NEWPORT SCHOOLS
Stage 1 Application for Housing Aid Review

Newport, Rhode Island
February, 2009

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Statement of Interest and Project Justification
February 12, 2009

Robert G. Flanders, Jr. Esquire
Chairman
Board of Regents of Elementary and Secondary Education
c/o Rhode Island Department of Education
255 Westminster Street, Fifth Floor
Providence, RI 02903-3400

Attention: Sharon Osborne

Dear Mr. Flanders:

This letter is in support of the Stage I Application for Housing Aid Review from the Newport Public Schools to the Board of Regents of Elementary and Secondary Education for the State of Rhode Island.

The Newport School Committee has been carefully examining its facilities over the course of the past four years, in that its elementary schools are small, old, and in need of extensive renovations. We have had ongoing fire code issues which will cost the District substantial dollars to comply with. Because of the conditions of our elementary schools and the need to renovate them at substantial cost to the taxpayers, the District has determined that a more educationally and financially responsible approach would be to consolidate our elementary school facilities.

This consolidation can occur because the school enrollment in the City of Newport has declined and will continue to decline in the foreseeable future.

The consolidation of schools, in the long run, not only makes for a better educational program but also, from an energy perspective and ongoing personnel savings, makes excellent financial sense. Additionally, the excess schools would be returned to the City of Newport, sold, and be placed back on the tax rolls.

It is our hope that the Board of Regents looks favorably upon this Project, in that it eliminates the need for extensive renovations to old and educationally irrelevant schools while putting them back on the tax rolls and, last, but not least, provides a cost-effective way of providing a quality educational program to our students through consolidation of administrative, secretarial, custodial, and professional services.

We have enclosed relevant documentation to this Letter of Intent to support our request. We look forward to your approval of this Stage I Application and are anxious to begin the Stage II Process in the City of Newport.

Sincerely,

John H. Ambrogi, Ed.D.
Superintendent of Schools

Jo Eva Gaines
Chair, Newport School Committee

Jeanne-Marie Napolitano
Mayor, City of Newport

JHAEJEGUMN wrg
Enclosures
High Performance Green Goals Statement

Newport is committed to building a new high performance school. They have selected a site that is being used as a schools site so that very little new land will be disturbed. The site allows potential for a school design with appropriate orientation for harvesting natural light. The site is flat and will require minimal importation of soils. The site will be developed with native plants to minimize requirements for irrigation. Newport will consider a grey water system for any necessary irrigation and a green roof system.

Newport will use both shading and high albedo materials to reduce heat island effects.

Newport will use cutoffs for all exterior and building mounted light fixtures.

Newport will use both waterless and lowflow toilets to reduce water use.

Newport is committed to minimizing use of CFC-based refrigerants in HVAC systems.

Newport will engage an independent commissioning agent.

Newport will design a school that will exceed ASHRAE 90.1-2001 standard by 25% or more.

Newport will explore the possibility of incorporating renewables, specifically photo-voltaics into the school design.

Newport will install an energy management system and submetering into the school.

Newport work actively to recycle both on-site waste and promote the efficient reuse of materials within the building.

Newport will assure a high level of indoor air quality through meeting or exceeding ASHRAE Standard 62.1-2004, and protecting against other hazards to air quality.

Newport with comply with Ashrae 55-2004 for thermal comfort

Newport will provide direct, line of sight to view glazing for at least 70% of the combined classroom and administration areas.

Newport will have classrooms wit a maximum background noise level of 45dba.

Newport will create a school maintenance plan and institute anti-idling procedures.

Newport will use a computerized Maintenance Management System
District Map
**Newport Elementary School Study**
Newport, Rhode Island

**District-Wide Map**

1. Trippett
2. Thompson
3. Coggeshall
4. Rogers
5. Underwood
6. Carey
7. Sullivan
8. Cranston Calvert

A. J.F.K. School
B. Forest Avenue
C. Aquidneck
School Building Committee Backgrounds
John H. Ambrogi, Ed.D.
Superintendent of Schools
437 Broadway
Newport, Rhode Island  02840-1739
Phone: (401) 847-2100
Fax: (401) 849-0170
E-mail: jackambrogi@newportrischools.org

Ad Hoc School Building Committee Members

Superintendent of Schools (superintendent)  John H. Ambrogi, Ed.D.
Dr. John H. Ambrogi holds a Bachelor of Arts degree from George Washington University (1971), a Masters from University of Delaware (1974), and a Doctorate of Education from Temple University (1979).  Dr. Ambrogi has thirty-seven (37) years of experience in education, having started his career as a Teacher Aide in 1972.  Dr. Ambrogi has been a Teacher, Principal, Central Office Administrator, College Professor and has had twenty-four (24) years of experience as a Superintendent of Schools. Dr. Ambrogi has served on several boards for non-profit organizations and governmental service groups. Additionally he has served as an officer in several professional organizations. Dr. Ambrogi has been involved in three distinct building programs, the first of which occurred in 1988 in Lincoln, Rhode Island with a major addition to Lincoln Central Elementary School. The next occurred in 1996 with the construction of a elementary school and middle school with a combined core facility in South River, New Jersey. The third was the construction of a primary school grades K-2 in 2003, also in South River, New Jersey.

James Asbel Architect, LLC (community architect- parent)  James B. Asbel
James Asbel, a registered architect in Rhode Island and North Carolina, is a Newport resident with children in the local public schools. Mr. Asbel earned his Masters in Architecture from the Graduate School of Design of Harvard University in 1985. Mr. Asbel taught Architecture Design, History and Theory at Texas A&M University, and the University of North Carolina at Charlotte. Mr. Asbel’s ongoing professional practice has included the planning and design of private and public educational facilities, starting in 1985 with district master planning and building designs for the Edgewood Independent School District in San Antonio, Texas, 1985-1987. Mr. Asbel’s most recent public work was the 2001 master plan and public advocacy, funded by the National Trust for Historic Preservation, for restoration and addition to an urban high school in Albemarle, NC for conversion to a K-8 elementary school. The recently completed project was dedicated in October 2007. Mr. Asbel’s local work is featured in the American Institute of Architects Guide to Newport Architecture. Mr. Asbel currently serves as an adjunct professor with the architecture faculty at Roger Williams University.
Community Member  
*(Community)*

Louisa Boatwright is a parent of a 4th grader who has experience in both the Newport Public Schools and a local private school. She has lived in Newport for 19 years, 9 as part-time and 10 a full-time resident. Louisa, before living in Newport, sold large, multi-million dollar computer systems into the top 100 financial institutions throughout the United States and Canada. This sales experience included a significant amount of financial analysis, efficiency analysis and many less tangible but real benefits that were used to justify large expenditures. Soon after coming to Newport she began a small business, *Newport for Kids and Families* which promoted kid and family-friendly activities and businesses within Newport County. Louisa has always been an advocate for quality public schools in Newport. She believes for Newport to be a vibrant community with lots of families, it needs quality public schools and quality year-round jobs.

School Principal  
*(School Principal)*

Dr. Jennifer Booth is currently the principal of Cranston-Calvert Elementary School. Dr. Booth is a life-long resident of Newport and attended Newport Public Schools. Dr. Booth earned her Bachelor of Arts degree in Elementary Education and Fine Arts at Salve Regina University in 1975 and a Masters of Education, also from Salve Regina University in 1995. Dr. Booth earned her doctoral degree in 2008 from Johnson & Wales University.

An educator with nineteen years of experience, Jennifer also brings 15 years of construction experience to the committee. She worked for various engineering firms as a construction inspector from 1976 - 1979. From 1979 - 1991 she worked as a construction superintendent overseeing a variety of federal, state, and municipal projects in RI, CT, MA and NH including bridge and utility construction, as well as buildings.

Director Planning, Zoning, Development & Inspection  
*(Municipal Planning)*

Paige R. Bronk, AICP, has over nineteen years of community planning experience. He has served as the Director of Planning, Zoning, Development and Inspections for the City of Newport, RI for eight years. Mr. Bronk earned his planning certification in 1996 from the American Institute of Certified Planners (AICP). He is a member of the American Planning Association (APA). He earned his Masters of Community Planning (MCP) degree from the University of Rhode Island with a concentration in environmental planning in 1991. He also earned a Bachelor’s degree in Environmental Studies and Geology from Alfred University in 1989.

Paige Bronk is currently responsible for administrative management, community planning, code enforcement, and land development projects for the City of Newport. Much of his current work in Newport addresses land development, comprehensive planning, master planning, and special projects. Notable recent planning projects include the West Side Master Plan, North End Master Plan, Central Newport Plan, and Newport Harbor Shuttle project. Key implementation projects include Potter School, CCRI, Sunset Hill Park, Lenthal School, BankNewport, and Coastal Extreme Brewing. Previous local government and regional experience includes comprehensive, natural resources, transportation, redevelopment and economic planning in Brunswick, Georgia; Savannah, Georgia; Frankfort, Kentucky; and Newport, Rhode Island.
Community Member

**Drew A. Carey, Ph.D.**

Dr. Carey has been a Newport resident for eighteen years with three children who have attended Newport Public Schools. Dr. Carey is a marine environmental scientist and small business owner committed to sustainable redevelopment and sound management of our public resources. He received his Ph.D from the University of St. Andrews, Scotland and returned to the United States to teach environmental science at Wesleyan University in 1982. Since moving to Newport he has supported government agencies, public interest groups and commercial firms with studies and technical assessment of the environmental impact of dredging and development projects. He has served as a facilitator for several national committees, technical conferences and the Long Range Facilities Planning Subcommittee of the Newport School Committee. He serves on the Ad Hoc Committee on Wastewater and Stormwater System Improvements of the City of Newport and is a founding member of Clean Ocean Access and Positively Newport Schools.

Community Member

**Lynn Ceglie**

Lynn Ceglie has been a resident of Newport since 1984. Mrs. Ceglie received her Bachelor’s Degree in Mass Communications from the University of Hartford. Since moving to Newport, Lynn was an interactive instructional program designer at Aquidneck Data Corporation, and an instructional design consultant for the Gilbane Building Company. Lynn has two children; Mia, 14 and Chase, 12 who are students in the Newport Public Schools. Mrs. Ceglie has served as a special education para-educator at the William J. Underwood Elementary School, a substitute teacher, and since 2004 has been a Child Outreach program screener. Her experience includes serving as co-president of the Cranston-Calvert PTO, serving on the Newport Charter Review Commission, and the Newport Cemetery Commission.

Community Member

**Arthur M. Dring, Jr.**

Arthur M. Dring, Jr., a Newport resident, received his Bachelors degree in Education from Georgetown University in 1954. Mr. Dring started his educational career 1956 as an elementary school teacher at the Mumford School. During the sixties, Mr. Dring led the school departments efforts in the establishment of the adult education program in Newport. In 1969, Mr. Dring was appointed Science Department Head at Thompson Junior High School. In 1979, Mr. Dring was appointed to the position of Vice Principal of Thompson Junior High School, and served as Vice Principal until his appointment as Principal in 1988. Mr. Dring retired from the school department in 1990, after thirty-five (35) years of service to the children of Newport. He remains active in several community organizations.

NPS Director of Property Services

**Paul C. Fagan**

A twenty-seven (27) year veteran of the Newport Public Schools, Paul C. Fagan was appointed Property Personnel Supervisor in 1998. In September 2002, Paul was appointed Director of Property Services. Mr. Fagan received a Bachelor of General Studies degree from the University of Rhode Island in 1993, majoring in Business Institutes. Mr. Fagan has received several certifications in the field of Educational Facilities Management. Paul has been a presenter at the Annual New England School Facilities Conference presented by the New England School Development Council.
Teachers Association of Newport  
(Nancy M. Folcarelli - NPS TAN Representative)
Nancy Folcarelli, a Newport native, graduated from Rogers High School in 1976. She received her Bachelor's degree in Elementary Education from the University of Rhode Island in 1979, and a Certification of Special Education in 1998 from Salve Regina University. She is currently pursuing her Master’s degree in Education from the University of Rhode Island. A parent of five children who advanced through the Newport Public Schools, Mrs. Folcarelli currently teaches Grade 2 at the Dr. Michael H. Sullivan Elementary School. Her previous experience in Newport Public Schools includes Grade 7 at Thompson Middle School and positions as a resource teacher, Grade 1 and Grade 2 teacher at the Dr. Michael H. Sullivan Elementary School.

School Committee Chairperson  
(Mrs. Jo Eva Gaines - school committee chairperson)
Mrs. Jo Eva Gaines studied Music Education at the Xavier University of LA (1954-56), completed her Bachelors of Education at Salve Regina University (1966) and received a Masters of Education in Counseling (1972) from Providence College. Jo Eva continued her education studying special education at Rhode Island College (1975-1977) leading to a Certificate of Advanced Graduate Studies in Educational Leadership with a concentration in Counseling and Career Information from Bridgewater State College (1980).

Jo Eva has over 29 years of experience as a teacher at the Elementary, Middle and High School levels; and administratively, she served as a high school guidance counselor and the Director of Guidance for Middletown Public Schools before her retirement in 1995. Mrs. Gaines served as a member of the Rhode Island Board of Regents of Elementary and Secondary Education (1985-1994, 1995-2004). Mrs. Gaines was elected to the Newport School Committee in 2000.

Community Member  
(David C. Hanos, Jr. - parent)
A lifelong Newport resident, Mr. David C. Hanos, Jr. currently serves as a Lieutenant with the Newport Fire Department. A parent with four children in the Newport Public Schools, Mr. Hanos is familiar with the need to improve our school facilities. With the Newport Fire Department, Mr. Hanos brings a wealth of safety concerns, alarm systems and a direct link to the Fire Marshall’s office. Prior to joining the Newport Fire Department, Mr. Hanos was the owner of a welding company during which time he fabricated steel structures which required him to read and understand blue prints, building codes and the process for bidding construction projects.

School Committee  
(Patrick Kelley - school committee member, committee chairman)
Patrick Kelley currently serves on the Newport School Committee. He was a member of the 2005 Long Range Facilities Planning subcommittee. Mr. Kelley holds a Masters of Science degree in Systems Engineering and Bachelor of Science degree in Electrical Engineering and is employed by the United States Navy. Mr. Kelley attended Newport Public Schools, is a taxpayer and resident of the City of Newport and currently has two children attending Newport Public Schools.

Community Member  
(Lindora J. Lopes - parent)
Lindora Lopes has been a Newport resident since 1984 and has four daughters in the Newport Public Schools: Allison, attending University of Notre Dame, RHS Class of 2007; Bethany, RHS Class of 2009; Selena, TMS, Grade 8; and Eliza, Cranston-Calvert, Grade 4. Lindora is currently employed as a special education teacher assistant, Melville Elementary School, Portsmouth, RI. Mrs. Lopes received her degree from Salve Regina University in 1984. Mrs. Lopes has served as a member of School Improvement Teams at TMS and NACTC, as well as a member of the former Newport School Committee Facilities Planning Sub-committee. Mrs. Lopes is an active member of St. Joseph’s Parish and is a Girl Scouts of Rhode Island Troop Leader.
School Principal, Dr. Michael H. Sullivan  
*(school principal)*

Maria Mare Schulz has over twenty-eight years of education experience in multi-language schools and programs. Maria received a Bachelor of Arts in Spanish, Portuguese and Elementary Education from the University of Massachusetts (Dartmouth) in 1980. Maria continued her education, obtaining a Masters degree in English as a Second Language from Rhode Island College in 1991 and a Masters degree in Elementary Administration from RIC in 1997. Maria has extensive experience in the areas of bilingual education, English as a Second Language (ESL) and Pre-School programs. Her most recent experience has been as the Principal of the Dr. Michael H. Sullivan Elementary School for the past ten years.

Business Education Teacher, William S. Rogers HS  
*(Teacher’s Association of Newport, President)*

Stephanie Martland, a graduate of Rogers High School, received her Bachelor’s of Business Education from Salem State College in 1977. She began her teaching career at Thompson Middle School in 1977 beginning in the Business Department and continuing into the Social Studies department for eleven years. Mrs. Martland then transferred to the Rogers High School business department and the vocational department at the Newport Area Career and Technical Center. She became the Director of the National Academy Foundation’s Academy of Hospitality, Travel and Tourism, and the first director to roll out the National Academy of Information Technology at the NACTC in Rhode Island. Stephanie became the National Academy Foundation’s teacher of the year in 1997 for Rhode Island and the Rhode Island Technology Council’s Workforce Development Technology Teacher of the year in 2002. This brought $30,000 worth of equipment and training to the system. She is currently working at Rogers High School teaching computers and business courses, while maintaining the position of President of the Newport Teachers’ Association.

Community Member  
*(community)*

Colleen McGrath is Executive Director of Friends of Ballard Park, a nonprofit organization dedicated to preserving and promoting the use of Newport RI’s only nature preserve. In this position she has created environmental educational programs and free, family-oriented events such as the Annual Ballard Park Pumpkin Tour. Ms. McGrath has served on the Newport City Council and Cliff Walk Commission. Prior to returning to Newport in 1999, Colleen worked in New York City’s publishing industry where she developed and implemented multi-million dollar budgets, managed staff members and outside consulting firms.

Newport City Council  
*(municipal representative - Ward 2 Councilor)*

Mr. Justin S. McLaughlin, Ward 2 Councilor, has been assigned to serve on the School Building Committee representing the Newport City Council, the municipal body authorized by law to approve a school construction bond and to request presentation of a school construction bond referendum to the voters of Newport.
Jeanne Kemp was born and raised and attended private schools in Washington, D.C. She came to Newport in 1968 to marry her husband, Jack. They have four children, three sons and a daughter, who are graduates of the Newport School System. While raising her family, Jeanne worked in the insurance industry in a variety of capacities that included service as Executive Director of the Rhode Island Life Underwriters.

Jeanne entered politics in 1991 when she successfully ran to represent the 1st Ward on the Newport City Council. She continued her community involvement after her first council term, by serving as a member of the board of New Visions of Newport County (NVNC). Service with New Visions provided Jeanne the opportunity to invest in and support a broad spectrum of community activities that engaged her interest in the cultural diversity of Newport’s neighborhoods. New Visions maintained a local health center and established a dental facility during her term. Jeanne was also instrumental in fostering many changes at New Visions during that time that culminated in the eventual merger of New Visions with East Bay Community Action Program (EBCAP) in 2000.

Jeanne ran successfully as an at-large candidate for the Newport City Council in 1999, and was reelected in 2001, 2003, 2006 and 2008. In 2000, she was appointed to the board of the Newport County Convention and Visitors Bureau (NCCVB) as the council’s representative and served in that role for seven years. In 2004 she was elected to be the NCCVB board chairwoman and served in that capacity until 2007. Just as service with New Visions had provided an opportunity to learn about various aspects of Newport’s diverse community and to work to provide help and to improve the lives of people in need, Jeanne’s service on the NCCVB provided an opportunity to learn first hand about the important role that the tourism and hospitality industries play in current and future economic life of Newport. Jeanne also served as City Council liaison with the U.S. Navy between 2000 and 2007. She has worked to ensure that the many contributions made by military, their personnel and their families are fully recognized.

Following Jeanne’s re-election in 2008, she was chosen by her City Council peers to serve as their chairwoman and Mayor of Newport. As Jeanne prepares to lead the City Council for the next two years, her vision of Newport captures the importance of the ethnic and cultural diversity of its neighborhoods, the richness of its historical and religious heritage, the vitality of its cultural activities, the dynamism of its commercial activity, the breadth of his natural beauty, the value of its iconic features - the ocean, the beaches the harbor, the Cliff Walk, the colonial era homes and buildings, the Gilded Age mansions - as well as the many complex infrastructure and financial challenges that confront the city. She is committed to working with all residents of the city in addressing these challenges and to working to protect and preserve the assets and resources we have to ensure that Newport’s future is bright and strong.

Richard Niejadlik has been the School Department’s Energy Manager since January 2004 and retired in 2007 from the Newport Area Career & Tech. Center as the Construction Technical Assistant since 1986. He has a BA in Child & Young Adult Psychology and has over 35 years of construction experience. Rick was on the Rogers High School Improvement Team (Facilitator, 1995-98), the Newport Area Career and Technical Center School Improvement Team, (2002-07), the Rogers High School’s S.A.D.D. Advisor (1999-2005) and a member of Newport School Committee’s Facilities Planning Committee (2004-05). He was appointed to the City of Newport’s 1st Juvenile Hearing Board (2002-05) and presently serves on the Board of Directors of M.A.D.D. RI since 2002 and served as Board President 2004-2008.
**Community Member**  
*(Newport Housing Authority - Director of Residents & Social Services)*  
A lifetime Newport resident, Pauline Perkins Moyé received a Bachelors Degree in Human Services from the New Hampshire College School of Human Services. She has also completed additional coursework at several Rhode Island colleges and has received a Family Development certificate from Salve Regina University. Pauline is active in many local organizations, including the Rhode Island Coalition for the Homeless, Campaign to Eliminate Childhood Poverty, Rhode Island Community Food Bank, Rhode Island Kids Count, Sullivan School Family Center Governing Council, NAACP, Rec Reunion Association, Community Baptist Church, and the Newport Partnership for Families. Pauline served as a member of the 2005 Newport Public School Facilities Planning Subcommittee. In March 2007, she was awarded the Lifetime Commitment Advocating to end Hunger Award by the Rhode Island Community Food Bank. In July 2006, Salve Regina University recognized Pauline’s service with the Gabrielle Bleeke-Byrne Award. In April 2002, Pauline was recognized as a “Women of Courage and Vision” by Salve Regina University. In March 1987, Pauline was selected as a Jefferson Award for Public Service recipient by WJAR TV-Channel 10.

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**Community Member**  
*(community)*  
Nicholas J. Phelan is a native Newporter, obtaining a Bachelor’s degree and a Master’s degree in Industrial Education from Rhode Island College. Mr. Phelan started a homebuilding program in 1977, building a house a year with his students for the next twenty-six years. Mr. Phelan has served on the Zoning Board for the City of Newport for a four year term and served on the Thompson Middle School Building Committee for three years.

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**Community Member**  
*(NPS - Local 841 Representative)*  
Marcin G. Rembisz has been with the Newport Public Schools providing administrative support since 2001. Mr. Rembisz received a Bachelor’s degree in Business Management from Salve Regina University in 1980. Immediately following college, Mr. Rembisz was employed for fifteen years by a Department of Defense contractor providing engineering services to the Naval Undersea Warfare Center. Mr. Rembisz previously served on the Newport School Committee’s Facility Planning Sub-committee.

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**NPS Business Manager**  
*(responsible for school finances)*  
Michael R. Saunders was appointed Business Manager in 2006. Michael is a CPA, graduate of Rogers High School (1969) and University of Rhode Island in 1976, majoring in Accounting. Mr. Saunders has over 30 years as a business professional holding positions of Chief Financial Officer in town, city and county government units. Mr. Saunders was a government business consultant for over 20 years implementing business technology solutions across North America. Mr. Saunders, prior to being appointed Business Manger, worked for the Department of Education compiling and publishing In$ite Financial data on Rhode Island School districts.
School Committee Member

Charles P. Shoemaker, MD
(school committee member)

Dr. Shoemaker has served on the Newport School Committee since January 2005, and has served as its chairman for three terms during 2006-2008. A 1959 graduate from Amherst College, Dr. Shoemaker completed medical school in 1964 at the Albany Medical College. After serving as a medical officer in the Navy 1969-1970, Dr. Shoemaker entered private practice in Newport in 1970 with the Aquidneck Medical Center, retiring in 2003. Dr. Shoemaker served as President of the medical staff at Newport Hospital, and was President of the RI Medical Society and headed the New England Delegation to the annual American Medical Association (AMA) for six years. Dr. Shoemaker was a founder and President of the American Society of General Surgeons. Dr. Shoemaker’s wife Stephanie is an Episcopal priest. Together they have raised three children, two of them graduates of Rogers High School.

City of Newport, Finance Director

Laura L. Sitrin, CPA
(local budget official)

Laura Sitrin has been a Director of Finance for municipalities for the past eleven (11) years. Laura has worked in the states of New York, Virginia and Rhode Island. Currently the Director of Finance for the City of Newport, Rhode Island, Laura oversees finance, accounting, payroll, information systems, assessment, budget and collections. Ms. Sitrin worked in public accounting for 10 years prior to working in government. Ms. Sitrin specialized in governmental and quasi-governmental audits and providing consulting and internal control services to governments. Laura is a member of the Government Finance Officers Association (GFOA), the New England GFOA and the Rhode Island GFOA. Laura is a member of the AICPA and the RI State Society of Certified Public Accountants.

Community Member

Ruth Barge Thumbtzen
(community)

Ruth Barge Thumbtzen retired from the Newport Public Schools in 2001, after teaching health and physical education at Thompson Middle School for thirty (30) years. Since her retirement, Mrs. Thumbtzen has been on the staff at Salve Regina University as the Community Service Liaison. Mrs. Barge Thumbtzen has served on several non-profit boards over the last 20 years. She is a past Regional Vice President for the National Education Association of Rhode Island, a former President of the Board of Trustees of Dr. Martin Luther King Jr. Community Center, former Vice President of the Newport Public Library Board of Trustees.

Mrs. Barge Thumbtzen was the founding Chairperson of the Mora Brown Hammonds Scholarship Fund, and was also a former Advisory Board Member of the Newport County Fund for six years. Mrs. Barge Thumbtzen has received many honors for her community service, including being honored as the Women of the Year by the Rhode Island Commission on Women in 2001 and in 2003 Mrs. Barge Thumbtzen was honored at Salve Regina University as a Woman with Courage and Vision.
Community Member
(retired NPS Assistant Superintendent)

Sydney O. Williams, retired in 1986 as Assistant School Superintendent in Newport, after more than 30 years in the local school system. Mr. Williams received a Bachelor’s degree in Education in 1953 from Rhode Island College, and a Master’s degree in Education from Rhode Island College in 1966. He has completed advanced course work at Brown University and the University of Rhode Island. He started at Newport Public Schools in 1953 as a teacher at Cranston-Calvert School.

A lifelong resident of Newport, Mr. Williams raised four children who attended and graduated from Newport Public Schools. Since retiring, he has been a member of the Board of Directors of the Rhode Island College Alumni Association, a trustee of the Long Wharf Trust and a member of the Education Committee for the Newport Historical Society and the Scholarship Committee for the Newport Lodge of Elks. He was chairman of Newport’s 350th Birthday Celebration and is a member of the American Legion and the Navy League. Mr. Williams remains active with many clubs and organizations in Newport and upstate. Mr. Williams has published several papers and reports, and has presented at national conferences in Washington, DC, New Orleans and San Francisco. A 1978 recipient of the US Office of Education Award for Outstanding Educational Contribution, Mr. Williams was honored by the RI Department of Education in 1986 with the RIDE Education Award for Outstanding Achievements.
District Asset Protection Plan
-District Asset Protection Plan for 3 years prior to application
# Asset Protection Plan Summary

**Date:**

**District:** Newport

**Certified Facilities Manager Contact Info:**

Paul Fagen

401-652-0510

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<td>Vehicles</td>
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<td>$2,056</td>
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<td>Unit Each School</td>
<td>Built SF (Gross)</td>
<td>Accessed Built Value</td>
<td>Current Enrollment</td>
<td>School Capacity</td>
<td>Total # Teachers Required</td>
<td>FY18</td>
<td>FY19</td>
<td>FY20</td>
<td>FY21</td>
<td>Planned Expenditures (See Attachment)</td>
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<td>7 Rogers High School</td>
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<td>1000</td>
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<td>38,992</td>
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<td>8 Vocational Center</td>
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</tbody>
</table>

* Tools for Schools

Newport's Director of Facilities attended the National Symposium on Tools for Schools in Washington, D.C. in 2004 and incorporated many of the techniques in the school system.

They use data loggers provided by their energy manager to measure humidity levels in suspected troubled areas. They change filters at recommended intervals.

They get radon inspections every 2 years as required. The school system uses and environmental consultant to advise them on air quality issues.
TO: The Honorable Mayor and Members of the Council
FROM: Edward F. Lavallee, City Manager
SUBJECT: Recommended 2008–2012 Capital Improvement Program

It is the City’s mission to provide efficient and effective services at an affordable cost. To achieve this mission, the staff has developed the attached five-year Capital Improvement Program (CIP). The purpose of the five-year plan is to provide a realistic and predictable projection for the cost of providing facilities and equipment to meet service needs. It is our goal to engage in active partnerships with public and private agencies and organizations. The recommended FY 2008–2012 Capital Improvement Program is coordinated with local, state and federal agencies.

The Newport School Committee submitted a CIP project entitled Fewer & Newer Schools, with proposed funding of $55,969,583 in Bonds. This project is represented as distinct from the CIP program total. The inclusion of this projected expense in the overall CIP conceptual plan is subject to review and discussion between the School Committee and the City Council.

This years’ CIP continues to include some “carry over” funding, especially for projects in future years. Notable projects in FY’08 include: building improvements to City Hall and City Schools, the upgrade of police and fire communication equipment, continued work to bring the remaining City buildings into compliance with the Rhode Island Fire Code; Roadway/Sidewalk Improvements, municipal government information systems, improvements to the Broadway roadway corridor between Bliss Road and Washington Square, and park and waterfront improvement and accessibility projects.

Capital Improvement Projects have been categorized by type of project in accordance with predefined goals and objectives. These include:

- Health and safety issues
- Items required by Federal, State or Local regulations
- To address deferred maintenance
- Perform regular, ongoing maintenance
- To provide matching funds for grants approved by Council
- Projects requested by various Commissions appointed by Council
- Technological improvements
- North End Redevelopment
- Protection of Cliffwalk
- Harbor Plan projects
- Protection of historic resources

This is the fourth year in which Newport Schools’ CIP projects have been included in the City’s five-year Capital Improvement Program, and this is the third year in which Newport Public Library CIP projects have been included the City’s CIP program.

The total CIP for FY’08 is $17,609,994. This is a decrease of $6,128,387 over the FY 07 proposed CIP, and $7,028,387 less than the adopted FY 07 CIP (via budget process) from last year’s CIP. The
inclusion of the $12,600,000 road bond in the FY 2007 budget accounts for the significant difference in funding requests between the two fiscal years.

The School, Library, General and Enterprise fund breakdowns are allocated as follows:

The School total is $465,000, the Library total is $140,000, and the General Fund total is $7,421,450. Of the expenditures, $6,798,500 will be supported by General Revenues, with an additional $822,950 raised through other sources of revenues.

The Water Fund total is $3,833,544. Supported by the recently Public Utilities Commission (PUC) approved Water Rate Increase, it represents capital projects and infrastructure system upgrades.

The Water Pollution Control (W.P.C.) Fund total is $1,355,009, representing capital projects related to system improvements such as combined sewer overflow abatement and other infrastructure upgrades mandated by RIDEM and EPA.

The Parking Fund total is $4,746,000. Projects include equipment and facility upgrades for the three municipal parking lots, identification of space appropriate for downtown parking use, and the design and building of a 300 space garage to occupy the location of the Mary Street surface lot.

The Easton's Beach Fund total is $215,000. Of this amount, $150,060 will be funded from general fund revenues. Recommended projects are designed to correct safety issues in beach facilities.

The Maritime Fund total is $186,000. Of this amount, $50,000 will be funded from general fund revenues for Public Pier Improvements. Projects include Public Pier improvements and Waterfront access and improvement programs.

The Equipment Replacement Schedule is budgeted at $622,950, and is supported by the Equipment Replacement Fund established four years ago.

The Recommended 2008 ~ 2012 CIP will be formally presented to the Council on January 10, 2007, and public hearings will be held at the January 24, and February 14, 2007 Council meetings.

Edward F. Lavaller
City Manager
Newport's existing elementary school facilities are in extremely poor condition, and are not designed for current day educational programs. The proposed Fewer and Newer Schools will deliver a better elementary school education in a more cost effective manner.

The proposed project consolidates five elementary schools to one elementary school and creates a new middle school at Rogers campus. This will require renovating existing buildings and adding an additional wing.

State Regulations, improve efficiencies and reduce operations costs

Reduction in maintenance and staffing. Return of existing building to tax roll would offset debt service from bond issue

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<tr>
<td>TOTAL COST</td>
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## Project Detail

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<th>Project Title</th>
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<th>Location</th>
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<tbody>
<tr>
<td>Building Renovations</td>
<td>School Department</td>
<td>Rogers High School</td>
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</table>

### Project Description

Roger's building's original 1958 mechanical systems including heating, electrical, ventilation, and plumbing need substantial upgrades. Several flat roofing systems need replacement. Additionally, both student and staff parking areas need to be repaved. Also, the Fire Life Safety systems (alarms, sprinkler, egress, wired glass, doors) need to be updated to meet code. Improvements to the Science labs, library and academic wing have been completed in the past two years, and the School Department will continue to use asset protection monies at Rogers.

### Goals & Objectives

Asset Protection: Health and Safety

### Status/Other Comments

Operating Costs/Savings

Maintenance costs for new mechanical systems will increase. However, emergency repair costs will decrease.

### Total Project Cost

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<td>-</td>
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### Planned Financing

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<td>Total GF Transfer</td>
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</table>
Facilities Analysis
Facilities Analysis

Coggeshall School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Underwood School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Carey School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Sullivan School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Cranston Calvert School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Thompson Middle School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Rogers High School—
Architectural
HVAC
Plumbing
Fire Protection
Electrical
Floor Plan
Site

Life & Safety Code Evaluations
RGB Architects, November 2008
## Coggeshall School

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<tr>
<td>Grades</td>
<td>K-5</td>
</tr>
<tr>
<td>Number of classrooms</td>
<td>11 classrooms ranging from 800 to 864 square feet. Library is inadequate in size, cafeteria is in basement and inadequate in size. Multi-purpose room on 3rd floor has non-conforming egress. No specialty spaces</td>
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<tr>
<td>Site Area</td>
<td>2.15 Acres</td>
</tr>
<tr>
<td>Building Area</td>
<td>33,093 Square Feet</td>
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<tr>
<td>Construction</td>
<td>3 Stories plus a basement, brick exterior, masonry construction slate roof, masonry interior partitions, aluminum windows, wood flooring with some VCT, Mix of acoustical tile ceiling and plaster ceilings. Concrete filled steel pan stairs</td>
</tr>
<tr>
<td>Building Condition</td>
<td>Ranking 4, Interiors in generally fair conditions. Brick chimneys need major repair. Systems are in poor condition. Mechanical systems should be replaced. Building does not meet accessibility codes.</td>
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</table>

### Materials

The building is brick with a wood/steel frame. It has slate roof and aluminum windows. The interior walls are primarily masonry with plaster finishes and wood base. The floors are wood. There are acoustical ceilings. Finishes are generally in good conditions. Walls need painting.

### Accessibility

There are many accessibility issues. There is no elevator. The entrances into the building are all at a mid level so that there is no accessible entrance into the building. Toilet rooms do not have accessible fixtures. Door hardware is not accessible.

### Exterior

The exterior of the building is in generally good condition. The roof was not inspected. It was reported that the brick chimneys are in extremely poor condition and would require extensive rebuilding and repointing.

### Site

The school is accessed from Van Zandt Street. There is limited parking on site with no room for onsite drop-off or pick-up. There is a paved play area and a play structure on a portion of the unpaved area. At 2.15 acres, the site is small.

### General

The materials are in fair condition but systems are in poor condition. There are however, significant accessibility issues. Most importantly, an elevator would be required to provide access on all levels. This would require an addition to the building or the insertion of a new elevator within the existing building.

There are 11 classrooms all of which are slightly smaller than standard. At 22 students per classroom the school could hold 242 students. There are no classrooms sized appropriately for kindergartens, nor is there the appropriate toilet rooms necessary for kindergartens. The cafeteria is in the basement. The
The corridors are wide creating a high level of inefficiency. This plan inefficiency creates higher than standard maintenance and operational costs.

The mechanical systems within the building have exceeded their serviceable life. There is extremely poor ventilation control, nonexistent temperature control and extremely inefficient equipment. While there are currently no system failures, there is the potential of a complete system failure resulting in total building shutdown most likely during the heating season when enormous stresses are applied to the systems.

The plumbing systems have served their useful life. Fixtures do not meet current codes for water conservation or accessibility. Complete new water piping systems are recommended.

All existing electrical panels should be replaced and new wiring provided throughout the building. The electrical service should be upgraded.

Existing HVAC Systems

Executive Summary
The Coggeshall Elementary School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to scale, poor water conditions, and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. With the extremely antiquated nature of the existing mechanical systems and the average maintenance this building is a typical example of one such project. While generally speaking, most systems are operating and maintaining reasonable space temperature control, but due to the extreme antiquated nature of the mechanical systems and their gradual scaling of the various piping systems, heat transfer rates have become reduced and the overall system is taxed to a point of inefficiency being created by the slowly depreciating system. In addition, the installed systems included very poor design techniques, and by today’s standards could not even be applied in school applications. The result is a compromised application providing extremely poor ventilation control, nonexistent temperature control, and extremely inefficient equipment. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating maintaining acceptable space temperature control however, continued operation will be at the expense of increased operating costs and the potential of a complete system failure more than likely during peak heating seasons when enormous stresses are applied to the systems. The lack of backup equipment will result in a complete building shut down. The systems installed within this building have exceeded their maximum serviceable life and it is strongly recommended that the systems be completely upgraded. The continued reuse of the systems will continue to produce unsatisfactory results in terms of overall air quality and operating costs and with the current energy crisis could prove to be extraordinarily expensive to operate this building.

Existing Conditions
The powerplant is provided with a single low-pressure steam for 50 Mills HB Smith cast iron sectional boiler with an oil fired burner. The boiler appears to be original to the building and approximately 50 years old. It was noted that there was slight corrosion on the mud drums apparently related to nipple leaks. The burner receives its supply of oil through a recirculating uninsulated copper distribution system laid on the floor which is partially in containment conduit. The lines communicate to a below ground fuel 7000 gallon oil tank which is apparently single wall construction with no leak monitoring. There was no information available as to the age of the system; however, in conversations with maintenance personnel could be in excess of 30 years old. The boiler is vented through a welded steel breeching system

cafeteria is inadequate for a school population of this size. However, that leaves no room for art, music science or computers or a library. The gym/multipurpose room is on the 3rd floor, which is not appropriate for the younger children. The emergency egress from the 3rd floor includes an emergency fire escape accessed through a window.
which is insulated with either calcium silicate or asbestos with acanthus jacket. The breeching terminates in a masonry chimney of which we could not determine if a flue liner is in place, however, the chimney is adequate height for the powerplant served. The horizontal length of breeching appears to be in excess of the maximum allowed by building code. The combustion air system is a single intake louver located high on the wall which was not provided with motor operated dampers. The size of the louver is not in compliance with current building code requirements. The piping system appears to be schedule 40 black steel and is insulated with fiberglass insulation, however, the elbows appear to contain asbestos. Based on the existing condition and age of all equipment it does appear that the entire powerplant has reached its maximum serviceable life and is in need of replacement.

The lower-level is provided with horizontally mounted cast-iron radiators located at the ceiling of the space. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The classroom areas are provided with cast-iron radiators with decorative covers located throughout the spaces. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The gymnasium is provided with cast-iron radiators located throughout the space along each exterior wall. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The circulation corridors are provided with cast iron radiation which is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. There was no ventilation air provided for the corridors of which is non code compliant. There was no additional heat provided at the main entrance nor were vestibule interlocks provided.

The public gang toilets were provided with cast iron radiation located on the exterior wall. Ventilation of the spaces is through operable windows. There was no mechanical ventilation provided. All systems are generally ineffective in maintaining proper ventilation control and heat and all systems should be replaced.

**Existing Plumbing Systems**

**Executive Summary**

Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, and natural gas. The plumbing systems, while continuing to function, have served their useful life. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

The plumbing fixtures are antiquated. The majority of fixtures are non-accessible and are not water conserving. In general, the fixtures appear to have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Code. Essentially, the code does not require these fixtures to be upgraded, but where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving type fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where adequately sized for the intended new use. Cast iron vent piping exposed along exterior of building should be replaced.
Complete new water piping systems are recommended. The copper piping is in poor condition and has served its useful life. A hydrant flow test will be needed to evaluate water pressure requirements.

New domestic water heating system with thermostatic mixing valve is recommended.

**Existing Conditions**

The Building is serviced by Municipal Sewer and Municipal Water. Rainwater from the sloped roofs is collected by gutters and downspouts that are piped to below grade and appear to connect to the Municipal drainage system.

**Fixtures:**

Plumbing fixtures generally are in fair condition, non-accessible and non-water conserving.

The water closets are vitreous china, predominately floor outlet with flush valve.

Urinals are wall hung, flush valve, vitreous china.

Lavatories are wall hung vitreous china, with hot and cold water handle faucets.

Drinking fountains are wall-hung vitreous china.

Janitor’s sink are generally trap standard mounted, enameled cast iron sinks. Faucets are not equipped with vacuum breakers.

Kitchen area fixtures are in fair condition. There is a 2-bowl pot sink, pass thru dishwasher, and convection oven. There is no grease interceptor provided for the kitchen waste. Kitchen appears to be a warming/serving kitchen. There is no kitchen hood.

**Water Systems:**

Building has a 4” domestic water service with 4” water meter and 4” water distribution main.

Piping where exposed appears to be copper with sweat joints. The majority of the piping is uninsulated.

There are two (2) natural gas water heaters in the mechanical room. The original water heater is a Rheem tank type heater with 37 gallon storage and 160,000 btuh input. The more recent heater, May 2003, is a RUUD tank type heater with 50 gallon storage and 40,000 btuh input. The water heaters are not equipped with thermostatic mixing valves.

**Drainage Systems:**

Cast iron is used for sanitary and storm drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be copper.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.

Natural Gas:

The Building is serviced by natural gas with meter located in the mechanical room. The gas piping is steel pipe with screwed joints.

**Existing Fire Protection Systems**

The Building has a 6” fire service, 4” backflow preventer, 4” dry alarm valve and 4” distribution main. The distribution main supplies two 4” risers, on in each stairwell. The 4” risers supply a sprinkler system for the third floor gymnasium, stage, and eave storage spaces. A branch is provided to protect the mechanical room as well. The piping is black steel.
The building contains two 2-1/2” standpipe risers located on each end of the main corridor of the building. The standpipes are fed from the domestic water supply.

Demolition of the existing domestic fed standpipe is recommended. New sprinkler system throughout the remaining unprotected areas is recommended. The existing 6” fire service can remain however a hydrant flow test will be needed to evaluate water pressure requirements.

**Existing Electrical Systems**

**Executive Summary**

The existing electrical service should be upgraded to accommodate any proposed renovations. The addition of equipment will increase the service size which may require a new pad mounted transformer. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to comply with energy codes. This new lighting system would contain occupancy sensors and energy efficient light fixtures.

Some exit signs and emergency lights appear to be in good condition. Additional emergency lighting and exit signs should be added and old units replaced.

Additional receptacles need to be added in the classrooms to accommodate all power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. Existing system is antiquated.

A new addressable fire alarm system will be required to comply with the latest local and ADA codes. The system will consist of ADA horn/strobes and addressable devices.

Existing entrance lighting should be replaced with energy efficient light fixtures and new fixtures provided at all exit/entrances without lighting.

**Existing Conditions**

The building has an incoming service of 400A, 120/240V, 1Ø, 3W via a General Electric fused disconnect switch located in the main electric room. A main distribution panel is located in the main electric room and feeds remote panels throughout the building.

Interior lighting consists of surface mounted fluorescent wraparound fixtures in the kitchen. Recessed 2’ x 4’ fluorescent fixtures are used in the classrooms, cafeteria, offices, toilets and corridors. The gym consists of hid high bay pendant fixtures. T8 type fluorescent lamps have been installed throughout the building.

Emergency lighting system consists of self-contained battery units with heads. Some units had remote heads. Exit signs were self-contained led type.

Classrooms have two receptacles per room with a few exceptions.

Sound/paging system consists of an Aiphone paging equipment with a Norstar phone system. Classrooms have an intercom for paging.

The fire alarm system consists of a Simplex 4002 8-zone non-addressable control panel with heat detectors in the boiler room and kitchen. Smoke detectors are located in the corridors, gym and cafeteria. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a radio master located inside the building adjacent to the fire alarm control panel with an outdoor antenna. Fire alarm control panel is located in the maintenance room adjacent to boiler room.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Flood lights are located on utility poles for parking area. Telephone and Cable TV services are provided overhead from utility pole.
Floor Plans

3rd Floor

2nd Floor

1st Floor

Basement
Building Photos

Aerial Site Photo
Underwood School

Address: 90 Harrison Street
Date of Construction: 1962
Grades: K-5
Number of classrooms: 11 classrooms ranging from 656 to 864 square feet in four small building; 1 with cafeteria admin and 2 classrooms, and 3 with 3 classrooms. No specialty spaces

Site Area: 6.42 Acres
Building Area: 15,293 Square Feet
Construction: 1 Story slab on grade with crawl spaces, wood frame and wood siding exterior, wood windows, sloped roofs with asphalt shingles, VAT flooring, Acoustical tile ceilings.

Building Condition: Ranking 4, Interiors in generally fair conditions. Systems are functioning but should be replaced soon.

Materials
Materials are in fair condition. The building is wood frame with wood siding and single glazed wood windows. There is indication of wood rot. It has an asphalt shingle roof. There is some floor tile that appears to be vinyl asbestos tile. The tile is cracked and broken. The tiles that are cracked and broken should be removed and replaced. The interiors have a wood panel interior finish and acoustical tile ceilings.

Accessibility
Toilet rooms do not have accessible fixtures. Door hardware is not accessible. Ramp railings do not conform to current codes.

Exterior
The exterior is in fair condition. The wood siding has deteriorated in many locations and the roof is in fair to poor condition. The windows are in poor condition. Crawl spaces below the buildings require further investigation. Poor ventilation in the crawl spaces can lead to the build up of moisture and result in susceptibility to mold growth.

Site
At 6.42 acres, the site is the largest undivided elementary school site. It is generally flat and has good access from both Harrison Street and Brenton Street. Wet areas along Brenton Street require further investigation. There are both hard and soft play areas. The school itself is made up of 4 independent single story buildings.

General
There are 11 classrooms all of which are slightly smaller than standard. At 22 students per classroom the school could hold 242 students. There are no classrooms sized appropriately for kindergartens, nor is there the appropriate toilet rooms necessary for kindergartens.

There is a library and a cafetorium. Both are small for this population.

The plumbing and mechanical systems within the building are deteriorating and reaching the end of their useful life expectancy. A complete new water piping system is required. With continued maintenance of the mechanical system, a continued service can be achieved but at higher than standard operating costs. But continued reuse of the mechanical systems will produce unsatisfactory results in terms of overall air quality and operating costs.

All existing electrical panels should be replaced and new wiring provided throughout the building. The electrical service should be upgraded.
Existing HVAC Systems

Executive Summary
The Underwood Elementary School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to the general nature of the equipment and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. This complex of buildings is a typical example of one such project. While generally speaking, the systems are operating and maintaining reasonable space temperature control, but due to the installation of the mechanical systems and their limitations the result is a slowly depreciating system. In addition, the shortcomings of the original design is accelerating, i.e. lack of ventilation air and combustion air, system longevity. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating maintaining acceptable space temperature control however; continued operation will be at the expense of increased operating costs due to the poor design and misapplication of the systems themselves. The majority of the systems installed within the various buildings have exceeded their maximum serviceable life. With overall maintenance, cleaning and calibrating of the systems, a continued limited service could be achieved however, unpredictable at best. At this time it is not necessary that the systems be modified to prevent a near catastrophic failure, but a continued reuse of the systems will continue to produce unsatisfactory results in terms of overall air quality and operating costs.

Existing Conditions
The school site is made up of four individual buildings labeled A, B, C and D. Each building is generally similar.

The powerplant is provided with a light commercial single down discharge gas-fired single zone air handling unit which distributes supply air to each classroom in an uninsulated galvanized sheet-metal supply duct which is located within the crawlspace. Each classroom is provided with supply air through a series of supplied registers located in the cake space under the casework around the perimeter of each classroom. Return air is drawn from a central location in each classroom through a low wall return air register. The main return air duct is also located within the crawlspace and travels back to the mechanical room for redistribution. The air handling unit is provided with a minimal amount of outside air which does not meet minimum building code requirements. Combustion air is provided to the mechanical room through a single wall mounted louver which is not provided with a motor operated damper nor is the size of the opening code compliant. The building is controlled by a single electric thermostat. The equipment was noted to be an average to below average condition however does operate and maintain reasonable heating control. The installed equipment is not recommended for public classroom design.

Building “C” is further provided with a single horizontal discharge gas-fired heating air handling unit with a separate thermostat each of which was replaced approximately 2 years ago. The unit is located over a mechanical space adjacent to the cafeteria. The unit is of the 100% recirculation design as no outside air is introduced into the system. Return air for this system is through a louvered door and is drawn into the rear of the air handling unit.

The main entrance of each building as well as the administrative area is also provided with electric convection heaters to supplement infiltration air. The heaters were noted to be soiled and slightly damaged. Ventilation for these areas appears to be through the use of operable windows.

The public toilet areas were provided with a ceiling mounted exhaust fan which is controlled by wall mounted switch. The fans are of a residential design and do operate however maintain a minimal amount of ventilation air control.

It was noted that in each building the natural ventilation openings located in the crawl spaces has been
blocked off and therefore the code required natural ventilation for these areas is no longer being provided. This could contribute quite dramatically to mold formation as well as compromise the overall building structure.

Existing Plumbing Systems

Executive Summary
Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, and natural gas. The school is approaching 50 years in age and the plumbing systems while continuing to function have served their useful life. The plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

The plumbing fixtures are antiquated. The majority of fixtures are non-accessible and are not water conserving. In general, the fixtures appear to have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Code. Essentially, the code does not require these fixtures to be upgraded, but where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving type fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where buried underground and where adequately sized for the intended new use.

Complete new water piping systems are required. The copper piping is in poor condition and has served its useful life. A hydrant flow test will be needed to evaluate water pressure requirements.

Installations of thermostatic mixing valves are recommended at the domestic water heaters.

Existing Conditions
The Building is serviced by Municipal Sewer and Municipal Water. Rainwater from the sloped roofs is allowed to splash to grade. Gutters and downspouts are provided at the entrance to each school.

Fixtures:
Plumbing fixtures generally are in fair condition, non-accessible and non-water conserving.

The water closets are vitreous china, floor outlet with flush valve.

Lavatories are wall hung vitreous china, with hot and cold water handle faucets.

Drinking fountains are wall-hung stainless steel.

The Building C kitchen area fixtures are in fair condition and consist of a 3-bowl wash sink and convection oven with hood. The 3-bowl pot sink is connected to a grease interceptor. Hot water for the kitchen is provided by a natural gas-fired 50 gallon RUUD water heater and a 9 gallon AO Smith booster heater. Both heaters are antiquated.

Water Systems:
Each building has a 1-1/2” domestic water service with meter. Piping is copper with sweat joints. The majority of the piping is uninsulated.

There is a natural gas water heater in the mechanical room which supplies the fixtures. Heaters appear to have been recently replaced and are RUUD tank type heaters with 40 gallon storage and 40,000 btuh
input. The water heaters are not equipped with thermostatic mixing valves.

**Drainage Systems:**
Cast iron is used for sanitary drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be copper. Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.

**Natural Gas:**
Each Building is serviced by natural gas with two (2) meters located in the mechanical room. One meter is dedicated for the domestic water heater and one for the heating systems. The gas piping is steel pipe with screwed joints.

**Existing Fire Protection Systems**
Each building has a 4” fire service, with gate valve, detector check valve, and wet alarm valve. The system is a single zone, wet type, supplying heads throughout the building including above ceiling and crawl space. Piping is steel with screwed fittings.

The existing detector check valve does not meet current code. Installation of a new double check valve at each building is recommended. In addition, the installation of supervisory switches on the existing gate valves is recommended.

**Existing Electrical Systems**

**Executive Summary**
The existing electrical service should be upgraded to accommodate any proposed renovations. The addition of equipment will increase the service size which may require a new pad mounted transformer. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to comply with energy codes. This new lighting system would contain occupancy sensors and energy efficient light fixtures.

Some exit signs and emergency lights appear to be in good condition. Additional emergency lighting and exit signs should be added and old units replaced.

Additional receptacles need to be added in the classrooms to accommodate all the power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. The existing system is antiquated.

A new addressable fire alarm system will be required to comply with the latest local and ADA codes. The system will consist of ADA horn/strobes and addressable devices.

Existing entrance lighting should be replaced with energy efficient light fixtures and new fixtures provided at all exit/entrances without lighting.

**Existing Conditions**
The building “B” has an incoming service of 200A, 120/240V, 1Ø, 3W via a Cutler-Hammer fused disconnect switch located in the boiler room. A main distribution panel is located in the boiler room and feeds remote panels in buildings “A” and “D”. Building “C” has a separate 100A main breaker service entrance panelboard.

Interior lighting consists of surface mounted fluorescent wraparound fixtures in the corridors. Recessed 2’ x 4’ fluorescent fixtures are used in the classrooms and the office. T8 type fluorescent lamps have been
installed throughout the building.

Emergency lighting system consists of self-contained plug-in battery units with heads. Some units had remote heads. Exit signs were self-contained type.

Classrooms have two receptacles per room with a few exceptions.

Sound/paging system consists of an Aiphone paging system with a Norstar phone system. Classrooms have intercom for paging.

The fire alarm system consists of Simplex 2001 4-zone non-addressable control panel with heat detectors in the classrooms, offices, and toilets. Smoke detectors are located in the corridors and cafeteria. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a radio master located inside the building adjacent to the fire alarm control panel with an outdoor antenna. The fire alarm control panel is located in Building “B” with remote annunciators at the other buildings.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Flood lights are located on utility poles for parking area. Telephone and Cable TV services are provided overhead from utility pole.

**Floor Plans**
Building Photos

Aerial Site Photo
Carey School

Address: 32 Narragansett Avenue
Date of Construction: 1896, altered 1935, 1960
Grades: 1-5
Number of classrooms: 10 classrooms from 600 to 896 square feet
Site Area: 0.75 Acres
Building Area: 26,988 Square Feet
Construction: 2 stories plus basement, masonry construction with wood/steel framing, wood floors with some VCT flooring, both plaster and acoustical tile ceilings. Asphalt shingle roof

Building Condition: Ranking 4. Interior is in poor condition. Systems are in poor condition. Mechanical systems should be replaced. Building does not meet accessibility code.

Materials
Wood and steel frame with brick exterior. Masonry interior bearing walls, slate and built-up roofing. VCT over wood floors with VCT in poor condition in some areas. There are some plaster ceilings most of which require patching and painting. There are indications of roof leaks. The gym has a wood floor. Acoustical tiles ceilings are in poor condition in some areas

Accessibility
Toilet rooms do not have accessible fixtures. Door hardware is not accessible. Entrances are not accessible. There is no elevator

Exterior
The building has a brick exterior with a granite base and granite windowsills and lintels. There appear to be roof leaks. There are aluminum windows with double glazed windows. The wood cornice and portico require some work

Site
The site is located between Narragansett and Carey Streets. At .75 acres, it is very small. The building sits in the middle of the site. Most of the site is bituminous pavement. There is a small area of landscaping around the perimeter of the site. A chain link fence surrounds the site and there is little play space for the students.

General
The Carey School has 10 classrooms plus an auditorium/gymnasium, a library and a cafeteria in the basement. It can hold approximately 220 students, but if separate spaces are needed for art music science of computers that number would have to be reduced. The cafeteria is in the basement. It is very small for a population this size. There are dehumidifiers in the basement and the environment feels humid. The interior finishes are in poor condition with broken floor tiles and stained ceiling tiles that should be replaced. Walls need to be painted. The school is not accessible.

The mechanical systems within the building have exceeded their serviceable life. There is extremely poor ventilation control, nonexistent temperature control and extremely inefficient equipment. While there are currently no system failures, there is the potential of a complete system failure resulting in total building shutdown most likely during the heating season when enormous stresses are applied to the systems.

The plumbing systems have served their useful life. Fixtures do not meet current codes for water conservation or accessibility. Complete new water piping systems are required.

All existing electrical panels should be replaced and new wiring provided throughout the building. The electrical service should be upgraded.
Existing HVAC Systems

Executive Summary
The Carey Elementary School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to scale, poor water conditions, and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. With the extremely antiquated nature of the existing mechanical systems and the very poor maintenance this building is a typical example of one such project. While generally speaking, most systems are operating and maintaining reasonable space temperature control, but due to the extreme antiquated nature of the mechanical systems and their gradual scaling of the various piping systems, heat transfer rates have become reduced and the overall system is taxed to a point of inefficiency being created by the slowly depreciating system. In addition, the installed systems included very poor design techniques, and by today’s standards could not even be applied in school applications. The result is a compromised application providing extremely poor ventilation control, nonexistent temperature control, and extremely inefficient equipment. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating maintaining acceptable space temperature control however, continued operation will be at the expense of increased operating costs and the potential of a complete system failure more than likely during peak heating seasons when enormous stresses are applied to the systems. The lack of backup equipment will result in a complete building shut down. The systems installed within this building have exceeded their maximum serviceable life and it is strongly recommended that the systems be completely upgraded. The continued reuse of the systems will continue to produce unsatisfactory results in terms of overall air quality and operating costs and with the current energy crisis could prove to be extraordinarily expensive to operate this building.

Existing Conditions
The powerplant is provided with a single low-pressure steam 44 Mills HB Smith cast iron sectional boiler with an oil fired burner. The boiler appears to be original to the building and approximately 60 years old. The boiler is insulated with what appears to be asbestos insulation with the canvas jacket. It was noted that there was extensive corrosion on the mud drums apparently related to nipple leaks. The boiler was also not installed with the minimum clearances as recommended by the building code. The burner receives its supply of oil through a recirculating uninsulated copper distribution system which ties into an overhead steel system which communicates to an aboveground fuel oil tank located in an adjacent enclosure covered in sand of approximately 5000 gallon capacity. The installation of the fuel oil tank is in excess of the maximum limit allowed by NFPA and the installation is non code compliant. Condensate is returned back to the boiler through a cast-iron receiver with a single discharge pump. It was noted in a number of cases that copper and steel piping connections were made without dielectric fittings. Based on the plant capacity it appears that the condensate system is extremely undersized. The boiler is vented through a welded steel breeching system which is uninsulated. The breeching terminates in a masonry chimney of which we could not determine if a flue liner is in place, however, the chimney is adequate height for the powerplant served. The combustion air system is a single intake louver located high on the wall which was not provided with motor operated dampers. The size of the louver is not in compliance with current building code requirements. The combustion air louver was noted to have extensive debris and soiling collected on the screen. The piping system appears to be schedule 40 black steel and is insulated with fiberglass insulation, however, the elbows appear to contain asbestos. Based on the existing condition and age of all equipment it does appear that the entire powerplant has reached its maximum serviceable life and is in need of replacement.

The lower-level is not provided with heat and heating of the space presently takes place through heat loss of the piping located at the ceiling. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The gymnasium is provided with cast-iron radiators located throughout the space. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and
original all of which was in need replacement. There appears to be a natural ventilation exhaust system located under the stage, however, it does not appear to operate. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The classroom areas are provided with cast-iron radiators with decorative covers located throughout the spaces. The radiation is provided with self-contained non-electric valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The administration area is provided with cast-iron radiators with self-contained non-electric valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows however it was noted that interior spaces had been created of which no ventilation is provided.

The circulation corridors within the first level are not provided with heat. The second-level corridor was provided with cast iron radiation. In addition, radiation is also located within the stairways at each end of the circulation corridors. All radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. There was no ventilation air provided for the corridors of which is non code compliant.

The public gang toilets were provided with fin tube radiation located on the exterior wall. The fin tube radiation has slight surface soiling however was generally in good condition. Ventilation of the spaces is through operable windows as it was noted that no mechanical ventilation system was provided of which the installation is not code compliant.

Existing Plumbing Systems

Executive Summary
Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, and natural gas. The plumbing systems, while continuing to function, have served their useful life. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

The plumbing fixtures are antiquated. The majority of fixtures are non-accessible and are not water conserving. In general, the fixtures appear to have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Code. Essentially, the code does not require these fixtures to be upgraded, but where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving type fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where adequately sized for the intended new use.

Complete new water piping systems are recommended. The copper piping is in poor condition and has served its useful life. A hydrant flow test will be needed to evaluate water pressure requirements.

Existing Conditions
The Building is serviced by Municipal Sewer and Municipal Water. Rainwater from the sloped roofs is collected by gutters and downspouts that are piped to below grade and appear to connect to the Municipal drainage system.
Fixtures:
Plumbing fixtures generally are in fair condition, non-accessible and non-water conserving.

The water closets are vitreous china, mixture of both floor outlet and wall hung with flush tanks or flush valves.

Urinals are vitreous china, floor outlet with flush valves.

Lavatories are wall hung vitreous china, with hot and cold water handle faucets.

Drinking fountains are wall-hung, vitreous china.

Classrooms contain a counter mounted inaccessible stainless steel sink with separate cold and hot water faucets.

Water Systems:
The building has a 3” domestic water service with 3” water meter located in a basement storage room. Piping where exposed appears to be copper with sweat joints. The majority of the piping is uninsulated.

There is a natural gas-fired, direct vent water heater located in a basement storage room. Water heater is a Bradford-White tank type heater, with 48 gallon storage and 65,000 btuh input. The water heater is equipped with a Leonard thermostatic mixing valve. There is evidence of pipe corrosion at the connections to the heater.

Drainage Systems:
Cast iron is used for sanitary and storm drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be copper.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.

Natural Gas:
The Building is serviced by natural gas with meter located in a basement storage room. The gas piping is steel pipe with screwed joints.

Existing Fire Protection Systems
The building contains a 2-1/2” standpipe riser fed from the existing 3” domestic water service. There are 1-1/2” plugged valves provided on each floor. Standpipe is extended to the attic space and capped. The system is not supervised.

Demolition of the existing standpipe and installation of a complete new sprinkler system throughout the building meeting the requirements of NFPA-13 is recommended. A hydrant flow test will be needed to evaluate water pressure requirements.

Existing Electrical Systems

Executive Summary
The existing electrical service should be upgraded to accommodate any proposed renovations. The addition of equipment will increase the service size which may require a new pad mounted transformer. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to comply with energy codes. This new lighting system would contain occupancy sensors and energy efficient light fixtures.
Some exit signs and emergency lights appear to be in good condition. Additional emergency lighting and exit signs should be added and old units replaced.

Additional receptacles need to be added in the classrooms to accommodate all the power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. The existing system is antiquated.

The existing addressable fire alarm control panel will be reused with new ADA horn/strobes and addressable devices as required.

Existing entrance lighting should be replaced with energy efficient light fixtures and new fixtures provided at all exit/entrances without lighting.

**Existing Conditions**

The building has an incoming service of 200A, 120/240V, 1Ø, 3W via a bull dog fused disconnect switch located in the storage room. A main distribution panel is located in the main electric room and feeds remote panels throughout the building. Most remote panels are recessed in the corridors.

Interior lighting consists of surface mounted fluorescent wraparound fixtures in the cafeteria and toilets. Some recessed 2’ x 4’ fluorescent fixtures are used in the classrooms and the corridors. Gym lighting consists of pendant mounted fluorescent 2’ x 4’ fixture with wire guard. T8 type fluorescent lamps have been installed throughout the building.

Emergency lighting system consists of self-contained battery units with heads. Some units had remote heads. Exit signs were self-contained type.

Classrooms have two receptacles per room with a few exceptions.

Sound/paging system consists of Simplex time control and Aiphone paging equipment with a Norstar phone system located at the main office. Classrooms have intercom for paging.

The fire alarm system consists of a new Simplex 4100u addressable control panel with Signal Com transmitter, heat detectors in the kitchen. Smoke detectors are located in the corridors, gym, offices and cafeteria. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a transmitter located inside the building adjacent to the fire alarm control panel with an outdoor antenna. Fire alarm control panel is located in the corridor at the main entrance.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Flood lights are located on utility poles for parking area. Telephone and Cable TV services are provided overhead from utility
Floor Plans
Building Photos

Site Plan
Sullivan School

Address: 35 Dexter Street
Date of Construction: 1955, 1967, and 1969
Grades: K-5
Number of classrooms: 18 classrooms ranging in size from 780 – 835 with 1 kindergarten at 1240 square feet, plus cafetorium/gym, library, and teacher’s workrooms
Site Area: 8.57 Acres split by Harrison Street
Building Area: 38,750 Square Feet
Construction: 1 Story slab on grade, brick exterior, masonry construction flat asphalt and built-up roof roof, masonry interior partitions, aluminum windows, wood flooring with some VCT, Mix of acoustical tile ceiling and concrete ceilings, steel windows. Engineered building addition
Building Condition: Ranking 3, Interiors in generally fair conditions. Major systems are functioning but should be replaced soon.

Materials
The building has several additions. The building is concrete slab on grade with a steel frame, a concrete roof and a brick and concrete panel exterior. Interior walls are masonry. There are both asphalt and built-up roofing. There are both steel and wood windows. The cafeteria has a laminated wood frame and a wood plank roof. There is a Concrete Masonry Unit addition and a pre-engineered building addition. Interior materials are generally in fair condition. Floors are VCT and have been frequently patched. The classrooms ceiling is the underside of the painted concrete. This offers no acoustical control and means that all fixtures and conduit have to be exposed and surface mounted. Where there is acoustical tile it is in poor condition. There is a wood framed glazing system that occurs between the rooms and adjacent to the corridor door.

Accessibility
Toilet rooms do not have accessible fixtures. Door hardware is not accessible. Doors into some of the classrooms do not the space beside the door to meet accessibility requirements

Exterior
The concrete deck is in poor condition with some expose reinforcing. Glazing is single paned. The pre-engineered building is in poor condition.

Site
The site is divided in half by Dexter Street with the school sitting on the southern portion of the site. There is a small drop off area on the school side of the street with a larger parking area on the northern side. There is a playground to the east of the school and a soccer field to the east of the school.

General
The school has 18 classrooms, a library, a number of support spaces and a cafetorium. 17 are below current size standards. An 18th classroom is appropriate for a kindergarten classroom. At 22 students per classroom the school could hold 416 students. However, that leaves no room for art, music science or a computer classroom.

The plumbing and mechanical systems within the building have exceeded their serviceable life. A complete new water piping system is recommended. With overall maintenance, cleaning and calibrating of the mechanical system, a continued limited service can be achieved. But continued reuse of the mechanical systems will produce unsatisfactory results and could be extraordinarily expensive to operate.

All existing electrical panels should be replaced and new wiring provided throughout the building. The electrical service should be upgraded.
Existing HVAC Systems

Executive Summary
The Sullivan Elementary School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to scale, poor water conditions, and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. This building is a typical example of one such project. While generally speaking, most systems are operating and maintaining reasonable space temperature control, but due to the extreme antiquated nature of the mechanical systems and their gradual scaling of the various piping systems, heat transfer rates have become reduced and the overall system is taxed to a point of inefficiency being created by the slowly depreciating system. In addition, various systems have been modified which have compromised the overall ventilation system and the automatic temperature control appear compromised due to be nonexistent or failed controls and equipment. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating maintaining acceptable space temperature control however, continued operation will be at the expense of increased operating costs due to inefficiency in heat transfer and through the generally antiquated nature of the systems themselves. The systems installed within this building have exceeded their maximum serviceable life. With overall maintenance, cleaning and calibrating of the system, a continued limited service could be achieved however, unpredictable at best. At this time it is not necessary that the systems be modified to prevent a near catastrophic failure, but a continued reuse of the systems will continue to produce unsatisfactory results in terms of overall air quality and operating costs and with the current energy crisis could prove to be extraordinarily expensive to operate this building.

Existing Conditions
The powerplant is provided with a single low-pressure steam series 60 HB Smith cast iron sectional boiler with an oil fired burner. The boiler appears to be original to the building and approximately 50 years old. It was noted that there was slight corrosion on the mud drums apparently related to nipple leaks. The burner receives its supply of oil through a recirculating uninsulated copper distribution system laid on the floor which is partially in containment conduit. The lines communicate to a below ground fuel 7000 gallon oil tank which is apparently single wall construction was no leak monitoring. There was no information available as to the age of the system; however, in conversations with maintenance personnel could be in excess of 30 years old. Condensate is returned back to the boiler through a vacuum return system to a storage tank receiver with duplex discharge pumps. It appears that the entire receiver and storage system was recently installed and based on the plant capacity it appears that the condensate system is adequately sized. The boiler is vented through a welded steel breeching system which is uninsulated. The breeching terminates in a masonry chimney of which we could not determine if a flue liner is in place, however, the chimney is adequate height for the powerplant served. The combustion air system is a single intake louver located high on the wall which was not provided with motor operated dampers. The size of the louver is not in compliance with current building code requirements. The piping system appears to be schedule 40 black steel and is insulated with fiberglass insulation, however, the elbows appear to contain asbestos. Based on the existing condition and age of all equipment it does appear that the entire powerplant has reached its maximum serviceable life and is in need of replacement.

The classroom areas are provided with the exterior wall mounted classroom unit ventilators which are provided with a supply fan, filters, steam heating coil with valve control, return air, and a direct source of outside ventilation. The equipment is controlled by individual electronic thermostats located in each classroom. Exhaust ventilation from each classroom is drawn to an exhaust register in the closets which collects above the adjacent corridors ceiling in a plenum and discharges through a roof mounted exhaust fan. There was no information relative to the age or condition of the equipment on the roof but it does appear that all equipment is original all of which should be in need replacement. All classroom equipment was original and noted to have extensive surface soiling and damage and it does appear that the ventilation controls had been disconnected at one time. We cannot be clear if in fact the ventilation dampers are operating in a code compliant fashion at this time. Based on age and overall condition the equipment has reached its maximum serviceable life.
The gymnasium is provided with a single horizontal discharge air handling unit which appears to be of the 100% recirculation design which is located at the ceiling within the boiler room. The unit is provided with a supply fan, low-pressure steam heating coil with valve control, a filters section and 100% return air. Supply air is provided through a series of sidewall registers located along one wall approximately 10 feet above the floor. Return air is drawn back through a single register located approximately 8 inches above the floor. The surface of all registers was noted to have soiling and slight contamination. The ductwork is of the galvanized sheetmetal design and is uninsulated. All systems are original and approximately 50 years old and based on overall condition and age the systems have reached their maximum serviceable life and are in need of replacement.

The media center is provided with a continuous length of commercial quality fin tube radiation located along the exterior walls. All fin tube radiation is original and approximately 50 years old and was soiled in have slight surface contamination. The space is not provided with mechanical ventilation and all ventilation appears to be through the use of operable windows. Based on the present use of the space and lack of code required mechanical ventilation the entire system should be upgraded.

The circulation corridor throughout the building is provided with recessed convection heaters located in the wall. All radiation was extremely antiquated and original all of which was in need replacement. There was no ventilation air provided for the corridors of which is non code compliant.

The public gang toilets were provided with convection cast iron radiation located on the exterior wall which were covered by decorative grills. Ventilation of the spaces are through wall mounted exhaust grilles to which appear to communicate to roof mounted exhaust fans however the system does not appear to operate. Secondary exhaust fans have been installed be the exterior windows but are extremely undersized for the area served. Louver doors are provided for make up air to the space. Operable windows are also provided, however, the systems are generally ineffective in maintaining proper ventilation control and all systems should be replaced.

Existing Plumbing Systems

Executive Summary

Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, storm drain piping, and natural gas. The original building was constructed in 1960 with a building addition in 1969. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

The plumbing fixtures appear to be original however there have been some modifications in an attempt to make fixtures water conserving and accessible. The majority of fixtures are non-accessible and are not water conserving. In general, the fixtures appear to have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Code. Essentially, the code does not require these fixtures to be upgraded, but where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving type fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where buried underground and where adequately sized for the intended new use.

Complete new water piping systems are recommended. The copper piping is in poor condition and has served its useful life. A hydrant flow test will be needed to evaluate water pressure requirements.

New domestic water heating system with thermostatic mixing valve is recommended.
Existing Conditions
The Building is serviced by Municipal Sewer and Municipal Water. Rainwater from the original building flat roof areas is collected by interior rain leaders which appear to discharge to the Municipal drainage system. Rainwater from the sloped roofs is collected by gutters and downspouts that are piped to below grade and appear to connect to the Municipal drainage system. Rainwater from the sloped roof 1969 building and recent addition adjacent to the Gym are allowed to runoff to grade.

Fixtures:
Plumbing fixtures generally are in fair condition, non-accessible and non-water conserving. The water closets are predominately flush valve type with a mixture of wall hung and floor mounted vitreous china. A number of flush valves have been upgraded to battery operated sensor flushes.

Urinals are wall hung, flush valve, vitreous china. A number of flush valves have been upgraded to battery operated sensor flushes.

The original building contains common wash fountains for the boy’s and girl's toilet room located in a lobby area. Lavatories in the later addition are wall hung vitreous china, with hot and cold water handle faucets.

Electric water coolers are wall-hung type, china and are equipped with water filters.

Janitor’s sink are generally trap standard mounted, enameled cast iron sinks. Faucets are equipped with vacuum breakers.

Classrooms contain a counter mounted, inaccessible stainless steel sink with cold and hot water handle faucet.

Kitchen area fixtures are in fair condition. There is a 2-bowl pot sink connected to a grease interceptor, pass thru dishwasher, and two (2) convection ovens. Kitchen appears to be a warming/serving kitchen. There is no kitchen hood.

Water Systems:
Building has a 6” water service with two 2” water meters in parallel with 4” water distribution piping.

Piping where exposed appears to be copper with sweat joints. The piping in the mechanical room is uninsulated.

There are two (2) natural gas water heaters in the mechanical room. The original water heater is a RUUD with 55 gallon storage and 60,000 btuh input. The more recent heater is a AO Smith with 77 gallon storage and 75,000 btuh input. The water heaters are not equipped with thermostatic mixing valves.

Drainage Systems:
Cast iron is used for sanitary and storm drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be copper.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.

Natural Gas:
The Building is serviced by natural gas with meter located on the exterior. Service appears to be 1-1/4”.

The gas serves the domestic water heaters, pilots for the oil-fired heating boilers, and the kitchen equipment.

The gas piping is steel with screwed joints.
**Existing Fire Protection Systems**

The Building contains no fire protection systems.

A complete new sprinkler system throughout the building meeting the requirements of NFPA-13 is recommended. A hydrant flow test will be needed to evaluate water pressure requirements.

**Existing Electrical Systems**

**Executive Summary**

The existing electrical service should be upgraded to accommodate any proposed renovations. The addition of equipment will increase the service size which may require a new pad mounted transformer. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to comply with energy codes. This new lighting system would contain occupancy sensors and energy efficient light fixtures.

Some exit signs and emergency lights appear to be in good condition. Additional emergency lighting and exit signs should be added and old units replaced.

Additional receptacles need to be added in the classrooms to accommodate all power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. Existing system is antiquated.

The existing addressable fire alarm control panel will be reused with new ADA horn/strobes and addressable devices as required.

Existing entrance lighting should be replaced with energy efficient light fixtures and new fixtures provided at all exit/entrances without lighting.

**Existing Conditions**

The building has an incoming service of 400A, 120/240V, 1Ø, 3W via a Westinghouse fused disconnect switch located in the main electric room adjacent to boiler room. A main distribution panel is located in the main electric room and feeds remote panels throughout the building.

Interior lighting consists of surface mounted fluorescent wraparound fixtures in the classrooms, offices, kitchen and corridors. The gym/cafeteria has HID pendent low bay light fixtures. T8 type fluorescent lamps have been installed throughout the building.

Emergency lighting system consists of self-contained battery units with heads. Some units had remote heads. Exit signs were self-contained type. Classrooms have two receptacles per room with a few exceptions.

Sound/paging system consists of an Aiphone paging equipment with a Norstar phone system. Classrooms have surface speakers for paging and telephone handsets.

The fire alarm system consists of a new Simplex 4100u addressable control panel with Signal Com transmitter, heat detectors in the classrooms, toilets, and kitchen. Smoke detectors are located in the corridors. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a transmitter located inside the building adjacent to the fire alarm control panel with an outdoor antenna. Fire alarm control panel is located in the corridor at the main entrance. Fire alarm devices appear to be addressable.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Flood lights are located on utility poles for parking area. Telephone and Cable TV services are provided overhead from utility pole.
Floor Plans
Building Photos

Site Plan
Cranston Calvert School

Address: 15 Cranston Avenue
Date of Construction: 1876, altered 1935, 1976
Grades: K-5
Number of classrooms: 17 classrooms from 433 to 770 square feet
Site Area: 1 Acre
Building Area: 44,545 Square Feet
Construction: 2 stories plus basement, masonry construction with wood/steel framing, wood floors with some VCT flooring, both plaster and acoustical tile ceilings. Slate roof on Calvert, Built-up roof on Cranston.

Building Condition: Ranking 4. Interior is in poor condition. Systems are in poor condition. Mechanical systems should be replaced. Building does not meet accessibility code. All classrooms are below acceptable size standards.

Materials
The Cranston Calvert is made up of two schools with a connector joining them together. There are some differences in materials and condition between the two schools. Both have wood and steel frame with brick exterior and masonry bearing walls inside. Both have new aluminum windows that are double-glazed. Both have plaster finish on the walls and wood flooring. Much of the wood flooring is covered with resilient flooring; some of which appears to be VAT flooring and some is VCT flooring. The flooring The Cranston portion and the connector between the schools have a build-up roof and the Calvert has a slate roof. Both have acoustic tile ceilings.
Handrails at stairs are not code compliant. Stair halls need to be enclosed within a 1-hour fire rated separation.

Accessibility
Toilet rooms do not have accessible fixtures. Door hardware is not accessible. The building entrances are not accessible and there is no elevator.

Exterior
New windows have been installed. The exterior is in good condition.

Site
The site is bounded by Cranston Street to the north and Calvert Street to the south. The site is small and awkwardly shaped. There is almost no room on the site for parking. The two paved areas on the site serve as playgrounds for the students. A play structure along Cranston Street serves students as well as the neighborhood. A chain link fence surrounds the site.

General
The school has 17 classrooms as well as a library, an auditorium, and a music room. While theoretically the school could hold 374 students, the classrooms are well below current acceptable size standards. The music room, the library and the cafeteria are all in the basement.

The mechanical systems within the building have exceeded their serviceable life. There is extremely poor ventilation control, nonexistent temperature control and extremely inefficient equipment. While there are currently no system failures, there is the potential of a complete system failure resulting in total building shutdown most likely during the heating season when enormous stresses are applied to the systems.

The plumbing systems have served their useful life. Fixtures do not meet current codes for water conservation or accessibility. Complete new water piping systems are required.

All existing electrical panels should be replaced and new wiring provided throughout the building. The electrical service should be upgraded.
Executive Summary

The Cranston Calvert Elementary School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to scale, poor water conditions, and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. With the extremely antiquated nature of the existing mechanical systems and the very poor maintenance this building is a typical example of one such project. While generally speaking, most systems are operating and maintaining reasonable space temperature control, but due to the extreme antiquated nature of the mechanical systems and their gradual scaling of the various piping systems, heat transfer rates have become reduced and the overall system is taxed to a point of inefficiency being created by the slowly depreciating system. In addition, the installed systems included very poor design techniques, and by today’s standards could not even be applied in school applications. The result is a compromised application providing extremely poor ventilation control, nonexistent temperature control, and extremely inefficient equipment. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating maintaining acceptable space temperature control however, continued operation will be at the expense of increased operating costs and the potential of a complete system failure more than likely during peak heating seasons when enormous stresses are applied to the systems. The lack of backup equipment will result in a complete building shut down. The systems installed within this building have exceeded their maximum serviceable life and it is strongly recommended that the systems be completely upgraded. The continued reuse of the systems will continue to produce unsatisfactory results in terms of overall air quality and operating costs and with the current energy crisis could prove to be extraordinarily expensive to operate this building.

Existing Conditions

The powerplant is provided with a Weil McLain 10 section series 88 which is approximately 20 years old and a 25 Mills HB Smith cast iron sectional boiler approximately 50 years old each of which are provided with an oil fired burner. Each boiler generates low-pressure steam and distributes to a common header. Condensate is returned to the boiler room through an uninsulated steel receiver which is atmospherically vented and provides condensate to each boiler through individual feed pumps. The piping associated with the condensate system is uninsulated. Located within the Calvert school is a separate cast-iron condensate receiver with duplex pumps which returns condensate from that building to the condensate receiver within the boiler room. The burners receive its supply of oil through a recirculating uninsulated copper distribution system which communicates to a belowground fuel oil tank of approximately 7000 gallon capacity. There was no information available on the fuel oil storage tank but it appears to be a single wall design and is not provided with a leak detection system. The boiler is vented through a galvanized steel uninsulated breeching system which terminates in a masonry chimney of which we could not determine if a flue liner is in place, however, the chimney is adequate height for the powerplant served. Combustion air is provided through a wall mounted louver which is not provided with a motor operated damper. The louver is covered with a manually operated panel. The entire installation is non code compliant. The piping system appears to be schedule 40 black steel and is insulated with fiberglass insulation, however, the elbows appear to contain asbestos. Based on the existing condition and age of all equipment it does appear that the entire powerplant has reached its maximum serviceable life and is in need of replacement.

The auditorium is provided with cast-iron radiators located on each exterior wall throughout the space. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. There appears to be a natural ventilation exhaust system located under the stage, however, it does not appear to operate. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The lower-level is provided with horizontally mounted cast-iron radiators located above the ceiling of the space. The radiation is provided with hand valves and thermostatic traps for control. All radiation was
extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The classrooms as well as the administrative areas are provided with cast-iron radiators many of which are provided with decorative covers. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Ventilation for the entire area is through the use of operable windows as no mechanical ventilation systems were provided.

The Calvert building which includes various classroom, storage, and media center is provided with commercial quality fin tube radiation located along the exterior walls which is controlled by electric wall mounted thermostats. All fin tube radiation is original and approximately 40 years old and was soiled in have slight surface contamination. The spaces are not provided with mechanical ventilation and all ventilation appears to be through the use of operable windows. Based on the present use of the spaces and lack of code required mechanical ventilation the entire system should be upgraded.

The circulation corridors within the first level are not provided with heat. The second-level corridor was provided with one cast iron radiator. Generally speaking, all heating appears to be through the radiation located within the stairways at each end of the circulation corridors. All radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. There was no ventilation air provided for the corridors of which is non code compliant.

The public toilets are provided with a combination of horizontally mounted cast-iron radiators located at the ceiling of the space as well is wall mounted cast-iron radiation. The radiation is provided with hand valves and thermostatic traps for control. All radiation was extremely antiquated and original all of which was in need replacement. Some of the toilet areas were provided with a limited amount of mechanical exhaust however what is provided is undersized for the spaces. Generally speaking, ventilation for each area is through the use of opera

**Existing Plumbing Systems**

**Executive Summary**

Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, and natural gas. The plumbing systems while continuing to function have served their useful life. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

The plumbing fixtures are antiquated. The majority of fixtures are non-accessible and are not water conserving. In general, the fixtures appear to have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Code. Essentially, the code does not require these fixtures to be upgraded, but where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving type fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where adequately sized for the intended new use.

Complete new water piping systems are recommended. The copper piping is in poor condition and has served its useful life. A hydrant flow test will be needed to evaluate water pressure requirements. New domestic water heating system with thermostatic mixing valve is recommended.
Existing Conditions
The Building is serviced by Municipal Sewer and Municipal Water. Rainwater from the sloped roofs is collected by gutters and downspouts that are piped to below grade and appear to connect to the Municipal drainage system.

Fixtures:
Plumbing fixtures generally are in fair condition, non-accessible and non-water conserving.

The water closets are vitreous china, both floor outlet and wall hung with flush valve.

Urinals in the Calvert building are wall hung, flush valve, and vitreous china. Urinals in the Cranston building are floor outlet, flush valve, and vitreous china.

Lavatories are wall hung vitreous china, with hot and cold water handle faucets. There are some lavatories equipped with single lever faucets.

Electric water cooler in the Calvert building is wall hung, stainless steel bowl, with vinyl cover. Drinking fountains in the Cranston building are wall-hung vitreous china.

Janitor’s sink are generally trap standard mounted, enameled cast iron sinks. Some faucets are not equipped with vacuum breakers.

Classrooms contain a counter mounted inaccessible stainless steel sink with cold and hot water faucet.

Kitchen area fixtures are in fair condition. The 3-bowl pot sink is equipped with a grease interceptor. There is a pass thru dishwasher and convection oven. Kitchen appears to be a warming/serving kitchen. There is no kitchen hood.

Water Systems:
The building has two water services, a 4” domestic water service with 2” water meter and a 3” water service with 3” meter. Both services are located in the basement of the building.

Piping where exposed appears to be copper with sweat joints. The majority of the piping is uninsulated.

There are two (2) natural gas-fired water heaters in the mechanical room. The water heaters are not equipped with thermostatic mixing valves.

Drainage Systems:
Cast iron is used for sanitary and storm drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be copper.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately.

Natural Gas:
The Building is serviced by natural gas with meter located in the mechanical room. The gas piping is steel pipe with screwed joints.

Existing Fire Protection Systems
The Building contains no fire protection systems.

A complete new sprinkler system throughout the building meeting the requirements of NFPA-13 is recommended. A hydrant flow test will be needed to evaluate water pressure requirements.
Existing Electrical Systems

Executive Summary
The existing electrical service should be upgraded to accommodate any proposed renovations. The addition of equipment will increase the service size which may require a new pad mounted transformer. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to comply with energy codes. This new lighting system would contain occupancy sensors and energy efficient light fixtures.

Some exit signs and emergency lights appear to be in good condition. Additional emergency lighting and exit signs should be added and old units replaced.

Additional receptacles need to be added in the classrooms to accommodate all power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. Existing system is antiquated.

The existing addressable fire alarm control panel will be reused with new ADA horn/strobes and addressable devices as required.

Existing entrance lighting should be replaced with energy efficient light fixtures and new fixtures provided at all exit/entrances without lighting.

Existing Conditions
The building has an incoming service of 250A, 120/240V, 1Ø, 3W via a Cutler-Hammer fused disconnect switch located in the main electric room. A main distribution panel is located in the main electric room and feeds remote panels throughout the building.

Interior lighting consists of surface mounted fluorescent wraparound fixtures in the classrooms and corridors. Some recessed 2’ x 4’ fluorescent fixtures are used in the corridors, toilets, auditorium and offices. T8 type fluorescent lamps have been installed throughout the building.

Emergency lighting system consists of self-contained battery units with heads. Some units had remote heads. Exit signs were self-contained led type.

Classrooms have two receptacles per room with a few exceptions.

Sound/paging system consists of a Simplex time control and Aiphone paging system with a Norstar phone system. Classrooms have surface speakers for paging and clocks.

The fire alarm system consists of a new Simplex 4020 addressable control panel with Signal Com transmitter. Smoke detectors are located in the corridors and auditorium. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a transmitter located inside the building adjacent to the fire alarm control panel with an outdoor antenna. Fire alarm control panel is located at the entrance.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Flood lights are located on utility poles for parking area. Telephone and Cable TV services are provided overhead from utility pole.
Floor Plans
Building Photos

Site Plan
Thompson Middle School

Address: 55 Broadway
Date of Construction: 2002
Grades: designed for 6th - 8th grades
Number of classrooms: 53 classrooms, typically 900 square feet
Site Area: 1.75 Acres
Building Area: 114,000 Square Feet
Construction: new construction 4 Stories, Concrete slab on grade, Brick exterior on Steel frame, double glazed aluminum windows, Acoustical tile ceiling. Existing construction is masonry, with wood trusses and with a new slate roof. Existing wood windows were refurbished as part of the construction process.

Building Condition: Ranking 1. The new construction was completed in 2002 and the existing portion was completely renovated

Materials:
All materials are new and in very good condition. The new building is primarily slab on grade with steel frame and metal stud construction with brick exterior and membrane roof. The new gym and associated support spaces as well as the technology classrooms are below grade.

The existing building was completely gutted as part of the construction process and has all new finishes. The existing wood windows were refurbished and significant structural improvements were made. The roof of the existing building is slate.

Interior materials include VCT flooring, ceramic tile wainscoting on gypsum wallboard walls in corridors, suspended 2x4 acoustic tile ceilings. There are tectum ceiling panels in acoustically sensitive areas.

Accessibility:
The building is fully accessible.

Exterior:
The exterior is in very good condition

Site:
The site housed the city’s previous middle school. Due to its poor condition and ineffective layout, most of the facility was demolished. The most historic portion of the building was saved and renovated. New construction was built encompassing the existing building on two sides. with a new main entrance facing Broadway.

The building fills most of the site. There is a formal from lawn and entrance facing Broadway. There is a 6 car parking lot and access for service in the rear of the site. There is lawn and paved are apart from the drive for meeting and outdoor activities. Outdoor sports take place remotely from the school.

General Summary:
The building is in very good condition and fulfills its current mission well. There are specialized spaces for music, art, science, and special needs classrooms as well as standard classrooms to house a population of 720 students. There is a full-sized gym and a cafeteria with a stage. The existing building was renovated to house the administrative areas on the first floor, library on the second floor and computer lab on the third floor.

All mechanical and electrical systems are new and operating well.
Existing HVAC Systems

Executive Summary

The Thompson Middle School has undergone a recent complete replacement of its entire mechanical systems including new powerplant, pumping and distribution, terminal equipment, rooftop heating ventilating and air-conditioning equipment, and direct digital automatic temperature controls. The system makeup includes gas-fired cast iron sectional boilers generating between 140 and 200° supply water temperature based on outside air conditions. Hot water is distributed through a schedule 40 black steel piping system which is insulated with fiberglass insulation. A primary and standby end suction pump each of which are provided with variable frequency drives provide a hot water distribution to terminal equipment throughout the building including fin tube radiation, convectors, cabinet unit heaters, and classroom unit ventilators. The general academic areas are heated and ventilated only utilizing exterior wall mounted louvers for ventilation air to each unit ventilator. The administration area, library, and interior academic areas are served by two individual rooftop heating ventilating and air-conditioning units each of which are provided with direct expansion cooling. A series of variable air volume boxes are located above the ceiling each of which are provided with hot water heating coils controlling the flow and temperature of air to each occupied space which are controlled by wall mounted electronic sensors. The gymnasium is provided with a single air handling unit located on in mezzanine mechanical space which distributes air to the space through and overhead distribution system. The system design includes economizer relief to allow higher amounts of outside air to be introduced when outside temperatures permit. A comparative assessment of the installed systems to other school mechanical systems suggests the installation to be average in terms of quality and concept which will achieve code required ventilation air and maintain reasonable operating costs.

The system was put into operation in 2002 and has received above average maintenance over its recent occupied years. Automatic temperature control and ventilation air control throughout the entire building is very good with no problematic areas indicated. Operation of the powerplant is consistent with the design in place and it does appear that all equipment is sized adequately to maintain comfortable temperature and ventilation control on design days. Maintenance of all mechanical systems is considered excellent with filters changed approximately (4) times per year as well as monitoring drive belts on exhaust fans and lubrication of all equipment. There were no indications of leaks within the system and it does appear that as problems arise they are immediately addressed to prevent an accelerated systemic failure. It does appear that the operating costs of the mechanical systems are consistent with the design in place and the use of the automatic temperature control system. Operating personnel knowledge of the system is considered excellent with an understanding of the automatic control system as well as maintains a broad knowledge in the use of all controls and mechanical systems. If the same level of attention is applied to this building in future operating years, it is conceivable that the installed systems could easily perform satisfactorily in excess of 30 years maintaining excellent temperature and ventilation control at a very reasonable cost. No recommendations for improvement are made.

Existing Plumbing Systems

Executive Summary:

Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, storm drain piping, and natural gas. The school was occupied in 2002.

In general, the fixtures are in good condition and meet current codes for accessibility and water conservation.

Drainage piping is in good condition. Sanitary and storm drainage piping is cast iron. Waste piping is copper.
Domestic water service is 4” in size. The service is protected with a 3” reduced pressure backflow preventer. The backflow preventer was leaking at time of inspection, inner parts should be replaced. There is a duplex booster pump system located in the boiler room. Overall systems are in good condition.

Domestic water system consists of two (2) high efficiency gas fired A.O. Smith tank type water heaters. A thermostatic mixing is provided to control water temperature. The existing domestic water heating system is in good condition.

The water heaters are condensing type. Condensate from the venting system appears to be connected directly to the building drain system. The condensate is acidic and should be neutralized prior to discharging to building drain.

Existing Fire Protection Systems

Executive Summary:

The building is serviced by an 8” fire service and includes a 40 hp fire pump rated at 1,000 GPM at 50 PSI boost, 8” Watts #709 backflow preventer and wet alarm valve. The building is fully sprinklered and includes standpipes in all egress stairways. Systems are in good condition.

Existing Electrical Systems

Executive Summary

The existing electrical service and equipment is in good condition. The service meter is indicating a demand of approximately 30% of capacity. The service and equipment does not require any foreseeable upgrade. The surge counter indicated 43 hits which indicates there may be a problem on the utility company’s incoming power.

The lighting system is in good condition. The system does not require any upgrades.

We would recommend group re-lamping of the gym metal halide fixtures.

Exit signs and emergency lights are in good condition. The coverage appears adequate.

The quantity of wiring devices in the classrooms and administration area are adequate. We did not witness deficiencies during the walkthrough.

The sound/paging system is state of the art system. Existing system is in good condition.

The existing addressable fire alarm system is in good condition and is compliant with local and ADA codes. The existing panel (Simplex 4100) is absolute. The new panel is a 4100U. Parts for the existing panel are still available.
Building Photos

Site
Rogers High School

Address: 15 Wickham Road  
Date of Construction: 1957  
Grades: grades 9-12  
Number of classrooms: 60 classrooms  
Site Area: 40 Acres  
Building Area: 164,000 Square Feet  
Construction: The building is brick and concrete on slab on grade with a steel frame and concrete block walls. The building has a membrane roof. It is primarily 1 story with several 2 story portions

Building Condition: Ranking 2/3. The building is structurally sound. Mechanical systems are nearing the end of their useful life. The building is not fully accessible.

Materials:  
Interior materials are generally in good to fair condition. Interior materials include VCT on the floor, CMU walls and acoustic tile ceilings. Acoustical ceilings are typically 2x4 tiles in classrooms with 1x1 tiles in corridor areas. The ceiling outside of the gym has tectum panel ceilings. There is some localized staining of ceiling tiles and some of the classroom ceiling tiles are nearing the end of their useful life. There are corridor areas with vinyl base need repair. Significant portions of the building have been recently painted, Most of the building’s original VAT has been replaced with new VCT. There is still VAT in a few, low utilization areas such as in the corridor behind the auditorium. There is terrazzo flooring in the cafeteria. There is a wood floor in the gym and the gym has bleacher seating for approximately 500 people. There ceiling in the vocational arts wing is primarily exposed metal deck ceilings and needs painting.

Exterior:  
The exteriors of the building are generally in good condition. New aluminum and glass curtain walls were installed in 1995 and all windows are now double glazed. Most of the roofs have been recently replaced. The metal fascia in some localized areas needs painting.

Accessibility:  
Portions of the building are not fully accessible. Dressing rooms on the second floor of the auditorium building are not accessible. The area use for ROTC is not accessible. There are 2 story sections which do not have internal accessibility but are accessible from the exterior. A exterior covered ramp connecting 2 portions of the building is steeper than allowable by code for accessibility. Most door hardware and most doorways are accessible but some storage areas and support spaces do not have accessible hardware and are not of required width. Several toilettrooms were made accessible during the 1995 renovations.

Site:  
In addition to the building, the site contains a football field and track and 6 tennis courts. There is parking for over 200 cars. The high school shares its site with a stand alone state maintained vocational education building. That building is used by the school for most of its vocational programs.

General Summary:  
The building is in fair condition. There are 60 classrooms including science labs. There are also separate cafeteria, auditorium and gymnasium facilities. The school is primarily one story with a second story over portions of the building. The building is divided into several components with enclosed corridors connecting most of the facilities together. There is an covered walkway connecting the science wing with the other portions of the building. Three “fingers” of the building were designed as double height vocational space with a portion of each space containing mezzanines. While vocational programs still take place within those spaces. Portions of these vocational area are now used by the Facilities Department, by the Food Service Department and by ROTC.
Most of the interiors have been well maintained and most of the exteriors are in good condition. There are portions of the building, specifically the vocational wing and the areas around the auditorium that have not been as well maintained. The vocational wing including the ROTC rooms has been underutilized in recent years and has not been as well maintained. The area behind the auditorium is in poor condition. Flooring is poor condition, there is VAT in areas behind the auditorium. Exposed metal decking and wall need painting in the ROTC area and in portions of the vocational wing. These areas need finish upgrades.

New energy efficient fixture have been recently installed through most of the building. The existing electrical service should be upgraded to eliminate high voltage within the building. The 2400volt services can only be operated by licensed electricians. The addition of equipment will increase the service size which would require a new pad mounted transformer and switchgear.

The mechanical systems within the building have exceeded their useful life and should be replaced soon. While they continue to function adequately, their energy efficiency continuously drops.

There is no fire suppression system within the building. Plumbing systems have exceeded their useful life and any significant renovation should include replacement of plumbing systems and fixtures.

### Existing HVAC Systems

**Executive Summary**

The Rogers High School has received average maintenance of the HVAC systems over its occupied years. Even with adequate maintenance, through normal operation systems do gradually deteriorate due to scale, poor water conditions, and lack of preventive maintenance. Systems will gradually deteriorate to a point of exceeding their maximum serviceable life. This building is a typical example of one such project. While generally speaking, most systems are operating and maintaining reasonable space temperature control, but due to the extreme antiquated nature of the mechanical systems and their gradual scaling of the various piping systems, heat transfer rates have become reduced and the overall system is taxed to a point of inefficiency being created by the slowly depreciating system. In addition, various systems have been modified which have compromised the overall ventilation system and the automatic temperature control appear compromised due to be nonexistent or failed controls and equipment. While there are no catastrophic failures obvious with the present systems, the systems could continuously be repaired and modified on a sectional basis that will keep the systems operating and maintaining acceptable space temperature control however, continued operation will be at the expense of increased operating costs due to inefficiency in heat transfer and through the generally antiquated nature of the systems themselves. The systems installed within this building have exceeded their maximum serviceable life. With overall maintenance, cleaning and calibrating of the system, a continued limited service could be achieved however, unpredictable at best. The overall poor condition of the powerplant does suggest that a major failure is inevitable however unpredictable as far as timing. Typically major failures will occur during high stress periods and also during marginal heating seasons with a limited amount of heating requirement. A continued reuse of the powerplant will not accelerate the failure rate, however, will continue to produce unpredictable and unsatisfactory results with accelerating operating costs and with the current energy crisis could prove to be extraordinarily expensive to operate this building.

### Existing Conditions

The powerplant is provided with three low-pressure steam Fitzgibbons water tube boilers each with dual oil fired burners operating in a low-high-low firing condition. Steam pressure for the boilers is controlled by boiler mounted pressure stats and each boiler is manually controlled on a need for heat and maintenance personnel. Each boiler appears to be original to the building and approximately 60 years old. It was noted that there was surface corrosion on and around the entire boiler surface much of which was re-
lated to its general age. Boiler number one has been completely removed from service and is not capable operating. The remaining two boilers provide adequate steam heating to the entire complex. The present sizing of each boiler suggests that one boiler is capable of handling the entire building with the second boiler as a standby. Each burner receives its supply of number two fuel oil through a recirculating uninsulated steel supply and return piping system which is suspended from the ceiling of the boiler room. The lines communicate to a below ground 9000 gallon oil tank which is apparently double wall construction with leak monitoring. In conversations with maintenance personnel the underground fuel oil tank with associated piping and controls appears to be approximately 10 years old. Condensate is returned back to the boiler through various condensate receivers located throughout the campus to a central storage tank receiver located on the mezzanine level within the boiler room. It appears that the entire receiver and storage system is original and approximately 60 years old and it’s condition was noted to be consistent with its age. In conversations with maintenance personnel it was indicated that the city water fill valve had operated incorrectly for many years allowing city water to be introduced into the system untreated. This would have resulted in extraordinarily high operating costs as well as the introduction of oxygen which will rapidly deprecate the piping within the system. This is also evidenced by the amount of pipe perforation resulting in leaks throughout the crawl spaces. The condensate receiver discharges to a boiler feed water system which is located at the floor of the boiler room. This feed water system consists of a storage tank and three discharge pumps which feed each of the operating boilers. The third pump acts as a standby to the two operating pumps. The feed water system along with the condensate return system has extensive surface soiling, surface corrosion particularly around the pumps and piping and does suggest that the systems have reached their maximum serviceable life. Adjacent to the condensate receiver on the mezzanine is what appears to be a condensate deaerator which has been completely terminated from service. Each boiler is connected to a common blowdown system which includes an uninsulated discharge line from each boiler which combines to a common uninsulated receiver tank which is provided with city water controls for cooling. The city water controls have been disconnected and the condensate is presently allowed to discharge directly to sanitary uncontrolled. This condition is non-code compliant and is in violation of temperature discharge limitations. The boiler combustion gases are vented through a welded steel breeching system which is insulated with either calcium silicate or asbestos with a hard surface painted finish. The breeching terminates in a masonry chimney of which we could not determine if a flue liner is in place. The chimney is not of adequate height for the powerplant served and discharges combustion gases which could contaminate the building and adjacent site. The combustion air system is a single intake louver located high on the wall which was not provided with motor operated dampers. The size of the louver is not in compliance with current building code requirements. All steam and condensate piping appears to be schedule 40 black steel and is insulated with fiberglass insulation, however, the elbows appear to contain asbestos. The insulation on the piping laterals is extensively damaged and also appears to be original and approximately 60 years old. Based on the existing condition and age of all equipment it does appear that the entire powerplant has reached its maximum serviceable life and is in need of replacement.

Steam and condensate is distributed to the entire campus through a network of tunnels and crawlspaces under the individual buildings. The piping throughout all areas is schedule 40 black steel and is provided with fiberglass insulation with an all service jacket. To a large degree the insulation on the piping is severely damaged and many sections of piping are not insulated. The crawl space and tunnels are provided with dirt floors with no vapor barrier. The crawl spaces are ventilated by natural means through areaways with wall louvers, many of which have been covered over on the interior therefore compromising the ventilation to the space. Also located in the tunnels and crawlspaces for each building where remote condensate return systems which include a storage tank and pumps which return condensate from each building to the central condensate system within the boiler room. In one location the condensate receiver tank system was provided with a single pump with no backup. In the event of a failure in this pump condensate will not be returned and the building will not heat adequately. All piping and condensate return systems had extensive surface contamination and soiling; many sections of piping were perforated and have been leaking, and all systems have reached their maximum serviceable life and are in need replacement.
The classroom areas are provided with exterior wall mounted fin tube radiation which are provided with valve control from a wall mounted pneumatic thermostat. Exhaust ventilation is generally provided from each classroom which is drawn through an exhaust register which collects above the adjacent corridors ceiling in a sheet-metal exhaust duct and discharges through roof mounted exhaust fans. There was no information relative to the age of the equipment on the roof but it does appear that all roof mounted exhaust fans were replaced within the last 10 years and all ductwork and registers are original and approximately 60 years old. The classroom fin tube radiation appears to have been upgraded over the years in various areas, however, the majority of all equipment was noted to have surface soiling and damage. Based on age and overall condition the equipment has reached its maximum serviceable life. The science classroom labs are provided with a central exhaust purge system which includes exhaust registers in the ceiling and roof mounted exhaust fans. This work was recently completed and was in very good condition. The science labs are also provided with a biological fume hood which also is provided with a separate roof mounted exhaust fan all of which was noted to be in very good condition and operating satisfactorily. All of the classrooms including the science labs are ventilated by natural means through the use of operable windows, and although this condition is code compliant, is generally not recommended in current classroom design. In a number of the classrooms which have undergone recent renovations the exhaust registers were not extended from the existing ceiling to the new ceiling and are presently ventilating the ceiling space above the classroom and not the classroom itself.

The gymnasium is provided with multiple horizontal discharge air handling units which are located above the ceiling within the gymnasium itself. The units are provided with a supply fan, low-pressure steam heating coil with valve control, a filter section with return air and outside air. Supply air is provided through a series of sidewall duct mounted registers located along two exterior walls over the mezzanines as well as through various supply diffusers located under the air handling units at the ceiling. The surface of all registers was noted to have soiling and surface contamination. The supply ductwork is of the galvanized sheetmetal design and is uninsulated. Also located over each mezzanine are (3) roof mounted exhaust fans which vent directly without ductwork over each mezzanine. All systems were operating and appeared to be maintaining minimum ventilation air control. Also located within the gymnasium are transfer registers which communicate with the adjacent locker rooms to provide make up air. The locker rooms were provided with a minimal amount of heating air through a separate heating unit which draws air directly from the gymnasium as a source of supply and ventilation to the lockers spaces. This condition is completely non-code compliant since no outside air is presently provided to the space. The exhaust systems have been modified in the boys locker area which presently include transfer grilles between the spaces for the circulation of airflow all of which is non-code compliant. All systems are original and approximately 60 years old and based on overall condition and age the systems have reached their maximum serviceable life and are in need of replacement.

The media center is provided with a continuous length of commercial quality fin tube radiation located along the exterior walls. All fin tube radiation was noted to have been replaced recently and appears to be in good condition with only slight soiling. The space is not provided with mechanical ventilation and all ventilation appears to be through the use of operable windows. Located along the interior wall are two individual exhaust registers which combine in an exhaust system above the corridor ceiling to a single roof mounted exhaust fan. The systems were noted to be in average condition and operating, however, based on the present use of the space and lack of code required mechanical ventilation the entire system should be upgraded.

The auditorium is provided with multiple horizontal discharge air handling units which are located above the ceiling within the auditorium itself. The units are provided with a supply fan, low-pressure steam heating coil with valve control, a filter section with return air and outside air. Supply air is provided through a series of ceiling mounted supply diffusers located under the air handling units at the ceiling. The supply ductwork is of the galvanized sheetmetal design and is uninsulated. The surface of all registers was noted to have soiling and surface contamination. Based on the population of the space and a number of diffusers installed it does appear that the system is undersized based on current building code requirements.
The auditorium is not provided with mechanical air-conditioning. All systems are original and approximately 60 years old and based on overall condition and age the systems have reached their maximum serviceable life and are in need of replacement.

The cafeteria mechanical system could not be verified as to its location or condition; however, the installation suggests three horizontal discharge air handling units which are located above the ceiling over the kitchen. The units are provided with a supply fan, low-pressure steam heating coil with valve control, a filter section with return air and outside air. Supply air is provided through a single ceiling mounted supply diffuser located after the discharge of the air handling units at the ceiling. The supply ductwork is of the galvanized sheetmetal design and is uninsulated. The surface of all registers was noted to have soiling and surface contamination. Based on the population of the space and the size of diffusers installed it does appear that the system is adequately providing ventilation air based on current building code requirements. Although the systems are operating they are original and approximately 60 years old and based on overall condition and age the systems have reached their maximum serviceable life and are in need of replacement.

The kitchen is heated by two horizontal discharge unit heaters suspended from the ceiling. The unit heaters appear original which tie into the existing steam and condensate system located in the crawl space under the kitchen. The unit heaters were noted have surface soiling and contamination and are very antiquated. The cooking area is provided with two separate kitchen exhaust hoods. The first hood is a short cycle make up air hood which is provided with cleanable cartridge filters of which were noted to be soiled and in need of cleaning, and vaportight incandescent lighting. There was no fire protection system installed. The hood is ducted to a roof top combination exhaust system and make up air unit which appears to have been installed within the last 10 years. This hood was noted to be in good condition and operating as intended however in need of cleaning. The second hood is a standard non-make up type hood which is provided with cleanable cartridge filters of which were noted to be soiled and in need of cleaning. There was no vaportight incandescent lighting or fire protection system installed. The hood is ducted to a roof top exhaust fan which appears to have been installed within the last 10 years. This hood was noted to be in good condition and operating as intended, however, in need of cleaning. Both hoods are of the proper plan dimension and mounting height for the cooking area served. The lack of make up air provided to the entire kitchen area could result in deficient exhaust air flows with the second exhaust hood. Also provided within the kitchen is a stainless steel exhaust hood which is located over the dishwasher. It appears that this hood is energized through a context which at the dishwasher which starts a roof mounted exhaust fan during dishwashing operations. The hood and exhaust fan also appear to be approximately 10 years old and do appear to operate satisfactorily and are in good condition. Make up air for this hood appears to be drawn from openings between the cafeteria and the kitchen and is adequate to maintain proper exhaust air quantities.

The circulation corridors throughout the building are provided with ceiling suspended vertical discharge unit heaters with a supply diffuser. All heaters were extremely antiquated and original all of which were in need replacement. There was no mechanical ventilation air provided for the corridors however many of the corridors which had exterior walls were provided with operable windows maintaining natural ventilation of which is code compliant but not recommended in this application. In a recently renovated corridors in the 1994 modification wall mounted fin tube radiation was provided of which was noted to be in average condition with slight soiling and damage. The ventilation, however, was typical to all of the corridors.

The public gang toilets were provided with fin tube radiation located on the exterior wall. The radiation was noted to have surface soiling and damage and generally in need of replacement. Ventilation of the spaces are through ceiling mounted exhaust grilles which communicate to roof mounted exhaust fans and the systems do appear to operate. Louver doors are provided for make up air to the space as well as operable windows which assist in overall space ventilation, however, the systems are generally ineffective due to their undersized nature in maintaining proper ventilation control and all systems should be replaced.
Existing Plumbing Systems

Executive Summary

Presently, the Plumbing Systems serving the building are cold water, hot water, sanitary waste and vent system, storm drain piping, and natural gas. The school is more than 50 years in age and the plumbing systems while continuing to function have served their useful life. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force a plumbing upgrade.

In general, the fixtures have served their useful life and do not meet current codes for accessibility and water conservation. Current Access Code requires accessible fixtures wherever plumbing is provided. In terms of the water conservation fixtures, their use is governed by the provisions of the Plumbing and Building Codes. Essentially, the code does not require these fixtures to be upgraded, but, where new fixtures are installed, as may be required by other codes or concerns, the new fixtures need to be water conserving types of fixtures. All new fixtures are recommended.

In general, the drainage piping can be reused where buried underground and where adequately sized for the intended new use.

Complete new water piping systems is recommended. The copper piping and valving is in poor condition and has served its useful life.

The existing domestic water heating system is in good condition and should remain however the installation of a thermostatic mixing valve is recommended to prevent scalding.

A dedicated water system protected by a backflow preventer to prevent cross connections is recommended for the science classroom area. A thermostatic mixing valve is recommended to supply tepid water to emergency shower fixtures. A neutralizing system is recommended for the science waste.

Existing Conditions

The Building is serviced by Municipal Sewer and Municipal Water. Rain water from roof areas is collected by interior rain leaders which appear to discharge to the Municipal drainage system.

Fixtures:

Plumbing fixtures generally appear to be original to the building and are in fair condition, antiquated, non-accessible and non-water conserving.

Predominantly, the water closets are flush valve type, wall mounted vitreous china.

Urinals are floor mounted pedestals, flush valve, vitreous china.

Lavatories are wall hung vitreous china, with hot and cold water handle faucets, non-water conserving.

Drinking fountains are wall hung type, and stainless steel.

Janitor’s sink are generally trap standard mounted, enameled cast iron sinks. Faucets do not have vacuum breakers.

Staff areas contain counter mounted inaccessible stainless steel sinks with hot and cold water.

Locker room shower fixtures are surface mounted with hot and cold water controls. Fixtures are antiquated and several are damaged.
Existing kitchen area appears to be a warming kitchen. Fixtures are in good condition. The 3-bowl pot sink and dishwasher are connected to a grease interceptor. The grease interceptor is located in the basement below.

The science classrooms consist of island type solid surface sinks with faucets equipped with vacuum breakers. Student sinks are fed with cold water and natural gas. Demonstration sink is supplied with hot water, cold water, and natural gas. The natural gas is controlled by an emergency gas solenoid shutoff valve. The water supply is not protected by a backflow preventer. Classrooms are equipped with a combination emergency shower and eyewash which is fed only by cold water. Science waste piping appears to be schedule 40 PVC with cement solvent joints. Waste from classrooms is not neutralized.

**Water Systems:**

Building has a 6” water service with a 4” water meter.

There is a 6” iron pipe distribution system throughout the building crawl spaces. The 6” distribution piping feeds yard fire hydrants. Piping feeding the plumbing fixtures, where exposed, appears to be copper with sweat joints. The piping for the most part is insulated. Because of its age, generally copper pipe is assumed to have a 50 year life; a major renovation should include new copper piping.

Domestic water heating for the majority of the building is provided by two A.O. Smith gas fired water heaters with 300,000 btuh input each. There are two (2) 200 gallon hot water storage tanks. Hot water is stored at 120°F.

There is no thermostatic mixing valve to control water temperature.

**Drainage Systems:**

Cast iron is used for sanitary and storm drainage. Where visible, the cast iron pipe appears to be in fair condition. Smaller pipe sizes appear to be a combination of galvanized and copper piping.

Generally the cast iron could be reused even in a major renovation provided it is sized appropriately. The galvanized waste piping should be removed.

**Natural Gas:**

The Building is serviced by natural gas. The meter is located in the basement below the kitchen.

The existing gas piping is steel with threaded joints. Gas supplies the kitchen, science classrooms, domestic water heater and heating equipment. Service appears to be large enough to support expansion.

**Existing Fire Protection Systems:**

 Portions of the existing building are protected by automatic sprinkler systems. The shop areas and portion of the auditorium building is protected. The systems are fed from the 6” distribution main run through the building crawl spaces and consist of an unsupervised shutoff valve and alarm valve. There are no backflow preventers installed to protect the domestic water supply.

The areas protected by the existing systems are limited and incomplete. A complete new sprinkler system throughout the building meeting the requirements of NFPA-13 is recommended. A hydrant flow test will be needed to evaluate water pressure requirements.
Existing Electrical Systems

Executive Summary

The existing electrical service should be upgraded to eliminate high voltage within the building. The 2400volt services can only be operated by licensed electricians. The addition of equipment will increase the service size which would require a new pad mounted transformer and switchgear. All existing panels need to be replaced and new wiring provided throughout the building.

A complete upgraded lighting system needs to be provided to accommodate proposed renovations. This new lighting system would contain occupancy sensors and energy efficient light fixtures. The majority of existing fixtures are energy efficient but have a substantial amount of glare. The corridors have been upgraded recently with new ceilings and light fixtures.

Exit signs and emergency lights appear to be adequate for code compliance. The system would be replaced in areas being renovated.

We recommend a new emergency generator in lieu of battery units due to the size of the facility.

Additional receptacles need to be added in the classrooms and administration areas to accommodate all power requirements.

The sound/paging system should be replaced with a new state of the art system with features to accommodate the needs of the school. The telephone system is in good condition and can accommodate future/renovations/additions.

The existing addressable fire alarm system can be expanded to comply with the latest local and ADA codes. The system will consist of ADA horn/strobes and addressable devices.

Existing site lighting should be replaced with energy efficient metal halide cutoff light fixtures. New fixtures should be provided at all exit/entrances without lighting.

Existing Conditions

The building has several incoming services rated at 2400volts, 3phase, 3 wire via a Power Corp. 4.16KV fused disconnect switch located in the main electric rooms. A dry type transformer and main distribution switchboard is located in the main electric rooms and feeds remote panels throughout the building. The 2400volt switches and dry type transformers have been recently installed.

Interior lighting consists of surface/pendant mounted fluorescent wraparound fixtures in most areas. Recessed 2’ x 4’ fluorescent fixtures are used in the corridors. The fixtures have been recently installed in corridors. The gym consists of high bay fluorescent industrial fixtures. T8 type fluorescent lamps have been installed throughout the building.

Emergency lighting system consists of self-contained battery units with heads. Some units had remote heads.

Classrooms have one receptacle per wall with some exceptions. Additional receptacles should be provided.

Sound/paging system consists of a Norstar phone system. Classrooms have a telephone handset. The system is in good condition.

The fire alarm system consists of a Simplex 4100 addressable control panel. Smoke detectors are located in the corridors. Pull stations are located at the entrances with horn/strobe units in the corridors. The fire department is notified of an alarm via a radio master located outside the building. The system does not have full detection.

Exterior lighting consists of incandescent surface fixture in the canopy at the main entrance. Cobra head lights are located on light poles for parking area.
Floor Plans
Newport Elementary School Study
Newport, Rhode Island
Rogers High School

Building Photos

Site Plan
Newport Schools
Life & Safety Code Evaluations

Sullivan School

Coggeshall School

Triplett School

Underwood School

Carey School

Cranston/Calvert School

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Report Basis & Project Cost Summary

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Architecture · Engineering · Interior Design
Newport Public Schools Existing Conditions Report - Executive Summary
RGB #5785-3

Nov 2008

Report Basis and Code Summary

The Robinson Green Beretta Corporation (RGB) was selected in September of 2008 to conduct an existing conditions study of six of the public school facilities for Newport Public Schools. The resulting study would be used to determine the approximate cost of modifying the schools in response to the deficiencies found by the Fire Marshal. The study is to review the current condition of each school in regards to conformance with current fire and building codes. The main purpose of the study is to develop an outline summary of work at all six schools that would be necessary to bring all schools into compliance with current life safety codes. The following is the list of the six schools in the study as well as their locations:

- Triplett School- 437 Broadway, Newport RI
- Coggeshall School- 139 Van Zandt Avenue, Newport RI
- Underwood School- 90 Harrison Street, Newport RI
- Carey School- 32 Narragansett Avenue, Newport RI
- Sullivan School- 35 Dexter Street, Newport RI
- Cranston Calvert School- 15 Cranston Avenue, Newport RI

All six schools are reviewed in the following reports based on the following Life Safety Code(s):

Life Safety Code:
The following Codes comprise the applicable Life Safety and Fire Codes that are currently enforced by the State of Rhode Island and local authorities having jurisdiction:

- Rhode Island State Building Code (RISBC) SBC-1 IBC 2006 2004
  RI Blue Page Amendments dated 01 July 2004
- Rhode Island Rehabilitation Code SRC-1 2002
- Rhode Island Fire Safety Code 2004
- Rhode Island Fire Laws (R.I.G.L.) Title 23, chapters 28.1 – 28.39 et seq. are incorporated into the RIFSC. Present fire laws where adopted 7 July 2003 and updated 30 June 2004
- RI Fire Safety Code Section 7 creates the RI Uniform Fire Code (RIUFC)
  1) Requires NFPA 1 2003 plus all Referenced Publications as amended by Section 7 of the RIUFC.
  2) RIUFC Chapter 13.3 Automatic Sprinkler Systems per NFPA 13 2002
RI Fire Safety Code Section 8 creates the RI Life Safety Code (RILSC)

1) Requires NFPA 101 2003 plus all Referenced Publications as amended by Section 8 of the RIUFC.
2) RILSC Chapter 15 Existing Educational Occupancies

RI State Building Code SBC-13 “Standards for Existing Schools” 1997

Currently the Rhode Island State Building Code (RISBC) IBC 2006 is not enforced as a retroactive code. Existing buildings that were currently in compliance with code when they were constructed and have been previously issued a certificate of occupancy are allowed to continue at their current use as constructed until they undergo an addition, change in use or renovation. RISBC Section 23-27.3-106.1 States that if the cost of the renovation or repairs exceeds 50% of the value of the structure, the building code’s requirements for flood resistant construction shall apply.

RISBC Section 23-27.3-106.3 states that if the cost of the renovation or repairs is between 25% and 50% of the value of the structure that the building official shall determine to what degree the work will have to comply with the Rehabilitation Code and Fire Code for Existing Buildings. Section 23-27.3-106.4 indicates if the work is below 25% that the work will comply with the provisions of the Rehabilitation Code and Fire Code for Existing Buildings allowing repair to the previous conditions as long as the repairs do not make the building less safe.

The Rhode Island Rehabilitation Code (SRC-1) creates a method for renovating and repairing existing buildings while maintaining their current use while not forcing them to become compliant with the building code requirements for new construction. Section 101.1.1 excludes the “educational occupancy” use from the provisions of SRC-1, and as such the Rehabilitation Code would not apply to an existing school.

The current Rhode Island Fire Laws mandates the Rhode Island Uniform Fire Code (RIUFC), NFPA 1 2006 & Rhode Island Life Safety Code (RILSC), NFPA 101 2003. These 2 codes are adopted as part of the Rhode Island Fire Safety Code. It is stated in the introduction of the Rhode Island Uniform Fire Code (RIUFC), Chapter 7 and the Rhode Island Life Safety Code (RILSC), Chapter 8, that all existing buildings, even if subject to the provisions of the Rehabilitation Code, must also comply with the existing occupancy provisions of the RIUFC / RILSC (NFPA 1 and NFPA 101). Essentially all existing buildings must now comply with the provisions of the Rhode Island Fire Safety Code as indicated above, making these codes a retroactive code for existing buildings.

The RI State Building Code SBC-13 “Standards for Existing Schools” requires that all schools be inspected by the local building official prior to August 1 of each year, and that any work be made in conformance with Section 23-27.3-102 “Ordinary Repairs”. SBC-13 also requires that a yearly “Repair log” be maintained by each school to be reviewed by the local building official. With the exception of the replacement of broken safety glazing, SBC-13 does not require that existing schools be brought up to the standards for new construction.

For the purposes of this report the Rhode Island Fire Safety Code is viewed as the minimum code standards that an existing facility must comply with in order to “meet code”. As such all facilities were reviewed for conformance in meeting these “minimum standards” and all “Life Safety Code” recommendations proposed in the following reports are based on bringing facilities into compliance with these standards.
Building Conditions Life Safety Project Cost Summary:

The Triplett School has a total of $748,899.24 worth of items that are considered Life Safety Code compliance deficiencies. This cost includes adding a sprinkler system to the lower level. If the building were to be fully sprinklered it would alleviate some of the other code issues documented and would have a total of $759,779 worth of items that are considered Life Safety Code compliance deficiencies. The two figures represent approximately 17% of the insured cost of the school at $4,476,741.

The Coggeshall School has a total of $1,212,951.76 worth of items that are considered Life Safety Code compliance deficiencies. This cost includes adding a sprinkler system to the lower level. If the building were to be fully sprinklered it would alleviate some of the other code issues documented and would have a total of $1,005,154.04 worth of items that are considered Life Safety Code compliance deficiencies. The two figures represent approximately 17% and 16% of the insured cost of the school at $6,160,132 respectively.

The Underwood School has a total of $478,310 worth of items that are considered Life Safety Code compliance deficiencies. This figure represents approximately 17.5% of the insured cost of the school at $2,719,099.

The Carey School has a total of $638,704.36 worth of items that are considered Life Safety Code compliance deficiencies. This cost includes adding a sprinkler system to the lower level. If the building were to be fully sprinklered it would alleviate some of the other code issues documented and would have a total of $853,271.80 worth of items that are considered Life Safety Code compliance deficiencies. The two figures represent approximately 13% and 17% of the insured cost of the school at $5,041,149 respectively.

The Sullivan School has a total of $1,397,498.88 worth of items that are considered Life Safety Code compliance deficiencies. This cost does not include adding a sprinkler system. If the building were to be fully sprinklered it would alleviate some of the other code issues documented and would have a total of $1,406,147.66 worth of items that are considered Life Safety Code compliance deficiencies. The two figures represent approximately 21% of the insured cost of the school at $6,604,043.

The Cranston Calvert School has a total of $807,897.96 worth of items that are considered Life Safety Code compliance deficiencies. This cost includes adding a sprinkler system to the lower level. If the building were to be fully sprinklered it would alleviate some of the other code issues documented and would have a total of $1,015,185.58 worth of items that are considered Life Safety Code compliance deficiencies. The two figures represent approximately 11% and 13% of the insured cost of the school at $7,665,191 respectively.

The total cost between all six schools is estimated to be $5,284,262.20 with sprinkling only the basements of all the buildings where required. The total cost of all six schools with full sprinkler systems is estimated to be $5,517,848.08.

*It should be noted that all estimates have been estimated in 2009 dollars and include general conditions as well as soft costs within the individual line items. Soft costs include contractor overhead, profit, design fees and 10% construction contingency. Projects started after 2009 need to factor an additional cost for Escalation @ 6% per year based on current RI market escalation.*
A. Executive Summary

The Triplett School was constructed in 1960, and is a two story 24,103 +/- gsf building constructed of brick on a steel frame. The building has a basement that houses the cafeteria & assembly space. The building is located behind the Newport School administrative office on a site undersized for an elementary school. The building currently functions as a Adult Education building and houses the Newport Schools Administration offices. Under Life Safety Code Section 6.1.3 defines an educational occupancy as a building where use for educational purposes through the twelfth grade by six or more persons for more than four hours a day or more than twelve hours per week. All other uses would classify this building (adult education) as Business occupancy per section 14.1.1.2. This building is being evaluated against the Existing Educational occupancy for reuse as a school. The current estimated insured / replacement value of the facility is $4,476,742.

The Triplett School has the following items regarding Life Safety, Fire Codes & Accessibility, that are considered **highest priority** and require immediate attention. The approximate cost to correct this work is estimated at $748,899.24 including sprinklering the basement. If the building were to have a full sprinkler system, some code items would be alleviated and the approximate cost would be $759,779.

**Life Safety Issues**

- Corridor walls are compromised by ductwork penetration and do not provide the minimal ½ hour rating or smoke resistance required by code.
- Many corridor doors are missing closers and do not provide the minimal 20 min. rating or smoke resistance required by code.
- Classroom windows do not meet Life Safety Code special egress requirements and the classrooms do not meet the exceptions for this requirement. There are several potential courses of action to rectify this violation and should be evaluated in conjunction with all other rehabilitation planned for the facility.
- Many areas of the building that require fire ratings between uses (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings, ductwork penetrations and/or walls that are not full height.
- An area of refuge must be provided in a building without direct discharge from a floor in a building without direct access to grade where no elevators are provided.
- Egress stairs and lobby are separated from corridor by non-rated window systems. The ceiling space above the window system is continuous from egress space to corridor.
Newport School Buildings Existing Conditions Report
RGB #5785 Tripplet School

- Doors near lobby have not rated transom panels above.
- A vending machine in the corridor drastically reduces corridor egress width.
- Recessed unit ventilators breach corridor wall rating.
- Egress stair hand rails do not meet code.
- Boiler room makeup air louver breaches fire wall rating. Two adjacent spaces are served by transfer grills which makes an occupied space a return air plenum.
- Walls around separating adjacent spaces and cafeteria do not extend to full height to provide rating as required by code.
- Cafeteria door hold-opens do not meet code since they are not tied into a Fire Alarm system.
- Student occupancy in the basement level would require the installation of an automatic sprinkler system.
- Cafeteria stairs do not meet code and would require intermediate railings as well as new side railings.

Fire Alarm:
- The existing fire alarm system in place is outdated and does not meet current Code. The fire alarm control unit is a Fire-Lite #424A, 4-zone conventional system.
- The manual pull stations are single action type devices (double action manual pull stations are required per RIUFC).
- The fire alarm system is connected to a radio municipal master-box for annunciation to the fire department.
- The classrooms & coat closets are protected with heat detectors that are original to the system. These heat detectors are outdated.
- The horn/strobe devices are original to the system and do not meet current fire code or Americans with Disabilities Act (ADA) guidelines for strobe flash-rate and temporal pattern audible characteristics.
- The horn/strobe devices in the corridors exceed 15'-0" from the ends of the corridors, which is not compliant with current fire codes.
- The classrooms are separated from the corridors with concrete masonry unit (CMU) construction. The classrooms do not have any fire alarm horns and may not achieve the required minimum sound levels per the current fire codes.
- Smoke detector coverage in some areas does not meet current fire codes.
- There are no fire alarm devices within the toilet rooms.
- The cafeteria only has only one (1) smoke detector and one (1) horn/strobe device, which does not meet the minimum coverage requirements per current fire codes. The horn/strobe is mounted above the maximum height level above the finished floor per Code.
- There is no hood fire suppression system in the kitchen.
- There is no gas solenoid valve in the kitchen.
- Doors at the stairways are held open with "wooden props". There are no magnetic door holders tied into the fire alarm system.
- The existing knox-box is weathered and in need of replacement.
- The spaces above the drop ceilings exceed 24" but do not have any fire alarm coverage.
- The boiler has an emergency burner switch (EBS) and fire shut-off detector above the boiler. The devices appear to be original to the system and appear to be at their useful life. The EBS is mounted to the boiler and should be relocated to the door entering the room.

Exit Signs & Emergency Lighting:
- There are some locations lacking the required exit signs per Code.
- The exit signs that exist on the Lower Level are relatively old and are not evenly illuminated.
- The exit signs in the corridor on the Upper Level are relatively new and appear to be functioning properly.
- The corridors and cafeteria have minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system.

Fire Suppression:
There are no fire sprinklers in the building.

B. Overview

The Triplett School was constructed in 1960. It is a two story building constructed of brick on a steel frame, 8” CMU block with tectum roof deck supported by metal joists. The facility was constructed to be a elementary school and currently functions as administrative offices and adult education classrooms.

The main level of the building is 12,557 gsf and has access from the East, West and North sides of the building, accommodating handicap ramp access from the North. Exterior building construction is brick on CMU bearing wall, while interior fire and smoke partitions are 8” CMU bearing wall. While most corridor walls are full height, however many ducts and unit ventilators pass thru the wall without fire safing compromising the corridor rating. The basement houses the boiler takes makeup air from the interior spaces of the basement thru open louvers into the cafeteria, compromising the rating of the boiler room and the cafeteria. Many of the new spaces that have been subdivided off from the cafeteria do not extend to the underside of the floor deck.

The basement level is approximately 11,546 gsf with stair access at both ends which accommodates both interior and exterior stair access on the north side of the building. The lower level currently houses one (1) cafeteria and kitchen space, three (3) classroom spaces, one (1) electrical room, three (3) offices, two (2) male and two (2) female student toilets, and seven (7) storage rooms.

The upper level of the building is a double loaded central corridor with staircases on both ends. The main level has eight (8) classrooms, three (3) administrative offices, one (1) faculty toilet, (1) male, (1) female student toilets, one (1) faculty dining lounge and three (3) storage rooms.

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<td>Total</td>
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E. Conclusions & Recommendations

The Triplett School has the following **Highest Priority** items regarding Life Safety, Fire Codes & Accessibility:

**Life Safety:**

(1) - Most corridor walls do not provide the minimal ½ hour rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Most corridor walls do not meet the minimal ½ hour rating or smoke resistance due to:
- Corridor walls compromised by ductwork penetration, or walls not running full height and do not provide required rating or resist the passage of smoke between the spaces.
- Most doors between classrooms and corridor are not equipped with automatic closing devices.
- Recessed unit heaters penetrate corridor walls.

Possible courses of action to bring corridors into compliance include:
- Equip building throughout with an approved automatic sprinkler system and make corridor walls smoke partitions in accordance with Section 8.4.
- Equip all classrooms / labs with a door leading directly to the exterior, which is an impractical solution for this two story building.
- Install ½ hour rated wall construction to provide a rated condition per 15.3.6.
- Seal all corridor partitions tight with ½ hr rated fire safing/sealant.

It should be noted that Lavatories would not required to be separated from the corridor if the building was equipped throughout with an automatic sprinkler system, otherwise the same ½ hour rating would apply.

(2) - Most corridor doors are missing closers and/or door hardware and do not provide the minimal 20 min. rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected above. Work would include:
- Replacing any doors with louvers, or any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices
- Replacing any door hardware not in compliance with 7.2.1
- Replacing manual hold opens.
- Replacing top only surface mounted exit rods. Doors 3'-0" x 7'-0" require 3 points of latching per NFPA. Top only rods provide 2 points of latching.

It should be noted that solid core doors comply with 20 minute rating per Life Safety Code Section 15.2.2.2 – Doors. Hollow core or non-rated glass doors will need to be replaced with 20 minute rated doors.

(3) - Most classrooms lack windows for rescue and do not meet the exceptions for this requirement of Life Safety Code Section 15.2.11 - Special Means of Egress Features.

Existing windows do not meet rescue requirements due to their size and in-swing orientation. Classrooms do not meet the exemptions for requirement of rescue windows due to:
- Walls between classrooms are not consistently constructed to the underside of structure above and do not resist the passage of smoke between the spaces.
E. Conclusions & Recommendations (con’t)

-Walls between classrooms and the main corridor are constructed of CMU to the underside of the structure above but are not sealed, thus do not resist the passage of smoke between the spaces.
-Doors between classrooms are not equipped with self-closing or automatic closing devices.
-Doors between classrooms do not provide direct access to exits in both directions or direct access to an exit in one direction and to a separate smoke compartment that provides access to another exit in the other direction. Doors are also equipped with deadbolts which are not permitted on a means of egress.

Possible courses of action to bring second floor classrooms into compliance include:
- Equip building throughout with an approved automatic sprinkler system.
- Modify existing classroom walls, doors and exits to comply with exemptions for requirement of rescue windows, Life Safety Code section 15.2.11.1.2.(5) This would include modifying all classroom walls to resist the passage of smoke, installation of required door hardware and devices and possible installation of additional smoke compartments and/or exits as required to meet maximum allowable travel distance of 150’.
- Replace windows with window meeting rescue requirements. A minimum of 1 window would be required in each student occupied room greater than 250 gsf.

In general it should be noted that a clear path of travel should be maintained through all intercommunicating classroom doors for a second means of egress through the classroom. This should be immediately enforced as a school policy procedure at all occupied classrooms.

(4)- Section 15.3.2.1 requires a 1 hour rating between areas using combustible supplies, boiler rooms, janitor closets and storage rooms for combustible supplies. Many areas of the building requiring fire ratings between uses in conformance with Section 15.3.2.1 (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings in doors. No limited area suppression systems were observed.

Work required to bring fire separation of spaces into compliance would include:
- Equipping the spaces with an approved automatic extinguishing system in accordance with Section 8.7 and 9.7.3 and separating the spaces from the remainder of the building with 1 hour rated wall construction in accordance with section 8.3

(5)- Section 15.2.3 requires hand rails to be installed between 30” to 38” and guard rails to be installed at no less that 42”. Existing guard rails are non compliant and handrails are non-compliant/non existing.

Possible courses of action to bring second floor classrooms into compliance include:
- Cafeteria handrails will have to be replaced with new side and intermediate rails installed.
- Stairwell guardrails need to be extended up to complaint height. Continuous handrails need to be installed.

(6)- Section 15.2.3.2 requires that a minimum corridor width shall be no less than 72”.

Possible courses of action to bring second floor classrooms into compliance include:
- Relocate vending machine in corridor.

(7)- Section 15.5.2 Heating, Ventilation and Air Conditioning Equipment (NFPA-90A 4.3.10.1.1) does not allow plenums for HVAC equipment to be occupied or storage space.
E. Conclusions & Recommendations (con’t)

Possible courses of action to bring second floor classrooms into compliance include:
- Provide compliant plenum space for HVAC equipment above finished ceiling.

(8)- Section 15.2.2.10 Areas of Refuge requires that in an non sprinklered building without an elevator where a stair is a part of the required means of egress an area of refuge must be provided.

Possible courses of action to bring second floor classrooms into compliance include:
- A 30” x 48” clear space in a smoke tight enclosure must be provided that is not in the required egress width of designated area. A communicable system must be provided from the area of refuge to a central point for notification of someone in the area of refuge.
- Install a sprinkler system.
- Install an egress elevator compliant with Life Safety Code 7.2.13 Elevator section.

(9)- Section 15.3.5 requires that an approved automatic sprinkler system be provided where students occupy a space below the level of exit discharge.

Possible courses of action to bring this issue into compliance include:
- Install an approved automatic sprinkler system throughout the basement level.
- Abandon occupancy of basement level by students.

Fire Alarm:
It is recommended that the existing conventional fire alarm system be replaced with a new total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The existing radio master-box should be re-used and connected to the proposed new fire alarm system. It is recommended a new weather-proof knox-box be installed for the fire departments use.

Exit Signs & Emergency Lighting:
It is recommended that the existing exit signs on the Lower Level be replaced with new LED exit signs with integral emergency battery backup as required by Code.

It is recommended that the existing emergency lighting battery units be replaced and new added where deficient on both floor levels as required by Code.

Fire Suppression:
Where student occupancy exists below the level of exit discharge (i.e. basement level), every portion of the basement shall be protected throughout by an automatic sprinkler system.
F. Exhibits

1. Typical classroom/corridor door without required closer.

2. Typical classroom windows that do not meet rescue requirements.
F. Exhibits (con't)

3. Egress stair hand rails do not meet code requirements

4. Non fire-rated aluminum system into egress staircase without closers in held-open position.
F. Exhibits (con’t)

5. Typical recessed unit in corridor wall that breaches required wall rating.

6. Typical HVAC ductwork with unprotected penetrations thru corridor wall.
Newport School Buildings Existing Conditions Report
RGB #5785 Triplett School

F. Exhibits (con't)

7. Non fire-rated, open louver door between egress staircase and storage room.

8. Trash chute. Breaks floor rating and corridor wall rating.
F. Exhibits (con’t)

9. Cafeteria perimeter wall that is braced at its top and does not run past the ceiling to the underside of the floor structure as require by Life Safety code.

10. Non code compliant, manual door hold-open into cafeteria area. Doors must close in case of fire.
F. Exhibits (con't)

11. Typical non-label door at corridor walls requiring rated conditions.

12. Wood transom above door that does not maintain required corridor wall rating.
<table>
<thead>
<tr>
<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req'd.</th>
<th>Unit</th>
<th>Total Cost</th>
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Budget with Sprinkler - Basement Only
November 7, 2008
# Newport Public Schools
## Preliminary Construction Budget

### Newport Elementary School Study
#### Newport, Rhode Island

**Triplet School**
RGB Project No. 5785

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<table>
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<td>Ea</td>
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Budget with Full Sprinkler System

November 7, 2008
A. Executive Summary

The Coggeshall School was constructed in 1897, has three stories above grade, and a basement mostly below grade. The building is approximately 38,236 +/- gsf. The exterior is constructed of brick, interior partitions are masonry, the roof structure is wood with slate shingles, and the stairs are concrete filled steel pan, which appear to be supported by a separate steel structure within the stair tower. A sprinkler system exists in limited portions of the building, including the 3rd floor gymnasium / stage, and adjacent attic spaces. The cafeteria was previously located in the basement but is temporarily served by a first floor classroom. The building currently functions as a K-5 school. The current estimated insured / replacement value of the facility is $6,160,132.66.

The Coggeshall School has the following items regarding Life Safety, Fire Codes & Accessibility that are considered highest priority and require immediate attention. The approximate cost to correct this work is estimated at $1,212,951.76 including sprinklering the basement. If the building were to have a full sprinkler system, some code items would be alleviated and the approximate cost would be $1,005,154.04.

Life Safety Issues
- Egress from the 3rd floor via internal stair doors does not meet remoteness requirements.
- Classrooms, basement library, and basement computer room windows do not meet Life Safety Code special egress requirements and the classrooms do not meet the exceptions for this requirement. There are several potential courses of action to rectify this violation and should be evaluated in conjunction with all other rehabilitation planned for the facility.
- Many corridor doors are missing closers and do not provide the minimal 20 min. rating or smoke resistance required by code.
- Many areas of the building that require fire ratings between uses (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings and ductwork penetrations.
- An area of refuge must be provided in a building without direct discharge from a floor in a building without direct access to grade where no elevators are provided.
- Means of egress via the fire escape, door, and wooden stairs on the 3rd floor is not permitted by the code.
- Existing dead end corridors are longer than permitted by code in a non sprinklered building.
- The basement is not fully sprinklered as required if used by students for educational purposes.
Acceptance of 3rd floor Assembly Use by Authority Having Jurisdiction recommended. RGB’s interpretation is that the building is type III (211), which permits Assembly use with a 1 hr rating. The roof is a non-protected wood structure.

Rescue windows adjacent to the fire escape are not permitted without fire doors or a fire window assembly.

Fire Alarm:
- The existing fire alarm system and radio master-box in place appears to be in good condition. The existing fire alarm control unit is a Simplex #4002 zoned conventional system. The control unit and master-box are currently located in the basement boiler room.
- The manual pull stations are single action type devices. Some of the manual pull stations are mounted at approximately 54” above the finished floor (AFF) and too far from the exit doors. The current RIUFC requires manual pull stations to be double action type and mounted 48” AFF.
- The classrooms do not have any heat detectors or horn/strobe devices.
- The existing horn/strobe devices do not provide the required coverage in the corridors.
- The horn/strobe devices are original to the system and do not meet current fire code or Americans with Disabilities Act (ADA) guidelines for strobe flash-rate and temporal pattern audible characteristics.
- The horn/strobe devices in the corridors exceed 15'-0” from the ends of the corridors, which is not compliant with current fire codes.
- The classrooms are separated from the corridors with concrete masonry unit (CMU) construction. Some of the classrooms do not have any fire alarm horns and may not achieve the required minimum sound levels per the current fire codes.
- The toilet rooms have no heat detectors or strobe devices.
- The smoke detectors in the corridors are spaced too far apart and do not provide the required coverage per Code.
- The stairways do not have smoke detectors at each level as required by Code.
- There is no hood fire suppression system in the kitchen.
- There is no gas solenoid valve in the kitchen.
- The spaces above the drop ceilings exceed 24” and has improper fire alarm coverage to meet Code.

Exit Signs & Emergency Lighting:
- The existing exit signs are relatively old and do not have the required emergency battery backup.
- The corridors and Gymnasium have minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system, however the Code does not require unless the building is used for public shelter.

Fire Suppression:
- The Boiler Room, third floor Gym, the Stair Towers, and the Attic spaces are equipped by dry-type sprinkler coverage.

B. Overview

The Coggeshall School was constructed in 1897. The building is constructed of predominantly brick walls with concrete / stone foundations, and a wood framed roof. The exterior chimneys are brick and in need of repair. Interior walls are generally finished in plaster or exposed CMU and are in fair condition, wood wainscot is applied to the walls in various locations. The facility currently functions as a Kindergarten to Grade-5 school.

The building is approximately 38,236 gsf and accessed from both the front, Van Zandt Ave side, and rear of the building, which serves as a recess area. The building does not appear to meet accessibility regulations; no exterior ramps or elevator exist. It appears that corridor walls are full height
from floor to underside of structure; however there are penetrations through many walls without proper fire stopping, which compromises the corridor fire rating.

The building layout of the 1st and 2nd floors has a central, double loaded corridor that form a general I shape. The internal egress stairs are accessed from 2 points along the same side of the corridor. There is a fire escape stair on the Van Zandt Ave. side of the building from 3rd floor down to grade. The building has a total of eleven (11) classrooms, three (3) administrative offices, two (2) male student toilet rooms, (2) female student toilet rooms, five (5) staff toilets, one (1) cafeteria & kitchen space, one (1) library, one (1) gymnasium / stage, two (2) attic storage areas, four (4) storage rooms in the basement, and (1) boiler / mechanical room.

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<tr>
<td>Current Enrollment</td>
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<td>Building Construction Type:</td>
<td></td>
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<td>IIIB</td>
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<tr>
<td>Rhode Island Life Safety Code (NFPA 220)</td>
<td>(III) 211</td>
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<tr>
<td>Building Height</td>
<td>Three stories above grade, one below</td>
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<td>Building Area</td>
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<tr>
<td>Basement Floor</td>
<td>9,559 sf</td>
</tr>
<tr>
<td>First Floor</td>
<td>9,559 sf</td>
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<tr>
<td>Second Floor</td>
<td>9,559 sf</td>
</tr>
<tr>
<td>Third Floor</td>
<td>3,991 sf occupiable (9,559 sf total incl. attics)</td>
</tr>
<tr>
<td>Total</td>
<td>32,668 sf w/out attics - 38,236 incl. attics</td>
</tr>
</tbody>
</table>

C. Conclusions and Recommendations

The Coggeshall School has the following **Highest Priority** items regarding Life Safety, Fire Codes & Accessibility: (Items listed below correspond to the order of the bullet points in the Executive Summary)

**Life Safety:**
(1) – Section 7.5.1.3.2 requires that where two separate exit doors are provided they be a minimum of ½ the diagonal distance of the area being served in a non-sprinklered building.
C. Conclusions and Recommendations (cont’d)

The third floor diagonal distance is approximately 80'-0", the two exit doors are approximately 26'-6" apart. The code requires they be a minimum of 40'-0" apart if the building is not sprinklered throughout.

Possible courses of action to bring 3rd floor egress into compliance include:

- Provide an approved supervised automatic sprinkler system throughout the entire building. This solution would reduce the required separation of exits to 26'-8" (1/3 diagonal of the space) 7.5.1.3.3
- Relocate/reconfigure exit doors to be a minimum of 40'-0" apart, this option requires stair / wall reconfiguration.
- Modify the occupied space so that half the diagonal space is equal or less than the existing condition, essentially reducing the 3rd floor occupied space.
- Remove the existing metal stair and lay out so that doors are on the opposite sides of the tower on all floors, which resolves the dead end corridor on the 2nd floor as well.
- See new stair towers as designed in 1935 plan. This scheme requires more demolition and floor infill, but may be considered for long term use of the building.

(2) Most classrooms lack windows for rescue and do not meet the exceptions for this requirement of Life Safety Code Section 15.2.11 - Special Means of Egress Features.

Existing windows do not meet rescue requirements due to their size and distance above finish floor. Classrooms do not meet the exemptions for requirement of rescue windows due to:

- Walls between classrooms do not resist the passage of smoke between the spaces.
- Walls between classrooms and the main corridor are constructed of CMU to the underside of the structure above but are not sealed, thus do not resist the passage of smoke between the spaces.
- Doors between classrooms are not equipped with self-closing or automatic closing devices.
- Doors between classrooms do not provide direct access to exits in both directions or direct access to an exit in one direction and to a separate smoke compartment that provides access to another exit in the other direction. Doors are also equipped with deadbolts which are not permitted on a means of egress.

Possible courses of action to bring 1st and 2nd floor classrooms into compliance include:

- Equip building throughout with an approved automatic sprinkler system.
- Modify existing classroom walls, doors and exits to comply with exemptions for requirement of rescue windows, Life Safety Code section 15.2.11.1.2.(5) This would include modifying all classroom walls to resist the passage of smoke, installation of required door hardware and devices and possible installation of additional smoke compartments and/or exits as required to meet maximum allowable travel distance of 150'.
- Replace windows with window meeting rescue requirements. A minimum of 1 window would be required in each student occupied room used for educational purposes. In the basement this would mean adding an areaway for egress, which could cause additional issues with drainage. On floors above grade, window sills will be required to be cut down.

Possible courses of action to bring the basement classrooms into compliance include:

- Add a compliant areaway to the exterior of the building allowing egress through a window or door. which could cause additional issues with drainage.
C. Conclusions and Recommendations (cont’d)

In general it should be noted that a clear path of travel should be maintained through all intercommunicating classroom doors for a second means of egress through the classroom. This should be immediately enforced as a school policy procedure at all occupied classrooms.

(3) - Most corridor doors are missing closers and/or proper door hardware and do not provide the minimal 20 min. rating or smoke resistance required by Life Safety Code Section 15.3.6. Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected. Work would include:
- Replacing any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices
- Replacing any door hardware not in compliance with 7.2.1
- Replacing manual hold opens.
- Replacing top only surface mounted exit rods. Doors 3'-0" x 7'-0" require 3 points of latching per NFPA. Top only rods provide 2 points of latching.

- Equip building throughout with an approved automatic sprinkler system with valve supervision, corridor walls will then not require a rating, they will be required to form a smoke partition only.

It should be noted that solid core doors comply with 20 minute rating per Life Safety Code Section 15.2.2.2 – Doors. Hollow core or non-rated glass doors will need to be replaced with 20 minute rated doors.

(4) - Section 15.3.2.1 requires a 1 hour rating between areas using / storing combustible items, boiler rooms, janitor closets and storage rooms.

Many areas of the building requiring fire ratings between uses in conformance with Section 15.3.2.1 (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings in doors. No limited area suppression systems were observed.

Work required to bring fire separation of spaces into compliance would include:
- Equip the spaces with an approved automatic sprinkler system or separate the spaces from the remainder of the building with 1 hour rated wall construction.

(5) - Section 15.2.2.10 Areas of Refuge require that in a non sprinklered building without an elevator, where a stair is a part of the required means of egress, an area of refuge must be provided.

Possible courses of action to bring second floor classrooms into compliance include:
- A 30” x 48” clear space in a smoke tight enclosure must be provided that is not in the required egress width of designated area. A communicable system must be provided from the area of refuge to a central point for notification of someone in the area of refuge.
- Install a sprinkler system.
- Install an egress elevator compliant with Life Safety Code 7.2.13 Elevator section, which will also require shaft pressurization and emergency power.

It should be noted that the current building does not meet accessibility regulations.

(6) - Section 7.2.2.4.4.2 requires that existing handrails be between 30” and 38” above the tread surface.
C. Conclusions and Recommendations (cont’d)

- Figure A.7.2.1.2.3(b) requires that an egress door be a minimum of 80” tall without projections into the minimum clear width required.

Possible courses of action to bring this item into compliance include:
- Install compliant stairs and a full height door with approved hardware, signage and emergency lighting.
- Modify the existing internal stair egress doors on this floor to comply with the code, see item #1 above, then the use of the current fire escape should not be needed. 7.2.8.1.2.1 permits use of an existing fire escape where not more that 50% of occupants use it; however access to it remains non-compliant.

(7) - Table A.7.6 requires that dead end corridors not exceed 20 ft in a non-sprinklered building. The current dead end corridors on the 2nd floor are approximately 30'-0”.

Possible courses of action to bring this issue into compliance include:
- Provide an approved automatic sprinkler system throughout the building, increasing the limit to 50 ft.
- Reconfigure stair access points, ie relocate doors to within the 20'-0” limit. This would require replacement of the existing internal stairs, doors and associated walls.

(8) - Section 15.3.5 requires that an approved automatic sprinkler system be provided where students occupy a space below the level of exit discharge.

Possible courses of action to bring this issue into compliance include:
- Install an approved automatic sprinkler system throughout the basement level.
- Abandon occupancy of basement level by students.

(9) - Section 15.3.3.2 requires that materials within corridors to be Class A or Class B. Existing wood paneling and wood cabinets within corridors do not meet material requirements.

Possible courses of action to bring corridors into compliance include:
- Remove all combustible paneling and cabinets from corridors.
- Protect combustible paneling with intumescent (fire resistant) paint finish.

(10) - Section 15.3.3.2 requires that materials within corridors to be Class A or Class B. Existing wood paneling and wood cabinets within corridors do not meet material requirements.

Possible courses of action to bring corridors into compliance include:
- Remove all combustible paneling and cabinets from corridors.
- Protect combustible paneling with intumescent (fire resistant) paint finish.

(11) - Section 7.2.2.4.1 Handrails are required on both sides of the ramps.

Possible courses of action to bring ramps into compliance include:
- Installation of handrails meeting code requirements.

(12) - Existing stair handrails are not continuous at landings, while this is not a code violation; it is our recommendation to replace these handrails with new that are continuous at landings.
(13)- Section 7.2.8.2 requires fire doors or fire window assemblies be installed at locations where windows are within 180" of a fire escape.

Possible courses of action to bring the windows into compliance include:
- Installation of fire doors or fire window assemblies.
- Provide an approved automatic sprinkler system throughout the building.
- Abandon and remove fire escape, which will require reworking of exit stairs.

(14)- Section 15.3.3.2 requires that all materials within all spaces of an Educational Occupancy to be a minimum classification of C. Stage curtain does not conform to this requirement. Prior to replacement of curtain, it should be confirmed with local Fire Marshal that the curtain does not have to comply with 13.4.5.7- requirements for proscenium stage curtains.

Possible courses of action to bring stage curtain into compliance include:
- Replace existing stage curtain with a minimum acceptable class C curtain.

**Fire Alarm:**
Due to a majority of the fire alarm system not meeting Code it is recommended that the existing zoned conventional fire alarm system be replaced with a new addressable panel and new devices to provide a total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The new fire alarm control unit (panel) and existing radio master-box should be relocated to the first floor exit door per the local fire departments requirements. New devices complying with NFPA-72 and ADA guidelines should be provided with the required coverage, mounting heights and locations.

**Exit Signs & Emergency Lighting:**
It is recommended that the existing exit signs throughout the School be replaced with new LED exit signs with integral emergency battery backup as required by Code.

It is recommended that the existing emergency lighting battery units be replaced and new added where deficient on both floor levels as required by Code.

**Fire Suppression:**
Where student occupancy exists below the level of exit discharge (i.e. basement level), every portion of the basement shall be protected throughout by an automatic sprinkler system. Installation of a full coverage automatic sprinkler system should be weighed in comparison with other scope of work required to bring the building into conformance with other life safety code violations.
D. Exhibits

1. Typical classroom windows that do not meet rescue requirements.

2. 3rd floor non-compliant egress stairs to exterior fire escape.
3. Typical corridor with wood wainscot and doors without closers.
D. Exhibits (cont’d)

4. Existing boiler room with non-fire stopped wall penetrations.

5. Typical corridor exceeding dead end limit (stair door visible far left of photo)
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<th>Scope of Renovations</th>
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<th>Total Cost</th>
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<td>Item</td>
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Budget with Full Sprinkler System       November 7, 2008
A. Executive Summary

The Underwood School was constructed in 1962 with and is a series of a series of one story buildings. The four buildings total about 15,293+/- gsf. Buildings A and B are approximately 3,688 gsf each. Building C is approximately 6,711 gsf, and building D is approximately 3,758 gsf. The buildings are constructed of wood siding on a wood stud frame. The building currently functions as a K-5 school. The current estimated insured / replacement value of the facility is $2,719,100.

The Underwood School has the following items regarding Life Safety, Fire Codes & Accessibility, that are considered **highest priority** and require immediate attention. The approximate cost to correct this work is estimated at **$478,310**.

**Life Safety Issues**
- Many corridor doors are missing closers.
- Kitchen walls do not extend to underside of roof structure to provide minimum fire rating.
- Kitchen does not have anul extinguishing system.
- Hand rails in building entries are not compliant to code.
- Boiler room door swing is non code compliant.
- The wood paneling wall covering exceeds the amount of combustible materials allowed.
- Laminating equipment impedes the means of egress.
- Fire extinguisher signage is not provided.
- Occupied and storage spaces used for return air plenum.

**Fire Alarm**
- The existing fire alarm systems for each of the four (4) buildings all tie into a main fire alarm control unit (panel) located in the boiler room of Building “B”. The main control panel and radio master-box in place appears to be in good condition. Outside of the boiler room is a modified master-box fitted with annunciator lights for each of the four (4) buildings. This “annunciator” box is subject to the weather and should be replaced.
- Buildings “A”, “C” and “D” tie into the main control panel via underground wiring troughs. The condition of the troughs were not determined or located.
- Buildings “A”, “B” “C” and “D” are typical of each other with minor variations except Building “C” which has a kitchen and Cafeteria. These buildings do not have any horn/strobe devices in the classrooms or toilet rooms. The smoke detectors in the common hallways did not provide the required coverage per Code. The manual pull stations are single action type devices. Some of the manual pull stations are mounted at approximately 54” above the finished floor (AFF) and too far from the exit doors. The current RIUFC
Exit Signs & Emergency Lighting:
- The existing exit signs are made of paper thus do not have the required emergency battery backup.
- The Cafeteria has minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system.

Fire Suppression:
- Each of the four (4) buildings is equipped throughout with a dedicated automatic sprinkler system, including the crawl spaces. It was noted that the isolation valves on each of the on-coming fire services lacked supervisory tamper switches. It was also noted that the Cafeteria area in Building C lack proper coverage and the Storage Room adjacent to the main entrances in each of the four buildings lacked coverage.

B. Overview

The Underwood School was constructed in 1962. The buildings are wood framed floors with a crawl space underneath construction with wood stud perimeter walls clad with wood siding. The roof is asphalt shingles on a wood truss frame. The facility currently functions as Kindergarten to Grade-5 school.

Each building has handicap access from one point. All classrooms have direct access outside through egress doors. Each building is fully sprinklered above and below the ceilings.

The school is comprised of four separate buildings and combined have twelve (12) classrooms. Building C houses one (1) cafeteria, two (2) administrative offices, and three (3) classrooms. Building’s A, B and D house three (3) classrooms each. Building C has eight (8) toilets; Building’s A, B, and D have five (5) toilet rooms each.
E. Conclusions & Recommendations

The Underwood School has the following **Highest Priority** items regarding Life Safety, Fire Codes, & Accessibility:

**Life Safety:**
(1) - Most corridor doors are missing closers and/or door hardware and do not provide the smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected above. Work would include:
- Replacing any doors with louvers, or any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices

(2) - Section 15.2.3 requires hand rails to be installed between 30" to 38" and guard rails to be installed at no less that 42". Existing guard rails are non compliant and handrails are non-compliant/non existing.

Possible courses of action to bring handrails into compliance include:
- Existing ramp hand and guard rails will have to be replaced.

(3) - Section 15.5.2 Heating, Ventilation and Air Conditioning Equipment (NFPA-90A 4.3.10.1.1) does not allow plenums for HVAC equipment to be occupied or storage space.

Possible courses of action to bring plenums into compliance include:
- Provide compliant plenum space or ducted supply and returns HVAC equipment above finished ceiling. Install fire stopping at rated walls where required.
E. Conclusions & Recommendations (Con’t)

(4)- Section 7.2.1.4.1 requires that all doors that are a part of egress shall open to provide the clear width of the frame that the door is installed in.

Possible courses of action to bring doors into compliance include:
- Replace any non compliant door and frame with a door and frame that are smaller but provide no less than 32” of clear width.

(5)- Section 15.3.3.2 requires that materials within corridors to be Class A or Class B. Existing wood paneling and wood cabinets within corridors do not meet material requirements.

Possible courses of action to bring corridors into compliance include:
- Remove all combustible paneling and cabinets from corridors.
- Protect combustible paneling with intumescent (fire resistant) paint finish.

(6)- Section 7.2.1.3.6 requires that a door can swing open onto stairs provided the door does not swing beyond the stair and serves less than 50 people. Mechanical door swings beyond stair nosing.

Possible courses of action to bring corridors into compliance include:
- Extend landing beyond door edge when fully opened

Fire Alarm:
Due to a majority of the fire alarm system not meeting Code it is recommended that the existing zoned conventional fire alarm system be replaced with a new addressable panel and new devices to provide a total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The new fire alarm control unit (panel) and existing radio master-box should be relocated to the first floor exit door per the local fire departments requirements. New devices complying with NFPA-72 and ADA guidelines should be provided with the required coverage, mounting heights and locations. New underground trenches and PVC conduit for interconnecting the four (4) buildings should be provided. A new weather-proof annunciator panel should be provided.

Exit Signs & Emergency Lighting:
It is recommended that the existing exit signs throughout each of the buildings be replaced with new LED exit signs with integral emergency battery backup as required by Code.

It is recommended that the existing emergency lighting battery units be replaced and new added where deficient in each building as required by Code.

Fire Suppression:
Supervisory tamper switches shall be installed on each of the four fire service isolation valves such that when the valve is closed it shall activate the fire alarm supervisory signal to indicate a trouble condition.

The sprinkler coverage in the Cafeteria area in Building C shall be adjusted to provide proper coverage throughout. In addition, sprinkler coverage shall be provided below the ductwork in each of the Storage Rooms in the four building.
F. Exhibits

1. Typical classroom/corridor doors without required closer.

2. Image of ceiling passing over non-full height kitchen wall.
3. Typical non compliant hand and guard rails at entry locations. Also shows non compliant door and stair relationship out of boiler room.

4. View of combustible materials in corridor area.
F. Exhibits (con’t)

5. View through corridor door at laminating machine in path of egress.

6. View of storage room used as return plenum through occupied space through door louver.
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<tr>
<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req'd</th>
<th>Unit</th>
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November 7, 2008
A. Executive Summary

The Carey School was constructed in 1896 with two additions in 1935 and 1960, and is a two story 26,988 +/- gsf building with a basement. The building is constructed of brick on a steel and wood structural frame. The building currently functions as a K-5 school. The current estimated insured / replacement value of the facility is $5,041,094.38.

The Carey School has the following items regarding Life Safety, Fire Codes & Accessibility, that are considered highest priority and require immediate attention. The approximate cost to correct this work is estimated at $638,704.36 including sprinklering the basement. If the building were to have a full sprinkler system, some code items would be alleviated and the approximate cost would be $853,271.80.

Life Safety Issues

- Many corridor doors are missing closers and do not provide the minimal 20 min. rating or smoke resistance required by code.
- Storage room and egress stair that require fire ratings between uses have compromised ratings due to unprotected openings.
- Handrails on exterior stair system are not code compliant.
- Interior handrails are not code complaint.
- Many areas of the building that require fire ratings between uses (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings, ductwork penetrations and/or walls that are not full height.
- Some egress stair doors from basement do not have complaint door hardware.
- Wood paneling finish in basement is not code complaint.
- Unenclosed clothing storage in corridors.
- Working space in front of electrical panels are not code compliant.
- Items are stored within the boiler room in the basement. A majority of these items are in separate spaces, but these spaces are not rated for one hour against the boiler room as required by code.
- All door and window systems may exceed allowable square footage for unprotected openings into an egress stair system.
- Sprinkler system required in basement if used for student occupancy.

Fire Alarm:

- The existing fire alarm system and radio master-box in place appears to be relatively new. The existing fire alarm control unit is a Simplex #4100U addressable system.
- The manual pull stations are dual action type devices but the majority of the manual pull stations are
mounted at approximately 54” above the finished floor (AFF). The current RIUFC requires manual pull stations to be mounted 48” AFF.

- The classrooms do not have any heat detectors or any horn/strobe devices.
- The existing horn/strobe devices do not provide the required coverage in the corridors.
- The horn/strobe devices in the corridors exceed 15'-0" from the ends of the corridors, which is not compliant with current fire codes.
- The classrooms are separated from the corridors with concrete masonry unit (CMU) construction. The classrooms do not have any fire alarm horns and may not achieve the required minimum sound levels per the current fire codes.
- The stairways do not have smoke detectors at each level as required by the current fire codes.
- There are no heat detectors or strobe devices in the toilet rooms.
- There is no hood fire suppression system in the kitchen.
- There is no gas solenoid valve in the kitchen.
- Doors at the stairways are held open with “wooden props”. There are no magnetic door holders tied into the fire alarm system.
- The spaces above the drop ceilings exceed 24” and have improper fire alarm coverage to meet Code.
- The attic space has old heat detectors that are outdated.
- The smoke detectors in the basement are not installed on listed backboxes.

Exit Signs & Emergency Lighting:
- The existing exit signs are relatively old and do not have the required emergency battery backup.
- The corridors and cafeteria have minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system.

Fire Suppression:
- There are no fire sprinklers in the building.

B. Overview

The Carey School was constructed in 1896 and altered in 1935 and 1960. The building is a brick façade built on a wood and steel frame. The floors are constructed of wood joist framing. The facility currently functions as a Grades K-5 school.

The building is 26,998 gsf and has access from all sides of the building, accommodating handicap ramp access through the gym. Exterior building construction is brick on CMU bearing wall with wood and steel frame.

The building is a series of double loaded corridors stacked on top of each other with egress stairs at both ends. The basement has a kitchen, a cafeteria space, boiler room, library space and storage rooms and three (3) staff toilets. The first floor has four (4) classrooms, two (2) administrative offices, one (1) male, (1) female student toilets, one (1) gym/auditorium, and one (1) storage rooms. The second floor has seven (7) classrooms, one (1) male, (1) female student toilets.
E. Conclusions & Recommendations

The Carey School has the following **Highest Priority** items regarding Life Safety, Fire Codes & Accessibility:

**Life Safety:**
(1) - Most corridor doors are missing closers and/or door hardware and do not provide the minimal 20 min. rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected above. Work would include:
- Replacing any doors with louvers, or any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices
- Replacing any door hardware not in compliance with 7.2.1
- Replace wood frame sidelights and non-rated glass.

(2) - Section 15.3.2.1 requires a 1 hour rating between areas using combustible supplies, boiler rooms, janitor closets and storage rooms for combustible supplies. Many areas of the building requiring fire ratings between uses in conformance with Section 15.3.2.1 (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings in doors. No limited area suppression systems were observed.
Work required to bring fire separation of spaces into compliance would include:
- Equipping the spaces with an approved automatic extinguishing system in accordance with Section 8.7 and 9.7.3 or separating the spaces from the remainder of the building with 1 hour rated wall construction in accordance with section 8.3

(3)- Section 15.2.2.3 requires hand rails to be installed between 30” to 38” and guard rails to be installed at no less that 42”. Handrails must be within 44” of reach on stairs. Existing guard rails are non compliant and handrails are non-compliant/non existing. Handrails at exterior stair at entry are too far apart.

Possible courses of action to bring second handrails into compliance include:
- Egress stair guard rails must be extended to a compliant height and continuous handrails need to be installed and replace existing handrails.
- Install additional handrail at center of exterior entry stairs.

(4)- Section 15.3.3.2 requires that materials within corridors to be Class A or Class B. Existing wood paneling and wood storage units in basement corridor would most likely not meet material requirements.

Possible courses of action to bring corridors into compliance include:
- Remove all combustible paneling and storage units from corridors.
- Install sprinklers in corridor.
- Finish wood paneling with intumescent paint finish.
- Replace storage units with metal lockers.

(5)- Section 15.7.4.2 requires that clothing and backpacks cannot be stored in corridor space. Coat racks, with articles of clothing, and other clothing storage observed in corridor.

Possible courses of action to bring corridors into compliance include:
- Provide additional locker units.
- Install sprinkler system.
- Install code compliant smoke detection.

(6)- Section 15.3.2.1 requires that a boiler room have one hour of separation from all other spaces. The existing boiler room connects to two storage spaces through unprotected openings.

Possible courses of action to bring boiler room into compliance include:
- Install rated opening protection to all adjacent spaces.
- Remove all items stored within spaces.
- Install sprinkler system.

(7)- Section 15.2.2.3 and section 8.3.3.9 requires that the total area of fire rated window assemblies cannot exceed 25% of the fire barrier area. The window & door assemblies between corridors and stair enclosure may not meet code, and was cited by the Fire Marshal.

Possible courses of action to bring window system into compliance include:
- Remove existing window assemblies and enclose opening with 1-hour rated construction.
- Confirm if existing windows are installed into approved metal frames and meet the exemption of 8.3.3.9.
Section 15.3.3.2 requires that all materials within all spaces of an Educational Occupancy to be a minimum classification of C. Stage curtain does not conform to this requirement. Prior to replacement of curtain, it should be confirmed with local Fire Marshal that the curtain does not have to comply with 13.4.5.7- requirements for proscenium stage curtains.

Possible courses of action to bring stage curtain into compliance include:
- Replace existing stage curtain with a minimum acceptable class C curtain.

Section 15.3.5 requires that an approved automatic sprinkler system be provided where students occupy a space below the level of exit discharge.

Possible courses of action to bring this issue into compliance include:
- Install an approved automatic sprinkler system throughout the basement level.
- Abandon occupancy of basement level by students.

Section 15.2.2.10 Areas of Refuge requires that in a non sprinklered building without an elevator where a stair is a part of the required means of egress an area of refuge must be provided.

Possible courses of action to bring second floor classrooms into compliance include:
- A 30” x 48” clear space in a smoke tight enclosure must be provided that is not in the required egress width of designated area. A communicable system must be provided from the area of refuge to a central point for notification of someone in the area of refuge.
- Install a sprinkler system.
- Install an egress elevator compliant with Life Safety Code 7.2.13 Elevator section.

Fire Alarm:
It is recommended that the existing addressable fire alarm system be re-used and new devices be added to provide a total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The existing radio master-box should be re-used. The existing manual pull stations should be lowered to 48"AFF per RIUFC. The existing horn/strobe devices should be replaced and horn/strobes devices should be added where deficiencies occur. New detectors will need to be added where deficiencies occur.

Exit Signs & Emergency Lighting:
It is recommended that the existing exit signs in the Auditorium be replaced with new LED exit signs with integral emergency battery backup as required by Code.

It is recommended that the existing emergency lighting battery units be replaced and new added where deficient on both floor levels as required by Code.

Fire Suppression:
Where student occupancy exists below the level of exit discharge (i.e. basement level), every portion of the basement shall be protected throughout by an automatic sprinkler system. This report assumes the concealed crawl space beneath the gymnasium will not require sprinkler coverage.
F. Exhibits

1. Typical classroom/corridor doors without required closer.

2. View of non code compliant stairway hand and guard rails.
F. Exhibits (con't)

3. View into storage room showing a pair of doors with glass that leads into fire rated stair condition.

4. Leading edge of egress door out of gym shown against egress door from basement staircase. The two doors create a swing conflict as they strike each other when opened.
F. Exhibits (con't)

5. Egress door out of gym without proper egress hardware.

6. View of door at top of basement egress stair without proper egress hardware.
F. Exhibits (con't)

7. View of non compliant combustible wood paneling in corridor at teachers lounge and adjacent wood storage cabinets.

8. View of item storage within boiler room without proper fire separation.
F. Exhibits (con't)

8. View of item storage within electrical panel space.

9. View of non compliant fire-window systems.
## Preliminary Construction Budget

Newport Public Schools  
Carey School  
RGB Project No. 5785

<table>
<thead>
<tr>
<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req’d.</th>
<th>Unit</th>
<th>Total Cost</th>
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Budget with Sprinkler - Basement Only  
November 7, 2008
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Budget with Full Sprinkler System               November 7, 2008
A. Executive Summary

The Sullivan School was constructed in 1955 with one addition in 1969, and is a two story 38,750+/- gsf building. The original building is constructed of brick on a concrete frame. The addition is corrugated metal on a prefabricated steel building. The cafeteria is a laminated wood frame space. The building currently functions as a K-5 school. The current estimated insured / replacement value of the facility is $6,604,094.77.

The Sullivan School has the following items regarding Life Safety, Fire Codes & Accessibility, that are considered highest priority and require immediate attention. The approximate cost to correct this work is estimated at $1,397,478.88 not including sprinklering the building. If the building were to have a full sprinkler system, some code items would be alleviated and the approximate cost would be $1,406,147.66.

Life Safety Issues

- Corridor walls are compromised by ‘transfer holes’ penetration and do not provide the minimal ½ hour rating or smoke resistance required by code.
- Many corridor doors are missing closers and do not provide the minimal 20 min. rating or smoke resistance required by code.
- Some classroom windows (addition) do not meet Life Safety Code special egress requirements and the classrooms do not meet the exceptions for this requirement. There are several potential courses of action to rectify this violation and should be evaluated in conjunction with all other rehabilitation planned for the facility.
- Many areas of the building that require fire ratings between uses (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings, ductwork penetrations and/or walls that are not full height.
- Wood frames in original building into classrooms do not maintain corridor rating.
- Corridor walls in metal frame additions do not extend to underside of structure as required to maintain ½ hour corridor rating or doors in corridor are not provided.
- Kitchen does not have Ansul fire extinguishing system.
- Guard rails in entry are not compliant to code.
- Ductwork into fire/smoke rated spaces requires fire stopping to maintain rating.
- Boiler room door not rated.
- Penetrations thru boiler room walls are not fire stopped.
HVAC return air plenum breaches corridor fire wall rating. Two adjacent spaces are served by transfer grills which makes a storage room a return air plenum.

Confirm trailer is 10'-0" minimum away from building face, or rate existing trailer or building wall by 1 hr minimum.

**Fire Alarm:**

- The existing fire alarm system and radio master-box in place appears to be relatively new. The existing fire alarm control unit is a Simplex #4100U addressable system.
- The manual pull stations are dual action type devices. Some of the manual pull stations are mounted at approximately 54" above the finished floor (AFF). The current RIUFC requires manual pull stations to be mounted 48" AFF.
- Approximately half of the classrooms have a heat detector and horn/strobe device mounted on the ceiling in the center of the room. The other half of the classrooms have a strobe only device mounted on the ceilings.
- The existing horn/strobe devices do not provide the required coverage in the corridors.
- The horn/strobe devices in the corridors exceed 15'-0" from the ends of the corridors, which is not compliant with current fire codes.
- The classrooms are separated from the corridors with concrete masonry unit (CMU) construction. Some of the classrooms do not have any fire alarm horns and may not achieve the required minimum sound levels per the current fire codes.
- The toilet rooms have heat detectors and strobe devices.
- The smoke detectors in the corridors are spaced too far apart and do not provide the required coverage per Code.
- The Auditorium is also used as the Cafeteria and Gymnasium. There is a high, peaked wooden ceiling that only has two (2) heat detectors. Given the high ceiling the heat detector spacing does not comply with NFPA-72 guidelines for ceiling exceeding 10'-0" above finished floors. There is only one (1) horn/strobe device which does not provide the required coverage per Code. In addition, there is insufficient emergency lighting.
- There is no hood fire suppression system in the kitchen.
- There is no gas solenoid valve in the kitchen.
- The spaces above the drop ceilings exceed 24" and have improper fire alarm coverage to meet Code.

**Exit Signs & Emergency Lighting:**

- The existing exit signs are relatively old and do not have the required emergency battery backup.
- The corridors and Auditorium have minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system.

**Fire Suppression:**

There are no fire sprinklers in the building.

**B. Overview**

The Sullivan School was constructed in 1955. The building is a brick façade built on a concrete column and cast in place concrete roof. A metal, prefab building was added on to the school in 1967 and another in 1969. The facility currently functions as Kindergarten to Grade-5 school.

The building is 38,750 gsf and has access from all sides of the building, accommodating handicap ramp access from the North. Exterior building construction is brick on CMU bearing wall with concrete frame, while interior fire and smoke partitions are 8" CMU non bearing wall. While most corridor walls in the original structure are full height, many penetrations exist thru the wall without fire saing compromising...
the corridor rating. The corridor walls in the additions are not full height as required to provide ½ hour rating.

The building is a series of double loaded central corridors that form a general U shape. The main level has twenty-one (21) classrooms, four (4) administrative offices, two (2) faculty toilets, (3) male, (3) female student toilets, eight (8) staff toilets, one (1) cafeteria/auditorium & kitchen space, two (2) and four (4) storage rooms.

Date of Construction: 1955
Date of Last Renovation/Addition 1969
Current Use(s) Education
Rhode Island State Building Code (IBC 2006) E-Educational
Current Enrollment 259
Building Construction Type:
Rhode Island State Building Code (IBC 2003) Original Building IA, Gym IV, Metal Building IIA
Rhode Island Life Safety Code (NFPA 101 - 2003) Original Building I(332), Gym IV(2HH), Metal Building II(000)
Building Height One Story
Building Area
First Floor 38,750 gsf
Total 38,750 gsf

E. Conclusions & Recommendations

The Sullivan School has the following Highest Priority items regarding Life Safety, Fire Codes & Accessibility:

Life Safety:
(1) Most corridor walls do not provide the minimal ½ hour rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Most corridor walls do not meet the minimal ½ hour rating or smoke resistance due to:
- Corridor walls compromised by ductwork penetrations, or walls not running full height and do not provide required rating or resist the passage of smoke between the spaces.
- Most doors between classrooms and corridor are not equipped with automatic closing devices.

Possible courses of action to bring corridors into compliance include:
- Equip building throughout with an approved automatic sprinkler system and make corridor walls smoke partitions in accordance with Section 8.4.
- Equip all classrooms with a door leading directly to the exterior.
E. Conclusions & Recommendations (con’t)

It should be noted that Lavatories would not required to be separated from the corridor if the building was equipped throughout with an automatic sprinkler system, otherwise the same ½ hour rating would apply.

(2) - Most corridor doors are missing closers and/or door hardware and do not provide the minimal 20 min. rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected above. Work would include:
- Replacing any doors with louvers, or any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices
- Replacing any door hardware not in compliance with 7.2.1
- Replace wood frame sidelights and non-rated glass.

(3) - Most classrooms in the additions lack windows for rescue and do not meet the exceptions for this requirement of Life Safety Code Section 15.2.11 - Special Means of Egress Features.

Existing windows do not meet rescue requirements due to their size and in-swing orientation. Classrooms do not meet the exemptions for requirement of rescue windows due to:
- Walls between classrooms are not consistently constructed to the underside of structure above and do not resist the passage of smoke between the spaces.
- Walls between classrooms and the main corridor do not extend to the underside of the structure and are not sealed thus do not resist the passage of smoke between the spaces.
- Doors between classrooms are not equipped with self-closing or automatic closing devices.
- Doors between classrooms do not provide direct access to exits in both directions or direct access to an exit in one direction and to a separate smoke compartment that provides access to another exit in the other direction.

Possible courses of action to bring second floor classrooms into compliance include:
- Equip building throughout with an approved automatic sprinkler system.
- Install exterior doors where possible to provide egress directly to grade where applicable.
- Modify existing classroom walls, doors and exits to comply with exemptions for requirement of rescue windows, Life Safety Code section 15.2.11.1.2.(5) This would include modifying all classroom walls to resist the passage of smoke, installation of required door hardware and devices and possible installation of additional smoke compartments and/or exits as required to meet maximum allowable travel distance of 150’.

(4) - Section 15.3.2.1 requires a 1 hour rating between areas using combustible supplies, boiler rooms, janitor closets and storage rooms for combustible supplies

Many areas of the building requiring fire ratings between uses in conformance with Section 15.3.2.1 (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings in doors. No limited area suppression systems were observed.

Work required to bring fire separation of spaces into compliance would include:
- Equipping the spaces with an approved automatic extinguishing system in accordance with Section 8.7 and 9.7.3 and separating the spaces from the remainder of the building with 1 hour rated wall construction in accordance with section 8.3

(5)- Section 15.2.2.3 requires hand rails to be installed between 30” to 38” and guard rails to be installed at no less that 42”. Existing guard rails are non compliant and handrails are non-compliant/non-existing.

Possible courses of action to bring second handrails into compliance include:
- Cafeteria handrails will have to be replaced with new side and intermediate rails installed.
- Stairwell guardrails need to be extended up to complaint height. Continuous handrails need to be installed.

(6)- Section 15.5.2 Heating, Ventilation and Air Conditioning Equipment (NFPA-90A 4.3.10.1.1) does not allow plenums for HVAC equipment to be occupied or storage space.

Possible courses of action to bring plenums into compliance include:
- Provide compliant plenum space for HVAC equipment above finished ceiling. With fire stopping at rated walls where required.

(7)- Section 7.3.2.1 NFPA 5000- Fire Ratings for Exterior Walls requires that in an assembly use, two exterior walls within 5’ to 10’ must be separated by a 1 hr minimum rated wall. The trailer in front of the school is in the range of 5’ to 10’.

Possible courses of action to bring the trailer into compliance include:
- Move trailer minimum 10’ from school building.
- Fire rate school exterior wall and openings minimum 1 hour.
- Fire rate trailer wall minimum 1 hour.

Fire Alarm:
It is recommended that the existing addressable fire alarm system be re-used and new devices be added to provide a total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The existing radio master-box should be re-used. The existing manual pull stations should be lowered to 48’AFF per RIUFC. The existing horn/strobe devices should be replaced and horn/strobes devices should be added where deficiencies occur. New detectors will need to be added where deficiencies occur.

Exit Signs & Emergency Lighting:
It is recommended that the existing exit signs throughout the School be replaced with new LED exit signs with integral emergency battery backup as required by Code.

It is recommended that the existing emergency lighting battery units be replaced and new added where deficient on both floor levels as required by Code.
F. Exhibits

1. Typical classroom/corridor doors without required closer.

2. Typical classroom windows that do not meet rescue requirements.
3. Main lobby ramp hand rails do not meet code requirements

4. Typical wood sidelight and transom system does not provide minimum rating.
F. Exhibits (con't)

5. View through office window at trailer. Trailer is too close to the buildings unprotected openings per NFPA.

6. View of top of corridor wall that ends just above finished ceiling. Wall should extend to underside of structure to provide required rating.
F. Exhibits (con’t)

7. View of non fire stopped penetrations thru rated wall assemblies.

8. View of plenum penetration through corridor wall into class room storage space.
F. Exhibits (con't)

9. View of non rated mechanical room door with non-code compliant handrails.

10. View of exterior mechanical room door without required egress hardware.
<table>
<thead>
<tr>
<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req’d</th>
<th>Unit</th>
<th>Total Cost</th>
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Budget without Sprinkler System
November 7, 2008
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<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req'd.</th>
<th>Unit</th>
<th>Total Cost</th>
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<td>30</td>
<td>Ea.</td>
<td>$15,000.00</td>
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<tr>
<td>Replace Door</td>
<td>$1,000.00</td>
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<td>Ea.</td>
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Budget with Full Sprinkler System

November 7, 2008
A. Executive Summary

The Cranston Calvert School was constructed in 1876, and is a two story building with a basement 44,545+/- gsf building constructed of brick on a steel and wood frame. The building has a basement that houses the cafeteria space. The building currently functions as a Kindergarten through Grade 5 School. The current estimated insured / replacement value of the facility is $7,665,192.

The Cranston Calvert School has the following items regarding Life Safety, Fire Codes & Accessibility, that are considered highest priority and require immediate attention. The approximate cost to correct this work is estimated at $807,897.96 including sprinklering the basement. If the building were to have a full sprinkler system, some code items would be alleviated and the approximate cost would be $1,015,185.58.

Life Safety Issues
- Many corridor doors are missing closers and do not provide the minimal 20 min. rating or smoke resistance required by code.
- Classroom windows do not meet Life Safety Code special egress requirements and the classrooms do not meet the exceptions for this requirement. There are several potential courses of action to rectify this violation and should be evaluated in conjunction with all other rehabilitation planned for the facility.
- Some areas of the building that require fire ratings between uses (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings.
- An area of refuge must be provided in a building without direct discharge from a floor in a building without direct access to grade where no elevators are provided.
- A copy machine and desk in the corridor drastically reduce corridor egress width at the main office.
- Egress stair hand rails do not meet code.
- Combustible items stored in basement corridor.
- Student occupancy in the basement level would require the installation of an automatic sprinkler system.
- Stage curtain is not code compliant.

Fire Alarm:
- The existing fire alarm system and radio master-box in place appears to be relatively new. The existing fire alarm control unit is a Simplex #4020 addressable system.
- The majority of the manual pull stations are single action type devices and/or are original to the building.
needing replacement (double action manual pull stations are required per RIUFC). The majority of the manual pull stations are mounted at approximately 65” above the finished floor (AFF). The current RIUFC requires manual pull stations to be mounted 48” AFF. In addition, in most corridors the manual pull stations are located in the middle of the corridor and not within 5'-0” of the exit doors.

- The classrooms in the Cranston building have existing heat detectors mounted in the center of the ceilings, but do not have any horn/strobe devices. The classrooms in the Calvert building do not have any existing heat detectors or any horn/strobe devices.
- The horn/strobe devices appear to be original to the building and do not meet current fire code or Americans with Disabilities Act (ADA) guidelines for strobe flash-rate and temporal pattern audible characteristics.
- The horn/strobe devices in the corridors exceed 15'-0” from the ends of the corridors, which is not compliant with current fire codes.
- The classrooms are separated from the corridors with concrete masonry unit (CMU) construction. The classrooms do not have any fire alarm horns and may not achieve the required minimum sound levels per the current fire codes.
- The stairways do not have smoke detectors at each level as required by the current fire codes.
- There are existing heat detectors within the toilet rooms but lack the required strobe devices per the Americans with Disabilities Act guidelines.
- The Auditorium has insufficient emergency lighting and horn/strobe devices to comply with Code. The stage is accessible with no fire alarm coverage.
- There is no hood fire suppression system in the kitchen.
- There is no gas solenoid valve in the kitchen.
- Doors at the stairways are held open with "wooden props". There are no magnetic door holders tied into the fire alarm system.
- The spaces above the drop ceilings exceed 24” and have improper fire alarm coverage to meet Code.

Exit Signs & Emergency Lighting:
- There are some locations lacking the required exit signs per Code.
- The exit signs that exist in the corridors are relatively new and appear to be functioning properly.
- The exit signs that exist in the Auditorium are relatively old and do not have the required emergency battery backup
- The corridors and cafeteria have minimal emergency battery lighting units that do not appear to provide the required coverage per Code.
- There is no emergency lighting outside of the exterior doors as required by Code.
- The building does not have an emergency generator system.

Fire Suppression:
- There are currently no fire sprinklers in the building.

B. Overview

The Cranston Calvert School was constructed in 1876 and renovated in 1935 and 1976. The school consists of two separate 2 story buildings, both with basements. Both buildings are constructed of brick on a steel and wood frame. Both buildings have interior masonry bearing walls.

Both of the buildings are a series of stacked double loaded corridors with egress stairs at both ends. The two buildings are joined through a one story connection. The Cranston building houses an auditorium and the Calvert basement contains the cafeteria.

The Cranston basement level currently houses one (1) library space, one (1) teachers lounge, two (2) toilet rooms, and four (4) offices.

The Cranston first floor level houses the auditorium, one (1) nursing facility, three (3) classrooms, two (2) offices, (1) male, one (1) female student toilet, and two (2) staff toilet rooms.
The Cranston second floor houses six (6) classrooms, two (2) office, (1) male, one (1) female student toilets, and one (1) staff toilet.

The Calvert basement level currently houses one (1) cafeteria and kitchen space, a boiler room, two (2) storage rooms, and one (1) staff toilet.

The Calvert first floor level currently houses four (4) classrooms with one office at the split level directly off the stair, and one (1) staff toilet.

The Calvert second floor level currently houses four (4) classrooms with two (2) boys and (1) girls student toilet rooms directly off the egress stairs one half level above the second floor.

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<th>1876</th>
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E. Conclusions & Recommendations

The Cranston Calvert School has the following Highest Priority items regarding Life Safety, Fire Codes & Accessibility:

**Life Safety:**
(1) Most corridor doors are missing closers and/or door hardware and do not provide the minimal 20 min. rating or smoke resistance required by Life Safety Code Section 15.3.6 - Corridors.

Work to existing doors would need to be completed to bring corridors into compliance with Section 15.3.6 as well as Section 8.4 regardless of which course of action were selected above. Work would include:
- Replacing any doors with louvers, or any existing non-solid core doors allowed by 15.3.6(6)
- Equipping all corridor doors with automatic closing devices
- Replacing any door hardware not in compliance with 7.2.1
Its should be noted that solid core doors comply with 20 minute rating per Life Safety Code Section 15.2.2.2 – Doors. Hollow core or non-rated glass doors will need to be replaced with 20 minute rated doors.

(3) - Most classrooms lack windows for rescue and do not meet the exceptions for this requirement \of Life Safety Code Section 15.2.11 - Special Means of Egress Features.

Existing windows do not meet rescue requirements due to their size and in-swing orientation. Classrooms do not meet the exemptions for requirement of rescue windows due to:

- Walls between classrooms are not consistently constructed to the underside of structure above and do not resist the passage of smoke between the spaces.
- Walls between classrooms and the main corridor are constructed of CMU to the underside of the structure above but are not sealed, thus do not resist the passage of smoke between the spaces.
- Doors between classrooms are not equipped with self-closing or automatic closing devices.
- Doors between classrooms do not provide direct access to exits in both directions or direct access to an exit in one direction and to a separate smoke compartment that provides access to another exit in the other direction. Doors are also equipped with deadbolts which are not permitted on a means of egress

Possible courses of action to bring second floor classrooms into compliance include:

- Equip building throughout with an approved automatic sprinkler system.
- Modify existing classroom walls, doors and exits to comply with exemptions for requirement of rescue windows, Life Safety Code section 15.2.11.1.2.(5) This would include modifying all classroom walls to resist the passage of smoke, installation of required door hardware and devices and possible installation of additional smoke compartments and/or exits as required to meet maximum allowable travel distance of 150'.
- Replace windows with window meeting rescue requirements. A minimum of 1 window would be required in each student occupied room greater than 250 gsf. This could easily be accomplished on upper floors given an average sill height of 36" +/-.

(4)- Section 15.3.2.1 requires a 1 hour rating between areas using combustible supplies, boiler rooms, janitor closets and storage rooms for combustible supplies. Many areas of the building requiring fire ratings between uses in conformance with Section 15.3.2.1 (ie: storage rooms, and janitor closets) have compromised ratings due to unprotected openings in doors. No limited area suppression systems were observed.

Work required to bring fire separation of spaces into compliance would include:

- Equipping the spaces with an approved automatic extinguishing system in accordance with Section 8.7 and 9.7.3 or separating the spaces from the remainder of the building with 1 hour rated wall construction in accordance with section 8.3

(5)- Section 15.2.3 requires hand rails to be installed between 30” to 38” and guard rails to be installed at no less that 42”. Existing handrails are non-compliant/non existing.

Possible courses of action to bring second floor classrooms into compliance include:

- Continuous handrails need to be installed on egress stairs.

(6)- Section 15.2.3.2 requires that a minimum corridor width shall be no less than 72”.

Possible courses of action to bring first floor corridor into compliance include:
- Relocate copy machine and desk out corridor.

(7)- Section 15.2.2.10 Areas of Refuge requires that in an non sprinklered building without an elevator where a stair is a part of the required means of egress an area of refuge must be provided.

Possible courses of action to bring second floor classrooms into compliance include:
- A 30" x 48" clear space in a smoke tight enclosure must be provided that is not in the required egress width of designated area. A communicable system must be provided from the area of refuge to a central point for notification of someone in the area of refuge.
- Install a sprinkler system.
- Install an egress elevator compliant with Life Safety Code 7.2.13 Elevator section, which would also require installation of an emergency generator system and shaft pressurization system.

(8)- Section 15.7.4.2 requires that combustible items cannot be stored in corridor spaces or stair enclosures. Combustible items stored within basement corridor.

Possible courses of action to bring corridors into compliance include:
- Provide additional metal locker units.
- Install sprinkler system.
- Install code compliant smoke detection.
- Remove stored items from basement stair and corridor to storage area.

(9)- NFPA – Section 10 5.1.2 requires that a full complement of fire extinguishers be provided for specific use hazards within a building and the building's occupancy. There are no class B or C extinguishers within the building to protect from specific hazard fires.

Possible courses of action to bring fire extinguishers into compliance include:
- Provide Class B fire extinguishers at all locations where class B hazards exist and per Local FD requirements.
- Provide Class C fire extinguishers at all locations where class C hazards exist and per Local FD requirements.
- Replace all extinguishers with multi-purpose dry chemical Class A,B,C extinguishers.

(10)- Section 7.2.2 requires that all egress stairs function solely for egress purposes and is completely enclosed within a 1 hour enclosure. The Calvert school has restrooms directly off the egress stairs.

- Verify existing bathroom wall and door construction meet required 1 hour fire separation.

(11)- Section 15.3.3.2 requires that all materials within all spaces of an Educational Occupancy to be a minimum classification of C. Stage curtain does not conform to this requirement. Prior to replacement of curtain, it should be confirmed with local Fire Marshal that the curtain does not have to comply with 13.4.5.7- requirements for proscenium stage curtains.

Possible courses of action to bring stage curtain into compliance include:
- Replace existing stage curtain with a minimum acceptable class C curtain.

(12)- Section 15.2.2.10 Areas of Refuge requires that in a non sprinklered building without an elevator where a stair is a part of the required means of egress an area of refuge must be provided.

Possible courses of action to bring second floor classrooms into compliance include:
- A 30” x 48” clear space in a smoke tight enclosure must be provided that is not in the required egress width of designated area. A communicable system must be provided from the area of refuge to a central point for notification of someone in the area of refuge.
- Install a sprinkler system.
- Install an egress elevator compliant with Life Safety Code 7.2.13 Elevator section.

**Fire Alarm:**

It is recommended that the existing addressable fire alarm system be re-used and new devices be added to provide a total (complete) coverage addressable fire alarm system per NFPA-72 section 5.5.2.1 and per RIUFC chapter 13 and the State of RI Accessibility Code. The existing radio master-box should be re-used. The existing manual pull stations and horn/strobe devices should be replaced and new pull stations and horn/strobes devices should be added where deficiencies occur. New detector will need to be added where deficiencies occur.

**Exit Signs & Emergency Lighting:**

It is recommended that the existing exit signs in the Auditorium be replaced with new LED exit signs with integral emergency battery backup as required by Code. It is recommended that the existing emergency lighting battery units be replaced and new added where deficient on both floor levels as required by Code.

**Fire Suppression:**

Where student occupancy exists below the level of exit discharge (i.e. basement level), every portion of the basement shall be protected throughout by an automatic sprinkler system.

The occupancy of the basement of the building requires that a fully automatic sprinkler system be installed. Because a sprinkler service and riser will already be installed, the cost of a fully sprinklered building should be compared against the cost of all other remedial work in the case of not sprinklering the whole building.
F. Exhibits

1. Typical classroom/corridor door without required closer.

2. Typical classroom windows that do not meet rescue requirements.
3. Egress stair hand rails do not meet code requirements

4. Although not specifically cited by the Fire Department nor prohibited by Life Safety Code, the radiator impedes on handrail and egress clearances.
F. Exhibits (con’t)

5. View of combustible item storage in exit corridor.

6. View of auditorium doors with non compliant hardware and no closer device.
F. Exhibits (con't)

7. View of non compliant handrails at building connector.

8. View of non rescue compliant windows on the Calvert building side basement.
F. Exhibits (con't)

9. Non compliant egress door hardware on doors from cafeteria into fire rated egress stair.

10. Non fire rated door between boiler room and storage room.
## Life Safety

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<tr>
<th>Scope of Renovations</th>
<th>Cost / Unit</th>
<th>Unit Req’d</th>
<th>Unit</th>
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## Newport Public Schools
### Preliminary Construction Budget
#### Cranston Calvert School
RGB Project No. 5785

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Budget with Full Sprinkler System
November 7, 2008
District and Community Demographics
-District-wide
DEMOGRAPHIC STUDY

for the

NEWPORT PUBLIC SCHOOLS

Newport City, Newport County, State of Rhode Island

Prepared By:

Whitehall Associates, Inc.

Educational Facilities Planning Consultants
65 Fayson Lakes Road
Kinnelon, New Jersey 07405-3129
www.whitehallnj.com

December 12, 2008
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Overview of the District ................................................................................................. 3
Enrollment Data and Projections .................................................................................. 3
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INTRODUCTION

Whitehall Associates, Inc. was retained by the Newport Public Schools to prepare a demographic study. This study is applicable in the planning of any facilities.

OVERVIEW OF THE DISTRICT

Newport City covers 39.31 square miles in Newport County, Rhode Island. The Board of Education maintains seven schools in a Pre-K-12 district. Board offices are located at 437 Broadway in Newport.

ENROLLMENT DATA AND PROJECTIONS

In developing a projection of enrollments, the cohort-survival method has been used as a base. The cohort-survival method acquires its name from the use of grade to grade survival figures derived from a recent history of the school district. Grade survival ratios at each level can then be computed on the basis of the recent years’ known enrollment with an average survival ratio per grade determined. Ratios less than one usually reflect such factors as out-transfers, ex-migration from the school district and other such losses. A survival ratio of more than one usually reflects such factors as in-transfers and in-migration. Projections of enrollment can then be made by applying the individual grade by grade survival ratio to each grade level for future years with a base of known enrollments for the present year.

With some adaptation to local circumstances, the cohort survival method is the most accurate we have to project enrollments. In some districts, the impact of new residential development must be taken into account. This is accomplished using data derived from The Urban Land Institute, the Center for Urban Policy Research at Rutgers University and Whitehall’s research. In Newport’s case there is some proposed residential development that will warrant the modification of the cohort survival projections.

MUNICIPAL POPULATION TRENDS

This table lists the decennial population of Newport since 1930. There was a spike in the population of 1960 to just over 47,000. This spike was caused by the Navy moving into Newport and then moving out. Since 1960 there has been a decline in the general population.

TABLE 1

The estimated growth of Newport for the next 33 years is displayed. It appears that the precipitous drop in population has abated and although there is an anticipated decline, it will be at a much lesser rate. A linear regression was used to make these projections. The original trend line was modified to begin with the actual figure for year 2007. The rate of change was not modified.

TABLE 2

The district’s enrollment history are shown wherein the survival ratios mentioned in the preceding paragraphs are developed. Student enrollments were taken from information supplied by the district. These figures are for students housed in the district schools and do not include out of district placement. Birth figures through the year 2007 were obtained from Colleen Fontana at the Rhode Island
Department of Health, Office of Vital Records. Birth figures for years subsequent to 2007 were calculated using a linear regression of the past thirteen years' live births.

**TABLE 3**

This is the main table and is designed to be used in conferences and meetings. It allows the participants to be able to refer to one page rather than searching through a document for more information. The back-up for Table 3 entries will be found in other tables. All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually. These projections can and should be updated every year.

The birth to kindergarten ratios, customarily used in cohort projections, did not produce accurate and realistic results. Therefore, a regression analysis of the last nine year's kindergarten enrollments was used to project the kindergarten enrollments.

The solid black boxed area to the lower left of the tables is an area of low confidence in that these children have either not been born or reported. Births in the red dashed boxed areas may be shown as a regression, an average of the last thirteen years' live births or the last known birth figure. In this case we used a linear regression.

Table 3 shows the live births attributed to Newport for the five years prior to the kindergarten year shown.

A projection of student enrollment for the next ten years has been made. In Table 3 the total school population is expected to decrease by 447 students or 21.33 percent in the next five years and 724 students or 34.55 percent in the next ten. This does not take into account any residential development impact. The projections ten years hence are of low confidence since a substantial number of the student population for that period has not been born or reported to date.

The line **Net Development impact** displays, by grade, the impact residential development will have on the cohort survival projections.

The line **2013-14 Total Enrollment** combines the net development impact and the normal cohort projection for 2013-14 to give a planning figure for enrollments.

**TABLE 4**

This table shows the population impact of planned and approved residential development in the district. The name of the development, type, number of units, number of bedrooms and remarks were supplied by Rhonda R. Mitchell, HOPE VI Director of the Housing Authority of the City of Newport and by Paige Bronk, Director of Planning, Zoning and Inspections for the City of Newport.

In Table 4 there are two major groupings. The largest is Newport Heights which is a renewal for properties that currently exist and are being replaced. Since the existing properties already have children in the Newport Public schools, these properties are not to be considered as having an additional impact on the school system.

The following note from Paige Bronk clarifies the situation with respect to properties that would have an impact on the Newport Public Schools. Although the statement was made over a year ago, in recent conversations he said it was still valid. **"One factor that is**
difficult to capture is the conversion of existing multiple family structures to condominiums. Many of these structures may not be fully occupied prior to their conversion, but the new units are occupied once sold. Regardless, most of these units would not be marketed towards families with children. Also, many of these units are used as second homes. As a result, there would probably not be any significant gain in terms of school aged children.”

From that, we begin with some assumptions. The cohort survival method assumes that the rate of growth during the period the data is collected will remain the same for the period of population projection. Therefore the rate of growth indicated in Table 2 will carry over to Table 3 in all cases. Now if something were to happen that changes the rate of growth, that event must be taken into account. Residential development is one of those factors. There are several options at this point:

a. If the development impact in Table 4 is less than the projected five year increase in student population shown in Table 3, the Table 4 impact is ignored. To do otherwise would be double counting.

b. If the development impact in Table 4 is more than the projected five year increase in student population shown in Table 3, the net impact is shown on the line labeled Net Development Impact in Table 3.

c. If there is a projected decrease in the student population in Table 3, the entire Table 4 impact is considered and shown on the line labeled Net Development Impact in Table 3.

d. If, within the past five years, there has been no development of the magnitude shown in Table 3, the entire Table 4 impact is considered and shown on the line labeled Net Development Impact in Table 3.

In Newport there is a projected decrease in the student population. The anticipated development impact of 19 in Table 4 should be considered in its entirety and is shown on the line labeled Net Development Impact in Table 3.

NOTE: Usually the Net Development Impact is added only to the fifth year of enrollment projections. This becomes the planning figure for new facilities. It is understood that the developments will contribute additional students throughout the five year period of projections. However, there is no competent way to determine how many students will be added in any particular year.

TABLE 5

The enrollment projections by school, by grade for the year 2013-14 are shown here. The ratio of students was taken from the Fall 2008 enrollment data and applied to the 2013-14 district wide projections.

CAUTION: There is one word of caution here. It has been Whitehall’s experience that when a new school is opened, the number of students increases from what was projected in the customary ways. There are many factors that contribute to this increase and it is impossible to estimate the increase. We have seen parents remove their children from private schools to take advantage of new, modern facilities. This fact must be kept in mind.
NEWPORT, RHODE ISLAND  
DECENNIAL POPULATION SINCE 1930  
LAND AREA = 39.31 Sq. Mi.

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<th>YEAR</th>
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<th>INCREASE</th>
<th>% INCREASE</th>
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<tr>
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SOURCE: U.S. Census Bureau
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NEWPORT, RHODE ISLAND
MUNICIPAL POPULATION PROJECTIONS

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<th>3rd Gr.</th>
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<td>0.95</td>
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**NOTE:** Due to the change in the allowable birth dates for kindergarten that affected the 2004-05 kindergarten enrollments, the birth to PK ratio for 2004-05 was not used to compute the respective average survival ratio.
### TABLE 3

NEWPORT, RHODE ISLAND BOARD OF EDUCATION

STUDENT ENROLLMENT PROJECTIONS

<table>
<thead>
<tr>
<th>School Year</th>
<th>Births 5 Yrs. Ago</th>
<th>PK</th>
<th>KF</th>
<th>1st Gr</th>
<th>2nd Gr</th>
<th>3rd Gr</th>
<th>4th Gr</th>
<th>5th Gr</th>
<th>PK-4 Total</th>
<th>6th Gr</th>
<th>7th Gr</th>
<th>8th Gr</th>
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<th>10th Gr</th>
<th>11th Gr</th>
<th>12th Gr</th>
<th>12-13 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>297</td>
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<td>0.17</td>
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<td>0.01</td>
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<td>0.01</td>
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<td>0.01</td>
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<tr>
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<td>0.01</td>
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<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>2018-19</td>
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<td>0.01</td>
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<td>0.01</td>
<td>0.01</td>
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</tr>
</tbody>
</table>

NOTES:
1. Births in the red dashed boxed area were calculated by a linear regression. Students in those year groups have not been born or reported to date.
2. Kindergarten figures in the blue dashed box were produced by a regression of the past nine year's actual kindergarten enrollment.
3. The black solid boxed area to the lower left of the total area is an area of low confidence in that these children have either not been born or reported to date.
4. All calculations are carried to eight or more decimal places. Since there cannot be a fraction of a student, the district totals may vary by one or two students if added manually.

FINAL - 2008-09 Demographics - Newport Public Schools - 11/12/2008

Page 9 of 11
### TABLE 4
NEWPORT RESIDENTIAL DEVELOPMENT
(As of December, 2008)

<table>
<thead>
<tr>
<th>DEVELOPMENT</th>
<th>TYPE</th>
<th>NUMBER OF UNITS REMAINING</th>
<th>NUMBER OF BEDROOMS</th>
<th>REMARKS</th>
<th>TOTAL STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coddington Cove Condos</td>
<td>townhouse</td>
<td>23</td>
<td>2</td>
<td>many are second homes</td>
<td>6</td>
</tr>
<tr>
<td>Brown &amp; Howard Condos</td>
<td>townhouse</td>
<td>5</td>
<td>2</td>
<td>many are second homes</td>
<td>0</td>
</tr>
<tr>
<td>Bellevue Gardens</td>
<td>townhouse</td>
<td>43</td>
<td>2</td>
<td>to be built - $1 million plus</td>
<td>3</td>
</tr>
<tr>
<td>Eastborne Lodge</td>
<td>single family</td>
<td>12</td>
<td>3</td>
<td>proposed</td>
<td>7</td>
</tr>
<tr>
<td>Lenthal School</td>
<td>townhouse</td>
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<td>being developed</td>
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<tr>
<td>Newport Heights - Hope VI - LIHTC</td>
<td>townhouse</td>
<td>20</td>
<td>2</td>
<td>affordable - rental units</td>
<td></td>
</tr>
<tr>
<td>Newport Heights - Hope VI - LIHTC</td>
<td>townhouse</td>
<td>15</td>
<td>3</td>
<td>affordable - rental units</td>
<td></td>
</tr>
<tr>
<td>Newport Heights - Hope VI - home ownership</td>
<td>townhouse</td>
<td>2</td>
<td>4</td>
<td>affordable - rental units</td>
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</tr>
<tr>
<td>Newport Heights - Hope VI - home ownership</td>
<td>townhouse</td>
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<td>on hold</td>
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</tr>
<tr>
<td>Newport Heights - Hope VI - home ownership</td>
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<td>townhouse</td>
<td>7</td>
<td>3</td>
<td>for sale - affordable</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

1. The name of the development, type, number of units, number of bedrooms and remarks for all except Newport Heights, were supplied by Paige Bronk, Director of Planning, Zoning, Development & Inspections, City of Newport. Newport Heights information was supplied by Rhonda R. Mitchell, HOPE VI Director, Newport Housing Authority.

2. All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually.

3. If there is a projected decrease in the student population in Table 3, the entire Table 4 impact is considered and shown on the line labeled Net Development Impact in Table 3. Any net development impact must be added to the normal 2012-13 projection. See pages 4 and 5 of the narrative for details.

4. Newport Heights is a renewal for properties that currently exist and are being replaced. Since the existing properties already have children in the Newport Public Schools, these properties are not to be considered as having an additional impact on the school system but are presented here for information purposes only.

As of December 2008, 396 units have been demolished and 343 have been replaced.
### TABLE 5
**NEWPORT, RHODE ISLAND BOARD OF EDUCATION**
**OCTOBER 1, 2008 ENROLLMENT, BY SCHOOL, BY GRADE**

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>PK</th>
<th>KF</th>
<th>1</th>
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<th>3</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rogers High School</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>168</td>
<td>174</td>
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<td>23</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
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<td>21</td>
<td>47</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>25</td>
<td>156</td>
<td>171</td>
<td>166</td>
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### PROJECTED ENROLLMENT BY SCHOOL, BY GRADE - FOR 2013-14

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<tbody>
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### TABLE 3 PROJECTIONS FOR 2013-14

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<td>135</td>
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</tr>
</tbody>
</table>
Cross Districting Due Diligence

- Correspondence with neighboring Superintendent
January 22, 2009

John H. Ambrogi, Ed.D.
Superintendent of Schools
Newport School Department
437 Broadway
Newport, Rhode Island 02840

Dear Dr. Ambrogi:

Please be advised that presently the Middletown Public Schools do not have any available buildings or classroom space.

Good luck in your new school construction authorization.

Sincerely,

Rosemarie K. Kraeger
Superintendent of Schools

RKK/md

“In partnership with students, parents, and community the mission of the Middletown Public Schools is to provide a comprehensive, safe educational environment that is learner-centered, enabling all students to succeed in the global economy of the 21st Century.”

“The Middletown Public Schools is an equal employment opportunity affirmative action employer”

Oliphant School • 26 Oliphant Lane • Middletown, RI 02842 • (401) 849-2122 • Fax 849-0202 • email: r kraeger@mpsri.net
Education Program Due Diligence
- Existing school capacity
Existing School Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Capacity</th>
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</thead>
<tbody>
<tr>
<td>Cranston Calvert School (K-4)</td>
<td>374</td>
</tr>
<tr>
<td>Carey (K-4)</td>
<td>220 No longer active as of 07/09</td>
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<tr>
<td>Coggeshall (K--4)</td>
<td>242</td>
</tr>
<tr>
<td>Sullivan (K-4)</td>
<td>416</td>
</tr>
<tr>
<td>Underwood (K-4)</td>
<td>242</td>
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<tr>
<td>Thompson Middle School (5-8)</td>
<td>720</td>
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<tr>
<td>Rogers High School (9-12)</td>
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</table>
Smart Growth Planning
Smart Growth Planning

One of the basic premises of Smart Growth Planning is to avoid urban sprawl and to move towards more sustainable communities. Constrained by both water and land boundaries, Newport has consistently worked to protect its natural and historic resources and to optimize its infrastructure. Newport’s Newer and Fewer Schools initiative was in line with those planning goals and the current plan continues that effort.

The overriding goal of the School Committee is to assure that all students receive an equivalent level of services and programs, regardless of the neighborhood school attend. The planning process has lead to a solution that achieves that primary goal while consolidating school facilities and making the entire school system more efficient as the student population decreases.

The planning process has been consistent with the basic premises of Smart Growth.

- The City will have fewer facilities to operate and maintain when the new plan is fully implemented.
- The City will reuse an existing school site for new construction and more fully utilize two of its existing facilities.
- All of the existing schools sites were considered as part of the planning process. The selected site is the only site that is both large enough for the new school and located near the geographic core of the City.
- Existing school facilities were investigated to determine their appropriateness for continued school use. The facilities were determined to be too small, too inefficient in their layout, and too severely in need of significant upgrades to be reused.
- The new school will be energy efficient and constructed in line with the CHPS guidelines.
- Newport will look to preserve their historic school buildings through negotiation and incentives to potential purchasers.
Operating Budget Analysis
Operating Budget Analysis
Utility Costs

Utility Costs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>FY07</th>
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<tr>
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<td>Sullivan</td>
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<td>Underwood</td>
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<tr>
<td></td>
<td>Totals</td>
<td>12,310.36</td>
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</table>

Cost for 5 existing schools $148,636.20

Be advised that the existing buildings are not provided with ventilation air which is the largest single consumer of energy and would account for as much as 50% of an overall associated heating bill. More often than not, when compared to an old building, the projected energy consumption for a new building operating in accordance with current building code and health code requirements will be higher.
To: John H. Ambrogi, Ed.D  
Superintendent

From: Michael Saunders  
Business Manager

Date: August 14, 2007

RE: FY 2007-2008 Fuel Oil Award

The East Bay city and schools bid fuel oil Tuesday August 14, 2007 which resulted in fuel oil decrease of 6% or $0.14 per gallon. There were four bidders and the low bid fixed prices of $2.1742 per gallon by Dennis K. Burke, Inc. It is recommended that the Newport Public Schools accepted and award the fuel oil bid to Dennis K. Burke, Inc. Dennis K. Burke, Inc. has been the fuel supplier to Newport Public Schools for FY 2006-2007.

There was a bid from Buckley Energy Group, Ltd with contingencies that did not adhere to bid specifications.

Attachment
Local Jurisdictional Considerations
Local Jurisdiction Considerations

On February 26, 2003 Newport City Council adopted a Comprehensive Land Use Plan. The Plan received approval from the State of Rhode Island on August 6, 2004, and remains in affect for five years. The Plan is divided into eight “Elements”. Of the eight, two of the elements have implications for school planning. Those two elements are Element 2, Land Use, and Element 6, Community Facilities and Services. The proposal approved by the School Committee is in alignment with the Land Use Plan.

Some examples of the alignment are as follows:
Element 2 Land Use
Goal A  Protect Newport’s Historic Character
The new school building will be constructed on the edge of an historic district. It will be designed to conform with the surrounding homes and structures. Goal B4  Preserve existing neighborhood character and stability. The new school will be constructed on the site of an existing school building.

Element 6 Community Facilities and Services
Goal 5  Maintain the municipal Infrastructure to the highest possible standard.
The School Committee plan will preserve the 2 schools that are in the best condition within Newport and create a brand new high performance elementary school

Goal 9  Provide a physical environment that is conducive to learning.
The existing elementary schools are no longer suitable educational facilities. There is little or no accessibility, materials are in poor condition and the infrastructure is in dire need of replacement. In some instances there is potential for indoor air quality issues.

The new plan will provide facilities that are conducive to learning. There will be ample natural light and natural ventilation. The rooms and layout will be designed for an early education program. There will be adequate play space and appropriate support facilities.
Description of how preliminary planning consultants contract procurement satisfies applicable laws.
Contract with HMFH Architects
The Newport Public Schools has been pursuing the issue of the need to construction new elementary schools for several years now. In the Spring of 2006, the district put out a request for proposal. That request resulted in a response from fifteen (15) architectural firms from New England. Of those fifteen, five (5) were interviewed and the School Committee had narrowed it down to three (3). The School Committee went to on-site visits to schools that were constructed by those three (3) architectural firms and selected HMFH Architects as the firm to move the district forward with its new construction program. As you can see from this documentation attached, the district had begun this process prior to the establishment of the new regulations from the Board of Regents regarding housing aid.
NEWPORT PUBLIC SCHOOLS

REQUEST FOR ARCHITECTURAL SERVICES
ELEMENTARY SCHOOL FACILITIES

The School Committee of the City of Newport, Rhode Island, is seeking letters of interest and statements of qualifications for architectural services in connection with schematic design, design development, construction documents, and project supervision for new construction for three (3) elementary schools housing approximately 400 students each.

All responses, including the completion of the enclosed Educational Facilities Experience Form, are to be received no later than 10 a.m., on June 9, 2006, in a sealed envelope clearly marked Architectural Services: Elementary School Facilities and addressed to:

Paul Fagan
Property Services Director
Newport Public Schools
437 Broadway
Newport, Rhode Island 02840

Dated: May 17, 2006
NEWPORT PUBLIC SCHOOLS

REQUEST FOR ARCHITECTURAL SERVICES
ELEMENTARY SCHOOL FACILITIES

I. Statement of Policy

It is the policy of the Newport School Committee to retain, when necessary, consultant services on the basis of demonstrated competence and qualification for the type of services required at fair and reasonable prices. It is recognized that competence, experience, and ability are important considerations, and the amount of fee alone is not the only criteria in selecting professional services.

II. Description of the Project

The Newport School Committee is proposing the construction of three (3) new elementary schools, which will house approximately 400 students each. Architectural services will include review of appropriateness of site locations, design development, specifications, construction documents, and administration for these facilities. It should be noted, however, that services beyond the schematic design phase are contingent upon voter approval of a Bond Referendum tentatively planned for May, 2007.

III. Selection Process

All submittals will be reviewed by a Subcommittee established by the Newport School Committee, and the top two or three firms deemed to match the selection criteria most closely will be invited to make presentations before the Newport School Committee who will make the final selection. Following these presentations, a select number of firms may be invited to submit formal proposals including a fee schedule and make a presentation(s) to the Newport School Committee before a final selection is made.
IV. **Basis for Selection**

Among the criteria in selecting architectural firms for further consideration will be:

A. Demonstrated experience in school construction, especially at the elementary school level. Familiar with Rhode Island Department of Education (RIDE) Regulations regarding school construction.

B. Record in accomplishing work on other projects involving new construction in the required time and budget.

C. Quality of work performed previously; minimum of three references from previous construction projects.

D. The professional background, experience, and expertise of Principals and staff assigned to the project.

E. Recent experience showing accuracy of cost estimates (Total Project Costs) in school construction projects.

F. Experience in working with elected officials, community groups, and committees.

G. Community relations including evidence of sensitivity to citizen concerns.

H. Ability to meet regularly with School Committee, staff members, and community groups.

I. Evidence of bonding capacity.

J. Competitive Fee Schedule.

K. Ability to provide all noted services in accordance with the Proposed Schedule, as follows.
V. Proposed Schedule


VI. Form of Submittal

In addition to the enclosed Educational Facilities Experience Form, interested firms should provide a Letter of Interest and Statement of Qualifications. A Statement of qualifications should include: a description of the size of the firm, the amount of work presently underway, any major educational facility design experiences, and the unique talents or qualifications of your firm. Also, please include the resumes of Principals and staff to be assigned to this project. This is needed to allow the School Committee a comprehensive review of your firm. Please keep in mind that this is not a design competition but a presentation of your firm/team capabilities and accomplishments in related projects.

Please submit ten (10) copies of your complete Request for Proposal Package.

VII. Additional Information

Additional information on this project and the submittal process may be obtained by contacting Paul Fagan, Property Services Director, c/o Newport Public Schools, 437 Broadway, Newport, Rhode Island 02840, at 401-847-2100, Ext.: 256.

Dated: May 17, 2006
NEWPORT PUBLIC SCHOOLS
REQUEST FOR ARCHITECTURAL SERVICES
ELEMENTARY SCHOOL FACILITIES

EDUCATIONAL FACILITIES EXPERIENCE: NEW CONSTRUCTION/RENOVATIONS

Name of Firm:
Person Completing this Document: ____________________________

In the space below, please provide information on educational facility projects for which your firm was directly responsible during the past five (5) years (most recent first).

<table>
<thead>
<tr>
<th>Facility and Location</th>
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<th>Current Telephone</th>
<th>Building Size (Square Feet)</th>
<th>Project Dates</th>
<th>Construction Costs</th>
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<tbody>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Estimated Bid Actual</td>
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<tr>
<td></td>
<td></td>
<td></td>
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Qualifications Submitted for Architectural Services

Elementary School Facilities

<table>
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<tr>
<th>COMPANY</th>
<th>STATE</th>
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<tbody>
<tr>
<td>1. Robinson Green Beretta Corporation</td>
<td>RI</td>
</tr>
<tr>
<td>2. Taylor &amp; Partners, Inc.</td>
<td>RI</td>
</tr>
<tr>
<td>3. Thomas Londardo &amp; Associates</td>
<td>RI</td>
</tr>
<tr>
<td>4. Design Partnership of Cambridge</td>
<td>MA</td>
</tr>
<tr>
<td>5. Edward Rowse Architects</td>
<td>RI</td>
</tr>
<tr>
<td>6. URS Corporation</td>
<td>CT</td>
</tr>
<tr>
<td>7. HMFH Architects Inc.</td>
<td>MA</td>
</tr>
<tr>
<td>8. Kaestle Boos</td>
<td>MA</td>
</tr>
<tr>
<td>9. Newport Collaborative Architects</td>
<td>RI</td>
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<tr>
<td>10. JCJ Architecture</td>
<td>CT</td>
</tr>
<tr>
<td>11. Mount Vernon Group</td>
<td>MA</td>
</tr>
</tbody>
</table>
March 14, 2007

Newport Public Schools
Office of the Superintendent of Schools
John H. Ambrogi, Ed. D., Superintendent
437 Broadway
Newport, Rhode Island 02840-1767

Dear Dr. Ambrogi:

In response to your letter of January 26, 2007, please be assured that the new construction requirements for Rhode Island, while containing some new elements, will not radically change what districts must and have historically done in preparing an application for Board of Regent's approval. You can proceed with going forward with your architectural study and do not have to re-visit work accomplished to date. The draft regulations are available on our website so that your architect can ensure that your design is in keeping with the new standards.

Your concerns about delays in the process under the new regulations are unfounded. Based on input from districts like your own, the new process provides for a rolling application and approval process. We plan to have a new position in place in the next few weeks, and the Department is ready to process your application when it is complete.

Please contact Kristen Cole at 222-4681 or kristen.cole@ride.ri.gov with questions or for additional information.

Sincerely,

Carolyn Dias, Director
Office of Finance

The Board of Regents does not discriminate on the basis of age, color, sex, sexual orientation, race, religion, national origin, or disability.
Friday, January 26, 2007

Mr. Peter McWalters, Commissioner
Rhode Island Department of Education
255 Westminster Street
Providence, RI 02903-3400

Subject: Newport Public Schools “Fewer, Newer” Initiative

Dear Commissioner McWalters:

We have recently become aware of a proposed change in the process for approving new school construction and procedures required to initiate a local bond referendum. The Newport School Committee has, since March 2005, started a process which we believe will culminate in proposing a bond referendum to the residents of the city of Newport for a school consolidation program at our elementary level.

To that end, the district has taken the following steps:

- Establishing a Facilities Long Range Sub-committee, with a report that was submitted to the Newport School Committee on July 22, 2005;

- The district contracted with Whitehall Associates to conduct a demographic study in the fall of 2005 and a revised demographic study in the fall of 2006;

- In the spring of 2006, the district had public dialogues that were held throughout the community to discuss the concept and options for new elementary schools in Newport. Online surveys were developed and forums were held to solicit community input.

- This past fall, as a result of all of this information, the Newport School committee began to interview architects. A committee of community members screened a field of fifteen (15) architects and narrowed the field down to five (5). The school committee interviewed the five architectural firms, and went on-site visits to schools that were designed by three of those architectural firms.

- In the month of December, the school committee determined that it would contract with HMFH Architects, Inc., for the new school construction with a first step being a total review of our current facilities and a recommendation from them with regard to the site locations available to us, and the ability of the district to support two or three new elementary schools. It was the committees’ intention to contract with HMFH to conduct the study and then have more public dialogue prior to having HMFH do the design of the new elementary schools.

Providing Quality Education That Makes A Difference in Each Student’s Life
Now we find that there is consideration of a new process for the Board of Regents' approval of school construction which will radically change the requirements. Although we applaud much of what the Regents are intending to do with regard to having wide public support and energy efficient schools, we are concerned that the last two years might have been wasted by the residents of Newport, if in fact, we have to go back to square one in the process.

I am asking, therefore, to request some clarification from your office regarding where the City of Newport school department may stand in terms of going forward with our architectural study to determine site locations and whether or not two or three schools might be appropriate for construction here in Newport. Because our schools are old and structurally unsound, time is somewhat of the essence for us. Additionally, with the cost of new school construction escalating precipitously each year, we are concerned that additional delays will just add to the bond referendum dollars that the taxpayers will be asked to support.

We would request that you would provide us with information regarding whether or not districts who find themselves in the same situation, can reasonably expect some relief from the new timelines as proposed by the preliminary draft as presented at the recent RI School Business Association meeting.

Right now, the district is on hold regarding the contract that we had intended to execute with HMFH Architects, Inc. and would appreciate your response to this request as soon as possible.

Sincerely,

John H. Ambrogi, Ed.D.
Superintendent of Schools

JHA\mgr

Copy to: Newport School Committee
MEMORANDUM

TO:        Neil F. Galvin, Esquire
FROM:      John H. Ambrogi, Ed.D.
            Superintendent of Schools
RE:        HMFH Architects—SCOPE OF WORK—CONTRACT
DATE:      August 16, 2007

Please find a copy of the proposed Contract from HMFH Architects as a supplement to the original Agreement.

My initial thoughts are that the total lump sum fee should be listed “as not exceed $23,000”. It does not say that, but please look at it in its entirety and advise me as soon as possible.
August 11, 2007

Dr. John Ambrogi  
Superintendent of Schools  
Newport Public Schools  
437 Broadway  
Newport, RI 02840

Re: Analysis of High School for Middle School Use  
Fee Proposal Revised

Dear Dr. Ambrogi:

From our conversation I understand that there is an interest in pursuing the concept of housing the 7th and 8th grades within the Rodgers High School. In order to explore this concept more fully I would suggest the following approach:

1. Meet with High School Administration and the Middle School Administration to:
   - Develop a preliminary philosophy regarding the relationship and level of interaction between the two student groups.
   - Understand and define the current enrollment and program requirements for the high school.
   - Understand and define the current enrollment and program requirements for the 7th and 8th grade students.

2. Develop utilization analysis of the high school facilities indicating unneeded spaces within the high school.

3. Determine what classrooms are necessary for the academic operations of the high school.

4. Create a base floor plan diagram of the high school from the existing floor plan prints that the School Department has.

5. Develop up to 3 preliminary options indicating how the 7th and 8th grades might be housed within the high school or within the high school and in new a new addition or additions to the high school.

6. Review the preliminary options with the Administrators from the 2 schools, receive their input and develop a final option based upon their feedback.

7. Develop a conceptual cost estimate based upon the final option developed.
Because it is difficult to gauge the scope of our work at this time, I would suggest that HMFH proceed to work on an hourly basis with an upset limit of $23,000. Newport would only be billed for the time actually spent on the project. If HMFH is able to develop an acceptable approach rapidly the fee could be significantly less. HMFH would not bill Newport beyond the $23,000 unless there were to be an agreed-upon change in the scope of the project beyond what is anticipated and described above.

HMFH would bill in accordance with the following rates:

<table>
<thead>
<tr>
<th>Position</th>
<th>Rate</th>
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</thead>
<tbody>
<tr>
<td>Project Director</td>
<td>$160.00/hour</td>
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<tr>
<td>Project Manager</td>
<td>$120.00/hour</td>
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<tr>
<td>Architectural Designer</td>
<td>$85.00/hour</td>
</tr>
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<td>CAD Designer</td>
<td>$65.00/hour</td>
</tr>
</tbody>
</table>

This fee assumes that we will develop a cost estimate based on square foot cost for recent, comparable projects.

We look forward to working with you on this undertaking. Please contact me with any questions you might have.

Very truly yours,

HMFH Architects, Inc.

[Signature]

Laura Wernick, AIA
Vice President

Cc: Margie Muirroe
PROFESSIONAL SERVICES SUPPLEMENT
AIA Document G604

In accordance with the AGREEMENT dated: March 10, 2007

BETWEEN:

Newport School Committee
427 Broadway
Newport, RI

and:

HMFH Architects, Inc.
130 Bishop Allen Drive
Cambridge, MA 02139

for the Project: Schools Feasibility Study and Basic Services

☐ authorization is requested

☒ to proceed with Additional Services

☐ to proceed with revised scope of Basic Services

☐ to incur Reimbursable Expenses

OR

☐ notification is made

☐ of the need to proceed with Contingent Additional Services

☐ of the need for other services

AS FOLLOWS:

The following adjustments shall be made to scope, compensation, and time:

Scope: For work undertaken starting December 15, 2008 for the submission of RIDE Stage 1 and Stage 2 Applications for a new elementary school on the Sullivan School site, and in accordance with letters to Dr. John Ambrogi dated January 12, 2009.

Compensation:

Total Lump Sum Fee: 

<table>
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<th>Fee</th>
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<tbody>
<tr>
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<tr>
<td>Stage 2 – Phase 1</td>
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<tr>
<td>Stage 2 - Phase 2 (Pending School Committee Approval)</td>
<td>$50,000</td>
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<tr>
<td>Total</td>
<td>$71,500</td>
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Reimbursable amount to be billed against for travel, printing and postage $ 5,000

Time: The final Stage 2 Application is to be submitted to RIDE in early April

SUBMITTED BY: HMFH Architects, Inc.  

AUTHORIZATION IS GIVEN or NOTIFICATION IS ACKNOWLEDGED BY:

Laura Wernick, AIA, Vice President

(printed name and title)  

(date)  

AIA DOCUMENT G604 • PROFESSIONAL SERVICES SUPPLEMENT • 1993 EDITION • AIA •  
• THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVE., N.W., WASHINGTON, DC 2006  
G604-1993
MEMORANDUM

TO: Newport School Committee

FROM: John H. Ambrogi, Ed.D.
Superintendent of Schools

RE: Architectural Services—Elementary School Facilities:
Contract Approval: Newport School Committee and HMFH Architects, Inc.

DATE: March 9, 2007

Please find attached a copy of the recommended Contract between the Newport School Committee and HMFH Architects, Inc. As you can see, it conforms with the outline that I had previously presented to you and has been reviewed by Neil Galvin to insure that it has similar provisions as the architectural contract that had previously been entered into with HMFH for the Thompson Middle School Project.

The only aspect of this Contract that you are now obligated for, finally, at this point in time, is the $37,000 and for the Feasibility Study and the $50,000 for the Pre-Bond Referendum Activities. Please remember that when the Bond passes, the $50,000 for the Pre-Bond Referendum Activities will be subsumed under the basic compensation fee of seven percent (7%) of the estimated construction costs.

Just of note to let you know, I think we negotiated an excellent contract. The last contract with HMFH Architects was 9.15 percent of estimated construction costs and this contract is based on 7 percent of construction costs. When you think about the millions of dollars for that project, to come in at 2.15 percent lower is a great deal of money.

JHA: wjg
Attachment
January 12, 2009

Dr. John Ambrogi
Superintendent of Schools
Newport Public Schools
437 Broadway
Newport, RI 02840

Re: Supplement to HMFH Contract
Newport Elementary School

Dear Jack:

Since the original contract between Newport and HMFH Architects was initiated March 10, 2007 there have been 3 Professional Supplementary Services agreements signed for HMFH’s services related to the feasibility of constructing a new elementary school in Newport. I understand that there is now renewed interest in an approach making use of the Sullivan School site for a new school. The Rhode Island Department of Education requires complete Stage 1 and Stage 2 application submittals to determine the feasibility of this approach. At this time I would suggest that Professional Services Supplement #4 be initiated. The proposed fee for our services is based on the scope of work outlined in my previous letter to you of January 12, 2009 which described the RIDE submission requirements.

Our fee for the complete RIDE submission process is as follows:

<table>
<thead>
<tr>
<th>Stage 1 Application</th>
<th>HMFH Architects</th>
<th>$6,500.00</th>
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<tbody>
<tr>
<td>Stage 2 Application – Phase 1</td>
<td>HMFH Architects</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>Stage 2 Application – Phase 2 (Pending School Committee approval of Phase 1)</td>
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<tr>
<td>GGD Engineers - Energy Modeling</td>
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<td>PMC Cost Estimators – Cost Estimate</td>
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<td>McPhail Engineers – Geotechnical Evaluation</td>
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<tr>
<td>Fee for Phase 2</td>
<td>$50,000.00</td>
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</tr>
</tbody>
</table>
Mr. Jack Ambrogi  
January 12, 2009  
Page 2

Total Fee - Stage 1 and Stage 2  

$71,500.00

In addition we would bill against the following amount for Reimbursable expenses for travel, printing and postage  

5,000.00

I have attached a proposed PSS #4. If you are in agreement with this approach please sign it and return a copy to this office.

We appreciate the opportunity to continue to work with you on this project.

Very truly yours,

HMFH Architects, Inc.

Laura Wernick, AIA  
Vice President

cc: Margie Monroe, Ginger Plummer
Adapted from

AIA Document B141

Standard Form of Agreement Between Owner and Architect

1987 EDITION

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES, CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION

AGREEMENT

made as of the 10th day of March in the year of Two Thousand and Seven

BETWEEN the Owner:

(name and address)

Newport School Committee
437 Broadway
Newport, Rhode Island 02139

and the Architect:

(name and address)

HMFH Architects, Inc.
130 Bishop Allen Drive
Cambridge, Massachusetts 02139

For the following Project:

(include detailed description of Project location, address and scope)

Provide Architectural services for a Feasibility Study & Architect’s Basic Services for new elementary schools, including the following:

A Feasibility Study investigating whether up to 3 new elementary schools shall be built in Newport. The sites to be considered are the sites of the current Coggeshall School, the Sullivan School and the Underwood School.

Review existing educational program information as necessary.

Prepare plan diagrams showing likely configurations of the program on each site.

Develop a perspective drawing showing a concept design of each school.

Develop project budgets.

Assist with a Public Information and Outreach Campaign in preparation for a Bond Referendum in the fall of 2007.

Provide Architect’s Basic Services for up to 3 new elementary schools as set forth in the Bond Referendum and upon approval of the bond referendum. The projects to be included in, and referenced by the Bond Referendum will be determined by the Feasibility Study. The schools will be for approximately 1000 students. The schools combined will be no less than 155,000 square feet. They will be similar in design to one another, they will be

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IMPORTANT TERMS AND CONDITIONS OF AGREEMENT BETWEEN OWNER AND ARCHITECT

ARTICLE 1
ARCHITECT'S RESPONSIBILITIES

1.1 ARCHITECT'S SERVICES

1.1.1 The Architect's services consist of those services performed by the Architect. Architect's consultants as enumerated in Article 2 and any other services included in Article 12.

1.1.2 The Architect's services shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the work.

1.1.3 The services covered by this Agreement are subject to the time limitations contained in Subparagraph 11.5.1.

ARTICLE 2
SCOPE OF ARCHITECT'S BASIC SERVICES

2.1 DEFINITION

2.1.1 The Architect's Basic Services consist of those described in Paragraphs 2.2 through 2.6 and any other services identified in Article 12 as part of Basic Services, and include normal structural, mechanical and electrical engineering services.

2.2 SCHEMATIC DESIGN PHASE

2.2.1 The Architect shall review the program furnished by the Owner to ascertain the requirements of the Project and shall arrive at a mutual understanding of such requirements with the Owner.

2.2.2 The Architect shall provide a preliminary evaluation of the Owner's program, schedule and construction budget requirements, each in terms of the other, subject to the limitations set forth in Subparagraph 5.2.1.

2.2.3 The Architect shall review with the Owner alternative approaches to design and construction of the Project.

2.2.4 Based on the mutually agreed-upon program, schedule and construction budget requirements, the Architect shall prepare, for approval by the Owner, Schematic Design Documents consisting of drawings and other documents illustrating the scale and relationship of Project components.

2.2.5 The Architect shall submit to the Owner a preliminary estimate of Construction Cost based on current area, volume or other unit costs.

2.3 DESIGN DEVELOPMENT PHASE

2.3.1 Based on the approved Schematic Design Documents and any adjustments authorized by the Owner in the program, schedule or construction budget, the Architect shall prepare for approval by the Owner, Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate.

2.3.2 The Architect shall advise the Owner of any adjustments to the preliminary estimate of Construction Cost.

2.4 CONSTRUCTION DOCUMENTS PHASE

2.4.1 Based on the approved Design Development Documents and any further adjustments in the scope or quality of the project or in the construction budget authorized by the Owner, the Architect shall prepare, for approval by the Owner, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the Project.

2.4.2 The Architect shall assist the Owner in the preparation of the necessary bidding information, bidding forms, the Conditions of the Contract, and the form of Agreement between the Owner and Contractor.

2.4.3 The Architect shall advise the Owner of any adjustments to previous preliminary estimates of Construction Cost indicated by changes in requirements or general market conditions.

2.4.4 The Architect shall assist the Owner in connection with the Owner's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.

2.5 BIDDING OR NEGOTIATION PHASE

2.5.1 The Architect, following the Owner's approval of the Construction Documents and of the latest preliminary estimate of Construction Cost, shall assist the Owner in obtaining bids or negotiated proposals and assist in awarding and preparing the Contract for Construction.

2.6 CONSTRUCTION PHASE-ADMINISTRATION OF THE CONSTRUCTION CONTRACT

2.6.1 The Architect's responsibility to provide Basic Services for the Construction Phase under this Agreement commences with the award of the Contract for Construction and terminates at the earliest of the issuance to the Owner of the final Certificate for Payment or 60 days after the date of Substantial Completion of the Work.

2.6.2 The Architect shall provide administration of the Contract for Construction as set forth below.

2.6.3 Duties, responsibilities and limitations of authority of the Architect shall not be restricted, modified or extended without written agreement of the Owner and Architect.

2.6.4 The Architect shall be a representative of and shall advise and consult with the Owner. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement unless otherwise modified by further agreement between the parties.
2.6.5 The Architect shall visit the site at intervals appropriate to the stage of construction or as otherwise agreed by the Owner and Architect in writing to become generally familiar with the progress and quality of the Work completed and to determine if the Work is being performed in a manner indicating that the Work when completed will be in accordance with the Contract Documents. However, the Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of on-site observations as an architect, the Architect shall keep the Owner informed of the progress and quality of the Work, and shall endeavor to guard the Owner against defects and deficiencies in the Work. (More extensive site representation may be agreed to as an Additional Service, as described in Paragraph 3.2).

2.6.6 The Architect shall not have control over or charge of, or shall not be responsible for, construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility for the Contractor's schedule or failure to carry out the Work in accordance with the Contract Documents. The Architect shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

2.6.7 The Architect shall at all times have access to the Work whenever it is in progress or progress.

2.6.8 Instructions to the Contractor shall be forwarded through the architect. Communications by and with the Architect's consultants shall be through the Architect.

2.6.9 Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect shall review and certify the amounts due the Contractor.

2.6.10 The Architect's certification for payment shall constitute a representation to the Owner, based on the architect's observations at the site as provided in Subparagraph 2.6.5 and on the date comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents, and to final specific qualifications expressed by the Architect. The issuance of a Certificate for Payment shall not be a representation that the Architect (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

2.6.11 The Architect shall have authority to reject Work which does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable for implementation of the intent of the Contract Documents, the Architect will have authority to require additional inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or to not exercise such authority shall give me to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees or other persons performing portions of the Work.

2.6.12 The Architect shall review and approve or take either appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action shall be taken with such reasonable promptness as to cause no delay in the Work or in the construction of the Owner or of separate contractors, while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities of or for substantiating instructions for installation or performance of equipment or systems designed by the Contractor, all of which remain the responsibility of the Contractor to the extent required by the Contract Documents. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. When professional certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon such certification to establish that the materials, systems or equipment meet the performance criteria required by the Contract Documents.

2.6.13 The Architect shall prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents, and may authorize minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time which are not inconsistent with the intent of the Contract Documents.

2.6.14 The Architect shall conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, shall receive and forward to the Owner for the Owner's review and record written warranties and related documents required by the Contract Documents, and as assembled by the Contractor, and shall issue a Final Certificate for Payment upon compliance with the requirements of the Contract Documents; provide the foregoing can reasonably be performed within the time period set forth in subparagraph 2.6.1.

2.6.15 The Architect shall inspect and, with the consent of the Owner, test the Contractor under the requirements of the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests shall be made with reasonable promptness and within any time limits agreed upon.

2.6.16 Interpretation and decisions of the Architect shall be consistent with the intent and reasonably inferable from the Contract Documents and shall be in writing or in the form of written. When making such interpretations and initial decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for errors of interpretations or decisions so rendered in good faith.

2.6.17 The Architect's decision on matters relating to aesthetic effect shall be final if consistent with the intent expressed in the Contract Documents.
2.6.19 The Architect's decisions on claims, disputes or other matters, including those in question between the Owner and Contractor, except for those relating to aesthetic effect as provided in Subparagraph 2.6.17, shall be subject to arbitration as provided in the Contract Documents.

ARTICLE 3
ADDITIONAL SERVICES

3.1 GENERAL

3.1.1 The services described in this Article 3 are not included in Basic Services unless so identified in Article 12, and they shall be paid for by the Owner as provided in this Agreement, in addition to the compensation for Basic Services. The services described under Paragraphs 3.2 and 3.4 shall only be provided if authorized or confirmed in writing by the Owner. If services described under Contingent Additional Services in Paragraph 3.3 are not required due to circumstances beyond the Architect's control, the Architect shall notify the Owner prior to commencing such services. If the Owner deems that such services described under Paragraph 3.3 are not required, the Owner shall give prompt written notice to the Architect. If the Owner indicates in writing that all or part of such Contingent Additional Services are not required, the Architect shall have no obligation to provide such services. Provided, however, that the Owner hereby agrees to authorize and confirm any Additional Services described below which the Architect is required to perform or provide pursuant to any law or regulation issued by a governmental authority having jurisdiction over the Project.

5.2 PROJECT REPRESENTATION BEYOND BASIC SERVICES

3.2.1 If more extensive representation at the site than is described in Subparagraph 2.6.5 is required, the Architect shall provide one or more Project Representatives to assist in carrying out such additional services.

3.2.2 Project Representatives shall be selected, employed and directed by the Architect, and the Architect shall be compensated therefor as agreed by the Owner and Architect. The duties, responsibilities and limitations of authority of Project Representatives shall be as described in the edition of AIA Document B352 current as of the date of this Agreement, unless otherwise agreed.

3.2.3 Through the observations by such Project Representatives, the Architect shall endeavor to provide further protection for the Owner against defects and deficiencies in the Work, but the furnishing of such project representation shall not modify the rights, responsibilities or obligations of the Architect as described elsewhere in this Agreement.

3.3 CONTINGENT ADDITIONAL SERVICES

3.3.1 Making revisions in Drawings, Specifications or other documents when such revisions are:

1. required by the enactment or revision of codes, laws or regulations subsequent to the preparation of such documents; or

3. due to changes required as a result of the Owner's failure to render decisions in a timely manner.

3.5.2 Providing services required because of significant changes in the Project including, but not limited to size, quality, complexity, the Owner's schedule, for the method of building or negotiating and contracting for construction, except for services required under Subparagraph 3.2.3.

3.3.3 Preparing Drawings, Specifications and other documentation and supporting data, evaluating Contractor's proposals, and providing other services in connection with Change Orders and Construction Change Directives.

3.3.4 Providing services in connection with evaluating and preparing drawings prepared by the Contractor and making subsequent revisions to Drawings, Specifications, and other documentation resulting therefrom.

3.3.5 Providing services concerning replacement of Work damaged by fire or other cause during construction, and furnishing services required in connection with the replacement of such Work.

3.3.6 Providing services made necessary by the default of the Contractor, by major defects or deficiencies in the Work of the Contractor, or by failure of performance of either the Owner or Contractor under the Contract for Construction.

3.3.7 Providing services in evaluating an extensive number of claims submitted by the Contractor or others in connection with the Work.

3.3.8 Providing services in connection with a public hearing, arbitration proceeding or legal proceeding except where the Architect is party thereto.

3.3.9 Preparing documents for alternate, separate or sequential bids or providing services in connection with bidding, negotiating or construction, prior to the completion of the Construction Documents Phase.

3.3.10 Providing coordination of construction performed by separate contractors or by the Owner's forces and coordination of services required in connection with construction performed and equipment supplied by the Owner.

3.3.11 Providing services in connection with the work of a construction manager or separate consultants retained by the Owner.

3.4 OPTIONAL ADDITIONAL SERVICES

3.4.1 Providing analyses of the Owner's needs and programming the requirements of the Project.

3.4.2 Providing financial feasibility or other special studies.

3.4.3 Providing planning surveys, site evaluations or comparative studies of prospective sites.

3.4.4 Providing special surveys, environmental studies and submissions required for approvals of governmental authorities or others having jurisdiction over the Project.

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3.4.6 Providing services relative to future facilities, systems and equipment.

3.4.6 Providing services to investigate existing conditions or facilities or to make necessary drawings thereof.

3.4.7 Providing services to verify the accuracy of drawings or other information furnished by the owner.

3.4.8 Providing coordination of construction performed by separate contractors or by the owner’s own forces and coordination of services required in connection with construction performed and equipment supplied by the Owner.

3.4.9 Providing services in connection with the work of a construction manager or separate consultants retained by the Owner.

3.4.10 Providing detailed estimates of Construction Cost.

3.4.11 Providing detailed quantity surveys or inventories of material, equipment and labor.

3.4.12 Providing analyses of owning and operating costs.

3.4.13 Providing interior design and other similar services required for or in connection with the selection, procurement or installation of furniture, furnishings and related equipment.

3.4.14 Providing services for planning tenant or rental spaces.

3.4.15 Making investigations, inventories of materials or equipment, or valuations and detailed appraisals of existing facilities.

3.4.16 Preparing a set of reproducible record drawings showing significant changes in the Work made during construction based on marked-up prints, drawings and other data furnished by the Contractor to the Architect.

3.4.17 Providing assistance in the utilization of equipment or systems such as testing, adjusting and balancing, preparation of operation and maintenance manuals, training personnel for operation and maintenance, and consultation during operation.

3.4.18 Providing services after the earlier to occur of issuance to the Owner of the final Certificate of Payment, or 60 days after the date of Substantial Completion of the Work.

3.4.19 Providing services of consultants for other than architectural, structural, mechanical, and electrical engineering portions of the Project provided as part of the Services.

3.4.20 Providing any other services not otherwise included in this Agreement, if mutually agreed by the Owner and the Architect.

ARTICLE 4
OWNER’S RESPONSIBILITY

4.1 The Owner shall provide full information regarding requirements for the project, including a program which shall set forth the owner’s objectives, schedule, constraints and criteria, including space requirements and relationships, flexibility, expandability, special equipment, systems and site requirements.

4.2 The Owner shall establish and update an overall budget for the Project, including the Construction Cost, the Owner’s other costs and reasonable contingencies related to all of these costs.

4.3 If requested by the Architect, the Owner shall furnish evidence that financial arrangements have been made to fulfill the Owner’s obligations under this Agreement.

4.4 The Owner shall designate a representative authorized to act on the Owner’s behalf with respect to the Project. The Owner or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Architect in order to avoid unreasonable delay in the orderly and sequential progress of the Architect’s services.

4.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable, grades and, in streets, alleys, pavements and adjoining property and structures; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, flood restrictions, boundaries and contours of the site; locations, dimensions and necessary data pertaining to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including invert and depths. All the information on the survey shall be referenced to a project benchmark.

4.6 The Owner shall furnish the services of geotechnical engineers when such services are requested by the Architect. Such services may include but are not limited to test borings, test pits, determinations of soil bearing values, percolation test, evaluations of hazardous materials, ground correction and resistivity tests, including necessary operation for anticipating subsel conditions, with reports and appropriate professional recommendations.

4.6.1 The Owner shall furnish the services of other consultants when such services are reasonably required by the scope of the Project and are requested by the Architect.

4.7 The Owner shall furnish structural, mechanical, chemical, air and water pollution tests, tests for hazardous materials, and other laboratory and environmental tests, inspections and reports required by law or the Contract Documents.

4.8 The Owner shall furnish all legal, accounting, and insurance counseling services as may be necessary at any time for the Project, including such accounting services as the Owner may require to verify the Contractor’s Applications for Payment and such legal services as the Owner may require or the Architect may reasonably request with regard to legal issues raised by the Contractor or to the applicability or legal interpretation of governmental laws and regulations.

4.9 The services, information, surveys and reports required by Paragraphs 4.5 through 4.8 shall be furnished at the Owner’s expense, and the Architect shall be entitled to rely upon the accuracy and completeness thereof.

4.10 Prompt written notice shall be given by the Owner to the Architect if the Owner becomes aware of any fault or defect in the Project or non-conformance with the Contract Documents.

4.11 The proposed language of certificates or certifications requested of the Architect or Architect’s consultants shall be submitted to the Architect for review and approval at least 14 days prior to execution. The Owner shall not request certifications that would require knowledge or services beyond the scope of this Agreement.
ARTICLE 5
CONSTRUCTION COST

5.1 DEFINITION

5.1.1 The Construction Cost shall be the total cost or estimated cost to the Owner of all elements of the Project designed or specified by the Architect.

5.1.2 The Construction Cost shall include the cost at current market rates of labor and materials furnished by the Owner and equipment designed, specified, selected or specially provided for by the Architect plus a reasonable allowance for the Contractor's overhead and profit. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the Work during construction.

5.1.3 Construction Cost does not include the compensation of the Architect and Architect's consultants, the costs of the land, rights-of-way, financing or other costs which are the responsibility of the Owner as provided in Article 4, but does include the cost of construction management and any payments to a contractor under shared savings or incentive clauses in the Contract for Construction or construction management agreements, and shall not be revised by any liquidated or other damages payable by a contractor to the Owner on account of delay or defaults.

5.2 RESPONSIBILITY FOR CONSTRUCTION COST

5.2.1 Evaluations of the Owner's Project budget, preliminary estimates of Construction Cost, if any, prepared by the Architect, represent the Architect's best judgment as a design professional familiar with the construction industry. It is recognized, however, that neither the Architect nor the Owner has control over the cost of labor, materials or equipment, over the Contractor's methods of determining bid prices, or over competitive bidding, market or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the Owner's Project budget or from any estimate of Construction Cost or evaluation prepared or agreed to by the Architect.

5.2.2 A fixed limit of Construction Cost shall be established as a condition of this Agreement by the furnishing, proposal or establishment of a Project budget, unless such limit has been agreed upon in writing and signed by the parties hereto. If such a fixed limit has been established, the Architect shall be permitted to include contingencies for design, bidding and price escalation, to determine what materials, equipment, components and types of construction are to be included in the Contract Documents, to make reasonable adjustments in the scope of the Project and to include in the Contract Documents alternate bids to adjust the Construction Cost to the fixed limit.

5.2.3 If the Bidding or Negotiation Phase has not commenced within 90 days after the Architect submits the Construction Documents to the Owner, any Project budget of fixed limit of Construction Cost shall be adjusted to reflect changes in the general level of prices in the construction industry between the date of submission of the Construction Documents to the owner and the date on which proposals are sought.

5.2.4 If a fixed limit of Construction Cost (adjusted as provided in Subparagraph 5.2.3) is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall

1. give written approval of any increase in such fixed limit;
2. authorize rebidding or reprogramming of the Project within a reasonable time;
3. if the Project is abandoned, terminate in accordance with Paragraph 8.3; or
4. cooperate in revising the Project scope and quality as required to reduce the Construction Cost.

5.2.5 If the Owner chooses to proceed under Clause 5.2.4.4, the Architect without additional charge, shall modify the Contract Documents as necessary to comply with the fixed limit, if established as a condition of this Agreement. The modification of Contract Documents shall be the limit of the Architect's responsibility arising out of the establishment of a fixed limit. The Architect shall be entitled to compensation in accordance with this Agreement for all services performed whether or not the Construction Phase is commenced.

ARTICLE 6
USE OF ARCHITECT'S DRAWINGS,
SPECIFICATIONS AND OTHER DOCUMENTS

6.1 The Drawings, Specifications and other documents prepared by the Architect for this Project are instruments of the Architect's services for use solely with respect to this Project and, unless otherwise provided, the Architect shall be deemed the author of these documents and shall retain all common law, statutory and other reserved rights, including the copyright. The Owner shall be permitted to retain copies, including reproducible copies, of the Architect's Drawings, Specifications and other documents for information and reference in connection with the Owner's use and occupancy of the Project. The Architect's Drawings, Specifications or other documents shall not be used by the Owner or others on other projects, for additions to this Project or for completion of this Project by others, unless the Architect is adjusted to be in default under this Agreement, except by agreement in writing and with appropriate compensation to the Architect.

6.2 Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the Architect's reserved rights.

ARTICLE 7
ARBITRATION

7.1 Claims, disputes or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof shall be subject to and decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise.

7.2 Demand for arbitration shall be filed in writing with the other party to this Agreement and with the American Arbitration Association. A demand for arbitration shall be made within a reasonable time after the claim, dispute or other matter in question has arisen. In no event shall the demand for arbitration be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statutes of limitation.

7.3 No arbitration arising out of or relating to this Agreement shall include, by consolidation, joiner or in any other manner, an additional person or entity not a party to this Agreement, except by written consent containing a specific reference to such Agreement signed by the Owner, Architect, and any other person.

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or entity sought to be joined. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity fully consented to by the parties to this Agreement shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.

7.4 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE 8
TERMINATION, SUSPENSION OR ABANDONMENT

8.1 This Agreement may be terminated by either party upon not less than seven days’ written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

8.2 If the Project is suspended by the Owner for more than 30 consecutive days, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect's compensation shall be equitably adjusted to provide for expenses incurred in the interruption and resumption of the Architect's services, and any fixed limit of Construction Cost established prior to such suspension shall be adjusted to reflect changes in the general level of prices in the construction industry during the period of such suspension.

8.3 This Agreement may be terminated by the Owner upon not less than seven days’ written notice to the Architect in the event that the Project is permanently abandoned. If the Project is suspended by the Owner for more than 30 consecutive days, the Architect may treat such suspension as an abandonment by the Owner and may, upon not less than seven days’ written notice to the Owner, terminate this Agreement, which shall be deemed a termination not the fault of the Architect. If the Project is abandoned in accordance with either of the two preceding sentences and a thereafter revived, the Owner shall be obligated to engage again the Architect under the then current AIA Owner- Architect form of agreement, with terms and conditions no less favorable to the Architect than those set forth herein.

8.4 Failure of the Owner to make payments to the Architect in accordance with this Agreement shall be considered substantial non-performance and cause for termination.

8.5 If the Owner fails to make payment when due the Architect for services and expenses, the Architect may, upon seven days’ written notice to the Owner, suspend performance of services under this Agreement. Unless payment in full is received by the Architect within seven days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, the Architect shall have no liability to the Owner for delay or damage caused the Owner because of such suspension of services.

8.6 In the event of termination not the fault of the Architect, the Architect shall be compensated for services performed prior to termination, together with Reimbursable Expenses then due and all Termination Expenses as defined in Paragraph 8.7.

8.7 Termination Expenses are in addition to compensation for Basic and Additional Services, and include all expenses incurred and damages suffered by the Architect as a result of such termination.

ARTICLE 9
MISCELLANEOUS PROVISIONS

9.1 Unless otherwise provided, this Agreement shall be governed by the law of the principal place of business of the Architect.

9.2 Terms in this Agreement shall have the same meaning as those in AIA Document A201, General Conditions of the Contract for Construction, current as of the date of this Agreement.

9.3 Causes of action between the parties to this Agreement pertaining to acts of failures to act shall be deemed to have accrued and the applicable statutes of limitations shall commence to run not later than either the date of Substantial Completion for acts or failures to act occurring prior to Substantial Completion, or the date of issuance of the final Certificate of Payment for acts or failures to act occurring after Substantial Completion.

9.4 The Owner and the Architect waive all rights against each other and against the contractors, consultants, agents and employees of the other for damages to the Project covered by any property insurance. The Owner and the Architect shall each require appropriate similar waivers from their contractors, consultants, and agents.

9.5 The Owner and Architect, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party, with respect to all covenants of this Agreement. Neither Owner nor Architect shall assign this Agreement without the written consent of the other.

9.6 This Agreement represents the entire and integrated agreement between the Owner and Architect and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both Owner and Architect.

9.7 The Owner agrees that it will include in its agreement with any contractor and/or construction manager the following clause: The Owner and the Architect have acknowledged that nothing in the Architect’s agreement implies any endorsement by the Architect of the benefit of or which may be enforced by the Contractor, its subcontractors, or the surety of any of them; it being understood that the Architect’s obligations are to the Owner and that, in performing such obligations, the Architect may increase the burdens and expense of the Contractor, its subcontractors, or the surety of any of them. Neither the Contractor, any Subcontractor, nor the surety of any of them shall bring any civil suit or other legal action against the Architect arising out of or in connection with the Project.”

9.8 Unless otherwise provided in this Agreement, the Architect and Architect’s consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the Project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances.

9.9 The Architect shall have the right to include representations of the design of the Project, including photographs of the exterior and interior, among the Architect’s promotional and professional materials. The Architect’s materials shall not include the Owner’s confidential or proprietary information if the Owner has previously advised the Architect in writing of the specific information considered by the Owner to be confidential or proprietary. The Owner shall provide professional credit for the
ARTICLE 10
PAYMENTS TO THE ARCHITECT

10.1 DIRECT PERSONNEL EXPENSE

10.1.1 Direct Personnel Expense is defined as the direct salaries of the Architect’s personnel engaged on the Project and the portion of the cost of their mandatory and customary contributions and benefits related thereto, such as employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions and similar contributions and benefits.

10.2 REIMBURSABLE EXPENSES

10.2.1 Reimbursable Expenses are in addition to compensation for Basic and Additional Services and include expenses incurred by the Architect and Architect’s employees and consultants in the interest of the Project, as identified in the following Clauses.

10.2.1.1 Expense of transportation in connection with the Project: expenses in connection with authorized out-of-town travel; long-distance communications; and fees paid for securing approval of authorities having jurisdiction over the project.

10.2.1.2 Expense of reproductions, postage and handling of Drawings, Specifications and other documents.

10.2.1.3 If authorized in advance by the Owner, expense of overtime work requiring higher than regular rates.

10.2.1.4 Expense of renderings, models and mock-ups requested by the Owner.

10.2.1.5 Expense of additional insurance coverage or limits, including professional liability insurance, requested by the Owner in excess of that normally carried by the Architect and Architect’s consultants.

10.2.1.6 Expense of computer-aided design and drafting equipment time when used in connection with the Project.

10.3 PAYMENTS ON ACCOUNT OF BASIC SERVICES

10.3.1 An initial payment as set forth in paragraph 11.1 is the minimum payment under this Agreement.

10.3.2 Subsequent payments for Basic Services shall be made monthly and, where applicable, shall be in proportion to services performed within each phase of service on the basis set forth in Subparagraph 11.2.2.

10.3.3 If and to the extent that the time initially established in Subparagraph 11.5.1 of this Agreement is exceeded or extended through no fault of the Architect, compensation for any services rendered during the additional period of time shall be computed in the manner set forth in Paragraph 11.3.

10.3.4 When compensation is based on a percentage of Construction Cost and any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions, in accordance with the schedule set forth in Subparagraph 11.2.2, based on (1) the lowest bona fide bid or negotiated proposal, or (2) if no such bid or proposal is received, the most recent preliminary estimate of Construction Cost or detailed estimate of Construction Cost for such portions of the Project, or (3) absent such estimate of Construction Cost, the Architect’s reasonable estimate of the cost for such portions of the Project.

10.4 PAYMENTS ON ACCOUNT OF ADDITIONAL SERVICES

10.4.1 Payments on account of the Architect’s Additional Services for Reimbursable Expenses shall be made monthly upon presentation of the Architect’s statement of services rendered or expenses incurred.

10.5 PAYMENTS WITHHELD

10.5.1 No deductions shall be made from the Architect’s compensation on account of changes in the Work or other costs incurred by the Owner other than those for which the Architect has been found to be liable in an arbitration proceeding pursuant to Article 7.

10.6 ARCHITECT’S ACCOUNTING RECORDS

10.6.1 Records of Reimbursable Expenses and expenses pertaining to Additional Services and services performed on the basis of a multiple of Direct Personnel Expense shall be available to the Owner or the Owner’s authorized representative at mutually convenient times.

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ARTICLE II
BASIS OF COMPENSATION

The Owner shall compensate the Architect as follows:

11.1 An INITIAL PAYMENT OF Zero Dollars ($0.00) shall be made upon execution of this Agreement and credited to the Owner's account at final payment.

11.2 BASIC COMPENSATION

11.2.1 FOR BASIC SERVICES, as described in Article 2, and any other services included in Article 12 as part of Basic Services, Basic Compensation shall be computed as follows:

A lump sum fee of $37,000.00 for a Feasibility Study to determine the size, site and cost of up to 3 new elementary schools for Newport. Payments will be made monthly on a percent complete basis.

The fee for the Community Outreach and Support Campaign for the project, including all appropriate meetings related thereto, will be in addition to the $37,000 for the Feasibility Study and will be billed on an hourly basis but in no event exceed $50,000 and will be due upon billing. Should the campaign succeed, the fee for the Campaign will be credited against the 7% for the Architect’s Basic Services and allocated over the phases of the project as set forth in 11.2.2. Should the Campaign not successfully lead to a construction project, HMFH will be paid the full amount earned during the Campaign effort but there will be no additional compensation due.

Compensation for Basic Services shall be 7% of the estimated construction cost as set by the Design Development Cost Estimate for up to 3 new elementary schools. The schools will be for approximately 1000 students. The schools will be no less than 155,000 square feet combined. They will be similar in design to one another, they will be designed simultaneously, and a single contractor will construct them simultaneously. The fee for Schematic Design and Design Development will be based initially upon the Feasibility Study Cost Estimate and may be adjusted once the Design Development Cost Estimate is approved if the Design Development Cost Estimate should vary from the approved Feasibility Design Cost Estimate. If the construction is delayed for more than 1 year after the Design Development Cost Estimate is approved, the construction cost estimate and the corresponding fee will be equitably adjusted.

11.2.2 Where compensation is based on a stipulated sum or percentage of Construction Cost, progress payments for Basic Services shall be made as provided in Subparagraph 10.3.2 so that Basic Compensation for each phase shall equal the following percentages of the total Basic Compensation payable:

| Schematic Design Phases                                      | 15% of 7% of ECC |
| Design Development Phase                                     | 20% of 7% of ECC |
| Construction Documents Phase                                 | 38% of 7% of ECC |
| Bidding or Negotiation Phase                                 | 2% of 7% of ECC  |
| Construction Phase                                           | 25% of 7% of ECC |

Total Basic Compensation: To be determined one hundred percent (100%)

11.3 COMPENSATION FOR ADDITIONAL SERVICES

11.3.1 FOR PROJECT REPRESENTATION BEYOND BASIC SERVICES, as described in Paragraph 3.2, compensation shall be computed as follows:

In accordance with attached rate schedule.

11.3.2 FOR ADDITIONAL SERVICES OF THE ARCHITECT, as described in Articles 3 and 12, other than (1) Additional Project Representation, as described in Paragraph 3.2, and (2) services of consultants, compensation shall be computed as follows:

In accordance with attached rate schedule.

11.3.3 FOR ADDITIONAL SERVICES OF CONSULTANTS, including additional structural, mechanical and electrical engineering services and those provided under Subparagraph 3.4.19 or identified in Article 12 as part of Additional Services, a multiple of 1 and one-seventh (1.1) times the amounts billed to the Architect for such services except as modified herein.

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11.4 REIMBURSABLE EXPENSES

11.4.1 FOR REIMBURSABLE EXPENSES, as described in Paragraph 10.2 and any other item included in Article 12 as Reimbursable Expenses, a multiple of one and one-tenth (1.1) times the expenses incurred by the Architect, the Architect's employees and consultants in the interest of the Project.

11.5 ADDITIONAL PROVISIONS

11.5.1 IF THE BASIC SERVICES for the Feasibility Study covered by this Agreement have not been completed within 6 months of the date hereof, through no fault of the Architect, the Architect's services beyond that time shall be compensated as provided in Subparagraph 10.3.3 and Paragraph 11.3.

11.5.2 Payments are due and payable thirty (30) days from the date of the Architect's invoice. Amounts unpaid (40) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Architect.

(Inset rate of interest agreed upon)

(Utility laws and requirements under the Federal Truth in Lending Act, similar state and local consumer credit laws and other regulations at the Owner's and Architect's principal places of business, the location of the Project and elsewhere may affect the validity of this provision. Specific legal advice should be obtained with respect to deletions or modifications, and also regarding requirements such as written disclaimers or waivers.)

11.5.3 The rates and multiples set forth herein shall be annually adjusted in accordance with normal salary review practices of the Architect.

ARTICLE 12
OTHER CONDITIONS OR SERVICES

(Inset descriptions of other services, identify Additional Services included within Basic Compensation and modifications to the payment and compensation terms, included in this Agreement).

12.1 Delete paragraph 3.4.1 and replace with the following:

12.3.17 Provide assistance in training personnel for operation and maintenance of equipment or systems and consultation during operation.

12.2 Paragraph 3.4.1, is deleted as Additional Service and is included in Basic Services under this agreement.

12.3 The Architect's Additional Services may, at the request of the Owner, include the services of consultants to provide a site survey, geotechnical engineering and hazardous materials removal design and monitoring as described in Paragraphs 4.5, 4.6 and 4.7. Such consultants shall be engaged by the Architect under agreements which shall be approved in writing by the Owner, the terms and conditions of which shall apply to the services performed by the consultant. It is the intent of the parties that such consultants and the Architect shall be responsible for the technical sufficiency of such services. To this end, the Architect hereby assigns to the Owner all of the Architect's right, title and interest in and to any claims which the Architect may have against such consultant, along with the right to prosecute such claims, but at the Owner's sole expense. The Architect's liability on account of acts or omissions of such consultants shall be limited to the amount, if any, actually collected from such consultants by the Owner on account of such acts or omissions.

The Owner agrees to release the Architect and hold the Architect harmless with respect to liability of these specific consultants in excess of such collected amounts. The Architect will endeavor to secure insurance coverages on all consultants referenced in this paragraph. If such insurance is not obtainable from these consultants, the Architect will promptly notify the Owner prior to engaging any of these consultants.

12.4 Delete Article 7 and replace with the following:

7.1 Nothing herein shall prevent the parties from agreeing to an alternative dispute resolution for disputes under the amount of $10,000.

12.5 Delete paragraph 3.3.8 and replace with the following:

3.3.8 Providing services in connection with a legal proceeding involving the Contractor(s) and the Owner, except where the Architect is party thereto.
12.6 Specifications provided to the Owner from the Architect and its consultants will include the requirement that the General Contractor and his subcontractors provide assistance in the utilization of equipment or systems such as testing, demonstrations, adjusting and balancing systems, and preparation of operation and maintenance manuals.

12.7 Delete paragraph 9.7 in its entirety.

12.8 Delete paragraph 10.5.1 and replace with the following:

10.5.1 No deductions shall be made from the Architect’s compensation on account of changes in the Work or other costs incurred by the Owner other than those for which the Architect has been found to be liable in litigation.

12.9 The Architect shall indemnify and hold the Owner harmless from and against any and all claims, demands, liabilities, actions, cause of actions, costs and expenses to the extent caused by the Architect’s breach of this agreement or negligence of the Architect or the Architect’s agents or employees.

12.10 Specifications produced by the Architect and its engineers/consultants for use by the General Contractor and its subcontractors for construction of the project shall include the provision that the General Contractor and his/her subcontractors will be responsible for preparing a set of reproducible record drawings (“As Built” drawings) showing significant changes in the Work made during construction based on marked up prints, drawings, and other data furnished by the Contractor and his/her subcontractors.

12.11 Basic Services and Additional Services for Schematic Design, not otherwise identified herein, are set forth as follows:

**Schematic Design Basic Services** shall consist of the preparation of the following information:

- Architectural floor plans of all levels
- Elevations of the principal facades
- Two 3-dimensional illustrations of the project or other massing studies
- Outline description of proposed structural, mechanical and electrical systems
- Preliminary building code review
- Preliminary project schedule
- Preliminary cost estimate
- Meetings with Building Sub-Committee
- One Meeting with historical representatives

**Schematic Design Additional Services** include the following:

- Survey of Existing Conditions
- Site Survey
- Site plan showing context, parking, pavement and landscape improvements
- Geotechnical Investigation and Report
- Hazardous Materials Survey
- Technology Consultant
- Food Service
- Historic Review (except 1 meeting under Basic Services)
- Zoning Review
- Independent Cost Estimating

12.12 All costs for the Architect to coordinate and administer Additional Services for site design, civil engineering, food service consulting, furniture & equipment consulting, infrastructure consulting and hazardous materials abatement consulting are included in the fee for Basic Services. The cost of the consultants listed in this paragraph to perform these services is not included in Basic Services.

12.13 Add the following new Subparagraphs 3.4.21, 3.4.22, and 3.4.23 as follows:

3.4.21 If requested by the Owner, arranging for a survey of the site and buildings by a registered land surveyor.
3.4.22 If requested by the Owner, arranging for the services of a soils or geotechnical engineering consultant including reports, test borings, test pits, soil bearing values, and other necessary operations for determining sub-soil, air and water conditions, with appropriate professional recommendations.

3.4.23 If requested by the Owner, providing the services of testing laboratory consultants for furnishing structural, mechanical and other tests, inspections and reports as recommended by the Architect, or as required by law or by the Contract Documents.

12.15 Add the following at the end of Paragraph 9.6: The terms of any agreement between the Architect and any consultants engaged by the Architect with the Owner’s approval pursuant to Subparagraph 3.4.21 through 3.4.23 shall apply to this Agreement insofar as such terms relate to liability for the performance of the services provided by such consultant, and the liability of the Architect to the Owner on account of such services shall be commensurate with the liability of such consultants to the Architect pursuant to such agreements.

12.16 Add new Subparagraphs 12.22.1 through 12.22.7 as follows:

12.22.1 The Architect hereby certifies that it has not given, offered or agreed to give any person, corporation or other entity any gift, contribution or offer of employment as an inducement for, or in connection with, the award of the Contract for design services.

12.22.2 The Architect hereby certifies that no consultant to or subcontractor for the Architect has given, offered or agreed to give any gift, contribution or offer of employment to the designer or construction manager, or to any other person, corporation or entity as an inducement for, or in connection with, the award to the consultant or subcontractor of a Contract by the Architect.

12.22.3 The Architect hereby certifies that no person, corporation or other entity, other than a bona fide full-time employee of the Architect, has been retained or hired by the Architect to solicit for or in any way assist the Architect in obtaining the Contract for design services upon an agreement or understanding that such person, corporation or other entity be paid a fee or other consideration contingent upon the award of the Contract to the Architect.

12.22.4 The Architect hereby certifies that it has internal accounting controls as required and that the Architect has filed and will continue to file an audited financial statement as may be required by law.

12.22.5 The Architect and its consultants shall not be compensated for any services involved in preparing changes that are required for additional work that should have been anticipated by the Architect in the preparation of bid documents, as reasonably determined by the Owner.

12.22.6 The Architect hereby stipulates that life-cycle cost estimate for the project shall be obtained at an initial stage and as a regular part of the services to be performed under this Agreement.

12.22.7 The Architect hereby certifies under penalties of perjury that the Architect has complied with all laws of the Commonwealth of Massachusetts and the State of Rhode Island relating to taxes.

This Agreement entered into as of the day and year first written above.

OWNER

ARCHITECT

(Signature)                                                 (Signature)

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HMFH Architects, Inc.
ADDENDUM

This Addendum is attached to and modifies the Standard Form of Agreement executed by the parties dated the 1st day of March, 2007. The provisions of this Addendum supersede and, where applicable, supplant corresponding numbered provisions of the Standard Form of Agreement to which it is appended. All terms in this Addendum have the same meaning as provided in the Standard Form of Agreement to which it is appended.

1.1.2 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

1.1.2 The Architect’s services shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the Work. Upon request of the Owner, the Architect shall submit for the Owner’s approval a schedule for the performance of the Architect’s services which may be adjusted as the Project proceeds, and shall include allowances for periods of time required for the Owner’s review and for approval of submissions by authorities having jurisdiction over the project.

2.1.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.1.1 The Architect’s Basic Services consist of those described in Paragraphs 2.2 through 2.6 and any other services identified in Article 12 as part of Basic Services, and include structural, mechanical, engineering/consulting services of electrical, and fire protection consulting to produce a reasonably complete and accurate set of Construction Documents, as described in Paragraph 2.4.

2.2.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.2.1 The Architect shall review and analyze the program furnished by the Owner to ascertain the requirements of the Project, shall arrive at a mutual understanding of such requirements with the Owner, shall commit such understanding to writing, and shall furnish a copy to the Owner for approval before proceeding with preliminary designs.

2.2.4 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.2.4 Based on the mutually agreed-upon program, schedule and construction budget requirements, the Architect shall prepare, (1) for approval by the Owner, Schematic Design Documents consisting of Drawings and other documents illustrating the scale and relationship of the Project components and (2) for review by the Owner, an estimate of the "Construction Cost" as that phrase is defined in Paragraph 2.2.5 of this Agreement. The Architect shall exercise due care in accordance with generally accepted standards of professional practice to produce the Design Documents that comply with applicable laws, statutes, ordinances, codes, orders, rules and regulations in force as of the date of the development of the documents. Approval by the Owner shall be deemed to be approval of the concept though not the means, techniques or particular material recommended by the Architect.
2.3.3 ADD THE FOLLOWING:

The Architect shall submit to the Owner an analysis of the total estimated energy necessary to operate the Project properly during a normal or average year. This analysis shall include the estimated energy necessary to heat, cool, and light the Project and to operate the equipment essential to both the Project and the Program. The total annual estimated energy need shall then be translated into cost estimates by type of energy based on current cost of each type of energy, i.e., electricity, coal, oil, natural gas, LP gas, etc., for each facility of the Project. The Owner and Architect agree that the actual energy cost and the estimated energy cost may vary due to the Owner’s usage of the energy system, weather conditions and increases in energy costs. The Architect shall not be responsible or held legally liable for variations between the estimated and actual energy costs.

2.4.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.4.1 Based on the approved Design Development Documents and any further adjustments in the scope or quality of the Project or in the construction budget authorized by the Owner, the Architect shall prepare, for approval by the Owner, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements of the Project, including, but not limited to, the work required for the architectural, structural, mechanical, electrical, plumbing, service-connected equipment, and the necessary general conditions of the contract. The Architect shall provide the services of professional structural, mechanical, electrical and other engineers as referenced in Paragraph 2.1.1 above, qualified by training and experience in their respective fields, as needed, to address the requirements of the Project; shall submit a list of the names of the engineers to be employed by the Architect to the Owner, in advance, for the Owner’s review and approval, which approval shall not be unreasonably withheld, and shall require such professional engineers to place their seal, name and signature on the Drawings and Specifications prepared by them. The Architect shall exercise due care in accordance with generally accepted standards of professional practice to ensure that said Construction Documents comply with applicable laws, statutes, ordinances, codes, rules and regulations in force as of the date of the development of the documents. Approval by the Owner shall not constitute approval of the means, techniques or particular material recommended by the Architect for the Project.

2.4.2 DELETE AND SUBSTITUTE WITH FOLLOWING:

The Architect, after consultation with the Owner, shall prepare the necessary bidding information, bidding forms, the Conditions of the Contract, a final estimate of the "Construction Cost" as defined in Paragraph 5.1.2 of the Agreement, and the form of Agreement between the Owner and Contractor, subject to the review and approval of the Owner’s legal counsel.

2.4.5 ADD THE FOLLOWING:

2.4.5 The Architect shall include in the bidding information, plans or specifications, a requirement that the Contractor(s) provide operation manuals and adequate training for the Owner in the operation of mechanical, electrical, heating and air conditioning systems installed by the contractor(s).
2.5.2 **ADD THE FOLLOWING:**

2.5.2 In the event the lowest responsible bid (or bids) exceeds by ten per cent the estimate of the Project Cost provided by the Architect pursuant to Paragraph 2.4.2 of this Agreement, the Architect, in consultation with and at the direction of the Owner, shall provide such modification in the Contract Documents as shall be necessary to bring the cost of the Project within the Project's budget or within ten per cent of the Architect's final estimate of the Project Cost as set forth above, provided that the Project is put to bid within 3 months of the date of such estimate.

2.6.1 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.1 The Architect's responsibility to provide Basic Services for the Construction Phase under this Agreement commences with the awarding of any Contract for Construction and terminates 60 days after the later of the issuance of the Certificate of Substantial Completion or issuance of a certificate of occupancy, unless extended under the terms of Paragraph 10.3.3.

2.6.2 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.2 The Architect shall provide administration of the Contract for Construction as set forth below and in the edition of AIA Document A201, General Conditions of the Contract for Construction, current as of the date of this Agreement, as may be amended by the Owner provided that the Architect shall have the right to review and appraise any amendments that affect its services or liability.

2.6.3 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.3 Duties, responsibilities and limitations of authority of the Architect shall not be restricted, modified or extended without written agreement of the Owner and Architect and notice to the Contractor.

2.6.4 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.4 The Architect shall be a representative of and shall advise and consult with the Owner. Instructions to the Contractor(s) shall be forwarded through the Architect. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement unless otherwise modified by written instrument.

2.6.5 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.5 The Architect shall visit the site regularly, generally once per week while significant work is in progress, and as often as necessary and appropriate to the stage of construction to observe the site and Work, to familiarize himself with the progress and quality of the Work; and to determine for the Owner's benefit and protection if the Work is proceeding in accordance with the intent of the Contract Documents and the construction schedule. The Architect shall attend all construction progress meetings in conjunction with or in addition to visiting the site in satisfaction of other responsibilities. The Architect shall use reasonable care to guard the Owner against defects and deficiencies in the Work and the Contractor's failure to carry out the Work in accordance with the Contract Documents and the construction schedule. On the basis of his on-site observations as an architect, the Architect shall keep the Owner informed of

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the progress and quality of the Work, and shall give prompt notice to the Owner in writing of any major or material deviations from the Contract Documents in the Work. The Architect shall provide services made necessary by major defect or deficiencies in the Work of the Contractor which through reasonable care should have been discovered by the Architect and promptly reported to the Owner and Contractor(s) but which the Architect failed to discover and/or report to the extent reasonably achievable in the course of the Architect’s periodic visits.

2.6.6 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.6 The Architect shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work. Except as provided in this Agreement, the Architect shall not be responsible for the Contractor’s schedules or failure to carry out the Work in accordance with the Contract Documents and shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

2.6.6.1 ADD THE FOLLOWING:

2.6.6.1 The Architect represents that he will follow the standards of the profession in performing all services under this Agreement. Any designs or specifications furnished by the Architect which do not comply with these standards shall be promptly corrected by the Architect at no cost to the Owner. The Owner’s approval, acceptance, use of or payment for all or any part of the Architect’s services hereunder or the Project itself shall in no way diminish or limit the Architect’s obligations and liabilities or the Owner’s rights.

2.6.7 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.7 Both the Owner and the Architect shall at all times have access to the Work wherever it is in preparation or progress.

2.6.8 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.8 The Owner and Contractor shall communicate through the Architect; except (1) as may otherwise be provided in the Contract Documents, (2) when direct communications have been specifically authorized, or (3) when such communication has been attempted and could not reasonably be accomplished in a timely manner in consideration of the requirements of the Project. Where direct communication between Owner and Contractor has occurred, the Owner and Contractor shall promptly and jointly document the nature and result of the communication as well as the reason for the direct communication and shall provide a copy of said document to the Architect. Communications by and with the Architect’s consultants shall be through the Architect.

2.6.9 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.9 Based on the Architect’s observations of the Work, and evaluations of the Contractor’s Applications for Payment, the Architect shall review and certify the amounts due the Contractor. Said review and certification shall be completed within 15 days of the Architect’s receipt of the Application.
2.6.11 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.11 Where Work does not conform to the Contract Documents, the Architect shall promptly notify the Owner of the Architect’s intent to reject such Work and shall reject nonconforming Work unless the Owner stops the Architect in writing within twenty-four (24) hours of being notified. Whenever the Architect considers it necessary or advisable for implementation of the intent of the Contract Documents, the Architect will have authority to require additional inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not such Work is fabricated, installed or completed. Where such additional inspection and testing is to be at additional cost to the Owner, such additional inspection and testing is to be required by the Architect only upon advance notice and approval by the Owner. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees or other persons performing portions of the Work.

2.6.12 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.12 The Architect shall review and approve or take other appropriate action upon Contractor’s submittals such as Shop Drawings, Product Data and Samples for the purpose of checking for conformance with the Contract Documents and applicable laws, statutes, ordinances, codes, rules and regulations in force as of the date of the development of the Contract Documents to the extent consistent with the generally accepted standards of practice. The Architect’s action shall be taken with such reasonable promptness as to cause no delay in the Work or in the construction of the Owner or of separate contractors, while allowing sufficient time in the Architect’s professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities or for substantiating instructions for installation or performance of equipment or systems designed by the Contractor to the extent required by the Contract Documents. The Architect’s review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of construction means, methods, techniques, sequences or procedures. The architect’s approval of a specific item shall not indicate approval of an assembly of which the item is a component. When professional certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon such certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents.

2.6.14 In the 8th line after the word “Documents” add a period and delete the remainder of the sub-section.

2.6.15 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

2.6.15 The Architect shall interpret and decide matters concerning performance of the Contractor under the requirements of the Contract Documents on written request of either the Owner or Contractor. The Architect’s response to such requests shall be made with reasonable promptness and within any time limits agreed upon.
2.6.16 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.16 Interpretations and decisions of the Architect shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and initial decisions, the Architect shall endeavor to secure faithful performance by the Contractor and shall not be liable for results of interpretations or decisions so rendered in good faith and without negligence.

2.6.17 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

2.6.17 The Owner shall have final authority on questions relating to aesthetic effect, provided such authority is exercised in a way which is consistent with the intent expressed in the Contract Documents.

2.6.18 At the end of the sub-section, delete the period and add “except as modified by this Agreement.”

3.1.1 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

3.1.1 The services described in this Article 3 are not included in Basic Services unless so identified elsewhere in this Agreement as being included in Basic Services, and they shall be paid for by the Owner as provided in this Agreement, in addition to the compensation for Basic Services. The services described under Paragraphs 3.2 and 3.4 shall only be provided if authorized in advance in writing by the Owner. If, in the opinion of the Architect, services described under Contingent Additional Services in Paragraph 3.3, are required due to circumstances beyond the Architect’s control, the Architect shall advise the Owner of the need for those services in writing prior to commencing such services. If the Owner deems that such services described under Paragraph 3.3 are not required, the Owner shall give prompt written notice to the Architect. If the Owner indicates in writing that all or part of such Contingent Additional Services are not required, the Architect shall have no obligation to provide these services. Notwithstanding any provision to the contrary, no compensation shall be paid to the Architect for additional services that become necessary as a result of the fault or negligence of the Architect or his agents or employees.

3.2.3 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

3.2.3 Through the observations by such Project Representatives, the Architect shall provide further protection for the Owner against defects and deficiencies in the Work, but the furnishing of such Project representation shall not modify the rights, responsibilities or obligations of the Architect as described elsewhere in this Agreement.

3.3.1 **DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

3.3.1 Making material revisions in Drawings, Specifications or other documents when such revisions are:

1. inconsistent with approvals or instructions previously given by the Owner, including revisions made necessary by adjustments in the Owner’s program or Project budget;

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2. required by the enactment or revision of 
   codes, laws or regulations subsequent to 
   the preparation of such documents; or

3. due to changes required as a result of the 
   Owner’s failure to render decisions in a 
   timely manner.

3.3.8 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

3.3.8 Providing services in connection with a legal proceeding involving the Contractor(s) 
   or other third parties and the Owner except where the Architect is a party thereto.

3.3.12 ADD THE FOLLOWING:

3.3.12 The Architect shall be responsible to provide a set of reproducible record drawings 
   ("As Built" Drawings) showing significant changes in the Work made during construction based 
   on marked-up prints, Drawings and other data furnished by the Contractor to the Architect.

3.4.18 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

3.4.18 Providing services after 60 days after the later of the issuance of the Certificate of 
   Substantial Completion or issuance of a certificate of occupancy.

4.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

4.1 The Owner shall, with the Architect’s assistance, identify requirements for the Project, 
   including a program which shall set forth the Owner’s objectives, schedule, constraints and 
   criteria, including space requirements and relationships, flexibility, expendability, special 
   equipment, systems and site 
   requirements.

4.10 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

4.10 Prompt written notice shall be given by the Owner to the Architect if the Owner 
   becomes aware of any fault or defect in the Project or non-conformance with the Contract 
   Documents, but the Owner’s failure or omission to do so shall not relieve the Architect of his 
   responsibilities hereunder and the Owner shall have no duty of observation, inspection or 
   investigation.

5.1.3 In the 4th line, add a period after the words “Article 4” and delete the remainder of the 
   sub-section.

6.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

6.1 The Drawings, Specifications and other documents prepared by the Architect for this 
   Project upon payment for their preparation are the property of the Owner who shall be vested 
   with all common law, statutory and other reserved rights; provided, however, that the Owner
will indemnify and hold the Architect harmless in the event the Owner uses such documents for completion of this Project by others.

**ARTICLE 7 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

7.1 Nothing herein shall prevent the parties from agreeing to an alternative dispute resolution for disputes under the amount of $10,000.

**8.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

8.1 This Agreement may be terminated by either party upon not less than seven days written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination. Should either party exercise his right of termination, the written notice shall set forth the nature of the other party’s breach.

**8.2 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

8.2 If the Project is suspended by the Owner for more than ninety (90) consecutive days, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect’s compensation shall be equitably adjusted to provide for expenses incurred in the interruption and resumption of the Architect’s services.

**8.3 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

8.3 This Agreement may be terminated for any reason by the Owner upon not less than seven calendar days written notice to the Architect. If the Project is abandoned by the Owner for more than ninety (90) consecutive days, the Architect may terminate this Agreement by giving written notice.

**8.6 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

8.6 In the event of termination set the fault of the Architect, the Architect shall be compensated for services performed prior to termination, together with Reimbursable Expenses then due and reasonable costs of an orderly cessation of work.

**8.7 DELETE**

**8.8 ADD THE FOLLOWING:**

8.8 Upon termination of this Agreement, the Architect shall perform no further services except as requested in writing by the Owner or as may be necessary to preserve the Work.

**9.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:**

9.1 This Agreement shall be governed by the law of Rhode Island.

**9.3 DELETE**
9.7 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

9.7 Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Owner or Architect.

9.8 ADD THE FOLLOWING:

9.8 The Architect shall not specify or approve for use in the Project any new materials containing asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances. If the Architect discovers that such substances as described herein have been used or do exist in the Project, the Architect shall promptly notify the Owner in writing. When asbestos containing materials, polychlorinated biphenyl (PCB) or other toxic or hazardous substances are suspected or found in the course of the Project, the Owner shall immediately provide the services of an appropriately qualified expert or consultant to determine the proper course of action.

10.2.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

10.2.1 Reimbursable Expenses are in addition to compensation for Basic and Additional Services and shall be payable provided they are approved in advance and in writing by the Owner. Reimbursable Expenses include actual expenses incurred by the Architect and Architect's employees and consultants in the interest of the Project, as identified in the following Clauses.

10.2.1.1 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

10.2.1.1 Expenses of authorized travel and long distance communication, excluding those associated with basic services, and fees paid for securing approval of authorities having jurisdiction over the Project. Expenses associated with travel and printing of presentation materials during the Feasibility Study Phase will be reimbursable.

10.2.1.2 DELETE AND SUBSTITUTE WITH THE FOLLOWING:

10.2.1.2 Expenses of reproductions, postage and handling of Drawings, Specifications and other documents, excluding reproductions of Basic Service documentation for the office use of (1) the Architect, and (2) the Architect's Consultants.

10.2.5 DELETE

10.2.6 DELETE

10.3.4 Add a period after the word "Project" in the 16th line and delete the remainder of the sub-section.

10.5.1 Add a period after the word "liable" in the 4th line and delete the remainder of the sub-section.
10.7 ADD THE FOLLOWING:

10.7 Payment in the amount of two and one-half percent (2 1/2%) of the cost to the Owner of Basic Services not yet performed by the Architect as of the date of this agreement will be withheld by Owner and will become due and payable immediately upon completion of each phase and, for the construction phase, upon final inspection and obtaining a certificate of occupancy, but in no event later than the date set forth in Paragraph 2.6.1.

12.1 ADD THE FOLLOWING:

12.1 It shall be the duty of the Architect throughout the term of this Agreement, as part of Basic Services, to make a prompt written record of meetings, conferences, discussions and decisions made between and/or among the Owner, Architect, and Contractor during all phases of the Project and concerning any material condition in the requirements, scope, performance and/or sequence of the Work and to provide promptly a copy of such record to the Owner or the Contractor.

12.2 ADD THE FOLLOWING:

12.2 The Architect agrees to maintain at no additional cost to the Owner the following insurances until the termination of services of this Agreement.

a. worker's compensation coverage that meets or exceeds legal requirements;

b. automobile and truck liability coverage with a minimum combined single limit of liability of $1,000,000; and

c. architects and engineers professional liability insurance coverage with minimum limits of $1,000,000 per claim and annual aggregate.

The Architect states that it carries insurance with a $1,000,000 limit on non-owned and hired automobiles and trucks, a $1,000,000 limit on professional liability policy and a $1,000,000 limit on general liability policy.

With respect to any of the insurance policies provided by the Architect pursuant to this Agreement which are "claims made" policies, in the event at any time any such policies are canceled or not renewed, the Architect shall provide a substitute insurance policy(ies) with terms and conditions and in amounts which comply with the terms of this Agreement and which provides for retroactive coverage to the date of cancellation or non-renewal to fill any gaps in coverage which may exist due to the cancellation or non-renewal of the prior "claims made" policy(ies). With respect to all "claims made" policies which are renewed, the Architect shall provide coverage retroactive to the date of commencement of work under this Agreement. All said substitute or renewed "claims made" policies shall be maintained in full force and effect for three (3) years from the date of completion of the Project.
Executed this 1st day of March, 2007.

Newport School Committee

By: _______________________

HMFH Architects, Inc.

By: _______________________

HMFH Architects, Inc.