EDUCATIONAL SPECIFICATIONS

NEW:

South Norwalk School at the Ely Site

11 Ingalls Avenue, Norwalk, Connecticut

June 7, 2017

Project Overview:

The 10-year facility, demographic, and utilization study for Norwalk Public Schools (NPS) has confirmed a growing student population in the City of Norwalk. The study, which took two years to complete, included the October 1, 2015 and October 1, 2016 actual enrollment numbers, which documents and confirms the high growth scenario projected in the base study. This rate of student growth has effectively been ongoing since 2010. It is currently evidenced by overcrowding in numerous schools, the necessity to utilize substandard educational spaces, and the 15 portable classrooms deployed in the district.

The study revealed that the NPS student per square foot formula is, in fact, 106% of the State's average of 75%.[1] This overcrowding was then further confirmed in the detailed space analysis for each school based on the per seat classroom model. The study also revealed that NPS buildings are 20% smaller than the state average for school size and 10 years older than the state average (refer to the 2013 comprehensive State data). The student population growth and overcrowding in the small, aging schools limits the options available to address the district's future educational needs.

The focus on student population growth was studied based on numerous demographic methods to effectively identify where and how the growth was occurring. The City and County residential building "boom" initially appeared to be the driving factor for the Norwalk school district's population increase. However, the study revealed that the existing City's housing, both public and private, provides ample lower income residency and in-migration, and that the student population growth was concentrated in existing housing and not in new construction. The growth is concentrated along the I-95 corridor.

Norwalk's growth also coincides with national trends.[2] NPS is now a minority student population district composed of 69% minority students.

Once the growth basis was established, the need to expand the district lead to an extensive study of available schools and school sites that would accommodate this growth. Of the million square feet and 240 total acres that make up Norwalk's elementary and middle schools, Ponus Ridge M.S. was identified as the ideal school and site for expansion. The largest of four middle schools at 104,350 sf, Ponus Ridge's location on 41 acres led to its selection as the first and most ideal school for expansion and alteration.

[1] Using the OSCGR Space Standards template for the 16 Elementary school and 4 Middle Schools and compare this to the Report on the Conditions of CT's Public School Facilities 2013, see study.
[2] UCLA Civil Rights Project, Brown at 62: School Segregation by Race, Poverty and State, May 16, 2016.

Norwalk's other 16 school sites average 12.5 acres and are already fully utilized, and also feature small school facility sizes, many of which are over-utilized. This led to the conclusion that Ponus Ridge M.S. is an anomaly in the district, and that a new site would need to be located. Therefore, the City and Norwalk Board of Education (BOE) determined that a new school, the first in over four decades, was needed to meet the educational needs of the district.

I. RATIONALE FOR THE PROJECT

The Nathaniel Ely site was identified as the prime site for a new school in South Norwalk, after an extensive analysis of all available City properties and potentially available sites including non-public schools. While numerous factors lead to this conclusion, the key factors are location, in the center of the highest growing student population and the most underserved student population considering neighborhood schools. The City-owned, 17-acre property and open City park, adjacent to the existing Odyssey Learning preschool, (located in the former Nathaniel Ely public school), is unequivocally the most cost-effective site for a new school, which is the second key factor to this site selection.

The economic study of the Ely school project site includes four additional site cost factors: 1) for assumed rock topography, 70 feet above sea level, which is within 1,000 feet; 2) for retaining the "man-made" wetlands; 3) for potential limited adjacent property acquisitions, to expand open space / fields and to correct a City street encroachment; 4) for potential offsite improvements to widen streets and re-align intersections. The total additional site costs are minimal when compared to any other potential site in the City near this location (within a two-mile radius). Of course, there is no property acquisition costs for City-owned land.

Simultaneously and included in the study, as part of the district's Strategic Operating Plan, the BOE and NPS determined that the pathway to racial balance in the schools would be to create a choice of neighborhood and intra-district magnet schools. This districtwide model will effectively deliver diversity. Educational pathways at Norwalk's two high schools already include the accredited International Baccalaureate (IB) diploma program at Brien McMahon HS, and a STEM-based program in Norwalk Early College Academy (NECA) at Norwalk High, the State's first early college program. These pedagogues are most effective in a Pre-K to 12 section model. Because the high schools have these established programs already in place, the BOE elected to create new Pre-K to 8th grade schools. The new Pre-K to 8th grade schools will start at two school locations: the new South Norwalk School at Ely and the expanded Ponus Ridge Middle School. NPS is continuing this educational pathway and alignment of the pedagogy across the district. Once these first two schools are in place, the model will begin to function and allow families more choice.

The choice program is one of attraction. Parents may choose to apply to a number of intra-district themed schools. This flexibility will then allow for the district to operate all schools within State Board of Education racial balance guidelines.

This approach will accomplish three essential goals: adding a total of 900 new seats across the district, creating choice, and effectively serving the education of the student population.

The education program is the key factor for the selection of these two sites and the proposed Pre-K to 8th grade model. The new South Norwalk school at Ely can be immediately occupied by the existing Columbus Magnet School, an intra-district magnet currently located 3,000 feet to the north of the proposed site. This successful and accredited progressive Bank Street model school has been a popular choice for Norwalk families for many years. The current 3-acre Columbus site is not effectively large enough to support the growth and expansion of this educational model. The BOE, staff, and parents believe the Columbus school will best be served in a new Pre-K to 8th grade school on the Ely site.

Once the new South Norwalk School is complete and occupied, the current Columbus ES building will be empty. In the future, Columbus could then be renovated as an unoccupied school, and then re-occupied to serve the same underserved neighborhood as well as the growing student population.

Therefore, these Educational Specifications for a new South Norwalk School at the Ely site are written around a Specialized Educational program with an intra-district choice. The pedagogy leads to specialized science classrooms, language classrooms, and a Cafetorium, which is most effective when used instead of an auditorium, where the entire student population can gather as a cohesive community. Classrooms will offer the flexibility to gather grades together and break out into smaller team learning environments. Music, choral, and theatrical performances and presentations begin in the classrooms and progress through other gathering spaces and the auditorium. Movement, dance, and physical education in a gym setting are essential elements for students of this age, and are integrated into the educational model.

II. LONG-RANGE EDUCATIONAL PLAN

Constructing a new South Norwalk School will enable the district to achieve many long-range plans: (in no specific order)

- Add a school with a 480-student capacity.
- Eliminate portable classrooms.
- Eliminate overcrowding and accommodate some of the growth over the next 10 years.
- Right-size neighborhood schools and “reconnect” the school to the community, including the use of the community spaces after school.

- Enable the district to include and "partner" with the Odyssey Learning program and the existing Pre-K education, as well as the after-school programs.
- Include the Grassroots Tennis and Education program and after-school programs.
- Expand and enhance the Bank Street Progressive Model, adding the 6th to 8th grades, in a social community oriented educational environment. Allow for assembling the entire school in one space. Add and expand the garden. Improve cooking, and dining as educational models, consistent with district change.
- Allow for movement and ample physical education.
- Improve the educational spaces with access to daylight, technology in enclosed classrooms, media and smaller classroom settings.
- Improve and continue to incorporate the core secondary instructional spaces: art, music, cooking, life and social skills.
- Create a new educational media center / learning commons.
- Provide new heating, and cooling and piping central systems to improve indoor air quality and allow the school to function year-round.
- Provide new electrical systems and infrastructure to allow for technology in all instructional spaces.
- Build a new roof structure for long term (20-year minimum), weather tight envelope as well the potential for roof top garden, PV, wind, and other energy conservation measures.
- Ensure a safe and secure school environment, meeting all the SSIC recommendations.
- Allow for some space all staff and educators to meet and collaborate.

III. LEARNING / EDUCATIONAL ACTIVITIES

The new South Norwalk School will follow the Bank Street (School for Children) progressive educational model. Bank Street is currently the basis for the Columbus Magnet Elementary School, which will move to the new school building.

Founded in New York City in 1916 by Lucy Sprague Mitchell, Bank Street moved to its current location in 1930 and continues today to train teachers with a graduate school, a full program of children's services, including the School for Children, and outreach programs for educators and the community at large. The Bank Street school is further influenced and based on educational theorist John Dewey's principles of school and classrooms as a microcosm of the democratic community, both local and worldwide. Teachers will continue to train and expand upon the Bank Street curriculum and will continue to seek every opportunity to grow the intellectual educational climate of inquiry.

Bank Street School, like the current Columbus school, is experience-based, interdisciplinary, and collaborative: "*The emphasis is on educating the whole child—the entire emotional, social, physical, and intellectual being—while at the same time, the child's integrity as learner, teacher, and classmate is valued and reinforced. The school is comprised of diverse racial and ethnic backgrounds to reflect the diversity inherent in our multicultural society. This effort is consistent with the progressive idea that schools should represent the demographics of the society in*

which they exist. The aim of progressive education, according to the Bank Street mission statement, is to nurture the creative, independent, and problem- solving talents of all children by "applying to the educational process all available knowledge about learning and growth." [3]

Therefore, the educational curriculum seeks to create environments in which children grow and learn to their full potential. The school model will expand from K-5 into a PreK to 8th grade model, aligned with Bank Street. Thus, the built school environment is key to learning, and the opportunity to build new could be highly effective and advantageous to the success of the school and the Bank Street programming. Some of the school's essential activities include assembling the entire student population as a learning society, studios, demonstrations, and presentation environment (the New York school includes a full auditorium for this purpose). Activities continue in music and dance studios, a teaching kitchen, science labs, and regulation gym, with outdoor play and recreation as well as garden(s), like the Progressive Educational method. These activities center around the interdisciplinary collaborative nature of education and learning, and when coupled with the emotional lives of the children and their stages of development, are highly successful educational environments. Classrooms should encourage students to be active and venture out into the world and society around them, and to seek what motivates them in becoming life time learners.

The Learning Commons (formerly library or media center) will be led by a media curator, with the goal of engaging, interactive, collaborative, and dynamic personal learning available to staff and student 24/7. The commons are analogs to the school "village green" where the school will showcase high quality teaching and learning. This dynamic hub will serve the school and will also foster new ideas, experimentation in teaching and technology before benefiting and rolling out to the entire school. The space will have limited book shelves on wheels, flexible division of space, tables, and chairs, including relaxing seats, in a space capable of supporting and allowing for numerous activities, from green screen production to research for up to two to three classrooms.

A health clinic and nursing services will be integrated into a School Based Health Center, a transition currently in progress across NPS. This school model seeks to break down barriers by integrating mental health professionals and to serve the total health of the students. Activities include exams, vaccines, daily care, and health maintenance, screening, counseling, and health education. A simple health center suite with reception, social worker and nurse's office and an exam room and a unisex toilet room ensure privacy at all levels.

The kitchen and cafeteria experience is changing across the NPS. A recent food service study suggests a systematic change to the food service for the entire approximately 12,600 students

[3] Bank Street. The School for Children and the College, West 112th Street, NY, NY, **Accreditation:** New York State Association of Independent Schools (NYSAIS) web site

served daily. The new kitchen should be designed for preparing and serving from scratch meals with more fresh and local foods, eliminating frozen, and prepackaged meals. While the central kitchen and or middle school based model has not been determined, this, along with the food service provider, a district chef, and inclusion of salad bars, will ultimately result in wholesale changes. The new kitchen design will be implemented to serve the nutritional needs of the 450-plus students.

The cafeteria experience is changing radically, too. The lunch experience is by far one of the greatest stressors in the school system, from timing, noise, allergies, dietary choices, and inclusion, and it is clear the entire lunch experience needs to change from the current "prison/military" style to a family/community or Progressive education dining experience. Pre-K and K grades may eat in their classrooms, and this trend works well with the educational model, however the upper grades should be paired together; 1-2; 3-4; 5-6; 7-8 and seated in round tables with pivot seats set in groupings to enhance the social dining experience. Including an adjacent teacher/staff dining area will connect the dining experience as one educational community.

The new school is to be an inviting, inspirational, open, secure, 21st century learning environment including technology, ample access to daylight and the engagement of the community immediately around the school(s). The school environment and design should be appropriate for the stages of student development, and encourage the social, emotional, and intellectual stage of each learner. The successful school will foster the active, experimental student engagement with the Norwalk society and the world.

IV. ENROLLMENT DATA AND PROPOSED PROJECT CAPACITY

The new South Norwalk School at Ely is envisioned with a preference for students attending from the immediately adjacent neighborhood, including families residing in income-restricted housing. In order to meet racial balance requirements, the balance of students would be drawn from an intra-district magnet component consisting of students from across Norwalk. The school is intended to operate as a two section per grade model, serving a target population of approximately 480 students.

Projected enrollments for the new South Norwalk School are based on the guiding principle that each school admit as many students from their preference areas as possible, subject to the constraint of racial balance considerations and the school's target size. Students drawn from the preference area are projected to be demographically representative of the existing student population in that area, while students drawn from outside the preference area are projected to match the demographics of the Norwalk Public Schools as a whole.

The proposed population is based on the highest projected eight (8) year enrollment of 480 students in the 2019-2020 school year. This includes the addition of two new Pre-K classrooms (18 students in each) and continues through the 8th grade. Students are organized in two (2) sections progressing through the elementary and middle school educational path from early development to the advancement into high school.

Size of Facility and proposed project capacity

These specifications provide for a new school facility to serve 480 students based on the OSCG&R Space Standards. The proposed new school will therefore be no greater than the space standards or a total 66,048 square feet.

The emerging relationship with the existing Odyssey Learning programs does not negate the need to plan for two Pre-K classrooms with 18 students in each. The development of a new relationship with a new public school will be dynamic. Synergy is anticipated and keeping the plan for 36 new students in the educational specification and grant application will allow for flexibility as the project progresses.

Attached are the programming matrix and summary based on this population which includes all proposed spaces as defined by the educational needs of the staff, the District and the BOE.

Also attached is the Norwalk School Facility Utilization Plan, dated April 2017 prepared by Milone & MacBroom, which provides the enrollment projections for the New South Norwalk School at the Ely Site (aka “the new *Nathaniel Ely* School”) on pages 45 through 49.

V. DETAILED DESCRIPTION - BEFORE, DURING, AFTER AND SUPPLEMENTAL

The current Odyssey Learning preschool program, located in the former Nathaniel Ely School is involved with the planning and educational specification process. The opportunity to create a dynamic synergy, and in fact, link the existing school with the new school has emerged as a result of this willing involvement. The option to share staff resources as well as facilities is possible. Identification and integration of education at an early age is a core goal of the public education system. With an ongoing program offering early learning and after school enrichment, opportunities can thus be multiplied across both systems.

The neighboring community and the directly adjacent Roodner Court Tenant Association uses the Odyssey spaces for some events throughout the year. The use of an assembly space, such as a Cafetorium, as well as the gymnasium would benefit the association and the community.

This South Norwalk location for a “community school” has been a long-term dream of numerous past and present leaders. Because these spaces have not existed in the adjacent South Norwalk community in the past, the development of this type of school community can only be imagined. Based on current discussions, the dynamic exists to grow this new school across the full spectrum of education, nutrition, social and life skills, as well as serving individual student’s needs.

Prior to the first stage of the project, Norwalk Grassroots Tennis and Education (Grassroots) will be expanded on site with two new courts and multiple practice courts and services, at the joint expense of the City and Grassroots. The site is planned to allow the tennis and after school program to expand by allowing for the use of other school spaces. This will also include the gymnasium and other appropriate physical education space, as well as education space once the program is further defined.

The new school will be laid out with double loaded classroom corridors in a two-story classroom wing. The school common spaces should be open after school hours and educational spaces secured or selectively open. The conceptual diagram portrays this relationship and the conceptual layouts explore these options. Further, refinement in schematic design enhances the community access to the school facilities as these relationships continue to be defined and more formalized.

Once the Columbus Elementary School moves into the new South Norwalk site, the existing Columbus building will be renovated and “right sized” as a neighborhood PreK to 5th grade school. The envisioned improvements should also allow for buses and vehicular traffic, along with the open recreation fields, to be expanded and better integrated into the immediate community and road network.

VI. BUILDING SYSTEMS

Security: An electronic security system will be installed in the school, including cameras and state of the art entry security. The school will be designed to prevent access to instructional areas of the school when community events take place during non-school hours.

Public Address: The building public address system will be comprehensive, and the infrastructure installed with the building. It will be completed as part of the technology component of the project and will incorporate internal building communications as well as external communications. Concurrently, the systems for the phones, clocks, and data/voice/video will be developed.

Technology:	Current technology standards and anticipated future standards are to be state-of-the-art. The most up-to-date voice/video/data systems will be added to all instructional and support spaces within this school. A WAN will be installed and this building will be networked to the NPS. Wireless Access Points (WAPs) will be installed through the entire school. The new School may serve as a WAP for the community.
Phone System:	A comprehensive phone system will be integrated with the technology component of the project, and phones will be installed throughout the facility. All support and instructional spaces will be included.
Clocks (& Bells):	Clocks, like the phone system, will be integrated into the technology component of the project. All support and instructional spaces will be included.
HVAC:	LEED or High Performance Building Standards will be followed. A new heating system, air conditioning, and ventilation system throughout will serve the new construction.
Electrical:	Maximize daylight and allow for dimming with new Electric infrastructure and manageable LED lighting.
Plumbing:	Low flow, energy efficient.

VII. INTERIOR BUILDING ENVIRONMENT

The new school will be designed for a secure, inviting, and obvious main entry, focusing all vehicles and visitors to the main entry with an adjacent “visible” administration space. The new classrooms will be enclosed allowing for window access to daylight for each classroom. Classrooms will be arranged into a two-story wing, supported by smaller scale learning spaces and fully ADA accessible bathrooms along the central corridor. A secondary secured entry will join the classroom wing with the music, art, gym, Cafetorium, and kitchen. The Cafetorium will be sized to allow for the entire school and staff gather together for educational and performances on a stage or platform. The Cafetorium should be a multi-purpose educational space designed also for use by smaller assembly groups and broad-based educational needs in an open plan. These sections of the school can be effectively used at night or after-school hours with the school wing secured or closed as needed.

The classroom wing includes a new state-of-the-art media center which should be configured for educational needs. The floor plan will include new materials and finishes throughout the facility. The project scope includes a new sprinkler system, new roof, new electrical, new heating, new ventilation, and air conditioning systems with, a new exterior, windows and doors.

The development of this educational specification will lead to a new two section classroom model, with two classrooms flanking a group room with sinks and moveable doors as well as two toilet rooms opening into the Pre-K to 2nd grade classrooms. See attached program diagrams. Spaces beyond the classrooms are also diagrammed and summarized in the attached matrix for all educational spaces. The following general description of each space:

2 Pre-Kindergarten and 2 Kindergarten, classrooms each approximately 900 square feet in size, with a group room for each pair and including age appropriate restrooms, opening into each classroom.

For room layout: age appropriate furniture, fixtures, and equipment for the Pre-K per NAEYC accreditation recommendations, and the K to 2nd to allow for grouping (e.g. trapezoids) and flexibility (lockable wheels) of tables, not desks. Classrooms will have cubbies for coats backpacks and school assignments. PreK and K will have sinks in classrooms for hand washing, prior to meals (see Cafetorium). Ample storage and access to technology, ultimately achieving one to one devices in each classroom. Heated radiant floors, if possible and loose instructional carpets/rugs.

16 First Grade to 8th Grade classrooms each approximately 800 square feet in size

For room layout: tables instead of desks will allow for grouping (e.g. trapezoids) and flexibility (lockable wheels). Ample storage and access to technology, ultimately achieving one to one devices in each classroom.

Common to all classrooms above:

- 1 teaching station per classroom: Teacher's desk, chair, 4 drawer file cabinet, lockable storage/wardrobe cabinet, lockable
- Cabinets for secured storage and project display/storage for learning materials
- Teacher voice module for phone and control of all technology
- Electrical convenience power and USB charging outlets
- Integrated modern technology with 1:1 devices, Wireless Access Point (WAP) in each classroom
- Floor electrical outlets (in new construction)
- Touchscreen, Smartboard, or Overhead projection racks with screen, most current school technology on the teaching wall
- White boards and tack boards
- Seamless vinyl/rubber high density flooring and base and vitreous painted walls with acoustic ceilings
- Air conditioned and provided with adequate air ventilation to meet current codes
- Parabolic LED lighting with variable light level switching or addressable.
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code
- Operable windows with screens are preferred.

2 music classrooms of approximately 1,000 square feet each, plus 150 square feet of music storage for each

- Accommodate both band and chorus classes

- The band & choral room should accommodate risers with handicapped accessibility
- Storage of limited instruments and devices to be available at the perimeter; program is digital music
- Uninterrupted flat countertop space with storage cabinets and open shelving
- Teacher's desk, chair, 4 drawer file cabinet, lockable, storage/wardrobe cabinet, lockable
- Incorporate new music technologies, WAP
- Electrical convenience power
- Touchscreen, Smartboard, or Overhead projection racks with screen, most current school technology on the teaching wall
- White boards and tack boards
- Appropriate sound management materials on walls and floor
- Sealed concrete floor, Acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Fire alarm system with horn/strobe notification
- School-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

2 Art classrooms of approximately 1 @ 1,000 and 1 @ 850 square feet each, plus 150 square feet of art storage for each

- Accommodate digital arts and a variety of general art classes
- Preferably located on ground level
- Space for 24/26 students in each classroom with handicapped accessibility
- Computer area along wall
- Include ample storage space within the room and adjoining supply room for art materials
- 2-4 fee standing deep utility sinks with sediment traps dispersed through the classroom
- Electrical convenience power throughout perimeter.
- Kiln in kiln room in one of the art classrooms.
- Uninterrupted flat counter top space with storage cabinets and open shelving including deep and wide drawer shelving with suspension hardware
- Drying racks
- Teacher's desk, chair, 4 drawer file cabinet, lockable, storage/wardrobe cabinet, lockable
- Touchscreen, Smartboard, or Overhead projection racks with screen, most current school technology on the teaching wall
- White boards and tack boards
- Integrated modern technology, WAP
- Sealed concrete flooring in Art Classrooms with vitreous painted walls
- Acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Fire alarm system with horn/strobe notification
- School-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

1 Science classroom totaling 1,000 square feet

- Space for 24 students with handicapped accessibility

- Uninterrupted science counter top space with cabinets for secured science storage and student projects.
- Teacher's lab station with instructional counter and desk area, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Student peninsulas and teacher demo station, with sinks and local acid waste drain.
- Classroom area with desks and chairs
- Touchscreen, Smart-board, or Overhead projection racks with screen, most current school technology on the teaching wall.
- Integrated modern technology with 1:1 devices, WAP.
- White boards and tack boards
- Science storage room to support both labs with code compliance venting cabinets.
- Sealed concrete flooring and base and painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected to school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

1 Technology/Robotics/STEM/Engineering classroom totaling 1,400 square feet

- Space for 24/26 students in each classroom with handicapped accessibility
- Support Project Lead the Way
- Adequate Electrical convenience power
- Integrated modern technology
- Glass and enclosed storage space for Makers Space for Robotics and engineering (Cisco router) equipment.
- Uninterrupted flat counter top space with cabinets for secured storage and project display/storage for learning materials
- 1 teaching station per classroom - Teacher's desk, chair, 4 drawer file cabinet, storage/wardrobe cabinet
- Integrated technology with 1:1 devices, WAP
- Touchscreen, Smart-board, or Overhead projection racks with screen, most current school technology on the teaching wall
- White boards and tack boards
- Sealed concrete flooring and base and vitreous painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

3 Special Education Rooms including staff work space/offices totaling approximately 1,050 square feet

- General support use classrooms clustered together for academic and service efficiencies
- Resource Room per grade level with handicapped accessibility
- Occupational Therapy Room
- Speech and Language Room
- Cabinets for secured storage and project display/storage for learning materials
- Integrated modern technology with 1:1 devices, WAP

- Floor outlets
- White boards and tack boards
- Sealed concrete flooring and base and vitreous painted walls with acoustic ceilings and parabolic LED lighting with variable light level switching
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

1 Student Kitchen classroom totaling 250 square feet

- Student kitchen, directly adjacent kitchen if possible, including washer and dryer, sinks, refrigerator, freezer, ovens, and microwave.
- Space for smaller student groups to learn, through hands experience the planning, preparation, and cooking their own food, from their own gardens when possible; as well as health, hygiene, and related life skills.
- Sealed concrete flooring and base and vitreous painted walls or FRP, with "washable" acoustic ceilings and parabolic LED lighting with variable light level switching. (Food service standards)
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Administration offices, including Principal, Front office, Psychologist, Nurses with Health Center, staff work and meeting spaces with conference rooms totaling approximately 3,380 square feet

Main administrative offices will be located at the front, adjacent to the main entry and connected by a security vestibule, allowing visual controlled access to the building through the administration reception waiting area. Glazing will be minimal and secure.

- General support office for Principal, assistant/house Principals with secure office, working desk and small meeting table, perimeter bookcase shelves. (House principal may be in house wing)
- Open staff work area with desks counter and storage. Lockable records storage.
- Kitchenette for coffee
- Carpet, painted walls, acoustic ceilings with LED lighting with variable light level switching, addressable
- Meeting rooms large enough for 10-12 people at a conference table, window preferable.
- Teacher work rooms with counters, storage, and space to assemble study material. Might be adjacent Admin or teacher dining room, or per house.
- Psychologist or Social worker (may be with Administration and Nurse with secure office and storage, meeting at desk with side chair(s). Lockable record storage
- Exam room (shared) with exam table, sink, lockable cabinets, and task seating.
- Health center to have antimicrobial (bleachable) flooring Vitreous painted or masonry walls for durability and high lay-in ceilings, durable and washable.
- Reception area(s) may need to be divided by age or accommodate different age based on privacy.

Learning Commons (plus computer & server rooms) of approximately 2,475 square feet

- To serve 50+/- to 75+/- students, with two major entry points and emergency access

- Classroom capacity for two classes of students (50) or 3 classrooms (75)
- Preferred location is at the physical center of the school
- One of these instructional spaces to be equipped with 24 computer stations
- Minimum of three WAP and some supplemental data jacks located throughout for student access to LAN and internet
- Monitors throughout space.
- Library checkout/management area
- Rolling book shelves for a limited collection of books with open sight lines possible for optimum adult supervision
- Seating for 24 students at six person tables
- Areas with comfortable seating
- Makers space
- Technology space for video production with a green screen for distance learning
- Carpet and walls with acoustic treatment and parabolic LED lighting with variable light level switching
- Ample windows/natural light
- Air conditioned and provided with adequate air ventilation to meet current codes
- Interconnected fire alarm system with horn/strobe notification
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

1 Gymnasium of approximately 7,500 square feet and shower changing rooms of approximately 1,000 square feet.

- Full-sized gym
- Space and age appropriate to meet the needs of physical education program for both boys and girls
- Space to accommodate tennis practice and storage
- Adjustable bleachers with 3 rows minimum
- Ropes, nets, rock climbing wall, basketball hoops, drop down batting cage
- Padding on walls and floor for physical education programs
- Suspension equipment and/or storage rooms for pads
- Room dividing curtain/mesh to bisect the space for dual activities
- Modern storage for day to day use inside and outside
- Separate storage for extra curricula activities
- Male and female locker rooms with sufficient ventilation that adjoin the gym
- Health/Physical education office to be shared
- Wood floor suitable for running, ball sports such as basketball, kickball, etc.
- Tile floor at locker rooms, no showers
- High output LED lighting for efficiency and color correction for multipurpose activities.
- Acoustic deck and/or acoustic wall panels or suspended panels/clouds
- Fire alarm system with horn/strobe notification and voice evacuation as required by code
- Air conditioned and ventilated to current air-quality standards
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

Kitchen (and serving area) of approximately 2,350 square feet

The district provides breakfast as well as lunch at most schools and this will be true in the new school. The districtwide change will be directed to the kitchen consultants who will provide the final guidance on the kitchen layout and the equipment which is appropriate for a school of this type and size and the additional educational need. Separate food storage space(s) must be planned in accordance with health codes, and surfaces must be washable, including the ceiling. An office for the food service manager must be constructed. A toilet room for food service staff should be constructed adjacent to the kitchen.

Cafetorium spaces of approximately 5,050 square feet

The cafeteria size and potential for subdivision by age group into four groupings 1-2, 3-4, 5-6 and 7-8th grade setting is needed. Typical acoustical treatments for the walls to dampen sound are needed. The cafeteria should be constructed adjacent to the kitchen. Multiple student traffic flows should be considered in the placement of the food serving line. The use of the Cafetorium by the community as well as the after-school program has the potential to put this space in use after school and on weekends as well, and could net a long-term improvement to the nutritional needs of many.

- The total seating shall be 480, roughly divided in half with tables and sufficient stackable seating in carts
- Space to seat approximately 100 students per lunch wave in 4 waves: 1-2, 3-4, 5-6, 7-8
- Stage, curtain, proscenium curtain and back stage curtain
- Lighting and sound systems to support the education and instructional use of the space
- State of the art public technology including but not limited to a projector and pull down screen at stage
- Acoustical treatment of wall and ceiling to support the use of the space
- Band and Choral room will have easy access/adjacencies to stage
- Sealed concrete, durable and washable, with slip resistant finish
- Provide windows with abundant natural light and create relationships to exterior
- Acoustical treatment of wall and ceiling to support the use of the space
- Provide exterior dining
- Vitreous painted or masonry walls for durability and high lay-in ceilings, durable and washable
- High out-put LED lighting for efficiency and color correction for dining and multipurpose activities
- Portable (fold in half on wheels) cafeteria round tables and built in separate round seats
- Convenience power for cleaning equipment and staff/visitor laptops
- Numerous WAP for LAN and internet use by staff, students, and visitors
- Several Monitors throughout space
- Fire alarm system with horn/strobe notification and voice evacuation as required by code
- Air conditioned and ventilated to current air-quality standards
- Interconnected school-wide intercom system
- Sprinkler system
- Emergency lighting as required by code

VIII. SITE DEVELOPMENT

The site is approximately 17.4 acres with a main entry drive on Ingalls Avenue leading to the Odyssey Learning, a preschool located in the former Nathanial Ely School. The drive includes

two “loop drives” with perpendicular parking and drop-off at the current school and at the pre-engineered Grassroots building. This main entry drive will remain and be modified to retain the Odyssey school loop and parking, while the Grassroots modular building and upper drive loop will be demolished to a new lower elevation, instead of the current second floor elevation that the modular building occupies now.

The entire site is approximately 70 feet above sea level, and is approximately 1,000 feet away from the Norwalk harbor. This fact, combined with the visible rock outcropping, changes in the natural topography indicates that rock or “ledge” are present on this site. Removing the high points and processing this material on site with the concept of balancing cut and fill makes good planning sense. The new school and existing school will share the same approximate first floor elevation. This may also necessitate the removal of the existing Grassroots building and “hill.” The south end of the second floor at the Odyssey school will remain and will be accessible as it is today, except for a retaining wall that will be constructed approximately 15 feet from the end of the existing building. Odyssey Learning and the new school may be linked together by a covered walk.

A new main entry drive is envisioned from Ingalls Avenue to allow for busses, vehicles, and pedestrians. The “best practice” planning concept is to separate and dedicate two drive networks, one for busses and the other for vehicles. This will allow for organized drop off and pick-up of the students regardless of schedule. Parking in the bus loop is dedicated to staff and parking in the vehicular loop is for parents. Visitors should be designated in separate and visually obvious locations near the main entry, promoting natural surveillance. Stand-off distances and vehicular separation from the school should be included wherever possible. The school parking needs have expanded greatly in the last 40 to 50 years creating a need for more parking while still allowing for and encouraging public transportation when possible.

The total parcel includes an unused baseball field and undeveloped “northern” extension bounded by the 90-degree intersection of Tito Court and Lexington Avenue. The right of way exists to connect the overall parcel at this intersection. There are two residential turned light commercial properties along the right of way. If these two parcels are acquired it will allow for direct alignment of the existing street with a new entry drive. A third access point at the northern extreme of the site is safer design approach and would allow for alternate emergency access to the school site. Acquiring these two parcels will also create enough space for a “regulation size” soccer field if desired, or multi-use athletic fields. Parking adjacent to the new field is then possible along the new access drive.

Given the scale of the change to the City road network, a traffic study may be needed for this project. The potential widening of and further definition of Ingalls Ave. is one concern, and the Tito Court and Lexington Ave. right-of-way is a second concern. This may cause a change to

this “micro City road network.” Sidewalks, public transportation, walking, and recreation paths should be included in a possible traffic study and site planning and have been requested through the educational specification process.

The wetlands run east to west at the southern end of the upper site area. The wetlands have been flagged and surveyed and is approximately ½ acre. The wetlands are fed on one side from an RCP under an adjacent parcel and discharge downhill into a pipe at a lower elevation. The wetlands are intended to remain, and the conceptual design is for a bridge over the wetlands to allow for vehicles and pedestrian access to the northern section of the site.

The designation of the entire site boundary with fencing or obvious demarcation of the school property is necessary on this urban site, where boundaries and walkways can be blurred. Natural surveillance of the school site should be included in the planning. The Roodner Court property line is somewhat artificial, and there should be a separate discussion and design effort when compared to the balance of the property lines. A renewed sense of community with a new educational facility is possible now. The commercial and residential boundaries along the site will be changed and defined in the design process. The new school, when complete, will be set back from the street line with a deliberate approach drive and parking.

The open play area, playgrounds and existing hard playscapes, including basketball courts run by Norwalk Recreation and Parks, can serve the new school’s physical education and recreation needs. This too needs further discussion to envision how both the fields and hardscapes should be included in the scope of the new school project.

IX. CONSTRUCTION BONUS REQUESTS

The Norwalk BOE may seek any or all special programs eligible for a school bonus at the new South Norwalk School, and at this time is seeking two new School Readiness Program bonuses to add two new Pre-Kindergarten classrooms in the new school:

- ✓ **School Readiness Program (C.G.S. Section 10-285a(e))**
- ☐ Lighthouse School (C.G.S. Section 10-285a(f))
- ☐ Out-of-District Students (CHOICE) (C.G.S. Section 10-285a(g))
- ☐ Full-Day Kindergarten or Reduced Class-Size (C.G.S. Section 10-285a(h))

X. COMMUNITY USES

Columbus Magnet Elementary School, Odyssey Learning, Roodner Court Tenants Association and the Grassroots Tennis and Education program all currently serve as community facilities and conduct numerous after-school programs and activities in collaboration with the other City partners. These relationships and active programs generally coincide with the Bank Street progressive educational model. The concept of a “school campus” on the entire site, along with community use, is in keeping with the proposed new South Norwalk school and the partners already in place on the site. The challenge of integrating others into and delivering a new public school through the school construction grant program culminated in the concept of an educational classroom wing which could be effectively closed after school, with the balance of the school remaining open and useable for the entire community, their programs, and all current public school partners. The layout of the proposed school should further enhance and simplify the after-school hours use of the Cafetorium and Kitchen and Gym, and might include the music, and art classrooms spaces. These spaces may require more consideration for community use and potential after-school programs.

The Odyssey Learning preschool will remain unchanged, except at the southern end where a new retaining wall and level discharge (egress) will be constructed, effectively re-creating the existing grade and access to the west side of the existing Ely school building. The east side of the Odyssey school will be connected by a walk and or stair at the second floor and could include a covered canopy to the second floor or a stair to the first floor to enter the new school. This approach will allow both schools to function independently and collaborate with shared resources and programs as the educational process grows and unfolds.

Grassroots includes full-time and part-time staff with space needed during school hours and numerous after-school space needs, now served in their current approximately 4,500 square foot City-leased building. The current modular building is directly in the primary entry path and ideally should be relocated to allow for open and level entry drives to the site and the proposed new school. Rather than entirely integrating this program into the new school, the plan is to recreate a similar building on the site as close to the tennis courts and gym as possible. This will allow the program to continue and operate with access to both schools, as well as to allow for the shared resources and programs as the educational process grows and unfolds.

The Norwalk Recreation and Parks Department maintains and uses recreation fields and basketball courts. The Bank Street educational model and NPS athletic programs will use the proposed 200-foot by 300-foot athletic field, which is large enough for soccer and numerous field sports. This field will also serve the community and is envisioned to be in high demand because of the lack of playing fields in South Norwalk. The drive road to Tito Court and Lexington Ave and the definition of the entire site with paved drives, walkways, and fenced boundaries should include walking and recreation paths or a simplified track for running and safe exterior recreation, which is in high demand as well.

The total development of the site is extremely challenging in its current uses and configuration. Encroachments are numerous and the local City street improvements are very limited. The City right of way to Tito Court has been “eclipsed” and appears to be owned by a private entity, including a section of the current public street. The City is aware of these situations as well as the potential to acquire some additional parcels to allow access and development of the unimproved parcel to the north of the proposed South Norwalk School. Further, it appears that Tito Court does not connect to Ely Ave as depicted on the engineering maps, and this too should be reviewed along with the safe and secure use of the roads/streets in this area.

The goal of community use of the new South Norwalk School is to be defined by each community partner. These organizations have already been participating in this process, and they will continue to do so moving forward. The State school grant process encourages and “expects” community use of the public school (w*hy build a new school and use it solely during school hours?),* especially when there is an unmet need and when the City is growing. The new school and proposed school site could ultimately bring to life the Bank Street vision of a community as a microcosm of worldwide democracy.

XI. PROGRAM DIAGRAMS AND PROGRAM MATRIX

The following program attachments are included in the Educational Specifications to supplement, clarify, and augment the above information.

New South Norwalk School @ Ely Site - Proposed Architectural Program
Projected Enrollment: 480 Students

Space Division	Quantity	Square footage	Subtotal
GENERAL CLASSROOMS			
TOTAL	21		21,900
SPECIAL SUPPORT			
TOTAL	9		7,180
LEARNING COMMONS			
TOTAL			2,475
PHYSICAL EDUCATION			
TOTAL			7,544
CAFETERIA			
TOTAL			7,407
ADMINISTRATION			
TOTAL			3,387
BUILDING INFRASTRUCTURE			
TOTAL			4,370
CIRCULATION			
Gross Square Foot Factor	1.21	54,263	11,768
TOTAL			**66,031**
State Space Standards for 480			66,048

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Norwalk Public Schools - Feasibility Study

New South Norwalk School @ Ely Site - Proposed Architectural Program
Projected Enrollment: 480 Students

Space Division	Quantity	Square footage	Subtotal
GENERAL CLASSROOMS			
Pre-K Classroom, w G & Br	2	1125	2250
Kindergarten Classroom, w G & Br	2	1125	2250
Grade 1 Classroom, w Group Rm	2	1025	2050
Grade 2 Classroom, w Group Rm	2	1025	2050
Grade 3 Classroom, w Group Rm	2	1025	2050
Grade 4 Classroom, w Group Rm	2	1025	2050
Grade 5 Classroom, w Group Rm	2	1025	2050
Grade 6 Classroom, w Group Rm	2	1025	2050
Grade 7 Classroom, w Group Rm	2	1025	2050
Grade 8 Classroom, w Group Rm	2	1025	2050
Science Lab (3rd FL, PV, Wind gen., antenna, green roof, "look out")	1	1000	1000
TOTAL	21		**21,900**

SPECIAL SUPPORT			
General Art Classroom	1	1000	1000
General Art Classroom	1	850	850
Art Storage	1	150	150
Kiln	1	150	150
General Music Classroom	2	1000	2000
Music Storage	2	150	300
Student Ktichen Classroom	1	280	280
Tech Ed	1	1400	1400
SPECIAL EDUCATION			
Social Work	1	200	200
OT/Sensory	1	250	250
Resource Room	1	600	600
Subtotal			1050
TOTAL	9		**7,180**

Norwalk Public Schools - Feasibility Study

New South Norwalk School @ Ely Site - Proposed Architectural Program
Projected Enrollment: 480 Students

Space Division	Quantity	Square footage	Subtotal
Learning Commons			
Office	1	125	125
Circulation Desk/Media	1	100	100
Reading/Storytelling Space	1	250	250
Book Stack Area	1	350	350
Work Table/Seating Area	2	450	900
Computer Resource Lab	1	400	400
Makersspace	1	350	350
TOTAL			**2,475**
PHYSICAL EDUCATION			
Full-size gymnasium	1	6200	6200
Equipment Storage	2	112	224
Lockers	2	500	1000
Office	1	120	120
TOTAL			**7,544**
CAFETORIUM			
Cafetorium - Dining Room (4 lunch waves) with stage	1	5058	5058
Kitchen	1	800	800
Servery	1	400	400
Dish Washing	1	200	200
Dry Storage	1	300	300
Refrigerator Storage	1	300	300
Freezer Storage	1	60	60
Office	1	100	100
Toilet	1	64	64
Shipping and Receiving	1	125	125
TOTAL			**7,407**
ADMINISTRATION			
Main Office Suite			
Front Lobby	1	200	200
Reception/Waiting	1	200	200

Norwalk Public Schools - Feasibility Study

New South Norwalk School @ Ely Site - Proposed Architectural Program
Projected Enrollment: 480 Students

Space Division	Quantity	Square footage	Subtotal
Secretarial Area	1	275	275
Work Area/Mail	1	100	100
Principal Office	1	225	225
Assistant Principal Office	1	120	120
Teacher Work room	1	150	150
Conference Room(s)	1	200	200
Conference Room(s)	1	150	150
Student Records	1	50	50
Toilet	1	64	64
Family Room	1	250	250
Subtotal			**1734**
Guidance	2	100	200
School Psychologist	1	120	120
Speech Pathologist	1	120	120
Faculty Lounge	1	270	270
Toilet	1	64	64
Satellite Copy Area(s)	1	100	100
2nd floor Subtotal			**874**
Nurse Suite			
Reception/Waiting	1	100	100
Office	1	120	120
Office	1	120	120
Exam	1	100	100
Cot Area	1	275	275
Toilet	1	64	64
Subtotal			**779**
TOTAL			**3,387**

Norwalk Public Schools - Feasibility Study

New South Norwalk School @ Ely Site - Proposed Architectural Program
Projected Enrollment: 480 Students

Space Division	Quantity	Square footage	Subtotal
BUILDING INFRASTRUCTURE			
Custodial Office	1	100	100
Custodial Work Area	1	120	120
Student Toilets (in classroom Sq Ft. area)	6	64	
Pair		770	0
Boys	2	770	1540
Girls	2	770	1540
Staff Toilets in suites.	4	64	
Public Toilets - Pair with 3 fixtures	1	770	770
Server Room	1	200	
Satellite Data Rooms	2	100	
Electrical Closets	3	80	
Elevator	3	100	300
TOTAL			**4,370**

CIRCULATION			
Gross Square Foot Factor 3rd floor			950
Gross Square Foot Factor 2nd floor			3,674
Gross Square Foot Factor 1st floor		**54,263**	**11,768**

TOTAL	**66,031**
State Space Standards for 480	66,048

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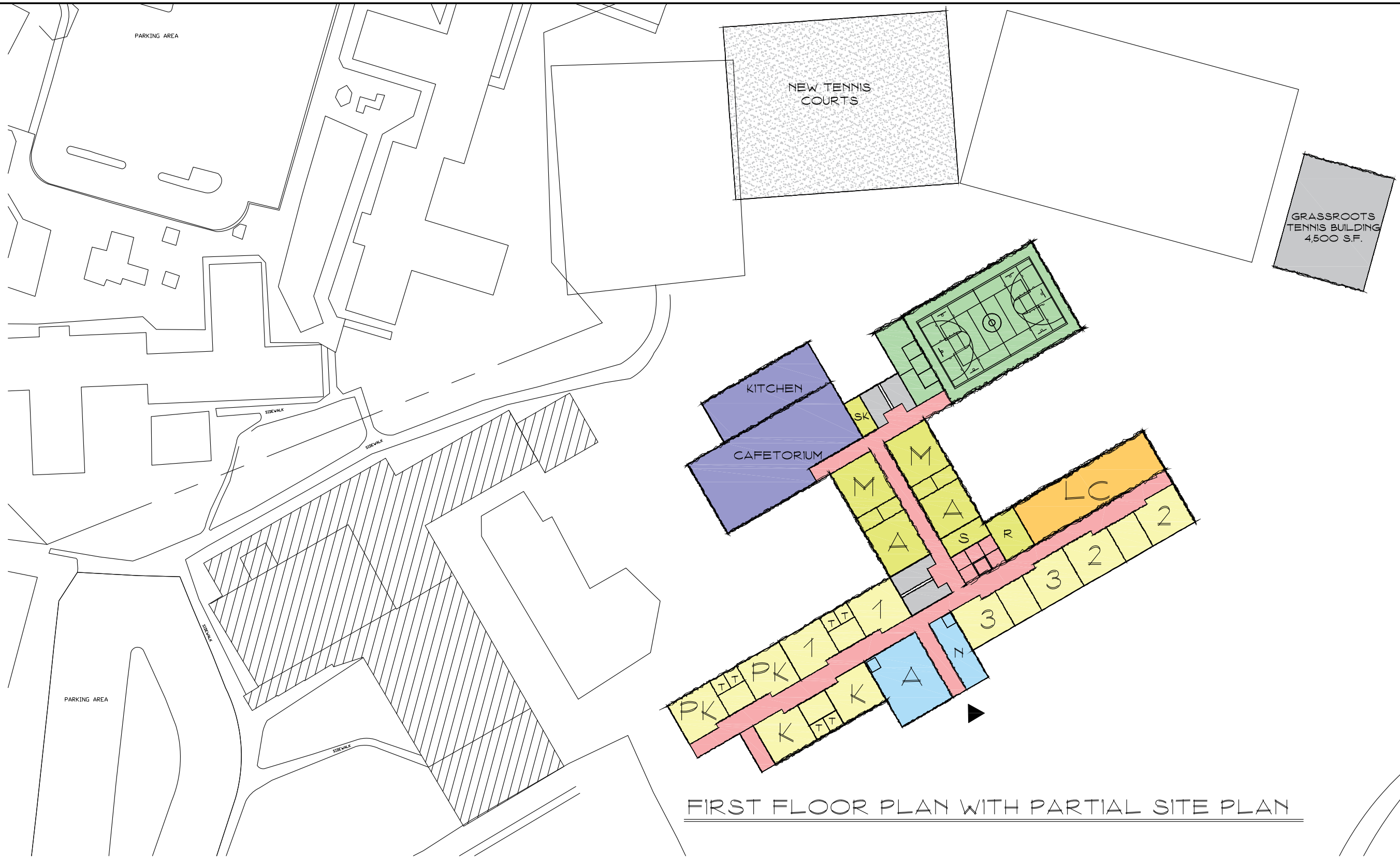


FIRST FLOOR PLAN WITH PARTIAL SITE PLAN

South Norwalk School : Pre-K to 8th
Norwalk School Facilities Study, 2017

11 Ingalls Avenue
Norwalk, Connecticut

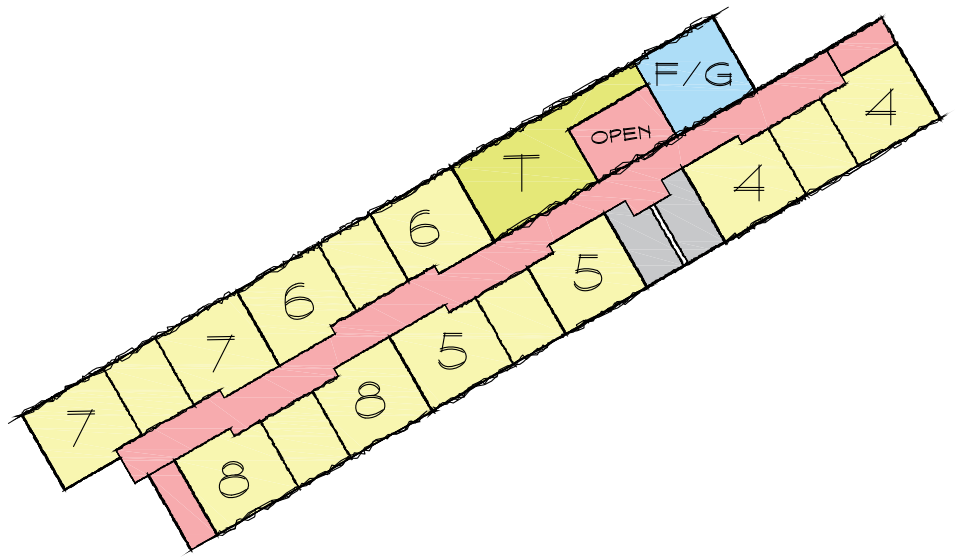
SILVER / PETRUCELLI + ASSOCIATES

Conceptual Design
Ed Spec 1st Fl Plan

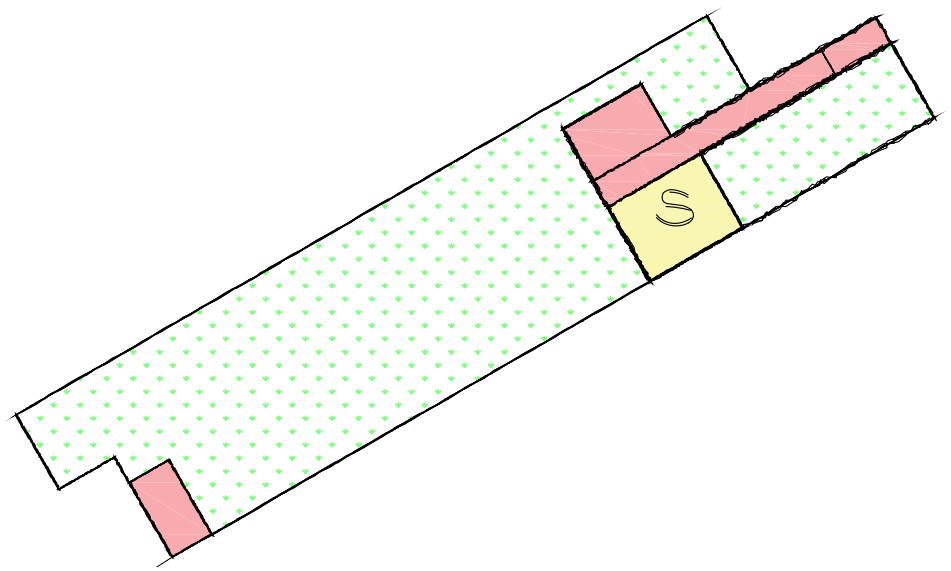
Date: 6/5/17

Scale: $\frac{1}{64}$ = 1' - 0"

NORTH



SECOND FLOOR PLAN



THIRD FLOOR PLAN & ROOF PLAN

South Norwalk School : Pre-K to 8th
Norwalk School Facilities Study, 2016
11 Ingalls Avenue
Norwalk, Connecticut

SILVER / PETRUCELLI + ASSOCIATES

Conceptual Design
Ed Spec 2nd Fl &
3rd Fl / Roof Plan

Date: 6/5/17

Scale: $\frac{1}{64}$ = 1' - 0"

NORTH