

1-1-2008

Reconnecting Schools and Neighborhoods: A proposal for School Centered Community Revitalization in Baltimore Maryland

Cody Miller

Roger Williams University, cmiller633@gmail.com

Follow this and additional works at: <http://docs.rwu.edu/archthese>



Part of the [Architecture Commons](#)

Recommended Citation

Miller, Cody, "Reconnecting Schools and Neighborhoods: A proposal for School Centered Community Revitalization in Baltimore Maryland" (2008). *Architecture Theses*. Paper 17.

<http://docs.rwu.edu/archthese/17>

This Dissertation is brought to you for free and open access by the School of Architecture, Art, and Historic Preservation Theses at DOCS@RWU. It has been accepted for inclusion in Architecture Theses by an authorized administrator of DOCS@RWU. For more information, please contact mwu@rwu.edu.

Reconnecting Schools and Neighborhoods

A proposal for School Centered Community Revitalization in Baltimore Maryland.

Independent project submitted to
Roger Williams University, School of Architecture, Art
and Historic Preservation
In fulfillment of the requirements of the B Arch Degree
in Architecture
In January 2009

By Cody Miller
Class of 2008

Stephen White

Dean
School of Architecture, Art
and Historic Preservation

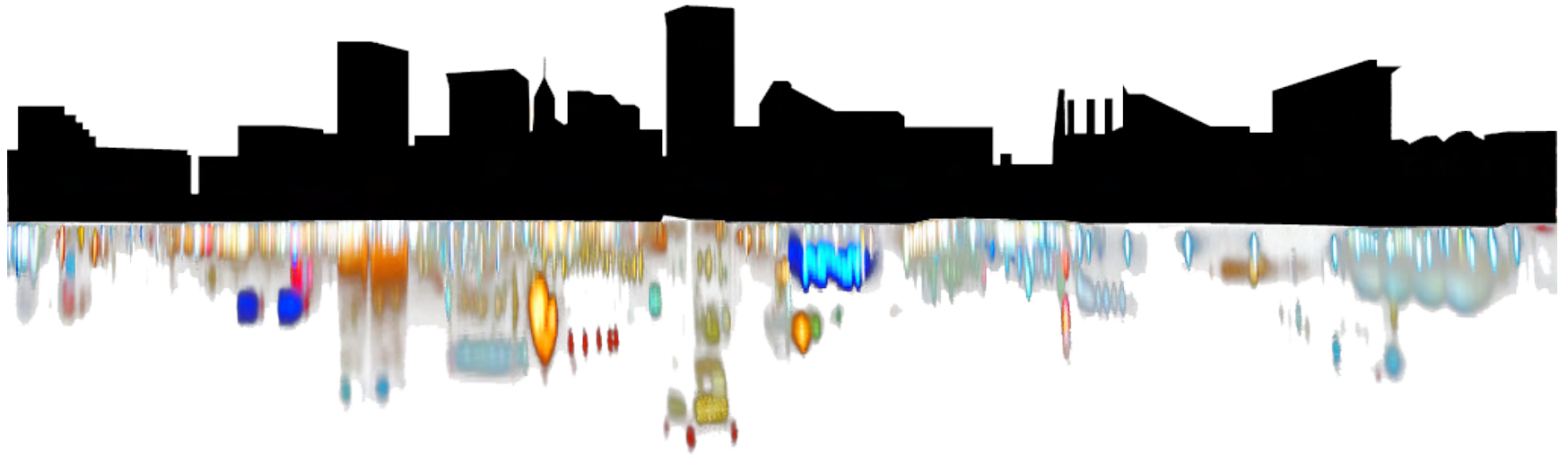
Andrew Cohen

Thesis Advisor
Professor
School of Architecture, Art
and Historic Preservation

Hasan-Uddin Kahn

Thesis Proposal Advisor
Distinguished Professor
School of Architecture, Art
and Historic Preservation

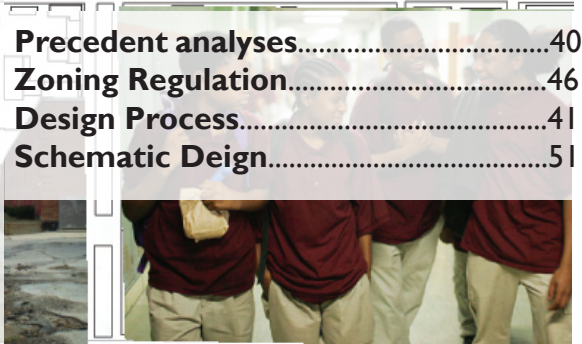
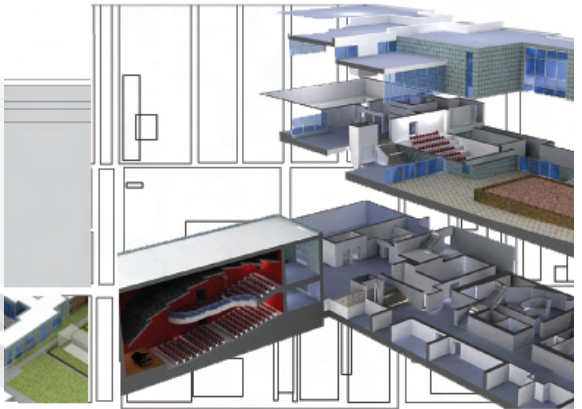
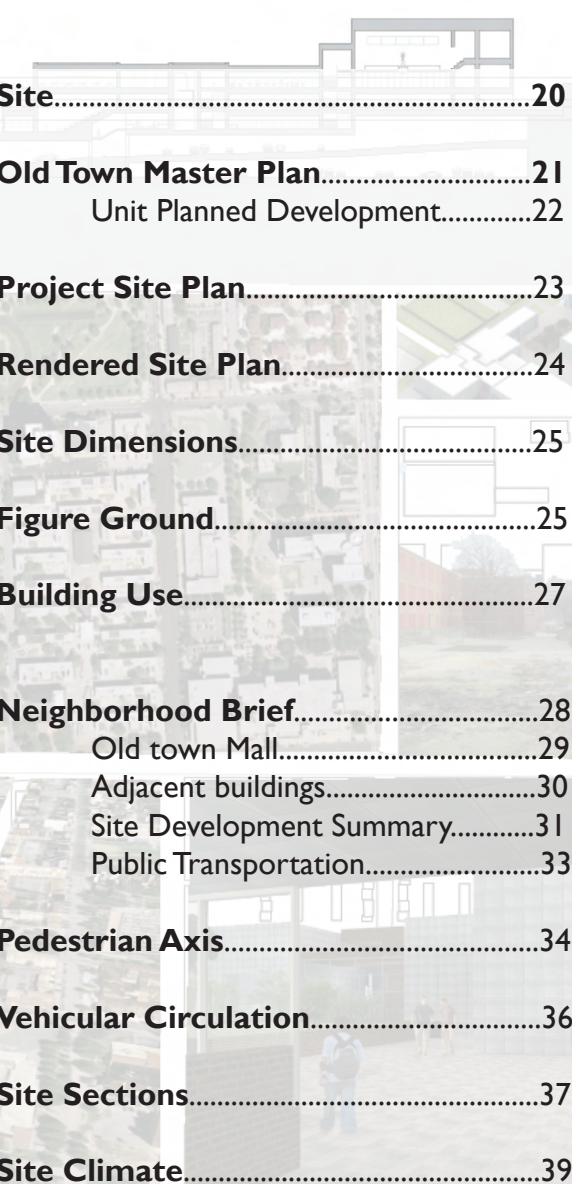
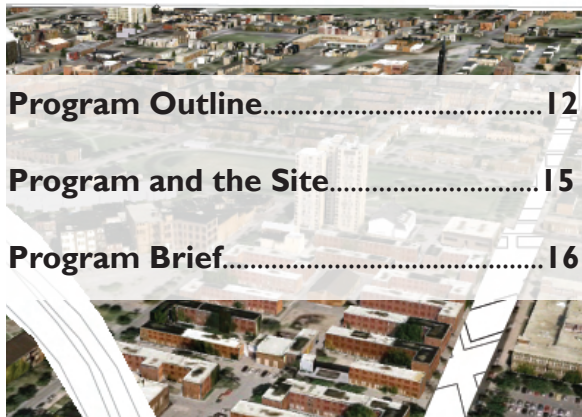
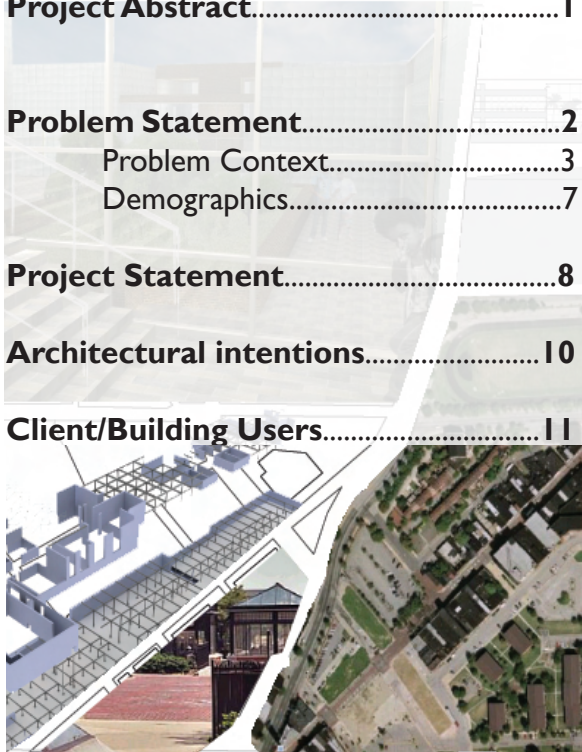
Reconnecting Schools and Neighborhoods



A proposal for School Centered Community Revitalization in Baltimore Maryland.

Table of Contents

Project Abstract	1		
Problem Statement	2	Site	20
Problem Context.....	3	Old Town Master Plan	21
Demographics.....	7	Unit Planned Development.....	22
Project Statement	8	Project Site Plan	23
Architectural intentions	10	Rendered Site Plan	24
Client/Building Users	11	Site Dimensions	25
		Figure Ground	25
		Building Use	27
		Neighborhood Brief	28
		Old town Mall.....	29
		Adjacent buildings.....	30
		Site Development Summary.....	31
		Public Transportation.....	33
Program Outline	12	Pedestrian Axis	34
Program and the Site	15	Vehicular Circulation	36
Program Brief	16	Site Sections	37
		Site Climate	39



Problem Statement

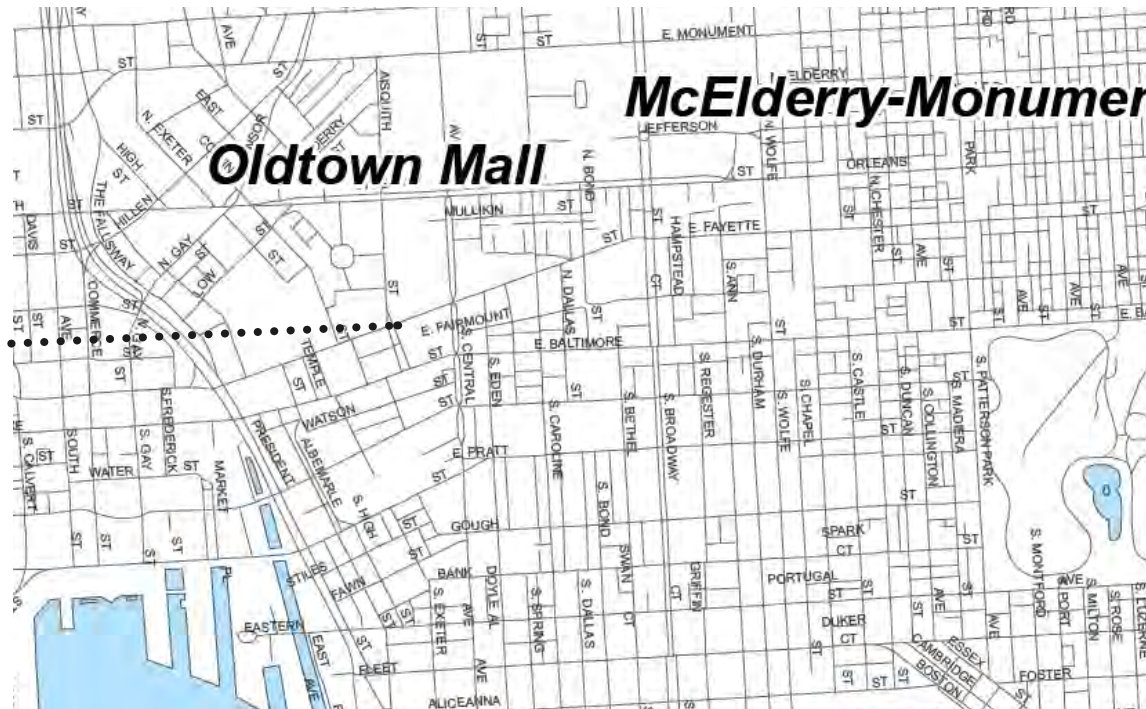
The city of Baltimore is currently facing a crisis. Public schools are far behind the national standards of education. With a graduation rate of 38%, one of the lowest among major cities in the country, something must be done. The city's African American communities in particular, represent the majority of those in the public school system who are suffering from this crisis due to political, economic and social reasons. As a result, schools in these communities don't receive the funding or support they need and the standard of education suffers.

To narrow down the problem in education to a manageable scale is difficult to do considering the scope of its roots in Baltimore's urban Community. However, in order to architecturally deal with the project at a manageable scale, one must look at the situation in Baltimore surrounding education, and how it is interdependently connected with the area's social issues. This community has known struggle in Baltimore for decades. The city's Historical context can help construct a true sense of why it is in the shape it is today.



Image: Cody Miller

Vacant row houses are typical of many of Baltimore neighborhoods.



Baltimore’s African American community is unique. In Baltimore Maryland, African American communities have formed common bonds in response to racial exclusion and segregation. These common bonds united different associations within the community in order to both fight racial discrimination, as well as provide their community with the economical and social needs that racial discrimination oppressed. Their communities’ ability to work together in order to meet these needs can be understood as social capital. In other words the “ability to work together to achieve social ends, based on past experiences and attachments, with minimal reliance on direct payments or coercion”. Moreover, social capital acts as a catalyst for social improvement allowing community members cooperate more successfully.¹ It refers to the connections in and between social networks.

The social ends that this project would hope to accomplish is to address the crisis in the Baltimore Public School System. In addressing these issues it is necessary to understand how social capital works in the community of Baltimore. Revitalizing inner-city associations and expanding networks of civic engagement through community based organizations related to the church and school would benefit church and school as well as the community. Having different civic groups interact, would allow them to cooperate efficiently and aide urban school reform.²

Historically Baltimore’s relationship between church organizations and the surrounding community has created social capital, and used it to meet social ends. Education and church organizations in Baltimore specifically have a history together, both socially as well as in playing vital roles in the community. This relationship is important to understanding how social capital surrounding the church can benefit educational improvements.



The projects site is pictured above showing a full city block of Vacant apartment buildings, located directly adjacent to a city block of schools

1 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).13.
2 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).8

Problem Context

Understanding the development of black social capital in Baltimore looks far back to its past. Baltimore's location created an interesting social relationship for African Americans. Racial tension essentially played a key role in the development of social capital among African Americans in Baltimore. The African American community came together to form extensive social networks in order to protect their civil rights. One institution, which had a great impact on the coagulation of the community, was the church.

The Sharp Street Methodist church was established in 1792, Bethel African Methodist Episcopal (A.M.E.) Church in 1817, St. James Protestant Episcopal Church in 1824, and union Baptist Church in 1852. All of which are still active today. These African American churches formed in response to restrictions and inequalities in white churches. By creating their own churches, African Americans were able to worship as they desired, without restrictions. "Once established, black churches quickly became the social, political, economic, educational, and even cultural center of the Baltimore black community... (they became) a vehicle for collective action for the congregations and the population at large".¹ Churches then emerged as a support to African American communities and play a vital role in their development.

Education became a large part of the church when the Baltimore City Public School (BCPS) system was established in 1829. Before 1867, the education of African American children was confined to private schools organized and supported by African American churches. Most churches in the 1800's taught reading and writing through reading religious scriptures in Sabbath schools. However some churches provided a day school service to both free and slave African Americans.

Historically, many other organizations associated themselves with African American churches. Since African Americans weren't able to go to public schools due to racial discrimination, private schools for African Americans often associated themselves with churches. African American benevolent associations, mutual aid and relief societies, literary and debating societies, and fraternal organizations were often linked to the church as well. By the mid to late 1800's, the relationships of social networks to the African American church formed a high level of social capital, making the church the "cultural womb of the black community."²

The African American community fell back on its social capital as racial tension fluctuated throughout history. During the early 1800's immigrants from Germany, Ireland and other European nations competed with African Americans for jobs. As a result of the competition, state legislation restricted civil liberties of African Americans. The Jacobs bill in 1860 specifically proposed to ban the assembly of African Americans and barring them from either acquiring or holding property. African American social capital was used in rallying opposition to the bill by using social networks to petition the amendment. "African American ministers organized weekly protests meetings, inviting prominent local ministers as speakers."³ These actions facilitated by social ties proved effective, defeating the Jacobs bill within the same year it was proposed.

In 1864, Maryland abolished slavery in the state. However, throughout the remainder of the 19th and 20th century the African American community relied on its ability to come together to fight violations in human rights specifically during the civil rights movement. During this time the African American community united at a large scale that permanently affected the social paradigm for them. Much like the past, history shows that throughout the movement various associations allied with churches in order to help the cause of the African American community during this time.

2 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).26

3 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).27

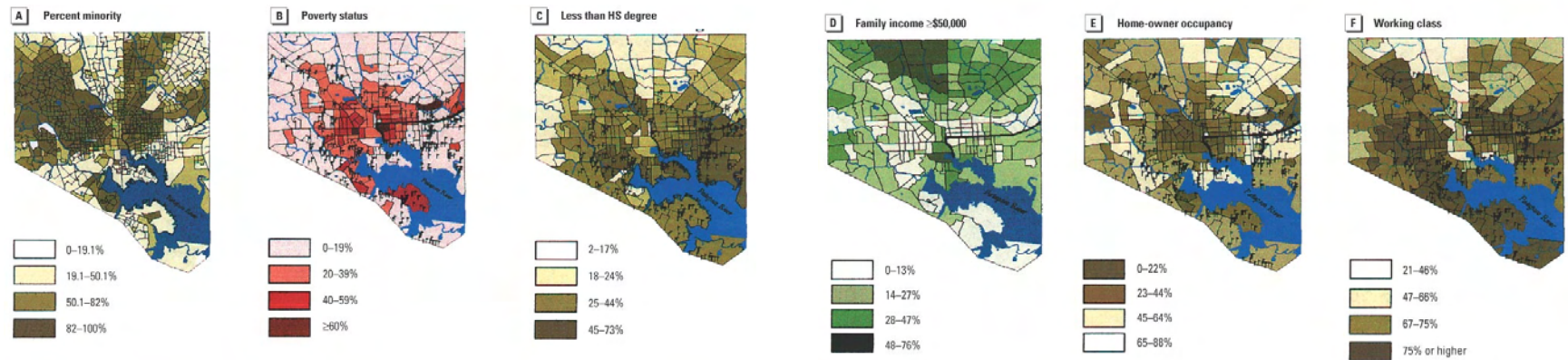
1 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).24.

African American social capital surrounds the economic history of Baltimore’s communities as well. After the 1950’s Baltimore suffered from significant economic decline. The city lost economic vitality in many of the African American neighborhoods. Industrial jobs in the 1960’s and early 70’s declined and people began moving out of the city creating many vacant buildings.¹ High-rise apartment buildings became sources of crime and social alienation. As communities deteriorated again the church played an important role to getting Baltimore back on track. Churches “responded to urban renewal and the costs it imposed on neighborhood and low-income resident by transforming themselves into aggressive community improvement organizations.”² Baltimoreans United in Leadership Development (BUILD) was an influential organization that became successful in renewing African American neighborhoods through uniting churches during the 1990’s.

The economic changes of the 1950’s directly affected the city’s schools. Today Baltimore’s school systems are some of the worst in the nation far behind national educational standards.

This understanding of Baltimore’s urban community informs the project’s program and site. The building’s program facilitates programs that are common between school and church as well as the community as a whole. Being located adjacent to a middle school, college institution and two churches, the site of the project connects school and church as well. While the building would operate as a school for the Baltimore City Public schools, the adjacent buildings would benefit from the musical qualities the building has to offer. As a result the school as well as the whole community benefits from the relationship between the organizations.

Spatial display of socioeconomic trends in Baltimore City



(A) Percentage minority by census block group. (B) Percentage below poverty level by census tract. (C) Percentage with less than a high school (HS) degree. (D) Percentage of families earning greater than \$50,000. (E) Percentage home-owner occupancy. (F) Percentage working class, as defined by 8 of 13 census occupational groups: administrative support; sales; private household services; other services (except protective services); precision production, crafts, and repairs; machine operators, assemblers, and inspectors; transportation and material moving; handlers, equipment cleaners, and laborers.

1 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999),36.
 2 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999),37.

Problem Context

In many ways the structure of the project came from developing the structure surrounding the problem it aimed to solve; Baltimore's educational crisis. In other words in attempting to develop an architectural solution to alleviate the symptoms of a problem the project began to take shape based on the cause of the symptoms. "To do a good architectural program you have to understand not only the symptoms but the source of the symptoms, the problem. In order to help define the problem, you have to understand the context".¹

However as you ask the question of what causes this problem I discovered that it was also caused by yet another problem, pushing the level of complexity of the problem as well as the scope of the relevant context further and further. Eventually the scope of the problem reaches "a realm where our traditional architecture skills are not particularly useful. However, we find that understanding the context results in architectural solutions that are more appropriate, that have more foresight...The history of architecture shows that while we cannot solve social problems with physical solutions, we can aggravate or alleviate them with architectural solutions."² In addressing the problem of education in Baltimore I found that expanding the scope of the context would ensure that the project helps, not hurt the existing situation.

In the broadest sense of scale Baltimore's urban community as a whole provides the social context to the issues surrounding school centered urban renewal. As a result analyzing the development of Baltimore's urban community or more specifically its African American community shows how the problem arose in the first place, as well as how the community has dealt with similar problems in the past. At the same time this analysis shows which approaches have been successful and which have failed. Thus far the communities development of Social Capital has proved to be successful in overcoming community crisis' in the past. The communities social capital than can be used as context to develop an architectural solution.



Looking Towards Downtown Baltimore and the inner harbor, a block with school buildings is located adjacent to a block of vacant row houses.



Looking towards Dunbar Middle School and playground located on the interior of the block in the adjacent picture.



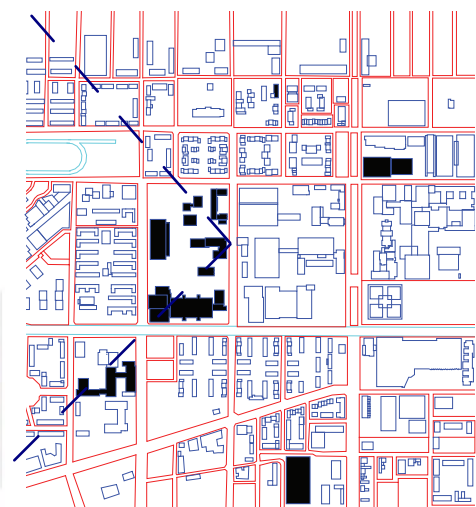
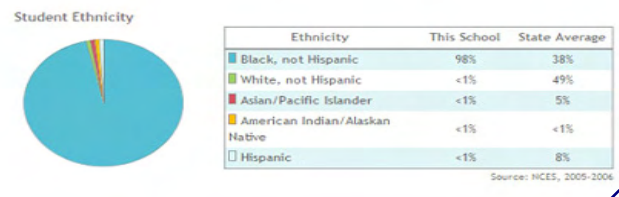
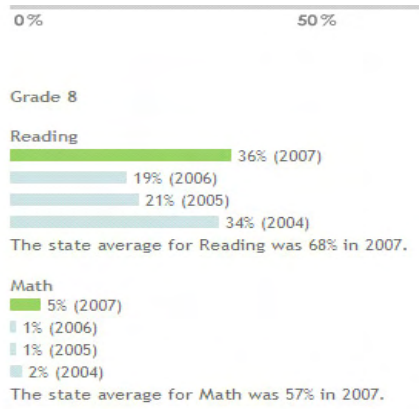
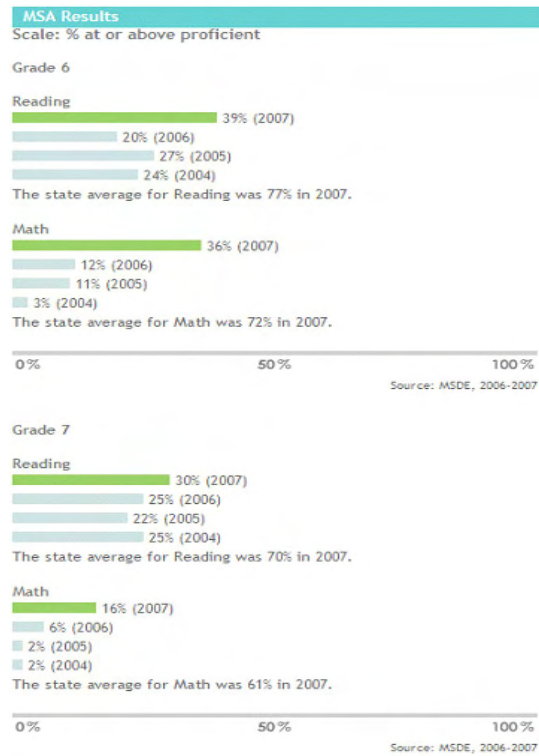
The Church pictured above is one of the few buildings that has not been abandoned on this city block.

- 1 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).31
- 2 ORR, Marion. Black social capital: the politics of school reform in Baltimore, 1986-1998 (Lawrence: University Press of Kansas, 1999).31

Demographics

Dunbar Middle school statistics are representative of Baltimore’s poor standards in public education. Located adjacent to the site this graph represent the statistics in the sites area as well. The graphs show that Dunbar Middle School as well as other Baltimore City Public schools are well behind the state average, and even further behind national standards. Dunbar Middle school is also 98% black, where the state average is 38%.

Dunbar Middle School serves 500 students from grades 6-8. The school currently works with various community organizations to provide extracurricular activities for its students. These activities include computers, instrumental music, arts and crafts, Charm club, basketball swimming, football, service learning, discussion groups, table games, debate team and chess club.



This chart displays the demographics of Dunbar Middle School located one block over from the projects site. The demographics shown here are comparable to students who are expected to use the facilities designed in the project.

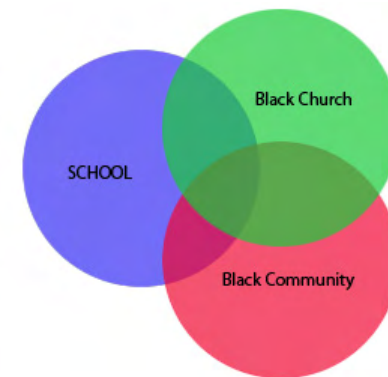
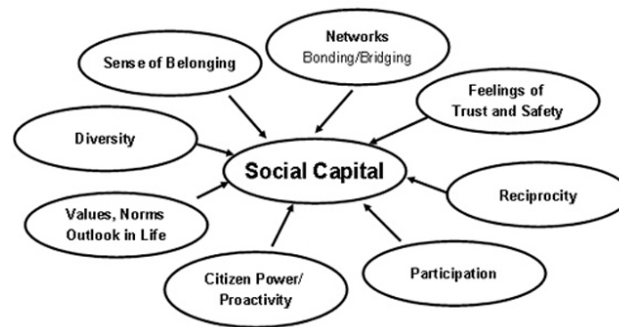
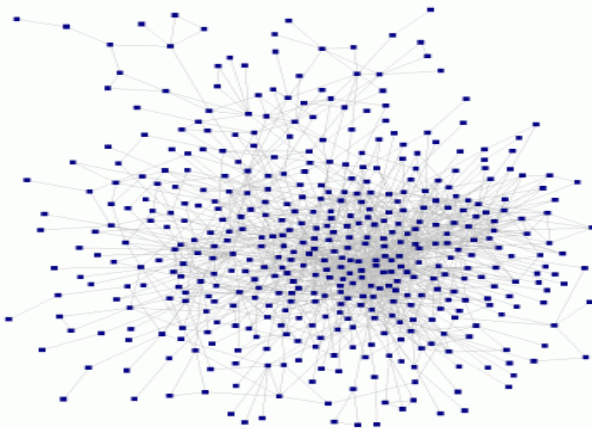
Schools located nearby the projects site Figure Ground Diagram

Project Statement

This project attempts to address the issues surrounding public education in Baltimore, and in doing so, assist in alleviating symptoms that prevent strong communities. By designing a public middle school that facilitates program for students as well as the community, it explores the possible approaches to school reform. To get a better understanding of what programs might support school reform I began my research by looking to historical organizations that have overcome similar crisis' in the past. No organization in the African American community has been as successful or influential as the African American church.

Historically churches have provided the means to overcome similar issues in Baltimore's urban communities. African American churches in Baltimore have shown they have the power to act as an organization with the means to unite community and influence its surrounding social, political, and economical context. This concept of the church as an organization with the means to address and overcome this crisis is in Baltimore is explored to gain understanding of how to create a building that combines program that activates the community and at the same time allows the community to activate the program. A building with a music-based program would act as such a catalyst. Music is an art that is shared between school, church and the community as a whole acting as a catalyst for both site and context. The design of a music school would be ideal for the city of Baltimore to bring different groups together, in order to create **SOCIAL CAPITAL**, and address the educational crisis in Baltimore.

This project is for the design of a building that facilitates music programs for a Middle school as well as performance spaces for the entire community including the church. The buildings site is ideal for allowing the building to cooperate fully with the surrounding contexts. Located directly adjacent to Dunbar Middle school and two churches with a dozen churches within walking distance, the building integrates with its immediate context as well as the African community as a whole. The two adjacent churches; First Baptist Church, and St. Phillips Evangelical Lutheran, and Dunbar Middle share programs that can interact to benefit each other.



Project statement

Growing up as a youth in Baltimore can be very difficult, especially when the public school system is failing. The period represented by grades 5-8 is especially critical in a student's development. Students in (BCPS) recognize that they cannot reach their full potential without a proper education, and the practicality of receiving one is limited by their environment. As a result many youths turn to the streets.

A music school for the city would provide insight on how to address this problem. A learning environment structured around performance and music would show students that they can really get something out of their education by connecting what they learn in school with community programs that share the building they learn in. The African American community already has strong connections to music in their culture. The building site reinforces these connections by working with the adjacent public buildings which all have a connection to music. A music school would bring the community together and benefit the Public School system at the same time. The young adults' education will be structured around something tangible that they can hold on to, be a part of, and be proud of.

To maximize the child's will to succeed, the building will provide state of the art facilities for both the school and the community. The services the building houses will act as a catalyst for the BCPS's as well as the surrounding area. By providing a facility with the means to accommodate professional performances the building would be able to attract significant clients to lease the space and generate income for the BCPS. At the same time receiving an education in a building in which their favorite artist performs, giving students a sense that what they are doing matters, creating an interest and will to succeed.

The music the students perform or study will become a part of their life creating a stronger connection between a student and an education, enabling them to begin to understand the connections and relationships between music and other disciplines. By understanding the cultural and historical forces that shape social attitudes and behaviors, students are better prepared to live and work in communities that are increasingly multicultural. The role that music will play in students' lives depends in large measure on the level of the skills they achieve in creating, performing, and listening to music.



Dunbar Middle School is located on the sites adjacent city block

Architectural Intentions

An important architectural intention of the project is to design a building that acts as a catalyst in reforming Baltimore's Public Schools, as well as revitalize the surrounding community. To do so, the program is designed to give young adults a rich musical environment in which to grow and receive a formal education while allowing them to maintain a focus on performance in the 21st century. At the same time the building's program is developed in a way that helps to reinforce existing, as well as create new ties to the community as a whole. By providing the City of Baltimore with state of the art music facilities, significant public building clients will be attracted to use the building. The intention in providing such significant space is that they would act as a catalyst for both the school and community, bringing economical and cultural support to the area. Another intention in providing the city with a substantial music facility would be to improve students drive to succeed. Students would feel a sense of pride in their school, performing in a nice facility in the same space that significant performers have used as well.

Another primary concern of this design project is to meet the acoustical needs of a music facility. Acoustical studies of performance spaces will aid in designing optimal performance spaces. In doing so the building will design spaces that enhance the experience of both performers as well as the audience.

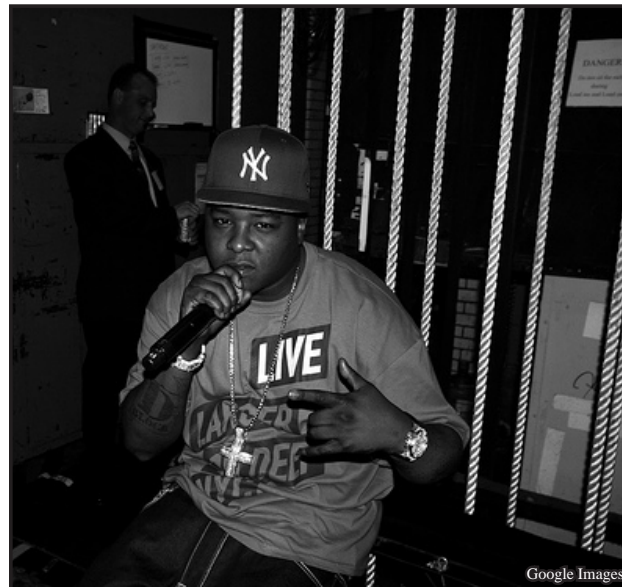
The project would also address how the technical aspects of music can be explored architecturally in order to create an ideal environment to learn about the art of contemporary music and performance. This project looks to the technological aspects of the Schulic School of Music building of McGill University in Montreal by architects Saucier and Perrotte as a precedent for music/building technologies. Since elements of the building require extensive engineering, the Schulic building is explored in order to understand how the building merges architecture and technologies in order to promote building use as well as improve standards of education.

Apart from the technological aspects, an architectural intention of the project would also be to create a place conducive to the learning environment of the programs. To do so the building should respond to local conditions that are generated from the sites context. Spaces should respond, and take advantage of local climate conditions. Classrooms should incorporate direct sunlight and natural ventilation.

The building should also enhance the sites current existing conditions such as the public spaces that are created in the interior of the block by the surrounding buildings. The exterior spaces and entrances of my project should work together with existing conditions to enhance the use of the building and its site.

While the building is intended to be used by the Community of Baltimore as a whole, the building's client is the Baltimore City Public Schools (BCPS). The building is intended to operate as a public school as well as a public music center incorporating, public meeting space, multiple venues for public performances, and professional rehearsal/recording studios.

As a result of the building type and location, the users of this facility represent a variety of cultural entities. The African American church represents a variety of faiths that all have strong connections to music. The culture of a public school in the area has a whole subculture of urban music as well. This creates a variety of tastes, offering a range of music and sounds. A music center in Baltimore could accommodate for concerts responding to a variety of genres. This would enhance their developing sense of community, and become a source of pride for the residents and its students. The building would serve as a focal point of their interaction in communal activities.



By providing flexibility of building uses and users, students and the community alike can support and invest in each other through a common space. With a focus on music the interaction between community and education resonates to create sustainable social conditions that will serve as a basis for an urban renewal plan.

Program Outline

The program is intended to provide young adults with a rich musical environment in which to grow and receive an education while allowing them to maintain a focus on performance in the 21st century. The program of the building would provide spaces for traditional classrooms as well as spaces for an academic study of music, but place a greater emphasis on performances.

Conceptually the Program can be broken up into separate components that work both individually, as well as cohesively as a school. The programmatic elements are divided into academic departments such as Music, Physical Education, Library, Cafeteria, Lecture Hall, and Classrooms. Each department's program is intended to be able to be used as its own building and function with out relying on the rest of school, allowing each department to operate after school hours.

Each department program is calculated as a whole and then broken down individually. Performance, rehearsal and recording spaces designed to be used by both the school and the surrounding community providing professional musical facilities for students and musicians. Performance, rehearsal and recording spaces provide a range of types of music performances and events that the building can house.

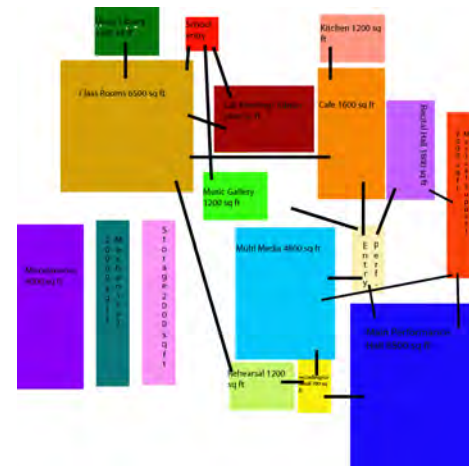
Program Narrative

It's the night of the Winter Concert at Baltimore's premier performing arts center. Students, parents, and their families make their way toward East Baltimore's newest center for Music and Performance. Young musicians withdraw to warm up/rehearsal spaces as their families enter to the Music Building's main lobby and mingle before taking their seat in the largest of the three theaters in the building. Others pass the time before the show by browsing through the music gallery or sitting in the gardens and plazas in front the building. The galleries offer recordings of recent performances the school has held; school plays, local artists, community ceremonies, and professional concerts. After browsing the galleries, parents gather with members of their community to watch their children perform in a state of the art theater.

The concert is taking place in Baltimore's newest and much needed modern concert hall. The theater fills with people and the show begins. The concert stage is a simplistically organized and as the curtain opens, live musicians, dancers and other performing artists take the stage. The entire room becomes included in the experience as costumed characters and giant puppets perform throughout the room, interacting with and often bringing audience members up onto the stage to become part of the show. Students and teachers all work together to produce the show for the audience.

After the performance the families reunite in the cafe. The Space is filled with the excitement of the ceremony and offers an inviting space for people to gather and have refreshments. As the building empties, people pour out onto plazas and filter out onto inner block pedestrian paths which the students take to and from school everyday or directly to the metro station.

Program Relationships diagram



School Total Program.....99,330 sq. ft.

Program.....70,950 sq. ft.

Circulation (40 %)...28,380 sq. ft.

Music.....26,000 sq. ft.

 Theater Lobbies.....6000 sq. ft.

 Main Performance Hall..... 8500 sq. ft.

 300 seats

 Multimedia Black Box Theater.....3800 sq. ft.

 225 seats

 Recital hall.....1500 sq. ft.

 100 seats

 Music Building Rest rooms.....575 sq. ft..

 Men's.....250 Sq. ft.

 Women's.....375 Sq. ft.

 Ticket Booth/Security Kiosk.....650 Sq. Ft.

 Practice/Rehearsal Rooms.....2480 sq. ft.

 Chorus Room.....450 sq. ft.

 Percussion Room.....1400 sq. ft.

 General Rehearsal Room.....950 sq. ft.

 Instrumental Room.....680 sq. ft.

 Piano Room.....270 sq. ft.

 Solo Rehearsal Room.....180 sq. ft.

 Control booths/Recording studio.....2000 sq. ft.

 Isolated Multi-Booth Studio.....1500 sq. ft.

 Instrumental Recording Booth....500 sq. ft.

 Mixing Booth.....2 @ 250 sq. ft.

 Music Faculty Offices.....480 sq. ft.

 Offices.....,3 @ 170 sq. ft.

Program Outline

Library..... 10,000 sq. ft.

- Browsing Space.....3000 sq. ft.
- Reading Space.....3000 sq. ft.
- Office/Kiosk.....850 sq. ft.
- Rest rooms.....375 sq. ft.
- Storage.....1950 sq. ft.

Physical Education.....26,000 sq. ft.

- Gymnasium.....5400 sq. ft.
60 ft. x 90 ft. x 40 ft..
- Weight Room.....2,4800 sq. ft.
- Changing Rooms.....1500 sq. ft.
- Music Offices/Kiosk.....1000 sq. ft.
 - Office.....1 @ 350 sq. ft.
 - Office.....2 @ 200 sq. ft.
- Storage.....1020 sq. ft.
 - Gym Storage.....420 sq. ft.
 - Weight Storage.....600 sq. ft.
- Rest Rooms.....480 sq. ft.

Lecture hall..... 1,550 sq. ft.

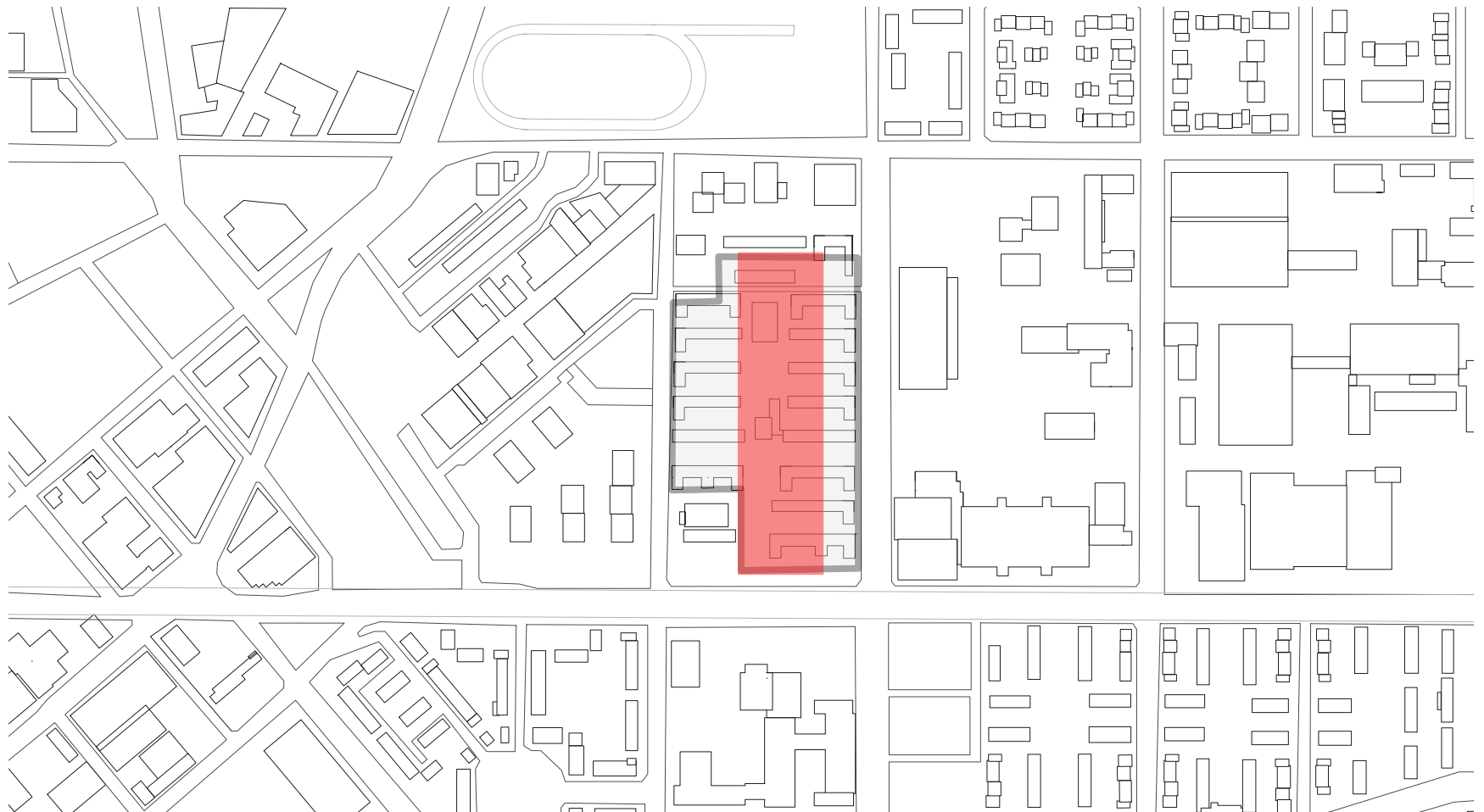
Cafeteria.....3,700 sq. ft.


- Cafeteria.....2 @ 1600 sq. ft.
- Kitchen.....2 @ 480 sq. ft.


Classrooms.....3,700 sq. ft.

- Art Rooms.....2 @ 1,800 sq. ft.
- Science Labs.....3 @ 1,800 sq. ft.
- Science Greenhouse.....1,120 sq. ft.
- Review/Study Rooms.....2 @ 800 sq. ft.
- Traditional Classrooms.....8 @ 1150 sq. ft.
- Multimedia Labs.....2 @ 560 sq. ft.

These diagrams show to scale, the dimensions of the buildings site overlaid on the program. Following the required setbacks, the site is roughly 3 times larger than the program. A site master plan will be helpful in considering how to best manage such a large space. All of the buildings on the block are vacant buildings except for the two churches on Asquith St. on the West of the block. The master plan should address how the abandoned row-houses on the site, as well as other structures that may aid the program of the music school. The master plan must also reinforce a strong relationship between program and site, creating an overall strategy for the project which interacts the program with the surrounding urban context to create a relationship which is beneficial to both site and program.



 Site.....292436 sq. ft.

 Total Program.....99,330 sq. ft.

Program Brief

Theater/Lobbies.....6000 sq. ft.

The Music Building’s program creates a condition that is unique in relationship to the rest of the building; during performances up to 700 people must be able to easily enter and exit the building through a primary entrance while at the same time, the building must be able to operate within the parti of being an independent programmatic element that makes up a part of the school as a whole. In order to maintain the parti and meet the logistical needs of 700 people who need access to a large space two separate entrances are required to the music building. Outside musicians will require an entrance that takes them directly to the location of the building they are using without compromising concerns that are necessary for school security. An entrance for the public that will be used during performances is necessary as well. This entrance must allow visitor’s access to all three performance spaces via a lobby large enough to accommodate 700 people. This entrance has a more public qualities; large open spaces that connect the public programs that would be activated by a performance in the building. The lobby should also provide public support space such as a small box office and coatroom.

Multimedia Black Box Theater.....4800 sq. ft.

A multimedia room accessible from the performance lobby is able to accommodate an audience of 225. This column-free, 60-by-80-by-60 ft.. tall black box that can accommodate a symphony orchestra or choir, providing a cutting edge sound stage for film scoring. Acoustically, there are advantages to constructing this space as a concrete or masonry box for sound and vibration isolation. Since no natural light is needed in this space, it can be pushed below grade further isolating acoustical vibrations. A connection to the recording studios would allow performances to be finely tuned and recorded. Access to support space is required for performances as well.



Main Performance Hall..... 8500 sq. ft.

The main performance hall holds up to 700 people and will be used for medium to large events held by the school and surrounding community. This space is used for major concerts, performances and other of the larger-scaled events that is held in the building. The space is accessible from the performance lobby and has a direct connection to support space and the cafe.

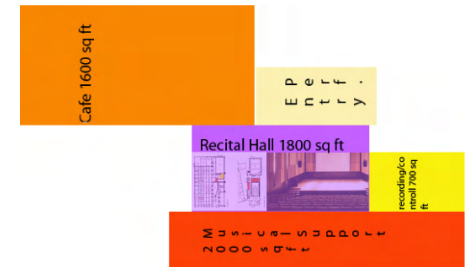
The stage is a primary teaching space for both music and drama. A 49-foot wide by 30-foot high proscenium accommodates combined choral and instrumental rehearsals and performances. The large proscenium also supports operatic drama performances. A moveable orchestra shell, composed of towers and ceiling pieces, reflects sound to the audience. A central sound system cluster directs reinforced music and speech to the audience. An orchestra pit, with movable floor fillers, provides space for musicians to support drama in musical and opera functions. The pit is sized and equipped for future installation of an orchestra lift.



Program Brief

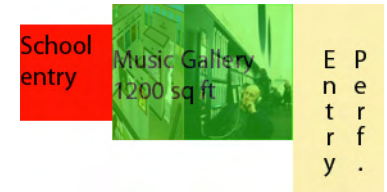
Recital Hall..... | 1250 sq. ft.

A 200-seat recital hall, intended to be used by vocal and instrumental performances as well as rehearsals. The recital hall performers have access to support spaces and control booths and the audience has a connection to the lobby and cafe. Audience seating is raked to provide aesthetically pleasing views in a somewhat intimate setting. The space is equipped with acoustic paneling.



Atrium/Music Gallery..... | 200 sq. ft.

This space is designed to be a common area between programs that displays public and student works. Connecting the main performance spaces, Cafe and meeting rooms. The space displays the work of students as well as previous performances that the building has accommodated. Users will be able to experience these works through audio and video media stations located throughout the space such as projected movies, headphones and images.



Ticket Booth/Security Kiosk..... | 200 sq. ft.

Information, Tickets, Security, and a Coat check must be accessible from the performance lobby.

Practice/Rehearsal Rooms.....2480 sq. ft.

The rehearsal rooms are designed to accommodate a variety of spaces to practice different types of music media from group instrumental and choir rooms to small individual, one on one rehearsal space. Like the main performance hall, all music rehearsal and performing spaces will be equipped with acoustic materials that activate the space. The Materials giving the users a sense that even in private rehearsal rooms, the music they are rehearsing is important.

- Chorus Room.....450 sq. ft.
- Percussion Room.....1400 sq. ft.
- General Rehearsal Room....950 sq. ft.
- Instrumental Room.....680 sq. ft.
- Piano Room.....270 sq. ft.
- Solo Rehearsal Room.....180 sq. ft.

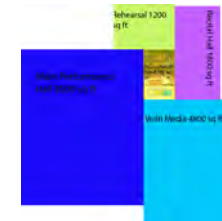


Program Brief

Control booths/Recording studio.....2000 sq. ft.

Students and Musicians will have access to state of the art recording and mixing equipment. A Multi-Booth Digital Recording Studio will allow up to 12 musicians to record at once in a 4-chambered studio. A smaller recording booth will allow musicians to record individually as well as two mixing booths to edit digital media. All chambers demand isolation from vibrations and sounds emanating from outside and inside the building including its mechanical systems.

- Isolated Multi-Booth Studio.....1 500 sq. ft.
- Instrumental Recording Booth.....500 sq. ft.
- Mixing Booth.....2 @ 250 sq. ft.



Music Faculty Offices.....480 sq. ft.

Offices will provide teachers and Music department faculty to manage the buildings music program.

Library.....10,000 sq. ft.

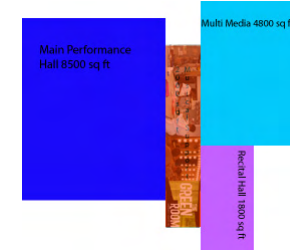
The Library is a comprehensive resource for the School's performance and research needs. It features two major collections; Music and Academy collection. The Music Collection includes music performance and study scores, including scholarly editions of composers' collected works and other historical editions; books on music, dance, drama, and general academic subjects; sound recordings (LPs, compact discs, reel-to-reel, cassette, and DAT tapes), and videos.

- Browsing Space.....3000 sq. ft.
- Reading Space.....3000 sq. ft.
- Office/Kiosk.....850 sq. ft.
- Rest rooms.....375 sq. ft.
- Storage.....1 950 sq. ft.



Performance Support.....2000 sq. ft.

Backstage areas including dressing rooms and a costume shop that will allow instruction of costume and make-up application, as well as providing support during performances. A green room, which allows performers holding area for presenters and performers prior to their introduction to the theatre audience, will also be located backstage. The scene assembly/storage room will provide instruction in set and prop assembly. Space and machinery are provided for working on wood, Styrofoam, plastics, foam board, etc.



Program Brief

Physical Education..... 14,500 sq. ft.

The gym is another component in the programs parti, which will allow it to function after normal school hours as a center for sports and in general as a meeting/auditory space. A weight room and changing rooms are also accessible from the gym. The gym will accommodate a 45 ft. by 75 ft. basketball court.

- Gymnasium.....5400 sq. ft.
60 ft. x 90 ft. x 40 ft.
- Weight Room.....2480 sq. ft.
- Changing Rooms..... 1500 sq. ft.
- Music Offices/Kiosk..... 1000 sq. ft.
- Rest Rooms.....480 sq. ft.

Lecture Hall.....3,700 sq. ft.

A lecture hall allows for 100 persons to meet in an auditorium style setting.

Cafeteria.....3,700 sq. ft.

Two cafeterias are used for multi-functional purposes.

- Kitchen.....2 @ 480 sq. ft.

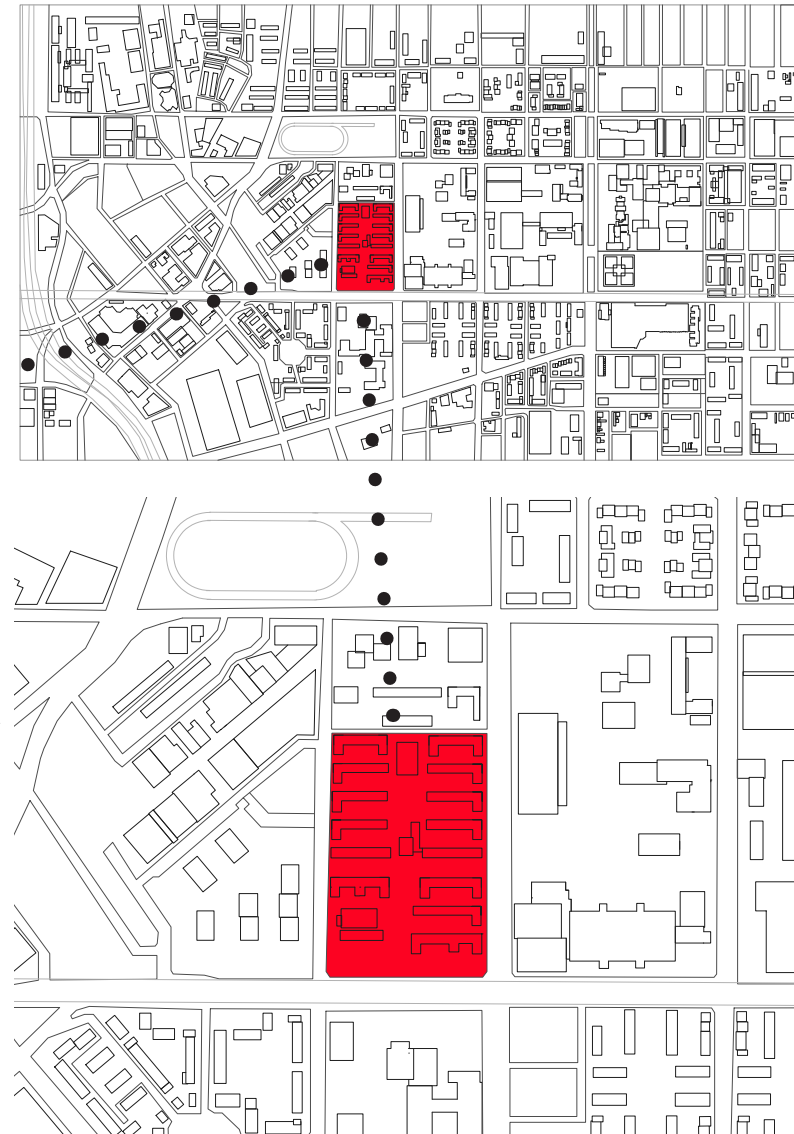
Classrooms.....3,700 sq. ft.

Traditional classrooms where the students academic education occupy 8 of the 17 class rooms in the building. Classrooms for specific programs such as art rooms and science labs are customized to accommodate students with educational technologies and equipment. Art and science classrooms are organized around a greenhouse allowing each department use the green house to structure lessons as well as experience having class overlooking the greenhouse.

- Art Rooms.....2 @ 1,800 sq. ft.
- Science Labs.....3 @ 1,800 sq. ft.
- Science Greenhouse..... 1,120 sq. ft.
- Review/Study Rooms.....2 @ 800 sq. ft.
- Traditional Classrooms.....8 @ 1150 sq. ft.
- Multimedia Labs.....2 @ 560 sq. ft.



Site.....Neighborhoods

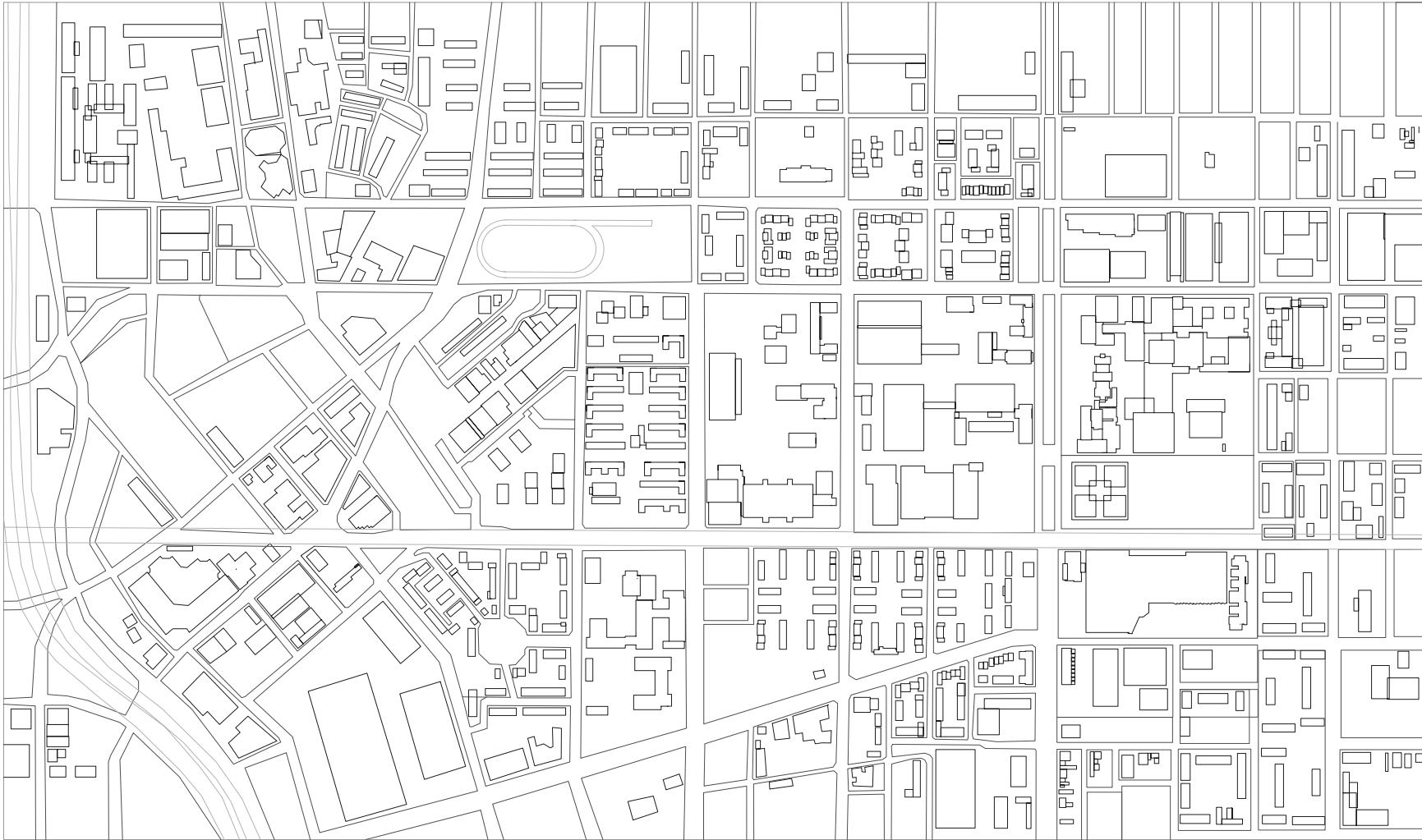


The site is located in the Old Town area of East Baltimore. Approximately 1.2 Miles from the inner harbor.

Old Town Master Plan

The site is located in an area in which Baltimore City's Department of Planning has just begun creating a master plan for the Old Town area as of 2008. However, a plan has yet to be submitted.



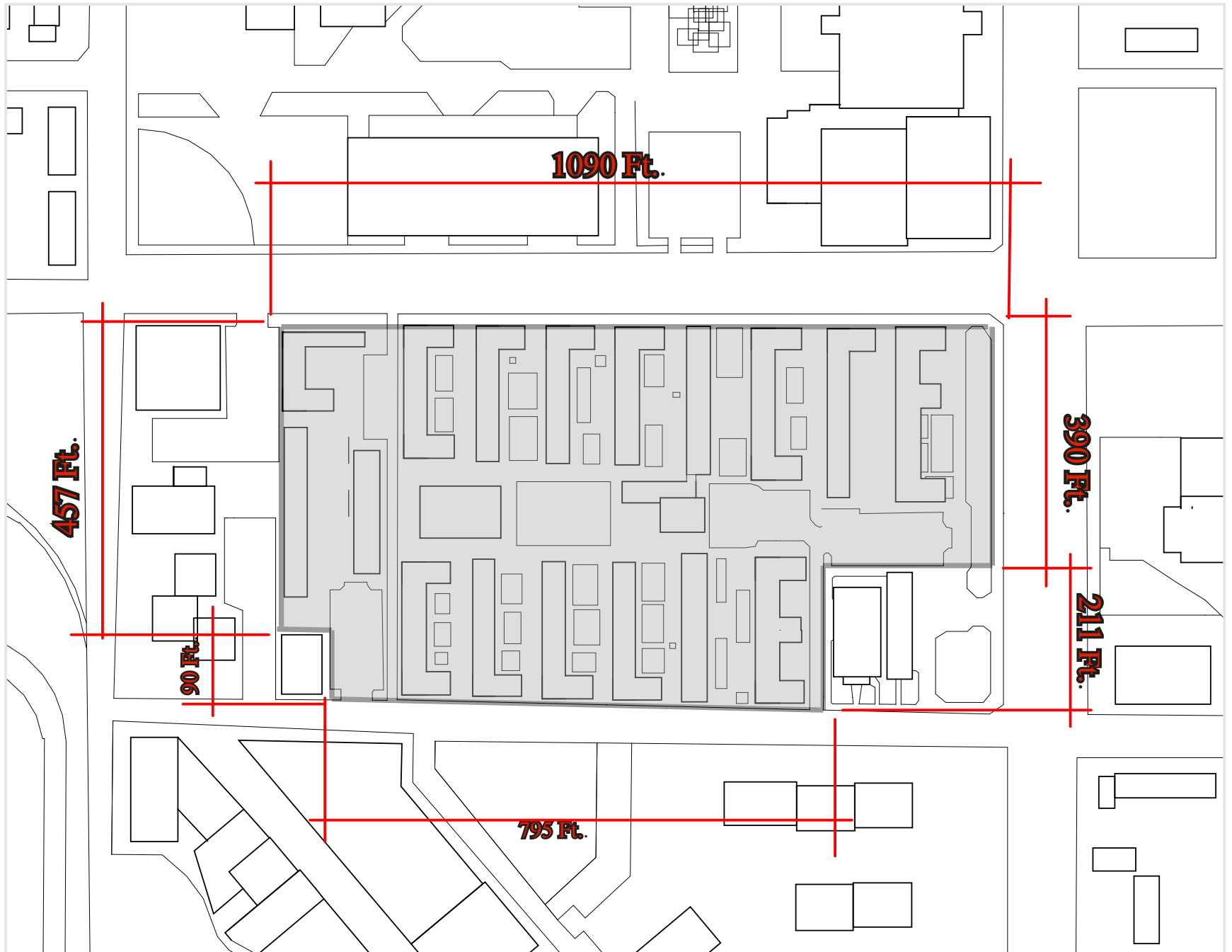


Site Plan With Landscaped Areas

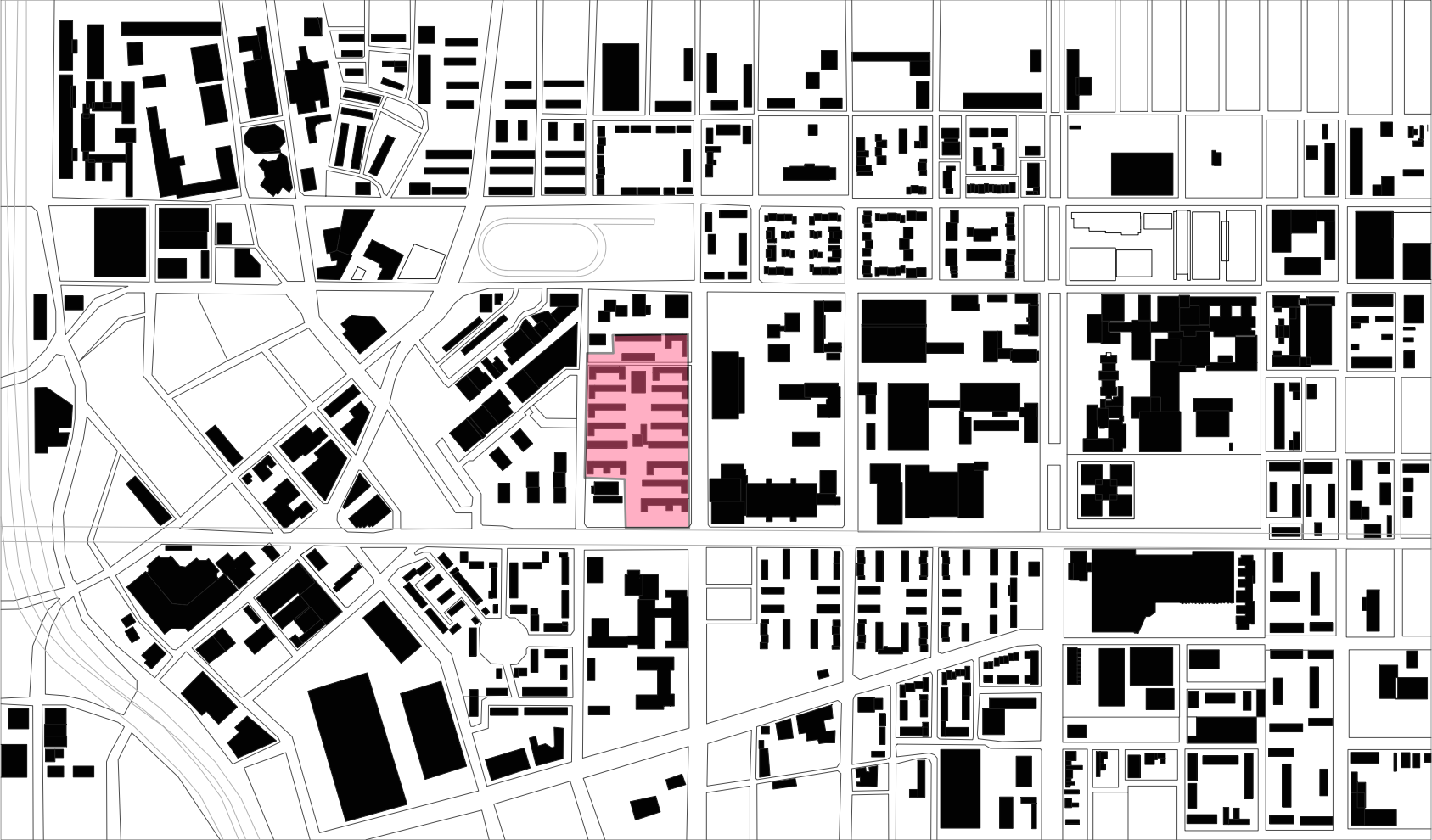



300'
Site Plan

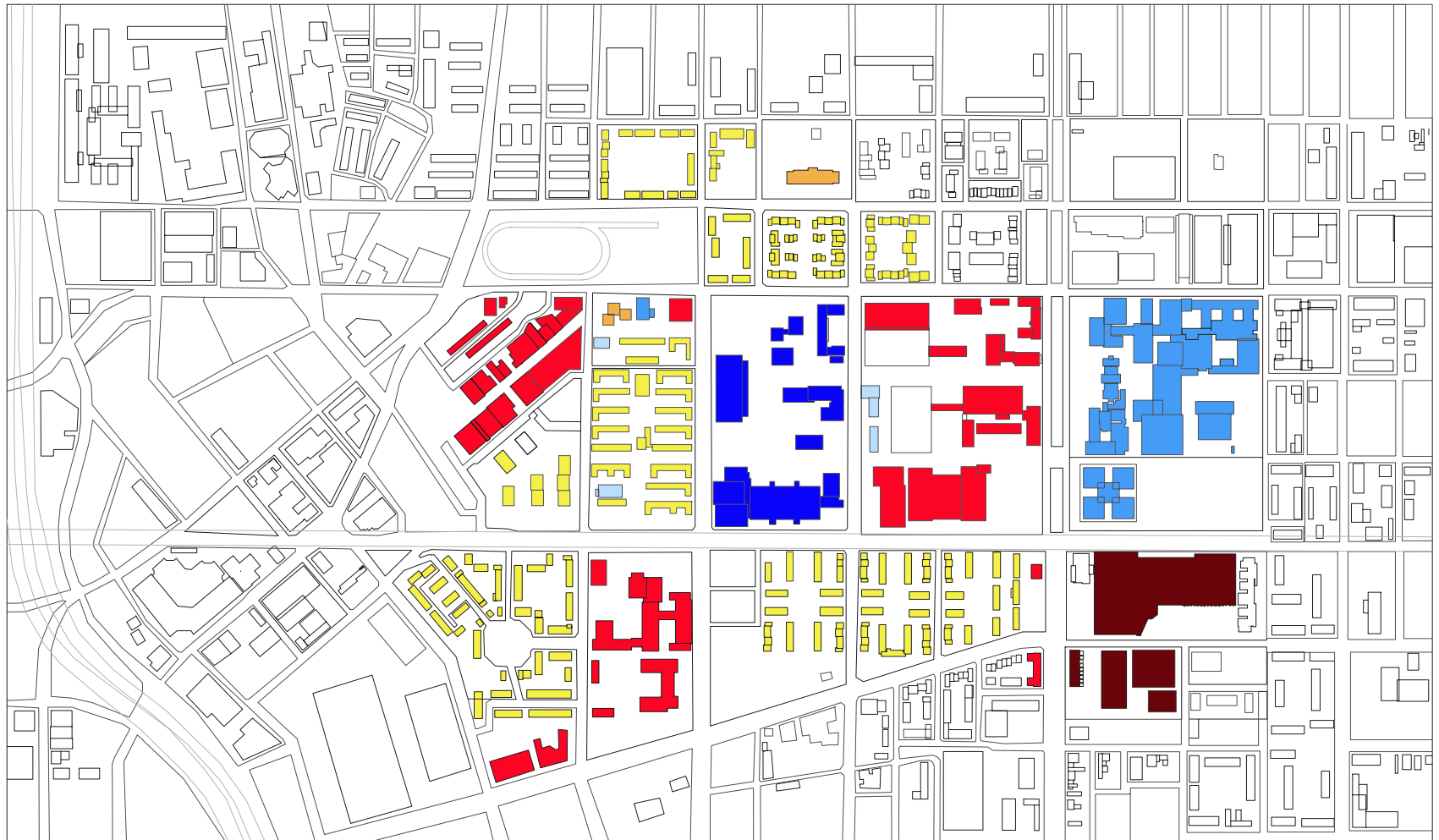
Site Dimensions



Figure/Ground



 Building Site



- Commercial
- Educational
- Industrial
- Residential
- High Rise Housing
- Building Site

Neighborhood Brief

The overall neighborhood quality is made up of patchy areas of alternating building uses. Clusters of schools, medical facilities, housing, and abandoned buildings make up the area's context. The scattered groups of vacant buildings give the area a sense of despair, especially when they are located adjacent to homes and schools. The site is directly adjacent to Dunbar Middle School as well as two churches with a dozen churches within a 1/4 mile or walking distance.



-  Old Town area
-  Project Site

Old Town Mall

Old Town Mall refers to a pedestrian mall that once thrived, serving the surrounding community with commercial goods. Today almost all of the lots on the Pedestrian strip are vacant or under used.

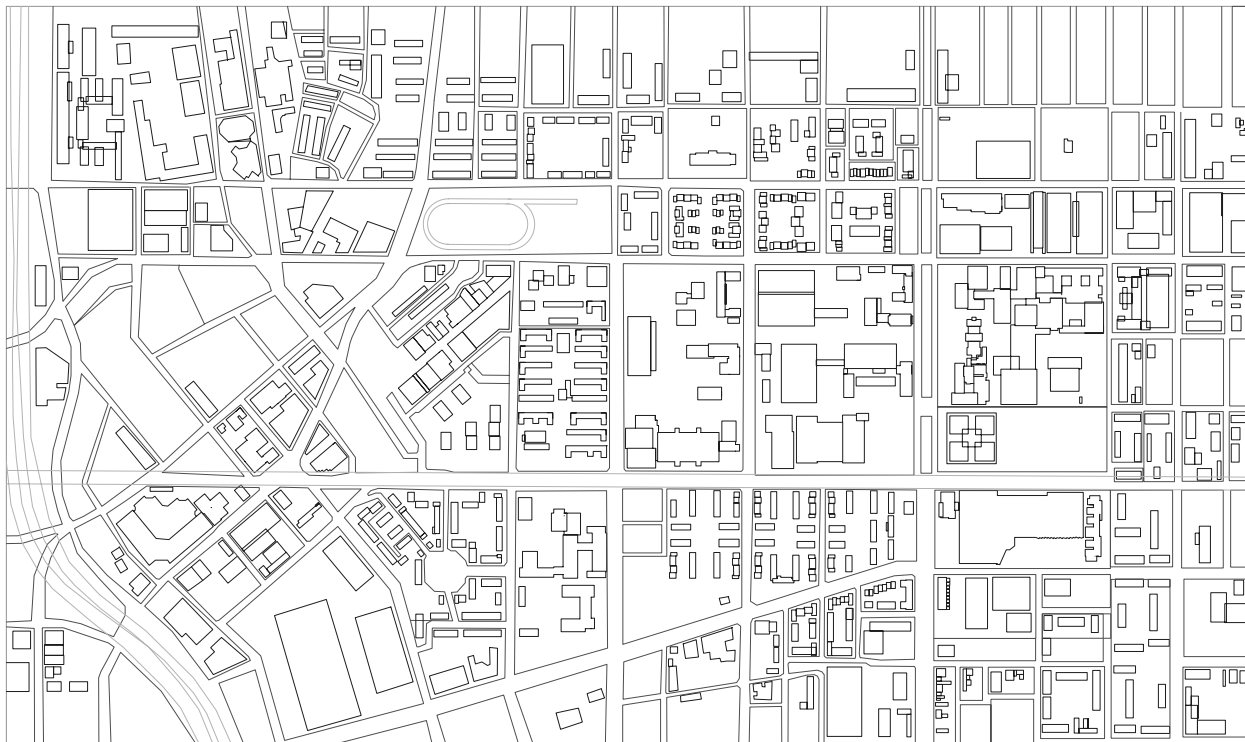
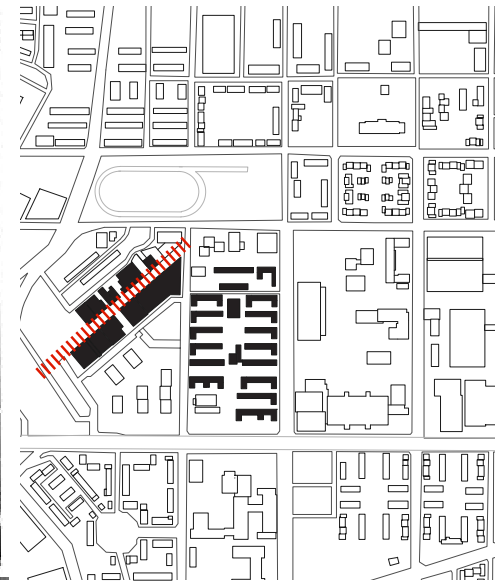
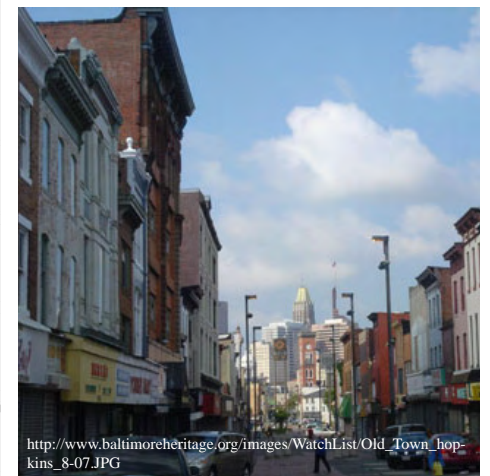
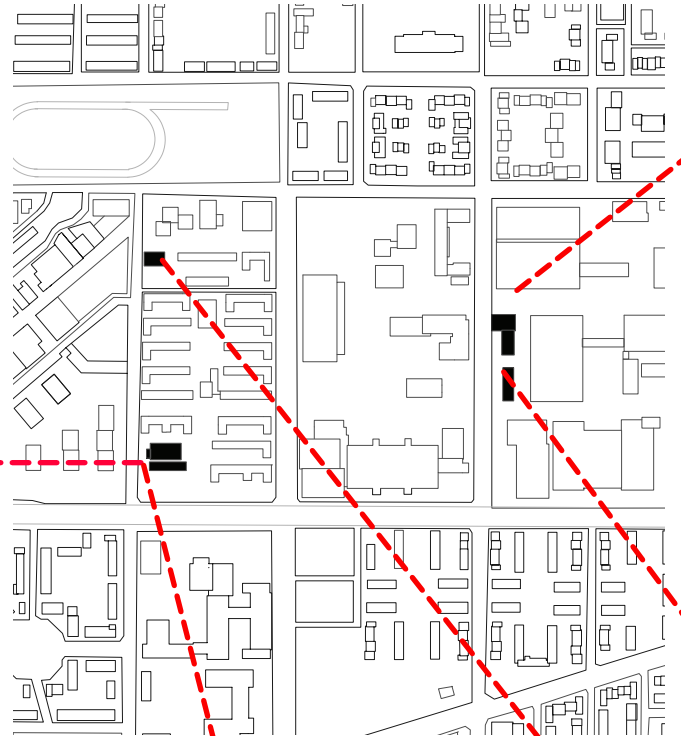


Diagram showing vacant buildings on and adjacent to the site.

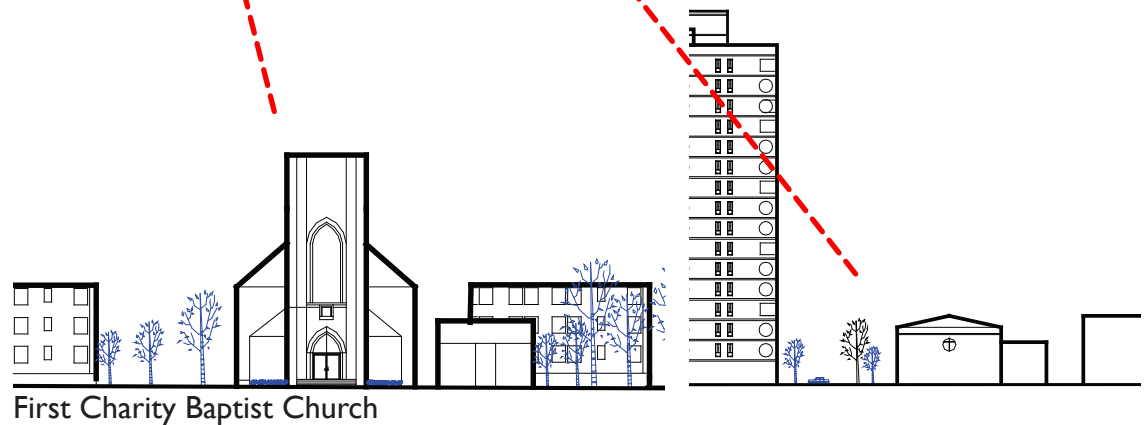
Old Town Pedestrian Mall

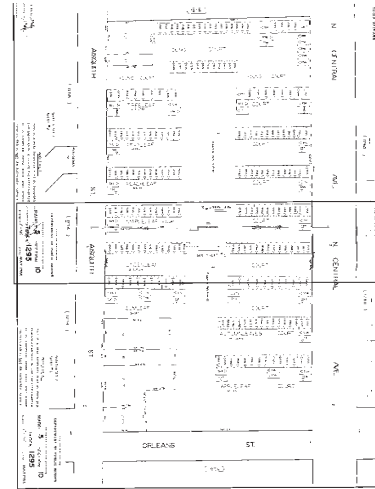


Adjacent Buildings



There are two churches located on the sites block as well as two others, one block over on N Central Ave. All four are still in use and the projects site wraps around the two located on N Aisquith avenue. First charity Baptist Church hosts a choir of twenty members that meets once a week, as well as a hand bell choir, both of which are potential building users.





The site was majorly developed into a community of row-houses known as somerset courts. The community is located just northeast of downtown Baltimore in the Old Town Neighborhood and is bordered by Orleans Street to the South, Central Avenue to the East, Aisquith Street to the West, and E. Monument Street to the North. The site slopes up slightly to the north and is approximately eight and a half acres in size.

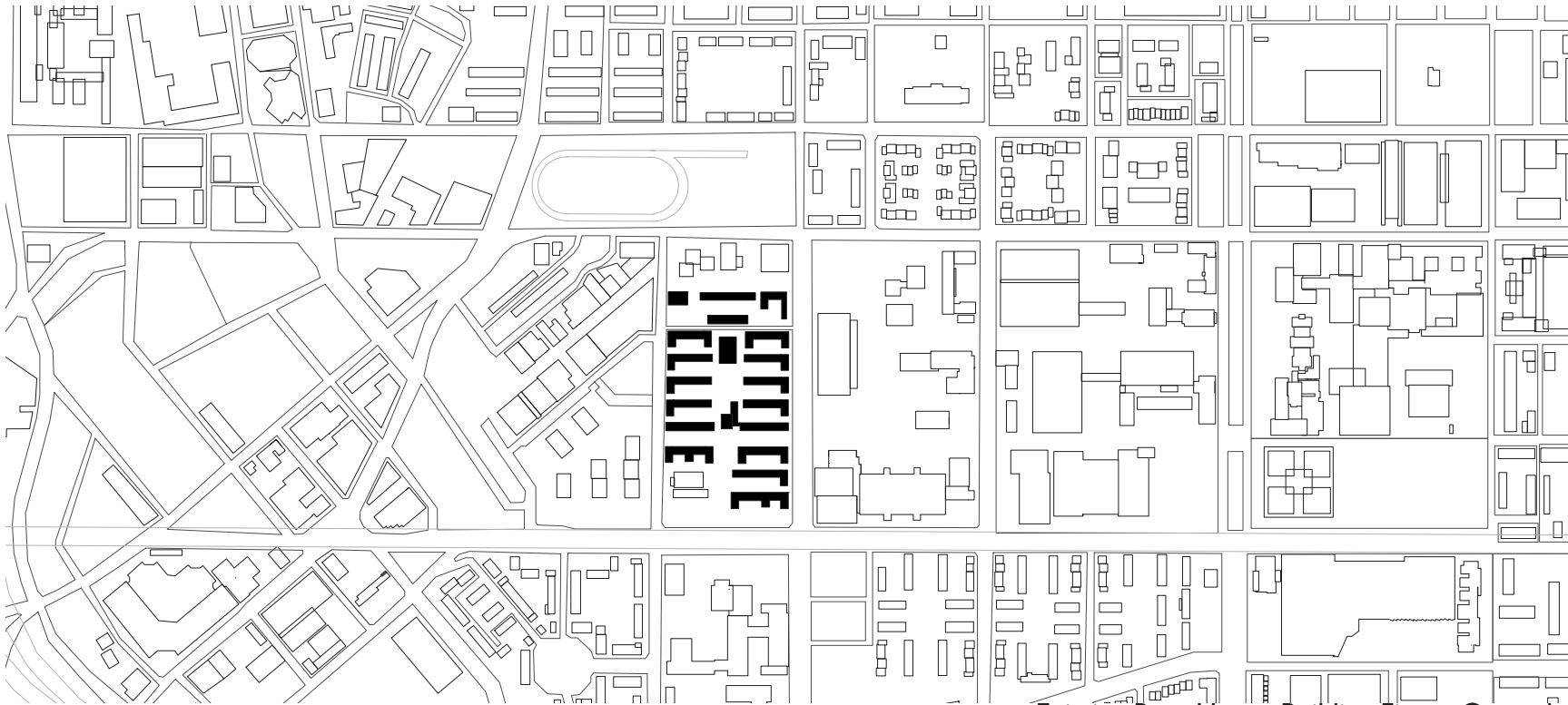
The design of this complex is typical of 1940's public housing. The rectangular brick buildings are situated perpendicular to the streets, around a central court. Each apartment has its own entrance from the front or sides of the buildings. There are no interior corridors.

The development underwent a major comprehensive modernization in 1981, which included the remodeling of all the apartment interiors, new roofs, windows, concrete walks, landscaping, and parking areas, however, the overall physical condition of the development is poor. The site infrastructure, such as sewer, steam, water, and gas lines, have had no major upgrades or replacement. These systems are approximately 60 years old and are at the end of their useful life and are constant maintenance issues.

This project provides an opportunity to restore a neglected area and is an ideal location to generate urban renewal.



Site Development Summary



Existing Row House Building Figure Ground

Somerset Courts Development Summary:

Year Built: 1944

Site Gross Building Area: 336,372 sq. ft.

Type of Development: Conventional Public Housing

Family Development

Total Buildings: 18

Dwelling: 17

Non-Dwelling: 1

Total Units: 257

Efficiencies: 1

One-Bedroom: 74

Two-Bedroom: 80

Three-Bedroom: 90

Construction:

Exterior Walls: Foundation wall

Interior wall: Dry wall

Heating System

Development DU system: Steam

Number of boilers: 0-Outsourced

Utilities Secondary electrical: Underground

Transformers: HABC_Owned/Operated



Image: Cody Miller



Image: Cody Miller



View of metro station access looking south



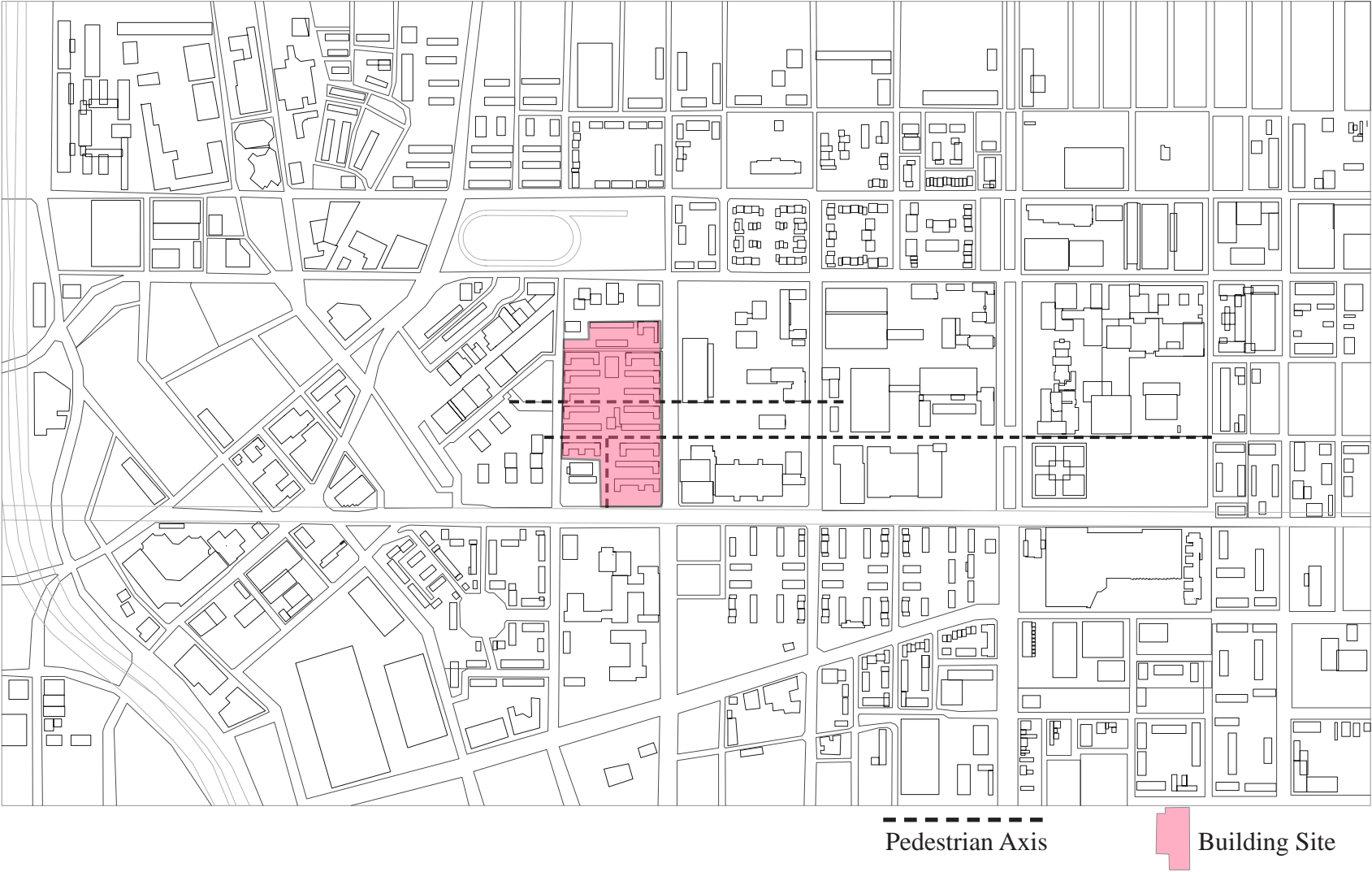
View of metro station access looking north

The location of the metro station in relationship to the site provides site access from the east via Orleans St. as well as the pedestrian access that connect the site with the John Hopkin's area to the east.

Bus transportation uses Orleans St. bus route and access points are located at the metro station as well.

Pedestrian Axis

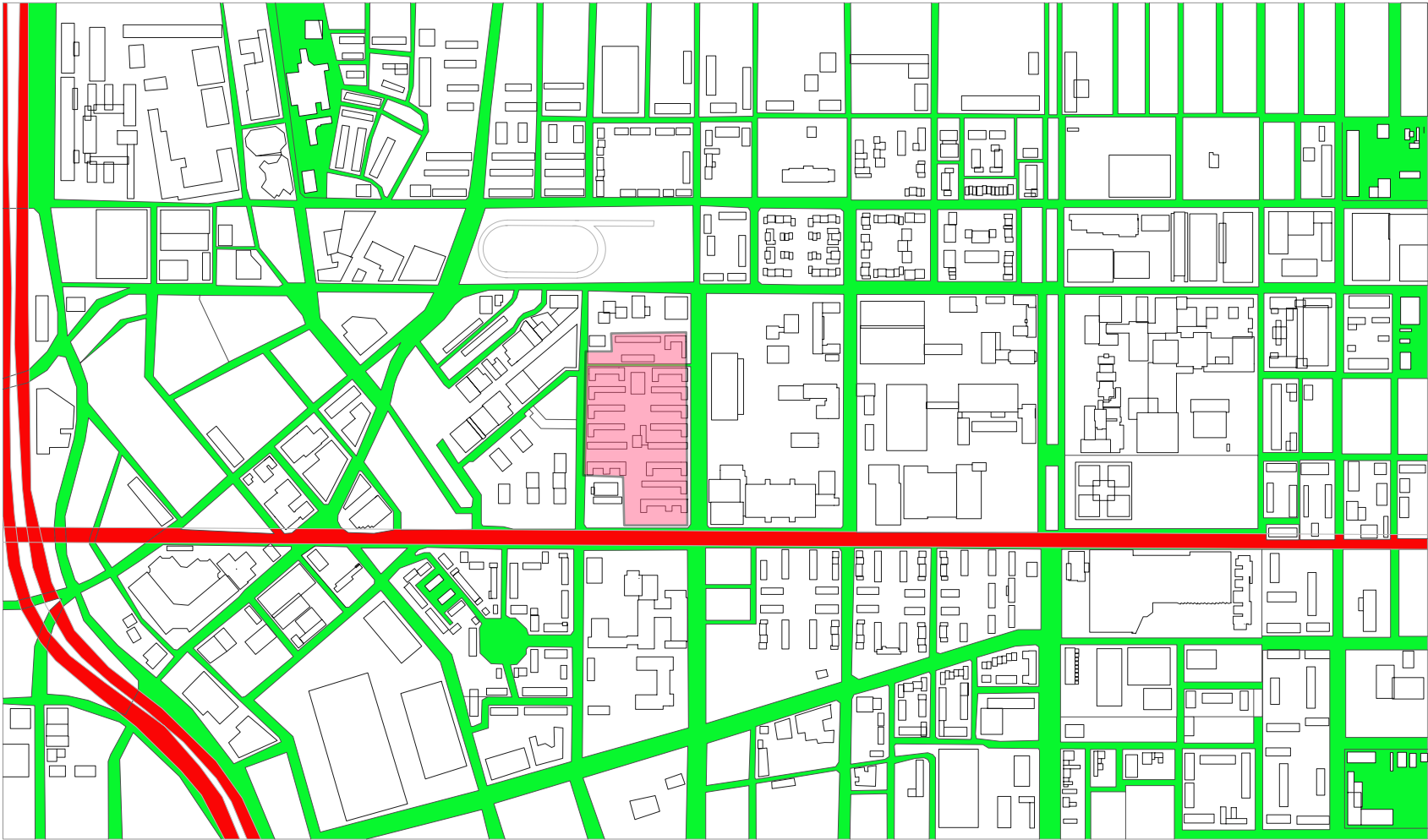
Buildings on adjacent blocks create framed views and pedestrian axis to the site.








Vacant buildings deactivate the pedestrian axes, separating the existing schools and John Hopkins Hospital from the Old Town Mall.

Vehicular Circulation



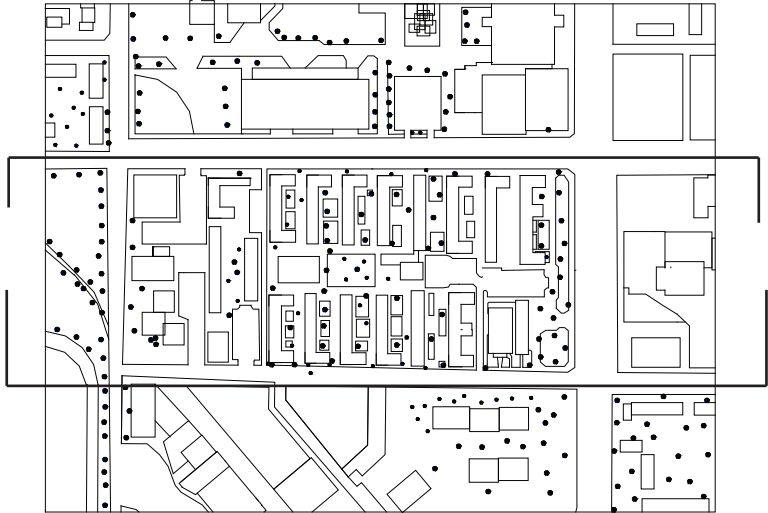
-  Highway
-  Secondary Vehicular Circ.
-  Building Site



300'

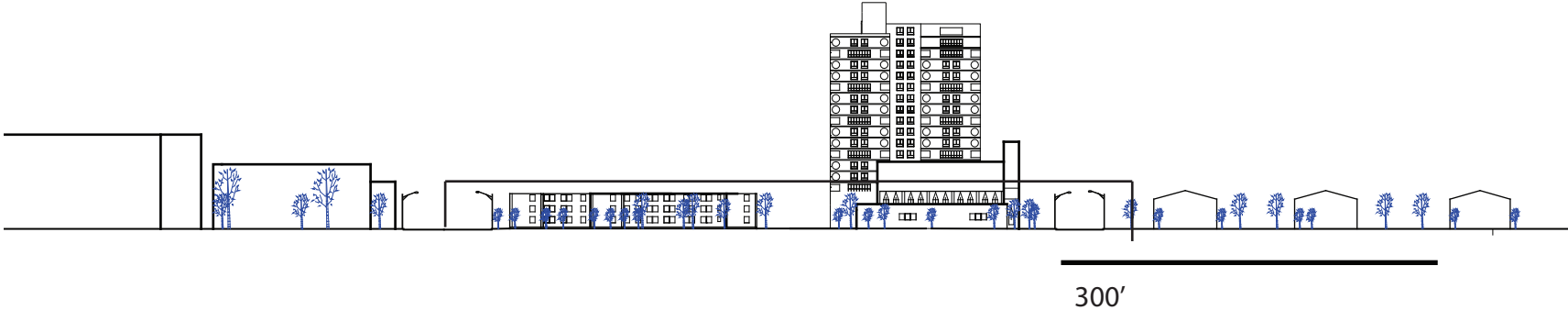
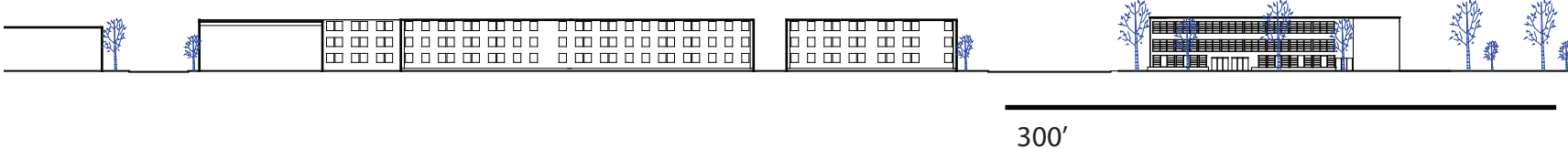


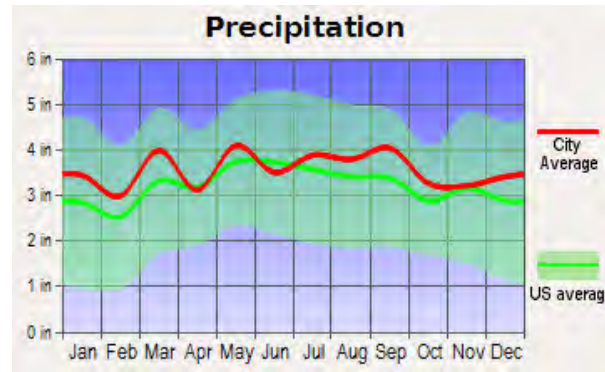
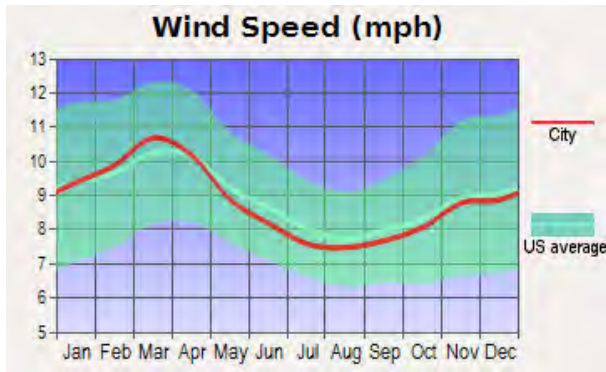
300'



300'

Site Sections

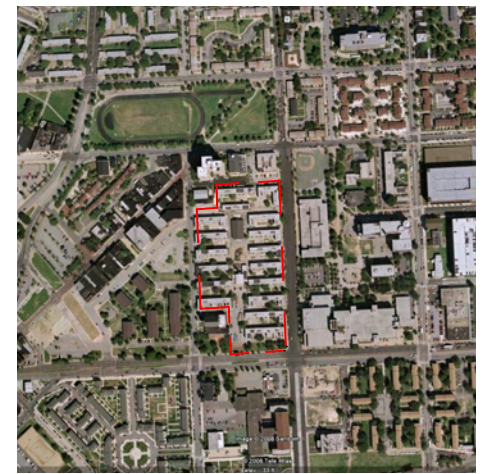
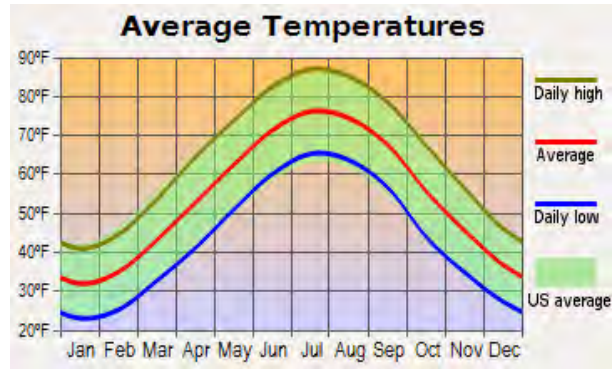
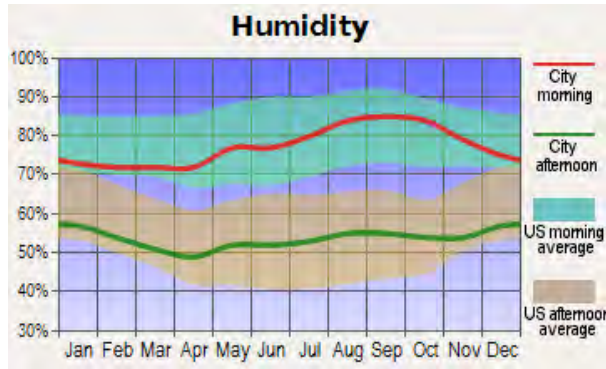




Baltimore's coldest month is January when the average temperature overnight is 23.5°F. In July, the warmest month, the average day time temperature rises to 87.2°F.

Rainfall on average is somewhat consistent and spread throughout the year.

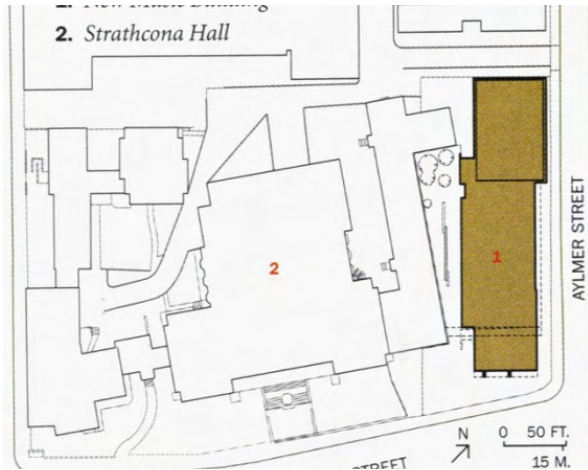
The city experiences hot, humid summers and cold, damp winters.



Precedent Analyses.....McGill Music School

Project.....McGill Music School
Location.....Montreal, CA
Architect.....Saucierr + Perrotte

126,750 sq.. ft..



Working from the outside in and inside out the build responds to the urban context, local topography and an evolving set of interior spatial needs. The building deals with site adjacencies Sherbrooke Streets busy and loud environment and takes advantage of Aylmer Streets quieter edge on the east in the way it organizes its program.

McGill's music school is an example of how music can be approached from a scientific and technological approach in order to understand the technological aspect of the building. Its program includes a Music Media and Technology Center, (MMTC) requiring state of the art performing and recording spaces, as well as.



Precedent Analyses

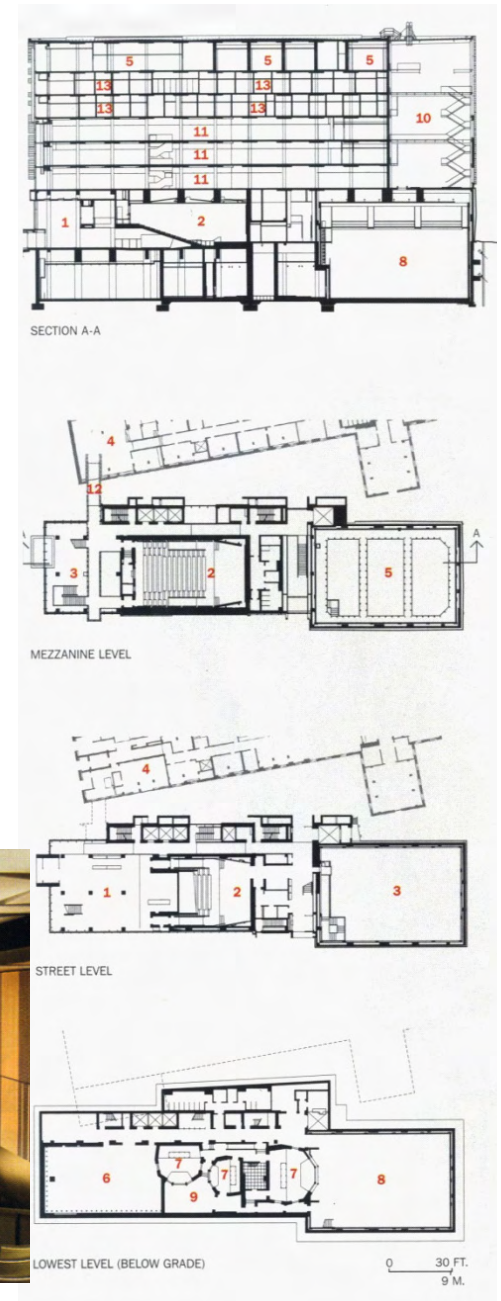
Central to the program is a five-story multimedia room; A column-free, 60-by80-by-60 ft.. tall black box that can accommodate a symphony orchestra or choir, providing a cutting edge sound stage for film scoring.

The facility also includes a rehearsal hall for opera and voice. As recording studios with high-tech digital controls, both chambers demanded isolation from vibrations and sounds emanating from outside and inside the building including its mechanical systems.

To accomplish this acoustic feat in the thick of the city, the MMTC is constructed as a concrete box within another separated by neoprene pads for sound and vibration isolation and is partially buried in the lowest two stories below grade where recording studios and acoustical chambers are entered.

In order to minimize interior sound due to mechanical systems, they are put in 6 story box stacked above the MMTC creating short and more direct and as a result quieter ducts. A 200-seat recital hall is entered off the lobby and its mezzanine with oak acoustic panels.

- 1.....Lobby
- 2.....Recital hall
- 3.....Void
- 4.....Strathcona Hall
- 5.....Lab, Meeting, or Administrative space
- 6.....Opera Rehearsal hall
- 7.....Control booths
- 8.....Multimedia room
- 9.....Recording studio
- 10.....Mechanical
- 11.....Music Library
- 12.....Bridge
- 13.....Office

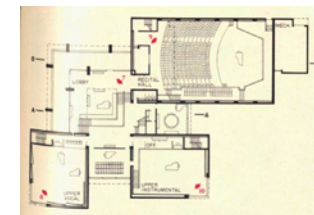
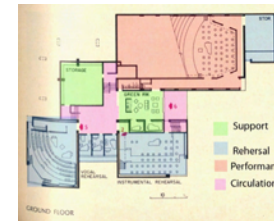
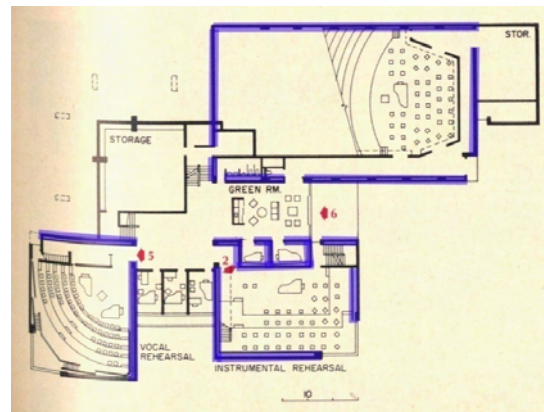
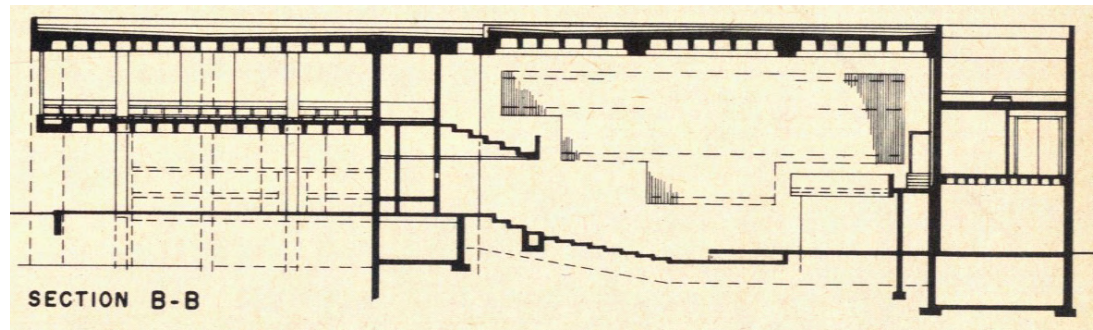
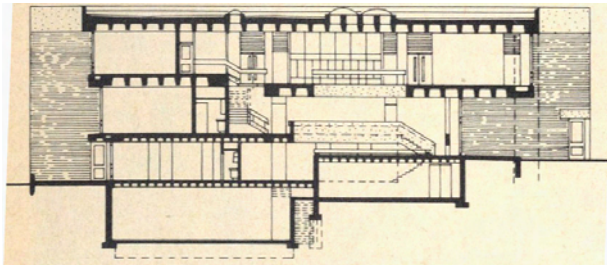


Precedent Analyses.....Amherst College Music Building

Project.....Amherst College Music Building
Location..... Montreal
Architect..... Benjamin Thompson

98,620 sq. ft.

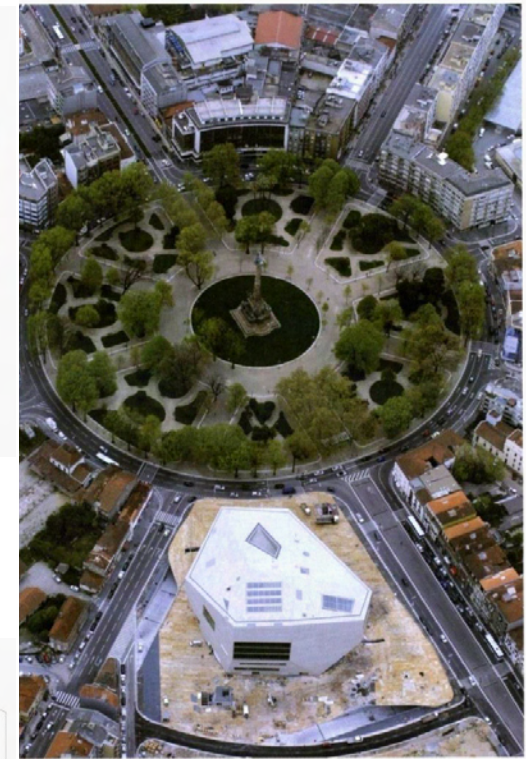
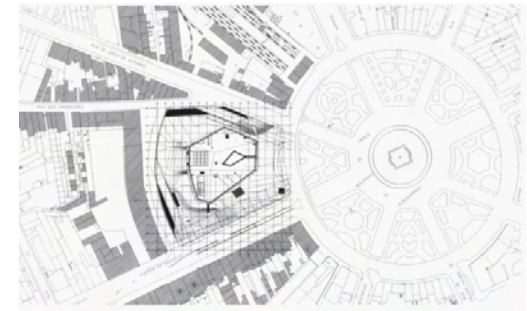
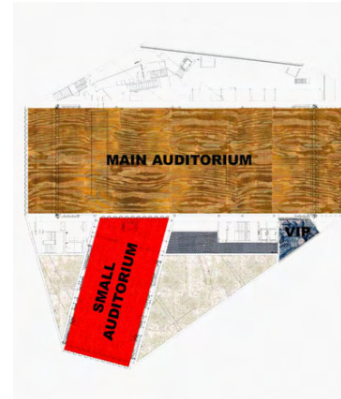
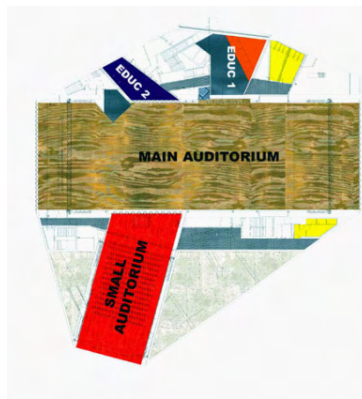
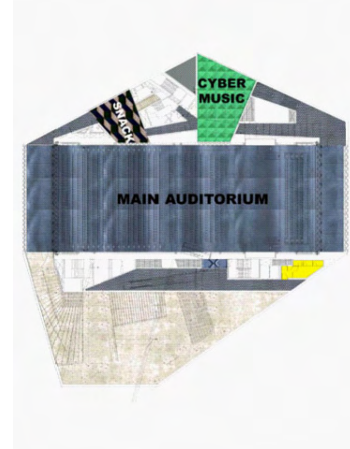
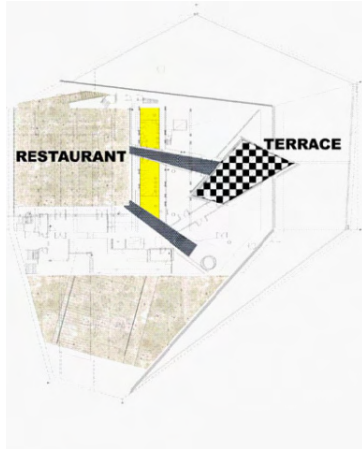
The plan accommodates for various sized rehearsal rooms. Performance and rehearsal spaces connect to support space and wrap around common areas. Concrete load bearing walls with acoustically isolate noise from room to room. Acoustic paneling helps isolate and reduce reverberation.



Precedent Analyses.....Casa Da Musica

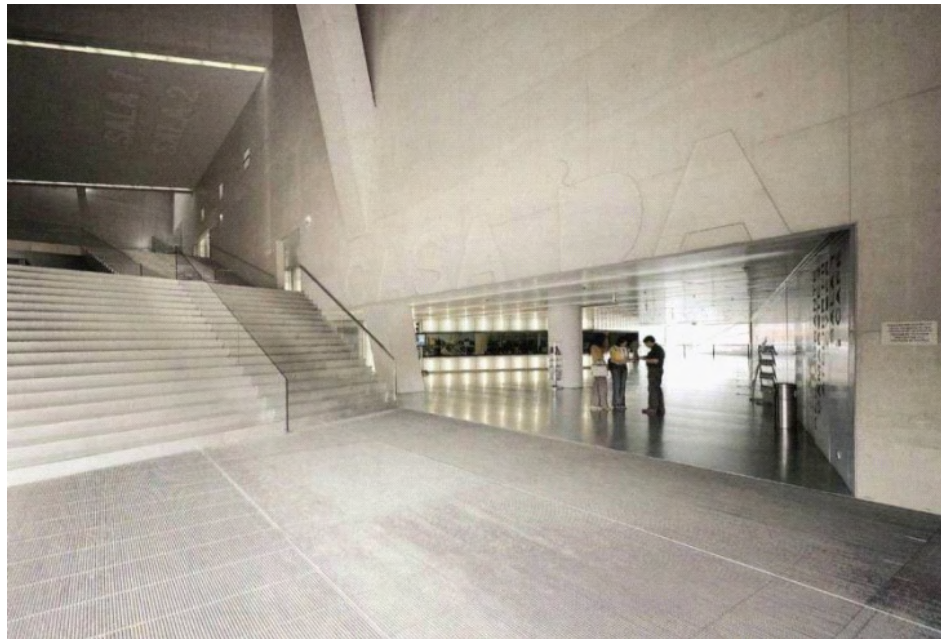
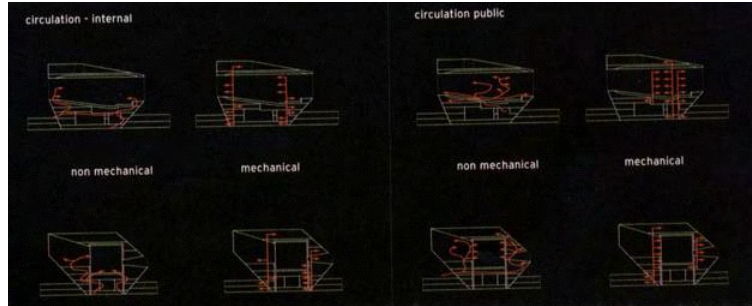
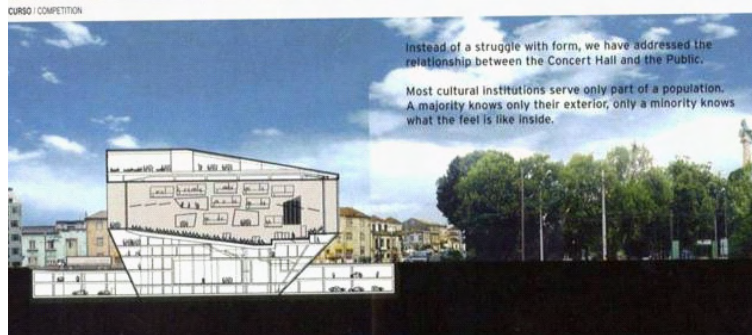
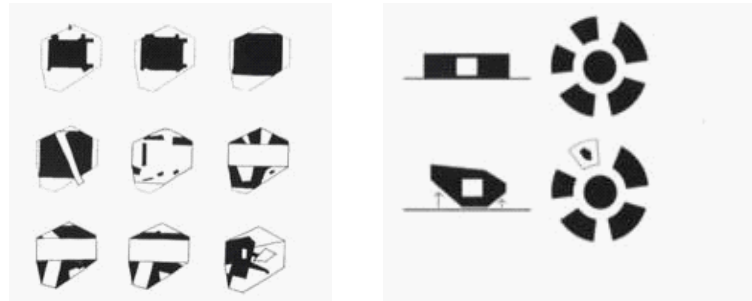
Project.....Casa Da Musica
Location.....Porto., Portugal
Architect..... OMA/ Koolhaas

Located in Porto in the historical centre of Porto, Portugal adjacent to the Rotun da Boavista. The building creates its own square that connects to the adjacent historical park. This connection creates a relationship that connects the old to new that allows them to create a positive encounter on the two modes of the city.



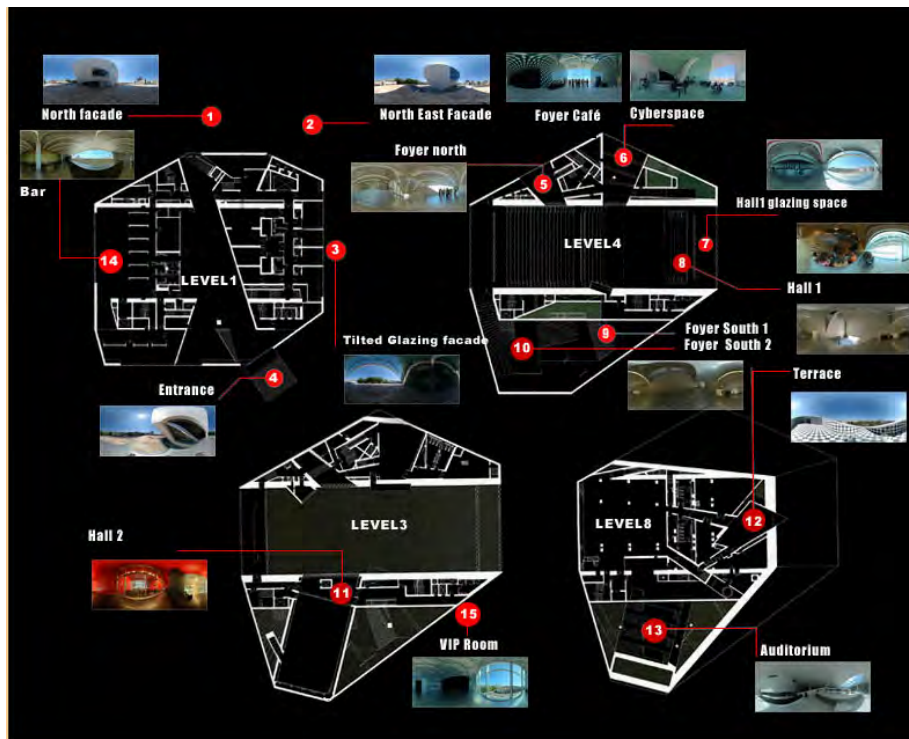
Precedent Analyses

The design tried to get away from the traditional shoebox shaped concert hall, however acoustically the shoe box was most efficient. The building uses various techniques to innovate in the condition of the concert halls traditional typology.



A continuous public route connects all public functions and remaining spaces located around the Grand Auditorium. This loop creates the possibility to use the building for festivals with simultaneous performances; the House of Music.

The building provides a large amount of rehearsal rooms, soloist rooms and dressing rooms to house the Porto Philharmonic Orchestra and to provide additional facility to external and guest performers.



Zoning Regulations

The Site of the project is located in an R-8 zoning area. Since R-8 is a residential the housing on the project will follow R-8 residential building codes. The School program will follow Conditional use zoning regulations which require approval by the zoning board but will follow requirements similar to that of Government and Public utility Uses.

R-8 GENERAL RESIDENCE DISTRICT PART I. USE REGULATIONS

§ 4-1101. Permitted uses.

In an R-8 District, permitted uses are as follows:

- (1) As in an R-2 District, except that agricultural uses are not permitted.
 - (2) Single-family attached dwellings — not exceeding 12 in a row or group.
 - (3) Multiple-family detached dwellings.
 - (4) Multiple-family attached dwellings — not exceeding 12 in a row or group.
 - (5) Clubs and lodges: nonprofit.
 - (6) Hospitals.
- (City Code, 1976/83, art. 30, §4.8-1a.) (Ord. 99-547.)

Since the project is intended to consider the site as a whole rather than a school and housing, the project will follow guidelines according to Baltimore City's Unitary Plan of Development which are listed as follows:

§ 9-101. Design.

Planned Unit Developments are intended to encourage the best possible design of building forms and site planning under a unitary development plan that, in accordance with this title, establishes:



- (1) land uses;
- (2) distances between buildings;
- (3) allocations for open space;
- (4) on-site parking;
- (5) density limitations per acre;
- (6) periphery setbacks;
- (7) floor area ratio;
- (8) land coverage;
- (9) land use relationships with adjoining areas; and
- (10) all other applicable specifications.

Unitary control over an entire development, rather than lot-by-lot regulation, will produce a well-designed development that will have a beneficial effect on the health, security, general welfare, and morals of the City and the neighboring areas.

In general the regulations established in this title are intended to permit and encourage sound and imaginative development. The ZG § 9-105 BALTIMORE CITY REVISED CODE states the following standards to established by this title to:

- (1) Insure that a Planned Unit Development conforms to the character and nature of the district in which it is located;
- (2) Achieve maximum coordination between the Planned Unit Development and neighboring land uses;
- (3) Promote the intent and purposes of this article; and
- (4) Encourage the most appropriate use of land within the area of the Planned Unit Development.

According to the City of Baltimore Zoning Code parking must be provided on school property. Off-street parking space for teachers and staff shall not be provided on any land under the jurisdiction of the Department of Education, except where approved by the Mayor and City Council.

(City Code, 1976/83, art. 24, §20.) (Ord. 72-130.)

Zoning Regulations

R-9 Zoning regulations for Yards and setbacks must be followed as well. The project must consider setbacks for both housing and Government/Public Uses which the zoning regulations are listed:

§ 4-1107. Yards.

(a) Permitted uses.

For each principal permitted use in an R-8 District, a front yard, 2 side yards, and a rear yard must be provided with the following minimum depths:

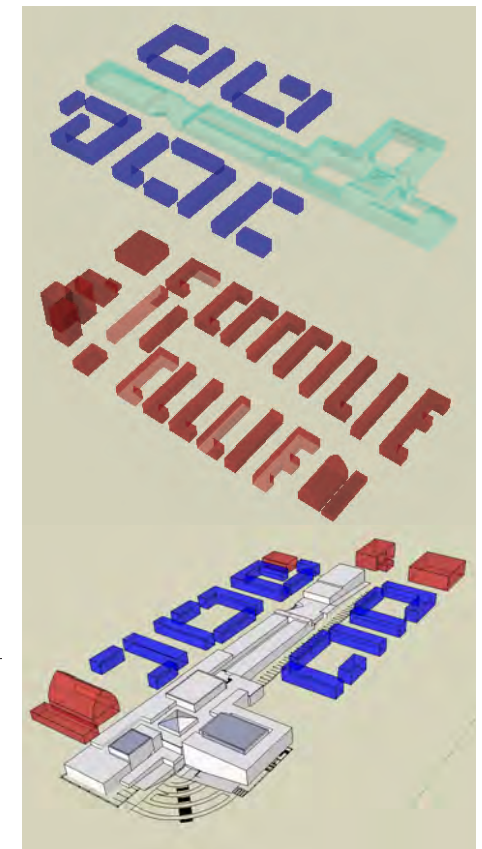
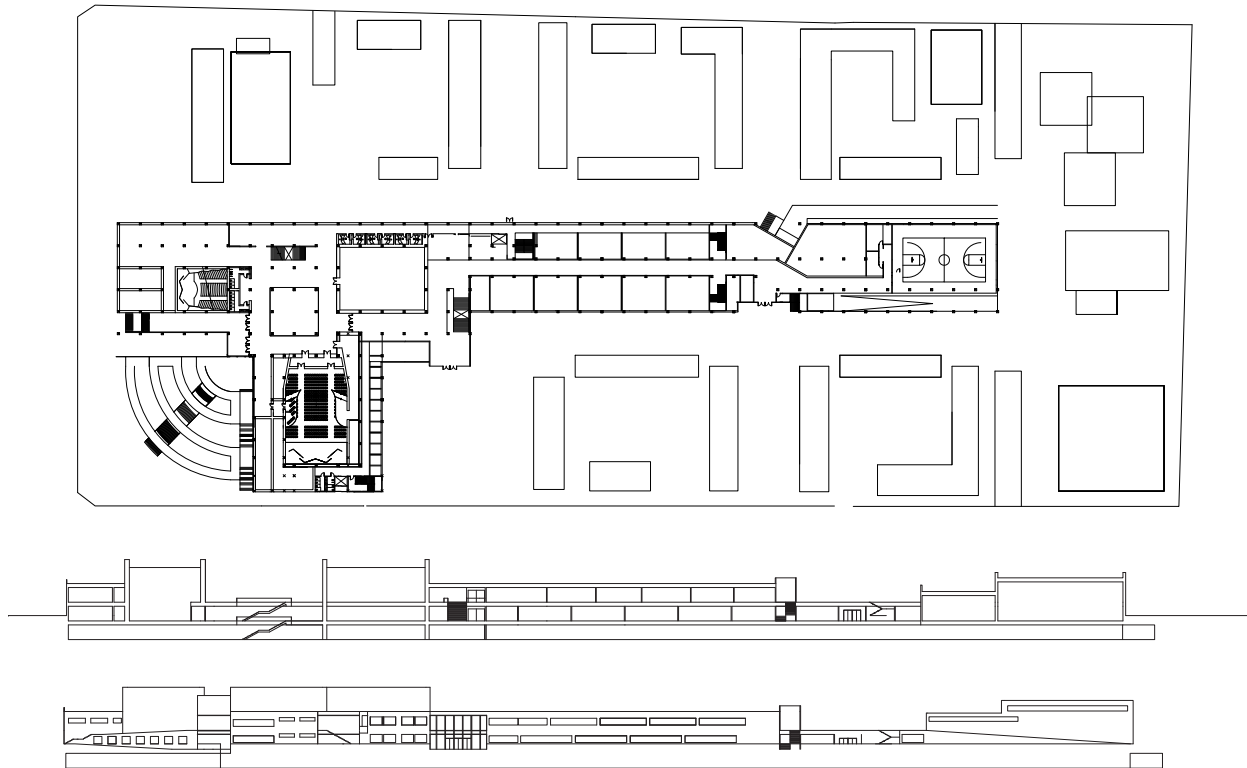
	Front	Interior Side	Street Corner Side	Rear Side
All principal Permitted uses	None req'd	10 ft. req'd for detached and semi-detached structures and for ends of groups	None req'd	25 ft. req'd

(b) Conditional uses.

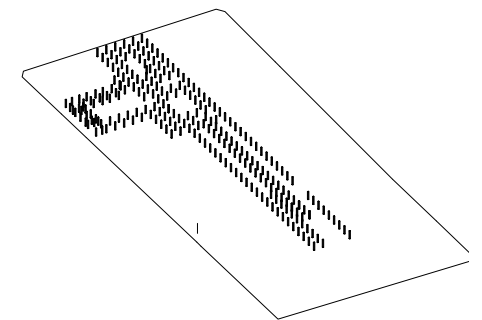
Principal conditional uses in an R-8 District must comply with the yard requirements for all principal permitted uses as set forth in subsection (a) of this section, except as follows:

	Front	Interior Side	Street Corner Side	Rear Side
Governmental services Health and medical institutions	As Board requires 20 ft.	10 ft.	15 ft.	25 ft.
Public utility uses	As Board requires			

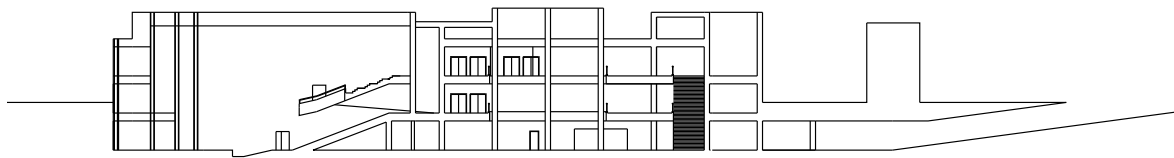
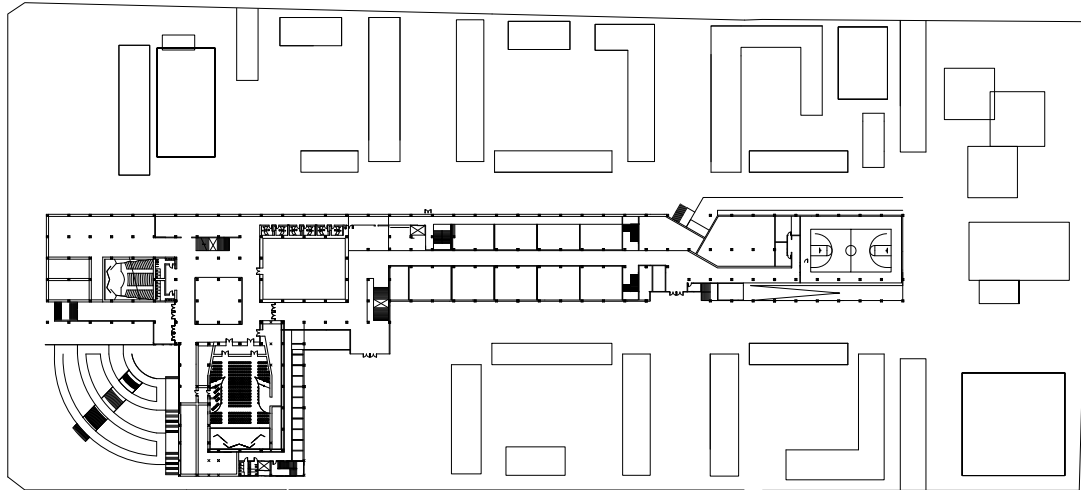
(City Code, 1976/83, art. 30, §4.8-2b.) (Ord. 99-547.)



The design process took a meandering and circuitous path in order to find the balance and harmony between the parti of creating an urban center for music and community with the pragmatic nature of designing a public school. The housing component along with the overall master planning of the site as a group of buildings within one building was explored throughout the design and led to a unique set of urban conditions. By designing the building as a linear element through the center of the block created a relationship between the existing housing and the school that was taken advantage of in order to give character and fit into the urban fabric.

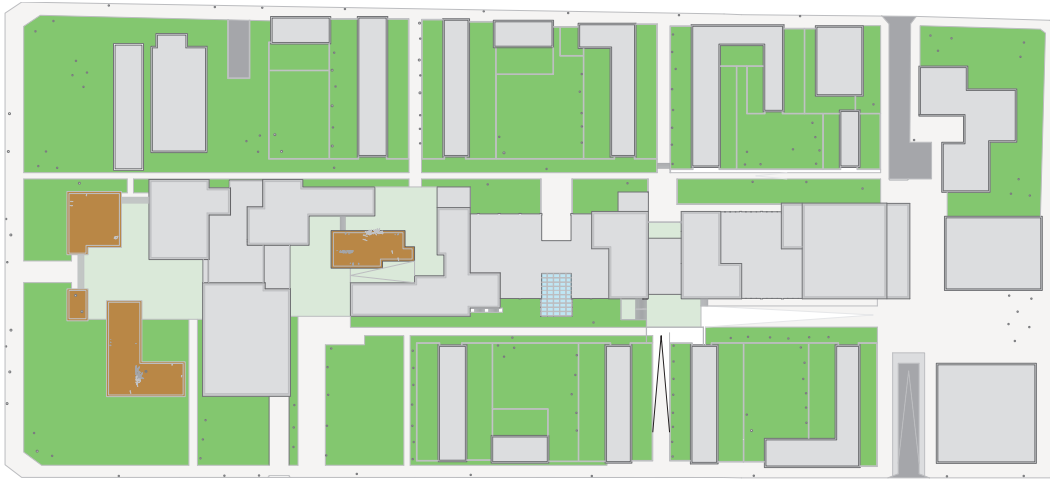


Design Process



The models plans and section on this page represent the project at a phase where the condition of having housing in close proximity to a school building is not yet resolved. The pedestrian axis that connects the site to Johns Hopkins and the public transit are terminated by entrances to the buildings different public programs. The final design takes advantage of these paths by creating a plaza between the music building and the library. This allows these paths to remain continuous while using the plaza as both a gathering space and a node which connects the site to the rest of the city. At the same time these paths are used in order to allow the housing units to be an integral component to the site and project and define each residences front yard from back.

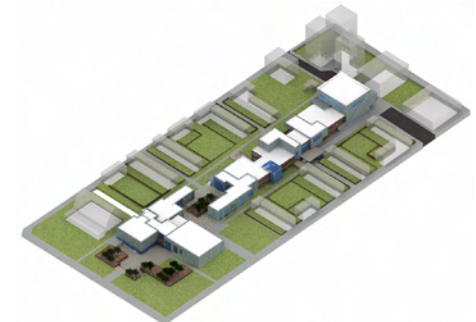




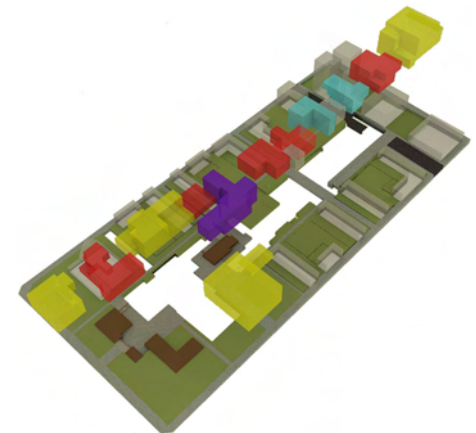
The overall strategy for the site takes advantage of the existing housing and pedestrian axis by placing the building in the center of the block yet allowing the cross-site pathways to continue either under or over the building. The existing row houses were adjusted to complement this scheme by removing every other row house, creating “U” shaped courtyards. Each Courtyard is contained by the school forming a quad for each Row house to use as a common semi public space. Each unit has its own yard in both the front along the pathways and back adjacent to the quad, which are defined by brick walls. The entrances to the units are located either along the pedestrian paths or along North Central and North Asquith Street.

The program is designed to operate as individual buildings that are part of an overall whole. In other words programmatic components can function on their own and will be able to be used by the community after schoolhouse. These components, specifically the Music Building, Library, Lecture hall/Cafeteria Building, and Gym have their own entrances and egress that allows them to work as individual buildings. During school hours these spaces can be directly accessed from within the school allowing students to use these spaces and defining the school as the sum of these individual components.

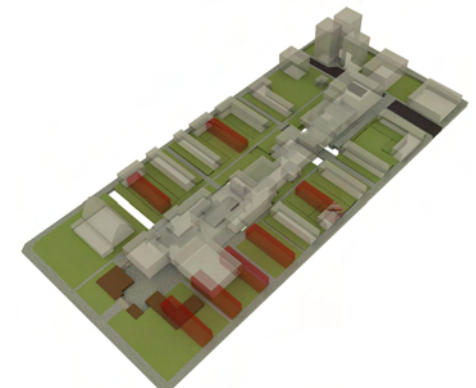
The idea of individual buildings or parts that make up a unified whole are carried through the architecture of the building as well. In both the plan and section of the building the massing makes the building appear to look like an exploded three-dimensional puzzle that is held together via classrooms in between each puzzle piece. The buildings two exterior materials; metal cladding and brick, help define each programmatic element as individual metal cladded volumes, glued together by brick classrooms.



Axonometric View

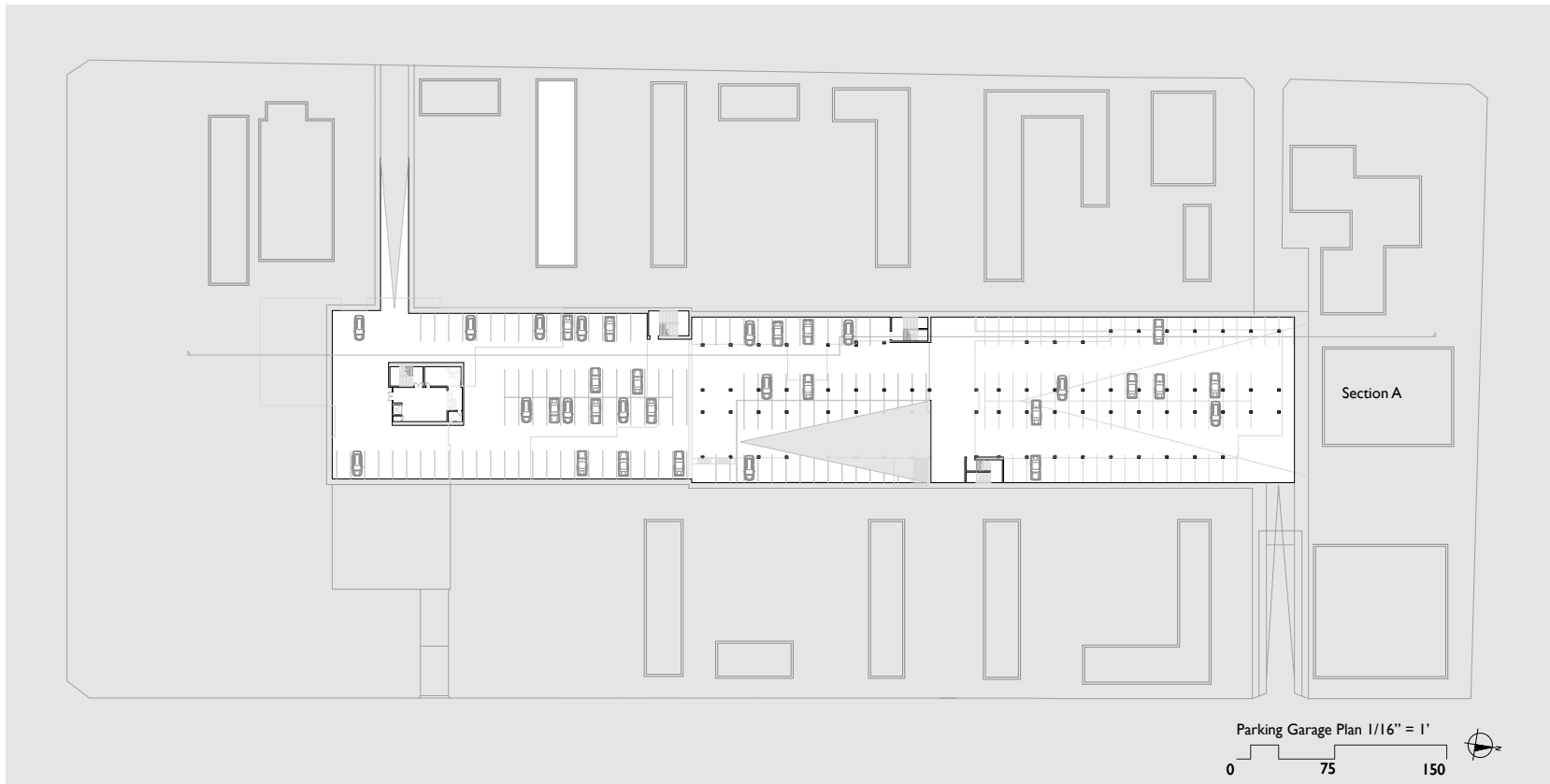


Exploded Program Diagram



Removed Housing Diagram

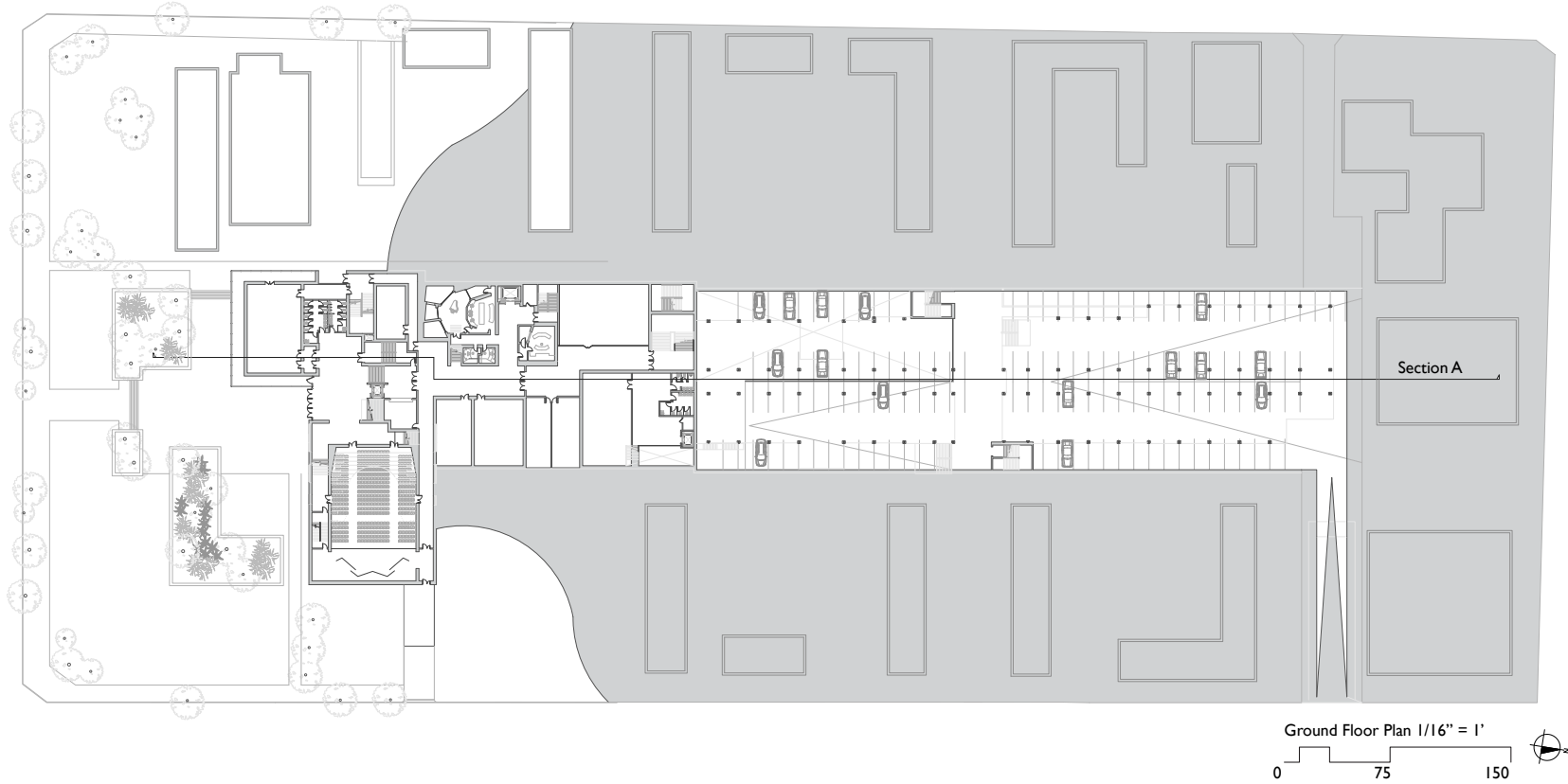
Schematic Design



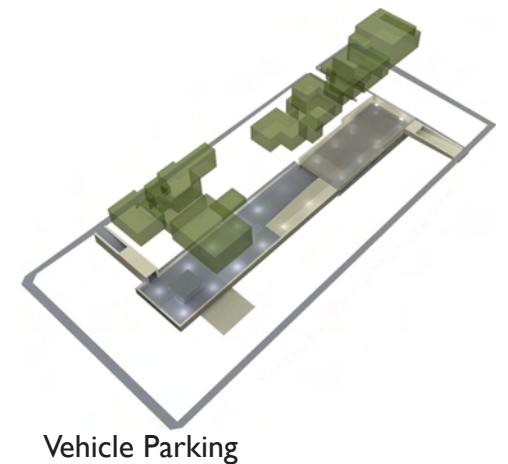
Underground parking accounts for the lowest level of the project that are accessible by vehicle from North Asquith St. on the west side of the site and North Central Avenue on the east side via ramps that bring vehicles down under the building. This level of the garage accommodates 150 parking spaces for school faculty, event parking, and neighborhood residents. Three staircases provide access to street level and bring pedestrians to the site's lateral pedestrian access ways. An enclosed lobby with a security booth and kiosk allows for people to enter the music building's lobby directly during operating hours, and can be used by the public when events are held in the music building.



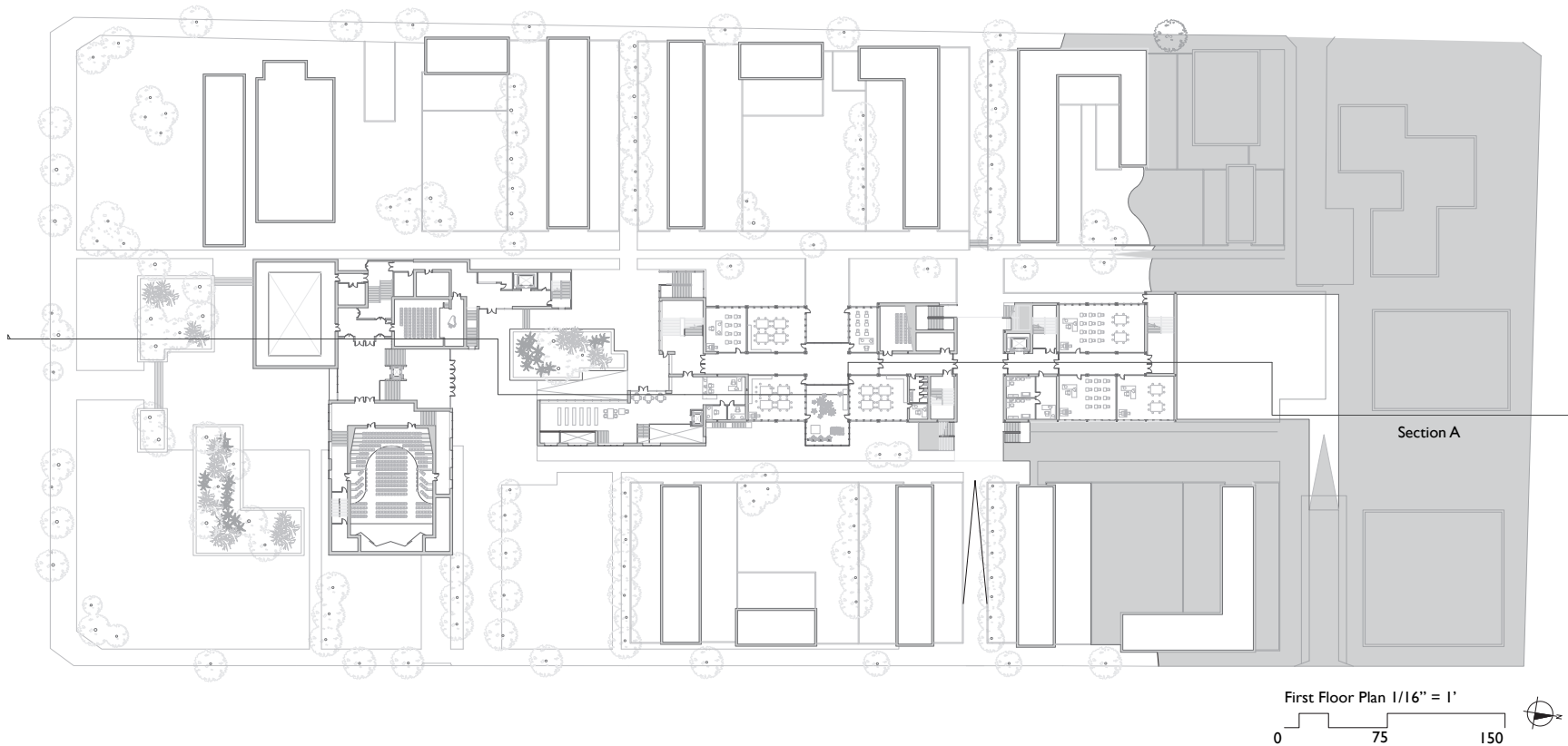
Main entrance to music building from Orleans St.



The Ground Floor Plan holds the first level of the music building where events and concerts will be held, as well as practice rooms and recording studios for both students and musicians who can arrange to use these spaces. The Ground Floor Plan provides access to the music building via the street entrance or the parking garage below which both enter into a main lobby space. The 2400 sq. ft. space serves as a lobby for both the Black Box Theater and the Grand Theater on the ground floor as well as the rest rooms. From this space, people can either continue up to the first floor lobby to enter the mezzanine level of each theater, or go down a half level to access the rehearsal spaces and recording studios. The library basement, mechanical room and building storage is also located on this level as well as the upper level of the parking garage which provides 77 parking spaces.

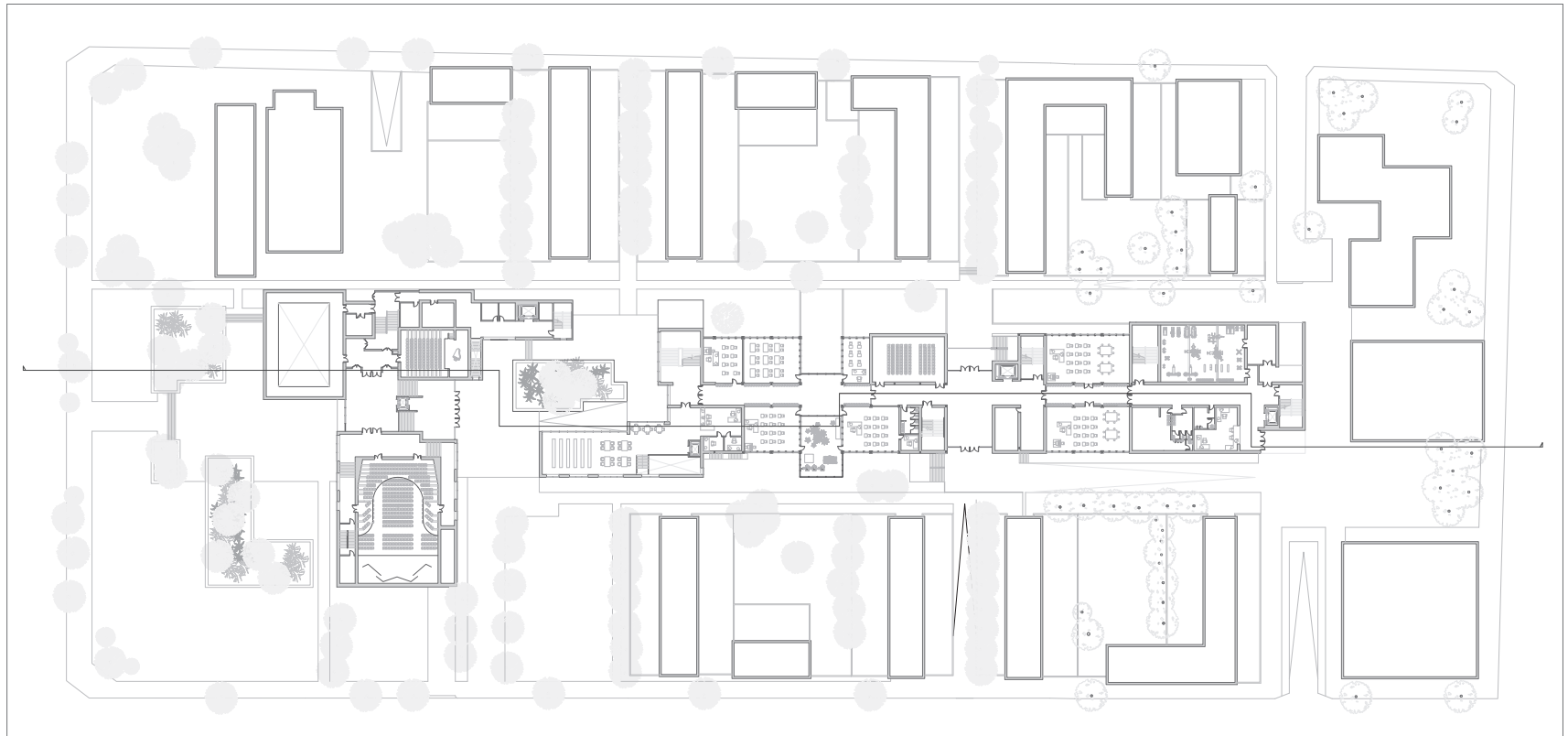


Schematic Design



The First floor plan responds to the two pedestrian cross axes which run east to west across the site. A plaza is carved out between the music building and library receiving pedestrians who are coming from Johns Hopkins and the metro station to the east and from the Old Town Mall to the west. A central garden serves as an outdoor gathering space at the entrances to both the library and music building main lobby. There is an additional entrance to the music building from the plaza allowing music facilities to be used after school hours without permitting access to the school. However during school hours students will be able to access the music building from within the school. The Library is de-



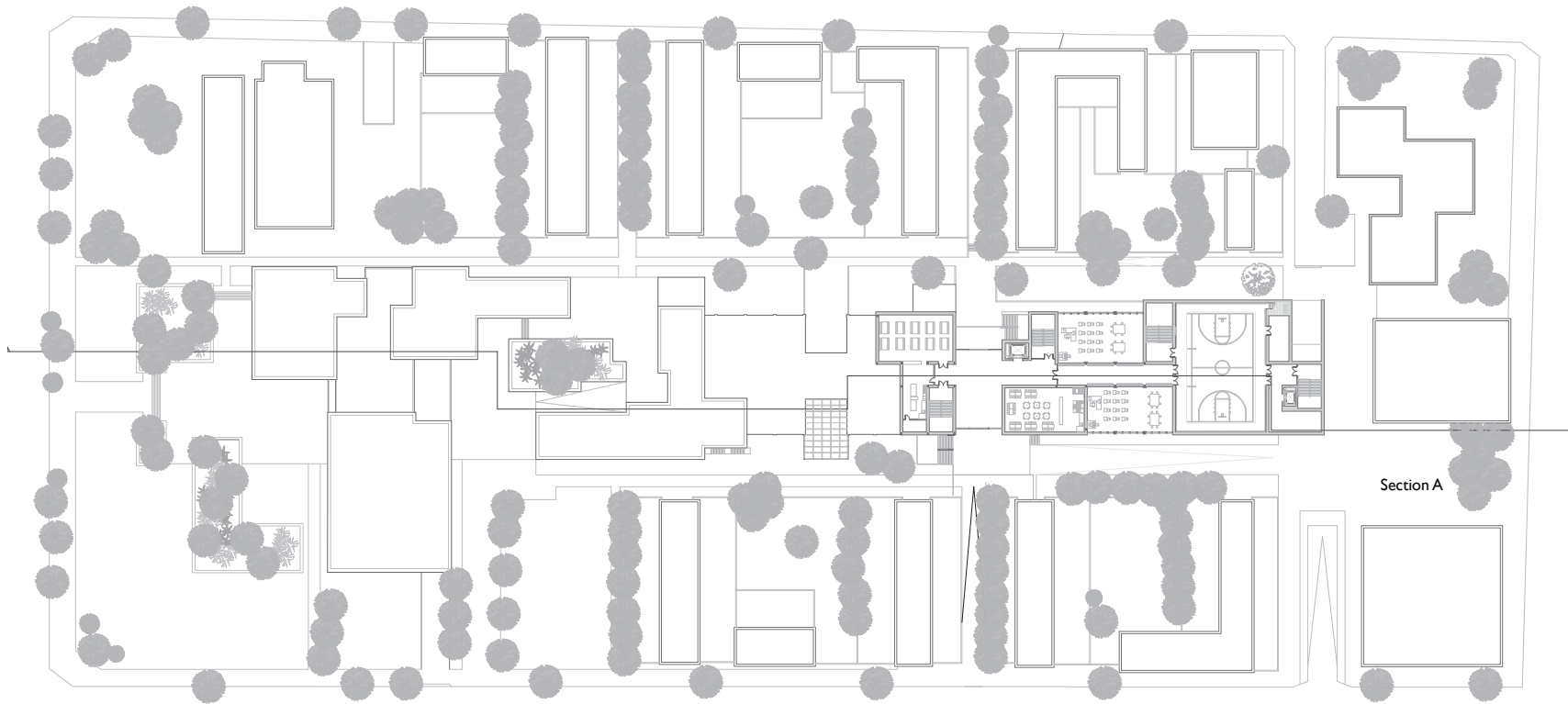


signed to function in the same way, allowing the facilities to be used as its own building with its own egress and entrance while being used by students during school hours.

On the second floor is the school's main entrance. Students enter to a central lobby that contains entrances to the lecture room, main office and egress. The lobby is contained by fire doors which break the schools classrooms up into two wings. The gym has an entrance on the north end of the site which, like the facilities directly connected to the schools main library, can be used as an individual building without providing access to school classrooms, or student lockers.

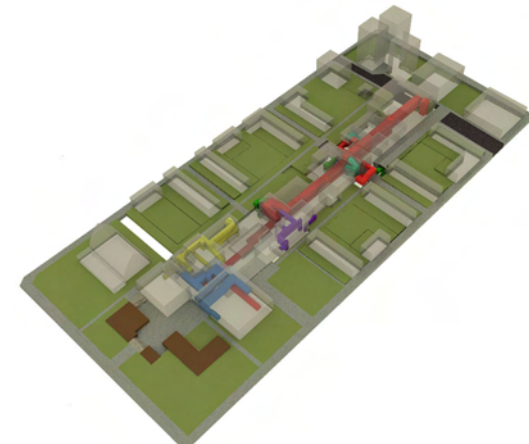


Schematic Design

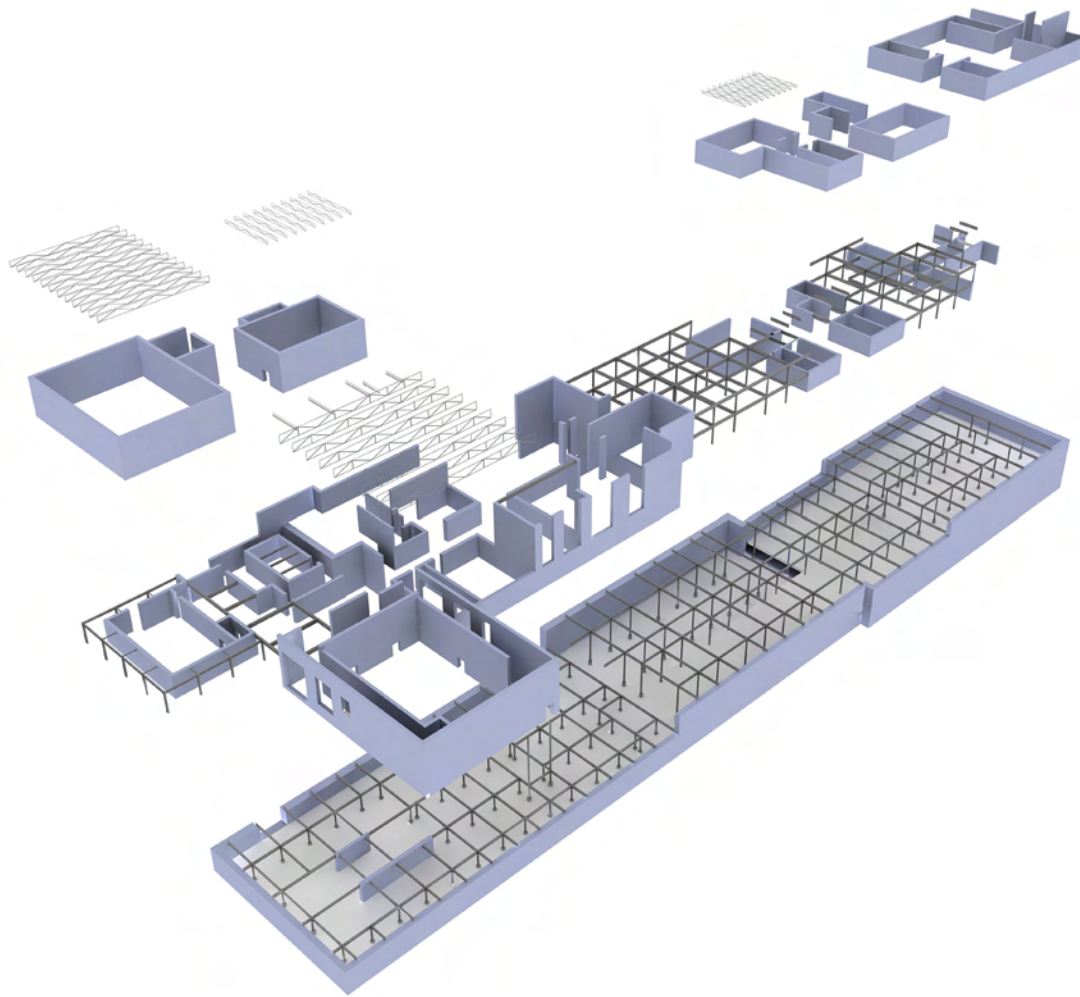


Third Floor Plan 1/16" = 1'
0 75 150

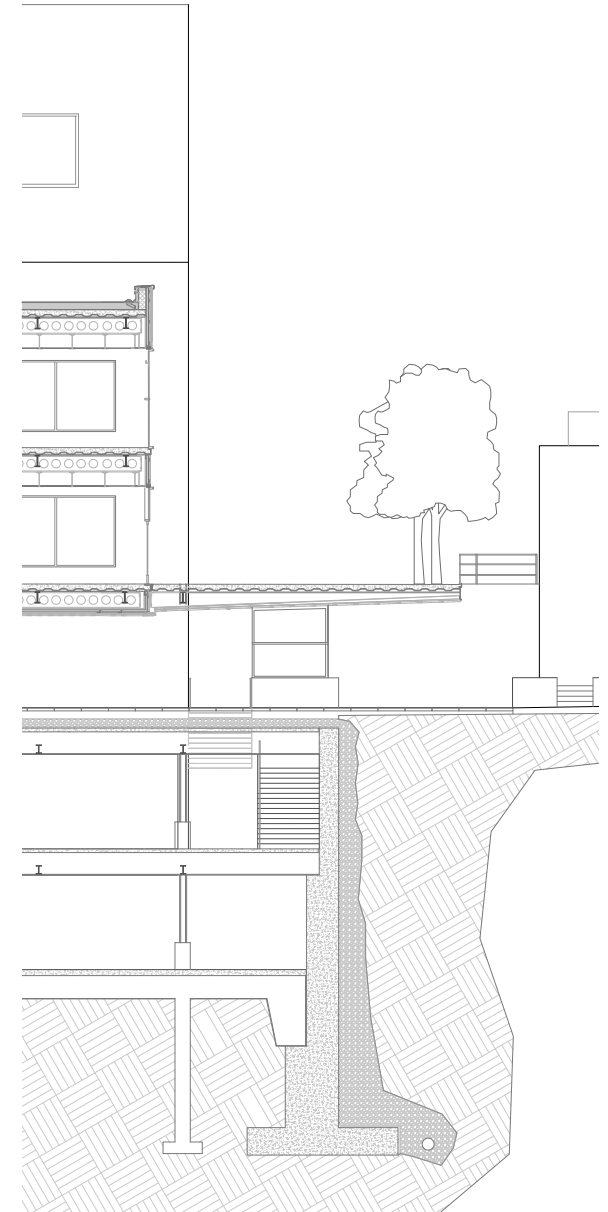
The school's circulation is designed as a linear hallway that runs lengthwise through the entire building. Each programmatic component is connected by this main corridor, allowing students access to the entire building during school hours. The circulation for each individual program-component branches off of the school's main hallway and is designed so that each component can be used as an individual building separate from the school. The Third floor contains two cafeterias, two class rooms and the Gym itself.



Circulation Diagram

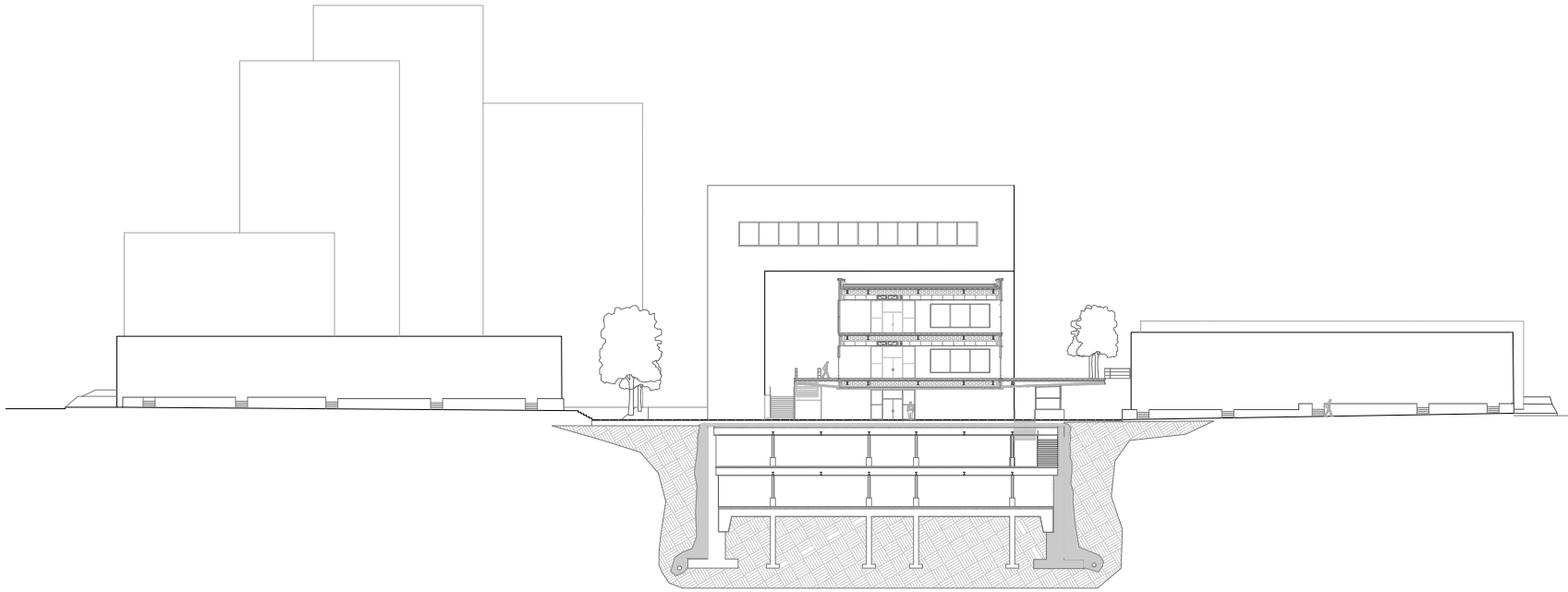


The building is supported by a modular steel structure that is enclosed in reinforcing CMU wall where acoustical insulation is required by the program. Steel trusses support the ceilings in the theaters and lecture hall.



Section Construction Detail

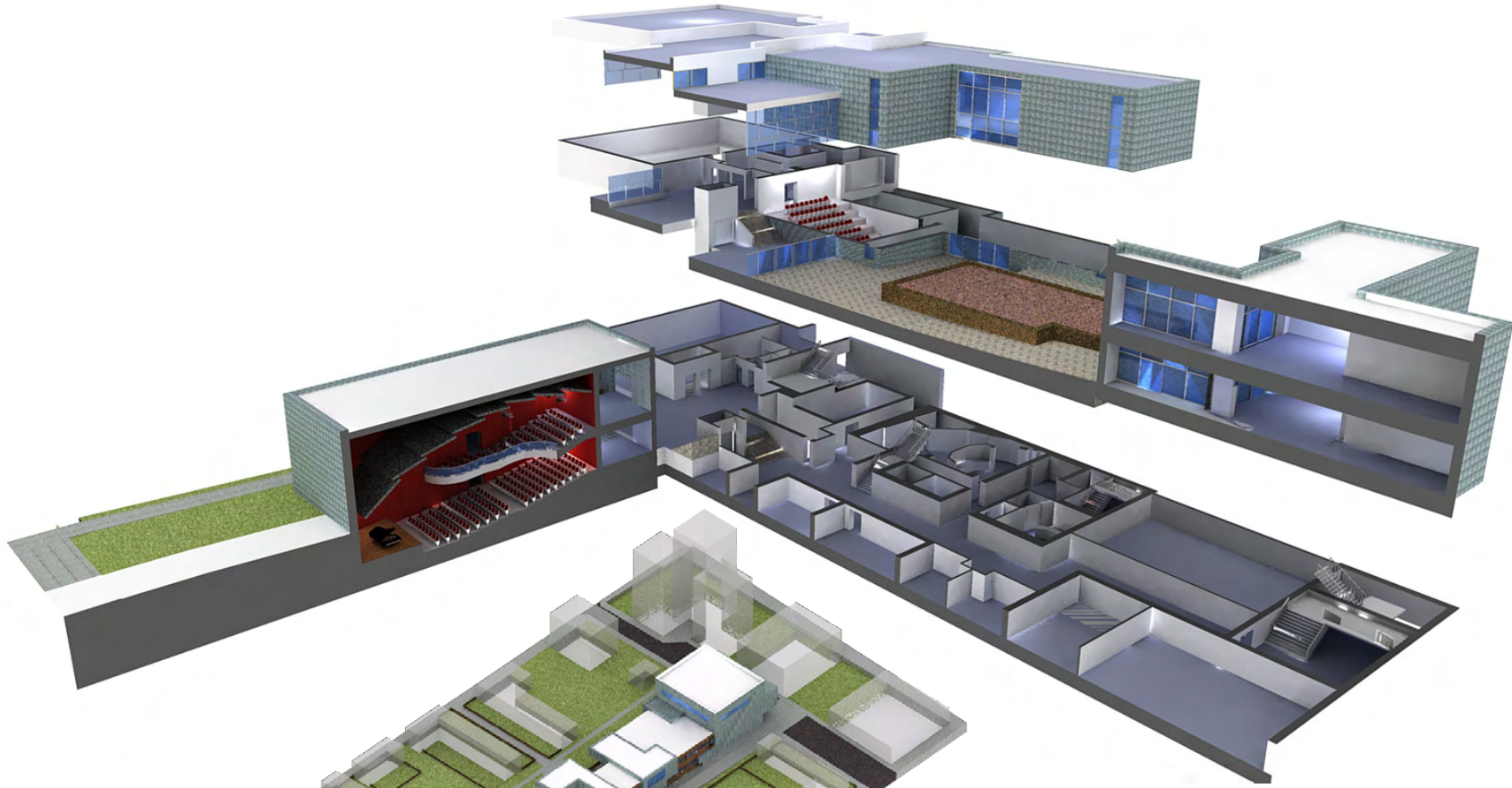
Schematic Design



The cross section is cut through the pedestrian path that cuts through the site and passes under that building. This axis is terminated by the main entrance to Paul Laurence Dunbar High school located on North Central Ave. Raising the building allows continuous pedestrian paths across the site while allowing students to bridge this path from inside the school.



Rendered perspective looking towards Library entrance

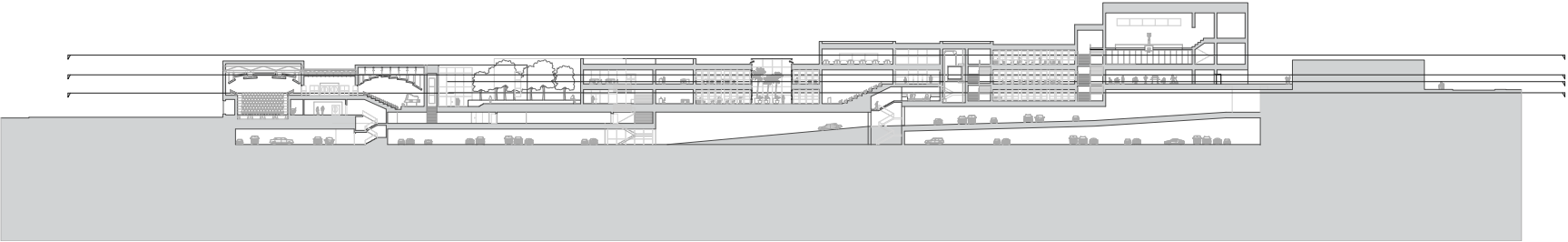


Exploded Sectional Perspective

Axonometric Rendering



Schematic Design



The section shows how the building takes advantage of the site's gradual slope up towards the north. It is cut perpendicularly to the site's pedestrian pathways and through the plaza.



Rendering overlooking the plaza.



Rendering entering the plaza from the underground parking garage.

