

Windham Board of Education

School Facilities Existing Condition Survey & Master Plan



Executive Summary

**WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES
EXISTING CONDITION SURVEY & MASTER PLAN
EXECUTIVE SUMMARY**

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WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN EXECUTIVE SUMMARY

Introduction

This report addresses the existing conditions at the six schools expressly serving the Towns of Windham, Willimantic, North Windham and Windham Center, Connecticut. The purpose of this report is to describe current conditions of the architectural, structural, electrical and mechanical (including fire protection) and site components. The report also evaluates code compliance requirements; specifically, compliance with the International Building Code (IBC), National Fire Protection Association (NFPA) and Americans with Disabilities Act (ADA) codes / regulations is evaluated.

Surveys were conducted from early May through late July, 2012. The survey work included documenting existing conditions, updating AutoCAD files and surveying electrical and mechanical equipment. After recording this and other pertinent information, the data was analyzed to determine the general condition of the building, addressing items such as the building enclosure, interior finishes and architectural conditions.

Through the Study and Design process, two main objectives emerged which guided the perspective in which ideas were evaluated and decisions made:

Primary Objective: The BOE resolved to insure all Windham children are able to attend a school that is safe, modern, compliant with building Codes and able to support its educational program; to facilitate completion of the Facilities Master Plan by exploring the feasibility of improving school buildings to support school programs that would meet the needs of Windham students and their families.

Secondary objective: Remove all BOE facilities from Kramer Building

By these guidelines, the 10-Year Facilities Master Plan recommendations and Opinion of Probable Costs were developed by Friar Associates in the months following the study, with estimating assistance from Newfield Construction. Through regular meetings with the School Planning & Design Committee, and input from the entire Board of Education, the plans were refined and the costs estimates adjusted accordingly.

Sections included in this report are as follows:

Section 1

In addition to this brief introduction to the processes followed and work undertaken during the Existing Condition Study, Section 1 reviews the needs and objectives of the Facilities Master Plan, and contains a school location plan, enrollment projections, and projected Space Standard for each facility.

Section 2

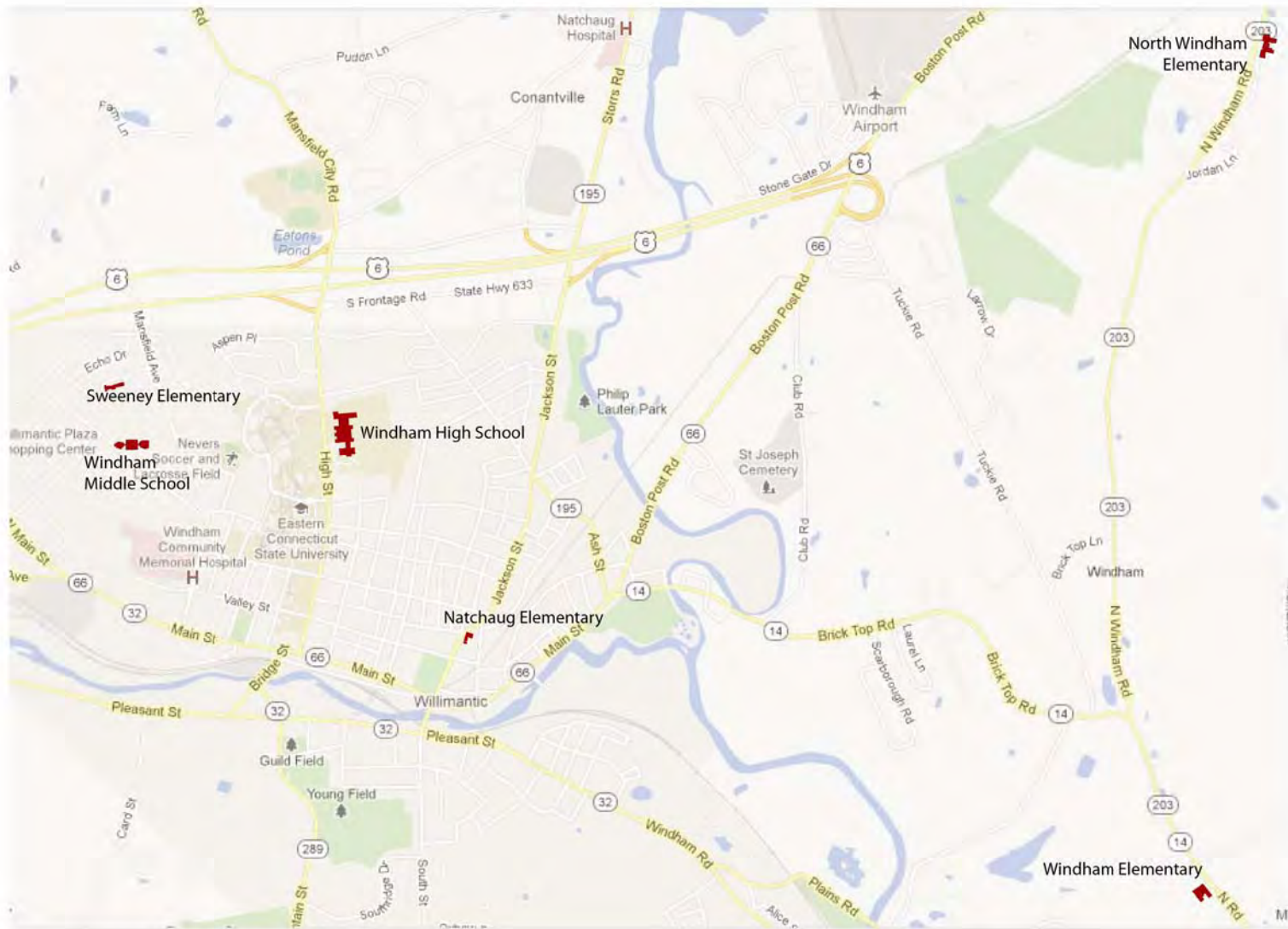
The second section contains the Executive Summary of each building, which provides an overview and summarizes the existing condition survey results. Graphs are included to represent current conditions of the building components and conformity with code requirements. A summary of the Opinion of Probable Costs and overview of the required work addressed by the building survey is included.

Section 3

Section 3 includes a program document of existing space / department listings of each building along with a description of the current conditions and building usage. This space utilization information is presented along with recommendations to meet the requirements of the proposed program. Conceptual plans, illustrating the assessment and possible improvements, are also included.

Section 4

The final section summarizes the recommendations of the Master Plan improvements and associated costs. This information, in conjunction with the program and existing conditions data, will provide the Owner the ability to prioritize construction projects and develop a long-range planning process that addresses and protects the value of the Board of Education's facility assets.



Site Map
Existing Conditions Survey & Master Plan

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN EXECUTIVE SUMMARY

Why has the Board of Education completed a Facilities Master Plan?

NEED

To improve student achievement and retention, the Board of Education has developed and adopted a Vision, Theory of Action and Strategic Operating Plan to create high-performing schools of choice.

Through the Facilities Master Plan, the Board has explored the feasibility of improving school buildings to support school programs that would meet the needs of Windham students and their families. This would insure that all Windham children are able to attend a school that is safe, modern, compliant with current building codes and able to support its educational programs.

Currently Windham Public Schools do not meet the standards of 21st century learning. Not only does this affect the education of Windham students, but it also creates difficulty in attracting and retaining qualified teachers. Quality school buildings attract highly qualified teachers with the abilities to provide students with tools they need to succeed in today's competitive world. These qualities in our schools, in turn, make Windham an attractive place to live, work and raise a family; directly affecting the overall value of property in Windham.

The need to improve our schools stems not just from a need to invest in student learning but a need to invest in the future of the Windham community.

Time since last renovations

As demonstrated by the State Department of Education's website, the majority of the Windham school facilities have not had significant improvements in the last 40-50 years.

2011 Report on the Condition of Connecticut's Public School Facilities

General Building Conditions

Michelle Dixon (860) 713-6477

Data Selection Page		Print	Download (CSV)		Query Criteria		Send E-Mail
District	School Name	Grade Range	Year Built	Last Major Update	Code Update	Handicap Access	
WINDHAM	Natchaug School	K -04	1914	1974	Y	AllPgms	
WINDHAM	North Windham School	K -04	1959	1988	Y	AllPgms	
WINDHAM	Windham Center School	K -04	1953	1968	Y	AllPgms	
WINDHAM	W.B. Sweeney School	K -04	1959	1963	Y	AllPgms	
WINDHAM	Windham Middle School	05-08	1997	N/R	N	GenArea	
WINDHAM	Windham High School	09-12	1970	N/R	N	AllPgms	
WINDHAM	Early Headstart – Boston Post Road	PK-PK	1985	N/R	N	AllAreas	

CT State Department of Education, Report on the Condition of Connecticut's Public School Facilities
<https://www.csde.state.ct.us/public/dgm/ed050/pickyear.aspx>

While the facilities and maintenance staff have worked hard to preserve the buildings under their care, yearly budget shortfalls have resulted in deferred maintenance and the postponement of necessary, but cost-prohibitive improvements, greatly increasing their workloads.

All of Windham's school buildings have dated mechanical systems that are not in prime working condition, or are nearing the end of their useful life. These conditions are one of several growing safety concerns for our students, teachers and community groups that utilize the buildings.

School capacity and portable classrooms

When school enrollments and populations peaked in the early 1970s and again in the early 1980s, badly needed space was added to the facilities in the form of temporary, portable classrooms. Those facilities are still in use, as indicated on the State Department of Education’s website.

2011 Report on the Condition of Connecticut's Public School Facilities Building Size and Capacity by School

Michelle Dixon (860) 713-6477

Data Selection Page		Print	Download (CSV)		Query Criteria		Send E-Mail	
District	School Name	Square Footage	Acreage	Class Rooms	# of Portable	Portable in use since	Capacity	10/2010 Enrollment
WINDHAM	Natchaug School	48,276	3.0	19			380	235
WINDHAM	North Windham School	55,000	15.0	21	1	1972	422	425
WINDHAM	Windham Center School	35,448	6.0	15	2	1985	300	289
WINDHAM	W.B. Sweeney School	43,000	5.0	19	2	1972	380	343
WINDHAM	Windham Middle School	173,872	18.0	73			1,100	986
WINDHAM	Windham High School	222,518	42.0	57			1,140	729
WINDHAM	Early Headstart – Boston Post Road	10,000	2.5	4			35	31
Total		588,114	91.5	208	5	0	3,757	3,038

CT State Department of Education, Report on the Condition of Connecticut's Public School Facilities
<https://www.csde.state.ct.us/public/dgm/ed050/pickyear.aspx>

As evidenced by the State’s calculation of each school building’s size and capacity, current school enrollments have decreased, resulting in schools which are oversized for the population they serve. It is a primary goal of each school renovation in the Facilities Master Plan to remove the portable classrooms and include those populations and programs within a single school building, correctly sized for the student population.

EFFICIENCIES

Enrollment

To gauge the projected enrollment for the school system, Friar Associates teamed Don Klepper-Smith, Chief Economist and Director of Research at DataCore Partners LLC. Friar and DataCore studied the historical demographics of the Windham and the public school enrollments.

The following page represents the projected enrollment for the Windham school system over the next eight years. Historical population data for years 2007-2011 was drawn from the State Department of Education’s records, and the 2012 population data comes directly from Superintendent Ortiz. The eight year enrollment projection data for years 2013-2021 was generated using linear regression trend lines.

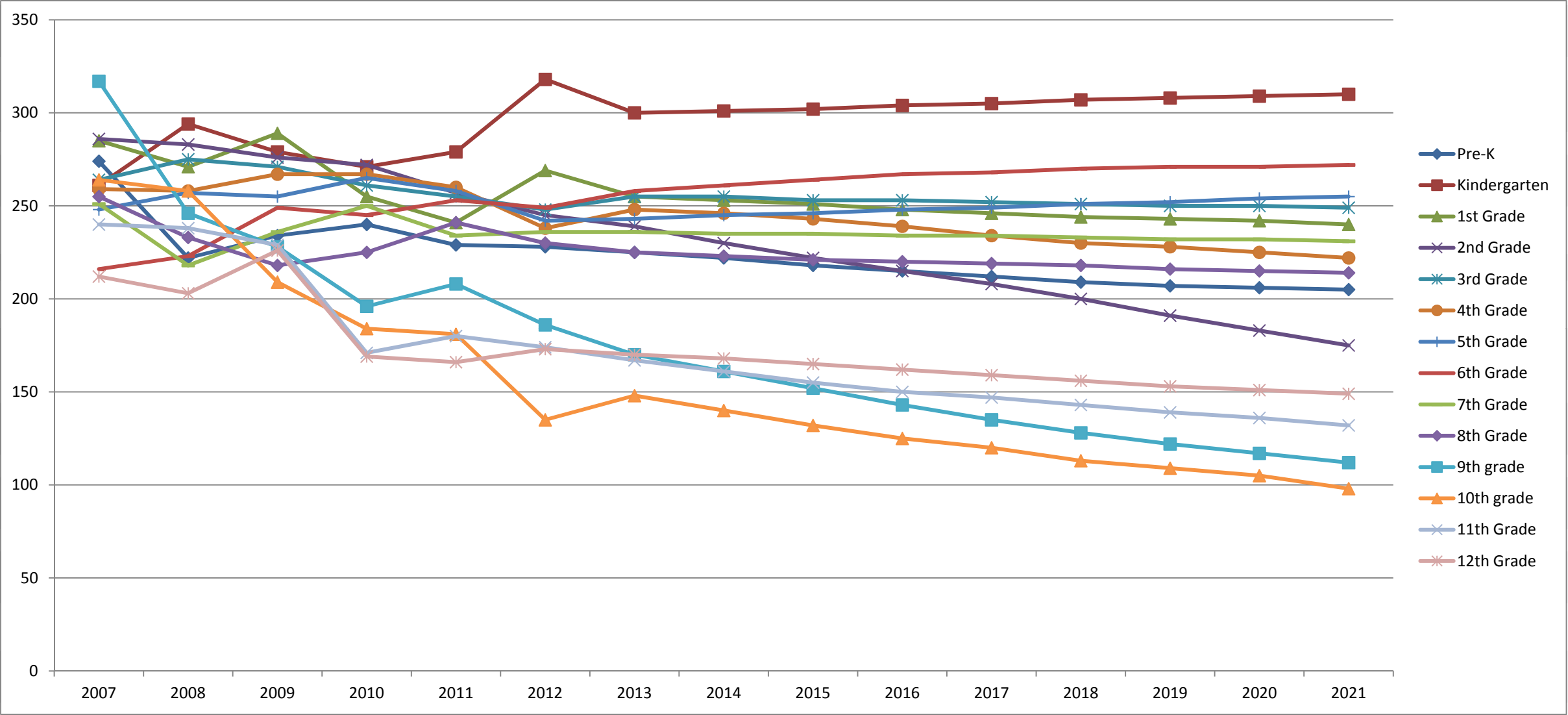
A separate census study completed by UCONN in 2012 projects an **overall population loss of 11.7%** in the ages 5-19 cohort for Windham. The calculated projections undertaken in the Master Plan indicate a **population loss in grades PK-12 of 9.7%** over the next eight years, as depicted on the following chart.

Consolidation

This information has been used to guide decisions on school development and sizing of facilities in the Facilities Master Plan that will promote:

- Consolidation of resources and facilities
 - Withdrawal from the Kramer & Natchaug buildings
- Efficiencies of facility maintenance and energy savings
- Creation of “free” swing space for use during school renovations
- Targeting school populations to maximize State reimbursement of renovations

GR/Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
PK	274	222	234	240	229	228	225	222	218	215	212	209	207	206	205
K	261	294	279	271	279	318	300	301	302	304	305	307	308	309	310
1	285	271	289	255	241	269	255	253	251	248	246	244	243	242	240
2	286	283	276	272	257	245	239	230	222	215	208	200	191	183	175
3	264	275	271	261	255	248	255	255	253	253	252	251	250	250	249
4	259	258	267	267	260	238	248	246	243	239	234	230	228	225	222
5	248	257	255	265	258	242	243	245	246	248	249	251	252	254	255
6	216	223	249	245	253	249	258	261	264	267	268	270	271	271	272
7	251	218	236	250	234	236	236	235	235	234	234	233	232	232	231
8	255	233	218	225	241	230	225	223	221	220	219	218	216	215	214
9	317	246	228	196	208	186	170	161	152	143	135	128	122	117	112
10	264	258	209	184	181	135	148	140	132	125	120	113	109	105	98
11	240	238	229	171	180	174	167	161	155	150	147	143	139	136	132
12	212	203	226	169	166	173	170	168	165	162	159	156	153	151	149
PK-12 Total	3,632	3,479	3,466	3,271	3,242	3,171	3,139	3,101	3,059	3,023	2,988	2,953	2,921	2,896	2,864
K-12 Total	3,358	3,257	3,232	3,031	3,013	2,943	2,914	2,879	2,841	2,808	2,776	2,744	2,714	2,690	2,659



WINDHAM PUBLIC SCHOOLS - FACILITY AND MASTER PLAN STUDY

MASTER PLAN Proposed School Realignment: reconfiguring existing student numbers to target desired building populations	Projected Enrollment (using '12/13 #s)	Enrollment Required for Max. Reimb Rate	Demolition (red) or Addition to meet State Space Stds.	Existing/ Adjusted Building Area (post 1950)	Building Area adjusted for State Space Stds	Allowable Building Area	Effective Reimb. Rate 79.64%	SF/Student (State Stds.)	PK/K	1	2	3	4	5	6	7	8	9	10	11	12
Windham High School (AHA/STEM academies)	800	1,000	33,789	181,000	181,000	181,000	79.64%	181										200	200	200	200
Windham Middle School (3 teams)	995	1,134		171,243	171,243	150,245	69.87%	151	260						254	243	238				
New Magnet School PK-8	400	600		83,700	83,700																
North Windham PK-5 (Year Round)	380	378	270	47,357	47,357	47,627	79.64%	125	80	61	58	58	54	60							
W.B. Sweeney Elementary - PK-5 (Dual Lang.)	557	286	34,022	35,789	35,789	69,811	79.64%	125	120	91	87	87	81	90							
Windham Center Elementary PK-5 (Montessori)	300	263	4,725	34,075	34,075	38,800	79.64%	129	67	51	48	48	45	50							
totals		3,432	3,661						267	203	193	193	180	201	254	243	238				

State Standards based upon school grade range and total school population	Projected Enrollment (using '12/13 #s)	Enrollment Required for Max. Reimb Rate	Demolish (red) or Addition	Existing Building Area (post 1950)	Building Area adjusted for State Space Stds			SF/Student (State Stds.)	PK/K	1	2	3	4	5	6	7	8	9	10	11	12
Windham High School (AHA/STEM academies)	800	1,003	33,789	181,000	181,000			181										170	184	184	184
Windham Middle School (3 teams)	995	1,134		171,243	171,243			151	116						148	170	170				
New Magnet School PK-8	400	600		83,700	83,700																
North Windham PK-5 (Dual Lang.)	380	378		47,357	47,357			125	120	120	120	120	120	152							
W.B. Sweeney Elementary - PK-5 (Year Round)	557	286		35,789	35,789			125	120	120	120	120	120	152							
Windham Center Elementary PK-5 (Montessori)	300	263		34,075	34,075			129	124	124	124	124	124	156							
totals		3,432	3,664																		

Priority List	Renovation Synopsis
Windham High School (AHA/STEM academies)	Full Roof Replacement; Heavy Renovations: 22,000 s.f.; Light Renovations: 32,000 s.f. Renovate as New: 171,000 s.f.
W.B. Sweeney Elementary - PK-5 (Dual Lang.)	New Addition: 34,000 s.f.; Medium Renovations: 25,000 s.f.; Light Renovations: 10,000 s.f.
North Windham PK-5 (Year Round)	Medium Renovations: 27,000 s.f.; Light Renovations: 20,000; New Toilet Addition: 300 s.f.; add A/C for Year Round program
Windham Center Elementary PK-5 (Montessori)	New Addition: 5,000 s.f. (4 classrooms); Medium Renovations: 24,000 s.f.; Light Renovations: 10,000 s.f.
Windham Middle School	Roof repairs and Code upgrades

INVESTMENT

It has been proven that the quality of learning environments directly affects a student's level of achievement. Few to no significant upgrades have been undertaken in the Windham Public School buildings since they were erected, in some cases 40-50 years ago. Program and space needs have changed significantly over the past half century, and the existing facilities can no longer offer adequate teaching environments, or modern technologies to enhance the learning and disciplinary experiences to better prepare Windham students for productive roles in life. In addition, many of the buildings physical systems are near or past their useful life.

Windham students have the right to an education based upon standards of excellence. The education provided by the Windham Public Schools is the shared responsibility of students, faculty, administration, support staff, parents and the community at large.

The Facilities Master Plan provides **enhanced learning and working areas for Students and Teachers**, promotes **healthy learning environments**, and **controls classroom sizes** by targeting optimal student populations for each building. The completed projects will provide **safe, modern facilities** that are compliant with all current building codes.

Through the implementation of these renovations, we will protect the most important investments of our community: our buildings, and our children's future.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN NATCHAUG SCHOOL

Executive Summary



Natchaug School is housed in a three-story, 48,026 square-foot masonry building located at 123 Jackson Street in Willimantic. Originally constructed in 1914, the building received an addition in 1923 and serves Grades K - 5.

The "L shaped" building contains three stairwells and an elevator. Circulation in the original building is provided by a central corridor with a stairwell at each end. The addition also has a central corridor with a stairwell and elevator near the end.

Based on the survey, Natchaug School is in poor condition.

Architectural Survey

The exterior skin of Natchaug School is brick masonry, which is in poor condition. The roof consists of Spray Polyurethane Foam (SPUF) roofing, which is in poor condition.

Typical windows consist of double hung windows with wood or painted aluminum frames, and exterior doors are painted metal. The windows are in fair condition and the exterior doors are in fair condition. The exterior sealants of the doors and windows are in poor condition.

The building interior is in fair condition with the original construction having been most recently renovated in 1975.

The work recommended to address architectural conditions includes:

- Replacing the SPUF roof, restoration of the roof deck and roof framing.
- Hazardous material removal and installation of new replacement finishes.
- Brick masonry restoration and parapet wall restoration.

Structural Survey

The building is typically constructed of masonry bearing walls and structural steel framing that is in fair condition. The roof is supported by structural wood framing with a wood plank roof deck. The foundation consists of a combination of reinforced concrete foundation walls and footings.

The work recommended to address structural conditions includes:

- Masonry parapet repair and restoration.
- Structural wood framing repairs, supplemental framing and replacement of deteriorated roof deck sheathing.
- Repair of exterior brick veneer at specific locations.

Electrical Survey

The electrical service is comprised of a 400 amp 208 volt three phase service that is functional but over 40 years.

The work recommended to address electrical system conditions includes:

- Replace broken and vandalized exterior lights.
- Replace non-ADA fire alarm horn strobes with ADA compliant fire alarm horn strobes and update the fire alarm system accordingly.
- Testing and / or replacing aged electrical circuit breakers and disconnect switches.

Mechanical Survey

The mechanical system is comprised of two (2) HB Smith oil burning steam boiler that are in fair condition

The work recommended to address mechanical systems conditions includes:

- Provide exhaust fans and ventilation in bathrooms.
- Replacing the two (2) 1/2 HP circulation pumps.
- Replacing the air conditioning units in roof.

Plumbing Survey

The plumbing system consists of 4" water line from Jackson Street and a direct connect to the city sewer system. There is also a 1" gas line to the building.

International Building Code Survey

Natchaug School was evaluated for compliance with the 2003 IBC and Connecticut Supplements and Amendments, through 2009 for Use Group E, Education. 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:

- Accessibility upgrades.
- Updates to the existing stair wells.
- Upgrading the Means of Egress from particular spaces and the individual floors and the early grades.

NFPA Code Survey

A review of Natchaug School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Upgrades to the exit access corridors and the stair wells to provide safe exiting.
- Door upgrades to provide proper fire ratings and enclosure.
- Stair exiting via proper handrails, guardrails, stairs and risers.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Accessible parking, site accessible route to the building and within the building.
- Accessible bathroom fixtures, seating areas, drinking fountains and door hardware.
- Accessible entrances, exterior and interior stairs, elevator and doors.

Site Survey

The site at Natchaug School was evaluated. Traffic flow at this school is poor, and walkways are in poor condition. Available parking accommodates 58 vehicles, with two handicap accessible spaces available. Paved play areas consist of bituminous concrete and are in fair condition. Playground areas include two playgrounds with a woodchip base, without a separate enclosed play area for the youngest students.

Site utilities include city water, city sewer, and an underground oil tank. Oil tank condition is unknown.

Plant beds, specialty or feature plants and trees are in good condition. There are special features, such as a small grassy lawn area with picnic tables and benches. This outdoor area is sun and part shade.

The work recommended to address site conditions includes:

- Site Accessibility: Building entrances / exits are not handicapped accessible, as doors are not flush with grade. Steep walks, abrupt elevation changes, and fencing prohibit site accessibility for handicapped users. Additionally, all playscape areas are equipped with perimeter curbing and are not handicapped user friendly.
- Parking: There is no on-site parking for the school. Natchaug School has a shared parking agreement with the adjacent St. Joseph's Church. Parking conflicts arise when services for the church occur during the week when school is use.
- Site Surface Materials: Asphalt paving is cracked and deteriorating.

Energy Survey

It is recommended that the Board of Education put in place a policy regarding energy-conscious design for the schools. With respect to possible energy-saving measures at Natchaug, recommended renovations include:

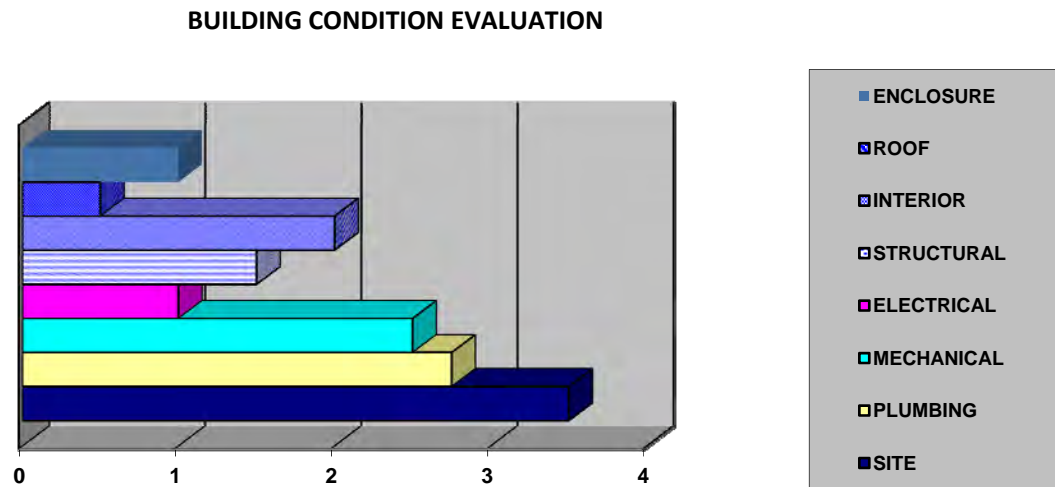
- Window and roof replacement.
- Lighting improvements to include LED fixtures.
- HVAC equipment replacement with high-efficiency systems.

It is recommended that the Board of Education select the following professionals to assist with the design and construction:

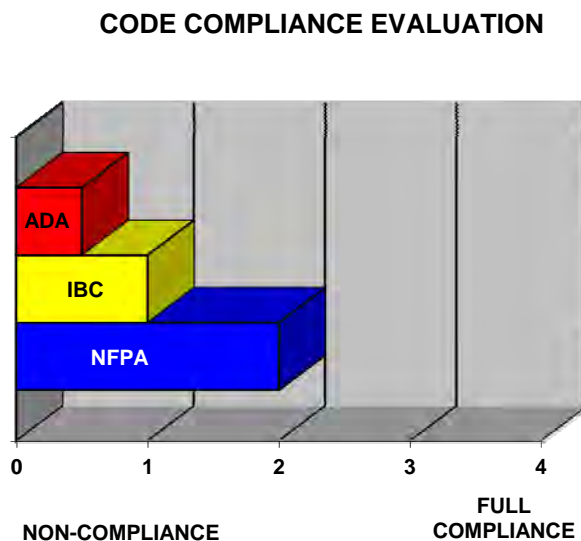
- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

Survey Results

Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be 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 survey results (reference Section 4 for a detailed description for each category).



The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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.



Note: The building contains many conditions that do not comply with applicable codes.

Recommendations

Based upon the construction work required to meet the programmatic needs of the users and upgrades required to comply with current applicable codes, while also meeting the overall goals of the Windham Public School System, it is recommended that no work be undertaken at Natchaug School.

Because it was determined by the Gale Associates report (March 2012) that the roof was in such poor condition, a recommendation was made for a full replacement of the roof and required repairs to the roof structure and building envelope. This work was undertaken as a separate project prior to the completion of the Existing Condition Survey & 10-Year Facilities Master Plan.

Proposed Work

Although it is recommended that no renovation work be undertaken at the Natchaug School, a rough estimate was generated during the study process to reflect the costs of bringing Natchaug School 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 Natchaug School to an Alteration condition.

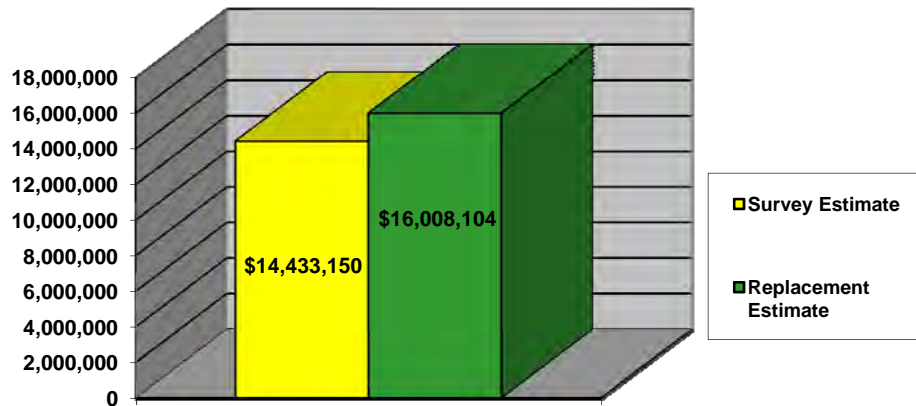
Projected costs are based on 2013 dollars and include no soft costs or contingencies. Not including the roof renovations which were removed as a stand-alone project, over the next 4 years, the required construction work at this school will cost approximately \$14,433,150. At 47,990 square feet, renovations at Natchaug School equate to approximately \$300 per square foot. This cost per-square-foot figure falls within industry standards for renovations/upgrades of this nature.

Replacement Cost

A new building of the same size would cost approximately \$300 per square foot. Using this figure, the replacement cost for Natchaug School is approximately \$16,008,104, which follows state standards for structures of this type. The square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type.

This estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”, but does not include potential site acquisition costs.

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



The required work addressed in this survey equates to approximately 90% percent of the Construction cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN NORTH WINDHAM SCHOOL

Executive Summary



North Windham School is housed in a one-story, 48,876 square-foot building located at 112 Jordan Lane in North Windham. Originally constructed in 1959, the building received an addition in 1974 and serves Grades K - 5.

The building was constructed slab on grade and therefore contains no stairs. Circulation is provided by a central corridor with two auxiliary corridors with ramps.

Based on the survey, North Windham School is in good condition.

Architectural Survey

The exterior skin of North Windham School is brick masonry, which is in fair condition. The roof consists of single ply EPDM roofing system, which is in poor condition.

Typical windows consist of sliding, double glazed hollow metal framed windows and exterior doors are insulated hollow metal. The windows are in fair condition and the exterior doors are in good condition. The exterior sealants of the doors and windows are in poor condition. At the older section of the building the windows are single glazed steel windows which are in need of replacement.

The building interior is in fair condition with the original construction having been most recently renovated in 1986.

The work recommended to address architectural conditions includes:

- Install a new roofing system to replace the existing providing additional roof pitch for drainage.
- Clean, repoint, and repair the existing masonry at the existing boiler chimney and at other spot locations at the building facade.
- Paint the existing fascia to protect the building enclosure.
- Repair cracking in CMU walls.
- Renovate existing portable classroom building to meet current codes or eliminate.
- Upgrade exiting doors and associated hardware to meet fire and ADA standards.
- Toilet Room finishes need upgrading due to deterioration.
- Interior ceilings which are water damaged need to be replaced.
- Interior floors need a finishes upgrade due to the age of the building.

Structural Survey

The building is typically constructed of structural steel frame and masonry infill that is in fair condition. The roof is supported by steel beams with a metal deck. The building foundation consists of a reinforced concrete slab-on-grade with reinforced foundation walls and footings.

The work recommended to address structural conditions includes:

- Repair the concrete foundation at corners where it is crumbling.
- Repair cracking in CMU walls and install control joint as required.
- Repair cracking in brick veneer walls and install expansion joints as required.
- Investigate roof deck for possible deterioration due to roof ponding.

Electrical Survey

The electrical service is comprised of 1200 amp 208 volt three phase entrance and is in fair condition.

The work recommended to address electrical system conditions includes:

- Replace broken and vandalized exterior lights.
- Replace non-ADA fire alarm horn strobes with ADA compliant fire alarm horn strobes and update the fire alarm system accordingly.
- Testing and / or replacing aged electrical circuit breakers and disconnect switches.

Mechanical Survey

The mechanical system is comprised of two (2) Weil-McLain oil burners and is in good condition.

The work recommended to address mechanical systems conditions includes:

- Inspecting classroom radiators for efficient and output.
- Inspect the existing gymnasium air handling units for efficiency and output.
- Provide exhaust fans and ventilation for the bathrooms.

Plumbing

The plumbing system consists of a 3-1/2" water line from an on-site well. The sanitary is pumped through an effluent pump to a large leeching field in the back.

The work recommended to address plumbing systems conditions includes:

- Provide a second well as an alternate water supply to the building.
- Repairing leaks to the existing septic system.

International Building Code Survey

North Windham School was evaluated for compliance with the 2003 IBC and Connecticut Supplements & Amendments, through 2009 for Use Group E, Education. 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:

- Accessibility upgrades.
- Upgrade the Means of Egress for accessibility.
- Provide on grade access from all teaching areas.
- Provide fire separation for code compliance.
- Means of egress for portable classrooms need to be upgraded.
- Provide compliant roof ladders and fall protection to all roof levels.

NFPA Code Survey

A review of North Windham School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Upgrade doors upgrades to provide proper fire ratings.
- Eliminate storage closets in the corridors.
- Eliminate wood paneled mural or protect with an intumescent coating.
- Provide Assembly areas with floor proximity exit signage.
- Remove existing folding gates from the corridors.

- Eliminate door closers which do not meet headroom clearances.
- Eliminate stored items, which impede the exit egress.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Upgrades for accessible parking, site accessible route to the building and accessible route within the building.
- Accessible bathroom fixtures, seating areas, drinking fountains and door hardware.
- Accessible entrances and exits at the portable classrooms.
- Accessible exits from the corridors and the classroom areas.
- Accessible Door hardware upgrades to provide accessibility to the classrooms and all rooms which require access.
- Accessibility to the Auditorium platform via a platform lift.
- Upgrade the existing toilet rooms to provide accessible plumbing fixtures and toilet accessories.
- Install new handicap accessible drinking fountains at accessible areas within the building.
- Install building signage throughout the facility.

Site Survey

The site at North Windham School was evaluated. Traffic flow at this school is good, but the walkways are in poor condition. Available parking accommodates 68 vehicles, with 2 available handicap accessible spaces. The outdoor recreational area consists of grass and is in excellent condition. Multiple playground areas have a woodchip base, but there is no separate enclosed play area for the youngest students.

Site utilities include domestic water, septic, underground oil and propane tanks. Underground oil and underground propane tank conditions are unknown. Septic tank and domestic water appear to be in poor condition due to water leaks in both systems.

Plant beds are in fair condition. There are special features, such as a heavily vegetated tree edge surrounding the lawn area. Along the tree edge are birdhouses for wildlife viewing.

The work recommended to address site conditions includes:

- Parking Lot: Parking spaces and fire land striping needs to be repainted. Handicapped parking signage posts are non-existent. Some clear delineation for handicapped parking needs to be addressed.

- Walkways: Cracked asphalt walks in need of repair. Conditions where doorways meet walkways needs evaluation for handicapped accessibility.
- Well: Drilling of two (2) new systems mandated by the state.
- Septic: Repairs due to water leakage into the system.

Energy Survey

It is recommended that the Board of Education put in place a policy regarding energy-conscious design for the schools. With respect to possible energy-saving measures at North Windham School, it is recommended that the school system continue to implement the proposals listed in the 2006 ConEdison energy audit and report, including:

- Window and roof repairs.
- Lighting improvements with consideration of LED fixtures.
- HVAC controls.

It is recommended that the Board of Education select the following professionals to assist with the design and construction:

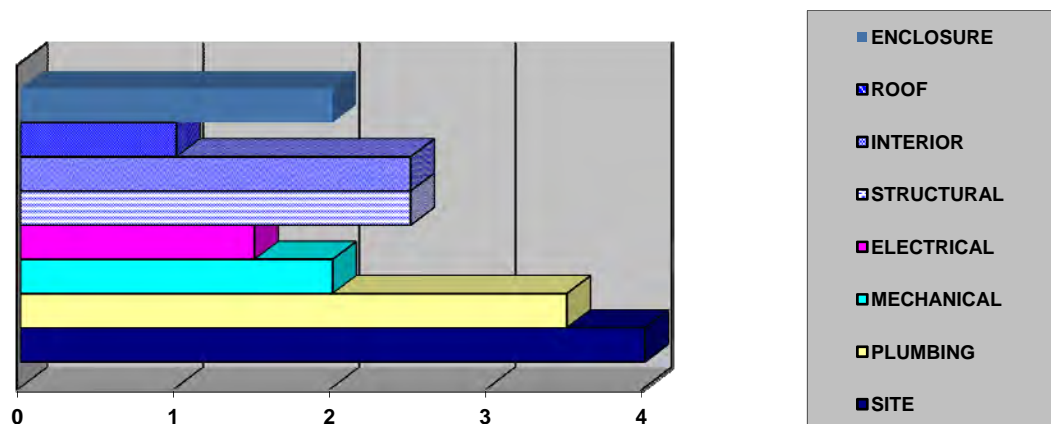
- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

Survey Results

Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be 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 survey results (reference Section 4 for a detailed description for each category).

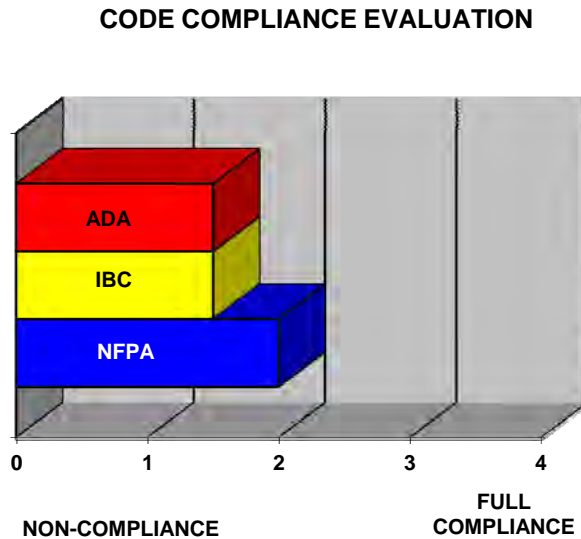
Program

BUILDING CONDITION EVALUATION



Scale: 1 = Poor Condition, 4 = Excellent Condition

The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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.



Note: The building contains conditions that do not comply with applicable codes.

Recommendations

Program and Conceptual Plan

Based upon the space utilization information gathered, a program that accommodates the various functions of the North Windham School includes the following needs:

- Addition of dedicated Toilet Rooms for the Kindergarten rooms which do not have them
- Relocation OT/PT and Social Worker's Offices, and repurposing areas for chair storage
- Creation of Teacher's Lounge/Workroom
- Creation of larger Special Education & Autism Learning Classrooms

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 the Windham Public School System.

Opinion of Probable Costs

The estimate of probable costs included in Section 10 of this report is designed as a planning tool for the Windham Board of Education. Estimates do not account for a possible change of use.

Required Work

The estimates reflect bringing North Windham School 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 provide Alterations at North Windham School. These costs were generated by Newfield Construction using Construction Cost Data and current local market conditions for buildings of this type.

Projected construction costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 4 years, the required Construction work at this school will cost approximately \$9,245,080. At 48,876 square feet, renovations at North Windham School equate to approximately \$190 per square foot. This cost per-square-foot figure falls within industry standards for renovations / upgrades of this nature.

Replacement Cost

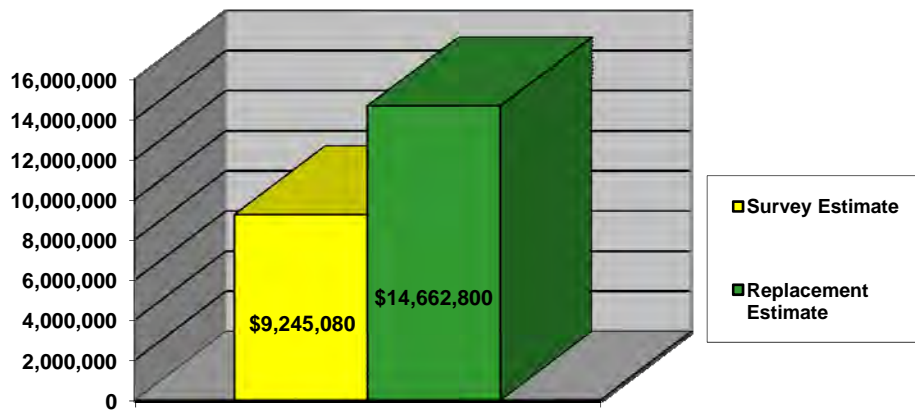
A similarly constructed building would cost \$300 per square foot. Using this figure, the replacement cost for North Windham School is approximately \$14,662,800, which follows state standards for structures of this type. The square foot replacement costs were generated by Newfield Construction using Construction Cost Data and current local market conditions for buildings of this type.

This estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other "soft costs", but does not include potential site acquisition costs.

State Reimbursement

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on an Alteration project is 69.64%. This would adjust the community's portion of the Total Project Costs from \$15,631,563 to \$6,378,616.

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



The required work addressed in this survey equates to approximately 63% percent of the Construction cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

**WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES
EXISTING CONDITION SURVEY & MASTER PLAN
SWEENEY ELEMENTARY SCHOOL**

Executive Summary



W. B. Sweeney Elementary School is housed in a one-story, 43,000 square-foot building located at 60 Oak Hill Drive in Willimantic. Originally constructed in 1959, the building received an addition in 1963 and serves Grades K - 4.

The building was built slab-on-grade, and therefore, does not contain any means of vertical circulation for students and faculty. Circulation provided by a central egress corridor with several means of egress.

Based on the survey, Sweeney Elementary School is in fair condition.

Architectural Survey

The exterior skin of Sweeney Elementary School is brick masonry, which is in good condition. The roof consists of single ply EPDM roofing system, which is in poor condition. Ponding, bubbling and patching are evident at the roof surface. It is believed that the roof is over 20 years old.

Typical windows consist of double-paned, sliding windows with painted aluminum frames and exterior doors are painted hollow metal. The windows are in fair condition and the exterior doors are in fair condition. The exterior sealants of the doors and windows are in poor condition.

The building interior is in fair condition with the original construction having been most recently renovated in 1963.

The work recommended to address architectural conditions includes:

- Install a new roofing system to replace the existing providing additional roof pitch for drainage.
- Clean, repoint, repair and repair the existing masonry at the existing boiler chimney.
- Paint the existing fascia to protect the building enclosure.
- Repair cracking in CMU walls.
- Renovate existing portable classroom building to meet current codes or eliminate.
- Upgrade exiting doors and associated hardware to meet fire and ADA standards.
- Toilet Room finishes need upgrading due to deterioration.
- Interior ceilings which are water damaged need to be replaced.

Structural Survey

The building is typically constructed of structural steel frame and masonry infill that is in fair condition. The roof is supported by steel beams with a metal deck. The foundation consists of a reinforced concrete slab-on-grade with reinforced foundation walls and footings.

The work recommended to address structural conditions includes:

- Repair the concrete foundation at corners where it is crumbling.
- Repair major cracking in CMU walls and install an expansion joint as required.
- Investigate roof deck for possible deterioration due to roof ponding.

Electrical Survey

The electrical service is comprised of an 800 amp 208 volt three phase entrance and is in fair condition.

The work recommended to address electrical system conditions includes:

- Replace broken and vandalized exterior lights.
- Replace non-ADA fire alarm horn strobes with ADA compliant fire alarm horn strobes and update the fire alarm system accordingly.
- Testing and / or replacing aged electrical circuit breakers and disconnect switches.

Mechanical Survey

The mechanical system is comprised of two (2) oil burning Burnam Boilers and is in good condition.

The work recommended to address mechanical systems conditions includes:

- Inspect the existing gymnasium air handling units for efficiency and output.
- Provide exhaust fans and ventilation for the bathrooms.
- Replacing the condensers on the roof.

Plumbing Survey

The plumbing system consists of 2" water line that connects to the water system in the street. There is sanitary line that connects to the city sewer system.

International Building Code Survey

Sweeney Elementary School was evaluated for compliance with the 2003 IBC and Connecticut Supplements & Amendments, through 2009 for Use Group E, Education. 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:

- Accessibility upgrades.
- Upgrading the Means of Egress for accessibility.
- Provide on grade access from all teaching areas.
- Fire separation for mixed use.
- Code compliant egress from the portable classrooms is needed.
- Provide compliant roof ladders and fall protection.
- Provide guardrails for fall protection.

NFPA Code Survey

A review of Sweeney Elementary School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Upgrades to the exit egress.
- Install fire rated doors.
- Eliminate storage closets in the corridors.
- Eliminate wood paneled mural or protect with an intumescent coating.
- Provide floor proximity exit signage in the Assembly area.
- Remove existing folding gates from the corridors.
- Eliminate door closers which do not meet the headroom requirement.
- Remove items that impede egress.
- Electrical installations need to be upgraded.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Upgrades for accessible parking, site accessible route to the building and accessible route within the building.
- Accessible bathroom fixtures, seating areas, drinking fountains and door hardware.
- Accessible entrances at the portable classrooms.
- Accessible exits from the corridors and the classroom areas.
- Accessible Door hardware upgrades to provide accessibility to the classrooms and all rooms which require access.
- Accessibility to the Cafetorium platform via a platform lift.
- Upgrade the existing toilet rooms to provide accessible plumbing fixtures and toilet accessories.
- Install new handicap accessible drinking fountains at accessible areas within the building.
- Install building signage throughout the facility.

Site Survey

The site at Sweeney Elementary School was evaluated. Traffic flow at this school is fair, and walkways are in poor condition. Available parking accommodates 65 vehicles, with three (3) handicap accessible spaces available. Paved play areas consist of bituminous concrete and are in poor condition. Playground areas include grass and two (2) playscapes, with a separate, partially enclosed play area for the youngest students.

Site utilities include city water, city sewer, underground propane tank and underground oil tank. Underground fuel tanks conditions are unknown.

Plant beds are in fair condition and deciduous shade trees are in excellent condition. There is a special feature, such as a large beech tree specimen near the entrance of the school.

The work recommended to address site conditions includes:

- Walkways: Walkways and paved play surface material needs to be repaired as they include cracked and uneven surface conditions. In addition to walkway surfaces, handicapped accessibility throughout the entire site needs to be evaluated. Some walks are not ADA accessible by code.
- Signage: Signage needs to be replaced and maintained. Signs are extremely faded; therefore no clear directions can be given to the site user.

- Utilities: Appropriate safety measures need to be taken to fuel / gas line access points. Currently the fuel / gas lines can be accessed by anyone, as there is no fence or lock prohibiting unauthorized access.
- Dumpster: Provide a safety barrier between the walkway and the retaining wall adjacent to the dumpster, as it poses a safety hazard to pedestrians.

Energy Survey

It is recommended that the school system continue to implement the proposals listed in the 2006 ConEdison energy audit and report, including:

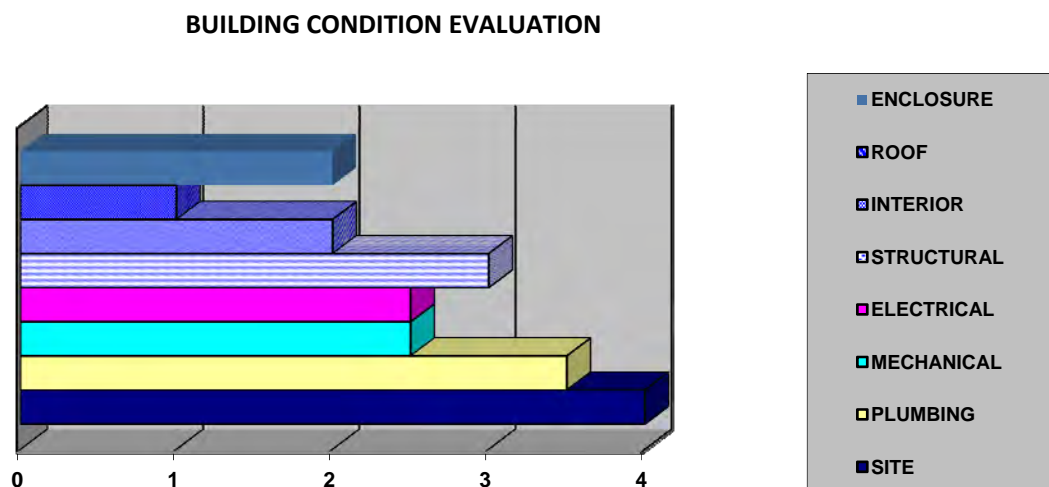
- Window and roof replacement.
- Lighting improvements to include LED fixtures.
- HVAC equipment replacement with high-efficiency systems.

It is recommended that the Board of Education put in place a policies regarding energy-conscious design for the schools, and select the following professionals to assist with the design and construction:

- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

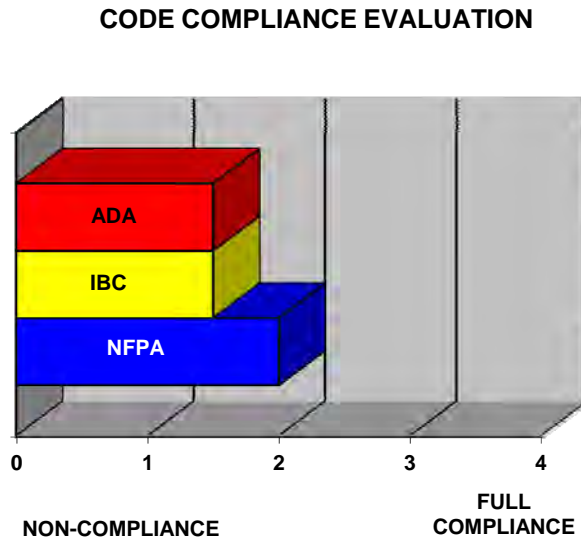
Survey Results

Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be 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 survey results (reference Section 4 for a detailed description for each category).



Scale: 1 = Poor Condition, 4 = Excellent Condition

The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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.



Note: The building contains many conditions that do not comply with applicable codes.

Recommendations

Program and Conceptual Plan

Based upon the space utilization information gathered, a program that accommodates the various functions of the Sweeney Elementary School indicates the following needs:

- Renovating the existing building “Like New” including the renovation or replace all existing building systems including finishes, roofing, plumbing, water supply, fire protection, HVAC, electrical systems, energy monitoring, communications and security to provide a useful life of at least 20 years
 - Renovate the existing Gymnasium into a dedicated Cafetorium
 - Renovate the former Locker Rooms/offices into a serving line
 - Provision of a new Nurse’s office with Dentist area
 - Renovation of all existing classrooms to accommodate grades PK-2
- Proposed building addition to include:
 - Classrooms to accommodate grades 3-5
 - New Kitchen and Loading Dock/Service Entry
 - New Gymnasium and support areas
 - New Art and Music rooms
 - New Support suite: Speech, Tutor, OT/PT, Family Liaison, Psychologist and Social Worker offices

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 the Windham Public School System.

Opinion of Probable Costs

The estimate of probable costs included in Section 10 of this report is designed as a planning tool for the Windham Board of Education. Estimates do not account for a possible change of use.

Required Work

The estimates reflect bringing the existing Sweeney Elementary School 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 Sweeney Elementary School to a Renovate Like New condition.

Furthermore, costs have been included for a new 35,000 square foot building addition to the existing structure. This new structure will share the renovated building systems (mechanical / electrical / plumbing / fire protection), designed in accordance with the guidelines for High Performance School Construction.

Projected costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 3 years, the required Construction work at this school will cost approximately \$22,138,210.

At 38,200 square feet, the proposed renovations at Sweeney Elementary School equate to approximately \$225 per square foot. This cost per-square-foot figure falls within industry standards for renovations and additions of this nature.

At 35,723 square feet, the proposed additions at Sweeney Elementary School equate to approximately \$270 per square foot. This cost per-square-foot figure falls below industry standards for renovations and additions of this nature, based upon the shared building systems and concurrent work undertaken within the existing building, which will benefit the addition.

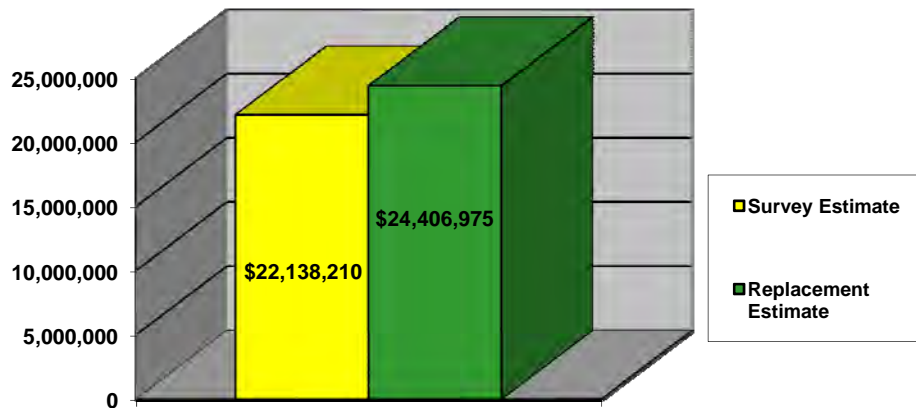
Replacement Cost

A similarly constructed new building of the same size as the completed building as proposed would cost \$325 per square foot. Using this figure, the replacement cost for Sweeney Elementary School is approximately \$23,667,745, which follows state standards for structures of this type. The per square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”.

State Reimbursement

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on a Renovate Like New project is 79.64%. This would adjust the community's portion of the Total Project Costs from \$30,309,069 to \$67,136,452.

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



The required work addressed in this survey equates to approximately 90 percent of the cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN WINDHAM CENTER SCHOOL

Executive Summary



Windham Center School is housed in a one-story, 35,851 square-foot building located at 45 North Road (Route 14) in Windham Center. Originally constructed in 1953, the building received an addition in 1968 and serves Grades K - 5.

The building contains two sets of stairs and one ramp that lead up to the original structure. Circulation in the original building is provided by a central corridor. This is also the method of circulation for the 1968 classroom addition. These two structures are connected by two corridors, which enclose a courtyard. There are several means of egress on the building perimeter.

Based on the survey, Windham Center School is in fair condition.

Architectural Survey

The exterior skin of Windham Center School is brick masonry, which is in fair to good condition. The roof consists of the combination of flat single-ply EPDM roof system which is in good condition and a pitched asphalt shingle roof system, which is in excellent condition.

Typical windows consist of painted aluminum framed, sliding windows with insulated glazing, and exterior doors are insulated painted metal. The windows are in good condition and the exterior doors are in good condition. The exterior sealants of the doors and windows are in fair condition.

The building interior is in fair condition with the original construction having been most recently renovated in 1968.

The work recommended to address architectural conditions includes:

- Install gutters and downspouts to protect the brick facade.
- Replace acoustical ceiling tile in corridors and classrooms.
- Install new flooring in older portions of the school.
- Repair ceramic tile in storage room as seen in photo 17.
- Replace or repair air conditioning units that produce condensation within the building.
- Update the clock and public address system.
- Install roof access hatch and ladders to access all portions of the roof.
- Maintain 10-year old EPDM roof construction.
- Provide sufficient attic ventilation at gabled roof area.
- Upgrade door hardware, exit egress, exit stairs to provide proper egress and enclosure.
- Platform lift to the Gym's platform.
- Limit access to the courtyard or provide exiting upgrades, accessibility, fire code upgrades.
- Paint exterior wood trim and / or replace with new trim.
- Renovate the existing bathroom areas.
- Provide areas of refuge at all required exit stairs.

Structural Survey

The building is typically constructed of structural steel frame and masonry infill that is in fair condition. Built on reinforced concrete footings, foundations, piers and floor slabs, the building consists of masonry bearing walls and steel framing, steel floor & roof framing and wood roof trusses.

In general, the building appears to be in fair to good condition structurally. Although observations could not be made of many structural elements without demolition, no dangerous conditions were observed.

The work recommended to address structural conditions includes:

- Monitor the first floor slab above the Boiler Room and the foundation wall at the south wall of the Boiler Room.
- Monitor the existing brick veneer repair any cracking in the brick veneer.
- Provide concrete pads and walkways for the outbuilding for exiting.

Electrical Survey

The electrical service is comprised of two (2) 208 volt three phase electrical service entrances. One (1) is 400 amps and one (1) is 1200 amps. The service entrances are in good condition.

The work recommended to address electrical system conditions includes:

- Replace broken and vandalized exterior lights.
- Replace non-ADA fire alarm horn strobes with ADA compliant fire alarm horn strobes and update the fire alarm system accordingly.
- Testing and / or replacing aged electrical circuit breakers and disconnect switches.

Mechanical Survey

The mechanical system is comprised of two (2) oil burning Burnam Boilers and is in fair condition.

The work recommended to address mechanical systems conditions includes:

- Replacing the existing aged boilers.
- Provide exhaust fans and ventilation for the bathrooms.
- Replacing the circulation pumps for the heating system.

Plumbing Survey

The plumbing system consists of an onsite well with a 2500 gallon storage tank. There is a 6" sanitary line that runs to two (2) leeching fields on the site.

The work recommended to address plumbing systems conditions includes:

- Provide a second well as an alternate water supply to the building.
- Provide a new FOG rated grease trap.

International Building Code Survey

Windham Center School was evaluated for compliance with the 2003 IBC and Connecticut Supplements & Amendments, through 2009 for Use Group E, Education. 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:

- Accessibility upgrades.
- Upgrade interior stairs and ramps.
- Upgrade the interior courtyard for code compliance.
- Provide sufficient exhaust ventilation from the toilet rooms.
- Replace door hardware.
- Upgrade exit access.
- Install compliant exit signs.

- Address doors that impede egress or the associated exit access doors.
- Attic space ventilation upgrades.
- Access to the gymnasium platform.
- Provide emergency escape and rescue openings.
- Fire alarm, detection systems, emergency lighting and communication systems need to be code compliant.
- Accessible interior routes will need to be provided.

NFPA Code Survey

A review of Windham Center School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Combustible material located on corridor wall surfaces must be addressed.
- Provide proper clearances at all electrical panels and equipment requiring access and servicing.
- Upgrade fire alarm equipment.
- Provide direct grade access from all classroom areas.
- Fire protection upgrades are needed.
- Upgrade exit access at all required exits.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Upgrades for accessible parking, site accessible route to the building and accessible route within the building.
- Accessible bathroom fixtures, seating areas, drinking fountains and door hardware.
- Accessible entrances at the portable classroom.
- Accessible exits from the corridors and the classroom areas.
- Accessible door hardware upgrades to provide accessibility to the classrooms and all rooms which require access.
- Accessibility to the cafetorium platform via a platform lift.
- Upgrade the existing toilet rooms to provide accessible plumbing fixtures and toilet accessories.
- Install new handicap accessible drinking fountains at accessible areas within the building.
- Install building signage throughout the facility.

Site Survey

The site at Windham Center School was evaluated. Traffic flow at this school is good, and walkways are in poor condition. Available parking accommodates 61 vehicles, with two (2) handicap accessible spaces available. The playing fields consist of grass and are in fair condition. Playground areas include paved play and two (2) playscapes, without a separate enclosed play area for the youngest students. Site utilities include septic and domestic well systems, in addition to an underground oil tank. Well systems appear to be in poor condition and oil tank condition is unknown.

Plant beds, specialty or feature plants and trees are in good condition. There is a memory plaque for a former student under a tree.

The work recommended to address site conditions includes:

- Provide adequate outdoor lighting; currently there is no parking lot lighting or any exterior pole lighting on site.
- Repair walkway surfaces to be flush and provide proper Site Accessibility. The stepped ramp walkway to the play areas needs immediate repair to prevent further deterioration.
- All site amenities are not fully handicapped accessible, and should be evaluated.
- The existing fuel oil fill area is located adjacent to the children's play areas, and the fill cover can be easily removed. Safety measures & precautions in this area need to be looked at.
- Provide safety measures at the retaining wall and concrete doorstep located near South side of the building, as it poses a safety hazard to children.

Energy Summary

It is recommended that the school system continue to implement the proposals listed in the 2006 ConEdison energy audit and report, including:

- Window and roof replacement.
- Lighting improvements to include LED fixtures.
- HVAC equipment replacement with high-efficiency systems.

It is recommended that the Board of Education put in place a policies regarding energy-conscious design for the schools, and select the following professionals to assist with the design and construction:

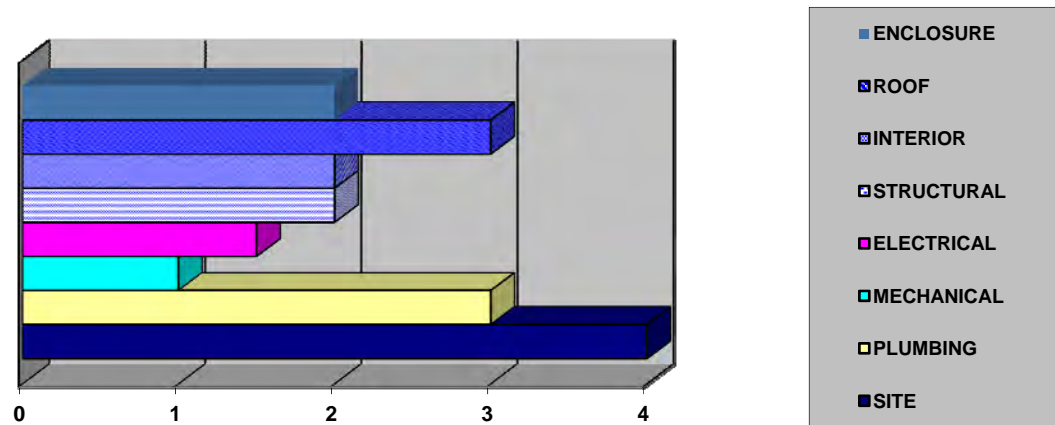
- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

Survey Results

Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be 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 survey results (reference Section 4 for a detailed description for each category).

Program

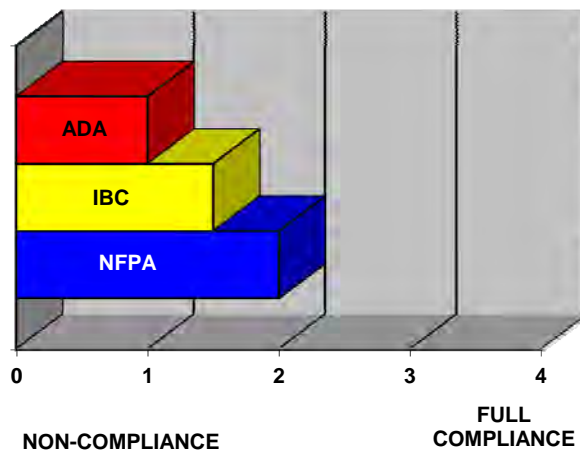
BUILDING CONDITION EVALUATION



Scale: 1 = Poor Condition, 4 = Excellent Condition

The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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



Note: The building contains some conditions that do not comply with applicable codes.

Recommendations

Program and Conceptual Plan

Based upon the space utilization information gathered, a program that accommodates the various functions of the Windham Center School includes the following:

- Removal of the portable classroom
- An addition of 6 classrooms, and expansion of the Cafeteria
- Renovations to add a new gang toilet for boys and girls
- Renovations to accommodate an Art classroom
- Renovations to accommodate a Teachers workroom and Lounge/Conference area
- Renovations of the former locker rooms into Special Education classrooms
- Renovations to add offices for:
 - Speech and Language and OT/PT
 - Instructional Consultants Office & Literacy Help Instructor
 - Nurse, Psychologist and Family Liaison

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 the Windham Public School System.

Opinion of Probable Costs

The estimate of probable costs included in Section 10 of this report is designed as a planning tool for the Windham Board of Education. Estimates do not account for a possible change of use.

The estimates reflect bringing Windham Center School 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 comprise an Alteration project per the State's Department of Education guidelines.

Projected Construction costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 6 years, the required Construction work at this school will cost approximately \$5,996,000. Targeted renovations considered across Windham Center School's 35,851 square feet equate to approximately \$168 per square foot. This cost per-square-foot figure falls within industry standards for renovations / upgrades of this nature.

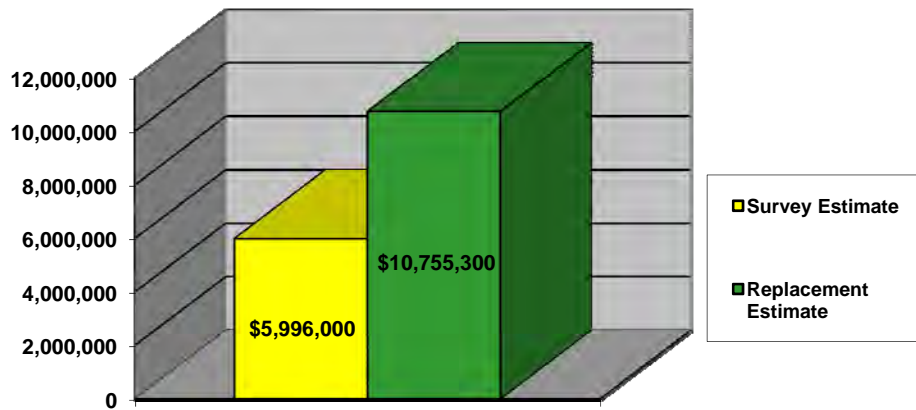
Replacement Cost

A similarly constructed building would cost \$300 per square foot. Using this figure, the replacement cost for Windham Center School is approximately \$10,755,300, which follows state standards for structures of this type. The per square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other "soft costs".

State Reimbursement

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on an Alteration project is 69.64%. This would adjust the community's portion of the Total Project Costs from \$9,310,685 to \$3,799,318.

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



The required Alteration work addressed in this survey equates to approximately 56 percent of the Construction cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

**WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES
EXISTING CONDITION SURVEY & MASTER PLAN
WINDHAM MIDDLE SCHOOL**

Executive Summary



Windham Middle School is housed in a three-story, 179,076 square-foot building located at 123 Quarry Street in Willimantic. Constructed in 1996, the building serves Grades 6 - 8.

The building contains four stairwells and two elevators in the central part of the building. The west wing is a one-story gymnasium and related spaces. The east wing is two levels with an additional stairwell. Circulation in the central three-story area is provided by double loaded corridors surrounding a central bi-level courtyard.

Based on the survey, Windham Middle School is in good condition.

Architectural Survey

The exterior skin of Windham Middle School is brick masonry, which is in excellent condition. The roof consists of ballasted single-ply EPDM roof, which is in fair condition. The barrel vaulted roof is of similar construction but it is not ballasted.

Typical windows consist of aluminum framed two paned operable windows and exterior doors are hollow metal or aluminum storefront doors. The windows are in fair condition and the exterior doors are in fair condition. The exterior sealants of the doors and windows are in poor condition.

This building has not been renovated. However, the interior is still in good condition.

The work recommended to address architectural conditions includes:

- The EPDM roof areas need to be repaired before the interior is damaged any further. The roof is currently leaking in several areas. The EPDM roof should be replaced within the next five years it is approaching the end of its useful life.
- The asphalt shingle roof has delaminating issues in several areas and is in need of repair. Subsequently, investigation to the issue needs to be conducted to find what is causing the delaminating.
- Restoration of the exterior and interior building joints is required as well as the installation of new joints to control cracking.
- The elevator and the elevator controller need to be restored to working order due to flooding.
- Door hardware should be maintained and upgraded where required.
- Exterior steel lintels need to be prepped and painted to avoid further deterioration.
- Interior finishes need to be upgraded; VCT flooring, acoustical tile ceilings, carpet needs to be replaced after 16 years of wear.
- Damaged window screens need to be replaced.

Structural Survey

The building is typically constructed of structural steel frame and masonry infill that is in good condition. The roof is supported by a combination of steel beams, joists and trusses with a steel metal roof deck. The foundation consists of reinforced concrete footings, foundation walls, retaining walls and concrete slabs.

The work recommended to address structural conditions includes:

- The building is typically in good condition, floor cracking, masonry cracking and settlement should be monitored so that they do not become structural issues. Install additional control joints and expansion joints to minimize cracking.

Electrical Survey

The electrical system is comprised of a 200 amp 480 volt three phase service in excellent condition.

Mechanical Survey

The mechanical system is comprised of three (3) HB Smith gas boilers in good condition.

Plumbing Survey

The plumbing system consists of 4" water line from a city owned water tower across the street. There is also a 3" gas line to the building. There is septic tank for kitchen waste and an 8" sanitary line connected to the city sewer for other wastewater.

International Building Code Survey

Windham Middle School was evaluated for compliance with the 2003 IBC and Connecticut Supplements & Amendments, through 2009 for Use Group E, Education. 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:

- Accessibility upgrades.
- Upgrade fall protection on all roof levels.
- Provide exterior emergency lighting at all exits.
- Headroom clearances need to be code compliant.
- Upgrade egress doors to meet requirements for doors in series.
- Install tempered glass in display cases.
- Upgrade guardrails.

NFPA Code Survey

A review of Windham Middle School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Provide exit signs at all required locations.
- Exterior stairs need to be provided with sufficient stair landings.
- Provide doors to the exterior with access to the public way.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Handicap accessible parking needs to be provided in the amount required, properly designated and dimensionally accurate.

- Access to the entire site including the baseball fields need to be provided.
- Exterior building and entrance signage needs to be installed. Interior building signage needs to be upgraded to meet current requirements.
- The assembly areas within the building need to be upgraded to have assisted listening systems.
- Auditorium accessible seating areas, ramp handrails, edge protection and the stairs to the stage need to be upgraded.
- Accessible route within the building needs to be upgraded for knee clearances, reach ranges, floor space, protruding objects.
- Curb ramps throughout the site need to be upgraded to provide access to the adjacent city streets.
- Automatic door for accessibility at the main entrance were not working at the time of the survey.
- All non-compliant accessible toilet rooms need to be upgraded for compliant plumbing fixtures, toilet accessories, grab bars, mounting heights, clearances and signage.

Site Survey

The site at Windham Middle School was evaluated. Traffic flow at this school is good, and walkways are in good condition. Available parking accommodates 182 vehicles, with 5 handicap accessible spaces available. The playing fields consist of natural grass turf and are in good condition. Additional outdoor recreational areas include a track, basketball court, and tennis courts. Site utilities include city water and sewer and appear to be in good condition.

Plant beds, specialty or feature plants and trees are in good condition. There are special features, such as outdoor courtyards available to students.

The work recommended to address site conditions includes:

- Concrete Walk: The main walk along the building's front façade needs to be repaired. The concrete curb, in multiple areas, has significantly separated from the walkway.
- Parking Lot: The main parking area of bituminous concrete surface cracks need to be addressed to prevent further deterioration. Parking striping and delineation is faded and needs to be restriped.
- Sports Surfacing: The tennis courts on site are in need of major surface repair due to deep surfacing splits. It is recommended to address the sporadic splits throughout the rubberized track surfacing, and the cracked, faded basketball court surfacing.

Energy Survey

It is recommended that the school system continue to implement the proposals listed in the 2006 ConEdison energy audit and report, including:

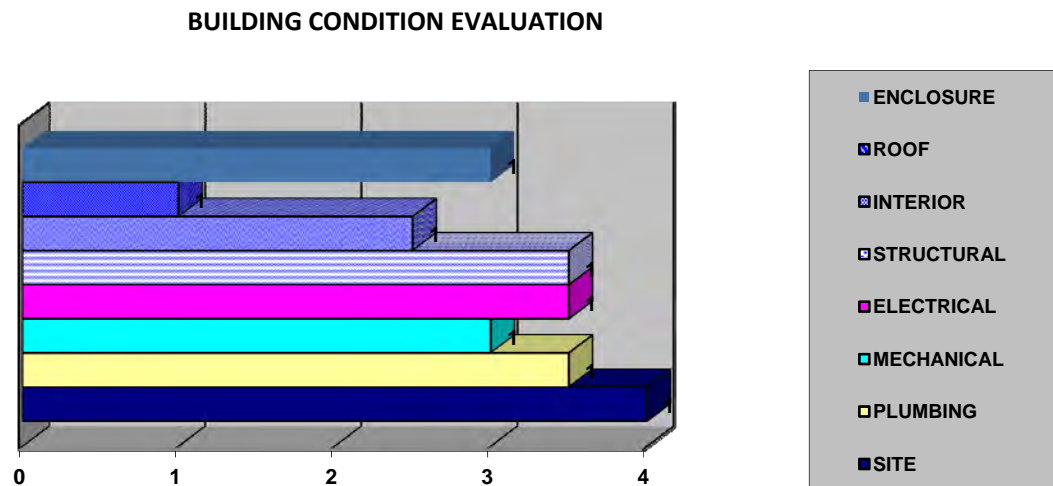
- Window repairs and caulking.
- Roof repairs until such time (+/- 5 years) that a full replacement is eligible for full reimbursement by the State.
- Lighting improvements to include LED fixtures.
- HVAC equipment replacement with high-efficiency systems.

It is recommended that the Board of Education put in place a policies regarding energy-conscious design for the schools, and select the following professionals to assist with the design and construction:

- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

Survey Results

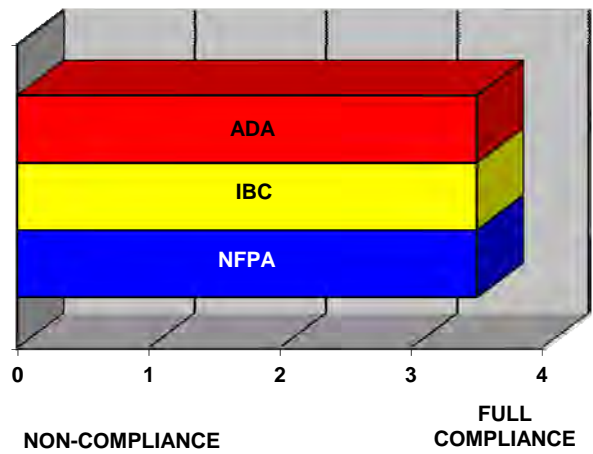
Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be considered to be in good condition, while rankings of 2 and 1 are considered to be in fair and poor condition, respectively. The following chart graphically presents the survey results (reference Section 4 for a detailed description for each category).



Scale: 1 = Poor Condition, 4 = Excellent Condition

The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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



Note: The building contains some conditions that do not comply with applicable codes.

Recommendations

Program and Conceptual Plan

Based upon the space utilization information gathered, a program that accommodates the various functions of the Windham Middle School indicates the following needs:

- Code upgrades throughout the building
- Reconfiguring the First Floor North wing to accommodate PK-K students while their home schools are renovated
- A roof replacement project starting in 2017, when the roof is 20 years old, and will receive full State reimbursement
- Repair the existing elevator damaged by flooding.
- Reinstall any missing emergency lighting fixtures at the exterior of the building which have been damaged.
- Add additional exit signage at the lower level court and the adjacent corridor for proper exiting.
- Update site accessible route from the parking lot to the main entrance. Repair the existing automatic door operator and associated door.
- Update accessible signage and parking parameters for bus drop off and passenger loading zone to the main entrance.
- Accessible toilet rooms need minor upgrades to make them Code compliant.
- Provide accessibility upgrades to the auditorium; stair and ramp handrails, guardrails, assistive listening systems, seating areas and floor finishes.
- Install a grease trap at the kitchen area.
- Provide an accessible route within the interior of the building for all classroom areas, toilet facilities, assembly areas and support services.
- Upgrade and provide new accessible signage throughout the building.
- Interior finish upgrades to worn floors and water damaged ceilings.
- Site work required for accessibility; curb ramp upgrades, site parking areas, drop offs and access to the ball fields.

Opinion of Probable Costs

The estimate of probable costs included in Section 10 of this report is designed as a planning tool for the Windham Board of Education. Estimates do not account for a possible change of use.

Required Work

The estimates reflect bringing Windham Middle School in its present configuration into compliance with current applicable current applicable Codes and replacing the roof. As this is the newest school building, built in 1996, the renovation needs of this building are minimal compared with the district's facilities as a whole.

Projected construction costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 4 years, the required work at this school will cost approximately \$5,600,000. Limited renovations considered across Windham Middle School's 179,076 square feet equate to approximately \$32 per square foot. This cost per-square-foot figure falls below industry standards for renovations of this nature.

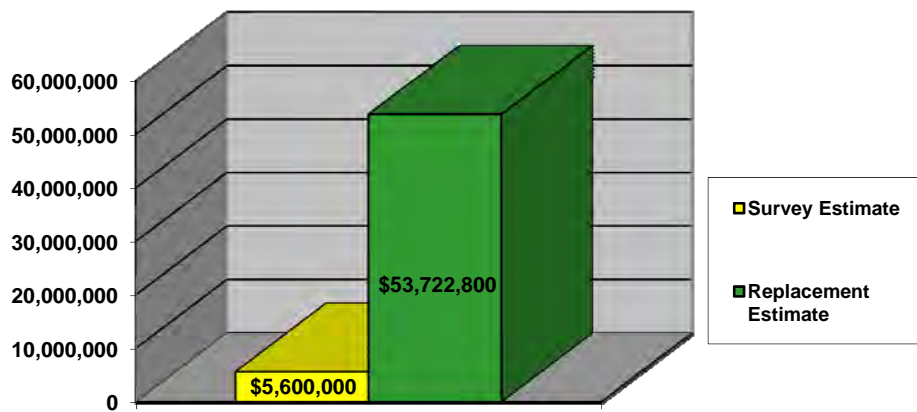
Replacement Cost

A similarly constructed building would cost \$300 per square foot. Using this figure, the replacement cost for Windham Middle School is approximately \$53,722,800, which follows state standards for structures of this type. The per square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”.

State Reimbursement

The municipality's reimbursement from the State of Connecticut Department of Education for eligible Code and Roof renovation items is 69.64% This would adjust the community's portion of the Total Project costs from \$8,419,757 to \$4,033,845.

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



The required work addressed in this survey equates to approximately ten percent of the cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN WINDHAM HIGH SCHOOL

Executive Summary



Windham High School is housed in a three-story, 226,765 square-foot building located at 355 High Street in Willimantic. The building was originally constructed in 1970 and serves grades 9 – 12.

The building contains nine stairwells and one elevator. There are two-levels of on-grade access to the building. The central part of the building contains classrooms and administrative space. Circulation in the central part is provided by a double loaded corridor, which surrounds a courtyard. Circulation in the northern side of the building is provided by a double loaded corridor which surrounds the auditorium. The southern end is a one-story section which provides access to the gymnasium and the pool.

Based on the survey, Windham High School is in fair condition.

Architectural Survey

The exterior skin of Windham High School is brick masonry, which is in good condition. The roof consists of Spray Polyurethane Foam (SPUF) roofing over the original Built Up Roof (BUR) System, which is in poor condition. The original BUR system was installed in 1970 (42 years) and the SPUF roofing was installed in 1988 (24 years).

Typical windows consist of fixed, project-out casement and awning type windows with insulating glazing. Exterior doors are hollow metal doors with glass vision panels. The windows are in good condition and the exterior doors are in poor condition. The exterior sealants of the doors and windows are in poor condition and need to be investigated for PCB's.

The building interior is in fair condition with the original construction having been most recently renovated in the 1980's.

The work recommended to address architectural conditions includes:

- All required ADA upgrades will need to be completed based on the ADA section of the report.
- The roof consists of Spray Polyurethane Foam (SPUF) roofing over the original Built Up Roof (BUR) System both require replacement. The existing roof top equipment and lightning protection will need to be removed and replaced.
- Install new roof access ladders and hatches.
- Restoration of the exterior and interior building joints is required as well as the installation of new joints to control cracking.
- The elevator needs to be upgraded to meet all of the ADA compliance requirements. The elevator cab, frame and piston will require upgrades due to their current age.
- Door hardware should be maintained, replaced and / or upgraded.
- Exterior hollow metal doors require replacement.
- Interior folding partitions and curtains need to be replaced.
- The existing required exits and entrances to and from the building need to be accessible. Concrete landings, ramps and sloped walkways need to be installed to the public way.
- The wood flooring in the industrial arts wing requires replacement due to damage and subsequent safety concerns.
- Exterior steel lintels need to be prepped and painted to avoid further deterioration.
- Interior finishes need to be upgraded after 42 years of wear; bathroom renovations need to be undertaken, locker room renovations need to be undertaken, VCT / VAT Flooring, ceramic tile floors, acoustical tile ceilings and carpeting all need to be replaced.
- Plumbing fixture and toilet accessories are in need of replacement due to their condition or accessibility requirements.

Structural Survey

The building is built on a reinforced concrete foundation, which consists of a combination of reinforced concrete slabs, footings, foundation walls, and retaining walls. The pool, pool deck and foundation are constructed as part of the building's concrete foundation with reinforced concrete floors, walls, and beams. The building's structural steel frame consists of a steel columns, beams, joists and trusses. The upper floor system is a 4-1/2" reinforced concrete slab supported on steel beams with form liners.

The typical roof structure is comprised of a combination of steel girders, beams, joists and trusses supporting a poured gypsum deck. The structural gypsum roof deck is poured on form boards supported by steel bulb tees welded to the steel frame. The pool roof structure is comprised of precast structural double tees supported on a structural steel frame and masonry end walls.

The work recommended to address structural conditions includes:

- Existing wood stair and platform construction should be removed and replaced with structural concrete or steel.
- The poured gypsum roof deck will need to be investigated for deterioration and may need to be replaced with a steel deck to allow for new roofing.
- All exterior structural steel lintels need to be restored, cleaned, primed, painted and sealed.
- All exterior structural steel lintels supporting existing brick cantilevered wall overhangs need to be investigated for structural integrity and torsion. These lintels also need to be restored, cleaned, primed, painted and sealed.

Electrical Survey

The electrical system is comprised of 2000 amp 480/277 volt electrical service and is in fair condition.

The work recommended to address electrical system conditions includes:

- Recommend implementing a regular program to test and exercise the existing circuit breakers and regularly replace older fuses. It is possible that existing circuit breaker may fail and should be replaced.
- Recommend improving the lightning protection system on the building to protect computers, security and alarm systems.
- Existing generator is old. Owner should consider replacing the existing generator.
- Recommend replacing old and vandalized exterior lighting fixture with new energy efficient vandal-resistant LED fixtures.

Mechanical Survey

The mechanical system is comprised of a new boiler and cogenerating system but several aged AHU's and RTU's and is in fair condition.

The work recommended to address mechanical systems conditions includes:

- The stand boiler in the basement of the pool area has near the end of its useful life and should be replaced if it is used regularly.
- The air handling units throughout the building are old and may have had new motors installed. We recommend a program to assess each individual motor and plan a replacement date depending in the individual motor.
- Recommend providing ventilation and an exhaust fan in the bathrooms.
- Recommend provide a dedicated exhaust fan for the chemical storage area near the pool.

Plumbing Survey

The plumbing system consists of 4" water service with a 12" sanitary line and is in fair condition. There is no fire protection in the building.

The work recommended to address plumbing / fire protection systems conditions includes:

- Recommend installing a sprinkler system in at least the storage rooms, boiler area and custodial office.
- Recommend installing ADA required faucets and sinks.
- Recommend installing emergency storm drains or overflow monitors on roof.

International Building Code Survey

Windham High School was evaluated for compliance with the 2003 IBC and Connecticut Supplements & Amendments, through 2009 for Use Group E, Education. 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:

- Install a new automatic sprinkler system.
- Upgrade existing exit stair enclosures.
- Reduce or eliminate dead end corridors.
- Eliminate classrooms without windows or without grade access.
- Upgrade all required exits to grade to provide accessibility.
- Provide proper mixed use separation.
- Stair and exit enclosures must have 1-hour ratings.
- Provide compliant roof ladders and fall protection to all roof levels.
- Use Group, construction type and fire resistance rating of structural elements based on a mixed use building and the associated fire separation assemblies.
- Provide accessible routes to the school and site amenities.

NFPA Code Survey

A review of Windham High School's compliance with the NFPA Life Safety Code 2003 was made. The Life Safety Code is a retroactive code for existing buildings and review of applicable systems is required. This building will require updates.

The work recommended to address NFPA code violations includes:

- Install a new fire alarm system.
- Provide code compliant exit signs.
- Install floor proximity exit signs at required exits.
- Make provisions for emergency escape and rescue openings for all classroom.
- Provide sprinkler protection at any level below the Level of Exit Discharge.
- Main entrances / exits at assembly areas should be upgraded for code compliance.
- Stage should be provided with all required upgrades.
- Provide proper smoke compartmentation.
- Make provisions for proper mixed use separation at the assembly areas.

ADA Compliance Survey

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

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

The work recommended to address ADA compliance issues includes:

- Handicap accessible parking needs to be provided in the amount required, at the appropriate locations, properly designated and dimensionally accurate.
- Accessibility to and from the building to the entire site needs to be provided.
- Exterior building and entrance signage needs to be installed. Interior building signage needs to be upgraded to meet current requirements.
- The assembly areas within the building need to be upgraded for assisted listening systems.
- Auditorium accessible seating areas, stage access via a platform lift, fire alarm equipment, stair handrails, and the stairs to the stage need to be upgraded.
- The accessible route within the building needs to be updated for stair nosings, proper handrails, areas of rescue assistance, elevator controls and operation.
- The accessible route within the building needs to be upgraded for knee clearances, reach ranges, floor space and protruding objects.
- Curb ramps throughout the site need to be upgraded to connect with the handicap parking areas, provide access to the adjacent city streets and to connect with the building's required entrances and exits.
- The automatic door for accessibility at the main entrance was not working at the time of the survey.
- All non-compliant accessible toilet rooms and locker rooms need to be upgraded for compliant plumbing fixtures, toilet accessories, grab bars, mounting heights, clearances and signage.
- Drinking fountains need to be upgraded to meet current accessibility standards.
- Accessibility to and from the girl's locker room to the gymnasium, auxiliary gymnasium, pool, weight room, wrestling room is via an elevator, which is less than ideal. The facilities for the boy's locker room are expanded to include a training room, a team room, a varsity locker room and an additional shower room.

Site Survey

The site at Windham High School was evaluated. Traffic flow at this school is good, and walkways are in poor condition. Available parking accommodates 309 vehicles, with ten (10) handicap accessible spaces available. The playing fields consist of natural grass turf and are in good condition. Additional outdoor recreation amenities include a track and field complex (track, football field, bleachers) and tennis courts.

Site utilities include city water, city sewer, and natural gas and appear to be in fair condition.

Plant beds, specialty or feature plants and trees are in good condition. There are special features, such as outdoor courtyard gathering areas.

The work recommended to address site conditions includes:

- Driveways, walkways, and associated curbing needs to be repaired. These site elements are extremely cracked, and continuously eroding. Crumbling walks and ramps are not ADA accessible.
- Site lighting needs to be repaired and / or provided along pedestrian walks. Pedestrian site lighting and fixtures are currently damaged and in poor condition (loose, hanging wires, no light bulbs, cracked, broken).
- The wooden retaining wall behind the dumpster area is leaning towards the service area and needs to be addressed. It is recommended that the problem be alleviated before the wall gives way to the soil.

Energy Survey

It is recommended that the school system continue to implement the proposals listed in the 2006 ConEdison energy audit and report, including:

- Window and roof replacement.
- Lighting improvements to include LED fixtures.
- HVAC equipment replacement with high-efficiency systems.

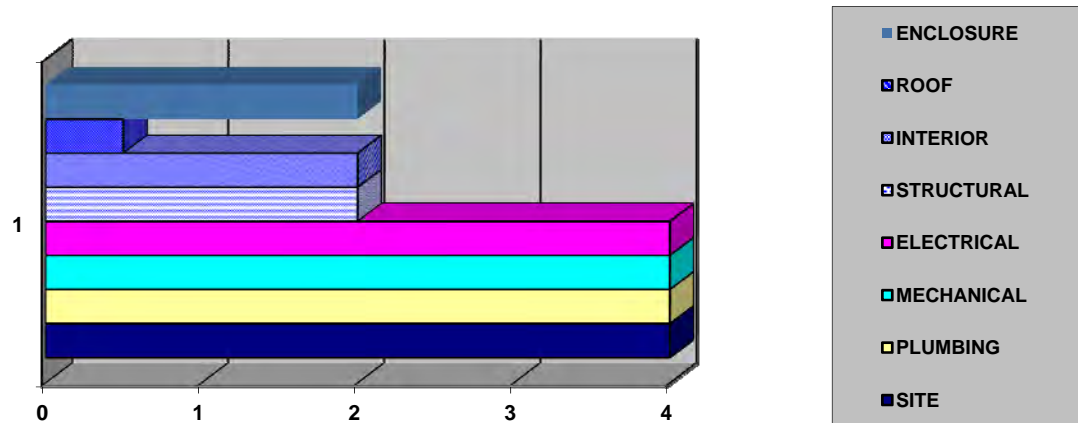
It is recommended that the Board of Education put in place a policies regarding energy-conscious design for the schools, and select the following professionals to assist with the design and construction:

- An Architect with experience in developing projects using the State of Connecticut High Performance Building (HPB) standards.
- A Commissioning Agent to oversee the final design, construction, and testing.
- A Construction Manager with experience in completing projects with HPB standards.
- An Owner's representative to work on behalf of the Board of Education as the project facilitator for the HPB process.

Survey Results

Each of the elements that were reviewed under this category was ranked on a scale of 0-4, with a 4 rating equating to excellent conditions. Components that received a ranking of 3 should be 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 survey results (reference Section 4 for a detailed description for each category).

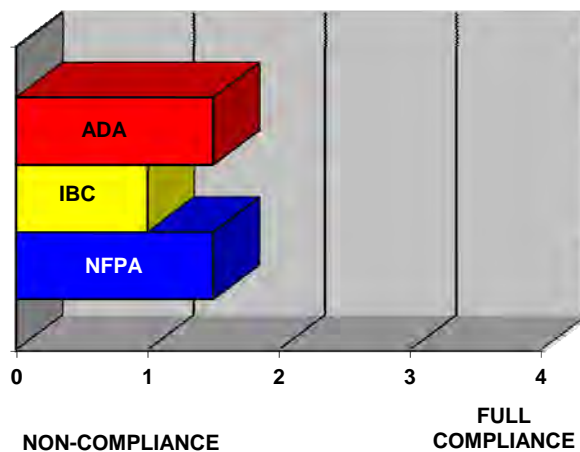
BUILDING CONDITION EVALUATION



Scale: 1 = Poor Condition, 4 = Excellent Condition

The graph below represents the building's overall conformity with IBC, NFPA and ADA requirements. Compliance was rated on a scale of 0-4, 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



Note: The building contains many conditions that do not comply with applicable codes.

Recommendations

Program and Conceptual Plan

Based upon the space utilization information gathered, a program that accommodates the various functions of the Windham High School indicates the following needs:

- **Phase I: Relocation of the Board of Education to the High School**
 - Reconfiguring the existing Technical Education wing at the Northwest portion of the First Floor to house the Board of Education
 - Renovations to accommodate new Technical Education classrooms and workshop areas
- **Phase I: Science Lab Renovations**
 - Reconfiguring the existing Science Laboratories to accommodate the needs of the new STEM Academy
- **Phase III: Windham HS Academies – Renovate Like New**
 - Code Renovations
 - Required architectural and structural improvements
 - Required M/E/P/FP and technology improvements
 - Areas of necessary site improvements

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 the Windham Public School System.

Opinion of Probable Costs

The estimate of probable costs included in Section 8 of this report is designed as a planning tool for the Windham Board of Education. Estimates do not account for a possible change of use.

Required Work – Phase I

Relocation of the Board of Education to the High School

The estimates in “Phase I” for the Windham High School renovation project reflect reconfiguring the existing Technical Education wing at the Northwest portion of the First Floor to house the Board of Education. These costs were generated by Newfield Construction using Construction Cost Data and current local market conditions for buildings and projects of this type.

Projected Construction costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 2 years, the proposed construction work for this phase will cost approximately \$3,800,000.

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on a BOE Alteration project is 34.82%. This would adjust the community's portion of the Total Project Costs from \$4,966,083 to \$3,496,272.

Science Lab Renovations

The estimates in “Phase I” for the Windham High School renovation project reflect reconfiguring the existing Science Laboratories to accommodate the needs of the new STEM Academy. The projected renovations for these areas would upgrade the Science Labs to a Renovate Like New condition. These costs were generated by Newfield Construction using Construction Cost Data and current local market conditions for buildings and projects of this type.

Projected Construction costs are based on 2013 dollars and include no soft costs or contingencies. Based on analysis, over the next 2 years, the proposed construction work for this phase will cost approximately \$2,500,000.

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on a Renovate Like New project is 79.64%. This would adjust the community's portion of the Total Project Costs from \$3,267,160 to \$769,272.

Required Work – Phase III

The estimates in “Phase III” for the Windham High School renovation project reflect reconfiguring the existing building to accommodate the needs of the two academic academies. Construction work has been estimated to bring the facility into compliance with current applicable codes and address the needs of the various building components (architectural, structural, mechanical / electrical / plumbing / fire protection and site). The projected renovations for these components would upgrade Windham High School to a Renovate Like New condition. These costs were generated by Newfield Construction using Construction Cost Data and current local market conditions for buildings of this type.

Projected Construction costs are based on 2013 dollars and include no soft costs or contingencies. Not including the roof renovations which were removed as a stand-alone project, over the next 10 years, the required work at this school for Phase III will cost approximately \$53,022,125. At 226,765 square feet, renovations at Windham High School equate to approximately \$234 per square foot. This cost per-square-foot figure falls below industry standards for renovations / upgrades of this nature.

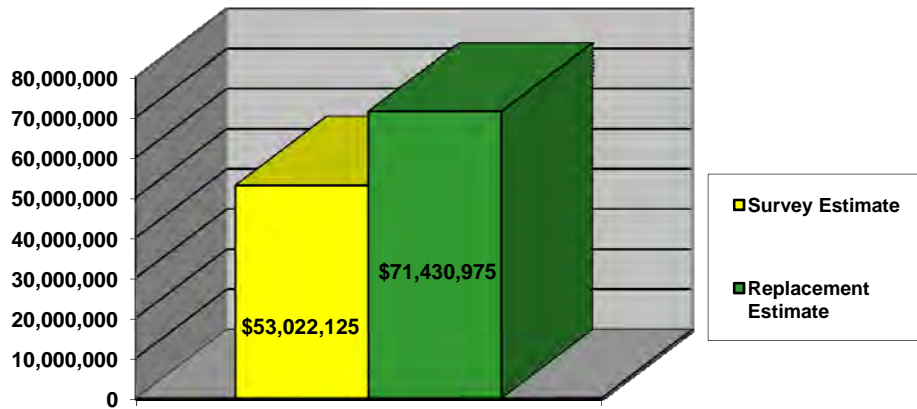
Replacement Cost

A similarly constructed building would cost \$315 per square foot. Using this figure, the replacement cost for Windham High School is approximately \$71,430,975, which follows state standards for structures of this type. The square foot replacement cost was obtained from R.S. Means Construction Cost Data and current local market conditions for buildings of this type. The estimate includes hard construction costs, demolition costs, construction contingencies, design costs, and other “soft costs”.

State Reimbursement

The municipality's reimbursement from the State of Connecticut Department of Education for eligible items on a Renovate Like New project is 79.64%. This would adjust the community's portion of the Total Project Costs from \$98,447,134 to \$23,179,968.

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



The required work addressed in this survey equates to approximately 74 percent of the Construction cost of an entire building replacement project. Site acquisition costs for a potential new building were not factored into this comparison.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN NATCHAUG SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This was performed to determine how to best reorganize the spaces within an overall conceptual plan that accommodates the various functions of the Natchaug School with an eye towards efficiency. The existing space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

The space standards were developed to analyze the available space in the existing buildings to be renovated and used to create a Space Program document. This allows for an objective comparison between Elementary Schools of different sizes, configurations and ages. The decisions made regarding current and projected space needs were used as a benchmark tool to establish a Conceptual Floor Plan and Opinion of Probable Costs for the Master Planning phase, and would serve to back-check the developed design plans beyond the Master Planning phase.

The Conceptual Plans illustrate the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

Based upon the construction work required to meet the programmatic needs of the users and upgrades required to comply with current applicable codes, while also meeting the overall goals of the Windham Public School System, it is recommended that no renovation work be undertaken at Natchaug School.

Windham Public Schools Natchaug Elementary School- Program											
EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Administrative											
Main Office	2	1	229	229	Overall space is very tight. Need more guest seating, not enough storage or visibility of the door.	Main Office	2	1	400	400	
Principal's Office	1	1	188	188	Room is fine the way it is.	Principal's Office	1	1	188	188	
Workroom/ Staff Office	2	1	221	221	This room is too small. It is the office copy/file room and also has desks for 2 staff members	Workroom/ Staff Office	2	1	400	400	
Conference Room	1	1	668	668	Faculty Meetings and Conferences held here. Room holds 35 people with is fine	Conference Room	1	1	668	668	
Instructional Consultants Office	1	1	149	149	Space to narrow for its function.	Instructional Consultants Office	1	1	149	149	Space to narrow for its function.
Social Worker & Itinerant Specialist Office	2	1	491	491	Works okay	Social Worker & Itinerant Specialist Office	2	1	491	491	
IT Tech Office	1	1	66	66	2 days per week.	IT Tech Office	1	1	66	66	
Speech Office	1	1	124	124	Way too small and narrow	Speech Office	1	1	225	225	
Family Resource Center	1	1	328	328	Becoming this summer	Family Resource Center	1	1	328	328	
Family Liaison Office	1	1	40	40	Small and narrow. Doesn't work well	Family Liaison Office	1	1	150	150	
Nurses Office	1	1	562	562	3 Cots, 1 nurse	Nurses Office	1	1	562	562	
Book Storage	1	2	115	230		Book Storage	1	2	115	230	
Faculty Break Room		1	544	544	Too small, needs to hold 15-20 and only holds 10 people tops.	Faculty Break Room		1	625	625	
New Office	3	1	387	387	New office space for 3 employees	New Office	3	1	387	387	
Health Center Storage		1	141	141	Storage and shower in this room.	Health Center Storage		1	141	141	
Existing Total				4,368		Total				5,010	
Service Areas											
Boiler Room	N/A	1	742	742		Boiler Room	N/A	1	742	742	
Pump Room	N/A	1	356	356		Pump Room	N/A	1	356	356	
Custodian Closet	2	1	422	422	2 Custodians	Custodian Closet	2	1	422	422	
Kitchen	3	1	1091	1,091	The grease traps back up, causing toilets and sinks to overflow.	Kitchen	3	1	1091	1,091	
Kitchen Storage		1	312	312		Kitchen Storage		1	312	312	
Cafeteria		1	2074	2,074		Cafeteria		1	2074	2,074	
Paper Storage		1	189	189		Paper Storage		1	189	189	
Existing Total				5,186		Total				5,186	
Common Area											
Media Center	1 librarian	1	1549	1,549	Used by grades K-5. Too small and has an awkward built in which makes room difficult to supervise and use.	Media Center	1 librarian	1	2000	2,000	
Auditorium/Gym		1	2,367	2,367	Gym teacher has no office. No storage for the stacking chairs that are used in this room. Chairs are scattered throughout school.	Auditorium/Gym		1	2,367	2,367	
						Gym Office		1	125	125	NEW
						Chair Storage		1	200	200	NEW
Gym Storage		1	120	120		Gym Storage		1	120	120	
Girls Toilet Room		1	204	204		Girls Toilet Room		1	204	204	
Boys Toilet		1	123	123		Boys Toilet		1	123	123	
Staff Toilet- Men		1	100	100		Staff Toilet- Men		1	100	100	
Staff Toilet- Women		1	86	86		Staff Toilet- Women		1	86	86	
Staff Toilet-Unisex		1	102	102		Staff Toilet-Unisex		1	102	102	
Boys Toilet Room		1	139	139		Boys Toilet Room		1	139	139	
Girls Toilet Room		1	141	141		Girls Toilet Room		1	141	141	
Staff Toilet		3	44	132		Staff Toilet		3	44	132	
Staff Toilet Women		1	50	50		Staff Toilet Women		1	50	50	
Toilet- Girls		1	69	69		Toilet- Girls		1	69	69	
						Gang Toilet- Boys		1	256	256	NEW
						Gang Toilet- Girls		1	256	256	NEW
Toilet-Boys		1	97	97	Need more boys and girls toilets- preferred Gang	Toilet-Boys		1	97	97	
Existing Total				5,279		Existing Total				6,567	
Academic Areas						Academic Areas					
Pre-K Classroom	15 Students 1 Teacher 1 Para	1	967	967		Pre-K Classroom	15 Students 1 Teacher 1 Para	1	967	967	
Pre-k Classroom	15 Students 1 Teacher 1 Para	1	618	618		Pre-K Classroom	15 Students 1 Teacher 1 Para	1	618	618	
Pre-K Toilet		1	58	58		Pre-K Toilet		1	58	58	
Self Contained Classroom	8 Students 1 Teacher 1 Para	1	872	872	Classroom for emotionally disturbed students.	Self Contained Classroom	8 Students 1 Teacher 1 Para	1	872	872	
Kindergarten Classroom	20 Students 1 Teacher	1	759	759		Kindergarten Classroom	20 Students 1 Teacher	1	759	759	
Kindergarten Classroom	20 Students 1 Teacher	1	674	674		Kindergarten Classroom	20 Students 1 Teacher	1	674	674	
Kindergarten Classroom	20 Students 1 Teacher	1	674	674		Kindergarten Classroom	20 Students 1 Teacher	1	674	674	
Kindergarten Storage		1	89	89		Kindergarten Storage		1	89	89	
Kindergarten Classroom	20 Students 1 Teacher	1	674	674		Kindergarten Classroom	20 Students 1 Teacher	1	674	674	
Second Grade Classroom	25 Students 1 Teacher	1	668	668		Second Grade Classroom	25 Students 1 Teacher	1	668	668	
Second Grade Classroom	25 Students 1 Teacher	1	668	668		Second Grade Classroom	25 Students 1 Teacher	1	668	668	
Grade 1 Classroom	22 Students 1 Teacher	1	672	672		Grade 1 Classroom	22 Students 1 Teacher	1	672	672	
Grade 1 Classroom	25 Students 1 Teacher	1	684	684		Grade 1 Classroom	25 Students 1 Teacher	1	684	684	

EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Grade 1 Classroom		1	684	684		Grade 1 Classroom		1	684	684	
Grade 1 Storage		2	91	182		Grade 1 Storage		2	91	182	
Grade 1 Classroom	25 Students 1 Teacher	1	901	901		Grade 1 Classroom	25 Students 1 Teacher	1	901	901	
Pathways Classroom	8 Students 1 Teacher	1	777	777	This is a classroom for emotionally disturbed children	Pathways Classroom	8 Students 1 Teacher	1	777	777	This is a classroom for emotionally disturbed children
Storage/Time out room	1	1	89	89		Storage/Time out room	1	1	89	89	
Math Intervention Office	15 Students 1 Teacher	1	524	524		Math Intervention Office	15 Students 1 Teacher	1	524	524	
Literacy Classroom	10 Students 2 Teacher	1	686	686		Literacy Classroom	10 Students 2 Teacher	1	686	686	
Grade 3 Classroom	25 Students 1 Teacher	1	681	681		Grade 3 Classroom	25 Students 1 Teacher	1	681	681	
Grade 3 Classroom	25 Students 1 Teacher	1	685	685		Grade 3 Classroom	25 Students 1 Teacher	1	685	685	
Grade 3 Storage		1	89	89		Grade 3 Storage		1	89	89	
Grade 3 Storage		1	89	89		Grade 3 Storage		1	89	89	
Grade 3 Classroom	25 Students 1 Teacher	1	827	827		Grade 3 Classroom	25 Students 1 Teacher	1	827	827	
Grade 4 Classroom	27 Students 1 Teacher	1	827	827		Grade 4 Classroom	27 Students 1 Teacher	1	827	827	
Grade 4 Classroom	27 Students 1 Teacher	1	684	684		Grade 4 Classroom	27 Students 1 Teacher	1	684	684	
Grade 4 Storage		1	89	89		Grade 4 Storage		1	89	89	
Grade 5 Classroom	27 Students 1 Teacher	1	684	684		Grade 5 Classroom	27 Students 1 Teacher	1	684	684	
Grade 5 Classroom	27 Students 1 Teacher	1	825	825		Grade 4 Classroom	27 Students 1 Teacher	1	825	825	
Literacy Classroom	10 Students 1 teacher	1	655	655		Literacy Classroom	10 Students 1 teacher	1	655	655	
Computer Classroom	24 Students	1	531	531		Computer Classroom	24 Students	1	531	531	
Art Storage		1	271	271		Art Storage		1	271	271	
Art Classroom	24 Students	1	845	845		Art Classroom	24 Students	1	845	845	
						Grade 5 Classroom	22 Students	1	845	845	NEW- 5th grade rooms too crowded
						Grade 4 Classroom	22 Students	1	845	845	NEW- 4th grade rooms too crowded
Existing Total				19,702		Total				21,392	
Net Sub-Total N.S.F.				34,535		Net Sub-Total N.S.F.				36,535	
Circulation						Circulation					
Core Factor			23%	8,005	Existing Calculated number	Core Factor			25%	9,134	New Calculated #
Grand Total N.S.F.				42,540	s.f.	Grand Total N.S.F.				45,669	s.f.

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN NORTH WINDHAM SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This was performed to determine how to best reorganize the spaces within an overall conceptual plan that accommodates the various functions of the North Windham School with an eye towards efficiency. The existing space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

The space standards were developed to analyze the available space in the existing buildings to be renovated and used to create a Space Program document. This allows for an objective comparison between Elementary Schools of different sizes, configurations and ages. The decisions made regarding current and projected space needs were used as a benchmark tool to establish a Conceptual Floor Plan and Opinion of Probable Costs for the Master Planning phase, and would serve to back-check the developed design plans beyond the Master Planning phase.

The Conceptual Plans illustrate the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

Windham Public Schools North Windham Elementary School- Program											
EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Administrative											
Administrative Office	2	1	297	297	Overall space is very tight. Need more guest seating.	Administrative Office	2	1	400	400	
Principal's Office	1	1	122	122	No room for conference table or guest seating, very little storage.	Principal's Office	1	1	250	250	
Vice Principal's Office	1	1	108	108		Vice Principal's Office	1	1	108	108	
Staff Work Room	N/A	1	174	174		Staff Work Room	N/A	1	174	174	
Conference Room	1	1	120	120	Way too small, can't fit enough people	Conference Room	1	1	275	275	
Teacher Office	2	1	187	187	Occupied by Reading teacher & Teacher TBD	Teacher Office	2	1	187	187	
Teacher Office	2	1	285	285	Occupied by 2 Teachers	Teacher Office	2	1	285	285	
Instructional Consultants Office	1	1	89	89	Not enough storage	Instructional Consultants Office	1	1	125	125	
Gym Office	1	1	112	112	Small	Gym Office	1	1	125	125	
Psychologist Office	1	1	75	75	Small	Psychologist Office	1	1	125	125	
Teacher's Lounge	N/A	1	358	358	Too small, need seating for at least 12	Teacher's Lounge	N/A	1	400	400	
Speech & Language Office	2	1	170	170		Speech & Language Office	2	1	170	170	
						Social Worker's Office	1 staff 4 interns	1	300	300	New
Math Office	1	1	275	275		Math Office	1	1	275	275	
Locker Room		1	236	236	Currently Social Worker's Office	Locker Room		0	236	236	not necessary
						OT/PT Office	2	1	310	310	New
Staff Work Room	N/A	1	185	185		Staff Work Room	N/A	1	185	185	
Staff Copy Room		1	112	112		Staff Copy Room		1	112	112	
Nurses Office	1	1	120	120		Nurses Office	1	1	120	120	
Health Center		1	314	314	Separate waiting and Exam areas	Health Center		1	350	350	
Existing Total				3,339		Total				4,512	
Service Areas											
Custodial Office	3	1	204	204		Custodial Office	3	1	204	204	
Transformer Vault		1	198	198		Transformer Vault		1	198	198	
Electrical Room		1	179	179		Electrical Room		1	179	179	
Mechanical Room		1	887	887		Mechanical Room		1	887	887	
Outdoor Storage		1	274	274		Outdoor Storage		1	274	274	
Janitors Closet		1	49	49		Janitors Closet		1	49	49	
Janitors Closet		1	56	56		Janitors Closet		1	56	56	
Delivery Entry		1	78	78		Delivery Entry		1	78	78	
Kitchen	4	1	1154	1,154		Kitchen	4	1	1154	1,154	
Dishwashing		1	70	70		Dishwashing		1	70	70	
Walk in Freezers		1	156	156		Walk in Freezers		1	156	156	
Kitchen Lockers/Toilets		1	123	123		Kitchen Lockers/Toilets		1	123	123	
Kitchen Servery		1	700	700		Kitchen Servery		1	700	700	
Kitchen Office	1	1	47	47		Kitchen Office	1	1	47	47	
Existing Total				4,175		Total				4,175	
Common Area											
Media Center	1 librarian	1	1,958	1,958	Used by grades K-5	Media Center	1 librarian	1	1958	1,958	
Lobby		1	220	220		Lobby		1	220	220	
Cafeteria		1	1814	1,814	Way too small. Currently 5 waves next year will be 6.	Cafeteria		1	2300	2,300	
Auditorium/Gym		1	3,612	3,612		Auditorium/Gym		1	3,612	3,612	
Gym Storage & Music Storage		1	183	183	Tight	Gym Storage & Music Storage		1	250	250	
Locker Room		1	215	215	Currently used as Chair Storage and General Storage.	Locker Room		0	215	0	not necessary
						General Storage/Chair Storage		1	225	225	New
Locker Room		1	215	215	Currently used as Social Worker Office	Locker Room		0	215	0	not necessary
Stage		1	702	702	Currently being used for OT/PT	Stage		1	702	702	
Girls Toilet Room		1	80	80	ADA issues	Girls Toilet Room		1	80	80	provide accessibility
Girls Toilet Room		1	78	78	ADA issues	Girls Toilet Room		1	78	78	provide accessibility
Girls Ganged Toilet Room		1	250	250		Girls Ganged Toilet Room		1	250	250	
Boys Ganged Toilet Room		1	250	250		Boys Ganged Toilet Room		1	250	250	
Boys Toilet Room		1	67	67	ADA issues	Boys Toilet Room		1	67	67	provide accessibility
Boys Toilet Room		1	68	68	ADA issues	Boys Toilet Room		1	68	68	provide accessibility
Staff Toilet Men		1	60	60	ADA issues	Staff Toilet Men		1	60	60	provide accessibility
Staff Toilet Women		1	50	50		Staff Toilet Women		1	50	50	
Staff Toilet		1	52	52		Staff Toilet		1	52	52	
Existing Total				9,874		Total				10,222	

EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Academic Areas											
Kindergarten Classroom	22 Students 1 Teacher 1 para	1	1109	1,109		Kindergarten Classroom	22 Students 1 Teacher 1 para	1	1109	1,109	
Kindergarten Classroom	22 Students 1 Teacher 1 para	1	763	763		Kindergarten Classroom	22 Students 1 Teacher 1 para	1	763	763	
Dual Language Kindergarten Classroom	22 Students 1 Teacher 1 Para	1	1109	1,109		Dual Language Kindergarten Classroom	22 Students 1 Teacher 1 Para	1	1109	1,109	
Dual Language Kindergarten Classroom	22 Students 1 Teacher 1 Para	1	790	790		Dual Language Kindergarten Classroom	22 Students 1 Teacher 1 Para	1	790	790	
First Grade Classroom	22 Students 1 Teacher	1	762	762		First Grade Classroom	22 Students 1 Teacher	1	762	762	
First Grade Classroom	22 Students 1 Teacher	1	763	763		First Grade Classroom	22 Students 1 Teacher	1	763	763	
Dual Language First Grade	22 Students 1 Teacher	1	785	785		Dual Language First Grade	22 Students 1 Teacher	1	785	785	
Dual Language First Grade	22 Students 1 Teacher	1	1018	1,018		Dual Language First Grade	22 Students 1 Teacher	1	1018	1,018	
Special Education Classroom	10 Students 1 Teacher	1	578	578	Needs a sink	Special Education Classroom	10 Students 1 Teacher	1	578	578	Needs a sink
Second Grade Classroom	25 Students 1 Teacher	1	800	800		Second Grade Classroom	25 Students 1 Teacher	1	800	800	
Second Grade Classroom	25 Students 1 Teacher	1	800	800		Second Grade Classroom	25 Students 1 Teacher	1	800	800	
Dual Language Second Grade Classroom	25 Students 1 Teacher	1	785	785		Dual Language Second Grade Classroom	25 Students 1 Teacher	1	785	785	
Dual Language Second Grade Classroom	25 Students 1 Teacher	1	800	800		Dual Language Second Grade Classroom	25 Students 1 Teacher	1	800	800	
Third Grade Classroom	26 Students 1 Teacher	1	833	833		Third Grade Classroom	26 Students 1 Teacher	1	833	833	
Third Grade Classroom	26 Students 1 Teacher	1	800	800		Third Grade Classroom	26 Students 1 Teacher	1	800	800	
Dual Language Third Grade Classroom	26 Students 1 Teacher	1	657	657		Dual Language Third Grade Classroom	26 Students 1 Teacher	1	657	657	
Dual Language Third Grade Classroom	26 Students 1 Teacher	1	1083	1,083		Dual Language Third Grade Classroom	26 Students 1 Teacher	1	1083	1,083	
Fourth Grade Classroom	27 Students 1 Teacher	1	800	800		Fourth Grade Classroom	27 Students 1 Teacher	1	800	800	
Fourth Grade Classroom	27 Students 1 Teacher	1	800	800		Fourth Grade Classroom	27 Students 1 Teacher	1	800	800	
Dual Language Fourth Grade Classroom	18 Students 1 Teacher	1	800	800		Dual Language Fourth Grade Classroom	18 Students 1 Teacher	1	800	800	
Dual Language Fourth Grade Classroom	18 Students 1 Teacher	1	800	800		Dual Language Fourth Grade Classroom	18 Students 1 Teacher	1	800	800	
Fifth Grade Classroom	28 Students 1 Teacher	1	800	800		Fifth Grade Classroom	28 Students 1 Teacher	1	800	800	
Fifth Grade Classroom	28 Students 1 Teacher	1	800	800		Fifth Grade Classroom	28 Students 1 Teacher	1	800	800	
Dual Language Fifth Grade Classroom	18-25 Students 1 Teacher	1	1032	1,032		Dual Language Fifth Grade Classroom	18-25 Students 1 Teacher	1	1032	1,032	
Dual Language Fifth grade Classroom	18-25 Students 1 Teacher	1	785	785		Dual Language Fifth grade Classroom	18-25 Students 1 Teacher	1	785	785	
K-5 Art Classroom	18-28 Students 1 teacher	1	656	656	Stools not appropriate height for students	K-5 Art Classroom	18-28 Students 1 teacher	1	656	656	Stools not appropriate height for students
Special Education Classroom	12 Students 2 teacher 1 para	1	482	482	Separated from Art Classroom by temporary wall.. Too noisy	Special Education Classroom	12 Students 2 teacher 1 para	1	482	482	Separated from Art Classroom by temporary wall.. Too noisy
Math Support Classroom	10 Students 1 Teacher	1	257	257		Math Support Classroom	10 Students 1 Teacher	1	257	257	
Small Group Work Classroom	6 Students	1	174	174		Small Group Work Classroom	6 Students	1	174	174	
Special Education Autism Classroom	8-11 Students 1 teacher 4-5 para	1	408	408		Special Education Autism Classroom	8-11 Students 1 teacher 4-5 para	1	408	408	
Existing Total				22,829		Total				22,829	
Sub-Total				40,217		Sub-Total				41,738	
Circulation						Circulation					
Core Factor	1		5,817	5,817		Core Factor	1		5,817	5,817	
Grand Total				46,034	s.f.	Grand Total				47,555	s.f.



0 8 16 32 48



DATE:
REV:

PROPOSED PLAN

N. WINDHAM ELEM.

WINDHAM PUBLIC SCHOOLS
EXISTING CONDITION SURVEY
STUDY OF
NORTH WINDHAM SCHOOL
112 JORDAN LANE
NORTH WINDHAM, CONNECTICUT

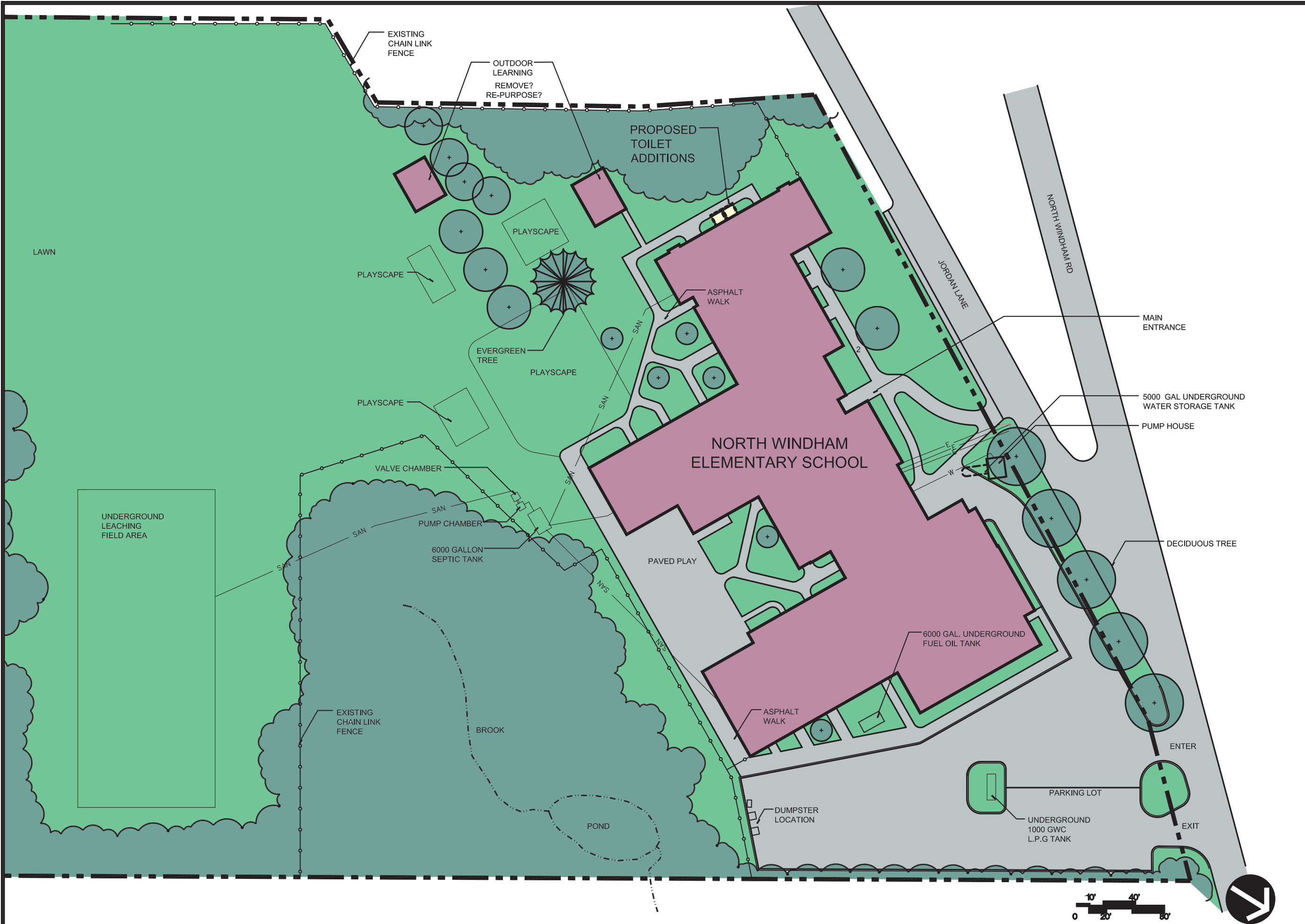



281 Farmington Avenue
Farmington, CT, 06032

SHEET NO.

P1

2012-014



DATE:		SCALE: NTS	
PROPOSED		SITE PLAN	
WINDHAM PUBLIC SCHOOLS EXISTING CONDITION SURVEY SURVEY OF			
NORTH WINDHAM SCHOOL			
112 JORDAN LANE NORTH WINDHAM, CONNECTICUT			
FRIAR 			
ASSOCIATES INC.			
281 Farmington Avenue Farmington, CT. 06032			
SHEET NO.			
L1			

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN SWEENEY ELEMENTARY SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This was performed to determine how to best reorganize the spaces within an overall conceptual plan that accommodates the various functions of the Sweeney Elementary School with an eye towards efficiency. The existing space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

The space standards were developed to analyze the available space in the existing buildings to be renovated and used to create a Space Program document. This allows for an objective comparison between Elementary Schools of different sizes, configurations and ages. The decisions made regarding current and projected space needs were used as a benchmark tool to establish a Conceptual Floor Plan and Opinion of Probable Costs for the Master Planning phase, and would serve to back-check the developed design plans beyond the Master Planning phase.

The Conceptual Plans illustrate the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

Windham Public Schools Sweeney Elementary School- Proposed Program											
EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Administrative											
Main Office	2	1	287	287	Overall space is very tight. Need more guest seating or storage.	Main Office	2	1	287	287	Taking over Principal's Office
Principal's Office	1	1	116	116	No room for conference table or guest seating, very little storage.	Part of Main Office now	1	1	116	116	Taking over Nurse's Office
Principal's Toilet	1	1	20	20		Principal's Toilet	1	1	20	20	
Supply Room		1	41	41	Not enough room.	Supply Room		1	41	41	
Conference Room		1	165	165	Way too small, can't fit enough people	Part of Reading & Instructional Consultants Office		1	165	165	
Health Center	1	1	246	246	Only room for 1 sick bed.	Principals Office	1	1	246	246	
Staff Break Room		1	596	596	Way too small. Need seating for 16-18	Conference room		1	596	596	
Staff Office for 7	(2) Reading Specialist (1) ELL (1) Intern (3) Tutors	1	804	804	Currently in Portable. No toilets, water, or covering from rain.	Remove Portable					
Speech & Language Office	2	1	111	111		Speech & Language Ed (lower grades)	2	1	111	111	
Staff Office for 5	(1) Psychologist (1) Social Worker (2) Interns (1) Family Liaison	1	804	804	Currently in Portable. No toilets, water, or covering from rain.	Remove Portable					
						Speech & Language Ed (upper grades)	1	1	165	165	NEW
						ELL Office	1	1	165	165	NEW
						Tutor Office	1	1	130	130	NEW
						Family Liaison Office	1	1	130	130	NEW
						Social Worker Office	1	1	130	130	NEW
						Psychologist Office	1	1	130	130	NEW
						Staff Workroom/ Break Room/ Conference	1	1	1,780	1,780	NEW
Locker Room		1	234	234	Currently being used as office for 2 staff. (1) Instructional Consultant & (1) Reading Specialist	New Servery		0	234	234	
						PE Office	1	1	278	278	NEW
Locker Room	1	1	245	245	Currently used as shared PE office and Gym Storage.	New Servery	1	0	245	245	
						Gym Storage		1	880	880	NEW
Existing Total				3,669		Total				5,849	
Service Areas											
Custodian	3	1	411	411	Office and Supplies combined	Custodian	3	1	411	411	Office and Supplies combined
Electrical Room		1	170	170		Electrical Room		1	170	170	
Boiler Room		1	685	685	Kitchen stores some food service items here because they don't have anywhere else to put it.	Boiler Room		1	685	685	
Kitchen	4	1	736	736	Food cooked here and served in Gym which is problematic. No walk ins	Nurse	4	1	736	736	
Dishwashing		1	110	110		Nurse		1	110	110	
						Gym		1	3,500	3,500	NEW
						Kitchen		1	1,300	1,300	NEW
						Toilet		2	80	160	NEW
Existing Total				2,112		Total				5,612	
Common Area						Common Area					
Media Center	1 librarian	1	912	912	Used by grades K-5. Way too small	First Grade Classroom		20 Students	912	912	
Lobby		1	250	250		Lobby		1	250	250	
Gymnasium		1	3491	3,491	Shared function as Auditorium and Cafeteria also. Problematic for scheduling.	Cafeteria		1	3491	3,491	
Paper Storage		1	198	198		Paper Storage		1	198	198	
Book Storage		1	98	98		Book Storage		1	98	98	
Stage		1	701	701	Currently being used for OT/PT	Stage		1	701	701	
Girls Toilet Room		1	195	195		Girls Toilet Room		1	195	195	
Girls Toilet Room		1	60	60		Girls Toilet Room		1	60	60	
Staff Toilet Room		1	39	39		Staff Toilet Room		1	39	39	
Staff Toilet Room		1	39	39		Staff Toilet Room		1	39	39	
Boys Toilet Room		1	158	158		Boys Toilet Room		1	158	158	
Boys Toilet Room		1	60	60		Boys Toilet Room		1	60	60	
Staff Toilet		1	38	38		Staff Toilet		1	38	38	
Staff Toilet		1	35	35		Staff Toilet		1	35	35	
H.C. Toilet		1	57	57	Only ADA bathroom in the building	H.C. Toilet		1	57	57	
						Boys Toilet		1	350	350	NEW
						Girls Toilet		1	350	350	NEW
Girls Toilet Room		1	60	60		Girls Toilet Room		1	60	60	
Staff Toilet		1	52	52		Staff Toilet		1	52	52	
Existing Total				6,443		Total				7,143	

EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Academic Areas						Academic Areas					
Kindergarten Classroom	25 Students 1 Teacher 1 Para	1	1162	1,162	Includes Toilet.	Kindergarten Classroom		1	1162	1,162	Includes Toilet.
Kindergarten Classroom	24 Students 1 Teacher 1 Para	1	789	789	No Toilet.	Kindergarten Classroom		1	789	789	
						Kindergarten Toilet Room		1	75	75	NEW
Pre-K Classroom	15 Students 1 Teacher 1 Para	1	773	773	Building a Toilet in the room -Summer 2012.	Pre-K Classroom		1	773	773	
Bilingual Kindergarten	26 Students 1 Teacher 1 Para	1	1215	1,215	Includes Toilet.	Bilingual Kindergarten		1	1215	1,215	Includes Toilet.
First Grade Classroom	22 Students 1 Teacher	1	761	761		Kindergarten Classroom		1	761	761	
First Grade Classroom	21 Students 1 Teacher	1	765	765		Kindergarten Classroom		1	765	765	
First Grade Classroom	22 Students 1 Teacher	1	770	770		First Grade Classroom		1	770	770	
Second Grade Classroom	24 Students 1 Teacher	1	767	767		OT/PT		1	767	767	
K-2 Special Education Resource Room	12 Students 1 Teacher 3 Para	1	772	772	Needs a sink	K-2 Special Education Resource Room		1	772	772	Needs a sink
Second Grade Classroom	25 Students 1 Teacher	1	784	784		First Grade Classroom		1	784	784	
Math Intervention Classroom	4-6 Students 1 Teacher	1	262	262		Becomes part of Reading & Instructional consultant		1	262	262	
Second Grade Classroom	25 Students 1 Teacher	1	1021	1,021		Second Grade Classroom		1	1021	1,021	
Special Education Upper Grade Resource Room	12 Students 1 Teacher 3 Paras	1	999	999		First Grade Classroom		1	999	999	
Third Grade Classroom	27 Students 1 Teacher	1	785	785		Math Intervention		1	785	785	
Fourth Grade Classroom	27 Students 1 Teacher	1	779	779		Second Grade Classroom		1	779	779	
Fourth Grade Classroom	26 Students 1 Teacher	1	778	778		Second Grade Classroom		1	778	778	
Third Grade Classroom	27 Students 1 Teacher	1	775	775		Second Grade Classroom		1	775	775	
Fifth Grade Classroom	25 Students 1 Teacher	1	777	777		Second Grade Classroom		1	777	777	
Fifth Grade Classroom	25 Students 1 Teacher	1	744	744		First Grade Classroom		1	744	744	
Reading Classroom	25 Students 1 Teacher	1	1338	1,338		Media Center		1	1338	1,338	
Art Classroom	25 Students 1 Teacher	1	1031	1,031	Also shared space with Before & After School Program which is not ideal because they shouldn't be sharing supplies.	First Grade Classroom		1	1031	1,031	
						Special Education		1	755	755	NEW
						Fifth Grade Classroom		4	755	3020	NEW
						Fourth Grade Classroom		4	755	3020	NEW
						Third Grade Classroom		4	755	3,020	NEW
						Art Classroom		1	1022	1,022	NEW
Computer Classroom	25 Students 1 Teacher	1	611	611		Computer Classroom		1	611	611	
Music Classroom	25 Students 1 Teacher	1	0	0	Currently in Portable with no bathroom or water.	Music Classroom		1	1057	1,057	NEW
Existing Total				18,458		Total				30,427	
Sub-Total N.S.F.				30,682		Sub-Total N.S.F.				49,031	
Circulation						Circulation					
Core Factor			15%	4,501	Existing Calculated number	Core Factor			20%	9,806	New Calculated number
Grand Total N.S.F.				35,183	s.f.	Grand Total N.S.F.				58,837	s.f.

25,200 SQ. FT.
PROPOSED BUILDING
ADDITION



37,207 SQ. FT.
EXISTING BUILDING
AREA

DATE:
REV:

PROPOSED ADDITION

SWEENEY ELEM.

WINDHAM PUBLIC SCHOOLS
EXISTING CONDITION SURVEY
STUDY OF
W.B. SWEENEY SCHOOL
60 OAK HILL DRIVE
WILLIMANTIC, CONNECTICUT

FRIAR
ASSOCIATES INC.

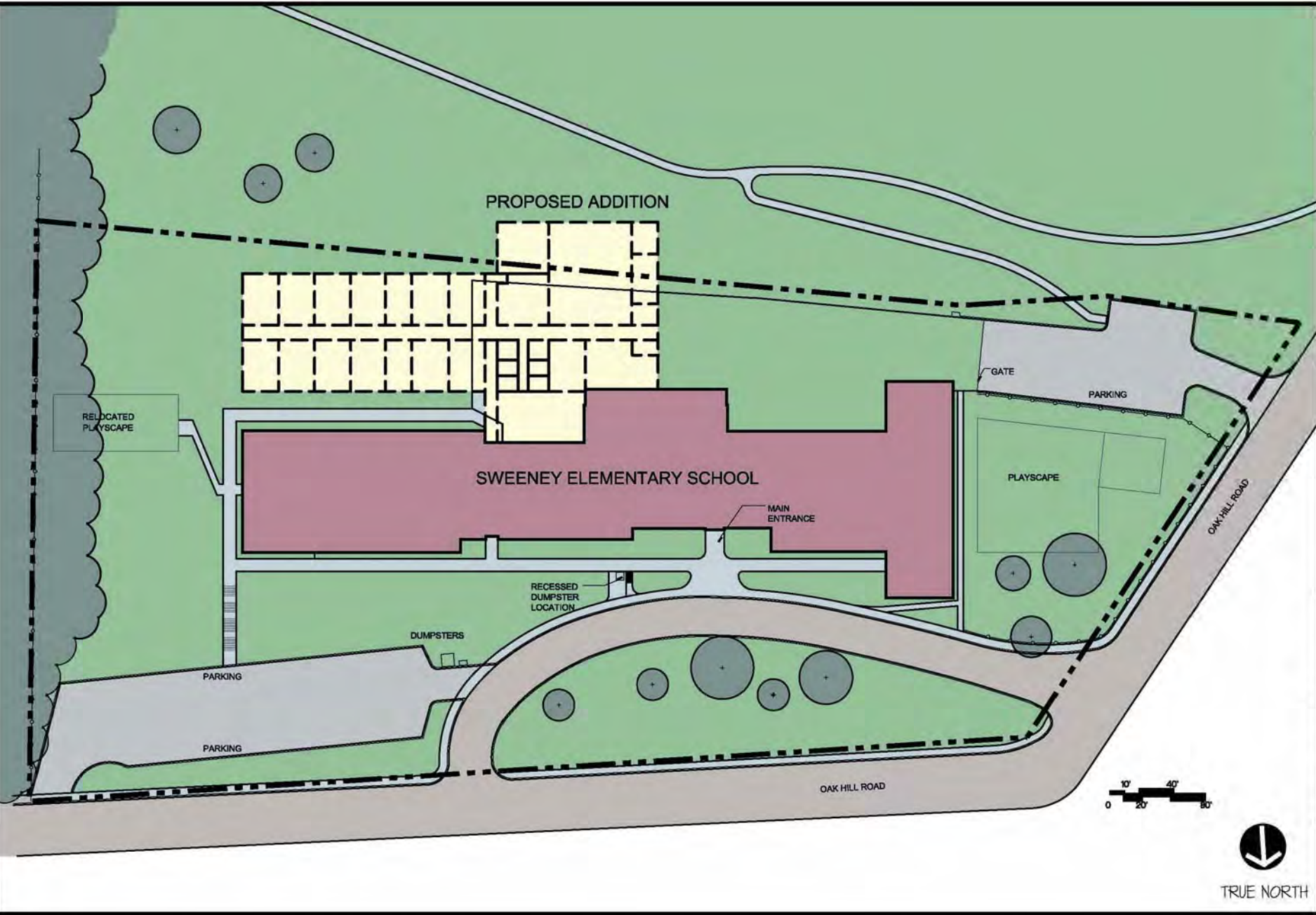
281 Farmington Avenue
Farmington, CT, 06032

SHEET NO.

PR-1

2012-014





DATE: _____
 SCALE: _____
 NTS

PROPOSED ADDITION
SITE PLAN

W.B. SWEENEY SCHOOL
 10 OAK HILL ROAD
 FARMINGTON, CT 06032

FRIAR
ASSOCIATES INC.
 281 Farmington Avenue
 Farmington, CT. 06032

SHEET NO.
AD-1



WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN WINDHAM CENTER SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This was performed to determine how to best reorganize the spaces within an overall conceptual plan that accommodates the various functions of the Windham Center School with an eye towards efficiency. The existing space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

The space standards were developed to analyze the available space in the existing buildings to be renovated and used to create a Space Program document. This allows for an objective comparison between Elementary Schools of different sizes, configurations and ages. The decisions made regarding current and projected space needs were used as a benchmark tool to establish a Conceptual Floor Plan and Opinion of Probable Costs for the Master Planning phase, and would serve to back-check the developed design plans beyond the Master Planning phase.

The Conceptual Plans illustrate the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

Windham Public Schools						Windham Center Elementary School- Program					
EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Administrative						Administrative					
General Office	2	1	241	241	Overall space is very tight. Need more guest seating.	General Office	2	1	550	550	
Principal's Office	1	1	140	140	No room for conference table or guest seating, very little storage.	Principal's Office	1	1	275	275	
Principal's Bathroom	1	1	25	25	Not ADA, currently using as storage closet.	Principal's Bathroom	1	1	60	60	
Staff Work Room	N/A	1	90	90		Staff Work Room	N/A	1	150	150	
Health Center	1	1	238	238	Only 1 sick bed, no room for privacy curtains, includes toilet	Health Center	1	1	300	300	
Teacher's Lounge	N/A	1	220	220	Sink not ADA, room too small. Need to accommodate at least 16-18 staff at once.	Teacher's Lounge	N/A	1	375	375	
						Psychologist Office	1	1	150	150	New
Psychologist Office	1	1	360	360	Becoming part of Classroom	Becoming 1st Grade Classroom	1	1	360	360	
						Instructional Consultants Office & Literacy Help Instructor Office	2	2	150	300	New
Instructional Consultants Office & Literacy Help Instructor Office	2	1	398	398	Not enough storage/ Becoming part of 3rd grade classroom.	Part of Third Grade Classroom	2	1	398	398	
Conference Room	N/A	1	360	360	Way too small. Need it to be twice the size to accommodate more people./ Becoming part of 3rd grade classroom next year.	Part of Third Grade Classroom	N/A	1	360	360	
						Conference Room		1	475	475	New
Family Liaison Office	1	1	87	87		Family Liaison Office	1	1	125	125	
Music Teacher's Office	1	0	0	0	Currently sits at a desk in the corner of the library.	Music Teacher's Office	1	1	125	125	New
Staff Office	7	1	785	785	Currently housed in a portable.	Staff Office	7	1	800	800	New
Special Education Office	3	1	393	393	Currently using old Locker Room	Girls Locker Room		1	0	0	Not required
						Social Worker's Office	1	1	375	375	New
Social Worker's Office	1	1	375	375	Currently using old Locker Room	Boys Locker Room		1	0	0	Not required
						Special Education Office	3	1	425	425	New
E.L.L Teacher's Office	2	1	91	91	Currently sitting in an old toilet room. Way too small.	E.L.L Teacher's Office	2	1	300	300	
OT/ PT Office	2	0	0	0	Currently using stage as office	OT/ PT Office	2	1	325	325	New
Gym Teacher's Office	1	0	0	0	Currently using stage as office	Gym Teacher's Office	1	1	125	125	New
Teacher's Copy Room		1	80	80		Teacher's Copy Room		1	80	80	
Copy Room		1	87	87		Copy Room		1	87	87	
Before & After School Program Director's Office	1	1	83	83		Before & After School Program Director's Office	1	1	125	125	
Speech & Language Office	3	1	377	377		Speech & Language Office	3	1	377	377	
Existing Total				4,430		Existing Total				7,022	
Service Areas						Service Areas					
Switch Room		1	86	86		Switch Room		1	86	86	
Server Room		1	96	96		Server Room		1	96	96	
Custodial Closet		1	108	108		Custodial Closet		1	108	108	
Kitchen		1	692	692	Too small, need space for walk in freezers. Coolers are being housed in cafeteria because of lack of space.	Kitchen		1	1200	1,200	
Kitchen Office		1	109	109		Kitchen Office		1	109	109	
Dishwashing		1	109	109		Dishwashing		1	109	109	
Custodians Office		1	59	59		Custodians Office		1	59	59	
Jan Closet		1	29	29		Jan Closet		1	29	29	
Existing Total				1,288		Existing Total				1,796	
Common Area						Common Area					
Cafeteria		1	1449	1,449	Way too small. Currently 5 waves next year will be 6.	Cafeteria		1	2600	2,600	
Auditorium/Gym		1	2,742	2,742	Need gym storage for storing folding chairs	Auditorium/Gym		1	2,742	2,742	
General Storage		1	298	298	Not nearly enough	General Storage		1	500	500	
Library		1	1,183	1,183	One Librarian	Library		1	1,500	1,500	
Stage		1	736	736	Currently 2 offices on the stage	Stage		1	736	736	
						Girls Ganged Toilet		1	250	250	New
						Boys Ganged Toilet		1	250	250	New
						Staff Toilet Rooms		2	75	150	New
Girls Toilet Room		1	211	211	Over used.. Not enough stalls	Girls Toilet Room		1	211	211	
Girls Toilet Room		1	193	193	Over used.. Not enough stalls	Girls Toilet Room		1	193	193	
Boys Toilet Room		1	215	215	Over used.. Not enough stalls	Boys Toilet Room		1	215	215	
Boys Toilet Room		1	183	183	Over used.. Not enough stalls	Boys Toilet Room		1	183	183	
Staff Toilet Rooms		2	75	150		Staff Toilet Rooms		2	75	150	
Existing Total				7,360		Existing Total				9,680	

EXISTING SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	NEW SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Academic Areas						Academic Areas					
Special Education Classroom	8 Students 2 Teachers	1	405	405	Ceiling leaking/ Becoming 1st Grade Classroom next year.	Part of First Grade Classroom	8 Students 2 Teachers	1	405	405	Special Ed moved to New Arrivals room which is no longer needed.
Music Classroom		0	0	0	Currently do not have, have teacher who works off a mobile cart	Music Classroom		1	750	750	New
Kindergarten Classroom	25 Students 1 Teacher 1 Para	1	914	914	Currently have an E.L.L teacher office in room. No Toilet .	Kindergarten Classroom	25 Students 1 Teacher 1 Para	1	914	914	
						E.L.L Teacher Office	1	1	125	125	New
Kindergarten Classroom	23 Students 1 Teacher 1 Para	1	783	783	No Toilet .	Kindergarten Classroom	23 Students 1 Teacher 1 Para	1	783	783	
Kindergarten Classroom	23 Students 1 Teacher 1 Para	1	810	810	Student furniture is not appropriate height. No Toilet .	Kindergarten Classroom	23 Students 1 Teacher 1 Para	1	810	810	
First Grade Classroom	18 Students 1 Teacher 1 Para	1	774	774		First Grade Classroom	18 Students 1 Teacher 1 Para	1	774	774	
First Grade Classroom	20 Students 1 Teacher 1 Para	1	802	802	Becoming 3rd Grade Fall 2012.	Third Grade Classroom	20 Students 1 Teacher 1 Para	1	802	802	
First Grade Classroom	20 Students 1 Teacher 1 Para	1	797	797		First Grade Classroom	20 Students 1 Teacher 1 Para	1	797	797	
Second Grade Classroom	20 Students 1 Teacher 1 Para	1	807	807		Second Grade Classroom	20 Students 1 Teacher 1 Para	1	807	807	
Second Grade Classroom	15 Students 1 Teacher 1 Para	1	832	832	Has inappropriately sized furniture for the children. Becoming Third Grade Fall 2012.	Third Grade Classroom	15 Students 1 Teacher 1 Para	1	832	832	
Second Grade Classroom	22 Students 1 Teacher	1	936	936	Has plumbing and sink in the middle of the floor that needs to be removed.	Second Grade Classroom	22 Students 1 Teacher	1	936	936	
Third Grade Classroom	23 Students 1 Teacher 1 Para	1	1001	1,001	This classroom works well/ Becoming Fifth Grade Fall 2012.	Fifth Grade Classroom	23 Students 1 Teacher 1 Para	1	1001	1,001	
Third Grade Classroom	23 Students 1 Teacher	1	828	828	Becoming Fifth Grade Fall 2012.	Fifth Grade Classroom	23 Students 1 Teacher	1	828	828	
Fourth Grade Classroom	20 Students 1 Teacher	1	824	824	Shared para	Fourth Grade Classroom	20 Students 1 Teacher	1	824	824	
Fourth Grade Classroom	20 Students 1 Teacher	1	996	996	Shared para	Fourth Grade Classroom	20 Students 1 Teacher	1	996	996	
New Arrivals Classroom	10 Students 1 Teacher 1 Para	1	865	865	Program terminated, room to be reassigned.	Special Ed Classroom	10 Students 1 Teacher 1 Para	1	865	865	
Art Classroom (in portable classroom)	23 Students 1 Teacher 1 Para	1	803	803	This room needs a sink and does not have one. There are no bathrooms near this portable and no covering for traveling between school and portable when it rains.	Art Classroom	23 Students 1 Teacher 1 Para	1	803	803	New (Currently in Portable)
Existing Total				13,177		Existing Total				14,052	
Sub-Total N.S.F.				26,255		Sub-Total N.S.F.				32,550	
Circulation						Circulation					
Core Factor			24.44%	6416	Existing Calculated number	Core Factor			25.00%	8,138	New Calculated number
Grand Total N.S.F.				32,671	s.f.	Grand Total N.S.F.				40,688	s.f.



DATE:
REV:

PROPOSED PLAN

WINDHAM CENTER

WINDHAM PUBLIC SCHOOLS
EXISTING CONDITION SURVEY
SURVEY OF
WINDHAM CENTER SCHOOL
45 NORTH ROAD
WINDHAM CENTER, CONNECTICUT

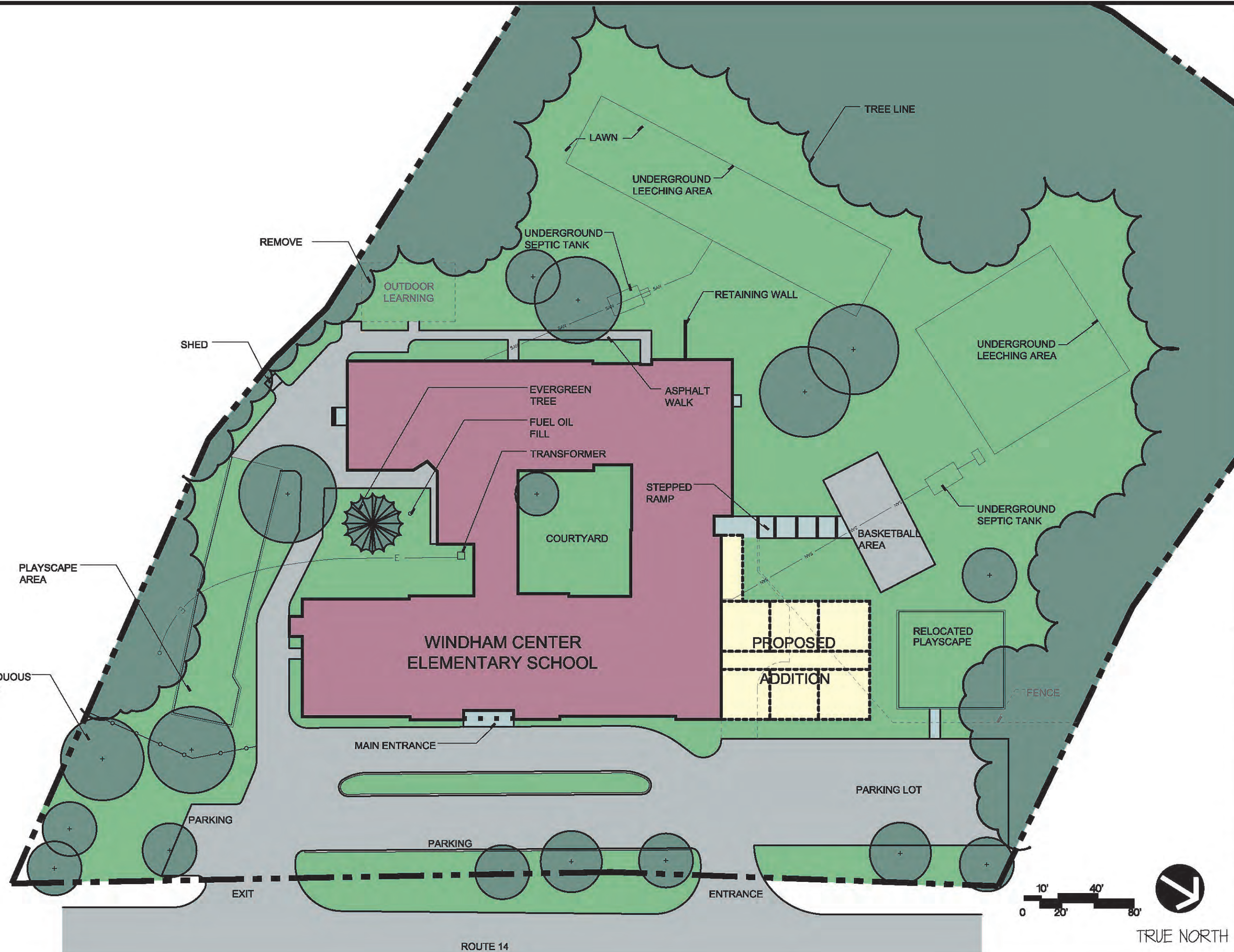



281 Farmington Avenue
Farmington, CT. 06032

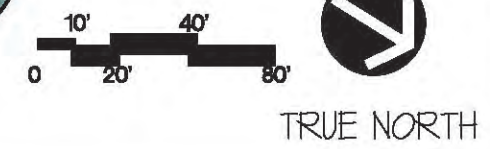
SHEET NO.

P 1

2012-014



DATE:		SCALE: NTS	
PROPOSED		SITE PLAN	
WINDHAM CENTER SCHOOL 45 NORTH ROAD WINDHAM CENTER, CONNECTICUT			
FRIAR  ASSOCIATES INC. 281 Farmington Avenue Farmington, CT. 06032			
SHEET NO. L1			



WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN WINDHAM MIDDLE SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

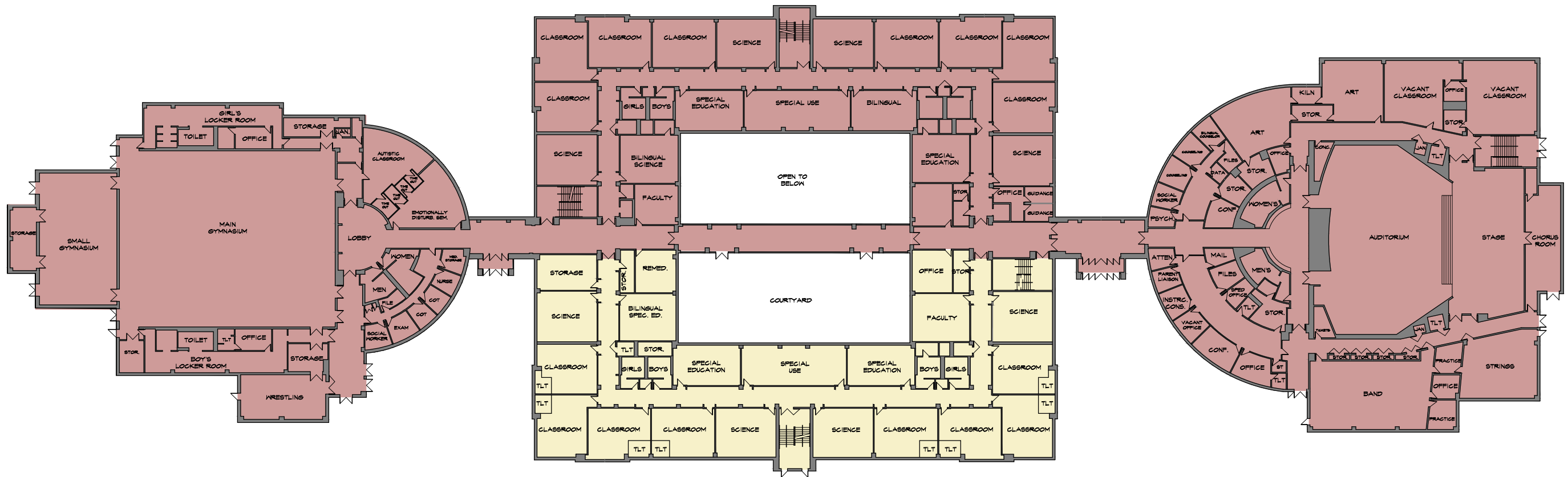
The program recommendations served as a tool to generate conceptual plans, illustrating the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

It was determined that the existing space is adequate to accommodate curriculum and various functions of the Windham Middle School, as well as the projected population. The recommended work includes Code upgrades throughout the building, reconfiguring the First Floor North wing to accommodate PK-K students while their home schools are renovated, and a roof replacement project.

Windham Public Schools Windham Middle School- Program											
SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Administrative											
Attendance Office	1	1	117	117	Works fine	Attendance Office	1	1	117	117	
Principal's Office	1	1	283	283	Works fine	Principal's Office	1	1	283	283	
General Storage	1	1	183	183		General Storage	1	1	183	183	
Instructional Consultant	1	1	163	163	Works Fine	Instructional Consultant	1	1	163	163	
VACANT Office	0	1	160	160	Vacant - Main office suite	Office	1	1	160	160	Vacant- use for Kramer staff
VACANT Office	0	1	277	277	Vacant - Main office suite	Office	2	1	277	277	Vacant- use for Kramer staff
VACANT Office	0	1	92	92	Vacant - NE between classrooms	Office	1	1	92	92	Use for teacher prep/workspace
Parent Liaison	2	1	125	125	Samll, but works well	Parent Liaison	2	1	125	125	
Guidance	1	2	102	204		Guidance	1	2	102	204	
Conference Room	N/A	1	271	271	Samll, but works well	Conference Room	N/A	1	271	271	
Mail room	N/A	1	108	108		Mail room	N/A	1	108	108	
File room	N/A	1	155	155	Not enough storage	File room	N/A	1	155	155	
Special Ed. Office	1	1	113	113	Samll, but works well	Special Ed. Office	1	1	113	113	
Toilet	N/A	1	60	60		Toilet	N/A	1	60	60	
General Storage	N/A	1	279	279		General Storage	N/A	1	279	279	
Psychologist Office	1	1	114	114		Psychologist Office	1	1	114	114	
Social Worker Office	1	1	139	139		Social Worker Office	1	1	139	139	
Counseling Room	1	1	174	174		Counseling Room	1	1	174	174	
Counseling Room	1	1	170	170		Counseling Room	1	1	170	170	
Storage	1	1	191	191		Storage	1	1	191	191	
Storage	1	2	140	280		Storage	1	2	140	280	
Files		1	70	70		Files		1	70	70	
Bilingual Counselor	1	1	142	142		Bilingual Counselor	1	1	142	142	
Storage	1	1	158	158		Storage	1	1	158	158	
Staff Office		1	113	113		Staff Office		1	113	113	
Conference Room		1	181	181		Conference Room		1	181	181	
Social Worker	1	1	135	135		Social Worker	1	1	135	135	
After School Care Office	1	1	204	204		After School Care Office	1	1	204	204	
Vice Principal's Office	1	1	389	389		Vice Principal's Office	1	1	389	389	
Faculty Room		1	399	399		Office Space		1	399	399	Kramer Program
Office		1	227	227		Office		1	227	227	
Office		1	395	395		Office		1	395	395	
Faculty Workroom		1	413	413		Faculty Workroom		1	413	413	
Existing Total				6,484		Total				6,484	
Service Areas						Service Areas					
Mechanical Room	1	1	1523	1,523		Mechanical Room	1	1	1523	1,523	
Electrical Room		1	757	757		Electrical Room		1	757	757	
Custodial Office		1	92	92		Custodial Office		1	92	92	
Custodial Lockers		1	93	93		Custodial Lockers		1	93	93	
Storage		1	531	531		Storage		1	531	531	
Data Room		1	473	473		Data Room		1	473	473	
Electrical/Tele Closet		1	137	137		Electrical/Tele Closet		1	137	137	
Elec.		1	50	50		Elec.		1	50	50	
Receiving		1	280	280		Receiving		1	280	280	
Kitchen/Serving		1	2860	2,860		Kitchen/Serving		1	2860	2,860	
Kitchen Office		1	134	134		Kitchen Office		1	134	134	
Concessions		1	117	117		Concessions		1	117	117	
Walk in Cooler		1	487	487		Walk in Cooler		1	487	487	
Dish Storage		1	174	174		Dish Storage		1	174	174	
Storage		1	159	159		Storage		1	159	159	
Storage		2	46	92		Storage		2	46	92	
Storage		3	68	204		Storage		3	68	204	
Janitors Closet		11	26	286		Janitors Closet		11	26	286	
Janitors Closet		1	44	44		Janitors Closet		1	44	44	
Janitors Closet		2	15	30		Janitors Closet		1	15	30	
Elev. Machine		1	46	46		Elev. Machine		1	46	46	
Electric Closet		2	52	104		Electric Closet		2	52	104	
AV Rep & Storage		1	294	294		AV Rep & Storage		1	294	294	
Existing Total				8,967		Total				8,967	
Common Area						Common Area					
Media Center	1 librarian	1	3113	3,113		Media Center	1 librarian	1	3113	3,113	
Storage		3	23	69		Storage		3	23	69	
Storage		1	107	107		Storage		1	107	107	
Chorus		1	69	69		Chorus		1	69	69	
Toilet		1	63	63		Toilet		1	63	63	
Toilet		10	57	570		Toilet		10	57	570	
Faculty Workroom		1	504	504		Faculty Workroom		1	504	504	
Storage		1	400	400		Storage		1	400	400	
Librarian Office	1	1	201	201		Librarian Office	1	1	201	201	
Computer Center		1	800	800		Computer Center		1	800	800	
Cafeteria		1	3989	3,989	6 lunch waves currently	Cafeteria		1	3989	3,989	
Faculty Dining		1	401	401		Faculty Dining		1	401	401	
Toilet		1	49	49		Toilet		1	49	49	
Boys Restroom		8	171	1,368		Boys Restroom		8	171	1,368	
Girls Restroom		8	229	1,832		Girls Restroom		8	229	1,832	
Small Gym		1	2400	2,400		Small Gym		1	2400	2,400	
Small Gym Storage		1	382	382		Small Gym Storage		1	382	382	
Girls Ganged Toilet Room		1	316	316		Girls Ganged Toilet Room		1	316	316	
Men Ganged Toilet Room		1	278	278		Boys Ganged Toilet Room		1	278	278	
Men's Ganged Toilet Room		1	192	192		Men's Ganged Toilet Room		1	192	192	
Women's Ganged Toilet Room		1	262	262		Women's Ganged Toilet Room		1	262	262	

SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
General Storage		1	489	489		General Storage		1	489	489	
Storage		1	140	140		Storage		1	140	140	
Main Gymnasium	4 teachers	1	9,068	9,068		Main Gymnasium	4 teachers	1	9,068	9,068	
Girls Locker Room		1	873	873		Girls Locker Room		1	873	873	
Girls Toilet Room		1	152	152		Girls Toilet Room		1	152	152	
Storage		5	65	325		Storage		5	65	325	
Media Retrieval Room		1	300	300		Media Retrieval Room		1	300	300	
Girls Gym Office		1	266	266		Girls Gym Office		1	266	266	
Gym Storage		1	259	259		Gym Storage		1	259	259	
Boys Locker Room		1	1068	1,068		Boys Locker Room		1	1068	1,068	
Boys Toilet Room		1	149	149		Boys Toilet Room		1	149	149	
Toilet.		1	82	82		Toilet.		1	82	82	
Boys Gym Office		1	184	184		Boys Gym Office		1	184	184	
Gym Storage		1	184	184		Gym Storage		1	184	184	
Wrestling Room		1	885	885		Wrestling Room		1	885	885	
Practice Room		1	188	188		Practice Room		1	188	188	
Chorus Room (Back Stage)		1	899	899	Currently using back stage	Chorus Room		1	899	899	
Band Office		1	148	148		Band Office		1	148	148	
Strings Room		1	1128	1,128		Strings Room		1	1128	1,128	
Practice Room		1	188	188		Practice Room		1	188	188	
Band Room		1	1961	1,961		Band Room		1	1961	1,961	
Auditorium		1	5199	5,199		Auditorium		1	5199	5,199	
Tickets		1	115	115		Tickets		1	115	115	
Stage		1	2515	2,515		Stage		1	2515	2,515	
Nurse Suite		1	610	610		Nurse Suite		1	610	610	
Gym Storage		1	247	247		Gym Storage		1	247	247	
Existing Total					44,987	Total					44,987
Academic Areas						Academic Areas					
Autistic Classroom	10 Students 2 Teacher 1 para	1	729	729		Autistic Classroom	10 Students 2 Teacher 1 para	1	729	729	
Time Out		2	77	154		Time Out		2	77	154	
Time Out		2	44	88		Time Out		2	44	88	
Emotionally Disturbed Classroom	10 Students 2 Teacher 1 para	1	815	815		Emotionally Disturbed Classroom	10 Students 2 Teacher 1 para	1	815	815	
Health Classroom	25 Students	1	651	651		Health Classroom	25 Students	1	651	651	
After School- 6th Grade	25 Students	1	712	712		After School- 6th Grade	25 Students	1	712	712	
Health Classroom	25 Students 1 Teacher	1	715	715		Health Classroom	25 Students 1 Teacher	1	715	715	
Art Classroom	24 Students	1	909	909		Art Classroom	24 Students	1	909	909	
Art Classroom	25 Students	1	1106	1,106		Art Classroom	25 Students	1	1106	1,106	
Storage		1	114	114		Storage		1	114	114	
Health Classroom	25 Students 1 Teacher	1	769	769		Health Classroom	25 Students 1 Teacher	1	769	769	
Machine Shop		1	598	598		Machine Shop		1	598	598	
Vacant Manufacturing Classroom	25 Students	1	579	579		Vacant Manufacturing Classroom	25 Students	1	579	579	
Computer Lab		1	1619	1,619		Computer Lab		1	1619	1,619	
Computer Lab Storage		1	204	204		Computer Lab Storage		1	204	204	
Manufacturing/Construction		1	2815	2,815		Manufacturing/Construction		1	2815	2,815	
Dust. Coll		1	57	57		Dust Coll.		1	57	57	
Elev. Machine		1	39	39		Elev. Machine		1	39	39	
Storage		1	64	64		Storage		1	64	64	
Finish		1	129	129		Finish		1	129	129	
Manufacturing Office	1	1	130	130		Manufacturing Office	1	1	130	130	
TV Production Room		1	105	105		TV Production Room		1	105	105	
OT/PT Therapy	varies	1	715	715		OT/PT Therapy	varies	1	715	715	
VACANT Classroom-Ground Floor	0	1	675	675	Vacant - adjacent to Library	Classroom-Ground Floor	0	1	675	675	relocated 6,7 & 8 Reading Room
VACANT Classroom- Ground Floor	0	1	457	457	Vacant	Classroom- Ground Floor	0	1	457	457	relocated Big Brothers/Big Sisters Classroom
VACANT Classroom- First Floor	0	1	1238	1,238	Vacant	Classroom- First Floor	0	1	1238	1,238	relocated 6th Grade Classrooms
VACANT Classroom- First Floor	0	1	969	969	Vacant	Classroom- First Floor	0	1	969	969	relocated 6th Grade Classroom
VACANT Classroom- Second Floor	0	1	632	632	Vacant	Classroom- Second Floor	0	1	632	632	relocated 7th Grade Classroom
VACANT Classroom-Second Floor	0	1	708	708	Vacant	Classroom-Second Floor	0	1	708	708	relocated 7th Grade Classroom
Emotionally Disturbed		1	621	621		Special Education Classroom		1	621	621	
Big Brothers/Big Sisters Classroom		1	401	401	relocate to Ground Floor	Remedial Classroom		1	401	401	Kramer program
ELL Classroom	10 Students 1 Teacher	1	691	691		ELL Classroom	10 Students 1 Teacher	1	691	691	
8th Grade Classroom	25 Students 1 Teacher	1	723	723		8th Grade Classroom	25 Students 1 Teacher	1	723	723	
8th Grade Classroom	25 Students 1 Teacher	1	732	732		8th Grade Classroom	25 Students 1 Teacher	1	732	732	
8th grade Classroom	25 Students	1	723	723		8th grade Classroom	25 Students	1	723	723	
Accelerated Classroom		1	705	705		Accelerated Classroom		1	705	705	
Special Education	25 Students	1	650	650		Special Education	25 Students	1	650	650	
8th grade Classroom	25 Students	1	700	700		8th grade Classroom	25 Students	1	700	700	
8th Grade Classroom	25 Students 1 Teacher	1	700	700		8th Grade Classroom	25 Students 1 Teacher	1	700	700	
8th Grade Classroom	25 Students	1	707	707		8th Grade Classroom	25 Students	1	707	707	
8th Grade Classroom		1	769	769		8th Grade Classroom		1	769	769	
8th Grade Classroom	25 Students	1	689	689		8th Grade Classroom	25 Students	1	689	689	
8th Grade Classroom	25 Students 1 Teacher	1	720	720		8th Grade Classroom	25 Students 1 Teacher	1	720	720	
8th Grade Science	25 Students 1 Teacher	1	1124	1,124		8th Grade Science	25 Students 1 Teacher	1	1124	1,124	
8th Grade Special Education	10 Students 1 Teacher	1	650	650		8th Grade Special Education	10 Students 1 Teacher	1	650	650	
Reading Intervention Room	10 Students 1 Teacher	1	616	616		Reading Intervention Room	10 Students 1 Teacher	1	616	616	

SPACE/LOCATION	OCCUPANCY	EXISTING NO. OF SPACES	EXISTING SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS	SPACE/LOCATION	OCCUPANCY	NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	COMMENTS
Multi-Handicap Classroom	10 Students 1 Teacher	1	995	995		Multi-Handicap Classroom	10 Students 1 Teacher	1	995	995	
Deaf Classroom	1 Student	1	639	639		Deaf Classroom	1 Student	1	639	639	
Health Classroom	25 Students 1 Teacher	1	769	769		Health Classroom	25 Students 1 Teacher	1	769	769	
Intervention Classroom	10 Students 1 Teacher	1	411	411		Intervention Classroom	10 Students 1 Teacher	1	411	411	
ELL Classroom	18 Students 1 Teacher	1	711	711		ELL Classroom	18 Students 1 Teacher	1	711	711	
6th Grade Classroom	25 Students 1 Teacher	1	707	707		Kramer Classroom	25 Students 1 Teacher	1	643	643	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
6th Grade Classroom	25 Students 1 Teacher	1	757	757		Kramer Classroom	25 Students 1 Teacher	1	693	693	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
6th Grade Classroom	25 Students 1 Teacher	1	735	735		Kramer Classroom	25 Students 1 Teacher	1	671	671	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
6th Grade Classroom	25 Students 1 Teacher	1	720	720		6th Grade Classroom	25 Students 1 Teacher	1	720	720	
Special Education Classroom	15 Students	1	633	633		Special Ed Classroom	15 Students	1	633	633	Kramer program
Math Lab	Varies	1	625	625		Math Lab	Varies	1	625	625	
Intervention Reed 180 Classroom	25 Students	1	985	985		Intervention Reed 180 Classroom	25 Students	1	985	985	
6th Grade Speech Classroom	15 Students	1	628	628		6th Grade Speech Classroom	15 Students	1	628	628	
6th Grade Classroom	25 Students	1	721	721		Kramer Classroom	25 Students	1	657	657	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
6th Grade Science	25 Students	1	1083	1,083		6th Grade Science	25 Students	1	1083	1,083	
6th Grade Classroom	25 Students	1	720	720		6th Grade Classroom	25 Students	1	720	720	
Special Education Classroom	18 Students	1	489	489		Sped Classroom	18 Students	1	489	489	
6th Grade Classroom	25 Students	1	721	721		6th Grade Classroom	25 Students	1	721	721	
6th Grade Science Classroom	25 Students 1 teacher	1	690	690		6th Grade Science Classroom	25 Students 1 teacher	1	690	690	
Read 180 Classroom	15 Students	1	700	700		Read 180 Classroom	15 Students	1	700	700	
Accelerated Science	25 Students	1	1092	1,092		Accelerated Science	25 Students	1	1092	1,092	
6,7,8 Classroom	25 Students	1	983	983		6,7,8 Classroom	25 Students	1	983	983	
Accelerated Classroom	25 Students	1	729	729		Accelerated Classroom	25 Students	1	729	729	
Classroom	25 Students	1	692	692		Classroom	25 Students	1	692	692	
In School Suspension	Varies	1	666	666		In School Suspension	Varies	1	666	666	
Spanish Classroom	25 Students	1	697	697		Spanish Classroom	25 Students	1	697	697	
System 44 Classroom	12 Students	1	680	680		System 44 Classroom	12 Students	1	680	680	
ELL Classroom	10 Students	1	629	629		ELL Classroom	10 Students	1	629	629	
Speech & Language	Varies	1	624	624		Speech & Language	Varies	1	624	624	
6,7 & 8 Reading Room		1	983	983	relocate to Ground Floor by Library	Special Use Room		1	983	983	Kramer program
7th Grade Special Education	15 Students	1	622	622		Kramer Special Education	15 Students	1	622	622	Kramer program
7th Grade Science Classroom	25 Students	1	888	888		7th Grade Science Classroom	25 Students	1	888	888	
7th Grade Classroom	25 Students 1 Teacher	1	478	478		7th Grade Classroom	25 Students 1 Teacher	1	478	478	
7th Grade Classroom	25 Students	1	673	673		7th Grade Classroom	25 Students	1	673	673	
7th Grade Science Classroom	25 Students	1	1097	1,097		7th Grade Science Classroom	25 Students	1	1097	1,097	
7th Grade Science Classroom	25 Students	1	685	685		7th Grade Science Classroom	25 Students	1	685	685	
7th Grade Classroom	25 Students	1	735	735	relocate to Second Floor	Kramer Classroom	25 Students	1	671	671	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
7th Grade Classroom	25 Students	1	735	735	relocate to Second Floor	Kramer Classroom	25 Students	1	671	671	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
7th Grade Classroom	25 Students	1	765	765		Kramer Classroom	25 Students	1	701	701	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
7th Grade Classroom	25 Students	1	707	707		Kramer Classroom	25 Students	1	643	643	Kramer program
						Kramer Classroom Toilet	1	1	64	64	Kramer program
Bilingual Classroom	25 Students	1	645	645		Faculty Room	25 Students	1	645	645	Kramer program
World Language-Mandarin	25 Students	1	709	709		World Language-Mandarin	25 Students	1	709	709	
Computer Lab	25 Students	1	632	632		Special Education	25 Students	1	632	632	Kramer program
7th Grade Classroom	25 Students	1	733	733		7th Grade Classroom	25 Students	1	733	733	
Existing Total				62,734		Total				62,734	
Sub-Total				123,172		Sub-Total				123,172	
Circulation						Circulation					
Core Factor	27.40%	1	46,494	46,494		Core Factor		1	46,494	46,494	
Grand Total				169,666	s.f.	Grand Total				169,666	s.f.



RENOVATE AS REQUIRED FOR
PRE-KINDERKARTEN, KINDERGARTEN
CLASSROOMS & TOILETS



281 Farmington Avenue
Farmington, CT. 06032

DATE:
REV:

PROPOSED RENOVATIONS

FIRST FLOOR
PLAN

WINDHAM PUBLIC SCHOOLS
EXISTING CONDITION SURVEY
WINDHAM MIDDLE SCHOOL
355 HIGH STREET
WILLIMANTIC, CONNECTICUT

SHEET NO.

P 1

2012-014

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES EXISTING CONDITION SURVEY & MASTER PLAN WINDHAM HIGH SCHOOL

Program and Conceptual Plans

This section includes a program document of existing space / department listings in the building, with a description of the current conditions and building usage. Following an initial existing conditions study, the various departments and their requirements were studied. This was performed to determine how to best reorganize the spaces within an overall master plan that accommodates the various functions of the Windham High School with an eye towards efficiency. This space utilization information, gathered during site visits and meetings with key personnel, is presented along with recommendations to meet the requirements of the proposed program. Estimated square footage and elements or requirements unique to each space are included.

The program recommendations served as a tool to generate conceptual plans, illustrating the room adjacencies, sizes and recommended improvements. The proposed plan is based on meeting the needs of the users and provides upgrades as necessary to comply with current applicable codes. Proposed space standards meet the requirements set by the State Department of Education, and the Teacher to Student ratio of the Windham Public Schools.

The proposed program for the Windham High School renovation project reflects the goal of the BOE's Strategic Operating Plan to redesign Windham High School to create two high-performing, themed academies, and incorporates the Design Specifications as presented to the BOE on June 27, 2012.

According to the space standards set by the State Department of Education, the existing High School is too large for the population it serves, and therefore any reimbursement monies for proposed renovations would be prorated. To fulfill the BOE's goal of maximizing the State's reimbursement monies for each proposed project, the plan calls for a school population increase over the next eight years, targeting 1,000 students in total.

To that end, also included is the proposed "reduction" of the overall size of the High School. A proposed reconfiguration the existing Technical Education wing at the Northwest portion of the First Floor to house the Board of Education would effectively reduce the area used by the Academies. New Technical Education classrooms and workshop areas will be provided within the building to replace the old areas, and meet the needs of the AHA and STEM Academies.

Windham Public Schools Windham High School- AHA Academy Program

SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	engineered program	PROGRAM / STAFF REQUIREMENTS
Core Literacy Program					
English I	1	800	800	800	
English II	1	800	800	"	
English III or AP/ECE English Literature	1	800	800	800	
English IV or AP/ECE English Language	1	800	800	"	
Creative Writing	1	800	800	800	
Broadcast Journalism	1	800	800	"	
Journalism	1	800	800	800	
Public Speaking	1	800	800	"	
Leadership	1	800	800	800	
The Writing Center	1	800	800	"	
	Proposed Total		8,000	4,000	
Core Math Program					
Algebra I	1	800	800	800	
Geometry	1	800	800	"	
Algebra II	1	800	800	800	
Probability and Statistics	1	800	800	"	
AP Statistics	1	800	800	800	
Data Analysis	1	800	800	"	
Advanced Algebra	N/A: use STEM rms.		0	0	
Trigonometry	N/A: use STEM rms.		0	0	
Pre-Calculus	N/A: use STEM rms.		0	0	
AP Calculus	N/A: use STEM rms.		0	0	
	Proposed Total		4,800	2,400	
Core Science Program					
Biology	1	1200	1,200	1,200	
General Science or Environmental Science	1	1200	1,200	"	
Chemistry	1	1200	1,200	1,200	
AP/ECE Environmental Science	1	1200	1,200	"	
AP Biology	N/A: use STEM rms.		0	0	
AP Chemistry	N/A: use STEM rms.		0	0	
Physics/AP Physics	N/A: use STEM rms.		0	0	
Human Anatomy & Physiology	N/A: use STEM rms.		0	0	
	Proposed Total		4,800	2,400	

Windham Public Schools Windham High School- AHA Academy Program

SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	engineered program	PROGRAM / STAFF REQUIREMENTS
Core History Program					
Facing History & Ourselves	1	800	800	800	
Global Studies	1	800	800	"	
U.S. History	1	800	800	800	
Civics or AP American Government and Politics	1	800	800	"	
AP Psychology	1	800	800	800	
Sociology	1	800	800	"	
AP/ECE U.S. History	1	800	800	800	
ECE Western Civilizations	1	800	800	"	
ECE European History	1	800	800	800	
Latin American History	1	800	800	"	
History of Willimantic	1	800	800	800	
Leadership	1	800	800	"	
Law and You	1	800	800	800	
Public Speaking	1	800	800	"	
History & Culture in Film	1	800	800	800	
Economics (AP)	1	800	800	"	
Existing Total	Proposed Total		12,800	6,400	
Art/Music Program					
Drawing & Painting I	1	1000	1,000	1,000	
Jewelry I	1	1000	1,000	"	
Clay I	1	1000	1,000	1,000	
Sculpture I	1	1000	1,000	"	
Choir	N/A: use Auditorium		0		
Graphic Design I & II	1	800	800	800	
Digital Photography I & II	1	800	800	800	
Computer Animation I & II	1	800	800	"	
Photoshop	1	800	800	"	
Broadcast Journalism	1	800	800	800	
AV Technology	1	800	800	"	
Drawing II	1	1000	1,000	1,000	
Painting II: Oil and Acrylic	1	1000	1,000	"	
Painting II: Watercolor	1	1000	1,000	1,000	
Illustration I	1	1000	1,000	"	
Illustration & Publishing	1	1000	1,000	1,000	
Jewelry II	1	1000	1,000	"	

Windham Public Schools Windham High School- AHA Academy Program

SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	engineered program	PROGRAM / STAFF REQUIREMENTS
Clay II	1	1000	1,000	1,000	
Sculpture II	1	1000	1,000	"	
AP Art History	1	800	800	800	
AP Drawing	1	800	800	"	
AP Studio 2-D	1	800	800	800	
AP Studio 3-D	1	800	800	"	
Concert Band	N/A: use Auditorium		0		
Percussion/Drums	1	800	800	800	
Guitar	1	800	800	"	
Piano	1	800	800	"	
Jazz Ensemble	N/A: use Auditorium		0		
Orchestra	N/A: use Auditorium		0		
Pep Band	N/A: use Auditorium		0		
Composition/Arrangement	1	800	800	800	
Concert Chorus	N/A: use Auditorium		0		
ECE Music Appreciation	1	800	800	"	
ECE Fundamentals of Music	1	800	800	"	
Theater	N/A: use Auditorium		0		
Survey of Dance	1	1200	1,200	1,200	
Ballet	1	1200	1,200	"	
Modern Jazz	1	1200	1,200	1,200	
Choreography	1	1200	1,200	"	
African Dance	1	1200	1,200	"	
	Proposed Total		30,800	14,000	
Physical Education/Health/Wellness					
Physical Education	Shared: N/A		0	0	
Health	Shared: N/A		0	0	
	Proposed Total		0	0	
World Language Program					
Spanish	1	800	800	800	share w/ STEM?
Latin	1	800	800	"	
Mandarin	1	800	800	800	share w/ STEM?
AP Spanish	1	800	800	"	share w/ STEM?
Spanish for Native Speakers	1	800	800	"	share w/ STEM?
	Proposed Total		4,000	1,600	
Sub-Total	Sub-Total		65,200	30,800	goal: 30,375
Circulation					
Core Factor		25%	16,300	11,750	goal: 10,125
Grand Total	Grand Total		81,500	42,550	s.f. goal: 40,500
Possible additional program					
AHA Teacher offices				800	
AHA Teacher conference Rm				400	
Eng Lang. Learner Support Rm				400	
Intervention Program Rm.				400	
				2,000	

Windham Public Schools Windham HS Academies & BOE Summary			
PROGRAM	TOTAL SQUARE FEET	SPACE STANDARD CALCULATIONS	
AHA Academy Program	42,550	1000	proposed enrollment
Possible additional program	2,000	181	s.f. per student (BSF)
STEM Academy Program	39,750	181,000	total s.f.
Possible additional program	2,000		
Subtotal	86,300	215,000	total s.f.
		34,000	proposed subtracted s.f. (calc)
Windham HS Academy Support Spaces	56,235	181,000	sub total
Core Factor (25%)	14,059	100,000	subtracted shared spaces
Subtotal	70,294	81,000	sub total
		40,500	(x1000) s.f. per academy
Spaces shared with Windham Board of Ed	26,664		
Core Factor (25%)	6,666		
Subtotal	33,330		
BOE spaces	16,420		
Core Factor (25%)	4,105		
Subtotal	20,525		
Grand Total	210,449		

Windham Public Schools Windham HS Academies- Shared Spaces				
EXISTING SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	PROGRAM / STAFF REQUIREMENTS PROPOSED USE
Library / Media Center	1	5015	5,015	
Media Center Workroom	1	276	276	
Media Center Office	1	122	122	
Storage for the Media Center	1	211	211	
Vault	1	160	160	
	Sub Total		5,784	
Office of the VP	1	296	296	Provide sep. spaces for each academy
Offices	1	200	200	Provide sep. spaces for each academy
Offices	1	168	168	Provide sep. spaces for each academy
Offices	1	196	196	Provide sep. spaces for each academy
Conference	1	204	204	
	Sub Total		1,064	
Career Center	1	1141	1,141	
Offices	1	89	89	
Offices	1	159	159	
Conference	1	183	183	
	Sub Total		1,572	
Guidance Suite	1	655	655	
Psychologist Office	1	382	382	
Social Worker's Office	1	187	187	
Guidance Office	1	122	122	
Offices	5	98	490	
Storage	1	58	58	
Intervention	1	374	374	
	Sub Total		2,268	
Main Office				
Office	1	197	197	Provide sep. spaces for each academy
Admin and Waiting area	1	730	730	
Work Room	1	124	124	
Conference Room	1	172	172	
Passage	1	51	51	
Storage	1	52	52	
In school suspension Room-1	1	503	503	
In school suspension Room-2	1	508	508	
In school suspension Room-3	1	478	478	
SRO Office (near Woodworking)	1	158	158	
Security Office	1	340	340	
Storage near ISS	1	242	242	
	Sub Total		3,555	
Office of the VP & Principal				
Principal Office	1	150	150	Provide sep. spaces for each academy
Secretary	1	142	142	Provide sep. spaces for each academy
File Room	1	100	100	Provide sep. spaces for each academy
Conference Room	1	290	290	
Circulation and Waiting	1	200	200	
VP Office	1	121	121	Provide sep. spaces for each academy
Admin Area	1	730	730	Provide sep. spaces for each academy
	Sub Total		1,733	
Health Area	1	285	285	
Waiting Space-entry	1	200	200	
Cot/rest Room	2	141	282	
Nurse's Office	1	158	158	
Exam	1	273	273	
Storage	1	73	73	
	Sub Total		1,271	

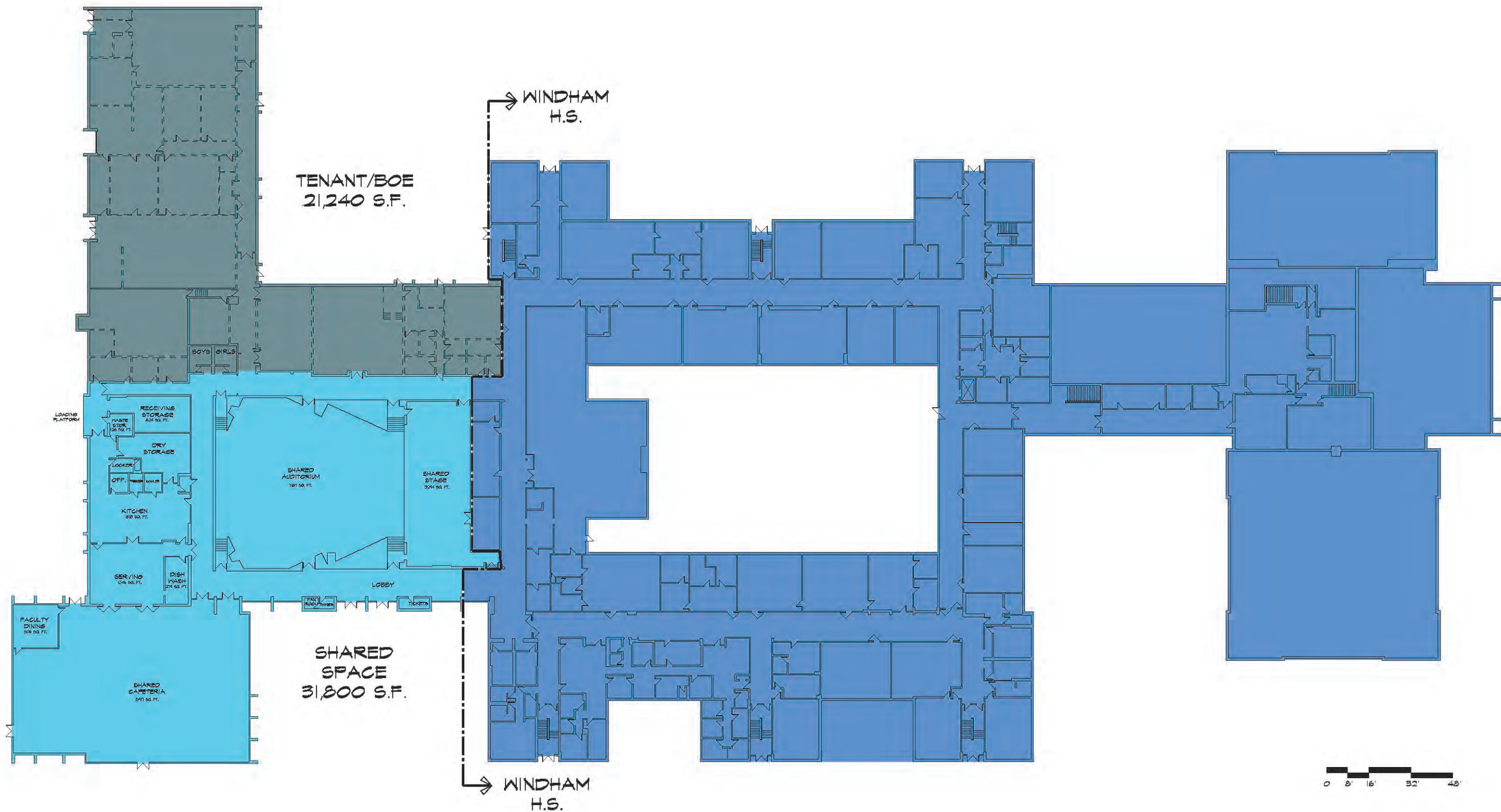
Windham Public Schools Windham HS Academies- Shared Spaces				
EXISTING SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	PROGRAM / STAFF REQUIREMENTS PROPOSED USE
Gymnasium	1	10784	10,784	
Storage	1	150	150	
Girl's Storage	1	166	166	
Office	1	118	118	
Small / Aux. Gym	1	4530	4,530	
Passage to Elevator	1	813	813	
Storage	1	377	377	
PE Storage	1	289	289	
PE Offices	1	155	155	
PE Offices	1	149	149	
Pool	1	5817	5,817	
Pool Office	1	228	228	
Pool Storage	1	154	154	
Pool Storage	1	116	116	
Passage to Pool	1	159	159	
Girl's Locker Room	1	2143	2,143	
Boy's Locker Room	1	2242	2,242	
Boy's Locker room office	1	212	212	
Storage	1	70	70	
Storage	1	52	52	
Varsity Locker Room	1	828	828	
Varsity Locker room office	1	127	127	
Storage	1	55	55	
Storage	1	70	70	
Wrestling Room	1	1038	1,038	
Weight Room	1	954	954	
Training Room	1	275	275	
Team Room	1	362	362	
Storage	1	124	124	
Storage	1	117	117	
Storage	1	85	85	
Shower	1	150	150	
Drying	1	177	177	
Physical Education Classroom	1	741	741	
Closets near Aux. Gym	1	52	52	
	Sub Total		33,879	
Cafeteria	1	8917	8,917	Space shared with BOE
Faculty Dining	1	506	506	Space shared with BOE
Kitchen	1	1618	1,618	Space shared with BOE
Serving	1	1246	1,246	Space shared with BOE
Dish Washing	1	279	279	Space shared with BOE
Receiving Area	1	624	624	Space shared with BOE
Loading Dock Area	1	250	250	Space shared with BOE
Dry Storage	1	665	665	Space shared with BOE
Locker Area	1	80	80	Space shared with BOE
Freezer	1	65	65	Space shared with BOE
Cooler	1	82	82	Space shared with BOE
Kitchen Office	1	89	89	Space shared with BOE
Recycle / Waste Area	1	126	126	Space shared with BOE
Storage	1	44	44	Space shared with BOE
Trash	1	252	252	Space shared with BOE
	Sub Total		14,843	
Auditorium	1	7187	7,187	Space shared with BOE
Stage	1	3294	3,294	Space shared with BOE
Stage Storage	1	298	298	
Auditorium Storage	1	382	382	
Projector Room	1	200	200	
Dark Room	1	529	529	
AV Work	1	142	142	
Offices near upper aud.	1	411	411	
Ticket Rooms	1	130	130	Space shared with BOE
	Sub Total		12,573	

Windham Public Schools Windham HS Academies- Shared Spaces				
EXISTING SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	PROGRAM / STAFF REQUIREMENTS PROPOSED USE
Instrument Room	1	2020	2,020	Renovate for BOE Offices
Choral Room	1	1150	1,150	Renovate for BOE Offices
Practice	1	139	139	Renovate for BOE Offices
Practice	1	90	90	Renovate for BOE Offices
Audio	1	84	84	Renovate for BOE Offices
Music Office	1	292	292	Renovate for BOE Offices
Special Ed	1	755	755	Renovate for BOE Offices
		Sub Total	4,530	
Woodworking Shop	1	2187	2,187	Renovate for BOE Offices
Wood Storage	1	473	473	Renovate for BOE Offices
Computer Room (near shops)	1	912	912	Renovate for BOE Offices
Graphic Arts	1	2086	2,086	Renovate for BOE Offices
Graphic Arts Storage	1	164	164	Renovate for BOE Offices
Graphic Arts Storage	1	131	131	Renovate for BOE Offices
Storage	1	164	164	Renovate for BOE Offices
Planning	1	716	716	Renovate for BOE Offices
Finishing	1	294	294	Renovate for BOE Offices
Office	1	329	329	Renovate for BOE Offices
Dark Room	1	100	100	Renovate for BOE Offices
Passage to ISS & Graphics	1	649	649	Renovate for BOE Offices
Video / Camera Area	1	350	350	Renovate for BOE Offices
Storage	1	382	382	Renovate for BOE Offices
		Sub Total	8,937	
Misc Spaces				
Office	1	426	176	Renovate for BOE Offices -250 sf
Storage	1	311	311	
Storage (near math)	1	80	80	
Storage	1	101	101	
Janitor	1	95	95	
Custodian near faculty	1	65	65	
Conference Rm (near English)	1	262	262	
Storage near lavs	1	51	51	
Storage near lavs (UP)	1	70	70	
Storage near lavs (business)	1	106	106	
Boys Lavatories	5	200	850	Renovate for BOE Offices -150 sf
Girls Lavatories	6	200	1,050	Renovate for BOE Offices -150 sf
Men- Lavatories	2	100	200	
Women- Lavatories	2	100	200	
Men- Lavatories	1	148	148	
Women- Lavatories	1	198	198	
MEP- Boiler Room	1	1557	1,557	Renovate for BOE Offices
Main Electrical Room	1	300	300	
Technology Room	1	100	100	
FP Room	1	100	100	
Pump Room	1	121	121	
Fan Room-1	1	1009	1,009	
Fan Room-2	1	1027	1,027	
Fan Room- 3- auditorium	1	791	791	
Fan Room- 4- kitchen	1	747	747	Space shared with BOE
Fan Room-5	1	463	463	Space shared with BOE
Machine Room	1	92	92	
Mech.	1	189	189	
Switch Gear	1	133	133	Renovate for BOE Offices
Repair	1	83	83	Renovate for BOE Offices
Emergency generator	1	131	131	Renovate for BOE Offices
Incinerator	1	160	160	Renovate for BOE Offices
Custodian's Closets	4	94	376	
Custodian's Area	1	159	159	Renovate for BOE Offices
Work Area custodian	1	180	180	Renovate for BOE Offices
	1	159	159	
Misc Storage Rooms				
		Sub Total	11,840	
		Total	99,319	
Windham HS Academies- Shared Spaces			56,235	
Space shared with BOE			26,664	
Renovate for BOE Offices			16,420	

Windham Public Schools Windham High School- STEM Academy Program					
SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	reverse engineered program	PROGRAM / STAFF REQUIREMENTS
Core Literacy Program					
English I	1	800	800	800	
English II	1	800	800	"	
English III	1	800	800	800	
English IV	1	800	800	"	
Scientific/Technical Writing	1	800	800	800	
STEM Biographies	1	800	800	"	
Science Fiction Literature	1	800	800	800	
Literature of the Technical Revolution	1	800	800	"	
Introduction to Digital Communication	1	800	800	800	
AP Language and Composition	1	800	800	"	
AP Literature	1	800	800	800	
ECE and QVCC Courses?	1	800	800	?	potential future usage/ program need
	Proposed Total		9,600	4,800	
Core Math Program					
Algebra I	1	800	800	800	
Algebra II	1	800	800	"	
Geometry	1	800	800	800	
STEM Statistics	1	800	800	"	
Transition Algebra I	1	800	800	800	
Principles of Algebra and Geometry	1	800	800	"	
Informal Geometry	1	800	800	800	
Construction Geometry	1	800	800	"	
Linear and Quadratic Function	1	800	800	800	
Functions Beyond the Quadratic	1	800	800	"	
Pre-Calculus	1	800	800	800	
Trigonometry	1	800	800	"	
Probability and Statistics	1	800	800	800	
Linear Algebra	1	800	800	"	
Linear Programming; AP Calculus, AP Statistics	1	800	800	800	
ECE and QVCC Courses?	1	800	800	?	potential future usage/ program need
	Proposed Total		12,800	6,400	
Core Science Program					
Physics	1	1200	1,200	1,200	
Chemistry	1	1200	1,200	1,200	
Biology	1	1200	1,200	1,200	
Conceptual Physics	1	800	800	"	
Environmental Science	1	1200	1,200	1,200	
Human Physiology	1	800	800	800	
Human Anatomy	1	800	800	"	
Biology for Technology	1	800	800	800	
Conceptual Chemistry	1	800	800	"	
AP Biology	1	1200	1,200	"	
AP Chemistry	1	1200	1,200	"	
AP Physics	1	1200	1,200	"	
AP Environmental Science	1	1200	1,200	"	
ECE and QVCC Courses?	1	800	800	?	potential future usage/ program need
	Proposed Total		14,400	6,400	

Windham Public Schools Windham High School- STEM Academy Program					
SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	reverse engineered program	PROGRAM / STAFF REQUIREMENTS
Core Technology/Engineering Program					
Introduction to Engineering Design (IED)	1	800	800	800	
Principles of Engineering (POE)	1	800	800	"	
Design & Modeling	1	800	800	800	
Automation & Robotics	1	800	800	"	
Energy & the Environment	1	800	800	800	
Digital Electronics	1	800	800	"	
Computer and Information Technology	1	800	800	800	
AP Computer Science	1	800	800	"	
Engineering Design & Development	1	800	800	800	
ECE and QVCC Courses?	1	800	800	?	potential future usage/ program need
	Proposed Total		8,000	4,000	
Core Social Studies Program					
Civics	1	800	800	800	
U.S. History	1	800	800	"	
World History	1	800	800	800	
Ethical Issues in STEM	1	800	800	"	
Contemporary U.S. Issues in Science and Technology	1	800	800	800	
International Relations in STEM	1	800	800	"	
Contemporary World Issues in STEM	1	800	800	800	
World Geography	1	800	800	"	
AP U.S. History	1	800	800	800	
AP European History	1	800	800	"	
AP Government	1	800	800	800	
	Proposed Total		8,800	4,800	
World Language Program					
Mandarin I, II, or III	3	800	2,400	800	share w/ AHA?
Spanish I, II, or III	3	800	2,400	800	share w/ AHA?
	Proposed Total		4,800	1,600	
Physical Education					
Physical Education I, II	Shared: N/A		0	0	
Physical Education Choice Course	Shared: N/A		0	0	
Fitness for Life	Shared: N/A		0	0	
Team Sports	Shared: N/A		0	0	
Weight Training	Shared: N/A		0	0	
Lifetime Sports Activities	Shared: N/A		0	0	
American Red Cross Adult First Aid with CPR/AED	Shared: N/A		0	0	
American Red Cross Lifeguarding	Shared: N/A		0	0	
	Proposed Total		0	0	

Windham Public Schools Windham High School- STEM Academy Program					
SPACE/LOCATION	REQUIRED NO. OF SPACES	SQUARE FOOTAGE PER SPACE	TOTAL SQUARE FEET	reverse engineered program	PROGRAM / STAFF REQUIREMENTS
Art/Music/Humanities Program					
Graphic Design	N/A: use AHA rms.	0	0		
Band	N/A: use AHA rms.	0	0		
Orchestra	N/A: use AHA rms.	0	0		
Chorus	N/A: use AHA rms.	0	0		
Programs Offered in the WPS Humanities and Arts Academy	N/A: use AHA rms.	0	0		
	Proposed Total	0	0		
	Sub-Total	58,400	28,000	<i>goal: 30,375</i>	
Circulation					
Core Factor	25%	14,600	11,750	<i>goal: 10,125</i>	
	Grand Total	73,000	39,750	s.f. <i>goal: 40,500</i>	
Possible additional program					
AHA Teacher offices			800		
AHA Teacher conference Rm			400		
Eng Lang. Learner Support Rm			400		
Intervention Program Rm.			400		
			2,000		



DATE:
REV:

PROPOSED PLAN

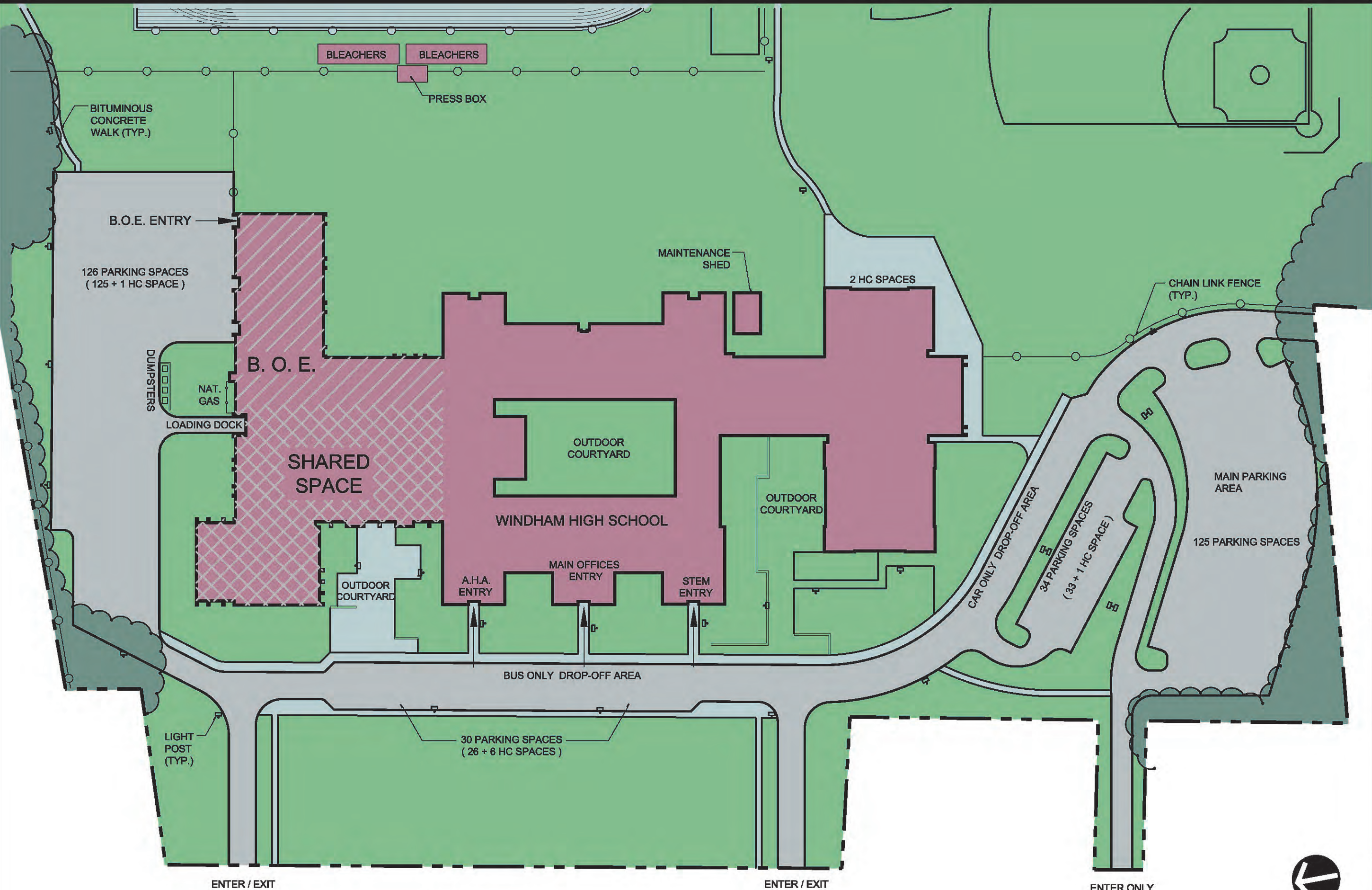
BOE / WINDHAM HS

WINDHAM PUBLIC SCHOOLS
EXISTING CONDITION SURVEY
STUDY OF
WINDHAM HIGH SCHOOL
355 HIGH STREET
WILLIAMANTIC, CONNECTICUT



281 Farmington Avenue
Farmington, CT. 06032

SHEET NO.
BOE



DATE: 9.12.12		SCALE: NTS	
PROPOSED		SITE PLAN	
WINDHAM PUBLIC SCHOOLS EXISTING CONDITION SURVEY STUDY OF			
WINDHAM HIGH SCHOOL 344 HIGH STREET WINDHAM, CONNECTICUT			
FRIAR			
ASSOCIATES INC.			
281 Farmington Avenue Farmington, CT. 06032			
SHEET NO.		L1.1	

WINDHAM BOARD OF EDUCATION – SCHOOL FACILITIES 10-YEAR SCHOOL FACILITIES MASTER PLAN

Primary Objective: The BOE resolved to insure all Windham children are able to attend a school that is safe, modern, compliant with building Codes and able to support it's educational program; to facilitate completion of the Facilities Master Plan by exploring the feasibility of improving school buildings to support school programs that would meet the needs of Windham students and their families.

Secondary objective: Remove all BOE facilities from Kramer Building

Pre-referendum work:

- **Natchaug Elementary – Roof Replacement**
 - Construction Timeline: Summer 2013- Fall 2013
 - Swing space:
 - Natchaug students return for the '14 school year
 - Beginning in '17/'18, Natchaug would move to the new Sweeney addition, and Natchaug would serve as swing space for the Elementary Schools during renovations
 - Grades PK-K would relocate to the MS following Code renovations
- **Windham High School – Roof Replacement**
 - Construction Timeline: Summer 2014 – Fall 2014 (3 months)
 - Estimated costs. \$3.5M Roof Construction costs + \$125K floor abatement

PROPOSED REFERENDA

Phase I

- **Windham High School – Misc. Renovations: \$7.73 M Total Projects Cost**
 - Relocate the BOE/Renovations: approx. \$5M Project costs
 - Timeline: Summer 2014 – Winter 2014 (5 months)
 - Science Classroom Renovations: approx. \$2.5M Construction costs
 - Timeline: Summer 2014 (2 months)
- **W.B. Sweeney Elementary - Additions and Renovate as New: \$30.3 M Project Cost**
 - Timeline: Fall 2014 – Fall 2016 (2 years)
 - Addition of approximately 35,000 s.f.
 - Targeted Enrollment of 560 students

Phase I Subtotal: \$38.54 M

Phase II

- **Windham Center Elementary** - Alterations: **\$9.3 M Project Cost**
 - Timeline: Summer 2017 – Winter 2018/19 (1-1/2 years)
 - Targeted school population of 300 students
- **Windham Middle School** – Misc. Renovations: **\$8.4 M Total Projects Cost**
 - Roof Replacement: approx. \$2.2M Construction costs
 - Timeline: Summer 2017 – Fall 2017 (3 months)
 - Relocate the Kramer PK-K/Renovations: approx. \$3.4M Construction costs
 - Timeline: Summer 2014 (5 months)
- **North Windham Elementary** - Alterations: **\$15.6 M Project Cost**
 - Timeline: Summer 2019 – Summer 2020 (1 year)
 - Targeted school population of 380 students

Phase II Subtotal: \$33.3 M

Phase III A

- **Windham High School** - Renovate as New: **\$49.22 M Project Cost**
 - Timeline: Summer 2020 – Summer 2022 (2 years)
 - Alterations as required to accommodate the STEM Academy
 - Alterations as required to accommodate targeted Enrollment of 500 students
 - Assumption is that we would be able to swing the students within the HS

Phase III B

- **Windham High School** - Renovate as New: **\$49.22 M Project Cost**
 - Timeline: Summer 2021 – Summer 2023 (2 years)
 - Alterations as required to accommodate STEM and AHA Academies
 - Alterations as required to accommodate targeted Enrollment of 500 students

Phase III Subtotal: \$98.44 M

Total Referenda Costs: \$170.35 M

Revised 5.28.13	Phase I											Phase II						Phase III									
	Natchaug Roof (ALT)			Relocate BOE to High School (ALT)			Windham H. S.		Science (RLN)			Sweeney Elementary School (RLN)			Windham Center School (ALT)			Windham Middle School (ALT)			North Windham School (ALT)			Windham High School (RLN)			Grand Totals
		Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Sq. Ft.	Value/ Sq Ft	Total	Grand Totals	
Renovate as New					Sci. Rms		2,500,000	38,200	225	8,595,000			n/a						n/a	226,765			45,022,125				
Heavy Renovations		20,000	190	3,800,000						included			n/a	20,000	170	3,400,000			n/a				included				
Medium Renovations										included	25,200	120	3,024,000				29,000	110	3,190,000				included				
Light Renovations										included	10,650	80	852,000				21,000	80	1,680,000				included				
Add Air Conditioning										included			n/a				50,000	50	2,500,000				included				
Roof Replacement										included			n/a	110,000	20	2,200,000	50,000	20	1,000,000								
Code Upgrades and Repairs										included			included						included				included				
Site Work										3,850,000			650,000						750,000				8,000,000				
Building Demolition								4,800	10	48,000	2,000	10	20,000				2,000	10	20,000				n/a				
New Construction								35,723	270	9,645,210	5,000	290	1,450,000				284	370	105,080				n/a				
Total Construction Costs				3,800,000			2,500,000			22,138,210			5,996,000			5,600,000			9,245,080				53,022,125				
Estimated Soft Costs (22%)				836,000			550,000			4,870,406			1,319,120			1,232,000			2,033,918				11,664,868				
Construction and Soft Costs				4,636,000			3,050,000			27,008,616			7,315,120			6,832,000			11,278,998				64,686,993				
Escalation 4%, 5% per year**	1.75 yrs.	7.12%		330,083	1.75 yrs.	7.12%	217,160	2.75 yrs	12.22	3,300,453	5.33 yrs	27.28%	1,995,565	4.67	23.24	1,587,757	7.08 yrs	38.59%	4,352,565	9yrs	52.19%		33,760,141				
Total Project Budget				4,966,083			3,267,160			30,309,069			9,310,685			8,419,757			15,631,563				98,447,134	170,351,451			
Net State Reimbursement				1,469,812			2,497,888			23,172,617			5,511,367			4,385,912			9,252,947				75,267,166	121,557,709			
Cost to Windham				3,496,272			769,272			7,136,452			3,799,318			4,033,845			6,378,616				23,179,968	48,793,743			
								Phase I : \$38,542,312									Phase II : \$33,362,005			Phase III:\$98,447,134							
State Reimbursement																											
Estimated Ineligible Costs			15%	744,912		4%	130,686		4%	1,212,363		15%	1,396,603		15%	1,262,964		15%	2,344,734		4%		3,937,885				
Estimated Eligible Costs				4,221,171			3,136,474			29,096,706			7,914,082			7,156,793			13,286,828				94,509,249				
State Reimbursement		34.82%		1,469,812		79.64%	2,497,888		79.64%	23,172,617		69.64%	5,511,367		69.64%	4,983,991		69.64%	9,252,947		79.64%		75,267,166				
Reimbursement Penalty				0			0			0			0			-598,079			0				0				
Net State Reimbursement				1,469,812			2,497,888			23,172,617			5,511,367			4,385,912			9,252,947				75,267,166	126,100,614			
Space Standards																											
Existing Square Footage (adjusted)					214,789 *						34,075			171,243			47,357			214,789 *							
Proposed Square Footage (net)					181,000		1,000			560	38,800		300	171,243		995	47,627		378	181,000		1,000					
State Allowable Sq. Footage					181,000						38,800			150,245			47,627			181,000							
Square Footage Penalty %					0%						0%			12%			0%			0%							
Construction Schedule				7/1/14-12/1/14			6/1/14-9/1/14			9/1/14-9/1/16			7/1/17-1/1/19			7/1/17-11/1/17			7/1/19-8/1/20			7/1/20-7/1/23					

* Repurpose 33,789 (net) sf

** Escalation Years 1-2 = 4%

**Escalation Years 3-10 = 5%

RLN= Renovate like New, Reimbursement Rate = 79.64%

ALT= Alterations, Reimbursement Rate= 69.64%, 34.82% for BOE Space

Excludes PCB Abatement