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SWBR ARCHITECTS

Feasibility / Master Plan Study

Brighton Central School District
Brookside and Council Rock Schools

SWBR Project No. 14725.00

December 9, 2014

I. Executive Summary

SWBR Architects was retained by Brighton Central School District (BSCD) to evaluate the feasibility of future expansion and renovations of either the Primary School at Council Rock or the former Brookside Elementary School sites and facilities as a Pre-Kindergarten through 2nd Grade school. At the conclusion of this report, we will analyze and compare the advantages and disadvantages of developing the provided program at each site.

Council Rock Primary School

Council Rock Primary School is a one story, 86,290 square foot building located on a 10.3 acre parcel of land at the south end of Grosvenor Road. The school's original building was constructed in 1957. Over the years, this building has been added onto four times, with the latest addition in 2006. This building currently houses half day kindergarten through 2nd grade program spaces. The building has double loaded corridors with the core spaces for staff, the auditorium, gymnasiums and cafeteria somewhat centrally located.

Former Brookside Elementary School

The former Brookside Elementary School (Brookside School), originally constructed in 1957, was added onto in 1961 and 1964. With 21.8 acres, this building site is located between Idlewood Road and Winton Road. This building is currently 55,900 square feet. Brighton Central School District currently owns this property and leases the facility to a number of town and private agencies. This is a traditional school building with double loaded classroom wings, with the exception of the original building which does not have a standard corridor for access to any classrooms. Within the original building, the farthest classroom is accessed by walking through a series of classrooms.

Report Overview

Within this report, Goals, Objectives and methods for data collection are established in the Study Approach. Existing Facilities are evaluated to determine the expected remaining useful life of site, civil, architectural, mechanical, electrical and plumbing systems. Program requirements are graphically established. Conceptual Plans provide potential building layouts and site options. Preliminary Building Aid Calculations are considered. Conceptual Level Cost Projections are provided to establish a rough order of magnitude of a Capital Project. Potential Phasing Approaches and Preliminary Schedule, Pre-Referendum

through Construction Completion are provided. Opportunities for environmental stewardship and sustainability through design and implementation are provided. An "Apples to Apples" program comparison Summary of advantages and disadvantages are identified for each building site.

Therefore, this report identifies but does not investigate or analyze leased program spaces at the former Brookside Elementary School.

II. Goals, Objectives and Study Approach

In preparation of this study, SWBR has used several techniques designed to provide the most inclusive and comprehensive results.

Client Contact - Work Plan

The SWBR Team met with key District personnel to establish the specific areas of concern regarding the facilities. A comprehensive list of space types and quantities for a 4 classroom Pre- Kindergarten Academy along with a 14 classroom per grade level Kindergarten through 2nd Grade program was developed and reviewed by BCSD leadership. Options for each building and site were developed and evaluated.

Field Investigation and Data Collection

The SWBR Team researched historical data including available drawings, other records of the infrastructure and sites at both Council Rock Primary School and the former Brookside Elementary School to establish a database of existing conditions. Using the 2010 Building Condition Surveys as reference, along with interviewing BCSD facilities staff and conducting visual observations of both facilities, the team was then able to determine the expected useful life of the building's systems.

Listed below are specific tasks that were completed in order to formulate the information provided within this report:

- Investigate and analyze existing facilities to determine the information required for a potential addition / renovation project.
- Identify and analyze existing site constraints.
- Evaluate existing surface conditions and available geotechnical information.
- Review existing architectural and structural systems and identify those systems that are approaching the end of their useful life.
- Review existing mechanical, electrical and plumbing (MEP) systems and identify those systems approaching the end of their useful life.
- Review available asbestos and PCB surveys.
- Visually inspect the physical condition of existing sites.
- Evaluate and analyze site vehicular and pedestrian circulation.
- Prepare conceptual level drawings and a report of the existing facilities.
- Refine the program requirements for Pre-Kindergarten to 2nd Grade school programs.

- Consult with the District Leadership Team and staff members to evaluate and establish space needs.
- Develop relationship diagrams, highlighting priority interactions between various facility users.
- Develop conceptual level floor plans and site plans.
- Provide conceptual level construction cost and total project cost estimates.
- Develop Building Aid Unit (BAU) and Maximum Cost Allowance (MCA) calculations for each option.
- Develop preliminary project implementation and phasing plan.
- Develop a preliminary project schedule.
- Identify the involved agencies under the State Environmental Quality Review Act (SEQRA) for each option.
- Prepare a report describing sites and summarizing the project costs, anticipated building aid, phasing, schedule and the advantages and disadvantages of each option.
- Attend and participate in meetings with the District's Leadership Team to present the report and address questions.

III. Program Requirements

The following tables where developed after meeting with Brighton Central Schools Stakeholder's Team. They are a summation of facts and information gathered at these meetings, which SWBR Architects and design consultants used to develop this reports design options.

Council Rock Existing K-12 Program for 698 Students

Function/Room Name	Quantity	Area (NSF)	Total Area (NSF)	Remarks
Kindergarten Classrooms (plus Toilet and Storage)	2	1,100	2,200	
Kindergarten Classrooms (plus Toilet and Storage)	4	1,373	5,492	
Grade 1 - 2 Classrooms (Toilet and Storage)	24	887	21,288	
Self-Contained Special Education Classrooms	3		3,359	
Auditorium	1	2,904	2,904	
Stage	1	1,542	1,542	Doubles as Music Room
Physical Education Station/Storage	2		4,496	2 gym stations + storage
Cafeteria	2		3,349	
Kitchen / Servery	1	1,653	1,653	
Library/Book Room	1		1,504	Library, Book Room
Music Classroom	1		1,031	1542 SF - Stage
Art Room + Storage	1	1,058	1,058	
Main Office Suite	1	1,748	1,748	
Nurses Office Suite	1	766	766	
OT Room	1	651	651	
PT Room	1	146	146	
Counseling Offices	1	910	910	
Primary Project	1	190	190	
P.E. Office	1	97	97	
Special Education Rooms	4		2,000	4 spaces - varing in size
ELA Specialist Room	1	1,078	1,078	
Speech Room	2	172	344	
ESOL Room	1	351	351	
Teacher Lounge / Workroom	1	515	515	
Tech Office/Data Clos.	1	404	404	
Kitchenettes	2		360	
Building Storage	2		113	
B & G Toilet Rooms	2	125	250	
B & G Toilet Rooms	2	283	566	
Staff Toilets	5		233	
Boiler Room / Office/ Workroom	1		2,171	
Maintenance Storage	2		520	

Total Program SF	63,289
Building Circulation/ Wall thickness (30% of Program SF)	18,987
TOTAL BUILDING SQUARE FOOTAGE	82,276

Council Rock All Day Kindergarten Program - Projected Enrollment of 673 Students (Including Pre-K)

Function/Room Name	Quantity	Area (NSF)	Total Area (NSF)	Remarks
Pre- Kindergarten Classrooms (plus Toilet and Storage)	4	1,400	5,600	Clrm. 800 SF, Toilet - 56 SF, Storage 100 SF
Kindergarten Classrooms (plus Toilet and Storage)	8	1,400	11,200	Clrm. 1100 SF, Toilet - 56 SF, Storage 100 SF
Grade 1 - 2 Classrooms (Toilet and Storage)	4	950	3,800	Clrm. 800 SF, Toilet - 56 SF, Storage 100 SF
Special Education Resource Classrooms	2	300	600	Clrm. 800 SF, Toilet - 56 SF, Storage 100 SF
Self-Contained Special Education Classrooms	1	950	950	Clrm. 800 SF, Toilet - 56 SF, Storage 100 SF
Multi-purpose Room/P.E./Testing/Storage	1	2,200	2,200	1 gym station - 240 Students
Cafeteria	1	1,600	1,600	4950 (25sf/student) Total Cafeteria SF = 3 classes/café x 4 lunch periods
Library	1	1,100	1,100	2,600 SF = Collection, seating, circulation, instruction, workrom.
Music Classroom	1	1,155	1,155	
Small Group Workspace	1	350	350	Office 100SF, + 8 Students
Speech Office	1	150	150	
Health Teacher's Office	1	150	150	
Mechanical Space	3	950	2,850	
Conference Room	1	350	350	20 people, 14'x25'

Total Program SF	26,455
Building Circulation/ Wall thickness (30% of Program SF)	7,937
ALL-DAY KINDERGARTEN BUILDING SQUARE FOOTAGE	34,392

Council Rock Additional Requested Program SF

Function/Room Name	Quantity	Area (NSF)	Total Area (NSF)	Remarks
Kitchen / Servery	1	350	350	772 Max Students = 192 students/ lunch prd.
Large Motor Room	3	1,600	4,800	66 students = 24 SF/student
Assessment Room	2	120	240	
Music Classroom	1	900	900	
Staff Bathrooms	4	56	224	
B & G Toilets	2	118	236	
General Building Storage	2	120	240	Outdoor equipment
Teaching Assistant Workroom	1	300	300	
Copier Room	1	150	150	
Program Storage Rooms	2	150	300	
Secured Entrance	1	100	100	
Kitchenette	1	120	120	
Data Clos.	2	50	100	
Conference Room	2	180	360	
Primary Project Add. SF	2	100	110	
Counseling Add. SF	1	150	150	

Total Program SF	26,455
Building Circulation/ Wall thickness (30% of Program SF)	7,937
ALL-DAY KINDERGARTEN BUILDING SQUARE FOOTAGE	34,392

Brookside School Leased Program

Function/Room Name	Quantity	Area (NSF)	Total Area (NSF)	Remarks
Clothing Cupboard	1		2,090	
Food Cupboard	1		1,730	
Parks and Recreation	1		17,080	Includes Senior Center
Monroe County School Boards	1		1,740	
Montessori School	1		12,165	
Genesee Valley BOCES program	1		1,650	
YMCA Program	1		825	

Total Program SF	37,280

Brookside School Pre-K Comprehensive Program - Site Program

Function/Room Name	Quantity		Remarks
Bus Loop	19	Buses	17 existing + 2 additional
Parking	177	Cars	142 Staff(Pre-K-2nd) +25 Visitor + 10 HC = 177 total
Play Areas - Playgound	2		Dispersed around the site for the different age groups
Play Areas - asphalt surface	1		An alternate play space
Play Fields	1		Minimum for outdoor P.E.
Receiving / Loading	1		Near Kitchen
Dumpster area	1		Near Receiving Loading (2 - dumpsters - Recycling and refuse)
Air Cooled Chiller	2		Exterior area near Boiler / Chiller room
Electric Pad Mounted Transformer	1		Near Electrical Service Location
Generator	1		Near Electrical Service Location

Brookside School Pre-K Comprehensive Program - List of Space Requirements

Room Name	Existing		Projected		
	2014-2015		Full 14 Strand		
	Qty	Enrollment	Qty	Target Enrollment	Comments
Pre-Kindergarten	0	0	4	72	Maximium Class size 18
Kindergarten	6	187	14	246	18 minimium - 20 maximium
1st Grade	12	251	14	265	20 minimium - 22 maximium
2nd Grade	12	235	14	255	20 minimium - 22 maximium
Self- Contained Special Education Clrms	2	*	4	*	* Student count within grade total
TOTAL	32	673	50	838	Full Day K- 2nd Grade Program (without Pre-K)

IV. Council Rock Primary School

EXISTING FACILITIES EVALUATION

Council Rock Primary School is a one story, 86,290 square foot building located on a 10.3 acre parcel of land at the south end of Grosvenor Road. The school's original building was constructed in 1957. Over the years this building has been added onto four times, with the latest addition in 2006. This building currently houses half day kindergarten through 2nd Grade program spaces. The building has double loaded corridors with the core spaces for staff, auditorium, gymnasiums and cafeteria somewhat centrally located.

The school is accessed from the north by Grosvenor Road. The bus loop accommodates 17 buses and parking for 33 cars (includes 2 handicap spaces). The parking lot provides 115 spaces (includes 3 handicap spaces) for staff and visitors, along with room for parents to pick up and drop off children. Combined total of parking spaces is 148 (includes 5 handicap spaces). The existing asphalt is currently in fair condition with some cracking and settling present. Sidewalks on site are mainly asphalt, and also show signs of cracking and settling.

Utilities are present on site and provide service to the school. The storm and sanitary systems are owned and maintained by the Town of Brighton. The water main is owned and maintained by the Monroe County Water Authority. The Town of Brighton Engineer has communicated that there are existing isolated drainage issues in the area and requested that the town be consulted during the design of drainage improvements to attempt to fix these issues. There are no federal or state regulated wetlands on the site. The site is not within an archeologically sensitive area, nor is it within any flood plains. An abandoned railroad, the Auburn Railroad, is located along the western border of the property and is currently used as a walking trail. The Town of Brighton is currently in the process of formalizing this trail to be called the Auburn Trail.

The 2010 Building Code of New York classifies this building as a pre-existing, non-conforming use with respect to allowable building areas. Any new additions would have to conform to the current 2010 New York State Building code requirements. Fire walls would be required with any new additions. The majority of the interior renovated space would fall under the NYS Existing Building Code's Alterations Level 2 classification and its requirements.

The classroom wings are oriented in plan as a classroom off a central corridor. The interior classroom masonry walls are bearing walls. The metal roof deck spans from the exterior end wall to the interior classroom wall and then continues to span from interior classroom wall to interior classroom wall. The roofs are sloped with generally wide overhangs.

Asbestos containing materials still remain in this building. Within the District's Capital Projects for this building, hazardous materials have been removed when it is disturbed within the scope of the project. The largest remaining abatement containing material is the vinyl asbestos floor tile and mastic, which remains in many of the original classrooms. Behind some chalk boards is asbestos containing mastic. Another asbestos containing material is corridor glazing compound within the older classroom wings. Some of the existing ductwork is wrapped with foam board insulation and adhered with asbestos containing mastic. The remaining exterior asbestos is in the glazing compound at some of the older exterior doors.

Existing Mechanical Systems Description

HVAC Systems

Heating Systems

Building heat is currently provided by a combination of gas fired heating equipment and a hot water boiler plant.

The existing boiler plant consists of two (2) cast iron sectional boilers that were installed in 1997. The boiler burners are configured for dual fuel operation (natural gas/#2 fuel oil); however, currently only operate on natural gas. The boilers are in good working condition and have an additional life expectancy of approximately 15 to 20 years.

The boiler plant currently serves about 50% of the building footprint, however, it is adequately sized to serve the entire building.

The boilers are located in the same Mechanical Room as the air handling unit that serves the East Wing of the building. This installation is not in compliance with the NY State Education Department Manual of Planning Standards.

The building heating pumps were replaced with the boilers as part of the 1997 Capital Project. The pumping systems are configured for a primary / secondary arrangement. The primary loop is constant

volume and serves the boilers. The secondary loop is variable volume and serves the building heating equipment. The pumps have an additional life expectancy of approximately 10 years.

The original heating piping distribution systems were installed in 1990 with major renovations in 1997. The heating mains installed in 1997 have taps for future expansion. The majority of the piping systems are copper and appear to be in good condition.

Air Conditioning Systems

Air conditioning to the building is limited to air cooled split systems located in approximately five (5) Classrooms and two (2) Offices. These systems were found to be in good working condition.

Air Handling Systems and Terminal Equipment

The majority of the East Wing of the building is heated and ventilated by a constant volume air handling unit installed as part of the original building construction in 1956. The air handling system pressurizes a concrete duct tunnel routed under the corridor. Reheat coils are provided in the ductwork branch systems that are routed below the floor systems to the Classroom, Corridors and Office spaces. The system utilizes the Corridor as a return air plenum.

The air handling unit and ductwork distribution systems were retrofitted as part of the 1997 Capital Project. The original gas fired furnaces associated with the air handling system were removed and heating coils were provided.

The supply fans for this air handling system are original to the building construction and have exceeded their life expectancy. Due to the nature of the concrete duct tunnel and the under slab ductwork systems, airflow distribution from this system was observed to be very low. In addition to low airflow, the tunnel systems were observed to be dirty. The current utilization of the Corridor as a return air plenum is not code compliant. Finally, housing the air handling unit in the same room as the boilers is no longer in compliance with the State Education Departments Manual of Planning Standards.

The South Classrooms in the East Wing are heated and ventilated by console unit ventilators. The unit ventilators are provided with stand-alone controls and are not tied into the building DDC system (Direct Digital Control). The units were installed in 1991/1992 and are approaching the end of their useful life.

The Gymnasium and Auditorium air handling units are conditioned by constant volume heating and ventilating air handling units. The units are original to the building construction. As part of the 1997 Capital Project, new heating coils, filters and control systems were installed to these units. New ductwork distribution systems were added to the Gymnasium as part of the 2004 / 2005 Capital Project. These systems are not configured or sized for future air conditioning requirements. These units have reached the end of their useful life.

Fan coil units were added to miscellaneous Office spaces as part of the 2004 / 2005 Capital Project. These systems are in good working condition.

Gas fired, roof mounted energy recovery ventilators were added to the two Cafeteria spaces, Tutor Office Suite and the South Classroom additions. These units are heating only and were installed as part of the 2004 / 2005 Capital Project. The District has reported numerous operational issues with these systems.

The Central, North and West wings of the building are heated and ventilated by a constant volume air handling system. The air handling unit utilizes gas fired furnaces as the heating source. The ductwork distribution system is routed through out a tunnel system located under the Corridor. Return airflow to the unit is achieved by utilizing the corridor as a plenum.

Similar to the East Wing system, poor airflow was observed from the distribution of this system. The limited turn down of the gas fired furnaces and the lack of reheat coils for the Classroom and Office spaces provides limited control for this system. The return air system is not code compliant. This system was installed as part of the original building construction in 1956 and has reached the end of its useful life.

There are currently occupied spaces in the building that are not mechanically ventilated. These spaces are not in compliance with the ventilation requirements of the NYS Mechanical Code or the State Education Department.

Exhaust Systems

The main kitchen hood exhaust system was installed as part of the 2004 / 2005 Capital Project and appears to be in good working condition. The exhaust hood is provided with a complete ansul fire suppression system and is code compliant.

The age of the toilet exhaust systems ranges from the original building construction in 1956 to renovation projects in 1990, 1997 and the 2004 / 2005 Capital Project. With the exception of the fans installed in the 2004 / 2005 Capital Project, the fan systems are approaching the end of their useful life.

Building Control Systems

The building has a pneumatically controlled system, with a portion controlled by DDC. A full investigation of the pneumatic system, including a compressor run time test, should be completed to properly evaluate the distribution system. Miscellaneous heating equipment is stand alone and not currently controlled by the building DDC system.

Site Electric

Existing site electric comes from a pole next to railroad tracks just outside classrooms to west side routed underground to a newer 300KVA pad mounted transformer on west side. If building wide Air Conditioning (AC) is added, existing service will need to be upsized. Existing secondary is 208v/120.

Electrical Systems

Site Lighting

The existing pole site lighting is newer and in good condition.

MDP

The existing MDP is a newer 1200A, 208/120, Square D. I-LINE system with an electronic main breaker. If building wide AC is added, existing MDP will need to be upsized.

Secondary Panels

Most of the existing secondary electrical panels within the building are newer and in good shape. There are approximately six (6) panels that are older, obsolete and need to be replaced.

Fire Alarm System

The existing fire alarm system is a hardwired system Cerberos Pyrotronics MXL-IQ system. There are no strobes in the classrooms and, coverage is lacking in the corridors. Replace with a point addressable system; add strobes to classrooms and additional coverage.

Building wide and Paging

There is an older Bogen Mulitcomm 2000 system that is not working properly. Speakers are wired in series to minimizing zoning.

Master Clock

The master clock system is an older hardwired 24v synchronous system (Simplex 6400 series).

Emergency Generator

The existing generator is an exterior grade 75kw diesel generator. Manufacture is Olympian and has one (1) ATS with emergency lighting and boiler plant on it. This is not up to current code. The generator may need to be upsized to handle additional loads.

Emergency Lighting

All of the exit discharge lighting was replaced and connected to the emergency generator. Various egress lighting in corridors is lacking. Large space emergency lighting requires additional.

Lighting

Most of the classroom lighting is T-8 fluorescent lighting. Various classroom lighting has recently replaced newer T-8 lighting. There are some spaces with incandescent and T-12 lighting. The gym lighting consists of 400W HID lighting and takes 15 minutes to turn fully on. The auditorium house lighting is original incandescent circular fixtures and needs to be replaced.

Technology

Existing Data closets at room 22 and 42 with Cat5/5e cabling and POE switches

Security

Various IP cameras have been installed through-out the building.

Plumbing Systems

Sanitary System

The existing sanitary system is primarily extra heavy cast iron hub & spigot with some no hub sections. The mains run exposed in the crawl spaces below the corridors and, the branch piping from rooms off the corridor are below the slab on grade. The exposed piping mains appear to be in good condition with no visible cracks or sagging. The District maintenance staff has indicated there have been drainage issues due to narrowing of pipes and, plumbing companies have had difficulty running snakes through them. They recommended replacing all the crawl space piping.

The exterior kitchen grease interceptor is concrete and approximately 1500 gallons. The District reports it is working but requests replacement due to age.

Storm System

The existing storm system is primarily gutters and downspouts with an occasional roof drain on smaller flat roofs. The observed roof drain piping is copper and appears to be in good condition.

Natural Gas system

There are two gas services for the school.

Service #1: Gas meter is located outside the heater room at the Northwest wing and serves only boilers for this wing. This service appears to be in good condition.

Service #2: Gas meter is located near storage rooms at the Southeast corner of the building and serves rooftop heating equipment for the remainder of the building. All gas piping runs exposed on the roof. This service appears to be in good condition.

Domestic Water System

There is one 4" domestic water service that enters the building in the fan room at the Southeast corner of the building. There is a 2" water meter and RPZ backflow preventer assembly on this service. Piping increases back to 4" to serve the building. There are two water heaters in the fan room.

Water Heater #1: Non ASME rated 80 gallon electric. Age appears to be dated in the 1990's and at the end of its useful life. Area served by this is unclear. SED requires ASME rated water heaters.

Water Heater #2: Newer 2012 ASME rated Burkay copper coil with approximately 500-750 gallon horizontal storage tank. Water heater appears to be in good condition. The storage tank is wrapped with insulation and condition is not known. It is unclear which area(s) is served from this water heater.

Water Heater #3: There is an additional 2005 Non ASME rated 80 gallon electric water heater located in the boiler room in the Northeast wing. It is assumed this serves only this wing. SED requires ASME rated water heaters.

All observed domestic piping is copper and appears to be in good condition.

There does not appear to be any hot water mixing valves to meet ANSI standards to prevent scalding.

There are no emergency eyewashes in the boiler or fan rooms as required by SED.

Fire Protection System

There is not a dedicated fire protection system. The only sprinklers in the building are in the 1991 / 1992 additions to wash the classroom corridor windows down. This system is fed from the domestic system.

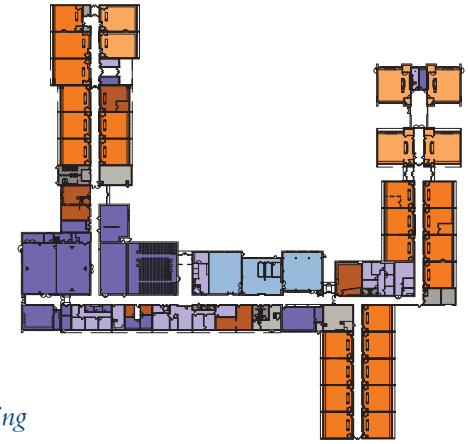
Plumbing Fixtures

Plumbing fixtures in the 1956 and 1960 portion of the building are original non water saving type and are approaching the end of their useful life. Fixtures in the 1991 / 1992 / 2006 additions are in good condition.

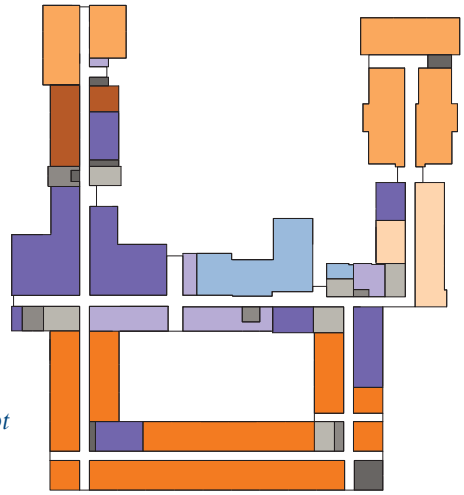
Council Rock Primary School

CONCEPTUAL OPTIONS

Council Rock - Option #1



Existing



Concept

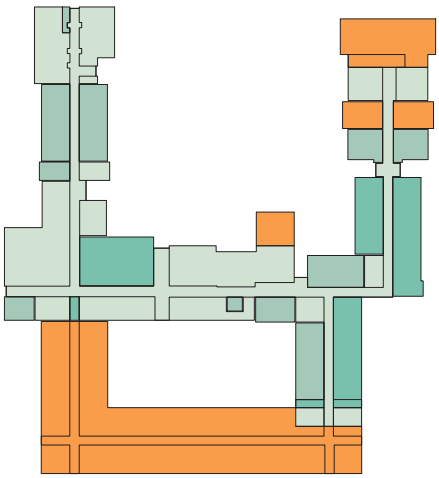
Architectural and Structural

This option shows a "U" shaped classroom addition added to the south of the building. This wing would house the 14 classroom, 1st and 2nd Grade program spaces. Circulation is improved by providing two-way directional traffic within the addition. The core program spaces; i.e. the gymnasium, library, cafeteria, music room, and art room are generally located in what would now become the center of the building. A third gymnasium would be housed in the existing auditorium space. The existing sloped floor and auditorium seating would be removed and in filled to match the existing finished floor elevation of the rest of the building. The stage area would remain at existing finished floor level. The kindergarten rooms would remain at either end of the east and west wings but would be expanded to accommodate the new number of classrooms required. The Pre-Kindergarten program spaces would be clustered together in the east wing near the new parent drop off. The Main Office, Counseling Services, instructional staff offices, and nurse would remain in their current location although reconfiguration of space would likely be necessary. The existing cafeteria and kitchen would be expanded and renovated in their current location to generate cost savings due to their recent renovation in 2005.

Site

A rectangular bus loop is shown providing access to 19 buses. This loop also includes 42 parking spaces for staff and administration. The existing parking lot to the west is shown to be expanded to the south, incorporating the hardscape play area. The parking area would be designed to provide 135 parking spaces for staff and visitors, creating a total of 177 parking spaces on site. The southwest end of this parking area includes room for parents to drop off and pick up children without interfering with bus or staff traffic. New concrete sidewalks and walkways are shown around the entirety of the proposed bus loop, along with the drop-off and pick-up area, to provide safe access to the school. Three play areas are located in the southeast corner of the property (1 Pre-K playground, 1 Elementary playground, and 1 hardscape play area) to replace the existing playground located at the rear of the building and the hardscape play area being replaced with additional parking. Two existing sports areas will remain on site as shown, but will be made smaller due to the addition to the south end of the building.

RENOVATION LEVELS



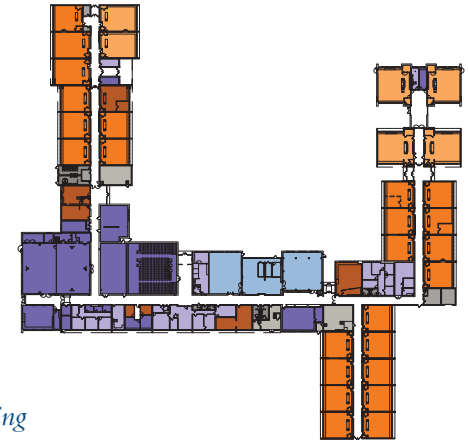
Low Level Renovation (47,000 SF):
- Painting of interior space
- New ACT Ceilings
- No Asbestos work
- No flooring replacement

Medium Level Renovation (17,000 SF):
- Low Level Renovation Work
- Demolition and new partition layout of space
- Casement for New layout
- Abatement of Classroom and Corridor Floors
- Replacement of flooring

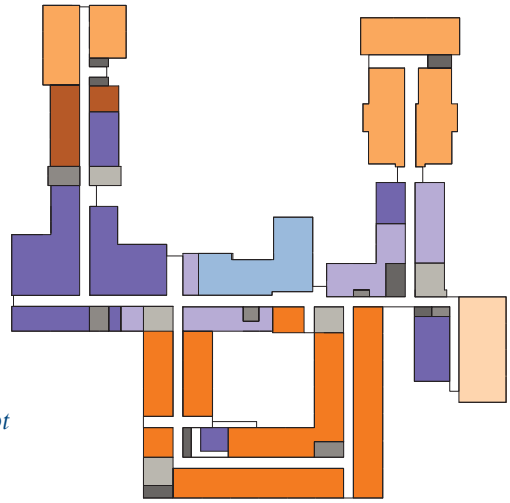
High Level Renovation (17,000 SF):
- Low Level Renovation Work
- Medium Level Renovation Work
- Structural Alterations @ Masonry Bearing walls
- Council Rock – Removal of stationary seating and Infilling of sloped Auditorium floor

New Construction (52,100 SF)

Council Rock - Option #2



Existing



Concept

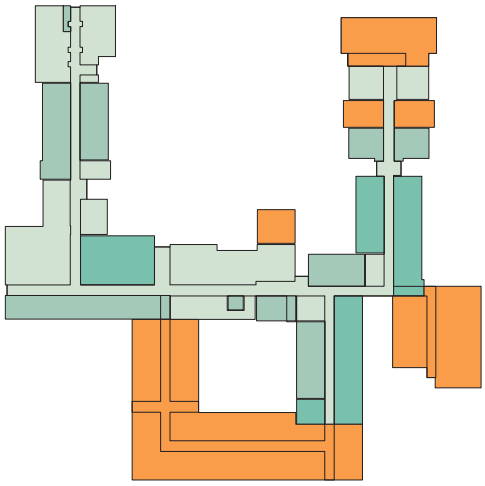
Architectural and Structural

This option shows a "U" shaped classroom addition added to the south of the building. This wing would house the 14 classroom, 1st and 2nd Grade program spaces. Circulation is improved in the building by providing a corridor to be a full loop back to the core of the building. Within this option the core program spaces; i.e. the gymnasium, cafeteria, music room, and art room are generally located in what would now become the center of the building. The third gymnasium space would be housed in the existing auditorium space. The existing sloped floor and auditorium seating would be removed and in filled to match the existing finished floor elevation of the building. The stage area would remain at existing finished floor level. The kindergarten rooms would remain at either end of the east and west wings but would be expanded to accommodate the new number of classrooms required. The Pre-Kindergarten program would be clustered together in the east wing near the new parent drop off. The Main Office, Counseling Services, instructional staff offices, and nurse would remain in their current location although reconfiguration of the existing space would likely be necessary. The existing cafeteria and kitchen would be expanded and renovated in their current location to generate cost savings due to their recent renovation in 2005. To the west of the new 1st and 2nd Grade classroom addition would be an addition that would include the Pre-Kindergarten Academy and a new library space. Locating this addition here would provide the district with separate entrances for the Pre-Kindergarten Academy and Library

Site

A circular bus loop is shown allowing access to 19 buses. The existing parking lot to the west is shown to be expanded to the south, replacing the hardscape play area. The parking area would be designed to provide 171 parking spaces for staff and visitors on site. The southwest end of this parking area includes room for parents to drop off and pick up children without interfering with bus or staff traffic. New concrete sidewalks and walkways are shown around the entirety of the proposed bus loop, along with the drop-off and pick-up area, to provide safe access to the school. Three play areas are located in the southeast corner of the property (1 Pre-K playground, 1 Elementary playground, and 1 hardscape play area) to replace the existing playground located at the rear of the building and the hardscape play area being replaced with additional parking. One existing sports area will remain on site as shown, but will be made smaller due to the addition to the south end of the building.

RENOVATION LEVELS



Low Level Renovation (42,000 SF):
- Painting of interior space
- New ACT Ceilings
- No Asbestos work
- No flooring replacement

Medium Level Renovation (20,500 SF):
- Low Level Renovation Work
- Demolition and new partition layout of space
- Casement for New layout
- Abatement of Classroom and Corridor Floors
- Replacement of flooring

High Level Renovation (17,500 SF):
- Low Level Renovation Work
- Medium Level Renovation Work
- Structural Alterations @ Masonry Bearing walls
- Council Rock – Removal of stationary seating and Infilling of sloped Auditorium floor

New Construction (53,600 SF)

Council Rock Primary School - Conceptual Options

SWBR has developed two Options at Council Rock Primary School using the following provided program:

Architectural / Structural

Modernize the existing facility and increase the square footage of the building by adding additions to accommodate the new Pre-Kindergarten through 2nd Grade program spaces. The new program consists of 4 Pre-Kindergarten classrooms and 14 classrooms per Grade level at the primary level for full day Kindergarten through 2nd Grade. The targeted operating capacity is 772 students. The total requested building program square footage is 133,100 square feet.

Site

Design a bus loop to accommodate 19 full size buses. Provide parking spaces for a minimum of 165 staff and visitors cars. Provide two playground areas and one asphalt play surface. Provide a minimum of one play field for physical education classes. Add locations for two dumpsters, a transformer pad, chillers and generator.

Heating Ventilation and Air Conditioning

Heating Systems

The existing boiler plant is in good operational condition and has an additional estimated life expectancy of approximately 15 to 20 years. The plant currently provides hot water heat to approximately half of the building. The remainder of the building is heated via gas fired equipment.

The boiler plant is adequately sized for the existing square footage at the Council Rock Campus. If a building renovation project adds additional square footage, the existing gas fired heating equipment should be removed and replaced with hot water heating systems. The existing heating piping systems would be modified and new heating mains would be routed to the West Wing of the building.

It is recommended to add a burner management system to the boilers to maximize operational efficiencies.

If no additions are made, the existing primary loop pumps can remain. The secondary pumps would be replaced to accommodate the additional flow rate to the West Wing of the building. The secondary pumps would be provided with Variable Frequency Drives (VFD's) to maximize efficiency and minimize energy usage.

The existing boiler plant is not adequately sized to accommodate substantial building additions. Adding square footage to the building will require additional heating capacity. Due to the age of the existing boilers, it is recommended to keep the boilers and add an additional boiler. The proposed boiler should be a high efficiency condensing style boiler to maximize energy efficiency and minimize utility costs. The boiler plant controls would be configured to utilize the new high efficiency boiler as the first source of heat.

If building additions are made, both primary and secondary pumping systems will need to be replaced. Larger pumps would be provided to accommodate the additional boilers. VFD's would be provided for the pumping systems to maximize system efficiencies.

The piping systems would take advantage of the existing tunnels below the Corridors for routing to the building.

The existing boiler plant is currently located in the same room as the East Wing air handling unit. This installation is not in compliance with the 2014 SED Manual of Planning Standards. All air handling systems would be required to be removed from this space, providing a dedicated Boiler Room. The Boiler Room would be used to house the domestic water heaters and the boilers. If the District elects to add air conditioning to the campus, the space would also be utilized to house the chilled water plant.

Air Conditioning System

The District has requested two (2) options for areas to be air conditioned. The first option would include spaces with twelve month usage only. Spaces included are: Special Education Classrooms, Resource Rooms, Counseling Offices, Main Office Suite, Nurse Office Suite and the Multi- Purpose Room. The second option would include air conditioning of the entire building.

The proposed system for the first option (twelve month space usage) would be a variable Volume Refrigerant System (VRV). This system maximizes system efficiency while providing low installation costs. This option also eliminates the requirement for a chilled water plant and would decrease potential noise concerns created from a chiller system. This option would also provide these spaces with supplemental heat for the heating season.

The proposed system for the second option (entire building) would be to provide a central chiller plant. An air cooled chiller plant is proposed

in lieu of a water cooled plant. The air cooled plant would be slightly less efficient, however would be less maintenance for the District and provides more operational flexibility. Premium efficiency chillers utilizing VFD's on the compressors would be utilized

An ice storage system would be incorporated into the chiller plant. This concept allows the District to operate the chillers during the off peak demand electrical periods. The chillers would be utilized to create ice at night. The ice is then utilized to cool the chilled water systems during the day.

Similar to the building heating plant, chilled water pumps and a new piping distribution system would be required for the chilled water plant. The system would utilize 2-way control valves and VFD's to maximize system efficiency. The existing tunnels below the corridors would be utilized for routing of the piping systems.

A cursory review of a geothermal heat pump concept was conducted. The initial cost of the geo-thermal wells for this application find the system to not be cost effective. The estimated cost of the geothermal well field would be in the range of $850,000 to $1,000,000. This cost would be in addition to the total HVAC system cost. The District would not receive a suitable pay back in energy savings and NYSERDA incentives to pursue this option.

Air Handling Systems and Terminal Equipment

The existing heating and ventilating systems through-out the building are either original to the building construction, are not code compliant in current application, are not adaptable for air conditioning, are problematic to the District or have reached the end of their useful life. These systems should be replaced.

One system option is chilled beam terminal units with energy recovery air handling systems for the Classroom, Lounge and Office Spaces. High efficiency filters and premium efficiency motors would be utilized in the air handling systems.

This system provides the District with an energy efficient solution providing individual room control at minimal noise disturbance. The chilled beam application minimizes the size of the air handling units and associated ductwork systems, allowing for application in the tight constraints of the existing building conditions. This application also allows the District the flexibility to add future cooling if not desired at the current time.

Another system option is a displacement ventilation system with energy recovery air handling systems for the Classroom, Lounge and Office Spaces. Similar to the chilled beam concept, these air handling systems would be provided with high efficiency filters and premium efficiency motors.

The displacement ventilation system discharges low velocity airflow at the floor levels. The low velocity airflow spreads out across the floor and displaces the warmer, stale air to the ceiling level. Advantages to this system include low velocity discharge resulting in noise reduction; warmer discharge air can be utilized as the discharge is at the occupant and not at the ceiling levels. Discharging warmer air to the spaces provides the District with energy savings on the chilled water systems.

The existing tunnel systems can be used for routing of the ductwork distribution systems.

If the District prefers the first option of cooling (twelve month space usage), the chilled beam systems for these spaces would be replaced with the previously proposed VRV systems. Additional energy recovery units would be provided to add ventilation.

Central station air handling units would be provided for the Gymnasiums, Auditorium and Cafeteria spaces. New ductwork systems would be provided to meet current ventilation code requirements, improve airflow distribution and decrease system noise. Demand control ventilation, energy recovery and VFD's would be provided on these systems to improve ventilation while reducing energy consumption. Similar to the chilled beam systems, the central station systems would be designed for cooling. This gives the District the ability to add air conditioning as part of the proposed project or at a future time.

Solar wall systems can be incorporated into the building design. The solar wall systems would be utilized to preheat the ventilation air systems prior to being introduced to the air handling systems. This concept reduces load to the heating systems, ultimately decreasing energy usage.

New radiation, cabinet heaters and unit heaters would be provided through-out the building.

All of the new HVAC equipment would be tied into the boiler plant for heat. This concept provides the District with better control of the heating equipment, and ultimately increases in energy efficiency. It will also improve aesthetics by reducing the quantity of gas piping routed across the roof systems.

Exhaust Systems

The existing kitchen hood exhaust and make up air systems were installed in the 2004/2005 Capital project and are in good working condition. If the Kitchen does not get relocated, these systems would remain as currently installed.

The toilet exhaust fan and ductwork systems through-out the building should be replaced. New roof mounted systems would be installed, providing ventilation to meet the current code requirements. Electronically Commutated Motors (ECM) motors should be utilized for maximum efficiencies. Additional transfer air systems would be provided to improved airflow to the spaces.

Additional exhaust systems would be provided at specialized rooms such as Art Rooms, Faculty Lounges and Custodial Spaces.

Building Control Systems

Due to the proposed replacement and expansion of the HVAC systems, it is recommended that the existing pneumatically controlled DDC system be removed and replaced with a new electronically controlled DDC system. As part of the system replacement, the DDC front end would be upgraded to the most current Andover system.

All HVAC systems will be controlled by the building DDC system to maximize system efficiencies. Additional systems such as domestic hot water plants and exterior lighting systems would also be controlled. Finally, metering of the electrical and gas systems would be implemented to aid the District.

Electrical Systems

Site Electric

Replace service with larger pad mounted transformer, revise secondary to be 480/277 to accommodate future building wide air conditioning and additions. Existing service to remain if building wide air conditioning scope is not required.

Site Lighting

Recommendation: Reuse existing site lighting. May require relocation of existing poles to accommodate new site work. Provide matching poles/lighting if need additional.

MDP

Replace MDP panel with larger panel (480v/277) to accommodate large chiller loads, additions and additional building wide Air Conditioning (AC) equipment. Existing 1200A MDP to remain if building wide AC scope is not required. Existing MDP gear can also be used to accommodate 208v/120 loads if building wide air conditioning is required.

Secondary Panels

Add additional 480/277v secondary panels if building wide AC is required. Reuse newer 208v/120 secondary panels. Add step down transformers to accommodate 208v/120 equipment and power. Utilize 277v panels for lighting. Add computer panels with TVSS (Transient Voltage Surge Suppression) system for all computer related panel power.

Fire Alarm System

Replace fire alarm system with a point addressable system, add strobes to all classrooms and bring coverage up to code.

Building Wide and Paging

Replace building wide and paging system; dedicated speaker runs to each classroom. Provide IP module at head end for out-of-building calls.

Master Clock

Replace with a wireless GPS system tied into building wide paging and intercom system bell tones. Clocks shall be 120v and hardwired.

Emergency Generator

Replace and upsize the generator to accommodate additional emergency loads. Locate life safety loads (emergency lighting, exits and Fire Alarm Control Panel (FACP) onto a dedicated Automatic Transfer Switch (ATS). Locate Life safety system in a separate 2 hour rated room from MDP. Add boiler plant, refrigeration units with-in kitchen, data closets, security systems and additional school requested loads.

Emergency Lighting

Replace all interior emergency lighting with new LED type. Designate various path of egress and discharge lighting to emergency generator.

Lighting

Replace all interior lighting with new dimmable LED type. Provide daylighting controls in each classroom.

Technology

Replace, add and update data closets to accommodate future additions. Provide equipment for a 10G network with Cat.6 cabling and new hardware. Separate security (IPCCTV) from data network as much as possible with dedicated patch panels and separate color cabling for WAP, IPCCTV,VOIP and data network drops.

Security

Add Access control system with proximity readers at designated various exterior doors. Create a single point entry system with Audio Entry, IPCCTV and visitor management system within the building/main office area to accommodate visitors. Replace Intrusion Detection system with updated system.

Plumbing System

Sanitary System

Provide a complete new underfloor cast iron hub and spigot sanitary system in additions. Provide a complete new no-hub system in the existing corridor crawl spaces. Saw cutting and patching will be required for areas outside the corridors in the existing building. Provide a supporting vent system. Underfloor piping is to be cast iron hub and spigot with copper Drain Waste and Vent (DWV) above floor.

Provide a new exterior grease interceptor with alarm system for the kitchen.

District could consider PVC piping below floor and in crawl spaces.

Storm System

The majority of the new storm system will be gutters and downspouts. Provide new roof drains and cast iron no hub piping above floor with cast iron hub and spigot below floor for flat roofs.

District should consider PVC piping below floor.

Natural Gas System

Relocate and combine the two gas service entrances and interior piping as required for existing building reconfigurations. Upsize piping and pressures as required to support building additions. Provide a dedicated gas line to the emergency generator (if gas fired). Run all new piping in ceiling spaces. Revise rooftop piping as required to support HVAC modifications. All piping to be schedule 40 black steel.

Domestic Water System

Relocate the water service entrance and interior piping as required for existing building reconfigurations and additions. Upsize interior piping as required to support building additions. Provide all new piping and run in ceiling spaces. Provide new backflow preventers on the main service and boiler make-up piping. All piping to be copper.

Provide one hot water heating system consisting of two high efficiency water heaters, two vertical storage tanks, a mixing valve and circulators as required. The system will serve all areas of the school.

Fire Protection System

Provide a dedicated fire protection system from the street main and full sprinkler system for the additions. The existing building is to remain un-sprinklered unless renovations reach Level 3.

Plumbing Fixtures

Provide new water saving fixtures throughout the existing building and additions. All faucets and flush valves are to be manually operated. Faucets are to be the metering type. District should consider sensor operated fixtures.

Council Rock Primary School

Parcel Size: 10.3 acres

Site Opportunities and Constraints

Item	Existing	Required/Proposed	Comment
Parking Spaces	143	177	34 additional spaces
Bus Drop-off/Pick-up (# buses accommodated)	17	19	Need to enlarge drop-off area
Parent Drop-off/Pick-up	Yes	Yes	Designated area at the East side of the building
# Soccer/Football/Lacrosse fields	3	2	Soccer, Mixed use
# Playgrounds	1	3	1 Pre-K, 1 Elementary, 1 Hard-scape

Utility Summary

Utility	Existing	Expansion Impacts / Comments
Sanitary Sewer	8” cast iron main	No impact from either option to existing system. New laterals should be provided.
Water	4” service fed from 8” main along property	Water service would need to be relocated in both Options 1 and 2. New service and a hot box for backflow prevention will be required.
Storm Sewer	27” pipe directs storm water off-site	27” pipe would need to be relocated. New piping installed for drainage of increased impervious area; must meet requirements for storm water quality and quantity.

SEQRA Agencies

Agency	Involved	Interested	Comment
Brighton Central School District			Lead Agency
State Education Dept	X		Plan Approval
Monroe County Health Department	X		Plan Approval
Monroe County Pure Waters	X		Plan Approval
Monroe County Water Authority	X		Plan Approval
Brighton Sewer Department	X		Plan Approval
Rochester Gas & Electric	X		Provide Service
NYS Dept of Environmental Conservation (SPDES)	X		SPDES Permit
NYS Dept of Environmental Conservation (Wetlands)	X		All Clear Letter required
US Fish and Wildlife Service		X	
NYS Historic Preservation Office (SHPO)		X	
US Army Corp of Engineers		X	
Monroe County Dept of Transportation		X	
NYS Dept of Transportation		X	
Town of Brighton		X	
Brighton Ambulance		X	
Brighton Fire Department		X	
Brighton Police Department		X	
Monroe County Planning and Development Department		X	
Monroe County Sheriff		X	

Wetlands/SHPO

Item	Comment
U.S. Fish and Wildlife Service National Wetlands Inventory	No federally regulated wetlands present on site.
NYSDEC regulated wetlands	No state regulated wetlands present on site.
NYS Historic Preservation Office (SHPO)	No Archeo Sensitive Area present on site.
FEMA Flood Plain	No flood plain present on site.

Soil Notes

Previous test pits show approximately 6" of topsoil on site. Soil is mainly silt, with a vein of clay approximately 6'down in some locations. With test pits up to 8' deep, groundwater was not encountered.

Utility Detail

Utility	Existing Information Detail
Sanitary Sewer	The building is serviced by an 8" cast iron main owned and maintained by the Town of Brighton Department of Public Works. This main runs from Rowland Parkway at the East end of the property to the site. Due to age and condition of existing cast iron system, new laterals are recommended.
Water	The 8"water main running along the southern border of the property is in a dedicated easement to the Monroe County Water Authority. The building is serviced by a 4" service running to the back of the building. Will require backflow prevention (hotbox) and new service.
Storm Sewer	The storm system is owned and maintained by the Town of Brighton Department of Public Works. Storm sewers run along the South, East, and North sides of the building. Storm water from the roof runs directly into the storm system. Surface storm water is directed to the system by catch basins located throughout the site. A 27" reinforced concrete pipe located at the rear of the building directs storm water off the site. The invert for this pipe is located approximately 5 feet underground. Will need to expand existing system and provide a storm water design that meets current requirements for storm water quality and quantity.

Pavement Notes

Locations	Comment
Bus Loop	Fair to Poor Condition. Evidence of cracking, alligator cracking and settling. Recommend under drainage.
North Parking Lot	Good to fair condition. Some cracking and settling along drainage path.

V. Brookside School

EXISTING FACILITIES EVALUATION

The Former Brookside Elementary School originally constructed in 1957, was added onto in 1961 and 1964. With 21.8 acres, this building site is located between Idlewood Road and Winton Road. This building is currently 55,900 square feet. Brighton Central School District currently owns this property and leases the facility to a number of town and private agencies. This is a traditional school building with double loaded classroom wings with the exception of the original building which does not have a standard corridor for access to any classrooms. Within the original building, the end classroom is accessed by walking through a series of classrooms.

The school has two access roads; one from the east off of Idlewood Road, and one from the west off of South Winton Road. The Idlewood access road leads to a bus loop currently not in heavy use. The South Winton access road crosses Allen's Creek and leads to a parking lot at the rear of the school. This parking lot has a total of 58 spaces (includes 4 handicap spaces). The parking lot to the northeast of the building has 29 parking spaces (no handicap spaces). Within the current bus loop, there are a total of 66 spaces (includes 3 handicap spaces). So the total parking lot count for the existing site is 152 spaces (which includes 7 handicap spaces). The existing asphalt is in poor condition, with significant cracking and settling visible. Sidewalks on site are mainly asphalt, and also show signs of cracking and settling.

Utilities are present on site and provide service to the school. The sanitary and storm system are owned and maintained by the Town of Brighton. Storm drainage is mainly present at the east side of the school, while drainage on the west side relies on surface runoff to Allen's Creek. The water main is owned and maintained by Monroe County Water Authority. Allen's Creek runs along the west and north border of the property; federal and state regulated wetlands are located on site. Portions of the site are within an archeologically sensitive area, as well as a flood plain.

Under the NYS Existing Building Code, the renovation for this project would be classified as Alterations Level 3. The requirements for Level 3 Alterations come into play when more than 50% of the existing building is being renovated. Little to no renovation work has been done to

the original building as it stands now, with the exception of a roof renovation project completed in 2010. All building windows, interior floor finishes, doors, ceilings and building systems would need to be replaced, bringing it beyond the 50% replacement threshold. Due to the amount of renovations needed at this facility, providing a full building sprinkler system would allow for unlimited fire areas and therefore no fire walls would be required where new additions meet the existing building footprint.

The original building is constructed of masonry bearing walls between classrooms. The roof system for this section of the building is bulb tees and tectum deck. The classroom wing additions are oriented in plan as a double loaded central corridor. The metal roof deck spans from the exterior end wall to the interior classroom wall and then continues to span from interior classroom wall to interior classroom wall. The roofs are sloped with generally wide overhangs.

Asbestos within this facility is present at the exterior door glazing and caulk compounds. The exterior windows contain asbestos caulk and glazing compounds. The plaster ceilings at some of the entrances and vestibules are also asbestos containing. Within the interior of the facility, asbestos is found in the floor tile and mastic throughout the classrooms and corridors, some door glazing compound, and thin set mortar in the Brighton Recreation wing. There is also thermal systems insulation (TSI) in the walls and mechanical trenches.

Existing Mechanical Systems Description

HVAC Systems

Heating Systems

The existing boiler plant consists of two (2) cast iron sectional boilers that were installed in 1997. The boilers' burners are configured for dual fuel operation (natural gas/#2 fuel oil); however currently only operate on natural gas. The boilers are in good working condition and have an additional life expectancy of approximately 20 years.

The space temperature conditions in the Boiler Room were observed to be very hot. The existing combustion air systems should be reviewed and capacity increased as required to comply with the current code.

The building heating pumps were replaced with boilers as part of the 1997 Capital Project. The pumping systems are configured for a primary / secondary arrangement. The primary loop is constant volume and serves the boilers. The secondary loop is variable volume and serves the building heating equipment. The pumps have an additional life expectancy of approximately 10 years.

The original heating piping distribution systems were installed in 1956, with major renovations in 1983 and 1997. The majority of the piping systems is copper and appears to be in good condition. The heating system isolation valves installed as part of the original 1956 construction have exceeded their useful life expectancy and should be replaced.

Air Conditioning Systems

The majority of the Classroom and Office spaces in the building are provided with window air conditioning units. The air conditioning units are in good working condition; however system efficiency and distribution are limited.

Air Handling Systems and Terminal Equipment

The majority of the spaces in the West Wing of the building were renovated as part of a Capital Project conducted in 1983. The rooms are heated and ventilated by a combination of console unit ventilators and perimeter radiation. This equipment is not currently tied into the building DDC system. The unit ventilators are reaching the end of their useful life and do not comply with the New York State Education Departments noise requirements.

The Multi-Purpose room is heated and ventilated by a constant volume air handling unit and powered relief fan. The powered relief fan system is original to the building construction. The air handling unit was installed as part of the 1983 Capital Project. The ductwork distribution systems for the space consist of sidewall registers located under the stage floor system. This distribution system is limited providing increased noise to the space and poor airflow distribution. The air handling unit and relief fan are approaching the end of their useful life.

The majority of the rooms in the North Wing of the building are heated and ventilated by the window induction units. Primary airflow to the induction units is provided by a heating and ventilating only air handling unit. These systems were installed in 1963 and have exceeded their useful life.

The Gymnasium space is heated and ventilated by the same air handling unit that serves the North Wing. Reheat coils are provided in the ductwork mains to the space. Airflow distribution is achieved by side wall registers. Similar to the Multi-Purpose room, the airflow distribution systems to the Gym are limited.

The East Wing of the building is heated and ventilated by a constant volume air handing unit. Each room is provided with a dedicated reheat coil. The airflow distribution systems are routed under the floor systems and distributed to the space by supply registers in the sill systems of the exterior walls. Return air is achieved through transfer grilles into the corridor. The airflow distribution systems are dirty and the airflows rates to the rooms are limited. These systems have reached the end of their useful life.

A handful of the spaces in the East Wing of the building is provided with perimeter radiation. The radiation is original to the building construction and is not tied into the building DDC system.

There are currently occupied spaces in the building that are not mechanically ventilated. These spaces are not in compliance with the ventilation requirements of the NYS Mechanical Code or the State Education Department.

Exhaust Systems

The main kitchen hood exhaust system was installed in 1963 and does not have an ansul system. It does not appear that the hood system is used, as the cooking equipment has been removed from this space.

The Lounge off from the Gymnasium currently has two (2) residential style ranges. These ranges do not have exhaust hoods and are not in compliance with the NYS Mechanical Code.

The majority of the toilet exhaust fans were installed as part of the original construction, the 1963 and 1983 Capital projects. These systems have reached the end of their useful life and do not meet current ventilation requirements.

Building Control Systems

The building has a pneumatically controlled system, with a portion controlled by DDC. A full investigation of the pneumatic system, including a compressor run time test, should be completed to properly evaluate the distribution system. Numerous unit ventilators, radiation and air handling systems are stand-alone and are not currently tied into the DDC system.

Electrical Systems

Site Electric

Existing site electric is underground to a transformer vault inside the building. The vault is locked and can only be access by RG&E. RG&E will require that this be located outside the building. Existing secondary is 208v/120.

Site Lighting

The existing site lighting is the original HID type pole fixtures; lacking in quantity.

MDP

The existing MDP is the original 800A, 208/120, EPCO system. Panel board is obsolete.

Secondary Panels

Most of the existing secondary panels are original and obsolete EPCO panels. Emergency secondary panels are newer.

Fire Alarm System

The existing fire alarm system is a hardwired system Simplex 4020. There are no strobes in the classrooms and, coverage is lacking in the corridors and large spaces.

Building Wide and Paging

There is an older analog system that is not working properly. Speakers are wired in series to minimizing zoning.

Master Clock

The master clock system is an older hardwired 24v synchronous system.

Emergency Generator

The existing generator is an exterior grade 45kw Natural Gas generator. Manufacturer is Onan and has two (2) ATS with emergency lighting and boiler plant on it. Life safety ATS is located in same room as MDP and needs to be relocated. The generator may need to be upsized to handle any additional loads.

Emergency Lighting

Some of the exit discharge lighting was replaced recently. Various egress lighting in corridors is lacking. Large space emergency lighting requires additional fixture units.

Lighting

Most of the classroom lighting is T-12 fluorescent lighting. There are some spaces with incandescent and T-8 lighting. The gym lighting consists of fluorescent lighting.

Technology

Currently there are no known data closets within the building. Various rooms have dedicated local carrier telecommunications services within the rooms.

Security

Intrusion detection system is an older type, with motion detectors and key pad at front door. There is no audio entry or access control.

Plumbing System

Sanitary System

The existing sanitary system in the 1956 building is below slab on grade and condition is unknown. Piping is nearly 60 years old and is approaching the end of its useful life. The mains generally run in the center of the wing it serves. Camera scoping would be required if intending to try and re-use.

The interior kitchen grease interceptor is dedicated only to a 2 bay sink.

Storm System

The existing storm system is primarily gutters and downspouts with an occasional roof drain on smaller flat roofs. The observed roof drain piping is copper and appears to be in good condition.

Natural Gas System

There is one gas service for the school with the gas meter located in a gas house at the Southeast end of the building. The piping runs above ceilings to the boiler room to serve boilers, water heaters and the emergency generator. The generator does not have a dedicated gas line upstream of all other connections from the gas meter as required. Piping is in good condition.

Domestic Water System

There is one 4" domestic water service that enters the building in the water meter room at the Southeast corner of the building. There is a 2" water meter and RPZ backflow preventer assembly on this service. Piping increases back to 3" to serve the building. Domestic piping in

the1956 building runs in trenches at the perimeter of the building and is inaccessible. The District has requested these be abandoned and run new piping above ceilings.

There are two water heaters in the boiler room.

Water Heater #1 (South): 1993 Non ASME rated 75 gallon. SED requires ASME rated water heaters. The water heater is at the end of its useful life.

Water Heater #2: (North) 2006 Non ASME rated 50 gallon. SED requires ASME rated water heaters. The water heater will be nearing the end of its useful life.

All observed domestic piping in the boiler room is copper and appears to be in good condition.

There does not appear to be any hot water mixing valves to meet ANSI standards to prevent scalding.

There are no emergency eyewashes in the boiler room as required by SED.

Fire Protection System

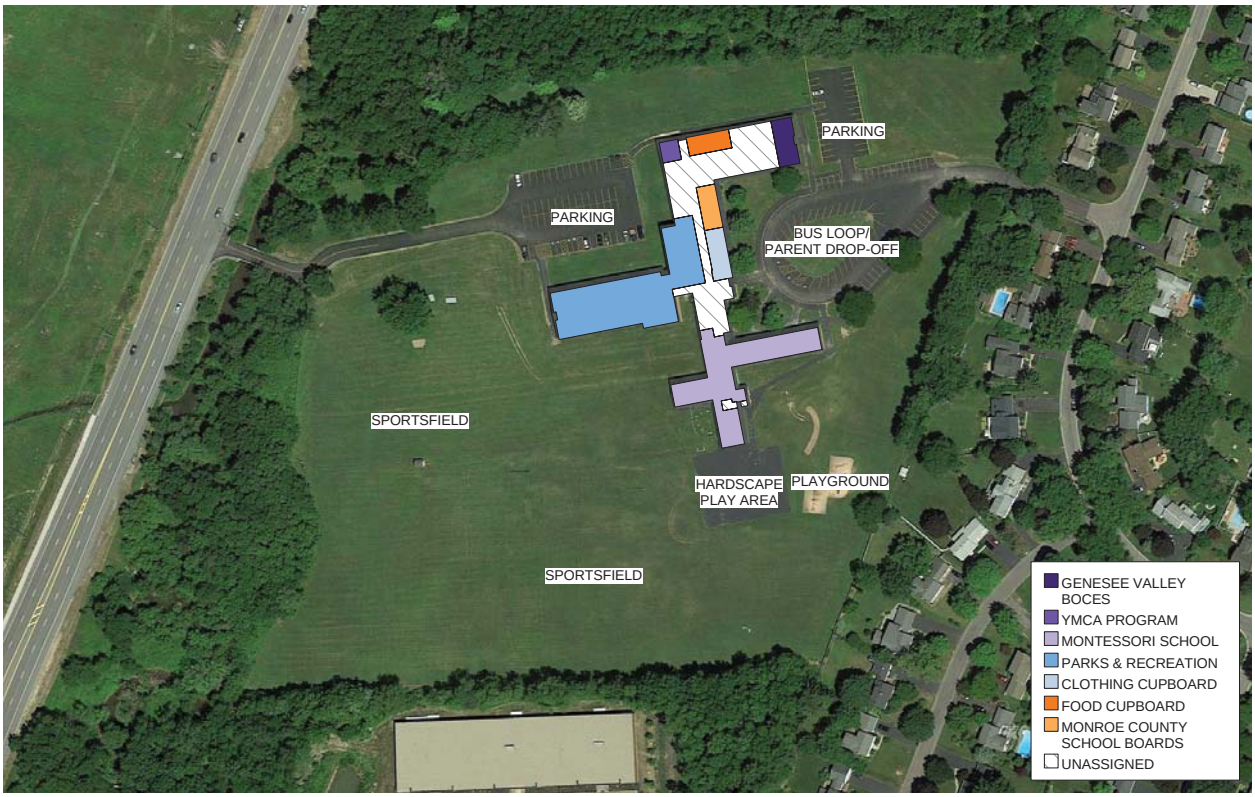
There is no dedicated fire protection system. There are no sprinklers in the building.

Plumbing Fixtures

Plumbing fixtures are original non water conserving type and are approaching the end of their useful life.

Brookside School

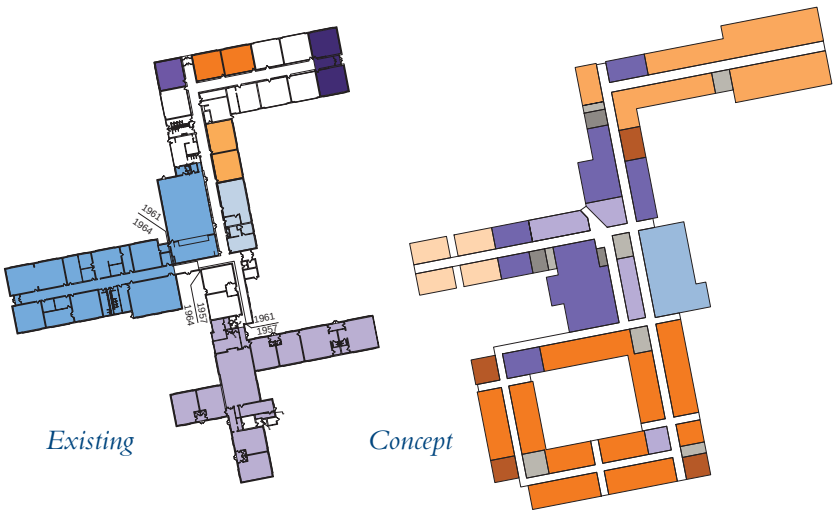
CONCEPTUAL OPTIONS



Brookside - Option #1

Architectural and Structural

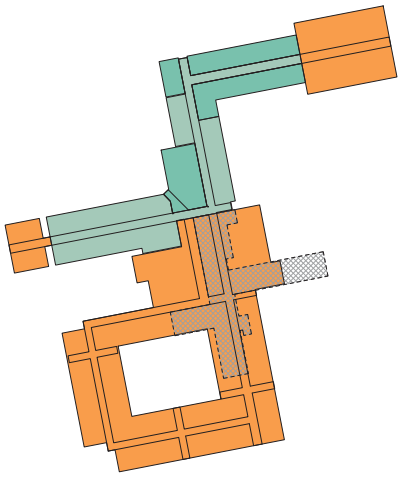
This option demolishes the original 1957 building. The existing classroom circulation layout is inappropriate for the desired use and demolishing this portion of the building will be more cost effective than manipulating the floor plan into a traditional double loaded corridor classroom layout. By demolishing this portion of the building, it provides a plan layout that efficiently locates new program spaces. This site currently has two vehicular street entrances, therefore this option shows two entrances that combine into an interior gathering space hub. This gathering space hub will have adjacent core functions of program. This includes the Main Office, 2 new Gymnasium spaces plus a renovated Multi-Purpose Room, a new Cafeteria and Kitchen. This option places these program spaces in what is currently the center of the building allowing for better student access. The north wing would be converted into the new all-day Kindergarten wing with the addition of 8 classroom spaces. A two classroom addition to the current east wing would then house the Pre-Kindergarten program spaces. Pre-Kindergarten at the end of the east wing provides an option for a separate entrance. This option provides a square shaped classroom configuration within the new construction wing. This wing would house the 14 classroom 1st and 2nd Grade classes. This layout provides improved circulation by allowing for a full loop corridor which is adjacent to the programs core functions.



Site

This site allows the flexibility of multiple access and parking variations, including access and parking for all vehicles from Winton Road. Depending on the level of traffic desired to be directed to South Winton Road, the bus loop, providing access and spaces for 19 buses, may be placed in the rear of the building. In this case, the bridge crossing Allen's Creek to South Winton Road will be expanded to two exit lanes and one entrance lane. All 177 parking spaces will be in the front of the building replacing the existing bus loop. If the bus loop is to remain at the front of the school, parking will remain at the rear of the school and additional parking will be added to the front of the school to provide a total of 177 parking spaces. An area for parents to drop off and pick up children will be provided for either choice at the front of the school to avoid interfering with other traffic, along with an access road connecting the front and rear entrances to facilitate access to and from either side of the school. New concrete sidewalks will replace all existing asphalt sidewalks around the entirety of the proposed bus loop and around the outside of the building to allow for safe access to the school. Two playgrounds are to be added (1 Pre-K south of the bus loop and 1 Elementary in the southeast corner of the property) along with hardscape play areas attached to each. These will replace the one existing playground. Three existing sports areas will remain on site as shown.

RENOVATION LEVELS



Low Level Renovation (0 SF)**:**
- Painting of interior space
- New ACT Ceilings
- No Asbestos work
- No flooring replacement

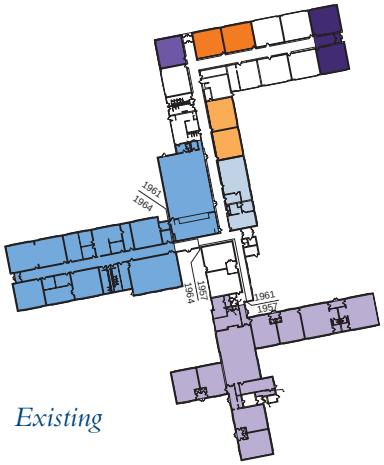
Medium Level Renovation (24,600 SF)**:**
- Low Level Renovation Work
- Demolition and new partition layout of space
- Casement for New layout
- Abatement of Classroom and Corridor Floors
- Replacement of flooring

High Level Renovation (16,000 SF)**:**
- Low Level Renovation Work
- Medium Level Renovation Work
- Structural Alterations @ Masonry Bearing walls
- Council Rock – Removal of stationary seating and Infilling of sloped Auditorium floor

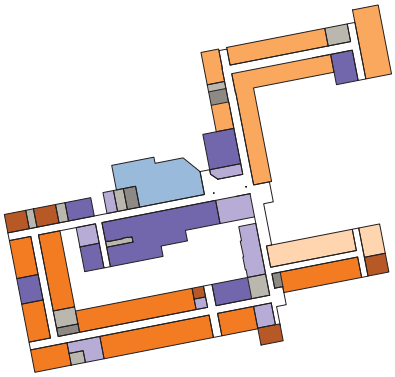
New Construction (93,000 SF)

Demolition (16,192 SF)

Brookside - Option #2



Existing



Concept

Architectural and Structural

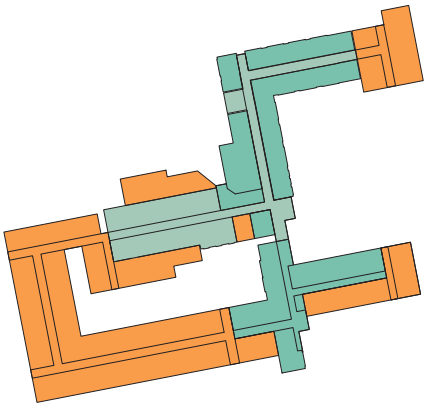
The original 1957 building plan would remain in this option. To make this wing functional, a new corridor would be carved out of the existing classrooms and, classroom additions would be added adjacent to these new corridors. This site currently has two vehicular street entrances; therefore this option also shows two entrances; one off the existing bus loop and one off the existing parking area. These two entrances combine into a gathering space hub within the floor plan. Adjacent to the gathering space hub will be the core functions of program. This includes the Main Office, 2 new Gymnasium spaces plus a renovated Multi-Purpose Room, a new Cafeteria and Kitchen. This option places these program spaces in what is now is the center of the building allowing for better student access. The north wing would be converted into the new all-day Kindergarten wing with the addition of 3 classrooms. The existing west wing would then house the Pre-Kindergarten program spaces and some of the 1st and 2nd Grade classrooms. This Option shows an "L" shaped classroom addition, to the south and east. This wing would house the majority of the 1st and 2nd Grade classroom spaces. This layout provides improved circulation by allowing for a full loop corridor which is adjacent to the programs core functions.

Site

This site allows the flexibility of multiple access and parking variations, including access and parking for all vehicles from Winton Road. Depending on the level of traffic desired to be directed to South Winton Road, the bus loop, providing access to 19 buses, may be placed in the rear of the building. In this case, the bridge crossing Allen's Creek to South Winton Road will be expanded to two exit lanes and one entrance lane. All 177 parking spaces will be in the front of the building, replacing the existing bus loop. If the bus loop is to remain at the front of the school, parking will remain at the rear of the school, and additional parking will be added to the front of the school to provide a total of 177 parking spaces. An area for parents to drop off and pick up children will be provided for either choice at the front of the school to avoid interfering with other traffic, along with an access road connecting the front and rear entrances to facilitate access to and from either side of the school. New concrete sidewalks will replace all existing asphalt sidewalks around the entirety of the proposed bus loop and around the outside of the school building as shown to allow for safe access to the school. Two playgrounds are to be added (1 Pre-K and 1 Elementary) at the south end of the school. The existing hardscape play area between the two playgrounds will remain. Three existing sports areas will remain on site as shown.

- **PRE-K CLASSROOMS** (4)
- **KINDERGARTEN CLASSROOMS** (14)
- **1-2 CLASSROOMS** (28)
- **SPECIAL EDUCATION** (4)
- **SPECIALS**
- **CAFETERIA**
- **INSTRUCTIONAL SUPPORT**
- **MECHANICAL**
- **STORAGE**
- **TOILET ROOMS**

RENOVATION LEVELS



Low Level Renovation (0 SF)**:**
- Painting of interior space
- New ACT Ceilings
- No Asbestos work
- No flooring replacement

Medium Level Renovation (21,000 SF)**:**
- Low Level Renovation Work
- Demolition and new partition layout of space
- Casement for New layout
- Abatement of Classroom and Corridor Floors
- Replacement of flooring

High Level Renovation (37,000 SF)**:**
- Low Level Renovation Work
- Medium Level Renovation Work
- Structural Alterations @ Masonry Bearing walls
- Council Rock – Removal of stationary seating and Infilling of sloped Auditorium floor

New Construction (75,600 SF)

Brookside Elementary School - Conceptual Options

SWBR has developed two Options at the former Brookside School using the following provided program:

Architectural/Structural

Modernize the existing facility and increase the square footage of the building by adding additions to accommodate the new Pre-Kindergarten through 2nd Grade program spaces. The new program consists of 4 Pre-Kindergarten classrooms and 14 classrooms per grade level at the primary level for full day Kindergarten through 2nd Grade. The targeted operating capacity is 772 students. The total requested building program square footage is 133,100 square feet.

Site

Design a bus loop to accommodate 19 full size buses. Provide parking spaces for a minimum of 165 staff and visitors cars. Provide two playground areas and one asphalt play surface. Provide a minimum of one play field for physical education classes. Add locations for two dumpsters, a transformer pad, chillers and generator.

Heating Ventilcation and Air Conditioning

Heating Systems

The existing boiler plant is in good operational condition and has an additional estimated life expectancy of approximately 15 to 20 years.

The boiler plant is adequately sized for the existing square footage at the Brookside Campus. Adding a burner management system to maximize operational efficiency of the boilers is a viable option. Increasing the combustion air to the Boiler Room will be necessary to comply with code requirements.

The existing boiler plant is not adequately sized to accommodate substantial building additions. Adding the proposed additional square footage to the building will require additional heating capacity. Due to the age of the existing boilers, it is recommended to keep the boilers and add an additional boiler. The proposed boiler should be a high efficiency condensing style boiler to maximize energy efficiency and minimize utility costs. The boiler plant controls would be configured to utilize the new high efficiency boiler as the first source of heat.

If building additions are made, both primary and secondary pumping systems would be replaced. Larger pumps would be provided to accommodate the additional boilers. VFD's would be provided for the pumping systems to maximize system efficiencies.

New piping mains would utilize the corridor ceiling space for routing pathways.

Air Conditioning Systems

The District has requested two (2) options for areas to be air conditioned. The first option would include spaces with twelve month usage only. The spaces include; Special Education Classrooms, Resource Rooms, Counseling Offices, Main Office Suite, Nurse Office Suite and the Multi- Purpose Room. The second option would include air conditioning of the entire building.

The proposed system for the first option (twelve month space usage) would be a Variable Volume Refrigerant system (VRV). This system maximizes system efficiency while providing low installation costs. This option also eliminates the requirement for a chilled water plant and would decrease potential noise concerns created from a chiller system. This option would also provide these spaces with supplemental heat for the heating season.

The proposed system for the second option (entire building) would be to provide a central chiller plant. An air cooled chiller plant is proposed in lieu of a water cooled plant. The air cooled plant would be slightly less efficient, however would be less maintenance to the District and provides more operational flexibility. Premium efficiency chillers utilizing VFD's on the compressors would be utilized.

An ice storage system would be incorporated into the chiller plant. This concept allows the District to operate the chillers during the off peak demand electrical periods. The chillers would be utilized to create ice at night. The ice is then utilized to cool the chilled water systems during the day.

The existing Boiler Room does not have adequate space; therefore a dedicated Mechanical Room would be required to house the chilled water plant. Similar to the building heating plant, chilled water pumps and a new piping distribution system would be required. The system would utilize 2-way control valves and VFD's to maximize system efficiency. The corridor ceilings would be utilized for routing of the piping systems.

A cursory review of a geothermal heat pump concept for this site was conducted. The initial cost of

geo-thermal wells for this application are prohibitive. The estimated cost of the geothermal well field would be in the range of $850,000 to

$1,000,000. This cost would be in addition to the total HVAC system. The District would not receive a suitable pay back in energy savings and NYSERDA incentives to pursue this option.

Air Handling Systems and Terminal Equipment

The existing heating and ventilating systems through-out the building are either original to the building construction, are not code compliant in current application, are not adaptable for air conditioning or have reached the end of their useful life. These systems should be replaced.

One system option is chilled beam terminal units with energy recovery air handling systems for the Classroom, Lounge and Office Spaces. High efficiency filters and premium efficiency motors would be utilized in the air handling systems.

This system provides the District with an energy efficient solution that provides individual room control at minimal noise distribution. The chilled beam application minimizes the size of the air handling units and associated ductwork systems, allowing for application in the tight constraints of the existing building conditions. This application also allows the District the flexibility to add future cooling if not desired at the current time.

Another system option is a displacement ventilation system with energy recovery air handling systems for the Classroom, Lounge and Office Spaces. Similar to the chilled beam concept, these air handling systems would be provided with high efficiency filters and premium efficiency motors.

The displacement ventilation system discharges low velocity airflow at the floor levels. The low velocity airflow spreads out across the floor and displaces the warmer, stale air to the ceiling level. Advantages to this system include low velocity discharge resulting in noise reduction; warmer discharge air can be utilized as the discharge is at the occupant and not at the ceiling levels. Discharging warmer air to the spaces provides the District with energy savings on the chilled water systems.

The corridor ceiling space can be used for routing of the ductwork distribution systems. Soffit systems would be required to accommodate routing of the systems through areas of low structure.

If the District prefers the first option of cooling (twelve month space usage), the chilled beam systems for these spaces would be replaced with the previously proposed VRV systems. Additional energy recovery units would be provided to add ventilation.

Central station air handling units would be provided for the Gymnasiums, Auditorium and Cafeteria spaces. New ductwork systems would be provided to meet current ventilation code requirements, improve airflow distribution and decrease system noise. Demand control ventilation, energy recovery and VFD's would be provided on these systems to improve ventilation while reducing energy consumption to the District. Similar to the chilled beam systems, the central station systems would be designed for cooling. This gives the District the ability to add air conditioning as part of the proposed project or at a future time.

Solar wall systems can be incorporated into the building design. The solar wall systems would be utilized to preheat the ventilation air systems prior to being introduced to the air handling systems. This concept reduces load to the heating systems, ultimately decreasing energy usage for the District.

New radiation, cabinet heaters and unit heaters would be provided through-out the building.

Exhaust Systems

A new grease hood system with a complete ansul fire extinguishing system would be required to accommodate a new kitchen space. The hood system would be provided with a roof mounted exhaust fan and make up air unit.

The toilet exhaust fan and ductwork systems through-out the building should be replaced. New roof mounted systems would be installed, providing ventilation to meet the current code requirements. ECM motors should be utilized for maximum efficiencies. Additional transfer air systems would be provided to improved airflow to the spaces.

Additional exhaust systems would be provided to specialized rooms such as Art Rooms, Faculty Lounges and Custodial Spaces.

Building Control Systems

Due to the proposed replacement and expansion of the HVAC systems, existing pneumatically controlled DDC system should be removed and replaced with a new electronically controlled DDC system. As part of the system replacement, the DDC front end would be upgraded to the most current Andover system.

All HVAC systems will be controlled by the building's DDC system to maximize system efficiencies. Additional systems such as domestic hot water plants and exterior lighting systems would also be controlled. Finally, metering of the electrical and gas systems would be implemented to aid the District.

Electrical Systems

Site Electric

RG&E will require that this be located outside the building on a concrete pad if the MDP is replaced per a UL inspection. Replace service with larger pad mounted transformer; revise secondary to be 480/277 to accommodate future building wide AC and additions.

Site Lighting

Replace and add pole fixtures with new LED type.

MDP

Replace MDP panel with larger panel (480v/277) to accommodate large chiller loads, additions and additional building wide AC equipment.

Secondary Panels

Replace all secondary panels with step down transformers to accommodate 208v/120 equipment and power. Utilize 277v panels for lighting. Add computer panels with TVSS (Transient Voltage Surge Suppression) system for all computer related panel power.

Fire Alarm System

Replace fire alarm system with a point addressable system, add strobes to all classrooms and bring coverage up to code.

Building Wide and Paging

Replace building wide and paging system; dedicated speaker runs to each classroom. IP module at head end for out of building calls.

Master Clock

Replace with a wireless, GPS system, tied into building wide paging and intercom system bell tones. Clocks shall be 120v and hardwired.

Emergency Generator

Replace and upsize the generator to accommodate the additional emergency loads. Locate life safety loads (emergency lighting, exits and FACP) and life safety ATS into separate 2 hour rated room from MDP. Add boiler plant, refrigeration units with in kitchen, data closets, security systems and additional school requested loads.

Emergency Lighting

Replace all interior emergency lighting with new LED type. Designate various path of egress and discharge lighting to emergency generator.

Lighting

Replace all interior lighting with new dimmable LED type. Provide day-lighting controls in each classroom.

Technology

Add approximately three (3) data closets to accommodate future additions. Provide equipment for a 10G network with Cat.6 cabling and new hardware. Separate security (IPCCTV) from data network as much as possible with dedicated patch panels and, separate color cabling for WAP, IPCCTV, VOIP and data network drops.

Security

Add an access control system with proximity readers at designated various exterior doors. Create a single point entry system with Audio entry, IP CCTV and visitor management system within the building/main office area to accommodate visitors. Replace Intrusion detection system with updated system.

Plumbing System

Sanitary System

Provide a complete new underfloor cast iron hub and spigot sanitary system. Saw cutting and patching required for all work in the existing building. Provide a supporting vent system. Underfloor piping is to be cast iron hub and spigot with copper DWV above floor.

Provide an exterior grease interceptor with alarm system for the kitchen.

District should consider PVC piping below floor.

Storm System

The majority of the new storm system should be gutters and downspouts. Provide new roof drains and cast iron no hub piping above floor with cast iron hub and spigot below floor for flat roofs.

District should consider PVC piping below floor.

Natural Gas System

Relocate the gas service entrance and interior piping as required for existing building reconfigurations and additions. Upsize piping and pressures as required to support building additions. Provide a dedicated gas line to the emergency generator. Run all new piping in ceiling spaces. All piping is to be scheduled 40 black steel.

Domestic Water System

Relocate the water service entrance and interior piping as required for existing building reconfigurations. Upsize interior piping as required to support building additions. Provide all new piping and run in ceiling spaces. Provide new backflow preventers on the main service and boiler make-up piping. All piping is to be copper.

Provide one hot water heating system consisting of two high efficiency water heaters, two vertical storage tanks, a mixing valve and circulators as required. The system will serve all areas of the school.

Fire Protection System

Provide a dedicated fire protection system from the street main and full sprinkler system for the existing building and additions.

Plumbing Fixtures

Provide new water conserving fixtures throughout the existing building and additions. Provide connections to all new kitchen equipment. All faucets and flush valves are to be manually operated. Faucets are to be the metering type. District should consider sensor operated for either.

Brookside School

Parcel Size: 21.80 acres

Site Opportunities and Constraints

Item	Existing	Required/Proposed	Comment
Parking Spaces	152	177	25 additional spaces
Bus Drop-off/Pick-up (# buses accommodated)	2	19	Currently little traffic. Need to enlarge drop-off area
Parent Drop-off/Pick-up	No	Yes	Designated area with entry off Idlewood Road
# Soccer/Football/Lacrosse fields	3	3	Soccer, Mixed use
# Playgrounds	1	3	1 Pre-K, 1 Elementary, 1 Hardscape

Utility Summary

Utility	Existing	Expansion Impacts / Comments
Sanitary Sewer	10” Main along Idlewood Road; 10” Service along entrance road	Sanitary service would likely need to be relocated under both Options 1 and 2
Water	8” Main along Idlewood Road; 6” Service along entrance road	No impact from either option
Storm Sewer	15” pipe directing storm water off-site to Allen’s Creek	No impact to existing storm water piping from either option New piping installed for drainage of increased impervious area

SEQRA Agencies

Agency	Involved	Interested	Comment
Brighton Central School District			Lead Agency
State Education Dept	X		Plan Approval
Monroe County Health Department	X		Plan Approval
Monroe County Pure Waters	X		Plan Approval
Monroe County Water Authority	X		Plan Approval
Brighton Sewer Department	X		Plan Approval
Rochester Gas & Electric	X		Provide Service
NYS Dept of Environmental Conservation (SPDES)	X		SPDES Permit
NYS Dept of Environmental Conservation (Wetlands)	X		Permit needed if bridge to be reconstructed/creek disturbed
US Fish and Wildlife Service	X		All Clear Letter required
NYS Historic Preservation Office (SHPO)	X		All Clear Letter required
US Army Corp of Engineers	X		Permit needed if bridge to be reconstructed/creek disturbed
Monroe County Dept of Transportation	X		Plan Approval
NYS Dept of Transportation		X	
Town of Brighton	X		Flood Plain Administration, Sanitary Sewer Permits
Brighton Ambulance		X	
Brighton Fire Department		X	
Brighton Police Department		X	
Monroe County Planning and Development Department		X	
Monroe County Sheriff		X	

Wetlands/SHPO

Item	Comment
U.S. Fish and Wildlife Service National Wetlands Inventory	National wetlands present on the west and north borders of the property along Allen's Creek.
NYSDEC regulated wetlands	State wetlands present along Allen's Creek with 100' offset (Classified Stream).
NYS Historic Preservation Office (SHPO)	SHPO GIS Mapper shows property in Archeo Sensitive Area. Further archeological investigation will be required.
FEMA Flood Plain	Flood Plain along East and North Property Borders. Flood Plain encroaches almost up to building along entire North side.

Soil Notes

Topsoil approximately 6" deep. Soil mainly silty, some clay. Groundwater located approximately 2 feet down.

Utility Detail

Utility	Comment
Sanitary Sewer	The sanitary sewers are owned and maintained by the Town of Brighton Department of Public Works. A 10" sanitary main runs along Idlewood Road. The 10" service to the building runs down the entrance road and enters at the Northeast and Southeast wings of the building.
Water	The water main is owned and maintained by Monroe County Water Authority. The 8" water main runs along Idlewood Road. The 6" water service runs up the access road and provides service to the school at the southernmost wing. The water service is owned and maintained by Union Free School District
Storm Sewer	Storm sewers are owned and maintained by the Town of Brighton Department of Public Works. Storm sewers run around the entrance loop, run under the building, and run along the West side of the building. Storm water is directed to the system by catch basins located throughout the site. Storm water is directed to Allen's Creek near the northwest corner of the property by a 15" pipe.
FEMA Flood Plain	Flood Plain along East and North Property Borders. Flood Plain encroaches almost up to building along entire North side.

Pavement Notes

Locations	Comment
Entrance from Winton Road	Fair to poor condition. Longitudinal cracking and alligator cracking.
Northwest Parking Lot	Fair to poor condition. Heavy cracking and settling.
Bus loop	Poor condition. Cracking. Provide under drainage.
Parking lot off bus loop	Fair Condition. Cracking. Provide under drainage. Severe alligator cracking at entrance to parking lot from bus loop.

Access to Winton Road:

If a bus loop at the west end of the building is desired, the bridge providing access to Winton Road will need replacement. Due to the wetlands in the area, this will require New York State Department of Environmental Conservation and Army Corps of Engineers approval. The bridge will need to be widened to facilitate two exit lanes and one entrance lane, along with sidewalks and/or bike paths. A southbound left turn only lane on Winton Road may also be desired, along with a traffic signal to facilitate the added bus traffic. It is suggested that a traffic study and impact analysis be conducted to assess the effects of any of these changes.

VI. Cost Projections

COUNCIL ROCK OPTIONS	COUNCIL ROCK		W/ FULL BLDG A/C	
	Option 1	Option 2	Option 1	Option 2
	Total	Total	Total	Total
Building Area (sf)	133,100	134,600	133,100	134,600
BUILDING COSTS				
Architectural / Structural / Asbestos	11,989,000	12,465,000	11,989,000	12,465,000
Plumbing	1,560,000	1,560,000	1,560,000	1,560,000
HVAC	4,767,000	4,767,000	5,989,500	5,989,500
Electrical	2,909,000	2,909,000	3,308,000	3,308,000
Design and Construction Contingency	4,245,000	4,340,200	4,569,300	4,664,500
Building Escalation (9%)	2,292,300	2,343,708	2,467,422	2,518,830
SUB-TOTAL BUILDING COST	27,762,300	28,384,908	29,883,222	30,505,830
INCIDENTAL COST				
Site Work	2,340,000	2,340,000	2,340,000	2,340,000
Furniture & Equipment	500,000	500,000	500,000	500,000
Lease Swing Space	3,240,000	3,240,000	3,240,000	3,240,000
Move Costs	150,000	150,000	150,000	150,000
Soft Costs	5,552,460	5,676,982	5,976,644	6,101,166
Incidental Contingency	2,356,492	2,381,396	2,441,329	2,466,233
Incidental Escalation (9%)	1,272,506	1,285,954	1,318,318	1,331,766
SUB-TOTAL INCIDENTAL COST	15,411,458	15,574,332	15,966,291	16,129,165
GRAND TOTAL PROJECT COST	**43,173,758**	**43,959,240**	**45,849,513**	**46,634,995**
Rounded	**43,200,000**	**44,000,000**	**45,800,000**	**46,600,000**

BROOKSIDE OPTIONS	BROOKSIDE		W/ FULL BLDG A/C	
	Option 1	Option 2	Option 1	Option 2
	Total	Total	Total	Total
Building Area (sf)	133,600	133,600	133,600	133,600
BUILDING COSTS				
Architectural / Structural / Asbestos	21,063,000	19,206,000	21,063,000	19,206,000
Plumbing	2,160,000	2,160,000	2,160,000	2,160,000
HVAC	4,767,000	4,767,000	5,989,500	5,989,500
Electrical	3,059,000	3,059,000	3,458,000	3,458,000
Design and Construction Contingency	6,209,800	5,838,400	6,534,100	6,162,700
Building Escalation (9%)	3,353,292	3,152,736	3,528,414	3,327,858
SUB-TOTAL BUILDING COST	40,612,092	38,183,136	42,733,014	40,304,058
INCIDENTAL COSTS				
Site Work	3,029,091	3,029,091	3,029,091	3,029,091
Furniture & Equipment	775,000	775,000	775,000	775,000
Lease Swing Space	-	-	-	-
Move Costs	75,000	75,000	75,000	75,000
Soft Costs	8,122,418	7,636,627	8,546,603	8,060,812
Incidental Contingency	2,400,302	2,303,144	2,485,139	2,387,981
Incidental Escalation (9%)	1,296,163	1,243,698	1,341,975	1,289,509
SUB-TOTAL INCIDENTAL COSTS	15,697,974	15,062,559	16,252,807	15,617,392
GRAND TOTAL PROJECT COST	**56,310,066**	**53,245,695**	**58,985,821**	**55,921,450**
Rounded	**56,300,000**	**53,200,000**	**59,000,000**	**55,900,000**

VII. Building Aid Considerations

Building Aid is available for expenses incurred in construction of new buildings, additions, alterations or modernization of district-owned buildings. The key factors in determining the building aid for a project is summarized below:

Pupil Capacity of the Building

The pupil capacity of the building is assigned to the project by the Facilities Planning Unit using prescribed formulas which can be used in modeling by architects and financial planners.

Estimated Construction and Incidental Cost

Construction costs are for major contracts (general construction, heating and ventilating, plumbing, and electrical), while incidental costs are for such items as site development, original equipment, furnishings, machinery or apparatus, and professional fees.

Maximum Cost Allowances

A maximum construction cost allowance for each building project is computed by multiplying a pupil construction cost allowance figure, adjusted for regional cost differences, by the assigned pupil capacity for the building. The maximum incidental cost allowance is 20 percent of the maximum construction cost allowance for K-6 buildings.

Bond Percent

To aid debt service expenditures associated with projects a bond percent is calculated to determine the aidable portion of the expense. The bond percentage is derived from the ratio of total approved cost allowances to the total principal borrowed. Based on the estimated construction and incidental costs provided for in Section VI. Cost Projections, the range of the bond percentage for the Council Rock Options are 34.2% to 36.6%. For the Brookside Options the bond percentage drop to a range of 28.1% to 30.0%.

The difference in the bond percentage between the different options is directly related to the amount of construction required compared to the maximum allowances for each building.

Building Aid Ratio

Building Aid equals approved building expenses, multiplied by the higher of the Building Aid Ratio computed by the State. For Brighton the current aid ratio is 73.7%, which would be applied to approved debt service costs, only.

(The impact that any one of the options discussed will have on the school district's levy and tax rate can be influenced by multiple factors that is outside the scope of SWBR's review. We recommend sharing the data and information provided in Section VI with the district's financial consultant to build a financial impact analysis.)

	Council Rock Options				Brookside Options			
	Without Air Conditioning		With Air Conditioning		Without Air Conditioning		With Air Conditioning	
VOTER AUTHORIZATION:	**$46,200,000**	**$47,100,000**	**$49,100,000**	**$49,900,000**	**$60,300,000**	**$57,000,000**	**$63,100,000**	**$59,900,000**
1. EXPENSES:								
Project Costs (Construction & Incidentals):	$ 43,173,758	$ 43,959,240	$ 45,849,513	$ 46,634,995	$ 56,310,066	$ 53,245,695	$ 58,985,821	$ 55,921,450
DASNY Fees:	1,220,000	1,240,000	1,285,000	1,305,000	1,560,000	1,480,000	1,625,000	1,545,000
Capitalized Interest Expense:	1,806,242	1,900,760	1,965,487	1,960,005	2,429,934	2,274,305	2,489,179	2,433,550
TOTAL EXPENSES:	**$ 46,200,000**	**$ 47,100,000**	**$ 49,100,000**	**$ 49,900,000**	**$ 60,300,000**	**$ 57,000,000**	**$ 63,100,000**	**$ 59,900,000**
2. REVENUES:								
Capital Reserves:	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bonding Amount:	46,200,000	47,100,000	49,100,000	49,900,000	60,300,000	57,000,000	63,100,000	59,900,000
TOTAL REVENUES:	**$ 46,200,000**	**$ 47,100,000**	**$ 49,100,000**	**$ 49,900,000**	**$ 60,300,000**	**$ 57,000,000**	**$ 63,100,000**	**$ 59,900,000**
3. ESTIMATED BOND PERCENTAGE:	36.6%	36.6%	34.2%	34.2%	28.1%	30.0%	26.6%	28.3%
4. 2014-15 ESTIMATED BUILDING AID RATIO:	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%

VIII. Phasing Approach and Schedule

COUNCIL ROCK (With 1 Grade In Building During Construction)	
Activity:	Duration
Pre-Referendum	8 months
Design	9 months
SED Review	8 months
Bid for Construction	1 month
Move Current Occupants Out Of Space	2 months
Award Construction Contracts	1 month
Mobilization & Submittals	5 months
Prepare Swing Space	3 months
Move K + 2nd Grade Into Swing Space	1 month
Site Utilities	5 months
Construct South Wing Addition	12 months
Renovate South Wing	12 months
Site Work South	5 months
Commission South Wing	2 months
Move 1st (or 2nd) Grade into South Wing	1 month
Construct Cafeteria Addition	12 months
Construct Kindergarten Addition	16 months
Renovate Remainder Of Existing Building	12 months
Site Work North	4 months
Commission K Addition & Remainder Of Building	2 months
Move All Remaining Occupants Back Into Building	2 months
TOTAL DURATION - PRE-REF. THROUGH OCCUPANCY	68 months

COUNCIL ROCK (If Vacant During Construction)	
Activity:	Duration
Pre-Referendum	8 months
Design	9 months
SED Review	8 months
Bid for Construction	1 month
Move Current Occupants Out Of Space	2 months
Award Construction Contracts	1 month
Mobilization & Submittals	5 months
Prepare Swing Space	3 months
Move K, 1st & 2nd Grade Into Swing Space	2 month
Site Work	20 months
Construct Addition	20 months
Renovate Existing Building	20 months
Commissioning	2 months
Move All Occupants Back Into Building	2 months
TOTAL DURATION - PRE-REF. THROUGH OCCUPANCY	56 months

BROOKSIDE	
Activity:	Duration
Pre-Referendum	8 months
Design	9 months
SED Review	8 months
Bid for Construction	1 month
Move Current Occupants Out of Brookside	3 months
Award Construction Contracts	1 month
Mobilization & Submittals	6 months
Site Work	20 months
Construct Addition	20 months
Renovate Existing Building	20 months
Commissioning	3 months
Move New Occupants Into Building	3 months
TOTAL DURATION - PRE-REF. THROUGH OCCUPANCY	56 months

IX. Sustainability Approach

Utilizes Toxin-free materials and cleaning to prevent environmental and human health concerns –
Eliminates the use of materials and cleaning agents that contain toxins such as PVC, urea-formaldehyde, and VOCs

Uses Energy and water efficient building systems –
Mechanical, electrical, and plumbing systems installed reduce the school's dependency on the grid and natural resources

Is built with environmentally-conscious material selections –
Materials contain recycled content, are extracted and manufactured locally, and/or are rapidly renewable

Focuses on indoor air quality –
Promotes occupant health and productivity reducing asthma attacks and improving test scores

Incorporates environmental education into the course curriculum –
Uses sustainable principles to develop STEM knowledge and thinking skills

Participates in waste diversion –
Diverts waste not only during construction, but through programs such as composting during school operations

Is health and fitness aware –
Addresses integrated pest management, moisture and mold concerns, student health, and nutrition

Promotes the use of alternative transportation –
Encourages carpooling, biking, and walking to school in addition to employing "no idling" policies for buses and drop-off

Green Ribbon Schools

The Aim: The US Department of Education's Green Ribbon Schools program is to inspire schools and districts to strive for excellence by highlighting exemplary practices and resources that all can employ. The ED-GRS program recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts.

This award is a tool to encourage, identify and communicate practices that result in improved student engagement, academic achievement, graduation rates, and workforce preparedness along with reinforcing federal efforts to increase energy independence and economic security. Encouraging resource efficient schools allows administrators to dedicate more resources to instruction rather than operational costs.

The Details: New York State is invited to nominate up to five PreK-12 schools that they assess to be high performing in their jurisdiction to the US Department of Education. Assessment is based on three Pillars:

Pillar I: Reduce environmental impact and costs;
Pillar II: Improve the health and wellness of students and staff;
Pillar III: Provide effective environmental and sustainability education incorporating STEM, civic skills and green career pathways.

How to Apply: NYS schools must have their application into NYSED by the mid-December deadline for NYS review and selection. All NYS nominations must be sent in to the US Department of Education by February 1st of each year. Honorees from each state are announced by the US Department of Education on Earth Day, April 22nd.

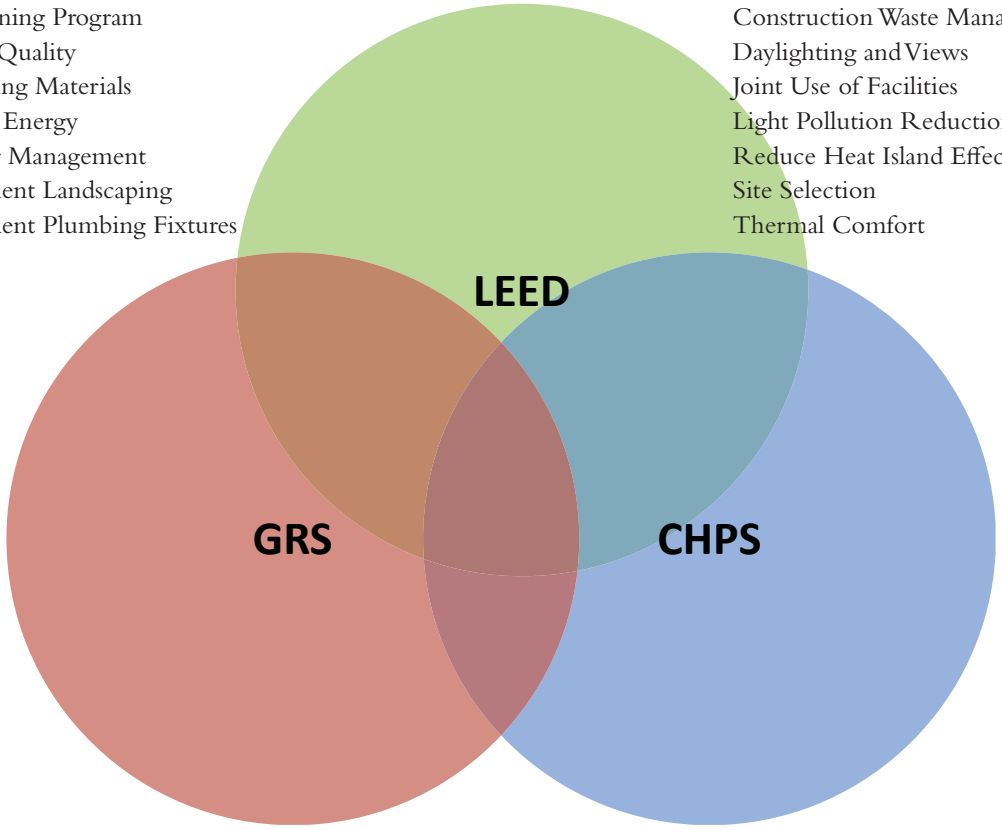
K-12 Sustainable Design Rating Systems: Overlapping Strategies

LEED + CHPS + GRS

Alternative Transportation
Chemical and Pollutant Source Control
Collection of and Programs for Recycling
Energy Efficiency
Green Cleaning Program
Indoor Air Quality
Low-Emitting Materials
Renewable Energy
Stormwater Management
Water Efficient Landscaping
Water Efficient Plumbing Fixtures

LEED + CHPS

Acoustical Performance
Building Reuse
Commissioning of Building
Construction Indoor Air Quality Plans
Construction Waste Management
Daylighting and Views
Joint Use of Facilities
Light Pollution Reduction
Reduce Heat Island Effect
Site Selection
Thermal Comfort



LEED + GRS

Mold Prevention
No Smoking Policy
Sustainability Incorporated into Education

CHPS + GRS

Alternative Fuel Buses and Transportation
Anti-idling Measures
ENERGY STAR Appliances and Equipment
Integrated Pest Management

IX Summary

In summary, the following, "Apples to Apples" comparison of educational program space and facilities needs are identified as advantages and disadvantages for future expansion and renovation at each site; the existing Council Rock Primary School site and the former Brookside Elementary School site.

Magnitude of Impact Levels Definition:
Each of the items in this summary are weighted, High, Medium or Low, strictly with respect to architectural, mechanical, electrical, plumbing and site impacts to Design, Construction Cost and Schedule.

- ✗✗✗ or ✓✓✓ **High Impact:** Will significantly impact design, cost and schedule. These items should be considered a priority and drivers in the decision making process.
- ✗✗ or ✓✓ **Medium Impact:** Will have moderate impact on design, cost and schedule. These items should supplement the high impact items and in conjunction with the high impact items, constitute a majority of the reasons that one site is chosen over another.
- ✗ or ✓ **Low Impact:** Will have the least impact on design, cost and schedule. These items are periphery to the decision making process. Multiple Low Impact Items affecting each other or within contiguous systems may increase their consideration.

Advantages / Disadvantages

	CRPS	Brookside
SITE / CIVIL		
1. Lot Coverage: Program sf. = 133,100 = 3.06 acres Brookside = 21.8 Acre Lot Pavement/Sidewalks/etc. 136,000 sf. = 3.1 acres Play area including hardscapes = 26,000 sf. = 0.6 acres Total = 6.76 of 21.8 = 31% CRPS = 10.3 Acre Lot Pavement/Sidewalks/etc. 105,000 sf. = 2.4 acres Play area including hardscapes = 26,000 sf. = 0.6 acres Total = 6.06 of 10.3 = 59%	✗✗✗	✓✓✓
2. Winton Road Bridge Reconfiguration and New Turning Lanes **Estimated Cost of Construction = $450,000**	✓✓	✗✗
3. Access to Playfields and Play Areas	✗	✓
4. Potentially Eliminate Bus Traffic Through Neighborhoods	✗	✓
5. Room for Future Infrastructure Expansion	✗✗✗	✓✓✓
6. Bus Loop and Vehicular Circulation Options	✗✗	✓✓
7. SHPO Involvement	✓	✗
8. District Centrality (Transportation Impact)	✓	✗
SITE OVERALL	✗	✓
Total Advantages:	(4)	(10)

	CRPS	Brookside
ARCHITECTURAL		
1. Renovation Type/Level and Associated Cost	✓✓	✗✗
2. Construction Phasing	✗✗✗	✓✓✓
3. Program/Occupant Disruption	✗	✓
4. Room for Future Building Expansion	✗	✓
5. Opportunity For Improved Building Wide Aesthetics	✗✗	✓✓
6. Improved Building Envelope	✗	✓
7. Existing Roof	✓	✗
8. Opportunity for Sustainable Design	✗✗✗	✓✓✓
9. School Community Engagement and Building Administration Hub (Hub & Spokes Floor Plan)	✗✗	✓✓
ARCHITECTURAL OVERALL	✗	✓
Total Advantages:	(3)	(13)

	CRPS	Brookside
MECHANICAL/ELECTRICAL/PLUMBING		
1. Underslab Tunnel System Can Be Used for New Mechanicals	✓	✗
2. 2005 Kitchen HVAC System Can Be Reused	✓✓	✗✗
3. Auditorium & Gymnasium Mechanical Space Can Be Reused	✓	✗
4. Significant Amount of Heat Piping Can Be Reused	✓✓	✗✗
5. Low Structural System	✗	✓
6. Centrally Located Existing Boiler Room	✗	✓
7. Existing Kitchen Plumbing Reuse	✓✓	✗✗
8. Reuse Existing 1200A, 208v/120 MDP	✓	✗
9. Reuse Various 208v/120 Secondary Panel Boards	✓	✗
10. Reuse Existing Site Lighting	✓	✗
11. Possible Reuse of Existing IP CCTV Cameras	✓	✗
12. New Building Wide Mechanical System	✗✗	✓✓
13. Overall Operating Expenses (New Systems & Equipment)	✗✗✗	✓✓✓
MEP OVERALL	✓	✗
Total Advantages:	(12)	(7)

Acknowledgements and Credits

DISTRICT LEADERSHIP TEAM:

Kevin McGowan, Superintendent of Schools
Louis Alaimo, Assistant Superintendent for Administrative Services
Matt Tappon, Principal Council Rock Primary School
Doug Ackert, Director of Buildings and Grounds

CONSULTANT TEAM:

SWBR Architects (Architectural and Structural)
Steve Rebholz, Principal
Joe Kosiorek, Project Manager
Lynanne Wehner, Project Architect

M/E Engineering (Mechanical, Electrical and Plumbing)
Bruce Knapp, Principal
Dave Merchant, Plumbing Engineer
Aaron McConnell, Senior Mechanical Engineer
Darren Pieters, Electrical Engineer

Marathon Engineering (Site/Civil)
John Stapleton, Principal
Kurt Hacola, Civil Engineer

Baer & Associates, LLC. (Cost Estimators)
Joe Dommer, President/Sr. Partner

Appendix A

SWBR ARCHITECTS

ROCHESTER NY
387 East Main Street
Rochester NY 14604
Voice: 585.232.8300
SYRACUSE NY
309 South Franklin Street
Syracuse NY 13202
Voice: 315.488.5635
www.swbr.com

Meeting Notes

Project:	Brighton CSD – Brookside Master Plan
Project No:	14725.00
Date:	10-9-14, 1:30 pm
Purpose:	Kick-Off Discussion
Location:	Brighton CSD – Business Office Conference Room

Present:

Lou Alaimo – Brighton CSD
Doug Ackert – Brighton CSD
Kevin McGowan - Brighton CSD
Matt Tappon - Brighton CSD
Steve Rebholz – SWBR Architects
Joe Kosiorek– SWBR Architects
Lynanne Wehner– SWBR Architects

1. Introductions were made.

2. Master Plan Goals:
   SWBR will provide the district with:
   a. A comprehensive list of advantages and disadvantages for the Brookside and Council Rock sites.
   b. Cost estimates.
   c. Adaptive reuse ideas for the non-school site.

3. SWBR will provide the district with the Master Plan on:
   a. November 14, 2014
   b. Board of Education meeting is November 18, 2014.

4. Construction Start Date:
   16-18 months after referendum passes

5. Master Plan Team:
   a. Individuals at this meeting
   b. Mechanical consultants: M/E Engineering
   c. Civil Engineers: Marathon Engineering
   d. Baer Associates - Estimating

6. Additional Groups that are to have input:
   a. Brighton Board of Education
   b. Council Rock Faculty
   c. Brookside Neighborhood
   d. Council Rock Neighborhood
   e. Full Day Kindergarten Committee
   f. Brighton Town Government:
      i) Town Supervisor: Bill Moehle
      ii) Chief of Police: Mark Henderson
      iii) Commissioner of Public Works/Highway Superintendent: Tim Keef

7. Programming
   a. Space requirements as listed in the RFP
   b. Include current space requirements for:
      i) Town Recreation Programs
      ii) Senior Center
      iii) Food Cupboard/Clothes Cupboard
   c. Monroe 1 BOCES -Bird Morgan School maybe also be looking for classroom space for a primary program.

8. Additional Information:
   a. Doug Ackert will provide SWBR:
      i) AHERA reports
      ii) SED - 5 Year Plan (SEI Document)
      iii) Building Condition Survey – Building Projects/Cost Estimate Summary (SEI Document)
   b. Bernie Donegan's office has Incidental Cost Allowance for each building for the last five years.
   c. Maria Hewitt – (Brighton CSD) Early Childhood Research for 21st Century Schools

9. Scheduled Meetings:
   a. Council Rock Faculty Meeting:
      1) October 15, 2014 - Council Rock Cafeteria at:
         7:15am- 8:15am and
         3:00pm-4:00pm
   b. Master Plan Committee Meeting:
      1) October 16, 2014 – Administration Building's Conference Room
         11:30am-12:30pm

10. Meeting to be scheduled:
    a. Building Walk-thru with Doug Ackert, SWBR, M/E and Marathon at both facilities.

The foregoing constitutes our understanding of matters discussed and conclusions reached. If there are any errors or omissions in the basic discussion, please notify the Architect in writing.

By:
Lynanne H.
Wehner

Distribution:

All present
file

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Minutes of Meeting *DRAFT*

Project:	Brighton CSD – Brookside Master Plan
Project No:	14725.00
Date:	10-9-14, 1:30 pm
Purpose:	Kick-Off Discussion
Location:	Brighton CSD – Business Office Conference Room

Present:

Lou Alaimo – Brighton CSD
Doug Ackert – Brighton CSD
Kevin McGowan - Brighton CSD
Matt Tappon - Brighton CSD
Steve Rebholz – SWBR Architects
Joe Kosiorek– SWBR Architects
Lynanne Wehner– SWBR Architects

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    a. Building Walk-thru with Doug Ackert, SWBR, M/E and Marathon at both facilities.

The foregoing constitutes our understanding of matters discussed and conclusions reached. If there are any errors or omissions in the basic discussion, please notify the Architect in writing.

By:
Lynanne H.
Wehner

Distribution:

All present
file

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www.swbr.com

Meeting Notes

Project:	Brighton CSD – Brookside Master Plan
Project No:	14725.00
Date:	October 15, 2014 – 2 Meetings 7:15 a.m. and 3:00 p.m.
Purpose:	Faculty Forum
Location:	Brighton CSD – Council Rock Elementary

Present	Lou Alaimo	Brighton Central School District
	MattTappon	Brighton Central School District
	Doug Ackert	Brighton Central School District
	Kevin McGowan	Brighton Central School District
	Staff	Council Rock Elementary School
	Joe Kosiorek	SWBR Architects
	Steve Rebholz	SWBR Architects
	Lyanne Wehner	SWBR Architects

Item:	Description:	Action
1	Introductions were made.	
2	**Staff was asked to give impute on the following statements:** a. "What does Council Rock School need to bring it up to standards?" b. "What currently works in the building?" c. "What currently does not work within the building?	
3	**The following are some of the statements gathered:**	
I	**Circulation / Existing Building Footprint:** a. Flow issues related to the Classroom / Lunch transition. b. Regarding the shape of the building, it is not helpful to have wings, nothing is central. c. Traffic flow issues in the Cafeteria. One door in and one door out.	
II	**Site:** a. Parking Spaces: 137 Spaces for 114 Faculty Members; No capacity for parents. b. Bus Loops are inadequate, require staffing. c. Black top Playground holds 4-Classes at a time. Playground backs up to Rowland Parkway with no divide. Not protected by any structure. d. Garden space or additional space for outdoor education e. Transition to recess from West Wing to East Wing Playgrounds.	

Item:	Description:	Action
III	**Program Needs:** a. Adult Bathrooms in the West Wing or equitable throughout the building b. Interest in including space for a large indoor motor. PE is typically booked. Indoor Recess takes place in the Classroom. Currently consider soundproofing. c. Example of Harris Hill and Common Space where kids can comingle. d. Sensory Room for Special Education and General Education alike. To be manned by the Classroom Teacher for breaks. Separate from Special Ed and OT / PT Services. e. Outdoor Classroom Space, Nature Core Classrooms, Early Childhood Development appropriate. Consider additional fields beyond PE requirements. f. Access to gang johns that can be monitored. g. Storage Space for reading materials, large motor activities and outdoor toys. h. Maintain a large space for groups (e.g. Auditorium). Minimum to hold 12-Classrooms, possible a Multi-Purpose Room i. Current Faculty Break Room Space with copiers is inadequate. j. Planning space for Teaching Assistants or irregular itinerant services not assigned to a Classroom (locker space), flexible space not assigned. k. Lack of storage for Buildings and Grounds – Currently only one closet. l. Cafeteria size is an issue. Only allows for 3-Classrooms at a time. Appreciated by the principal. Do not want a huge Cafeteria. Would need additional line space for additional Classrooms. m. Concern about outdoor Recess space for additional Classrooms. n. Copier Room separate from Break Room space. o. Hardening of entrance way for security guard - allow for him to buzz in visitors - accommodate all activities that happen at the same time (check in check out, waiting areas) - need to consider in conjunction with how the auditorium is used. p. Gymnasium space would not be adequate with full-day Kindergarten. q. Art and Music Spaces are adequate but will not if more classrooms are added. At capacity now with second teacher using a cart and traveling to the stage. r. Health / Nurses space is not adequate for testing s. Library space with addition of teaching space that can evolve as technology evolves. Request was made for a Multi-Purpose Learning space. A space that can be reassembled for testing / meeting / labs. t. Wrap around programs do not have adequate storage space.	

Item:	Description:	Action
III	**Program Needs (Continued):** u. Space that could accommodate evolution of instructional materials. v. Space for Assessment. Different alternatives other than the Hallway. w. Computer Lab space and increased infrastructure. x. Small kitchens for full-day Kindergarten. y. Teacher's Lounge and Staff areas for collaboration. z. Display space in Hallway and in the Classroom. aa. Primary project playrooms current state is inadequate. bb. Counseling services are appropriately placed in a central location. cc. Need central location or multiple locations for the Printing Machines. dd. Small areas for quiet spaces. ee. Place for conferences. ff. Book room into a meeting space could serve multiple purposes. gg. Separate Cafeteria space for Kindergarten. hh. Allow ability to grow to avoid being at capacity.	
IV	**Classroom:** a. Consider the size of the Classroom beyond the 770 and the permanent structures that currently exist at Council Rock. Inefficient for cleaning. b. First and Second Grades Looping Classrooms require storage space. Needs to be considered when Bathrooms are in the Classroom. c. Power outlets not efficient. Inadequate power supply in the Classrooms. d. Layout of Classroom sometimes makes it difficult to lock down and hide children. Goes back to Classroom size. e. Bathrooms in the classrooms should be standard - requesting in every classroom with sink and drinking fountain. Need to be ADA compliant f. Need more flexible space in the classrooms. Island concept in classrooms limits functionality. Shelving space is not flexible g. Island concepts work with Kindergarten Classrooms but are too high. Varying heights limit functionality. h. Additional bookcases and storage for teaching materials in classrooms. i. Power outlets in the Classroom and charging stations for 1:1 Technology. j. Space for coats and boots to keep separate (cubbies), possibly in hallways.	

Item:	Description:	Action
V	**Building Systems:** a. 1957 Building: Heating System not easily accessed; inconsistent heating patterns. Clock System, PA system issues because of power overloads. No capacity for additional phones or lines. b. Inadequate cell phone coverage within the building – Security issue. c. Intercom phones are inefficient and do not provide for access to outside lines. d. Air conditioning	

The foregoing constitutes our understanding of matters discussed and conclusions reached. If there are any errors or omissions in the basic discussion, please notify the Architect in writing.

By: Lynanne H. Wehner / jmd

Distribution **All Present**
File

SWBR ARCHITECTS

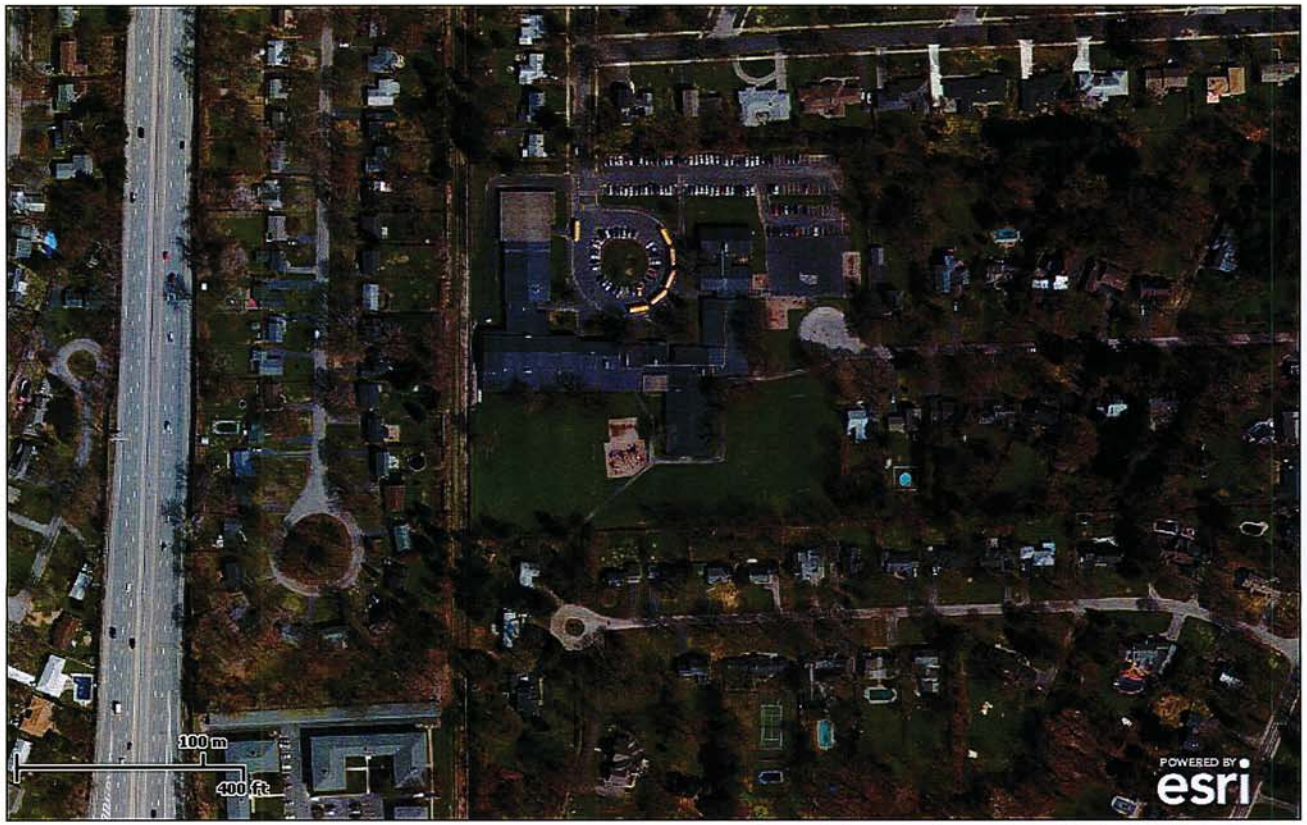
Appendix B

U.S. Fish and Wildlife Service

National Wetlands Inventory

Council Rock School

Nov 11, 2014



Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

User Remarks: No wetlands present

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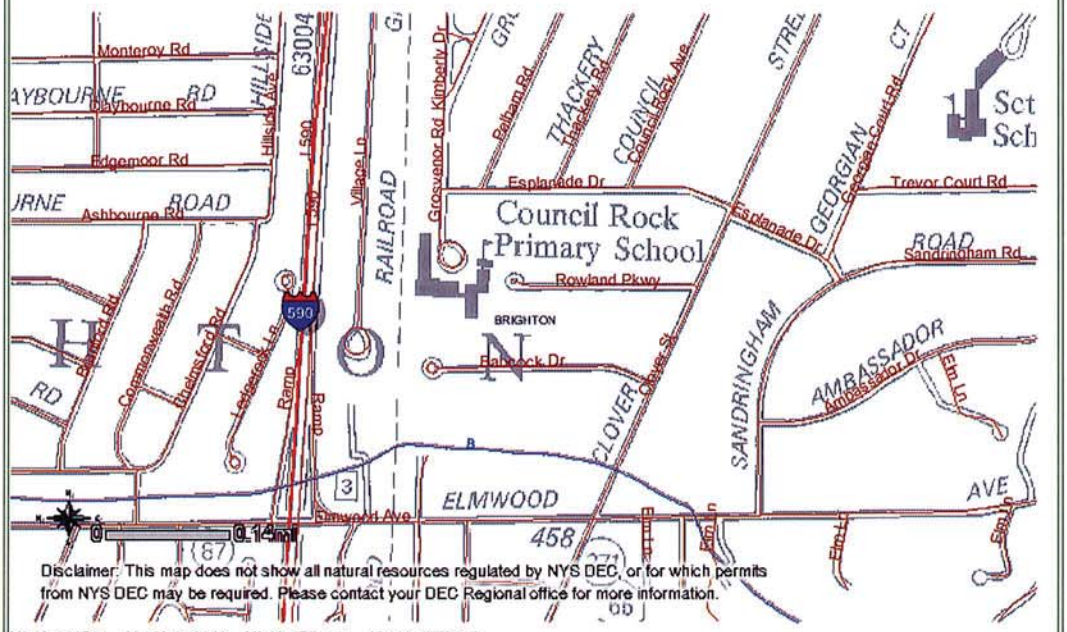
Please set your printer orientation to "Landscape".

Council Rock School



Disclaimer: This map does not show all natural resources regulated by NYS DEC, or for which permits from NYS DEC may be required. Please contact your DEC Regional office for more information.

MinX: 291794, MaxX: 293642, MinY: 4778916, MaxY: 4777931

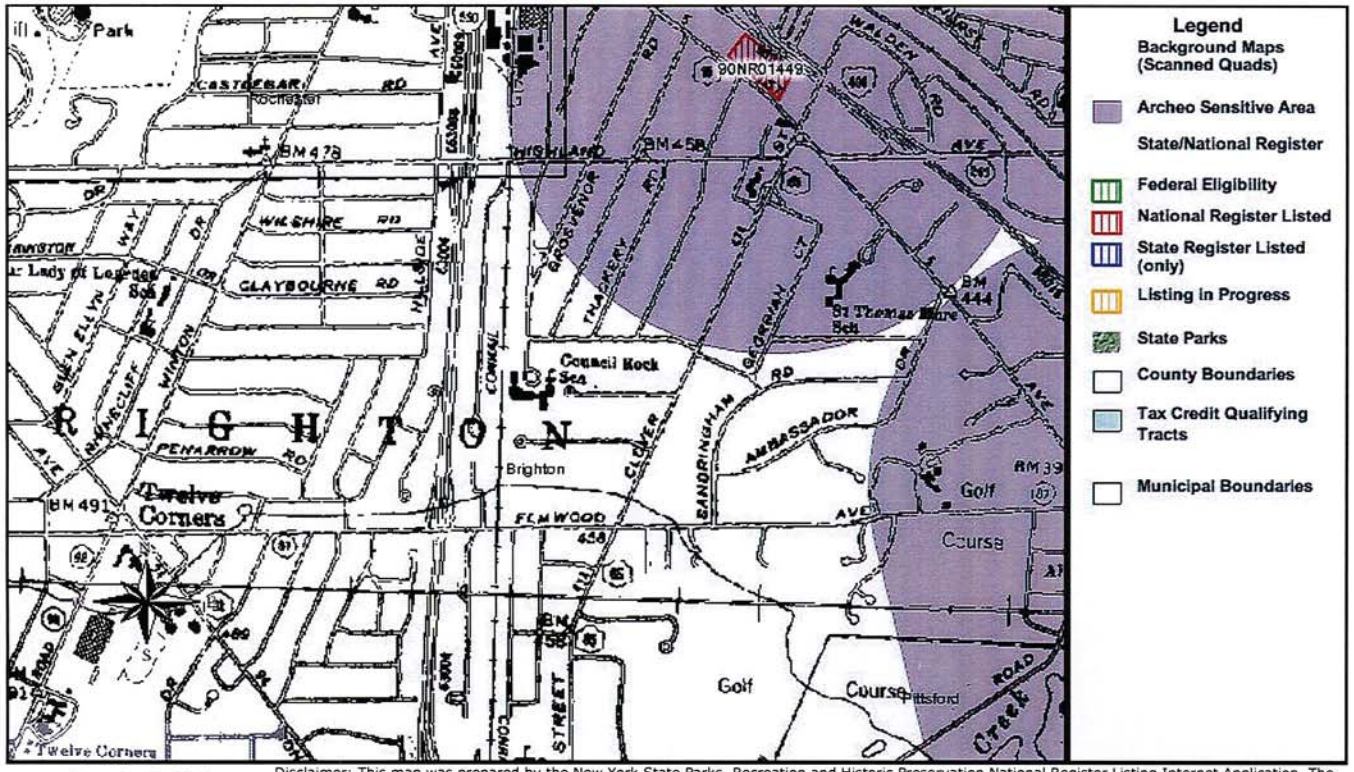
Visible Layers

- Classified Streams
- State-Regulated Freshwater Wetlands
- Wetland Checkzone
- State-Regulated Freshwater Wetlands
- Rare Plants and Rare Animals
- Interstate Highways
- Adirondack Park Boundary
- Counties

State wetlands not present

Disclaimer:This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

Council Rock School



November 11, 2014

Disclaimer: This map was prepared by the New York State Parks, Recreation and Historic Preservation National Register Listing Internet Application. The information was compiled using the most current data available. It is deemed accurate, but is not guaranteed.

SHPO - Not Present

U.S. Fish and Wildlife Service

National Wetlands Inventory

Brookside School

Nov 11, 2014

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

National Wetlands on site

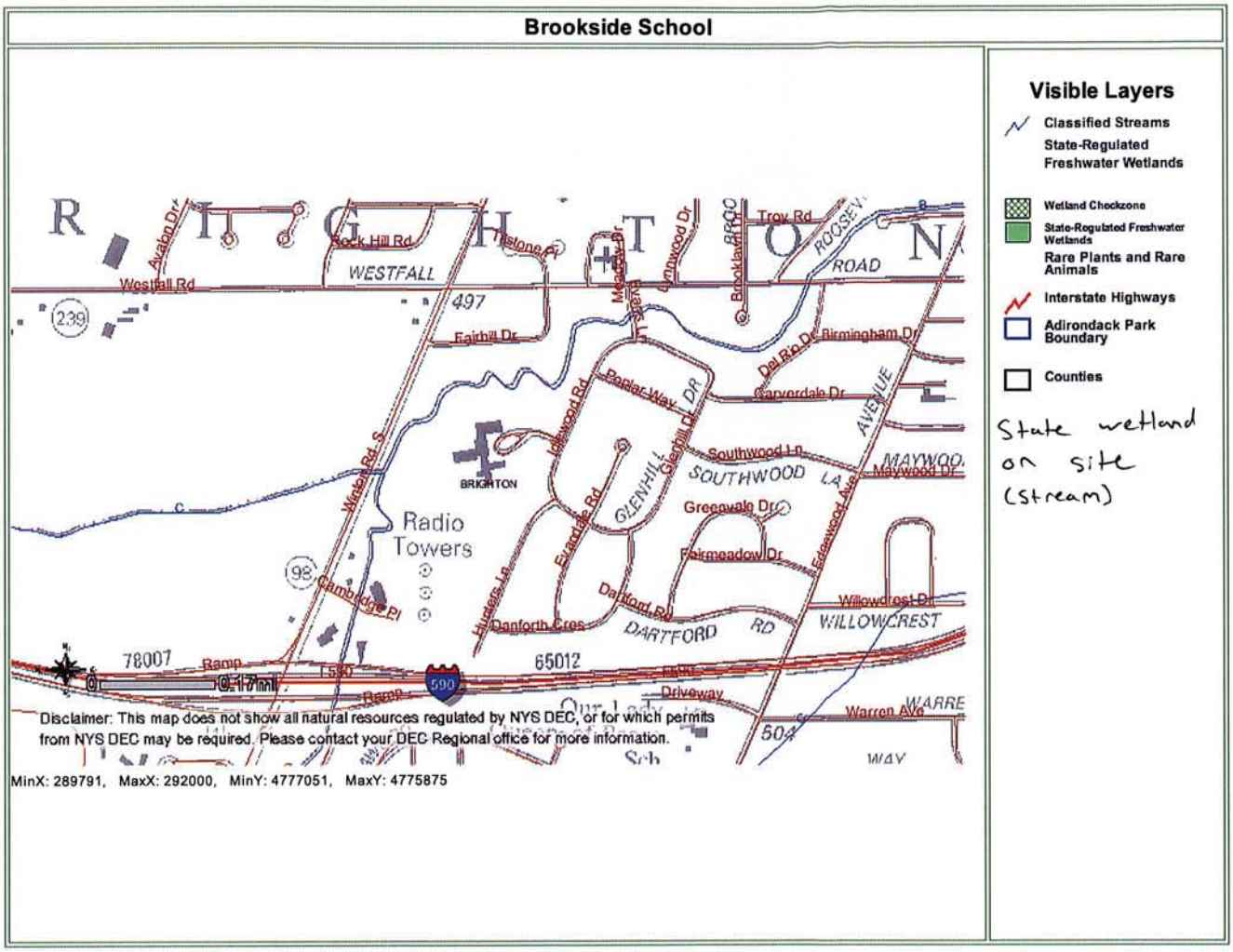
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

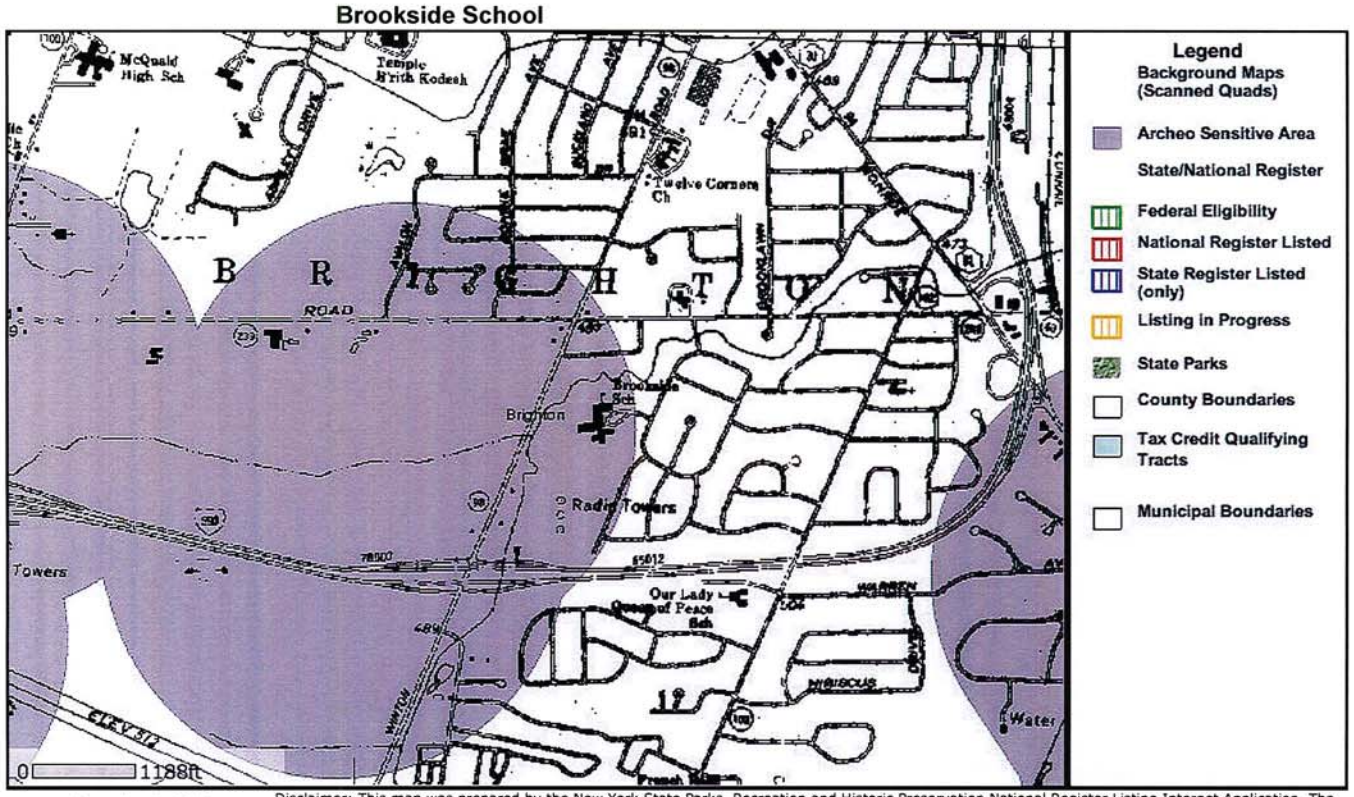
[print page] [close window]

Please set your printer orientation to "Landscape".

Brookside School



Disclaimer:This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.



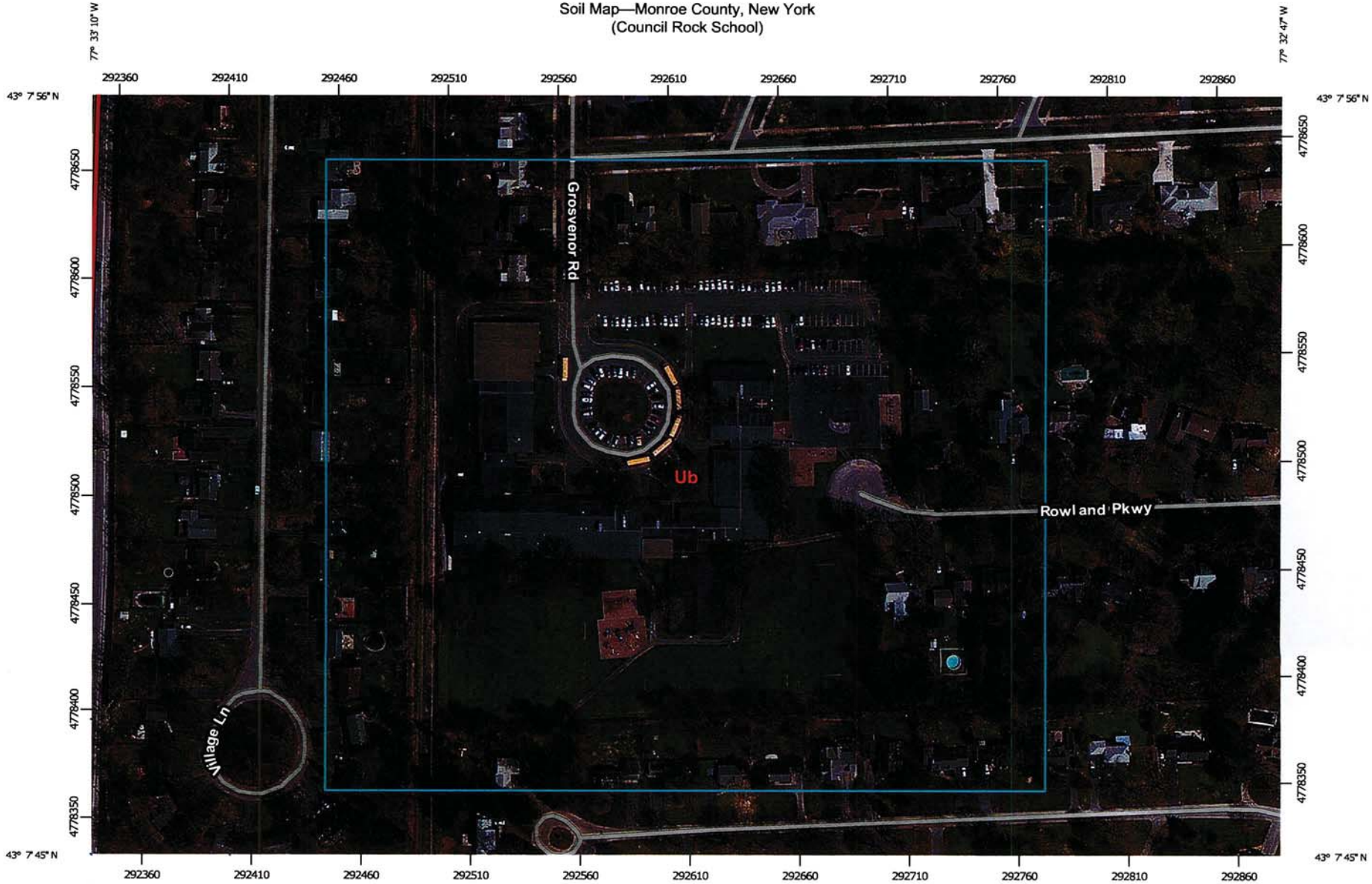
November 11, 2014

Disclaimer: This map was prepared by the New York State Parks, Recreation and Historic Preservation National Register Listing Internet Application. The information was compiled using the most current data available. It is deemed accurate, but is not guaranteed.

SHPO

Archeo Sensitive Area on site

Soil Map—Monroe County, New York
(Council Rock School)



Map Scale: 1:2,480 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

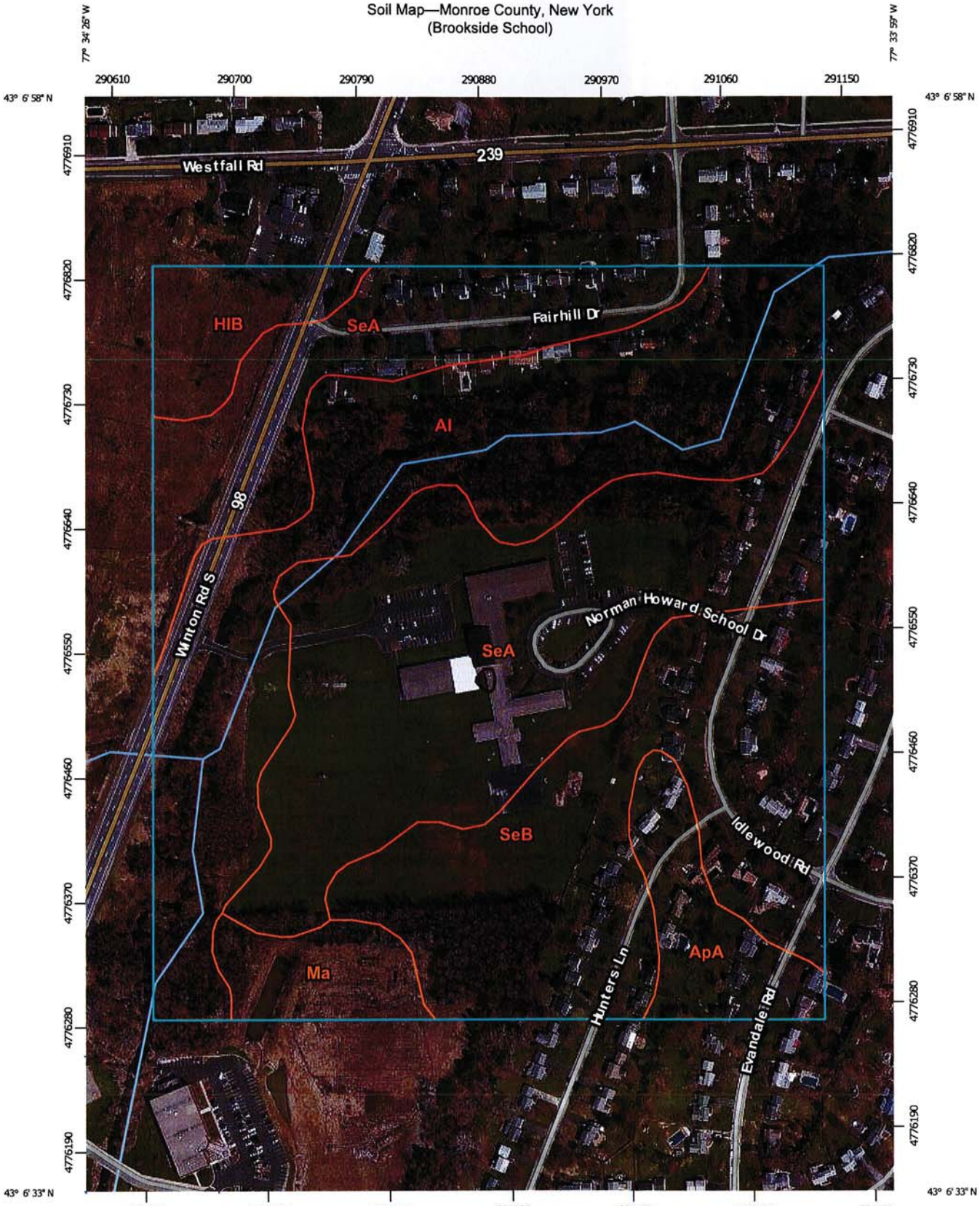
Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Monroe County, New York (NY055)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Ub	Urban land	23.8	100.0%
Totals for Area of Interest		**23.8**	**100.0%**

Soil Map—Monroe County, New York
(Brookside School)



Map Scale: 1:3,850 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Monroe County, New York (NY055)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Al	Alluvial land	18.1	26.9%
ApA	Appleton loam, 0 to 3 percent slopes	3.3	4.9%
HlB	Hilton loam, 3 to 8 percent slopes	2.6	3.9%
Ma	Madalin silty clay loam, 0 to 3 percent slopes	2.4	3.5%
SeA	Schoharie silt loam, 0 to 2 percent slopes	26.0	38.7%
SeB	Schoharie silt loam, 2 to 6 percent slopes	14.9	22.1%
Totals for Area of Interest		**67.2**	**100.0%**

Modified Flow Data

Town	Brighton	
Location	600 Grosvenor Dr	
Date	10/29/2014	
Conducted By	EH	
Flow Nozzle	2.5	
Flow Hydrant	#631	
Static	86	psi
Pitot	60	psi
Style	A	1.00
Residual Hydrant	#630	
Static	86	psi
Residual	66	psi
Corrected		
Static	86	
Residual	66	
Calculations		
Q Observed	1307	gpm
Q @ 20 psi	2491	gpm
System Status		
Zone	650D	
Hydraulic Grade	670'	
Ele @ Flow Hyd	470'	
Main Size	6"	

PLEASE NOTE THE FOLLOWING INFORMATION

The pressure and flow data provided herein represents the calculated values for this location in the distribution system based on typical low operating conditions. These values can vary depending on demands, operational parameters, system configurations, subsequent modifications and other related criteria. Please contact Ed Heindl at 585-442-2001 ext 411 with any questions or concerns.

Modified Flow Data

Town	Brighton	
Location	220 Idlewood Rd	
Date	10/29/2014	
Conducted By	EH	
Flow Nozzle	2.5	
Flow Hydrant	#698	
Static	80	psi
Pitot	62	psi
Style	A	1.00
Residual Hydrant	#697	
Static	80	psi
Residual	70	psi
Corrected		
Static	80	
Residual	70	
Calculations		
Q Observed	1329	gpm
Q @ 20 psi	3497	gpm
System Status		
Zone	751N	
Hydraulic Grade	680'	
Ele @ Flow Hyd	490'	
Main Size	8"	

PLEASE NOTE THE FOLLOWING INFORMATION

The pressure and flow data provided herein represents the calculated values for this location in the distribution system based on typical low operating conditions. These values can vary depending on demands, operational parameters, system configurations, subsequent modifications and other related criteria. Please contact Ed Heindl at 585-442-2001 ext 411 with any questions or concerns.

SWBR ARCHITECTS

Appendix C

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Council Rock Primary School - Existing Site

0' 40' 80' 160' 320'

N

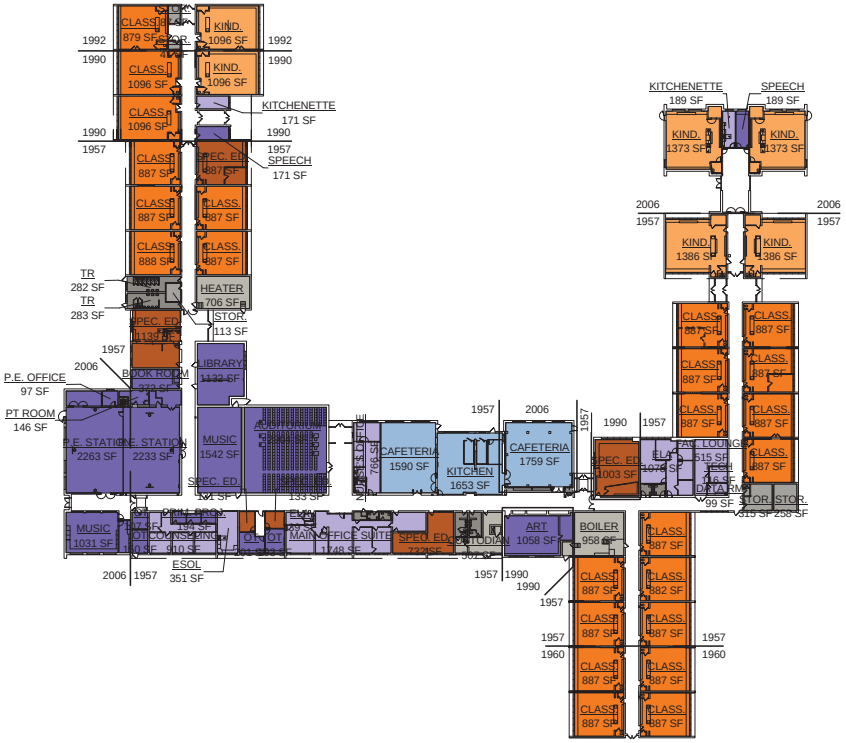
COUNCIL ROCK PRIMARY SCHOOL - EXISTING

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Existing Program Floor Plan



ROOM LEGEND

- KINDERGARTEN CLASSROOMS
- 1-2 CLASSROOMS
- SPECIAL EDUCATION
- SPECIALS
- CAFETERIA
- INSTRUCTIONAL SUPPORT
- MECHANICAL
- STORAGE
- TOILET ROOMS

N

0' 20' 40' 80' 160'

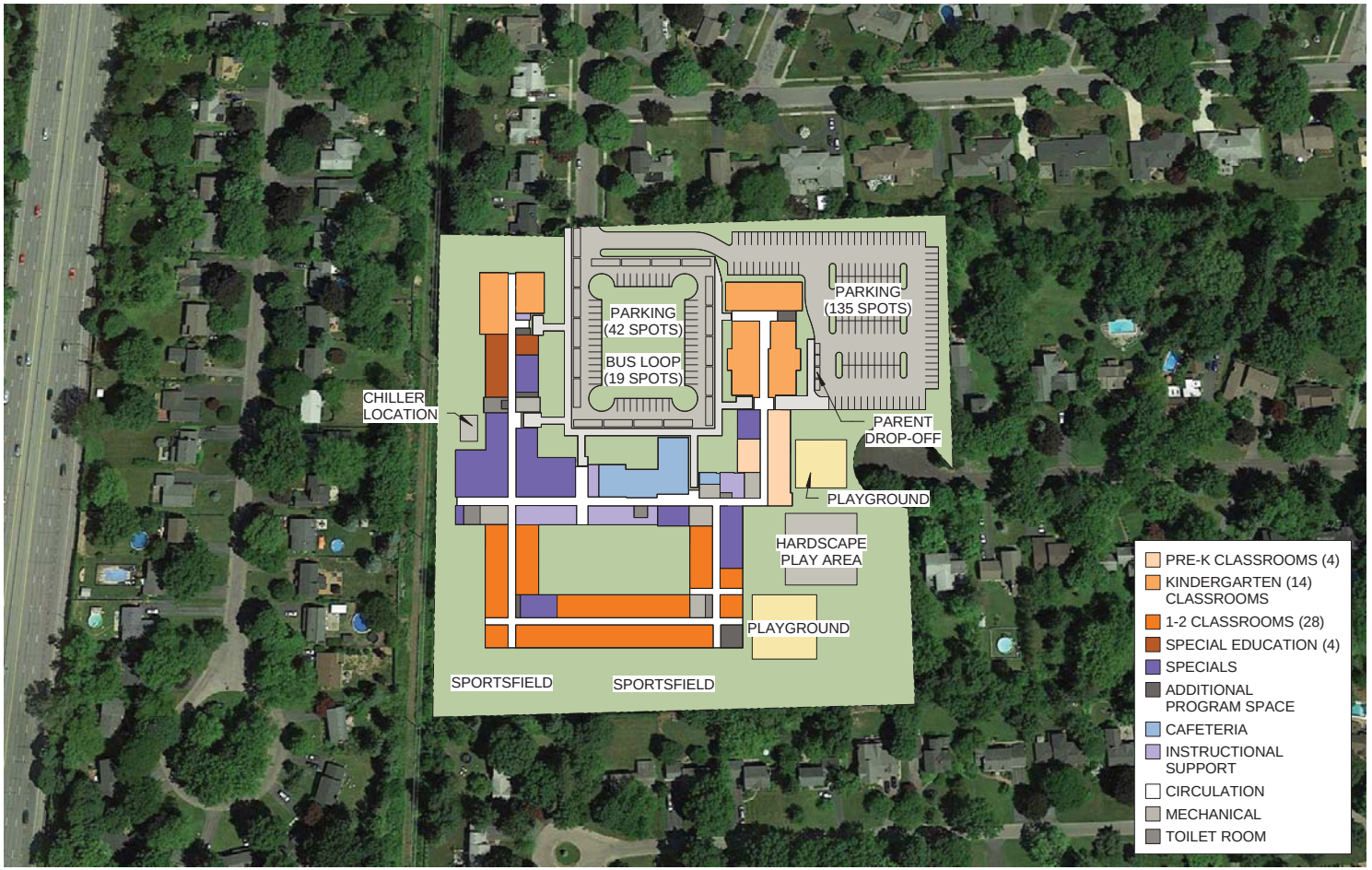
COUNCIL ROCK PRIMARY SCHOOL - EXISTING

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Council Rock Primary School - Option No.1



0' 40' 80' 160' 320'

N

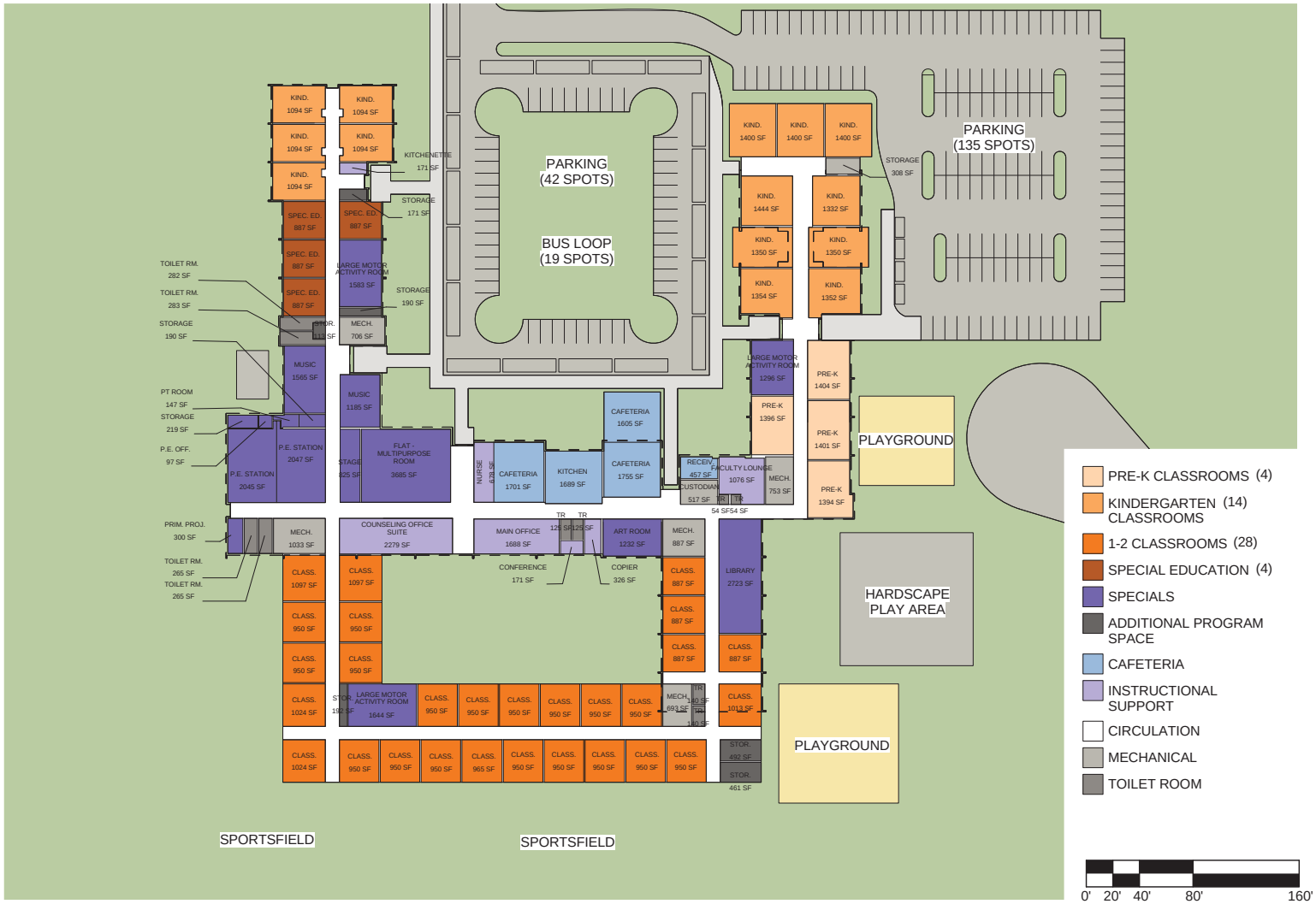
COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 1

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00 © 11/14/2014

Option No.1 - Floor Plan



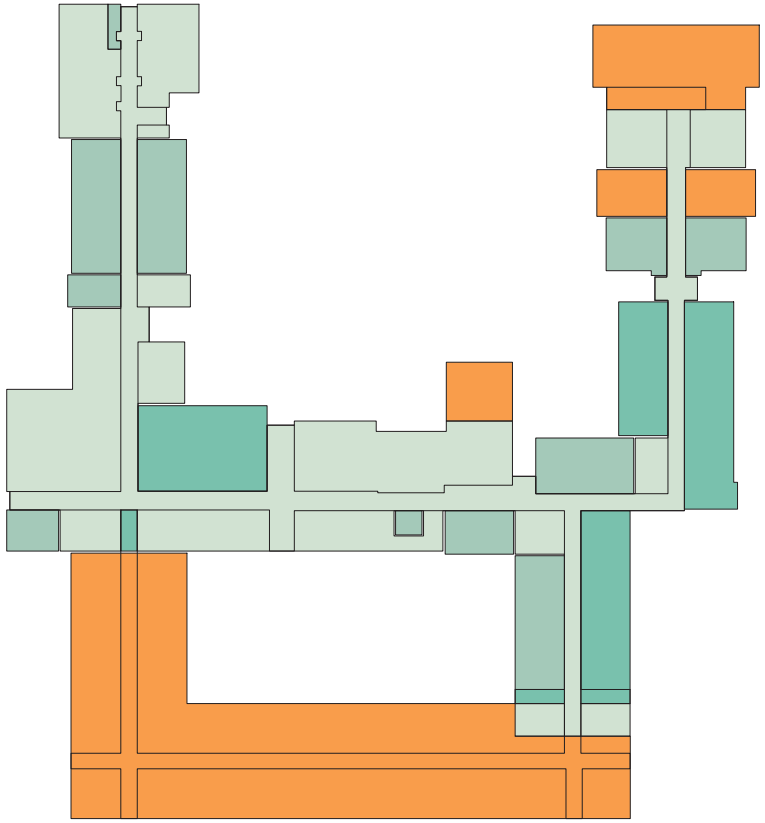
COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 1

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.1 - Categories of Construction



CATEGORIES OF CONSTRUCTION

LOW LEVEL RENOVATION	47,000 S.F.
MEDIUM LEVEL RENOVATION	17,000 S.F.
HIGH LEVEL RENOVATION	17,000 S.F.
NEW CONSTRUCTION	52,100 S.F.

N

0' 20' 40' 80' 160'

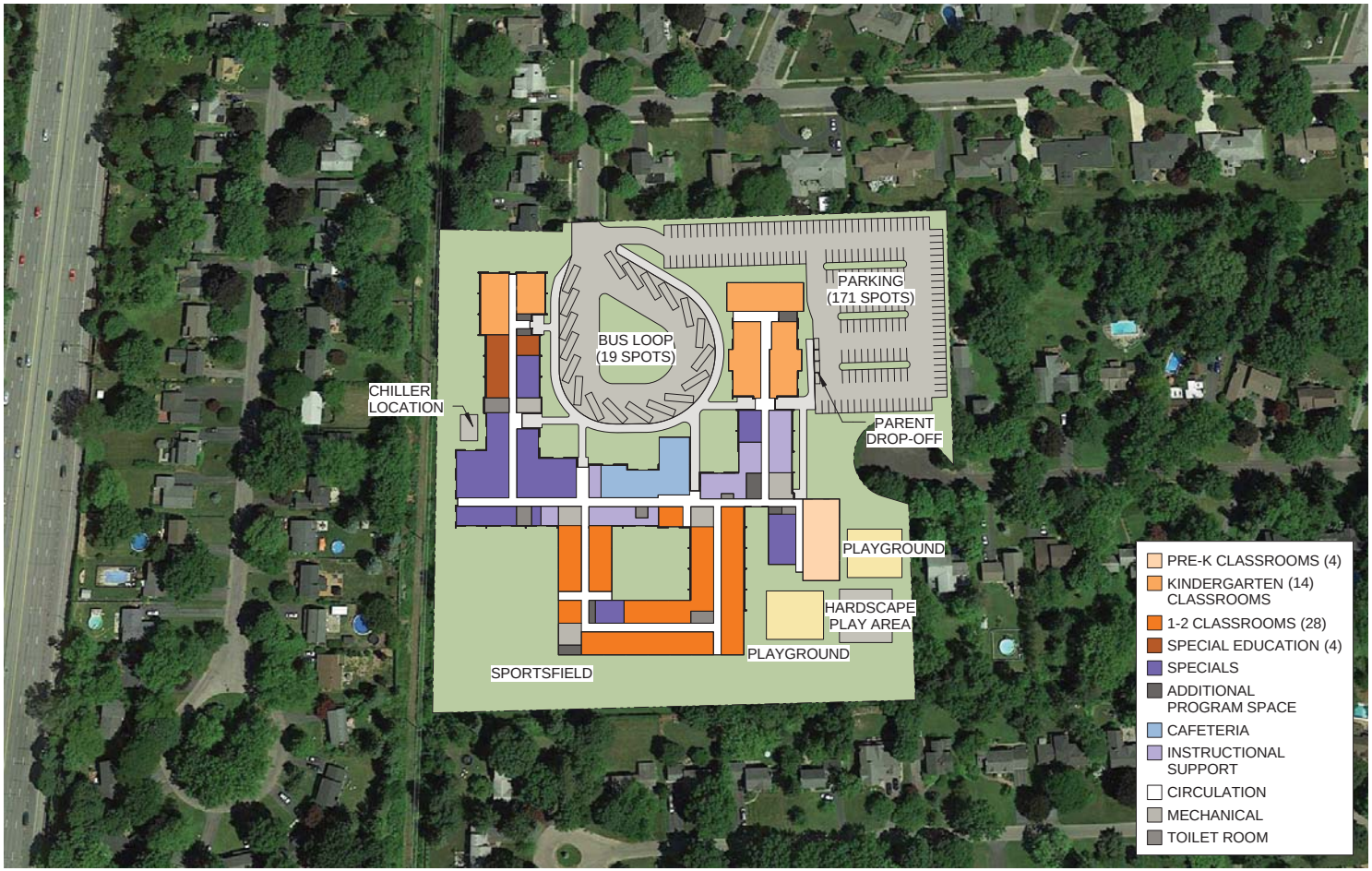
COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 1

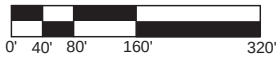
SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00 © 11/14/2014

Council Rock Primary School - Option No.2





COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 2

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.2 - Floor Plan

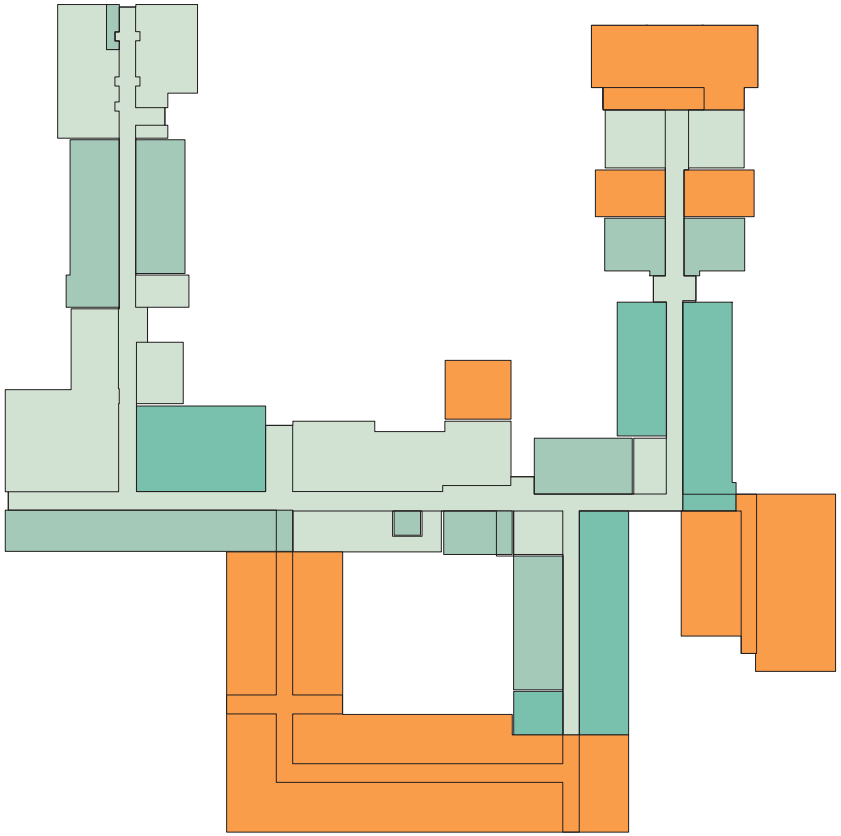
COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 2

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.2 - Categories of Construction



CATEGORIES OF CONSTRUCTION

LOW LEVEL RENOVATION	42,000 S.F.
MEDIUM LEVEL RENOVATION	20,500 S.F.
HIGH LEVEL RENOVATION	17,500 S.F.
NEW CONSTRUCTION	53,600 S.F.

N

0' 20' 40' 80' 160'

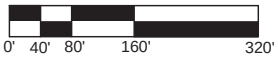
COUNCIL ROCK PRIMARY SCHOOL - OPTION No. 2

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Brookside School - Existing Site



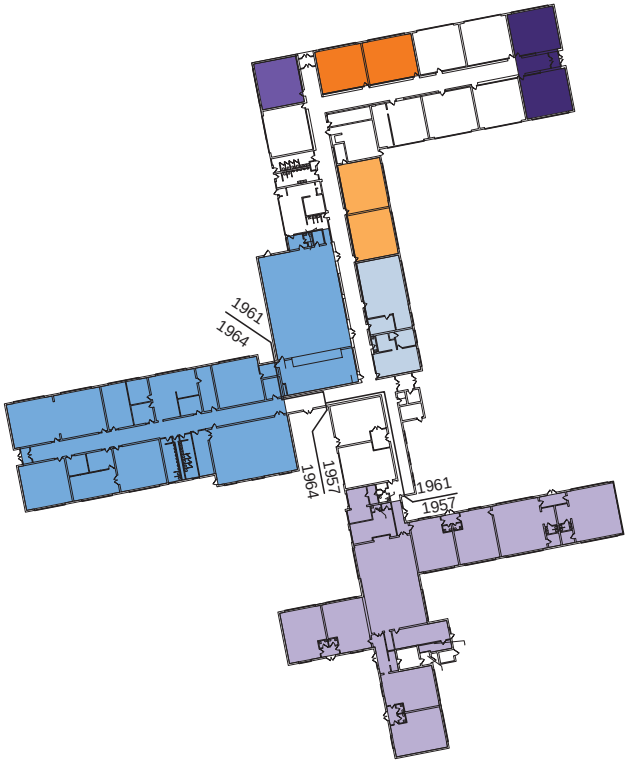
BROOKSIDE SCHOOL - EXISTING

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Existing Program Floor Plan



GENESEE VALLEY BOCES	1,650 S.F.
YMCA PROGRAM	825 S.F.
MONTESSORI SCHOOL	12,165 S.F.
PARKS & RECREATION	17,080 S.F.
CLOTHING CUPBOARD	2,090 S.F.
FOOD CUPBOARD	1,730 S.F.
MONROE COUNTY SCHOOL BOARDS	1,740 S.F.
UNASSIGNED	

N

0' 15' 30' 60' 120'

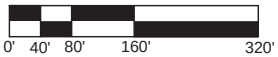
BROOKSIDE SCHOOL - EXISTING

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Brookside School - Option No.1



BROOKSIDE SCHOOL - OPTION No.1

SWBR ARCHITECTS
387 East Main Street
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Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No. 1 - Floor Plan

BROOKSIDE SCHOOL - OPTION No.1

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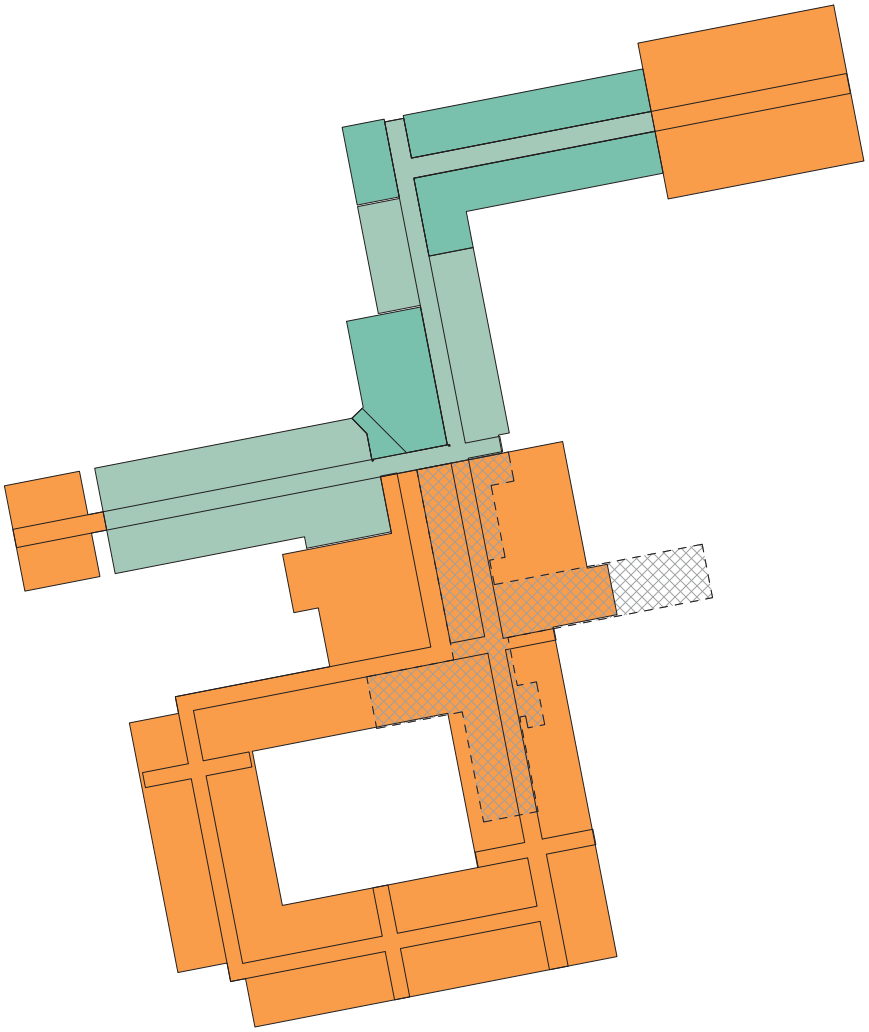
BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.1 - Categories of Construction



CATEGORIES OF CONSTRUCTION

LOW LEVEL RENOVATION	0 S.F.
MEDIUM LEVEL RENOVATION	24,600 S.F.
HIGH LEVEL RENOVATION	16,000 S.F.
DEMOLITION	16,192 S.F.
NEW CONSTRUCTION	93,000 S.F.

0' 20' 40' 80' 160'

N

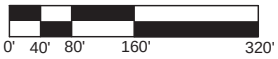
BROOKSIDE SCHOOL - OPTION No.1

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
Fax: 585.232.9221
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Brookside School - Option No.2



BROOKSIDE SCHOOL - OPTION No.2

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
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www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.2 - Floor Plan

BROOKSIDE SCHOOL - OPTION No.2

SWBR ARCHITECTS
387 East Main Street
Rochester, NY 14604-2107
Voice: 585.232.8300
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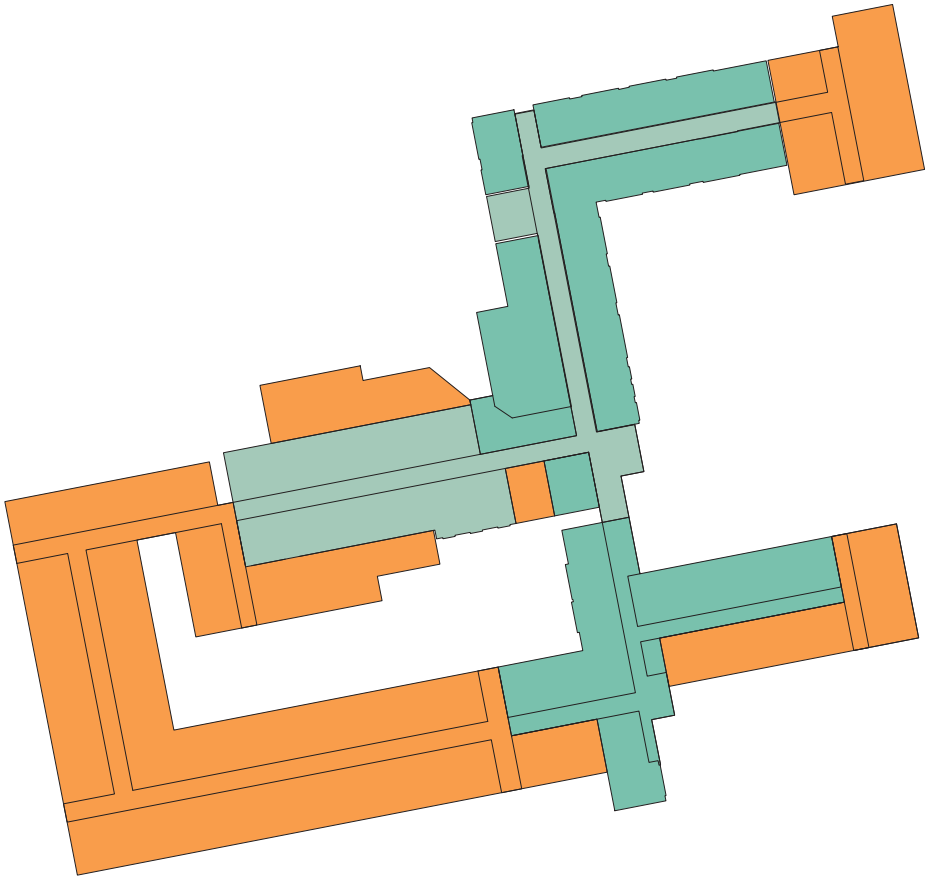
www.swbr.com

BRIGHTON CSD FEASIBILITY

SWBR PROJECT NUMBER: 14725.00

Option No.2 - Categories of Construction



CATEGORIES OF CONSTRUCTION

LOW LEVEL RENOVATION	0 S.F.
MEDIUM LEVEL RENOVATION	21,000 S.F.
HIGH LEVEL RENOVATION	37,000 S.F.
NEW CONSTRUCTION	75,600 S.F.

0' 20' 40' 80' 160'

N

BROOKSIDE SCHOOL - OPTION No.2