**CREC Academy of Aerospace Elementary School**

**![MC900083235[1]]()**

**Educational Specifications**

Approval:

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### PROJECT RATIONALE

Magnet schools have become an effective response to the Connecticut statutory requirement to reduce student isolation and provide equality educational opportunities for Hartford students. The Capitol Region Education Council (CREC) currently operates an array of schools that successfully education children from the suburban communities in the same classrooms as their peers from Harford. Its magnet school division was created in response to the *Sheff v. O’Neill* desegregation case of 1996 with the primary purpose of reducing “racial, ethnic and socioeconomic isolation of student by initiating, developing and managing innovative educational programs.”

In April of 2008, the State of Connecticut and the Sheff plaintiffs entered into a five-year year stipulated agreement with the following goals: to increase the number of Hartford-resident minority students in a reduced-isolation educational setting and to move toward meeting the demand of Hartford-resident minority students seeking placement in such settings. By the fifth year of the stipulation, at least 80 percent of the demand for a reduced-isolation setting must be met through the implementation of the Voluntary Interdistrict Programs of which CREC magnet schools play a significant role. The agreement identified yearly benchmarks toward this goal.

CREC is seeking to develop additional magnet schools to assist in meeting the 5 year goal. Magnet schools serve the best interest of all children in that the capitol region since they provide specialized instructional programs that recognize the uniqueness of student and their interest, and have the advantage of offering parents and students more option than would be available in their home communities. The CREC Academy of Aerospace Elementary School will enroll students in grades preK through grade 5 and provide opportunities for students to be educated in a literacy rich and culturally diverse learning community with an emphasis on developing the whole child while focusing on the Aerospace theme of the school.

At the CREC Academy of Aerospace Elementary School, learning is connected to what the world events surrounding the student. The acquisition of knowledge and skills and the search for meaning and understanding are best done in the context of inquiry and exploration of relevant content. This magnet school will utilize a thematic interdisciplinary curriculum so that students will gain the ability to perceive the relationships among societal, scientific and technological issues. Additionally, the school will offer a comprehensive approach to early childhood learning, aligned with the Connecticut State Frameworks and guidelines on teaching methodologies and assessment strategies.

The CREC Academy of Aerospace Elementary School will offer students a broad exposure to the world, cultures and species with which they share the global planet through aerospace.

**Goals of the CREC Academy of Aerospace Elementary School:**

* Promote racial integration and reduce racial, ethnic and economic isolation
* Foster an understanding of and an appreciation for cultural diversity
* Provide a quality integrated educational program focusing on science and technology in a cooperative, problem-solving environment
* Provide a high quality and challenging education so student reach grade level academic benchmarks and are prepared to exceed state and national standards of achievement
* Infuse technology into classroom activities and student projects
* Create a student-centered learning community that acknowledges learners’ developmental levels and provides performance based learning experiences
* Foster family engagement and provide student support through the establishment of a Family Resource Center.
* Emphasize the development a strong of literacy skills across all content areas, especially the aeronautical theme of the school.
* Align the curriculum with the Connecticut State Standards, pre-school Curriculum and Assessment Frameworks and the Connecticut Common Core of Learning
* Implement a developmentally appropriate curriculum
* Promote the development of the whole child by assessing and attending to the academic, social, personal, emotional and physical needs of every student
* Integrate the arts throughout the transdisciplinary themes to enable creative expression and learning via multiple modalities
* Develop a school culture that promotes a love of learning through inquiry and collaboration.

### SCHOOL PROJECT HISTORY

The genesis of this building project was through cooperative action with CREC working together with the Rocky Hill Board of Education to pursue the construction of two new school buildings at a single site, yet to be determined, within the town of Rocky Hill. It is envisioned that the Rocky Hill building will be a new intermediate school for grades 4 and 5 serving 400 student from Rocky Hill while also enrolling Hartford minority students (15 students per grade) selected through the State Department of Education’s Open Choice lottery. On the same site will be the CREC Academy of Aerospace Elementary School built to accommodate grades K-5, with an anticipated enrollment of 704 students.

This unique partnership between the CREC and Rocky Hill Public Schools would serve as an important component with respect to reaching the ultimate goal of satisfying the requirements established by the *Sheff v. O’Neill* judgment. Further, the partnership would mark the first time that a suburban school district in the greater Hartford region has entered into a joint construction venture with CREC in order to increase the number of Hartford students participating in an integrated setting. Moreover, this arrangement could serve as an example for other suburban Hartford communities that would be willing to enter into a similar relationship with CREC in order to expand the number of Open Choice seats available, either through joint construction projects or the creative use of existing classroom space in towns that are experiencing declining enrollments.

Moreover, the construction of a new intermediate school in Rocky Hill would serve to alleviate overcrowding in the town’s two existing K-5 schools, Stevens Elementary and West Hill Elementary. With the new school, the Rocky Hill Board of Education would convert its two K-5 elementary school to K-3 grades level once the new intermediate school is open in the fall of 2017. This would provide an immediate increase of 90 Open Choice students in attendance in Rocky Hill. In the years, that follow the Board of Education would commit to accepting 15 additional Open Choice students with each incoming kindergarten cohort and by the 2024-25 school there would be 15 Open Choice students enrolled in all grade levels for a total enrollment of 195 Hartford resident minority students.

While making significant progress in terms of the *Sheff* settlement is a major goal of this building project, the concept provides additional benefits as well. The unique school approach would potentially yield savings on architectural and construction management fees. More important, it will provide opportunities for collaboration in the area of staff development, instruction and extra-curricular offerings. Rocky Hill’s close proximity to Hartford, with easy access to major thoroughfares, will make the campus attractive to both student and families throughout the greater Hartford region. Critically important to this and CREC’s building project is the commitment to provide each and every student at both schools the opportunity to learn in a diverse and educationally progressive setting.

The Capitol Region Education Council and the Rocky Hill Board of Education are committed to working with children, families and one another to build a learning community that values, enhances, promotes, and respects the intellectual and social-emotional growth of young children. This educational environment provides high quality early childhood experiences that foster the important development of relationships, diversity, literacy, creativity, high expectations for children inclusive of the natural world so all children will experience early success in education.

### LONG RANGE PLAN

This school building project falls under the long range plan of the State Department of Education to create magnet schools within the Greater Hartford area. The construction of the school facility will assist the current needs of supporting school districts by offering a choice to families of pre-school and elementary school students. The Aerospace Magnet School will offer families an opportunity to educate their children in an environment that promotes global awareness through trans-disciplinary program of international education designed to foster the development of the whole child with the expected result of reducing economic isolation and racial segregation.

This new building is to be constructed on a single parcel of land shared with the new Rocky Hill Intermediate Grade School. Through CREC’s educational program, it will continue to offer families an opportunity to educate their children in a learning environment that advocates for every child, no matter what her or his family background, to achieve at high levels and to acquire the literacy, science and numeracy skills that will enable them to be successful lifelong learners.

### PROJECTED STUDENT ENROLLMENT AND SPACE REQUIREMENT

As indicated earlier, the new school facility will accommodate students in preK, 1 to 5th grade with an expected enrollment of 704 students. The enrollment will be supported by 32 regular classrooms with 4 for each level: preK3, PreK4, grades 1-5. An incubator school commenced operation in a temporary space in Rocky Hill in 2012. Student enrollment is expected to expand at a temporary site in anticipation of the new building until it is near maximum enrollment upon entering the new building.

### LEARNING/EDUCATIONAL ACTIVITIES

The academic goals of the CREC Academy of Aerospace Elementary School are aligned to the Common Core Standards for mathematics and English/Language Arts as well as Connecticut’s Curriculum Standards for social studies, science, world language, physical education and the arts. These standards offer a continuum of skills and knowledge that build across a child’s school career, beginning with pre-kindergarten as the foundation.

The CREC Academy of Aerospace Elementary School will create an atmosphere which cultivates student confidence, self-concept and esteem through the development of a positive and strong learning community. Cooperative learning standards which include listening, participating, helping and encouraging others, demonstrating responsibility and using critical thinking skills will be emphasized.

Language Arts

Learning to read and write is a developmental process that begins at birth. Literacy skills begin in infancy and continue with a child’s basic need to communicate. This is at the core of the school’s literacy programs. Children develop literacy skills and become readers and writers by engaging in meaningful reading and writing experiences.

The ultimate goal of literacy instruction for learners is to construct meaning and employ the language arts for lifelong learning, work and enjoyment. The curriculum provides that all students will read, write, speak, listen and construct meaning of written, visual and oral texts.

Students will demonstrate essential pre-literacy and literacy skills in sight vocabulary, oral language development, reading fluency, reading comprehension, phonemic understanding, use of personal background knowledge to make connections, reading for purpose, retelling, understanding author’s purpose, and identification of various literary genre.

* Students will demonstrate appropriate grade writing skills.
* Students will demonstrate the ability to utilize active listening skills.
* Students will demonstrate grade appropriate speech sounds and patterns.
* Students will demonstrate their ability to solve problems using creativity and conceptual knowledge.

Social Studies

All students will acquire Connecticut State Student Performance skills that are grade appropriate. Social studies instruction is for learners to gain an understanding of the interaction between and among societies and cultures of the past and present world; to understand principles which are uniquely American/democratic and to apply concepts and understanding as a responsible citizen in a culturally, diverse interdependent world.

Students will demonstrate understanding of grade appropriate democratic principles, historical perspectives, and geographic and economic concepts. Students will be required to demonstrate understanding of human influence on environmental systems.

Mathematics

All students will master the mathematics standards and skills identified at each grade level. Students are expected to perform at proficient, goal, or above goal levels in mathematics by benchmark school standards. The goal of Math instruction is for learners to use mathematical skills and concepts with proficiency and confidence. Further, learners will understand and appreciate the power and utility of mathematics as a discipline and tool for solving problems. The curriculum provides that all students receive instruction composed of a variety of inter-related components that follows the Connecticut’s Mathematic Standards.

Students will demonstrate understanding of grade appropriate concepts of numeracy, quantity, numeric relationships, geometry and measurement.

* Students will demonstrate the ability to use mathematic concepts to solve problems.
* Students will demonstrate the ability to represent mathematic concepts in a variety of ways (charts, graphs, tables, etc.).

Science

The goal of science instruction is for learners to apply scientific skills, processes and methods of inquiry to all realms of science, earth, life and physical.

The school’s focus is to effectively integrate science across the curriculum as a means of developing literacy, numeracy and social studies concepts as well as a means for motivating students. The inquiry based method of instruction will also focus on learning how humans adapt and manipulate the environment to solve problems. The building will provide space and equipment which will effectively nurture problem solving skills through hands-on experiential learning and embed the Connecticut Science Standards.

* Students will demonstrate understanding of grade appropriate principles in life, physical and earth science.
* Student will demonstrate problem solving skills based on the scientific method and use of appropriate foundational knowledge and technology.

Physical Education

Physical education assists children in gross motor development and in acquiring healthy lifestyles that lead to life-long health and wellness. This includes acquiring healthy eating habits and participating in rigorous physical activity on a daily basis.

The Standards for Health and Safety and Physical Education for all grades will be an important integral part of the total school curriculum.

* Students will demonstrate learning concerning healthy food choices
* Students will demonstrate knowledge of certain body systems.
* Students will demonstrate knowledge of the dangers of Alcohol, Tobacco, and Other Drug use.
* Students will be monitored for normal growth.
* Students will demonstrate strength and endurance according to national norms.
* Students will demonstrate acquisition of certain sports related skills.

Art and Music

Instruction in the arts is to integrate dance, music, visual art and theatre standards throughout the curriculum. Students will be encouraged to express their knowledge of themselves and others as well as specific curricular content throughout their school experience. The Arts curriculum will model Connecticut’s Standards in the Arts including dance, music, theatre and visual arts.

### Overall Instructional Design

The common focus is to assess each child’s level of development and to design an early literacy, science and numeracy program that meets their needs to ensure that they are successful at their grade level. The goal of the school is to have every child performing academically successfully by the end of 5th grade.

Personal Goals:

* Every child will develop the vocabulary and interpersonal communication skills needed to be a successful learner
* Every child will acquire the early literacy, science and numeracy skills needed to enter a learning level that leads to performing on level in all academic areas by the end of 5th grade
* Every child will show an interest in and an engagement in early learning
* Every child will be in a learning environment that is driven by research-based best practices in early childhood education.

The daily routine the CREC Academy of Aerospace Elementary School educational program provides a balanced variety of experiences and learning opportunities. Children engage in both individual and social play, participate in small-group and large-group activities, assist with cleanup, socialize during meals, develop self-care skills, and exercise their small and large group muscles. The most important segment of the daily routine is the plan-do-review sequence, in which children make choices about what they do, carry out their own ideas, and reflect on their activities with adults and other children.

The academic calendar year will parallel that of the shared site and adjacent Rocky Hill Intermediate Grade School, as well as meeting state and CREC requirements. It is anticipated that active exploration will be conducted to determine the possibility of shared educational experience with the Rocky Hill Intermediate Grade School.

### BUILDING SPACE REQUIREMENTS

The instructional thrust of instructional program is one that develops the students for creative thinking and problem solving. In addition to the traditional instructional classrooms, some specialty areas will require slightly larger areas with specialized architectural and environmental considerations to allow students hands-on learning experiences. A program description for the classrooms and specialty spaces listed is included. The descriptions also include the special requirements for each.

The space requirements for classrooms, administration and other related support areas of the new building are to be in compliance with the CREC design guidelines that are included in its publication, “CREC Design Guidelines and Standards”, *version: September 14, 2014.* Final selected design professionals are to use this publication in planning the new building.

### EDUCATIONAL SUPPORTING SPACES

###### Administration

The school administration is to be located near the main entrance of the building. The design and location should be the focal point upon entering the school. The space should contain sufficient area to accommodate a principal with a small meeting area, assistant principal, general office and reception area for two secretarial employees. Also included is a unisex handicap toilet and adequate space for a workroom with a copier and mail room including a file room and secure and regular storage space for office supplies.

 Adjacent to the administrative office is to be a school security office with appropriate video and other monitoring capabilities for a security guard. Space requirements for this area should be approximately 1,440 sq. ft.

###### General Purpose Classroom Design and Layout

There are to be thirty two classrooms for PK3, PK4 and K to grade 5. Classrooms are to be of sufficient size to accommodate 22 students, a teaching station, file cabinets, and furniture to seat them inclusive of desks. Instructional whiteboards, one of which is to be digitally interactive, will be located on at least two walls in each classroom. Also included should be lockable storage for teachers’ personal items, storage shelves for books, and 2 bulletin boards for display and notices.

 The general purpose classrooms for PK3 and PK4 are to be 1,300 sq. ft. The 4 K classrooms are to be 1,100 sq. ft. while the remaining general classrooms for grades 1 through 5 are to be 1,000 sq. ft. All are to be designed to allow flexibility for different teaching/learning styles such as group work, and independent study. Classrooms within the school will have similar instructional equipment and configuration layout as follows:

The front and back walls of the rooms will serve as teacher/student presentation areas. Teacher stations will be located in the front of the classroom and will have the following components: computer with DVD drive, document camera, projection screen and an interactive whiteboard with the required support equipment, LCD projector, and touch-screen control monitor panel.

The location and configuration of classroom educational and technology equipment will be consistent for all classrooms to allow faculty ease and confidence in their use. Instructional computers in the teacher offices should be similar to those in the classrooms. The similarity of the computers throughout the school provides uniformity in faculty and student use while reducing maintenance costs.

###### Magnet Theme Spaces

The magnet theme of the building will require specialized areas that include the following:

* LEGO Robotics Lab/Workroom (1,200 sq. ft.)
* Wind tunnel for study of aerodynamics (1,000 sq. ft.)
* IMAX Projection Studio (1,500) able to accommodate 3 to 4 classrooms of students
* 6 Shared Labs/flexible space of 1,400 sq. ft. each (8,400sq. ft.)

###### Student Support Spaces

Space is to be provided for student support services. The location of these spaces should be easily accessed by students within the building as well as building administrators.

Within this area provisions are to be made to house the follow support services:

* PPT Conference Room of approximately 300 sq. ft.
* Behavior Tech/OT and Pt 400 sq. ft.
* Social workers offices of 200 sq. ft.
* Magnet Office of 200 sq. ft.
* Part time staff of 180 sq. ft.

###### Resource Rooms

Support services will require a variety of spaces to accommodate direct services to students as well as assessment and evaluation. Included will be the follow:

* Special education will require 5 space of 200 sq. ft. each.
* Two Literacy and two Numeracy room with 200 sq. ft. each. (800 sq. ft. total)
* A small tutorial room of 400 sq. ft.
* A teacher’s workroom with copier and laminator of 800 sq. ft.
* English/LL Room of 200 sq. ft.

###### Specialty Spaces

* **Art Room** A general art room of 1,500 sq. ft. with provision for 300 sq. ft. for storage is required. Also included is a separate kiln room (125 sq. ft.) This area will of sufficient size to provide for 2-3 dimensional art.
* **Music Area** A combination space that will be used for choral and band room of 1,200 sq. ft. is required. Within this same area is to be a 400 sq. ft. music storage area with 3 instrumental practice rooms that are 80 sq. ft. each.
* **Language Lab** A language lab of 1,000 sq. ft. is required.

######  Gymnasium Area

The gymnasium/fitness area of 3,700 sq. ft. is be included with storage area of 600 sq. ft. Also included is space of 600 sq. ft. each for boys and girls student changing rooms with toilets. Lastly, a staff office of 200 sq. ft. with a toilet to be included.

This area will be used for a variety of school activities including basketball, volleyball, and other related individual physical exercise programs and will require adequate storage space for gym equipment.

It is anticipated that the gymnasium will available for other function when not in use by the school.

###### Cafetorium, Kitchen and Servery Areas

An expected combined maximum enrollment of 704 students will require a self-contained cafetorium (cafeteria and auditorium) and supporting kitchen and equipment to service not only the students but also the faculty.

It is expected that the cafeteria program will operate as a full service lunch program with food preparation being done on site and possibly as a satellite facility for the adjacent Rocky Hill Intermediate School.

 The cafetorium will require need approximately 4,000 square feet including a servery of 600 sq. ft. to accommodate several waves of student lunches. In addition, the cafetorium will be designed with a stage to allow multiply use of the space for student performances and other school assemblies or activities. Portable seating to accommodate 275 people will be required with a separate storage area for the chairs when not in use of approximately 100 sq. ft.

In addition, the serving and food preparation areas will require additional space for the following areas:

* Dry storage for cafeteria supplies (200 sq. ft.)
* Walk in refrigerator and freezer (280 sq. ft.)
* General supplies storage for (240 sq. ft.)
* Dishwashing room (100 sq. ft.)
* Food service office (100 sq. ft.)
* Locker room and toilets for cafeteria workers (80 sq. ft.)
* Receiving area (300 sq. ft.)

######  Nurses Area

The nurse’s room is to be located to provide easy access for students. It is recommended that its location be adjacent to the administration area. Areas to be included are nurse’s office are the following:

* Main office including waiting area, nurse’s office, student cots with curtains and adequate storage for supplies (520 sq. ft.)
* Exam room (80 sq. ft.)
* Handicapped unisex toilet (60 sq. ft.)

###### Maintenance/Operations/Common Areas

The expected square footage for the entire facility for both instructional and non-instructional use will be approximately 101,790 square feet.

Non-instructional space estimated at 30-35 percent of the net usable area is to be allocated for building systems that include corridor circulation, stair towers, locker spaces, elevator, and related common areas. The maintenance and operations space should be planned around the following requirements.

* Head-End Room
* Data Closets
* Shop/Office Maintenance Area
* Storage Area
* Employee Locker Rooms and Toilets
* Boiler Mechanical Room
* Electrical Room
* Sprinkler Room
* Custodian Supply Wet Closets
* Elevator Machine Room (if required)

###### Building Systems

The school will have an automatic control system designed to promote a safe, efficient, and healthful indoor environment. Standards for design selection include reliability, simplicity of operation, comprehensiveness, energy efficiency, low ongoing maintenance and repair costs, length of useful life, and operational efficiency overall.

At minimum, the new building will require the following systems to meet the programmatic needs of the school: the telecommunications infrastructure consists of a state-of-the-art voice, video, and data network. The network is designed to provide users voice, video, and data communication across the globe.

The heart of the building's voice network is a digital PBX providing telephone and intercom service to all academic and administrative spaces. A typical user will have the capability to call room to room or access outside local and long distance line using access codes. All users will have the option to answer intercom calls via the “hands free” speakerphone or pick up the handset for privacy. Administrators will have the added capability to perform all-call and zone pages from various locations. All-call and zone-paging functions can be routed to the speakerphone or the traditional ceiling-mounted speaker. All users will also have access to voice mail. The voice mail system is capable of individual mailboxes as well as public boxes for homework assignments, event notification, school information, or other various announcements. The video network is a hybrid analog/digital system providing users a variety of services from CATV to video on demand.

The basic function of the video network is to provide CATV service to television monitors located in selected academic spaces and select administrative areas. The system will also have two community bulletin boards for broadcasting school and community event notifications, lunch menus, daily schedules, and other announcements. Users will also have access to video on demand. Video on demand will offer users a database of available videotape, DVD, Blu-ray, laser disk, or CD-ROM resources. After selecting a resource from the database, users will be able to schedule a broadcast. Control of the broadcast will be accomplished via the local computer. The television monitors will also be connected to a computer or other video input device for group presentations requiring local control.

The system will have a digital record function. Users may simultaneously record any event that is being broadcast. The event is recorded onto a video file server. Therefore, subsequent broadcasts may be scheduled via the video file server, thus eliminating the need to load the resources as users directly access the file server. The video file server can be broadcast over the digital network as well as the analog network. The video network will also support distribution of signals received on the satellite communications antenna.

The digital network consists of CAT5e and fiber optic cabling supporting a gigabit backbone and 100 mbps switched data to the desktop. A typical classroom will be wired with CAT5e to accommodate a minimum of four computers or peripherals with additional wireless access. Labs and specialty areas will range from 30 devices and administrative areas from two devices per occupant. Fiber optic cable will be used to interconnect all the campus buildings. In addition to supporting the data network, the fiber optic cabling will support the video network.

The data network will be equipped with file servers with various functions such as web access, distance-learning access, file storage, application service, print service, video streaming, and security/administrative services. All computers on the network will have Internet access via a proxy server. Staff and student will have large storage files. The server will provide applications such as attendance and grading. The video file server will allow users to stream video files over the network. Unlike the analog network, which allows only a single point of control, several users may control video files simultaneously. The network will also support administrative and capacity for security functions to control access to the network.

1. Integrated voice, video, and data in all spaces with a minimum of five data locations in each classroom and within the computer lab. Head-end equipment for distribution is to be located in the head-in room. Internet and cable television access is also required. The technology infrastructure should support the highest feasible speeds over both wired and wireless infrastructure.
2. The latest wireless technology should be incorporated into the school design
3. Integrated telephone and intercom system with dial-out capabilities and paging from each area of the school is needed.
4. Security and video surveillance systems are to be provided for selected areas of the school, primarily at points of entry and high traffic areas of the school. The security system should use both infrared and motion sensing technology. Exterior doors should have electronic contacts that activate video cameras. A monitoring console to be located in the security for the video surveillance should allow the viewing of all exterior doors, parking lots, and delivery areas. Panic buttons should be provided for immediate access to the local Police Department via a telephone dial-out switch.
5. Complete fire alarm system with sprinklers, pull stations, horns, flashing, lighting, voice evacuation in areas of large assembly, smoke and heat detectors, battery backup, and plastic shields on pull stations is required. The fire alarm system should be integrated and monitored through one location. The fire alarm system should have a direct connect to the local Rocky Hill Fire Department in case of activation.
6. A fully digital energy management system to monitor and control mechanical systems for heating, ventilation, air conditioning, and interior and exterior lighting with appropriate manual overrides is required.
7. A fully programmable clock and bell system is requested that will allow the school administration flexibility of bell signals as needed. Clocks must be located in all spaces throughout the school. Choice of tones and loudness levels must be part of the program that can be modified by the administration.
8. There is to be a lighting plan to promote an optimal learning environment. Lighting should be designed to maximize the use of natural lighting in all areas of the building and supplemental artificial lighting to ensure appropriate foot candles of low-glare brightness and illumination. External lighting should be environmentally friendly.
9. Interior surfaces that include carpeting, floor tile and ceramic flooring as well as related interior finishes should be used that are easy to maintain.

###### Environment

The electrical service provided to the building should be designed to meet the needs of all mechanical equipment, lighting, and educational equipment. Controls should be through circuit breakers and the entire system must be properly grounded.

All light fixtures, controls, motors, switches, and electrical components must be of an energy conscious design to reduce the use of electricity. All operating systems must be monitored and controlled by an energy management system capable of reducing peak demand and load shedding.

Plumbing in the school must meet present codes; and the sanitary sewer lines must be properly sized and located to handle the anticipated load.

The entire facility should be properly heated and cooled, including the air conditioning of the entire building.

The facility must be accessible to handicapped individuals and appropriate provisions made for all doors, stairs, built-in equipment, sinks, toilets, and other fixtures used by handicapped individuals.

As a minimum, there is to be acoustic treatment of rooms that are in accordance with the latest noise abatement standards for new school construction, in order to provide the best listening environment possible for the hearing-impaired students.

An elevator must be installed if the facility is over one story.

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### SITE DEVELOPMENT

As indicated in the Project Rationale, the construction of the school is being planned in cooperation with Rocky Hill Public School’s Building Project on a common building site to accommodate both schools. This building project requires a site of approximately 10 acres to accommodate the CREC Academy of Aerospace Elementary School with an expected enrollment of 704 students. Although the construction of the two building will be separate, there is an expectation that the design and construction of can be accomplished at the same time. This will allow joint design possibilities for common site construction of driveways, play areas and shared building spaces between both facilities

 The placement of the school building on site should be located so as to maximize the use of the land. At this writing, a specific site has not been selected for the school. During the design and selection of the site, care should be taken to assure that every consideration is given to the items that follow.

There is to be constructed outdoor playgrounds with playscapes for lower and upper grade students as well as a soccer field and baseball field for both student and community use.

###### Bus Pick Up and Drop Off of Students

Since this building will welcome students from Hartford and surrounding communities, it is anticipated that participating school districts will transport all students to the school on buses or vans, which will require an adequate entrance and driveway to the school.

Entrance and egress will be constructed in a drive through fashion that will allow buses to enter from a common driveway with a pass-through and exit onto a returning perimeter driveway. Bus drop off and pick up location should be located where the activity can be observed from the building administration offices or security offices. There is to be a separate parent drop-off loop**.**

###### General Service and Cafeteria Deliveries

In addition, there is to be provided a loading dock area for the safe and efficient delivery of school supplies and equipment as well as food products for the cafeteria. A well illuminated receiving area for the school is to be included with card and camera security systems including an elevated loading dock for easy delivery to the site.

###### Parking Facilities Including Walkways

Parking must be provided for normal school day activities including required handicapped and visitor parking including parking for special weekend and evening activities. It is anticipated 150 parking spaces will be needed for staff, students and visitors. These requirement must be in compliance with the Town of Rocky Hill code requirements. For special events, additional parking on grass areas or play areas should be considered.

In addition, entrance walkways are to be designed and constructed to allow safe passage around the building and from the parking lot into the building. Lighting of the parking lot, sidewalk and driveways is to be provided.

Full compliance with applicable code requirements is required to provide proper access of handicapped students and visitors into the building from the sidewalks and parking lots.

### PROJECT BUDGET

The cost estimate for this building project, as required by the State Department of Education, was prepared by a professional estimator. Of necessity, it is expected that the magnet school design of the building to be unique and will include the most current instructional technology and classroom equipment. It is our belief that the proposed cost for the new facility is in line with recently constructed schools of comparable size and grade level.

### PROJECT PRIORITY CATEGORY

The CREC Academy of Aerospace Elementary School will be fully occupied by its expected completion date of 2019. The construction of this new school addresses the increasing State Department of Education’s requirement for additional magnet schools for minority students in Hartford. Therefore, this building project is be considered for legislative approval as a priority category.