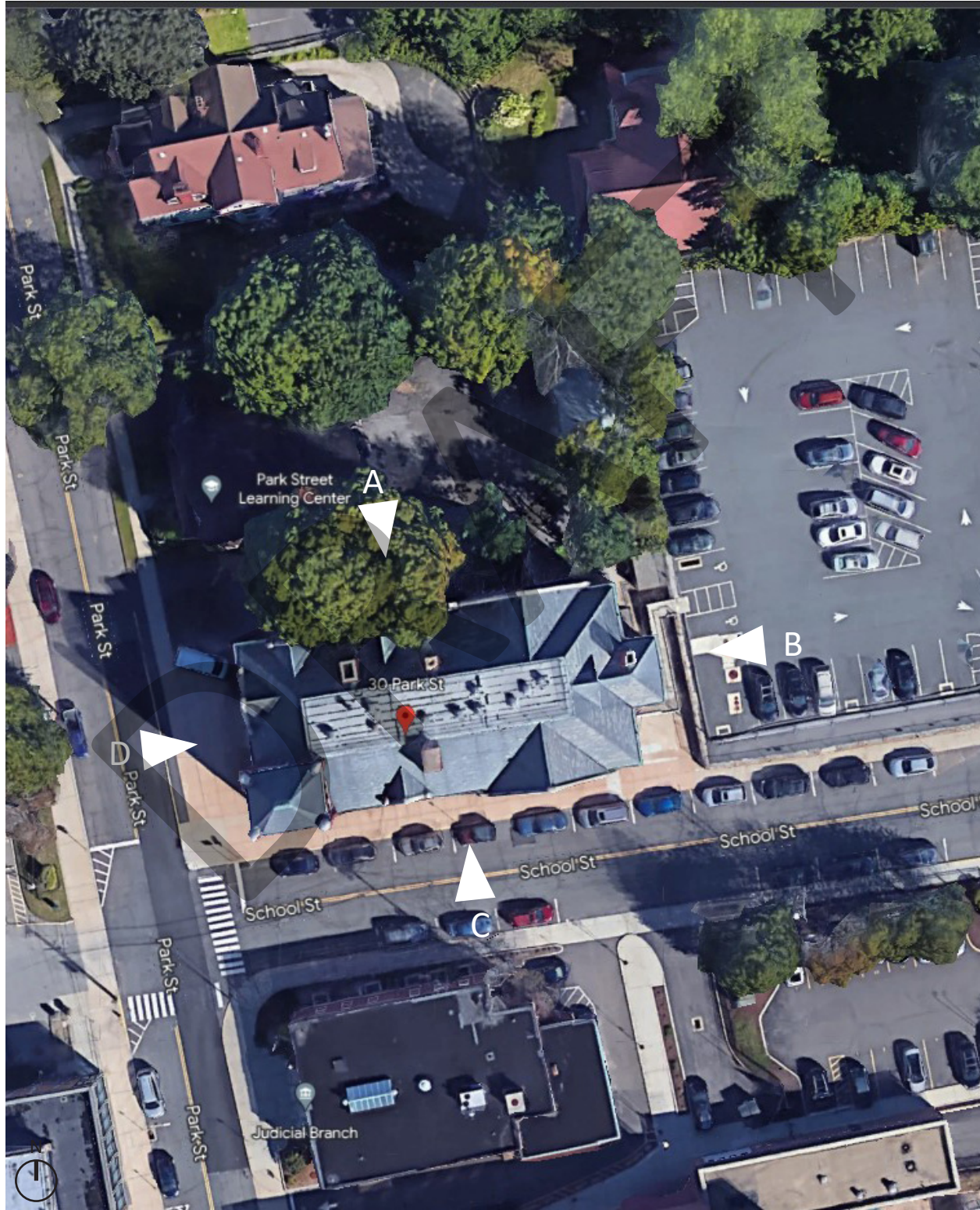
This section contains the executive summary, which provides an overview of the building and summarizes the survey results. Graphs are included to represent current conditions of the building's components and conformity with IBC, NFPA and ADA requirements. Photographs of various elevations of the building are provided for reference. This section also provides a summary of the opinion of probable costs, presenting a graphic comparison of the work required to address the deficiencies uncovered during the survey versus the cost of replacing the structure. At the end of Section 2, a chart provides an overview of the required work addressed by the building survey and potential replacement costs.

Vernon Public Schools Central Administration

Stories	4 (including Basement)
Area	23,324 sf
Address	30 Park Street, Vernon CT 06066
Original Construction	1892 (Listed on the Historic Buildings of Connecticut)
Addition(s) / Renovations	1992 & 2008 Renovations
Condition	Fair to Good
Description	Historical building previously housing the High School. Now used as the public school's main administration building. The masonry building has a wood frame.

Building Overview - Photographs

The following is a selection of photographs showing the main exterior elevations of the building. These photographs are keyed by letter on the site plan below. The elevation marks show the location and direction from which the photographs were taken.



Building Overview - Photographs



North Elevation - A



East Elevation - B

Building Overview - Photographs continued...



South Elevation - C



West Elevation- D

Architectural Survey

The exterior skin of Vernon Public Schools Central Administration is brick, which is in good condition minus some areas of visible efflorescence. Refer to the Appendix of this report for a survey of the existing roof.

Typical windows consist vinyl frames which are in good condition. Exterior doors are typically hollow metal and in good condition. The exterior sealants of the doors and windows are in fair to good condition.

The building interior is in good condition.

The work recommended to address architectural conditions includes:

- Provide regular cleaning of stone foundation with mildew build up
- Replace concrete exterior ramp
- Provide sealant at all exterior doors and windows
- Replace any damaged window screens
- Replace damaged downspouts
- Metal stairs need to be repainted and refinished (landing, railings, treads, etc)
- Touch up interior walls with paint
- Clean stained carpeting
- Replace or refinish rubber flooring
- Repair or replace ceiling, walls and flooring where water damage is visible

Structural Survey

The building is typically constructed of timber frame and masonry enclosure. The roof is supported by xxx. The foundation consists of stone and concrete.

The work recommended to address structural conditions includes:

- Further investigation into the source of efflorescence in the exterior brick is recommended.

Mechanical Survey

The building is heated by two cast iron boilers in the basement that are in poor condition. The building is cooled by ten air handling units that appear to be in good condition.

The work recommended to address mechanical systems conditions includes:

- Heating Plant: The existing building is served by mid-efficiency steam boilers with condensate return system and duplex boiler feed pumps. Boilers are not near the end of their life however recommend replacing with high efficiency condensing hot water boilers for increased energy savings. Further we recommend replacing all steam and condensate piping throughout building due to corrosion from steam condensate.
- Ventilation: Provide an energy efficient, code compliant ventilation system that meets present day ASHRAE and building code requirements. This system would include energy recovery to maximize ventilation and energy efficiency.
- Exhaust: The existing building does not appear to have sufficient exhaust throughout. We recommend adding exhaust throughout to balance building pressure.
- Cooling: Air handling units providing heating, cooling, and ventilation to building were observed to be in good working condition. No changes are required at this time.

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- Controls: The air handling units are controlled by a centralized BAS system. Spaces are controlled by two types of thermostats. Replace all thermostats to have occupancy override and set point adjustment.

Electrical Survey

The power originates from a utility pole located on Maple Street. It is fed into the basement connecting to the main disconnect switch and CT cabinet. The main switch and CT cabinet are past their serviceable life. There is no life safety or emergency power to the building.

The work recommended to address electrical system conditions includes:

- Main switch, CT and distribution equipment is well maintained and serviceable, but nearing the end of its lifespan. Recommend replacement in 3-5 years.
- Older branch panelboards are original to the building and in need of immediate replacement. Branch panelboards that were installed as part of more recent renovations and / or upgrades, should provide service for another 15-20 years before replacement is necessary.
- No evidence of a lightning protection system for the building was observed. If none exists, Recommend installing a lightning protection system in the immediate future, to safeguard people and property from fire risk and related hazards associated with lightning exposure .

Plumbing Survey

Water to the building originates from the underground water main located under Park Street and appears to be in good condition. The building contains floor mounted toilets, manual flush valves and faucets.

The work recommended to address plumbing systems conditions includes:

- Domestic water service and piping is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Domestic Water heater is nearing the end of its useful life and we recommend it be replaced with an electric water heater.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Natural Gas service and system is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Storm water system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.

Fire Protection Survey

The building is protected with a 6" fire water service originating from the underground water main. The building has a wet and dry fire protection system. This building does not have any type of fire pump or booster pumps.

The work recommended to address the fire protection system conditions includes:

- Fire service and associated piping is nearing the end of its useful life and we recommend it be replaced in its entirety.

Lighting Survey

Interior lighting consists mostly of fluorescent fixtures retrofitted with LED lamps. Battery powered emergency light fixtures and remote emergency light heads are throughout the corridors, stairwells and above exit doors. Occupancy sensors are used for lighting control.

The work recommended to address lighting system conditions includes:

- Most lighting systems in the building have been retrofitted with newer technology, more energy efficient LED lamps. As capital funding becomes available, recommend replacing existing lighting and control systems throughout the building with new technology LED fixtures, along with new low voltage controls, for improved efficiency and to comply with current energy code requirements

Fire Alarm Survey

The building is equipped with an addressable fire alarm system control panel with voice evacuation. There are manual pull stations and alarm speaker/strobe coverage throughout the building.

No improvements or repairs for the fire alarm systems are required at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 7-10 years to ensure system reliability.

Telecommunications Survey

The telecommunications system is comprised of the telephone system located in the basement and a data systems rack located in a data closet near the reception area. Wireless Access Point devices are used throughout the building.

No repairs or improvements for the telecommunication system are required at this time. Upgrades to these systems (i.e. backbone cabling, workstation outlets, etc.) should be anticipated to accommodate new program requirements as they occur.

Security System Survey

The security system is comprised of an access control system made up of card readers located near the main points of entry. Surveillance cameras are located at various points around the interior and exterior of the building. There is no evidence of an intrusion detection alarm system for the building.

The work recommended to address security system conditions includes:

- Recommend a review of all access controlled doors and end-user operations be performed in the next 1-2 years, or as program needs dictate.
- Recommend a full system assessment be performed to verify all devices are connected and tested for proper operation in the next 1-2 years, or as program needs dictate.
- Recommend installation and implementation of an intrusion detection or silent alarm system within the next year.

Low Voltage Survey

The low voltage system is comprised of a stand-alone sound system in the third floor conference room. There is no

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central clock system or public address system within the building.

No improvements or repairs for the **low voltage** system are required at this time. Improvement and / or replacement of these systems is recommended in the next 10-15 years, or as program needs dictate.

International Building Code Survey

Vernon Public Schools Central Administration was evaluated for compliance with the 2022 Connecticut State Building Code, including the 2021 IBC with Connecticut Supplements and Amendments, for Use Group B (Business). This report does not address alterations to the existing building, because the scope of an alteration project has not been defined. In this case, a change of use would be very unlikely.

The work recommended to address IBC code violations includes:

- Provide closers on all office doors.
- Modify existing central stair to have complying handrails/guardrails.
- Central Stair connects 3 stories and does not appear to be within a rated enclosure.
- In secondary stairs shafts, handrails are not continuous along full run of stairs.

NFPA Code Survey

A review of Vernon Public Schools Central Administration's compliance with the NFPA Life Safety Code 2015 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Modify existing central stair to be fully enclosed on first floor.
- Modify existing central stair to have complying handrails/guardrails.
- Modify layout of first floor central office so that accessible egress route is through corridor rather than through an open office.
- Provide access directly to grade is >50% of all exits.

ADA Compliance Survey

Vernon Public Schools Central Administration was also evaluated based on the Americans with Disabilities Act (ADA), Title II, for public building accessibility. ADA is an act of Congress mandating certain standards for accessibility that are enforceable through the civil courts. Vernon Public Schools Central Administration fails to meet some of these requirements, evident in the "ADA Compliance Survey".

The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage.

The work recommended to address ADA compliance issues includes providing:

- There is signage on the exterior of the building that points towards the nearest accessible entrance, but this signage is not located in an accessible area. Signage should be provided at ground level at these entrances to indicate the direction of the accessible entrance.
- The accessible entrance is only accessible from the parking lot. There is not an accessible site path to this location.

- Modify existing door locations to ensure minimum required clearance on latch side of a pull door.
- Build out wing walls at drinking fountains in corridors that are considered protruding objects.
- Replace bathroom accessories to locations where operable components are located below 48" high.
- Replace telephones to locations where operable components are located below 48" high.
- Provide vertical grab bars at all accessible toilet rooms.
- Replace casework and sink in employee lounge to allow for pull under and modify existing accessories mounting heights to be below 48".
- Replace signage for Superintendent office to include braille characters.
- Replace any welcome mats that do not lay flat.
- Modify existing accessible parking spots so that the cross slope does not exceed 1:48 pitch.
- Modify existing accessible parking signage so that the bottom edge is located at or above 60" high.

Site Survey

The site at Vernon Public Schools Central Administration was evaluated. Traffic flow at this facility is good with parking at the rear of the building. Available parking accommodates 44 vehicles, with 2 handicap accessible spaces available. The walkways are in fair to good condition. The exterior ramp is in poor condition and requires immediate replacement. See MEP Survey for utility related recommendations.

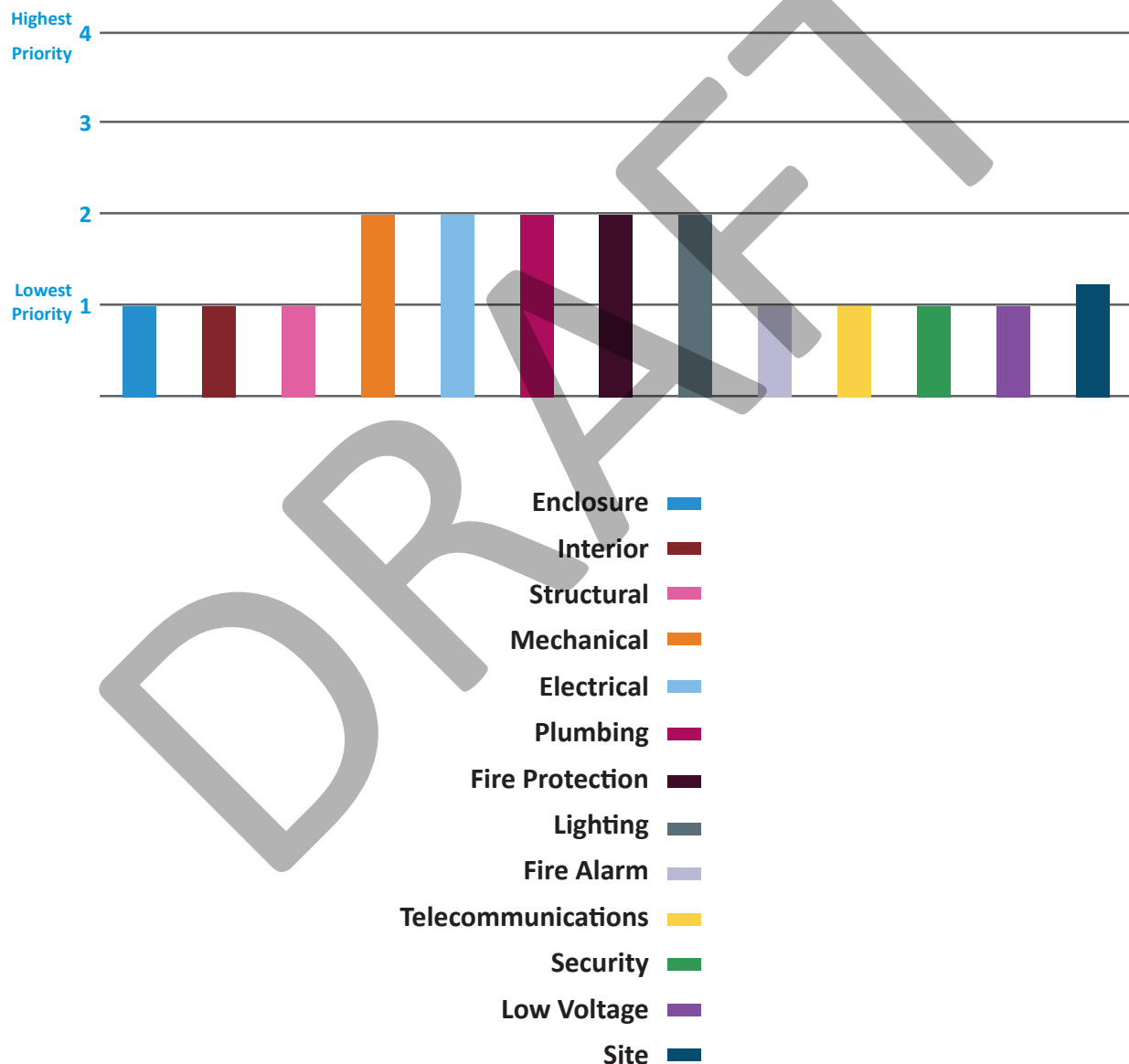
The work recommended to address site conditions includes:

- Replace exterior concrete ramp and landing leading from the parking area to the building.
- Repair cracks in walkways and replace missing drain covers.

Survey Results

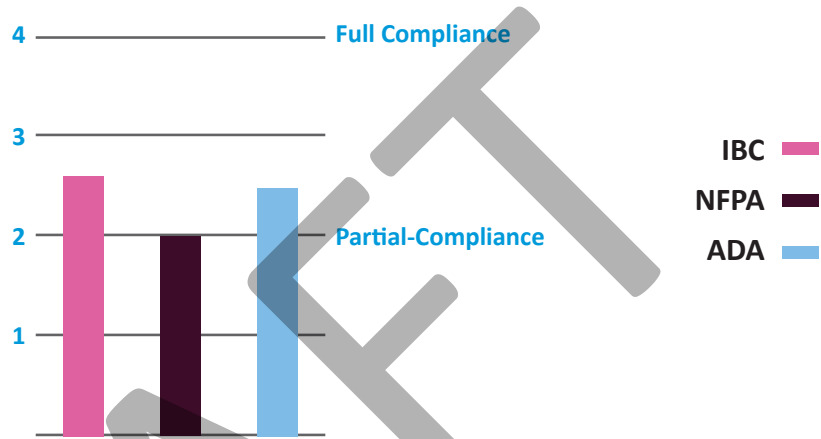
Each of the elements that were reviewed under this assessment was ranked on a scale of 1-4, with a 4 rating equating to the highest priority. Components that received a ranking of 3 should be considered to be moderate priorities, while rankings of 2 and 1 are considered to be low priorities. The following chart graphically presents the survey results (reference Section 4 for a detailed description for each category).

Prioritization of Required Work



The graph below represents the building’s overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building’s occupants.

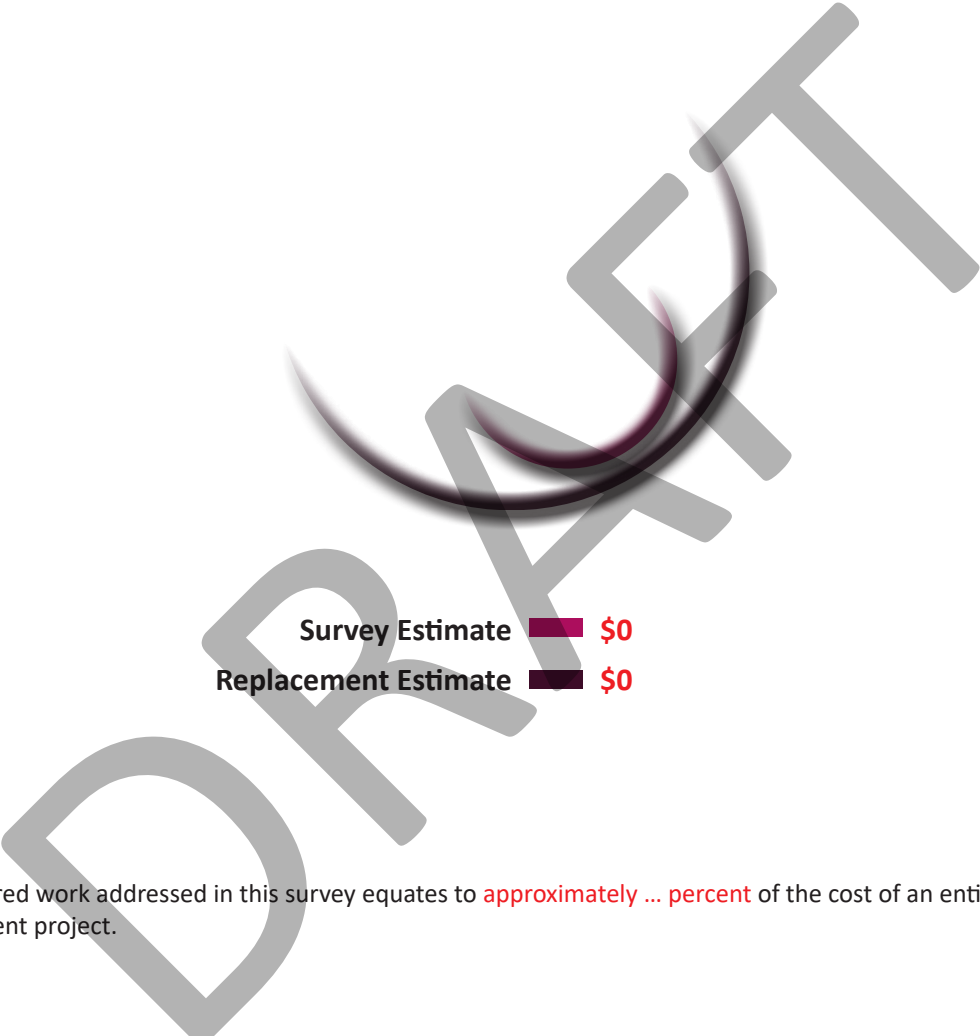
Code Compliance Evaluation





Summary of Recommendations

Opinion of Probable Costs	The estimate of probable costs included in Section 8 of this report is designed as a planning tool for Vernon Public Schools. Estimates do not account for a possible change of use.
Required Work	<p>The estimates reflect bringing the building, in its present configuration, into compliance with current applicable codes and addressing the needs of the various building components (architectural, structural, mechanical / electrical / plumbing / fire protection and site). The projected renovations for these components would upgrade the building to a ... condition.</p> <p>Projected costs are based on 2020 dollars and include no soft costs or contingencies. Based on analysis, over the next 10 years, the required work at this building will cost approximately \$... At xxx square feet, renovations at this building equate to approximately \$... per square foot. This cost-per-square-foot figure falls / does not fall within industry standards for renovations / upgrades of this nature.</p>
Replacement Cost	A similarly constructed building would cost \$... per square foot. Using this figure, the replacement cost for this building is approximately \$..., which follows state standards for structures of this type. The \$... per square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”.
State Reimbursement	The municipality’s reimbursement from the State of Connecticut Department of Education for eligible items is xxxx. This would adjust the community’s portion of the renovation costs from \$xxxx to \$xxxx, before taking enrollment and other potential ineligible items into account.

The chart below indicates the estimated value of the required work addressed by the building survey alongside the potential replacement cost. The replacement cost is provided as a guideline for comparative purposes and is based on replacing the building as is, i.e. size and use. Information considered includes the type of structure, year built and existing area for the building.



Survey Estimate  \$0

Replacement Estimate  \$0

The required work addressed in this survey equates to **approximately ... percent** of the cost of an entire building replacement project.

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Section 3 : Architectural & Structural Survey

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Architectural Existing Conditions

This section provides a listing of existing conditions of the various architectural and structural components of the building, followed by summary descriptions. A space utilization plan is provided to identify the current locations / number of spaces available and adjacencies. Photographs of existing conditions are included for clarification purposes, identifying areas that require attention. The floor plans indicate the building layout and are keyed to photograph locations. Recommendations for improvements to the various components are discussed to provide Vernon Public Schools with an overview of the required work.

Vernon Public Schools Central Administration

Plan Drawings	1992 & 2008 Renovations
Photos	2023 Survey
Date Built	1892 (Listed on the Historic Buildings of Connecticut)
Architect	Friar Architecture / JCJ Architecture - Renovations
Date(s) Additions / Renovations	1992 & 2008 Renovations
Construction	IIIB
Type of Occupancy	Business
Number of Stories	4 (including Basement)
Gross Square Feet*	23,324 sf

* Gross Square Footage defined as: The sum of all areas on all floors of a building included within the outside faces of its exterior walls, including all vertical penetration areas, for circulation and shaft areas that connect one floor to another.

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Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Architectural Conditions - Enclosure

Exterior Skin	Material	Condition
Primary Surface	Brick	Good
Secondary Surface	Stone Foundation	Good
Insulation	Unknown	Assumed Good
Features	Stone Decorative Banding	Good
Windows		
Lintel	Stone	Good
Jamb	Brick	Good
Sill	Stone	Good
Frame	Vinyl	Good
Glazing	Varies	Good
Sealant	Yes	Fair -Good
Operable	Yes	Good
Exiting	Unknown	N/A
Doors		
Lintel	Steel, Masonry	Good
Jamb	Masonry	Good
Sill	Concrete	Good
Frame	Hollow Metal	Good
Door	Hollow Metal	Good
Glazing	Safety tempered	Good
Flashing	Unknown	Assumed Good
Sealant	Yes	Fair - Good
Hardware	Stainless Steel	Good

Architectural Conditions - Enclosure (continued)

Exit Stairs	Material	Condition
Tread	Stone	Good
Riser	Stone	Good
Landing	Stone	Good
Handrail	Painted metal	Good
Exit Ramp		
Ramp	Concrete	Poor
Landing	Concrete	Fair
Handrail	Painted Metal	Good

The Vernon Public School Central Office Administration building is part of the Historic Buildings of Connecticut. It was built in 1892 and was the original home of Rockville High School.

The building has a brick exterior that is in good condition. There are areas of efflorescence on the front facade as well as other smaller areas. Varying brick color was visible which can be accounted for due to the 2008 exterior renovations where various areas of brick were replaced. At the entrance off of Park Street some edges of the brick are damaged and more efflorescence is visible under the entry covering. The stone window sills, heads and banding around the building appear to be in good condition. The exposed areas of stone foundation are also in good condition but regular cleaning on the north side of the building is needed due to mildew growth.

The windows and exterior doors are in good condition. Some windows have frosted glazing but other windows do not indicate the type of glazing so it is assumed to have insulated glazing. Exterior sealants at the windows and doors are in fair condition.

The upper portions of the building could not be fully examined due to the height of the building but no hazardous conditions were observed.

The exterior ramp at the east side of the building adjacent to School Street is in poor condition. There are many areas where the concrete is damaged and crumbling making usable for anyone in a wheelchair.

Architectural Conditions - Interior

Corridors	Material	Condition
Walls	Gypsum / Plaster / Wood Panel	Good
Doors & Frames	Hollow Metal, hollow metal frame / Wood, wood frame	Good
Door Hardware	Stainless Steel, Push and Lever	Good
Flooring	Carpet	Good
Ceilings	2x4 ACT / Metal Decorative	Good
Interior Stair(Main)		
Walls	Gypsum	Fair to Good
Treads	Rubber	Fair to Good
Risers	Wood	Fair to Good
Landing(s)	Rubber	Fair to Good
Handrails	Wood	Good
Ceilings	2x4 ACT / Metal Decorative / Gypsum (Top Level only)	Good
Offices		
Walls	Gypsum	Good
Doors & Frames	Hollow Metal, hollow metal frame / Wood, wood frame	Good
Door Hardware	Stainless Steel, type varies	Good
Flooring	Carpet	Good
Ceilings	2x4 ACT	Good
Toilet Rooms		
Walls	Gypsum	Good
Doors & Frames	Hollow Metal, hollow metal frame	Good
Door Hardware	Stainless Steel, Push and Lever	Good
Flooring	VCT	Good
Ceilings	2x4 ACT	Good
Conference Room		
Walls	Wood Paneling / Gypsum	Good to Excellent
Doors & Frames	Wood, wood frame / Hollow metal, hollow metal frame	Good
Door Hardware	Stainless Steel, Lever	Good
Flooring	Carpet	Good to Excellent
Ceilings	2x4 ACT / Metal Decorative	Good

Kitchenette	Material	Condition
Walls	Wood Paneling	Good
Doors & Frames	Wood, hollow metal frame	Good
Door Hardware	Stainless Steel	Good
Flooring	VCT	Good
Ceilings	2x4 ACT	Good
Secondary Stair		
Walls	Brick / Concrete	Fair to Good
Treads	Metal	Fair to Good
Risers	Metal with abrasive nosing	Good
Landing(s)	Concrete / Wood (Top Level Only)	Fair to Good
Handrails	Metal	Fair to Good
Ceilings	Gypsum	Good

Overall, the interior of the building is in good condition.

Metal stairs were in fair to good condition. The finish is faded on landings and stair treads and should be refinished or touched up. The rubber flooring on the main stair is faded and water damage was seen.

Flooring throughout is in good condition. The carpet throughout was in good condition with the exception of some stains that need to be cleaned or carpet tile needs to be replaced.

Wood doors need some paint touch-up but were generally in good condition.

Walls throughout are in good condition with the exception of some general wear and tear and a couple areas with appeared water damage. Wall base is in generally good condition throughout the building.

Ceilings are in good condition throughout with minimal damage to the decorative ceiling on the third floor.

Architectural Conditions - Conveying Systems

Component	Elevator 1
Hydraulic	Hydraulic
Passenger / Freight	Passenger
Weight	2,000 lbs
Floors - #	4
Floors - From	Basement
Floors - To	Third Floor
Inspection Expiration Date	4/26/2024

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Structural Existing Conditions

The following is a data summary of the structural conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

The following codes are used throughout this report to identify the condition of various elements.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Structural Conditions - Exterior Condition

	Material	Condition
Enclosure	Masonry	Good
Foundation	Stone, Assumed Concrete	Good
Footings	Assumed Concrete	Assumed Good
Deck	Unknown	Assumed Good
Exterior Frame	Timber / Wood	Good
Other	N/A	N/A

Structural Conditions - Interior Condition

	Material	Condition
Framing	Assumed Wood	Assumed Good
Walls	Assumed Wood & Metal Stud	Good
Ground Floor Slab	Concrete	Good
Flooring System (other levels)	Assumed Wood	Assumed Good
Stairs	Varies - Assumed Wood, Concrete	Good
Other	N/A	N/A

The structural components of Vernon Public School's Central Office were evaluated.

In general, the building appears to be in good condition structurally. Although observations could not be made of many structural elements without demolition, no dangerous conditions were observed. The plans available for this survey were limited in structural information.

Architectural & Structural Survey Photographs



1. Location:

West Elevation

Description:

Entrance on Park Street - efflorescence visible on brick as well as discoloration likely from water.



2. Location:

West Elevation - Entrance

Description:

Sealant missing between door frame and brick facade



3. Location:

West Elevation - Entrance

Description:

Sealant missing between window frame and brick facade

Architectural & Structural Survey Photographs



4. Location:

West Elevation - Entrance

Description:

Damaged brick and areas where repointing is needed.



5. Location:

West Elevation - Entrance

Description:

Efflorescence visible inside overhang.



6. Location:

West Elevation

Description:

Areas of brick appear to have been replaced as various times and repointed in varying shades.

Architectural & Structural Survey Photographs



7. Location:

South Elevation

Description:

Damaged window screen



8. Location:

South Elevation - Entrance

Description:

Vestibule soffit in needs of repainting.

Architectural & Structural Survey Photographs



9. Location:

South Elevation

Description:

Downspout is old and rusted. The metal holding it together is damaged and should be replaced. Brick needs to be repointed.



10. Location:

East Elevation

Description:

Exterior concrete stair.

Architectural & Structural Survey Photographs



11. Location:

South Elevation

Description:

Exterior door sits high potentially allowing for water infiltration. No weatherstripping was visible.



12. Location:

South Elevation

Description:

Sealant at door/window frame has deteriorated.



13. Location:

Ramp along East Elevation

Description:

Ramp leading to east and south entrances is in poor condition.

Architectural & Structural Survey Photographs



14. Location:

Ramp along East Elevation

Description:

Concrete ramp in poor condition.



15. Location:

East Elevation

Description:

View of splattered materials above low roof.

Architectural & Structural Survey Photographs



16. Location:

East Elevation

Description:

View of mold and mildew growth on low wall. Areas of brick crumbling and missing mortar.



17. Location:

North Elevation

Description:

Mildew growth on stone foundation. Existing vent appears to have a wood frame and slats.



18. Location:

North Elevation

Description:

Basement window with mildew growth on and around the window.

Architectural & Structural Survey Photographs



19. Location:

North Elevation

Description:

Mildew growth on stone foundation walls - typical on this facade.



20. Location:

East Stair

Description:

Painted landing is chipped and faded.



21. Location:

East Stair

Description:

Painted stairs and handrails are worn and faded.

Architectural & Structural Survey Photographs



22. Location:

First Floor

Description:

Outside corner of gypsum wall is damaged and needs to be repaired.



23. Location:

North Stair

Description:

General wear and tear on rubber treads.



24. Location:

First Floor

Description:

Door has scratches and chips that need repainting and repair.

Architectural & Structural Survey Photographs



25. Location:

2nd Floor office Area

Description:

Stain on carpet needs to be cleaned or replaced.



26. Location:

Toilet Room

Description:

Rust from door closer is staining the door.



27. Location:

Toilet Room

Description:

Plastic laminate back splash is chipped and light damage to the wall behind.

Architectural & Structural Survey Photographs



28. Location:

North Stair

Description:

Rubber flooring is faded and should be refinished or replaced.



29. Location:

North Stair

Description:

Rubber flooring shows water damage and staining.



30. Location:

North Stair

Description:

Wall shows several cracks and bubbling indicating signs of water damage.

Architectural & Structural Survey Photographs



31. Location:

3rd Floor - Large Conference Room

Description:

Damage to decorative ceiling.

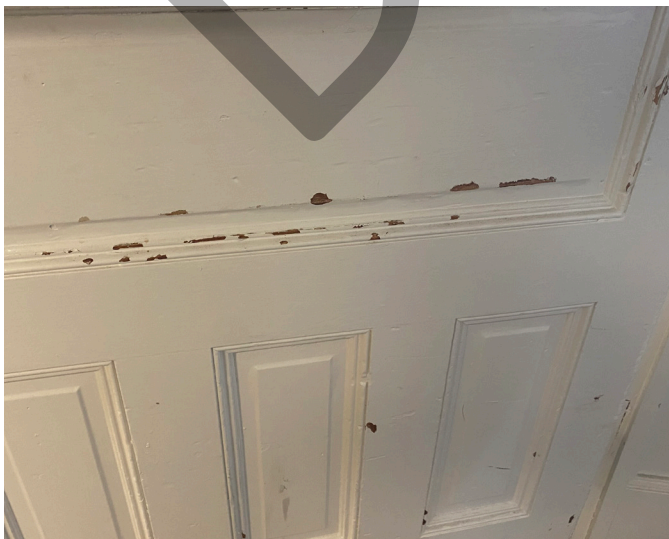


32. Location:

East Stair

Description:

Cracking and chipping in wall should be repaired.



33. Location:

3rd Floor

Description:

Paint chipping on doors.

Architectural & Structural Survey Photographs



34. Location:

3rd Floor

Description:

Damage to ceiling is causing paint to peel.



35. Location:

Basement

Description:

Painted concrete is faded and needs to be refinished.



36. Location:

Basement

Description:

Rust is seen on brick and concrete slab.

Architectural & Structural Photograph Key Plan

The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

DRAFT

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PARK STREET

OVERHEAD
TELEPHONE

CONCRETE SIDEWALK

1 →
ENTRANCE

2,3,4,5

19

18

17

TOWN OF VERNON ADMINISTRATION BUILDING

8

ENTRANCE

7 ↗

CONCRETE SIDEWALK

9 ↗

OVERHEAD POWER LINES

SCHOOL STREET

PROPERTY LINE

CONC. BASE

MECH EQUIP

16

EXTG. SHED

OIL TANK
VENT

RAMP AND HANDICAPPED
ENTRANCE

11,12

DN 13 →

10

EXIST'G FUEL OIL FILLER
CAP MAN HOLE CHECK VALVE

UP 15

14

P 4

P 1

Vernon Public Schools Central Administration

Site Plan

Arch/Struc Survey

DRAFT

Architectural & Structural Recommendations

The architectural and structural components of Vernon Public Schools Central Administration are in **xxx** condition.

The following represents areas of necessary architectural improvements and / or required work.

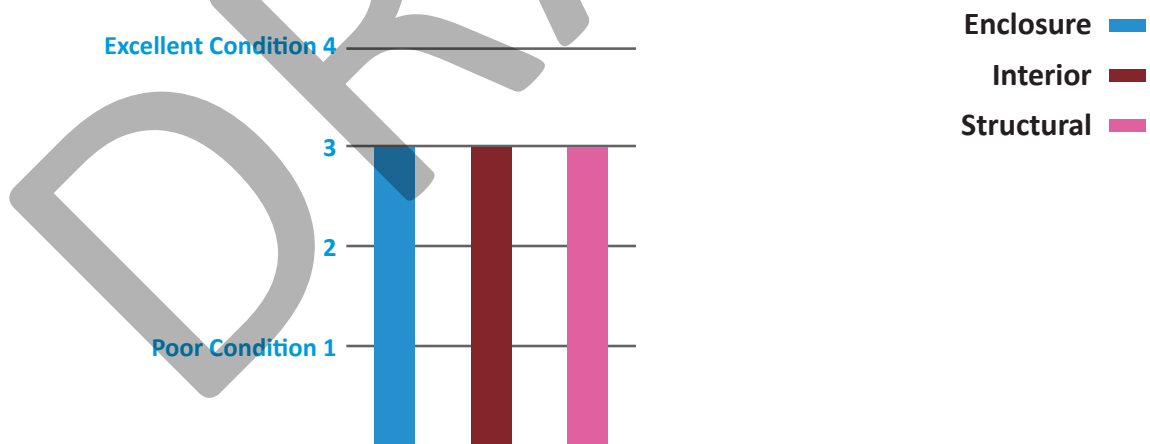
- Provide regular cleaning of stone foundation with mildew build up
- Replace concrete exterior ramp
- Provide sealant at all exterior doors and windows
- Replace any damaged window screens
- Replace damaged downspouts
- Metal stairs need to be repainted and refinished (landing, railings, treads, etc)
- Touch up interior walls with paint
- Clean stained carpeting
- Replace or refinish rubber flooring
- Repair or replace ceiling, walls and flooring where water damage is visible

The following represents areas of necessary structural improvements and / or required work.

- Further investigation into the source of efflorescence is recommended.

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



Note: Ratings range from 1 (poor condition) to 4 (excellent condition)

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Section 4 : Mechanical, Electrical, Plumbing & Fire Protection Survey

DRAFT

4

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M/E/P/FP Existing Conditions

The mechanical / electrical / plumbing / fire protection survey results are presented within this section. Included are a chart of existing components and their conditions, summary descriptions, photographs, plans, and recommendations.

Mechanical

The following is a data summary of the Mechanical system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Mechanical Conditions

System	Condition	Comments
Boilers	Poor	Boilers were observed to be working but nearing the end of their life cycle.
Heating System	Fair	The heating system was observed to be in fair working condition. Condensate piping appeared aged and nearing the end of its life cycle.
Heating System Pumps	Fair	Condensate pump was observed to be operational
Indoor Air Handlers	Good	Air Handlers were observed to be in good working condition.
Air Distribution / Ductwork	Good	Ductwork was observed to be clean, sealed, and in good condition.
Condensate Piping (A/C)	Good	Condensate piping was observed to be in good condition serving the baseboard radiators.
Exhaust Fans	N/A	No exhaust fans.
Controls	Good	Controls were observed to be in good condition.

Building is heated from two cast iron steam boilers in the basement. A condensate return system with receiver and dual pumps is located within the basement. The steam system is distributed throughout the building through copper and steel piping to baseboard radiators, cabinet unit heaters, and air handling units throughout.

Building cooling is supplied by (10) ten air handling units located in the mechanical mezzanine spaces. The units consist of a heating coil, DX cooling coil, supply fan, and filters. The units are mounted with a variation of hung units and units mounted with spring isolators on wooden platforms. The air handling units are controlled by the centralized Distech BAS system.

Building does not appear to have mechanical exhaust in all spaces which may cause excessive positive building pressure due to unbalanced air flow and lack of relief air.

Mechanical (continued...)

Building is controlled by a centralized BAS system by Distech. We observed two types of thermostats from Andover controls, some with occupancy override and set point adjustment and others that are flat front space sensors without adjustment.

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Electrical

The following is a data summary of the electrical system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Electrical Distribution Conditions

System	Condition	Comments
Main Service	Good	Main Disconnect and CT Cabinet is Well Maintained and in Good Condition.
Power Distribution	Fair	Equipment Varies in Age. Overall Condition is Fair.
Life Safety Power	N/A	There is No Life Safety Power to the Building.
Emergency Power	N/A	There is No Emergency Power to the Building.
Transformers	N/A	There are no Distribution Transformers in the Building.
Grounding	Fair	Service Equipment Grounding, Where Observed, Appeared Undamaged and in Fair Condition.
Lightning Protection	N/A	No Lightning Protection System Observed.

Power originates at a utility pole located on School Street at the front of the building, across from the main entrance. Secondary feeders run overhead from a utility pole mounted 208V, 3-phase utility transformer and enter the basement Main Electrical Room, where the main service disconnect switch, CT cabinet and meter are located. The metering is arranged cold sequence with the meter mounted on a wall next to the main disconnect switch.

The main switch and CT section feeds a 800A MLO, 208/120V, 3-phase, 4-wire, 2-section main distribution panel labeled "MDP1/MDP2". "MDP1/MDP2" contains branch circuit breakers that feed panels and equipment located throughout the building at 208/120V.

Branch circuit panelboards are mostly of recent vintage and in fair to good condition. Branch circuit wiring is in EMT/armored cable, where observed.

There is no Life Safety or Emergency/Optional Standby power to the building.

There is no evidence of a lightning protection system for the building.

Plumbing

The following is a data summary of the plumbing system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Plumbing Conditions

System	Condition	Comments
Water Service	Fair	2" Service Size
Fixtures	Fair	Floor Mounted Toilets, Manual Flush Valves and Faucets
Domestic Cold Water Pipe	Fair	Copper Piping
Domestic Hot Water Pipe	Fair	Electric Storage Tank Type Water Heaters Appear to be Newer and in Good Condition, Copper Piping
Sanitary & Vent Piping	Fair	Sanitary Piping Appears to be Installed Recently in Basement and is in Good Condition
Storm Piping	Fair	Piping and Insulation Appear to be in fair Condition, Roof Drains are in fair Condition, and below grade piping is believed to be original to the building.
Natural Gas Piping	Fair	Piping Starting to show signs of Rust
Irrigation	N/A	N/A

The water originates and enters the building in one of the storage rooms in the basement of the building and appears to be in fair condition as rust has begun to form on the piping.

The water closets are floor mounted and made of vitreous china. The urinals in this building are wall hung and made of vitreous china. Both the water closets and urinals in this building have manual flush valves. The lavatories are wall hung and counter top drop in type lavatories. The lavatories are equipped with manual type faucets. There are stainless steel drop-in counter-top sinks in the break-room that also have manual faucets.

The domestic water the building is heated by a total of four electric storage tank type water heaters. There is a large electric residential heat pump water heater that has the ability to serve a lot of the hot water demand that this building needs. There is also another smaller electric storage tank type heater in the basement of the building as well as underneath the sink in the upper level break room and also one in the attic of the building. All of the water heaters mentioned and seen appear to be newer and still in good condition.

Plumbing (continued...)

The domestic water in the building flows through copper piping that all seem to be in good condition and showing no signs of any corrosion.

The sanitary piping also appears to be in good condition with some of the sanitary in the basement of the building appearing to be fairly new and in great condition.

The natural gas piping in the building appeared to be in good condition with a few spots of the piping appearing to have rust beginning to form on it.

This building does not have any irrigation piping or systems, as well as there are no roof drains on the roof of the building and no internal storm piping.

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Fire Protection

The following is a data summary of the fire protection system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Fire Protection Conditions

System	Condition	Comments
Fire Service	Poor	Service Size 6", Rust Covering Piping
Backflow Preventer	Fair	Testing and Service Appear To Be Up To Date, Rust Forming
Standpipe System	Fair	Standpipe In Stairwell and Main Hallway, Rust Beginning to Form on Piping
Sprinkler System	Fair	Wet and Dry System, Rust Forming On Risers
Fire Department Connection	Good	
Heads	Fair	Concealed Pendants, Sidewall, Uprights with Guards
Piping	Good	Black Steel Piping
Fire Pump	N/A	N/A
Booster Pumps	N/A	N/A

This building is protected with a 6" fire water service that originates from the underground water main that runs under Park Street and enters the building in the basement where the backflow preventer and fire protection risers are located.

The service and testing of the fire protection system appears to be up to date with testing records showing completed tests every year since 2016.

There are two standpipes in this building with one being located in the stairwell of the building and the other being located in the center of the building. Both standpipes appear to be in good condition with no signs of damage or corrosion on the piping.

This building is served with both a wet and a dry fire protection system with the fire protections risers located at the fire service area being in good condition, however there is rust starting to form on the piping in that area of the building.

Black steel piping runs throughout the building to serve concealed pendant type sprinklers with all piping and sprinkler heads appearing to be in good condition.

This building does not have any type of fire pump or any booster pumps.

Lighting

The following is a data summary of the lighting system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Lighting Conditions

System	Condition	Comments
General Lighting	Fair	Fluorescent Fixtures Retrofitted with LED Lamps. Lighting Levels Adequate.
Emergency Lighting	Fair	Battery Powered Emergency Light Fixtures in Utility Areas and Along Paths of Egress.
Exit Signs	Good	Battery Powered LED Fixtures at All Exits and Paths of Egress.
Exterior Lighting	Fair	Down lights at Egress Doors.
Lighting Control	Fair	Occupancy Sensors with Manual Override.
Theatrical Lighting	N/A	N/A

Interior lighting fixtures consist mostly of 2'x4' recessed lay-in troffers with prismatic lenses in offices and corridors. Decorative pendant fixtures are in vestibules, stair landings and conference areas. Fixtures in utility space are surface mounted industrial style with prismatic lenses. All interior fixtures have been retrofitted with LED lamps and drivers and are in fair to good condition. Light levels throughout the building appear adequate.

Battery operated emergency lights and remote emergency light heads are used to light egress paths in corridors, stairwells and above exit doors. Emergency fixtures were not tested for operation, but appear correctly installed and maintained.

Exit signs are LED with battery backup. Exit signage in all areas appears in compliance with current codes. All signage appears to be in good condition and operating properly.

Recessed downlights are used for exterior egress above exit doors. No other building mounted exterior lighting was observed..

Lights in corridors and public spaces are controlled with toggle switches and ceiling mounted occupancy sensors. Offices utilize wall occupancy sensors with manual override. No daylighting was observed.

Fire Alarm

The following is a data summary of the fire alarm system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Fire Alarm System Conditions

System	Condition	Comments
Fire Alarm Control Panel	Good	Panel Appears Well Maintained and in Good Working Condition.
Initiating Devices	Good	Devices are Installed Properly and Appear in Good Working Condition.
Indicating Devices	Good	Devices Appear Sufficient and in Good Working Condition.
Area of Rescue	N/A	Signage Only.
Voice Evacuation	Fair	System Equipment Appears Functional.
Elevator Recall	Good	System Appears Functional, with No Reported Issues.

The building is equipped with a Simplex 4000 series addressable fire alarm system control panel with voice evacuation. The control panel is located in the main entry vestibule, with a separate voice control panel that allows annunciation over the building's speaker/horn-strobe devices.

Locations of manual pull stations appear compliant. Fire alarm speaker/strobe coverage throughout the building appears sufficient. All fire alarm devices appeared in good working condition and mounted at the correct ADA height. Firefighter's handsets are located at stairwell landings.

The building is equipped with a sprinkler system with supplemental smoke detection devices in corridors, storage areas and utility rooms, heat detectors in mechanical spaces, tamper and flow alarm switches at the service entrance and standpipes. All systems appear operational and in compliance.

Signage for Area of Rescue was observed in stairwell landings. No equipment for this system was evident.

Smoke detectors for elevator recall are located on the ceiling at each elevator landing

Telecommunications

The following is a data summary of the telecommunications system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Telecommunications System Conditions

System	Condition	Comments
Backbone Cabling	Good	Well Maintained with No Visible Damage.
Rack System	Good	Well Maintained with No Visible Damage.
Telecommunication Ground	Fair	No Visible Damage – observed at Telephone Equipment Backboard Only.
Telephone Service Entrance	Good	Well Maintained with No Visible Damage.
Data Horizontal Cabling	Good	Well Maintained with No Visible Damage.
MDFs / IDFs	Good	Well Maintained and Functioning with No Visible Damage. Possible Working Clearance Issue.
Pathways	Good	Well Maintained with No Visible Damage.
Coaxial Cable	N/A	None Observed.

Telecommunications services originate at a utility pole located on Park Street. Cabling runs overhead and enters the building in the Main Telecommunications Demarc in the basement, where the telephone systems equipment backboard and equipment are located. From this location, service cabling runs to the data systems rack in the data closet on the main level. All equipment appears undamaged and in fair condition.

The main data systems rack is located in data closet near the reception area. Data communications consists of a fiber backbone and a combination of wired outlets and wireless access points located throughout the building. Typical offices contain a hardwired data drop and convenience drops that vary in quantity depending on room function. Wireless Access Point (WAP) devices are distributed throughout the building – one per office suite and throughout corridors and common areas. All equipment and cabling appeared well maintained and in good condition.

General telephone utilization for the building is VoIP. This system operates through speaker handsets in offices and conference rooms. All systems appeared operational with no reported issues.

The building appears to contain elements of TV infrastructure at the data systems rack. This could not be confirmed as Video IPTV streaming provisions for the building.

Security System

The following is a data summary of the security system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5years)

Security System Conditions

System	Condition	Comments
Intrusion Alarm System	N/A	N/A
Video Monitoring	Good	Well Maintained and Functioning with No Apparent Issues.
Access Control	Good	Functioning with No Apparent Issues.
Intercom System for Entrance	Good	Not Tested – Appears Operational.

The building uses an access control system made up of card readers located at the main points of entry. Headend equipment is by Altronix and is located in the server room, behind the main data systems rack. Surveillance cameras are located at various points around the interior and exterior of the building. The video system is networked with a dedicated HD display located in the Reception area. All systems appear in good condition and functioning properly.

A hand-free communications device with fixed camera, manufactured by Aiphone, allows communication between the main entry vestibule and Reception desk. The system was not tested for operation, but appears functional and in good condition.

There was no evidence of an intrusion detection alarm system for the building.

Low Voltage Systems

The following is a data summary of the low voltage system's existing conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

Low Voltage System Conditions

System	Condition	Comments
Clock System	N/A	N/A
Public Address System	N/A	N/A
Stand-Alone Sound System(s)	Good	Well Maintained and Functioning with No Apparent Issues.
Assisted Listening	N/A	N/A

There is no central clock system in the building.

There is no evidence of a public address system in the building.

A local stand-alone sound system exists in the third floor conference room, consisting of amplification and control equipment and wall mount mounted speakers. No system for assisted listening was evident.

M/E/P/FP Survey Photographs



1. Location:

Storage Room

Description:

Domestic Water Service



2. Location:

Storage Room

Description:

Fire Service and Riser

M/E/P/FP Survey Photographs



3. Location:

Storage Room

Description:

Water Heater



4. Location:

Toilet Room

Description:

Toilet Room Fixtures

M/E/P/FP Survey Photographs

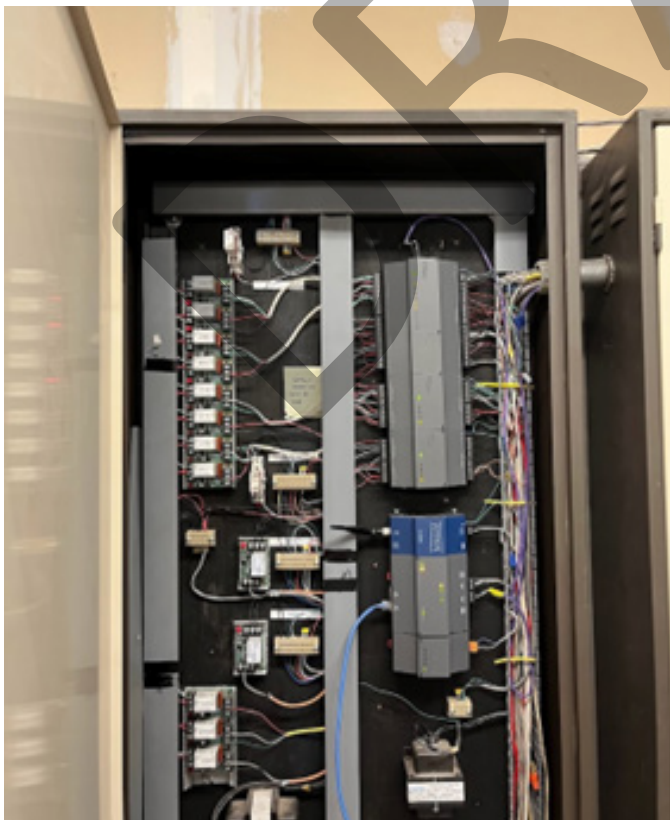


5. Location:

Toilet Room

Description:

Toilet Room Fixtures



6. Location:

Attic Space

Description:

Distech Centralized Control System

M/E/P/FP Survey Photographs



7. Location:

Mechanical Mezzanine

Description:

Air Handling Unit



8. Location:

Meeting Room

Description:

Andover Thermostat



9. Location:

Front Office

Description:

Andover Thermostat with Occupancy
Override and Set Point Adjustment

M/E/P/FP Survey Photographs



10. Location:

Roof

Description:

Roof Top AC



11. Location:

Mechanical Room

Description:

Steam Condensate Neutralization Tank and Dual Pump System

M/E/P/FP Survey Photographs



12. Location:

Mechanical Room

Description:

Smith Cast Iron Steam Boiler



13. Location:

Basement

Description:

Main Service Disconnect, CT Cabinet and Meter

M/E/P/FP Survey Photographs



14. Location:

Basement

Description:

Main Distribution Panels



15. Location:

Main Level

Description:

Typical Branch Panelboard Interior

M/E/P/FP Survey Photographs



16. Location:

Main Entry Vestibule

Description:

Decorative Lighting



17. Location:

Second Floor

Description:

Typical Office Lighting

M/E/P/FP Survey Photographs



18. Location:

Main Entry Vestibule

Description:

Fire Alarm Control Panel



19. Location:

Basement

Description:

Smoke Detector for Elevator Recall

M/E/P/FP Survey Photographs



20. Location:

Basement

Description:

Telecommunications Equipment
Backboard



21. Location:

Second Floor Data Closet

Description:

Data Systems Rack

M/E/P/FP Survey Photographs



22. Location:

Second Floor Corridor

Description:

Typical Wireless Access Point



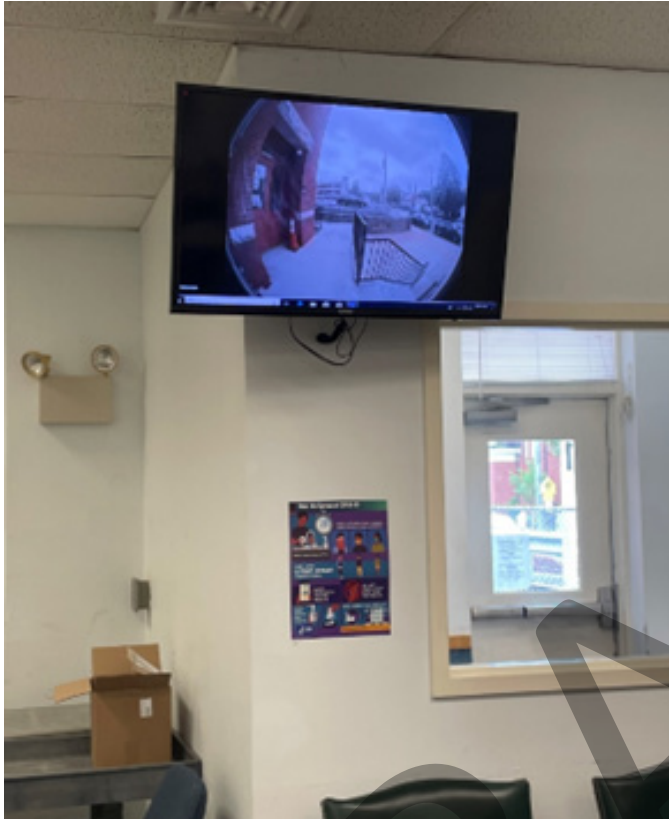
23. Location:

Second Floor

Description:

Access Control Panels

M/E/P/FP Survey Photographs



24. Location:

Reception Area

Description:

Networked HD Display

M/E/P/FP Recommendations

Recommendations for the existing building systems are listed below by trade.

The following represents areas of necessary **mechanical** improvements and / or required work.

- Heating Plant: The existing building is served by mid-efficiency steam boilers with condensate return system and duplex boiler feed pumps. Boilers are not near the end of their life however recommend replacing with high efficiency condensing hot water boilers for increased energy savings. Further we recommend replacing all steam and condensate piping throughout building due to corrosion from steam condensate.
- Ventilation: Provide an energy efficient, code compliant ventilation system that meets present day ASHRAE and building code requirements. This system would include energy recovery to maximize ventilation and energy efficiency.
- Exhaust: The existing building does not appear to have sufficient exhaust throughout. We recommend adding exhaust throughout to balance building pressure.
- Cooling: Air handling units providing heating, cooling, and ventilation to building were observed to be in good working condition. No changes are required at this time.
- Controls: The air handling units are controlled by a centralized BAS system. Spaces are controlled by two types of thermostats. Replace all thermostats to have occupancy override and set point adjustment.

The following represents areas of necessary **electrical** improvements and / or required work.

- Main switch, CT and distribution equipment is well maintained and serviceable, but nearing the end of its lifespan. Recommend replacement in 3-5 years.
- Older branch panelboards are original to the building and in need of immediate replacement. Branch panelboards that were installed as part of more recent renovations and / or upgrades, should provide service for another 15-20 years before replacement is necessary.
- No evidence of a lightning protection system for the building was observed. If none exists, Recommend installing a lightning protection system in the immediate future, to safeguard people and property from fire risk and related hazards associated with lightning exposure .

The following represents areas of necessary **plumbing** improvements and / or required work.

- Domestic water service and piping is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Domestic Water heater is nearing the end of its useful life and we recommend it be replaced with an electric water heater.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Natural Gas service and system is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Sanitary system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.
- Storm water system (above and below grade) is nearing the end of its useful life and we recommend it be replaced in its entirety.

The following represents areas of necessary **fire protection** improvements and / or required work.

- Fire service and associated piping is nearing the end of its useful life and we recommend it be replaced in its entirety.

The following represents areas of necessary **lighting** improvements and / or required work.

- Most lighting systems in the building have been retrofitted with newer technology, more energy efficient LED lamps. As capital funding becomes available, recommend replacing existing lighting and control systems throughout the building with new technology LED fixtures, along with new low voltage controls, for improved efficiency and to comply with current energy code requirements

No improvements or repairs for the **fire alarm** systems are required at this time. Average life expectancy for fire alarm systems is 15 years. System equipment should be updated or replaced in the next 7-10 years to ensure system reliability.

No repairs or improvements for the **telecommunication system** are required at this time. Upgrades to these systems (i.e. backbone cabling, workstation outlets, etc.) should be anticipated to accommodate new program requirements as they occur.

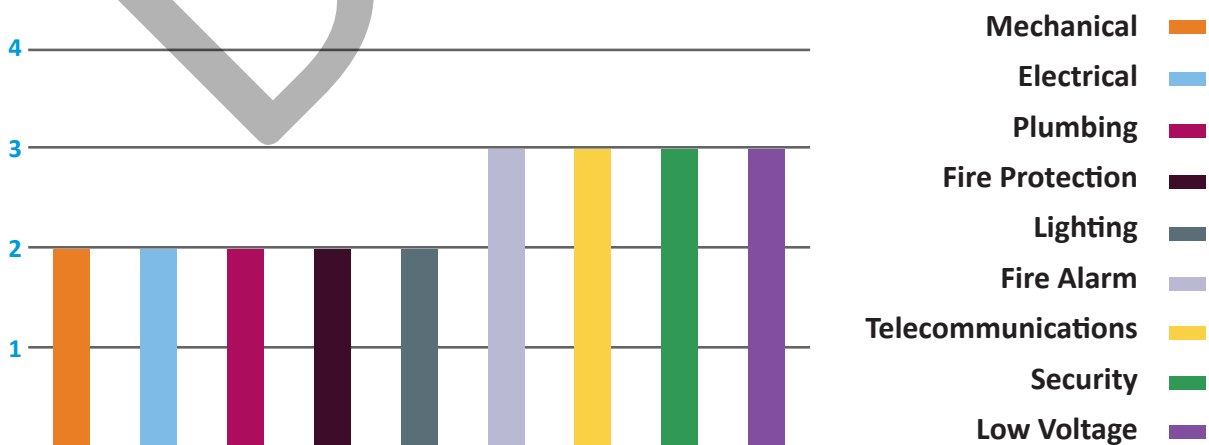
The following represents areas of necessary **security system** improvements and / or required work.

- Recommend a review of all access controlled doors and end-user operations be performed in the next 1-2 years, or as program needs dictate.
- Recommend a full system assessment be performed to verify all devices are connected and tested for proper operation in the next 1-2 years, or as program needs dictate.
- Recommend installation and implementation of an intrusion detection or silent alarm system within the next year.

No improvements or repairs for the **low voltage** system are required at this time. Improvement and / or replacement of these systems is recommended in the next 10-15 years, or as program needs dictate.

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



Note: Ratings range from 1 (poor condition) to 4 (excellent condition)

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Section 5 : Code Survey

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IBC Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the IBC code regulations.

Vernon Public Schools Central Administration has been evaluated for compliance with the 2022 Connecticut State Building Code, including the 2021 IBC with Connecticut Supplements and Amendments, for Use Group B (Business). Since the scope of a potential alteration project is not yet defined, this report does not address code compliance with regard to future alterations. A change of use would require code compliance upgrades. Other required code upgrades are contingent upon the nature and extent of a specific alteration and are determined on a case-by-case basis.

Corrective work is required for compliance with IBC, under it's existing use and conditions. The majority of the IBC defines new construction requirements and is not a retroactive code.

IBC Summary Sheet	
Existing Use	Business
Year Constructed	1892 (Listed on the Historic Buildings of Connecticut), 1992 & 2008 Renovations
Type of Construction	IIIB
% Open Perimeter	100%
Fire Suppression	Complete NFPA 13 System
Compartmentalization	>30,000 sf
Fire Resistance Rating of Vertical Opening Enclosures	1 Hour
Automatic Alarms	Installed
Automatic Alarms Type	Smoke Detectors
Smoke Control	None
Smoke Control Type	N/A
Mixed Use	N/A
Dead End	< 50'
Maximum Exit Access Travel Distance	< 300' (with Sprinkler System)
Number of Stories	4 (including Basement)
Floor Area(s)	6,664 sf Basement; 6,664 sf First Floor 6,664 sf Second Floor; 3,332 sf Third Floor
Reduction of Area Limitations	None
Corridor Wall Rating	30 Min. Smoke Rated
Door Closers	Along egress route only
Adequate Exit Routes	Yes
Elevator Controls	Yes
Emergency Lights	Battery powered emergency light fixtures in utility areas and along egress

IBC Code Survey (continued...)

Plan Conditions Verified for:	Yes / No
Fire Safety	Yes
Means of Egress	Yes
General Safety	Yes
Handicapped Accessibility	Yes

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NFPA Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the NFPA code regulations. Vernon Public Schools Central Administration was evaluated for compliance with NFPA 101 Life Safety Code, 2021. Chapter 39, Existing Business Occupancy, of the NFPA Code applies to this building.

NFPA Code Compliance

A listing of required elements per NFPA 101 code follows:

Classification of Occupancy	Description
Date of Original Construction	1892 (Listed on the Historic Buildings of Connecticut)
Date of Addition(s)	1992 & 2008 Renovations
Primary Occupancy	Existing Business
Secondary Occupancy	Existing Storage (Basement - Separated)
Mixed Use	Existing Assembly (3rd Floor Meeting Room - Separated)

Fire Regulations	Description	Conforms (Y/N)
Stair Separation	1 Hour (Secondary Stairs), Unknown (Main Stair)	No
Corridor Separation	30 Min. Smoke Rated	Yes
High Hazard Occupancy	N/A	N/A
Doors		
Width	32" Minimum Clear Width	Yes
Swing Direction	In Direction of egress unless serving < 50 persons	Yes
Locks / Latches	Operable from direction of egress	Yes
Exit Hardware	Panic hardware at exit doors and fire doors	Yes
Closers	On egress routes and select offices	No
Stairs		
Classification	Enclosed / Non-Enclosed	No
Width	42"	Yes
Riser	7"	Yes
Tread	11"	Yes
Guards	>30" Tall, No Openings	Yes
Handrails	On enclosed stair only	No
Enclosure	1 Hour	Yes
Horizontal Exits	N/A	N/A
Ramps	Greater than 1:12 slope	No
Fire Escapes	Yes	Yes

NFPA Code Survey (continued...)

Means of Egress		
Occupant Load	-	N/A
Factor	150 Business, 7/15 Assembly	N/A
Area per Floor	6,664 sf Basement; 6,664 sf First Floor 6,664 sf Second Floor; 3,332 sf Third Floor	N/A
Occupants per Floor	44 Basement; 44 First Floor 44 Second Floor; 22 Third Floor	N/A
Exit Unit Widths	-	Yes
Number of Exits	5	Yes
Exit Location	-	Yes
Exits through Spaces	Primary accessible exit is through open office suite	No
Dead Ends/Common Travel	Dead End < 50' Common Path of Travel < 100'	Yes
Travel Exit	300' (with Sprinkler)	Yes
Discharge	Directly to Grade in >50% of cases	No
Illumination of Exits	-	Yes
Emergency Lighting	Battery powered emergency light fixtures in utility areas and along paths of egress	Yes
Exit Marking	Battery powered LED fixtures at all exits and paths of egress	Yes
Fire Protection Features	Description	Conforms (Y/N)
Construction & Compartmentalization		
Construction - Minimum	III(200)	Yes
Requirements	N/A	N/A
Compartmentalization	<30,000 sf	Yes
Flooring Openings Enclosed	1 Hour	Yes
Floor Openings Unenclosed	Unknown	No
Concealed Spaces	N/A	N/A
Smoke Protection		
Smoke Barriers	At corridor walls	Yes
Smoke Doors	At smoke barriers	Yes
Smoke Dampers	Not observed	N/A
Penetrations Sealed	Not observed	N/A
Special Protection	N/A	N/A
Fire Rated Enclosure		

NFPA Code Survey (continued...)

Trash	N/A	N/A
Mixed Use	Assembly (3rd Floor Meeting Room)	Yes
Corridors	30 Min. Smoke Rated	Yes
Sprinklers - Entire Building	Yes	Yes
Selected Hazards	N/A	N/A
Other		
Interior Finish	-	Yes
Corridors & Stairwells	-	No
Non-Conforming Locations	-	N/A
Sprinkler Protection	Description	Conforms (Y/N)
Sprinkler Service	Wet and Dry sprinkler system	Yes
Area Serviced	Whole Building	Yes
Pressure	115 PSI Static 90 PSI Residual	Yes
Alarm Valve Size	4"	Yes
Service Size	6" fire service	Yes
Fire Department Connection	Wall-Mounted Siamese Connection	Yes
Sprinkler Spacing	Standard	Yes

Discharge from Exits	Conforms (Y/N)
50% required directly to exterior	No
Other through areas on level of discharge with protection	No
Building Service & Fire Protection Equipment	Conforms (Y/N)
Utilities	Yes
Smoke Control	N/A
Elevators, Dumbwaiters & Vertical Conveyors	Yes
Rubbish Chutes, Incinerators & Laundry Chutes	N/A
Detection, Alarm & Communication Systems	Yes
Automatic Sprinklers	Yes

Code Survey Recommendations

The code components of Vernon Public Schools Central Administration are considered partially compliant with IBC and NFPA code requirements. Additional items, that pertain to life safety and ADA accessibility, are addressed under other sections of this report. Some issues are covered by more than one code. Estimates for required work are provided in the Opinion of Probable Costs section of this report.

The following represents areas of necessary improvements and / or required work to meet IBC regulations.

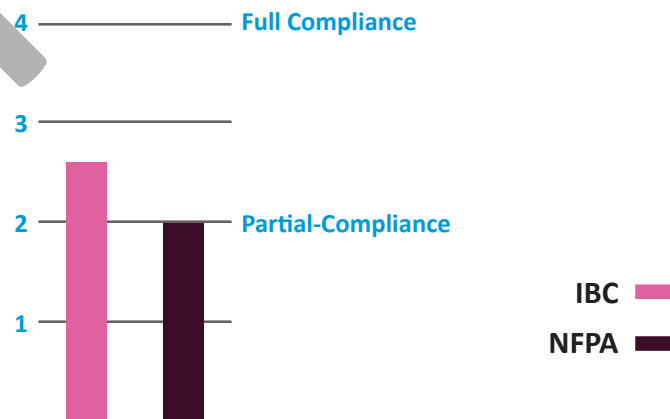
- Provide closers on all office doors.
- Modify existing central stair to have complying handrails/guardrails.
- Central Stair connects 3 stories and does not appear to be within a rated enclosure.
- In secondary stairs shafts, handrails are not continuous along full run of stairs.

The following represents areas of necessary improvements and / or required work to meet NFPA regulations.

- Modify existing central stair to be fully enclosed on first floor.
- Modify existing central stair to have complying handrails/guardrails.
- Modify layout of first floor central office so that accessible egress route is through corridor rather than through an open office.
- Provide access directly to grade is >50% of all exits.

Existing Conditions Evaluation:

The graph below represents the building's overall conformity with IBC and NFPA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building's occupants.



Section 6 : ADA Compliance Survey

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ADA Compliance Survey Introduction

This section contains an ADA compliance report, consisting of a list of conditions which fail to meet code requirements, and brief descriptions.

The ADA compliance survey for Vernon Public Schools Central Administration was completed after data gathering and fieldwork. The Americans with Disabilities Act is a far-reaching civil rights law comprised of four parts. Title I affects employment practices. Title II addresses government-owned buildings and facilities. Title III is similar to Title II except that it addresses privately owned properties. Title IV addresses federally-regulated telecommunication.

This report solely addresses ADA Title II, and the report may serve as a basis for Vernon Public Schools Barrier Reduction Plan. However, this report does not propose specific design solutions for each ADA violation.

A survey checklist was also prepared during the on-site data collection process. Each survey element contains detailed items that reference specific ADA - Title II requirements from the Federal Register. The survey checklist consists of the following elements:

Item	Section
01	Site Access Route
02	Accessible Parking
03	Curb Ramps
04	Entrances
05	Accessible Route - Interior
06	Ramps
07	Stairs - Exterior
08	Stairs - Interior
09	Elevators
10	Platform Lifts
11	Doors
12	Drinking Fountains
13	Bathroom / Toilets
14	Telephones
15	Signage
16	Storage
17	Alarms
18	Seating & Tables
19	Libraries / Assembly Areas / Cafeteria

ADA Survey Failures

To complete this report the survey team walked through the building to evaluate and record the ADA elements. During this process, the team assessed whether the building “Passed” or “Failed” accessibility requirements. An item may have occurred several times within the building; however, if the item failed in one location only, the element was recorded as a “Fail”. For example, “Handrails” are an item in the ADA checklist under the element “Stairs”. A building may have two or three stairs. Handrails on one stair may fail to meet ADA Guidelines, where the others may meet such guidelines. In this instance, the item “Handrails” would be deemed to have failed to meet ADA Guidelines.

Another critical purpose of the survey is to determine if items that fail are “Readily Achievable.” Although the Americans with Disabilities Act places both an architectural and legal definition to the term, this report focuses only on the architectural issues. The category “Readily Achievable” applies to existing building alterations / renovations and does not apply to new construction. The term “Readily Achievable” may also be defined as technically feasible. For example, a specific item may not be “Readily Achievable” due to existing structural or site conditions.

Finally, the survey team reviewed each ADA – Title II “Failed” item and assessed the extent of failures.

The following report documents the ADA requirements that Vernon Public Schools Central Administration failed to meet. Plan and photograph references, notes and whether or not the item is readily achievable are noted.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
2	0	504.2	Site Access Route	Stairs: Treads & Risers	All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Risers shall be 4 inches high minimum and 7 inches high maximum. Treads shall be 11 inches deep minimum.	N	F	22, 26			
3	0	504.4	Site Access Route	Stairs: Tread Surface	Stair treads shall comply with 302. Changes in level are not permitted. EXCEPTION: Treads shall be permitted to have a slope not steeper than 1:48.	Y	F	12			
4	0	504.5	Site Access Route	Stair: Nosing	The radius of curvature at the leading edge of the tread shall be ½ inch (13 mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1½ inches (38 mm) maximum over the tread below. See Graphic	Y	F	12			
9	0	302.1	Site Access Route	Floor Surfaces	Floor surfaces shall be stable, firm, and slip resistant and shall comply with 302. Changes in level in floor surfaces shall comply with Section 303.	Y	F	25			
15		502	Accessible Parking	General	Accessible car and van parking spaces shall comply with Section 502	Y	F	15			
16	0	502.2	Accessible Parking	Vehicle Spaces	Car parking spaces shall be 96 inches minimum in width. Van parking spaces shall be 132 inches minimum in width. Car and Van parking spaces shall be marked to define the width. EXCEPTION: Van parking spaces shall be permitted to be 96 inches minimum in width where the access aisle is 96 inches minimum in width.	Y	F	15			

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ADA Compliance Survey

Vernon Public Schools Central Office

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
19	0	502.7	Accessible Parking	Identification	Where accessible parking spaces are required to be identified by signs, the signs shall include the International Symbol of Accessibility complying with 703.6.3.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches minimum above the finish floor of the parking space, measured to the bottom of the sign.	Y	F	15			
23	0	405.2	Ramps	Slope	Ramp runs shall have a running slope greater than 1:20 and not steeper than 1:12. EXCEPTION: In existing buildings or facilities, ramps shall be permitted to have slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.	Y	F	14			
24		405.4	Ramps	Floor Surfaces	Floor surfaces of ramp runs shall comply with 302.	Y	F	25			
25		405.5	Ramps	Clear Width	The clear width of a ramp run shall be 36 inches (915mm) minimum. Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run. 405.6 Rise: The rise for any ramp run shall be 30 inches (760mm) maximum.	Y	F	14			
32		404.1	Entrances	Doors, Doorways	Doors and doorways that are part of an accessible route shall comply with Section 404.	Y	F	1, 5, 8, 9, 17, 18, 22, 26			
33		302.1	Access Route Interior	Floor Surfaces: General	Floor surfaces shall be stable, firm, and slip resistant and shall comply with 302.	Y	F	9			

Prepared by: Friar Architecture, Inc.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
34		302.2	Access Route Interior	Floor Surfaces: Carpet	Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no level loop, textured loop, level cut pile, or level cut/uncut pile texture. The pile shall be ½ inch (13 mm) maximum in height. Exposed edges of carpet shall be fastened to floor and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.	Y	F	10			
39		307.2	Access Route Interior	Protruding Objects: Protrusion Limits	Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor shall protrude 4 inches (100 mm) maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4½ inches (115 mm) maximum.	Y	F	2, 20			
41		308.2.1	Access Route Interior	Forward Reach: Unobstructed	Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor.	Y	F	3			
42		308.2.2	Access Route Interior	Forward Reach: Obstructed High Reach	Where a high forward reach is over an obstruction, the clear floor space complying with Section 305 shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum above the floor where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum above the floor and the reach depth shall be 25 inches (635 mm) maximum.	Y	F	3, 6			

Date Prepared: 8/21/2023

ADA Compliance Survey

Vernon Public Schools Central Office

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
43		309.4	Access Route Interior	Operable Parts: Operation	Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum. EXCEPTION: Gas pump nozzles shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.	Y	F	17			
45		403.5	Access Route Interior	Walking Surfaces: Clear Width	The clear width of an accessible route shall be 36 inches (915mm) minimum. EXCEPTION: The clear width shall be permitted to be reduced to 32 inches minimum for a length of 24 inches maximum provided that reduced width segments are separated by segments that are 48 inches (1220mm) minimum in length and 36 inches (915mm) minimum in width.	Y	F	18			
49		402.2	Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a slope not steeper than 1:20, doors and doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable portions of this standard.	N	F	13, 15, 22, 26			
61		405.10	Ramps	Wet Conditions	Landings subject to wet conditions shall be designed to prevent the accumulation of water.	Y	F	14, 25			

Prepared by: Friar Architecture, Inc.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
75		504.5	Stairways	Nosings	The radius of curvature at the leading edge of the tread shall be ½ inch (13mm) maximum. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. Risers shall be permitted to slope under the tread at an angle of 30 degrees maximum from vertical. The permitted projection of the nosing shall extend 1½ inches (38mm) maximum over the tread or floor below.	Y	F	24, 26, 27			
77		505.2	Handrails	Handrails: Where Required	Handrails shall be provided on both sides of stairs and ramps. EXCEPTION: In assembly seating areas, handrails shall not be required on both sides of aisle stairs, provided with a handrail either at the side or within the aisle.		F	12			
78		505.3	Handrails	Handrails: Continuity	Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs or ramps shall be continuous between flights or runs. EXCEPTION: Handrails shall not be required to be continuous in aisles serving seating where handrails are discontinuous to provide access to seating and to permit crossovers within the aisles.	Y	F	12, 21			
79		505.4	Handrails	Handrails: Height	Top of gripping surfaces of handrails shall be 34 inches minimum and 38 inches maximum vertically above walking surfaces, stair nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.	Y	F	12			

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ADA Compliance Survey

Vernon Public Schools Central Office

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
81		505.6	Handrails	Handrails: Gripping Surface	Gripping surfaces shall be continuous, without interruption by newel posts, other construction elements, or obstructions. EXCEPTIONS: 1. Handrail brackets or balusters attached to the bottom surface of the handrail shall not be considered obstructions, provided the brackets or balusters comply with the following criteria: a. Not more than 20% of the handrail length is obstructed, b. Horizontal projections beyond the sides of the handrail occur 1 1/2 inches minimum below the bottom of the handrail, and provided that for each 1/2 inch of additional handrail perimeter dimension above 4 inches, the vertical clearance dimension of 1 1/2 inch can be reduced by 1/8 inch, and c. Edges shall be rounded. 2. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottom of the handrail gripping surfaces shall be permitted to be obstructed along the entire length where they are integral to crash rails or bumper guards.	Y	F	12, 24			
86		505.10	Handrails	Handrails: Extensions	Handrail shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10. EXCEPTIONS: 1. Continuous handrails at the inside turn of stairs and ramps.2. Handrail extensions are not required in aisles serving seating where the handrails are discontinuous to provide access to seating and to permit crossovers within aisles. 3. In alterations, full extensions of handrails shall not be required where such extensions would be hazardous due to plan configuration.	Y	F	12, 19			

Prepared by: Friar Architecture, Inc.

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
87		505.10.2	Handrails	Handrails: Top Extension at Stairs	At the top of a stair flight, Handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the landing nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.	Y	F	12			
88		505.10.3	Handrails	Handrails: Bottom Extension at Stairs	At the bottom of a stair flight, handrails shall extend at the slope of the stair flight for a horizontal distance equal to one tread depth beyond the bottom tread nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.	Y	F	19			
104		407.4.6.4.1	Elevators	Elevator Car Controls: Emergency Controls: Height	Emergency control buttons shall have their centerlines 35 inches minimum above the floor.	Y	F				
117		404.1	Doors	General	Doors, doorways, and gates that are part of an accessible route shall comply with 404. EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.6, 404.2.7, and 404.2.8.	Y	F	1, 5, 8, 9, 17, 18, 22, 26			

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Date Prepared: 8/21/2023

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
119		404.2.2	Doors	Clear Width	Doorways shall provide a clear width of 32 inches (815 mm) minimum. Clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Openings more than 24 inches (610 mm) in depth at doors and doorways without doors shall provide a clear opening width of 36 inches (915 mm) minimum. There shall be no projections into the clear opening width lower than 34 inches (865 mm) above the floor. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the floor shall not exceed 4 inches (100 mm). EXCEPTIONS: 1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor. 2. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear opening width shall be permitted for the latch side stop.	Y	F	17			
120		404.2.3	Doors	Maneuvering Clearances	Minimum maneuvering clearances at doors shall comply with 404.2.3 and shall include the full clear opening width of the doorway. Required door maneuvering clearance shall not include knee and toe clearance.	Y	F	18			
121		404.2.4	Doors	Thresholds	If provided, thresholds at doorways shall be 3/4 inch (13 mm) maximum in height. Raised thresholds and changes in level at doorways shall comply with 302 and 303. EXCEPTION: An existing or altered thresholds shall be permitted to be 3/4 inch maximum in height provided that the threshold has a beveled edge on each side with a maximum slope of 1:2 for the height exceeding 1/4 inch.	N	F	22, 26			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
123		404.2.6	Doors	Door Hardware	Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. EXCEPTION: Locks used only for security purposes and not used for normal operation shall not be required to comply with Section 404.2.6.	Y	F	17			
128		602.1	Drinking Fountains	General	Accessible drinking fountains shall comply with 307 and 602	Y	F	2			
130		602.4	Drinking Fountains	Spout Height	Spout outlets of wheelchair accessible drinking fountains shall be 36 inches maximum above the floor. Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the floor.	Y	F	2			
132		604.1	Water Closets	General	Accessible water closets and toilet compartments shall comply with 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.9. Ambulatory accessible compartments shall comply with Section 604.10. EXCEPTION: Water closets and toilet compartments primarily for children's use shall be permitted to comply with 604.11 as applicable.	Y	F	4			

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Date Prepared: 8/21/2023

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
135		604.6, 309	Water Closets	Flush Controls	Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. Flush controls shall be located on the open side of the water closet. EXCEPTION: In ambulatory accessible compartments complying with 604.10, flush controls shall be permitted to be located on either side of the water closets.	Y	F	4			
136		604.7	Water Closets	Dispensers	Toilet paper dispensers shall comply with 309.4. Where the dispenser is located above the grab bar, the outlet of the dispenser shall be located within an area 24 inches minimum and 36 inches maximum from the rear wall. Where the dispenser is located below the grab bar, the outlet of the dispenser shall be located within an area 24 inches minimum and 42 inches maximum from the rear wall. The outlet of the dispenser shall be located 18 inches minimum and 48 inches maximum above the floor. Dispensers shall comply with Section 609.3. Dispensers shall not be of a type that control delivery, or do not allow continuous paper flow.	Y	F	3, 4			
137		604.9.1	Toilet Compartments	General	Wheelchair accessible toilet compartments shall comply with 604.9.	Y	F	4			
139		604.8.1.2	Toilet Compartments	Wheelchair Accessible Compartments: Doors	Toilet compartment doors, including door hardware, shall comply with 404, except that if the approach is to the latch side of the compartment door, clearance between the door side of the stall and any obstruction shall be 42 inches minimum. The door shall be self-closing. A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the required minimum area of the compartment.	Y	F	4			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
148		308	Mirrors / Accessories	Reach Ranges	Reach ranges shall comply with 308.	Y	F	3, 6			
149		603.3	Mirrors / Accessories	Mirrors	Where mirrors are located above lavatories, a mirror shall be located over the accessible lavatory and shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor. Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.	Y	F				
151		606.2, 305, 306	Lavatories / Sinks	Clear Floor Space	A clear floor space complying with 305.3, positioned for a forward approach, shall be provided. Knee and toe clearance complying with 306 shall be provided. The dip of the overflow shall not be considered in determining knee and toe clearances. EXCEPTIONS: 1. A parallel approach complying with 305 and centered on the sink, shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided. 2. The requirement for knee and toe clearance shall not apply to a lavatory in a toilet or bathing facility for a single occupant, accessed only through a private office and not for common use or public use. 3. A knee clearance of 24 inches minimum above the floor shall be permitted at lavatories and sinks used primarily by children 6 through 12 years where the rim or counter surface is 31 inches maximum above the floor. 4. A parallel approach complying with 305 and centered on the sink, shall be permitted at lavatories and sinks used primarily by children 5 years and younger. 5. The requirement for the knee and toe clearance shall not apply to more than one bowl of a multibowl sink. 6. A parallel approach complying with Section 305 and centered on the sink, shall be permitted at wet bars.	Y	F				
						Y	F	6			

ADA Compliance Survey

Date Prepared: 8/21/2023

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
152		606.3	Lavatories / Sinks	Height	The front of lavatories and sinks shall be 34 inches maximum above the floor, measured to the higher of the rim or counter surface. EXCEPTIONS: 1. A lavatory in a toilet or bathing facility for a single occupant accessed only through a private office and not for common use or public use shall not be required to comply with 606.3.2.	Y	F	6			
172		609.4	Grab Bars	Position of Grab Bars	Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the floor measured to the top of the gripping surface or shall be installed as required by Items 1 through 3. 1. The lower grab bar on the back wall of a bathtub shall comply with Section 607.4.1.1 or 607.4.2.1. 2. Vertical grab bars shall comply with Sections 604.5.1, 607.4.1.2.2, 607.4.2.2 and 608.3.1.2. 3. Grab bars at water closets primarily for children's use shall comply with Section 609.4.2.	Y	F	4			
191		703.1	Signage	General	Accessible signs shall comply with Section 703. Tactile signs shall contain both raised characters and braille. Where signs with both visual and raised characters are required, either one sign with both visual and raised characters, or two separate signs, one with visual, and one with raised characters, shall be provided.	Y	F	2, 7, 16, 17, 20			
192		703.1.1	Signage	Designations	Interior and exterior signs identifying permanent rooms and spaces shall comply with sections 703.1, 703.2, and 703.3. EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.3.	Y	F	16			

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
195		703.4	Signage	Braille	703.4.3 Dimensions: Braille dots shall have a domed or rounded shape and shall comply with Table 703.4.3. 703.4.2 Uppercase Letters: The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms. 703.4.4 Position: Braille shall be below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch minimum from any other raised characters and 3/8 inch minimum from raised borders and decorative elements. Braille provided on elevator car controls shall be separated 3/16 inch minimum and shall be located either directly below or adjacent to the corresponding raised characters or symbols.	Y	F	7			
199		305.3	Storage	Clear Floor Space	The clear floor space shall be 48 inches minimum in length and 30 inches minimum in width.	Y	F	8			
202		702.1	Alarms	General	Accessible audible and visible alarms and notification appliances shall be installed in accordance with NFPA 72 listed in Section 105.2.2, be powered by a commercial light and power source, be permanently connected to the wiring of the premises electric system, and be permanently installed.	Y	F			Toilet Rooms	
203		902.1	Dining Surfaces and Work Surfaces	General	Accessible dining surfaces and work surfaces shall comply with Section 902. EXCEPTIONS: Dining surfaces and work surfaces primarily for children's use shall be permitted to comply with Section 902.5.	Y	F	6			
205		902.4	Dining Surfaces and Work Surfaces	Height	The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum in height above the floor.	Y	F	6			

ADA Survey Photographs



1. Location:

Main Office

Description:

Front approach door does not have 18" clearance on latch side of door when approaching from the pull side.



2. Location:

Corridor

Description:

Water fountain does not have insulated pipes. Water fountain is considered a protruding object.



3. Location:

Toilet Room

Description:

Mirror is mounted above the required maximum of 40". Operable components of toilet room accessories are located above the required maximum of 48".

ADA Survey Photographs

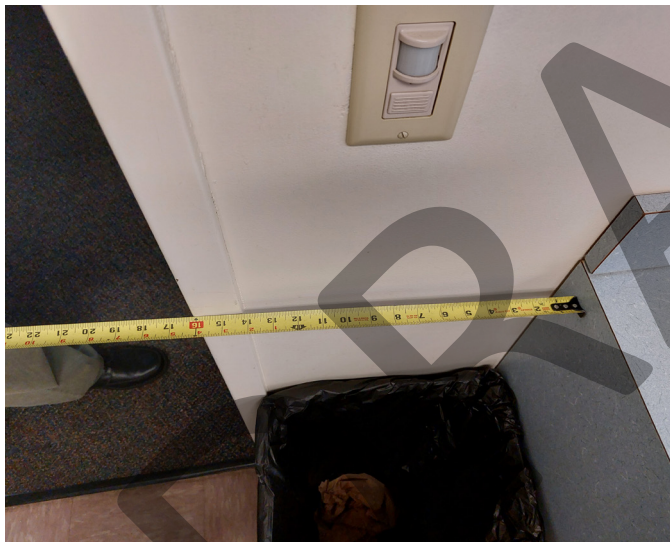


4. Location:

Toilet Room

Description:

A vertical grab bar is not present, swing down grab bar is no longer required, controls are located incorrectly, and the sidewall grab bar is not long enough for compliance.



5. Location:

Toilet Room

Description:

Front approach door does not have 18" clearance on latch side of door when approaching from the pull side.



6. Location:

Employee Lounge

Description:

Only sink available in this room is not accessible, does not provide proper pull under distance and exceeds height requirements. Accessories are mounted above required maximum height of 48".

ADA Survey Photographs



7. Location:

Office of Superintendent

Description:

Signage for this area does not meet accessible requirements. Does not have braille characters.

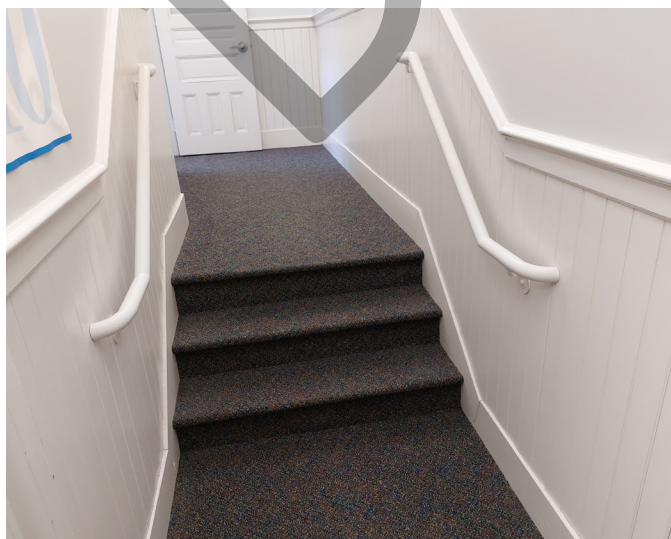


8. Location:

Office of Superintendent

Description:

Door does not meet clear space requirement of 48" for latch side approach without closer.



9. Location:

Office of Superintendent

Description:

Office of Superintendent does not have accessible route.

ADA Survey Photographs



10. Location:

Entry

Description:

Welcome mat has edges that are raised greater than a 1/2", presenting a tripping hazard.

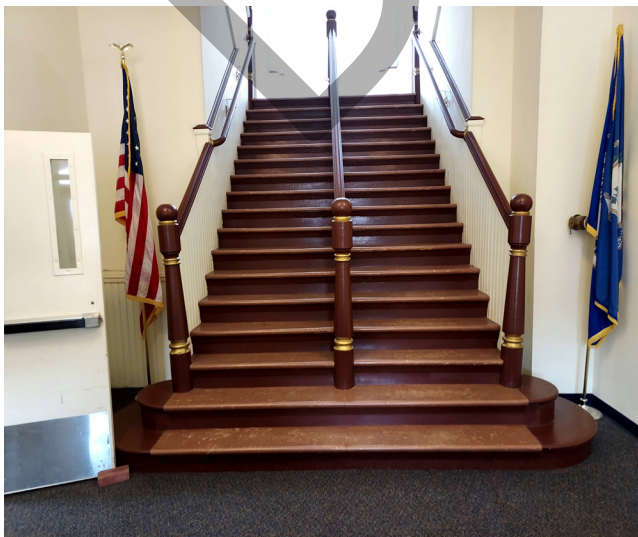


11. Location:

Basement

Description:

The basement is currently "locked out" for public access. The floor is mainly used as storage, utility, boiler, electrical, mechanical and workshop spaces. The elevator and stairs go to this level, upgrades will be required for accessibility.



12. Location:

Second Floor Stair

Description:

The old stair's handrails do not meet current accessibility requirements. Further up the stair handrails are not present on either side of the current stair.

ADA Survey Photographs

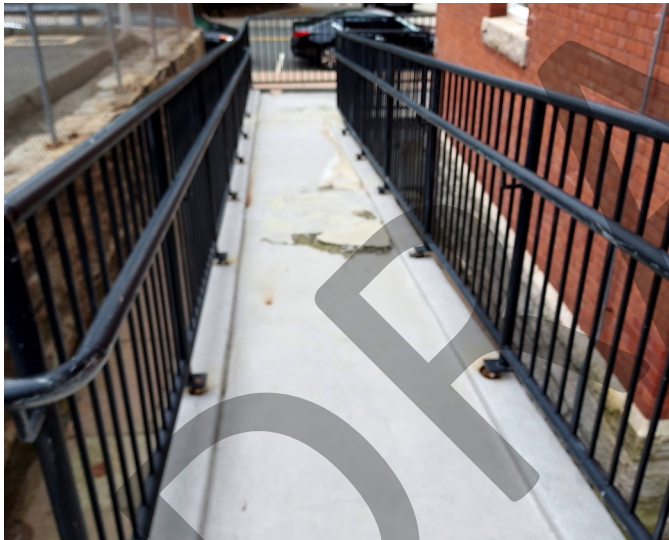


13. Location:

Parking

Description:

Side Accessible entrance does not have a circulation path from outside of the site. Side entrance is only accessible from parking lot.



14. Location:

Site

Description:

Slope of existing ramp is greater than 1:12



15. Location:

Site

Description:

Of the two accessible spaces 1 is sized to be van accessible, but the signage does not indicate this. Signage for both accessible spaces are not located above the required minimum 60" above grade. Parking spaces exceed a slope of 1:48.

ADA Survey Photographs



16. Location:

Main Office

Description:

No signage designating room or space.



17. Location:

Second Floor Office Area

Description:

The existing door is not wide enough and the door hardware is not compliant. This is the exception for this building.



18. Location:

Second Floor Office Area

Description:

The office furniture is restricting the clear width and the access to the two office spaces.

ADA Survey Photographs

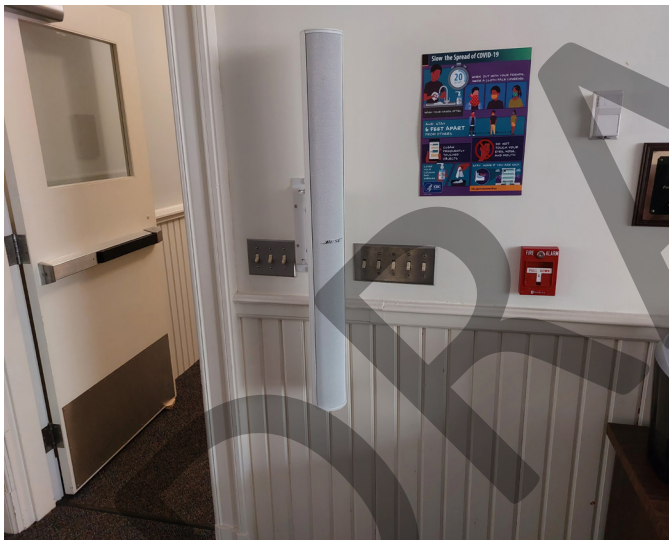


19. Location:

Exit Stair - Second Floor

Description:

The handrail extensions at the bottom of the stair are not typical, do not extend for 1' in the direction of the stair.



20. Location:

Third Floor - Meeting Room

Description:

The speaker has been installed, which has created a protruding object.



21. Location:

Basement

Description:

The exit is not provided with continuous handrails.

ADA Survey Photographs



22. Location:

Main Entrance

Description:

Signage exists to direct people to the accessible side entrance, but it does not exist in an accessible location. The stair riser and treads are not compliant.



23. Location:

School Street Side (South)

Description:

The current side walk creates a cross slope condition.



24. Location:

School Street Side (South)

Description:

There is currently not a drop off and/or loading zone for the building.

ADA Survey Photographs



25. Location:

Exterior Ramp

Description:

The condition of the ramp is contingent on access. Deterioration will create depressions and loose surfaces, which the wheel chair can not navigate.



26. Location:

Park Street Side (West)

Description:

Originally the high school circa 1892, the building was not designed as an accessible building. Access from the public way is currently not possible.



27. Location:

Accessible Main Entrance

Description:

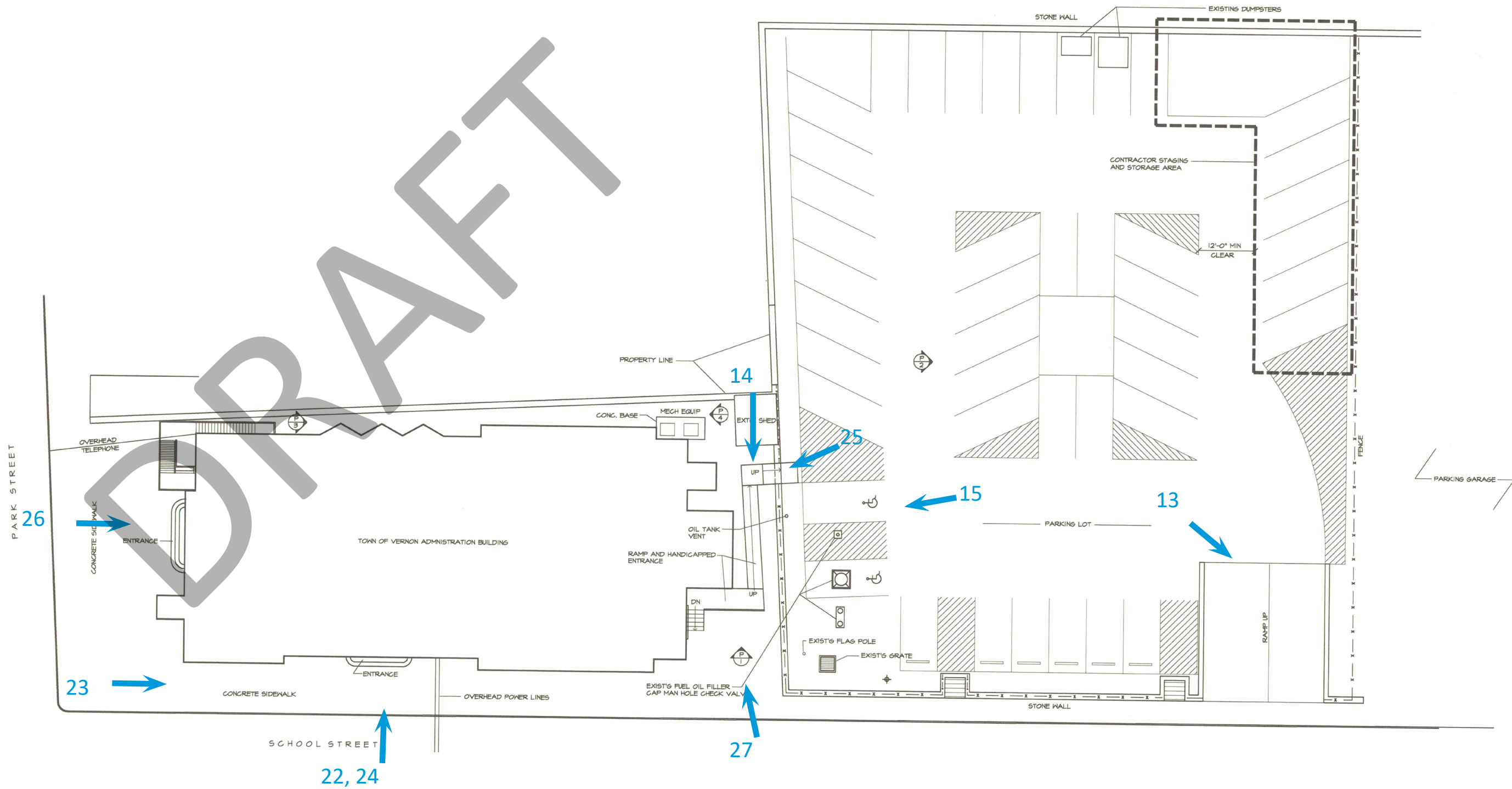
The ramp from the parking lot is the only accessible entrance / exit to the building.

ADA Survey Photograph Key Plans

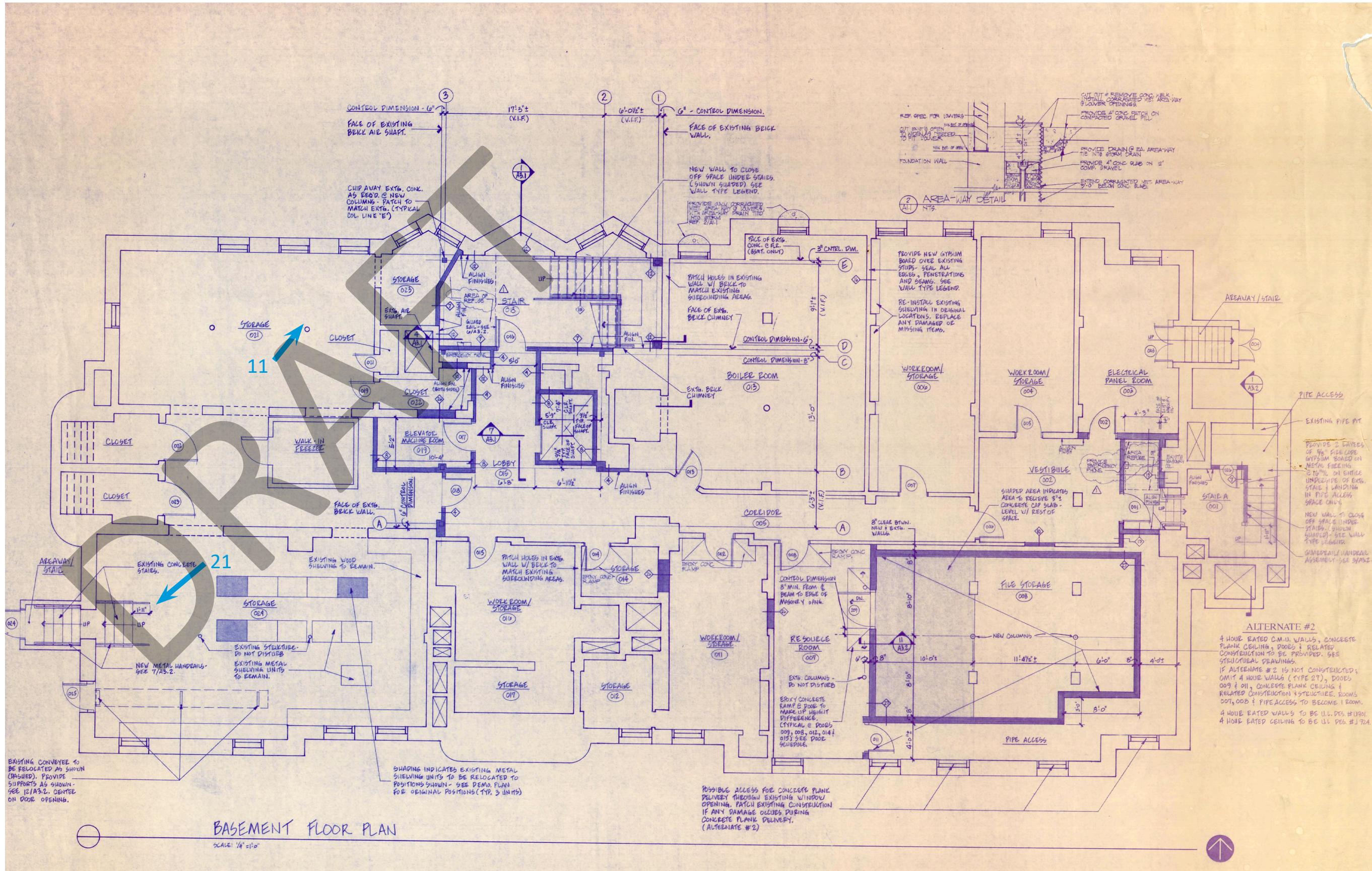
The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

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NOTE:
 (TYPICAL FOR MEN'S TOILET #128, WOMEN'S TOILET #131 & HCR TOILET STALL #152.)
 RE-INSTALL EXISTING FIXTURES & ACCESSORIES (SHOWN DIAGONAL HATCHED) AS SHOWN ON PLAN. ITEMS TO BE RE-INSTALLED INCLUDE:
 MEN'S TOILET #128
 1 WATER CLOSET (W), 1 URINAL (U), 2 TOILET PAPER DISPENSERS (P), 1 SOAP DISPENSER (S), 1 MIRROR (K) & 1 PAPER TOWEL DISPENSER (E). RE-CONFIGURE & RE-INSTALL EXISTING TOILET PARTITIONS WHEREVER POSSIBLE.
 WOMEN'S TOILET #131/132
 2 WATER CLOSETS (W), 3 TOILET PAPER DISPENSERS (P), 1 SOAP DISPENSER (S), 1 MIRROR (K) & 1 PAPER TOWEL DISPENSER (E). RE-CONFIGURE & RE-INSTALL EXISTING TOILET PARTITIONS WHEREVER POSSIBLE.
 PROVIDE NEW HCR ACCESSIBLE WATER CLOSET, SINKS, GRAB BARS & OTHER ACCESSORIES AS SHOWN. PROVIDE MODIFICATIONS & ADDITIONS TO EXISTING TOILET PARTITIONS. PROVIDE URINAL SCREEN & MIRROR PARTITIONS. SEE 2/A1.1 FOR FIXTURE MOUNTING HEIGHTS; SEE 3/A1.1 FOR GRAB BAR DETAILS; SEE DEMO PLAN FOR ORIGINAL LOCATIONS OF EXISTING FIXTURES.

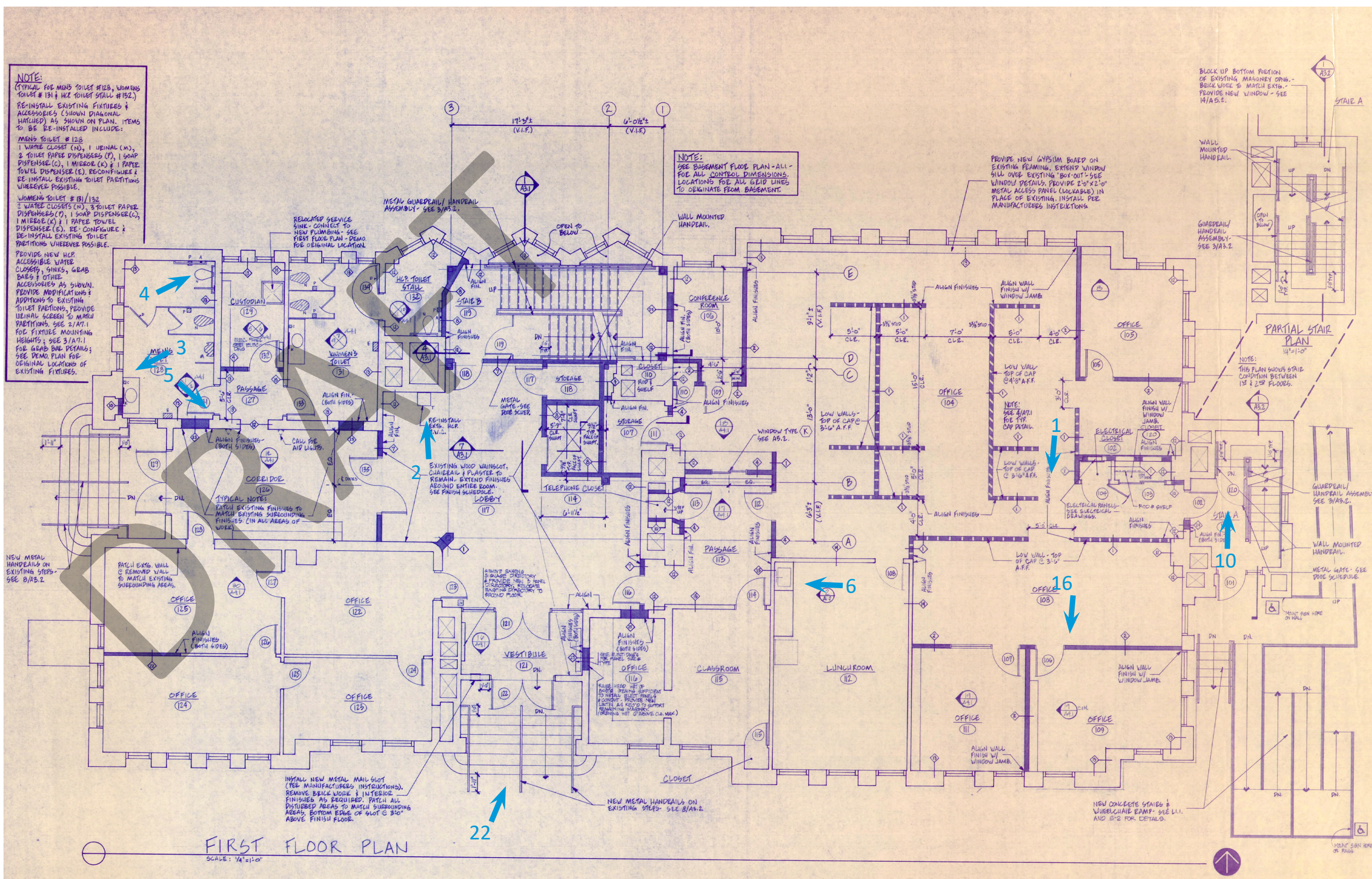
NOTE:
 SEE BASEMENT FLOOR PLAN - ALL - FOR ALL CONTROL DIMENSIONS. LOCATIONS FOR ALL GRID LINES TO ORIGINATE FROM BASEMENT.

PROVIDE NEW GYPSUM BOARD ON EXISTING FRAMING. EXTEND WINDOW SILL OVER EXISTING "BOX-OUT" - SEE WINDOW DETAILS. PROVIDE 2'-0" X 2'-0" METAL ACCESS PANEL (CLOCKABLE) IN PLACE OF EXISTING. INSTALL PER MANUFACTURER'S INSTRUCTIONS.

BLOCK UP BOTTOM PORTION OF EXISTING MAHONEY CORNER - BRICK VENEER TO MATCH EXISTING - PROVIDE NEW WINDOW - SEE 14/A5.2.

PARTIAL STAIR PLAN
 1/4" = 1'-0"
 NOTE: THIS PLAN SHOWS STAIR CONDITION BETWEEN 1ST & 2ND FLOORS.

FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"



13

Vernon Public Schools Central Administration

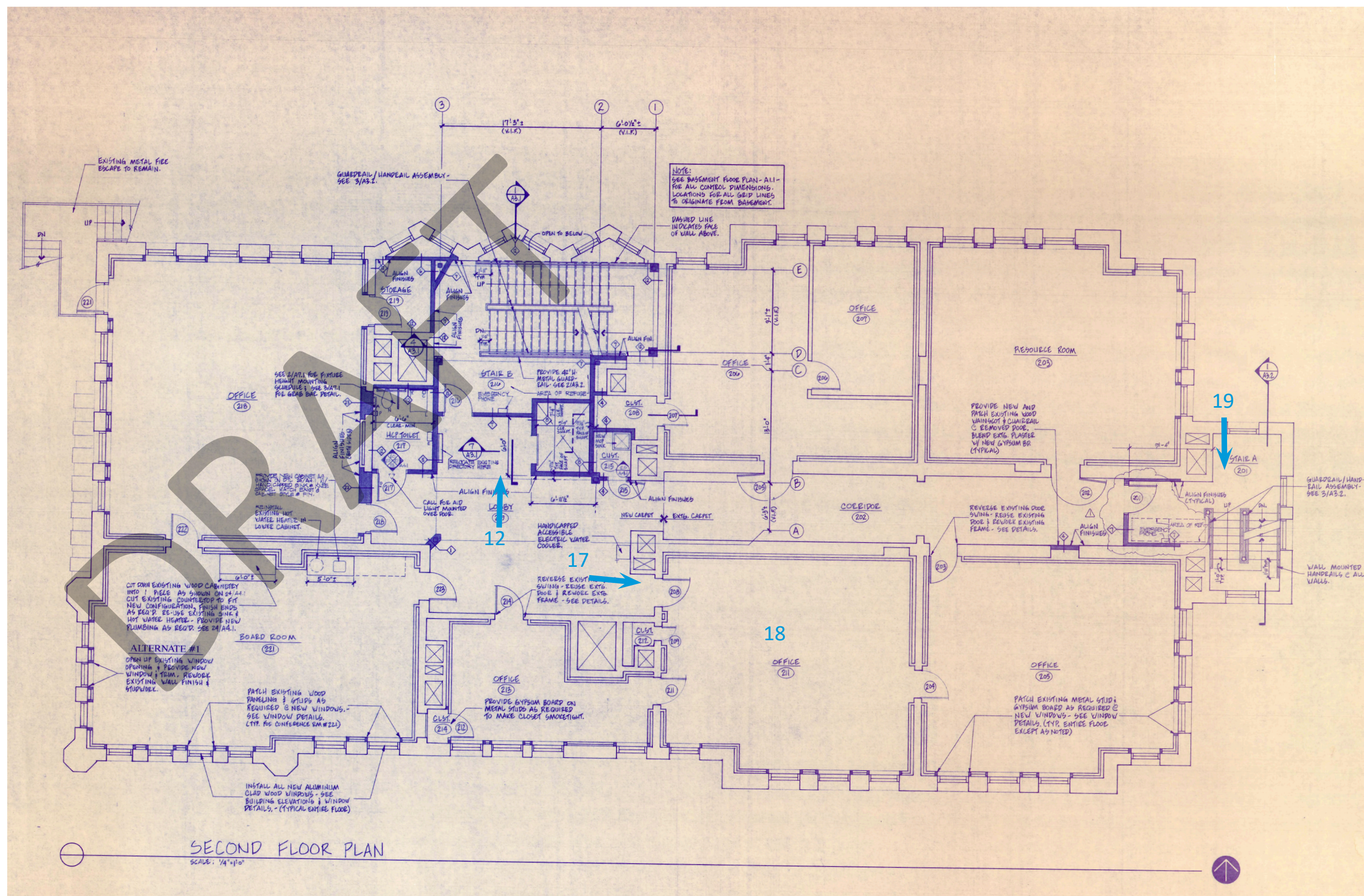
First Floor Plan

ADA Survey

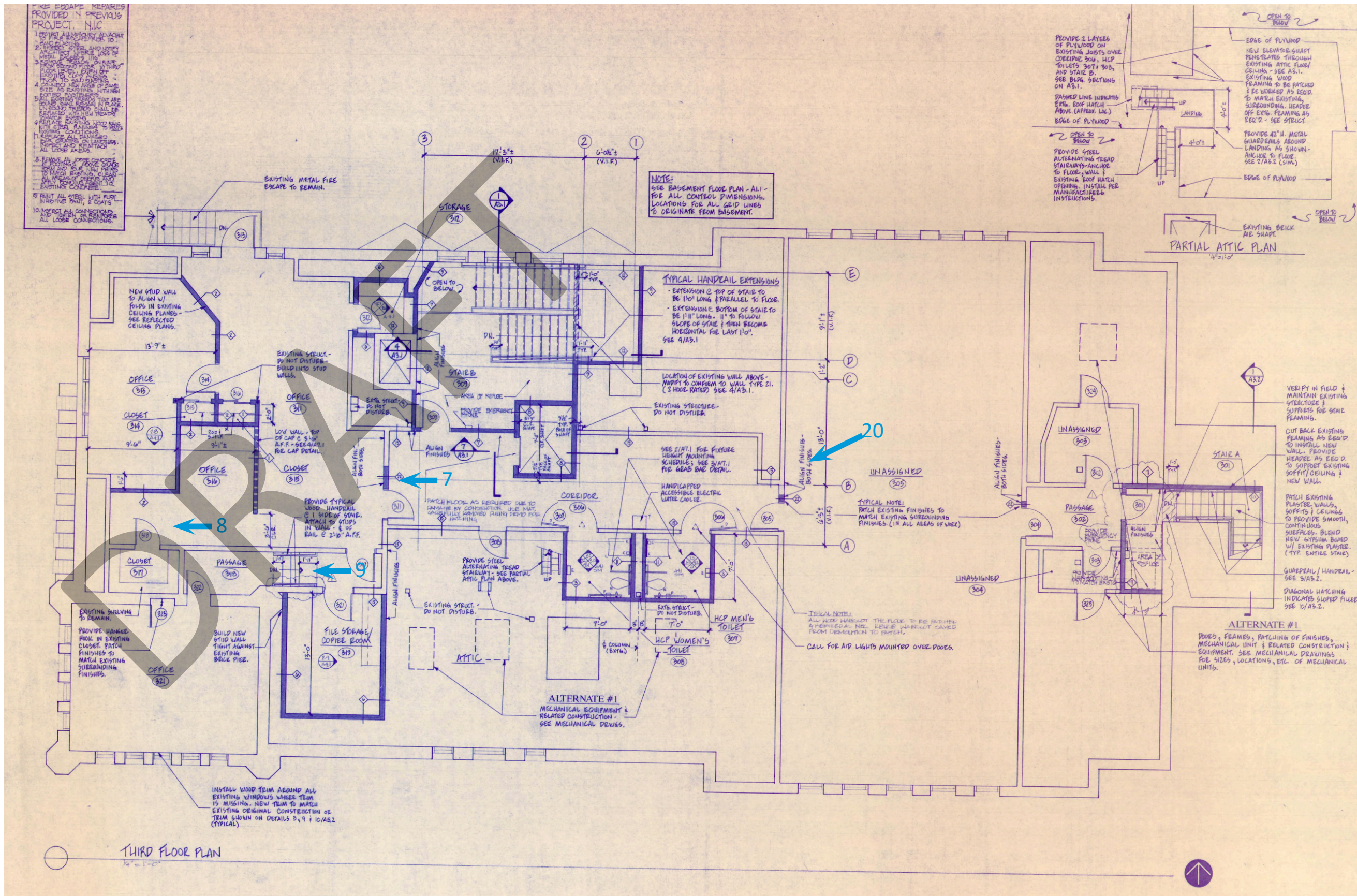


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Second Floor Plan



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ADA Survey Recommendations

Vernon Public Schools Central Office was evaluated based on the Americans with Disabilities Act (ADA), Title II, for public building accessibility. ADA is an act of Congress mandating certain standards for accessibility that are enforceable through the civil courts. Vernon Public Schools Central Office fails to meet some of these requirements, evident in the “ADA Compliance Survey”.

The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage.

The work recommended to address ADA compliance issues includes providing:

- There is signage on the exterior of the building that points towards the nearest accessible entrance, but this signage is not located in an accessible area. Signage should be provided at ground level at these entrances to indicate the direction of the accessible entrance.
- The accessible entrance is only accessible from the parking lot. There is not an accessible site path to this location.
- Modify existing door locations to ensure minimum required clearance on latch side of a pull door.
- Build out wing walls at drinking fountains in corridors that are considered protruding objects.
- Replace bathroom accessories to locations where operable components are located below 48” high.
- Replace telephones to locations where operable components are located below 48” high.
- Provide vertical grab bars at all accessible toilet rooms.
- Replace casework and sink in employee lounge to allow for pull under and modify existing accessories mounting heights to be below 48”.
- Replace signage for Superintendent office to include braille characters.
- Replace any welcome mats that do not lay flat.
- Modify existing accessible parking spots so that the cross slope does not exceed 1:48 pitch.
- Modify existing accessible parking signage so that the bottom edge is located at or above 60” high.

Existing Conditions Evaluation:

The graph below represents the building’s overall conformity with ADA requirements. Compliance was rated on a scale of 1-4, with a 4 rating equating to full compliance. A rating of 2 or under indicates that the building requires moderate to substantial code compliance updates in order to protect the safety of the building’s occupants.



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Section 7 : Site Survey



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Existing Site Conditions

This section provides a listing of existing conditions followed by summary descriptions for the site components. A site plan is provided along with photographs of existing conditions that identify areas requiring attention. Existing site utilities are also identified. Recommendations for site improvements are discussed to provide Vernon Public Schools with an overview of the required work.



Map Data: Google

Vernon Public Schools Central Administration

Plan Drawings	1992 & 2008 Renovations
Photos	2023 Survey
Date Built	1892 (Listed on the Historic Buildings of Connecticut)
Site / Civil & Landscape Architect	Unknown
Date(s) Additions	1992 & 2008 Renovations
Zone	RC
Gross Area (site)	0.2652 Acres

The following is a data summary of the site conditions that were observed and noted during the survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with various building personnel.

Site Conditions

The following codes are used throughout this report to identify the condition of various elements.

Condition Codes	
Excellent	16-20 years useful life
Good	Good at present (11-15 years)
Fair	Minor / cosmetic repairs needed to maintain condition (6-10 years)
Poor	Immediate repairs needed to prevent deterioration (0-5 years)

	Material	Condition
Entry Drive		
Primary Surface	Bituminous	Good
Curbs	Stone	Fair to Good
Striping	Yes	Good
Signage	Minimal	Good
Walkways		
Primary Surface	Concrete	Poor to Good
Curbs	Concrete	Good
Signage	Yes	Good
Handicap Access	Yes	Poor
Parking		
Total Spaces	44	Good
Designated Handicap Spaces	2	Good
Primary Surface	Bituminous	Good
Curbs	Bituminous	Good
Striping	Yes	Fair to Good
Signage	Yes	Good
Planting/Features		
Plant Beds	Yes	Good
Trees/Shrubs	No	N/A

The following is a summary of the site survey of this building.

Item	Summary
Site Lighting	There is minimal pole lighting in the parking area. Wall mounted light fixtures are on the facade to provide lighting for building entrances.
Driveways/Walkways	The concrete walkways surrounding the building are in fair to good condition. The concrete ramp at the rear of the building is crumbling and unusable for anyone requiring an accessible entry into the building. The short driveway leads to a parking lot on the east side of the site.
Parking	The entrance to parking is located off of School Street. There is signage indicating parking for Vernon Public Schools Central Administration. The bituminous parking area has been patched in several locations but is in good condition.
Topography	The building sits on flat topography. A stair and ramp lead to the raised parking lot on the east side of the site. A stone retaining wall separates this grade change.
Drainage	Some drainage was seen in the concrete walkways and within the parking area.
Plantings	Minimal plantings were on site. The entrance along Park Street had the only bed of flowers on site.
Service Area	No service area indicated.

Site Survey Photographs



1. Location:

Walkway Along School Street

Description:

Concrete has been patched in several locations.



2. Location:

Walkway Along School Street

Description:

Concrete cracking and has been patched in several locations.

Site Survey Photographs



3. Location:

Back Entrance along School Street

Description:

View of concrete stairs, concrete ramp and stone retaining wall.



4. Location:

Rear of Building (East)

Description:

Concrete flooring cracking and stained in some locations.



5. Location:

Rear of Building (East)

Description:

Deteriorating concrete ramp landing.

Site Survey Photographs



6. Location:

Rear of Building (East)

Description:

Patchwork at concrete ramp.



7. Location:

Parking Lot (Rear)

Description:

Entry drive from School Street. Parking and drive haven been patched in various locations.



8. Location:

Parking Lot (Rear)

Description:

Bituminous parking area with painted directional indicators.

Site Survey Photographs



9. Location:

North Side of Building

Description:

Cracked concrete with mildew build up.



10. Location:

North Side of Building

Description:

Drain in concrete walkway



11. Location:

North Side of Building

Description:

Missing drain cap in concrete walkway

Site Survey Photographs



12. Location:

North Side of Building

Description:

Discarded metal railing



13. Location:

East View of Retaining Wall

Description:

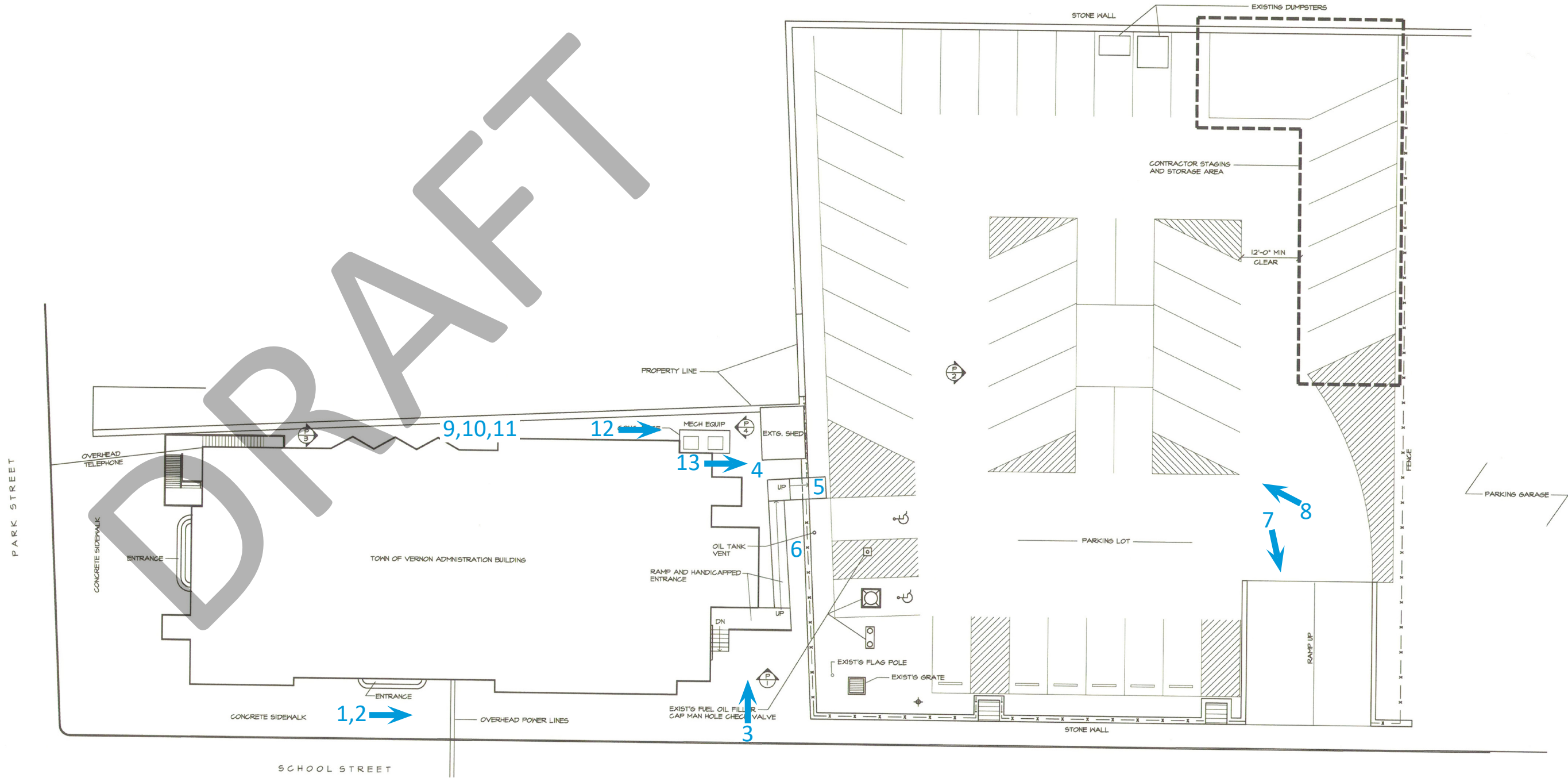
Some areas of decay in the stone retaining wall and staining visible.

Site Photograph Key Plan

The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

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Site Recommendations

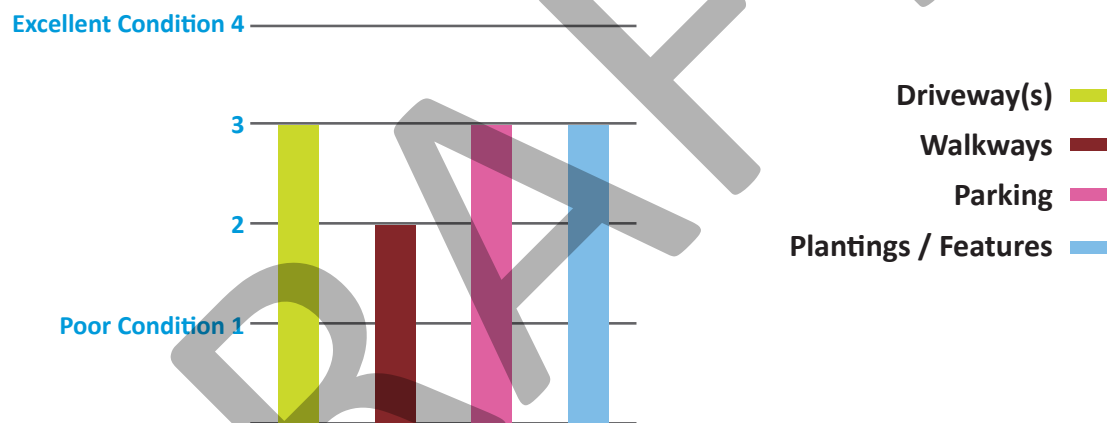
The site components of Vernon Public Schools Central Administration are in **good** condition overall with the exception of the concrete ramp at the rear of the building.

The following represents areas of necessary site improvements and / or required work.

- Replace exterior concrete ramp and landing leading from the parking area to the building.
- Repair cracks in walkways and replace missing drain covers.

Existing Conditions Evaluation:

The elements reviewed under this assessment were ranked on a scale of 1-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 are considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the results and their expected life spans.



Notes:

- Ratings range from 1 (poor condition) to 4 (excellent condition)
- Please refer to MEP survey for complete utility prioritization.

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Section 8 : Opinion of Probable Costs

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Opinion of Probable Costs

This section provides an estimate of probable costs for the work required to bring the building into compliance with applicable codes and meet safety requirements. Non-code related items are also included to identify the costs associated with meeting suitable architectural, structural and site standards. The estimates for this work are compared to the cost of replacing the existing structure.

The following opinion of probable costs was developed utilizing data obtained by conducting a survey of the existing building as well as knowledge of upgrades required at similar facilities and industry standards. The estimate was generated on the basis of a 20-year life expectancy for all building elements. The need for the building to be provided with the same features and upgrades as a typical building was taken into account. This estimate can be used as a tool to help facilitate prudent fiscal decisions relating to future projects at Vernon Public Schools Central Administration.

The estimate of work required at Vernon Public Schools Central Administration is based on meeting current applicable code and safety requirements. Non-code related items necessary to meet suitable architectural standards for occupancy are also included. Both unit and square-footage prices were utilized to prepare the estimate, based on Means Building Construction Cost Data and recent bid data. The itemized ADA Compliance Survey Information estimates were used as a basis in determining the costs related to ADA compliance. Items were reviewed for duplicity.

The estimate includes the following modifications:

- XXXX
- XXXX
- XXXX
- XXXX
- XXXX
- XXXX
- XXXX

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Section 9 : Appendix

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Appendix

This section contains miscellaneous items that support information provided within this report and is included for reference.

This appendix includes the following items:

- Roof Survey Report - Garland
- AHERA Six Month Periodic Surveillance

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Facility Summary

Client: Vernon Public School District

Facility: Central Administration



Facility Data

Address 1	30 Park Street
City	Vernon
State	Connecticut
ZIP	06066
Type of Facility	Municipal
Square Footage	10,060
Contact Person	Mr. Mark Rizzo

Asset Information

Name	Date Installed	Square Footage	Roof Access
Low Slope Section	Unknown	1,650	Internal Roof Hatch
Sloped Slate Tile	Unknown	84,350	Manlift



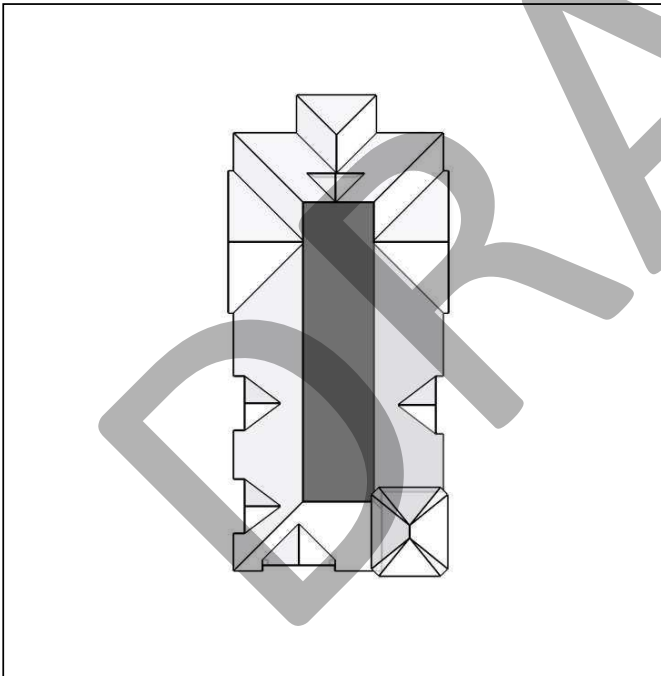
ROOF MEASUREMENT REPORT

30 Park Street, Vernon, CT 06066

Report Contents



Images	1
Length Diagram.....	4
Pitch Diagram.....	5
Area Diagram	6
Penetrations Diagram	7
Notes Diagram	8
Property Info.....	9
Report Summary.....	10



In this 3D model, facets appear as semi-transparent to reveal overhangs.

Report Details

Date:	03/21/2023
Report:	51200739

Roof Details

Total Area:	10,061 sq ft
Total Roof Facets:	34
Predominant Pitch:	12/12
Number of Stories:	>1
Total Ridges/Hips:	414 ft
Total Valleys:	324 ft
Total Rakes:	26 ft
Total Eaves:	320 ft
Total Penetrations:	45
Total Penetrations Perimeter:	437 ft
Total Penetrations Area:	325 sq ft

Report Run By:

Contact:	Jeremy Cogdill
Company:	The Garland Company, Inc.
Address:	3800 East 91St Cleveland OH 44105
Phone:	802-598-2974

Contact Us:



Jeremy Cogdill

Territory Manager - Southern & Eastern CT
The Garland Company, Inc.

m: (802) 598-2974

p: (860) 204-1006

e: jcogdill@garlandind.com

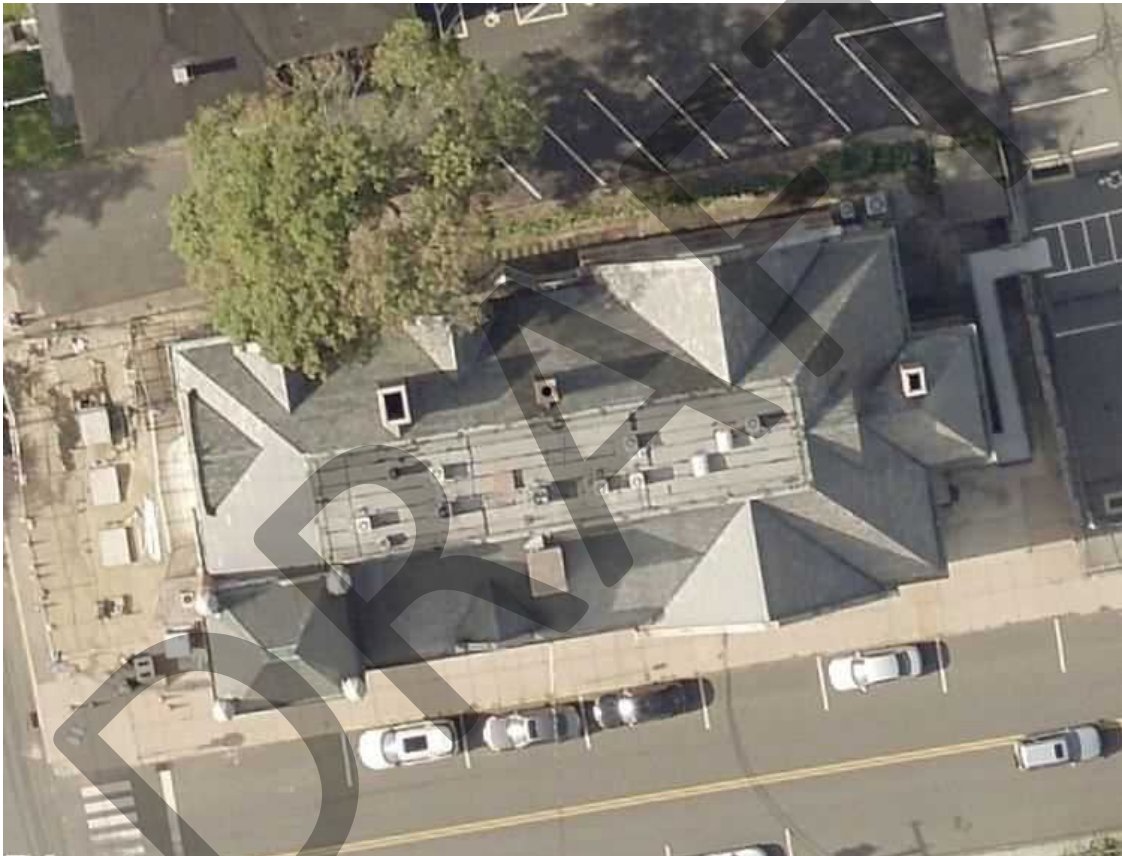
s: www.garlandco.com



ROOF MEASUREMENT REPORT

REPORT IMAGES

The following aerial images show different angles of this structure for your reference.



Top View

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ROOF MEASUREMENT REPORT

REPORT IMAGES



North View



East View

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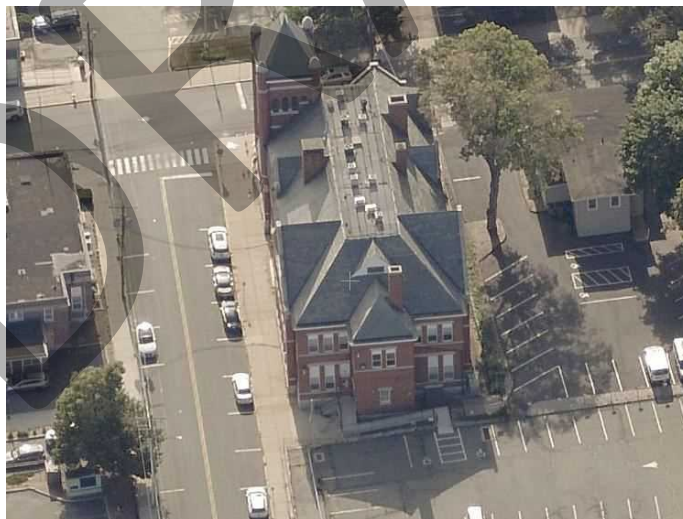


ROOF MEASUREMENT REPORT

REPORT IMAGES



South View



West View

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LENGTH DIAGRAM

The floor plan shows a building with a central vertical corridor (71) and a horizontal corridor (21). The building is divided into several rooms and sections, with dimensions and room numbers indicated. The plan includes a compass rose in the bottom right corner, showing North (N), South (S), East (E), and West (W). A large 'DRAFT' watermark is visible across the plan.

Key dimensions and room numbers include:

- Overall width: 82 (left and right sides)
- Overall height: 13 (bottom)
- Central vertical corridor: 71
- Horizontal corridor: 21
- Rooms and sections: 10, 17, 18, 19, 20, 22, 24, 28, 33, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

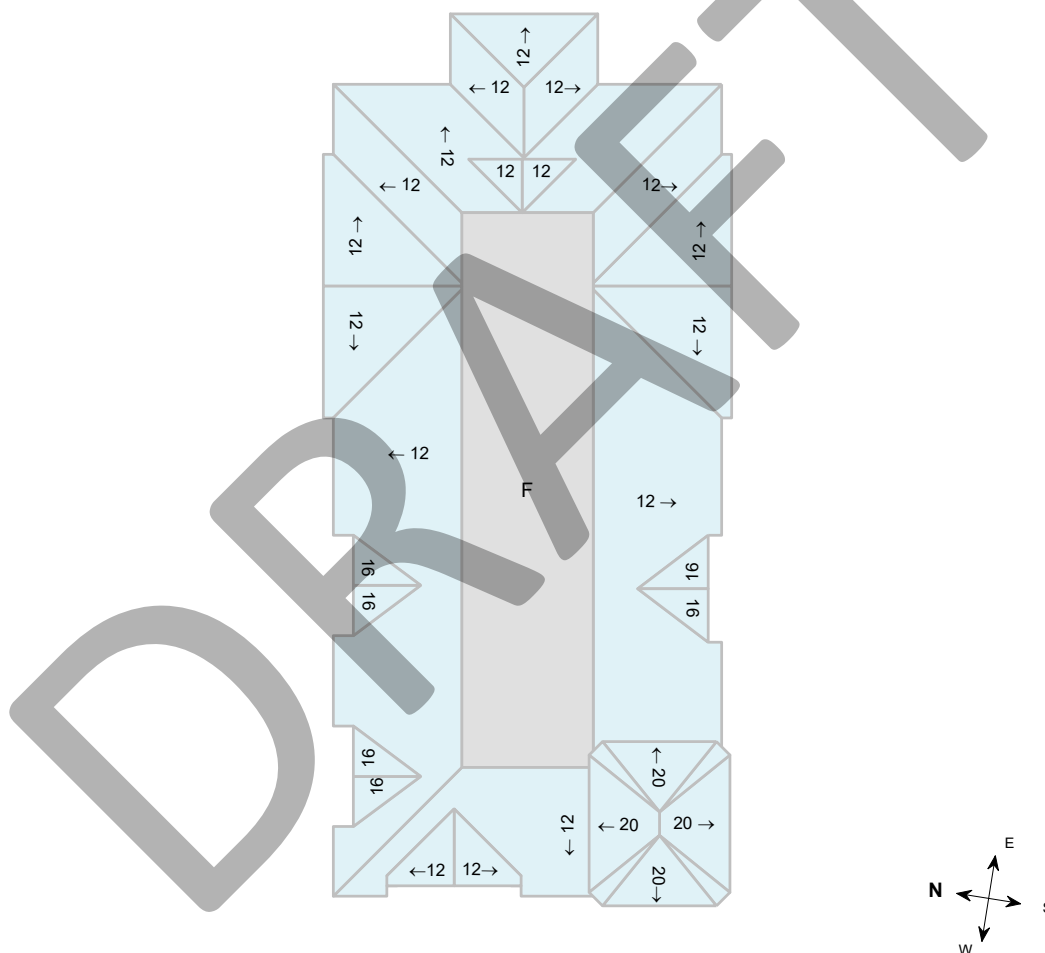
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ROOF MEASUREMENT REPORT

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 12/12.



Note: This diagram contains labeled pitches for facet areas larger than 20 square feet. In some cases, pitch labels have been removed for readability. Gray shading indicates flat, 1/12 or 2/12 pitches. If present, a value of "F" indicates a flat facet (no pitch).

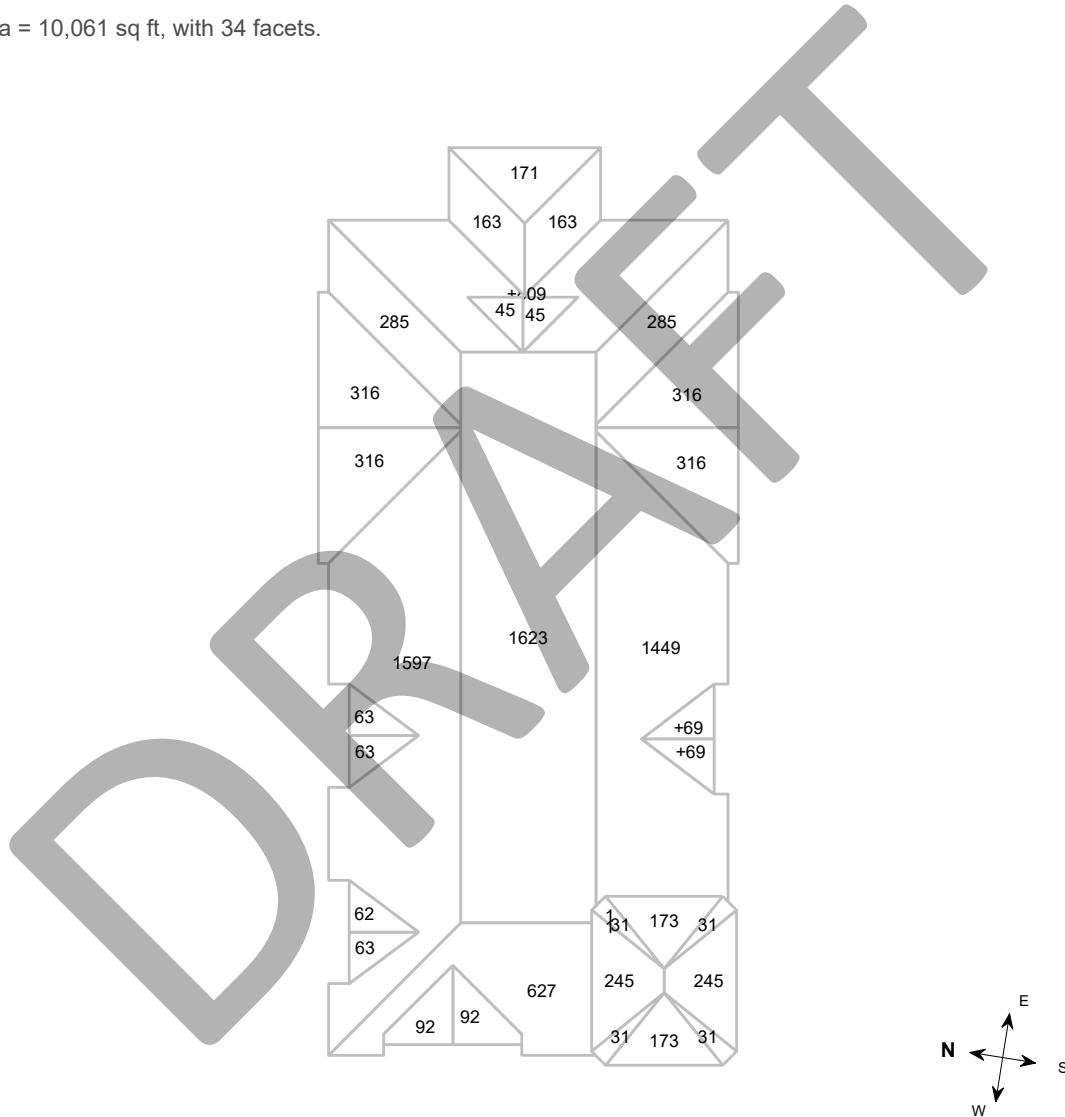
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ROOF MEASUREMENT REPORT

AREA DIAGRAM

Total Area = 10,061 sq ft, with 34 facets.



Note: This diagram shows the square feet of each roof facet (rounded to the nearest foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

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ROOF MEASUREMENT REPORT

PENETRATIONS

Penetrations Notes Diagram

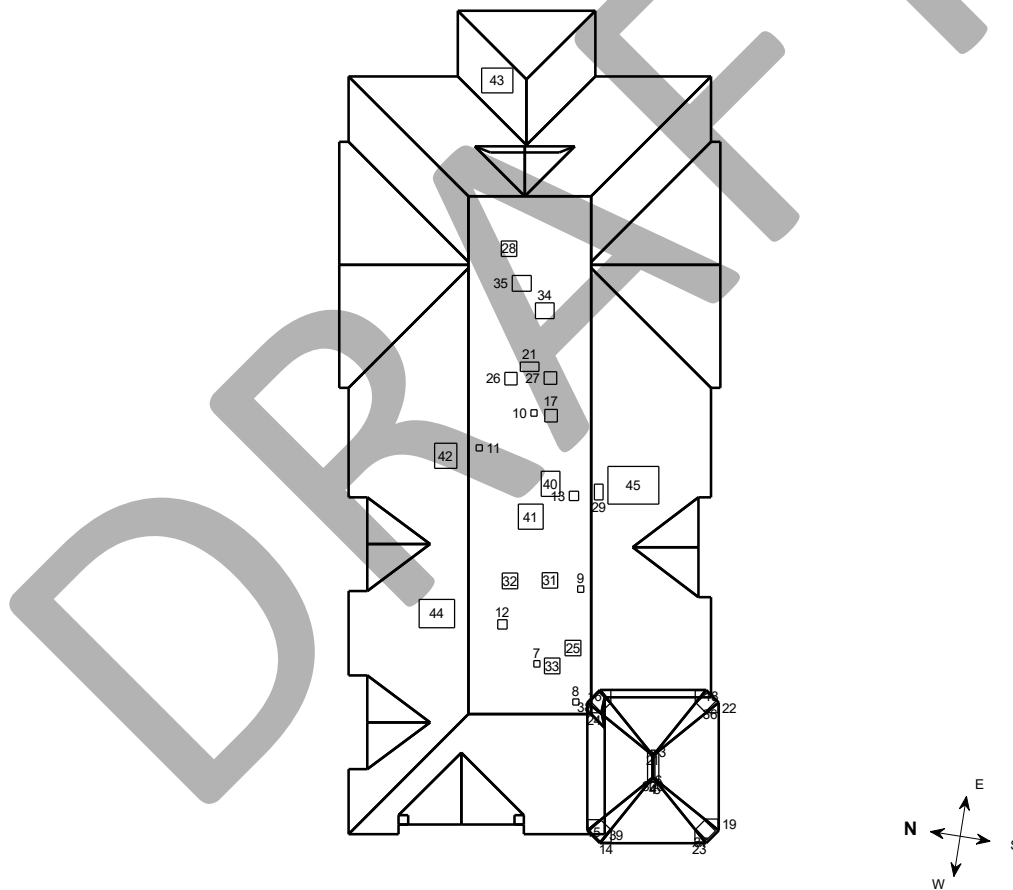
Penetrations are labeled from smallest to largest for easy reference.

Total Penetrations: 45

Total Penetrations Perimeter = 437 ft

Total Penetrations Area: 325 sq ft

Total Roof Area Less Penetrations = 9,736 sq ft



Note: Any measured penetration smaller than 3x3 feet may need field verification. Accuracy is not guaranteed. The total penetration area is not subtracted from the total roof area.

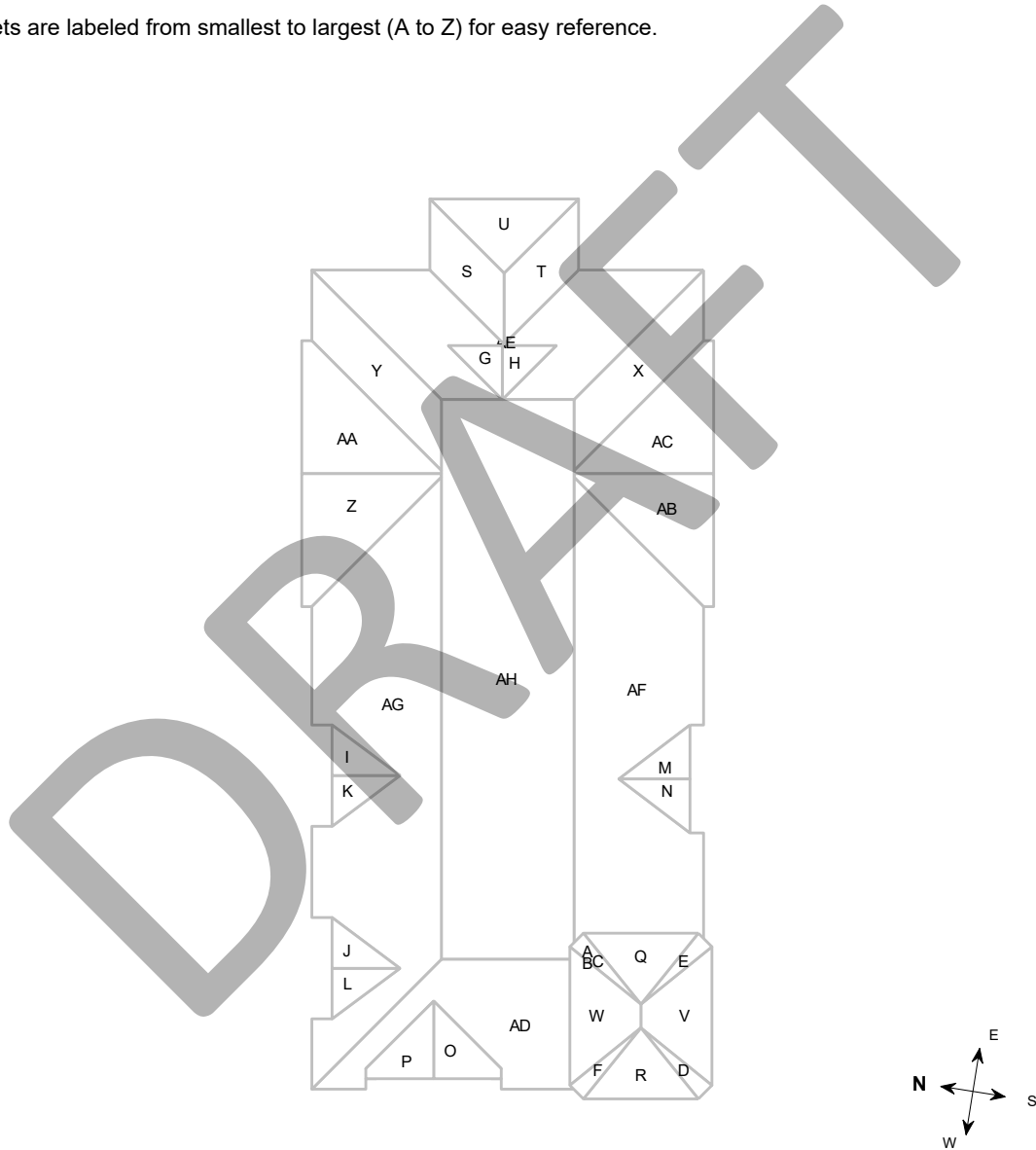
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ROOF MEASUREMENT REPORT

NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.





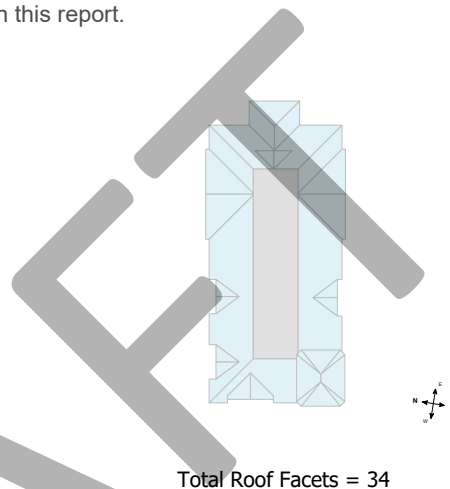
ROOF MEASUREMENT REPORT

REPORT SUMMARY

Below is a measurement summary using the values presented in this report.

Lengths, Areas and Pitches

Ridge	106 ft (10 Ridges)
Hips	308 ft (14 Hips)
Valleys	324 ft (18 Valleys)
Rakes*	26 ft (6 Rakes)
Eaves/Starter**	320 ft (29 Eaves)
Drip Edge (Eaves + Rakes)	346 ft (35 Lengths)
Parapet Walls	0 ft (0 Lengths)
Flashing	20 ft (6 Lengths)
Step Flashing	300 ft (28 Lengths)
Total Area	10,061 sq ft
Total Penetrations Area	325 sq ft
Total Roof Area Less Penetrations	9,736 sq ft
Total Penetrations Perimeter	437 ft
Predominant Pitch	12/12



*Rakes are defined as roof edges that are sloped (not level).

** Eaves are defined as roof edges that are not sloped and level.

Areas per Pitch

Roof Pitches	0/12	3/12	12/12	16/12	20/12
Area (sq ft)	1623.2	1.2	7085.8	513.4	836.8
% of Squares	16.1%	0%	70.4%	5.1%	8.3%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Waste Calculation Table

Waste %	0%	10%	12%	15%	17%	20%	22%
Area (sq ft)	10,061	11067.1	11268.3	11570.2	11771.4	12073.2	12274.4
Squares	100.6	110.7	112.7	115.7	117.7	120.7	122.7

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.



Construction Details

Client: Vernon Public School District

Facility: Central Administration

Roof Section: Low Slope Section



Information					
Year Installed	Unknown		Square Footage	1,650	
Slope Dimension	1/4:12"		Eave Height	60	
Roof Access	Internal Roof Hatch		System Type	Mineral Modified Bitumen	

Assembly					
Roof #	Layer Type	Description	Attachment	R-Value	Thickness
1	Deck	Wood Plank	Mechanically attached	-	-
1	Vapor Retarder	2 ply hot	Hot Mopped	-	-
1	Insulation	Perlite	Hot applied	0 - WET	1/2"
1	Membrane	Mod Bit - 3 ply	Hot Mopped	-	-



Photo Report

Client: Vernon Public School District

Facility: Central Administration

Roof Section: Low Slope Section

Report Date: 03/15/2023

Title: Visual Inspection & Core



Photo 1

**View of the underside of
the wood plank deck- 16"
OC**



Photo 2

**Wood Decking- Added
shims for slope**



Photo 3

**Overview of the low slope
roof section**



Photo 4

Mechanicals improperly flashed into system-saturated area



Photo 5

Failed pitchbox



Photo 6

**Open condition- Failed
safety railings tie-in -
Consistent throughout**



Photo 7

**No ponding or standing
water observed**



Photo 8

Open condition- Failed roofing system- Most seams were open



Photo 9

Open condition- Light post tie-in failure



Photo 10

Improperly flashed in vent



Photo 11

Core Cut: 3 or 4 Ply BUR with mineral surface



Photo 12

Core Cut: 1/2" saturated perlite insulation over sloped deck



Photo 13

Core Cut: View of the wood deck- a VB layer is the only thing stopping this decking from rotting out



Construction Details

Client: Vernon Public School District

Facility: Central Administration

Roof Section: Sloped Slate Tile



Information			
Year Installed	Unknown	Square Footage	84,350
Slope Dimension	12:12, 16:12, 20:12	Eave Height	45-60
Roof Access	Manlift	System Type	Slate



Photo Report

Client: Vernon Public School District

Facility: Central Administration

Roof Section: Sloped Slate Tile

Report Date: 03/21/2023

Title: Visual Inspection



Photo 1

Overview- Gothic dormers



Photo 2

**Bell tower slate and
exposed porous concrete**



Photo 3

**Inside the bell tower-
Unable to gain access to
inspect EPDM roof**



Photo 4

**Open condition- Porous masonry and exposed cap-
Repointing and sealing
needed**



Photo 5



Photo 6

**Delaminating slate tiles- Loose and failed
slate- Consistent throughout**



Photo 7

**Overview of slate- Further investigation
required**



Photo 8

Porous masonry- Exposed copings- Loose slate tiles



Photo 9

Loose slate can become a very costly and dangerous issue above a sidewalk



Photo 10

Failing ADA entrance



Photo 11

Non flashed penetrations



Photo 12

**Failed coating system-
Improper installation**



Photo 13

**Cracking and failed coating
system- Holding moisture
within the concrete**



Photo 14

Failed transition and repair



Photo 15

No membrane flashing and failing masonry due to salt and snow



Photo 16

Improper and failed repairs- Tripping hazard



Photo 17

Masonry moisture retention- Specific to rear, west facing side



Photo 18

Potential for structural issue- Further investigation required

AHERA Six Month Periodic Surveillance

AHERA SIX MONTH PERIODIC SURVEILLANCE

Administration Building

30 Park Street

Vernon, CT 06066

Page 1 of 1

MATERIAL DESCRIPTION	LOCATION(S)	PREVIOUS CONDITION	CHANGE IN CONDITION (Y/N)	COMMENTS
Concealed 9" floor tile and associated mastic (beneath carpeting or 12" floor tile)	Cafeteria office, Conference Room, Main Area, Custodial Closet, Men's & Women's Bathroom ✓	No damage	~12" cracking by entrance for est. office	Known beneath carpeting or 12" floor tile
Concealed 9" floor tile and associated mastic (beneath non-ACBM 12" floor tile)	Human Resources, Family School Partnership Center ✓	No damage	N	Known beneath non-ACBM 12" floor tile
Wood Wall Panel Adhesive 3rd Floor	Storage – Budget Monitoring and Internal Control Office ✓	No damage	N	Presumed

Mark Rizzo – cell 860-916-6171

SURVEILLANCE CONDUCTED BY

Brendan McClure

DATE 3-17-23