

Facility Survey, Code Analysis and Buildings & Grounds Survey & Master Plan

The Sherman School

Sherman, Connecticut

November 2018



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Section 1 : Introduction

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Introduction

Background

Friar Architecture Inc. was engaged by the Sherman Board of Education to prepare a Facility Condition Study and Master Plan.

Purpose of this Study

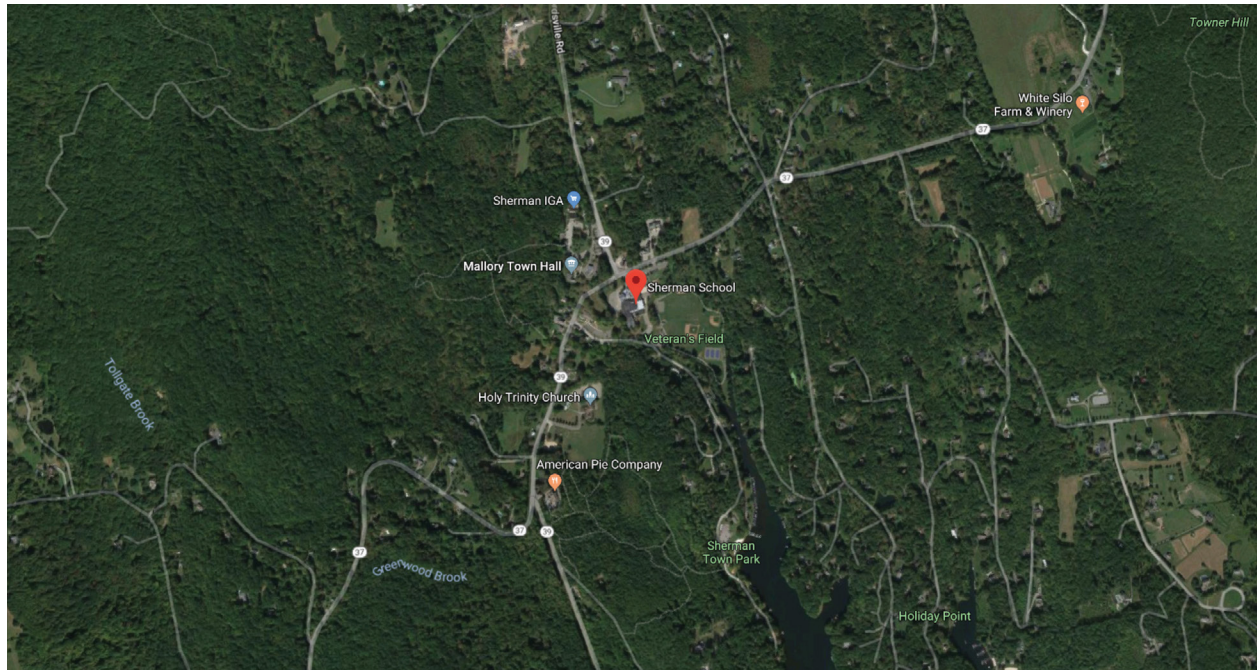
The intent of the Facility Study is to provide a comprehensive look at all existing components of the facility, and the development of a master plan for transforming the existing facility into a code compliant facility, that incorporates all of the State safety recommendations in addition to perfectly accommodating and supporting the existing and future academic programs and future school population. The facility condition study and the master plan consider and evaluate the following;

- Mechanical systems, electrical systems, HVAC systems, building controls
- Existing technology and possible upgrades.
- ADA review of building and associated facilities.
- Building and fire code review, fire and security alarm system review.
- Roof systems, exterior building envelope evaluation.
- Playgrounds and parking.
- Security and security monitoring system.
- Evaluation of domestic water system high Sodium and Chloride issues.
- Evaluate K-Wing section of the building that requires renovations in order to deal with mold and other environmental issues including old interior brick waterproofing that contains asbestos materials.
- Work with school staff and review existing academic programs and assist in evaluating future programs to determine the adequacy of spaces to accommodate these programs. Provide reprogramming of existing spaces as required. Evaluate support spaces needs.

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Context Map

The map below identifies the location of The Sherman School within the context of the Town of Sherman.



Map Data: Google

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.

The Sherman School

Stories	Two
Area	Total Area (Main & Lower Level) 85,745 s.f.
Address	2 CT-37, Sherman
Original Construction	1937
Addition(s) / Renovations	1953, 1961, 1971, 1992 & 2000
Grades	PK - 8
Condition	Fair (Overall rating)
Description	Educational

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 continued...



North Elevation (Original) - A



North Courtyard Elevation (Addition) - B

Building Overview - Photographs continued...



North Elevation (Addition) - C



East Elevation (Addition) - D

Building Overview - Photographs continued...



East Elevation (Addition) - E



South Elevation (Addition) - F

Building Overview - Photographs continued...



South Elevation (Addition) - G



West Elevation (Addition) - H

Building Overview - Photographs continued...



West Elevation - I

18 Executive Summary

The surveys for The Sherman School were conducted in the late spring and summer of 2018. The team included licensed architects, interior designers, a building code official and engineers. The surveys included no intrusive demolition or testing. Based on the team experience and the input from the school staff we have determined ratings for each element and system included in the survey. The categories below summarize our findings.

Architectural Survey

The exterior skin of The Sherman School is brick, which is in fair to good condition. The roof consists of Bituminous, EPDM and Asphalt Shingles throughout the building, which are generally in fair to good condition. The roof area above the Area E (see roof plan) is failing and should be replaced. Other roof areas are nearing the end of their life expectancy and will be out of warranty in two years.

Typical windows consists of steel lintel, brick jamb and steel or aluminum frame; exterior doors consist of metal doors and frames. The doors and frames are in fair to good condition. The windows are in fair condition. However, the project-out type windows were given a poor rating due to their age, difficulty with finding replacement parts and general difficulty with operations. The exterior sealants of the doors and windows vary and are in fair condition.

The building interior is in good condition with flooring and ceilings getting poor ratings in several areas.

See pages 30 through 36 for a full list of survey ratings.

In general, the work recommended to address architectural conditions includes:

- Flooring replacement/repair
- Ceiling tile replacement
- Interior corridor wood door replacement
- Roof repairs and Area 'E' replacement
- Roof overhanging trees trimming/ removal
- EIFS (exterior insulation and finish system) repair/replacement

Required work for the existing K-Wing is excluded from this section and is addressed elsewhere in the report.

Structural Survey

The building exterior has a steel frame and poured reinforced concrete foundation that is in good condition. Interior framing consists of CMU, metal and wood studs. The decks consist of concrete slab on grade and poured concrete on metal decking. There are no recommendations for improvements or required work at this time. See pages 43 and 44 for survey element ratings.

Mechanical Survey

The mechanical and plumbing central plant for The Sherman School is in fair operating condition. The majority of equipment and infrastructure were replaced approximately 18 years ago and have been maintained to a fair condition currently.

The work recommended to address mechanical systems conditions includes:

- Inspection of piping/replacement of corroded piping is necessary.

- Install new insulation on heating piping in Boiler Room.
- Inspect and replace valves on heating equipment (perimeter radiation, CUH, UV and AHU with VAV boxes).
- Mechanical equipment (AHU, RTU) are approximately 18 - 30 years old and replacement should be a consideration.
- Exhaust fans are experiencing failures and replacement should be considered.
- Unit Ventilators are nearing the end of their life expectancy and currently do not meet State of CT code for classroom noise emissions and should be replaced.
- Upgrade control system to provide digital control to provide full control of HVAC systems.
- Replace pumps for the boilers.
- Install insulation on all condensate piping.

In addition to the deferred maintenance items listed above, we recommend fully air conditioning of the remaining areas of the building. Currently the existing K-Wing, Media Center, Administration and Lower Level A wing are air conditioned spaces.

Electrical Survey

Electrical infrastructure is in good operating condition overall. The majority of systems were upgraded or replaced as part of additions/renovations to the facility that were done approximately 18 years ago and have been well maintained since.

The work recommended to address electrical system conditions includes:

- The existing (original) 800 amp service is obsolete and replacement should be considered.
- Provide separate transfer switches for Emergency and Stand By power.
- Provide new wiring between Emergency Generator and Fire Pump.
- Replace Panel in Fire Pump Room with weather resistant enclosure.
- Provide 3 way toggle switches at Electrical Room by Rm101 for proper lighting control.

In addition to deferred maintenance items listed above we recommend the following items:

- Add receptacles as needed.
- Provide Lightning protection

Plumbing Survey

The plumbing system consists of a private water storage tank supplied by a well system which is in poor condition. There are multiple 4-inch sanitary lines and 5-inch storm lines that run to the septic tank located on the property.

The work recommended to address plumbing systems conditions includes:

- Booster pumps for domestic water are obsolete and replacement should be considered.
- Pending completion of the Towns water report, install Reverse Osmosis system to control chloride/sodium levels within each well. Another option is to relocate the oil tank, see commentary on page 96.
- Confirm that grease separator is cleaned-out.
- Numerous roof drains are clogged due to excessive foliage which is creating ponding to occur.
- Recommendation to replace existing Water fountains with bottle fill stations with bubbler in "A" wing and "D" wing upper/lower levels and "C" wing upper level.

Fire Protection Survey

The fire protection systems in The Sherman School are in need of service. Sprinkler heads and distribution piping

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are generally in fair condition, however, the fire pump and associated accessories are in poor condition due to years of moisture buildup within the fire pump vault.

The work recommended to address fire protection systems conditions includes:

- Install a low water level alarm for the fire sprinkler water storage tank.
- Verify operation of dry system air compressor and replace as required. Not required if K-Wing is removed.
- Fire pump equipment is experiencing damage due to moisture issue.
- Provide proper coverage per NFPA 13 2010 and reinstall ceiling tiles for proper activation of sprinkler system, particularly at the electrical room next to the Band Room #101.

Lighting Survey

Interior lighting consists of a mixture of recessed, surface mounted, troffers and pendant fixtures which are currently LED type with LED ballasts. The exterior lighting consists of wall mounted fixtures which are HID and Site parking lot lighting which is LED. Lighting is considered in good condition.

- The recommendation is to change the wall mounted HID fixtures to LED fixtures.

This will help lower the schools operating costs. Although not required, the controls in the classrooms could be changed to allow daylight harvesting which will automatically turn the lights nearest the windows off if enough natural light is provided.

Fire Alarm Survey

The existing fire alarm system is an addressable system equipped with a remote annunciator panel. There are manual pull stations located within the required distance to the building exits. The condition rating is good for the fire alarm system.

- Rework fire alarm system to accommodate building renovations.

The existing fire alarm system requires no modifications unless educational enhancements are made, in which case devices will be relocated and/or added to meet current code requirements.

Telecommunications/Technology/Low Voltage Survey

This category includes systems that are comprised of the clock, phone, public address systems, cable TV, bell systems, hardwired and wireless systems and assisted listening systems. The overall rating in this category is Good. Most of the recommendations in this section are long term objectives.

- Add assisted listening devices for classrooms and assembly areas.

Security System Survey

The security system is generally in good condition. Due to the sensitivity of this issue we will keep out recommendations general. The existing systems consist of an AI Phone intercom system which is complimented with security cameras for visual aid. There are video security cameras and proximity card entry systems located around the building. Recommendations include:

- Provide additional Entry Access locations and Security cameras.
- Update glass and entrance point specifications.

International Building Code Survey

The Sherman School was evaluated for compliance with the 2012 IBC and Connecticut Supplements and Amendments, through 2016 for Use Group E, Education. The overall rating is good. 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:

- Protect through penetrations at all penetrations in fire resistance rated wall assemblies, particularly the existing "K" wing and Library/Media Center walls.
- All exits shall be marked with an approved exit sign.
- Re-roofing applications need to comply with the minimum continuous insulation standard
- All new windows, doors & storefront system installations will need to comply with a minimum insulating U and R values.
- Re-roofing need to comply with the overflow roof drainage provision
- Provide an accessible route to and from the Boys and Girls Locker Rooms at the Main Level by changing the door swing to the rooms. Provide an accessible route to and from the Girls Toilet Room by changing the door swing to the room at the Lower Level. Provide the proper maneuvering clearance at the exit from Art Room at the Lower Level. Provide an accessible site access route at the exit from the Resource Office 105 at the Lower Level by eliminating steps and installing proper walkways.
- Accessible means of egress required. Develop a designated accessible route, upgrade associated signage and coordinate required exiting at the Lower Level from the south end stair, south side corridor and the southeast exterior exit stair.
- Stair and ramp handrails need to be upgraded
- Exit signs; All existing exits shall be marked with an approved exit sign, providing proper mounting and headroom clearances.
- Stair details; Provide Solid Risers at Stage in the Multipurpose Room.
- Exit discharge capacity - shall not be less than the required discharge capacity of the exit being served (South end stair)
- Chapter 11 Accessibility: Refer to ADA Section of the Report

Items which are included within the IBC Code Survey shall only be addressed if renovations occur or if they are a violation within another code.

NFPA Code Survey

A review of The Sherman School's compliance with the NFPA Life Safety Code 2012 was made. The overall rating is fair. 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:

- Maintain the required headroom (6'-8") at all exit access corridors and required exits.
- Compliant stair handrails at the exterior exit and raised platform stairs.
- Compliant ramp handrail extensions and landing clearances due to location of lockers at the lower level of "D" wing.
- Provide compliant stair and platform construction at the raised platform addition.
- Posted occupancy signs in all designated assembly occupancies.
- Provide emergency plans per requirements of existing educational and existing assembly occupancies.
- Slip Resistance, stair treads at raised platform in the Multipurpose Room.
- Discharge from Exits, exit termination at south stair exit

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- Occupant Load Posting, every assembly occupancy
- Emergency Plans (provide as required) emergency egress required for all occupants

ADA Compliance Survey

The Sherman School 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. The overall rating is good. The Sherman School does fail 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:

- Provide compliant walkways, ramps, curb ramps, cross slopes, bus drop off areas, van accessible space, loading zones, accessible egress from the lower level at the south side of the building.
- Update the parking spaces at the southeast parking area and provide one (1) accessible parking space. Current ADA code A117.1-2009 requirements are as follows (1 to 25 spaces require one (1) accessible parking space).
- Update and/or install new signage, parking aisles and cross slopes at accessible parking spaces.
- Update and/or relocate accessible parking spaces at the building's north side.
- Install new curb ramps and update existing curb ramps to complete the site accessible route.
- Provide a Main and Lower Level access from the handicapped parking areas to and from the designated accessible entrances (Main Entrance and Library Entrance)
- Designate an accessible interior route and update all compliance issues within that designated route.
- Provide the required accessible egress from each level of the building.
- Provide compliant handrails at all interior ramps.
- Update the one exterior stair from the building's Lower Level with compliant handrails and riser heights.
- Provide the required door maneuvering clearances at all locations along the accessible route.
- Recommendation to replace existing Water fountains with bottle fill stations with bubbler in "A" wing and "D" wing upper/lower levels and "C" wing upper level.
- Update all room signage to coincide with the current use of each space.
- Add companion seating and a compliant drinking fountain within the Gymnasium to comply with A117.1-2009 Accessibility requirements.
- Update plumbing fixture faucet assemblies within existing classrooms to comply with the reach requirements.

Site Survey

The site at The Sherman School was evaluated. The bituminous drive ways with bituminous/concrete curbs are in are generally in fair condition. The bituminous and concrete walkways are in poor to fair condition. Available parking accommodates 124 vehicles, with five handicap accessible spaces available. The playing fields are outside of the scope of this report, but consist of grass and appear to be in good condition. Playground areas include rubberized mat and wood composite surfaces and are in poor condition.

Site utilities include well water, septic, oil tank and electrical service.

The work recommended to address site conditions includes:

- Upgrade Well System - water quality is an concern (See Plumbing Survey write-up)³

- Repair existing damage to concrete curbing to prevent further degradation.
- Provide exterior signage to direct the public to the accessible entrance(s).
- Provide signage indicating van accessible parking space.
- Provide accessible exiting to comply with the proper number of exits required.
- Replacement of Playscape for Pre-Kindergarten - Kindergarten is needed
- Replacement of Playground for all other grades is needed.

In addition to the Site Survey results, we recommend an accessible ramp to the lower play fields. This is not required by code since the fields are on Town property and the costs are not reimbursable by the State of Connecticut.

Educational Enhancements

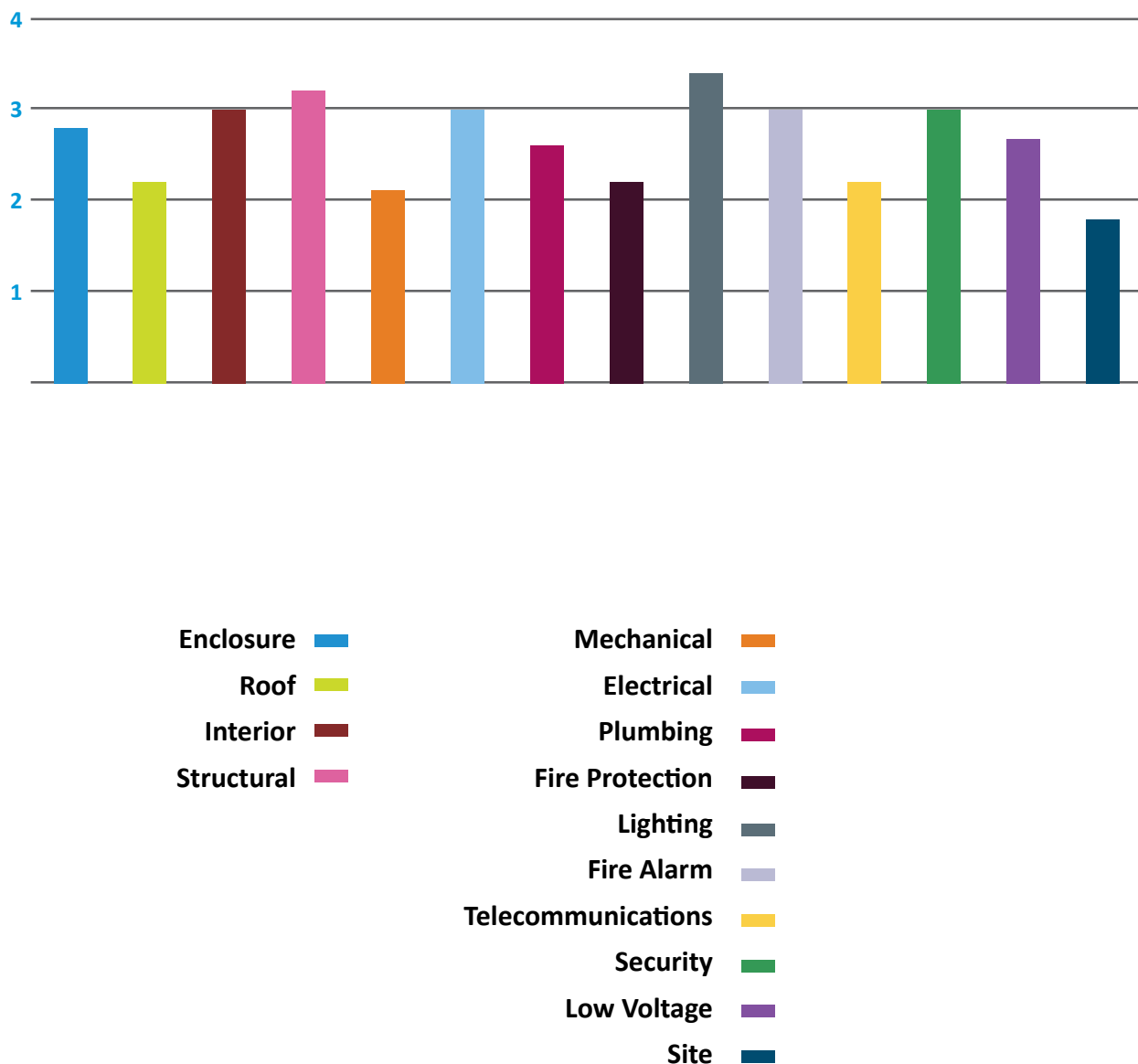
The facilities to provide a educational program at The Sherman School is generally rated at good. Based on staff interviews and observations several recommendations can be made.

- For reasons outlined in other portions of this study we recommend complete demolition of the existing "K-wing" classrooms. This demolition is key to fulfilling other recommendations noted below.
- Construct a new Performing Arts wing for the multi-purpose room, stage, vocal music and band. Add a stage craft area. This provides an opportunity to fully develop the educational program for the performing arts program.
- Relocate the Library to existing multi-purpose space to include Computer / Digital Art Studio, TV/Video Room, student printer location, Media Center, Work Room / Office. The existing multipurpose areas are well suited in location, size and space quality for the new functions. The removal of the tier risers and stage eliminate major code deficiencies. Demolition of the small storage rooms along the exterior wall provides an opportunity to install windows for natural light. The proposed location for the new Media Center more centrally located for access to all grade levels.
- Re-purpose the existing library for Pre-K and Kindergarten classrooms, cubbie area and break-out space. The final major space re-purposing addresses the need to bring the Pre-K, Kindergarten and 1st grade together in a wing. The adjacent exit could permit access for separate drop off and pick up.
- Update Art Room and Kiln Room and Fully renovate Science Lab and Prep Room
- Renovate Lobby Space, Security Vestibule and Main Office
- Relocate and update Special Education Director's Office.
- Relocate and update OT/PT and Resource Room in "New K-Wing"
- Re-purpose exterior space between "New K-Wing" and new Performing Arts wing for Multi-Purpose Exterior Space ie: seating, performance area and small play area
- Provide an outdoor classroom and upper grade gathering space.

Survey Results

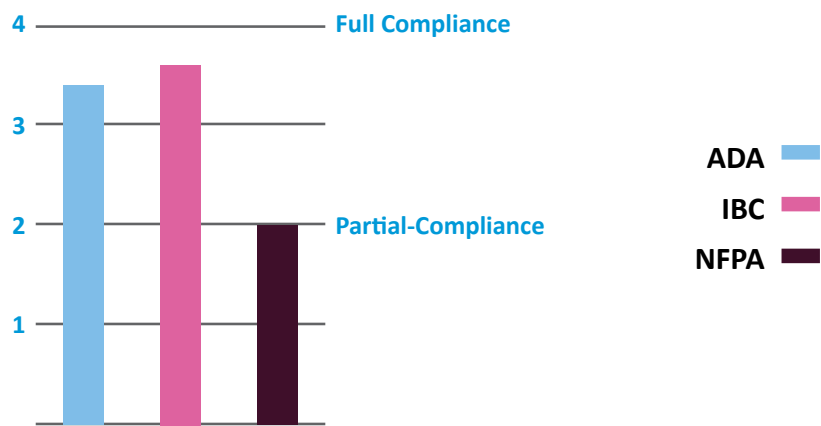
Each of the elements that were reviewed under this assessment was ranked on a scale of 1-4, with a 4 rating equating to an excellent rating. Components that received a ranking of 3 should be considered to be a good rating, while rankings of 2 and 1 are considered to be fair and poor ratings. The following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

Survey Results of Required Work



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.

Code Compliance Evaluation



Summary of Recommendations

Program and Conceptual Plan	<p>Based on staff survey information, individual meetings with administration, staff and teachers we have concluded that the following three areas/programs need to be updated to meet current educational design directions:</p> <ul style="list-style-type: none"> • Multi-Purpose / Music Areas • Library / Computer Lab • Pre-K / Kindergarten <p>These program recommendations have been used to generate a conceptual plan (Section 9) which illustrates the program assessment and recommended improvements. The proposed plan is based on meeting the needs of the users and upgrades required to comply with current applicable code, while also meeting the overall goals and projected enrollment of Sherman Board of Education.</p>
Opinion of Probable Costs	<p>The estimate of probable costs included in Section 8 of this report is designed as a planning tool for Sherman Board of Education. Estimates do not account for a possible change of use.</p>
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 full building to a good condition.</p> <p>The required work at this building will cost approximately \$16,357,698 Projected costs are based on 2018 dollars and include soft costs and contingencies. At 85,745 s.f. renovations at this building equate to approximately \$190 per square foot. This cost-per-square-foot figure falls within industry standards for renovations / upgrades of this nature.</p>
Replacement Cost	<p>A similarly constructed building would cost \$450 per square foot. Using this figure, the replacement cost for this building is approximately \$38,600,000. The \$450 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".</p>
State Reimbursement	<p>The municipality's reimbursement from the State of Connecticut Department of Education for eligible items is 25.71%. However this rate is reduced to 11.59% due to the building area exceeding the state space standards.</p>

Section 3 : Architectural & Structural Survey

3

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 Sherman Board of Education with an overview of the required work.

The Sherman School

Plan Drawings	Scanned Drawings
Photos	Site Survey(s) - June 2018
Date Built	1937
Architect	2000 Renovations - Kaestle Boos Associates
Date(s) Additions / Renovations	1953, 1961, 1971, 1992 & 2000
Construction	Original Building - 5B / Additions & Renovations - 3B
Type of Occupancy	Education
Number of Stories	Two
Gross Square Feet*	Total Area (Main & Lower Level) 85,745 s.f.

* 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.

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	Fair / Good
Secondary Surface	Vinyl Siding (some cedar clapboard siding)	Poor / Good
Insulation	Fiberglass Batt	Poor
Soffit/Fascia	EIFS (Exterior Insulation and Finish Systems)	Poor
Windows	Material	Condition
Lintel	Steel	Good
Jamb	Brick	Fair
Sill	Brick / Wood - Aluminum	Poor / Fair
Frame	Steel / Aluminum	Good
Glazing	Insulated	Fair / Good
Sealant	Assorted	Fair
Operable	Double Hung Sliding Project Out	Fair Good Poor to Fair

School safety is an important subject, state recommendations are made in the report titled School Safety Infrastructure Council dated November 2015. The report covers: Site development and preparation; Perimeter boundaries and access points; Secondary perimeters up to the building exterior; and the interior of the building. In addition to this state report the state also provides a Safe School Facilities Checklist. A copy of this checklist is included in the appendix.

The school is provided with various security measures. A separate memorandum of these items will be provided outside of this report. Additional safety design measures could be considered based on completion of the Safe School Facilities Checklist by law enforcement or a security consultant.

Architectural Conditions - Enclosure (continued)

Doors	Material	Condition
Lintel	Steel	Good
Jamb	Brick	Good
Sill	Aluminum	Fair / Good
Frame	Metal	Fair / Good
Door	Metal	Fair
Glazing	-	Fair
Flashing	-	N/A
Sealant	Silicone	N/A
Hardware	Lever Handle / Pull	Fair / Good
Exit Stairs	Material	Condition
Tread	Concrete	Fair
Riser	Concrete	Fair
Landing	Concrete	Fair
Handrail	Steel	Fair

The Sherman School is comprised of many additions from the original 1937 building, additions/renovations occurring in 1953, 1961, 1971, 1992 & 2000. The school has a brick exterior that is in fair condition. There are areas of the brick veneer that have cracks and in some areas moss growing particularly the "D" Wing.

In addition to the brick exterior there is vinyl siding located at the "A" and "C" Wings. There are numerous locations within the vinyl areas that are damaged and in need of immediate repair. There are signs of discoloration at the CMU and concrete facades. Water and moisture proofing of the exterior walls primarily in the "C" Wing could not be thoroughly inspected. Infrared thermal scanning of the walls and roof will provide insight to locations of hidden moisture is recommended. The windows are of varying type and condition depending on the age of the structure. Some window hardware was found to be inoperable or broken. Sealant is missing in some areas. The majority of the windows were installed in 2000. Energy efficiency is not up to current standards. The EIFS areas require replacement and/or restoration located at the "D" Wing.

K-Wing issues are well documented through environmental testing, selective demolition of materials, review of mechanical systems and multiple staff accounts and reports. Our review of the tests, meeting minutes and our own visual inspections lead us to conclude that the K-Wing building components have been impacted by mold or other contaminants leaving little question that poor construction practices and design detailing are the cause. There are three alternatives to consider each are reviewed in financial terms in Section 9 of this report.

1. Since the school has adjusted to not using the K-Wing classrooms this portion of the building could be demolished saving future maintenance and operating costs.
2. The wing could be completely gutted down to the structural frame and reconstructed (roof, exterior walls, interior walls, and interior concrete slab) using new materials and mechanical systems. Two reasons this option is not recommended are psychological and the classroom design does not fit into the overall educational enhancement plan.
3. We recommend the third option. Completely demolish the K-Wing and reconstruct an addition that meets the educational enhancements outline in other parts of this report. This option removes any psychological impact that the source and residual affects of the contaminants were removed.

Architectural Conditions - Roof

Roof	Material	Condition
Type 1	Bituminous (See Roof Plan)	Good
Type 2	EPDM (See Roof Plan)	Poor/Fair
Type 3	Asphalt Shingles (See Roof Plan)	Fair/Good
Visible Repairs (% area)	15%	Good
Deck Material	Metal Deck/Wood Deck	Fair/Good
Insulation (from plans)	Tapered Insulation	Could Not Verify
Penetrations	Mechanical/Plumbing/Electrical	Good
Mountings	Skylights	Good
Flashings	Metal	Fair/Good
Drains	Internal Roof Drains (See Roof Plan)	Poor/Fair
Drain Termination	-	Good
Gutters	Aluminum Gutters & Downspouts (See Roof Plan)	Fair/Good
Lightning Protection	N/A	N/A
Cornice / Coping	Wood / Aluminum	Poor

The Sherman School roof is constructed with several roof membrane types with varying ages and conditions. See roof plan for specific areas. The overall rating of the roof is fair with some areas given a good rating and other areas a poor rating. The K-Wing and Library have shingled roofs, with sufficient pitch and gutters for drainage. Most of the remaining sections of the roof are EPDM with a tapered insulation system pitched to 1/4" or 1/2" per foot sloop to internal roof drains. A small portion of the roof has a bituminous roof system with a gravel cap sheet. Except for the shingled roof the EPDM and Bituminous roof carry a 20 year warranty. The shingled roofs typically have a 25 - 40 year warranty depending on the shingle specification. Several roof areas are nearing the 20 year warranty limits.

Our visual inspection of the roof indicated numerous issue that have and could result in leaks. The list below highlights our concerns and should be addressed:

- Lap seams have opened up
- Pin holes in the membrane
- Wall to Roof flashing not fully adhered
- Many areas of membrane not fully adhered
- Edge Metal not tightly fit at corners
- Tapered insulation not mechanically fastened to deck
- Base flashing around mechanical equipment lifting
- Roof area "E", see plan, has a failing membrane

Recommendation:

1. Conduct an infrared scan of all roof areas. This will determine where the moisture has penetrated the membrane and wet insulation is located.
2. For the immediate short term repair all loose seams, holes and flashings.
3. Trim all tree branches at least 10' from the building perimeter and keep drains clear of leaves.
4. Prepare a plan to replace each roof section as they reach the 20 year warranty limits.

Architectural Conditions - Interior

Interior Stairs	Material	Condition
Stringer	Painted Steel	Excellent
Baluster	Painted Steel	Excellent
Handrails	Painted Steel	Good
Treads	Concrete Filled Steel Pan with Rubber	Good
Risers	Painted Steel / Rubber	Good
Width	Varies	Good
Interior Walls	Material	Condition
Corridors	Painted CMU	Fair to Good
Offices	Painted Gypsum Board	Good
Toilet Rooms	2"x2" Ceramic Tile and CMU	Good
Stairwells	Brick and CMU	Good
Classrooms	CMU & Gypsum Board	Good
Cafeteria	CMU	Good
Gymnasium	CMU	Good
Entry Vestibules	Zolatone on Gypsum Board and CMU	Good
Servery	CMU	Good
Interior Doors	Material	Condition
Frame	Hollow Metal	Good
Hardware	Levers / Knob	Good
Corridor	Hollow Metal	Good
Offices	Wood	Good
Toilet Rooms	Wood	Good
Stairwells	Wood	Good
Classrooms	Wood	Good
Art Classroom	Wood	Good
Cafeteria	Wood	Good
Kitchen	Wood / Hollow Metal	Good
Gymnasium	Wood	Good
Media Center / Library	Wood	Good
Mechanical Room	Hollow Metal	Good
Lockers	Metal	Fair/Good

34 Architectural & Structural Survey

Flooring	Material	Condition
Main Corridors	12"x12" Vinyl Composite Tile	Poor to Fair
Corridors	Recessed Entry Grill System	Poor
Toilet Rooms	2"x2" Ceramic Tile	Good
Stairwells	1 piece rubber riser pieces with raised disks	Good to Excellent
Classrooms	12"x12" Vinyl Composition Tile	Fair
Art Classroom	12"x12" Vinyl Composition Tile	Poor
Cafeteria	12"x12" Vinyl Composition Tile	Fair to Good
Kitchen	Sheet Vinyl	Fair to Poor
Servery	Sheet Vinyl	Fair
Gymnasium	Wood	Good
Multipurpose Room	Carpet with wood stage	Poor
Entry Vestibules	12"x12" Vinyl Composite Tile around recessed entry grates	Poor
Offices	Broadloom Carpet Luxury Vinyl Tile (LVT)	Fair Good
Nurse	12"x12" Vinyl Composite Tile	Fair to Good
Custodial Areas	12"x12" Vinyl Composite Tile	Fair
Ramps	Rubber Flooring with Hammered Finish	Fair to Good
Ceilings	Material	Condition
Corridors	2'x2' & 2'x4' Ceiling Tiles	Poor to Fair
Offices	2'x2' Ceiling Tiles	Fair
Toilet Rooms	2'x4' Ceiling Tiles	Fair to Good
Stairwells	Gypsum Board	Good
Classrooms	2'x4' Ceiling Tiles	Fair
Art Classroom	2'x4' Ceiling Tiles	Good
Cafeteria	2'x2' Ceiling Tiles	Good
Kitchen	2'x4' Ceiling Tiles	Good
Gymnasium	Exposed Deck	Good

Lockers vary in age and size within the school. The newest lockers for the upper grade levels meet the recommend size for middle school students. There are currently a sufficient quantity of lockers for the student population however, many of the remaining lockers are the narrow ones making it difficult for student to store backpacks and coats. We recommend that future replacement lockers match the newest larger locker size.

Architectural Conditions - Waterproofing

Waterproofing	Material	Condition
Plaza / Deck	N/A	N/A
Below Grade	Could Not Verify	Could Not Verify

The interior of the building is generally in fair to good condition. With-in the architectural and structural survey several areas need to be addressed.

1. The ceilings within the building are generally in fair to good condition, but there are areas that are in poor condition due to leaks caused by either roof leaks such as in roof area "E", see roof plan, condensate from mechanical units or plumbing piping.
2. Wood doors at stairs have been damaged at the hinge side and require replacement and installation of continuous hinge units.
3. Flooring, varying types, need repair or replacement.
4. Roofing repair/ replacement recommended on page 32.
5. Exterior building enclosure materials (brick, windows, EIFS) require repair or replacement in varying areas.

Architectural Conditions - Interior - Pre-K / Kindergarten Wing

Interior Walls	Material	Condition
Corridors	Painted Gypsum Board	Fair
Toilet Rooms	Painted Gypsum Board 2"x2" Ceramic Tile	Good Fair
Classrooms	Painted Gypsum Board	Poor to Fair
Flooring	Material	Condition
Main Corridors	12"x12" Vinyl Composite Tile Rubber at ramps	Fair Poor
Toilet Rooms	2"x2" Ceramic Tile	Fair
Classrooms	12"x12" Vinyl Composite Tile / Sheet Vinyl	Poor
Entry Vestibule	Recessed Entry Grill System covered with Area Rug	Fair
Ceilings	Material	Condition
Corridors	2'x4' Ceiling Tiles	Fair
Toilet Rooms	2'x4' Ceiling Tiles	Fair to Good
Classrooms	2'x2' Ceiling Tiles	Poor to Fair

The Pre-K / Kindergarten wing has been locked to all students and staff. It is currently being used as a storage facility due to documented reasons. Using rooms for storage that were not designed for storage (door and wall fire ratings in particular) are of concern. See recommendations for K-Wing on page 31.

Architectural Conditions - Conveying Systems

Component	Elevator 1	Elevator 2
Hydraulic	Yes	N/A
Passenger / Freight	Passenger	Passenger - 80 FPM
Car Width	5'-1"	5'-8"
Depth	3'-9"	4'-3"
Door	32"	42"
Weight	-	2500
Floors - #	2	2
Floors - From	Lower	Lower
Floors - To	Main	Main
Inspection Expiration Date	Locked - out of Service	3/23/2020

Elevator No. 1 is the older of the two elevators and is located in the building's south wing. This elevator does not provide access to the students or the public and is key operated. Elevator No. 2 was installed in the 2000 renovation, this elevator is up to current standards and provides accessibility for the students, teachers and the public. There is also a lift located at the Multi-Purpose Room, which travels 3'-6" vertically to the raised platform. This lift has a 34" wide access gate or door and the travel platform is 4'-8" x 2'-10".

Existing Space Utilization Plans

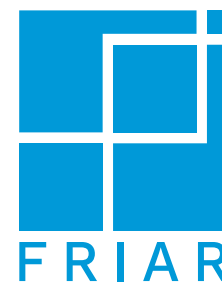
The following is a diagram of the various spaces and their uses that were observed and recorded during this survey. This information was gathered by a field survey, reviewing the existing drawings and discussions with staff, administration, and teachers.

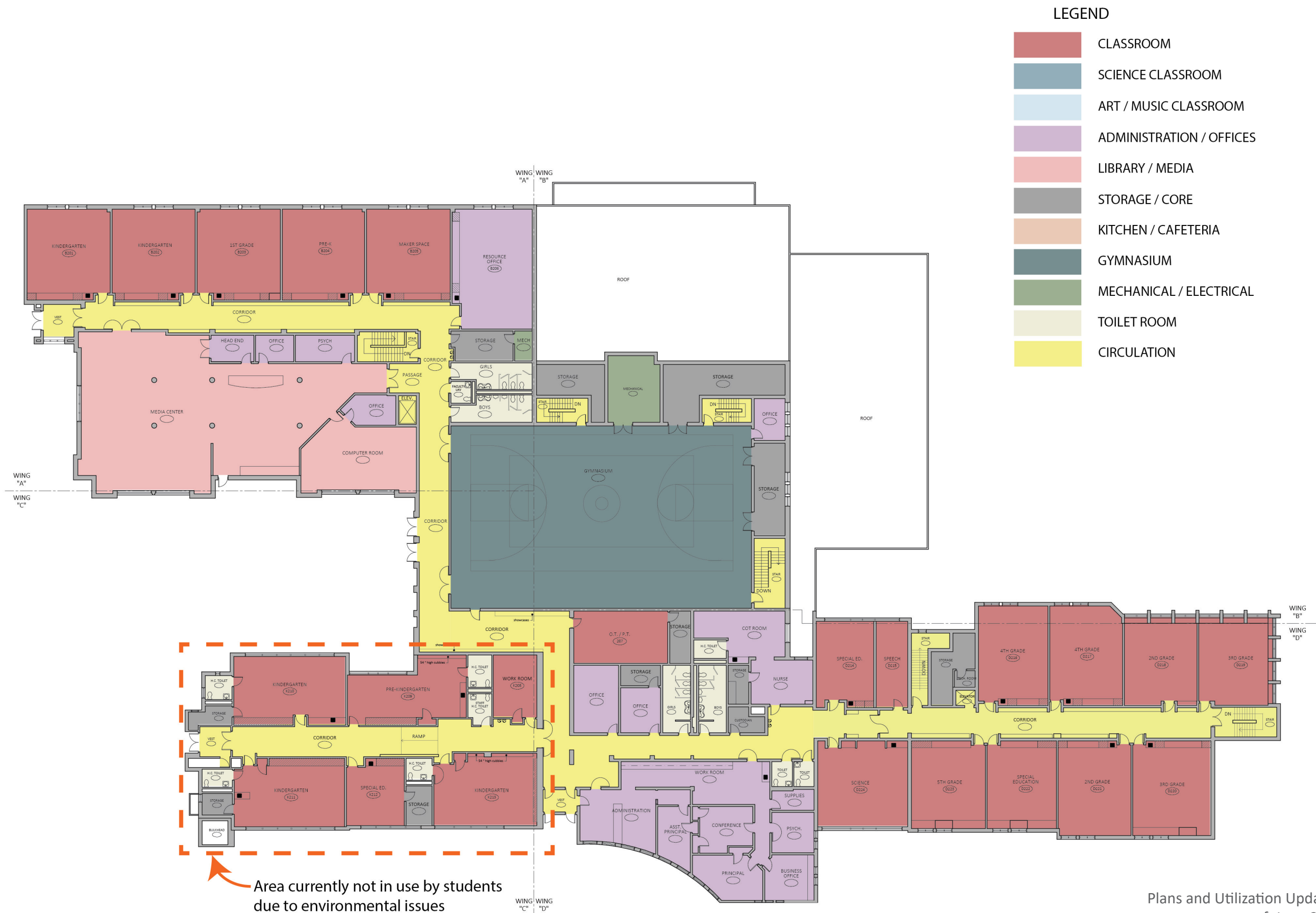


The Sherman School

Existing Lower Level Utilization Plan

Plans and Utilization Updated
as of June 2018





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	Brick	Fair / Good
Foundation	Poured Reinforced Concrete	Good
Footings	Poured Reinforced Concrete	Could Not Verify
Deck	1st Floor - Concrete Slab on Grade / 2nd Floor - Poured Concrete on Metal Decking	Good
Exterior Frame	Structural Steel	Good
Other	Masonry Bearing Walls	Good

Structural Conditions - Roof Condition

	Material	Condition
Surface	EPDM/Bituminous/Asphalt Shingles	See Page 32
Drainage	Internal Roof Drains / Gutters & Downspouts	Poor/Fair
Parapet	N/A	N/A
Insulation	Tapered Rigid	Could Not Verify
Rooftop Structures	Skylights	Good

Numerous roof drain/overflow drains are clogged due to excessive foliage which is creating ponding to occur.

Structural Conditions - Interior Condition

	Material	Condition
Framing	CMU Masonry/Metal Studs/Wood Studs	Fair/Good
Walls	Gypsum Wall Board	Fair/Good
Ground Floor Slab	Poured Concrete on Grade	Good
Flooring System (other levels)	Poured Concrete on Metal Decking	Good
Stairs	Steel w / Concrete Filled Pan	Good
Other	N/A	N/A

The structural components of The Sherman School were evaluated. The building is comprised of multiple sections, the original 1937 building, and five additions/renovations ranging from 1953 to 2000.

The Original Building ("C" Wing) is constructed on concrete floor (slab on grade) construction with concrete foundation walls. There are exterior and interior masonry bearing walls along with structural steel columns supporting the wood roof framing. The infill walls are most likely wood stud with plaster and lath finishing and gypsum board.

The building additions are constructed of reinforced concrete foundation walls, footings and slabs. The interior corridor and exterior masonry walls are bearing walls. The concrete floor construction is cast in place concrete. The main floor is typically constructed of concrete slab on steel floor deck supported by steel beam framing. The steel framework consists of steel columns, steel beams, steel trusses, steel joists and steel roof decking.

Architectural & Structural Survey Photographs



1. Location:

"B" Wing Roof

Description:

New Condensing Unit / Exhaust Fan on Bituminous Roof Looking Southeast.



2. Location:

"A" Wing Roof

Description:

Existing Condensing Units / Exhaust Fan on EPDM Roof Looking North. The roof is nearing its 20-year mark.



3. Location:

"A" Wing Roof

Description:

Equipment Walkway on EPDM Roof. The roof is nearing its 20-year mark.

Architectural & Structural Survey Photographs



4. Location:

"C" Wing

Description:

Typical Gable Valley Flashing



5. Location:

"C" Wing

Description:

Asphalt Shingle Roof - Roof is nearing the 20 year mark.



6. Location:

"A" Wing

Description:

Typical Downspout to Splash Block for Gable Roof to EPDM Roof.

Architectural & Structural Survey Photographs



7. Location:

"A" Wing

Description:

Drainage around Hip Roof at "A" Wing Entrance.



8. Location:

"A" Wing

Description:

Gable Vent / Entrance Metal Door to Mechanical Room in Poor Condition



9. Location:

"C" Wing

Description:

Damaged Vinyl Siding at Gable End Wall

Architectural & Structural Survey Photographs



10. Location:

"C" Wing

Description:

Damaged Gable Roof Trim



11. Location:

"C" Wing

Description:

Damaged Gable Trim & Siding



12. Location:

"B" Wing

Description:

Clogged Roof Drain Causing Flooding of Roof

Architectural & Structural Survey Photographs



13. Location:

"B" Wing

Description:

Architectural Screen located on Roof above Gymnasium. Steel Posts are in Poor Condition/Metal Screening Material is in Good Condition.



14. Location:

"B" Wing East Elevation

Description:

An overview of the "B" Wing Lower Level brick veneer and EIFS



15. Location:

"B" Wing South Elevation

Description:

Damaged EIFS

Architectural & Structural Survey Photographs



16. Location:

"A" Wing

Description:

An overview of the East Elevation



17. Location:

"A" Wing

Description:

Library Looking East from Courtyard Playground. Playground and surfacing in need of replacement.



18. Location:

"A" Wing Entrance

Description:

An overview of the "A" Wing Entrance showing the CMU, Precast, brick veneer and the Storefront.

Architectural & Structural Survey Photographs



19. Location:

"C" Wing

Description:

Main Entrance



20. Location:

Cafeteria # 116

Description:

An overview of the Cafeteria. The vinyl tile floors, painted CMU (Concrete Masonry Unit) Walls, Gypsum Board Walls and Acoustical ceiling are all in good condition



21. Location:

Kitchen # 114 Looking East

Description:

An overview of the Kitchen. The 3 bay Sink area is shown. The epoxy floors, painted CMU walls and acoustical tile ceiling system are all in good condition

Architectural & Structural Survey Photographs



22. Location:

Girls Room # 125

Description:

ADA Compliant Handicap Stall



23. Location:

Facility Lounge # 127

Description:

Vinyl Sanitary Baseboard Missing
Throughout Room



24. Location:

Kiln Room # 122

Description:

Exhaust Fan for Kiln / Floor unprotected

Architectural & Structural Survey Photographs



26. Location:

Former Special Education # 223 (Band Room)

Description:

Typical Damaged Ceiling Tile



26. Location:

Ramp # 417 / Corridor # 401

Description:

An overview of the ramp/corridor in the "D" Wing looking South. Non compliant ramp area due to protrusion of lockers into landing area.



27. Location:

Music/Multipurpose # 206/207

Description:

An Overview of the Music/Multipurpose Room looking West. The carpeted floor is in poor condition The painted CMU (Concrete Masonry Unit) walls and painted roof structure are all in good condition.

Architectural & Structural Survey Photographs



28. Location:

Gymnasium #1208

Description:

An overview of the Gymnasium. The wood floor, painted CMU walls and painted roof structure are all in good condition. The opening to the P.E. Office, Storage Room & Stairwell are shown at the far wall.



29. Location:

Media Center # 1110

Description:

An overview of the Media Center. The carpeted floors, painted Gypsum walls, soffits and ceilings are in good condition.



30. Location:

Storage Room # 127

Description:

Overview of Storage Room showing MEP systems.

Architectural & Structural Survey Photographs



31. Location:

"C" Wing

Description:

Framing in Kindergarten Wing during the 2000 Alterations.



32. Location:

"C" Wing

Description:

Framing in Kindergarten Wing during the 2000 Alterations.

Architectural & Structural Survey Photographs



33. Location:

"C" Wing

Description:

Framing in Kindergarten Wing during the 2000 Alterations.



34. Location:

Main Corridor

Description:

Heavy cracking in some areas.

Architectural & Structural Survey Photographs



35. Location:

Main Corridor

Description:

Areas near or around exterior doors have very heavy damage and require attention. Frames for the recessed entry grill system is popping up and poses a tripping hazard.



36. Location:

Main Corridors

Description:

Areas adjacent to recessed flooring tracks in corridor areas by exterior doors show heavy damage and pose a tripping hazard.

Architectural & Structural Survey Photographs



37. Location:

Main Corridor

Description:

Yellow tape which has been applied to the center of each corridor is peeling up.

Lockers are in poor condition. Lockers are too small for required student book bags.



38. Location:

Multipurpose Room

Description:

Carpet is heavily soiled and stained.

Architectural & Structural Survey Photographs



39. Location:

Multipurpose Room

Description:

Stage flooring poses tripping hazard and requires repair.



40. Location:

Corridors

Description:

CMU shows minimal cracking. Many areas where paint is peeling.

Architectural & Structural Survey Photographs

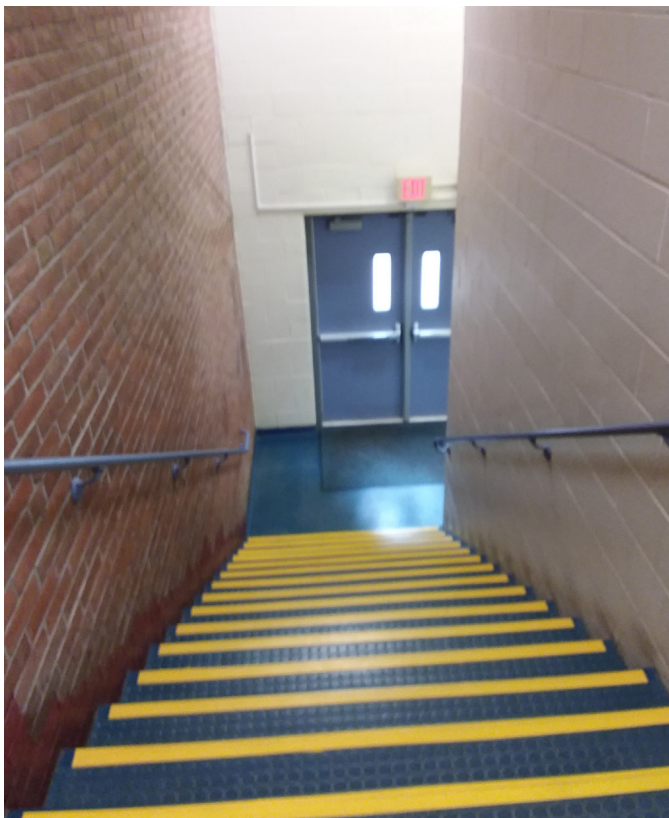


41. Location:

Toilet Rooms

Description:

2"x2" Ceramic tile and CMU



42. Location:

Stairwells

Description:

Brick and CMU walls

Architectural & Structural Survey Photographs



43. Location:

Entry Vestibules

Description:

Zolatone paint on Gypsum Board & CMU



44. Location:

Offices

Description:

Staining and traffic pattern wear is visible on carpet.

Architectural & Structural Survey Photographs



45. Location:

Offices / Conference

Description:

Vinyl appears in good condition.



46. Location:

Toilet Rooms

Description:

Tile base cracking or broken in areas.

Architectural & Structural Survey Photographs



47. Location:

General Classrooms

Description:

Cracking and tile separation is present in many classrooms



48. Location:

Kitchen

Description:

Area needs significant cleaning.

Architectural & Structural Survey Photographs



49. Location:

Servery

Description:

Some staining present, floor needs deep cleaning.



50. Location:

Art Classrooms

Description:

Heavy cracking present. Area directly in front of the exterior door requires immediate attention.

Architectural & Structural Survey Photographs



51. Location:

Cafeteria

Description:

Majority of the floor shows minor tile separation. The transition at the entry to the cafeteria from the corridor needs a transition strip to prevent further cracking at threshold.



52. Location:

Nurse

Description:

Heavy cracking visible.

Architectural & Structural Survey Photographs

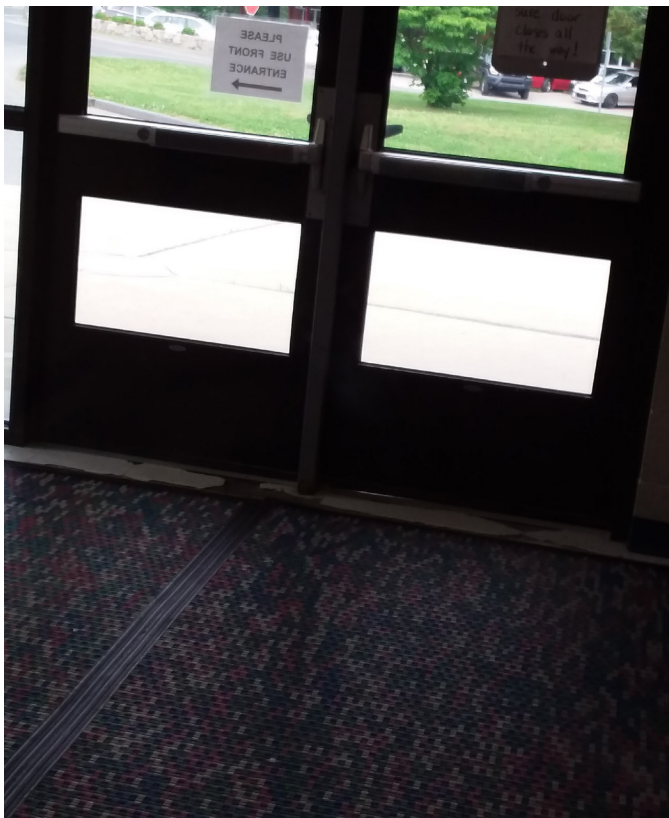


53. Location:

Ramps

Description:

The rubber ramps themselves are in good condition, however where the rubber transitions to the adjacent Vinyl Composition Tile (VCT) the two flooring materials are separating. The VCT is chipping. A temporary solution of duct tape over the seams has been applied to these thresholds, however this is not a long term solution. Heat welding seams is suggested here.



54. Location:

Entry Vestibules

Description:

Entry grates are popping up and the VCT around the grate edges and doors are crumbling. Immediate attention is required.

Architectural & Structural Survey Photographs



55. Location:

Corridors

Description:

Many areas of water damage present throughout.



56. Location:

Offices

Description:

Few areas of water damage present in some offices.

Architectural & Structural Survey Photographs



57. Location:

Toilet Rooms

Description:

Areas of water damage present in some toilet rooms as well as attempted repair by infill of various types/colors of ceiling tiles.



58. Location:

Classrooms

Description:

Areas of water damage appear frequently.

Architectural & Structural Survey Photographs



59. Location:

Pre-K / Kindergarten Wing - Corridors

Description:

Walls damaged in many areas. Some have been spackled, but repair has not been completed.



60. Location:

Pre-K / Kindergarten Wing - Corridors

Description:

Walls damaged in many areas, especially outside corners. Some have been spackled, but repair has not been completed.

Architectural & Structural Survey Photographs



61. Location:

Pre-K / Kindergarten Wing - Toilet Rooms

Description:

Most toilet rooms appear in fair condition with the exception of the ones where walls have been opened to investigate the moisture.



62. Location:

Pre-K / Kindergarten Wing - Main Corridors

Description:

No heat welding at transition between vinyl floor and VCT will pose issue if left as is.

Architectural & Structural Survey Photographs



63. Location:

Pre-K / Kindergarten Wing - Classrooms

Description:

Heavy cracking, cupping from moisture and separation of tiles present in VCT.



64. Location:

Pre-K / Kindergarten Wing - Classrooms

Description:

VCT shows signs of lifting.

Architectural & Structural Survey Photographs



65. Location:

Pre-K / Kindergarten Wing - Classrooms

Description:

No transition strips were used between different materials at doorways.



66. Location:

Pre-K / Kindergarten Wing - Entry Vestibule

Description:

Recessed entry grill system cover with area rug.

Architectural & Structural Survey Photographs



67. Location:

Pre-K / Kindergarten Wing - Corridors

Description:

Many areas of water damage present.



68. Location:

Pre-K / Kindergarten Wing - Classrooms

Description:

Areas of water damage present.

Architectural & Structural Photo 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.



16

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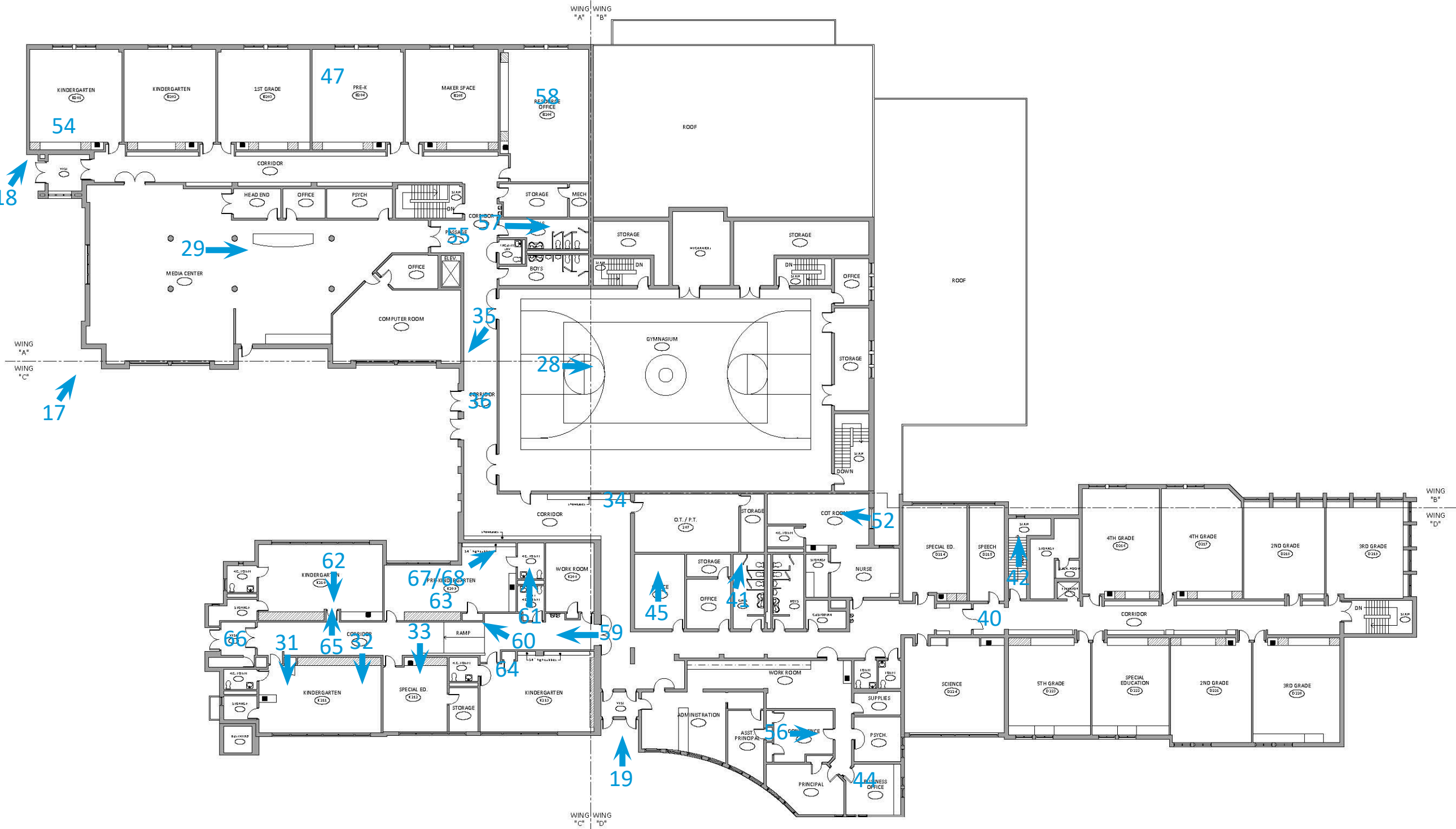
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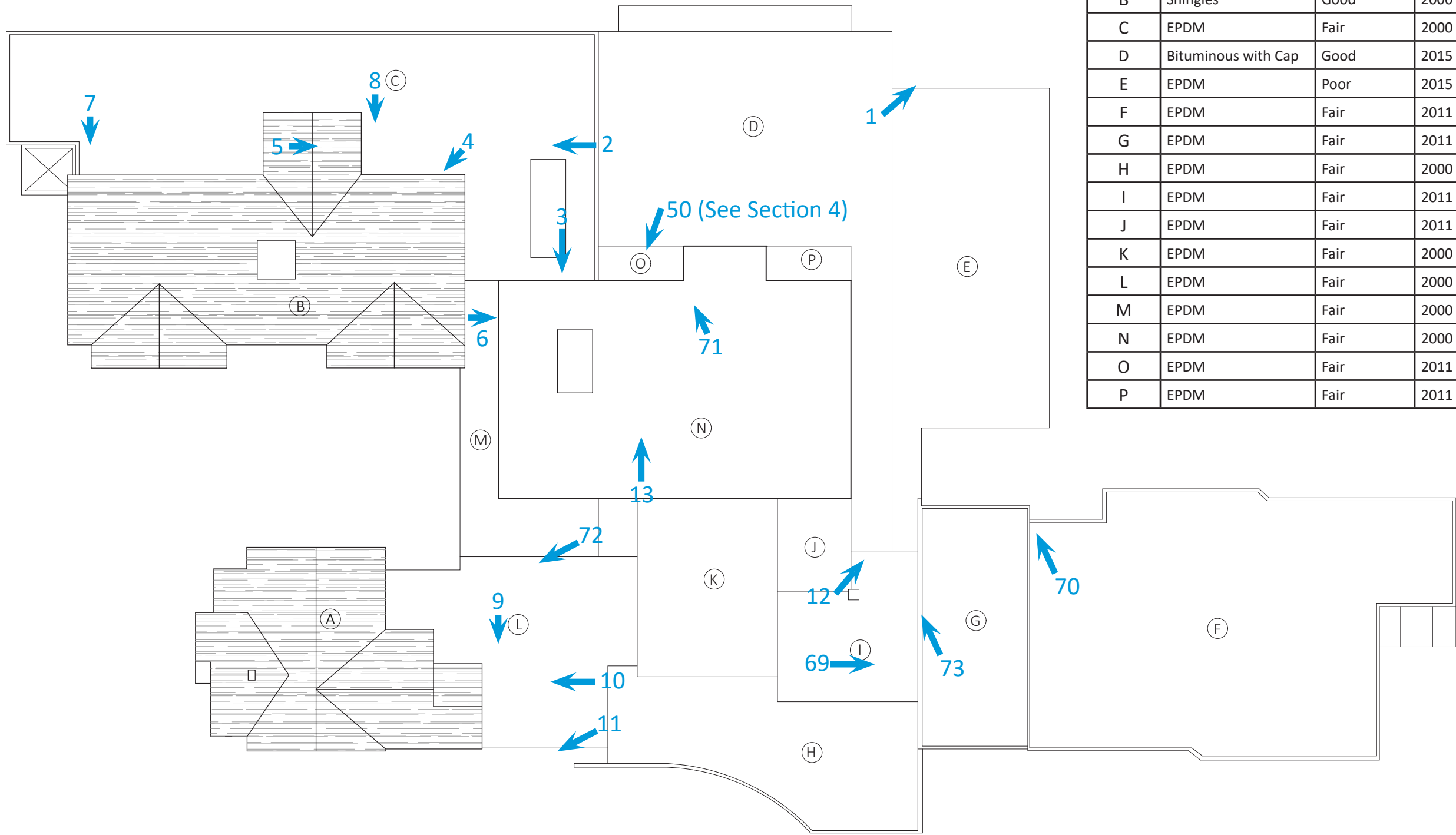
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The Sherman School

Main Level Plan



Mark	Material	Condition	Last Year Replaced
A	Shingles	Good	2011
B	Shingles	Good	2000
C	EPDM	Fair	2000
D	Bituminous with Cap	Good	2015
E	EPDM	Poor	2015
F	EPDM	Fair	2011
G	EPDM	Fair	2011
H	EPDM	Fair	2000
I	EPDM	Fair	2011
J	EPDM	Fair	2011
K	EPDM	Fair	2000
L	EPDM	Fair	2000
M	EPDM	Fair	2000
N	EPDM	Fair	2000
O	EPDM	Fair	2011
P	EPDM	Fair	2011

Architectural & Structural Recommendations

The original portion of The Sherman School is 81 years old and the additions/renovations range between 18 - 65 years old. The existing building is in fair condition.

Architectural recommendations are pending resolution of educational enhancement plans. In general the following bullet points will be considered.

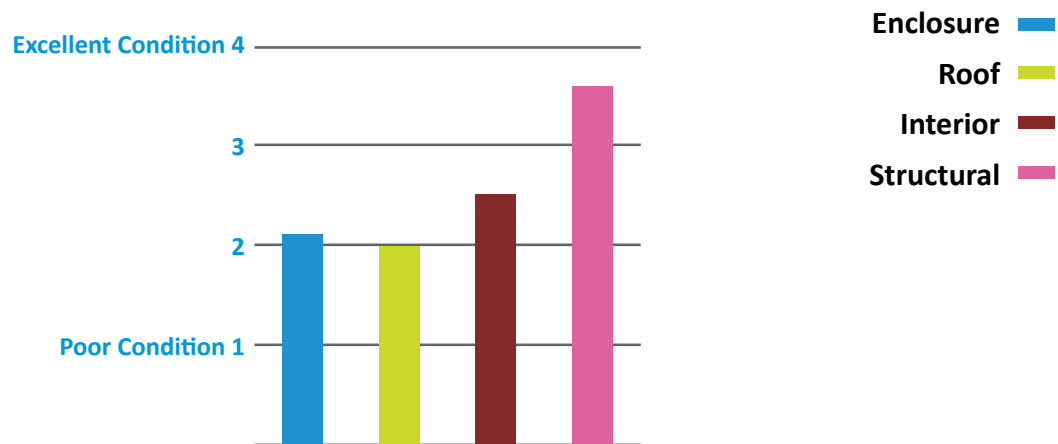
- Additional Safety measures
- Exterior facade repairs - brick, windows, EIFS, sealants
- Roof repairs
- Interior ceiling and floor replacements and various other repairs

The level at which these items are to be addressed is based on decisions for the K-Wing, Library and Multi-Purpose Room educational enhancements.

There are no structural related deficiencies.

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)

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

4

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.

The mechanical, electrical, plumbing, and fire protection systems will be reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements

- 2016 Connecticut State Building Code, including adopted supplements and amendments
- 2016 Connecticut State Fire Safety Code, including adopted supplements and amendments
- 2012 International Building Code (IBC)
- 2012 International Energy Conservation Code
- Illuminating Engineering Society Lighting Handbook (IESNA), 10th Edition
- NFPA, Latest Versions
- ASHRAE 90.1

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	Fair	(6) Oil Fired Boilers Serve Domestic and Heating Energy Kinetics System 2000 Model EK-3F (357 MBH) Boilers Appear to be Well Maintained
Heating System	Fair / Good	Improvements Have Been Made Over Time, Piping Generally in Fair Condition With Several Renovations Recently
Heating System Pumps	Poor / Fair	(10) Heating Pumps Vary in Condition and Age. Some Showing Signs of Seal Failure (refer to narrative)
A/C Roof-Top Units	Fair	Multiple Rooftop and Indoor AHU's in the Building. Condition Generally Fair, With Ages At Approximately 18 Years.
Air Distribution / Ductwork	Fair	Ductwork Generally Original to 2000 Renovation. Several Indoor Air Handling Units From both 2000 and 1991.
Condensate Piping (A/C)	Fair	With Exception of Roof Condensate and Minor Localized Systems, AC Condensate is Limited in This Building.
Exhaust Fans	Fair / Poor	Fans Generally Original to 2000 Renovation. Motor Replacements Have Been Ongoing With Several Issues Noted in the Narrative
Controls	Fair	Controls are Outdated but Functional. Johnson Controls Metasys System Provides Basic Functionality Although Several Issues Exist With Pump Controls.

Mechanical (continued...)

Heat Generation

The building heating plant consists of (6) Energy Kinetics System 2000 cast iron boilers with oil fired burners. The model numbers for the boilers are EF-3F. The boilers are each rated for up to 357 MBH capacity and currently run on fuel oil. The boilers are in fair operating condition and appear to have recently been re-fit with local 1/8 HP Taco circulation pumps and valves between the boilers and main piping. All (6) boiler flues combine into a 16" IPIC flue which exits the building in the location of the former chimney. Boiler intakes are each piped with PVC directly to an intake plenum. All intakes and flue piping appear to be in good condition.

Hot water moves throughout the boiler room in welded steel pipe and is circulated by several primary and secondary pumps. Despite numbering of pumps reaching #12, only (10) large pumps currently exist. Pumps #11 and #12 are horizontal base mounted pumps serving the air handling unit coils. The remainder of the pumps are vertical in-line and serve various dedicated wings of the school in a duty/standby configuration. These pumps are in poor to fair condition. It appears as though many of the pump seals are either currently leaking or were leaking in the past. Pump horsepower range from 2 HP to 5 HP.

The following pumps are in fair condition: A-1, A-2, D-2, P-11, P-12, C-1, C-2

The following pumps, connections, or immediately adjacent piping are in poor condition: D-1, B-1, B-2

Piping in many locations within the boiler room is missing insulation and exhibiting signs of corrosion. It is recommended that this piping be properly cleaned, painted with rust inhibiting primer, and insulated with 2" fiberglass insulation.

The floor drain serving the boiler room is located next to a leak sensor which is also surrounded by water stains and an apparent water line from when the room floods. According to Facilities Personnel, the room has a tendency to flood when exterior rains are heavy and drainage is backed up. This issue is more prevalent during the winter months. This is problematic not only due to the water entering the room, but also due to the risk of oils getting into the storm sewer system which the drain is possibly connected to.

Space Heating

Heating throughout the occupied portions of the building is provided by a combination of perimeter radiation, cabinet unit heaters, unit ventilators and ducted air handling units with VAV boxes. The majority of the heating devices are in fair condition. According to Facilities Personnel, hot water control valves serving each room have been failing at a high rate and leave rooms without control. The valves have been periodically replaced as needed but a recurring pattern exists. All valves should be investigated and replaced.

The PT/OT room contains electric radiation which appears to have been installed within the last 5-10 years. This is the only space that was observed to have this type of equipment.

Ventilation and Cooling

The building contains a wide variety of air handling systems with various ages and styles.

- The majority of units appear to have been installed in the 2000 renovation with several exceptions. Air handling units in this category and application typically have a useful life of 20-25 years before major service and renovations are required.
- RTU-1 serves the cafeteria, kitchen, faculty lounge, and the art classroom. The unit was installed during the 2000 renovation and is in fair condition. The unit is a Trane Intellipak, has DX cooling, hot water heating, and provides up to 11,000 CFM with variable air volume (VAV) boxes at each space. Facilities Personnel noted

Mechanical (continued...)

- several failures with VAV boxes in the cafeteria area which are contributing to poor control of the systems.
- RTU-2 serves the gymnasium. The unit was installed during the 2000 renovation and is also in fair condition. The unit is a Trane Intellipak with hot water heating, no cooling, and provides up to 9,600 CFM to the single gymnasium zone.
- RTU-3 serves the administration area. The unit was installed during the 2000 renovation and is in fair condition. The unit is a Trane Voyager, has DX cooling, hot water heating, and provides up to 6,750 CFM with variable air volume (VAV) boxes at each space.
- RTU-4 serves the K-wing. The unit was installed during the 2000 renovation and is in fair condition. The unit is a Trane Voyager, has DX cooling, hot water heating, and provides up to 5,600 CFM with variable air volume (VAV) boxes at each space. Although this wing of the building is not currently occupied, the indoor air quality has been noted as an issue.
- It is recommended that the wing and remaining building be provided with enough ventilation air to maintain a positive pressure in the building. Positive pressure will keep any residual moisture in the walls, floors, or attic out of the spaces being occupied. In addition, the existing cooling and dehumidification systems should be tested and certified by a factory technician to ensure they are functioning properly.
- AHU's-1&2 serve the band/choral room which has a central divider. Each unit serves half of the overall space with cooling and heating. The units were recently retrofitted with DX cooling coils and outdoor condensing units. The unit casings, fans, and hot water piping accessories are approximately 30 years old but have been well maintained and recently were serviced.
- AHU-3 serves the locker rooms and is approximately 30 years old. The unit has hot water heating only, and supplies approximately 1,200 CFM.
- AHU-4 appears to be removed from service and could not be located in the field. Plans indicate that it was removed.
- AHU-5 serves the library/media center. The unit is located within a penthouse on the roof and has both hot water heating and DX cooling coils. The remote condenser (CU-5) for AHU-5 is located outside the penthouse. The unit was installed during the 2000 renovation and is in good condition. The outdoor condenser is of the same age and is in fair condition due to being located outside in the elements. AHU-5 provides 8,400 CFM.
- (3) Mitsubishi split systems provide spot cooling to the computer lab and server room. These units appear to be approximately 10 years old, however the serial numbers were corroded and not visible. Insulation on the piping connected to these units is decayed and should be replaced. The overall condition of the units, which have a 15-20 year service life is fair.
- Unit ventilators serve the majority of classrooms. These units are providing a combination of heating and ventilation to the spaces and are located against outside walls or recessed below the ceilings. In addition to the unit ventilators, exhaust fans also remove excess air from the classrooms. The unit ventilators are approximately 18 years old and have a 20 year useful life. These unit ventilators do not currently meet modern State of Connecticut code for classroom noise emissions.

Exhaust

Ducted exhaust fans serve the majority of the classroom and bathroom areas. These fans are both in-line and down-blast and are located throughout the building and roof. According to Facilities Personnel these fans are frequently failing and requiring motor replacement. Fans are also found not to be wired. Also, the fans located in the "D" wing discharge into a plenum which has an exhaust damper that is currently not supplied with a power source and requires replacement. The kitchen area is served by exhaust fans connected to the hood and dishwasher. The kitchen exhaust fan does not appear to have any grease accumulation issues, however, the grease receptor on the fan should be replaced in the event that heavy cooking resumes.

The exhaust fan serving the outdoor storage room adjacent to the kitchen is not functional and should be replaced.

Mechanical (continued...)

Controls

The majority of the building is connected to a digital control system, Johnson Controls Metasys. The controls appear to have been added to most equipment and air handlers, including motorized valve and damper controls. The control system has scheduling capability and master control for Facilities Personnel, however, due to the age of the system graphical readouts are not provided. As the system is upgraded over time it is recommended that a new graphical interface be provided for better user operating control of the system. Also, the hot water zone pumps are scheduled by seasonal temperature and operate continuously whenever a manual switch is triggered. This configuration consumes energy, requires frequent oversight, and should be updated to include actual digital control. Variable frequency drives are recommended for additional energy savings.

Oil System

A 10,000 gallon oil tank was installed in the year 2000 and should be inspected regularly by a certified tank specialist. The tank is reportedly in the parking lot near the drop-off which is too close to the domestic water well.

The oil level is monitored by a Veeder-Root tank level control system. The oil is circulated by a pair of duplex ½ HP Webster Pumps. The entire pump set was replaced in the summer of 2017. No leaks were evident and all piping was in good condition however, according to staff the level control is currently in a constant alarm state. A vendor inspection needs to be scheduled to remediate.

Note:

Although an assessment of the mechanical equipment was made, as well as a general inspection of piping, it is unclear what the final effect of the sodium and chloride levels have done to this equipment. Elevated levels of sodium and chloride somewhat increase the water's ionic conductance, and thus increase the potential for corrosive water damage to mechanical equipment.

The overall rating for the mechanical systems is fair. Some elements have been rated poor and will require attention in the next five years.

The plans show a small ventilation fan for the water room, but nothing for the mechanical room. There should be ventilation in both rooms, likely more than they have.

- Rust on the heating circulation pumps (large green pumps around boiler room) is due to seals gradually leaking and corroding over time. The water in the closed heating loop should be treated regularly which would reduce the chlorides.
- Rust on the domestic water booster pumps (the chrome ones on the floor of the water room) is due to both leaking seals and sweating. The water in this system is untreated and the chlorides would accelerate corrosion. Ventilation and dehumidification of the room would help mitigate further corrosion.

The school is susceptible to poor air quality especially in the lower level classroom wing. The current mechanical code requires 10 CFM per person + 0.12 CFM/SF in a typical classroom. In a typical room in this school with 20 students the ventilation airflow would be 275 CFM of supply air. The existing system follows an older code in which active ventilation supply wasn't required. These rooms, like many older schools, have exhaust which extracts 300 CFM of air from the room, with 300 CFM of makeup air coming in through the unit ventilator. This makeup air is only heated, so the outdoor humidity is not removed. On a 90% humid day, the makeup air is the 90% humid coming into the room. Also, the unit vents must be open to make this work.... Often times they are closed off. This is why most new schools get dehumidified active supply air, ducted to each room. Dehumidification or air conditioning should be considered.

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	Service is Rated at 1600A, 480/277V, 3-phase, 4-wire and Consists a Main/CT Section with Ground Fault Protection, Distribution Section (MDP) and a 200A Meter and Circuit Breaker Section for the Fire Pump. Equipment Appears to be in Good Condition and Has Been Well Maintained.
Power Distribution	Poor to Good	Majority of Distribution Equipment in Good Condition. Some Parts of Old Building System in Poor Condition (Refer to Narrative).
Life Safety Power	Good	200A ATS and Associated Distribution Equipment Appears Well Maintained. Suggest Using 4-Pole ATS (Refer to Narrative).
Emergency Power	Fair	Distribution Equipment Appears Well Maintained. Suggest Separate ATS for Stand-By Power (Refer to Narrative).
Transformers	Good	Equipment Observed Has Been Well maintained.
Grounding	Good	Appears to be Intact and in Compliance.
Lightning Protection	N/A	No Lightning Protection Was Observed.

Electrical (continued...)

Electrical Service

Electrical power for the site is sourced from SNET pole #95, located on the property along CT Route 37. Utility primary feeders run underground from this pole to a utility pad mount transformer located at the back of the building, adjacent to the playing fields. Secondary feeders, consisting of 5-sets of 4#600 kCMIL in 5-4" C run underground from the utility transformer to the Main Service Switchboard, located in the Main Electrical Room.

The Main Service Switchboard is rated at 1600A, 480/277V, 3-phase, 4-wire and is manufactured by General Electric. It was installed in 2000 as part of a building addition/renovation and is in good condition. The switchboard consists of a 1600A main/CT section with ground fault protection, 1600A distribution section (MDP) and a 200A meter and circuit breaker section that serves the fire pump.

The Main Service Switchboard also feeds a 225kVA transformer used to back-feed an older service that was the building's original main distribution switchboard. This "Old" service is located Electrical Room Across from Room 103 Lower Level and consists of a main switch and distribution section rated at 800A, 208/120V, 3-phase, 4-wire and is used to feed various panels and equipment that are original to the building and still functioning. This service and much of the ancillary equipment it serves is obsolete and in poor condition.

The Main Service has a separate utility meter socket located outside, at the entrance to the Main Electrical Room.

No lightning protection was observed in the facility.

Electrical Distribution

The Main Switchboard feeds transformers and branch panels located throughout the building. Breakers within the switchboard are in good working condition, although they are somewhat aged (18 years). Feeders are in conduit/ EMT. Branch circuits are in EMT/armored cable.

Much of the electrical equipment (panel boards, disconnect switches, motor starters, etc.) was installed as part of additions/renovations to the building done in 2000, or as part of various maintenance upgrades performed since. Branch panel boards are manufactured by General Electric and are of the molded case circuit breaker type. Transformers, disconnect switches, motor starters, etc. are mainly by General Electric. Some Square D distribution equipment was observed.

Receptacles in the building were mostly observed to be 3-prong type. GFCI receptacles were observed near sinks and in other areas as required. Tamper-proof receptacles were observed in Pre-K classrooms. Currently receptacles in the Faculty Lounge located at the counter are not in compliance with the code and replacement of receptacles to GFCI is required.

No exposed wiring was observed.

Emergency/Optional Standby Power

Emergency power is provided by a Caterpillar diesel generator with sub-base fuel tank, rated at 60kW, 480/277V, 3-phase, 4-wire and located at the back of the building, adjacent to the playing fields. The generator has a 200A output circuit breaker fed from a single 200A-3P automatic transfer switch (ATS) located in the Main Electrical Room. The ATS feeds Panel "EL", which provides Emergency (Life Safety) power for egress lighting and feeds a transformer, which powers a 208/120V, 3-phase, 4-wire Panel "ER" for Stand-By power.

Electrical (continued...)

Consideration should be given to providing separate transfer switches for Emergency (Life Safety) and Stand-By power. Also, it is good practice to use 4-pole, instead of 3-pole, transfer switches and create a 4-wire “separately derived” system for emergency power. This is done for safety reasons, to protect the generator in case of a ground fault.

Fire Pump Controller

The building fire pump controller/ATS is fed from a 200A-3P disconnect section in the Main Service Switchboard and is rated at 42.5A/183LRA, 480/277V. The equipment appears to be in good condition. Recent maintenance test reports indicate the unit is functioning properly.

The room that contains the fire pump and control equipment is partially open to the elements. Although operation of the controller/ATS appears to be unaffected, there are signs of corrosion on the surface of the unit and there is a branch panel in the same room that has been severely damaged by the damp conditions. It is suggested that the existing fire pump and its associated controller/ATS and all ancillary equipment be replaced and a new fire pump and controller/ATS installed in a dedicated space, protected from the elements.

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	Poor / Fair	Well 1 Meter: Carlon, 1000MNL (Good) Well 2 Meter: Sensus, 5/8" PMM (Fair) Storage Tank: Make and Model Obscured by paint (Poor to Fair) Building Meter: Sensus, 53922434 (Fair) Booster Pumps: G&L Pumps, 2SVA1G2F0 (Fair) Expansion Tanks: Amtrol, WX422 (Good)
Water Heaters	Excellent	Primary WH (tank served by heat exchanger): Energy Kinetics, 100263835 Heat Exchanger: Frontier, 18U Emergency WH: Bradford White, M250S6DS-1NCWW
Kitchen Water Heater	Excellent	KWH: A.O. Smith, DVE 120A 917
Fixtures	Good	Fixtures in general appear to have been replaced during renovations in 2000.
Domestic Cold Water Pipe	Fair to Good	Piping in the building generally appears to be in good condition.
Domestic Hot Water Pipe	Fair to Good	Piping in the building generally appears to be in good condition.
Sanitary & Vent Piping	Fair to Good	Piping in the building generally appears to be in good condition.
Storm Piping	Fair to Good	Piping in the building generally appears to be in good condition. Storm drains are frequently blocked by leaves, pollen, tree buds, and other debris.
Natural Gas Piping	Fair to Good	Piping in the building generally appears to be in good condition.
Irrigation	N/A	N/A

Plumbing (continued...)

Plumbing Services

Domestic Water:

- Domestic water is supplied from two wells and associated well pumps which fill an underground storage tank that protrudes into the boiler room. Well pump controls were installed in 2010 and are in good condition. Well 1 appears to have been installed in 2011 and is in good condition. Well 2 was installed in 1990 but is in fair condition. The domestic water storage tank was installed in 1990 and requires further inspection by a potable water tank specialist, capacity of the tank is unknown. The building wells are known to have excessive chlorides; drinking water is being brought in for students and staff in five gallon containers.
- Domestic water pressure to the building is maintained by two booster pumps and associated expansion tanks within the boiler room. Booster pumps are an obsolete model that is no longer manufactured, it appears that they have been in place for some time but are in fair condition. Expansion tanks appear to have been installed in 2001 per hand written name plate data (booster pumps were likely installed at the same time).

Sanitary:

- The sanitary system terminates into a septic tank located on the building site. Facilities Personnel reported no issues with smells, wet spots, or functionality of the septic system. The tank and associated piping should be inspected by a septic engineer on a regular basis.

Grease Waste:

- The kitchen produces grease waste which is collected in a grease trap located outside of receiving room 0105 in the A wing. The trap should be cleaned and inspected on a regular basis. The location of clean-out covers or access ports was unknown at the time of survey.

Plumbing Fixtures

Plumbing fixtures within the building are varying ages and conditions due to renovations and general replacements over time.

In general plumbing fixtures are as follows:

- Water Closets are wall mounted, vitreous china with manual flush valves. The fixtures are in varying conditions but appear to have all been replaced during renovations in 2000.
- Urinals are wall mounted, vitreous china with manual flush valves. Fixtures are in varying conditions but appear to have all been replaced during renovations in 2000.
- Lavatories in single use bathrooms are wall mounted vitreous china with manual flush valves. Fixtures are in varying conditions but appear to have all been replaced during renovations in 2000.
- Lavatories in gang bathrooms are wall mounted two station systems with touch sensors. Fixtures are new.
- Electric water coolers and drinking fountains throughout the school are not in use as water has been found to be unsafe for drinking by others.
- Classroom sinks are top mount stainless steel, with manual valves and an additional bowl with bubbler. Fixtures are in varying conditions but appear to have all been replaced during renovations in 2000. Update plumbing fixture faucet assemblies within existing classrooms to comply with the reach requirements

Several plumbing fixtures (WC and Urinals) that have poor flush qualities. The water flow seems to be good but the suction on the flush just doesn't clear things out. Vent pipe could be blocked, but normally a bank of fixtures shares the same vent, so it's less likely that the main vent stack is the problem where some fixtures are fine, and

Plumbing (continued...)

others nearby aren't. The 2000 renovation plans called for reuse of existing piping at fixtures. Considering the age of piping there is most likely corrosion or blockage happening at unique fixtures. This could be both the local vent and waste pipes. It's possible that in the last 20 years some fixtures were replaced or some drains were snaked which may have cleared things out as well. We recommend that a video snake be used to verify that pipes and vents are clear and flush valves are fully charging the fixture.

Domestic Hot Water Systems

There are two domestic hot water heaters with storage tanks in the boiler room. One is served by the boilers with a heat exchanger and is for regular use. The other is electric and is used in emergencies by manually opening and closing valves. The domestic hot water heater served by boilers has a capacity of 80 gallons and was installed three to five years ago and is in excellent condition. The electric domestic hot water heater has a capacity of 50 gallons and was also installed three to five years ago and is in excellent condition. The associated recirculation pump and heat exchanger were also installed three to five years ago and are in good condition.

There is an electric domestic hot water heater with storage tank serving the kitchen located in Storage room 0108. The kitchen electric domestic hot water heater has a capacity of 119 gallons and was installed three to five years ago and is in excellent condition. The associated recirculation pump was also installed three to five years ago and is in excellent condition.

Recirculation pumps and mixing valves for domestic water heaters are in good condition.

Propane Systems

The propane system is served by a LP storage tank which has no reported issues and has been recently serviced. The tank should be restrained in place (per IFC) and continue to be serviced and inspected periodically.

Storm Water Systems

Per maintenance staff roof drains in general are frequently blocked by pollen, buds, seeds, and leaves requiring monthly cleaning, also in the winter roof drains leak at the point of termination through the roof possibly due to ice expansion. Roof drains above stair 22 are clogged, the clog is unable to be cleared by staff using drain snakes. Currently the drain located in the Boiler Room experiences back-ups during the winter months. A further investigation into this issue should be considered.

The storm water system requires frequent and year-round upkeep to remove blockages due to fallen leaves, pollen, tree buds, and other debris. Ponding frequently occurs on the roof in a number of places.

Well Water

Although an assessment of the plumbing equipment was made, as well as a general inspection of piping, it is unclear what the final effect of the sodium and chloride levels have done to this equipment. Elevated levels of sodium and chloride somewhat increase the water's ionic conductance, and thus increase the potential for corrosive water damage to plumbing fixtures.

Water Quality

As indicated in the water status report located in the appendix, of this study, the recommended solution to the high concentrations of Chlorides and Sodium is the installation of a commercial reverse osmosis system (RO). The two other options: Distillation and Ion Exchange were discarded due to the high cost and use of hazardous chemicals.

Plumbing (continued...)

The best solution is to determine and eliminate the source of the contamination. For the purpose of this report we assume that the source is not eliminated. The School has two options; continue providing bottled water for drinking and cooking or install a reverse osmosis system. Utilizing bottled water does not provide a solution to any potential early failures to mechanical equipment, valves, pumps and piping which long term will carry a high replacement cost. The reverse osmosis system does carry an on going maintenance cost but so is there an on going cost to provide, store and distribute the bottled water. If a commercial reverse osmosis system is selected we recommend an engineering design study to determine the system size, installed location, maintenance schedule and operation instructions.

Recent water quality test have indicated that the Chlorides and Sodium levels are within the allowable limits. The second well is still not viable. The well with better water quality however, is within the limits of the oil tank safety zone. The health department has indicated that by installing flow restrictions on the well it could remain in the oil tank safety zone. But by relocating the oil tank, which must be replaced every thirty years, the water line flow restriction could be removed allowing the school to use the domestic water.

Well Options:

- Eliminate the sources of water contamination.
- Continue using bottled water
- Install a reverse osmosis system (Recommended option)
- Relocate the oil tank so the existing well may be used for domestic water (Recommended option)

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	Fair to Good	Wells etc. (see domestic water service) Fire Protection storage tank: Make and Model Obscured (Fair to Good)
Backflow Preventer	N/A	N/A
Standpipe System	Unknown	The fire department has checked the standpipes, however no report was readily available.
Sprinkler System	Good	Piping in the building generally appears to be in good condition.
Fire Department Connection	Good	The Fire Department Connection is in good condition.
Heads	Good	Heads in the building generally appear to be in good condition.
Piping	See Comments	Piping in the building generally appears to be in good condition. The piping in the fire pump room is in poor condition.
Fire Pump	Fair	Fire Pump: Make and Model obscured by rust Motor: US Motors, 6210-2Z-J/C3
Jockey Pump	Excellent	Jockey Pump: Grundfos, A96082125P115390003 Motor: Baldor, 84Z04050

Fire Protection (continued...)

Fire Protection Services

The fire protection system is served by an underground storage tank located across the driveway from Area C. It appears that the storage tank is filled via a water line with manual valve operation from within the school and there is no low water level alarm system in place.

The fire pump room is located underground outside the C wing of the building, this room has a moisture problem that is damaging equipment.

The water is pressurized with a new jockey pump and distributed to one wet system and one dry system with a compressor that is in fair condition.

The fire pump though installed in the 2000 renovations, is very corroded from moisture; though the motor appears to be in fair condition it is unknown if the pump, piping and supports immediately around the pump would fail upon the motor being started. The operation of the fire pump system is critical to the emergency systems and protection of the property. We recommend the pump system be tested and made a high priority for replacement if the test warrants replacement. Future educational enhancements proposed in other sections of this report should be a consideration in any replacement.

Fire Protection Distribution

The fire protection system consists of pendent heads throughout the school that appear to offer complete coverage and piping outside of the pump room appears to be in good condition.

There is a dry system in the unconditioned attic of the "C" wing of the building.

Several sprinkler heads in the main electrical room were spaced too closely together. Provide proper coverage per NFPA 13 2010 and reinstall ceiling tiles for proper activation of sprinkler system, particularly at the electrical room next to the Band Room #101.

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 to Good	Interior Lighting is retrofitted fluorescent fixtures with LED lamping. (Refer to Narrative).
Emergency Lighting	Good	Emergency Lighting in Corridors, Stairwells and Places of Assembly is on Generator. Not Tested For Compliance During Time of Survey (Refer to Narrative).
Exit Signs	Good	Coverage Appears to be in Compliance.
Exterior Lighting	N/A	Not Tested for Compliance During Time of Survey (Refer to Narrative).
Lighting Control	Fair to Good	Lights are Controlled by Toggle Switches and occupancy sensors in most areas (Refer to Narrative).
Theatrical Lighting	Good	Non LED fixtures

Overall the lighting in the school is rated as good. Most general lighting fixtures are retro fitted 2x4 fluorescent fixtures to allow LED lamps. Lighting control is via key or toggle switch and a room occupancy sensor. No dimming was evident in classrooms. Dedicated audiovisual lighting zones were also not evident. Suggest using daylight sensing for fixtures that are closest to windows. This will increase energy savings over the long term.

Lighting fixtures in the corridors are controlled by key operated toggle switches and occupancy sensors.

Lighting fixtures in the gym appear to be LED type fixtures, although they could not be confirmed at the present time due to floor refinishing but appear to be in good working condition.

Battery operated and lay-in type emergency lights are used for egress.

Exterior building mounted light fixtures appear to be HID wall packs controlled via a combination of timeclock and photocell. Suggest replacing these fixtures with LED designed fixtures and updating controls.

Lighting (continued...)

There is a theatrical lighting system for the auditorium, consisting of a boom and several stands with incandescent spots.

Emergency Lighting

The use of exit signage in most areas of the building appears to be compliant.

Emergency lighting for egress in corridors, stairwells and places of assembly is on generator power. Battery operated emergency lights are used for egress above exterior exit doors. Emergency light fixtures with battery backup were not tested for operation, only observed to have been installed. Emergency lighting on generator power was not tested for compliance during the time of the survey. It is suggested that testing be performed in the near future to ensure full building compliance.

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	Excellent	Edwards EST-2 with Voice Evacuation. Not Tested During Time of Survey.
Initiating Devices	Good	Manual Pull Stations and Smoke Detectors were observed and appear to be in Compliance. Not Tested During Time of Survey.
Indicating Devices	Good	Speaker/Horn-Strobes with Voice Evac. Coverage Appears to be Compliant. Not Tested During Time of Survey.
Area of Rescue	N/A	None Observed.
Voice Evacuation	Good	System is Equipped with Voice Evac. Not Tested During Time of Survey.
Elevator Recall	N/A	Not Observed.

The building is equipped with an Edwards EST-2 addressable fire alarm system with voice evacuation. The system appears to be fairly new and in good working condition. The Fire Alarm Control Panel is located in the Main Office Workroom and contains a microphone and voice evacuation unit to allow annunciation over the building's speaker/horn-strobe units. A remote annunciating unit is located at the main entrance to the building.

Fire alarm speaker/strobe coverage throughout the building appears to be sufficient. Locations of manual pull boxes appear to be in compliance. Use of both horn/speaker/strobes and pull boxes throughout the building appear code compliant.

Smoke detectors are located in all corridors, storage areas and electrical rooms. Heat detectors are located in mechanical rooms. System devices appear to be operational. Locations appear to be in compliance.

Monitor and control modules are provided for duct smoke detectors and sprinkler system components as required by code.

Telecommunications and Data Service Systems

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 and Data Service System Conditions

System	Condition	Comments
Backbone Cabling	Good	Fiber and a Combination of Wired and Wireless Access Points. Appears Functioning Without Issue.
Rack System	Good	Appears Functioning Without Issue.
Telecommunication Ground	N/A	Not Observed.
Telephone Service Entrance	Good	Demarcation Equipment on Backboard in Main Electrical Room
Data Horizontal Cabling	N/A	Not Observed.
MDFs / IDFs	Good	MDF in Secure Room in Media Center. IDF located on the main level near the un-used elevator.
Pathways	Good	N/A
Coaxial Cable	Good	Not used by school

The telecommunication and data service backbone systems serve the schools communication, security and data systems within the school. Services originate at SNET pole #95 and enter the building below ground via a manhole located at the back of the building, adjacent the playing fields. All demarcation equipment is located on a backboard in the Main Electrical Room and appears to be in good condition.

These backbone systems serve the low voltage, data and security systems. See following sections for additional information.

Protection of these systems are vital to the school. We recommend that the IDF room be provided with a split system air conditioning unit. We also recommend the service cabling be properly bundled above the ceiling with hangers and/or cable trays. All cabling shall be in sleeves for through wall penetrations and fire caulked.

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	Not Tested for Operation During Time of Survey. System Exists and Appears Operational.
Video Monitoring	Good	CCTV Cameras at Various Locations. Appear to be Functioning Without Issue.
Access Control	Good	Keypads at Main Entrances to Building. Appear to be Functioning Without Issue.
Intercom System for Entrance	Good	Appears to be Functioning Without Issue

The building is equipped with an intrusion detection system. Keypads are located at the main entrances. CCTV cameras were observed at various locations throughout the interior and on the exterior of the building. All systems appeared to be functioning without any issues. Install additional security cameras at South side of building for added security.

Low Voltage and Data 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	Good	Centrally Controlled Line Voltage System. Appears to be Functioning Without Issue.
Public Address System	Fair	Operates Through Phone System. Appears to be Functioning Without Issue.
Stand-Alone Sound System(s)	Fair	The Sound System in the Gym, Cafeteria and Multi-Purpose Appears to be Functional and Used Regularly.
Phone System	Good	VOIP with handsets in all teaching and office areas. No wireless phones.
Cable TV	NA	Cable TV is present to the building but not used in classrooms.
Projectors	Good	Located is approximately 90% of the classrooms.
Bell System	Fair	Manually changed, tied to the clock system.
Wireless Access Points	Good	Additional WAP have been recently added, coverage appears adequate.
Hardwired Data Jacks	Good	Located throughout the school for computers, printers, and copiers.
Assisted Listening	N/A	None Observed.

M/E/P/FP Survey Photographs



1. Location:

Boiler Room

Description:

Existing Energy Kinetics System 2000 boilers



2. Location:

Boiler Room

Description:

Hot Water Boiler Pumps

M/E/P/FP Survey Photographs



3. Location:

Boiler Room

Description:

Corroded Pump with Leaking Seal



4. Location:

Mechanical Room

Description:

AHU Coil Pump #11

M/E/P/FP Survey Photographs



5. Location:

Boiler Room

Description:

Floor Drain with Leak Sensor (see plumbing report)



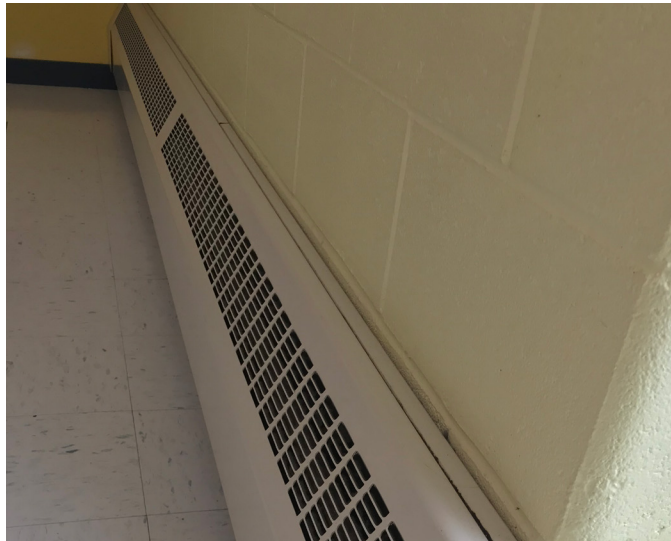
6. Location:

Typical Stairwell

Description:

Cabinet Unit Heater

M/E/P/FP Survey Photographs



7. Location:

Varies

Description:

Fin Tube Radiation



8. Location:

Varies

Description:

Unit Ventilator in Classroom

M/E/P/FP Survey Photographs



9. Location:

Boiler Room

Description:

Oil Pump Set



10. Location:

Electrical Room next to Room 101

Description:

Main Service Switchboard

M/E/P/FP Survey Photographs



11. Location:

Electrical Room Across from Room 103
Lower Level

Description:

Transformer and "old" Service
Switchboard



12. Location:

Electrical Room next to Room 101

Description:

Branch Panels

M/E/P/FP Survey Photographs



13. Location:

Original Building

Description:

Branch Panel



14. Location:

Service Area East Side of Building

Description:

Generator with Sub-Base Fuel Tank

M/E/P/FP Survey Photographs



15. Location:

Electrical Room next to Room 101

Description:

ATS and Emergency Panel



16. Location:

Sprinkler/Pump Room

Description:

Fire Pump Controller ATS

M/E/P/FP Survey Photographs



17. Location:

Sprinkler/Pump Room

Description:

Branch Panel



18. Location:

Varies

Description:

Typical Classroom Lighting

M/E/P/FP Survey Photographs

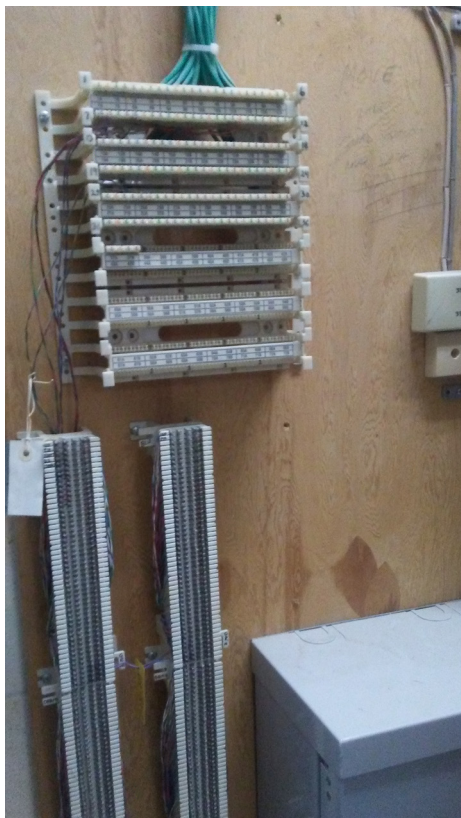


19. Location:

HeadEnd/IT Room

Description:

Telecommunications Backboard



20. Location:

HeadEnd/IT Room

Description:

Rack in MDF

M/E/P/FP Survey Photographs



21. Location:

Water Tank Room

Description:

Well Pump Controller



22. Location:

Water Tank Room

Description:

Domestic Water Storage Tank

M/E/P/FP Survey Photographs



23. Location:

Water Tank Room

Description:

Domestic Water Booster Pump



24. Location:

Water Tank Room

Description:

Domestic Water Booster Pump Controls



25. Location:

Boiler Room

Description:

Domestic Water Heaters and Storage Tanks

M/E/P/FP Survey Photographs



26. Location:

Storage Room @ Kitchen

Description:

Kitchen Domestic Water Heater and Storage Tank



27. Location:

"B" Wing Penthouse @ Mechanical Room

Description:

Storm Water Ponding

M/E/P/FP Survey Photographs



28. Location:

Northwest Lawn at Main Driveway

Description:

Fire Protection Storage Tank



29. Location:

Sprinkler/Pump Room

Description:

Fire Protection System In-line Fire Pump



30. Location:

"K" Wing

Description:

Typical Classroom Bathroom Lavatory

M/E/P/FP Survey Photographs



31. Location:

"K" Wing

Description:

Typical Sink with Bubbler



32. Location:

"K" Wing

Description:

Typical Hi/Low Drinking Fountains - Not in Service



33. Location:

"C" Wing North Elevation

Description:

Fire Pump Test Header and Sprinkler System Siamese Connection

M/E/P/FP Survey Photographs



34. Location:

"A" Wing

Description:

Typical Exhaust Fans



35. Location:

Art Room # 508

Description:

Stainless Steel Sink w/Clay Trap



36. Location:

"A" Wing

Description:

Condensing Units

M/E/P/FP Survey Photographs



37. Location:

"A" Wing Boys Room Lower Level

Description:

ADA Compliant Gang Lavatory



38. Location:

"A" Wing Lower Level Stairwell @
Cafeteria

Description:

Non-Compliant Fire Hose Valve Located
approx. 7'-0" AFF



39. Location:

"A" Wing Girls Room Lower Level

Description:

ADA Compliant WC and Stall

M/E/P/FP Survey Photographs



40. Location:

"K" Wing

Description:

Fire Alarm and Emergency Lighting Devices. EM lighting fixture type varies in the school.



41. Location:

Main Entrance

Description:

Entry Door w/Key Fob Entry and AIPhone



42. Location:

Kitchen

Description:

Overview of Kitchen Showing 3-Bay Stainless Steel Sink.

M/E/P/FP Survey Photographs



43. Location:

Multipurpose Room # 511

Description:

Lighting and HVAC



44. Location:

Science Room # 523

Description:

Emergency Shower



45. Location:

Computer Room

Description:

Lighting and Computer Stations

M/E/P/FP Survey Photographs



46. Location:

Gymnasium

Description:

Area of Rescue Signage, Emergency Exit and Fire Alarm Devices



47. Location:

Work Room - Office

Description:

Typical Lighting/Fire Protection



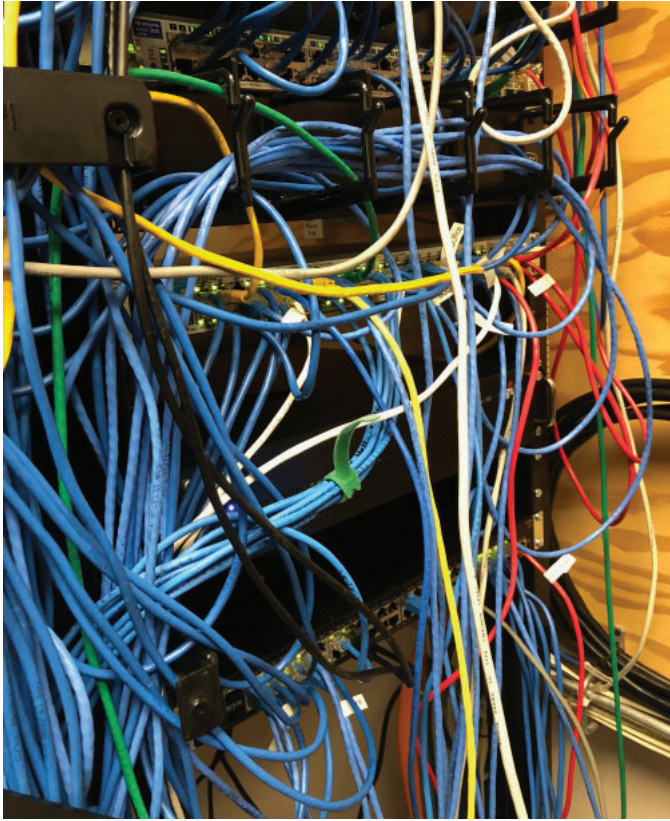
48. Location:

Varies

Description:

Ceiling Mounted Cabinet Unit Heater

M/E/P/FP Survey Photographs



49. Location:

MDF Room

Description:

Data wiring and rack



50. Location:

See Roof Plan in Section 3

Description:

Roof Drains - Ponding water

M/E/P/FP Survey Photographs



51. Location:

MDF Room

Description:

Equipment not in use.



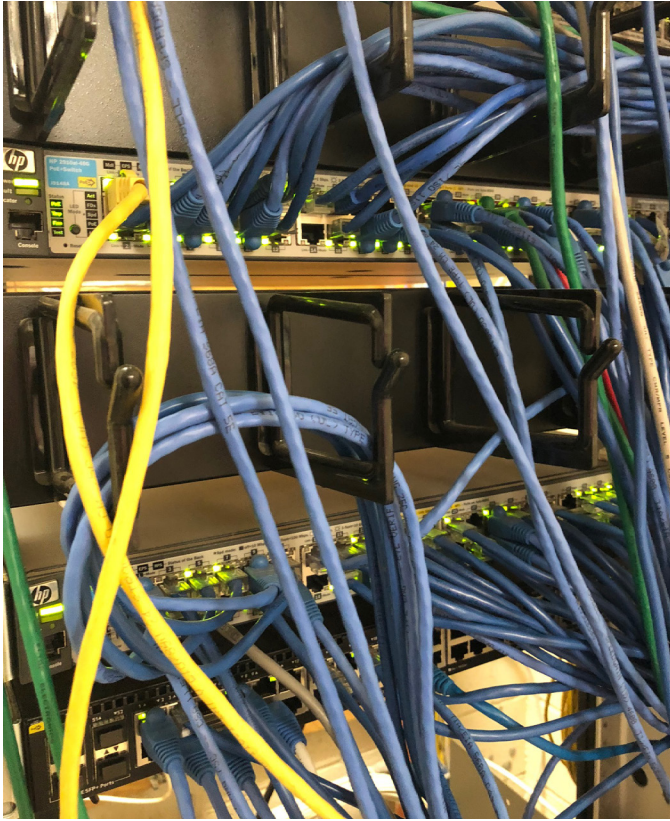
52. Location:

IDF Room

Description:

Data wiring and rack. Room lacks air conditioning.

M/E/P/FP Survey Photographs



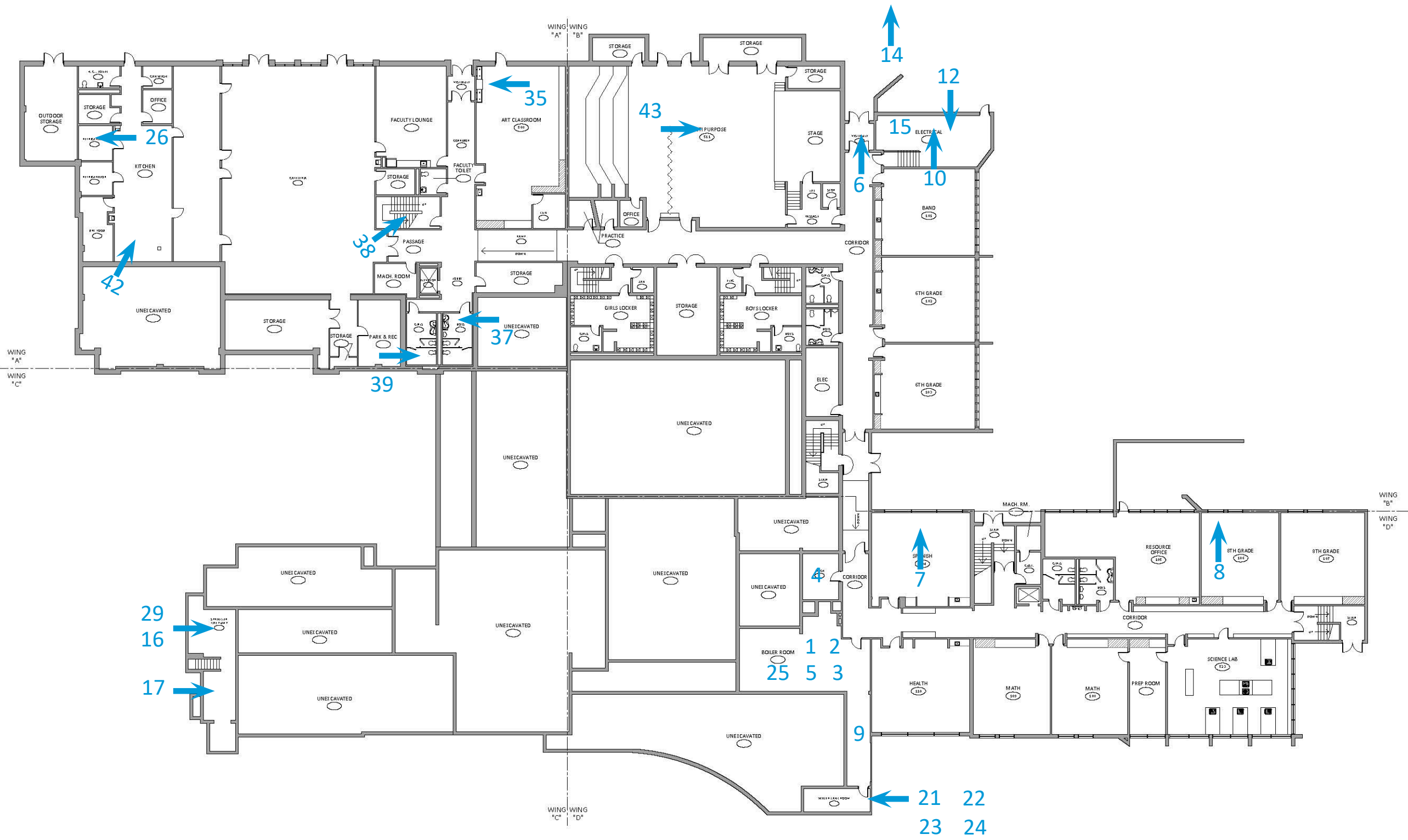
53. Location:

Description:

Data wiring - IDF Room

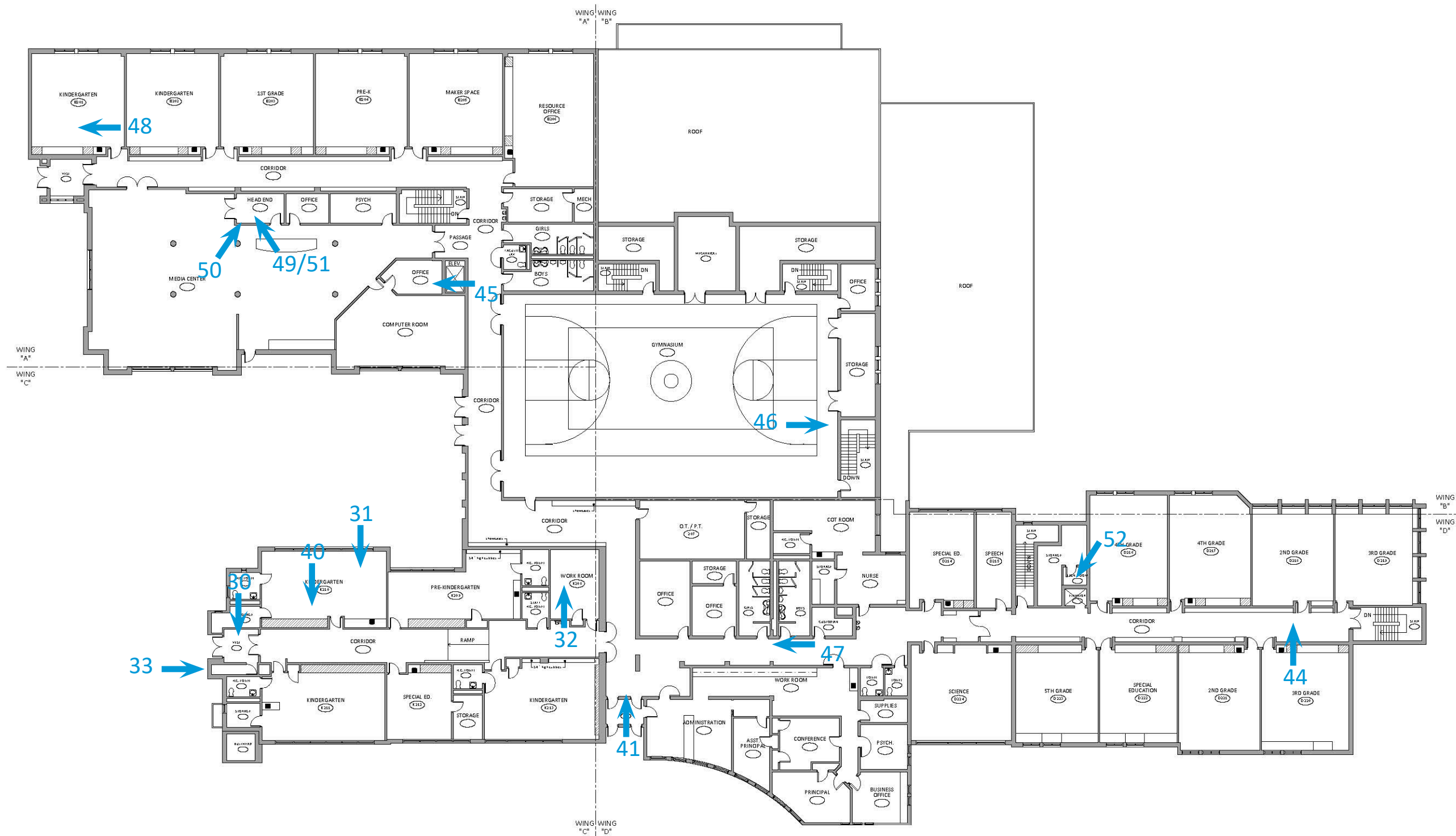
M/E/P/FP Survey Photo Key Plan

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.



The Sherman School

Lower Level Floor Plan



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.

- Replacement of pumps for the boilers should be replaced.
- Inspection of piping/replacement of corroded piping is necessary.
- Install new insulation on heating piping in Boiler Room.
- Inspect and replace valves on heating equipment (perimeter radiation, CUH, UV and AHU with VAV boxes.
- Mechanical equipment (AHU, RTU) are approximately 18 - 30 years old and replacement should be a consideration.
- Exhaust fans are experiencing failures and replacement should be considered.
- Unit Ventilators are nearing the end of their life expectancy and currently do not meet State of CT code for classroom noise emissions and should be replaced. Provide air conditioning or dehumidification in the school.
- Upgrade control system to provide digital control of HVAC systems
- Fuel oil tank is not in compliance with State of CT code. Consideration of relocation should be considered.

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

- The existing 800 amp service is obsolete and replacement should be considered.
- Lightning protection should be considered.
- Provide new wiring between Emergency Generator and Fire Pump.
- Provide separate transfer switches for Emergency and Stand By power.
- Replace Panel in Fire Pump Room with weather resistant enclosure.

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

- Booster pumps are obsolete and replacement should be considered.
- Install system to control chloride/sodium levels within each well. See appendix.
- Confirm that grease separator is cleaned-out.
- Video survey plumbing fixtures with poor drainage for pipe corrosion.
- Numerous roof drains are clogged and ponding is occurring. Maintain as necessary.

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

- Verify that a low water level alarm is in place at water tank.
- Verify operation of dry system air compressor and replace as required.
- Fire pump equipment is experiencing damage due to moisture issue.
- Provide proper coverage per NFPA 13 2010 and reinstall ceiling tiles for proper activation of sprinkler system, particularly at the electrical room next to the Band Room #101.

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

- Replace existing exterior wall mounted light fixtures to LED type fixtures.

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

- Technology changes quickly. A 5 year modernization plan should be considered. This may include switches and other backbone devices.

134 Mechanical, Electrical, Plumbing & Fire Protection Survey

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

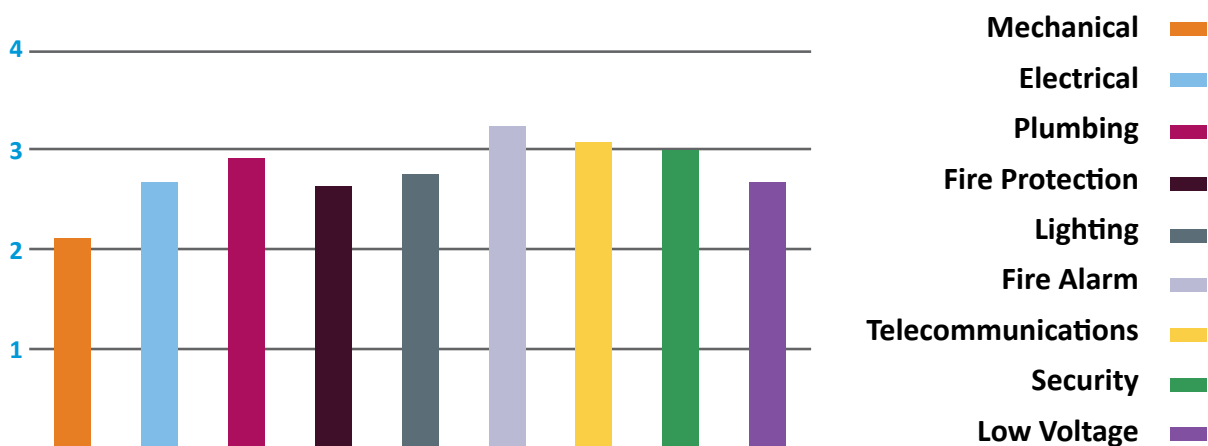
- Install additional security cameras at South side of building for added security.

The following represents areas of necessary **low voltage data/ communication** improvements and / or required work.

- Recommend adding assisted listening systems in classrooms and assembly spaces.
- Terminal devices will need upgrades as technology changes. Depending on the plan for Educational Enhancements some of these systems may be upgraded as part of the improvement.

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)

Section 5 : Code Survey



5

IBC Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the IBC code regulations. Photographs of any code violations or issues discovered are also provided.

The Sherman School has been evaluated for compliance with the 2016 Connecticut State Building Code, including the 2012 IBC with Connecticut Supplements and Amendments, for Use Group E. 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.

If the Town of Sherman elects not to undertake building renovations then items noted under the IBC survey are not required to be completed unless required by the building official. The items included in the IBC survey only are required to be corrected if new renovations are planned or if required by another code.

IBC Summary Sheet	
Existing Use	Educational
Year Constructed	1937; Additions/Renovations - 1953, 1961, 1971, 1992 & 2000
Type of Construction	Original Building - 5B / Additions & Renovations - 3B
% Open Perimeter	100
Fire Suppression	Complete Fire Protection System
Compartmentalization	All additions
Fire Resistance Rating of Vertical Opening Enclosures	1 Hour
Automatic Alarms	Installed
Automatic Alarms Type	Smoke Detectors, Pull Stations
Smoke Control	N/A
Smoke Control Type	N/A
Mixed Use	Yes, Business
Dead End	N/A
Maximum Exit Access Travel Distance	< 250'
Number of Stories	2
Floor	Lower Level - 37,716 s.f. Main Level - 48,029 s.f.
Reduction of Area Limitations	N/A
Corridor Wall Rating	Smoke Resistant Separation
Door Closers	Yes
Adequate Exit Routes	Yes
Elevator Controls	Yes
Emergency Lights	Yes

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

Required Upgrades for Compliance with IBC Code

- Chapter 7 Fire and Smoke Protection Features: Section 714 Penetrations, Protect through penetrations at all penetrations in fire resistance rated wall assemblies.
- Chapter 10 Means of Egress: Section 1007 Accessible Means of Egress - 1007.1 Accessible means of egress required.
- Chapter 10 Means of Egress: Section 1012 Handrails - Stair handrails need to be upgraded
- Chapter 10 Means of Egress : Section 1011 Exit Signs - All exits shall be marked with an approved exit sign.
- Chapter 11 Accessibility: Refer to ADA Section of the Report
- Chapter 13 Energy Efficiency: IECC (International Energy Conservation Code) - Re-roofing applications will need to comply with the minimum continuous insulation standard
- Chapter 13 Energy Efficiency: IECC - Window, door & skylight replacement for the original building will need to comply with a minimum insulating value
- Chapter 15 Roof Assemblies and Rooftop Structures: 1503.4 Roof Drainage - Re-roofing will need to comply with the overflow roof drainage provision

Additional items, that pertain to life safety and ADA accessibility, are addressed under the NFPA and ADA sections of this report. Some issues are covered by more than one code. However, the cost estimates do not contain duplicate entries for any item.

NFPA Code Survey

This section outlines the results of the code evaluation survey, listing the building's compliance with the NFPA code regulations. Photographs of any code violations or issues discovered are also provided.

Sherman School was evaluated for compliance with NFPA 101 Life Safety Code, 2012. Chapter 13, Existing Assembly Occupancies and Chapter 15, Existing Educational Occupancies, of the NFPA Code apply to this building.

Work is currently required for compliance with NFPA requirements in this building as follows:

- Chapter 7: Means of Egress
- 7.1.5.1 - Headroom within the Means of Egress
- 7.1.6.4 - Slip Resistance, Stair Treads
- 7.2.2.4.1 - Handrails, Stairs and ramps require handrails both sides
- 7.2.2.4.4 - Guards and Handrails, Handrail Details
- 7.2.5.3 - Ramp Details, 7.2.5.3.2 Landings
- 7.2.5.4.2 - Guards and Handrails, (Ramp) Handrails
- 7.7.1 - Discharge from Exits, Exit Termination at South Stair Exit
- Chapter 13 Existing Assembly Occupancies
- 13.4.9.3 - Guards and Handrails
- 13.7.9.3 - Occupant Load Posting, every assembly occupancy
- Chapter 15: Existing Educational Occupancies
- 15.2 - Means of Egress Requirements
- 15.2.10 - Marking of Means of Egress, means of egress shall have signs in accordance with Section 7.10.
- 15.7.1 - Emergency Plans (Provide as Required) Emergency Egress required for all occupants
- Chapter 43: Building Rehabilitation
- 43.5 Modifications, 43.5.1 General Requirements - The modification work must not reduce the level of code compliance. In reference to the addition to the Raised Platform in the Multi-Purpose Room.

NFPA Code Compliance

A listing of required elements per NFPA 101 code follows:

Classification of Occupancy	Description
Date of Original Construction	1937
Date of Addition(s)	1953, 1961, 1971, 1992 & 2000
Primary Occupancy	Educational
Secondary Occupancy	Assembly
Mixed Use	Yes

Fire Regulations	Description	Conforms (Y/N)
Stair Separation	1 Hour Fire Separation	Yes
Corridor Separation	Smoke Resistant Separation	Yes
High Hazard Occupancy	1 Hour or Sprinkler Protection	Yes, Sprinkler Protection
Doors		
Width		Yes
Swing Direction		Yes
Locks / Latches		Yes
Exit Hardware		Yes
Closers		Yes
Stairs		
Classification	Existing Stairs	Yes/ Existing
Width	44" Minimum	Yes
Riser	6.5" - 7.5"	Yes
Tread	10" - 11.5"	Yes
Guards		Yes
Handrails		No
Enclosure	1 Hour Fire Rated	Yes
Horizontal Exits	Exit from Gym	Yes
Ramps	Existing Handrails / Landings	No
Fire Escapes	N/A	N/A
Means of Egress		
Occupant Load	Lower & Main Level = 2,978	
Factor	7, 15, 20, 100, 300	
Area per Floor	37,716 Lower Level / 48,029 Main Level	
Occupants per Floor	1,187 Lower Level / 1,791 Main Level	Yes
Exit Unit Widths	3,215 Lower Level / 1,856 Main Level	Yes
Number of Exits	Lower Level - 10 / Main Level - 6	Yes
Exit Location	-	Yes
Exits through Spaces	-	Yes
Dead Ends/Common Travel	< 20'	Yes
Travel Exit	< 250'	Yes
Discharge	South Exit to Public Way	No
Illumination of Exits	-	Yes
Emergency Lighting	Wall Packs	Yes

NFPA Code Survey (continued...)

Fire Regulations	Description	Conforms (Y/N)
Exit Marking	Height of Exit Signs	No
Occupancy Load/Emergency Signage	-	No
Construction & Compartmentalization		
Construction - Minimum Requirements		Yes
Compartmentalization		Yes
Flooring Openings Enclosed		Yes
Floor Openings Unenclosed		Yes
Concealed Spaces		Yes
Smoke Protection		Yes
Smoke Barriers		Yes
Smoke Doors		Yes
Smoke Dampers		Yes
Penetrations Sealed		Yes
Special Protection		Yes
Fire Rated Enclosure		
Trash	N/A	N/A
Mixed Use	2 Hour Rated	Yes
Corridors	Smoke Resistant Separation	No
Sprinklers - Entire Building		Yes
Selected Hazards	Sprinkler Protection	Yes
Other		
Interior Finish		Yes
Corridors & Stairwells		Yes
Non-Conforming Locations	N/A	N/A
Headroom Clearance at Corridors and Exits	-	No

Discharge from Exits	Conforms (Y/N)
50% required directly to exterior	Yes
Other through areas on level of discharge with protection	Yes

NFPA Code Survey (continued...)

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

Sprinkler Protection	Description	Conforms (Y/N)
Sprinkler Service	31,000 gallon Storage Tank	Yes
Area Serviced	Entire School	Yes
Pressure	Supplied by Fire Pump	Yes
Alarm Valve Size	4"	Yes
Dry Pipe Valve Size	4"	Yes
Service Size	6" Ductile Iron Pipe	Yes
Fire Department Connection	4" x 2 1/2" x 2 1/2" Free Standing	Yes
Sprinkler Spacing	Light and Ordinary Hazard	Yes

Code Survey Photographs



1. Location:

"A" Wing - Lower Level - Corridor Exit Door

Description:

The exit signs located within the corridor do not provide the required 6'-8" clearance



2. Location:

"D" Wing - Main Level - Corridor outside of Nurse's Office

Description:

The building's Hi/Low drinking fountains are currently not in service. The drinking fountain installation is considered a protruding object.



3. Location:

"A" Wing - Lower Level - Stairwell adjacent to the Cafeteria

Description:

The headroom height is not provided, causing an unprotected obstruction.

Code Survey Photographs



4. Location:

"A" Wing - Lower Level - Cafeteria

Description:

The exposed electrical floor box is not protected from infiltration.



5. Location:

Kindergarten Wing - Room K212

Description:

The wing is currently unoccupied and is being used as a storage area. The classroom was not designed as a storage room with required fire ratings for walls and doors.



6. Location:

"A" Wing - Lower Level - Stairwell adjacent to the Cafeteria

Description:

The fire hose valve is non-compliant being installed at approximately 7'-0" above the finished floor.

Code Survey Photographs



7. Location:

"A" Wing - Lower Level - Faculty Lounge

Description:

The receptacle is in a non-compliant location in relation to sink.



8. Location:

"A" Wing - Lower Level - Girls Toilet Room

Description:

The required handicap accessible maneuvering clearance at the entry door has not been provided, therefore the accessible route has not been provided.



9. Location:

"A" Wing - Lower Level - Raised Platform

Description:

The required handicap accessible lift is not in service, therefore the accessible route has not been provided.

Code Survey Photographs



10. Location:

Kindergarten Wing - Room K213

Description:

The existing floor slab construction has been core drilled for investigative purposes.



11. Location:

"A" Wing - Lower Level - Art Room 508

Description:

The stainless steel sink within the classroom has a compliant clay trap.



12. Location:

Kindergarten Wing - Toilet Room off of Room K213

Description:

Typical Classroom Bathroom Lavatory, Non-Compliant Protection

Code Survey Photographs



13. Location:

"C" Wing - North Elevation

Description:

The fire pump test header and sprinkler system siamese connection are shown. Access to this equipment is limited due to shrubs.



14. Location:

Exterior Exit at Resource Office 105

Description:

The designated exit from the Resource Office is not compliant. An acceptable egress path to the public way has not been provided. Refer to Photo #19 for the



15. Location:

Kindergarten Wing - Ramp at Corridor

Description:

The ramp handrail extensions do not continue in the same direction as the ramp.

Code Survey Photographs



16. Location:

"D" Wing - Lower Level - Corridor
outside of South Stairwell

Description:

The non-compliant signage due to
location between masonry wall and
lockers



17. Location:

"D" Wing - Lower Level - Corridor at
Double Egress Doors

Description:

The ramp lower landing does not
continue in the same direction
unobstructed.

Code Survey Photographs



18. Location:

"D" Wing - Lower Level - Corridor

Description:

The ramp lower landing does not continue in the same direction unobstructed.



19. Location:

Exterior Exit at Resource Office 105

Description:

The designated as a "fire exit" to the building's exterior from Resource Office. The evacuation plan for the room also designates this as the main exit from the space. Refer to Photo #14 for view from the building exterior.

Code Survey Photographs



20. Location:

Roof - Area D

Description:

An overflow drainage system has not been installed due to the age of the existing roofing system. The overflow system would notify building staff that there was a clog at the roof level.



21. Location:

Roof - Area C

Description:

The roof construction may not be provided with the proper ventilation. The roof eaves / soffits are not vented and the gable ends are minimally vented.



22. Location:

"A" Wing - Lower Level - Cafeteria

Description:

The assembly area is properly marked with a posted occupant load sign. All assembly areas require a posted occupancy sign.

Code Survey Photographs



23. Location:

Lower Level - Parks and Rec - off of the Cafeteria

Description:

This tenant can not be located by the general public. The signage for the room needs upgrading.



24. Location:

Resource Office B206

Description:

All water leaks need to be monitored and remediation performed as soon as possible to avoid contamination.



25. Location:

Exit from South Stair Well - Area "D"

Description:

The door leaf will block the access to the walkway when egressing the stair. This stair has an area of refuge at the Main Level but not at the Lower Level.

Code Survey Photographs



26. Location:

Area "B" - Lower Level - Multi-Purpose Room

Description:

The raised platform was added onto after the original construction. The raised platform was of wood framed construction. Typically the floor structure would be protected and/or sprinklered. Wood framing is not consistent with the original construction type for the building.

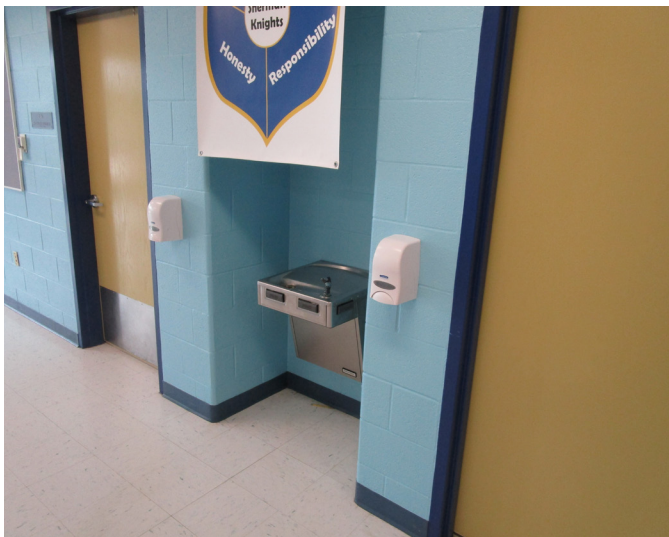


27. Location:

Area "B" - Lower Level - Exterior Exit Stair

Description:

The handrails for this stair need to be upgraded for height. Handrail ends need to be returned to the wall or pavement



28. Location:

"A" Wing - Lower Level - Cafeteria

Description:

The banner is a protruding object in relation to clear headroom.

Code Survey Photographs



29. Location:

"A" Wing - Main Level - Media Center

Description:

The exit doors from the Media Center do not close properly. The smoke barrier at the exit access corridor is therefore compromised.



30. Location:

Pipe Penetration

Description:

All piping through rated wall should be sealed with UL rated sealant

Code Survey Photographs



31. Location:

Area "B" - Lower Level - Multi-Purpose Room

Description:

Open risers are not permitted. The handrails are not compliant. The slip resistance for the stair treads is not evident. The stair construction may not meet the structural capacity for this application.



32. Location:

West Elevation - Lower Level

Description:

The existing propane tank serves the Science Lab 523. The existing propane tank needs to be properly enclosed and/or braced so it is secure.

Code Survey Photo Key Plan

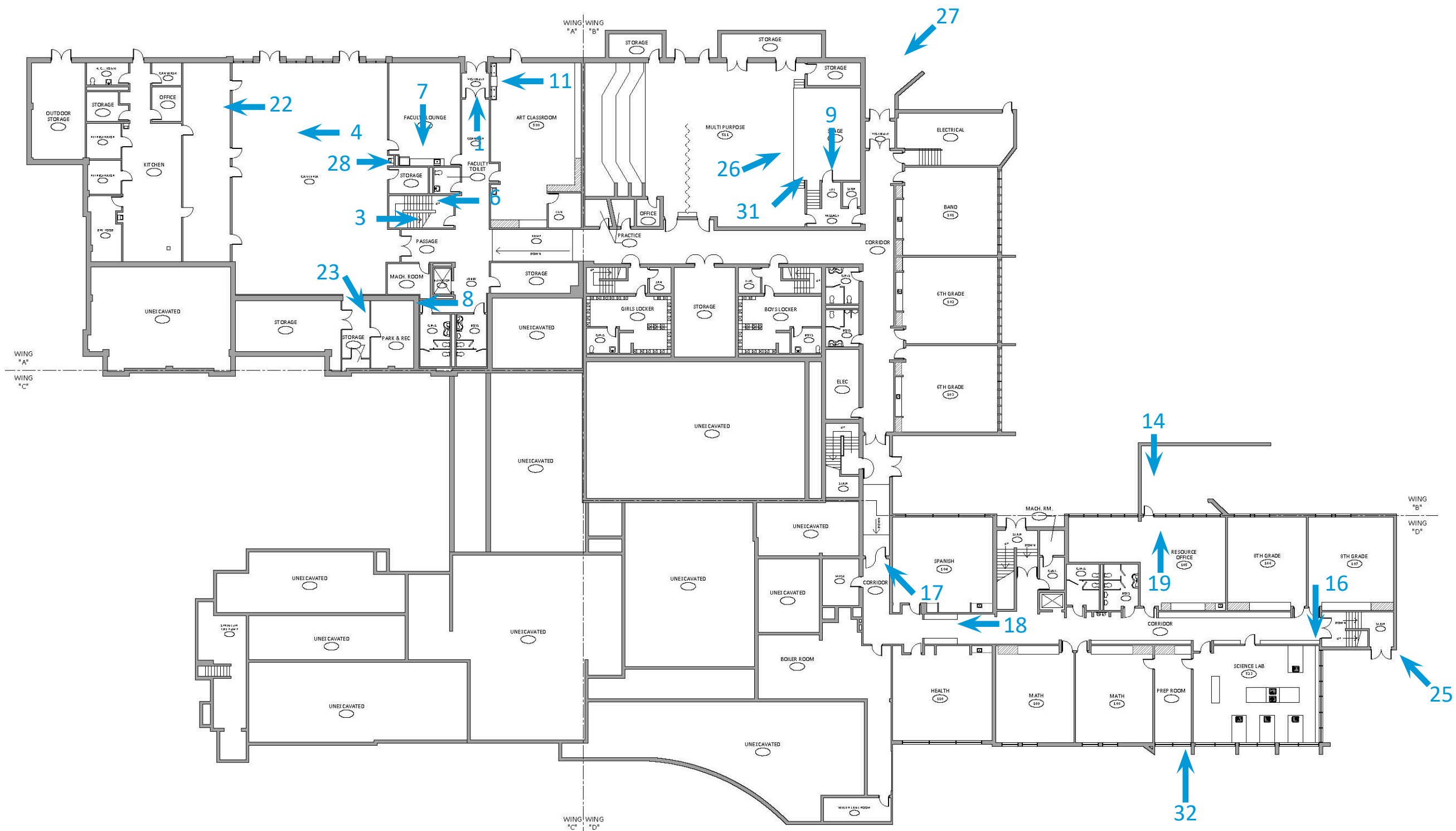
The following plan shows the actual building plan as verified during field surveys. Photographs from the previous pages are keyed into the building plans with numbered arrows at the approximate photograph site and direction from which the photographs were taken.

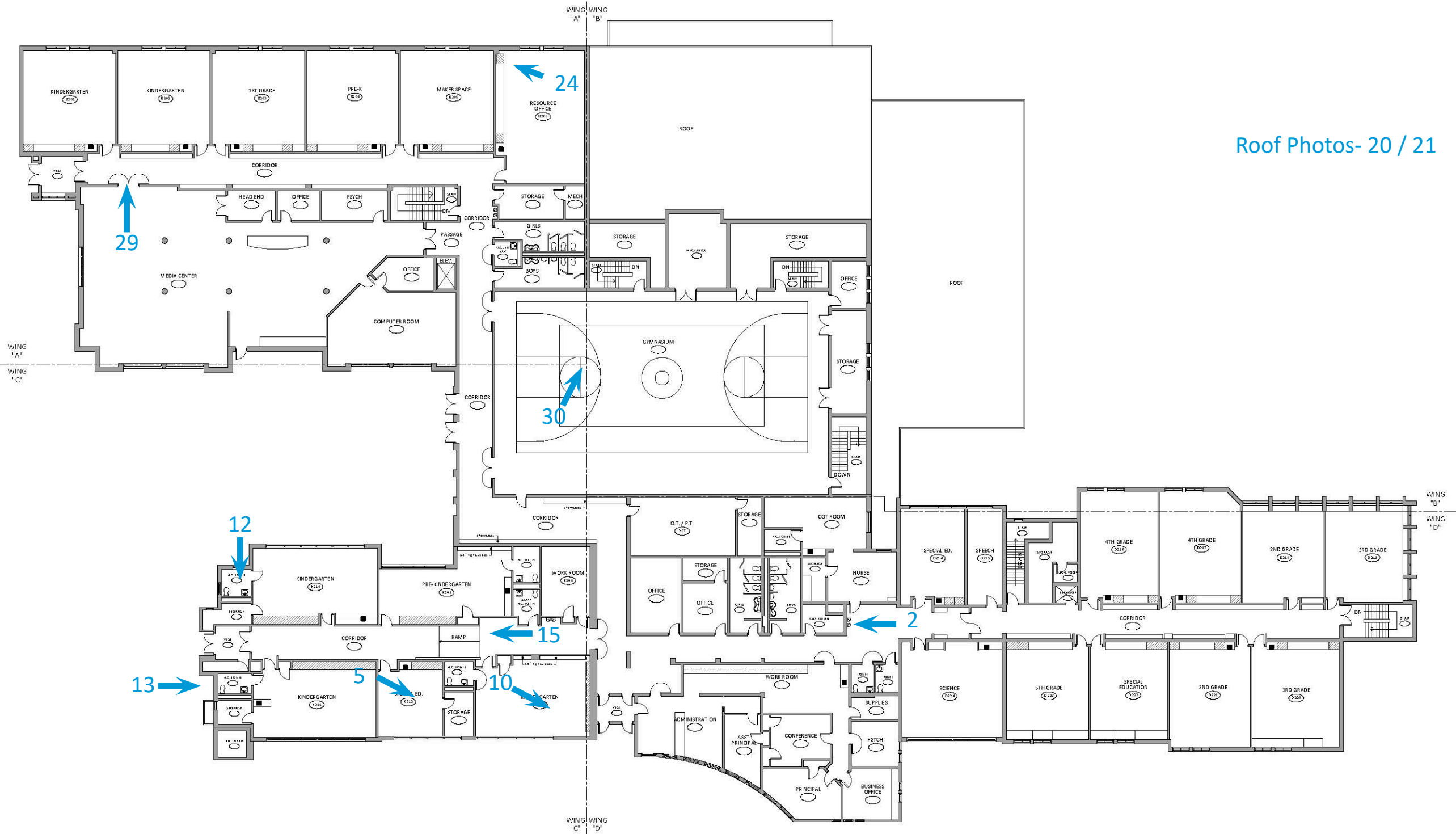


The Sherman School

Lower Level Floor Plan

Code Survey





Roof Photos- 20 / 21

Code Survey Recommendations

The original portion of The Sherman School is 81 years old and the additions/renovations are approximately 18 - 65 years old.

The following represents areas of necessary improvements and / or required work to meet **IBC** regulations. Photo examples, in some cases, are referenced for clarity.

- Protect through penetrations at all penetrations in fire resistance rated wall assemblies, see photo #30.
- Exterior stair handrails need to be upgraded, see photo #27.
- All exits shall be marked with an approved exit sign, see photo #19.
- Re-roofing applications need to comply with the minimum continuous insulation standard
- Window & door replacement for the original building need to comply with a minimum insulating value
- Re-roofing need to comply with the overflow roof drainage provision, see photo #20.
- Provide an accessible route to and from the boys and girls locker rooms, to and from the Girls Toilet Room, exit from Art Room, exit from the Resource Office 105. See photo #8
- Accessible means of egress required.
- Stair and ramp handrails need to be upgraded
- Exit signs; All exits shall be marked with an approved exit sign, providing proper headroom clearances.
- Stair details; Solid Risers, Handrail Extensions, Handrail Height, see photos #1 and #31
- Exit discharge capacity - shall not be less than the required discharge capacity of the exit being served (South end stair)
- Attic Ventilation; verify existing and/or provide proper ventilation at attic spaces (Kindergarten wing)
- Chapter 11 Accessibility: Refer to ADA Section of the Report

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

- Maintain the required headroom (6'-8") at all exit access corridors and required exits.
- Compliant stair handrails at the exterior exit. See photo #27
- Compliant ramp handrail extensions and landing clearances. See photos #15, 17, and #18
- Posted occupancy signs in all designated assembly occupancies. See photo #22
- Provide emergency plans per requirements of existing educational and existing assembly occupancies.
- Discharge from Exits, exit termination at south stair exit
- Modification work must not reduce the level of code compliance, the addition to the raised platform in the Multi-Purpose Room. See photo #26.
- Provide compliant stair and platform construction at the raised platform addition. See photo #31.
- Slip Resistance, stair treads at raised platform
- Compliant stair handrails at the raised platform stairs.

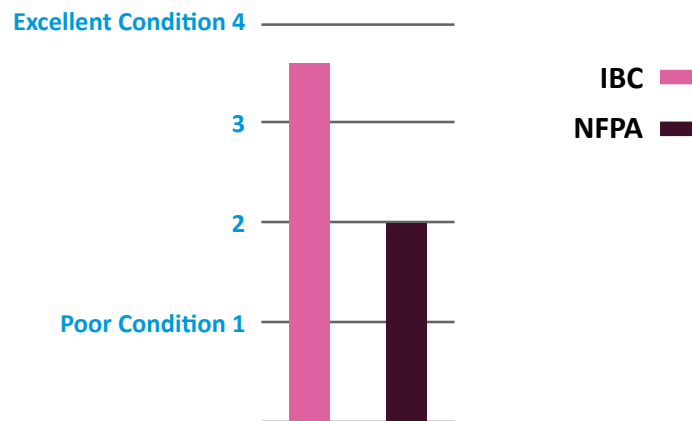
The overall rating for the school for the IBC (building code) is good. This rating is not to say there are not issues to be addressed and a plan should be developed to resolve them through the capital improvement budget process. The areas which need attention and noted in the study must be addressed if the school moves forward with a larger overall educational enhancement project. All work undertaken by maintenance staff or a contractor require a building permit and review by the local officials.

The overall rating for the school for the NFPA (fire code) is fair. This code requires the findings in the study be addressed regardless if the school moves forward with the educational enhancement plans. Priority should be given to egress and fire protection violations. All work undertaken by maintenance staff or a contractor require a building permit and review by the local officials.

These codes overlap in many areas and similar issues may be cited under both codes. Issues found in the report pertaining to accessibility are note in the ADA section.

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)

Section 6 : ADA Compliance Survey

6

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 The Sherman School was completed after several days of 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 Sherman Board of Education 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

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. Included in the index are the ADA survey items which were considered a passing.

ADA Survey Failures

The following report documents the ADA requirements that The Sherman School failed to meet. Plan and photograph references, notes and whether or not the item is readily achievable are noted.

Date Prepared: 6/21/2018

ADA Compliance Survey

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
1	0	206.2.1	Site Arrival Points	Where Required	At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required. 2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	27	27
2	0	206.2.2	Site Arrival Points	Within a Site	At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site. EXCEPTION: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	32	32
4	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.	Yes	Fail	36	36

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
7	0	206.3	Site Access Route	Location	Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior	Yes	Fail	37	37
8	0	403.5.1	Site Access Route	Walking Surfaces: Changes in Level: Clear Width	Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches minimum. EXCEPTION: The clear width shall be permitted to be reduced to 32 inches minimum for a length of 24 inches maximum provided by reduced width segments are separated by segments that are 48 inches long minimum and 36 inches wide minimum.	Yes	Fail	38	38
14	0	403.3	Site Access Route	Walking Surfaces: Slope	The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48	Yes	Fail	34	34
15	0	303.2	Site Access Route	Changes in Level: Vertical	Changes in level of ¼ inch high maximum shall be permitted to be vertical.	Yes	Fail	35	35
17		303.4	Site Access Route	Changes in Level: Ramps	Changes in level greater than ½ inch (13 mm) high shall be ramped, and shall comply with 405 or 406	Yes	Fail	28	28
23	0	502.2	Accessible Parking	Vehicle Spaces	Car parking spaces shall be 96 inches wide minimum and van parking spaces shall be 132 inches wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3. EXCEPTION: Van parking spaces shall be permitted to be 96 inches wide minimum where the access aisle is 96 inches wide minimum.	Yes	Fail	26	26

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
24	0	502.3, 502.3.1-4	Accessible Parking	Access Aisle	Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle. 502.3.1 Width: Access aisles serving car and van parking spaces shall be 60 inches wide minimum. 502.3.2 Length: Access aisles shall extend the full length of the parking spaces they serve. 502.3.3 Marking: Access aisles shall be marked so as to discourage parking in them. 502.3.4 Location: Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space except for angled van parking spaces which shall have access aisles located on the passenger side of the parking spaces.	Yes	Fail	26	26
25		502.4	Accessible Parking	Floor and Ground Surfaces	Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted.	Yes	Fail	26	26
26	0	502.6	Accessible Parking	Identification	Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches minimum above the finish floor or ground surface measured to the bottom of the sign.	Yes	Fail	24	24

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
28	0	503.3	Accessible Parking	Passenger Loading Zones: Access Aisle	Passenger loading zones shall provide access aisles complying with 503 adjacent to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.	Yes	Fail	29	29
32	0	402.2	Curb Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.	Yes	Fail	37	37
39		406.6	Curb Ramps	Diagonal Curb Ramps	Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches long minimum located on each side of the curb ramp and within the marked crossing.	Yes	Fail	41	41

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
43		206.4	Entrances	Entrances	Entrances shall be provided in accordance with 206.4. Entrance doors, doorways, and gates shall comply with 404 and shall be on an accessible route complying with 402.EXCEPTIONS: 1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with 404 that is on an accessible route, the altered entrance shall not be required to comply with 206.4 unless required by 202.4.2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one public entrance shall be required to comply with 206.4. Where no public entrance can comply with 206.4 under criteria established in 202.5 Exception, then either an unlocked entrance not used by the public shall comply with 206.4; or a locked entrance complying with 206.4 with a notification system or remote monitoring shall be provided.	Yes	Fail	30, 31	X
44	0	206.4.1	Entrances	Public Entrances	In addition to entrances required by 206.4.2 through 206.4.9, at least 60 percent of all public entrances shall comply with 404	Yes	Fail	32	32

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
49		216.1	Entrances	Signage	Signs shall be provided in accordance with 216 and shall comply with 703. EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with 216.2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6 through 216.12.3. Temporary, 7 days or less, signs shall not be required to comply with 216.4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with 216	Yes	Fail	33	33
52		206.2.1	Access Route Interior	Site Arrival Points	At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required.2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	35	35

Date Prepared: 6/21/2018

ADA Compliance Survey

Sherman School

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
54		207.1	Access Route Interior	Accessible Means of Egress	Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel. 2. Areas of refuge shall not be required in detention and correctional facilities.	Yes	Fail	3	3
55		302.1	Access Route Interior	Floor or Ground Surfaces: General	Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. EXCEPTIONS: 1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant. 2. Areas of sport activity shall not be required to comply with 302.	Yes	Fail	2, 5	2, 5
61		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 or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4½ inches (115 mm) maximum.	Yes	Fail	13	13

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
62		307.4	Access Route Interior	Protruding Objects: Vertical Clearance	Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground. EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.	Yes	Fail	1	1
63		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 or ground.	Yes	Fail	12	12
64		308.2.2	Access Route Interior	Forward Reach: Obstructed High Reach	Where a high forward reach is over an obstruction, the clear floor space 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 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 and the reach depth shall be 25 inches (635 mm) maximum.	Yes	Fail	19	19

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
65		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.	Yes	Fail	20	20
78		405.7.2	Ramps	Landings: Width	The landing clear width shall be at least as wide as the widest ramp run leading to the landing.	Yes	Fail	11	11
82		405.8	Ramps	Handrails	Ramp runs with a rise greater than 6 inches shall have handrails complying with 505. EXCEPTION: Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths are designed to permit the installation of handrails complying with 505. Ramps not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.	Yes	Fail	11	11

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
96		505.10	Ramps	Handrails: Handrail Extensions	Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10.EXCEPTIONS: 1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps.2. In assembly areas, extensions shall not be required for ramp handrails 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.	Yes	Fail	17	17
98		504.2	Stairways	Treads and 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.	Yes	Fail	36	36
99		504.3	Stairways	Open Risers	Open risers are not permitted	Yes	Fail	21	21
102		505.2	Stairways	Handrails: Where Required	Handrails shall be provided on both sides of stairs and ramps. EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.	Yes	Fail	21	21
104		505.4	Stairways	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.	Yes	Fail	36	36

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ADA Compliance Survey

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
111		505.10	Stairways	Handrails: Extensions	Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10. EXCEPTIONS: 1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps. 2. In assembly areas, extensions shall not be required for ramp handrails 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.	Yes	Fail	36	36
113		505.10.3	Stairways	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 at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.	Yes	Fail	36	36
143		410.3, 305.3	Platform Lifts	Clear Floor Space	Clear floor space in platform lifts shall comply with 305.305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.	Yes	Fail	14	14

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
145		206.2.4	Doors	Spaces and Elements	At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by 206.2.3. EXCEPTIONS: 1. Raised courtroom stations, including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the space. 2. In assembly areas with fixed seating required to comply with 221, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided. 3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story. In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by 206.2.3 Exceptions 1 through 7.	Yes	Fail	43	43

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
146		207.1	Doors	Accessible Means of Egress	Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel. 2. Areas of refuge shall not be required in detention and correctional facilities.	Yes	Fail	45	45
150		404.2.4	Doors	Maneuvering Clearances	Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance. EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.	Yes	Fail	3	3
151		404.2.5	Doors	Thresholds	Thresholds, if provided at doorways, shall be ½ inch (13 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with 302 and 303. EXCEPTION: Existing or altered thresholds ¾ inch high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5.	Yes	Fail	4	4

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
153		404.2.7	Doors	Door and Gate Hardware	Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. EXCEPTIONS: 1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail. 2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.	Yes	Fail	20	20
159		602.1	Drinking Fountains	General	Drinking fountains shall comply with 307 and 602	Yes	Fail	22	22
162		602.4	Drinking Fountains	Spout Height	Spout outlets shall be 36 inches maximum above the finish floor or ground	Yes	Fail	22	22
164		602.7	Drinking Fountains	Drinking Fountains for Standing Persons	Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the finish floor or ground.	Yes	Fail	22	22

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Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
165		213.1	Toilet Facilities and Bathing Facilities	General	Where toilet facilities and bathing facilities are provided, they shall comply with 213. Where toilet facilities and bathing facilities are provided in facilities permitted by 206.2.3 Exceptions 1 and 2 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.	Yes	Fail	43	43
166		213.2	Toilet Facilities and Bathing Facilities	Toilet Rooms and Bathing Rooms	Where toilet rooms are provided, each toilet room shall comply with 603. Where bathing rooms are provided, each bathing room shall comply with 603. EXCEPTIONS: 1. In alterations where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with 213.2.1 is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no fewer than one toilet room for each sex complying with 603 or one unisex toilet room complying with 213.2.1 shall be provided.3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with 603. Portable toilet units and bathing units complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1.4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use	Yes	Fail	43	43

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
168		604.1	Water Closets	General	Water closets and toilet compartments shall comply with 604.2 through 604.8. EXCEPTION: Water closets and toilet compartments for children's use shall be permitted to comply with 604.9.	Yes	Fail	9	9
171		604.6, 309.4	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 except in ambulatory accessible compartments complying with 604.8.2. 309.4 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.	Yes	Fail	9	9
173		604.8	Toilet Stalls	Toilet Compartments	Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.	Yes	Fail	9	9

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Sherman School

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
175		604.8.1.2	Toilet Stalls	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 compartment and any obstruction shall be 42 inches minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.	Yes	Fail	9	9
184		308	Mirrors / Accessories	Reach Ranges	Reach ranges shall comply with 308. Table 308: Children's Reach Ranges: Forward or Side Reach Age 3&4 36" High 20" Low; Age 5-8 40" High 18" Low; Age 9-12 44" High 16" Low	Yes	Fail	12	12
191		606.5	Lavatories / Sinks	Exposed Pipes and Surfaces	Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks	Yes	Fail	15	15

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
196		608.2.1	Shower Compartments	Transfer Type Shower Compartments	Transfer type shower compartments shall be 36 inches by 36 inches clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch wide minimum entry on the face of the shower compartment. Clearance of 36 inches wide minimum by 48 inches long minimum measured from the control wall shall be provided.	Yes	Fail	10	10
209		609.4, 607.4.1.1, 607.4.1.2	Grab Bars	Position of Grab Bars	Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches minimum and 27 inches maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1. 607.4.1.1 Back Wall: Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches minimum and 10 inches maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches maximum from the head end wall and 12 inches maximum from the control end wall. 607.4.1.2 Control End Wall: A grab bar 24 inches long minimum shall be installed on the control end wall at the front edge of the bathtub.	Yes	Fail	42	42

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ADA Compliance Survey

Sherman School

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
231		216.1	Signage	General	Signs shall be provided in accordance with 216 and shall comply with 703. EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with 216. 2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6 through 216.12. 3. Temporary, 7 days or less, signs shall not be required to comply with 216. 4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with 216	Yes	Fail	16, 33	16, 33
232		216.2	Signage	Designations	Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5. EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.2.	Yes	Fail	2	2
233		703.1	Signage	General	Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided	Yes	Fail	44	44

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ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
237		703.4.2	Signage	Location	Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches minimum by 18 inches minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position. EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.	Yes	Fail	23	23

Date Prepared: 6/21/2018

ADA Compliance Survey

Sherman School

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
238		703.5.1-9	Signage	Visual Characters	Visual characters shall comply with 703.5. EXCEPTION: Where visual characters comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9. 703.5.1 Finish and Contrast: Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background. 703.5.2 Case: Characters shall be uppercase or lowercase or a combination of both. 703.5.3 Style: Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. 703.5.4 Character Proportions: Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I". 703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I". 703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40	Yes	Fail	43	43
239		703.7.1	Signage	Symbols of Accessibility: Finish and Contrast	Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.	Yes	Fail	43	43

Prepared by: Friar Architecture, Inc.

21

ADA Compliance Survey

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
240		225.2	Storage	Storage	Where storage is provided in accessible spaces, at least one of each type shall comply with 811.	Yes	Fail	19	19
241		225.2.1	Storage	Lockers	Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with 811.	Yes	Fail	18	18
244		811.3	Storage	Height	Storage elements shall comply with at least one of the reach ranges specified in 308	Yes	Fail	19	19
245		811.4, 309	Storage	Operable Parts	Operable parts shall comply with 309. 309.4 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.	Yes	Fail	20	20
255		221.2	Assembly Areas	Wheelchair Spaces	Wheelchair spaces complying with 221.2 shall be provided in assembly areas with fixed seating. 221.2.1 Number and Location: Wheelchair spaces shall be provided complying with 221.2.1. 221.2.1.1 General Seating: Wheelchair spaces complying with 802.1 shall be provided in accordance with Table 221.2.1.1	Yes	Fail	7	7

Sherman School

ADA Compliance Survey

Date Prepared: 6/21/2018

Entry	Priority	Code	Element	Item	Compliance Requirement	Readily	Pass/	Photo	Plan
263		802.3	Assembly Areas	Companion Seats	<p>802.3.1 Alignment: In row seating, companion seats shall be located to provide shoulder alignment with adjacent wheelchair spaces. The shoulder alignment point of the wheelchair space shall be measured 36 inches from the front of the wheelchair space. The floor surface of the companion seat shall be at the same elevation as the floor surface of the wheelchair space. 802.3.2 Type: Companion seats shall be equivalent in size, quality, comfort, and amenities to the seating in the immediate area. Companion seats shall be permitted to be movable.</p>	Yes	Fail	7	7

Prepared by: Friar Architecture, Inc.

ADA Survey Photographs

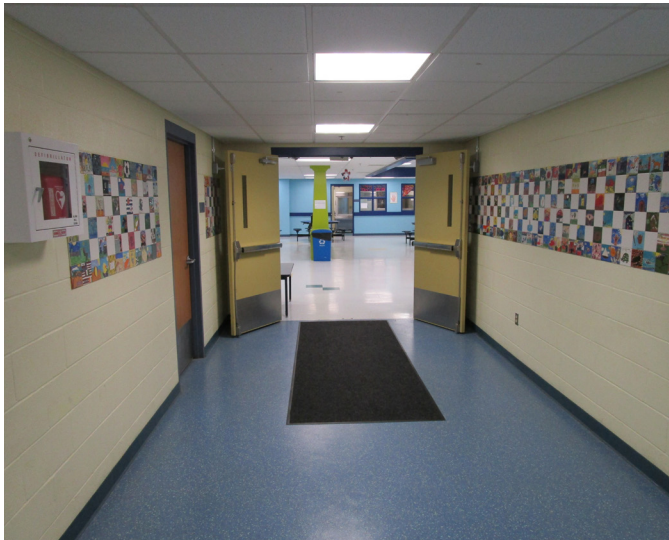


1. Location:

Cafeteria - Lower Level

Description:

Provide headroom clearances at drinking fountain.



2. Location:

Passage to the Cafeteria - Lower Level

Description:

Accessible room signage could not be located.



3. Location:

Accessible Girls Toilet Room - Lower Level

Description:

The maneuvering clearance at the toilet room entrance door has not been provided.

ADA Survey Photographs



4. Location:

Art Classroom Exit Door - Lower Level

Description:

The required maneuvering clearance at the exit door has not been provided. The door threshold height is an issue due to settlement.



5. Location:

Corridor Exits - Main Level

Description:

The floor mats in the corridor are loose and not permanently fixed to the floor.



6. Location:

Music Room - Lower Level

Description:

The risers at the back of the Music Room are not accessible.

ADA Survey Photographs



7. Location:

Gymnasium - Main Level

Description:

Accessible seating in conjunction with companion seating is not available and/or identified.



8. Location:

Media Center - Main Level

Description:

The clear width at the end of the aisle is not wide enough.



9. Location:

Boys Handicap Toilet Room - Main Level

Description:

The stall door swings into the clear space required.

ADA Survey Photographs



10. Location:

Boys Locker Room - Lower Level

Description:

The clear floor space behind the seat wall has not been provided.



11. Location:

Corridor Ramp - Lower Level

Description:

The clear floor space at the ramp landing has not been provided.

ADA Survey Photographs



12. Location:

Nurses Handicap Toilet Room - Main Level

Description:

A compliant height for the paper tower dispenser has not been provided.



13. Location:

Corridor Outside of Nurses Office - Main Level

Description:

The drinking fountains are placed incorrectly, they are protruding objects which are located within the required door clearance area.

ADA Survey Photographs



14. Location:

Handicap Lift - Lower Level

Description:

The compliant lift is currently used as a storage area.



15. Location:

Kindergarten Wing - Handicap Toilet Room - Main Level

Description:

The grab bars are not continuous behind the toilet. The drain pipe for the sink is not insulated.

Install vertical grab bar at all toilets, typical.



16. Location:

Cafeteria - Lower Level

Description:

Compliant signage for the new town department office has not been provided.

ADA Survey Photographs



17. Location:

Kindergarten Wing - Corridor - Main Level

Description:

The handrail extensions need to continue in the same direction as the ramp for 12" minimum.



18. Location:

Corridor - Main Level

Description:

Accessible lockers have not been provided and/or designated within the school.



19. Location:

Art Classroom - Lower Level

Description:

Accessible storage areas and counter work areas within the art classroom have not been provided.

ADA Survey Photographs



20. Location:

Special Education Classroom - Main Level

Description:

Closet door handle hardware has not been updated



21. Location:

Raised Platform - Lower Level

Description:

The stairs to the platform are non-compliant.

ADA Survey Photographs



22. Location:

Gymnasium - Main Level

Description:

The drinking fountain is not provided with the high/ low operating feature.



23. Location:

Kindergarten Wing - Main Level

Description:

If the door is fully opened the signage cannot be located. The handicap accessible sign needs to be properly located.

ADA Survey Photographs



24. Location:

Handicap Parking Lot - Main Entrance

Description:

The existing handicap parking area requires upgrades; accessible signage, aisle widths, compliant accessible spaces, van accessible space, parking striping and layout.

Although not pictured, the lower school parking lot lacks accessible parking spaces.



25. Location:

Handicap Parking Lot - Main Entrance

Description:

The parking space has been designed as a van accessible parking space. The handicapped parking sign does not designate this as a van accessible space. The wheel stop location will not prevent the accessible route from being blocked.



26. Location:

Handicap Parking Lot - Main Entrance

Description:

The handicap parking space is not designated with a handicapped parking sign. The aisle is in conflict with a curb ramp.

ADA Survey Photographs



27. Location:

Site access from the public way.

Description:

Access from the main road is compromised by the lack of a curb ramp at the school side walk. Refer to Photo #35.



28. Location:

Bus Drop Off Area - Main Entrance

Description:

The bus loop / drop off area is not provided with a curb ramp to access the accessible route. Currently the area is designated as a fire lane.



29. Location:

Handicap Accessible Drop Off Area - Main Entrance Drive

Description:

The slope of the drop off area and the adjacent side walk compromise accessibility. Currently the area is designated as a fire lane despite the handicap accessible signage.

ADA Survey Photographs



30. Location:

North Parking Lot - Handicap Accessible Parking Area

Description:

If a car is parked up to the existing wheel stop the handicap accessible route will be blocked.



31. Location:

North Parking Lot - Handicap Accessible Parking Area

Description:

The cross slope of the existing handicap accessible parking is too steep. The handicap parking signage is not evident through the trees.



32. Location:

North Parking Lot - To Playground / Lower Level Accessible Entrance

Description:

The slope of the accessible walk from the parking area to the east side of the building is too steep. Refer to Photo #31

ADA Survey Photographs



33. Location:

Front Entrance

Description:

Accessible signage needs to be provided for the accessible main entrance and the other accessible entrances. Directional signage needs to direct the public to the accessible entrances and away from other entrances.



34. Location:

Main Entrance Drive - North Elevation
Looking East

Description:

The slope of the driveway, parking lots and the drop off area do not allow for proper accessibility.



35. Location:

Cross Walk at Main Entrance Drive -
North Elevation

Description:

A curb ramp and tactile warning need to be provided at the cross walk. Refer to Photo #27.

ADA Survey Photographs



36. Location:

Exterior Exit Stair from the Lower Level - East Elevation

Description:

The top of the existing handrails are too low. The handrail on the left does not return to a wall or the walk. The first stair riser is lower than the remaining risers.



37. Location:

Accessible Exit from the Lower Level - South Elevation

Description:

The slope of the exit to the public way is too steep for accessibility. Accessible signage is not provided to direct the public to the accessible entrance.



38. Location:

Walkway - East Elevation - South Parking Lot

Description:

The walk way does not provide the minimum width at the brick knee wall. An accessible exit from the Enrichment Lab would use this walkway. Refer to Photo #45, Enrichment Lab Door.

ADA Survey Photographs



39. Location:

Adjacent Site Parking Lot for the School
Playground / Fields

Description:

The handicap accessible parking space
requires upgrading for accessibility.



40. Location:

Work Room - Main Level

Description:

An accessible work space has not been
provided along the counter space.

ADA Survey Photographs



41. Location:

Handicap Accessible Drop Off Area -
Main Entrance Drive

Description:

The diagonal curb ramp requires tactile warning, a proper relationship with the cross walk and proper slope for an acceptable site accessible route.



42. Location:

Boys Locker Room - Lower Level

Description:

The vertical grab bar has not been provided.

ADA Survey Photographs



43. Location:

Boys Locker Room - Lower Level

Description:

The door maneuvering clearance has not been provided at the entrance door to the Boys Locker Room



44. Location:

Science Lab - Lower Level

Description:

Accessible classroom signage is not evident.

ADA Survey Photographs



45. Location:

Enrichment Lab - Lower Level

Description:

The door is marked and shown as the primary exit for this space. The designated exit is not an accessible exit leading to the public way.



46. Location:

Enrichment Lab - Lower Level

Description:

The push side accessible door clearance has not been provided.

ADA Survey Photo 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.



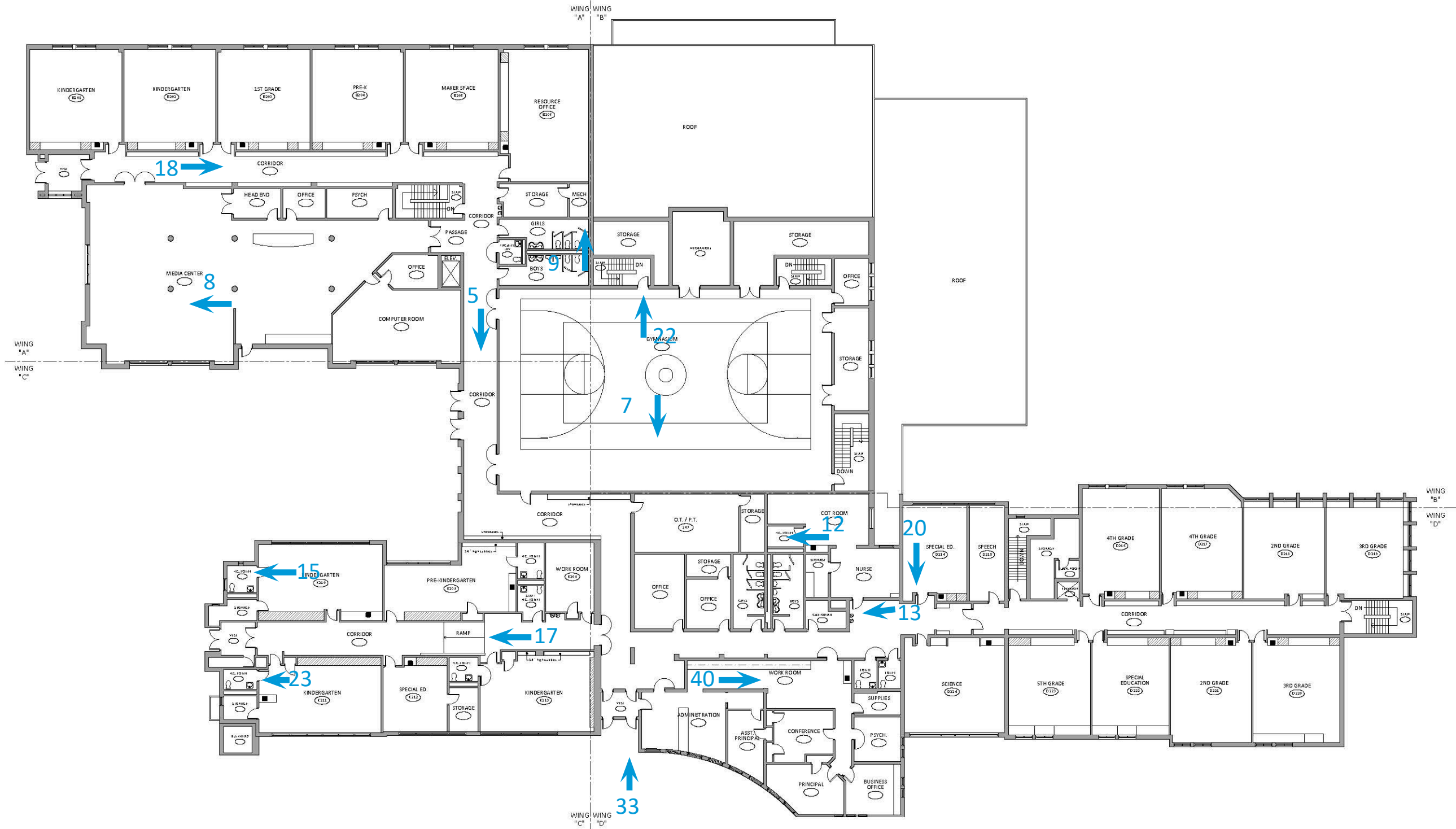
The Sherman School

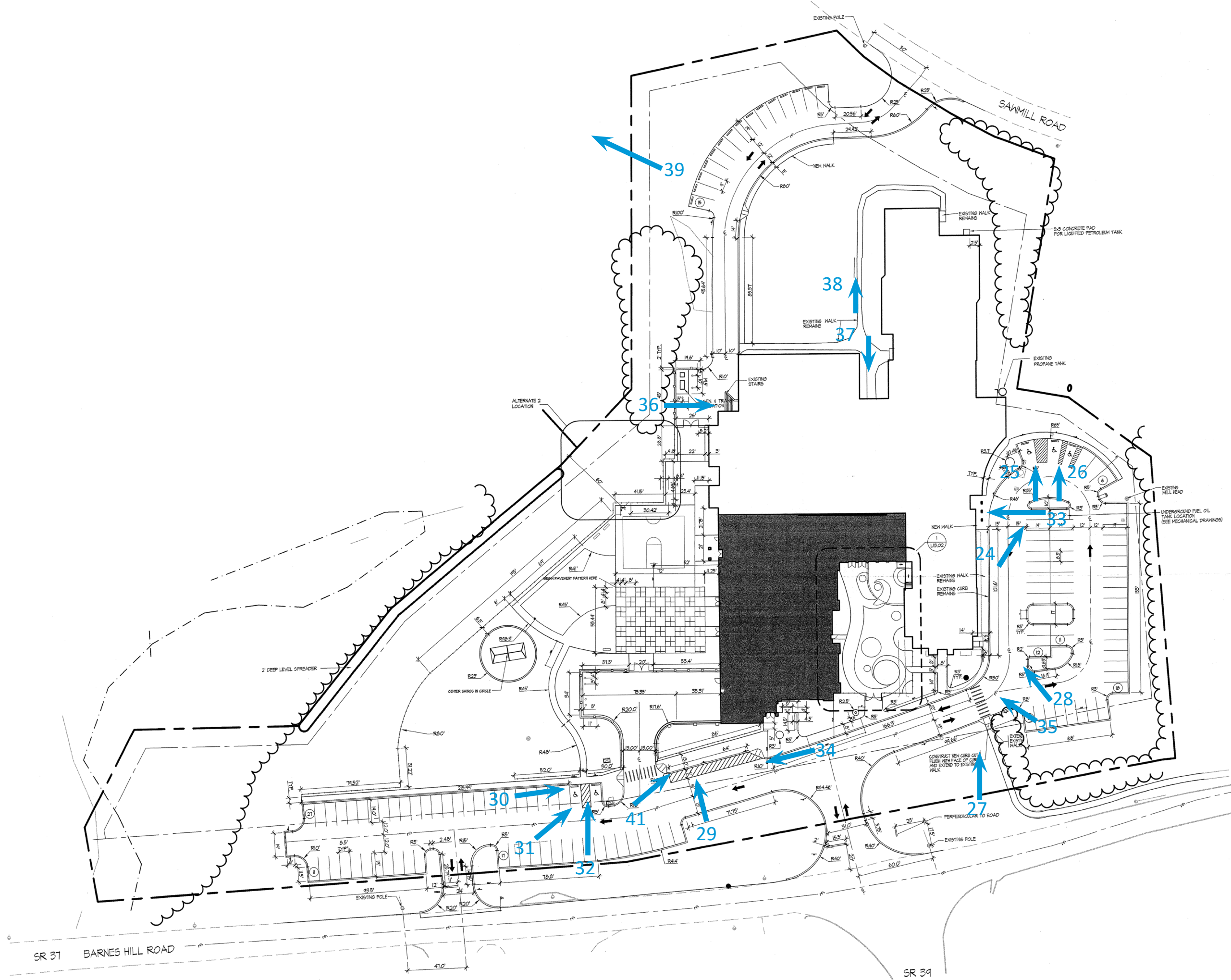
Lower Level Floor Plan



ADA Survey







ADA Compliance Survey

The Sherman School 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. Sherman School fails to meet some of these requirements, evident in the "ADA Compliance Survey".

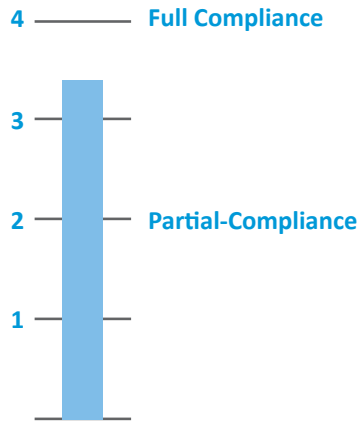
The building was evaluated based on a review of existing documentation, field verification of existing space usage and discussions with building staff to confirm existing space allocation and usage. The overall rating for ADA compliance is slightly above a fair rating.

The work recommended to address ADA compliance issues includes providing:

- Site Accessible Route - Due to the sloping site at the school: Provide compliant walkways, ramps, curb ramps, cross slopes, bus drop off areas, van accessible space, loading zones, accessible egress from the lower level at the south side of the building. Also consider updating the accessible parking at the school fields and adding an accessible south side parking area.
- Accessible Parking - Update and/or install new signage, parking aisles and cross slopes. Update and/or relocate accessible parking spaces at the building's north side. Provide accessible parking in the south parking lot.
- Curb Ramps - Install new and update existing curb ramps to complete the site accessible route.
- Entrances - In conjunction with Signage and Site Accessible Route provide a Main and Lower Level access from the handicapped parking areas to and from the designated accessible entrances.
- Accessible Route Interior - Designate an accessible interior route and update all compliance issues within that designated route. In conjunction with the Site Accessible Route provide the required accessible egress from each level of the building.
- Ramps - Provide compliant handrails at all interior ramps.
- Exterior Stairs - Update the one exterior stair from the building's Lower Level "Generator Stairs" with compliant handrails and riser heights.
- Doors - Provide the required door maneuvering clearances at all locations along the accessible route. In particular, the access to the Locker Rooms, Girls Handicapped Toilet at the Lower Level
- Drinking Fountains - Remove existing drinking fountains and provide new "Bottle Fill" and "Bottle Fill/Bubbler" fountains for accessibility. If existing drinking fountains are to remain, update (gymnasium and corridors) drinking fountains not in compliance.
- Signage - Exterior signage for accessible entrances, the Kindergarten Wing requires significant updating and the existing signage is dated and very hard to read, requiring restoration. Update all room signage to coincide with the current use of each space.
- Assembly Areas - Update book stack access and clearances within the Library, eliminate and/or replace stairs to the raised platform at the Multi-Purpose Room, provide access to the risers to the tiered Music Classroom and add companion seating and a compliant drinking fountain within the Gymnasium.

The work recommended to address ADA compliance issues is required regardless if the school moves forward with the larger educational enhancement plan. However, if the educational enhancement plan is approved then some of the cited items would be removed or address within the larger project.

ADA Compliance Survey



Section 7 : Site Survey

A large, stylized number '7' is positioned in the bottom right corner. The background features a light gray grid pattern consisting of a vertical line and a horizontal line that intersect to form a cross, with additional lines extending to the edges of the page.

7

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 Sherman Board of Education with an overview of the required work.



Map Data: Google

The Sherman School

Plan Drawings	Scanned Drawings
Photos	Site Survey June 2018
Date Built	1937
Site / Civil & Landscape Architect	Varies
Date(s) Additions	1953, 1961, 1971, 1992 & 2000
Zone	1
Gross Area (site)	7.21 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	Fair
Curbs	Bituminous / Concrete	Poor / Fair
Striping	Painted	Fair
Signage	Metal Panel	Fair / Good
Walkways		
Primary Surface	Bituminous / Concrete	Poor / Fair
Curbs	Bituminous / Concrete	Poor / Fair
Signage	Metal Panel	Fair / Good
Handicap Access	Concrete	Fair
Parking		
Total Spaces	124 Spaces: (25-Lower South Lot, 53-Northeast Lot, 43-Main Entrance)	Fair / Good
Designated Handicap Spaces	5 Spaces: (3-Main Entrance, 2-Northeast Lot)	Fair / Good
Primary Surface	Bituminous	Fair
Curbs	Bituminous/Concrete	Poor / Fair
Striping	Painted	Fair
Signage	Metal Panel	Fair / Good
Fields/Play Areas		
Field(s)	Grass	Good
Play Area(s)	Rubberized Mat	Poor
Play Scape(s)	Wood / Composite	Poor
Planting/Features		
Plant Beds	Mulch	Good
Trees/Shrubs	Typically Mature Deciduous / Evergreen Shrubs, Flowering Plants, Small Ornamental Bushes	Good

Special Features	The site has a flagpole	Good
Service Drive/ Loading Area		
Primary Surface	Bituminous	Fair
Curbs	N/A	N/A
Striping	N/A	N/A
Signage	N/A	N/A

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

Item	Summary
Site Lighting	Exterior wall lights are provided at building exits and building perimeter. Although not tested the units are standard units for the exterior usage. Additional exterior lighting is provided by bollard lights generally for walkway lights and pole lighting for parkings and large area lighting. We would recommend that a photometric analysis be complete to determine adequate foot-candle coverage for safety and security.
Driveways/Walkways	The bituminous paving areas are showing signs of failure by way of cracks and settlement of the base under the pavement. Nothing can be done to fix the settlement short of replacement however, extending the life can be accomplished by patching and sealing the cracks. The overall rating for the bituminous paving is fair. Bituminous curbs are in poor condition. Sections are missing and numerous sections are heavily cracked. Typically, snow plows are hard on bituminous curbs. Recommend extruded concrete curbs be used in parking areas. Concrete curbs are in fair condition, damaged by snow plows. They do not show signs of failure due to settlement. We do not recommend replacement until and unless the adjacent sidewalks are replaced. Then, an integral curb/sidewalk should be installed.
Parking	There are currently three parking areas at the building perimeter; a main entrance lot, a large lot located along Route 37 and a rear lot located at the south side of the building. Typically, the condition of the parking area is similar to that of the entrance driveways leading to them. Due to settling and pitch at the main entrance lot, ponding is occurring around these catch basins. The rear entrance drive and associated parking lot are in fair condition.
Play Areas	There are two play areas on school property, both in poor condition. Town fields are adjacent to the school and are used by the students but outside the scope of this report. The play area between the K-Wing and Library should be abandoned or replaced pending the plan for educational enhancements at the school. The lower level play area is made up of rubberized surfacing, hard paving and a small grass area. We recommend complete removal and redesign of the lower play area.

Utilities Site Survey

The following is a data summary of the site utilities 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 the various utilities.

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)

	Description	Condition
Gas	N/A	N/A
Propane	LP tanks	Good
Electricity	800 Amp Service to Interior Transformer	Good
Water	3" From Well	See Report in Appendix
Sewer	N/A	N/A
Septic	(2) 5,000 Gallon Tanks (Per Site Septic Plan 6/2/99)	Good
Well	(2) Supply to Building	See Report in Appendix
Oil Tank(s)	10,000 Gallon UST (Per Dwg. M3.01 - 6/2/99)	Fair

Site Survey Photographs



1. Location:

Main Entrance Parking Lot

Description:

Damaged Concrete Curb



2. Location:

Main Entrance Parking Lot

Description:

Ponding at Storm Drain / Fuel Oil Tank Location



3. Location:

Main Entrance

Description:

Entrance Ramp not in Compliance -
Tactile Missing

Site Survey Photographs



4. Location:

Main Entrance Parking Lot

Description:

Ponding / Non-Compliant Drop-off



5. Location:

Kindergarten Playground

Description:

Wood/Composite Play-scape , Worn Rubberized Mat

Wood play elements in poor condition.



6. Location:

North Parking Lot Entrance

Description:

Non-Compliant Drop-off Area

Site Survey Photographs



7. Location:

Varies

Description:

Patched Storm Drain



8. Location:

North Parking Lot along Route 37

Description:

Damaged Bituminous Curbing



9. Location:

Walkway to East Playground

Description:

Damaged Bituminous Walkway / Non-Compliant Pitch / Railings

Site Survey Photographs



10. Location:

Playground at East Side of Building

Description:

Damaged Rubberized Mat / Damaged Fence Rails

Wood play elements in poor condition.



11. Location:

Service Area East Side of Building

Description:

Emergency Generator



12. Location:

Egress Area "D" Wing East Side of Building

Description:

Damaged Bituminous Walkway

Site Survey Photographs



13. Location:

Egress Walkway "D" Wing East Side of Building

Description:

Egress Accessible Ramp Non-Compliant
Handrails Required



14. Location:

Main Entrance Parking Lot

Description:

Van Accessible Handicap Space Required



15. Location:

Exit Stair West of Multipurpose Room

Description:

Handrails not in Compliance

Site Survey Photographs



16. Location:

Main Entrance Parking Lot

Description:

Well Cap



17. Location:

Route 37 Looking West`

Description:

Bituminous Sidewalk



18. Location:

Main Entrance Parking Lot

Description:

Concrete Sidewalk at Handicap
Accessible Parking Spaces

Site Survey Photographs



19. Location:

Kindergarten Playground

Description:

Accessible Ramp from Kindergarten
Room 1310



20. Location:

Northeast Parking Lot

Description:

Handicap Accessible Parking Spaces



21. Location:

Northeast Parking Lot

Description:

Access to Handicap Accessible Parking
Spaces

Site Survey Photographs



22. Location:

Rear Parking Lot

Description:

Site Lighting



23. Location:

Exit Stair West of Multipurpose Room

Description:

Exterior Building Lighting/Security
Camera



24. Location:

East Elevation (Northeast)

Description:

Service Area / Retaining Wall

Site Survey Photographs



25. Location:

Sports Field

Description:

Tennis Courts, Soccer and Baseball Fields shown on Town property. The condition survey of the fields are outside the scope of this study. Photo shown for information only.



26. Location:

Sports Field

Description:

Restroom Facilities located on Town property. The condition survey of this facility is outside the scope of this study. Photo shown for information only.

Site 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.

Site Recommendations

The Sherman School is 81 years old, and the additions /renovations are between 18 - 65 years old. The existing site is in fair to good condition. See explanation below

The site at The Sherman School was evaluated. Available parking accommodates 124 vehicles, with five handicap accessible spaces available. Site utilities include well water, septic, oil tank and electrical service.

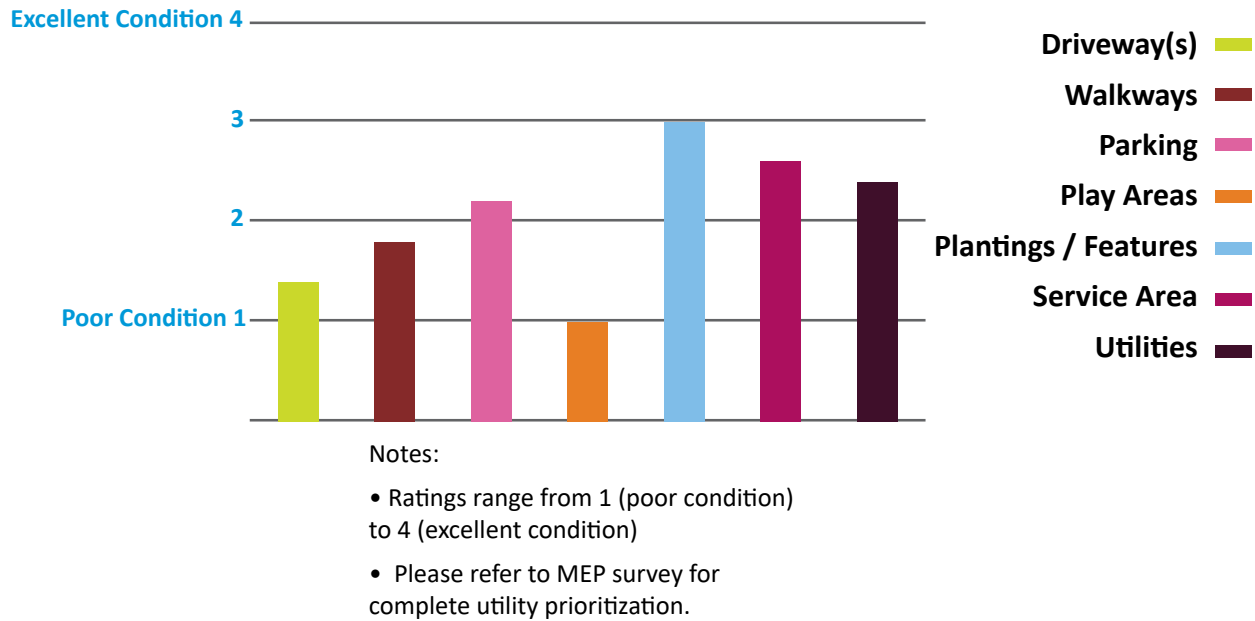
Overall the site is rated as fair. Certain elements of the site are poor, such as the play areas and some elements are rated good, such as plantings. Pending determination of the plan for educational enhancements the scope of recommendations will differ. In general the following items need to be addressed:

- Bituminous paving and base replacement to eliminate ponding and improve drainage.
- Bituminous curb replacement - consider extruded concrete for better wear.
- Concrete curb replacement - only recommended if settlement becomes an issue.
- Bituminous sidewalks - replace as needed to address accessibility and damaged areas.
- Replace play areas including surface materials and equipment.
- Landscaping (trees and shrubs) are mature and in some cases too close to the building - remove and/or trim as needed. See additional comment in the roof recommendation section for tree limes overhanging the roof.
- Upgrade Well System - water quality is an concern (See Plumbing Survey write-up)
- Service area recommendations include providing concrete pads for the dumpsters and replacement of the wood screen fence with a material better suited for the long term.

The lower play fields, owned by the Town of Sherman, are utilized by the school students during the school day. If the school intends to continue using the fields we recommend an accessible ramp to prevent ADA equal access claims being made. Note that current property lines indicate that the portion of the site where the ramp might be constructed is on town property and therefore not eligible for reimbursement under a school grants construction project. If the property line can be altered to allow ramp construction to take place on school property then the ramp could be eligible for reimbursement.

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.



Section 8 : Planning Options



8

Educational Enhancements - Space Utilization

The purpose of this section is to evaluate the current space utilization, programs and space adjacencies of the existing school. Sherman School last addressed program enhancements in 2000. Based on staff survey information, individual meetings with administration, staff and teachers we have concluded that the following three areas/ programs need to be updated to meet current educational design directions. These areas include the Multi-Purpose / Music Areas, Library/ Computer Lab, and Pre-K / Kindergarten Classrooms. In addition to these major changes the following programs / spaces require significant updates to meet current programs – Science Lab and Prep Room, Main Office, and Art Room. As we studied the room adjacencies we are recommending additional changes to OT/PT, Maker Spaces, Staff Workroom/ Lounge and Resource spaces.

The following list of spaces and comments offer a summary of our findings.

Room / Space / Program	Comment
ADMINISTRATION	
Superintendent / Principal Office	Meets standards – No recommended changes
Assistant Principal Office	Meets standards – No recommended changes
Main Office Conference Room	Meets standards – No recommended changes
General Office / Reception	Space shall be modified to permit waiting area and better visual/ security of the main entrance
Executive Assistant	Space shall be partitioned from main office reception to allow privacy without eliminating the need to provide main office coverage as needed
Business Office	Meets standards – No recommended changes
Storage	Meets standards – No recommended changes
Main Office Work Room	Meets standards – No recommended changes
Curriculum Specialist Office	Meets standards – No recommended changes
Teacher Lounge / Workroom	Space to be relocated and Unisex toilet room added for better adjacencies.
NURSE'S AREA	
Nurse's Office	Meets standards – No recommended changes
Student Rest Area	Meets standards – No recommended changes
Unisex Restroom	Meets standards – No recommended changes
Storage	Meets standards – No recommended changes
GENERAL PURPOSE CLASSROOMS	
Pre-Kindergarten	Space to be relocated for better adjacencies and usable space
Kindergarten	Space to be relocated for better adjacencies and usable space
Cubby Area	Space to be added
Breakout Space	Space to be added

1st Grade	Meets standards – No recommended changes
2nd Grade	Meets standards – No recommended changes
3rd Grade	Meets standards – No recommended changes
4th Grade	Meets standards – No recommended changes
5th Grade	Meets standards – No recommended changes
6th Grade	Meets standards – No recommended changes
SPECIALTY CLASSROOM SPACES	
Spanish Classroom	Meets standards – No recommended changes
Health Classroom	Meets standards – No recommended changes
Science Classroom – (grades 3-5)	Meets standards – No recommended changes
Science Lab – (grades 6-8)	Space shall be modified to provide ADA Student Lab Stations, Teacher Demonstration Station and Storage casework. Lab station to be provided with gas, water, electric and data. Fume hoods shall also be considered.
Science Prep Room	Space shall be modified to provide proper storage.
Math Classroom	Meets standards – No recommended changes
Social Studies Classroom	Meets standards – No recommended changes
Band Room	Space to be relocated for better adjacencies
Vocal Music	Space to be relocated for better adjacencies
Art Room	Space to be modified for ADA
Kiln Room and Storage	Spaces to be modified to meet standards
Maker Space	Space to be relocated for better adjacencies and usable space
TV / Video	Space to be relocated for better adjacencies and usable space
Library	Space to be relocated to permit better space utilization and adjacencies for the Pre-K and Kindergarten classrooms.
Computer Lab	Space to be relocated to permit better space utilization and adjacencies for the Pre-K and Kindergarten classrooms.
STUDENT SUPPORT SERVICES	
OT/PT	Space to be relocated with additional usable area.
Speech Office	Meets standards – No recommended changes
Physiology Office	Space to be relocated for better adjacencies
Guidance Room	Meets standards – No recommended changes

Special Education Office	Space to be relocated for better adjacencies and usable space
Special Education Classrooms	Meets standards – No recommended changes
Resource Rooms	Meets standards – Minor changes recommended with the relocation of one resource room
ASSEMBLY SPACES	
Gymnasium	Meets standards – No recommended changes
Gym Locker Rooms	Meets standards – No recommended changes
Multi-Purpose Room	Space to be relocated for better adjacencies
Cafeteria	Meets standards – No recommended changes
ANCILLARY SPACES	
Kitchen and Related Spaces	Meets standards – No recommended changes
Custodial Spaces	Minor changes as needed
Storage Spaces	Minor changes as needed
Facility Office / Workroom	Space relocated near cafeteria
Mechanical / Electrical Rooms	Meets standards – No recommended changes

Planning Recommendations

- For reasons outlined in other portions of this study we recommend complete demolition of the existing "K-wing" classrooms. This demolition is key to fulfill other recommendations noted below.
- Construct a new Performing Arts wing for the multi-purpose room, stage, vocal music and band. Add a stage craft area. This provides an opportunity to fully develop the educational program for the performing arts program. The suggested location, as shown on the following pages, provides a easy access for after school events and town uses. This location also provides a secluded area for the nosier uses of band and vocal music programs.
- Relocate the Library to existing multi-purpose space to include Computer / Digital Art Studio, TV/Video Room, student printer location, Media Center, Work Room / Office. The existing multipurpose areas are will suited in location, size and space quality for the new functions. The removal of the tier risers and stage eliminate major code deficiencies. Demolition of the small storage rooms along the exterior wall provides an opportunity to install windows for natural light. The proposed location for the new Media Center more centrally located for access to all grade levels.
- Re-purpose the existing library for Pre-K and Kindergarten classrooms, cubbie area and break-out space. The final major space re-purposing addresses the need to bring the Pre-K, Kindergarten and 1st grade together in a wing. The existing library space allows potential designer creativity for the classrooms, great natural light, high ceilings, and current air conditioning. The adjacent exit could permit access for separate drop off and pick up.
- Update Art Room and Kiln Room and Fully renovate Science Lab and Prep Room
- Renovate Lobby Space, Security Vestibule and Main Office
- Relocate and update Special Education Director's Office.
- Relocate and update OT/PT and Resource Room in "New K-Wing"
- Re-purpose exterior space between "New K-Wing" and new Performing Arts wing for Multi-Purpose Exterior Space ie: seating, performance area and small play area
- Provide an outdoor classroom and upper grade gathering space.

244 Planning Options

The Town of Sherman currently receives a 25.71% reimbursement for authorized and approved construction grant projects. The State of Connecticut restricts some items from reimbursement. These items can be found on the States Department Education web site. Furthermore, the state reduces reimbursement if the building exceeds the space standards. The allowable spaces standards are based on total enrollment and grade levels.

The charts below demonstrate how the proposed educational enhancements will affect the Town's reimbursement rate.

- Existing Building Area: 85,745 SF
- Demolished Area
 - K-Wing: (3,933) SF
 - Storage Rooms LL: (421) SF
- Proposed New Building Area
 - Performing Art's Wing: 5,831 SF
- TOTAL PROPOSED BUILDING AREA: 87,222 SF

State Space Standards allow 141.6 SF per Student. Note - the State's Office of School Construction Grants have been in the process of modifying the way this calculation is done and therefore may be different in the future.

# of Students	Allowable SF	Proposed Building Area	SF Ratio between Allowed and Proposed	Current Reimbursement Rate	Allowed Reimbursement Rate
300	42,480	87,222	.487	25.71%	12.5%
400	55,040	87,222	.631	25.71%	16.2%
500	68,800	87,222	.788	25.71%	20.26%
600	82,560	87,222	.946	25.71%	24.32%

The chart above clearly demonstrates how enrollment changes the allowable building area and the reimbursement rate the town receives.

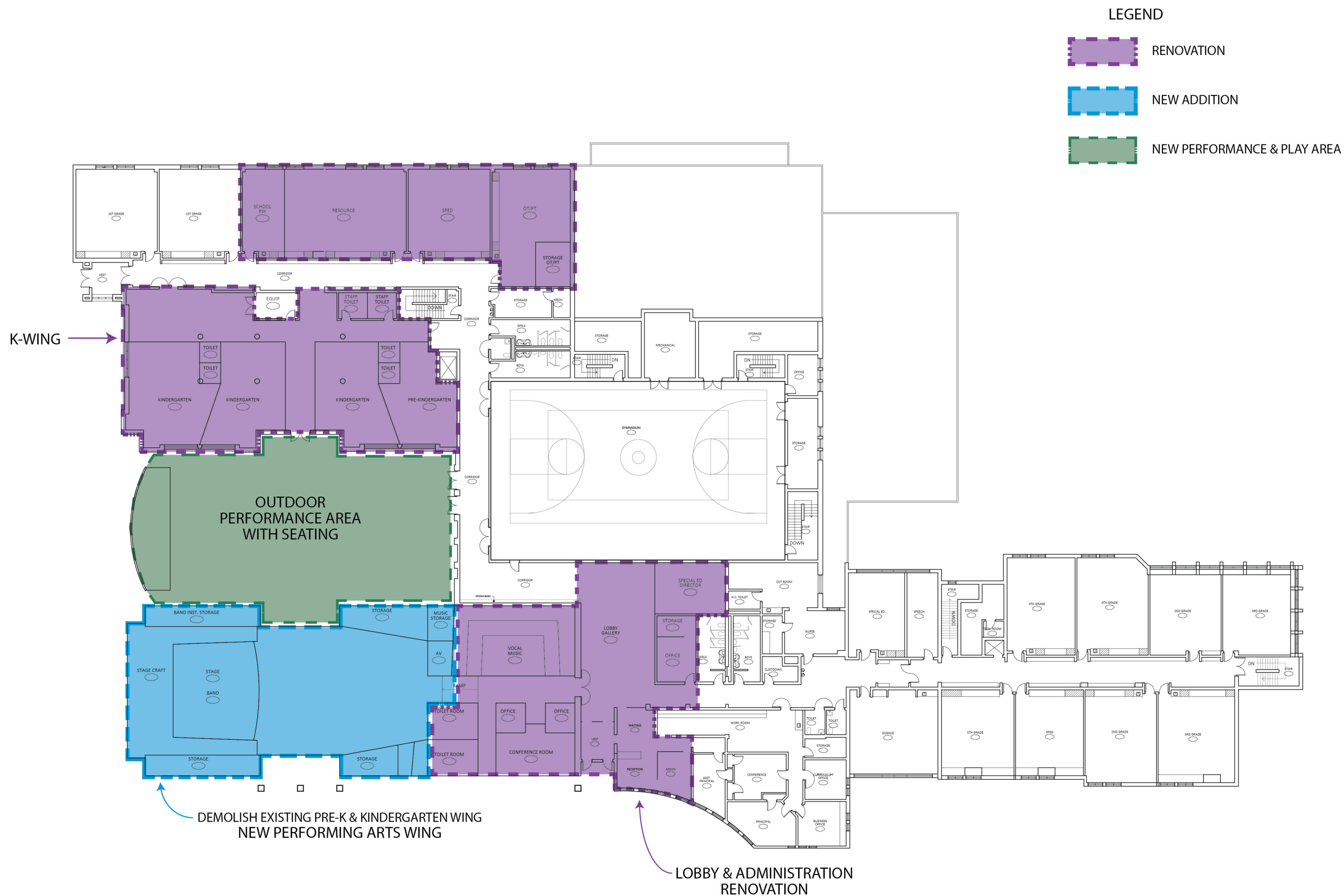
Even without the educational enhancement additions the school exceeds the allowable space standards at it's current enrollment level.

We recommend that before any project is moved forward a meeting take place with the state to discuss current standards and eligibility.



The Sherman School

Proposed Main Level Floor



Section 9 : Opinion of Probable Costs

9

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 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 The Sherman School.

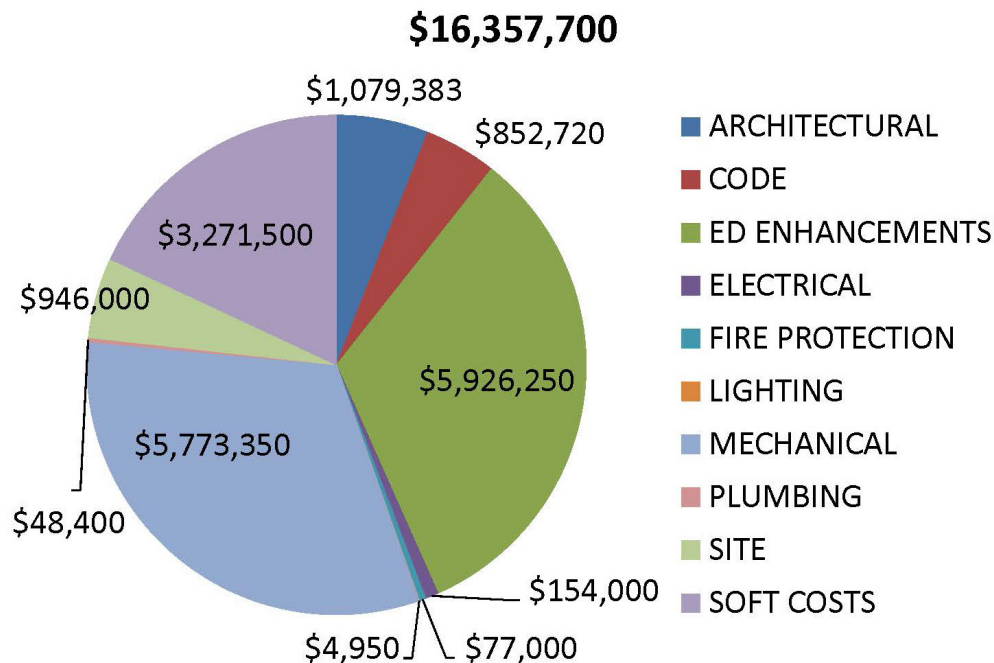
The estimate of work required at The Sherman School is based on meeting current applicable code and safety requirements. Non-code related items necessary to meet suitable architectural standards for occupancy are also included. Both unit and square-footage prices were utilized to prepare the estimate, based on Means Building Construction Cost Data and recent bid data then reviewed by an independent cost estimator.

The total cost including construction, contingencies, and soft cost totals \$16,357,698. The project may be approached in several ways.

1. Bonding a single large project - This approach will result in the lowest cost to the town and have the best opportunity for state reimbursement. We estimate that the project planning/design phase would take 12 months and the construction phase would last between 18 - 24 months.
2. Bonding Multiple projects by category or priority - This approach will result in greater overall costs due to escalation over multiple years but may be more manageable financially for the Town of Sherman. It may also have the result in completing work in one phase only to remove it in a future phase.
3. Multiple projects through capital budgets and/or town Bonding - This approach, similar to option 2 above gives greater flexibility to the town and the project funding approach.

The cost chart below summarizes the costs for each category of the study. See the appendix for the complete detailed cost budget.

Budget by Category



Section 10 : Appendix



10

Appendix

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

This appendix includes the following items:

- Asbestos Management Plan
- Water System Report
- Domestic Water Supply Study
- Existing and Proposed Square Footages
- Full ADA Report

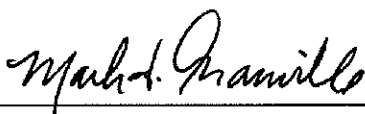
Asbestos Management Plan

ASBESTOS MANAGEMENT PLAN UPDATE

SHERMAN SCHOOL
2 Route 37 East
Sherman, Connecticut 06784

DATE: April 22, 2015

PLANNER: Mark F. Granville
Brooks Environmental Consulting.
9 Isaac Street
Norwalk, CT 06850
203-853-9792



CT licensed Inspector/Planner
License #000009 expires 5-31-15

BUILDING: SHERMAN SCHOOL**A. RECOMMENDED RESPONSE ACTIONS**

1. Removal
none.
2. Repair
none.
3. Enclosure
none.
4. Encapsulation
none.
5. Operations & Maintenance
9"x9" floor tile and associated mastic under HVAC unit in mechanical room off gymnasium.

B. JUSTIFICATION OF RECOMMENDED RESPONSE ACTIONS

Material is in good condition and is non-friable. In this case, Operations & Maintenance is the least burdensome method which will protect public health.

C. SCHEDULE AND RESOURCES FOR IMPLEMENTATION

1. Removal
2. Repair
3. Enclosure
4. Encapsulation
5. Operations & Maintenance Program

Estimated cost:	nominal
Start Date:	ongoing
Completion Date:	upon removal of all ACBM from building
5. Three-Year Reinspection (2017)

Estimated cost:	\$450
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THREE YEAR REINSPECTION OF ACBM

SHERMAN SCHOOL
2 Route 37 East
Sherman, Connecticut 06784

DATE: April 22, 2015

INSPECTOR: Mark F. Granville
Brooks Environmental Consulting
9 Isaac Street
Norwalk, CT 06850
203-853-9792



CT licensed Inspector/Planner
License #000009 expires 5-31-15

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Asbestos Management History	1
Statement of Limitations.....	2
Reinspection Findings: Summary of ACBM	3
Building Information Sheet.....	4

INTRODUCTION

This report contains the results of a three-year reinspection of asbestos-containing building materials (ACBM) following the protocols of the State of Connecticut Department of Public Health (DPH) "Asbestos-Containing Materials in Schools" regulation.

The information presented here was compiled by Mark F. Granville, an accredited asbestos inspector under the EPA model accreditation plan and the DPH training requirements for asbestos consultation services. Mr. Granville completed his original accreditation training at the Tuft's University Asbestos Information Center, Center for Environmental Management, Medford, Massachusetts in 1987. He is currently operating under an annual refresher certificate from Cardno/ATC, West Springfield, Massachusetts and is licensed in the State of Connecticut as an Asbestos Building Inspector/Management Planner.

The "Building Information Sheet" summarizes the extent of the facility at the time of this reinspection. The building structure has not changed since the previous reinspection.

ASBESTOS MANAGEMENT HISTORY

Sherman School was inspected for asbestos-containing materials in 1988 under the U.S. Environmental Protection Agency (EPA) "Asbestos-Containing Materials in Schools" regulations. The last 3-year reinspection was performed in 2011.

An asbestos inspection and asbestos abatement design was carried out by Connecticut Valley Technical Services, Inc. as part of the 2000 addition and renovation project. According to the available records, all interior asbestos-containing materials, except for a small amount of floor tile under an HVAC unit, were removed during the project. This included removal of boiler lagging and breeching insulation and demolition of the boilers, removal of floor tiles and underlying mastic throughout the school, removal of plaster ceilings in the locker rooms, removal of mud-type pipe fitting insulation throughout the school, removal of transite panels behind bookcases, removal of transite countertops from science and art rooms, and removal of pipe insulation and contaminated fiberglass batt insulation from the attic. The designer was A. David Lynch, Connecticut Valley Technical Services, Cromwell, Connecticut. The abatement contractor was Connecticut Abatement Technologies, West Haven, Connecticut. The project monitor was Applied Environmental Control, Watertown, Connecticut.

Asbestos-containing black mastic was discovered under new sheet flooring in the entry lobby in 2008. Subsequently, 1327 square feet black mastic and yellow adhesive and associated blue pliable linoleum with gray backing was removed from the lobby, hallway, and vestibule. The designer was Mark Granville, Brooks Environmental Consulting, Norwalk, Connecticut. The abatement contractor was P&T Asbestos Contractors, Stamford, Connecticut. The project monitor was Brooks Environmental Consulting, Norwalk, Connecticut.

New roofing was installed during the summer of 2011. Old bituminous built-up material was removed. During the project, asbestos-containing insulation was discovered on two roof drain

bowls in stairwells near the gymnasium. The material was removed with glovebags by personnel from ENCO, Waterbury, Connecticut.

No bulk samples were collected during this reinspection.

STATEMENT OF LIMITATIONS

Inspection of school buildings for suspect asbestos-containing building materials under the Federal and State asbestos-in-schools regulations generally does not include demolition of structures to find hidden materials. It is thus possible that renovation or demolition preceded by a NESHAP level asbestos inspection may uncover previously unknown suspect materials. Such possibilities include, but are not limited to: (1) roping between sections of a previously abated sectional boiler, (2) insulation board behind fire brick in the base of boilers, (3) pipe insulation inside wall chases, (4) floor tile and mastic under other flooring, (5) glue daubs under acoustic tile, (6) glue daubs behind chalk boards and/or tack boards, (7) insulation inside walls, and (8) materials previously excluded from inspection by an architect or engineer statement.

REINSPECTION FINDINGS
Summary of ACBM

AREA	MATERIAL	LOCATION/FUNCTIONAL SPACE	8/30/2011 CONDITION	4/22/2015 CONDITION	CHANGE IN CONDITION
101	30 SF 9"x9" brown asphalt floor tile with chek pattern	under HVAC unit in mechanical room off gymnasium	nf ND	nf ND	none
102	30 SF black mastic	under area 101	nf ND	nf ND	none

Condition Codes: *fr = friable* *ND = no damage*
 nf = non-friable *D = damaged*
 SD = significant damage
 * = *thermal system insulation which has an undamaged air-tight cover*



BUILDING INFORMATION SHEET 3-Year AHERA Reinspection

DATE

April 22, 2015

BUILDING NUMBER AND NAME

1

Sherman School

BUILDING LOCATION/ADDRESS

2 Route 37 East
Sherman, CT 06784

NAME OF LOCAL EDUCATION AGENCY

Sherman Public Schools

Number of Floors in This Building

2

Number of Basement Levels

0

Number of Attic Levels

1

Number of Other Levels

0

Original Construction Date

1937

Addition/Renovation Date 1

1961, 1990

Addition/Renovation Date 2

2000

Estimated Gross Square Feet

48,175

Building Construction Type

masonry and steel

Building Use

%Floor Space

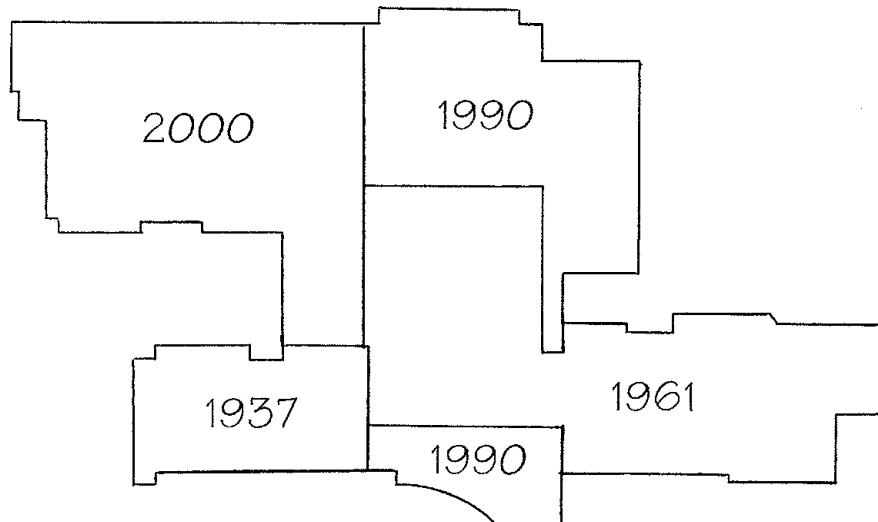
FRIABLE
ACM
PRESENT

no

NON-FRIABLE
ACM
PRESENT

yes

Friable ACM includes intact TSI



Water Status Report

Sherman Water Status

Testing Results

Tab: CL = Chlorides; S = Sodium;

All measurements are mg/liter. The state limits on sodium and chloride are: Sodium is 100 mg/l and chloride is 250 mg/l

Old Town Hall:

May 15 CL 458; S 130
Jan. 16 CL 536; S 188
May 16 CL 357; S 139
Nov. 16 CL 556; S 181
Jan. 17 CL 384; S 176
May 17 CL 331; S 128
Nov. 17 CL 373; S 147
Jan. 18 CL 342; S 147

Mallory Town Hall:

May 15 CL 378; S 97
Jan. 16 CL 333; S 85
May 16 CL 445; S 122
Nov. 16 CL 426; S 89
Jan. 17 CL 365; S 86
May 17 CL 277; S 87
Nov. 17 CL 314; S 105
Jan. 18 CL 228; S 84

EMS/Firehouse Building:

May 15 CL 774; S 253
Jan. 16 CL 437; S 197
May 16 CL 576; S 238
June 16 CL 437; S 197
Nov. 16 CL 430; S 259
Jan. 17 CL 370; S 254
May 17 CL 274; S 149
Nov. 17 CL 330; S 210
Jan. 18 CL 276; S 160

Sherman School:

May 15 CL 548; S 144 Rear well CL 578; S 156
Jan 16 CL 356; S 114 Rear well CL 360; S 116
May 16 CL 314; S 100 Rear well CL 290; S 98
Nov. 16 CL 396; S 138 Rear well CL 207; S 76
Jan. 17 CL 278; S 88 Rear well CL 277; S 86
May 17 CL 264; S 91 Rear well CL 394; S 134
Nov. 17 CL 213; S 72 Rear well CL 342; S 122
Jan. 18 CL 220; S 78; Rear well CL 345; S 125

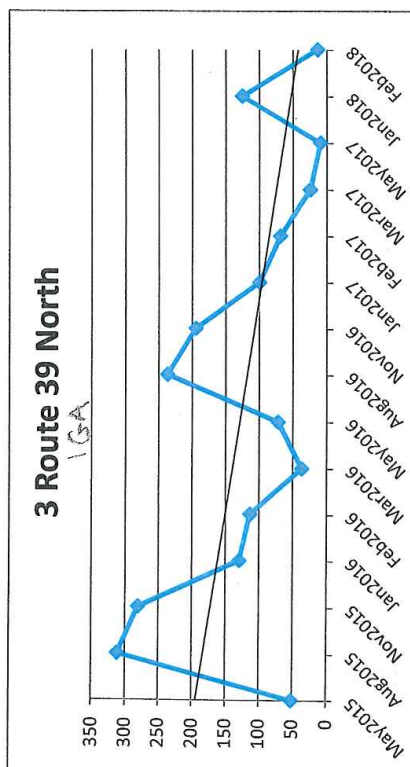
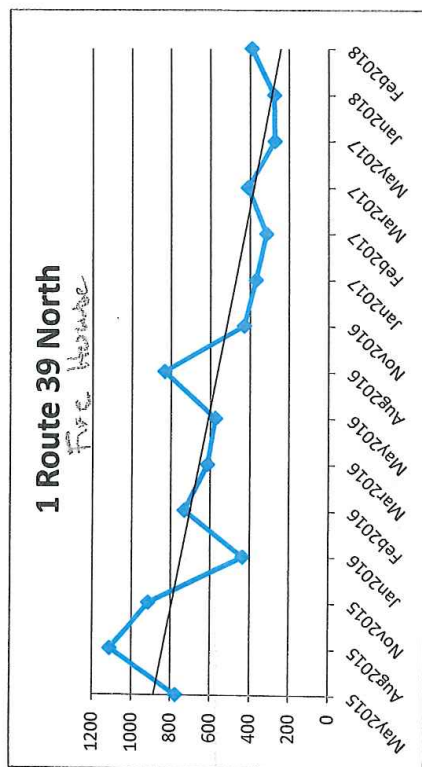
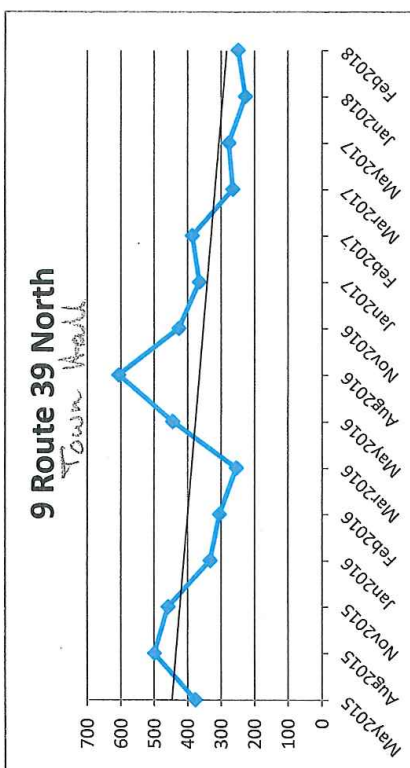
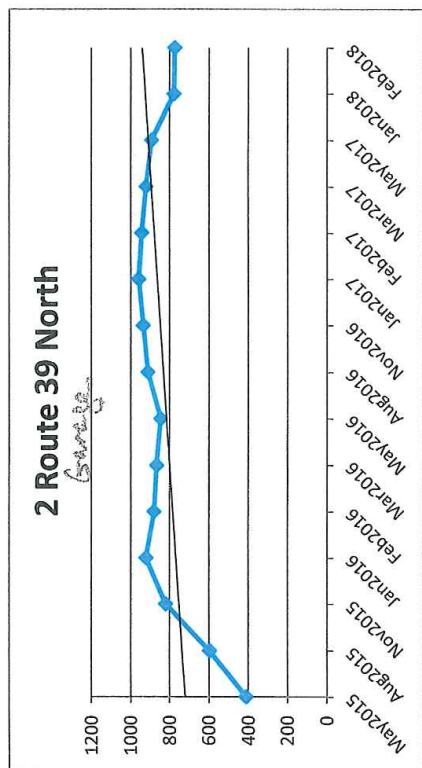
2018

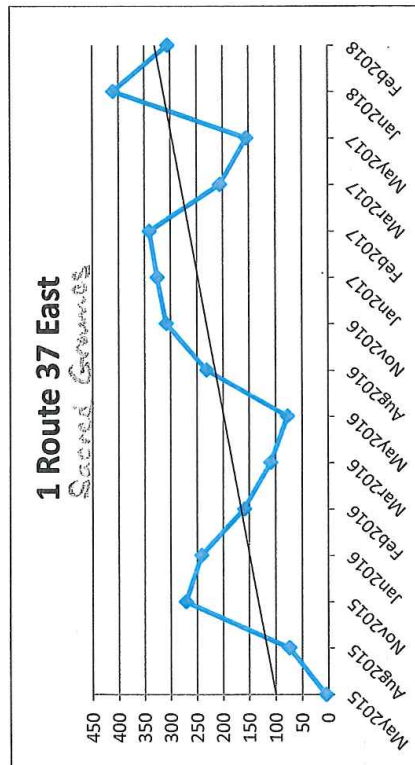
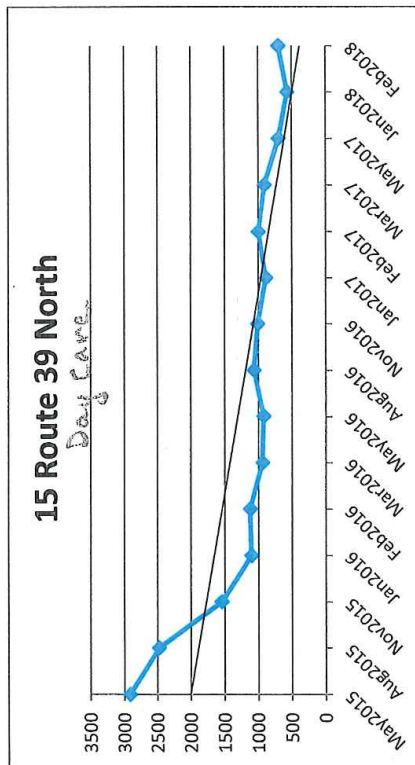
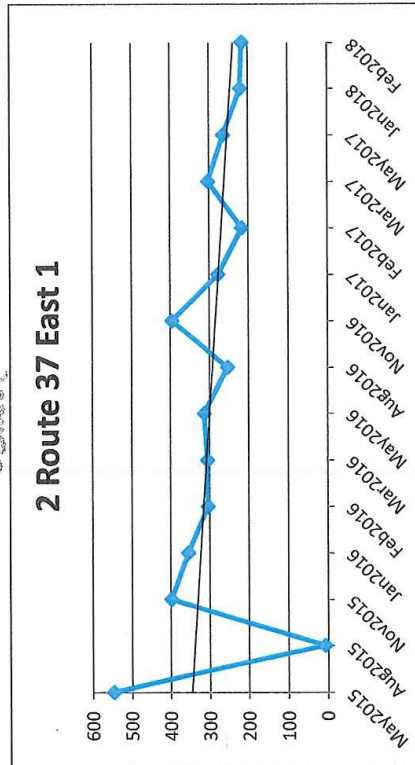
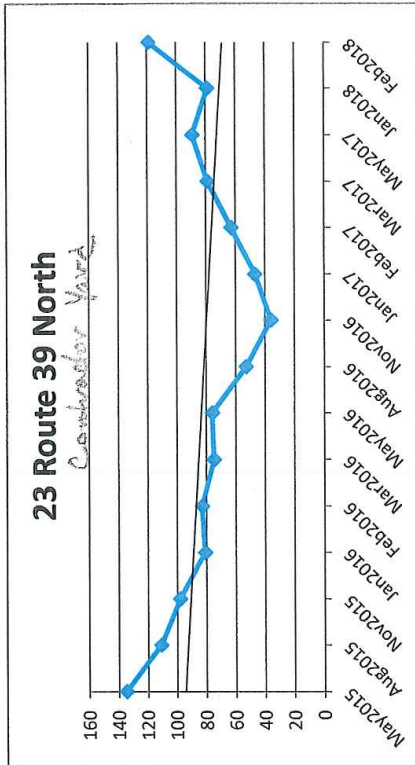
January 30: Spoke on the phone with UCONN Professor Gary Robbins who had provided Sherman with a water analysis proposal.

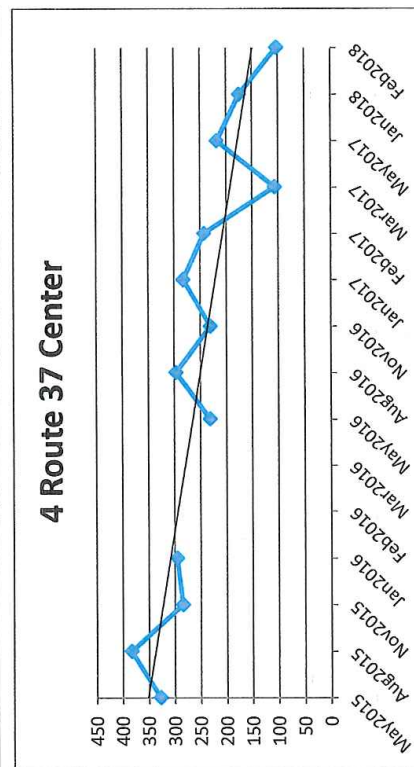
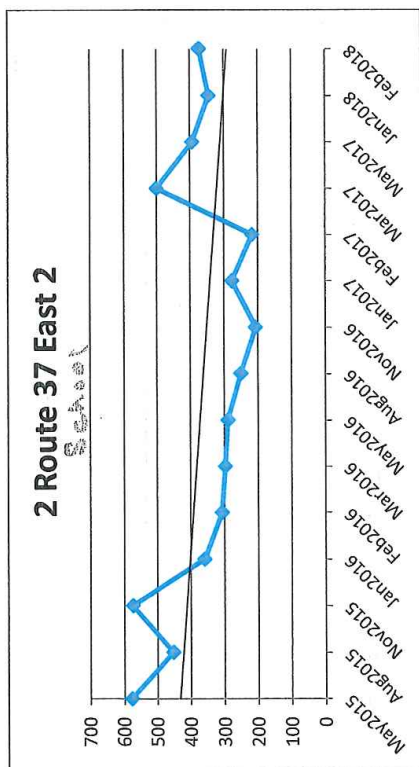
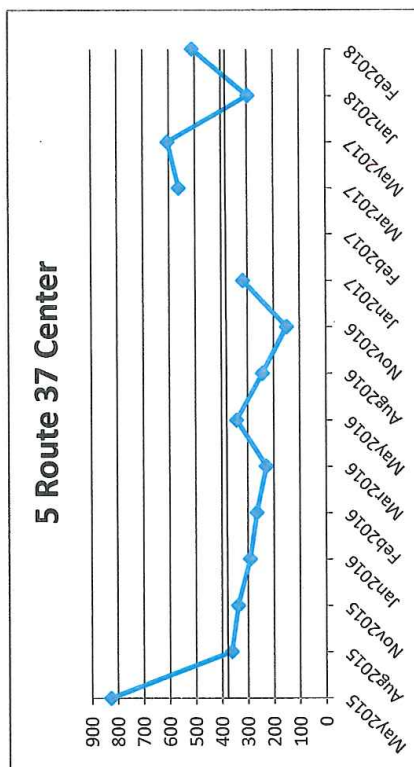
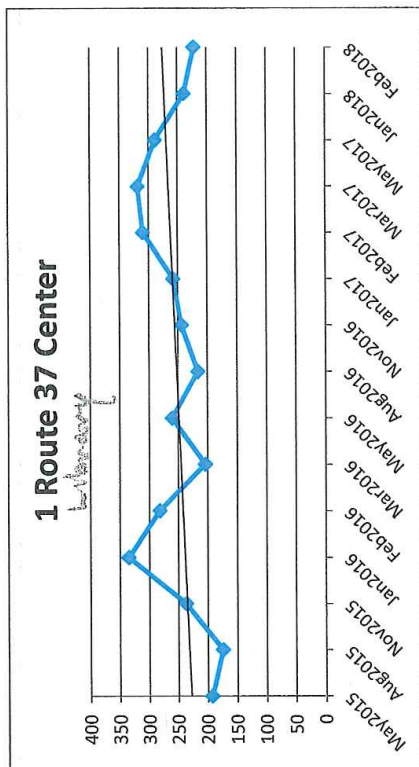
February 16: Tim Simpkins, Marc Cohen (Solution Water Program Manager at Atlantic States Rural Water Association), and I met in discussion about Sherman's water issues. We discussed the proposal from Gary Robbins and also went over the information from the 4 undergraduates of George Washington University who provided data on our situation.

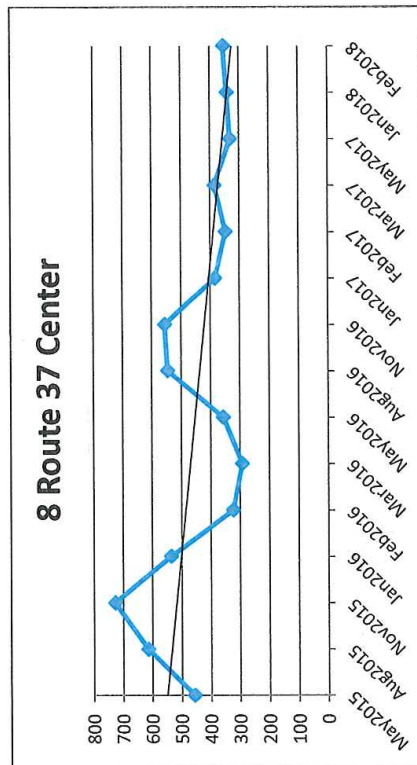
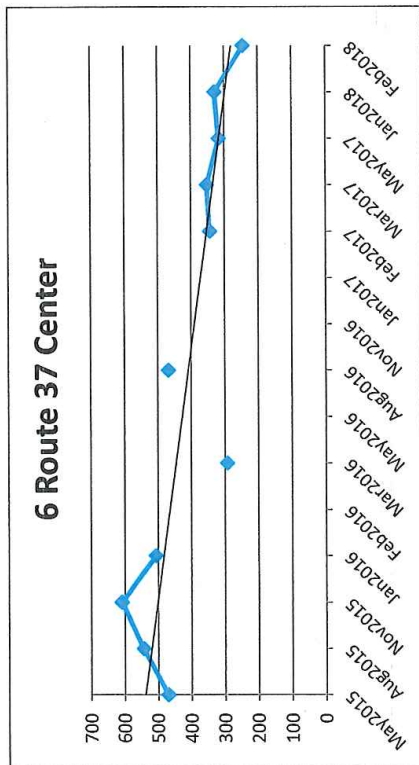
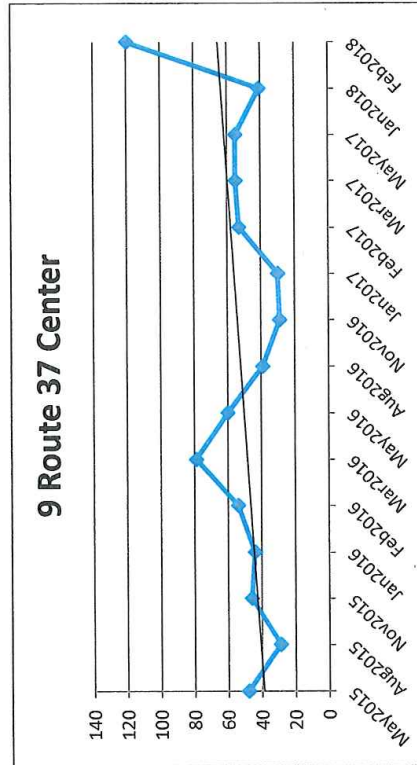
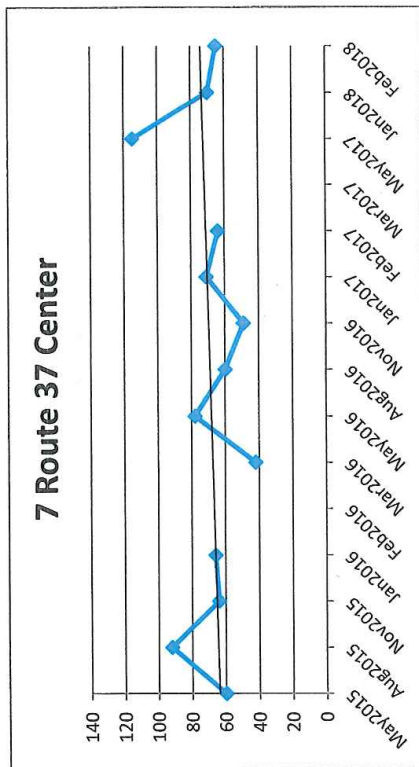
February 20: Met with a private geologist (Paul Jaehnig) to discuss possible solutions to the high sodium and chlorides found in Sherman water.

March 23: Set to meet with Lori Mathieu and Pat Bisacky of the Connecticut state water commission along with Tim Simpkins, Marc Cohen, and Paul Jaehnig. This meeting will cover possible solutions to remediate our high levels and to agree on a way to use less de-icing product on our state roadways.

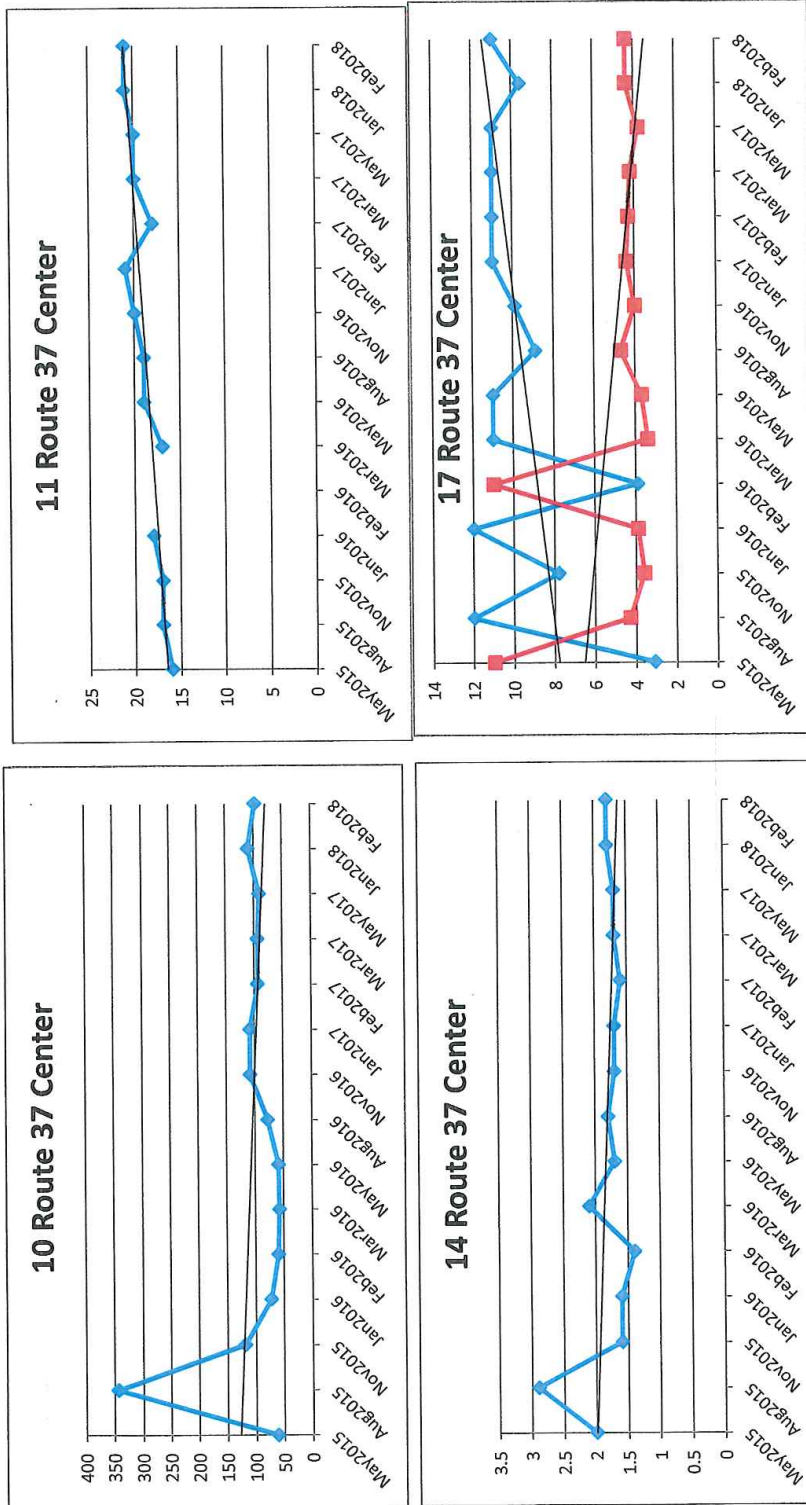


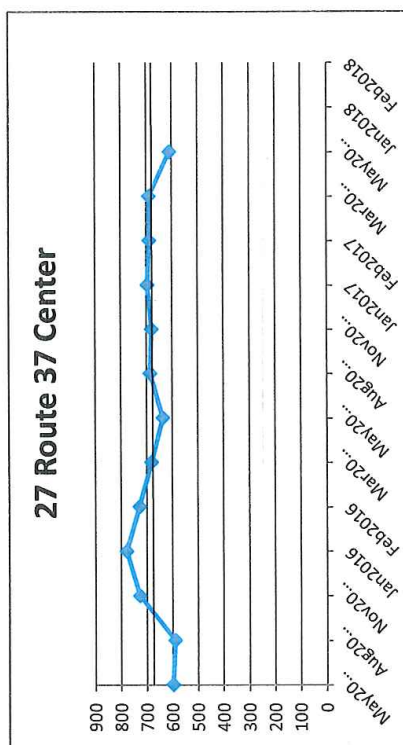
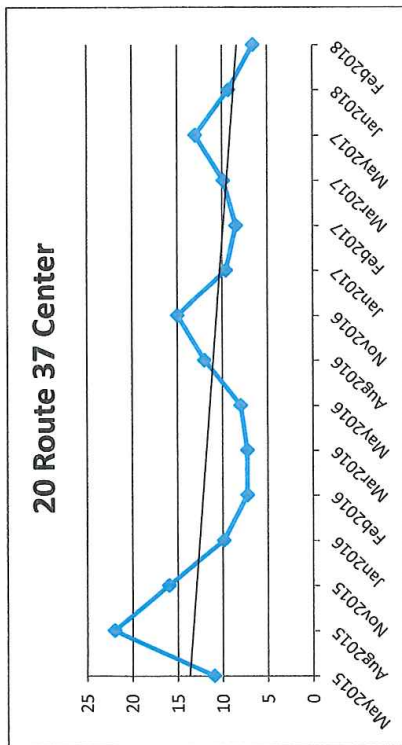
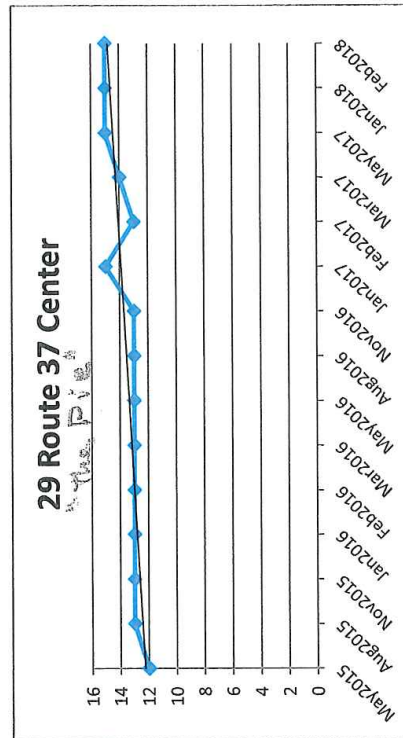
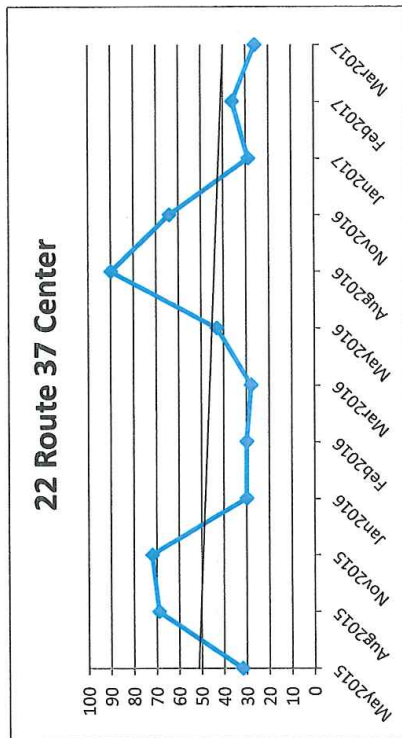






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Domestic Water Supply Study

Sherman School Domestic Water Supply Study

1.0 Sherman School Water Quality Issue

The Sherman School has been experiencing poor water quality from their two groundwater wells. Water samples collected at the well, entry point, and distribution system from July 2017 through April 2018 has shown elevated levels of sodium and chloride. To address this issue, the school has been using bottled water in the kitchen and water coolers. This study will investigate alternative treatment technologies for removing sodium and chloride from the school's water supply instead of having to purchase bottle water.

2.0 Sherman School Water Quality

The Sherman School water system consists of two wells located on the western edge of the school's property that are adjacent to the parking lot. Well #1 has a 5 gpm flow restrictor and the flow rate from Well #2 is not known. The water is pumped into a storage tank and then distributed throughout the school and to the athletic fields.

From July 27, 2017 to April 23, 2018, water samples were collected on 10 occasions at various locations from at Well #1 through the distribution system. Samples were analyzed for typical water quality parameters such as pH, turbidity, color, and odor; pathogens (coliform and E. Coli); chlorine; and sodium and chloride (see Table 1). In general, the water had very low turbidity ranging from 0.03 NTU to 0.21 NTU, pH ranging from 7.2 to 7.5, and no odor. The water had no color except on one occasion where it had a color of 2, which is below the US EPA National Secondary Drinking Water Regulation of 15. Coliform and E.Coli were absent from all samples except on July 31, 2017 when coliform were present in the distribution system. The two constituents of concern were found to be chloride and sodium, which ranged from 200 to 340 mg/L and 70 to 100 mg/L, respectively. The variation of the concentration of chloride and sodium are shown in Figures 1 and 2, respectively.

Table 1. Sherman School Water Quality (July 2017 – April 2018)

<u>Date</u>	<u>Location</u>	<u>Chloride</u> <u>(mg/L)</u>	<u>Sodium</u> <u>(mg/L)</u>	<u>Coliform</u>	<u>E. Coli</u>	<u>pH</u>	<u>Turbidity</u> <u>(NTU)</u>	<u>Chlorine</u> <u>(mg/L)</u>	<u>Color</u> <u>(CU)</u>	<u>Odor</u>	<u>Nitrate</u> <u>-N</u> <u>(mg/L)</u>	<u>Nitrite</u> <u>-N</u> <u>(mg/L)</u>
7/27/2017	Entry Point	341									2.9	ND
7/27/2017	Distribution System			Present	Absent							
7/31/2017	Well 1				<1							
7/31/2017	Distribution System			Absent	Absent	7.39	0.09	0	0	0		
8/14/2017	Distribution System			Absent	Absent	7.19	0.21	0	2	0		
8/14/2017	Special Sample	224	88									
10/4/2017	Distribution System	209	80	Absent	Absent	7.51	0.03	0	0	0		
10/4/2017	Entry Point	218										
11/27/2017	Distribution System			Absent	Absent	7.45	0.05	0	0	0		
11/27/2017	Special Sample	216	81									
1/8/2018	Special Sample	208	71									
1/26/2018	Distribution System			Absent	Absent	7.30	0.08	0	0	0		
1/26/2018	Entry Point	328										
2/16/2018	Special Sample	220	89									
3/15/2018	Distribution System	243	100									
4/23/2018	Special Sample	271	101									

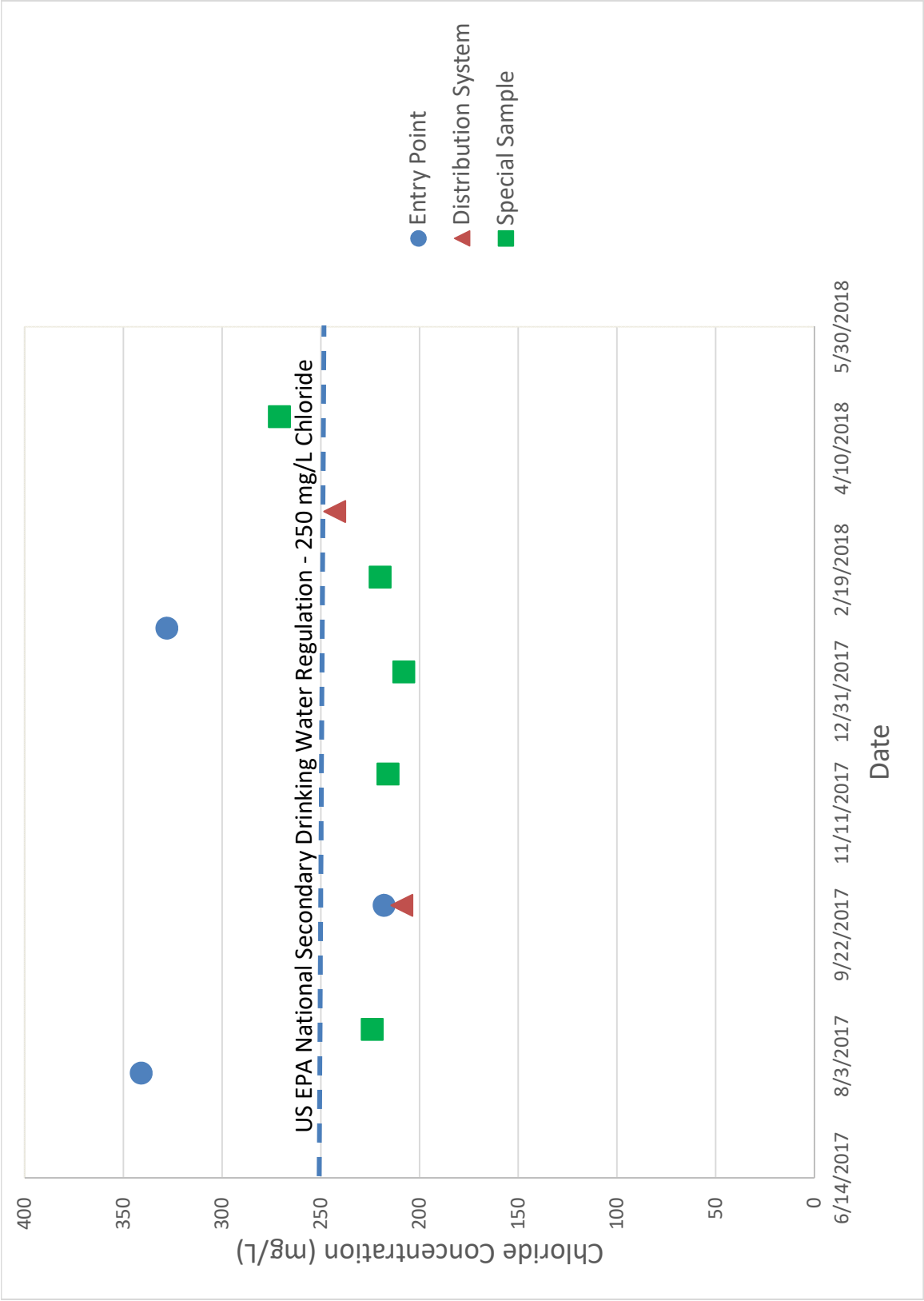


Figure 1. Sherman School Chloride Concentration

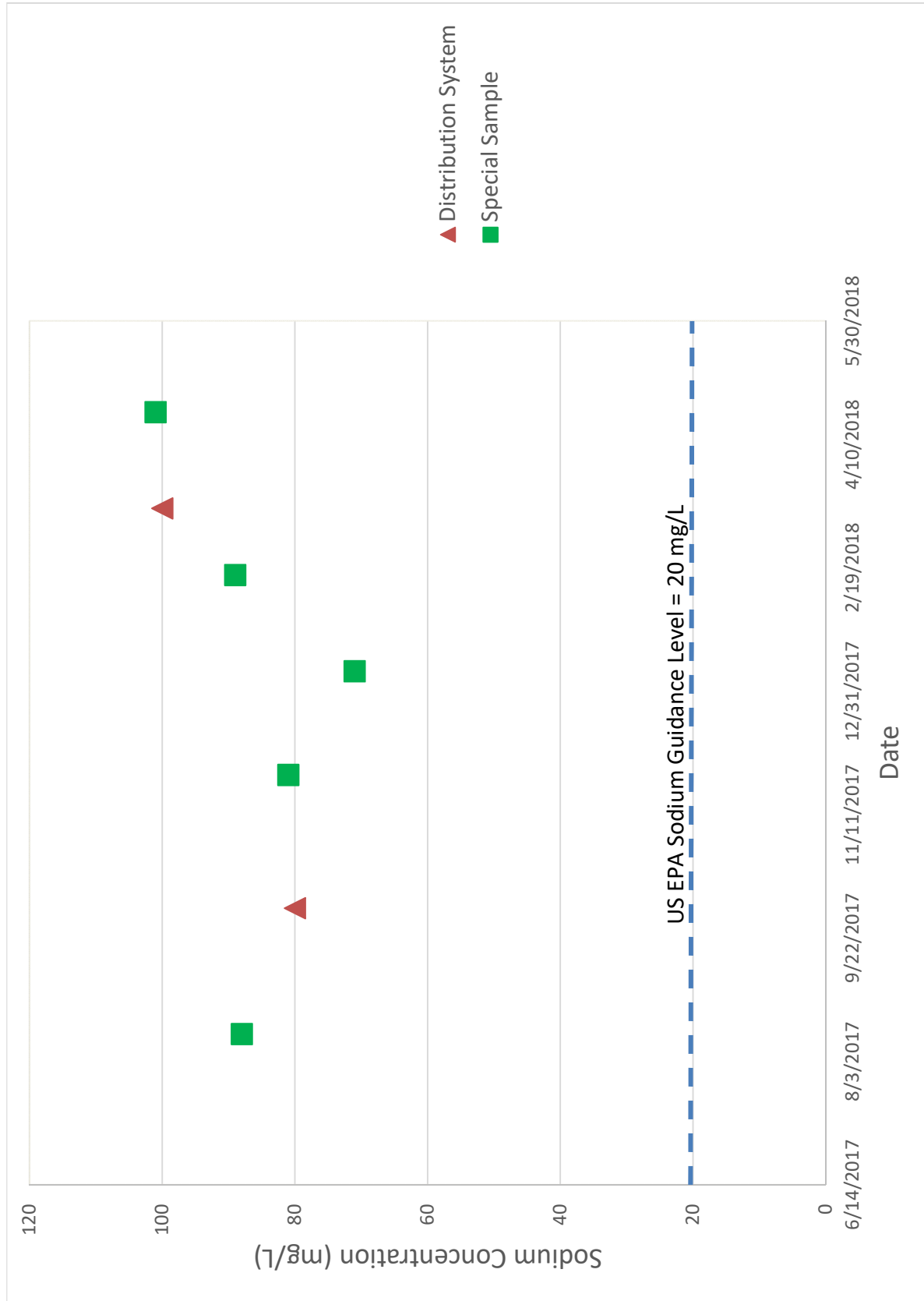


Figure 2. Sherman School Sodium Concentration

3.0 Drinking Water Regulations, Boiler Water Quality, and Copper Pipe Corrosion

3.1 Drinking Water Regulations

Three of the 10 samples exceeded the chloride US EPA National Secondary Drinking Water Regulation of 250 mg/L. Unlike National Primary Drinking Water Regulations (NPDWRs) that are enforceable maximum contaminant level standards based on protecting the public against consumption of drinking water contaminants that present a risk to humans, National Secondary Drinking Water Regulations (NSDWRs) set a non-mandatory water quality standard for 15 contaminants including chloride. These secondary maximum contaminant levels establish guidelines for managing aesthetic considerations such as taste, color and odor that do not present a risk to human health. In the case of chloride, the water has a “salty taste” when the concentration exceeds the NSDWR of 250 mg/L (<https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals#self>).

There are no National Primary or Secondary Water Regulations for sodium, but the US EPA has published a Drinking Water Advisory on the Consumer Acceptability Advice and Health Effects Analysis in February 2003 (https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_sodium_dwreport.pdf). The advisory provides a guidance level for sodium in drinking water of 20 mg/L. This concentration was developed for those individuals restricted to a total sodium intake of 500 mg/day and should not be extrapolated to the entire population. As for taste, most individuals would not perceive as salty drinking water containing between 30 and 60 mg/L.

3.2 Boiler Water Quality

Elevated concentrations of sodium, chloride, and other dissolved solids also impact the operation and efficiency of the school’s water boiler. The school currently does not treat the feed water and has experienced issues with the hy-vent and pump seals. The boiler was replaced in 2015.

Boilers require periodic blowdown or removal of boiler water to maintain an acceptable level of total dissolved solids (TDS) in order to provide for good equipment life and reduce maintenance expenses. Blowdown also has an economic impact in that water that is “wasted” has been heated to the steam saturation temperature. Assuming a maximum TDS of 3000 mg/L in the boiler and feed water of 460 mg/L TDS (estimate based on 250 mg/L chloride, 80 mg/L sodium and no additional dissolved solids), the blowdown would be 18% of the boiler make-up water to maintain an acceptable level of total dissolved solids (<https://byworth.co.uk/wp-content/uploads/2015/06/Best-Practice-in-Boiler-Water-Treatment-Part-2.pdf>).

3.3 Copper Pipe Corrosion

High pH and low alkalinity water with significant levels of chloride and sulfate have been associated with the corrosion of copper pipes. A study performed by the American Water Works Association (AWWA) in 2008 found that pitting was not observed at pH 6.5 and 7 and was evident at pH 8 only at high chlorine levels.

(https://www.researchgate.net/profile/Michael_Schock2/publication/241663552_Pitting_corrosion_of_copper_in_waters_with_high_pH_and_low_alkalinity/links/5486ec9b0cf2ef34478e49d6/Pitting-corrosion-of-copper-in-waters-with-high-pH-and-low-alkalinity.pdf). Given that the Sherman School water is not chlorinated, it is not expected that the well water would cause corrosion or pitting of the school's copper pipes.

4.0 Sources of Sodium and Chloride in Groundwater

Sodium chloride groundwater contamination is typically from salt spread on roads, parking lots, and sidewalks during snow and ice storms. Sodium and chloride can also come from septic systems but it is unlikely in this case because no bacterial contamination of the groundwater was found. Sodium and chloride can also be from salt water intrusion when a well is located near the coast or from the discharge of water softener systems. Both of these do not apply to the Sherman School wells.

The source of the sodium and chloride is being studied by the Town of Sherman because surrounding properties have similar problems. These properties are all on the same side of a stream that is located south of the school.

5.0 Water Treatment Alternatives for Removing Sodium and Chloride

The three primary treatment technologies for removing dissolved solids such as sodium and chloride are reverse osmosis (RO), distillation, and ion exchange. The following is a brief description of each technology.

5.1 Reverse Osmosis (RO)

In a reverse osmosis process, high purity water is produced by forcing raw water through a semi-permeable membrane. The contaminant ions and other contaminants are filtered out by the membrane and discharged in a concentrated waste stream. A schematic of a spiral wound reverse osmosis membrane housed in a pressured vessel is shown in Figure 3.

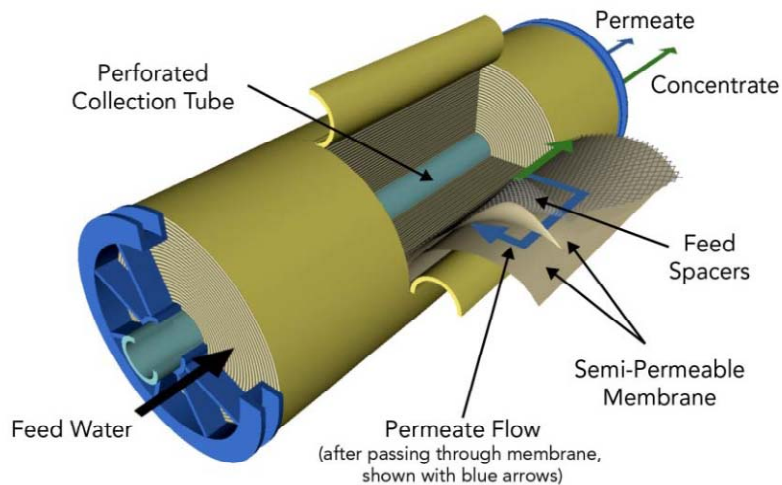


Figure 3. Spiral Wound Reverse Osmosis Membrane Configuration(from https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-22682.pdf)

A typical reverse osmosis system consists of a pre-filter, RO membrane, pump, concentrate recirculation loop, and a storage tank as shown in Figure 4. The RO system can be installed at the point-of-use, such as in the kitchen or at the water cooler, or can be used to treat all of the water entering the school. The process produces a highly purified water than can be used for drinking and cooking as well as for boiler feed water.

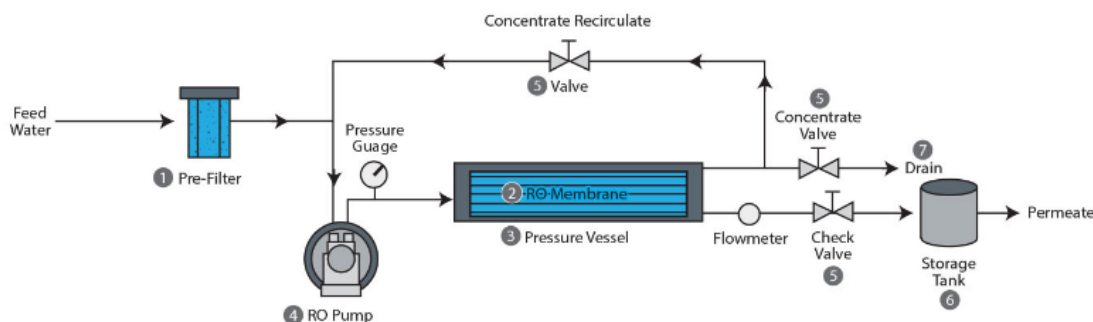


Figure 4. Typical Reverse Osmosis System (from https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-22682.pdf)

Multiple pre-filters are required. These include a sediment filter to remove sand, silt, and other suspended solids from the feed water and a carbon filter to remove organic matter. The pre-filters reduce fouling of the membrane and increases the efficiency and life of the reverse osmosis system.

The typical water production rate of a reverse osmosis system is 40% (i.e., 4 gallons of treated water for every 10 gallons of water treated) and can range from about 25% to 90%. Achieving higher water production rates is typically a trade-off between increased fouling of the membrane because of higher dissolved solid concentration in the RO membrane and lower energy efficiency because of

the higher pumping pressure required. The development of new membrane technology is attempting to counteract this trade off through higher permeability and surface area membranes. This will enable higher water production rates without sacrificing energy efficiency.

5.2 Distillation

In a water distillation treatment system, raw water is boiled and then the water vapor is condensed back to clean liquid water. The inorganic minerals such as sodium and chloride and non-volatile organic constituents do not evaporate and are separated from the clean condensed water.

Distillation systems are energy intensive from having to evaporate all of the feed water. Heat recovery systems can be installed to reduce the energy intensive process by preheating the raw feed water with the heat recovered from the condensation process. Also, distillation systems have the same issue as water boilers where “blowdown” or wasting of some of the heated water is required to maintain an acceptable concentration of dissolved solids.

The cost of producing clean water from reverse osmosis and distillation systems depend on a variety of factors. These include system cost, raw water quality, water production rate, cost of electricity, and system efficiency. A study performed by Adusumilli and Almas from West Texas A&M University found that reverse osmosis was about half the cost per gallon of treated water compared to distillation when factoring in the annualized cost, operation cost, and repair and maintenance costs (http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1063&context=ucowrconf_2006).

5.3 Ion Exchange

Ion exchange systems operate in a similar way as a water softener except that they are designed to also remove monovalent sodium and chloride ions in addition to divalent calcium and magnesium ions. Because ion exchange resins preferably adsorb higher valent ions, it is important to regenerate the anion and cation exchange resins before they become saturated. Otherwise, any sulfate or other multi-valent anions will replace chloride ions that have already been adsorbed and calcium, magnesium, and other multivalent cations will replace sodium ions that have already been adsorbed. Also, acids and bases are required for regenerating ion exchange systems designed to remove monovalent sodium and chloride ions as compared to a water softener where a high concentrated salt solution (i.e., sodium chloride) is used to regenerate the ion exchange resin.

6.0 Recommendation for Water Treatment Technology

It is recommended that the Sherman School use a reverse osmosis system for removing sodium and chloride ions from the well water supply. Distillation is more expensive than reverse osmosis and an ion exchange system requires the use of hazardous chemicals.

A single reverse osmosis system can be installed to treat all of the water entering the school or point-of-use systems can be installed in the kitchen, at the water coolers, and for pre-treating the boiler feed water. The point-of-use systems cost less to operate because they are only needed to treat the approximately 160 gallons per week that is currently used for drinking and cooking plus the water boiler system feed water. In contrast, the operation and maintenance of a single system treating all of the school's water requires less effort than maintaining multiple RO systems. A more detailed analysis can be completed after analyzing the school's total water demand and the number of point-of-use systems that would be required.

Another important consideration in selecting the reverse osmosis system is that the CT Public Health Code prohibits the discharge of reverse osmosis brine to septic systems due to the potential failure of the septic system. CT DEEP's General Permit for the Discharge of Low Flow Water Treatment Wastewater addresses the need for specific treatment of the brine. As defined in the general permit, "Low Flow Water Treatment Wastewater" or "LFWTW" means a maximum of 500 gallons per day of wastewater generated by a point of entry water treatment device for the treatment of well water used to supply potable water to a residential building or institution or non-residential building and where the treated water is not purchased by another party but does not include discharges from treatment system components for the removal of radionuclides. Reverse osmosis brine is covered by this general permit and a subsurface disposal structure must be constructed to allow the wastewater to percolate into the ground. This subsurface disposal structure must be separate from a subsurface sewage disposal system (i.e., septic system)

http://www.ct.gov/deep/lib/deep/public_notice_attachments/general_permits/2017december27generalpermitlowflowwatertreatmentwastewaterfactsheet.pdf.

Full ADA Report

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
1	0	206.2.1	Site Arrival Points	Where Required	At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve.EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required.2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	27	27	Public walk	
2	0	206.2.2	Site Arrival Points	Within a Site	At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site. EXCEPTION: An accessible route shall not be required between accessible buildings, accessible facilities, accessible elements, and accessible spaces if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	32	32	Side HC Lot	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
3	0	204.1, 307.2	Site Arrival Route	Protruding Objects	204.1: Protruding objects on circulation paths shall comply with 307. EXCEPTIONS: 1. Within areas of sport activity, protruding objects on circulation paths shall not be required to comply with 307.2. Within play areas, protruding objects on circulation paths shall not be required to comply with 307 provided that ground level accessible routes provide vertical clearance in compliance with 1008.2. 307.2 Protrusion Limits: Objects with leading edges more than 27 inches and not more than 80 inches above the finish floor or ground shall protrude 4 inches maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4½ inches maximum.		Pass				
4	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.	Yes	Fail	36	36	Angled Stairs	
5	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.		Pass				
6	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		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
7	0	206.3	Site Access Route	Location	Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior	Yes	Fail	37	37	HC Exits to site	
8	0	403.5.1	Site Access Route	Walking Surfaces: Changes in Level: Clear Width	Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches 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 long minimum and 36 inches wide minimum.	Yes	Fail	38	38	Back Walkway	
9	0	403.5.2	Site Access Route	Walking Surfaces: Changes in Level: Clear Width at Turn	Where the accessible route makes a 180 degree turn around an element which is less than 48 inches wide, clear width shall be 42 inches minimum approaching the turn, 48 inches minimum at the turn and 42 inches minimum leaving the turn. EXCEPTION: Where the clear width at the turn is 60 inches minimum compliance with 403.5.2 shall not be required.	Pass					
10	0	403.5.3	Site Access Route	Walking Surfaces: Changes in Level: Passing Spaces	An accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum. Passing spaces shall be either: a space 60 inches minimum by 60 inches minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.	Pass					

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
11	0	307.4	Site Access Route	Vertical Clearance	Vertical clearance shall be 80 inches high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches high. The leading edge of such guardrail or barrier shall be located 27 inches maximum above the finish floor or ground. EXCEPTION: Door closers and door stops shall be permitted to be 78 inches minimum above the finish floor or ground.		Pass				
12	0	302.1	Site Access Route	Floor or Ground Surfaces	Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. EXCEPTIONS: 1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant. 2. Areas of sport activity shall not be required to comply with 302.		Pass				
13	0	302.3	Site Access Route	Floor or Ground Surfaces: Openings	Openings in floor or ground surfaces shall not allow passage of a sphere more than ½ inch diameter except as allowed in 407.4.3, 409.4.3, 410.4, 810.5.3 and 810.10. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.		Pass				
14	0	403.3	Site Access Route	Walking Surfaces: Slope	The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48	Yes	Fail	34	34	HC Lot/Loading Zone	
15	0	303.2	Site Access Route	Changes in Level: Vertical	Changes in level of ¼ inch high maximum shall be permitted to be vertical.	Yes	Fail	35	35	Back Exit	
16	0	303.3	Site Access Route	Changes in Level: Beveled	Changes in level between ¼ inch (6.4 mm) high minimum and ½ inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2	N/A					
17		303.4	Site Access Route	Changes in Level: Ramps	Changes in level greater than ½ inch (13 mm) high shall be ramped, and shall comply with 405 or 406	Yes	Fail	28	28		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
18	0	202.5	Site Access Route	Alterations to Qualified Historic Buildings & Facilities	Alterations to a qualified historic building or facility shall comply with 202.3 and 202.4. EXCEPTION: Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.		N/A				
19		208.2	Accessible Parking	Parking Spaces: Minimum Number	Parking spaces complying with 502 shall be provided in accordance with Table 208.2 except as required by 208.2.1, 208.2.2, and 208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
20	0	208.3.1	Accessible Parking	Parking Spaces: Location	Parking spaces complying with 502 that serve a particular building or facility shall be located on the shortest accessible route from parking to an entrance complying with 206.4. Where parking serves more than one accessible entrance, parking spaces complying with 502 shall be dispersed and located on the shortest accessible route to the accessible entrances. In parking facilities that do not serve a particular building or facility, parking spaces complying with 502 shall be located on the shortest accessible route to an accessible pedestrian entrance of the parking facility. EXCEPTIONS: 1. All van parking spaces shall be permitted to be grouped on one level within a multi-story parking facility. 2. Parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee, and user convenience.						
21		208.2.4	Accessible Parking	Van Parking Spaces	For every six or fraction of six parking spaces required by 208.2 to comply with 502, at least one shall be a van parking space complying with 502.		Pass				
22		209.4	Accessible Parking	Valet Parking	Parking facilities that provide valet parking services shall provide at least one passenger loading zone complying with 503		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
23	0	502.2	Accessible Parking	Vehicle Spaces	Car parking spaces shall be 96 inches wide minimum and van parking spaces shall be 132 inches wide minimum, shall be marked to define the width, and shall have an adjacent access aisle complying with 502.3. EXCEPTION: Van parking spaces shall be permitted to be 96 inches wide minimum where the access aisle is 96 inches wide minimum.	Yes	Fail	26	26		
24	0	502.3, 502.3.1-4	Accessible Parking	Access Aisle	Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle. 502.3.1 Width: Access aisles serving car and van parking spaces shall be 60 inches wide minimum. 502.3.2 Length: Access aisles shall extend the full length of the parking spaces they serve. 502.3.3 Marking: Access aisles shall be marked so as to discourage parking in them. 502.3.4 Location: Access aisles shall not overlap the vehicular way. Access aisles shall be permitted to be placed on either side of the parking space except for angled van parking spaces which shall have access aisles located on the passenger side of the parking spaces.	Yes	Fail	26	26		
25		502.4	Accessible Parking	Floor and Ground Surfaces	Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted.	Yes	Fail	26	26		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
26	0	502.6	Accessible Parking	Identification	Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches minimum above the finish floor or ground surface measured to the bottom of the sign.	Yes	Fail	24	24		
27	0	503.2	Accessible Parking	Passenger Loading Zones: Vehicle Pull-Up Spaces	Passenger loading zones shall provide a vehicular pull-up space 96 inches (2440 mm) wide minimum and 20 feet (6100 mm) long minimum.		Pass				
28	0	503.3	Accessible Parking	Passenger Loading Zones: Access Aisle	Passenger loading zones shall provide access aisles complying with 503 adjacent to the vehicle pull-up space. Access aisles shall adjoin an accessible route and shall not overlap the vehicular way.	Yes	Fail	29	29		
29	0	208.2.1	Accessible Parking	Hospital Outpatient Facilities	Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities shall comply with 502		N/A				
30	0	208.2.2	Accessible Parking	Rehabilitation Facilities and Outpatient Physical Therapy Facilities	Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with 502.		N/A				
31	0	209.3	Accessible Parking	Medical Care and Long-Term Care Facilities	At least one passenger loading zone complying with 503 shall be provided at an accessible entrance to licensed medical care and licensed long-term care facilities where the period of stay exceeds twenty-four hours.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
32	0	402.2	Curb Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.	Yes	Fail	37	37		
33	0	405.2	Curb Ramps	Slope	Ramp runs shall have a running slope not steeper than 1:12. EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.		Pass				
34		405.4	Ramps	Floor or Ground Surfaces	Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.		Pass				
35		405.5	Ramps	Clear Width	The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum. EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed		Pass				
36		406.3	Curb Ramps	Sides of Curb Ramps	Where provided, curb ramp flares shall not be steeper than 1:10.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
37		406.4	Curb Ramps	Landings	Landings shall be provided at the tops of curb ramps. The landing clear length shall be 36 inches minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the landing. EXCEPTION: In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.		Pass				
38	0	406.5	Curb Ramps	Location	Curb ramps and the flared sides of curb ramps shall be located so that they do not project into vehicular traffic lanes, parking spaces, or parking access aisles. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides.		Pass				
39		406.6	Curb Ramps	Diagonal Curb Ramps	Diagonal or corner type curb ramps with returned curbs or other well-defined edges shall have the edges parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have a clear space 48 inches minimum outside active traffic lanes of the roadway. Diagonal curb ramps provided at marked crossings shall provide the 48 inches minimum clear space within the markings. Diagonal curb ramps with flared sides shall have a segment of curb 24 inches long minimum located on each side of the curb ramp and within the marked crossing.	Yes	Fail	41	41		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
40		406.7	Curb Ramps	Islands	Raised islands in crossings shall be cut through level with the street or have curb ramps at both sides. Each curb ramp shall have a level area 48 inches long minimum by 36 inches wide minimum at the top of the curb ramp in the part of the island intersected by the crossings. Each 48 inch minimum by 36 inch minimum area shall be oriented so that the 48 inch minimum length is in the direction of the running slope of the curb ramp it serves. The 48 inch minimum by 36 inch minimum areas and the accessible route shall be permitted to overlap.						
41	0	407.2.1.3, 305	Curb Ramps	Clear Floor or Ground Space	A clear floor or ground space complying with 305 shall be provided at all controls.		N/A				
42		206.3	Entrances	Location	Accessible routes shall coincide with or be located in the same area as general circulation paths. Where circulation paths are interior, required accessible routes shall also be interior.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
43		206.4	Entrances	Entrances	Entrances shall be provided in accordance with 206.4. Entrance doors, doorways, and gates shall comply with 404 and shall be on an accessible route complying with 402.EXCEPTIONS: 1. Where an alteration includes alterations to an entrance, and the building or facility has another entrance complying with 404 that is on an accessible route, the altered entrance shall not be required to comply with 206.4 unless required by 202.4.2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one public entrance shall be required to comply with 206.4. Where no public entrance can comply with 206.4 under criteria established in 202.5 Exception, then either an unlocked entrance not used by the public shall comply with 206.4; or a locked entrance complying with 206.4 with a notification system or remote monitoring shall be provided.						
44	0	206.4.1	Entrances	Public Entrances	In addition to entrances required by 206.4.2 through 206.4.9, at least 60 percent of all public entrances shall comply with 404	Yes	Fail	30, 31	X	HC Side Lot	
45	0	206.4.2	Entrances	Parking Structure Entrances	Where direct access is provided for pedestrians from a parking structure to a building or facility entrance, each direct access to the building or facility entrance shall comply with 404	Yes	Fail	32	32	HC Side Lot	
46	0	206.4.3	Entrances	Entrances from Tunnels or Elevated Walkways	Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one direct entrance to the building or facility from each tunnel or walkway shall comply with 404		N/A				
							N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
47		206.4.5	Entrances	Tenant Spaces	At least one accessible entrance to each tenancy in a facility shall comply with 404. EXCEPTION: Self-service storage facilities not required to comply with 225.3 shall not be required to be on an accessible route.		N/A				
48		206.4.8	Entrances	Service Entrances	If a service entrance is the only entrance to a building or to a tenancy in a facility, that entrance shall comply with 404		N/A				
49		216.1	Entrances	Signage	Signs shall be provided in accordance with 216 and shall comply with 703. EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with 216.2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6 through 216.12.3. Temporary, 7 days or less, signs shall not be required to comply with 216.4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with 216						
50		404.1	Entrances	Doors, Doorways and Gates	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 404.2.7, 404.2.8, 404.2.9, 404.3.2 and 404.3.4 through 404.3.7	Yes	Fail	33	33		
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
51		202.5	Access Route Interior	Alterations to Qualified Historic Buildings & Facilities	Alterations to a qualified historic building or facility shall comply with 202.3 and 202.4. EXCEPTION: Where the State Historic Preservation Officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the exceptions for alterations to qualified historic buildings or facilities for that element shall be permitted to apply.		N/A				
52		206.2.1	Access Route Interior	Site Arrival Points	At least one accessible route shall be provided within the site from accessible parking spaces and accessible passenger loading zones; public streets and sidewalks; and public transportation stops to the accessible building or facility entrance they serve. EXCEPTIONS: 1. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no more than one accessible route from a site arrival point to an accessible entrance shall be required.2. An accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing pedestrian access.	Yes	Fail	35	35	Public Way	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
53		206.2.3	Access Route Interior	Multi-Story Buildings and Facilities	At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities. EXCEPTIONS: 1. In private buildings or facilities that are less than three stories or that have less than 3000 square feet (279 m2) per story, an accessible route shall not be required to connect stories provided that the building or facility is not a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot or other station used for specified public transportation, an airport passenger terminal, or another type of facility as determined by the Attorney General.2. Where a two story public building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.3. In detention and correctional facilities, an accessible route shall not be required to connect stories where cells with mobility features required to comply with 807.2, all common use areas serving cells with mobility features required to comply with 807.2, and all public use areas are on an accessible route.4. In residential facilities, an accessible route shall not be required to connect		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
54		207.1	Access Route Interior	Accessible Means of Egress	Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.2. Areas of refuge shall not be required in detention and correctional facilities.						
55		302.1	Access Route Interior	Floor or Ground Surfaces: General	Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. EXCEPTIONS: 1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.2. Areas of sport activity shall not be required to comply with 302.	Yes	Fail	3	3		
56		302.2	Access Route Interior	Floor or Ground Surfaces: Carpet	Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be ½ inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.	Yes	Fail	2, 5	2, 5		
57		303.2	Access Route Interior	Changes in Level: Vertical	Changes in level of ¼ inch (6.4 mm) high maximum shall be permitted to be vertical.		Pass				

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58		303.3	Access Route Interior	Changes in Level: Beveled	Changes in level between ¼ inch (6.4 mm) high minimum and ½ inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.		Pass				
59		304.4	Access Route Interior	Turning Space: Door Swing	Doors shall be permitted to swing into turning spaces		Pass				
60		305.3	Access Route Interior	Clear Floor or Ground Space	The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.		Pass				
61		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 or ground shall protrude 4 inches (100 mm) maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4½ inches (115 mm) maximum.	Yes	Fail	13	13	Drinking Fountains	
62		307.4	Access Route Interior	Protruding Objects: Vertical Clearance	Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground. EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.	Yes	Fail	1	1	Drinking Fountains	
63		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 or ground.	Yes	Fail				
						Yes	Fail	12	12	Nurses Bathroom	

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64		308.2.2	Access Route Interior	Forward Reach: Obstructed High Reach	Where a high forward reach is over an obstruction, the clear floor space 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 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 and the reach depth shall be 25 inches (635 mm) maximum.	Yes	Fail	19	19	Art Room	
65		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.	Yes	Fail	20	20	Closet doors	
66		403.3	Access Route Interior	Walking Surfaces: Slope	The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48		Pass				
67		403.5.1	Access Route Interior	Walking Surfaces: Clear Width	Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches 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 long minimum and 36 inches wide minimum.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
68		403.5.2	Access Route Interior	Walking Surfaces: Clear Width at Turns	Where the accessible route makes a 180 degree turn around an element which is less than 48 inches wide, clear width shall be 42 inches minimum approaching the turn, 48 inches minimum at the turn and 42 inches minimum leaving the turn. EXCEPTION: Where the clear width at the turn is 60 inches minimum compliance with 403.5.2 shall not be required.		Pass				
69		403.5.3	Access Route Interior	Walking Surfaces: Passing Spaces	An accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum. Passing spaces shall be either: a space 60 inches minimum by 60 inches minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with 304.3.2 where the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.		Pass				
70		809.2.1	Access Route Interior	Residential Dwelling Units: Accessible Route: Location	At least one accessible route shall connect all spaces and elements which are a part of the residential dwelling unit. Where only one accessible route is provided, it shall not pass through bathrooms, closets, or similar spaces.		N/A				
71		402.2	Ramps	Components	Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
72		405.2	Ramps	Slope	Ramp runs shall have a running slope not steeper than 1:12. EXCEPTION: In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.		Pass				
73		405.3	Ramps	Cross Slope	Cross slope of ramp runs shall not be steeper than 1:48.		Pass				
74		405.4	Ramps	Floor or Ground Surfaces	Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.		Pass				
75		405.5	Ramps	Clear Width	The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches minimum. EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of common use circulation paths shall be permitted to be decreased by work area equipment provided that the decrease is essential to the function of the work being performed.		Pass				
76		405.7	Ramps	Landings	Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.		Pass				
77		405.7.1	Ramps	Landings: Slope	Landings shall comply with 302. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted.		Pass				
78		405.7.2	Ramps	Landings: Width	The landing clear width shall be at least as wide as the widest ramp run leading to the landing.	Yes	Fail	11		Lower Level Ramp	
79		405.7.3	Ramps	Landings: Length	The landing clear length shall be 60 inches long minimum.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
80		405.7.4	Ramps	Landings: Change in Direction	Ramps that change direction between runs at landings shall have a clear landing 60 inches minimum by 60 inches minimum.		Pass				
81		405.7.5	Ramps	Landings: Doorways	Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing area.		Pass				
82		405.8	Ramps	Handrails	Ramp runs with a rise greater than 6 inches shall have handrails complying with 505. EXCEPTION: Within employee work areas, handrails shall not be required where ramps that are part of common use circulation paths are designed to permit the installation of handrails complying with 505. Ramps not subject to the exception to 405.5 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.	Yes	Fail	11	11	Lower Level Ramp	
83		405.9	Ramps	Edge Protection	Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings. EXCEPTIONS: 1. Edge protection shall not be required on ramps that are not required to have handrails and have sides complying with 406.3. 2. Edge protection shall not be required on the sides of ramp landings serving an adjoining ramp run or stairway. 3. Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of ½ inch maximum within 10 inches horizontally of the minimum landing area specified in 405.7		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
84		405.9.1	Ramps	Extended Floor or Ground Surfaces	The floor or ground surface of the ramp run or landing shall extend 12 inches minimum beyond the inside face of a handrail complying with 505.		N/A				
85		405.9.2	Ramps	Curb or Barrier	A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.		Pass				
86		405.10	Ramps	Wet Conditions	Landings subject to wet conditions shall be designed to prevent the accumulation of water.		Pass				
87		505.2	Ramps	Handrails: Where Required	Handrails shall be provided on both sides of stairs and ramps. EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.		Pass				
88		505.3	Ramps	Handrails: Continuity	Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs. EXCEPTION: In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating		Pass				
89		505.4	Ramps	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.		Pass				
90		505.5	Ramps	Handrails: Clearance	Clearance between handrail gripping surfaces and adjacent surfaces shall be 1½ inches minimum.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
91		505.6	Ramps	Handrails: Gripping Surface	Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1½ inches minimum below the bottom of the handrail gripping surface. EXCEPTIONS: 1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards. 2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches.		Pass				
92		505.7.1	Ramps	Handrails: Circular Cross Section	Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1½ inches minimum and 2 inches maximum.		Pass				
93		505.7.2	Ramps	Handrails: Non-Circular Cross Sections	Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches minimum and 6¼ inches maximum, and a cross-section dimension of 2¼ inches maximum.		N/A				
94		505.8	Ramps	Handrails: Surfaces	Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.		Pass				
95		505.9	Ramps	Handrails: Fittings	Handrails shall not rotate within their fittings.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
96		505.10	Ramps	Handrails: Handrail Extensions	Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10.EXCEPTIONS: 1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps.2. In assembly areas, extensions shall not be required for ramp handrails 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.						
97		505.10.1	Ramps	Handrails: Top and Bottom Extension at Ramps	Ramp handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.	Yes	Fail	17	17	K Wing Ramp	
98		504.2	Stairways	Treads and 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.		Pass				
99		504.3	Stairways	Open Risers	Open risers are not permitted	Yes	Fail	36	36	Exterior Stair	
						Yes	Fail	21	21	Stage	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
100		504.5	Stairways	Nosings	The radius of curvature at the leading edge of the tread shall be ½ inch 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 maximum over the tread below.		Pass				
101		504.7	Stairways	Wet Conditions	Stair treads and landings subject to wet conditions shall be designed to prevent the accumulation of water.		Pass				
102		505.2	Stairways	Handrails: Where Required	Handrails shall be provided on both sides of stairs and ramps. EXCEPTION: In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.						
103		505.3	Stairways	Handrails: Continuity	Handrails shall be continuous within the full length of each stair flight or ramp run. Inside handrails on switchback or dogleg stairs and ramps shall be continuous between flights or runs. EXCEPTION: In assembly areas, handrails on ramps shall not be required to be continuous in aisles serving seating.	Yes	Fail	21	21	21 Stage	
104		505.4	Stairways	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.		Pass				
105		505.5	Stairways	Handrails: Clearance	Clearance between handrail gripping surfaces and adjacent surfaces shall be 1½ inches minimum.		Fail	36	36	36 Exterior Stair	
							Pass				

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106		505.6	Stairways	Handrails: Gripping Surface	Handrail gripping surfaces shall be continuous along their length and shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall occur 1½ inches minimum below the bottom of the handrail gripping surface. EXCEPTIONS: 1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards. 2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches.		Pass				
107		505.7.1	Stairways	Handrails: Circular Cross Section	Handrail gripping surfaces with a circular cross section shall have an outside diameter of 1½ inches (32 mm) minimum and 2 inches (51 mm) maximum.		Pass				
108		505.7.2	Stairways	Handrails: Non-Circular Cross Sections	Handrail gripping surfaces with a non-circular cross section shall have a perimeter dimension of 4 inches (100 mm) minimum and 6¼ inches (160 mm) maximum, and a cross-section dimension of 2¼ inches (57 mm) maximum.		N/A				
109		505.8	Stairways	Surfaces	Handrail gripping surfaces and any surfaces adjacent to them shall be free of sharp or abrasive elements and shall have rounded edges.		Pass				
110		505.9	Stairways	Handrails: Fittings	Handrails shall not rotate within their fittings.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
111		505.10	Stairways	Handrails: Extensions	Handrail gripping surfaces shall extend beyond and in the same direction of stair flights and ramp runs in accordance with 505.10. EXCEPTIONS: 1. Extensions shall not be required for continuous handrails at the inside turn of switchback or dogleg stairs and ramps.2. In assembly areas, extensions shall not be required for ramp handrails 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.						
112		505.10.2	Stairways	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 first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.	Yes	Fail	36	36	Exterior Stair	
113		505.10.3	Stairways	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 at least equal to one tread depth beyond the last riser nosing. Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.		Pass				
114		206.2.3	Elevators	Multi-Story Buildings and Facilities	At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.	Yes	Fail	36	36	Exterior Stair	

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115		407.1	Elevators	General	Elevators shall comply with 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.		Pass			Old Elevator was not available	
116		407.2.2.1	Elevators	Visible and Audible Signals	A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons. EXCEPTIONS: 1. Visible and audible signals shall not be required at each destination-oriented elevator where a visible and audible signal complying with 407.2.2 is provided indicating the elevator car designation information. 2. In existing elevators, a signal indicating the direction of car travel shall not be required.		Pass				
117		407.2.2.2	Elevators	Visible Signals	Visible signal fixtures shall be centered at 72 inches minimum above the finish floor or ground. The visible signal elements shall be 2-½ inches minimum measured along the vertical centerline of the element. Signals shall be visible from the floor area adjacent to the hall call button. EXCEPTIONS: 1. Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance. 2. Existing elevators shall not be required to comply with 407.2.2.2.		Pass				

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118		407.2.2.3	Elevators	Audible Signals	Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal annunciators shall have a frequency of 300 Hz minimum and 3000 Hz maximum. The audible signal and verbal annunciator shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button. EXCEPTIONS: 1. Destination-oriented elevators shall not be required to comply with 407.2.2.3 provided that the audible tone and verbal announcement is the same as those given at the call button or call button keypad. 2. Existing elevators shall not be required to comply with the requirements for frequency and dB range of audible signals.		Pass				
119		407.2.2.4	Elevators	Differentiation	Each destination-oriented elevator in a bank of elevators shall have audible and visible means for differentiation.		N/A				
120		407.2.3.1	Elevators	Floor Designation	Floor designations complying with 703.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches high minimum. A tactile star shall be provided on both jambs at the main entry level.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
121		407.3.3	Elevators	Reopening Device	Elevator doors shall be provided with a reopening device complying with 407.3.3 that shall stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person. EXCEPTION: Existing elevators with manually operated doors shall not be required to comply with 407.3.3		Pass				
122		407.3.4	Elevators	Door and Signal Timing	The minimum acceptable time from notification that a car is answering a call or notification of the car assigned at the means for the entry of destination information until the doors of that car start to close shall be calculated from the following equation: $T = D/(1.5 \text{ ft/s})$ or $T = D/(455 \text{ mm/s}) = 5$ seconds minimum where T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door. EXCEPTIONS: 1. For cars with in-car lanterns, T shall be permitted to begin when the signal is visible from the point 60 inches (1525 mm) directly in front of the farthest hall call button and the audible signal is sounded. 2. Destination-oriented elevators shall not be required to comply with 407.3.4		Pass				
123		407.3.5	Elevators	Door Delay	Elevator doors shall remain fully open in response to a car call for 3 seconds minimum.		Pass				

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124		407.4.1	Elevators	Car Dimensions	Inside dimensions of elevator cars and clear width of elevator doors shall comply with Table 407.4.1. EXCEPTION: Existing elevator car configurations that provide a clear floor area of 16 square feet minimum and also provide an inside clear depth 54 inches minimum and a clear width 36 inches minimum shall be permitted.		Pass				
125		407.4.2, 302, 303	Elevators	Floor Surfaces	Floor surfaces in elevator cars shall comply with 302 and 303. 302.1 General: Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. 302.2 Carpet: Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be ½ inch maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303. 303.2 Vertical: Changes in level of ¼ inch high maximum shall be permitted to be vertical. 303.3 Beveled: Changes in level between ¼ inch high minimum and ½ inch high maximum shall be beveled with a slope not steeper than 1:2.						
126		407.4.4	Elevators	Leveling	Each car shall be equipped with a self-leveling feature that will automatically bring and maintain the car at floor landings within a tolerance of ½ inch under rated loading to zero loading conditions.		Pass				
127		407.4.5	Elevators	Illumination	The level of illumination at the car controls, platform, car threshold and car landing sill shall be 5 foot candles (54 lux) minimum.		Pass				

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128		407.4.6.1, Table 308	Elevators	Elevator Car Controls: Location	Controls shall be located within one of the reach ranges specified in 308. EXCEPTIONS: 1. Where the elevator panel serves more than 16 openings and a parallel approach is provided, buttons with floor designations shall be permitted to be 54 inches maximum above the finish floor. 2. In existing elevators, car control buttons with floor designations shall be permitted to be located 54 inches maximum above the finish floor where a parallel approach is provided. Table 308: Children's Reach Ranges: Forward or Side Reach Age 3&4 36" High 20" Low; Age 5-8 40" High 18" Low; Age 9-12 44" High 16" Low		Pass				
129		407.4.6.2, 407.4.6.2.1, 407.4.6.2.2	Elevators	Elevator Car Controls: Buttons	Car control buttons with floor designations shall comply with 407.4.6.2 and shall be raised or flush. EXCEPTION: In existing elevators, buttons shall be permitted to be recessed. 407.4.6.2.1 Size: Buttons shall be 3/4 inch minimum in their smallest dimension. 407.4.6.2.2 Arrangement: Buttons shall be arranged with numbers in ascending order. When two or more columns of buttons are provided they shall read from left to right.						
130		407.4.6.4.1	Elevators	Elevator Car Controls: Emergency Controls: Height	Emergency control buttons shall have their centerlines 35 inches minimum above the finish floor.		Pass				

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131		407.4.7, 407.4.7.1.1 - 407.4.7.1.3	Elevators	Designations and Indicators of Car Controls	Designations and indicators of car controls shall comply with 407.4.7. EXCEPTION: In existing elevators, where a new car operating panel complying with 407.4.7 is provided, existing car operating panels shall not be required to comply with 407.4.7. 407.4.7.1.1 Type: Control buttons shall be identified by tactile characters complying with 703.2.407. 4.7.1.2 Location: Raised character and braille designations shall be placed immediately to the left of the control button to which the designations apply. EXCEPTION: Where space on an existing car operating panel precludes tactile markings to the left of the controls, markings shall be placed as near to the control as possible. 407.4.7.1.3 Symbols: The control button for the emergency stop, alarm, door open, door close, main entry floor, and phone, shall be identified with tactile symbols as shown in Table 407.4.7.1.3.		Pass				
132		407.4.8.1	Elevators	Car Position Indicators	Visible indicators shall comply with 407.4.8.1		Pass				
133		407.4.8.1.1	Elevators	Visible Indicators: Size	Characters shall be ½ inch (13 mm) high minimum.		Pass				
134		407.4.8.1.2	Elevators	Visible Indicators: Location	Indicators shall be located above the car control panel or above the door.		Pass				
135		407.4.8.1.3	Elevators	Visible Indicators: Floor Arrival	As the car passes a floor and when a car stops at a floor served by the elevator, the corresponding character shall illuminate. EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.4.8.1.3 provided that the visible indicators extinguish when the call has been answered.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
136		407.4.8.1.4	Elevators	Visible Indicators: Destination Indicator	In destination-oriented elevators, a display shall be provided in the car with visible indicators to show car destinations.		N/A				
137		407.4.9	Elevators	Emergency Communication	Emergency two-way communication systems shall comply with 308. Tactile symbols and characters shall be provided adjacent to the device and shall comply with 703.2.		Pass				
138		404.2.3	Platform Lifts	Clear Width	Door openings shall provide a clear width of 32 inches minimum. Clear openings 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) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).EXCEPTIONS: 1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.						
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
139		404.2.4	Platform Lifts	Maneuvering Clearances	Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance. EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.		Pass				
140		404.2.6	Platform Lifts	Doors in Series and Gates in Series	The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches minimum plus the width of doors or gates swinging into the space		Pass				
141		410.1	Platform Lifts	General	Platform lifts shall comply with ASME A18.1 (1999 edition or 2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). Platform lifts shall not be attendant-operated and shall provide unassisted entry and exit from the lift.		Pass				
142		410.2	Platform Lifts	Floor Surfaces	Floor surfaces in platform lifts shall comply with 302 and 303. 302.2 Carpet: Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be ½ inch maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303. 303.2 Vertical: Changes in level of ¼ inch high maximum shall be permitted to be vertical. 303.3 Beveled: Changes in level between ¼ inch high minimum and ½ inch high maximum shall be beveled with a slope not steeper than 1:2.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
143		410.3, 305.3	Platform Lifts	Clear Floor Space	Clear floor space in platform lifts shall comply with 305.305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.						
144		410.5, 309.4	Platform Lifts	Operable Parts	Controls for platform lifts shall comply with 309.309.4 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	Yes	Fail	14	14	Stored Items within the platform lift	
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
145		206.2.4	Doors	Spaces and Elements	At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by 206.2.3. Exceptions 1 through 7. EXCEPTIONS: 1. Raised courtroom stations, including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the space. 2. In assembly areas with fixed seating required to comply with 221, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided. 3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story. In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings or facilities are exempted by 206.2.3 Exceptions 1 through 7.	Yes	Fail	43	43	Boys Locker Room	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
146		207.1	Doors	Accessible Means of Egress	Means of egress shall comply with section 1003.2.13 of the International Building Code (2000 edition and 2001 Supplement) or section 1007 of the International Building Code (2003 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1). EXCEPTIONS: 1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel. 2. Areas of refuge shall not be required in detention and correctional facilities.						
147		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 404.2.7, 404.2.8, 404.2.9, 404.3.2 and 404.3.4 through 404.3.7.	Yes	Fail	45	45		
148		404.2.2	Doors	Double-Leaf Doors and Gates	At least one of the active leaves of doorways with two leaves shall comply with 404.2.3 and 404.2.4		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
149		404.2.3	Doors	Clear Width	Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings 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) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening width lower than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).EXCEPTIONS: 1. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the latch side stop.2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.						
150		404.2.4	Doors	Maneuvering Clearances	Minimum maneuvering clearances at doors and gates shall comply with 404.2.4. Maneuvering clearances shall extend the full width of the doorway and the required latch side or hinge side clearance.EXCEPTION: Entry doors to hospital patient rooms shall not be required to provide the clearance beyond the latch side of the door.	Yes	Fail	3	3		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
151		404.2.5	Doors	Thresholds	Thresholds, if provided at doorways, shall be ½ inch (13 mm) high maximum. Raised thresholds and changes in level at doorways shall comply with 302 and 303. EXCEPTION: Existing or altered thresholds ¾ inch high maximum that have a beveled edge on each side with a slope not steeper than 1:2 shall not be required to comply with 404.2.5.	Yes	Fail	4	4	Art Classroom	
152		404.2.6	Doors	Doors in Series and Gates in Series	The distance between two hinged or pivoted doors in series and gates in series shall be 48 inches minimum plus the width of doors or gates swinging into the space.		Pass				
153		404.2.7	Doors	Door and Gate Hardware	Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. Operable parts of such hardware shall be 34 inches minimum and 48 inches maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides. EXCEPTIONS: 1. Existing locks shall be permitted in any location at existing glazed doors without stiles, existing overhead rolling doors or grilles, and similar existing doors or grilles that are designed with locks that are activated only at the top or bottom rail. 2. Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches maximum above the finish floor or ground provided the self-latching devices are not also self-locking devices and operated by means of a key, electronic opener, or integral combination lock.	Yes	Fail	20	20	Closet Doors	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
154		404.2.8.1	Doors	Closing Speed: Door Closers and Gate Closers	Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 5 seconds minimum.		Pass				
155		404.2.8.2	Doors	Closing Speed: Spring Hinges	Door and gate spring hinges shall be adjusted so that from the open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.		N/A				
156		404.2.9	Doors	Door and Gate Opening Force	Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:1. Interior hinged doors and gates: 5 pounds (22.2 N) maximum.2. Sliding or folding doors: 5 pounds (22.2 N) maximum.These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door or gate in a closed position.		Pass				
157		404.3	Doors	Automatic and Power-Assisted Doors and Gates	Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).		N/A				
158		404.3.7	Doors	Revolving Doors, Revolving Gates and Turnstiles	Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.		N/A				
159		602.1	Drinking Fountains	General	Drinking fountains shall comply with 307 and 602	Yes	Fail	22	22		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
160		602.2, 306.3	Drinking Fountains	Clear Floor Space	Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit. Knee and toe clearance complying with 306 shall be provided. EXCEPTION: A parallel approach complying with 305 shall be permitted at units for children's use where the spout is 30 inches maximum above the finish floor or ground and is 3½ inches maximum from the front edge of the unit, including bumpers. 306.3.1 General: Space under an element between 9 inches and 27 inches above the finish floor or ground shall be considered knee clearance and shall comply with 306.3. 306.3.2 Maximum Depth: Knee clearance shall extend 25 inches maximum under an element at 9 inches above the finish floor or ground. 306.3.3 Minimum Required Depth: Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches deep minimum at 9 inches above the finish floor or ground, and 8 inches deep minimum at 27 inches above the finish floor or ground. 306.3.4 Clearance Reduction: Between 9 inches and 27 inches above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch in depth for each 6 inches in height. 306.3.5 Width: Knee		Pass				
161		602.3, 309.4	Drinking Fountains	Operable Parts	Operable parts shall comply with 309. 309.4 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.		Pass				
162		602.4	Drinking Fountains	Spout Height	Spout outlets shall be 36 inches maximum above the finish floor or ground	Yes	Fail	22	22	Gym	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
163		602.5	Drinking Fountains	Spout Location	The spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the unit, including bumpers.		Pass				
164		602.7	Drinking Fountains	Drinking Fountains for Standing Persons	Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the finish floor or ground.	Yes	Fail	22	22	Gym	
165		213.1	Toilet Facilities and Bathing Facilities	General	Where toilet facilities and bathing facilities are provided, they shall comply with 213. Where toilet facilities and bathing facilities are provided in facilities permitted by 206.2.3 Exceptions 1 and 2 not to connect stories by an accessible route, toilet facilities and bathing facilities shall be provided on a story connected by an accessible route to an accessible entrance.	Yes	Fail	43	43	Boys Locker Room	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
166		213.2	Toilet Facilities and Bathing Facilities	Toilet Rooms and Bathing Rooms	Where toilet rooms are provided, each toilet room shall comply with 603. Where bathing rooms are provided, each bathing room shall comply with 603. EXCEPTIONS: 1. In alterations where it is technically infeasible to comply with 603, altering existing toilet or bathing rooms shall not be required where a single unisex toilet room or bathing room complying with 213.2.1 is provided and located in the same area and on the same floor as existing inaccessible toilet or bathing rooms.2. Where exceptions for alterations to qualified historic buildings or facilities are permitted by 202.5, no fewer than one toilet room for each sex complying with 603 or one unisex toilet room complying with 213.2.1 shall be provided.3. Where multiple single user portable toilet or bathing units are clustered at a single location, no more than 5 percent of the toilet units and bathing units at each cluster shall be required to comply with 603. Portable toilet units and bathing units complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1.4. Where multiple single user toilet rooms are clustered at a single location, no more than 50 percent of the single user toilet rooms for each use	Yes	Fail	43	43	Boys Locker Room	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
167		216.8	Toilet Facilities and Bathing Facilities	Signs: Toilet Rooms and Bathing Rooms	Where existing toilet rooms or bathing rooms do not comply with 603, directional signs indicating the location of the nearest toilet room or bathing room complying with 603 within the facility shall be provided. Signs shall comply with 703.5 and shall include the International Symbol of Accessibility complying with 703.7.2.1. Where existing toilet rooms or bathing rooms do not comply with 603, the toilet rooms or bathing rooms complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1. Where clustered single user toilet rooms or bathing facilities are permitted to use exceptions to 213.2, toilet rooms or bathing facilities complying with 603 shall be identified by the International Symbol of Accessibility complying with 703.7.2.1 unless all toilet rooms and bathing facilities comply with 603		Pass				
168		604.1	Water Closets	General	Water closets and toilet compartments shall comply with 604.2 through 604.8. EXCEPTION: Water closets and toilet compartments for children's use shall be permitted to comply with 604.9.	Yes	Fail	9		Bathroom Stall Door	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
169		604.2	Water Closets	Location	The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches minimum to 18 inches maximum from the side wall or partition, except that the water closet shall be 17 inches minimum and 19 inches maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2. Water closets shall be arranged for a left-hand or right-hand approach.		Pass				
170		604.4	Water Closets	Seats	The seat height of a water closet above the finish floor shall be 17 inches minimum and 19 inches maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position. EXCEPTIONS: 1. A water closet in a toilet room 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 604.4.2. In residential dwelling units, the height of water closets shall be permitted to be 15 inches minimum and 19 inches maximum above the finish floor measured to the top of the seat.		Pass				
171		604.6, 309.4	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 except in ambulatory accessible compartments complying with 604.8.2. 309.4 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.	Yes	Fail	9	9		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
172		604.7	Water Closets	Dispensers	Toilet paper dispensers shall comply with 309.4 and shall be 7 inches minimum and 9 inches maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches minimum and 48 inches maximum above the finish floor and shall not be located behind grab bars. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.		Pass				
173		604.8	Toilet Stalls	Toilet Compartments	Wheelchair accessible toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. Ambulatory accessible compartments shall comply with 604.8.2 and 604.8.3.	Yes	Fail	9	9	604.9 ?	
174		604.8.1.1	Toilet Stalls	Wheelchair Accessible Compartments: Size	Wheelchair accessible compartments shall be 60 inches wide minimum measured perpendicular to the side wall, and 56 inches deep minimum for floor mounted water closets measured perpendicular to the rear wall. Wheelchair accessible compartments for children's use shall be 60 inches wide minimum measured perpendicular to the side wall, and 59 inches deep minimum for wall hung and floor mounted water closets measured perpendicular to the rear wall.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
175		604.8.1.2	Toilet Stalls	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 compartment and any obstruction shall be 42 inches minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches maximum from the front partition. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.	Yes	Fail	9	9	Boys Toilet Room	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
176		604.8.1.4	Toilet Stalls	Wheelchair Accessible Compartments: Toe Clearance	The front partition and at least one side partition shall provide a toe clearance of 9 inches minimum above the finish floor and 6 inches deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Compartments for children's use shall provide a toe clearance of 12 inches minimum above the finish floor. EXCEPTION: Toe clearance at the front partition is not required in a compartment greater than 62 inches deep with a wall-hung water closet or 65 inches deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches wide. Toe clearance at the front partition is not required in a compartment for children's use that is greater than 65 inches deep.						
177		604.8.2.1	Toilet Stalls	Ambulatory Accessible Compartments: Size	Ambulatory accessible compartments shall have a depth of 60 inches minimum and a width of 35 inches minimum and 37 inches maximum.		Pass				
178		604.8.2.2	Toilet Stalls	Ambulatory 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 compartment and any obstruction shall be 42 inches minimum. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the minimum required compartment area.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
179		604.8.2.3	Toilet Stalls	Ambulatory Accessible Compartments: Grab Bars	Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment						
180		605.2	Urinals	Height and Depth	Urinals shall be the stall-type or the wall-hung type with the rim 17 inches maximum above the finish floor or ground. Urinals shall be 13½ inches deep minimum measured from the outer face of the urinal rim to the back of the fixture.		N/A				
181		605.3, 305.3	Urinals	Clear Floor Space	A clear floor or ground space complying with 305 positioned for forward approach shall be provided. 305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.		Pass				
182		605.4, 309.4	Urinals	Flush Controls	Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309. 309.4 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.		Pass				
183		309.4	Mirrors / Accessories	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.		Pass				
184		308	Mirrors / Accessories	Reach Ranges	Reach ranges shall comply with 308. Table 308: Children's Reach Ranges: Forward or Side Reach Age 3&4 36" High 20"Low; Age 5-8 40" High 18" Low; Age 9-12 44" High 16" Low	Yes	Fail	12	12	Nurse's Bathroom	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
185		603.3	Mirrors / Accessories	Mirrors	Mirrors located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 40 inches maximum above the finish floor or ground. Mirrors not located above lavatories or countertops shall be installed with the bottom edge of the reflecting surface 35 inches maximum above the finish floor or ground.		Pass				
186		603.4	Mirrors / Accessories	Coat Hooks and Shelves	Coat hooks shall be located within one of the reach ranges specified in 308. Shelves shall be located 40 inches minimum and 48 inches maximum above the finish floor.		Pass				
187		605.3, 305.7.1	Mirrors / Accessories	Clear Floor Space	A clear floor or ground space complying with 305 positioned for forward approach shall be provided. 305.7.1 Forward Approach. Alcoves shall be 36 inches wide minimum where the depth exceeds 24 inches.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
188		606.2, 305.7.1, 306	Lavatories / Sinks	Clear Floor Space	A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided. EXCEPTIONS: 1. A parallel approach complying with 305 shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided and to wet bars. 2. A lavatory in a toilet room 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 provide knee and toe clearance complying with 306.3. In residential dwelling units, cabinetry shall be permitted under lavatories and kitchen sinks provided that all of the following conditions are met: (a) the cabinetry can be removed without removal or replacement of the fixture; (b) the finish floor extends under the cabinetry; and (c) the walls behind and surrounding the cabinetry are finished. 4. A knee clearance of 24 inches minimum above the finish floor or ground 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 finish floor or ground. 5. A parallel approach complying with 305 shall be permitted to lavatories and sinks used		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
189		606.3	Lavatories / Sinks	Height	Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches maximum above the finish floor or ground. 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. In residential dwelling unit kitchens, sinks that are adjustable to variable heights, 29 inches minimum and 36 inches maximum, shall be permitted where rough-in plumbing permits connections of supply and drain pipes for sinks mounted at the height of 29 inches.		Pass				
190		606.4, 309.4	Lavatories / Sinks	Faucets	Controls for faucets shall comply with 309. Hand-operated metering faucets shall remain open for 10 seconds minimum. 309.4 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.		Pass				
191		606.5	Lavatories / Sinks	Exposed Pipes and Surfaces	Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks	Yes	Fail	15	15		

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
192		607.2	Bathtubs	Clearance	Clearance in front of bathtubs shall extend the length of the bathtub and shall be 30 inches wide minimum. A lavatory complying with 606 shall be permitted at the control end of the clearance. Where a permanent seat is provided at the head end of the bathtub, the clearance shall extend 12 inches minimum beyond the wall at the head end of the bathtub.		N/A				
193		607.5, 309.4	Bathtubs	Controls	Controls, other than drain stoppers, shall be located on an end wall. Controls shall be between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub. Controls shall comply with 309.4. 309.4 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.		N/A				
194		607.6	Bathtubs	Shower Spray Unit and Water	A shower spray unit with a hose 59 inches long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Bathtub shower spray units shall deliver water that is 120°F (49°C) maximum.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
195		607.7	Bathtubs	Bathtub Enclosures	Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs. Enclosures on bathtubs shall not have tracks installed on the rim of the open face of the bathtub.		N/A				
196		608.2.1	Shower Compartments	Transfer Type Shower Compartments	Transfer type shower compartments shall be 36 inches by 36 inches clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch wide minimum entry on the face of the shower compartment. Clearance of 36 inches wide minimum by 48 inches long minimum measured from the control wall shall be provided.	Yes	Fail	10	10	Boys Locker Room	
197		608.2.2	Shower Compartments	Standard Roll-In Type Shower Compartments	Standard roll-in type shower compartments shall be 30 inches wide minimum by 60 inches deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches wide minimum entry on the face of the shower compartment.		N/A				
198		608.2.2.1	Shower Compartments	Standard Roll-In Type Shower Compartments: Clearance	A 30 inch wide minimum by 60 inch long minimum clearance shall be provided adjacent to the open face of the shower compartment. EXCEPTION: A lavatory complying with 606 shall be permitted on one 30 inch wide minimum side of the clearance provided that it is not on the side of the clearance adjacent to the controls or, where provided, not on the side of the clearance adjacent to the shower seat.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
199		608.2.3	Shower Compartments	Alternate Roll-In Type Shower Compartments	Alternate roll-in type shower compartments shall be 36 inches wide and 60 inches deep minimum clear inside dimensions measured at center points of opposing sides. A 36 inch wide minimum entry shall be provided at one end of the long side of the compartment.		N/A				
200		608.5, 309.4	Shower Compartments	Controls	Controls, faucets, and shower spray units shall comply with 309.4. 309.4 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.		Pass				
201		608.5.1	Shower Compartments	Transfer Type Shower Compartments: Controls	In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches minimum and 48 inches maximum above the shower floor and shall be located on the control wall 15 inches maximum from the centerline of the seat toward the shower opening.		Pass				
202		608.5.2	Shower Compartments	Standard Roll-In Type Shower Compartments: Controls	In standard roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be installed on the back wall adjacent to the seat wall and shall be located 27 inches maximum from the seat wall.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
203		608.5.3	Shower Compartments	Alternate Roll-In Type Shower Compartments: Controls	In alternate roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be located on the side wall adjacent to the seat 27 inches maximum from the side wall behind the seat or shall be located on the back wall opposite the seat 15 inches maximum, left or right, of the centerline of the seat. Where a seat is not provided, the controls, faucets, and shower spray unit shall be installed on the side wall farthest from the compartment entry.		N/A				
204		608.6	Shower Compartments	Shower Spray Unit and Water	A shower spray unit with a hose 59 inches long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120°F (49°C) maximum. EXCEPTION: A fixed shower head located at 48 inches maximum above the shower finish floor shall be permitted instead of a hand-held spray unit in facilities that are not medical care facilities, long-term care facilities, transient lodging guest rooms, or residential dwelling units.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
205		608.7	Shower Compartments	Thresholds	Thresholds in roll-in type shower compartments shall be ½ inch high maximum in accordance with 303. In transfer type shower compartments, thresholds ½ inch high maximum shall be beveled, rounded, or vertical. EXCEPTION: A threshold 2 inches high maximum shall be permitted in transfer type shower compartments in existing facilities where provision of a ½ inch high threshold would disturb the structural reinforcement of the floor slab.		Pass				
206		609.2.1	Grab Bars	Circular Cross Section	Grab bars with circular cross sections shall have an outside diameter of 1¼ inches minimum and 2 inches maximum		Pass				
207		609.2.2	Grab Bars	Non-Circular Cross Section	Grab bars with non-circular cross sections shall have a cross-section dimension of 2 inches maximum and a perimeter dimension of 4 inches minimum and 4.8 inches maximum.		N/A				
208		609.3	Grab Bars	Spacing	The space between the wall and the grab bar shall be 1½ inches. The space between the grab bar and projecting objects below and at the ends shall be 1½ inches minimum. The space between the grab bar and projecting objects above shall be 12 inches minimum. EXCEPTION: The space between the grab bars and shower controls, shower fittings, and other grab bars above shall be permitted to be 1½ inches minimum.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
209		609.4, 607.4.1.1, 607.4.1.2	Grab Bars	Position of Grab Bars	Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the finish floor measured to the top of the gripping surface, except that at water closets for children's use complying with 604.9, grab bars shall be installed in a horizontal position 18 inches minimum and 27 inches maximum above the finish floor measured to the top of the gripping surface. The height of the lower grab bar on the back wall of a bathtub shall comply with 607.4.1.1 or 607.4.2.1. 607.4.1.1 Back Wall: Two grab bars shall be installed on the back wall, one located in accordance with 609.4 and the other located 8 inches minimum and 10 inches maximum above the rim of the bathtub. Each grab bar shall be installed 15 inches maximum from the head end wall and 12 inches maximum from the control end wall. 607.4.1.2 Control End Wall: A grab bar 24 inches long minimum shall be installed on the control end wall at the front edge of the bathtub.						
210		609.5	Grab Bars	Surface Hazards	Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive elements and shall have rounded edges.	Yes	Fail	42	42	No Vertical Grab Bar	
211		609.8	Grab Bars	Structural Strength	Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.		Pass				
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
212		610.2	Tub/Shower Seat	Bathtub Seats	The top of bathtub seats shall be 17 inches minimum and 19 inches maximum above the bathroom finish floor. The depth of a removable tub seat shall be 15 inches minimum and 16 inches maximum. The seat shall be capable of secure placement. Permanent seats at the head end of the bathtub shall be 15 inches deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.		N/A				
213		610.3	Tub/Shower Seat	Shower Compartment Seats	Where a seat is provided in a standard roll-in shower compartment, it shall be a folding type, shall be installed on the side wall adjacent to the controls, and shall extend from the back wall to a point within 3 inches of the compartment entry. Where a seat is provided in an alternate roll-in type shower compartment, it shall be a folding type, shall be installed on the front wall opposite the back wall, and shall extend from the adjacent side wall to a point within 3 inches of the compartment entry. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches of the compartment entry. The top of the seat shall be 17 inches minimum and 19 inches maximum above the bathroom finish floor. Seats shall comply with 610.3.1 or 610.3.2.						
214		610.3.1	Tub/Shower Seat	Shower Compartment Seats: Rectangular Seats	The rear edge of a rectangular seat shall be 2½ inches maximum and the front edge 15 inches minimum and 16 inches maximum from the seat wall. The side edge of the seat shall be 1½ inches maximum from the adjacent wall.		Pass				
							N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
215		610.3.2	Tub/Shower Seat	Shower Compartment Seats: L-Shaped Seats	The rear edge of an L-shaped seat shall be 2½ inches maximum and the front edge 15 inches minimum and 16 inches maximum from the seat wall. The rear edge of the “L” portion of the seat shall be 1½ inches maximum from the wall and the front edge shall be 14 inches minimum and 15 inches maximum from the wall. The end of the “L” shall be 22 inches minimum and 23 inches maximum from the main seat wall.		Pass				
216		610.4	Tub/Shower Seat	Structural Strength	Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.		Pass				
217		803.4, 903	Dressing, Fitting and Locker Rooms	Benches	A bench complying with 903 shall be provided within the room. 903.6 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure. 903.7 Wet Locations: Where installed in wet locations, the surface of the seat shall be slip resistant and shall not accumulate water.		Pass				
218		217.1	Telephones	General	Where coin-operated public pay telephones, coinless public pay telephones, public closed-circuit telephones, public courtesy phones, or other types of public telephones are provided, public telephones shall be provided in accordance with 217 for each type of public telephone provided. For purposes of this section, a bank of telephones shall be considered to be two or more adjacent telephones		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
219		217.2	Telephones	Wheelchair Accessible Telephones	Where public telephones are provided, wheelchair accessible telephones complying with 704.2 shall be provided in accordance with Table 217.2. EXCEPTION: Drive-up only public telephones shall not be required to comply with 217.2		N/A				
220		217.4.1	Telephones	Bank Requirement	Where four or more public pay telephones are provided at a bank of telephones, at least one public TTY complying with 704.4 shall be provided at that bank. EXCEPTION: TTYs shall not be required at banks of telephones located within 200 feet (61 m) of, and on the same floor as, a bank containing a public TTY.		N/A				
221		704.2.1, 305.3	Telephones	Clear Floor or Ground Space	A clear floor or ground space complying with 305 shall be provided. The clear floor or ground space shall not be obstructed by bases, enclosures, or seats. 305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.		N/A				
222		704.2.1.1	Telephones	Parallel Approach	Where a parallel approach is provided, the distance from the edge of the telephone enclosure to the face of the telephone unit shall be 10 inches maximum.		N/A				
223		704.2.1.2	Telephones	Forward Approach	Where a forward approach is provided, the distance from the front edge of a counter within the telephone enclosure to the face of the telephone unit shall be 20 inches (510 mm) maximum.		N/A				
224		704.2.2	Telephones	Wheelchair Accessible Telephones: Operable Parts	Operable parts shall comply with 309. Telephones shall have push-button controls where such service is available. 309.4 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.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
225		704.2.3	Telephones	Wheelchair Accessible Telephones: Telephone Directories	Telephone directories, where provided, shall be located in accordance with 309						
226		704.2.4	Telephones	Wheelchair Accessible Telephones: Cord Length	The cord from the telephone to the handset shall be 29 inches long minimum.		N/A				
227		704.3	Telephones	Volume Control Telephones	Public telephones required to have volume controls shall be equipped with a receive volume control that provides a gain adjustable up to 20 dB minimum. For incremental volume control, provide at least one intermediate step of 12 dB of gain minimum. An automatic reset shall be provided.		N/A				
228		704.4	Telephones	TTYs	TTYs required at a public pay telephone shall be permanently affixed within, or adjacent to, the telephone enclosure. Where an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the TTY and the telephone receiver.		N/A				
229		704.4.1	Telephones	TTYs: Height	When in use, the touch surface of TTY keypads shall be 34 inches minimum above the finish floor. EXCEPTION: Where seats are provided, TTYs shall not be required to comply with 704.4.1.		N/A				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
230		704.5	Telephones	TTY Shelf	Public pay telephones required to accommodate portable TTYs shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a TTY and shall have 6 inches minimum vertical clearance above the area where the TTY is to be placed.		N/A				
231		216.1	Signage	General	Signs shall be provided in accordance with 216 and shall comply with 703. EXCEPTIONS: 1. Building directories, menus, seat and row designations in assembly areas, occupant names, building addresses, and company names and logos shall not be required to comply with 216. 2. In parking facilities, signs shall not be required to comply with 216.2, 216.3, and 216.6 through 216.12. 3. Temporary, 7 days or less, signs shall not be required to comply with 216. 4. In detention and correctional facilities, signs not located in public use areas shall not be required to comply with 216	Yes	Fail	16, 33	16, 33	Parks & Rec, Main Entrance	
232		216.2	Signage	Designations	Interior and exterior signs identifying permanent rooms and spaces shall comply with 703.1, 703.2, and 703.5. Where pictograms are provided as designations of permanent interior rooms and spaces, the pictograms shall comply with 703.6 and shall have text descriptors complying with 703.2 and 703.5. EXCEPTION: Exterior signs that are not located at the door to the space they serve shall not be required to comply with 703.2.	Yes	Fail	2	2	Cafeteria	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
233		703.1	Signage	General	Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided	Yes	Fail	44	44	Science CR	
234		703.2.1-8	Signage	Raised Characters	<p>Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3.</p> <p>Raised characters shall be installed in accordance with 703.4. 703.2.1 Depth: Raised characters shall be 1/32 inch minimum above their background.</p> <p>703.2.2 Case: Characters shall be uppercase.</p> <p>703.2.3 Style: Characters shall be sans serif.</p> <p>Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. 703.2.4</p> <p>Character Proportions: Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".</p> <p>703.2.5 Character Height: Character height measured vertically from the baseline of the character shall be 5/8 inch minimum and 2 inches maximum based on the height of the uppercase letter "I". EXCEPTION: Where separate raised and visual characters with the same information are provided, raised character height shall be permitted to be ½ inch minimum. 703.2.6 Stroke Thickness: Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character. 703.2.7 Character Spacing: Character spacing shall be measured between the</p>						Pass

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
235		703.3.1-2	Signage	Braille	703.3.1 Dimensions and Capitalization: Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. 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. 703.3.2 Position: Braille shall be positioned 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 tactile characters and 3/8 inch minimum from raised borders and decorative elements. EXCEPTION: 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.						
236		703.4.1	Signage	Installation Height and Location	Tactile characters on signs shall be located 48 inches minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character. EXCEPTION: Tactile characters for elevator car controls shall not be required to comply with 703.4.1.		Pass				
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
237		703.4.2	Signage	Location	Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches minimum by 18 inches minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position. EXCEPTION: Signs with tactile characters shall be permitted on the push side of doors with closers and without hold-open devices.	Yes	Fail	23	23	K-Wing	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
238		703.5.1-9	Signage	Visual Characters	Visual characters shall comply with 703.5. EXCEPTION: Where visual characters comply with 703.2 and are accompanied by braille complying with 703.3, they shall not be required to comply with 703.5.2 through 703.5.9. 703.5.1 Finish and Contrast: Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background. 703.5.2 Case: Characters shall be uppercase or lowercase or a combination of both. 703.5.3 Style: Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms. 703.5.4 Character Proportions: Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I". 703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I". 703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40						
239		703.7.1	Signage	Symbols of Accessibility: Finish and Contrast	Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.	Yes	Fail	43	43	Old Signs are hard to read	
240		225.2	Storage	Storage	Where storage is provided in accessible spaces, at least one of each type shall comply with 811.	Yes	Fail	43	43	Old Signs are hard to read	
						Yes	Fail	19	19	Art CR	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
241		225.2.1	Storage	Lockers	Where lockers are provided, at least 5 percent, but no fewer than one of each type, shall comply with 811.	Yes	Fail	18	18	General	
242		225.3	Storage	Self-Service Storage Facilities	Self-service storage facilities shall provide individual self-service storage spaces complying with these requirements in accordance with Table 225.3.	N/A					
243		811.2, 305.3	Storage	Clear Floor or Ground Space	A clear floor or ground space complying with 305 shall be provided. 305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum.	Pass					
244		811.3	Storage	Height	Storage elements shall comply with at least one of the reach ranges specified in 308	Yes	Fail	19	19	Art CR	
245		811.4, 309	Storage	Operable Parts	Operable parts shall comply with 309. 309.4 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.	Yes	Fail	20	20	Closet Doors	
246		215.1	Alarms	General	Where fire alarm systems provide audible alarm coverage, alarms shall comply with 215. EXCEPTION: In existing facilities, visible alarms shall not be required except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.	Pass					

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
247		702.1	Alarms	General	Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition). EXCEPTION: Fire alarm systems in medical care facilities shall be permitted to be provided in accordance with industry practice.		Pass				
248		226.1	Dining Surfaces and Work Surfaces	General	Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with 902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with 902. EXCEPTIONS: 1. Sales counters and service counters shall not be required to comply with 902. 2. Check writing surfaces provided at check-out aisles not required to comply with 904.3 shall not be required to comply with 902.		Pass				
249		226.2	Dining Surfaces and Work Surfaces	Dispersion	Dining surfaces and work surfaces required to comply with 902 shall be dispersed throughout the space or facility containing dining surfaces and work surfaces.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
250		902.2, 306.2, 306.3	Dining Surfaces and Work Surfaces	Clear Floor or Ground Space	A clear floor space complying with 305 positioned for a forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided. 305.3 Size: The clear floor or ground space shall be 30 inches minimum by 48 inches minimum. 306.2 Toe Clearance 306.2.1 General: Space under an element between the finish floor or ground and 9 inches above the finish floor or ground shall be considered toe clearance and shall comply with 306.2. 306.2.2 Maximum Depth: Toe clearance shall extend 25 inches maximum under an element. 306.2.3 Minimum Required Depth: Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches minimum under the element. 306.2.4 Additional Clearance: Space extending greater than 6 inches beyond the available knee clearance at 9 inches above the finish floor or ground shall not be considered toe clearance. 306.2.5 Width: Toe clearance shall be 30 inches wide minimum. 306.3 Knee Clearance 306.3.1 General: Space under an element between 9 inches and 27 inches above the finish floor or ground shall be considered knee clearance and shall comply with 306.3. 306.3.2 Maximum Depth: Knee clearance shall extend 25 inches maximum						
251		902.3	Dining Surfaces and Work Surfaces	Height	The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum above the finish floor or ground.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
252		902.4, 902.4.1-2	Dining Surfaces and Work Surfaces	Dining Surfaces and Work Surfaces for Children's Use	Accessible dining surfaces and work surfaces for children's use shall comply with 902.4. EXCEPTION: Dining surfaces and work surfaces that are used primarily by children 5 years and younger shall not be required to comply with 902.4 where a clear floor or ground space complying with 305 positioned for a parallel approach is provided. 902.4.1 Clear Floor or Ground Space: A clear floor space complying with 305 positioned for forward approach shall be provided. Knee and toe clearance complying with 306 shall be provided, except that knee clearance 24 inches minimum above the finish floor or ground shall be permitted. 902.4.2 Height: The tops of tables and counters shall be 26 inches minimum and 30 inches maximum above the finish floor or ground.						
							Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
253		206.2.6	Assembly Areas	Performance Areas	Where a circulation path directly connects a performance area to an assembly seating area, an accessible route shall directly connect the assembly seating area with the performance area. An accessible route shall be provided from performance areas to ancillary areas or facilities used by performers unless exempted by 206.2.3 Exceptions 1 through 7. 206.2.3 Multi-Story Buildings and Facilities: At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities. EXCEPTIONS: 1. In private buildings or facilities that are less than three stories or that have less than 3000 square feet per story, an accessible route shall not be required to connect stories provided that the building or facility is not a shopping center, a shopping mall, the professional office of a health care provider, a terminal, depot or other station used for specified public transportation, an airport passenger terminal, or another type of facility as determined by the Attorney General. 2. Where a two story public building or facility has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below. 3. In detention and correctional facilities,		Pass			Lift	
254		221.1	Assembly Areas	General	Assembly areas shall provide wheelchair spaces, companion seats, and designated aisle seats complying with 221 and 802. In addition, lawn seating shall comply with 221.5.		Pass			Gym	

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
255		221.2	Assembly Areas	Wheelchair Spaces	Wheelchair spaces complying with 221.2 shall be provided in assembly areas with fixed seating. 221.2.1 Number and Location: Wheelchair spaces shall be provided complying with 221.2.1. 221.2.1.1 General Seating: Wheelchair spaces complying with 802.1 shall be provided in accordance with Table 221.2.1.1	Yes	Fail	7		Companion 7 Seating	
256		216.1	Assembly Areas	Assistive Listening Systems	Each assembly area required by 219 to provide assistive listening systems shall provide signs informing patrons of the availability of the assistive listening system. Assistive listening signs shall comply with 703.5 and shall include the International Symbol of Access for Hearing Loss complying with 703.7.2.4. EXCEPTION: Where ticket offices or windows are provided, signs shall not be required at each assembly area provided that signs are displayed at each ticket office or window informing patrons of the availability of assistive listening systems.		N/A				
257		219.2	Assembly Areas	Assistive Listening Systems: Required Systems	In each assembly area where audible communication is integral to the use of the space, an assistive listening system shall be provided. EXCEPTION: Other than in courtrooms, assistive listening systems shall not be required where audio amplification is not provided.		N/A				

ADA Compliance Survey

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
258		802.1.1	Assembly Areas	Wheelchair Spaces: Floor or Ground Surface	The floor or ground surface of wheelchair spaces shall comply with 302. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted. 302.1 General: Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. 302.2 Carpet: Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be ½ inch maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.		Pass				
259		802.1.2	Assembly Areas	Wheelchair Spaces: Width	A single wheelchair space shall be 36 inches wide minimum Where two adjacent wheelchair spaces are provided, each wheelchair space shall be 33 inches wide minimum.		Pass				
260		802.1.3	Assembly Areas	Wheelchair Spaces: Depth	Where a wheelchair space can be entered from the front or rear, the wheelchair space shall be 48 inches deep minimum. Where a wheelchair space can be entered only from the side, the wheelchair space shall be 60 inches deep minimum.		Pass				
261		802.1.4	Assembly Areas	Approach	Wheelchair spaces shall adjoin accessible routes. Accessible routes shall not overlap wheelchair spaces.		Pass				
262		802.1.5	Assembly Areas	Overlap	Wheelchair spaces shall not overlap circulation paths.		Pass				

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Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
263		802.3	Assembly Areas	Companion Seats	802.3.1 Alignment: In row seating, companion seats shall be located to provide shoulder alignment with adjacent wheelchair spaces. The shoulder alignment point of the wheelchair space shall be measured 36 inches from the front of the wheelchair space. The floor surface of the companion seat shall be at the same elevation as the floor surface of the wheelchair space. 802.3.2 Type: Companion seats shall be equivalent in size, quality, comfort, and amenities to the seating in the immediate area. Companion seats shall be permitted to be movable.						
264		802.4	Assembly Areas	Designated Aisle Seats	802.4.1 Armrests: Where armrests are provided on the seating in the immediate area, folding or retractable armrests shall be provided on the aisle side of the seat. 802.4.2 Identification: Each designated aisle seat shall be identified by a sign or marker.	Yes	Fail	7	7	Companion Seating	
							N/A				

ADA Compliance Survey

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
265		206.2.4	Cafeterias	Spaces and Elements	At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility which are otherwise connected by a circulation path unless exempted by 206.2.3 Exceptions 1 through 7.EXCEPTIONS: 1. Raised courtroom stations, including judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, and court reporters' stations shall not be required to provide vertical access provided that the required clear floor space, maneuvering space, and, if appropriate, electrical service are installed at the time of initial construction to allow future installation of a means of vertical access complying with 405, 407, 408, or 410 without requiring substantial reconstruction of the space.2. In assembly areas with fixed seating required to comply with 221, an accessible route shall not be required to serve fixed seating where wheelchair spaces required to be on an accessible route are not provided.3. Accessible routes shall not be required to connect mezzanines where buildings or facilities have no more than one story. In addition, accessible routes shall not be required to connect stories or mezzanines where multi-story buildings		Pass				

ADA Compliance Survey

Entry #	Priority	Code Reference	Element	Item	Compliance Requirement	Readily Achievable	Pass/Fail	Photo Ref #	Plan Ref #	Notes	Cost to Fix
266		206.2.5	Cafeterias	Restaurants and Cafeterias	In restaurants and cafeterias, an accessible route shall be provided to all dining areas, including raised or sunken dining areas, and outdoor dining areas.EXCEPTIONS: 1. In buildings or facilities not required to provide an accessible route between stories, an accessible route shall not be required to a mezzanine dining area where the mezzanine contains less than 25 percent of the total combined area for seating and dining and where the same decor and services are provided in the accessible area.2. In alterations, an accessible route shall not be required to existing raised or sunken dining areas, or to all parts of existing outdoor dining areas where the same services and decor are provided in an accessible space usable by the public and not restricted to use by people with disabilities.3. In sports facilities, tiered dining areas providing seating required to comply with 221 shall be required to have accessible routes serving at least 25 percent of the dining area provided that accessible routes serve seating complying with 221 and each tier is provided with the same services.		Pass				
267		227.4	Cafeterias	Food Service Lines	Food service lines shall comply with 904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with 308.		Pass				

[illegible]

The Sherman School
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A1	Upgrade building entrances for added security measures - (5 locations)	3		Y		5	EA	\$ 30,000	\$ 150,000	\$ 15,000	\$ 165,000	4%		\$ 193,027		Y	This line item may be reduced if combined with educational enhancement items.
A2	Provide added access control at exterior doors (appx 15 drs)	2		Y		15	EA	\$ 2,500	\$ 37,500	\$ 3,750	\$ 41,250	4%		\$ 48,257		Y	
A3	Schedule an infrared thermal scan of roof and walls.	3		Y		1	LS	\$ 7,500	\$ 7,500	\$ 750	\$ 8,250	4%	\$ 8,923				
A4	Replace classroom windows in "B" wing and "D" wing (23 rms)	3		Y		23	EA	\$ 2,400	\$ 55,200	\$ 5,520	\$ 60,720	4%		\$ 71,034			
A5	Replace exterior EFIS at main entry and other parts of "D" wing.	2		Y		1000	SF	\$ 11	\$ 11,060	\$ 1,106	\$ 12,166	4%		\$ 14,232			
A9	Repair all roofing loose seams, holes and flashing.	4		Y		1	LS	\$ 20,000	\$ 20,000	\$ 2,000	\$ 22,000	4%	\$ 23,795				
A10	Replace roof area "E" - failing membrane with EPDM, provide overflow drains.	4		Y		4800	SF	\$ 23	\$ 108,000	\$ 10,800	\$ 118,800	4%	\$ 128,494			Y	
A11	Roof areas "C,H,K,L,M,&N" will be eligible for state reimbursement in two years. These areas should be replaced in 2020.	2			Y	22811	SF	\$ 23	\$ 513,248	\$ 51,325	\$ 564,572	4%		\$ 660,470		Y	
A12	Replace water damaged ceiling tile, mitigate source of water (roof, plumbing, of condensate)	3		Y		3000	SF	\$ 3.0	\$ 9,000	\$ 900	\$ 9,900	4%	\$ 10,708				
A13	Replace damaged wood stair doors with fire rated doors and provide continuous hinges units. (11 drs.)	4		Y		11	EA	\$ 2,250	\$ 24,750	\$ 2,475	\$ 27,225	4%	\$ 29,447				
A14	Repair / replace various flooring areas. (RUBBER, CARPET,VCT)	4		Y		4000	SF	\$ 10	\$ 40,000	\$ 4,000	\$ 44,000	4%	\$ 47,590				
A15	Trim all trees overhanging the roof and clear roof drains.	4		Y		1	LS	\$ 5,000	\$ 5,000	\$ 500	\$ 5,500	4%	\$ 5,949				
M1	Pumps for the boilers should be replaced.	1		Y		10	EA	\$ 3,500	\$ 35,000	\$ 3,500	\$ 38,500	4%			\$ 46,841		
M2	Replace corroded piping in boiler room.	1		Y		500	LF	\$ 50	\$ 25,000	\$ 2,500	\$ 27,500	4%			\$ 33,458		
M3	Install new insulation on heating piping in Boiler Room.	3		Y		500	LF	\$ 12	\$ 6,000	\$ 600	\$ 6,600	4%		\$ 7,721			
M4	Inspect and replace valves on heating equipment (perimeter radiation, CUH, UV and AHU with VAV boxes.	4			Y	100	EA	\$ 225	\$ 22,500	\$ 2,250	\$ 24,750	4%	\$ 26,770				This line item may be reduced if full building AC is completed.
M5	Mechanical equipment (AHU, RTU), avg 9,000 CFM are approximately 18 - 30 years old and replacement should be a consideration.	4			Y	6	EA	\$ 95,000	\$ 570,000	\$ 57,000	\$ 627,000	4%		\$ 733,501			This line item may be reduced if full building AC is completed.
M6	Replace exhaust fans (approx. 10 units)	3		Y		10	EA	\$ 3,500	\$ 35,000	\$ 3,500	\$ 38,500	4%	\$ 41,642				
M7	Unit Ventilators are nearing the end of their life expectancy and currently do not meet State of CT code for classroom noise emissions and should be replaced. Provide full building air conditioning or dehumidification in the school.	4			Y	46961	SF	\$ 50	\$ 2,348,050	\$ 234,805	\$ 2,582,855	4%		\$ 3,021,575		Y	
M8	Upgrade control system to provide digital control of HVAC systems	4			Y	80000		\$ 6	\$ 480,000	\$ 48,000	\$ 528,000	4%	\$ 571,085				
M9	Replace oil tank with 10,000 gal. above ground unit.	3		Y		1	LS	\$ 75,000	\$ 75,000	\$ 7,500	\$ 82,500	4%		\$ 96,513		Y	
E1	The existing 800 amp service is obsolete and replacement should be considered.	2		Y		1	EA	\$ 35,000	\$ 35,000	\$ 3,500	\$ 38,500	4%			\$ 46,841		
E2	Provide U.L. Designed lightning protection at roof levels.	1			Y	55000	SF	\$ 1	\$ 55,000	\$ 5,500	\$ 60,500	4%		\$ 70,776		Y	
E3	Provide new wiring between Emergency Generator and Fire Pump.	2		Y		300	LF	\$ 75	\$ 22,500	\$ 2,250	\$ 24,750	4%		\$ 28,954			
E4	Provide separate transfer switches for Emergency and Stand By power.	2		Y		1	LS	\$ 25,000	\$ 25,000	\$ 2,500	\$ 27,500	4%		\$ 32,171			
E5	Replace Panel in Fire Pump Room with weather resistant enclosure.	3			Y	1	LS	\$ 2,500	\$ 2,500	\$ 250	\$ 2,750	4%					
P1	Domestic water booster pumps are obsolete and replacement should be considered.	1		Y		2	EA	\$ 4,500	\$ 9,000	\$ 900	\$ 9,900	4%	\$ 10,708				

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P2	Install system to control chloride/sodium levels within each well, pending Towns final report.	1		Y		1	LS	\$ 17,500	\$ 17,500	\$ 1,750	\$ 19,250	4%	\$ 20,821			Y	
P3	Video survey plumbing fixtures with poor drainage for pipe corrosion.	2		Y		1	LS	\$ 7,500	\$ 7,500	\$ 750	\$ 8,250	4%			\$ 10,037		
P4	Verify that a low water level alarm is in place at water tank.	2		Y		1	LS	\$ 10,000	\$ 10,000	\$ 1,000	\$ 11,000	4%			\$ 13,383		
FP1	Verify operation of dry system air compressor and replace as required.	2		Y		1	LS	\$ 5,000	\$ 5,000	\$ 500	\$ 5,500	4%			\$ 6,692		
FP2	Replace fire pump equipment.	3			Y	1	LS	\$ 50,000	\$ 50,000	\$ 5,000	\$ 55,000	4%		\$ 64,342			
FP3	Provide proper coverage per NFPA 13 2010 and reinstall ceiling tiles for proper activation of sprinkler system, particularly at the electrical room next to the Band Room #101.	2		Y		1000	SF	\$ 15	\$ 15,000	\$ 1,500	\$ 16,500	4%		\$ 19,303			
L1	Replace existing exterior wall mounted light fixtures to LED type fixtures	2		Y		10	EA	\$ 450	\$ 4,500	\$ 450	\$ 4,950	4%			\$ 6,022		
T2	Install additional security cameras at South side of building for added security. (5 locations)	3		Y		5	EA	\$ 3,000	\$ 15,000	\$ 1,500	\$ 16,500	4%		\$ 19,303		Y	
T3	Recommend adding assisted listening systems in classrooms and assembly spaces.	2		Y		15	EA	\$ 1,500	\$ 22,500	\$ 2,250	\$ 24,750	4%			\$ 30,112	Y	
C1	Maintain the required headroom (6'-8") at all exit access corridors and required exits.	3		Y		1	LS	\$ 3,000	\$ 3,000	\$ 300	\$ 3,300	4%		\$ 3,861		Y	
C2	Install compliant stair handrails at the exterior exit.	3		Y		50	LF	\$ 95	\$ 4,750	\$ 475	\$ 5,225	4%		\$ 6,113		Y	
C3	Install compliant ramp handrail extensions and landing clearances at interior locations.	3		Y		See item C13				\$ -	\$ -	4%				Y	
C4	Post occupancy signs in all designated assembly occupancies.	2		Y		3	EA	\$ 75	\$ 225	\$ 23	\$ 248	4%		\$ 290		Y	
C5	Provide emergency plans per requirements of existing educational and existing assembly occupancies.	2		Y		45	EA	\$ 125	\$ 5,625	\$ 563	\$ 6,188	4%		\$ 7,238		Y	
C6	Discharge from Exits, exit termination at south stair exit	3		Y		1	LS	\$ 5,000	\$ 5,000	\$ 500	\$ 5,500	4%		\$ 6,434		Y	
C7	Provide compliant stair and platform construction at the raised platform addition. Provide slip resistance, stair treads at raised platform. Provide compliant stair handrails at the raised platform stairs.	3		Y		500	SF	\$ 125	\$ 62,500	\$ 6,250	\$ 68,750	4%		\$ 80,428		Y	This item is not needed if Ed Enhancements are completed
C8	Site Accessible Route - Due to the sloping site at the school: Provide compliant walkways, ramps, curb ramps, cross slopes, bus drop off areas, van accessible space, loading zones, accessible egress from the lower level at the south side of the building. Also consider updating the accessible parking at the school fields and adding an accessible south side parking area.	2			Y	1	LS	\$ 250,000	\$ 250,000	\$ 25,000	\$ 275,000	4%		\$ 321,711		Y	
C9	Accessible Parking - Update and/or install new signage, parking aisles and cross slopes. Update and/or relocate accessible parking spaces at the building's north side. Provide accessible parking in the south parking lot.	3			Y	1	LS	\$ 50,000	\$ 50,000	\$ 5,000	\$ 55,000	4%		\$ 64,342		Y	
C10	Curb Ramps - Install new and update existing curb ramps to complete the site accessible route.	2		Y		5	EA	\$ 3,500	\$ 17,500	\$ 1,750	\$ 19,250	4%		\$ 22,520		Y	
C11	Entrances - In conjunction with Signage and Site Accessible Route provide a Main and Lower Level access from the handicapped parking areas to and from the designated accessible entrances.	2			Y	1	LS	\$ 75,000	\$ 75,000	\$ 7,500	\$ 82,500	4%		\$ 96,513		Y	

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C12	Accessible Route Interior - Designate an accessible interior route and update all compliance issues within that designated route. In conjunction with the Site Accessible Route provide the required accessible egress from each level of the building.	2			Y	1	LS	\$ 100,000	\$ 100,000	\$ 10,000	\$ 110,000	4%		\$ 128,684		Y	
C13	Ramps - Provide compliant handrails at all interior ramps.	2		Y		80	LF	\$ 95	\$ 7,600	\$ 760	\$ 8,360	4%			\$ 10,171	Y	
C14	Doors - Provide the required door maneuvering clearances at all locations along the accessible route. In particular, the access to the Locker Rooms, Girls Handicapped Toilet at the Lower Level	2		Y		20	EA	\$ 7,500	\$ 150,000	\$ 15,000	\$ 165,000	4%			\$ 200,748	Y	
C15	Drinking Fountains - Remove existing drinking fountains and provide new "Bottle Fill" and "Bottle Fill/Bubbler" fountains for accessibility. If existing drinking fountains are to remain, update (gymnasium and corridors) drinking fountains not in compliance.	1		Y		4	EA	\$ 3,500	\$ 14,000	\$ 1,400	\$ 15,400	4%			\$ 18,736	Y	
C16	Signage - Exterior signage for accessible entrances. Update all room signage to coincide with the current use of each space.	1		Y		150	EA	\$ 200	\$ 30,000	\$ 3,000	\$ 33,000	4%			\$ 40,150	Y	
S1	Bituminous paving and base replacement to eliminate ponding and improve drainage.	1			Y	50000	SF	\$ 5	\$ 250,000	\$ 25,000	\$ 275,000	4%			\$ 334,580		
S2	Bituminous curb replacement - consider extruded concrete for better wear.	1			Y	1000	LF	\$ 25	\$ 25,000	\$ 2,500	\$ 27,500	4%			\$ 33,458		
S3	Bituminous sidewalks - replace as needed to address accessibility and damaged areas.	1			Y	10000	SF	\$ 4	\$ 35,000	\$ 3,500	\$ 38,500	4%			\$ 46,841		
S4	Replace play areas including surface materials and equipment.	4		Y		1	LS	\$ 500,000	\$ 500,000	\$ 50,000	\$ 550,000	4%	\$ 594,880				Two playscapes combined into one for different age groups, includes demolition, surfacings, equipment, fencing and related work.
S5	Landscaping (trees and shrubs) are mature and in some cases too close to the building - remove and/or trim as needed.	3		Y		1	LS	\$ 10,000	\$ 10,000	\$ 1,000	\$ 11,000	4%	\$ 11,898				
S6	Service area recommendations include providing concrete pads for the dumpsters and replacement of the wood screen fence with a material better suited for the long term.	4		Y		2000	SF	\$ 20	\$ 40,000	\$ 4,000	\$ 44,000	4%	\$ 47,590				
Ed1	K-Wing Option 3 - (recommended)Construct a new Performing Arts wing for the multi-purpose room, stage, vocal music and band. Add a stage craft area. This provides an opportunity to fully develop the educational program for the performing arts program.	3			Y	5830	SF	\$ 450	\$ 2,623,500	\$ 262,350	\$ 2,885,850	4%		\$ 3,376,036		Y	
Ed2	Relocate the Library to existing multi-purpose space to include Computer / Digital Art Studio, TV/Video Room, student printer location, Media Center, Work Room / Office. The existing multipurpose areas are will suited in location, size and space quality for the new functions. The removal of the tier risers and stage eliminate major code deficiencies. Demolition of the small storage rooms along the exterior wall provides an opportunity to install windows for natural light.	3			Y	4416	SF	\$ 250	\$ 1,104,000	\$ 110,400	\$ 1,214,400	4%		\$ 1,420,676		Y	
Ed3	Re-purpose the existing library for Pre-K and Kindergarten classrooms, cubbie area and break-out space. The final major space re-purposing addresses the need to bring the Pre-K, Kindergarten and 1st grade together in a wing. The adjacent exit could permit access for separate drop off and pick up.	3			Y	5900	SF	\$ 100	\$ 590,000	\$ 59,000	\$ 649,000	4%		\$ 759,238		Y	

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Ed4	Update Art Room and Kiln Room and Fully renovate Science Lab and Prep Room	3			Y	2800	SF	\$ 150	\$ 420,000	\$ 42,000	\$ 462,000	4%		\$ 540,475		Y	
Ed5	Renovate Lobby Space, Security Vestibule and Main Office	3			Y	1700	SF	\$ 150	\$ 255,000	\$ 25,500	\$ 280,500	4%		\$ 328,145		Y	
Ed6	Relocate and update Special Education Director's Office.	3			Y	400	SF	\$ 75	\$ 30,000	\$ 3,000	\$ 33,000	4%		\$ 38,605		Y	
Ed7	Relocate and update OT/PT and Resource Room in "New K-Wing"	3			Y	900	SF	\$ 75	\$ 67,500	\$ 6,750	\$ 74,250	4%		\$ 86,862		Y	
Ed8	Re-purpose exterior space between "New K-Wing" and new Performing Arts wing for Multi-Purpose Exterior Space ie: seating, performance area and small play area	3			Y	5500	SF	\$ 45	\$ 247,500	\$ 24,750	\$ 272,250	4%		\$ 318,494		Y	
Ed9	Provide an outdoor classroom and upper grade gathering space.	1		Y		1	LS	\$ 50,000	\$ 50,000	\$ 5,000	\$ 55,000	4%		\$ 64,342		Y	
TOTAL ALL ITEMS									\$ 11,896,508	\$ 1,189,651	\$ 13,086,158		\$ 1,580,299	\$ 12,752,187	\$ 878,071		
25% Soft Costs (A&E Fees, CM Fees, Legal, Financing, FF&E, Printing, Other Consultants)												\$ 3,271,540					
TOTAL PROJECT COSTS												\$ 16,357,698					
POSSIBLE STATE REIMBURSMENT (11.59%)												\$ 1,895,857	Reimbursment % will be different depending on enrollment and final building area and project type				

A6	K-Wing options (#1) Demolish building wing and do not rebuild) Landscape open area.				Y	3933	SF	\$ 26.00	\$ 102,258	\$ 10,226	\$ 112,484	4%					Not required if Ed Enhancements are completed.
A7	K-Wing option (#2) Completely gut existing wing down to structure and rebuild to match existing program spaces.				Y	3933	SF	\$ 242	\$ 951,786	\$ 95,179	\$ 1,046,965	4%					Not required if Ed Enhancements are completed.