

# **RIDE School Construction Regulations (5/24/07)**

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## **RIDE 1.01: AUTHORITY, PURPOSE, AND SCOPE**

RIDE 1.00 is promulgated by the Rhode Island Board of Regents for Elementary and Secondary Education (hereinafter the “Regents”). The Regents were established by R.I.G.L. 16-60-1 and have the authority to develop and promulgate these regulations pursuant to R.I.G.L. 16-60-4(9) (iv), 16-7-35 through 16-7-47, 16-7-24, 16-7.1-2 (b) (7), and 16-9-4.1. The regulations are intended to govern the process by which the Regents perform their statutory functions of determining the necessity of school construction, establishing standards for design and construction of school buildings, approving projects for school housing aid reimbursement, and ensuring that districts have adequate asset protection plans in place to maintain their school facilities. Proper exercise of this authority will ensure that approval for school construction will reflect a statewide perspective, establish statewide uniformity in the quality of school building, and meet the needs of the district. The Regents are also authorized to issue such supplemental policies, guidelines, guidance documents, and/or administrative procedures that may assist in the implementation of these regulations. These regulations supercede prior “Information and Instructions” on Necessity of School Construction. This document does not supercede the Regulations of the Board of Regents on School Housing Aid (September, 1997).

The Rhode Island Department of Elementary and Secondary Education (hereinafter “RIDE”) has the authority to implement and administer these regulations on behalf of the Regents, including making recommendations to the Regents on project approvals, disbursing school housing aid for approved projects, and monitoring compliance with the conditions of project approval set by the Regents and requirements for asset protection and maintenance of facilities as set forth in these regulations.

“District” as used throughout these regulations shall refer to school districts, regional school districts, charter schools, and any other public school entity seeking approval of the necessity of school construction and/or requesting to fund a portion of the cost of school construction, modernization, or addition projects through reimbursement from the school housing aid program.

RIDE 1.00 applies to all new school construction and school renovations projects where the total cost exceeds \$500,000. Multi-year capital improvement projects supported by capital reserve funds that exceed \$500,000 over the life of the multi-year cycle must be approved by the Regents and shall be submitted using the approved capital improvement plan format in Appendix A. Capital improvement projects with projected costs of less than \$500,000 are still required to obtain the Commissioner’s approval and shall be submitted using the format found in Appendix A.

## **RIDE 1.02: DEFINITIONS**

For the purposes of RIDE 1.00, the following terms shall have the meaning set forth, unless the context clearly requires otherwise:

Applicant means the district and the superintendent or other chief administrative agent of the school district, regional school district, or charter school.

Application means all documents, forms, letters, statements, certifications, plans, studies, drawings, and other data and information required to be submitted within the deadlines and in the format prescribed by these regulations. The Application will include, but not necessarily be limited to, a Design and Educational Program, Educational Facility Master Plan, Facilities Assessment, Feasibility Study, and Design and Construction Cost Projection; copies of the school committee and municipal approval; and any other documents, forms, letters, statements, certifications, plans, studies, drawings, data, or other information as deemed necessary.

Approved Project means a project that has received the Regents’ approval pursuant to these regulations.

Audit means an examination by the Regents and/or its designee of Audit Materials as shall be submitted in a form or manner prescribed by the Regents to determine compliance with any provision of these regulations.

Audit Materials means all papers, invoices, votes, contracts, agreements, change orders, progress reports, purchase orders, on-site observation of construction materials and methods, financing information, bonding schedules and

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other documents related to an Approved Project, and any other documents or information that may be requested or required to determine compliance with these regulations.

Board of Regents for Elementary and Secondary Education (hereinafter the “Regents”) means the public corporation established by R.I.G.L. 16-60-1, with all of the powers, authorities, and responsibilities accorded to it by the General Laws of Rhode Island.

Capital Improvement Plan is a long-range plan, typically five years, which identifies capital needs in a district and provides a funding schedule and timeline for implementation. The capital improvement plan allows for systematic evaluation of all projects at one time so that a district can anticipate future needs. The capital improvement plan should not include routine maintenance expenses of the district but should include required upkeep of the facilities, including but not limited to, roof repairs, heating and ventilation system repairs, or window and door replacement.

Design and Educational Program means a comprehensive numerical and written description of a district’s specific educational program for a specified number of students over a specified period of time, in a format prescribed by the Regents. It shall include: an itemization of spaces needed to support the educational program, complete to the degree that a designer may use it as the basic document from which to create the design of a school facility; the instructional programs, grade configuration, type of facility, and the spatial relationships for the functions housed at the facility; the number of students and a list of any specialized classrooms or major support areas, non-instructional support areas, or external activity spaces; gross and net square footage of any affected existing facility; the overall security and security measures taken to safeguard the facility and its occupants; the school administrative organization; and the hours of operation that include the instructional day, extracurricular activities, and any public access. The Design and Educational Program shall begin with a thorough, in-depth explanation of curriculum goals and instructional activities that occur within the learning environment of the facility affected by the proposed project. The Design and Educational Program shall comply with all applicable laws and applicable Regents and RIDE regulations, including but not limited to, those governing curriculum, basic education program, and length of school day and year. The Design and Educational Program for the proposed project shall include an itemization of each functional space and determination of square footage allocations, a calculation of total building square footage, and establish a realistic construction budget. The Regents will provide districts with annual guidance on what constitutes a realistic construction budget by annually determining a maximum per square foot cost in accordance with state, regional, and national construction data.

Educational Program Space Guidelines means the itemized listing (set forth in Section 1.06) of educational spaces and square footages that comprise a model program for an elementary school, middle school, and high school, or other grade configurations based upon varying levels of enrollment. The gross square footages are inclusive of all spaces to be designed in an Approved Project.

Enrollment Projection means a district’s five-year estimate of student population by grade based on local demographics. It must show increases/decreases from year to year shown in actual numbers or percents and demonstrate how this data supports the need for the project. When possible, local enrollment projections should be supported by those from an outside source, such as RIDE or the New England School Development Council (NESDEC).

Fiscal Year means the year beginning July 1st and ending the following June 30th, unless otherwise determined by the Regents.

School Housing Aid means funds appropriated by the General Assembly in support of completed school construction projects to guarantee adequate school housing for all public school children in the state and prevent the cost of school housing from interfering with the effective operation of the schools. Funds are distributed as promulgated in R.I.G.L 16-7-35 through 16-7-47.

Proposed Project means any project submitted by an Applicant, but not yet approved by the Regents, including construction of a new school facility, addition to an existing school facility, renovation or refurbishment of an existing school facility, purchasing and renovating a building as a school facility, and repair or replacement of any eligible part of a school facility.

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## **RIDE 1.03: PROJECT CATEGORIES AND PRIORITIES**

In order to ensure effective planning, management, and financial sustainability of an approved project, the following general requirements and standards shall be met in the application for project approval.

### **1.03-1 General Requirements**

General requirements are as follows:

1. Districts must ensure that construction will be completed in a timely, cost-effective manner and that buildings will be occupied within the timelines established during the approval process. The approval of a project by the Regents and/or the payment of reimbursements by the Regents shall not render the Regents responsible or liable for the project, or any aspect thereof, except to ensure that the project is in compliance with these regulations. Districts have sole and exclusive responsibility for all aspects of a proposed and/or approved project, from its inception, including engaging all necessary and appropriate personnel for design, construction, and oversight, including a Commissioning Agent (see Section 1.09-2).
2. Approved projects must have a useful life of fifty years for new construction or an addition to an existing school building.
3. Districts are required to have current capital improvement plans on file at RIDE. Only projects included in the capital improvement plan will be eligible for approval.
4. A project that results from lack of maintenance or negligence by the district will not be approved.
5. A district is not eligible to be reimbursed for temporary housing costs incurred because adequate project planning was not performed or local approvals were not obtained in a timely manner.
6. Projects shall be designed to minimize vandalism, and materials and finishes shall be selected to minimize vandalism.
7. Projects shall provide for equality of educational opportunity without discrimination on account of sex, race, color, religion, sexual orientation, national origin, or handicap, and all approved projects shall meet the requirements of the Rhode Island Building Code as it pertains to accessibility and Rhode Island General Laws pertaining to discrimination. All projects shall comply with all applicable provisions of federal, state, and local laws relative to the accessibility of programs and facilities to persons with disabilities.
8. Districts shall demonstrate that projects have undergone review in accordance with applicable state law and regulations and, to the extent applicable to the project, by the Rhode Island's State Building Commissioner, Department of Administration, Department of Health, Historical Preservation and Heritage Commission, Commission for Human Rights, Department of Environmental Management, Governor's Commission on Disabilities, Architectural Access Board, and any other department or agency of the state required by law to review such projects.
9. Projects shall have undergone review in accordance with applicable local or district charters, by-laws, ordinances, or regulations, including local conservation, fire prevention, water, sewer, or building code requirements.
10. Districts shall demonstrate that they have identified educational collaborative programs in the school district not currently housed in public school facilities, and have reviewed any such programs to determine if students in such programs can be served more efficiently and effectively if the project is approved, assuming the project is for school use only.
11. Districts must submit an analysis of the impact on the operating budget of implementing the project in such detail and in the format required by the Regents. The analysis shall include an estimate of the costs of additional maintenance required of the district, the costs of additional instructional or support staff,

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additional utility costs, the costs of additional transportation, if any, and the estimated revenue, if any, from the sale or lease of any school facility decommissioned as a result of implementing the project.

12. Districts must provide an analysis of the potential economic and non-economic impact of leveraging cross-district school capacity and demonstrate that the applicant has considered existing district boundaries, facilities, and populations and the operating cost impact in determining the need and siting of proposed projects.
13. Districts shall ensure that all contracts and subcontracts are complied with and are in conformity with all applicable provisions of federal, state, and local laws and regulations.
14. Districts shall submit an analysis of life cycle costs of all projects including initial capital costs, maintenance costs, and utility costs and demonstrate how such costs will be reduced over the life of the building and its systems. Districts shall consider life cycle costs estimates of all feasible energy systems and technologies, including renewable systems, to identify the system with the lowest life cycle cost estimate.

### **1.03.2 Existing and New Facilities**

The district shall evaluate and present alternatives to school construction projects including but not limited to new school construction, rehabilitation of existing schools, additions to existing schools, the use of temporary and mobile facilities, and the rehabilitation or historic preservation of existing non-school buildings.

Applicants shall consider these alternatives within the context of each district's comprehensive facilities plan and specifically address issues of school capacity, educational adequacy, capital needs, and life cycle operating costs.

RIDE will determine the extent to which an applicant demonstrates the necessity for a school construction project using the following criteria:

- Construction and operating costs, including those costs not eligible for reimbursement
- The effect on student populations
- Educational use and space requirements
- Proximity to local resources
- Opportunity for shared facilities
- The impact on transportation routes and costs
- Environmental impact
- Land acquisition and site preparation, including environmental assessments and remediation requirements, permitting, and zoning requirements
- The impact on historic resources and community character
- Adherence to smart growth principles (Refer to Section 1.05-6)

### **1.03-3 Priority of Projects**

In the event the General Assembly or State Budget Office imposes funding limits, the Regents will consider applications for school construction and renovation projects in accordance with the priorities listed below and in the order of the priorities listed below:

1. Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists;
2. Elimination of existing severe overcrowding;
3. Prevention of loss of accreditation;
4. Elimination or prevention of severe overcrowding as documented by current enrollment or by enrollment projections;
5. Creation or alteration of school facilities to provide mandatory instructional programs;

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6. Replacement, renovation, or modernization of any school facility to increase energy conservation and decrease energy related costs in the facility;
7. Space requirements due to short term enrollment growth for which no reasonable alternative to school construction exists;
8. Replacement of or addition to obsolete buildings in order to provide a full range of programs consistent with approved state and local requirements; and
9. Creation or alteration of school facilities to provide supportive services and ensure equitable statewide access to adequate school facilities.

### **RIDE 1.04: SCHOOL CONSTRUCTION STANDARDS**

#### **1.04-1 High Performance School Design**

Projects shall meet all applicable federal, state, local, and regional building code requirements. Projects shall reflect cost-effective design, material, and finish decisions consistent with good architectural and engineering practice and high quality construction. Projects shall demonstrate that the current technological needs of students, faculty, and school staff are met.

Projects shall comply with all requirements set forth in the most recent Northeast Collaborative for High Performance Schools Protocol (Northeast-CHPS) so that approved projects provide high quality learning environments, conserve natural resources, consume less energy, are easier to maintain, and provide an enhanced school facility.

#### **1.04-2 Minority Business Enterprise (MBE)**

Minority (MBE) and Women (WBE) Business Enterprises shall mean a small business concern, owned and controlled by one or more minorities or women certified by the Rhode Island Department of Administration to meet the definition established by Chapter 37-14.1 of the General Laws of Rhode Island. Disadvantaged Business Enterprises (DBE) shall mean socially and economically disadvantaged firms which are owned and controlled by individuals who are citizens of the United States, or legal permanent residents whose social disadvantage must stem from an individual's color, national origin, gender, physical handicap, long term residence in an environment isolated from the mainstream of American society, or other similar cause beyond the control of the individual, and whose economic disadvantage must stem from an inability to compete in the free enterprise system due to diminished capital and credit opportunities, as compared to others in the same or similar line of business and/or competitive market area who are not socially disadvantaged.

Districts are required to demonstrate that ten percent (10%) of the dollar value of the work performed against contracts for construction exceeding \$500,000 shall be performed by MBE, WBE, or DBE where it has been determined that subcontract opportunities exist, and where certified Minority Business Enterprises are available.

This section of RIDE 1.00 applies to approved projects to the extent that the state law is determined to be applicable and any future determination that Section 1.04-2 is no longer held to be valid does not affect the enforcement in part or in whole of these regulations.

#### **1.04-3 Miscellaneous Construction Requirements**

1. Applicants are prohibited from utilizing chlorofluorocarbon-based (CFC) refrigerants in any new system for building heating, ventilating, air conditioning, or refrigeration.
2. All new construction and major reconstruction projects shall meet applicable local ordinances for recycling space and provide space within the building that is dedicated to the separation, collection, and storage of materials for recycling, including, at a minimum, paper (white ledger and mixed), cardboard, glass, plastics, aluminum cans, and metals.

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3. New construction shall be oriented on the site so that natural daylight for classroom spaces is maximized.
4. Windowless classrooms and occupied instructional spaces which do not have operable windows equal to at least four percent of the floor space shall be air conditioned, excluding gymnasiums, industrial shops, kitchens, and locker rooms.
5. School facilities shall be designed, constructed, and renovated consistent with state and federal law for radon, lead, asbestos and other contaminants, and subject to the enforcement of such standards by the applicable state or federal agency.
6. Concrete floors in all instructional areas, except shops, shall be covered with a resilient floor covering;
7. The storage of pesticides shall be in a locked metal cabinet and vented to the exterior.
8. Spaces in which power tools and machines in shops generate dust shall have dust collecting equipment. Such equipment shall be either single or multi-use vacuum packs or a central dust collection system. Installed systems shall comply with National Fire Protection Association (NFPA) Standard 664 "Standards for the Prevention of Fire and Explosion in Wood Processing and Woodworking Facilities" (1998)
9. Instructional spaces shall comply with the American National Standards Institute standard number ANSI/IES RP3-00, Guide for Educational Facilities Lighting, (2000) incorporated herein by reference, as amended and supplemented

### **RIDE 1.05: SITE STANDARDS**

#### **1.05-1 Site Ownership**

The applicant shall own the site of an Approved Project or be in the process of acquiring or have a reasonable expectation of owning the site by the end of the Architectural Feasibility Study (refer to Section 1.08-2).

If the applicant is acquiring a new parcel of land for the project, the applicant shall provide in its Architectural Feasibility Study to RIDE a completed, signed, and sealed description of the plot plan of the land to be acquired showing:

- Topographical and contour lines
- Adjacent properties indicating current land uses, access roads, deed restrictions, easements, protective covenants, right of ways, and environmentally sensitive areas such as waterways and wetlands.
- The acreage and dimensions of the tract proposed for acquisition
- Anticipated footprint of the proposed school

#### **1.05-2 Responsible School Site Selection**

Protecting student health is the most important issue during site selection. These requirements are intended to eliminate sites containing pollutants known to be hazardous to student and staff health. A variety of factors, from hazardous materials in the soil to airborne pollutants from nearby sources, will be considered in the site review process.

1. Project sites must be at sufficient distances from facilities that might reasonably be anticipated to emit hazardous air emissions or to handle hazardous or acutely hazardous materials, substances, or waste. Applicants must demonstrate that the health and safety of students and staff are not jeopardized by the location of the site.



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2. Project sites must have a minimum separation of 500 feet from 50-133kV power-lines, 750 feet from 220-230kV power-lines, and 1,500 feet from 500-550kV power-lines; and 1,500 feet from railroad tracks, hazardous pipelines, and major highways.
3. Project sites may not be located in an area with moderate or high radon potential, or in an EPA radon zone, unless the school building project plan incorporates a radon mitigation strategy.
4. Sites shall be free from noxious pollution or contamination, and shall be selected to avoid flood plain, wetlands or other environmentally sensitive areas. A new school site must not be located within a one-mile radius of an active landfill. A landfill, as defined by the RI Department of Environmental Management's Hazardous Waste regulations, shall mean a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, an injection well, a waste pile, or a corrective action management unit.

In addition, selected sites shall be sensitive to known and unidentified historic resources, including archaeological sites.

### **1.05-3 Cross District Planning**

When choosing a site for school construction projects, applicants shall consider cross districting issues and possibilities in order to more efficiently and fairly serve the community and student population. Districts will be required to document that this was done as part of the school construction application (refer to Section 1.08-1).

### **1.05-4 Consolidation**

Applicants must submit an analysis of the option of school consolidation and school district consolidation. This applicant shall provide this analysis in its Architectural Feasibility Study (refer to Section 1.08-2). Documentation shall include:

1. Current school capacity and enrollment by school and grade and anticipated five year district growth by grade and school;
2. A map of the district showing the location of the site or sites under consideration and the location of existing school buildings in the district;
3. The attendance area to be served by the proposed school and the number of school-age children who reside within the attendance area and future demographic projections for the district and attendance area;
4. A map of the nearest adjacent district(s) showing their buildings and attendance areas;
5. Other potential non-school buildings evaluated for conversion, include information on age, location, size, nearby community services and buildings, cost, and needed modernization;
6. Information regarding any school buildings abandoned by the district or converted to other use by the community in the last ten years including a map of their location in the district;
7. A comparative analysis of the potential impact of building sites on student transportation and local traffic conditions including traffic impact, public transportation opportunities, times of transit by school transportation, and cost of any changes that would be required to roads or the transportation system; and
8. Documentation must also be provided demonstrating that a licensed professional engineer has examined soil conditions for structural integrity and drainage in order to determine the suitability or lack thereof of possible sites and identified the existence of soil conditions which may increase site development costs.

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## **1.05-5 Community Resources**

R.I.G.L. 16-7-41.1 restricts payment of school housing aid for school facilities which are under the care and control of the school committee and located on school property. Facilities with combined school and municipal uses or facilities that are operated jointly with any other profit or non-profit entity also do not qualify for reimbursement. Nonetheless, it is often necessary to site schools near other existing community resources in order to provide a comprehensive educational program. This is especially true of small and urban districts where land is at a premium. In this context, the site selected shall be chosen to meet the educational needs of the students who will be housed in the building, maximize the use of any available community resources, and minimize any possible adverse educational, social, environmental, or economic impact upon the community.

Consideration should be given to locating facilities in areas that are already served by existing or planned water, sewer, and other public infrastructure. When possible, the site selected should be in close proximity to other community resources such as libraries, museums, parks, natural resources, nature study areas, community centers, and businesses, so as to enhance the Design and Educational Program.

Sites should be located to efficiently and safely serve intended school populations and provide sufficient space for needed parking, bus turnarounds, delivery areas, required setbacks, and planned aesthetics.

## **1.05-6 Smart Growth Planning**

The site shall incorporate “smart growth” concepts where feasible with relation to educational facilities and the impact of suburban sprawl in developing and planning for new construction. Smart growth schools involve the community in school facility planning, make use of existing resources, such as historic school buildings, are located within neighborhoods and fit into the scale and design of the neighborhood, and are usually small in size. The National Trust for Historic Preservation’s publication *Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can’t Walk to School* made recommendations as to how districts could avoid suburban sprawl.

## **1.05-7 Transportation Impact**

Whenever possible, sites shall be located close to public transportation. In order to reduce automobile-related pollution and conserve energy, designs shall incorporate the use of public transportation and carpooling by minimizing parking, creating bike facilities, providing safe walking/biking access, and other appropriate design elements.

Additionally, applicants shall consider the proximity of other services in the community, such as supermarkets, commercial office buildings, grocery stores, day cares, cleaners, fitness centers, hair care, hardware, laundry, medical/dental services, senior care facilities, public parks, pharmacies, post offices, banks, libraries, and community centers.

## **1.05-8 Storm Water Pollution Prevention**

The district must submit a Storm Water Pollution Prevention plan addressing erosion and sediment control that complies with the National Pollution Discharge Elimination System Construction General Permit issued by the U.S. Environmental Protection Agency. Exception: If land disturbance is less than 100,000 square feet for the entire project as a whole, then the project is exempt from this prerequisite. However, all projects involving the protection of wetlands must meet this requirement.

## **1.05-9 Site and Building Layout**

All proposed projects must:

1. Orient the building(s) to take advantage of maximum natural day lighting and plot shadow patterns from surrounding buildings and place buildings to optimize solar gain (for urban-infill sites).

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2. Consider prevailing winds when determining the site and building layout. For example, consider how the shape of the building itself can create wind-sheltered spaces and consider prevailing winds when designing parking lots and driveways to help blow exhaust fumes away from the school.
3. Maximize use of existing land formations and vegetation to provide shelter from extreme weather or to deflect unwanted noise.
4. Plant or protect existing deciduous trees to block summer sun and allow winter solar gain. Plant or protect existing coniferous trees to block winter wind.
5. Minimize importation of non-native soils and exportation of native soils. Optimize Cut & Fill (ideally 1:1) during clearing and excavation.
6. Create physical connections to existing bike paths, natural features, or adjacent buildings and neighborhoods.
7. Design parking lots and driveways to limit student proximity to bus emissions. Design bus loading and unloading areas such that buses need not be lined up head to tail. Do not design bus loading and unloading areas such that bus exhaust is in proximity to any of the school's air intake vents.
8. Site the building to maximize opportunities for on-site renewable energy generation. For example, preserve or ensure availability of space for wood chip storage facilities for biomass heating, wind turbines (if wind resources are adequate), or other renewable energy sources.
9. Facilitate use of public transportation by locating the school within a one-mile radius of a public bus route.

### **RIDE 1.06: SPACE STANDARDS**

#### **1.06-1 General Provisions**

School facilities shall afford space for general instruction, specialized instruction, administration and student services, the adequacy of which shall be pursuant to the requirements of this section. In addition, school facilities shall afford accommodations for approved vocational and special education programs. General design and construction space requirements are as follows:

1. Instructional rooms with windows shall have no exterior obstructing wall within 20 feet of the major window wall;
2. The minimum dimension of any instructional space or specialized instructional space shall be 10 square feet of floor area;
3. Ceiling heights reported in the design and construction plans shall meet the following requirements:
  - The ceiling height of an academic classroom or other instructional space containing more than 300 square feet in area shall average nine feet six inches (9'-6"), and no part of the ceiling or other obstruction shall be lower than eight (8) feet;
  - Instructional spaces of less than 300 square feet and areas of larger spaces devoted to clothing alcoves, storage or work space shall have a minimum ceiling height of eight feet;
  - Large group spaces shall have minimum ceiling heights as follows:
    - Gymnasium --22 feet
    - Music Room (Vocal or Instrumental)-- 12 feet, The minimum height from overall highest riser to ceiling shall be eight feet
    - Cafeteria --12 feet
    - Industrial Arts and Vocational Shop--12 feet
    - Library/Media Center --9 1/2 feet;

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- Corridors and all other administrative spaces shall have a minimum ceiling height of eight (8) feet; and
4. A health unit shall be provided and shall include a nurse’s area, a waiting area, an examination area, a rest area with privacy, drinking water and toilet facilities sized and arranged so that physically disabled persons requiring assistance will be able to receive such aid.

### 1.06-2 Space Allowance Guidelines

All projects must meet Educational Program Space Guidelines that provide the basis for gross square foot per pupil allowances. The standards and any associated guidelines provide by RIDE shall define prototype school design and space recommendations for each specified program activity eligible for housing aid. Projects that exceed gross square foot per student allocations will be reimbursed only up to the limits provided herein. These standards are reflective of realistic, future-oriented, and contemporary educational program goals and are based on the summation of square foot allocations for each itemized educational space.

Table 1: Gross Square Feet (GSF) per Student - Elementary Schools

<i>Projected Enrollment</i>	<i>GSF per Student</i>	<i>Projected Enrollment</i>	<i>GSF per Student</i>
Less than 300	180	450-459	163
300-309	180	460-469	161
310-319	179	470-479	160
320-329	178	480-489	159
330-339	177	490-499	158
340-349	175	500-509	157
350-359	174	510-519	156
360-369	173	520-529	154
370-379	172	530-539	153
380-389	171	540-549	152
390-399	170	550-559	151
400-409	168	560-569	150
410-419	167	570-579	149
420-429	166	580-589	147
430-439	165	590-599	146
440-449	164	600 and greater	145

Table 2: Gross Square Feet per Student – Middle and Junior High Schools

<i>Projected Enrollment</i>	<i>GSF per Student</i>	<i>Projected Enrollment</i>	<i>GSF per Student</i>
Less than 400	190	580-589	175
400-409	190	590-599	174
410-419	189	600-609	173
420-429	188	610-619	172
430-439	187	620-629	171
440-449	187	630-639	170
450-459	186	640-649	169
460-469	185	650-659	169
470-479	184	660-669	168
480-489	183	670-679	167
490-499	182	680-689	166
500-509	181	690-699	165
510-519	181	700-709	164
520-529	180	710-719	163
530-539	179	720-729	163
540-549	178	730-739	162
550-559	177	740-749	161
560-569	176	750 and greater	160
570-579	175		

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Table 3: Gross Square Feet per Student – Academic High Schools

<i>Projected Enrollment</i>	<i>GSF per Student</i>	<i>Projected Enrollment</i>	<i>GSF per Student</i>
Less than 600	205	800-809	195
600-609	205	810-819	195
610-619	205	820-829	194
620-629	204	830-839	194
630-639	204	840-849	193
640-649	203	850-859	193
650-659	203	860-869	192
660-669	202	870-879	192
670-679	202	880-889	191
680-689	201	890-899	191
690-699	201	900-909	190
700-709	200	910-919	190
710-719	200	920-929	189
720-729	199	930-939	189
730-739	199	940-949	188
740-749	198	950-959	188
750-759	198	960-969	187
760-769	197	970-979	187
770-779	197	980-989	186
780-789	196	990-999	186
790-799	196	1000 and greater	185

Vocational Technical Schools and the Vocational Education space components of comprehensive high schools shall not exceed 225 gross square feet per pupil and any additional programmatic requirements may be considered on a case by case basis.

### 1.06-3 Space Allowance by Program Activity

The following space allowance guidelines shall be used to plan new educational facilities. Square footage designed above these criteria is ineligible for reimbursement funding.

#### ELEMENTARY SCHOOLS

<b>Type of Space</b>	<b>300 Students</b>	<b>600 Students</b>
Pre-Kindergarten & Kindergarten (including toilet)	1200 square feet each	1200 square feet each
Core Classrooms	950 square feet each	950 square feet each
Art (including storage and workroom)	1150 square feet	2300 square feet
Music (including practice and ensemble)	1350 square feet	2700 square feet
Special Education:		
Self-contained classroom (including toilet)	950 square feet	950 square feet
Small Group/Resource Room	500 square feet	500 square feet
Media Center/Library	2020 square feet	3310 square feet
Gymnasium (including storage and office)	6300 square feet	6300 square feet
Food Prep/Kitchen	1600 square feet	1900 square feet
Cafeteria	15 square feet per student accommodating ½ planned enrollment	15 square feet per student accommodating ½ planned enrollment
Stage	1000 square feet	1000 square feet
Chair/Table Equipment Storage	200 square feet	300 square feet
Staff Lunch Room	200 square feet	300 square feet
General Office	1500 square feet	1600 square feet
Nurse/Health	510 square feet	510 square feet
Guidance	185 square feet	185 square feet
Teachers Workroom/Lounge (including toilet)	300 square feet	450 square feet
Custodian/Maintenance	1500 square feet	1600 square feet
General Storage (Books)	400 square feet	600 square feet

# RIDE School Construction Regulations (5/24/07)

## JUNIOR HIGH/MIDDLE SCHOOLS

Type of Space	400 Students	750 Students
Core Classrooms	950 square feet each	950 square feet each
Science	1200 square feet each	1200 square feet each
Art (including storage and workroom)	1350 square feet	2550 square feet
Music (including practice and ensemble)	1700 square feet	1700 square feet
Tech Classroom (e.g. drafting, business)	1200 square feet	2400 square feet
Tech Shop (e.g. consumer, wood)	2000 square feet	4000 square feet
Special Education: Self-contained classroom (including toilet)	950 square feet	950 square feet
Small Group/Resource Room	500 square feet	500 square feet
Media Center/Library	2680 square feet	4700 square feet
Gymnasium (including storage and office)	6150 square feet	6150 square feet
Food Prep/Kitchen	1700 square feet	2050 square feet
Cafeteria	15 square feet accommodating 2/3 planned enrollment	15 square feet accommodating 2/3 planned enrollment
Stage	1600 square feet	1600 square feet
Chair/Table Equipment Storage	200 square feet	300 square feet
Staff Lunch Room	200 square feet	300 square feet
General Office	1920 square feet	2170 square feet
Nurse's Office/Health	510 square feet	510 square feet
Guidance	450 square feet	750 square feet
Teachers Workroom/Lounge (including toilet)	300 square feet	450 square feet
Custodian/Maintenance	1375 square feet	1400 square feet
General Storage (Books)	400 square feet	600 square feet

## HIGH SCHOOLS

Type of Space	600 Students	1000 Students
Core Classrooms	950 square feet each	950 square feet each
Science	1200 square feet each	1200 square feet each
Art (including storage and workroom)	1350 square feet	2700 square feet
Music (including practice and ensemble)	2125 square feet	2275 square feet
Tech Classroom (e.g. drafting, business)	2400 square feet	4800 square feet
Tech Shop (e.g. consumer, wood)	4000 square feet	8000 square feet
Special Education: Self-contained classroom (including toilet)	950 square feet	950 square feet
Small Group/Resource Room	500 square feet	500 square feet
Media Center/Library	3650 square feet	6150 square feet
Gymnasium (including storage and office)	10000 square feet	10000 square feet
Ancillary PE Space (including PE alternatives, storage, lockers, offices, and locker rooms)	7000 square feet	10300 square feet
Food Prep/Kitchen	1900 square feet	2300 square feet
Cafeteria	15 square feet per student accommodating 1/3 planned enrollment	15 square feet per student accommodating 1/3 planned enrollment
Auditorium	2/3 enrollment at 10 square feet per student (750 seats maximum)	2/3 enrollment at 10 square feet per student (750 seats maximum)
Stage Auditorium Storage, dressing rooms, controls	2800 square feet	2800 square feet
Staff Lunch Room	400 square feet	500 square feet
General Office	2020 square feet	2270 square feet
Nurse's Office/Health	710 square feet	910 square feet
Guidance	1050 square feet	1500 square feet
Teachers Workroom/Lounge (including toilet)	300 square feet	450 square feet
Custodian/Maintenance	1475 square feet	1575 square feet
General Storage (Books)	400 square feet	600 square feet

# **RIDE School Construction Regulations (5/24/07)**

## **1.06-4 Special Education Spaces**

Spaces for special education classes/programs may receive special consideration for additional space at the discretion of RIDE, if the district documents and certifies a greater need in the Design and Educational Program. The gross square feet per student defined herein includes an assumption that 8% of the total planned enrollment will be enrolled in self-contained special education programs.

The Regents shall approve requests for additional space eligible for housing aid reimbursement if the district demonstrates that:

1. School facility needs related to the required programs cannot be addressed within the existing facilities and that all other spaces are consistent with the space allowance guidelines;
2. Such spaces are necessary to comply with federal or state laws concerning educating students with disabilities to the greatest extent possible in the same building or classes with their non-disabled peers and the additional or inconsistent spaces will:
  - a) Allow for the return of students with disabilities from out of district facilities;
  - b) Permit the retention of students with disabilities who would otherwise be placed in out of district facilities;
  - c) Provide space for regional programs in a host school building that houses both disabled and non-disabled students; or
  - d) Provide space for the coordination of regional programs by a county special services district, educational services commission, jointure commission or other agency authorized by law to provide regional special education services, in a School facility that houses both disabled and non- disabled students

## **1.06-5 Space Allowance Exception**

The applicant may make reasonable departures from the guidelines shown above only with a prior written determination of the Regents that special circumstances exist and that such departures are consistent with the intent of RIDE 1.00 to provide adequate, safe, cost-effective, and programmatically sound school facilities.

## **RIDE 1.07: COST STANDARDS**

### **1.07-1 Cost Guidelines**

Districts shall include in their application a complete and detailed breakdown of the estimated costs associated with the project, prepared by a professional construction cost estimator. Cost estimates should be in the format provided in the annual guidance. This format will be an elemental classification framework developed through industry and government consensus. Construction cost estimates must be carried forward to the proposed bid date and include project management and design fees. Project information collected by RIDE will be stored in a database to provide a means for preparing annual cost guidance.

Project management and design fees, as a percentage of total construction costs, shall not exceed 20% of the general construction costs. Where projects mix new and retrofit construction, costs shall be clearly separated for new construction, new additions, gut rehabilitation, and space modernization.

### **1.07-2 Additional Facilities**

The provisions of this section shall not be deemed to preclude an applicant from including in an Approved Project, in addition to the Design and Educational Program as approved by the Regents, such additional facilities as said district might desire. Any and all costs related to said additional facilities, including but not limited to, the design, construction and implementation of said additional facilities, shall be the sole responsibility of the eligible district.

# **RIDE School Construction Regulations (5/24/07)**

## **1.07-3 Ineligible Costs**

The cost of project elements that exceed or diverge from the project scope of an approved project, including items noted below, are categorically ineligible to receive school housing aid. School housing aid is not paid on furnishings, fittings, and equipment unless the project involves new construction.

Categorically ineligible costs shall include, but not be limited to:

1. Any costs for an Approved Project in excess of the final approved amount for Housing Aid.
2. Financing costs incurred by an Applicant if the bond is not issued through the Rhode Island Health, Education, and Building Corporation (RIHEBC).
3. The cost of legal services.
4. The provision of any direct or indirect municipal services shall be ineligible costs, except the provision of public safety services as required by law, or services which RIDE determines are necessary for the completion of the project.
5. All costs associated with the operation and routine maintenance of a school facility.
6. Costs associated with site remediation costs, unless a district demonstrates that there are no available sites that do not require remediation or that it is less costly to remediate the selected site rather than purchase other property. In addition, the district will have to document its efforts to obtain other sources of public and private funds to assist with the remediation of the site. The Regents expect that municipalities will secure federal funding or judgments against those responsible for the contamination.
7. Any costs determined to be ineligible by the Regents during the course of the enforcement of the regulations and compliance with the memorandum of agreement process. The Regents reserve the right to disallow any costs associated with any change order that deviates from the scope of the project.
8. Other ineligible costs: swimming pools, skating rinks, field houses, district administrative office space that is not incorporated into a school building, indoor tennis courts, and outdoor field surface materials on existing fields. In addition, districts building new or an addition to existing elementary schools will be reimbursed only for a multi-purpose room for auditorium and cafeteria purposes. Furthermore, athletic facilities requests will be considered only if the district demonstrates that the facility will be used predominantly by the school population. This demonstration shall include an analysis of needed physical education and sports activities based on the student population to be served by the proposed new facility. The district shall also include an inventory of community athletic/recreation facilities to ensure that school housing aid is not being paid for community resources.

## **RIDE 1.08: APPLICATION AND APPROVAL PROCEDURES**

The process and requirements of the revised Necessity of Construction approval process allow the Regents to:

- better project and allocate school housing aid;
- give school districts adequate planning time prior to a final bond-approval commitment; and
- provide greater accountability over individual school district project costs and content through a structured review process.

The Necessity of School Construction approval process is a two-stage process as outlined below. Stage 1 of the process requires districts to include a statement of interest, project justification, facilities analysis, district asset protection plan, capital improvement plan, and community demographics. Upon the preliminary determination by RIDE that the project meets the criteria for the Stage 1 of the necessity of school construction process, the



# **RIDE School Construction Regulations (5/24/07)**

application proceeds to Stage 2. Stage 2 of the process requires districts to complete a feasibility study, cost projections, design plans, and site work.

## **1.08-1 Necessity of School Construction: Stage 1**

The project approval process begins with informing RIDE of the district's intent to modernize, modernize and build an addition, or construct a new school building. The intent is confirmed once the Necessity of School Construction Application packet has been completed by the district, submitted to RIDE, and accepted by RIDE in writing. The Stage 1 Necessity of School Construction Application shall include the following:

### **1) Statement of Interest/Project Justification**

Districts must submit a letter from the School Committee to RIDE signed by the Superintendent, School Committee Chair, and a representative of the municipality in which the district is located (Town Council, Mayor, etc.) indicating the intent of the district to request school housing aid funds and clearly justifying why the proposed project is necessary.

When submitting a Statement of Interest, the district must clearly demonstrate why the project is deemed necessary to the district's educational mission and the building deficiencies that this project will remediate such as: not meeting student enrollment needs, class size above appropriate limits, reduced ability or inability to offer ancillary services, and/or learning environments and classroom sizes that are inadequate for student learning or student programs.

The district must indicate whether the building will be a major renovation of a current building, a major renovation with an addition, or construction of a new building. In the case of new construction, the district must clearly demonstrate why new construction is necessary as opposed to renovating existing facilities. With renovation projects, the Facility Analysis must clearly indicate that the condition of the affected facility is poor. The application, through the Facility Analysis, should note the reason for the renovations, such as the need to rectify building code compliance issues, safety and/or health concerns, or security issues. When renovations to or closing of an historic building are proposed, the justification should identify historic tax credits or other potential costs if the building were put to commercial use.

The district must indicate how the current condition of existing facilities has been addressed through the Asset Protection plan below and link this information to the need for new construction or a major renovation project.

If the district is applying for High Performance Green School Status and the additional 2-4% reimbursement for energy efficiency pursuant to Section 1-12.2, this must be stated in the Necessity of Construction Application.

### **2) School Building Committee members**

The district must submit names and backgrounds of the members of the school building committee that shall be formed in accordance with the provisions of the district's local charter and/or by-laws.

The school building committee must, at a minimum consist of eight people, including the superintendent of schools, at least one member of the school committee, the local official responsible for building maintenance, a representative of the office or body authorized by law to construct school buildings in the municipality, the school principal from the subject school, a member who has knowledge of the educational mission and function of the facility, a local budget official or member of the local finance committee, and at least one member of the community with architectural, engineering and/or construction experience to provide input relative to the effect of the project on the community and to examine building design and construction plans for reasonableness.

### **3) District Asset Protection Plan**

The district must submit the district's Asset Protection Plans for the three years prior to the Application documenting spending on preventive maintenance, renovation, and adaptation of the building to be modernized or

## **RIDE School Construction Regulations (5/24/07)**

replaced with notes explaining actions taken by the district to ensure protection of its physical assets. Particular attention must be given to projects receiving Housing Aid reimbursement in previous years.

A review of a district's past investment in maintenance and ongoing maintenance activities will indicate to the Regents whether the district has effectively maintained existing buildings in accordance with its asset protection plans, such that approval of the proposed project by the Regents is justified.

### **4) Capital Improvement Plan**

The district must submit the municipality or district's most recently submitted Capital Improvement Plan showing how the proposed building modernization or construction project has been anticipated in district planning or a written explanation of the reason that the project has been moved up in the planning sequence or added to the Plan.

If the district does not have a current five-year Capital Improvement Plan on file with RIDE, the district must complete and submit such Plan. Districts submitting new plans or amendments to existing plans will be notified in writing if the Commissioner of Education accepted the plan prior to Stage 2 of the approval process

### **5) Facility Analysis of Existing Buildings**

A facility analysis must be submitted. The Facility Analysis should list any deficiencies in the district's existing buildings. The Facility Analysis must be conducted by a licensed engineer and must include:

- Inspection and analysis of the building envelope (roof, walls, glazing, foundation, floor/slab)
- Inspection and analysis of the structural elements of the facility
- Inspection and analysis of all mechanical systems, including condition, age, energy efficiency, levels of ventilation, and compliance with American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) standards
- Inspection and analysis of the lighting system, including condition, age, energy efficiency and lighting levels
- Inspection and analysis of all controls including lighting controls and sensors, energy management systems, emergency shutoffs
- Inspection and analysis of all fire, safety and security systems including emergency plans
- Analysis of the energy use (electric and heating and/or cooling) of the facility for at least the last two years, a survey of the facility systems, and recommendations for improving energy efficiency. The use of Energy Star Portfolio Manager or ComCheck software systems to benchmark the facility against other buildings or the Rhode Island Building Energy Code is highly encouraged.

### **6) District and Community Demographics**

Districts must submit enrollment projections for the next five years for each grade with a brief analysis (increases/decreases from year to year shown in actual numbers or percents) of how the data supports the need for the project. When possible, local enrollment projections should be supported by those from an outside source, such as RIDE or the New England School Development Council (NESDEC).

The district must submit community data including actual and projected population, housing statistics, birth rates, or immigration estimates, and an analysis of how the data supports the need for the project.

### **7) Cross Districting**

Districts must provide an analysis for the potential economic and non-economic impact of cross-districting, which shall demonstrate that the district has considered district boundaries, other existing facilities, and population trends in determining the need and site of proposed projects.

# RIDE School Construction Regulations (5/24/07)

## 8) Approval of Funding for Architectural Feasibility Study

The district must submit an agreement to fund an Architectural Feasibility Study, to include initial energy modeling of energy efficiency or renewable energy technologies, signed by the school district authority or municipal authority. No application will be considered unless there has been an approval by the authority that authorizes funding of an Architectural Feasibility Study.

The Stage 1 application is reviewed by RIDE and either approved, returned to the district for further information, or disapproved.

Plan Review options:

- Approval: RIDE approves the Application and schedules and conducts a conference with the School Building Committee and RIDE at which questions about the Application may be asked and answered and the school construction regulations and feasibility study requirements are discussed. If a project is approved, a written timeline will be established for how the project will proceed.
- Further information needed: RIDE returns the Application with requests to provide timely answers to questions, clarification of prescribed issues or request supplemental information. This step may also include a Plan Review where the concerns are addressed at the scheduled conference.
- Disapproval: RIDE returns the Application and notes the reasons for disapproval. The district may request a meeting with RIDE to review the Application and the decision.

Once RIDE has approved the Stage 1 Necessity Application, the district has one year in which to complete Stage 2 of the application. This is the critical step in project design since Stage 2 will include the projected total cost of construction of the project as well as the rationale for the project to be presented to voters, if a bond issue is required. If districts do not submit Stage 2 within one year of the preliminary approval, the approval will expire and districts will have to start at Stage 1 again.

### **1.08-2 Necessity of School Construction: Stage 2**

The following Stage 2 Necessity of School Construction items are submitted within one year of the preliminary approval and must include the following:

#### 1) Architectural Feasibility Study

The Architectural Feasibility Study must include the following items:

- Design and Educational Program as defined in Section 1.02
- The site selected in the case of new construction along with a comparison of the costs and feasibility of modernization/addition and new construction.
- Cost comparison between this project and other alternatives reviewed. If the project involves new construction, the cost analysis must show clearly and fully that the proposed new construction is the best available alternative to meet the projected need based upon educational programs to be housed, total cost effectiveness (including life cycle cost analysis using twenty years as the lifetime), and the public interest. A consideration of indirect costs associated with the project, such as new sewers, roads, transportation or utilities, must be included. If there are surplus buildings, include benefits or costs to the public, such as resale value or demolition costs. If the project includes the renovation of an existing building, the Facility Analysis must clearly demonstrate that the building is structurally sound or can be made so reasonably.
- Documentation of compliance with Site Standards as referenced in these regulations and the Northeast-CHPS.
- Consideration of school district or school facility consolidation pursuant to Section 1.05-4
- Analysis of historic implications and comments from the RI Historical Preservation and Heritage Commission, if applicable.
- Traffic/Transportation Impact Plan pursuant to Section 1.05-7
- Preliminary energy analysis or modeling [reference Northeast-CHPS]
- Feasibility of using renewable energy technologies [reference Northeast-CHPS]

# **RIDE School Construction Regulations (5/24/07)**

## **2) Architect's Design Plans**

District must submit three sets of architect's schematic design plans to RIDE for Plan Review.

## **3) Design and Construction Cost Projection**

Cost projections must consider the effects of initial capital costs versus maintenance costs over the life of the building with the goal of reducing operation and maintenance costs. Districts must demonstrate the incorporation of life cycle cost analysis in the selection of mechanical systems, equipment, and materials.

The projection shall include a detailed breakdown of the costs associated with this project. This cost analysis should include not only the estimated costs of construction escalated for inflation at the anticipated bid date but also the project management and design fees. Refer to Section 1.07-1. Project management and design fees as a percentage of total construction costs shall not exceed 20% of the general construction costs, as determined by RIDE.

Basic architectural services shall consist of the following phases, schematic design, design development, construction documents, bidding, and construction administration and include the following: architectural drawings, mechanical, electrical, plumbing, fire protection, structural, site development, basic environmental permitting, graphics, lighting design, acoustics, data and communication, educational consultants, any specialty consultants for laboratory, library/media center and kitchen space, code consultants, accessibility, and other services established by RIDE. Additional architectural services may include: geotechnical consultants, asbestos consulting, wetlands flagging, and other additional services as determined by RIDE.

Cost projections must be broken down between new space (i.e. addition) and space improvements (i.e. renovation). If a district is building an addition onto a school as well as conducting major renovations, the soft costs shall be pro rated between the two aspects of the project. By separating the costs, RIDE is able to compare the cost of the new construction versus renovation. RIDE provides cost guidelines as prescribed in Section 1.07-1. The cost comparison should also include an evaluation of the potential for the use of historic tax credits for historic buildings that are being reused or surplus.

## **4) Financing plan**

Districts must consider the impact on the operating budget of implementing the project in such detail and format as required by the Regents, including but not limited to, an estimate of the costs of additional maintenance required of the district, the costs of additional instructional or support staff, additional utility costs, the costs of additional transportation, if any, and the estimated revenue, if any, from the sale or lease of any school facility decommissioned as a result of implementing the project.

## **5) Site Purchase Plan (if required)**

Districts must detail information about the location, cost, and acquisition plan for any new site. The site must meet all site standards included in these regulations. The district has sole responsibility for identifying and acquiring control of the site.

## **6) Local Support, Approval by the Regents, and Memorandum of Agreement**

Districts must submit documentation of community support for the project, including City/Town Council and School Committee approvals. Please include a timeline for when the project will be submitted to voters for approval, if applicable.

Upon receipt of the Stage 2 Application, RIDE conducts a project feasibility review followed by a Plan Review meeting with the school building committee, design team, commissioning agent (see Section 1.09-2), and other applicable parties. After the Plan Review, if the application has received preliminary approval by RIDE, the project will be sent to the Regents for final approval. If the project is approved, a Memorandum of Agreement will be entered into with the district that sets forth the dollar authorization for the project (budget agreement), the scope of

## **RIDE School Construction Regulations (5/24/07)**

the project, and any contingencies that the district must comply with. Districts will be required to agree to any contingencies noted in the Memorandum of Agreement. A standing contingency is that districts will be expected to warn and conduct the vote for public approval for funding within six months of the Regents approval. If the voters do not approve the project within that time frame, the approval will expire and districts will have to start at Stage 1 again. The district will submit a signed copy of the Memorandum of Agreement to RIDE within 10 days of receipt. The Superintendent, or other chief administrative officer of the district, as well as all members of the School Committee must sign the agreement.

Finally, there will be ongoing design document review and approval process by RIDE that occurs, at a minimum, at the following three stages of project implementation (see Section 1.10):

- Completion of Schematic Design
- Completion of Design Development
- 60% completion of Construction documents

### **RIDE 1.09: DESIGN AND REVIEW PROCESS**

#### **1.09-1 Design Review**

RIDE will conduct an architectural and technical peer review of each Approved Project at the completion of schematic design, design development, and construction document phases, or at such other times determined by RIDE. Such a review will ensure that the designs comply with the approved Design and Educational Program approved by the Regents and these regulations. In the event that the school project involves historic buildings or districts, the RI Historical Preservation and Heritage Commission may require an ongoing review through construction.

Districts are responsible for submitting all required documentation to RIDE upon completion of each design phase and attending Plan Review meetings as scheduled by RIDE. At the Plan Review meetings, the design team and building committee are expected to answer all questions posed by RIDE and, upon successful conclusion of the review, may move to the next phase of design.

Listed below is the required documentation for each phase of the design process:

#### ***Schematic Design:***

The purpose of the documentation submitted during the Schematic Design is to document the continuing development of the school construction project and its major components and to project a project budget. The documentation should also demonstrate compliance with the Northeast-CHPS.

- Site plan and Landscape plan @ 1/16" = 1'-0"
- Floor plans @ 1/16" = 1'-0" showing all partitions and door swings
- Color Rendering
- Exterior elevations @ 1/16" = 1'-0"
- Typical building wall sections
- Single line engineering diagrams
- Outline specifications
- City Planning Board submission
- Civil engineering drawings (scale as required)
- Confirm Project schedule
- Site engineering calculations
- Construction Cost Estimates
- Project Report
- LEED™ Checklist Form
- Project Review Meeting
- Educational Specifications and Schematic submission to DOE

# RIDE School Construction Regulations (5/24/07)

## *Design Development and Construction Documents:*

Design Development is intended to further develop the school facilities project design with greater detail.

- Construction drawings for all trades that show the scope of work for the Project as defined in the detailed deliverables description
- Specifications with general conditions and all technical sections
- Construction Cost Estimate
- Legal/regulatory approvals completed as required
- Confirm Project schedule
- Project Report
- LEED™ Checklist Form
- Project Review Meeting

The cost of project elements that exceed or diverge from approved project scope may be declared ineligible for school housing aid reimbursement. The district may retain such elements only by accepting sole financial responsibility for non-conforming elements in writing in a format prescribed by RIDE, prior to inclusion of such elements in any designs.

### **1.09-2 Commissioning Agent Services**

The district shall procure the services of an independent engineering Commissioning Agent. Commissioning is the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the design intent of a project. The Commissioning Agent must be secured prior to the design phase of the project. The Commissioning Agent must be independent, and be procured separately from the contract for the district's construction services. The Commissioning Agent will be responsible, in part, for the local reporting required to implement state enforcement of the regulations for the project during the design, construction, and operational acceptance process to ensure compliance with the regulations during integrated design. During schematic design and design development, the Commissioning Agent will verify that all standards have been met through meetings with the design team and review of plans submitted by the design team. The Commissioning Agent will continue to monitor compliance with these regulations through the development of construction documents and through the construction process to ensure that all building systems, mechanical and lighting equipment, and all specifications are in compliance with regulations, included in and consistent with all plans, construction documents, and cost estimates. The Commissioning Agent will submit reports certifying compliance with all standards and regulations to RIDE and the district representative. The Commissioning Agent should work closely with the district's project manager, also referred to as clerk of the works.

The Commissioning Agent must:

- Bring the owner's needs and project requirements to the forefront at each phase of the project to ensure that the finished project will meet expectations;
- Improve the building's overall performance by optimizing energy-efficient design features and directly addressing issues like equipment performance testing and system integration; and
- Verify that building staff members are well-trained and possess the documentation they need to operate and maintain the building's systems and equipment after turnover.

### **1.09-3 Architectural, Engineering, and Other Services**

Architectural, engineering, project management, construction management, financial, and other professional services shall be procured by the districts for all projects.

The Facility Analysis must include an analysis of the energy use (electric and heating and/or cooling) of the facility for at least the last two years, a survey of the facility systems, and recommendations for improving energy efficiency. The use of Energy Star Portfolio Manager or ComCheck software systems to benchmark the facility against other buildings or the Rhode Island Building Energy Code is highly encouraged.

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## **1.09-4 Timelines**

The district must meet the timelines established in the Memorandum of Agreement. If the district does not meet said timelines, RIDE reserves the right to rescind project approval and the district may reapply for the Project in a subsequent fiscal year.

## **1.09-5 Construction Bidding Documents**

The district shall maintain bidding information and tabulation sheets and shall provide them and any other documentation upon request by RIDE.

## **1.09-6 Project Files**

The district shall maintain a project file that shall include, but not be limited to, the following documents:

1. All documents related to the project approval process, including project siting, land acquisition, real estate documents (deeds, leases, title report including searches for easements, mortgages, judgments, liens, unpaid taxes, water and sewer, or property description by metes and bounds) surveys, school board resolutions, referendum ballot questions or municipal debt ordinances, and all public notices.
2. All documents related to the financing of the project including:
  - a. Selection and payment of professionals, such as bond counsel and other attorneys, underwriters, financial and investment advisors, trustees, official printers, and bond insurers;
  - b. Structuring of the financing, such as the method(s) of borrowing considered, complete financing estimates and cash flows, all number runs including escrow sufficiency, if applicable, and yield calculations, the rationale for the plan of financing (resulting in the issuance of obligations under terms most advantageous to the district), long-range plans or models, computerized models, private uses, and costs of issuance; and
  - c. Issues of debt, such as general, series and supplemental bond resolutions, trust indentures, trust agreement, preliminary official statement, all disclosure materials, Official Notice of Sale or Purchase Contract, arbitrage certificate, tax regulatory agreement, IRS Form 8083, as appropriate, Disclosure Agreement, and TEFRA Notice, if applicable
3. All documents related to the bidding process, evaluation of bids, award, and execution of contracts, the specifications, request for proposal (“RFP”) or other invitations to bidders, the advertisements or public notices of the opportunity to bid, logs of the bids received and the bids opened, bid evaluation worksheets, notices of contract award, and the executed construction contract documents;
4. All documents related to the construction of school facilities, including the documents required to be kept by the construction contract documents, specifications, change orders, alternate submissions, approvals or rejections, unit prices, product data, time of performance schedules, construction photographs, quality control management reports, value engineering information, up-to-date project accounting system, intermediate and final audits, “as built” or other drawings documenting the actual facilities built and fixtures installed, close-out documentation on forms provided by RIDE, related correspondence, vouchers, and certifications;
5. All payroll certifications filed with the district by all contractors and subcontractors; and
6. All documents a district is legally required to make, maintain, or keep on file as part of a construction project.

The documents above shall be maintained in a readily accessible place for review and inspection by the RIDE and any other related agencies for the duration of the school facilities project and three years thereafter or, if litigation concerning any aspect of the school facilities project is instituted, until completion of all litigation, whichever is later.

# **RIDE School Construction Regulations (5/24/07)**

## **RIDE 1.10: Enforcement of Regulations and Compliance with the Memorandum of Agreement**

During design, RIDE will review schematic design and design development documents as indicated in Section 1.08-2. During construction, RIDE may visit the construction site to determine that the project is being built as approved. RIDE will review periodic construction progress reports. RIDE will review construction documents at the 60% completion stage and review change orders exceeding 10% of the original approval to determine that the project is proceeding as approved and in compliance with these regulations. The cost of change orders, which result in elements that diverge from or exceed the provisions of the Design and Educational Program and/or the Memorandum of Agreement, may be deemed ineligible for reimbursement. RIDE may inspect the completed facility, in operation, to ensure the project has been completed and is operating consistent with project approval by the Regents and pursuant to the terms of the Memorandum of Agreement. RIDE or its representative reserves the right to conduct an Audit, as defined in Section 1.02. Audit Materials, as defined in Section 1.02, shall be provided as requested.

In order to determine the eligible costs of an Approved Project, districts will submit fiscal records to RIDE as prescribed by the Regents to ensure that only eligible costs are included in the school housing aid reimbursement. Districts shall cooperate with RIDE or its designee, if any, in the conduct of a fiscal review. Such cooperation shall include, but not be limited to, scheduling, provision of adequate work space, requests for documents, access to personnel with knowledge of the Approved Project, access to Approved Project-related materials stored electronically, or any other requirement for the thorough and expeditious conduct of the review.

Except as provided herein, the cost of an audit shall be borne by RIDE. If RIDE determines that the district has not reasonably cooperated in the conduct of a review, is responsible for any delay in the review, or is determined to be making frivolous or non-meritorious appeals, RIDE may, in its sole discretion, deduct all or a portion of the cost of conducting the fiscal review from the district's school housing aid reimbursement.

Applicants shall maintain all records related to an Application and an Approved Project pursuant to the requirements established in Section 1.09.

## **RIDE 1.11: ASSET PROTECTION AND MAINTENANCE OF FACILITIES**

### **1.11-1 Asset Protection Plans and Building Maintenance**

Each school district shall develop, implement, and maintain a comprehensive asset protection plan for every school building, not just buildings for which school housing aid is sought or received. The plan must include a full analysis of the building's current condition, the need for repairs if any, the costs associated with the repairs, and the nature and cost of annual maintenance for each building. The asset protection plan must be submitted to RIDE annually and will be reviewed by a certified licensed professional to determine that the plan is adequate. The plans must address regularly scheduled preventive maintenance to prevent premature failure and to maximize the useful life of a facility. If the plan submitted by the district is determined to be inadequate, districts will be notified by RIDE and required to submit a revised plan within thirty (30) days. Districts must submit annual updates to these plans to RIDE that list all maintenance performed and expenditures pursuant to the plan for the previous year.

The asset protection plan and annual expenditures pursuant thereto must meet the following minimum requirements:

- a. All facilities and structures shall be maintained in a safe, sound, and energy efficient condition. All service equipment, means of egress, devices, and safeguards which are required by the state building code in a building or structure, when erected, altered, or repaired, shall be maintained in good working order;
- b. For each facility, the plan shall itemize anticipated annual expenditures for required maintenance;
- c. Capital maintenance expenditures shall be itemized and be consistent with the district's approval capital improvement plan; and



## **RIDE School Construction Regulations (5/24/07)**

- d. The plan shall itemize costs for the replacement of all approved temporary facilities in the district with permanent structures.

Commencing on July 1, 2010, RIDE will not approve a school construction application for a district that does not have a budget for that fiscal year which provides for full funding of its asset protection plan. Also commencing on July 1, 2010, RIDE will not approve a school construction application for any district that has not spent at least fifty percent (50%) of its asset protection budget pursuant to its asset protection plan in each of the previous three years prior to application.

If a district receiving school housing aid fails to maintain compliance with the asset protection requirements of these regulations or any guidelines, policies or procedures established by the Regents, the district may be prohibited from receiving school housing aid for at least one year and prior to reinstatement of school housing aid payments shall be subject to a review by RIDE to determine that the district is in compliance with these regulations.

### **1.11-2 Certified Educational Facilities Manager**

(a) No person shall be employed by a district to supervise buildings and grounds unless the candidate meets one of the following criteria:

- Has completed a minimum of two years experience in the field of buildings and grounds supervision.

Or

- Has been certified an educational facilities manager through an industry accepted certification offered at a regionally accredited institution of higher education or an approved postsecondary institution located within or outside Rhode Island.

Or

- Has a college degree in a field related to facilities management.

(b) When a vacancy occurs in a position in which the duties of a supervisor of buildings and grounds are performed, the district may select, for a period not to exceed six months from the date of the vacancy, a person who does not meet the requirements noted above to perform on an interim basis the duties of a supervisor of buildings and grounds.

## **RIDE 1.12: HOUSING AID REIMBURSEMENT AND INCENTIVE**

### **1.12-1 General**

RIDE shall annually award school housing aid within the amounts and at such times as authorized by R.I.G.L. 16-7-35 through 16-7-47. State funding shall be awarded to completed projects according to statutes and regulations governing school housing aid. No payment of school housing aid for an Approved Project shall be made before the completion of the project and submission of the forms as prescribed by the Regents. School housing aid will be paid on interest only for bonds issued through the RIHEBC.

### **1.12-2 Energy and Water Efficiency Incentive**

Additional reimbursement funds are available to approved new construction projects that demonstrate energy and water efficiency cost reduction beyond the minimum school construction threshold requirements as defined in the Northeast-CHPS.

Districts are eligible for 2% additional reimbursement funds for projects that achieve energy efficiency 30% above the RI Building Energy Code; 3% additional reimbursement for energy efficiency 40% above the RI Building Energy Code; and 4% additional reimbursement for energy efficiency 50% above the RI Building Energy Code.

## **RIDE School Construction Regulations (5/24/07)**

Compliance with increased energy efficiency levels is demonstrated through submission of results of energy modeling and analysis reports during the Necessity for School Construction application process as prescribed in Section 1.08 and Plan Review upon completion of schematic design, design development, and construction documents as outlined in these regulations. The submission must be reviewed and certified by a licensed professional engineer and approved by RIDE.

Energy efficiency performance must be documented each year through the submission of yearly reports that include: monthly utility bills, summary of energy consumption for the previous year, and energy consumption compared to the baseline design. The district may submit benchmark energy software programs (such as ENERGY STAR Portfolio Manager) to demonstrate compliance.

Buildings that are not able to maintain energy efficiency over time must meet with RIDE officials to review the materials and explain any discrepancies. Should non-compliance persist, RIDE may reduce any further reimbursement by the percent of the incentive.

### **RIDE 1.13: PROGRAM INTEGRITY**

Where RIDE determines that false or intentionally misleading information or documentation was submitted by an applicant in support of any effort to obtain acceptance of an application, approval for a Project, reconsideration of an appeal, granting of waiver or any other action or forbearance by RIDE, or a district commits any other act affecting the integrity of the Program, RIDE may permanently revoke any and all payments due to a district, RIDE may take steps to recover any previous payments made to a district and/or said district shall be prohibited from receiving school housing aid for a period of time to be determined by RIDE.

### **RIDE 1.14: CLOSING SCHOOLS**

A district must notify RIDE in writing six months prior to the sale, lease, demolition, or other removal from service of any school facility in the district's jurisdiction. The notification must include the district's plan for accommodating any displaced school programs or services and a plan for accommodating district students within remaining school buildings as a result of this sale, lease or removal from service.

Where a building that has received school construction payments from RIDE for a building that has not remained in service for 50 years, RIDE may recapture at its discretion a portion of the housing aid reimbursement.

In the event of a proposed closure, a district shall inform neighboring districts of the proposed action in the event that the second district may wish to acquire the building for its own use.

### **RIDE 1.15: WAIVER**

Any request for a waiver of any provision of these regulations shall be governed by the "Protocol for Granting Variances to Regulations of the Board of Regents or Regulations of the Commissioner" (May, 1993)

RIDE Proposed School Construction Regulations (3/9/07) **DRAFT**

*APPENDIX A*

*Sample Capital Improvement Plan*

**Five Year Capital Improvement Plan**

**District: ABC**

Description	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total
Replace HVAC system at XYZ Elementary School	250,000	250,000				500,000
Upgrade wiring at High School for new technology			50,000			50,000
Repave Middle School parking lot				100,000		100,000
Replace roof at ABC Elementary School				250,000	250,000	500,000
Repair tile flooring district-wide	10,000	10,000	10,000	10,000	10,000	50,000
Paint classrooms district-wide	25,000	25,000	25,000	25,000	25,000	125,000
<b>Total Request</b>	<b>285,000</b>	<b>285,000</b>	<b>85,000</b>	<b>385,000</b>	<b>285,000</b>	<b>1,325,000</b>

Some items that will not be reimbursed: lockers; window screens, curtains, or blinds; equipment (e.g. computer monitors, hardware, and software; air compressor; individual air conditioning units; floor washing machines; television/media equipment; vehicles; auditorium stage curtains; or maintenance related items (e.g. air duct cleaning; oil burner maintenance; or graffiti removal).

This list is not comprehensive but gives districts an idea of the types of items that do not qualify for Housing Aid. If you have any questions regarding the eligibility of an item, please contact the State Aid Specialist.