ADDING TO MEYERSON:
A THEORETICAL APPROACH TO DESIGNING ADDITIONS TO BUILDINGS OF THE RECENT PAST

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A THESIS

In

Historic Preservation

Presented to the Faculties of the University of Pennsylvania in
Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

2004

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I would like to dedicate this to my family whose love and support have helped guide me through another chapter in my life.

Acknowledgements

In my two years at the University of Pennsylvania I have come across many great teachers who have inspired me. These teachers were not just professors but classmates as well. Through the preparation of this thesis, those teachers have remained by my side and assisted me when I needed it. I would like to thank them all.

First I would like to thank my advisor, David DeLong, who has inspired me from the first day I started school till the last. He has guided me and helped structure and broaden my views toward architecture and preservation by exposing me to different architectural philosophies. His knowledge and constructive criticism have made me think in many different levels that I did not know even existed. Most importantly, I would like to thank him for helping me organize my thoughts and ideas, and clarify them into what is my thesis.

I would also like to thank my reader, Morris (Marty) Hylton III, whom I had the pleasure to work with and learn from. He provided me with the direction I needed when I was lost in my thoughts. I would like to thank him for getting me interested in contemporary approaches to Historic Preservation and introducing me to a wide range of different buildings and architects.

I would like to thank my employer, Page Ayres Cowley, FAIA, who has provided me with knowledge and resources in the field of Historic Preservation. I would like to thank my brother, who along with my employer, introduced me to Historic Preservation through architecture. He has always been there for support and torment, but most importantly he has been a big brother to me not just in my personal life but my professional life as well.

I would also like to acknowledge Professor Lindsay Falck. His knowledge of Meyerson Hall helped me in determinig many important issues and his knowledge of the University has led me in a straight path when I needed to find something. I would also like to thank him for listening and for providing me with resources and research done on Meyerson Hall that would have otherwise taken me years to compile. Along with Professor Falck I would also like to thank John Hinchman for all his technological assistance and all his time I wasted in 051.

I would like to thank my friends for providing a sense of balance in my life between school and leisure. I would also like to thank them for having to hear me ramble random ideas about my thesis that I am sure made no sense at that time. As I rambled I was also paying attention to the sacrifices everybody has made for me and if the situations were reversed I would have done the same. When I remember my thesis, I will remember all the long nights of school work and all the fun times outside of school.

Finally I owe a special thanks to my parents for giving me the opportunity to pursue this education through love, support, and patience. They have always been there for me and have provided a great amount of help with all the important decisoins in my life as well all the little things that mean so much.

Gustavo Carrera

April 2004

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Unless otherwise mentioned, all photographs and drawings are by author.

Introduction

Time only keeps moving forward and so does preservation. Preservation has increased in importance but most of the procedures followed for restoration remain the same. As new technology emerges, new opportunities are available to modify and interpret our history and architecture. By re-interpreting the past, a new path can be taken to construct a different future and a different way of preserving architecture. Re-interpreting the past does not mean to revive some old style or specific way of thinking, it means to re-interpret the meaning and concept of the building. Restoring a building to a time period only gives us an idea of the period, but not the true feeling of it. Keeping the historic fabric is very important, but where does one draw the line as to how much. A portion of a structure could be completely preserved as to the way it originally was and another portion can be interpreted to the same period but portrayed and constructed in a different more contemporary method. The true concept and idea of a building cannot be interpreted by restoring everything to the way it was. The structural members, fabric, and material things are only part of what made such a building significant. The life and meaning of the building is gone. Preserving this past can only restrain the future. By continuing the life of a building with the freedom to look at the concept and go without the worry of damaging historic material fabric, preservation can contribute to a new architecture and a new symbol for our past. Restoring a concept of a building instead of restoring the walls and ceiling of the building can advance architecture. While keeping a portion of the historic fabric that best portrays the architectural and technological significance, the other portion is left open to imagination, creativity, and a new form of preservation through design. The outcome will integrate the past with the future in a different way. Additions to historic buildings provide a form of preservation that allows new design to be integrated with restoration. However there are limits and rules to follow that are completely understandable. Expanding on this is only logical as new uses are invented and new methods are discovered.

In the field of Historic Preservation, one studies and analyzes buildings based on integrity and significance prior to adding to a historic building. How does one approach the design of an addition to buildings of the recent past? The approach must be different as the factors have different values. The process begins to change as we must now begin to analyze buildings on more than just its significance and integrity. These two words take on a different meaning and thus change the process. The significance is sought out in the every aspect of the building, not just their architectural features or historic past. Even the significance becomes questionable with these buildings. The approach taken towards the design of additions to buildings of the recent past that have no real significance also needs to be modified from conventional methods.

For historic buildings, research is done to verify the building's significance and historical facts. The analyzing begins when the building is compared to its historical state and original features and changes are documented. The integrity of the building is determined by the original fabric that still remains. A condition assessment is then done on the building studying material and structural status. After all this the design process begins, keeping in mind that all original fabric should try to be saved. It is recommended that the design process work around the historic fabric without damaging it. This approach will not work with most buildings of the recent past.

The process can be slightly different when dealing with buildings of the recent past. As the time proceeds, the buildings of the recent past evolve into the historic buildings that reflect our heritage and culture. However, the values have shifted from the historic buildings that we are familiar with and are less about conventional ornamentation. The materials used are sometimes common and minimal. These buildings are now usually steel frame or reinforced concrete with glazing. There is also the category that most of these

buildings will fall under, the one consisting of buildings with questionable significance. The same process of designing additions cannot be used if the building contains no real significance. Other factors must take precedence over the significance or the significance must be sought out elsewhere.

After World War II the United States was left with an abundant amount of industrial style buildings, designed to fit a need and take advantage of the space available. Architects sought a modern idiom through the elimination of historicizing detail, tending to substitute in its place exaggerated expressions of structure, material, and function. As these buildings were constructed at a rapid rate, the decoration was replaced with technology. The price of space encouraged the development of thin strong framing structures that allowed for the most space possible that still conformed to the requirements of the use. There was less time to spend on a motif or money on the extra material to enhance the facades. The large scale buildings constructed of load bearing masonry walls, which were rich in ornamentation, have been replaced mostly by steel framed construction with some type of cladding. The design of additions to these buildings must also change to incorporate these factors.

As we treat our historic buildings with much care, these new soon to be historic buildings need the same attention. Most are not highly significant, but are in great quantity. Not all of these buildings contain the significant physical features as listed on standard historic registers. However, just because these buildings are not listed on any historic register now and probably will not be, does not mean we should ignore them and forget about them. Their significance lies in their meaning and purpose. The emphasis of function and construction dominates over refinement of ornament. "Until recently, many post-war buildings were demolished rather than refurbished."[1] Yet these buildings are part of our history and accomplishments. They did their time and we cannot forget them so easily. We must repair, alter, or add to help these buildings survive. This is why the approach taken

to preserve these buildings must be different than previous historic buildings. Buildings that do not meet a certain level of significance cannot be judged and preserved on the same principles of fabric, style, and integrity as the rest. We must now look beyond the fabric and physical constraints and deal with the social, technological, and psychological attributes that these buildings embody.

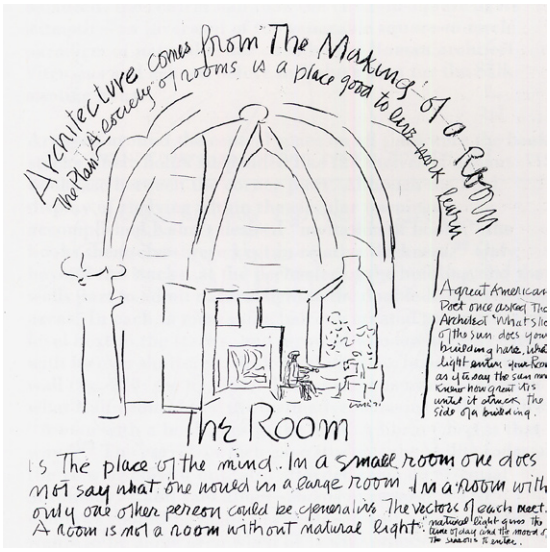
The buildings that need a different approach usually fall within a certain category. The aspects of this category apply to the building that will be studied and used as an example for an approach to designing an addition in this thesis. This category contains criteria that consist of the date of construction, an arguable significance, and poorly designed functional properties. The issue of authenticity lies in its context. As long as the element is original or true to its nature it is authentic. The authenticity of the building is based on the site, the fabric, and the concept. Authenticity is a broad concept and can refer to almost anything. The integrity of the building is related to the significance of the building. The integrity lies not just in the original existing fabric, but also in the context and concept of the building. The arguable significance as criteria is essential in determining these buildings that lack a distinct manner or style yet can be important to our society and history. These buildings are important or can be important depending on the argument. The date of construction helps to categorize buildings. The date of construction places these buildings in context and in relation to historic status. In the case under discussion, the date of construction should be post 1950. The year represents fifty years prior to the current year and also the period after World War II. In the United States, buildings must be at least 50 years old in order to be considered historic by the National Register of Historic Places. These buildings also must have some functional property that does not function as well as it did causing the building to need an addition. The malfunction can be a result of physical, social, or economic reasons. This criteria makes way for another approach to designs of additions.

The style of a building, as used in this report, means the physical result of the period of construction with the ideas of the architecture. The appearance of the building is often portrayed by public opinion. If the public finds the building to be physically appealing then the building can possess a sense of beauty. Likewise, if the building is an eyesore, or not appealing to look at, then the building could be perceived as ugly. The design is not interpreted as ugly or beautiful. If the design is defined as good or bad, then that reflects on the building's ability to perform its basic function and use. Most buildings that are considered great possess a sense of beauty, functions properly and is clear and understandable to all. These factors contribute to the quality of the design and appearance of the building.

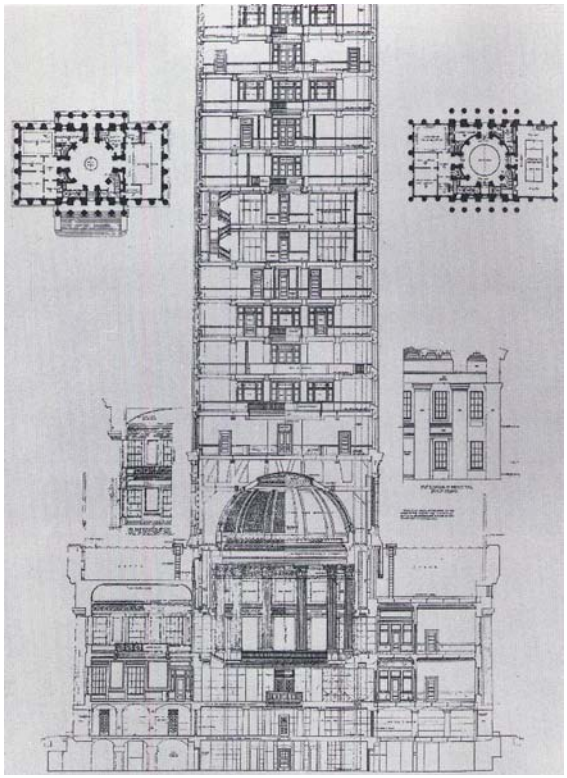
Buildings are built to serve a specific use. When that use expands or changes, additions and alterations must be made to accommodate such needs. In dealing with additions, it is crucial to understand the building, the site, the time, and the community. The environment plays a key role especially when the building is an historic landmark or in an historic district. There are specific guidelines to follow when adding to an historic building and the architecture must be sympathetic to the existing building and its surroundings.

A modern building that will soon be historic is Meyerson Hall. This building falls within the criteria set previously of buildings of the recent past with questionable significance and poor functional properties. Meyerson Hall, with its industrial size skylights, factory roof profile, and exaggerated concrete sunscreens, is a good candidate to study and analyze for a different approach to designing an addition. Since this building falls within the jurisdiction of the University of Pennsylvania, *The Design Guidelines and Review of Campus Projects*, take precedence over design requirements. The introduction of the Design Guidelines does offer an open approach to the requirements and expresses its success of variety. The introduction as written in the Guidelines follows.

"The Penn Campus, on its West Philadelphia site, has evolved over more than a century, with each new building added in a way that expressed its particular time. As a result, there is not a single overriding building style, and many different materials may be found side by side. Nonetheless, the campus has acquired a special character: it is an "academic crossroads" where people from twelve schools and many disciplines rub shoulders and share ideas. Its character is set by the density of schools and buildings, the scale, materials, and proportions of its older structures, and the green matrix of landscape extending outward from Blanche Levy Park."[2]



Ill. 1 “The Room” Inscribed Lou K’ 71.
Louis I. Kahn: In The Realm of Architecture, p.127



Ill. 2 Peabody & Stearns’s provisions for the preservation of the Custom House in the alteration.
The Architecture of Additions, p.88

II. Understanding The Building

I. Understanding the Building

When working with historic buildings, it is obvious that the historic fabric must be preserved and that any additions must be able to be distinguishable yet subtle and compatible with the size, scale, and architectural features in order to protect the integrity of the building. These additions also must be made in a way as to leave the essential parts of the original building unharmed and retrievable. It is understandable to protect architectural features that have survived through many years and that were significant either in technology or the history of America. It is likewise important to preserve the overall look and appearance of historic buildings through a compatible design of additions. While preserving and understanding the physical features of the building, the non-physical features of the building are also important to recognize and understand. These non-physical features lie in the concept, function, and meaning of the building. The circulation, the spatial properties, the layout, and the history of the building supply information of the non-physical properties of the buildings that help to completely understand the significance of the building.

The meaning of the building goes beyond the physical properties of ornament and material of the building. Although ornamentation and materials do add to the expression the buildings give out, these elements are just the outer layer of the meaning of the building. When these elements are used for structural purposes, then we reach another level of meaning. The structure is the skeleton of the building. It is necessary to find out if the building can support an addition. By studying the structure it would be easier to pick the proper place for an addition. Understanding the materials that make up the structure is essential, not only in knowing the tectonics of the structure but also the personality that the material contains. In modern buildings, architects often chose to reveal the structure,

turning the building inside out and exposing the skeleton. In doing so, the material of the structure is exposed to interpretation and the characteristics must be re-examined. The material used, whether it is wood, steel, or masonry, is being combined for structural and aesthetic purposes. In pre-modern buildings, the materials used for the structure were used in a straightforward manner, used for their strengths and properties. Modern buildings manipulated these materials in ways that pre-modern buildings did not. Post World War II buildings took another step in utilizing technology now available that can produce almost anything. Basically, when analyzing the structural elements, a clear perception of the characteristics and intentions of the materials and technology used is required in order to proceed to the work that is to be performed on the historic building. In addition, whether the structure is exposed or hidden, it must still be analyzed and used as an interpretive tool for the new design.

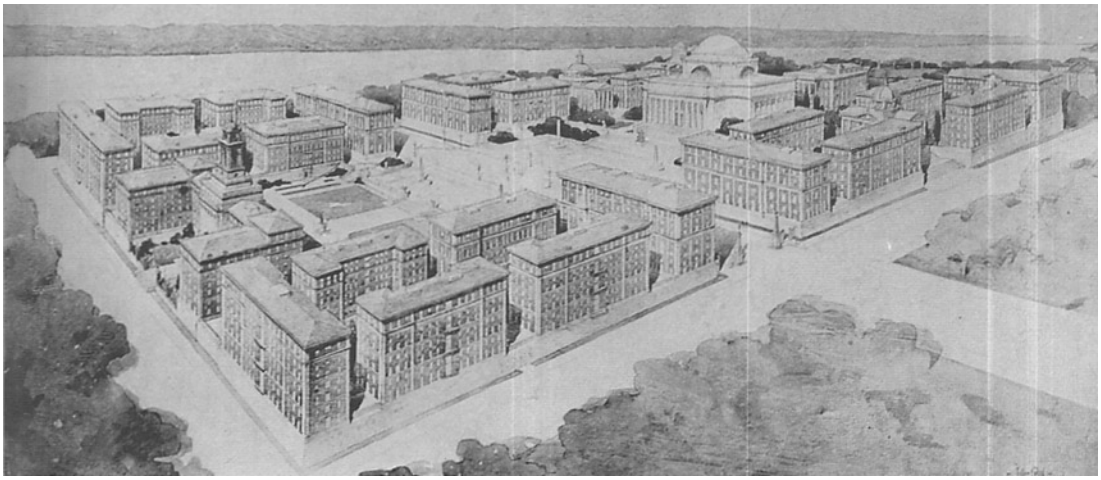
The materials used in buildings help to interpret the building to the public. A wood building will get a different reaction than a concrete building. These emotional reactions that the buildings emanate are another level of the meaning of the building. The material is the fabric of the building. The fabric is important to the building. Giving it a sense of integrity is not its only function. Fabric has become a way to reflect ideas and concepts. The different uses of fabric portray a variety of functions and perceptions needed to accomplish the interpretation of the building. Fabric can be used to show mass, volume, transparency, outlines, and emotions. The material of the building comes together to give form to the building. The form must then too be analyzed. Perhaps the greatest use for fabric is in determining a style and a date for the building. No matter in what way you chose to use fabric, it will still be used according to methods used at a given time.

The next step in understanding the building is knowing the operational systems. In the beginning these systems just included doors and windows; now they also include mechanical and communication systems. The mechanical system incorporate the heating and cooling systems as well as the plumbing and electrical systems. The wiring infrastructure for communication systems is also part of the mechanical system. The communication system includes telephone, fax, television and computer systems. The demand for new technology to be installed into old buildings is growing, but new buildings that already use this new technology will require a different approach. Aside from doors and windows, there are movable and operational walls and floors. Buildings have changed over time and not all buildings contain the same types of systems. Identifying what system is used or was used, both historically and recently, is the next step once knowing that a system exists. Modern buildings have made the most of the modern systems historic. All these systems fit into the meaning of the building and the investigation of how the building comes together.

Once the building is constructed, another system is created. This system is the circulation of the building. The circulation of the building reveals the movement of people and air throughout and around the building. A bit on the intangible side of understanding the building, circulation is a major factor in determining if the building functions, or operates well. It also relates to the geometry and axial concepts of the building. The circulation is determined by the layout of the spaces within the building and by the function or use of the building. These spaces, along with the materials used, create a psychological affect inside the building. Circulation is used in designing theatres, museums, and institutions, just to name a few. The meaning comes from the form, function, aesthetic appearance, and ideas of the building. The form encompasses the structural and architectural features and the function includes the operational systems as well as the use of the building. The aesthetic

appearance includes the ornamentation and the materials and the way they are used. The ideas of the building deal with the concept, the circulation, the meaning, the light, and any intangible aspect of the building. In understanding the building, it is crucial to read all these factors and determine some type of balance between them. The need for an addition usually entails that one of these factors is not functioning, as it should be or was designed to.

Ill. 3 Campus view looking northeast from College Hall, University Archives Digital Image Collection, 1890. http://hdl.library.upenn.edu/1017.6/2003041002



Ill. 4 Jules Crow's rendering of a proposal by McKim, Mead & White for South Field. Morningside Heights: A History Of Its Architecture & Development, p.167

Understanding The Site

Understanding the Site

The context of the building is vital to its significance and survival. Recreating an experience or keeping the existing experience of a site can be hindered if the proposed addition to a historic building is designed without incorporating the site. The orientation, location, and relation to the site provide the feeling and sense of the building. The orientation can place the building to receive the most sunlight or shade. It can create a new path or axis based on which way the entrance is or which sides are most significant. Similarly, the location of a structure on a site can strengthen any axis or disorientate the existing axis. The location can create a view and a connection for the people that are deeper than something physical.

Landscaping also plays a part in understanding the site. Paths, trees, and even parking lots are associated with buildings and their sites. The special relationship between the building and open space is strengthened through proper landscaping. A building sitting alone on a site expresses a different feeling than a building sitting alone on a site surrounded by trees and walkways just as they both provide a different feeling than a building on a site surrounded by many other tightly placed buildings. The shadows, the materials, and the decoration that are created by these different scenarios must change giving an addition that does not recognize the site. On the other hand, these factors can be used to strengthen the addition by being incorporated into the design in a conceptual manner.

Historic buildings are contributing factors to the neighborhood just as the layout and master plan of the site are contributing factors of the historic building. In the past, some additions have been carefully tailored to include the concept of the site and layout when it is a major factor in the significance. Additions focused on the site usually apply to stand alone additions made to a master plan. Stand-alone additions are basically new

construction on an already existing site that had been carefully planned out in the original design. These new buildings are considered additions because they can alter or add to the original intent or concept of the site. Although stand-alone additions usually apply to institutions and universities, it can apply to any site as long as the site permits it. In a sense, historic buildings were once additions to the neighborhoods in which they now lie.

In most historic buildings, the site is overshadowed by the significance of the building. In modern buildings, the integrity of the building alone might not be enough to justify its significance. There are many buildings out there whose significance lies in their contribution to the site. While in the past many buildings were preserved for their architectural significance, we can now preserve those buildings that lacked architectural significance but served an important role in either creating a significant view or axis. The site helps the building and the building helps the site. They are a part of each other and the reason why we must also look at the site when designing an addition. Relating the concept and significance of the building to its surrounding is essential in fully understanding the site. Whether landmarks, regular buildings, or nothing surrounds the building, the site and the rational of the placement of the building in the site must always be looked at.

Ill. 5 Acropolis, Athens, January 1951. Louis I. Kahn: In The Realm of Architecture, p.149

Understanding Time

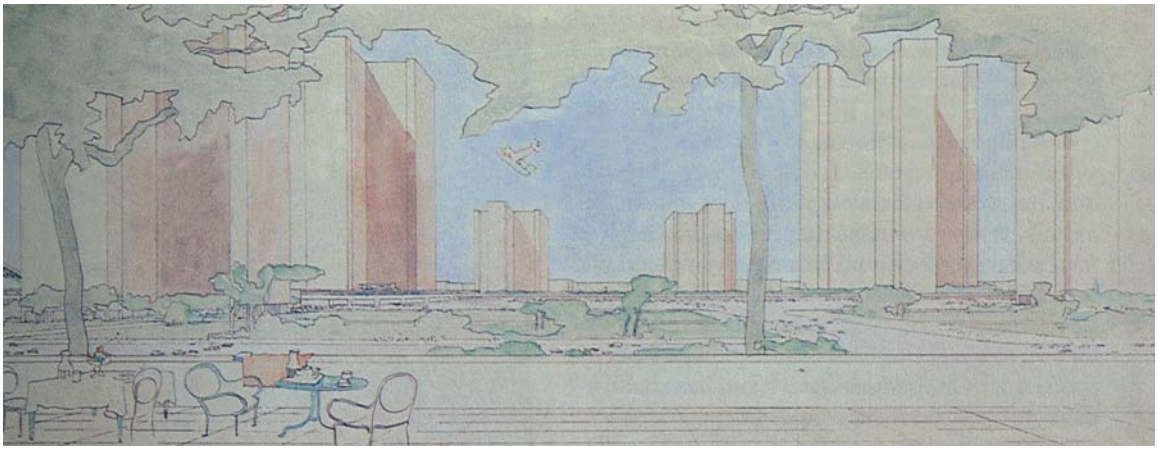
Understanding Time

Perhaps the most complex of all aspects of designing an addition is time. Time affects the addition on many levels and can be interpreted many different ways. It is imperative to consider time in as many ways as possible. Time is not only the place we are in now, but also the past and the future. Time involves economical and philosophical influences. Time can mean condition or duration. Time is what causes the need for additions. It is the changing of needs for uses and growth that evolved throughout time that contributes to the expansion of buildings. Time is the heart of architecture. Whichever approach is taken toward the design, time is going to affect it, either directly or indirectly.

The world is growing and changing at a rapid pace. What took people years to built now takes months. Time has greatly increased in value and has caused new techniques and machines to be invented that speed up the process, not only of construction but also of design. As is commonly said, “time is money.” Time is so important in construction that it is possible that some construction can be compromised just to save time and money. Historic buildings demand more time to understand and incorporate new design, if contractors start cutting corners to save money an time, then it could be very detrimental to the historic buildings we are trying to save

Historic buildings have one thing in common; they have been around for a long time. As time passes, more and more buildings gain this common factor. The only differences being that the buildings still remain distinct in many ways such as style and construction. Time affects what style the building is as well as the change or deterioration of materials. Certain styles have been reintroduced but other factors can determine the date of the building. Materials have a reaction to time and are the reason for the need to repair most buildings. It is time that allows us to date buildings through materials by knowing

the type of reaction and the state the material is in. Recently constructed buildings create a new category in time and also in time become historic. There are materials used in new ways that are not tested or studied yet. It is when these recently constructed buildings become historic that we will see the affect of time on contemporary technology, besides time only moves in one direction.



Ill. 6 Le Corbusier, ‘Contemporary City for Three Million Inhabitants’ 1922 perspective. Modern Architecture Since 1900, p.247

Understanding The Community

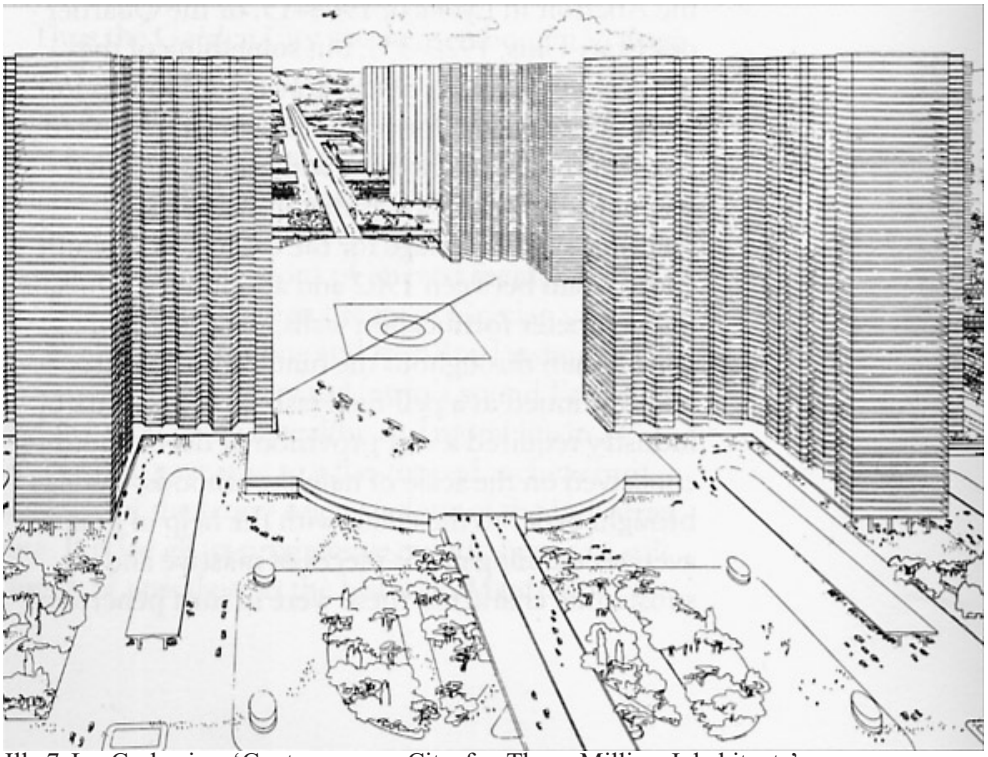
Understanding the Community

The community is part of the context of the building in a social aspect. The community provides the physical, historical, and social significance of the building. In a broader sense, the community involves the social trends of city, state, nation, and even the world. In this case, I will discuss the community as the social state of the surrounding cities and neighborhoods that are directly involved in dealing with historic buildings and renovations done to them. In addition, topics dealing with modern buildings that are now historic buildings need also be discussed. The social state we are in now finds that community involvement is necessary.

The community sets rules and regulations to deal with historic buildings. These regulations can be stronger and historic fabric is very important. However, when a modern building is involved, especially one that is not aesthetically pleasing to view, the community can be accepting of a broader range of designs. These designs might not be the appropriate way to go. As time passes this might not be the case anymore, then the community is left with a non-compatibly designed addition. Historic neighborhoods form groups to deal with this but it is fundamental to consider modernism as historic.

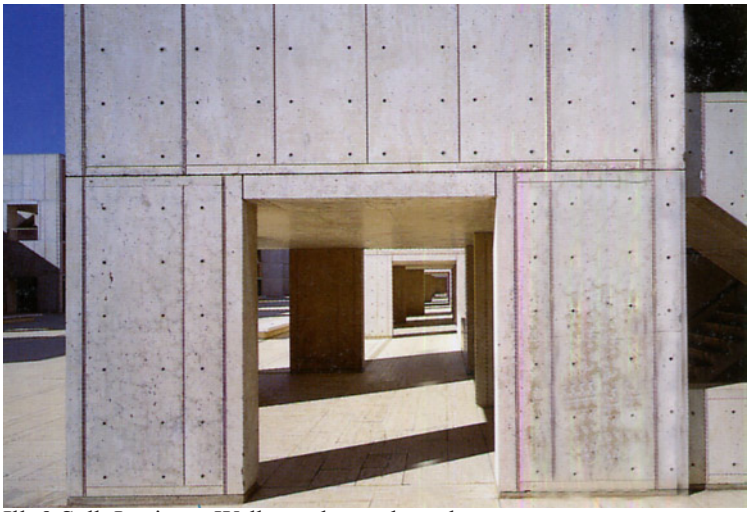
The community does not always know of the concept of the building or the reasons for the design. There are buildings that have been designed to accommodate the community's needs. Architects like Le Corbusier and Frank Lloyd Wright have designed based on the community's needs. Although not all buildings have been solely designed to accommodate the community, the presence of the building long enough to be considered historic can add that level of significance in the community aspect. Approaching an addition to a building that has served the community for a long time must take into account the community's thoughts and new needs. When done right this can be used to produce

an appropriate design that can please the community and still reflect the significance of the building while not damaging the integrity through major loss of original fabric.



Ill. 7 Le Corbusier, 'Contemporary City for Three Million Inhabitants' 1922, glazed skyscrapers and multi-level transport terminal at city centre. Modern Architecture Since 1900, p.246

Ill. 8 Sherman Fairchild Center North Facade.
Architecture of Additions, p.120



Ill. 9 Salk Institute. Walkway beneath study towers.
Louis I. Kahn: In The Realm of Architecture, p.186

II. Case Studies

II. Case Studies

To determine the appropriate approach to take when designing an addition, it is important to compile case studies to analyze. These case studies consist of a range of approaches to various types of buildings in different situations and under different circumstances. It is critical to see the response these additions received from the public and the affect it has had on the significance of the building. The analysis of these case studies will also aid in providing experience in distinguishing what works and what does not work as well as a feeling for the designs and the thoughts of the architects. In addition, these case studies, although a wide range of situations, must apply to the issues at hand with the building that will contain the proposed addition in this study. Ideas behind the approach to take may not be directly taken from the case studies but will definitely have some influence on it.

The case studies chosen are all building built after World War II. These buildings also contain additions or are additions themselves. The reasons for additions contained in these case studies range from functional needs or aesthetic reasoning to just a need for more space. The functional need refers to buildings that never really functioned as they were intended to and need an addition to resolve this problem. The aesthetic reasoning deals with buildings that were not aesthetically pleasing to view and resulted in an addition to "cover" the existing buildings. The need for more space is self explanatory as a reason for an addition. These situations as well as others are documented and summarized in a spreadsheet included as an appendix to this thesis. This spreadsheet offers a way of seeing the connections these case studies have with each other and the way they fit the criteria associated with the building that will contain the proposed addition.

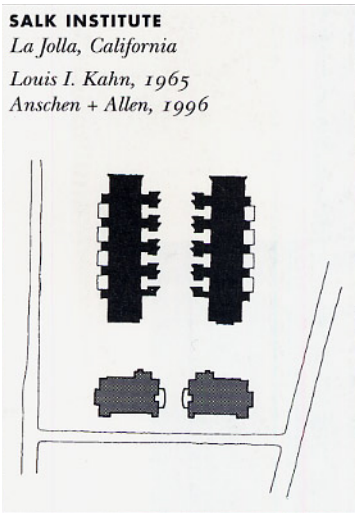
Overall there are twelve buildings analyzed and they include office buildings, industrial buildings, university buildings, and institutional buildings. However, only five of these twelve buildings were analyzed to a greater depth. The five case studies chosen include institutional and university buildings. The site, context, and methods of additions are also explored in these studies. Just as important as the building and its location is its architect. Theories and concepts of architects relating to the case studies are also discussed to better understand the buildings and the additions. All these case studies deal with new technology and modern approaches that were daring at the time of their design. The fabric is dealt with in a different manner in these case studies since the buildings were not historic.

Ill. 10 Salk Institute, Central Courtyard
view toward mountains
Louis I. Kahn: In The Realm of Architecture
p.190

Ill. 11 Salk Institute, central courtyard
view toward sea.
Louis I. Kahn: In The Realm of Architecture,
p.181

Case Study:
Salk Institute

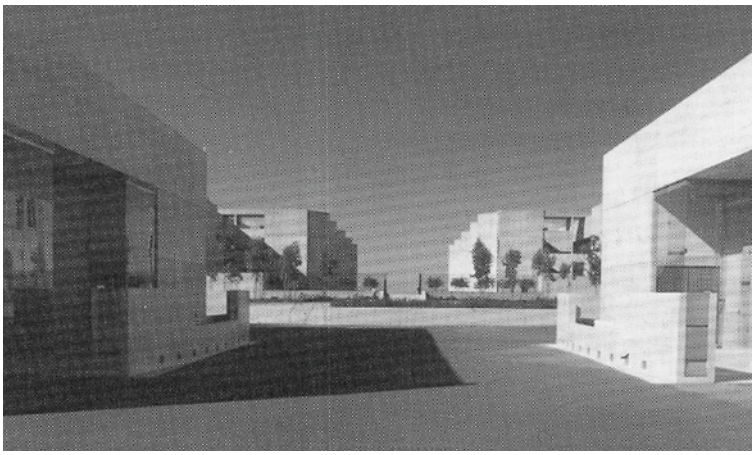
Salk Institute



Ill. 12 Salk Institute plan showing building with additions.
The Architecture of Additions, p.114

Perhaps the most important and significant building of the case studies, the Salk Institute serves as an institute for biological studies and was designed by Louis Kahn between the years of 1959 to 1965. Although the complex was never fully completed, the structures that were completed on the site embodied a unique combination of materials, views, and ideas. It consisted of two structures housing the laboratories and studies and defining a courtyard and central axis. The central axis framed a view at both ends. To the west are the Pacific Ocean and the horizon, and to the east are the mountains and trees. The buildings are made of poured-in-place concrete with teak woodwork. "Both were provocatively detailed in a way that moved back and forth between abstraction and structural description; neither was allowed to stand in the background."[3] The materials, the laid out spaces, and the site contribute to the success of this building.

The Salk Institute was designed as a compound with many functions. Although the entire compound was not built, the two structures that were built still functioned and proved to have a special connection to the site. The two structures on the north and south create a single central axis forming two spectacular views establishing the image and the feeling of the Salk Institute. The axis running between



Ill. 13 Facade of additions on foreground.
Architecture of Additions, p.115

the buildings not only produces these views and feelings, but also dominates the layout of the master plan and strengthens the meaning of the buildings and their relation to the site. With such a commanding plan, it would be difficult to design an addition to the plan. The remaining buildings that were not constructed were placed on other parts of the site, not interfering with this central axis. These locations would have been more appropriate for any new additions made.

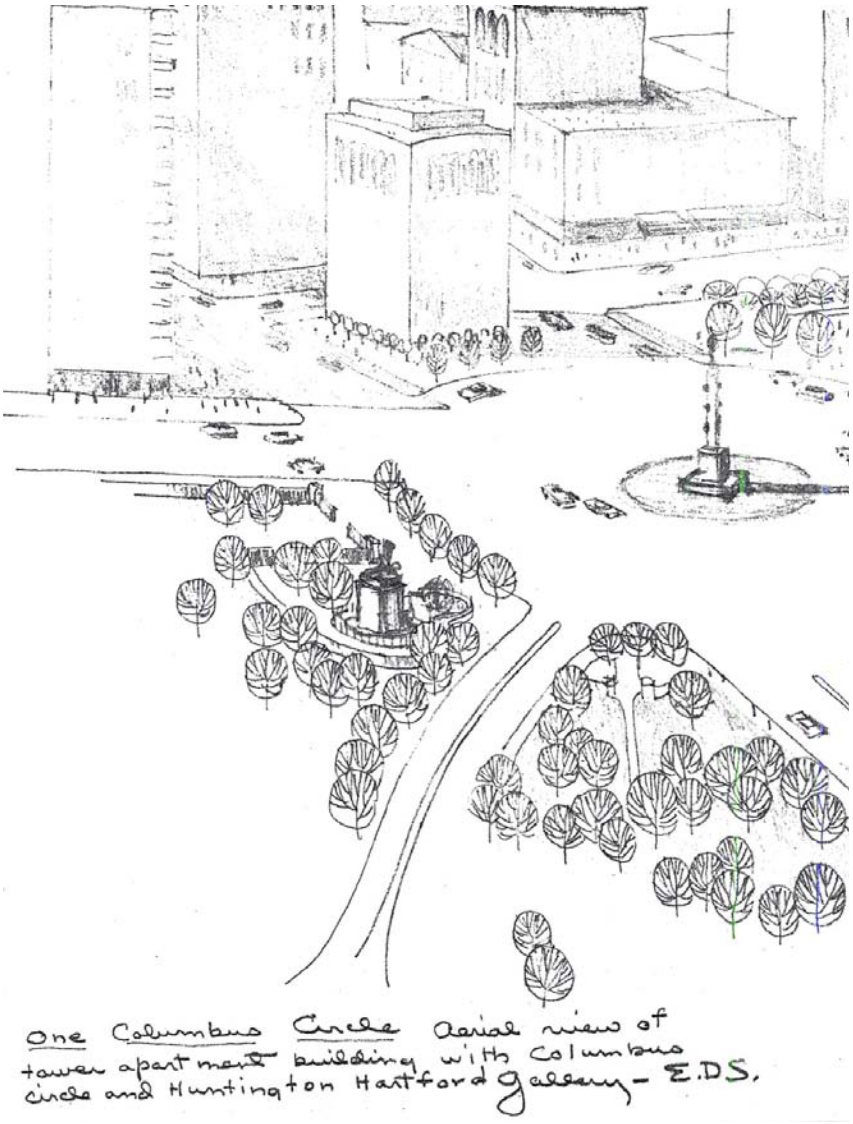
In 1996, an addition was constructed to the Institute by Anschen + Allen. The additions, which are stand-alone additions, are compatible to the massing, size, scale, and architectural features of the original structures. These additions are not additions to the existing buildings, but are additions to the site of the institute. They are considered additions because the master plan was already laid out and designed as a whole. Any new structures would be seen as an addition. The institute consists of more than just the two

Ill. 14 Salk Institute, view toward sea. Modern Architecture Since 1900, p.127

existing structures; the landscape connects these structures and produces a whole unit. While making these additions compatible in many ways, the true meaning of the site was not recognized.

These additions distort the concept of this single axis plan of the site. The two additions, located at the ends of the two original structures but spaced apart, create a second axis and close off one view. These additions take away from the importance of the two original structures by removing the concept of the single axis created by these structures.[4] The additions try to emphasize the central axis but unconsciously diminish it. The two new buildings, with a parking lot in front of them, do not adhere to principles that Louis Kahn was trying to communicate. Although these additions tried to repeat the look and style of the existing building, they did not capture the concept and the meaning that was formulated by the structures. The paved courtyard with the water running in the center resulted from the influence the two structures had on the site. These physical features were only part of the site and created intangible features that the additions were not compatible with.

Aside from being a different type of addition, this case study shows the importance of the building and its relation to the site. Meyerson Hall does not have this special significant axis and but does have a connection to the site, although not as strong as the Salk Institute. It was added to the master plan and gained its own reputation. This building also has intangible features that can be strengthened given the proper make over. If these features can hurt such a great building like the Salk Institute, then it can definitely improve a building like Meyerson Hall. It is these buildings that make us realize the importance of understanding every aspect of the building and can assist in addressing any type of historic preservation project dealing with any time period of construction.



Ill. 15 Aerial view Sketch of Huntington Hartford Museum. Edward Durell Stone. The Evolution of an Architect, 1962

Case Study:
The Huntington Hartford Museum

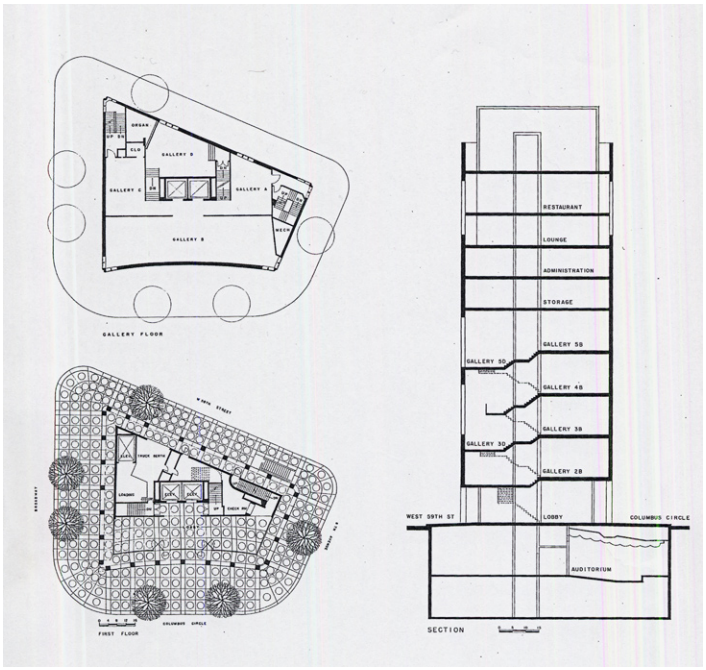
The Huntington Hartford Museum, 2 Columbus Circle

Ill. 16 Former Huntington Hartford Museum, 2 Columbus Circle, NY.2004

This nearly windowless, white marble structure is in a prominent location in New York City with a view of Central Park and in front of a major intersection. The Venetian motifs and curved façade make this building unique and curious in its context. Designed by a prominent architect in America in 1962, Edward Durell Stone, this building was left to deteriorate by neglect in 1998 by the City of New York. The idea behind the design dealt with Stone's view that the modernist movement had become exhausted and not worth pursuing anymore.[5] The building housed the Huntington Hartford Museum for only five years. The ownership then shifted to Fairleigh Dickinson University and then in 1975 to the Gulf and Western Industries who turned it over to the city. The history of this building is sad and short.

Cursed from the beginning, this building never had a chance to survive or to function as it was intended to. The porthole windows along the sides provide air and light throughout the building and the gallery spaces were designed as landings for the elaborate stairs in the center of the building. The vertical circulation contributed to its open floor plan. The small lot size has aided in its use as a museum. Although a bit small, the building did function acceptably, but was ahead of its time in design and interpretation. People did not see the

building for what it was; they did not see the interior and its layout and effectiveness. They just saw this large nearly windowless building that was not aesthetically pleasing to look at and did not conform to other styles of architecture at that time. After five years, the owner could no longer support the financial costs of this building. Without any outside support, the owner had to give up the building.[6]



Ill. 17 Huntington Hartford Museum, first floor, gallery floor, and section of building. Edward Durell Stone, 1958.
The Evolution of an Architect, p.204

Although many people agree that this is not a pretty building, they have grown accustomed to it and recognize its distinction in the area.[7] Time has added an emotional significance to this building that makes up for the lack of understanding people have of the ideas and theories behind the building. The building in its context offers a rich diversity with its scale and materials. Most importantly, this building represents an architect's idea and interpretation. There is more to this building than meets the eye. The only problem is recognizing it. Among all the buildings in New York City, this building leaves an impression very few others do. The approach to preserving this type of strong building is

either to leave it alone or change it to another bold statement of our time. As Muschamp said in his article, "The distinction of 2 Columbus Circle is that Stone was out of step. You do not necessarily improve on such a building by replacing it with something recessive. If anything, you punch up the idea of difference,."[8]

After seeing the proposed plans designed by Brad Cloepfil of Allied Works Architecture, Tom Wolf, who wrote a New York Times article on December 1, 2003, predicted a "what-have-we-done shock" when "one of the most important buildings in the history of the 20th century architecture" has been "vaporized."[9] The proposed addition involves a complete overhaul and re-cladding of the building. The plans include removing the windowless façade and sheathing the skeleton with glass.[10] Since this article was written another proposal has surfaced. The proposed renovation retains such elements as size, scale, and orientation; however, the concept is not interpreted right. This proposal includes a 30-inch wide glass strip along the front façade of the building.[11] The building will be used as an art gallery again but will be completely changed on the inside. They alter what has made this building unique for all these years, its face. The once strong, distinct building will now be just another glass curtain wall building sitting among the rest. The unique look of the building and its location has made it an important building and worthy of preserving. Other factors, such as economic factors, have also made this building important and in danger of severe alterations. The historic fabric which has made this building significant has to be taken into account now. Although everyone does not appreciate the look of the building, the relation that the fabric has on the meaning of the building should be preserved.

Many are still questioning the significance of this building. The unappreciated appearance referred to by the public is not disputed. The building lies in a prominent location and the architecture that surrounds it speaks to a different level than style, it

represents money and power. Aside from the money and power, Meyerson Hall shares most of the same burdens that 2 Columbus Circle does. Meyerson Hall does not have a strong concept but does lie in a location surrounded by prestige and respect. Meyerson has been overlooked just like 2 Columbus Circle. These buildings represent two different approaches to the same type of architecture. A complete overhaul might be necessary for Meyerson Hall but careful consideration has been taken after learning about 2 Columbus Circle. Given the right approach, something good can result from a re-cladding and complete makeover of an historic building.

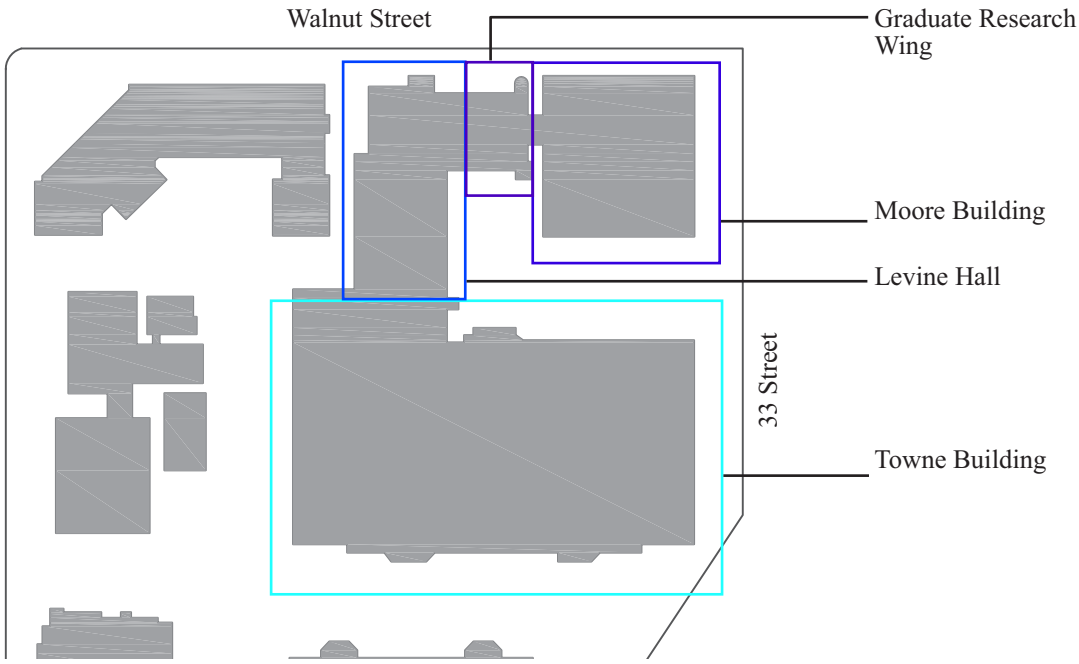
Ill. 18 View looking south to 2 Columbus Circle in the context of New York City, 2004

Ill. 19 Levine Hall, University of Pennsylvania West Facade, 2004

Case Study: Levine Hall

Levine Hall, University of Pennsylvania

Levine Hall, an addition made to the Graduate Research Wing in 2003, integrates the original 1966 work by Geddes, Brecher, Qualls, and Cunningham consisting of the dark, reflective glass curtain wall with new technology of steel and glass facades. The Graduate Research Wing was an addition to the Moore Building. Designed by Kieran Timberlake Associates LLP, Levine Hall is occupied by the Department of Computer and Information Science and the Weiss Tech House. Levine Hall links the Towne and Moore buildings that lie east and south of the building. The Towne building constructed in 1906 by



Ill. 20 Levine Hall, University of Pennsylvania, Site Plan, AutoCad Drawing 2004

Cope & Stewardson established the architectural character of the University's laboratory buildings and was used to train students in modern industrial practices. The Moore building, designed in 1912 by Erskin & Morris, and altered in 1926 by Paul Cret, was the birthplace of ENIAC, the world's first large scale electronic computer.[12] These brick buildings along with Levine Hall create a new courtyard and walkway for students.

This addition to an addition links many different years of architecture and styles but also links the trend of developing and incorporating modern views of technology through engineering and architecture. Levine Hall is the first building in the United States to use a pressure equalized active curtain wall system. The architects chose to "do something that seams the existing pieces together,"[13] rather than just copy one of the styles of the surrounding buildings. The decision shows the emphasis on connecting to the idea of

Ill. 21 Moore Building,
University of Pennsylvania, 2004

Ill. 22 Towne Building,
University of Pennsylvania, 2004

preserving the concept rather than the fabric. Parts of the Town Building were demolished to accommodate for this new design. This new building is now part of the history of the school and continues with the ideas and guidelines of the University of Pennsylvania.

Ill. 23 Graduate Research Wing,
University of Pennsylvania, 2004

Mostly comprised of glass and steel, this building provides areas of masonry to relate to the existing materials in the area. The floors are fourteen feet high and the interior is designed to be flexible for future uses. The heights of the floors make it easier

to connect to the existing buildings on both sides.[14] The building is built with state of the art technology and resources. The technology is visible as soon as you enter the building into the double height lobby. The glass facades add a special feeling inside the lobby and give a sense of a school of engineering. The facades are made of "double-glazed glass units on the outside and single-glazed glass units on the inside and encased in an aluminum frame."[15] This system serves to provide a glass wall that can manage heat and provide adequate transparency without glare. It is more like an atrium with gadgets all over the place. This building adds 48000 square feet of more space to the engineering school. This space consists of classrooms, a 150-seat auditorium, and lounges.[16]

Levine Hall, which engulfed the Graduate Research Wing, has created a distinct vocabulary and provided a benefit for the area and the students. The transparent building is in a sense open and inviting to the public and the students. The glass mitigates the loss of the views of the historic buildings but also stands strong as an accepted member of the engineering community. The concept of the building represents what the school was created for; the study and advancement in technology. This building does more than just contribute to the physical fabric of the existing buildings; it also contributes to the social and psychological aspects of the students.

Levine Hall sits on an area that was once a loading docks and garage. The building is surrounded by historical significant buildings and was derived as an addition to a building built in 1968. These situations are similar to the situations of Meyerson Hall. Aside from the fact that both buildings are less than a block away, the separate departments that occupy these buildings provide a more distant relationship. Nonetheless, the Graduate Research Wing and Meyerson Hall show that there is a need to upgrade and add to these buildings built after the Second World War. These buildings were built to fulfill the need presented at that time and were designed based on function. Now that the function needs

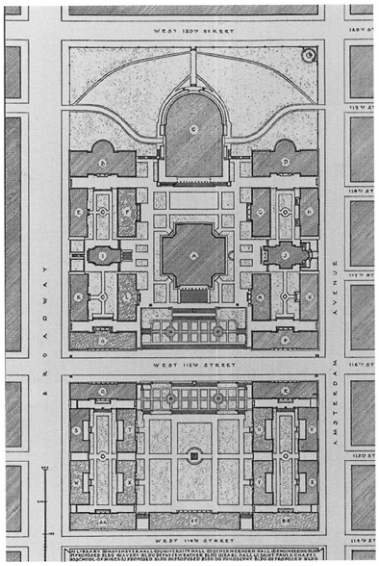
upgrading and the lifespan of the materials and mechanical systems reach their end, we are left with two buildings, that we know of, within the same campus that need additions. The Graduate Research Wing already got its renovation and Meyerson Hall should follow the same path.

Ill. 24 Sherman Fairchild Center, West Facade, Columbia University, 2004

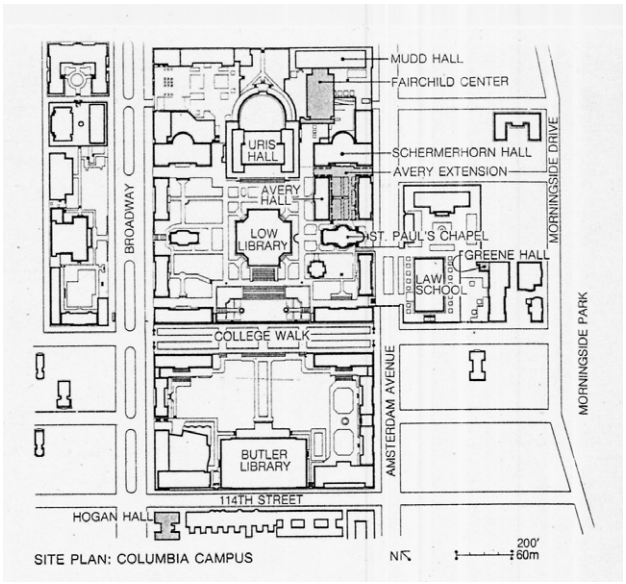
Case Study:
Sherman Fairchild Center

Sherman Fairchild Center for the Life Sciences, Columbia University

The Sherman Fairchild Center for the Life Sciences was an addition made to the master plan of Columbia University originally laid out by McKim, Mead, & White. Romaldo Guirgola, of Mitchell/Guirgola Associates (MGA), designed this addition in 1977 using a contextual approach. The building was an addition to Mudd Hall and stood atop a podium. Mudd Hall was one of the buildings that Columbia University was not too proud of. The Sherman Fairchild Center served to hide this building from when looking at it from the main campus. "Beginning in the 1970s, following criticism from the architectural and popular press and from students and faculty, Columbia attempted to commission designs from more prominent architects and build more distinguished buildings."[17] They succeeded by hiring MGA and giving Romaldo Guirgola the freedom to expand on the



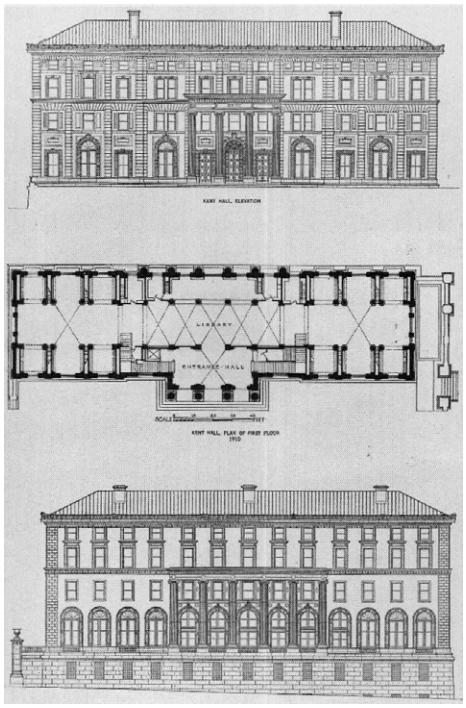
Ill. 25 McKim, Mead & White's plan for Columbia University
The Architecture of Additions, p.117



Ill. 26 Site Plan: Columbia University Campus.
Progressive Architecture v.59

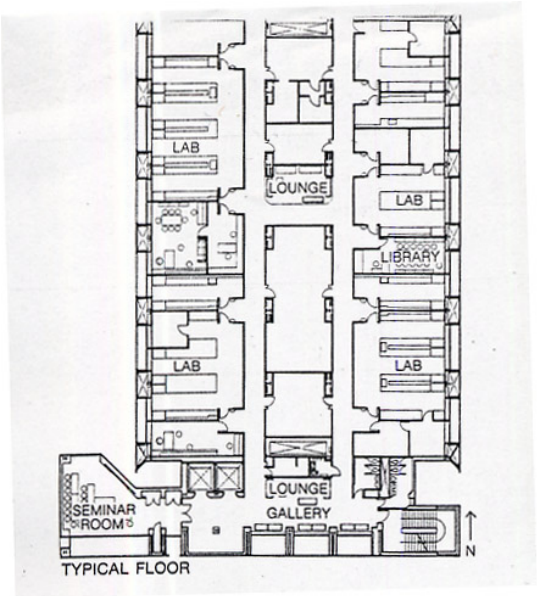
campus. The concept of the building was determined by the situation in which it laid. The buildings surrounding the Sherman Fairchild Center do not resemble any significance or prominence in their design. However, these buildings were home to the schools of

engineering and business. The Sherman Fairchild Center was designed to improve and set Columbia among the top in the life sciences department.



Ill. 27 McKim, Mead & White's basic academic building block for Columbia University.
The Architecture of Additions, p.117

Since the building was to be placed above an existing podium, light steel framing was used and ended up being the deciding factor in the design as it tried to reaffirm the lightness that the framing expressed. The light tile paneling that functions as the exterior wall is made of terra cotta and behind it is another wall made of glass. This contributes to the control of light and glare within the building. The double panel wall adds a unique sense to the building. The panels of the façade are all proportioned to each other and the building. These panels are not intended to imitate any material through color or design. The layout of the tiles and the borders points out the individuality of the curtain wall and all its components.



Ill. 28 Sherman Fairchild Center, Typical Floor Plan. Progressive Architecture

Romaldo Guirgola tried to relate the plan to that of the original building blocks of McKim, Mead, & White. The proportions resulted from this and so did the axis. The proportions and the axis played and important role in the concept of the design of the new building. The double panel lightweight steel framing in conjunction with the circulation and concepts of the building generated a much-

needed new look and direction for Columbia University. "The building was transformed from a structure that exemplified the decline of the International Style (as characterized by its functional and physical obsolescence within a generation) to high-quality education environments that contribute to community life."[18] The layout of the floor plan provided a comfortable setting to work and the circulation followed the vertical and horizontal axis. This building functions properly and reads in a clear format. The building also fits with the surrounding buildings and contributes to the scenery.

This building contributed to the campus and to the building it was attached to. The design still stands out among the other buildings not as something extravagant, but as something different and conforming to the campus plan. It does not humiliate Mudd Hall or any other building around it. It works well with Uris Hall and alleviates the transgression of the lower levels that cannot be seen from the main campus. "Giurgola's Sherman Fairchild Center inaugurated a new period of critical and inventive engagement with McKim's legacy and was much admired upon completion in 1977. For the first time in decades Columbia's architecture was heralded as exemplary in the architectural and daily press."[19] Not long after the construction of the Sherman Fairchild Center,

Ill. 29 Sherman Fairchild Center next to Mudd Hall, Columbia University, 2004

Ill. 30 Sherman Fairchild Center, Columbia University, 2004

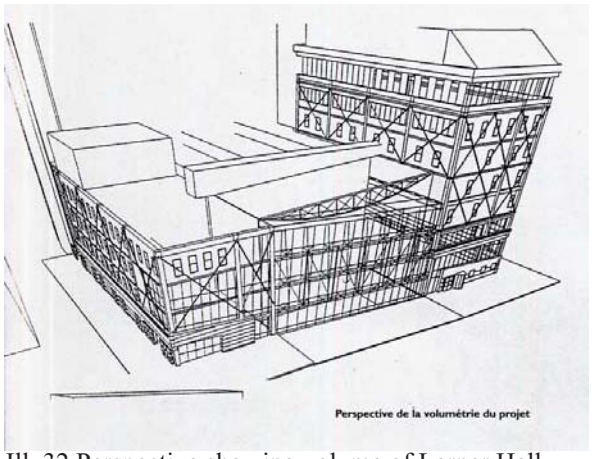
Columbia University lapsed back into a practice of building mediocrity.[20] With additions like Lerner Hall and the addition to the Law School, hopefully period of critical and inventive engagement will continue.

The addition to Meyerson Hall will have to be critical and inventive to the school of design. The building does not have to be hidden and the addition does not have to be this great piece of architecture that will take notice away from Meyerson. The addition has to work with Meyerson Hall to create a new building that is as clear and conforming as the Sherman Fairchild Center. The addition will be a result of the situations we are dealt with. The addition will also serve as an addition to the campus, but more emphasis as an addition to Meyerson. The inclusion of landscaping and vistas will link it to the campus. The Sherman Fairchild Center does make the view from the main campus more appealing.

Ill. 31 View looking south at Lerner Hall in context at Columbia University, 2004

Case Study: Lerner Hall

Lerner Hall, Columbia University



Ill. 32 Perspective showing volume of Lerner Hall. "Bernard Tschumi/Ove Arup and Hugh Dutton/Eiffel: Students Center, Lerner Hall, Columbia University, New York" Architecture d'aujourd'hui. 2000 July-Aug., no.329, p.61

Lerner Hall, designed by Bernard Tschumi, tried to incorporate the past with the present. Completed in August of 1999, a lot was expected from this building. The concept of this building dealt with contextual issues relating to the traditional Columbia buildings while also linking the planning of the original McKim, Mead, & White campus plan to the design. This addition to the campus appears as three buildings. The two end buildings as traditional Columbia style buildings with a contemporary design of ramps connecting them enclosed in glass. The architecture combines the Beaux-Arts era with a technological new millennium.[21] The ramps work on a system of suspension cables and structural glazing. This new look of a glass façade connects with the more traditionally designed outer portions of the building. These outer portions of the building are brick and with granite bases and conform to the building model laid out by McKim, Mead, & White. The building is described as "not one building but three: a low, clumsy detailed masonry

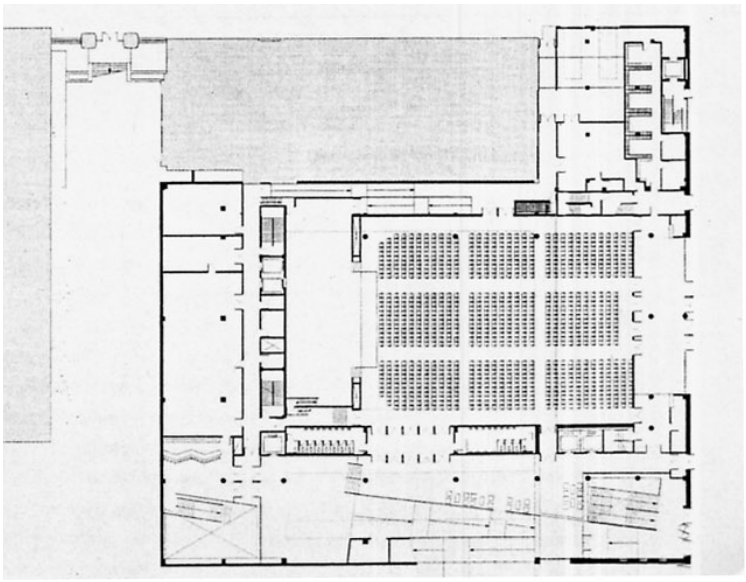
Ill. 33 Lerner Hall, Columbia University, 2004

block next to the library; the techno glass-and-steel extravaganza of the ramping atrium; and a higher but equally awkward block fronting Broadway."[22] The building connects and wraps around one corner of Carman Hall and the street front facade does remain in scale and consistency with material as the other street front buildings and as McKim, Mead, & White wanted it to be, although not a complete success. Carman Hall was constructed in 1960 and serves as student housing. This building is tall and does not conform to the building types of the campus.

It is difficult to properly design a contemporary building when working in an historic area and having so many restrictions and politics governing the outcome. "The massing of this controversial stone, brick, and glass building is a bold attempt at a contemporary adaptation of McKim, Mead & White's South Field proposal."[23] While trying to relate to the site and in keeping with the original plan of the Columbia University, Lerner Hall fails. It tries to relate to too many things and does not relate to itself or fit in with the overall site. As a whole, it does not protrude a sense of strength or confidence. A different form of architecture is displayed. The middle section tells a different story than the outer portions. Bernard Tschumi wanted "to make a building do something, not just look like something."[24] The building does do something but unfortunately it looks

Ill. 34 View looking south at Lerner Hall, 2004

like something that tried to relate to the other buildings. There are a variety of materials used and the two end sections do not compliment each other. The circulation of the ramps does not work well and the public does not like it. This addition seems as though it was looked at as a new building rather than an addition. There are no conceptual connections to Carman Hall besides providing services to the residents of the building. The connections are geared more towards the campus than the building.



Ill. 35 First Floor plan of Lerner Hall, "Bernard Tschumi/Ove Arup and Hugh Dutton/Eiffel: Students Center, Lerner Hall, Columbia University, New York" Architecture d'aujourd'hui. 2000 July-Aug., no.329, p.61

A good attempt, and perhaps if the ramps were the addition to another building, then it might be viewed differently. The glass and steel portion could be seen as a bold attempt to connect historic buildings, similar to Levine Hall at the University of Pennsylvania. However, this technological wonder is lost within a building that does not work well. Its placement on the campus served to add amenities to service the students. The building contains a theater, a bookstore, cafeteria, and many other facilities. It consists of 225,000 square feet of new space. The only problem is that the ramps are out of place with the amenities provided in the building. The ramps do not enhance the amenities provided. They just work as ramps. It seems as though such a strong emphasis was placed on these ramps that they should do more.

Lerner Hall wraps around a building, Carman Hall, which was not pleasing to look at and tried to hide it and improve it. It tried too hard and the result was not good. This 1960's building is tall and awkward too, but it is that way because it has to house many students. Space is valuable in New York City and student housing is needed. More stress should have gone into addressing the vocabulary of this building. This is an example of using an addition to fix and aesthetic problem. In that respect it improves it but does not fix it. Carman Hall now sits behind Lerner Hall but is still visible because of its height. Modifications were made to Carman Hall but are overshadowed by the ramps and the composition of Lerner Hall.

Ill. 36 Lerner Hall Broadway Facade, corner wrapping around Mudd Hall.
Columbia University, 2004

The addition to Meyerson has to incorporate contemporary thinking, design, and materials, but to a manner in which they are compatible to the site. The interpretation that Lerner Hall tried in relating to the existing buildings while introducing something new turned out to be its downfall. This case study serves as lesson in trying to integrate contemporary design to a historic setting. Though the dislike of the appearance of the exterior of Meyerson Hall is well known, the addition cannot seek out to hide it, but alter it. Lerner Hall was not just an addition to a building; it was an addition to the campus. It did not retain the use of the building it is connected to; it added new uses to it and added to the function and needs of the campus.

Ill. 37 Lerner Hall ramp system, Columbia University, 2004

Ill. 38 Meyerson Hall South Facade, University of Pennsylvania, 2004.

III. Meyerson Hall

III. Meyerson Hall

The building that will be added to is Meyerson Hall, a building located in the University of Pennsylvania. Constructed in 1968 by Steward, Noble, Class, and Partners, this building is home to the University Of Pennsylvania School Of Design (PennDesign) and ironically is considered one of the worst buildings on campus due to its appearance and function. The unsuccessful design has brought aesthetic and structural problems from the beginning and continues to this day. Constructed at a time when Louis Kahn was a faculty member of the architecture school, the commission went to another firm instead of him because of politics and consideration of cost and schedule. This led to the chosen firm adapting an architectural thesis and turning it into what is there today.[25] However, there is some influence of Louis Kahn present in the design of this building in the industrial skylights and concrete sunscreens. The concrete sunscreens as well as the way the concrete was used throughout the building also show influence of beton brut work. This was a method used by Le Corbusier in his post war buildings that consisted of bare reinforced concrete as a finished surface. Beton brut was the main ingredient in a style known as brutalism which was popular in the 1960s. These influences should play a role in the design of the addition.

The building leaks and the air circulation does not work. There are cracks along the facades and constant maintenance is required. The building is structurally sound from what can be seen but water damage is also evident. Ceilings on the fourth floor show water staining. The water has penetrated the roof sufficiently enough to reach the ceiling tiles. Fixing the leak be will harder than installing a new roof. This building was not designed for easy patchwork. The heating and cooling systems do not operate as well as to reach comfortable levels. It is either too hot or too cold, whatever the temperature is outside. The water pipes seem to work well. I have not witnessed or heard of any flooding or loss of

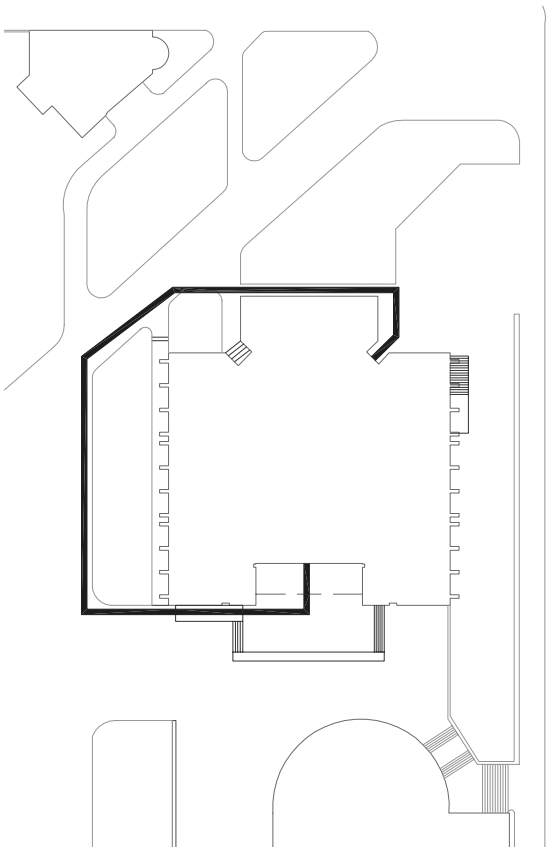
hot water. The materials embedded into this concrete building will be difficult to alter. The building is adequately maintained and upgraded. With wireless technology now available, running computer wires will not be a problem, however electrical wires still have to exist.

Aside from all the mechanical and structural problems associated with the building, the function is also a problem. The building is uncomfortable to walk around, not big enough in size, and has a very dark scheme due to lack of sunlight in most rooms and corridors. Because of its location, the sun causes the east side of the building to be very hot and the west side to be very cold. There is too much glare that enters the studios making it impossible to work. On the other hand, there are numerous classrooms without windows and without sunlight. The galleries on the first floor and the computer lab do not need sunlight, but the Historic Preservation lab on the fourth floor and all the classrooms in the basement do need sunlight. There is a sense of despair and isolation when you are in these classrooms. Because of the lack of windows and poorly operating air systems, these rooms can get very uncomfortable and annoying. The corridors in this building run in the shape of a square around the middle. Because of their location they too do not receive sunlight.

The circulation is distorted because of a last minute change to the space that was supposed to house the Institute for Contemporary Art (ICA).[26] The ICA was supposed to be in the center of the building with a skylight. This would have worked well for lighting and circulation purposes. However, now we are left with small corridors encased in the center of the building. The student has to walk around the building instead of through it. The layout of the spaces also poses a problem in accommodating the lower gallery and providing an adequate route though the building. The lower gallery is accessible through the front of the building. There is a ramp for ADA purposes and the space has been upgraded to a wonderful space. The ADA ramp in the front entrance only leads to the gallery. Because of the uneven floor levels, there are stairs everywhere once you enter

through the front. If you enter through the back, you have access to the entire building but not to the lower gallery. In addition, not many people walk through the lower gallery; they either go to the right or to the left. The second floor overlooks the gallery through glass panels. This causes a big square in the middle with no sunlight and way of cutting across. The third floor works well with the computing lab in the center, but the corridors are far narrower than they are anywhere else in the building and do not have any type of sunlight. The computer lab has been one of the many changes that Meyerson Hall has undergone since it was first constructed that is useful and an appropriate use of the available space. At least the second has the lower gallery to look at; the third floor just has narrow walls. The fourth floor has a square in the middle too, but not as large as the other floors. The space that is now used for presentations and pinups is right where the stairs come in. It is very odd how the stairs appear toward the middle of the floor.

The corner entries at the rear do not correlate too well with the main entrance on the other side. All the entrances are at different levels. The loading dock is located in one of the rear entrances and so is the building garbage container. The students use this entrance a lot during the day. It faces a two major streets and one of the entrances to the campus. The other entrance only serves as an exit and is not ADA accessible. This exit feels like a back door. To get to the rear door from the central front door, you have to walk around the entire building. The ADA ramps also are in completely opposite



Ill. 39 Diagram showing inconvenient path from south ADA ramp to north ADA entrance. 2004

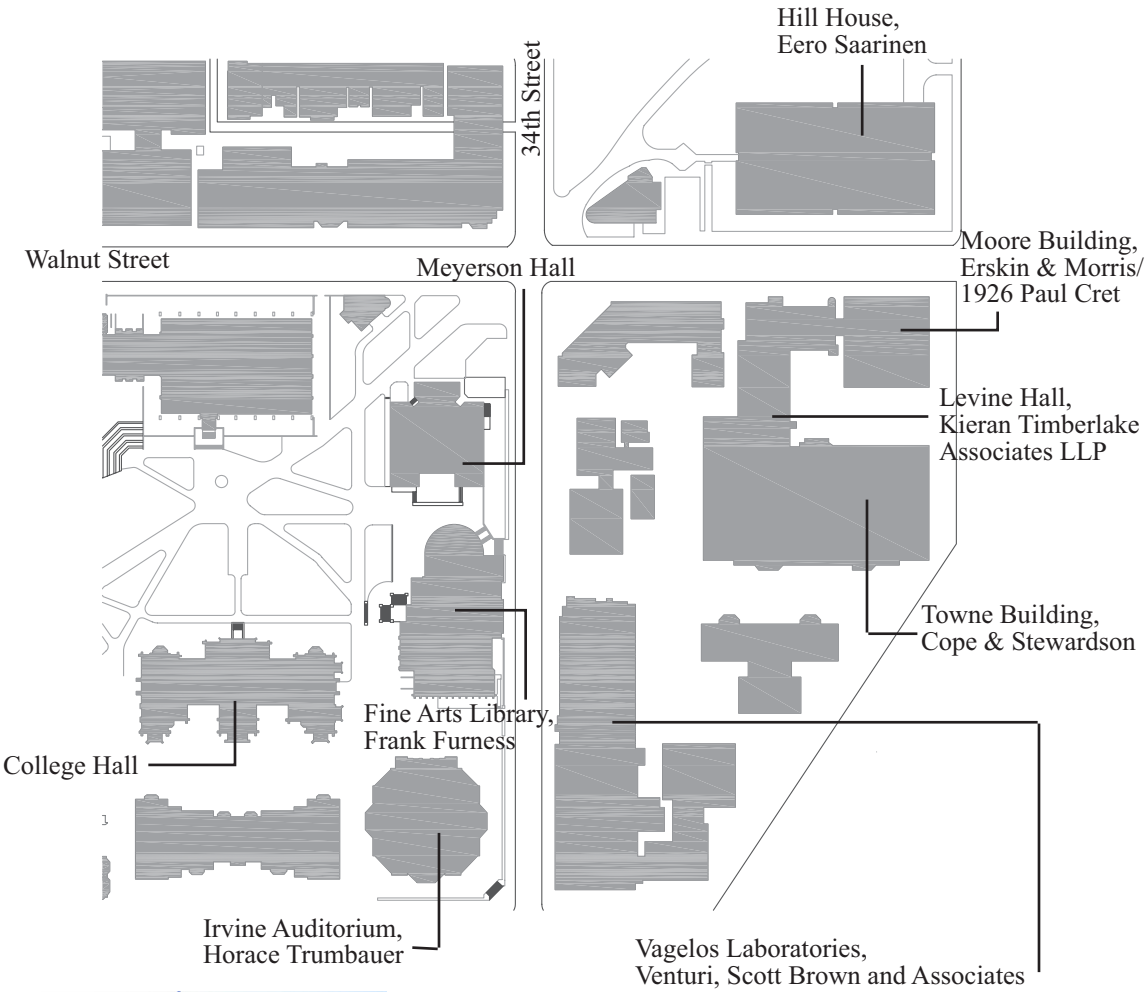
corners. There is only one way to go too as one side of the front of the building leads to stairs. The other side of the front of the building provides a view into the mechanical room. This room would be better off as a classroom.

The building is not that bad. The rear of the building has balconies. The front of the building has balconies too. The only problem with here is that only one balcony is accessible to students. The other balconies are outside of offices or labs. The third floor lounge, the only lounge in the building, contains this balcony. It provides a nice view and a good feeling. The upper and lower galleries are great places to present work. Although not that well for vocal presentations, the display quality is wonderful. Meyerson Hall also has the largest classroom in the University of Pennsylvania. Located in the basement, this classroom has comfortable seating and state of the art technology. Modified over the years, this classroom is another example of what can be changed in this building. Being in the basement, there are no windows and it is also subject to the same climate control issues.

There have been constant renovations to done to Meyerson Hall. Practically every room in the building is wired for Internet service and is now being converted to wireless Internet service. The entry area has been enhanced and brightened by the recent removal of the canopy and additions of lights and a new ceiling. The elevators have also been upgraded and fitted to the space without much damage. There are also many rooms that have been rearranged and created to meet certain needs. Cosmetic repairs are also done on a yearly basis. Meyerson Hall is an adaptable building, but space is limited. The changes that have occurred since its construction have served to keep the building up to date and have proven to fit well within the building. However, these changes have not added to the size of the building, which is what is needed now.

Meyerson Hall is more than just a building. Most of its significance lies in its location. The location is the major strength of the building. Located near the corner of a major intersection and adjacent to an open area, the possibilities of an addition are great. Significant buildings surround Meyerson Hall. To the south of Meyerson are the Fine Arts library by Frank Furness, Irvine Auditorium by Horace Trumbauer, the Vagelos Laboratories by Venturi, Scott Brown and Associates, and to the east is Hill Hall by Eero Saarinen and Associates. These are just a few of the buildings that make this location a prominent area in the entire site of the campus. Although some might think it would be more appropriate to demolish and rebuild, the feasibility behind that is nonexistent and although Meyerson has so many problems, it is a part of the history of the university and the history of PennDesign.

Ill. 40 University of Pennsylvania, Partial Plan
AutoCad Drawing. Irvine Auditorium & Vagelos Laboratories, 2004



Irvine Auditorium, 2004

Vagelos Laboratories, 2004

IV. Theory and Practical Application

Buildings reflect a certain time in history and in designing an addition, that time must be recognized and properly dealt with. The ideas thought of at the time of original construction might be different than the ideas people think of now. Those ideas contribute to the concept of the building and play a key role in the style of the building. According to the Secretary of the Interior's Standards for Rehabilitation**,** additions must be distinguishable from the original building yet compatible to it**,** then it is the time that provides the ideas to do this. Architects approach this by using what is available at that time. When approaching an addition, whether it is an historic building or a modern building, time can be used to determine an acceptable and compatible design even if it is different than the actual building. Time has also changed human and social values. As a basis for designing additions, these buildings can be looked at differently and valued for its meaning. I agree with Louis Kahn when he redefined the term "institution" as "the expression of a people's community of ideas, despite the contradictions of time which are reflected in everything."[27] The buildings we area dealing with are institutions of our time.

In dealing with post World War II modern buildings, time can be a great ally. "Architecture works in four dimensions, not just three. By nature it is involved with time and change."[28] I do not choose to elude time, but to incorporate it into the design and approach taken. As many preservation projects tend to freeze time, this project continues time and interprets it to fulfill the current state of needs and resources. Time does not serve in this purpose as a revival of some style but as variable to better fit the design with the context. Linking time together in one building incorporates history and ideas that might otherwise be overlooked or ignored. These ideas tend to focus on all that gives the building life and meaning. At the same time, the design of the addition must not be a prisoner to a style or design associated with the time it will be constructed. The building should be

looked at as a product of thoughts and its relation to time, but not be limited to just time. Although time does serve to connect these buildings and define certain terms, time does have a strong influence on architecture and must be approached with care.

In the present year of 2004, most buildings that were designed to reflect volume, structure, and function have reached historic status according to the national register of historic places. These monolithic concrete or glass buildings as well as the marvels constructed in the twentieth century have to be carefully tendered to. How can one preserve a building that focused on the idea and function rather than the appearance? While it is easy to preserve a building of Louis Kahn or Frank Lloyd Wright, whose buildings turned out to have a distinct manner, what happens to those buildings that lack this quality and lack any significance of fabric? It is easy to preserve the architectural features of historic landmarks, but the modern buildings from the 1950's might seem a bit more difficult to deal with. These buildings avoided architectural decoration and centered on the program and space. The only problem is that the program and space change with technology. Not only is technology a factor of change but also are light, air, and sound. Advances in technology are preserved, like the first curtain wall building, but not all buildings exhibit this feature. The preservation architect must look beyond the fabric and appearance of the building and look at the intangible features associated with the building when designing an addition. Those features should be comprehended and interpreted to fit into the layout of the existing building and be most compatible with the addition. The addition cannot severely alter the program as to remove any intentional concept involving these intangible features. The design must incorporate and strengthen the program even if that means altering the historic fabric. The addition will be permanently embedded into the existing building and site. In a way it will like adding another layer of skin to buildings that essentially are frame and glazing. The historic fabric might be altered but the concept remains. As modern architecture looked back at the basics of architecture, we must look

back at the ideas of these designs. These features serve to broaden and change the way preservation is used today. Preserving the meaning of the building is critical in preserving modern buildings.

All the ideas and concepts behind the building derive from the function of the building. The building was created after the use was figured out. It is then that the design can start and it is to this point that we must return. If the use of the building has not changed then it is only logical that we return to that use and re-examine the needs and ideas associated with that use. Technology has afforded us a new perspective on common uses. The new perspectives will serve as the main difference between the addition and the existing building and will also be used to connect them. Meyerson Hall is home to PennDesign. It was originally built and designed to fit this use. However, technology has forced the building to be constantly upgraded and the rise of students has initiated a need for more space. The addition must be designed to accommodate these needs. The design can be similar to the original design but interpreted to today's social and technological standards. The program will be slightly modified and improved. This improvement will force a change in the layout, circulation, and function of the building. The need for an addition results from the need to improve the function of the building.

Before we jump to the design, a critical step that we must take is to fit this addition to the site. The site is already predefined and the space allocated for the design is limited. In addition, the site contains other buildings that reflect a history of the campus and are significant architectural structures. The landscape has also been laid out accordingly and has created views and scenery that must also be treated sympathetically. This addition will be designed from the outside in and then from the inside out. Since the building is in a prominent location surrounded by distinguished buildings, the new addition cannot be

designed to overpower or humiliate these buildings. The new addition must be a product of all the architectural vocabulary that surrounds it. If the result is a new type of vocabulary, then it will fit with the many types of vocabularies of the buildings of the University of Pennsylvania. The size should be reasonable and appropriate for the space. The geometry of the building with the addition can change, but important features like symmetry and orientation should be preserved. The symmetry of the building is an important part in the concept and meaning of the building. Symmetry can be a result of the philosophy behind the building and can aid in construction methods and the layout of the interior spaces. The orientation affects the way the building is viewed by determining a front and back. It is also very important because it is part of the concept and can relate to other things like sunlight, landscaping, and other buildings. A study of the orientations of surrounding buildings and building entrances will be conducted to determine the best design for the addition and decide whether or not to alter such an important feature such as orientation. Meyerson Hall faces 34th street and Walnut Street. The main entrance however is not on any of these facades. The façade on facing Walnut Street is used as the loading dock and contains food carts. According to the University Design Guidelines, "Building entrances should be visible to those arriving on campus, and should contribute to the life and activity of streets and walks. Where buildings front on public streets, there should be public entrances and attractive, open streetscape facing the street."[29] It is for this reason that changing the orientation of the building is considered and studied. A renovation has been recently done to the park diagonally across form the Meyerson Hall and must also be taken into account. The University of Pennsylvania is a historic district and any design that will harm or lessen the significance of this campus will not work properly. Once all these outside features are identified and incorporated into a preliminary design of the outside form of the building, then we can move into the inside and let the outside form be modified accordingly.

Meyerson Hall is a very important building in the University. Many students use this building on a daily basis and any new construction can cause numerous problems. The spaces and movement throughout the building have to be changed. The mechanical rooms also have to be relocated and many facilities are going to be introduced or expanded. The students and faculty of PennDesign cannot be moved to any other areas. There is not enough room in other buildings to accommodate the students or provide the resources that are necessary for the departments to operate. In order for this to work, the construction must be done in phases and carefully managed. With a preliminary outline of the new building, important spaces can be built first and house functions of the building that will allow the building to remain in operation. This will be creating a new building on the outside and then proceeding inward. As the construction moves inward, the interior spaces can be modified and adjusted to fit the new layout and design. I want to design a new building, completely separated from Meyerson Hall at first then slowly integrating them. Creating this new building from the old one is the first step in interpreting the change and need for the addition. In older historic buildings, the building had to retain its physical significance, now in these modern buildings; addition will strengthen the physical significance and change it in the process. When completed, the addition will overpower the original building but the concept will still be preserved. Meyerson Hall will live through its new outer layer and successfully meet the needs of its current inhabitants. The large industrial concrete and glass building will grow into a new school of design and hopefully stand proud alongside its current neighbors.

The intangible elements from this building will become tangible through the placement of walls and facilities. The ideas will remain the same but will have a different affect on the design of the building. Improving the circulation through the building has to create new corridors and new placement of windows and openings. The corridors and hallways of the building will be used as connecting passages to the addition and as the main

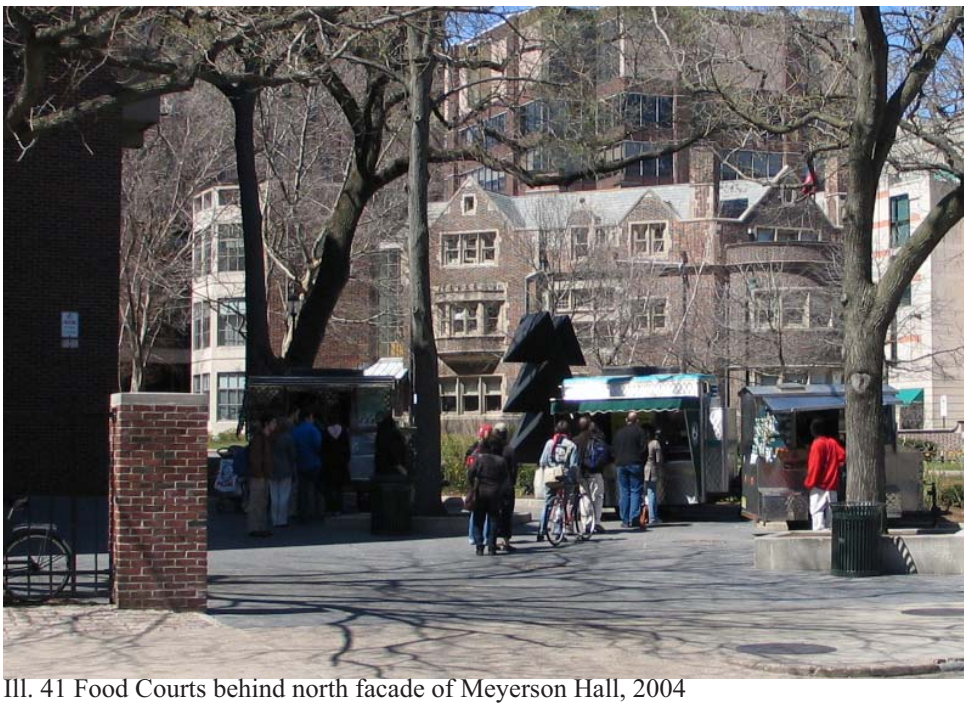
concept for the design of the interior. They will be placed in such a way as to create an easy flow of traffic from one side of the building to the other. In situations where the corridors cannot conform to the easy flow of traffic, they still have to conform to the same size and feeling of the rest. Some of the corridors are used to pin up work, posters, flyers, and some have lockers. These corridors should be wider than they are now and diminish the feeling of cramped, dark spaces. As a design school, the corridors should also be used as work areas and places of congregation where ideas can be shared between different students and departments. The conceptual skeletal feature of the building will no longer be the frame of the building but will be the corridors. Perhaps it may be possible to also shift the structural features to the corridors as well. PennDesign describes itself as "a single school, within a great university, dedicated in promoting excellence in design across a rich diversity of programs – Architecture, City Planning, Landscape Architecture, Fine Arts, Historic Preservation, Digital Media Design, and Visual Studies."[30] The corridors are the common places within the building and can help PennDesign accomplish a more unified integration of these programs. The key to the proper integration lies within the circulations.

The lab and studio spaces, which are areas of departmental integration, have to work well with sufficient space, light, access, and movement. The same goes with the classrooms. All of these spaces will incorporate a meeting area and personal student areas. Of course these areas will be flexible space with moving walls, furniture, and wireless technology. Since I am trying to unite the different departments in order to promote this sense of a completely integrated design school, the only solution is to have the studios connected to each other in some direction. Double doors that can create a big enough opening to unite to spaces should connect them. In cases where the opening is above, stairs within the rooms connecting the studios can accomplish the integration. The studios and labs are the places where students spend most of their time. The work and social atmosphere that one experiences in these studios are tremendously valuable in creating

the right circulation. The spaces and the teaching that goes on in these spaces create the atmosphere. Just as the teaching and experience help to shape the student, they too can help in shaping the new connecting studios. The department that is directly related to the type of lab usually uses the labs, which can be used by all. To better serve their use, these labs should be closer to the studios associated with that use. The Fabrication lab houses heavy machinery. Large models can also be created in this lab. The placement of the lab on the fourth floor is, by common sense, absurd. The new fabrication lab will be placed on the ground floor with easy access to the street and more open space. In the new location, the lab can be a reference point for all studios and with its massive size and space, and can be an anchor for the new building. By removing it from the fourth floor, not only does it divert traffic and help with the circulation horizontally, but it also helps in the vertical circulation as it lightens the weight and increases the elevator space that would otherwise be used by the materials and machines transported to the fabrication lab.

There is also a need for new lounges and facilities. The new lounges need to expand on the few that exist now and reflect with the circulation of the building and location of classrooms, studios, and labs. When studying at a school of design, it is necessary to take a break and relax. The current lounge cannot support the number of students that attend PennDesign. In addition to increasing the number of lounges and their size, the lounges should also be exterior and interior spaces. These areas should be able to change depending on the outside weather. The location of lounges will be near the labs and towards the perimeter of the building. Smaller lounges, from now on referred to as meeting areas, also exists within the building. These meeting areas are places where students meet before or after class, or just on a daily routine passage around the building. Meeting areas can be created anywhere by the students along the corridors, but space also has to be allocated for these areas. Waiting areas in the departmental offices are a form of meeting areas. The range of people that these areas can hold will vary throughout the

building and their location will develop over time. These meeting areas will also affect the entrances of the building. As recognized by the school, "building entrances are frequently the meeting places, and gathering places of those using the buildings, and should be designed to encourage interaction."[31]



Ill. 41 Food Courts behind north facade of Meyerson Hall, 2004

In addition to these meeting areas, a cafeteria-like area is also proposed. The current location of food carts outside the north side of the building are situated near an important corner and in open view. The food carts are not there all day and the fact that they are movable is a good thing. However, there is no place to eat and the space taken up by these carts cause some concern. They do serve as meeting areas outside the building and also provide an important service for the students. The area proposed will contain space for the companies to sell their food indoors or within a confined area with a more appropriate reflection on the site. The companies can store some of their equipment within a closed area and overnight. If it rains or is cold, the students do not have to exit the building any

more. Seating will be provided and a lounge will be attached. When the food companies close for the day, the space remains and can be used for committee meetings, lectures, or workspace. The school supply store can also be incorporated in this space. The presence of a food court brings a sense of relaxation and togetherness. You can go, sit and eat while you talk to some friends or to other people eating. The sense created will continue to times of the day when there is no food available. The location of this area has to be close to the ground, probably on the second floor, and close to the perimeter. Easy access to this area for the venders and maintenance people should be close. Ventilation can be obtained by also incorporating interior outside spaces. Large windows and doors allowing light and air inside this area may be included.

We have a set of corridors connecting all the classrooms and the studios (which are interconnected with each other), with meeting areas along the sides ending in lounges with a cafeteria, all anchored to the fabrication lab and all within the outline of the new building. This network created provides the foundation for the building and outlines the circulation and movement throughout. Adding materials, light, windows, and students will result in a unique sense of place for the people that pass through Meyerson Hall. Although the outline is set, certain features like windows, doors, and patios, can help in altering the outline where needed and add to the open floor plan of the building. The skin of the building also has not been defined yet.

Natural sunlight and air is a big issue in the classrooms in the basement. Being able to install windows in these rooms' sounds like a great solution but must be approached with ease. Excavation around the building is necessary and so is proper reinforcement of the foundation wall. Installing windows and creating some type of light well will allow natural light and air to enter the rooms and also fix the climate control problems that also exist. These rooms are either too hot or too cold and always in opposite to the outside

temperature. The addition will be built far enough away from the basement classrooms in order to allow light to come in. Above the first floor and throughout designated areas, the addition will be connected to the existing building. Above the first floor, sunlight is a problem. The sunlight enters the studios and produces heat and glare inside. A solution to this must be part of the addition. Doors and windows in the studios and lounges will open to porches and outside spaces. At any time, I would like there to be a continuous flow of air from one side of the building to the other. Some of the porches and outside spaces will be covered to allow this to happen and to reduce glare and sunlight.

The outside appearance of the building will result in the form created by the amount of space available, the protruding spaces from within, and from the landscape. The surrounding buildings will contribute to the style, manner, and vocabulary of the building through compatible materials, orientation, and height. The University of Pennsylvania guidelines for new construction will also play a role in the outside appearance of the building as they address all these issues. To end this section, I would like to include the words use in the guidelines to reflect the architectural style.

> "Buildings on the campus reflect many styles, and the essential quality of the campus is one of buildings that speak in their own voice about their purposes and the era in which they were built. It is the landscape and public spaces that integrate these buildings into a coherent whole.
> New buildings should express the aesthetic ideas of our times, so that as we look back on them they also become a cultural record of ideas about architecture and campus life. Penn's finest older buildings are admired internationally for their contributions to architecture and campus design. The university should engage architects who are recognized leaders, and aspire to design each structure so it not only suits its occupants and addresses its physical and historical context, but also contributes to ways of thinking about buildings."[32]

V. Conclusion

At the end, the addition must present a sense of clarity and understanding. Louis Kahn saw clarity as "the special quality which distinguishes one object from another; uniqueness, but also purpose."[33] Everything must come together and work in harmony. All the features associated with the design must resemble a total and complete building. The addition and the building need to be seen as the design school and not as a building that serves no purpose, is not aesthetically pleasing to look at, or just a building with an addition. Adding the unique touch of the designer, this building should be ready and clear for the public. Meyerson Hall is going to be a home to the students and at the same time feel at home within the campus. Modern buildings were designed for the purpose to function. If the approach works, then the building will continue to function for the next fifty years. These buildings are not holding on to century-old traditions of material and ornamentation, they are holding on to clarity.

The integrity of the building goes beyond the physical fabric that survives that represents the time of its significance. These buildings are not judged based on any one moment in time, they are judged based on their life-long contribution to its intended use and function. The determination of integrity is based on a site-by-site analysis. Either way the integrity will be based on the authenticity of the meaning of the building rather than the physical evidence. The location and the feeling associated with the building can contribute to the integrity even if the building has been radically changed. The integrity of the building lies within the interpretation and continual use. Altering or demolishing historic fabric, in this case, does not interfere with the integrity of the building that much. The integrity lives in an almost imaginary dimension that exists.

The significance of the building will be preserved and whatever fabric can be saved will be. Some type of design feature or ornamentation will indicate places where fabric was removed. Perhaps when steel and concrete are dominated by some other type of building material then all the fabric in these buildings will be worth saving. In dealing with this Post-World War II modern building the fabric was not as significant as the concept and purpose of the building. As we crossed into a new century, intangible features of buildings play a bigger role than the fabric. We are no longer preserving the old fabric and ornamentation that barely exists; we are preserving the meaning of the building by reinterpreting the concept and purpose. Though time has made these building historic, the time in which they exist has altered the way that buildings were designed and has left us with in a place that reminds us of how important views and light and sound are. The views of the campus and the relation of Meyerson Hall to the surrounding buildings will not change. A part of the history of the University of Pennsylvania that was once leaning towards the negative side will lean the other way and the history of PennDesign will continue. The new building can serve as an example to other buildings with the same situations as well as older buildings that can benefit from the intangible rather that the tangible.

Endnotes

Introduction

[1] Jeff Parkes, "Towards the Fully Integrated Building: Servicing Post-War Buildings" Preserving Post-War Heritage. (England: Donhead Publishing, 2001)46

[2] Olin Partnership, *Design Projects and Review of Campus Projects*, University of Pennsylvania 2001, www.facilities.upenn.edu/uop/BldgDesignGuidelines.pdf, p.2. Viewed in March 2004. A copy of this is included in the appendix.

II. Case Studies
Case Study: Salk Institute

[3] David B. Brownlee and David G. Delong, *Louis I. Kahn: In The Realm of Architecture* (New York: Rizzoli International Press, 1991) 100

[4] Paul Spencer Byard, *Architecture of Additions* (New York: W.W. Norton & Company, 1998) 114-116. Information and illustration pertaining to the addition used from these pages to determine analysis.

Case Study: Huntington Hartford Museum, 2 Columbuc Circle

[5] Tom Wolf, "Wolf admires Huntington Museum" *boston.com*. (Boston: boston.com, 12/03) (www.boston.com/ae/celebrity/articles/2003/12/01/author_wolfe_admires_huntington_museum). This information was found in this website and is a summary of the October 13, 2003 article of the New York Times. Full quote is "Stone was the most prominent architect in America, and he decided that the modernist movement in architecture – in other words, the parade of glass boxes that marched across America – had become exhausted, not worth pursuing anymore, " Wolfe said. "He did this as a way of saying, 'Enough is enough.'"

[6] Tom Wolf, "The Building That Isn't There, Cont'd" *New York Times*. October 13, 2003. Information of the interior of the building, people's perception, and financial troubles taken from this article.

[7] Andre Vornic, "Makeover for New York's 10-storey oddity" *BBC News*. December 8, 2003

[8] Herbert Muschamp, "Critic's Notebook; A Builders Bold Spirit, Clad in Marble and Controversy" *New York Times*. November 24, 2003

[9] Andre Vornic, "Makeover for New York's 10-storey oddity" *BBC News*. December 8, 2003
[10] *Ibid.*

[11] Thomas de Monchaux, "Amid Protest, Cloefil unveils new design for 2 Columbus Circle" *Architectural Record.* March 2004 vol.192: no.3 p.4

Case Study: Levine Hall

[12] George E. Thomas, *University of Pennsylvania* (New York: Princeton Architectural Press, 2002) 82-84. General information of the Graduate Research Wing, the Moore building, and the Towne Building, was taken from these pages.

[13] John Pendergast, "A Passion for Putting Things Together" *Pennsylvania Gazette* (Pennsylvania, 2003) Vol. 102 no. 2

[14] Jennifer Baldino Bonett, "Levine Hall: A Beautiful Symmetry" *Penn Engineering Alumni Newsletter* (Philadelphia: SEAS University of Pennsylvania, 2000) Fall 2000. www.seas.upenn.edu/alumni/seasnewsF_00/article2.htm viewed March 2004

[15] John Pendergast, "A Passion for Putting Things Together" *Pennsylvania Gazette* (Pennsylvania, 2003) Vol. 102 no. 2

[16] *Ibid.*

Case Study: Sherman Fairchild Center

[17] Andrew S. Dolkart, Morningside Heights (New York: Columbia University Press, 1998)200

[18] Charles Linn, "Educating the Masses: A Process" (Kansas State University college of Architecture, Planning and Design, 2003). The sentence was taken from a press release of an exhibit at Kansas State University from February 24 – March 7, 2003. Information was found at the following website, www.arch.ksu.edu/info/events/03s-educatingmasses.htm, viewed in December 2003

[19] "After 1968: I.M. Pei to Romaldo Guirgola" exhibition overview at Columbia University found at website www.columbia.edu/cu/wallach/overview_VIII.html, viewed in December 2003

[20] Paul Spencer Byard, *Architecture of Additions* (New York: W.W. Norton & Company, 1998) 120, 121. Information and illustration pertaining to the addition used from these pages to determine analysis.

Case Study: Lerner hall

[21] Robert Campbell, "Modernism and contextualism meet at Bernard Tschumi and Gruzen Samton's Lerner Hall with provocative results" *Architectural Record* (New York: The McGraw Hill Companies, Inc, 1999) 187: 11 p.94. Information about the concept and design were taken form this article.

[22] Philip Nobel "Textbook Example Critique" *Metropolis* (April 2000, vol.19:no.7) 58

[23] Andrew S. Dolkart, Morningside Heights (New York: Columbia University Press, 1998)201. This quote is footnoted by the author in the book. The original source is "For Columbia, a New $68 Million Student Center," NYT, January 28, 1996, sec.9, p.1

[24] Robert Campbell, "Modernism and contextualism meet at Bernard Tschumi and Gruzen Samton's Lerner Hall with provocative results" *Architectural Record* (New York: The McGraw Hill Companies, Inc, 1999 vol.187: no.11) 94.

III. Meyerson Hall

[25] George E. Thomas, *University of Pennsylvania* (New York: Princeton Architectural Press, 2002) 42. The facts relating to construction and history were taken form this page.

[26] *Ibid.*

IV. Theory and Practical Application

[27] Romaldo Guirgola, *Louis I. Kahn* (Barcelona: Ingoprint, S.A., 1979,1994) 93

[28] William J.R. Curtis, *Modern Architecture Since 1900* (London: Phaidon Press Limited, 1997) 275

[29] Olin Partnership, *Design Projects and Review of Campus Projects*, University of Pennsylvania 2001, www.facilities.upenn.edu/uop/BldgDesignGuidelines.pdf, p.4. Viewed in March 2004. A copy of this is included in the appendix.

[30] University of Pennsylvania School of Design, "About Penn Design" *PennDesign* (www.design.upenn.edu/index.php) Viewed in March 2004

[31] Olin Partnership, *Design Projects and Review of Campus Projects*, University of Pennsylvania 2001, viewed March 2004, p.4

[32] *Ibid.*, p.5-6

V. Conclusion

[33] Romaldo Guirgola, *Louis I. Kahn* (Barcelona: Ingoprint, S.A., 1979,1994) 154

Appendix A: Catalogue of Case Studies Spreadsheet

	Buildings	Types of Additions									
		A1	A2	A3	A4	A5	B	C1	C2	C3	C4
1	Whig Hall			x					x		
2	Kimbell Art Museum	x			x	x		x		x	
3	Penn Mutual Life Insurance Co.				x			x	x		x
4	Bracken House	x			x				x		x
5	NY Merchants' Exchange					x					
6	Uris Hall		x	x							
7	Museum of Contemporary Art	x						x		x	
8	Salk Institute	x			x	x	x	x		x	
9	Huntington Hartford Museum	x	x		x			x	x		
10	Levine Hall			x		x					
11	Sherman Fairchild Center			x		x		x		x	
12	Lerner Hall			x							

Types of Additions

A. Additions to:
    1. Mid-twentieth century buildings
    2. Buildings that never functioned as well as were intended to function
    3. University buildings
    4. Industrial, Commercial, and Institutional buildings
    5. Significant buildings
B. Stand Alone Additions*
C. Additions that:
    1. Hindered or improved the function and/or appearance of the building
    2. Involve complete overhaul of the existing building
    3. Relate to the site and master plan
    4. Result from adaptive re-use

* Please refer to "Understanding the Site" for explanation of "stand-alone additions"

Building Information

1. Whig Hall - Interior Rebuilding by Gwathmey Siegel Associates -1974
2. Kimbell Art Museum - Proposed Addition by Mitchell/Giurgola Associates -1989
3. Penn Mutual Life Insurance Company- Addition by MGA -1975
4. Bracken House - Addition by Micheal Hopkins -1992
5. New York Merchants' Exchange – Addition by McKim Mead & White -1910
6. Uris Hall, Columbia University
7. Museum of Contemporary Art, San Diego - Venturi, Scott Brown & Associates, Inc. –1996
8. Salk Institute – Addition by Anschen + Allen -1996
9. Huntington Hartford Museum – Proposed Design For Renovation by Allied Works Architecture – 2003-2004
10. Levine Hall, University of Pennsylvania - Kieran Timberlake Associates - 2003
11. Sherman Fairchild Center, Columbia Universtiy - Mitchell/Giurgola Associates - 1977
12. Lerner hall, Columbia University - Bernard Tschumi - 1999

Design Guidelines and Review of Campus Projects

Introduction

The Penn Campus, on its West Philadelphia site, has evolved over more than a century, with each new building added in a way that expressed its particular time. As a result, there is not a single overriding building style, and many different materials may be found side by side. Nonetheless, the campus has acquired a special character: it is an "academic crossroads" where people from twelve schools and many disciplines rub shoulders and share ideas. Its character is set by the density of schools and buildings, the scale, materials, and proportions of its older structures, and the green matrix of landscape extending outward from Blanche Levy Park.

The campus development plan, prepared by the Olin Partnership and collaborators and adopted by the trustees in 2001, sets guiding principles and recommendations for future development. Each new building and site improvement project should be consistent with the plan, or carries the burden of showing how it improves upon the plan. The following document addresses the principles common to all buildings and sites within the University, while the Site Development Guidelines within the Campus Development Plan set parameters for certain suggested projects.

These basic guidelines and principles are an integral part of the campus development plan. They outline the ways that new buildings and open space should take account of neighboring structures, and serve the population intended. They also outline a design and review process that ensures that the specific surroundings and the campus as a whole are taken into account in each new building project.

Design Principles

Buildings and Spaces that Promote Intellectual and Social Exchange

The purpose of a campus is to bring together diverse people and their ideas in an environment that creates potential for intellectual and social exchange. While the physical character and quality of a campus is defined by both its buildings and its open space, it is the open space which has the greatest potential for unifying and equalizing the shared space of the campus. It can promote the sense of community derived from actively shared space, and provide for the enriching experiences of both planned and chance encounter. Comprised of streets, walkways, greens, courtyards, plazas, gardens and playfields, open space has the potential to knit together the diverse elements of the campus in a coherent way.

Individual buildings should also be designed to maximize the opportunities for social and intellectual exchange. Public spaces should be generous, provide places for conversations, and be visible to those using buildings and passing by them. Each school should have both indoor and outdoor spaces suitable for gatherings and social occasions. While there will always be pressure to maximize the proportion of dedicated spaces in buildings, their success will ultimately depend upon balancing the public and private spaces.

Heights of Structures

Buildings should be in scale with the surrounding structures, and the streets and public ways that are adjacent to them. Typically, structures should not be taller than approximately 75 feet fronting on major east-west streets (Spruce, Walnut) and approximately 50 feet fronting on pedestrian ways such as Locust Walk, Hamilton Walk or Smith Walk. If portions of the buildings must be taller, they should be set back a minimum of 15 feet from the street wall, with lower portions facing the street. On north-south streets, building heights should relate to the predominant heights of existing structures. Care should be taken not to cast shadows on open spaces or important walkways, particularly during the daylight hours of 11 am to 3 pm.

New structures should mediate the impacts of existing tall structures, by being intermediate in height, and buffering ground level walkways and open spaces from winds.

Predominant Materials

Many materials have been used on campus over the years, and to good effect. The large number of dark brown brick buildings (e.g. The Quad, Irvine Auditorium, and the University Museum) are complemented by buildings whose predominant materials are red brick (e.g. Fisher Fine Arts Library and Hayden Hall*)*, green serpentine ashlar masonry (e.g. College and Logan Halls) and cream ashlar masonry (e.g. the Annenberg School.)

Brown brick establishes a general tenor for the campus, while complementary materials are used successfully--and in some cases dramatically--to signal the different functions and ownership of buildings and to take advantage of particular sites and other design opportunities. While there should be no hard and fast rule, the presumption is that this pattern should continue, and that dark brown brick will be the point of departure for new structures. The historic buildings utilizing this brick usually feature burned brick headers and limestone trim giving the buildings an individual richness as well as the appearance of campus accord. Architects and designers are encouraged to thoroughly explore and expand on this basic vocabulary, and to find ways to contribute to the interplay of materials and textures.

New construction need not duplicate these historical features, however consideration should be made towards achieving a similar richness through the detail and fenestration of individual facades. For example, both Hill House and the Richards Building use the dark brown brick in unique and modern expressions, while being comfortable neighbors to the surrounding historical buildings.

Future residential structures should use materials that are warm (such as brick and wood) and should be of a scale and proportion appropriate to living spaces. They should reinforce the social patterns being promoted through the system of college houses.

Commercial structures adjacent to the campus may depart from the predominant campus materials, but should be respectful in other ways (program, scale, contribution of life onto streets, etc.) to the campus, and should not overwhelm their residential or commercial neighbors.

Building Orientation

Most campus buildings are seen from perimeter streets as well as the campus interior, and lower ones from above as well, and should be designed so that they contribute to the buildings, streets, and pedestrian ways on each side.

Building entrances should be visible to those arriving on the campus, and should contribute to the life and activity of streets and walks. Where buildings front on public streets there should be public entrances and attractive, open streetscape facing the street.

Building entrances are frequently the meeting places, and gathering places of those using buildings, and should be designed to encourage interaction.

The academic activities of the University, in so far as they are compatible, should be visible to passers-by. Windows should be placed to light and provide views to internal spaces, but also to give walks and streets the security and richness that derives from the visibility of adjacent activity. Highly reflective or deeply tinted glass should not be used on the campus.

Landscape, Streetscape and Signage

Structures should be sited and designed to form lively and secure public ways, that have surveillance from occupants throughout the day and night. The object is to provide spaces that are defensible and used.

Each project should take responsibility for improving adjacent streets and pedestrian ways, by including funds in its budget to bring these up to campus standards. The campus palate of landscape materials, walkways, lighting, signage and street furniture must be used on all public spaces that are part of building projects. These elements should be used to create both active gathering and contemplative spaces, and to reinforce linkages and gateways within the campus and at its edge. Spaces that are courtyards of individual schools or buildings can depart from these guidelines to some extent, but only if it is necessary to convey special identity.

Every project should provide secure bicycle parking areas. Residential projects should provide these areas internally**,** where possible.

Commitment to Accessibility

The university is committed to providing equal access to all buildings for those with disabilities, and to doing so in a dignified manner. All new construction must comply with the Americans with Disabilities Act (ADA) guidelines. Renovations of historic buildings should seek to improve access for disabled persons in a manner compatible with their historic integrity.

Functional and Mechanical Facilities

Areas devoted exclusively to building loading and services, to the removal of trash, or to mechanical equipment should be designed so that their visibility from public areas, including walkways, is minimized. Rooftop mechanical equipment should be enclosed in structures that are integrated into the building design. Acoustic mitigation should be required to ensure the quality of the pedestrian environment.

Architectural Style

Buildings on the campus reflect many styles, and the essential quality of the campus is one of buildings that speak in their own voice about their purposes and the era in which they were built. It is the landscape and public spaces that integrate these buildings into a coherent whole.

New buildings should express the aesthetic ideas of our times, so that as we look back on them they also become a cultural record of ideas about architecture and campus life. Penn's finest older buildings (as examples, the Quad, the Fisher Fine Arts Library, Hayden Hall, Hill House, the Richards Memorial Research Building) are admired internationally for their contributions to architecture and campus design. The university should engage architects who are recognized leaders, and aspire to design each structure so it not only suits its occupants and addresses its physical and historical context, but also contributes to ways of thinking about buildings.

Respect for Cultural Resources

Many of the existing structures on campus have local, regional or national historic significance, and are included on the corresponding registers of historic structures. Portions of the campus are included in locally designated historic districts. An inventory of all campus buildings has been prepared by the University, outlining each structure's level of importance as a cultural resource, and the specific aspects of the buildings that deserve special protection. New buildings, or adaptations to existing structures must take this into account.

As noted below, a special subcommittee on cultural resources will review all projects that have a bearing on culturally significant buildings before moving forward to obtain city or state permits. Restoration, renovation, or additions to many buildings on campus will require review and approval by the Philadelphia Historical Commission. The responsibility of the Cultural Resources Committee goes beyond the Historical Commission and includes changes to building interiors, which the city is unable to review.

Integration of Art in Buildings

The university has a percent-for-arts policy, and each new building project should include a budget and program for works of art. These may be integral to the building (eg, murals or artistic expressions in spaces), works purchased for permanent display in particular locations, or works commissioned for the structure. Whenever possible projects should strive to create new art that advances the way we think about the world we inhabit.

Responsible Use of Energy and Natural Resources

Each project should undertake a comprehensive analysis to diminish the use of energy and reduce the use of non-renewable resources. The university intends to be a leader and champion of environmentally sensitive design, demanding innovation and creativity from our design consultants and helping to educate our community.

The university is committed to creating a campus environment that moves beyond merely sustainable, to one that actively improves the quality of life and the environment for its users. Our goals include:

- Reducing dependence on non-renewable resources by using appropriate recycled materials and by promoting adaptive reuse of existing structures
- Reducing marginal energy costs by promoting selection of locally manufactured or fabricated products and materials
- Siting new structures mindful of orientation, shading and the effect on adjacent buildings and spaces
- Using landscape design to create healthy and ecologically appropriate spaces, provide pleasant outdoor environments, reduce exterior lighting demand and minimize stormwater runoff
- Minimizing maintenance and operating costs by employing whole-systems lifecycle evaluation to determine the true project costs, and by integrating innovative daylighting and building engineering solutions at project inception
- Improving indoor environmental quality
- Adopting monitoring, measuring and feedback systems to establish baselines of energy usage and building performance, against which the university can evaluate improvements and set goals for future projects
- Maximizing building flexibility to satisfy the varied demands of current and future users and residents
- Reduce energy consumption of building and site systems (HVAC, hot water, lighting) through the use of appropriate mechanical and construction technology (natural cooling, light recovery, passive solar design, etc.)

The construction, as well as design, process should also respect these goals.

Responsible Renovation and Upgrades to Existing Buildings

It is the intent of these guidelines to encourage responsible stewardship of all existing University buildings. Each renovation project, therefore, should include an investigation of all aspects, systems and features impacted by the specific intervention. Conditions discovered during project evaluation, design or construction that are in need of improvement cannot be ignored. Even in cases where budgetary or schedule constraints necessitate only a partial remediation, any building deficiencies brought to light are to be examined and documented so that they may be addressed at a future time.

The Design Review Process

Role of the Trustees

The trustees of the University of Pennsylvania have final responsibility for reviewing and approving all building projects on the campus. Their facility planning committee reviews projects, offers constructive advice, and ultimately recommends to the full board of trustees that projects be constructed. The trustees are also advised in this decision by the president, provost and campus design review committee.

The Design Review Committee and Cultural Resources Sub-Committee

The design review committee is chaired by the dean of the Graduate School of Fine Arts, and consists of the vice president for facilities, the university architect, the university planning consultants, several faculty members who are design professionals, and outside architects drawn from the extended university community. The committee's role is to advise the president, provost, executive vice president and trustees on the merits of projects being designed for the campus. The committee meets monthly, and on special request in case of critical issues.

For art projects on campus, the design review committee may create a special subcommittee that may include faculty and administrators beyond the committee, to provide advice and guidance to the artists involved, and to recommend approval of promising projects to the appropriate deans, the president and the trustees. This subcommittee will coordinate its work with The Office of the Curator, and its Art Advisory Committee, to review proposed art project and evaluate its suitability and maintenance requirements.

The university also has a cultural resources sub-committee, was mandated by an agreement between the university, the Philadelphia Historical Commission, and the US Department of the Interior. It is charged with reviewing all projects that affect buildings of historical importance on the campus, or within designated historical districts. The sub-committee, chaired by the dean of the Graduate School of Fine Arts, includes several faculty experts on historic preservation, a representative of the provost's office and the executive director of the City of Philadelphia Historical Commission. It meets monthly, and forwards its recommendations to university officials and the trustees, and to the Philadelphia Historical Commission and/or State Historic Commission.

The Design Review Process

Step 1: Briefing of the Architect and Design Team

An information package will be provided to the design team following its selection including:

- feasibility studies done for the project prior to a capital commitment
- the campus development plan
- design guidelines (this document)
- limits and easements on the site
- infrastructure available (such as central heating and cooling lines)
- pedestrian and vehicular circulation patterns
- preferred locations of service access
- details of any other proposed projects in the immediate vicinity

At the outset of design, the design team, client representatives and user representatives will meet with the university architect and the campus design review committee to discuss the ground rules for design. This meeting will seek to identify special architectural, historical, environmental and functional considerations that will be important to ensuring that the building contributes to overall campus development objectives.

Step 2: Design Framework

Designers of campus buildings should photograph the surroundings, research the history of structures adjacent or on the site, and draw from these investigations a set of principles as to how the structure should relate to its surroundings. This may include heights or cornice lines to be respected, open spaces or walkways to be maintained, predominant materials to be used in the building so that it harmonizes with its surroundings, scale and building envelope language, and other contextual factors.

Based on this analysis, and on the issues discussed previously, the designers should prepare a "design framework", describing (at least):

- Context
- Analysis of the fit of the program and the site
- Massing and bulk possibilities
- Building "hold-to" lines
- Zones of pedestrian and service entry
- Facade expression lines
- Fenestration guide lines
- Suggested materials palettes and details
- Ground level expression, program, and relationship to adjacent open space

The design framework will typically include diagrams, storyboard, and photo examples, and will be discussed with the design review committee, the president and provost**,** and trustees facilities planning committee prior to or concurrent with presentation of conceptual design.

Step 3: Schematic Design

The schematic design presentation to both the campus design review committee and the trustees' facilities planning committee should include enough of a portrayal of the building in its context so that judgments can be made of its appropriateness. Typically this will include elevations with surrounding buildings shown, and renderings and models of the building in its context. Special attention should be paid to how the building will be experienced by pedestrians at ground level, how it will impact public open spaces (such as shadow and wind patterns), and how it will be seen from surrounding buildings.

Special attention should be paid to the ground level experience of pedestrians on campus or on surrounding streets. Perspectives should be shown from their eye level, and should include adjacent structures and landscape.

In order for the impact on utility infrastructure to be adequately planned for, the design team should, at this stage, provide an energy budget for each project outlining energy consumption, storage, and recovery; as well as a materials handling plan indicating anticipated solid waste generation and a strategy for site storage and collection.

Step 4: Design Development and Construction Documents

Design palettes should be discussed with the design review committee, along with design development drawings of facades and exterior details.

Responsibility for ensuring that the agreed upon design principles are respected during the course of preparing construction documents falls to the staff of the university architect and vice president for facilities and real estate services. Where significant departures are necessitated, proposals may be resubmitted to the design review committee for advice and opinions.

Step 5: Construction

Full-scale mockups of wall assemblies should be constructed on the site, so materials can be compared to adjacent structures, before final material decisions.

Works of public art will be reviewed by the design review committee or its subcommittee, and the Office of the Curator, for their compatibility with the architectural and campus context.

Appendix C

SPACE INVENTORY
FOR RELOCATION OF GSFA
INTO A NEW BUILDING

10 December 2001
Lindsay Falck
Joe Moser
Stacy Lutner

Existing and Proposed Future GSFA Space Inventory / Usage Schedule

NET USABLE AREAS

	EXISTING GSFA SPACES	SQ. FT. AREAS						
	Space Use	Meyerson	Morgan	Duhring	Fisher	Franklin	Current Totals	Projected Totals
1	Studio Spaces	17,673	7,108	1,900	3,676	3,077	**33,434**	36,000
2	Studio back-Up Spaces (dirty, wet, dusty, assembly, etc)	1,329	0	0	0	0	**1,329**	1,000
3	Review, Exhibition Spaces	5,068	2,067	0	0	0	**7,135**	7,000
4	Computing Labs	2,434	334	0	172	0	**2,940**	2,000
5	Fabrication Labs	2,869	0	0	0	0	**2,869**	2,900
6	HSPV Labs	2,020	0	674	0	0	**2,694**	2,400
7	CML Labs	728	0	0	0	0	**728**	750
8	Classrooms	9,133	0	0	964	0	**10,097**	8,000
9	Lounge Areas	2,909	401	0	0	0	**3,310**	3,500
10	Faculty Offices	4,494	180	3,217	167	0	**8,058**	7,500
11	Dept. Administration Offices	2,487	700	343	214	0	**3,744**	3,700
12	Dean's Administration Offices	2,933	0	0	0	0	**2,933**	3,000
13	Computing Offices	417	0	0	0	0	**417**	550
14	Storage- Model/Drawing	500	0	0	0	0	**500**	500
15	General Storage and Mailroom	653	755	0	102	0	**1,510**	2,000
16	Building Services/ Toilets	1,650	526	517	25	0	**2,718**	2,500
17	Printmaking	0	1,728	0	0	0	**1,728**	1,750
18	PennPraxis Office	0	0	399	0	0	**399**	1,000
19	Conference Rooms	0	0	0	647	0	**647**	650
20	Architectural Archives	0	0	0	1,898	0	**1,898**	2,000
21	Reading/ Study Room	0	0	0	1,408	0	**1,408**	1,500
	TOTALS:	**57,297**	**13,799**	**7,050**	**9,273**	**3,077**	**90,496**	**90,200**

Note: It is assumed that some digitally equipped classrooms in item 8 will double for digital studiowork reviews thus easing demand for reviewspaces in item 3.

	NEW FACILITIES							
22	"High" Lab							2,000
	PROJECTED TOTALS:							**92,200**

+ 50% for Grossing: **Estimated Gross Total:** **138,300**

GRADUATE SCHOOL OF FINE ARTS
UNIVERSITY OF PENNSYLVANIA

21 November 2001

SCHEDULE OF SPACE NEEDS FOR A RE-ACCOMMODATED GSFA
Assuming approximately 540/575 Students, total in all departments and programs

Note: All floor areas listed are NET USABLE SPACES
A grossing factor is applied to total net areas at the end of the schedule. Comparisons are made to similar spaces in existing GSFA buildings, where applicable, in the right hand column. Notes on increases or decreases in new allocated areas are also added for clarification, where thought necessary. Existing student numbers and space allocation are as for Spring Term 2002
(PhD students in coursework are included, those in Dissertation are not.)

1. **STUDIO WORKSTATIONS IN DESIGN STUDIO**

Architecture - one, two and three year programs
New total of 220 students @ 66.00 sq. ft. each = 14,520.00 sq. ft. (GSFA now 206 @ 61.33 sq. ft. =12,633.00 sq. ft.)

Landscape Architecture
New total of 75 students @ 66.00 sq. ft each = 4,950.00 sq. ft. (GSFA now 65 @ 63.61 sq. ft. = 4,135.00 sq. ft.)

City and Regional Planning
New total of 120 students @ 40.00 sq. ft = 4,800 sq. ft. (GSFA now 118 @ 31.18 sq. ft. = 3,680.00 sq. ft.)

Historic Preservation
New Total of 25 of total of 50 students in studio @ 40.00 sq. ft. = 1,000.00 sq. ft. (GSFA now 23 of 46 @ 34.91 sq. ft. = 838.00 sq. ft.)

2. **INDIVIDUAL FINE ARTS STUDIOS**
New total of 50 students @ 200.00 sq. ft. = 10,000.00 sq. ft. (GSFA now 48 @242.25 sq. ft. = 11,628.00 sq. ft.)
Plus shared sculpture assembly area of 1,000

3. **PhD WORKSPACES**
New Architecture - 12 students @ 40.00 sq. ft. = 480.00 sq. ft. (GSFA now 8 @ 47.00 sq. ft. = 376.00 sq. ft.)
New City Planning - 12 students @ 40.00 sq. ft. = 480.00 sq. ft. (GSFA now 8 @ 15.00 sq. ft. = 120.00 sq. ft.)

TOTALS (items 1,2,3)
New Students - 539 students 37,230.00 sq. ft (GSFA now 499 for 33,410.00)

WORKING CALCULATIONS:

GRADUATE SCHOOL OF FINE ARTS
UNIVERSITY OF PENNSYLVANIA

21 November 2001

	Room	Areas (in sq. ft.)	Students
STUDIO SPACES - ARCHITECTURE STUDENTS (All in Meyerson for Spring 2002 Term)	201W	1,271.00	
	202W	1,248.00	
	203W	1,195.00	
SUBTOTAL		**3,714.00**	62
	201E	1,206.00	
	211E	1,248.00	
	212E	1,269.00	
SUBTOTAL		**3,723.00**	65
	310E	684.00	
	311E	647.00	
	312E	768.00	
SUBTOTAL		**2,099.00**	32
	310W	768.00	
	302W	650.00	
	303W	671.00	
SUBTOTAL		**2,089.00**	32
	410	1,008.00	15
TOTAL		**12,633.00**	**206**
		(61.32 sq. ft per student)	
STUDIO SPACES - LARP (All in Meyerson for Spring 2002)	401W	2,805.00	
	402W	1,330.00	
TOTAL		**4,135.00**	**65**
		(63.61 sq. ft per student)	

GRADUATE SCHOOL OF FINE ARTS
UNIVERSITY OF PENNSYLVANIA

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STUDIO SPACES - STUDIO SPACE FOR C.P.	Room	Areas (in sq. ft.)	Students
Workshops in Fisher Fine Arts	Apse	2010.00 (29.55 sq. ft. per student)	68
Studios - Fisher Fine Arts	RM. 406	553.00 (39.50 sq. ft. per student)	14
	RM 401	382.00 (31.83 sq. ft. per student)	12
Meyerson	RM G2	735.00 (30.62 sq. ft. per student)	24
TOTAL		**3,680.00**	**118**
		(31.19 sq. ft. average per student)	

STUDIO WORKSPACES HISTORIC PRESERVATION (All in Meyerson Hall)	RM 412	838 (34.9 sq. ft. per student) (Room has workstations plus one large meeting table.)	24
TOTAL		**838.00**	**24**
		(34.9 sq. ft. per student)	

GRADUATE SCHOOL OF FINE ARTS
UNIVERSITY OF PENNSYLVANIA

21 November 2001

INDIVIDUAL STUDIOS - FINE ARTS

Morgan Building		5958.00 sq. ft. for 29 student studios (205.44 sq. ft. per student)
Duhring Wing - 5th floor	D3	280.00 sq. ft.
	D4	200.00 sq. ft.
	D5	160.00 sq. ft.
	D6	180.00 sq. ft.
	D7	180.00 sq. ft.
	D8	160.00 sq. ft.
	D9	160.00 sq. ft.
	D10	160.00 sq. ft.
		1,480.00 sq. ft. for 8 student studios (185.00 sq. ft. per student)
Fisher Fine Arts	B39	1113.00 sq. ft. for 5 student studios (222.60 sq. ft. per student)
Franklin Annex (Sculpture majors)	R115	3077.00 sq. ft. for 6 student studios (512.83 sq. ft. per student)
TOTAL		**11,628.00 sq. ft. for 48 students** **(242.25 sq. ft. per student)**

DETAIL SCHEDULE OF SPACE USE:

Meyerson Hall - Room Usage

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT	AV Equipment	Computer Ports
Meyerson Hall	B	B1	4178	430	Classroom	Instruction	Provost			
Meyerson Hall	B	B2	778	50-55	Classroom	Instruction	Provost		2 SP, 1 OH	
Meyerson Hall	B	B3	1656	100	Classroom	Instruction	Provost		2 SP, 1 OH	
Meyerson Hall	B	B4	561	45-50	Classroom	Instruction	Provost		2 SP, 1 OH	
Meyerson Hall	B	B5	405	15-20	Classroom	Instruction	Provost		1 SP, 1 OH	
Meyerson Hall	B	B6	371	15-20	Classroom	Instruction	Provost		1 SP, 1 OH	
Meyerson Hall	B	B7	409	15-20	Classroom	Instruction	Provost		1 SP, 1 OH	
Meyerson Hall	B	B13	681	45-50	Classroom	Instruction	Provost		2 SP, 1 OH	
Meyerson Hall	B	B22	94		Assembly, Service	Instruction	Projection Booth			
Subtotal:			**9133**		**Classrooms**					
Meyerson Hall	B	B9	72		Locker Room	Building Service	General/GSFA	House Keeping		
Meyerson Hall	B	B10	48		Storage	Building Service	General/GSFA			
Meyerson Hall	B	B14	231		Men's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	B	B15	231		Women's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	0	G21	121		Men's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	0	G25	117		Women's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	0	G80	113		Women's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	1	114	128		Men's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	3	304	232		Men's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	3	309	171		Women's Toilet Room	Building Service	General/GSFA			
Meyerson Hall	3	309A	186		Women's Toilet Room	Building Service	General/GSFA			
Subtotal:			**1650**		**Building Services/Toilets**					
Meyerson Hall	0	G15	102		Office	Office, Faculty		Lindsay Falck		
Meyerson Hall	0	G16	124		Office	Office, Faculty	Historic Preservation	Preservation Faculty Office		
Meyerson Hall	0	G17	216		Office	Office, Faculty	Architecture	Nick Temple		
Meyerson Hall	0	G19	204		Office	Office, Faculty	City Planning	Sidney Wong		
Meyerson Hall	0	G24	210		Office	Office, Faculty	LARP	John Dixon Hunt		
Meyerson Hall	0	G3	221		Office	Office, Faculty	City Planning	Stephen Putman		
Meyerson Hall	0	G18	210		Office	Office, Faculty	City Planning	Seymour Mandelbaum		
Meyerson Hall	0	G22	216		Office	Office, Faculty	Architecture	Branko Kolarevic		
Meyerson Hall	0	G23	204		Office	Office, Faculty	Architecture	Witold Rybezynski		
Meyerson Hall	0	G27	216		Office	Office, Faculty	Architecture	William Braham		
Meyerson Hall	1	116	192		Office	Office, Faculty	Historic Preservation	David DeLong		
Meyerson Hall	1	117	192		Office	Office, Faculty	Historic Preservation	Frank Matero		
Meyerson Hall	1	120	192		Office	Office, Faculty	LARP	J. Corner		
Meyerson Hall	1	123	181		Office	Office, Faculty	City Planning	J. Keene		
Meyerson Hall	1	126	164		Office	Office, Faculty	City Planning	Genie Birch		
Meyerson Hall	1	128	245		Office	Office, Faculty	City Planning	T. Tomazinis		
Meyerson Hall	2	204	199		Office	Office, Faculty	Architecture	Annette Fierro		
Meyerson Hall	2	205	229		Office	Office, Faculty	Architecture	Richard Wesley		

Meyerson Hall	2	213	181		Office	Office, Faculty	Architecture	Patricia Conway
Meyerson Hall	2	214	162		Office	Office, Faculty	Architecture	Peter McCleary
Meyerson Hall	2	215	163		Office	Office, Faculty	Architecture	Enrique Norton
Meyerson Hall	2	216	163		Office	Office, Faculty	Architecture	Ali Rahim
Meyerson Hall	2	217	181		Office	Office, Faculty	Architecture	David Leatherbarrow
Meyerson Hall	3	315	127		Office	Office, Faculty	LARP	Anita Berrizbeita
Meyerson Hall	3	316	127		Office	Office, Faculty	LARP	Dana Tomlin
Subtotal:			**4621**		**Office, Faculty**			
Meyerson Hall	0	G28	228		Office	Office, Administration	General/GSFA	Joseph Moser
Meyerson Hall	0	G29	253		Office	Office, Administration	General/GSFA	Facilities and Events
Meyerson Hall	1	101	429		Office	Office, Administration	Dean's Office	
Meyerson Hall	1	102	473		Office	Office, Administration	Dean's Office	
Meyerson Hall	1	105	258		Office	Office, Administration	Dean's Office	
Meyerson Hall	1	106	256		Office	Office, Administration	Registrar	
Meyerson Hall	1	107	218		Office	Office, Administration	Finance Office	
Meyerson Hall	1	108	210		Office	Office, Administration	Finance Office	
Meyerson Hall	1	110	256		Office	Office, Administration	Admissions Office	
Meyerson Hall	1	111	166		Office	Office, Administration	Admissions Office	
Meyerson Hall	1	112	186		Office	Office, Administration	Admissions Office	
Subtotal:			**2933**		**Office, Dean's Admin.**			
Meyerson Hall	1	118	192		Office	Office, Staff	LARP	Diane Pringle
Meyerson Hall	1	119	298		Office	Office, Academic	LARP	
Meyerson Hall	1	125	140		Office	Office, Staff	City Planning	Patti Gregory
Meyerson Hall	1	127	520		Office	Office, Academic	City Planning	
Meyerson Hall	2	207	444		Office	Office, Academic	Architecture	
Meyerson Hall	1	126A	147		Office	Office, Academic	City Planning	
Meyerson Hall	2	208	201		Office	Office, Staff	Architecture	Betty Romanella
Meyerson Hall	2	209	229		Office	Office, Staff	Architecture	Mary O'Toole
Meyerson Hall	2	207A	189		Conference Room	General Academic	Architecture	
Subtotal:			**2360**		**Office, Academic**			

Meyerson Hall - Room Usage

Meyerson Hall	3	314	145		Office	Office, Staff	Computing	Cathy DiBonaventura
Meyerson Hall	3	317	127		Office	Office, Staff	Computing	Greg Finnson
Meyerson Hall	3	318	145		Office	Office, Staff	Computing	Rick Haverkamp
Subtotal:			**417**		**Office, Computing**			
Meyerson Hall	0	G6	305		Laboratory	Research	CML	
Meyerson Hall	0	G9	423		Laboratory	Research	CML	
Subtotal:			**728**		**CML**			
Meyerson Hall	3	320	336		Computing Support	General Academic	General/GSFA	
Meyerson Hall	3	321	761		Computing Lab	General Academic	General/GSFA	
Meyerson Hall	3	322	118		Server Room	General Academic	General/GSFA	
Meyerson Hall	3	324	381		DDRL	General Academic	General/GSFA	
Meyerson Hall	3	325	337		Plotters	General Academic	General/GSFA	
Meyerson Hall	3	326	250		Lab Assistant Room	General Academic	General/GSFA	
Meyerson Hall	3	323	251		Computing Support	General Academic	General/GSFA	
Subtotal:			**2434**		**Computing**			
Meyerson Hall	4	406	498		Laboratory	Instruction	Historic Preservation	
Meyerson Hall	4	407	345		Laboratory	Research/ Instruction	Historic Preservation	
Meyerson Hall	5	412	838		Laboratory	Research/ Instruction	Historic Preservation	
Meyerson Hall	4	403	280		Office	Research/Instruction	Historic Preservation	
Meyerson Hall	4	403A	59		Toilet	Research/Instruction	Historic Preservation	
Subtotal:			**2020**		**HSPV Labs**			
Meyerson Hall	4	409	1380		Laboratory	Instruction	General/GSFA	Fabrication Laboratory
Meyerson Hall	4	409A	1414		Laboratory	Instruction	General/GSFA	Fabrication Laboratory
Meyerson Hall	4	414	75		Laser Cutter		General/GSFA	Fabrication Laboratory
Subtotal:			**2869**		**FAB Labs**			
Meyerson Hall	0		2129		Lower Gallery	General Academic	General/GSFA	Review/Exhibition
Meyerson Hall	1		1367		Upper Gallery	General Academic	General/GSFA	Review/Exhibition
Meyerson Hall	1		912		Dean's Alley	General Academic	General/GSFA	Review/Exhibition
Meyerson Hall	4	413	660		Review	General Academic	General/GSFA	Review/Exhibition
Subtotal:			**5068**		**Review Spaces**			
Meyerson Hall	2	201W	1271	_	Studio	General Academic	Architecture	
Meyerson Hall	2	202W	1248	62	Studio	General Academic	Architecture	
Meyerson Hall	2	203W	1195	_	Studio	General Academic	Architecture	
Meyerson Hall	0	G2	753	20	Studio	Instruction	City Planning	
Meyerson Hall	0	G5	152		Studio	Instruction	City Planning	

Meyerson Hall	2	210E	1206	_	Studio	General Academic	Architecture	
Meyerson Hall	2	211E	1248	62/66	Studio	General Academic	Architecture	
Meyerson Hall	2	212E	1269	_	Studio	General Academic	Architecture	
Meyerson Hall	3	310E	684	_	Studio	Instruction	Architecture	
Meyerson Hall	3	311E	647	32	Studio	Instruction	Architecture	
Meyerson Hall	3	312E	768	_	Studio	Instruction	Architecture	
Meyerson Hall	3	310W	768	_	Studio	Instruction	City Planning	
Meyerson Hall	3	302W	650	45	Studio	Instruction	City Planning	
Meyerson Hall	3	303W	671	_	Studio	Instruction	City Planning	
Meyerson Hall	4	401W	2805	65	Studio	Instruction	LARP	
Meyerson Hall	4	402W	1330	_	Studio	Instruction	LARP	
Meyerson Hall	4	410	1008	14/15	Studio	Instruction	General/GSFA	
Subtotal:			**17673**		**Studio Spaces**			
Meyerson Hall	B	B8	537		Storage	General Academic	General/GSFA	Equipment
Meyerson Hall	0	G13	200		Storage	Office, Administration	General/GSFA	
Meyerson Hall	0	G14	80		Storage	General Academic	Fine Arts - Graduate	Registrar
Meyerson Hall	1	109	14		Storage	Office, Administration	Finance Office	
Meyerson Hall	1	121	49		Storage	Building Service	Historic Preservation	
Meyerson Hall	1	122	115		Mail Room	General/GSFA	General/GSFA	
Meyerson Hall	1	140	13		Storage	General/GSFA	City Planning	
Meyerson Hall	1	141	5		Storage	General/GSFA	City Planning	
Meyerson Hall	4	411	140		Storage	Studio Storage	General/GSFA	
Subtotal:			**1153**		**Storage/Mailroom**			
Meyerson Hall	2	218	154		Lounge	Student Services	General/GSFA	Student Lounge
Meyerson Hall	3	308	450		Lounge	Student Services	General/GSFA	Student Lounge
Meyerson Hall	3	333	129		Lounge	Student Services	General/GSFA	Student Lounge
Meyerson Hall	B	B19	2176		Lounge	General Academic	General/GSFA	Center B Lobby Area
Subtotal:			**2909**		**Lounge Areas**			
Meyerson Hall	4	408	1329	20	Wet Space	Instruction	Fine Arts - Graduate	
Subtotal:			**1329**		**Studio/Wet Space**			
TOTAL:			**57,297**					

Fisher Fine Arts Library - Room Usage

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT	AV Equipment	Computer Ports
Fisher Fine Arts	B	46	25		Janitors' Closet	Building Service	General/GSFA			
Subtotal:			**25**							
Fisher Fine Arts	B	25	214		Office	Office, Administration	Archives	Julia Moore-Converse		
Subtotal:			**214**							
Fisher Fine Arts	4	405	167		Office	General Academic	Architecture	Joseph Rykwert		
Subtotal:			**167**							
Fisher Fine Arts	B	65	267		Conference Room	Libraries	Fine Arts Library			
Subtotal:			**267**							
Fisher Fine Arts	B	64	834		Archives	Exhibition Space	Archives			
Fisher Fine Arts	B	66	1064		Archives	Exhibition Space	Fine Arts Library			
Subtotal:			**1898**							
Fisher Fine Arts	3	302	380		Conference Room	General Academic	Architecture	Phd Candidates		
Fisher Fine Arts	3	303	102		Storage	General Academic	Architecture			
Fisher Fine Arts	3	306	582		Classroom	Instruction	Architecture			
Fisher Fine Arts	3	309	172		Computing Room	General Academic	Architecture			
Fisher Fine Arts	4	401	382		Seminar Classroom	General Academic	Architecture			
Subtotal:			**1618**							
Fisher Fine Arts	B	39	1113		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Fisher Fine Arts	4	414	2010	34	Studio	Instruction	Fine Arts - Graduate			
Subtotal:			**3123**							
Fisher Fine Arts	4	406	553	12/14	Studio	Instruction	Architecture			
Subtotal:			**553**							
Fisher Fine Arts	4	404	1408		Reading/ Study Room	Libraries	Fine Arts Library			
Subtotal:			**1408**							
TOTAL:			**9273**							
Fisher Fine Arts	4	414A	604		Studio Service	Catwalk	Fine Arts - Graduate			
Subtotal:			**604**							
GRAND TOTAL:			**9877**							

Duhring Wing - Room Usage

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT	AV Equipment	Computer Ports
Duhring Wing	2	202	65		Women's Toilet Room	Building Service	General/GSFA			
Duhring Wing	2	205	66		Men's Toilet Room	Building Service	General/GSFA			
Duhring Wing	3	303	63		Women's Toilet Room	Building Service	General/GSFA			
Duhring Wing	3	304	16		Janitors' Closet	Building Service	General/GSFA			
Duhring Wing	3	305	67		Men's Toilet Room	Building Service	General/GSFA			
Duhring Wing	4	403	63		Women's Toilet Room	Building Service	General/GSFA			
Duhring Wing	4	404	16		Janitors' Closet	Building Service	General/GSFA			
Duhring Wing	4	405	67		Men's Toilet Room	Building Service	General/GSFA			
Duhring Wing	5	503	22		Women's Toilet Room	Building Service	General/GSFA			
Duhring Wing	5	504	25		Janitors' Closet	Building Service	General/GSFA			
Duhring Wing	5	505	47		Men's Toilet Room	Building Service	General/GSFA			
Subtotal:			**517**							
Duhring Wing	B	52	219		Office	Office	General/GSFA			
Duhring Wing	4	401	124		Office	Office, Service	General/GSFA	Printer Copier Room		
Subtotal:			**343**							
Duhring Wing	4	409	199		Office	Research	General/GSFA	Penn Praxis Offices		
Duhring Wing	4	410	200		Office	Research	General/GSFA	Penn Praxis Offices		
Subtotal:			**399**							
Duhring Wing	3	307	85		Office	Office, Faculty	Energy Mgmt.	CPLN Visiting		
Subtotal:			**85**							
Duhring Wing	3	311	149		Office	Office, Emeritus	Art History	Malcolm Cambell		
Subtotal:			**149**							
Duhring Wing	3	309	186		Office	Office, Faculty	LARP	James Corner		
Duhring Wing	3	310	149		Office	Office, Faculty	LARP	Anu Mathur		
Duhring Wing	4	417	139		Office	Office, Faculty	LARP	Adjunct Office		
Duhring Wing	3	312	186		Office	Office, Emeritus	LARP	Dan Rose		
Duhring Wing	3	313	148		Office	Office, Faculty	LARP	STORAGE		
Subtotal:			**808**							
Duhring Wing	3	314	147		Office	Office, Faculty	CPLN	Jonathan Barnett		
Duhring Wing	3	315	190		Office	Office, Faculty	CPLN	Roger Raufer		
Duhring Wing	3	316	146		Office	Research	CPLN	JAPAN Project		
Duhring Wing	3	317	146		Office	Office, Faculty	CPLN	Visiting		
Duhring Wing	3	318	190		Office	Office, Faculty	CPLN	Ann Strong		
Duhring Wing	2	212	191		Office	Office, Emeritus	CPLN	Britton Harris		
Duhring Wing	3	301	124		Office	Office, Student	CPLN	Phd Candidates		
Subtotal:			**1134**							

Duhring Wing - Room Usage

Duhring Wing	4	407	88		Office	Office, Faculty	Fine Arts - Graduate	Terry Adkins
Subtotal:			**88**					
Duhring Wing	4	411	200		Office	Office, Faculty	Architecture	Ali Malkawi
Duhring Wing	4	412	164		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	413	200		Office	Office, Faculty	Architecture	Atkin
Duhring Wing	4	414	200		Office	Office, Faculty	Architecture	Tony Atkin
Duhring Wing	4	415	202		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	416	136		Office	Office, Faculty	Architecture	Marion Weiss
Subtotal:			**1102**					
Duhring Wing	5	D1/D2	500		Studio	Faculty Studio	Fine Arts - Graduate	Terry Adkins
Duhring Wing	5	D3	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D4	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D5	160		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D6	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D7	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D8	160		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D9	160		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	5	D10	160		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Duhring Wing	B	51	674		Studio	Research	General/GSFA	
Subtotal:			**2574**					
TOTAL:			7199					

Morgan Building - Room Usage

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT	AV Equipment	Computer Ports
Morgan Building	2	210	401		Lounge	General Academic	Fine Arts - Graduate	As Assigned		
Subtotal:			**401**		**Lounge**					
Morgan Building	2	280	100		Women's Toilet	Building Service	General/GSFA			
Morgan Building	3	302	100		Men's Toilet	Building Service	General/GSFA			
Morgan Building	B	B1	192		Toilet	Building Service	General/GSFA			
Morgan Building	B	B2	84		Toilet	Building Service	General/GSFA			
Subtotal:			**476**		**Toilet Rooms**					
Morgan Building	2	205A	25		Sink Clean Up Area	Instruction	Fine Arts - Graduate			
Morgan Building	1	101	400		Entrance/Gallery	Instruction	Fine Arts - Graduate			
Morgan Building	3	302A	25		Sink Clean Up Area	Instruction	Fine Arts - Graduate			
Subtotal:			**450**		**Gallery**					
Morgan Building	3	M30	180		Office	Office, Faculty	Fine Arts - Graduate	Adjunct Office		
Subtotal:			**180**		**Office, Faculty**					
Morgan Building	1	100	700		Office	Academic Administration	Fine Arts - Graduate	Fine Arts		
Subtotal:			**700**		**Office, Acedemic**					
Morgan Building	B	B7	200		Studio	Instruction	Fine Arts - Graduate			
Morgan Building	1	101	550		Studio	Instruction	Fine Arts - Graduate			
Morgan Building	3	301	400		Studio	Instruction	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M1	256		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M2	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M3	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M4	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M5	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	1	M6	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M7	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M8	220		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M9	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M10	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M11	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M12	182		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M13	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M14	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M15	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M16	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M17	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	2	M18	230		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	3	M19	300		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	3	M20	150		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		
Morgan Building	3	M21	150		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned		

Morgan Building - Room Usage

Morgan Building	3	M22	300		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M23	180		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M24	250		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M25	260		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M26	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M27	220		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M28	200	D	Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Morgan Building	3	M29	200		Studio	Graduate Studio	Fine Arts - Graduate	As Assigned
Subtotal:			**7108**		**Studio**			
Morgan Building	2	Hall	319		Review	General Academic	Fine Arts - Graduate	
Morgan Building	3	Hall	518		Review	General Academic	Fine Arts - Graduate	
Morgan Building	1	White Rm	830		Review	General Academic	Fine Arts - Graduate	
Subtotal:			**1667**		**Review**			
Morgan Building	B	B11	578		Printmaking	General Academic	Fine Arts - Graduate	
Morgan Building	B	B12	459		Printmaking	General Academic	Fine Arts - Graduate	
Morgan Building	B	B14	528		Printmaking	General Academic	Fine Arts - Graduate	
Morgan Building	B	B13	163		Acid Room	General Academic	Fine Arts - Graduate	
Subtotal:			**1728**		**Printmaking/Acid room**			
Morgan Building	B	B3	334		Computing Lab	General Academic	Fine Arts - Graduate	
Subtotal:			**334**		**Computing Lab**			
Morgan Building	B	B5	380		Storage			
Morgan Building	B	B7A	375		Storage			
Subtotal:			**755**		**Storage**			
TOTAL:			**13799**					

115 Franklin Annex - Room Usage

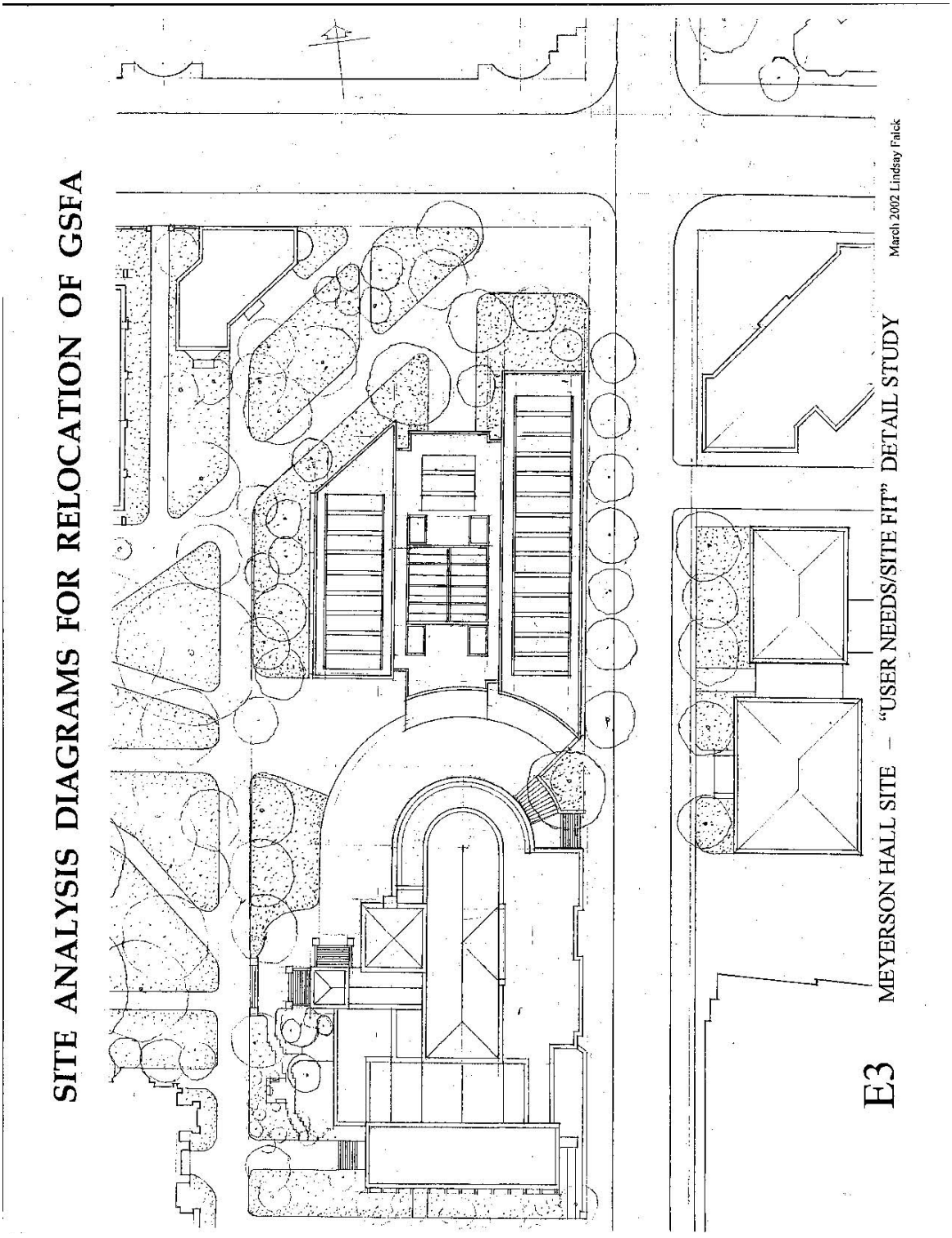
BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTIOI	FUNCTION	DEPARTMENT	OCCUPANT	AV Equipment	Computer Ports
Franklin Annex	1	115	3077		Studio	Graduate Studio	Sculpture	Sculpture Students		
TOTAL:			**3077**							

Faculty Office Use - By Department

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT
Meyerson Hall	0	G3	221		Office	Office, Faculty	City Planning	Stephen Putman
Meyerson Hall	0	G18	210		Office	Office, Faculty	City Planning	Seymour Mandelbaum
Meyerson Hall	0	G19	204		Office	Office, Faculty	City Planning	Sidney Wong
Meyerson Hall	1	123	181		Office	Office, Faculty	City Planning	J. Keene
Meyerson Hall	1	126	164		Office	Office, Faculty	City Planning	Genie Birch
Meyerson Hall	1	128	245		Office	Office, Faculty	City Planning	T. Tomazinis
Duhring Wing	3	314	147		Office	Office, Faculty	City Planning	Jonathan Barnett
Duhring Wing	3	315	190		Office	Office, Faculty	City Planning	Roger Raufer
Duhring Wing	3	316	146		Office	Research	City Planning	JAPAN Project
Duhring Wing	3	317	146		Office	Office, Faculty	City Planning	Visiting
Duhring Wing	3	318	190		Office	Office, Faculty	City Planning	Ann Strong
Duhring Wing	2	212	191		Office	Office, Emeritus	City Planning	Britton Harris
Duhring Wing	3	301	124		Office	Office, Student	City Planning	Phd Candidates
Duhring Wing	3	307	85		Office	Office, Faculty	Energy Mgmt.	CPLN Visiting
Subtotal:			**2444**		**Average Sq. Ft. per Office in CPLN: 174.57**			
Meyerson Hall	0	G16	124		Office	Office, Faculty	Historic Preservation	Preservation Faculty Office
Meyerson Hall	1	116	192		Office	Office, Faculty	Historic Preservation	David DeLong
Meyerson Hall	1	117	192		Office	Office, Faculty	Historic Preservation	Frank Matero
Meyerson Hall	4	403	280		Office	Office, Faculty	Historic Preservation	
Meyerson Hall	4	403A	59		Toilet	Office, Faculty	Historic Preservation	
Subtotal:			**847**		**Average Sq. Ft. per Office in HSPV: 169.4**			
Meyerson Hall	0	G24	210		Office	Office, Faculty	LARP	John Dixon Hunt
Meyerson Hall	1	120	192		Office	Office, Faculty	LARP	J. Corner
Meyerson Hall	3	315	127		Office	Office, Faculty	LARP	Anita Berrizbeita
Meyerson Hall	3	316	127		Office	Office, Faculty	LARP	Dana Tomlin
Duhring Wing	3	309	186		Office	Office, Faculty	LARP	James Corner
Duhring Wing	3	310	149		Office	Office, Faculty	LARP	Anu Mathur
Duhring Wing	4	417	139		Office	Office, Faculty	LARP	Adjunct Office
Duhring Wing	3	312	186		Office	Office, Emeritus	LARP	Dan Rose/Lenore
Duhring Wing	3	313	148		Office	Office, Faculty	LARP	STORAGE
Subtotal:			**1464**		**Average Sq. Ft. per Office in LARP: 162.66**			
Meyerson Hall	0	G15	102		Office	Office, Faculty		Lindsay Falck
Meyerson Hall	0	G17	216		Office	Office, Faculty	Architecture	Nick Temple
Meyerson Hall	0	G22	216		Office	Office, Faculty	Architecture	Branko Kolarevic
Meyerson Hall	0	G23	204		Office	Office, Faculty	Architecture	Witold Rybczynski
Meyerson Hall	0	G27	216		Office	Office, Faculty	Architecture	William Braham
Meyerson Hall	2	204	199		Office	Office, Faculty	Architecture	Annette Fierro
Meyerson Hall	2	205	229		Office	Office, Faculty	Architecture	Richard Wesley
Meyerson Hall	2	213	181		Office	Office, Faculty	Architecture	Patricia Conway
Meyerson Hall	2	214	162		Office	Office, Faculty	Architecture	Peter McCleary
Meyerson Hall	2	215	163		Office	Office, Faculty	Architecture	Enrique Norton
Meyerson Hall	2	216	163		Office	Office, Faculty	Architecture	Ali Rahim
Meyerson Hall	2	217	181		Office	Office, Faculty	Architecture	David Leatherbarrow
Duhring Wing	4	411	200		Office	Office, Faculty	Architecture	Ali Malkawi
Duhring Wing	4	412	164		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	413	200		Office	Office, Faculty	Architecture	Atkin
Duhring Wing	4	414	200		Office	Office, Faculty	Architecture	Tony Atkin
Duhring Wing	4	415	202		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	416	136		Office	Office, Faculty	Architecture	Marion Weiss
Fisher Fine Arts	4	405	167		Office	Office, Faculty	Architecture	Joseph Rykwert
Subtotal:			**3501**		**Average Sq. Ft. per Office in ARCH: 184.26**			
Duhring Wing	4	407	88		Office	Office, Faculty	Fine Arts - Graduate	Terry Adkins
Morgan Building	B	B3	250		Office	Office, Faculty	Fine Arts - Graduate	H. Nakazato, B. Kreydatus, S. Kaylor
Morgan Building	3	M30	180		Office	Office, Faculty	Fine Arts - Graduate	Adjunct Office
Subtotal:			**518**		**Average Sq. Ft. per Office in FNAR: 172.66**			
					Average Sq. Ft. per Office in FNAR per Faculty Member: 106			
TOTAL:			**8774**		**Average Sq. Ft. per Office: 175.4**			

Faculty Office Use - By Building

BUILDING	FLOOR	ROOM#	SQ. FT	Capacity	DESCRIPTION	FUNCTION	DEPARTMENT	OCCUPANT
Meyerson Hall	0	G3	221		Office	Office, Faculty	City Planning	Stephen Putman
Meyerson Hall	0	G15	102		Office	Office, Faculty		Lindsay Falck
Meyerson Hall	0	G16	124		Office	Office, Faculty	Historic Preservation	Preservation Faculty Office
Meyerson Hall	0	G17	216		Office	Office, Faculty	Architecture	Nick Temple
Meyerson Hall	0	G19	204		Office	Office, Faculty	City Planning	Sidney Wong
Meyerson Hall	0	G24	210		Office	Office, Faculty	LARP	John Dixon Hunt
Meyerson Hall	0	G18	210		Office	Office, Faculty	City Planning	Seymour Mandelbaum
Meyerson Hall	0	G22	216		Office	Office, Faculty	Architecture	Branko Kolarevic
Meyerson Hall	0	G23	204		Office	Office, Faculty	Architecture	Witold Rybczynski
Meyerson Hall	0	G27	216		Office	Office, Faculty	Architecture	William Braham
Meyerson Hall	1	116	192		Office	Office, Faculty	Historic Preservation	David DeLong
Meyerson Hall	1	117	192		Office	Office, Faculty	Historic Preservation	Frank Matero
Meyerson Hall	1	120	192		Office	Office, Faculty	LARP	J. Corner
Meyerson Hall	1	123	181		Office	Office, Faculty	City Planning	J. Keene
Meyerson Hall	1	126	164		Office	Office, Faculty	City Planning	Genie Birch
Meyerson Hall	1	128	245		Office	Office, Faculty	City Planning	T. Tomazinis
Meyerson Hall	2	204	199		Office	Office, Faculty	Architecture	Annette Fierro
Meyerson Hall	2	205	229		Office	Office, Faculty	Architecture	Richard Wesley
Meyerson Hall	2	213	181		Office	Office, Faculty	Architecture	Patricia Conway
Meyerson Hall	2	214	162		Office	Office, Faculty	Architecture	Peter McCleary
Meyerson Hall	2	215	163		Office	Office, Faculty	Architecture	Enrique Norton
Meyerson Hall	2	216	163		Office	Office, Faculty	Architecture	Ali Rahim
Meyerson Hall	2	217	181		Office	Office, Faculty	Architecture	David Leatherbarrow
Meyerson Hall	3	315	127		Office	Office, Faculty	LARP	Anita Berrizbeita
Meyerson Hall	3	316	127		Office	Office, Faculty	LARP	Dana Tomlin
Meyerson Hall	4	403	280		Office	Office, Faculty	Historic Preservation	
Meyerson Hall	4	403A	59		Toilet	Office, Faculty	Historic Preservation	
Subtotal:			**4960**		**Average Sq. Ft. per Office in Meyersun: 183.35**			
Duhring Wing	3	307	85		Office	Office, Faculty	Energy Mgmt.	CPLN Visiting
Duhring Wing	3	309	186		Office	Office, Faculty	LARP	James Corner
Duhring Wing	3	310	149		Office	Office, Faculty	LARP	Anu Mathur
Duhring Wing	4	417	139		Office	Office, Faculty	LARP	Adjunct Office
Duhring Wing	3	312	186		Office	Office, Emeritus	LARP	Dan Rose
Duhring Wing	3	313	148		Office	Office, Faculty	LARP	STORAGE
Duhring Wing	3	314	147		Office	Office, Faculty	CPLN	Jonathan Barnett
Duhring Wing	3	315	190		Office	Office, Faculty	CPLN	Roger Raufer
Duhring Wing	3	316	146		Office	Research	CPLN	JAPAN Project
Duhring Wing	3	317	146		Office	Office, Faculty	CPLN	Visiting
Duhring Wing	3	318	190		Office	Office, Faculty	CPLN	Ann Strong
Duhring Wing	2	212	191		Office	Office, Emeritus	CPLN	Britton Harris
Duhring Wing	3	301	124		Office	Office, Student	CPLN	Phd Candidates
Duhring Wing	4	407	88		Office	Office, Faculty	Fine Arts - Graduate	Terry Adkins
Duhring Wing	4	411	200		Office	Office, Faculty	Architecture	Ali Malkawi
Duhring Wing	4	412	164		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	413	200		Office	Office, Faculty	Architecture	Atkin
Duhring Wing	4	414	200		Office	Office, Faculty	Architecture	Tony Atkin
Duhring Wing	4	415	202		Office	Office, Faculty	Architecture	Adjunct Office
Duhring Wing	4	416	136		Office	Office, Faculty	Architecture	Marion Weiss
Subtotal:			**3217**		**Average Sq. Ft. per Office in Duhring: 160.85**			
Morgan Building	B	B3	250		Office	Office, Faculty	Fine Arts - Graduate	I. Nakazato, B. Kreydatus, S. Kaylor
Morgan Building	3	M30	180		Office	Office, Faculty	Fine Arts - Graduate	Adjunct Office
Subtotal:			**430**		**Average Sq. Ft. per Office in Morgan: 215**			
Fisher Fine Arts	4	405	167		Office	Office, Faculty	Architecture	Joseph Rykwert
Subtotal:			**167**		**Average Sq. Ft. per Office in Furness: 167**			
TOTAL:			8774		Average Sq. Ft. per Office: 174			


SITE ANALYSIS DIAGRAMS FOR RELOCATION OF GSFA
E3
MEYERSON HALL SITE – "USER NEEDS/SITE FIT" DETAIL STUDY
March 2002 Lindsay Falck

GSFA RELOCATION STUDIES - ALTERNATIVE SITE "E" - MEYERSON HALL SITE

DETAILED USER NEEDS / SITE-FIT STUDY

TERMS OF REFERENCE

This study continues on from the GSFA Relocation and Space Needs studies of December 10, 2001.

The more detailed study of the Meyerson Hall site is motivated by general preference of the GSFA faculty to retain the current location, close to the Fisher Fine Arts Library and on a key part of the College Green precinct.

This study addresses the basic space needs, locational preferences for groups of spaces within the building envelope, conditions of natural light, ventilation, view etc. for the spaces and the impact that a larger building envelope would have on adjacent buildings, open spaces and visual axes of the campus.

PROGRAM

A building program of approximately 130,000 square feet has been assumed.

It has also been assumed that the GSFA will retain the use of currently used facilities in the Fisher Fine Arts library (approximately 10,000 square feet including Architectural Archives, the Apse Kahn studio and rooms 306, 406, 039 and ancillary office and seminar spaces.)

It is assumed that currently GSFA-used space in Duhring Wing will be relinquished.

SITE CONSTRAINTS - HEIGHT LIMITS

A basic height limit matching the existing top level of the Meyerson Hall flat roof parapets has been assumed. (Level 108'4" above datum)
The height of the proposed angled skylights of the new building has been kept at level 114'0", four feet lower than the existing skylights and 10'0" back from the new building face.

The height of the proposed HVAC penthouse is some 8'0" lower than the level of the current Meyerson penthouse thereby reducing the "long-view" visual bulk of the building.

SITE CONSTRAINTS - PLAN FOOTPRINT

The length of the North East end of the proposed new footprint has been limited to line up with the façade set-back of Bennett Hall.

The extent of the West face of the new footprint is slightly shorter and displaced 3'0" Northwards from the façade of the existing Meyerson building.

The extent of the South face curves from slightly back from the current building facade to slightly forward of it on the East corner. The new footprint on the East, 34th Street side, follows the same façade line of the Lea Library extension to the Fisher Fine Arts library and follows the front line of the 3401 building on the other side of Walnut Street.

VEIW AXES

By containing the footprint of the new building within these limits the critical view angles are maintained down Locust Walk Eastwards, up Woodland Terrace Westwards and along the Eastern edge of College Green. The curved South façade is shaped to respond, in a fragmented way, to the curved North end of the Fisher Fine Arts Library and to visually "hold" the forecourt terrace slightly, before the view passes across 34th Street and is deflected down Smith Walk.

CONCEPTUAL AIMS

The main intentions for the building are as follows:

1. To present an active, animated, "busy" building to this corner entry point of Penn's campus.
2. To provide attractive entry points from both Locust Walk and the South terrace.
3. To create an active, animated, well-lit internal working courtyard in the heart of the building where large sculptures, building modules or performance activities could take place.
4. To create large-span column-free floor plates to afford maximum flexibility for short or long term changes.
5. To organize HVAC, electrical, network and other services in soffit - hung horizontal duct-runs and ceiling grids so as to reinforce this flexibility
6. To optimize the energy equations of the building by using sophisticated computer controlled climate control mechanisms, which optimize natural ventilation through openable windows and skylights, sliding sunscreens, etc.
7. To optimize natural day lighting to as many rooms as possible and as deeply into the floor plates as possible, by means of reflective light shelves - white painted flat soffit ceilings etc.
8. To create a double-layered facade skin to the building which would offer depth for sunscreening and visual transparency to the façades of the building thereby increasing interest in the building and decreasing the visual mass of the envelope.

First thoughts are to use a metal hung perforated terra-cotta horizontal grillage of the same color as the Vagelos laboratories further down 34th Street and closer in color to the bricks of the Fisher Fine Arts Library opposite.

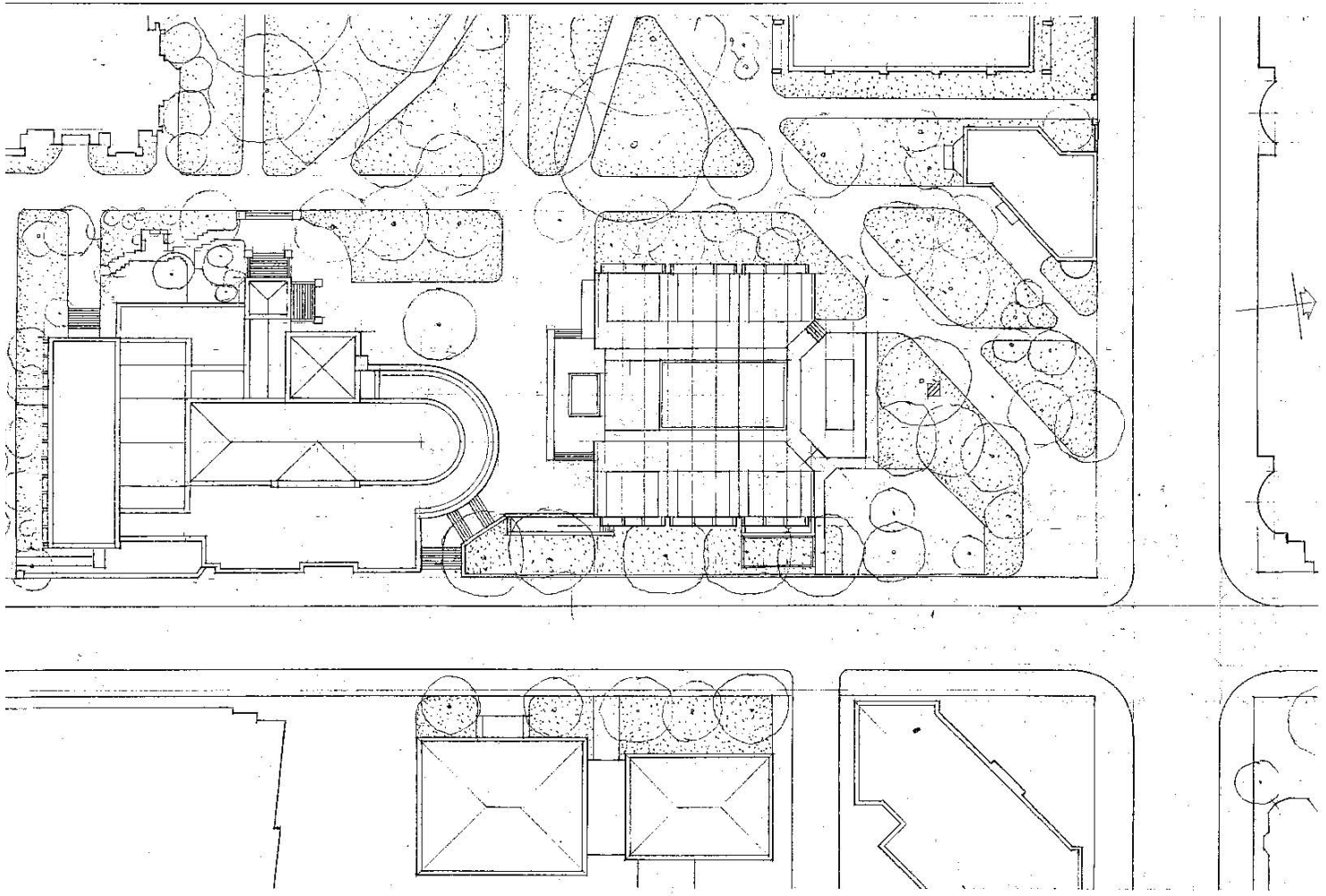
CONCLUDING COMMENTS

These are very basic thoughts and diagrams, generated in a very limited time frame, done purely to explore further the overall feasibility of re-using the Meyerson Hall site to accommodate a future GSFA of about 550 total population, about 50 more than as of Spring Term 2002.

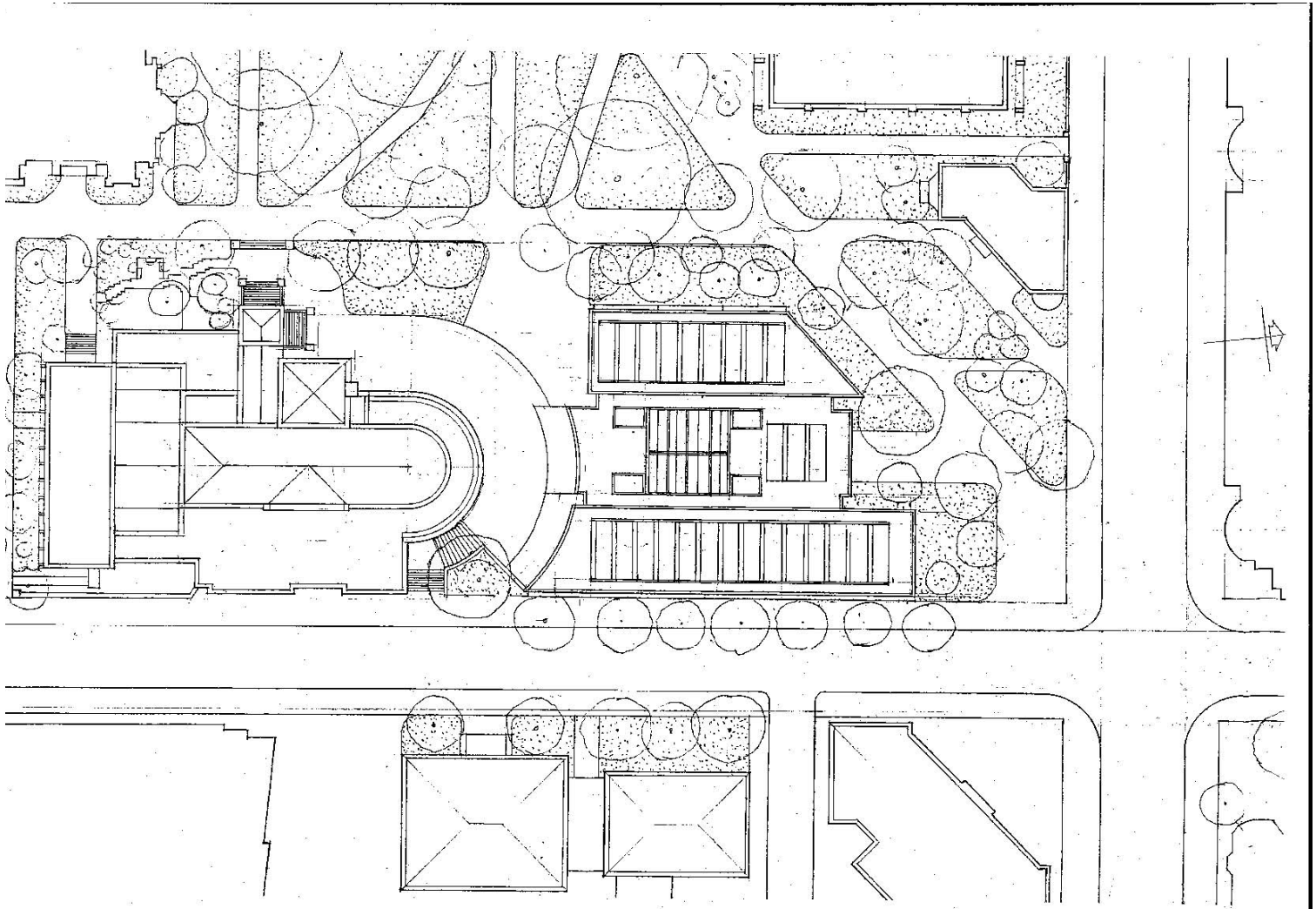
Obviously if this 550 number is reduced the "fit" would be easier and the building envelope reduced some ten percent.

Comments, criticisms, suggestions are welcome.

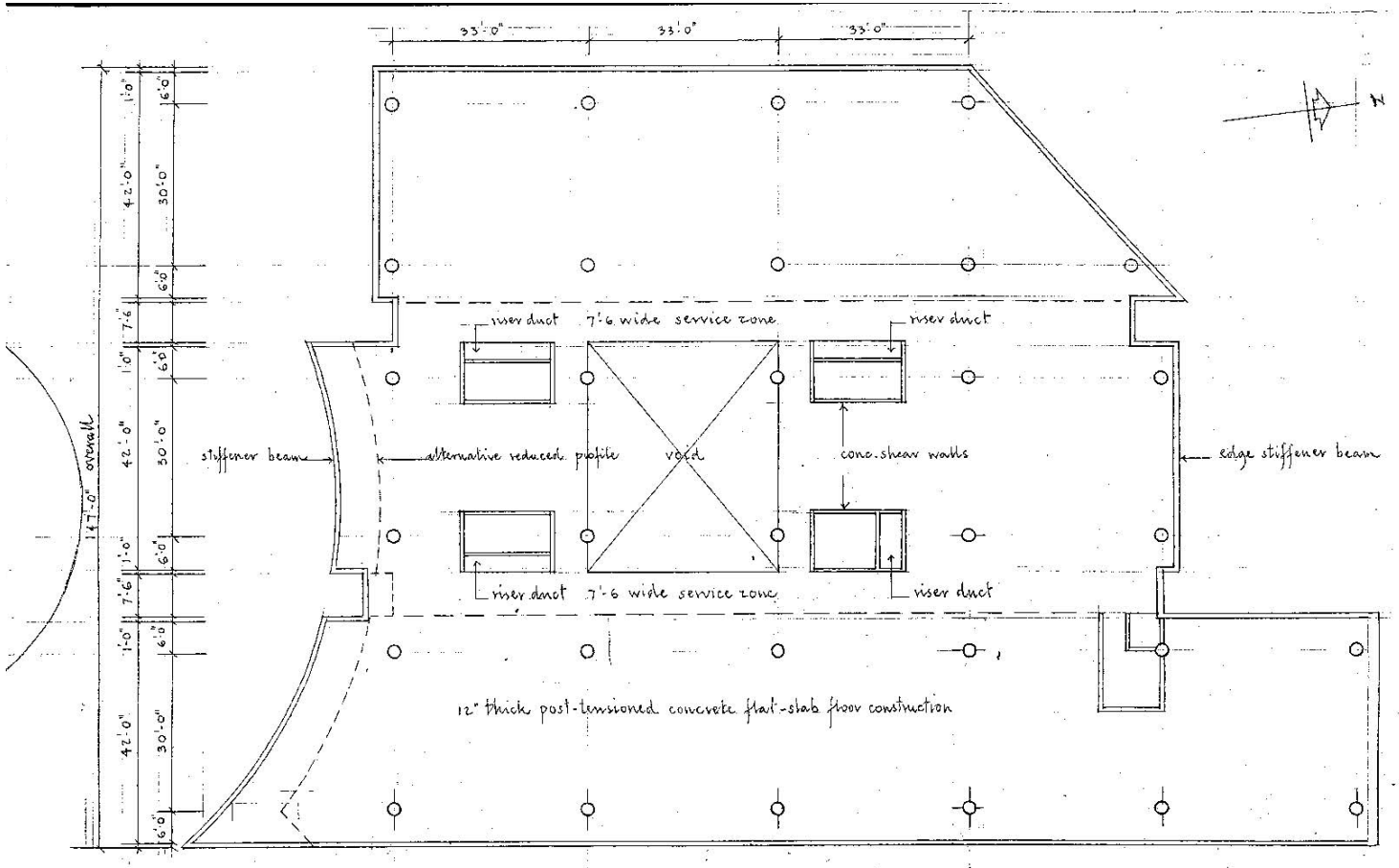
Lindsay Falck
6 March 2002



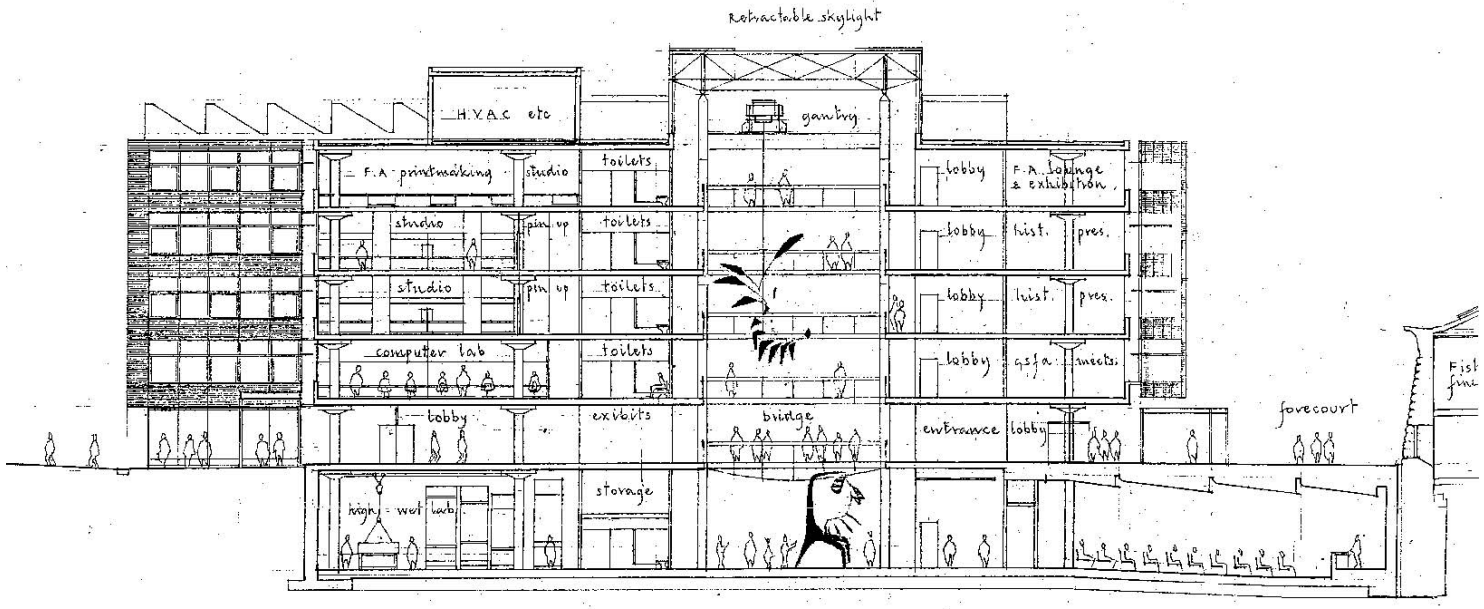
FOOTPRINT AND LANDSCAPING OF EXISTING MEYERSON HALL AND ADJACENT BUILDINGS



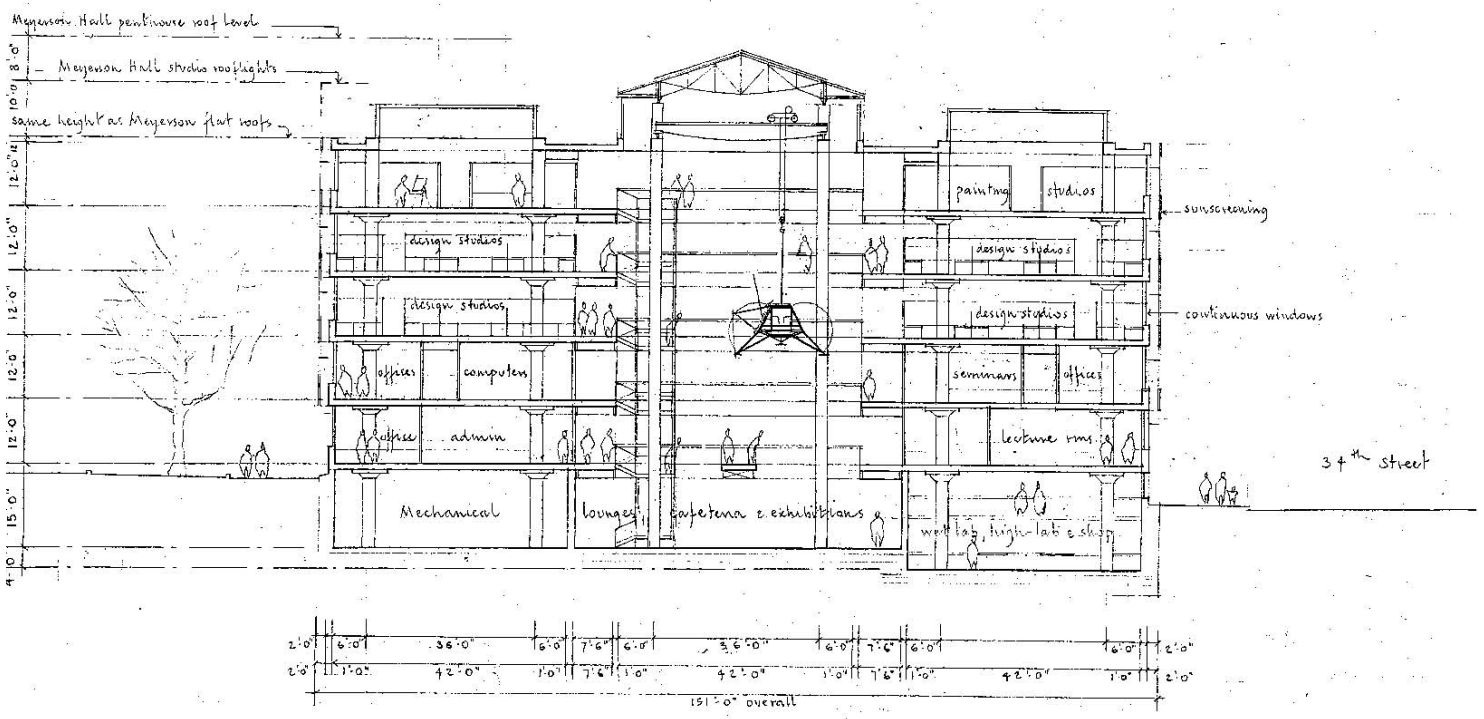
ALTERNATIVE FOOTPRINT A CONTINUOUS CURVED FAÇADE ON SOUTH SIDE



STRUCTURAL FLOOR PLATE PLAN showing potential for flexibility of layout for initial program and later adaptations

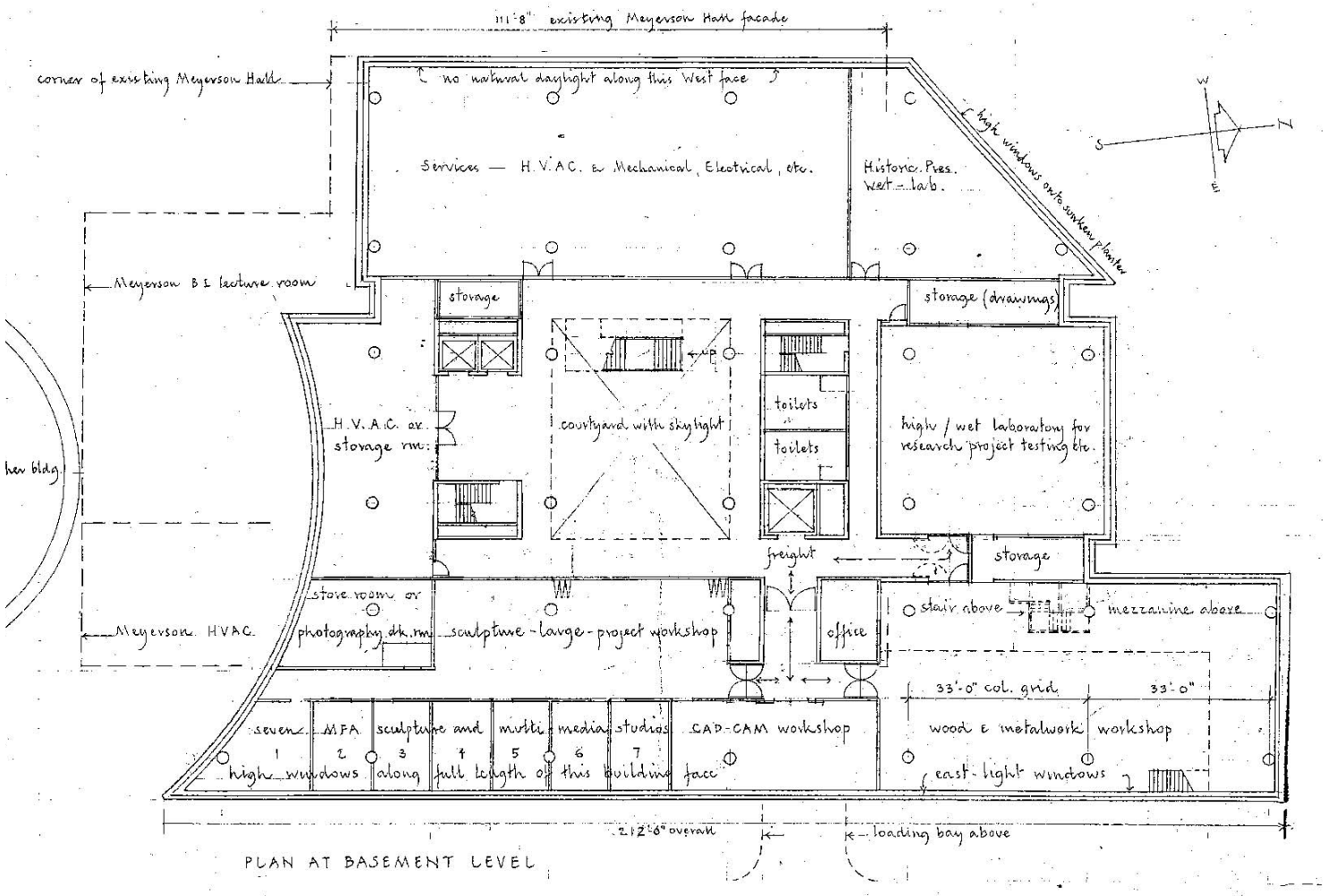


LONGITUDINAL SECTION Showing alternative basement layout where the existing Meyerson Hall B I excavation area is re-used.

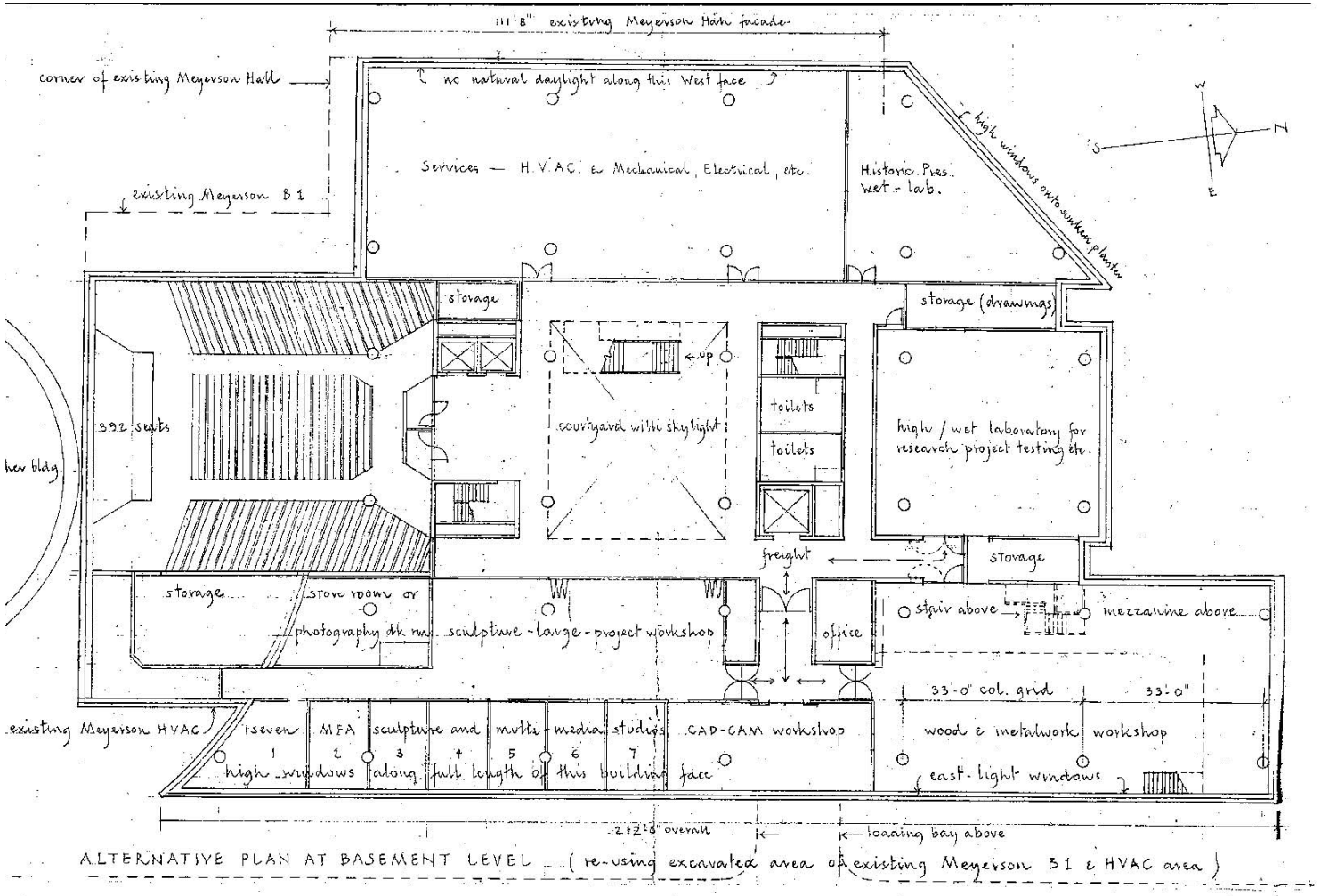


Feb 2002 LF

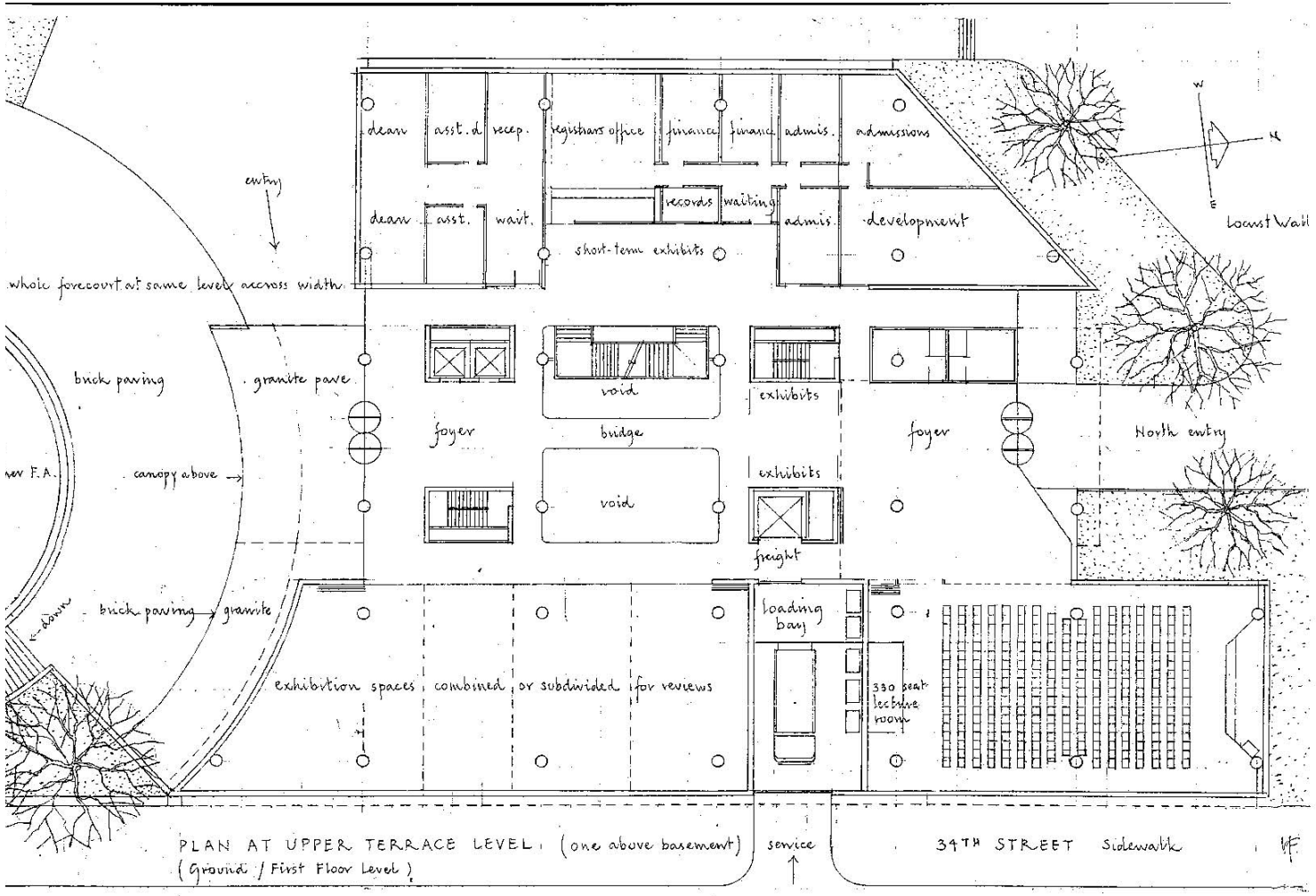
CROSS SECTION THROUGH COURTYARD AREA showing general structural layout & heights relative to Meyerson Hall

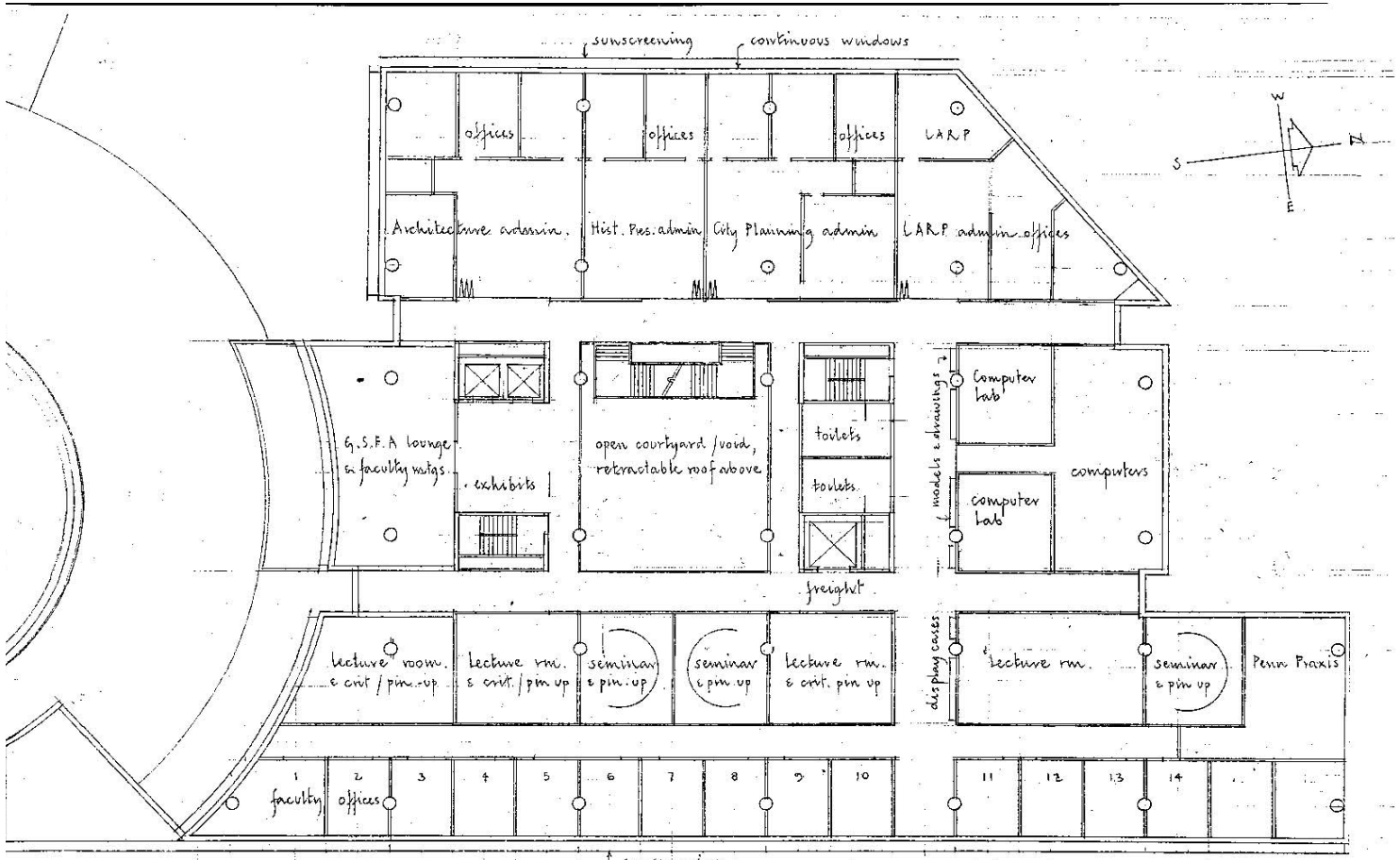


PLAN AT BASEMENT LEVEL

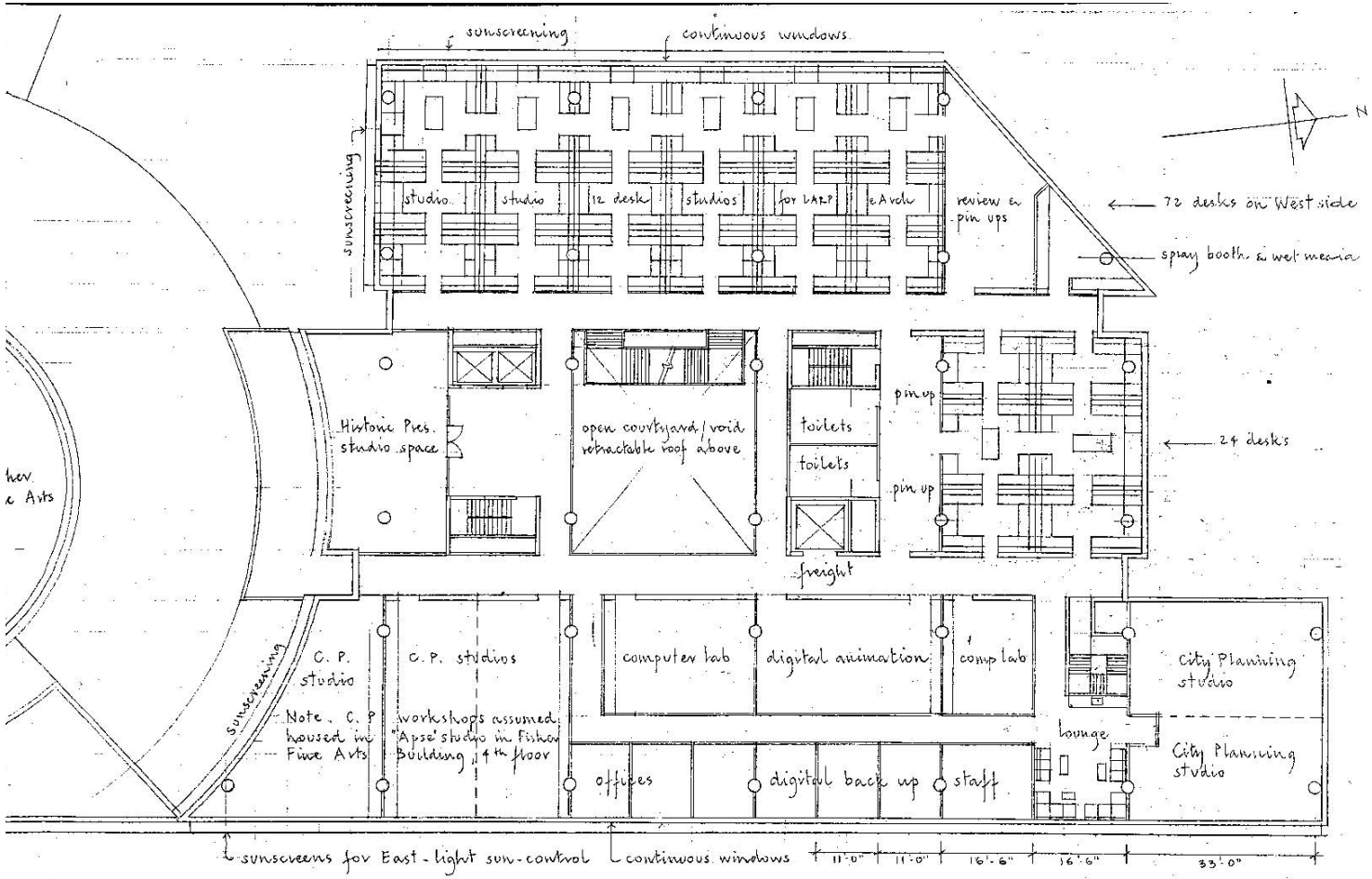


ALTERNATIVE PLAN AT BASEMENT LEVEL (re-using excavated area of existing Meyerson B1 & HVAC area)

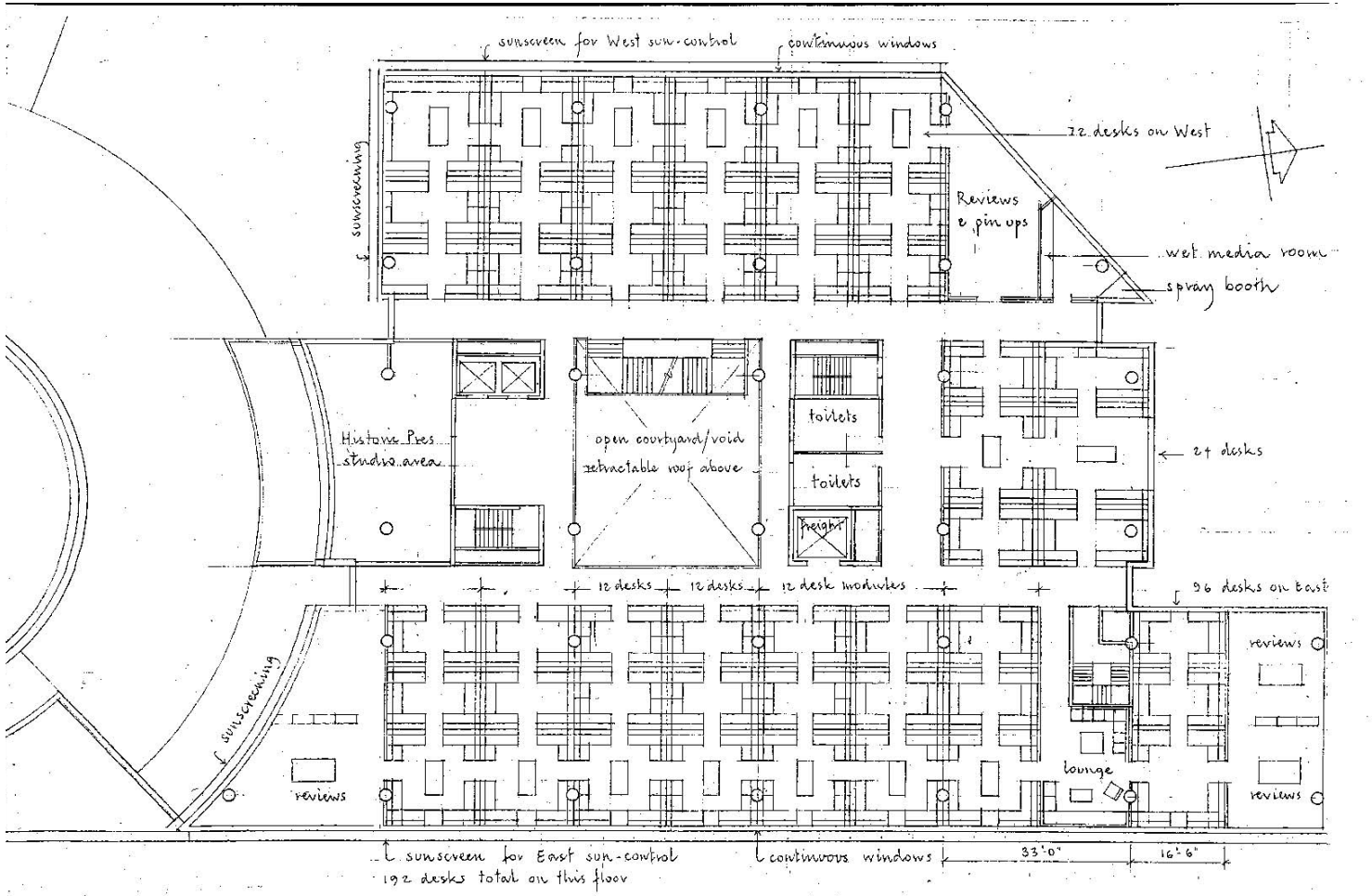

dean
asst. d
recep.
registrars office
finance
finance
admis.
admissions
dean
asst.
wait.
records
waiting
admis
development
short-term exhibits
entry
whole forecourt at same level across width
Locust Walk
brick paving
granite pave
void
exhibits
foyer
bridge
foyer
North entry
canopy above
exhibits
void
freight
brick paving
granite
loading bay
exhibition spaces combined or subdivided for reviews
330 seat lecture room
PLAN AT UPPER TERRACE LEVEL (one above basement)
(Ground / First Floor Level)
service
34TH STREET Sidewalk



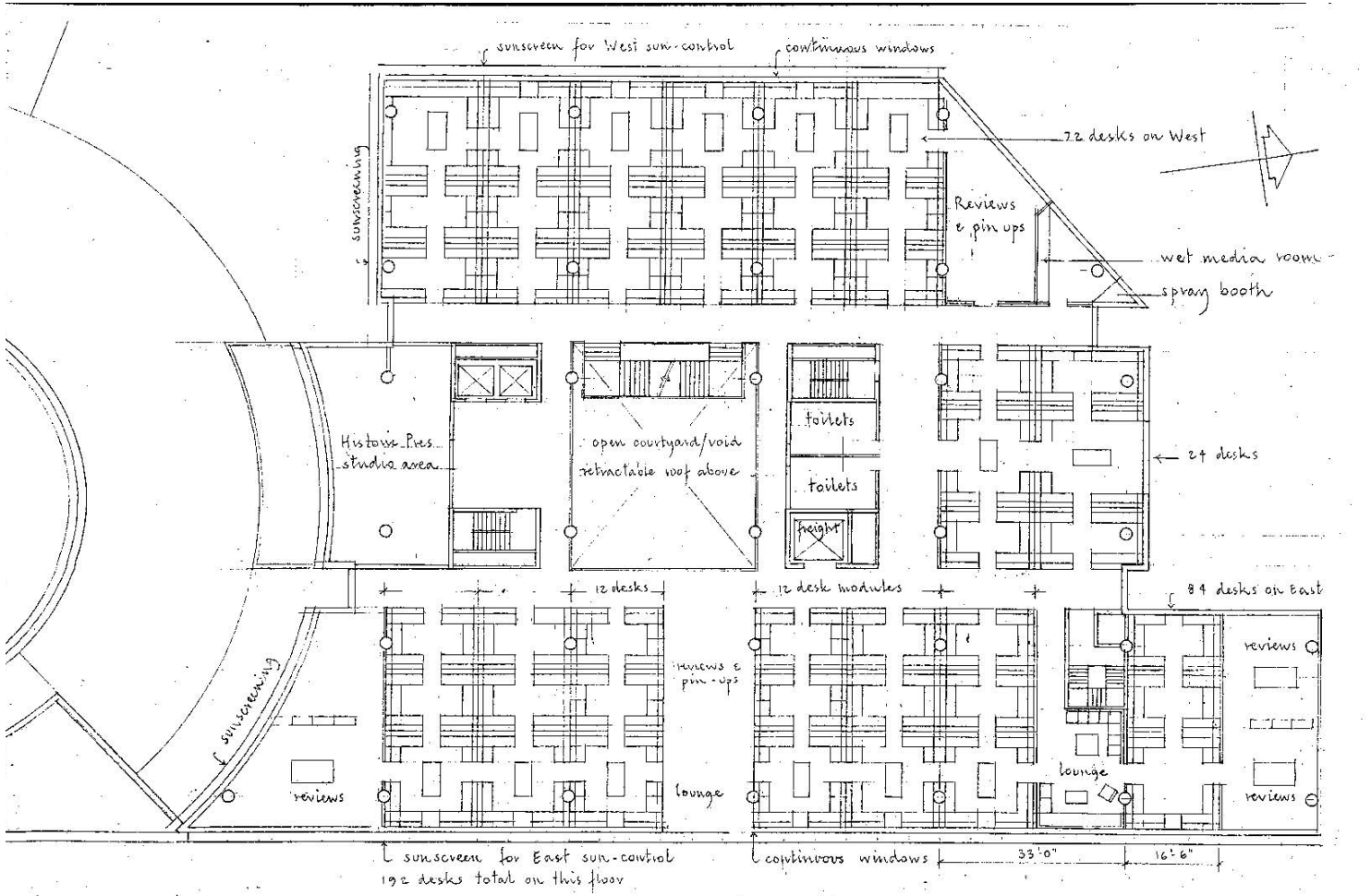
1/16" SCALE PLAN AT SECOND FLOOR LEVEL Accomodation for Department & faculty offices, Computer labs, Lecture & Seminar rooms.



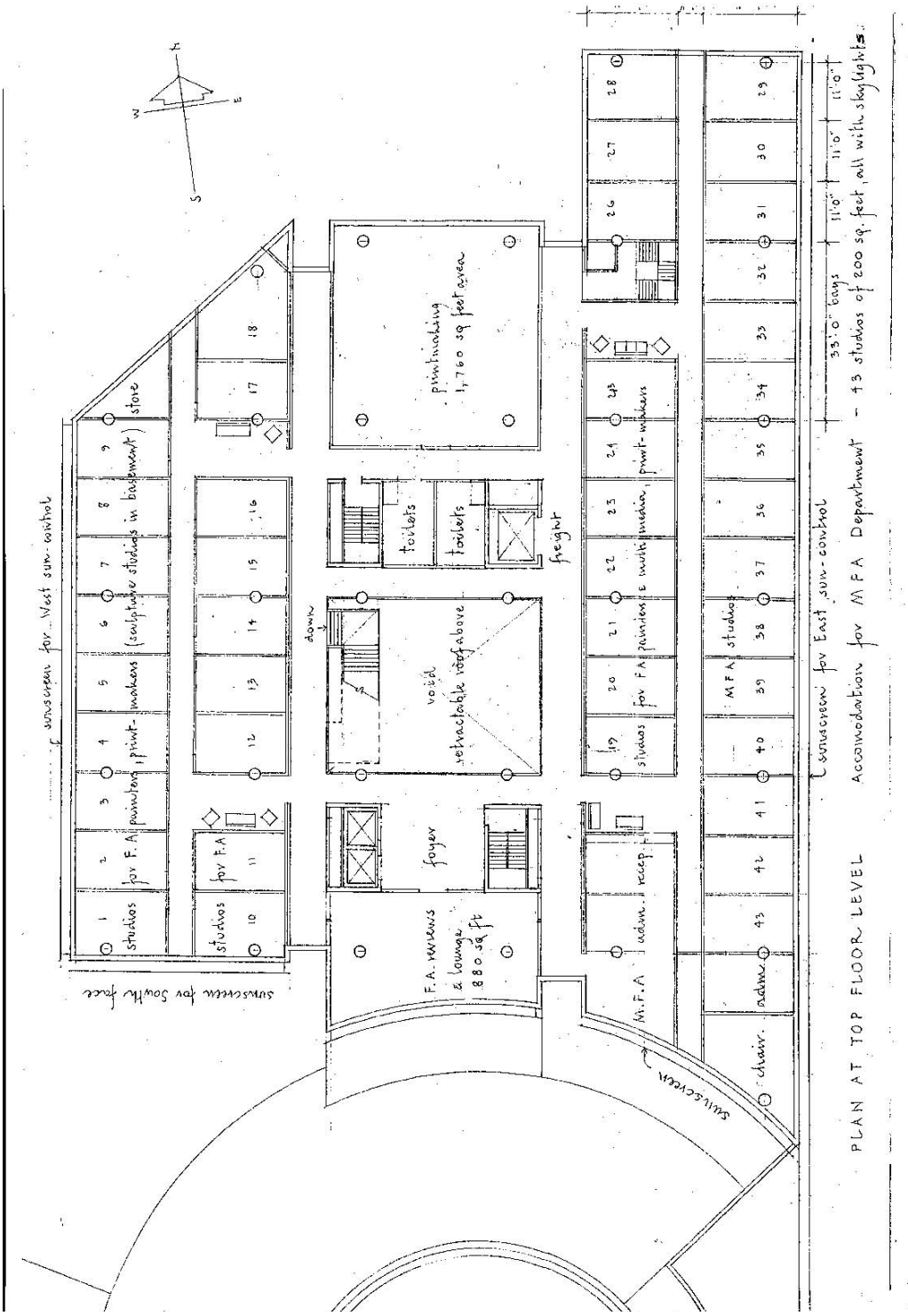
PLAN AT THIRD FLOOR LEVEL showing studio spaces for C.P., LARP, Arch. and review & digital labs.



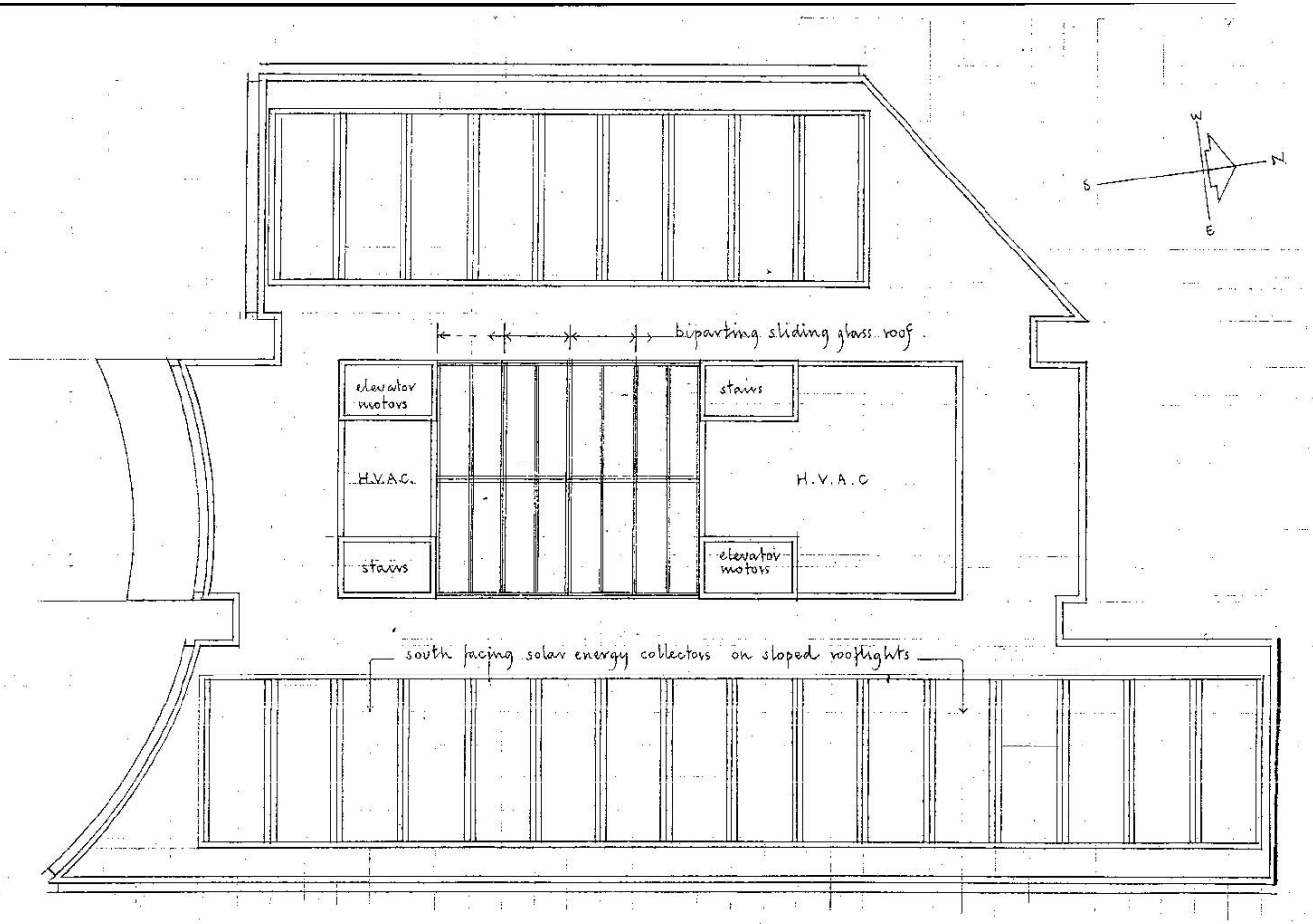
PLAN AT FOURTH FLOOR LEVEL showing desk layout for Arch & Landscape studios based on 16'-6" module. (currently 14'-4")



(ALTERNATIVE) PLAN AT FOURTH FLOOR LEVEL showing desk layout for Arch & Landscape studios based on 16'-6" module. (currently 14' 2")

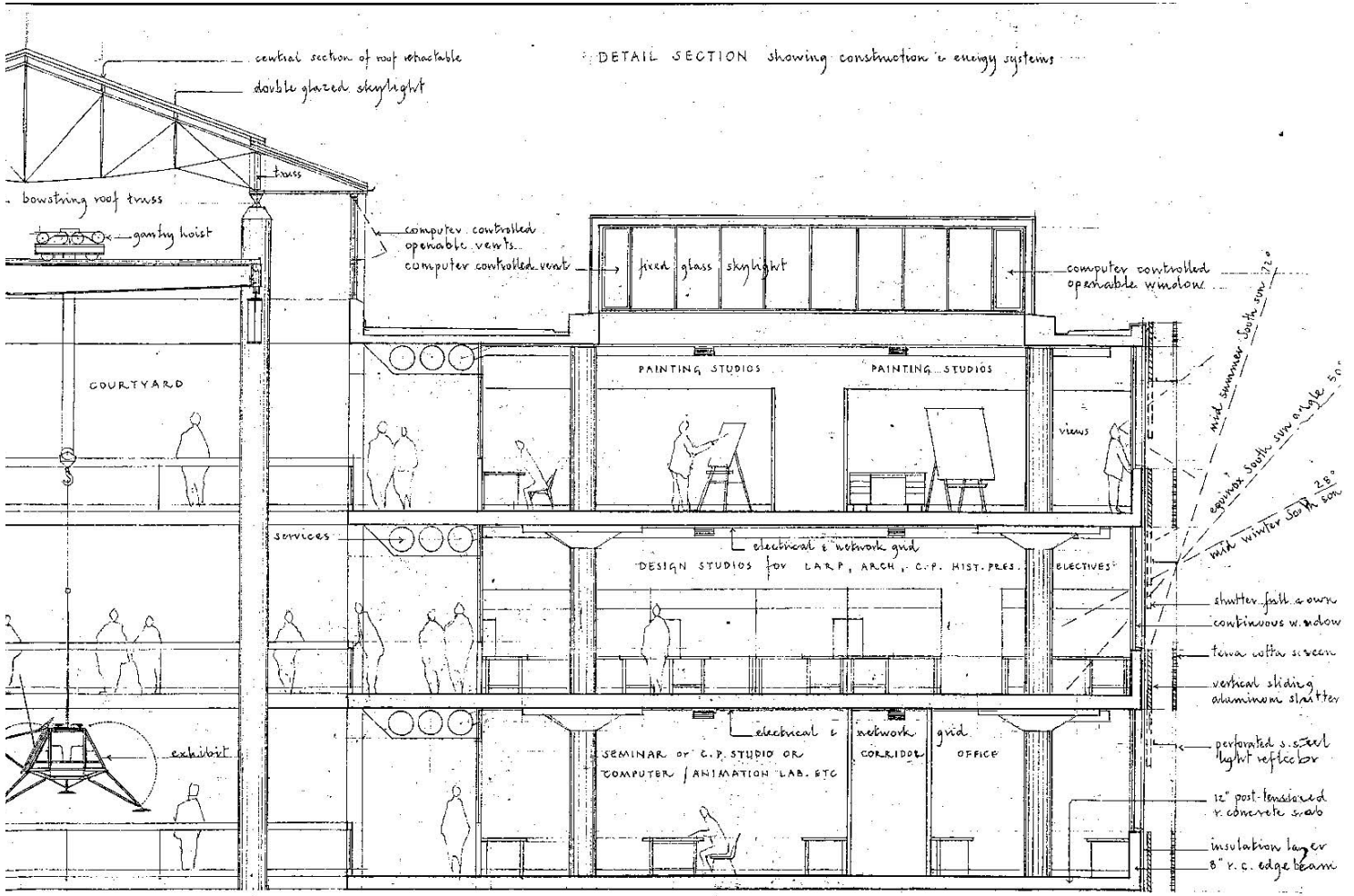


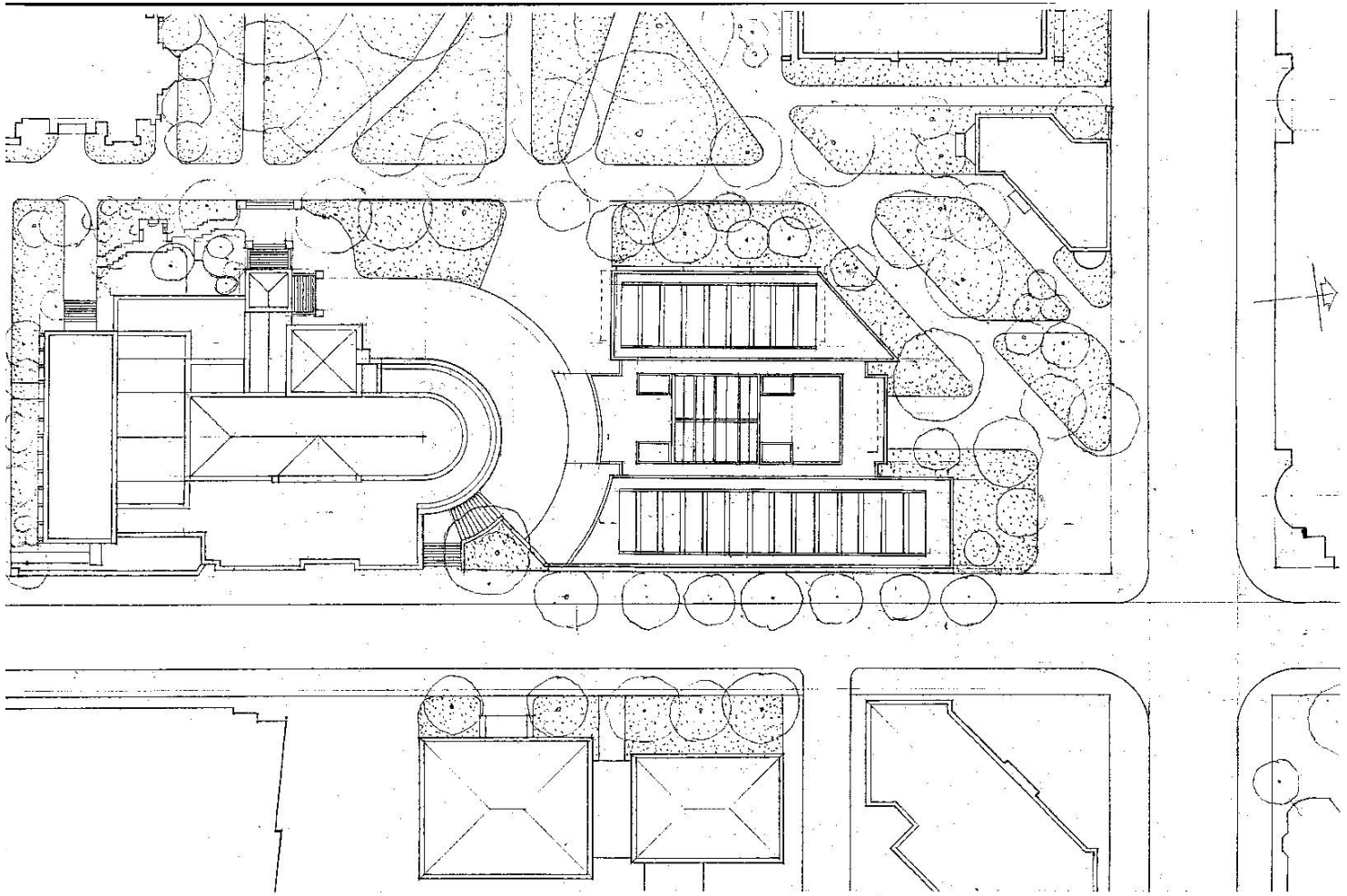
PLAN AT TOP FLOOR LEVEL Accomodation for M F A Department - 43 studios of 200 sq. feet, all with skylights.



PLAN AT ROOF LEVEL

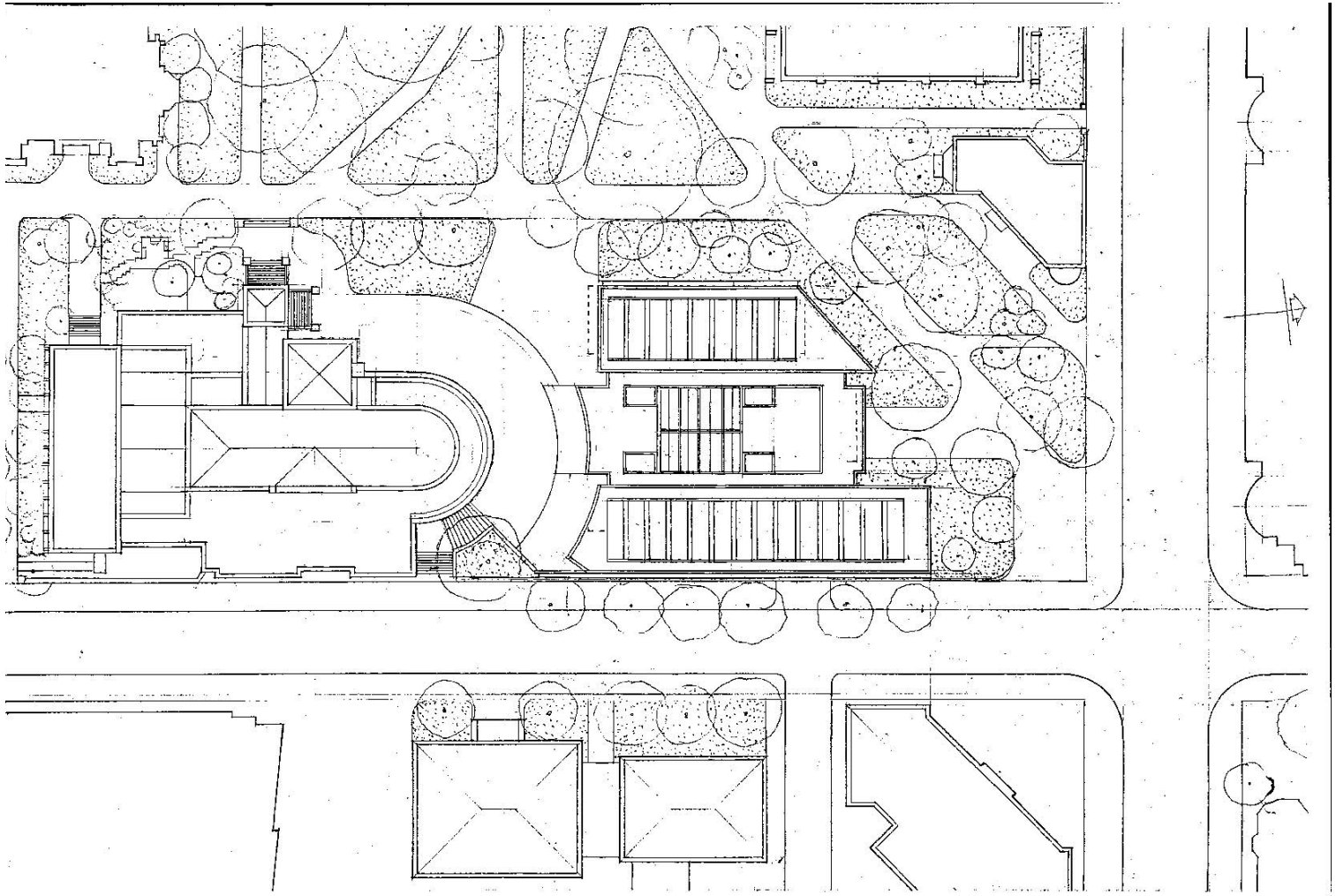
Feb '02 1:F


DETAIL SECTION showing construction & energy systems
central section of roof retractable
double glazed skylight
truss
bowstring roof truss
gantry hoist
computer controlled openable vents
computer controlled vent
fixed glass skylight
computer controlled openable window
COURTYARD
PAINTING STUDIOS
PAINTING STUDIOS
views
services
electrical & network grid
DESIGN STUDIOS for LARP, ARCH, C.P. HIST. PRES.
ELECTIVES
exhibit
SEMINAR or C.P. STUDIO OR COMPUTER / ANIMATION LAB. ETC
electrical & network grid
CORRIDOR
OFFICE
mid summer South sun angle 72°
equinox South sun angle 50°
mid winter South sun 28°
shutter path of sun
continuous window
terra cotta screen
vertical sliding aluminum shutter
perforated s. steel light reflector
12" post-tensioned r. concrete slab
insulation layer
8" r. c. edge beam

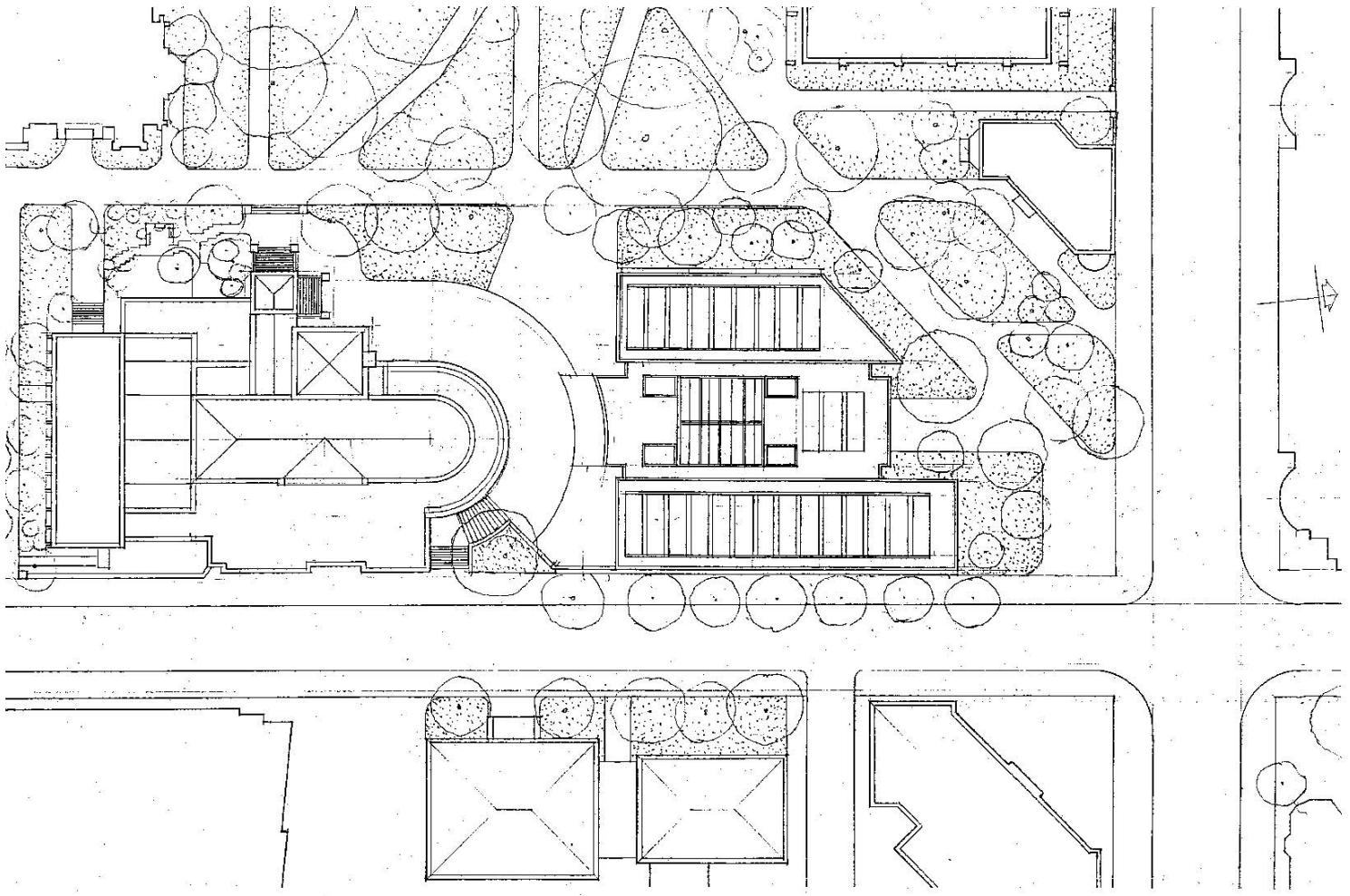


ALTERNATIVE FOOTPRINT B

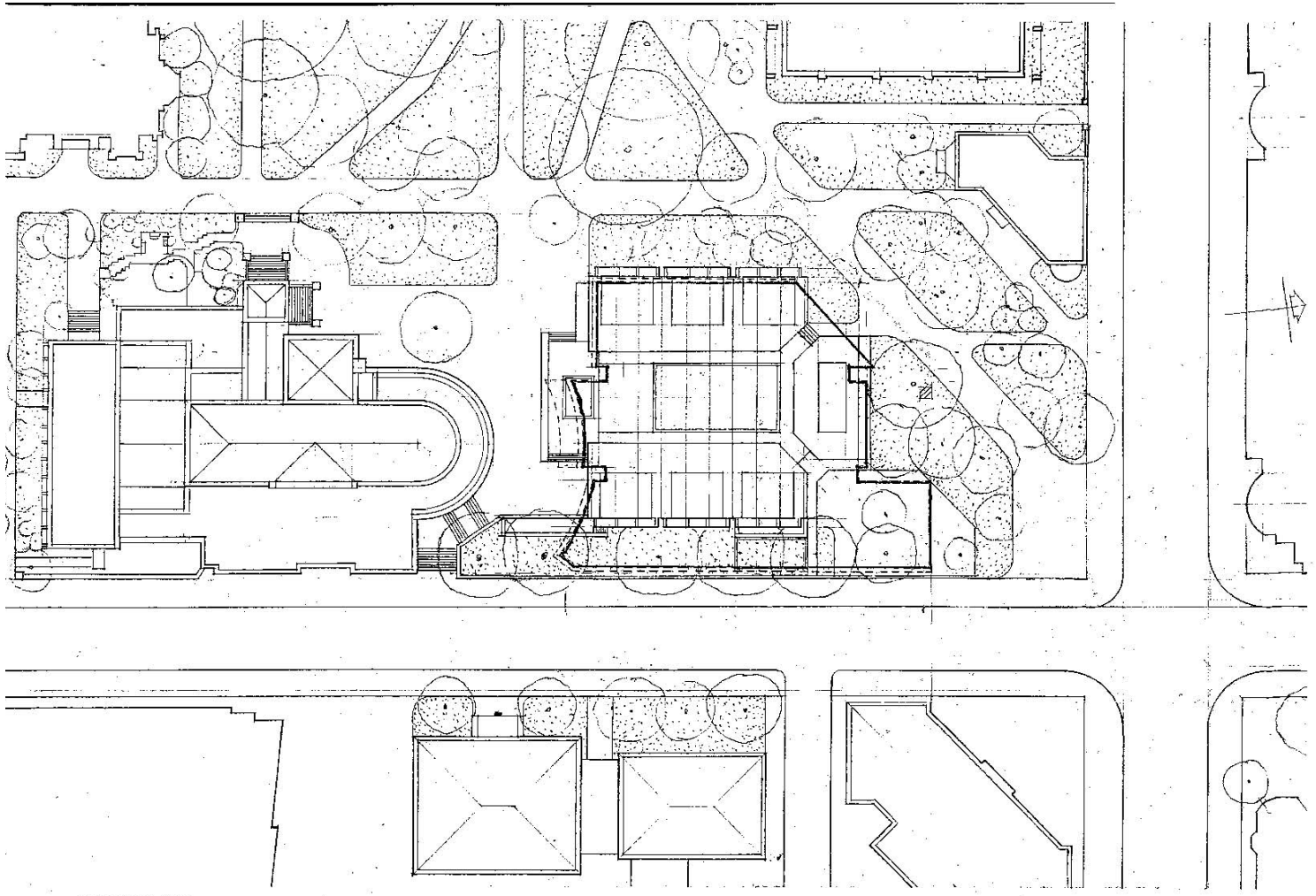
SAME AS FOOTPRINT A BUT CURVED SOUTH EAST CORNER FACE PULLED BACK



ALTERNATIVE FOOTPRINT C SAME AS B BUT SOUTH EAST CORNER CUT BACK

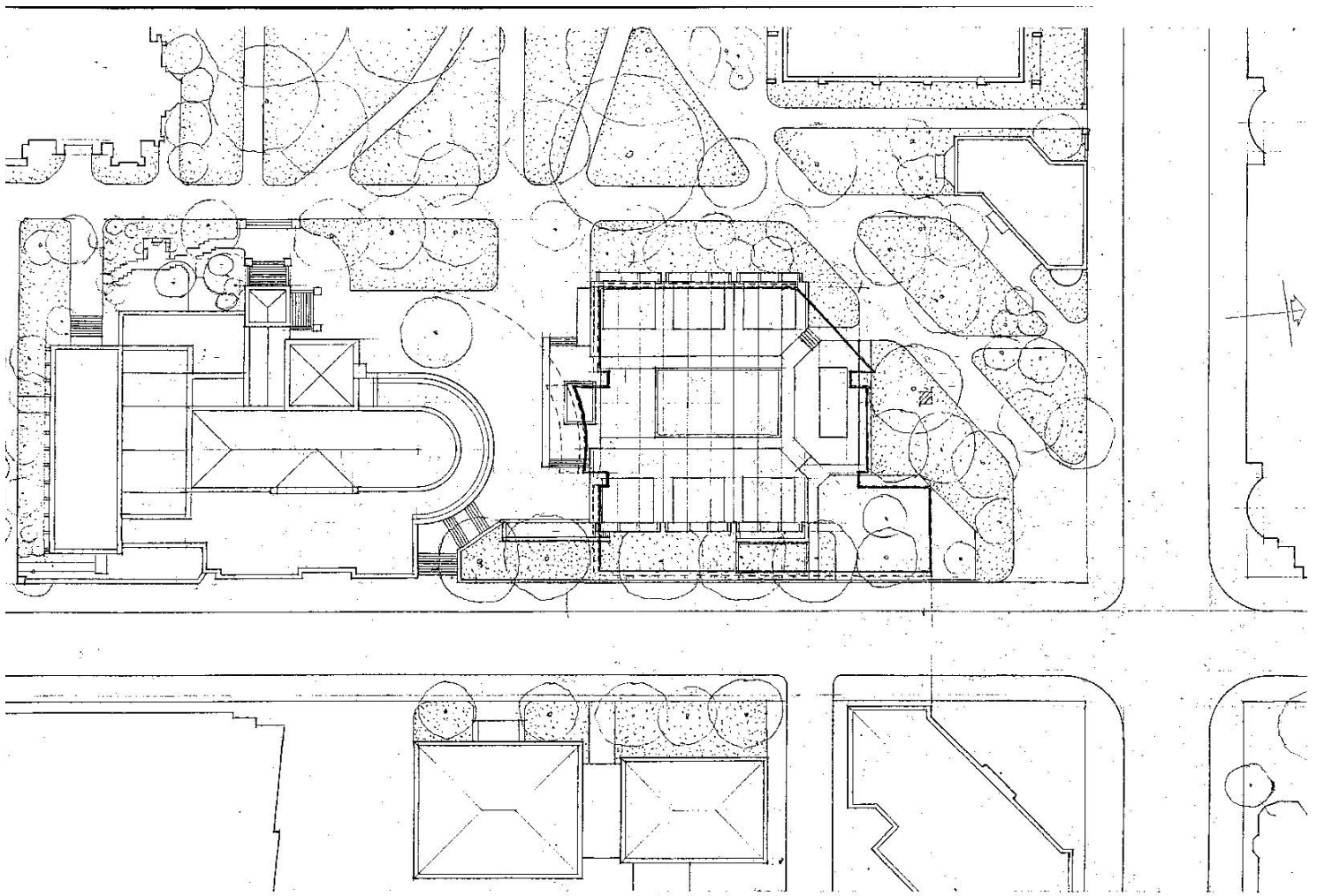


ALTERNATIVE FOOTPRINT D SOUTH EAST CORNER FACE CUT BACK SQUARE



SITE PLAN

ALTERNATIVE FOOTPRINT C OVERLAID ON EXISTING MEYERSON HALL FOOTPRINT TO ACHIEVE MAXIMUM REDUCTION



SITE PLAN

ALTERNATIVE FOOTPRINT D OVERLAID ON EXISTING MEYERSON HALL FOOTPRINT TO ACHIEVE MAXIMUM REDUCTION

Appendix E

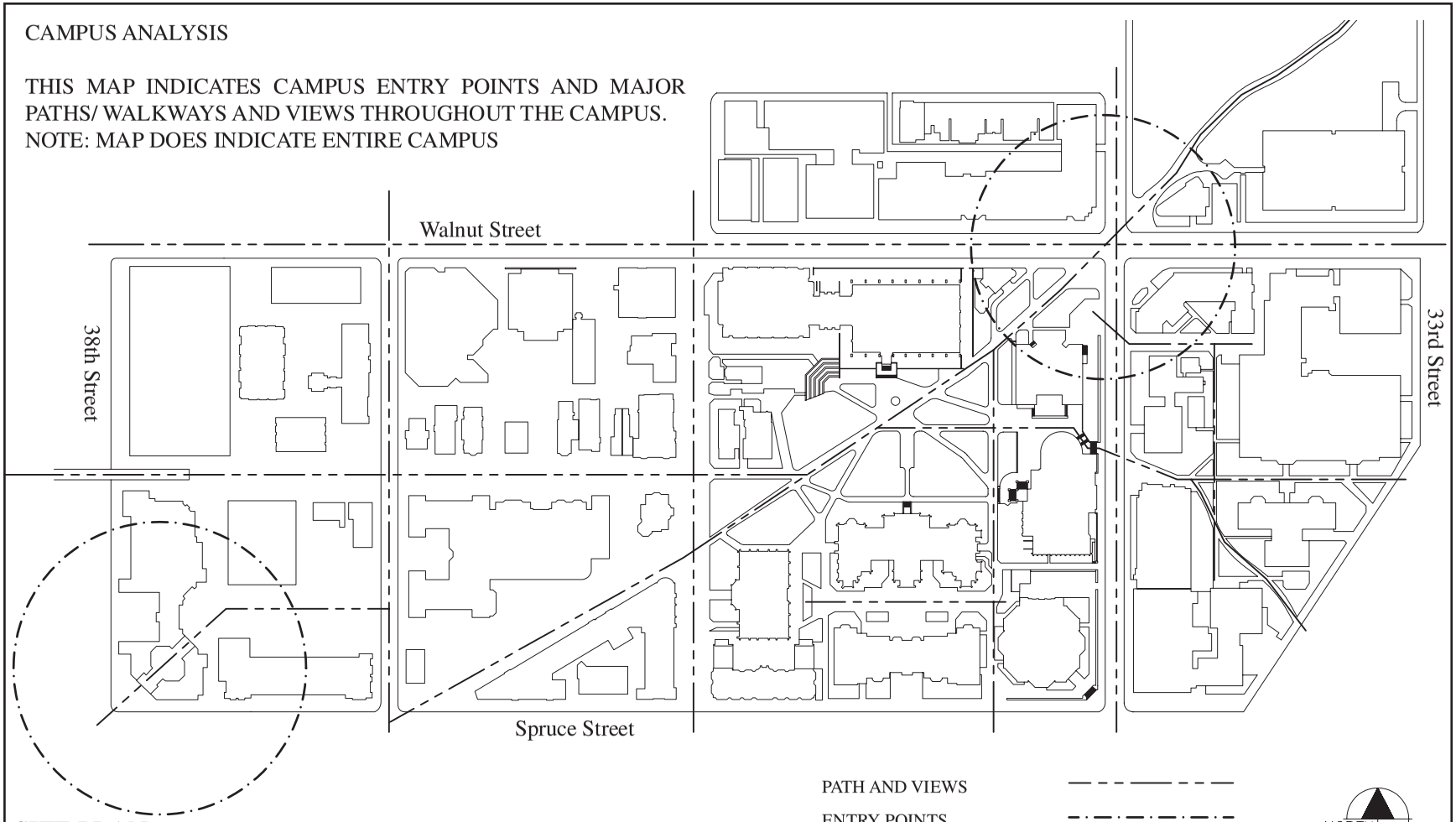
Proposed Addition to Meyerson Hall
University of Pennsylvania School of Design
Graduate Program in Historic Preservation
A Thesis in Historic Preservation
Author: Gustavo Carrera
Advisor: David G. DeLong
May 2004

List of Drawings

Meyerson Hall Addition	Gustavo Carrera May 2004	T1
University of Pennsylvania	Graduate Program in Historic Preservation	

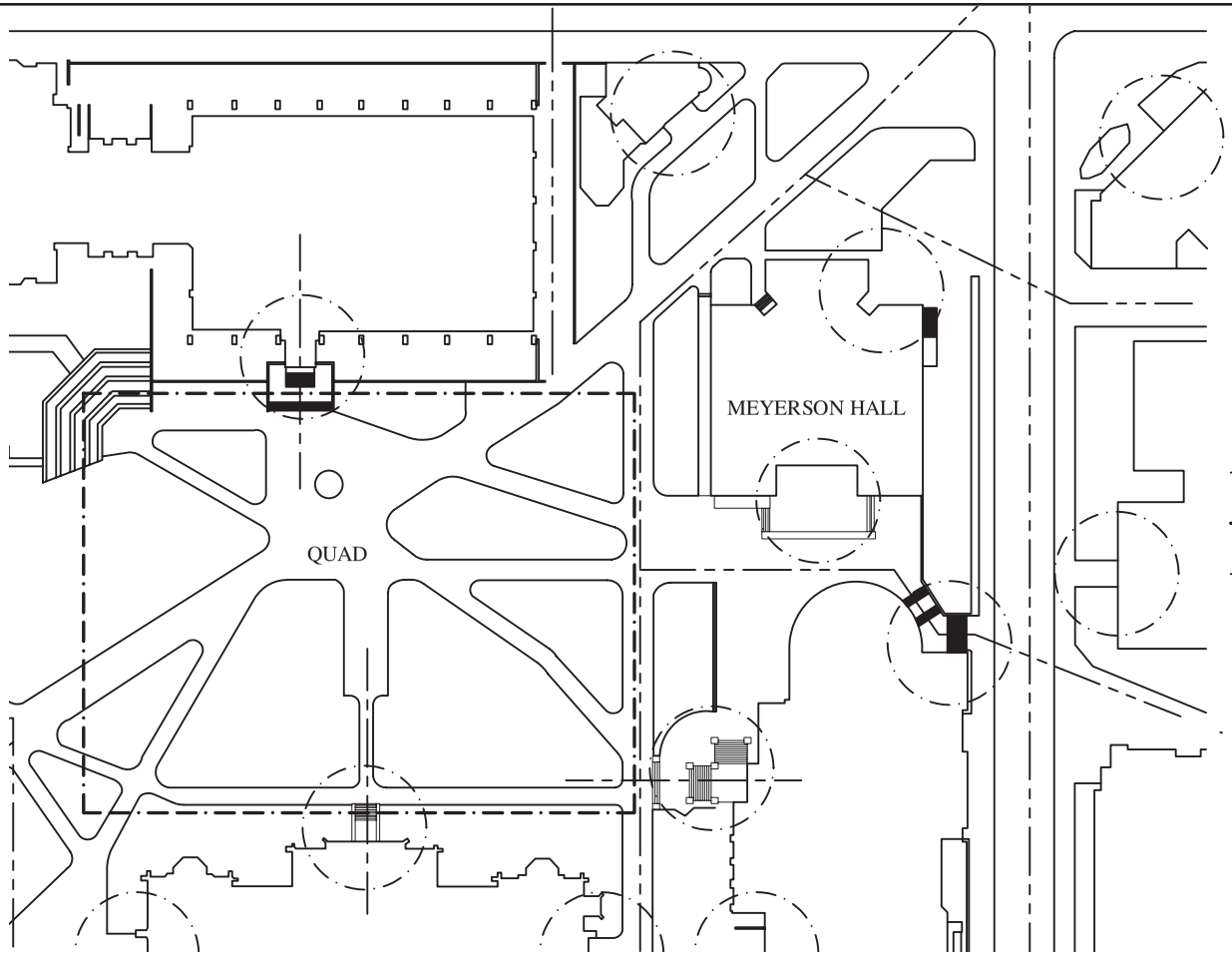
CAMPUS ANALYSIS

THIS MAP INDICATES CAMPUS ENTRY POINTS AND MAJOR PATHS/ WALKWAYS AND VIEWS THROUGHOUT THE CAMPUS.
NOTE: MAP DOES INDICATE ENTIRE CAMPUS



SITE PLAN
SCALE: 256' = 1"

Meyerson Hall Addition	Gustavo Carrera May 2004	SITE ANALYSIS	SP1
University of Pennsylvania	Graduate Program in Historic Preservation		



QUAD ANALYSIS

THIS MAP INDICATES THE QUAD ENTRANCES ON THE EAST SIDE AND THE SURROUNDING BUILDING ENTRANCES.

BUILDING ENTRANCES

QUAD ENTRANCES

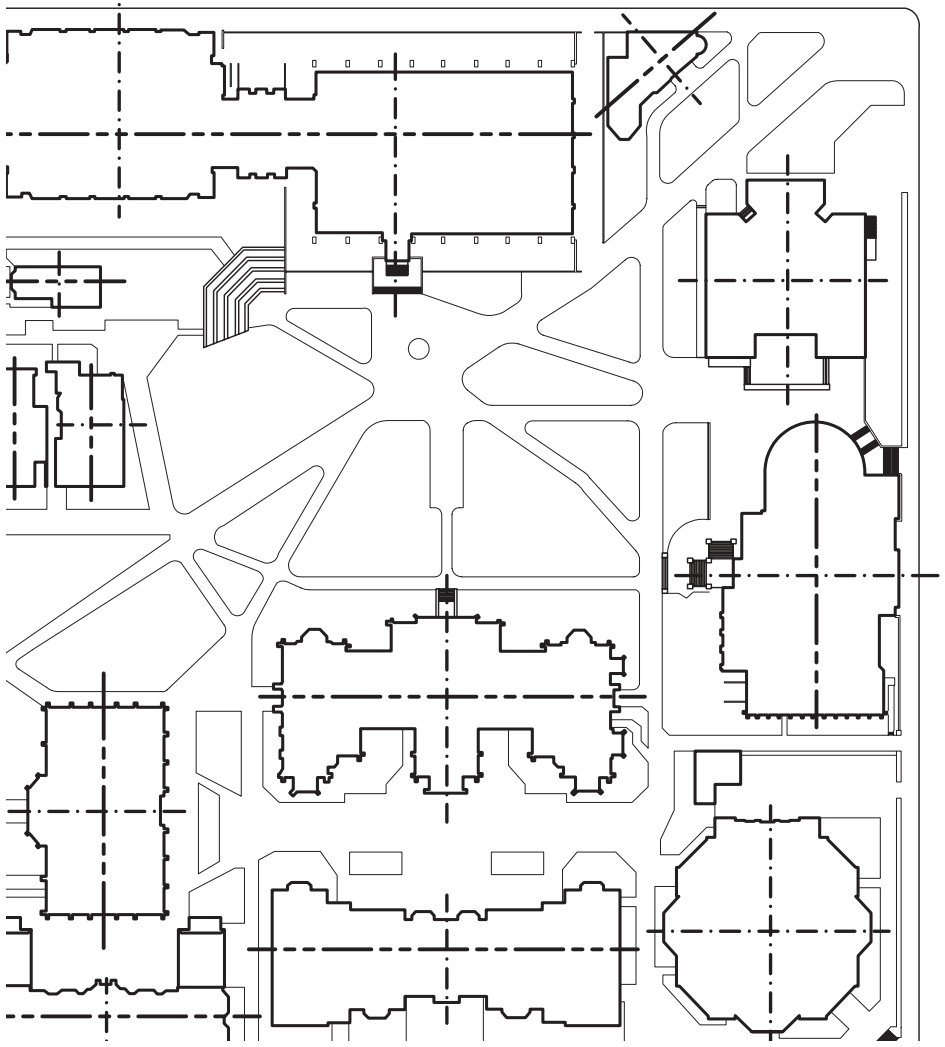
QUAD OUTLINE

LANDSCAPE OUTLINE

NORTH

SITE PLAN
SCALE: 96' = 1"

Meyerson Hall Addition	Gustavo Carrera May 2004	SITE ANALYSIS	SP2
University of Pennsylvania	Graduate Program in Historic Preservation		



BUILDING ORIENTATION ANALYSIS

THIS MAP INDICATES THE BUILDING ORIENTATIONS AND THEIR RELATION TO THE QUAD. ALL THE BUILDINGS FACE THE QUAD ON THEIR LONGITUDINAL SIDE EXCEPT FOR MEYERSON HALL.

LONGITUTINAL LINE

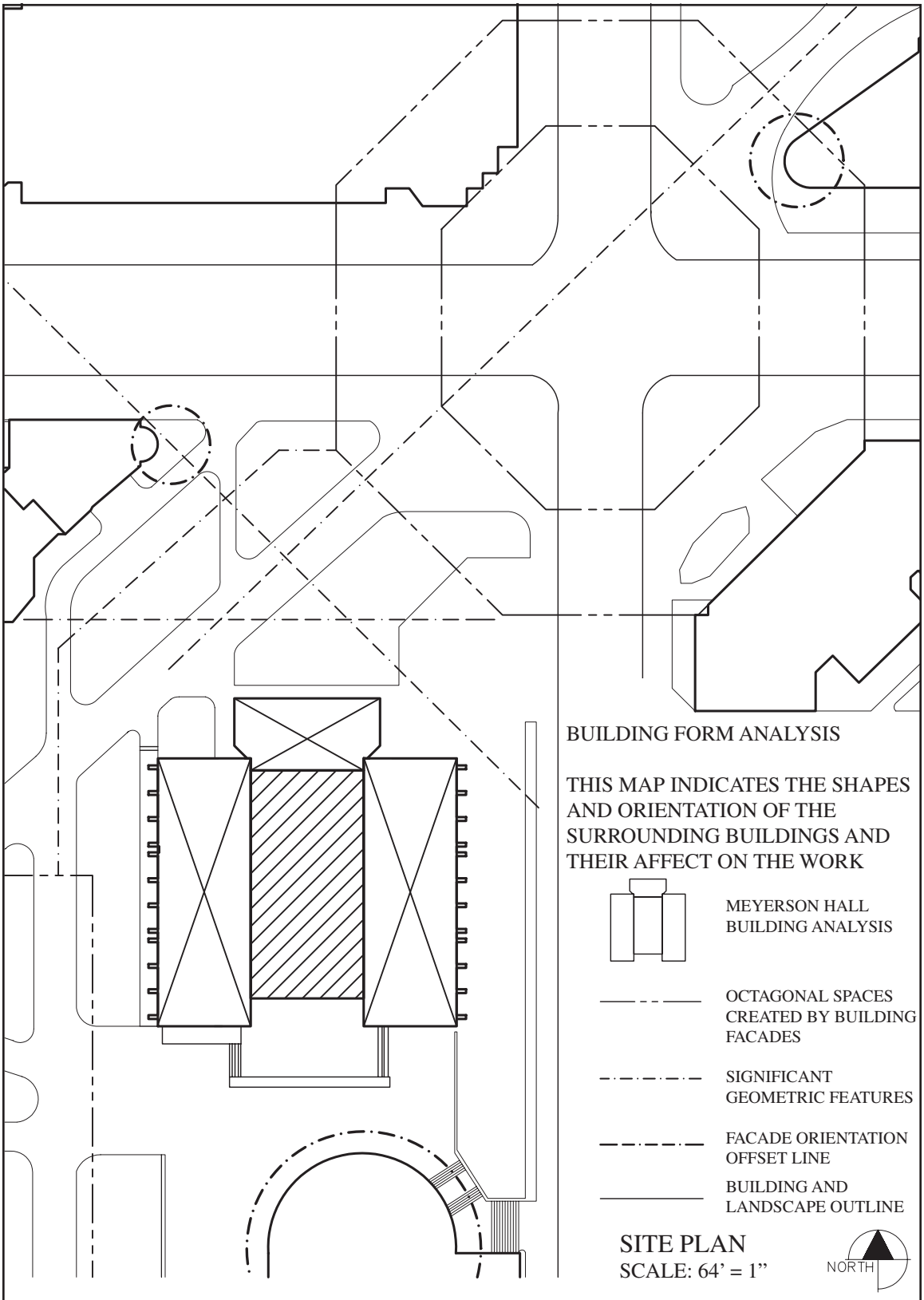
TRANSVERSE LINE

BUILDING AND LANDSCAPE OUTLINE

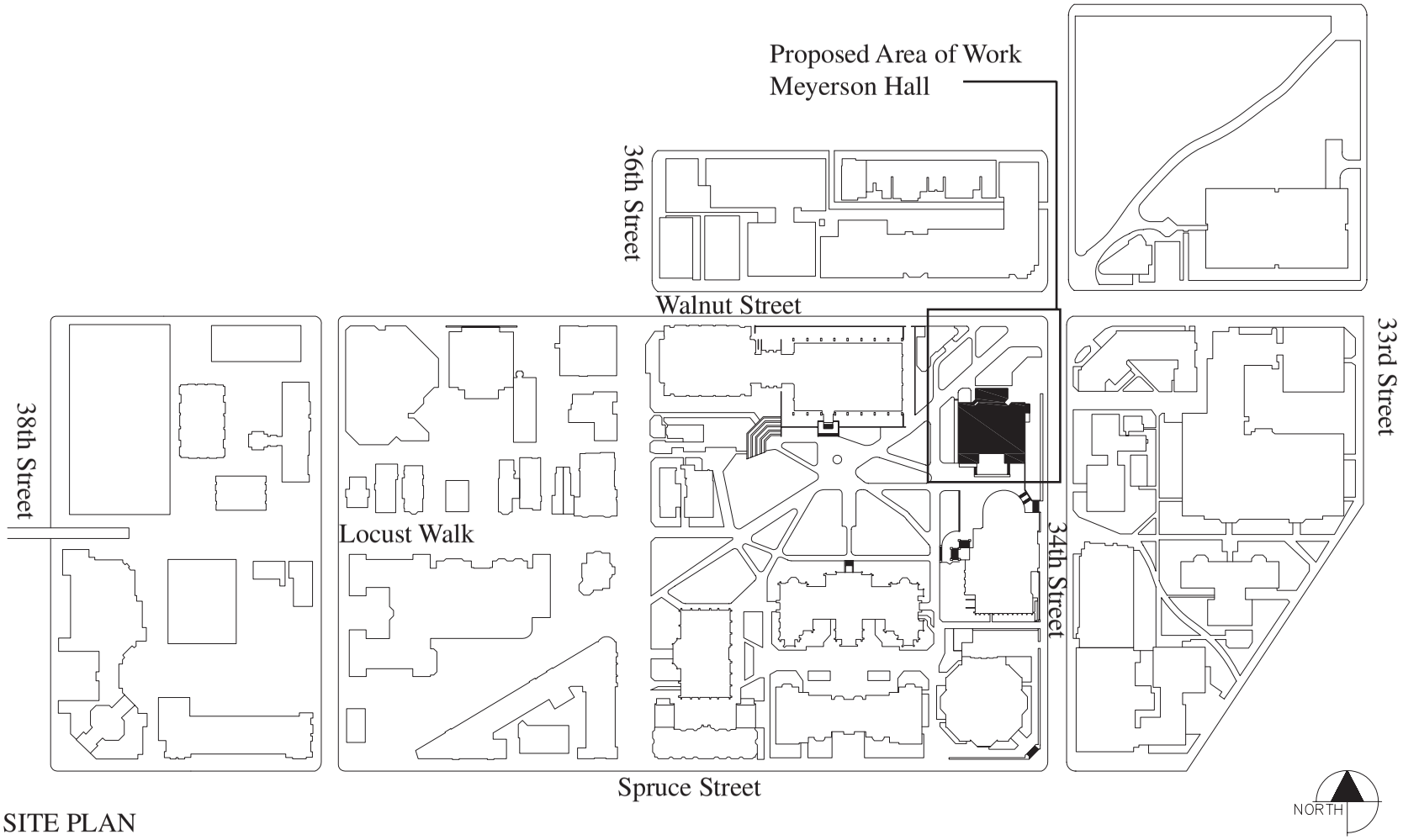
SITE PLAN
SCALE: 128' = 1"

NORTH

Meyerson Hall Addition	Gustavo Carrera May 2004	SITE ANALYSIS	SP3
University of Pennsylvania	Graduate Program in Historic Preservation		

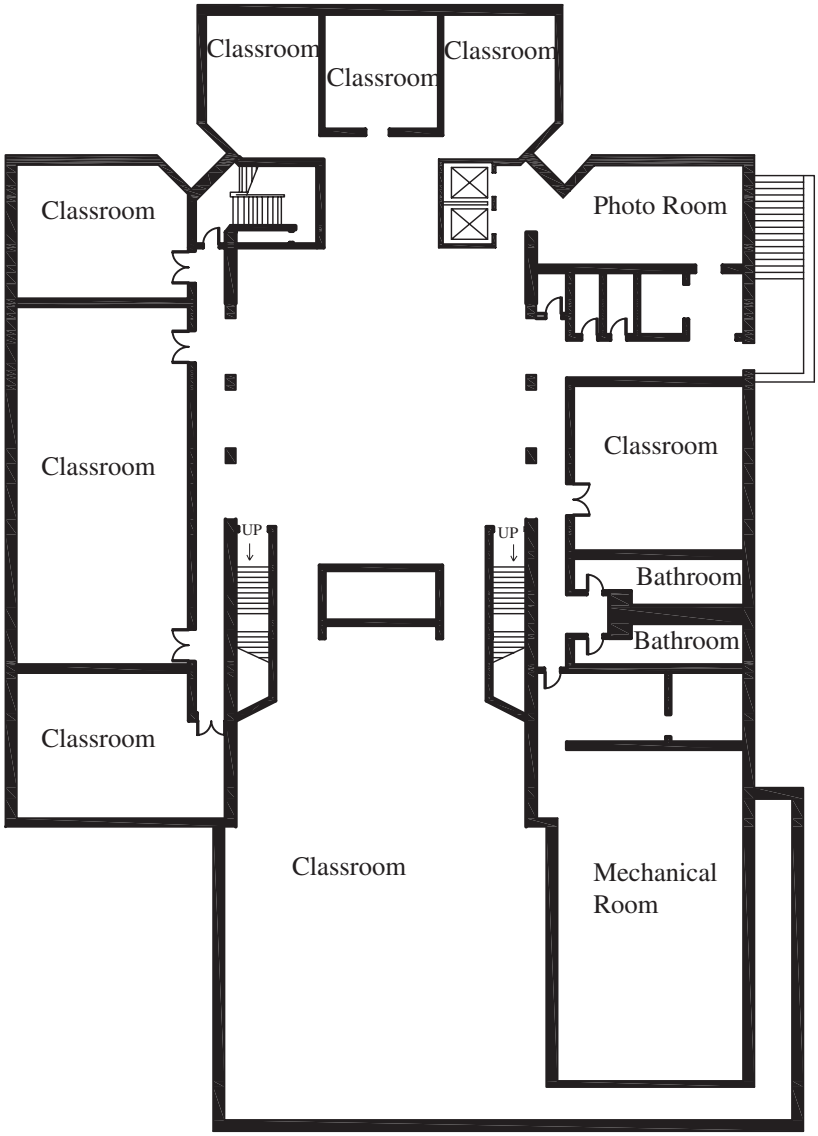


Meyerson Hall Addition	Gustavo Carrera May 2004	SP4
University of Pennsylvania	Graduate Program in Historic Preservation	



SITE PLAN
SCALE: 256' = 1"

Meyerson Hall Addition	Gustavo Carrera May 2004	EXISTING CONDITIONS	EX1
University of Pennsylvania	Graduate Program in Historic Preservation		

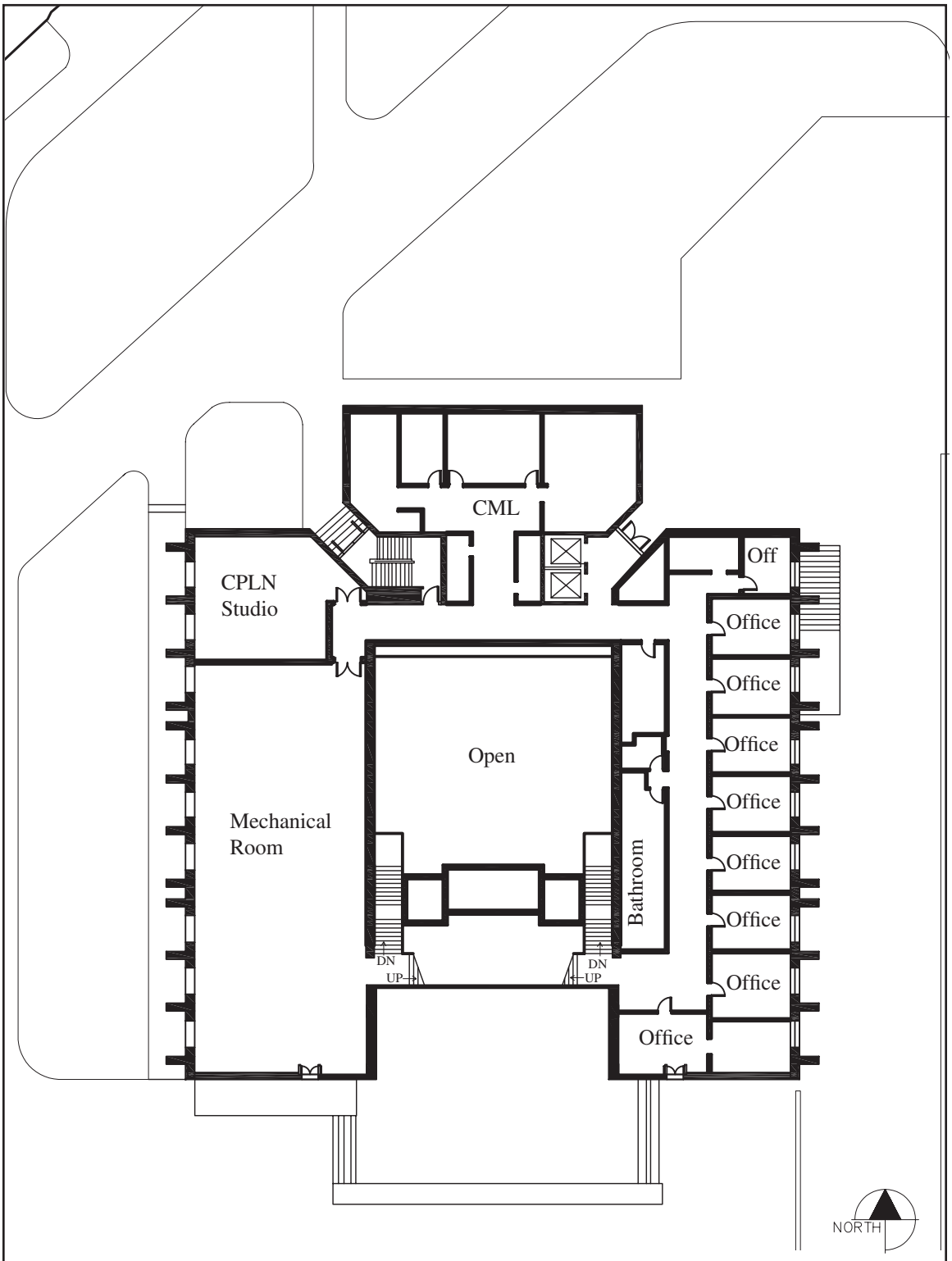


NORTH

BASEMENT PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

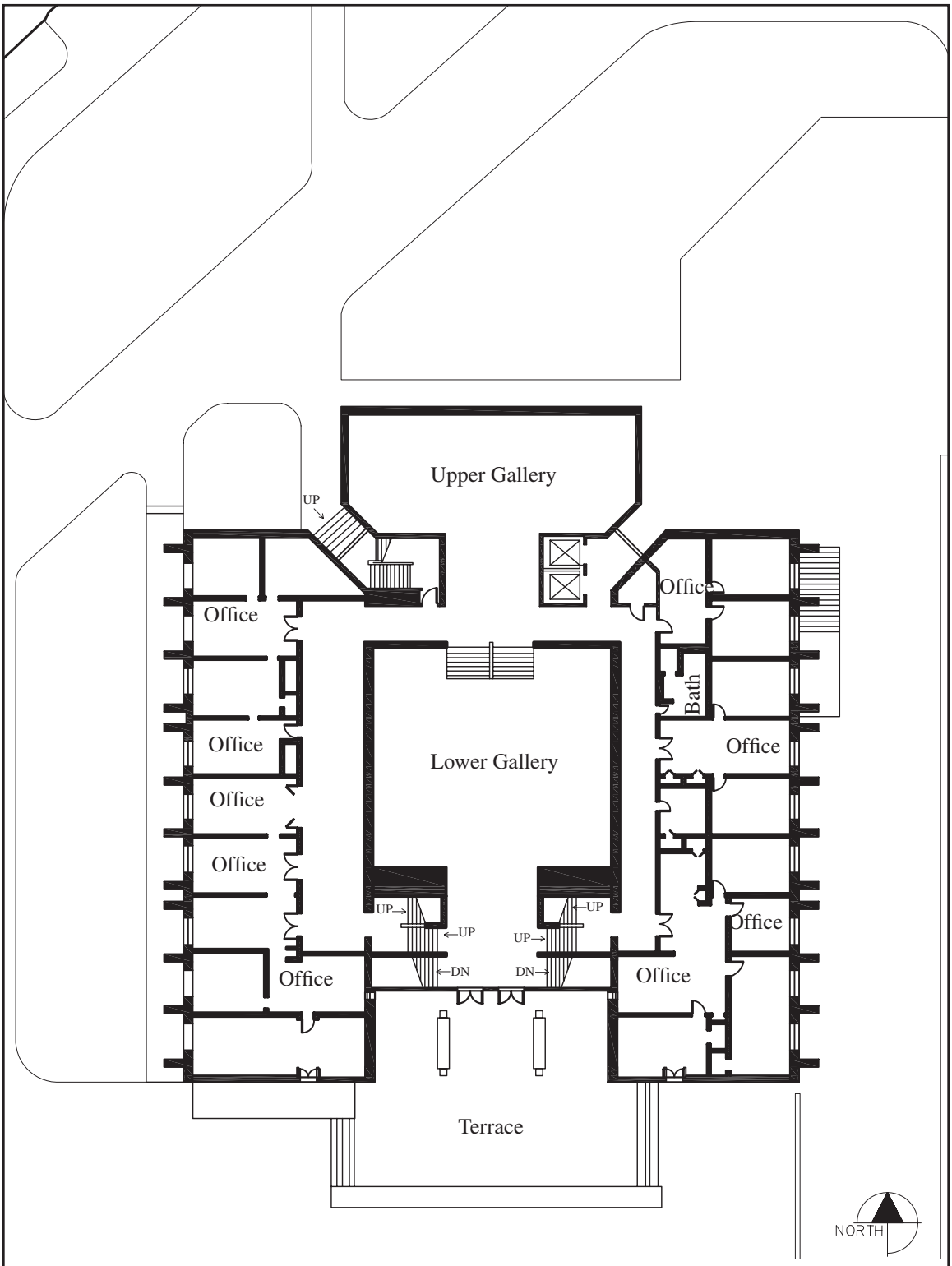
Meyerson Hall Addition	Gustavo Carrera May 2004	EX2
University of Pennsylvania	Graduate Program in Historic Preservation	



GROUND FLOOR PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

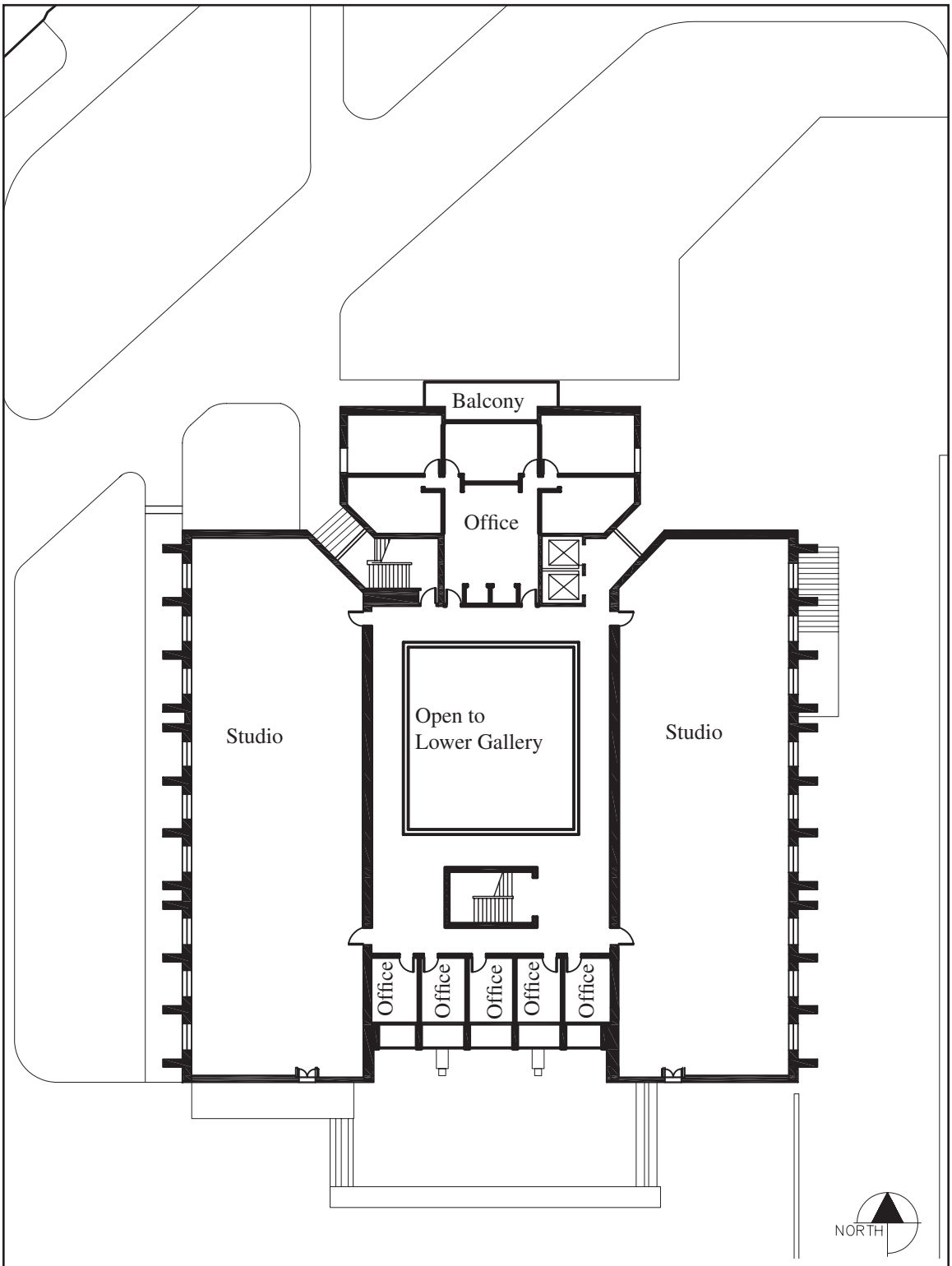
Meyerson Hall Addition	Gustavo Carrera May 2004	EX3
University of Pennsylvania	Graduate Program in Historic Preservation	



FIRST FLOOR PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

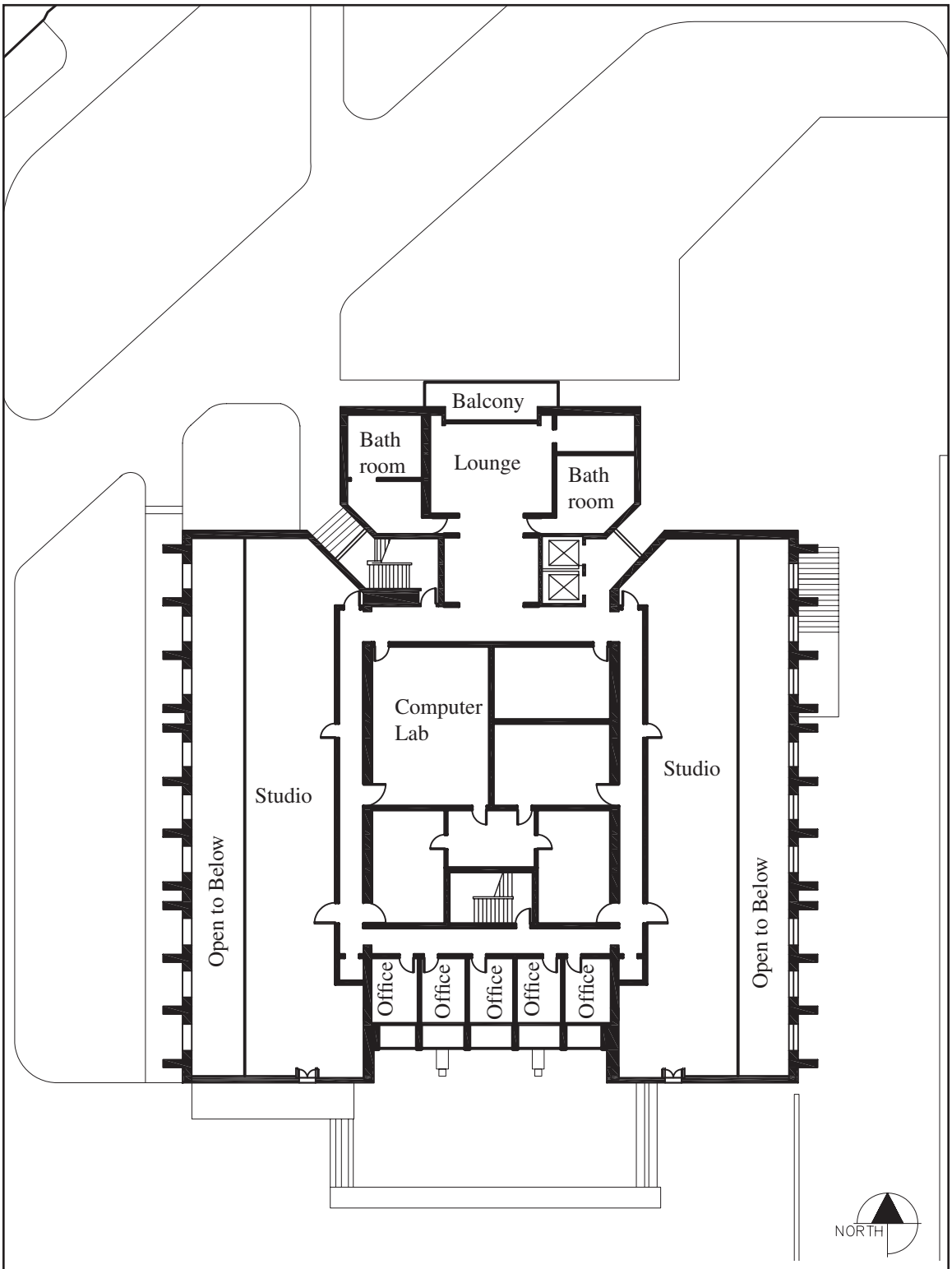
Meyerson Hall Addition	Gustavo Carrera May 2004	EX4
University of Pennsylvania	Graduate Program in Historic Preservation	



SECOND FLOOR PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

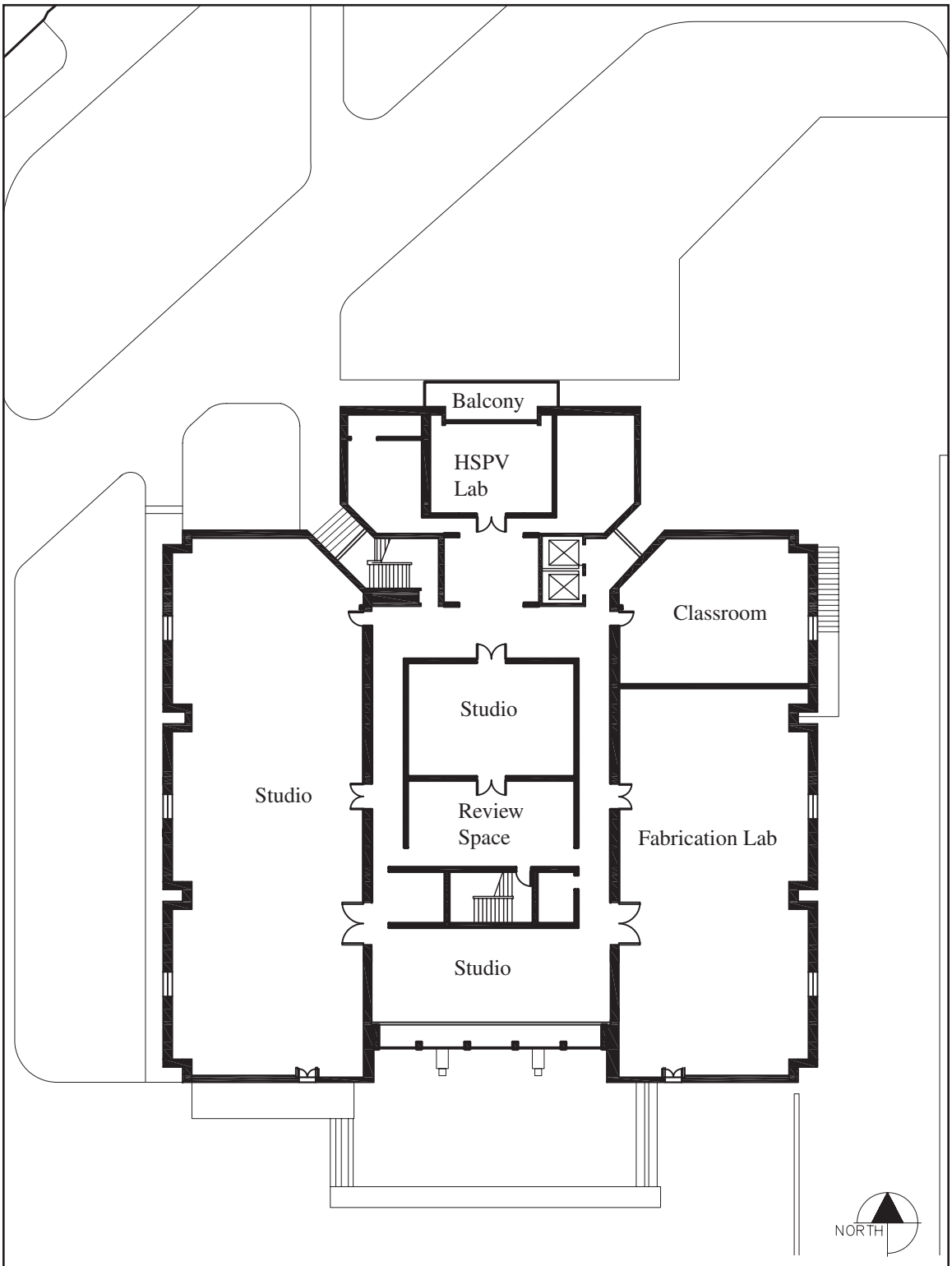
Meyerson Hall Addition	Gustavo Carrera May 2004	EX5
University of Pennsylvania	Graduate Program in Historic Preservation	



THIRD FLOOR PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

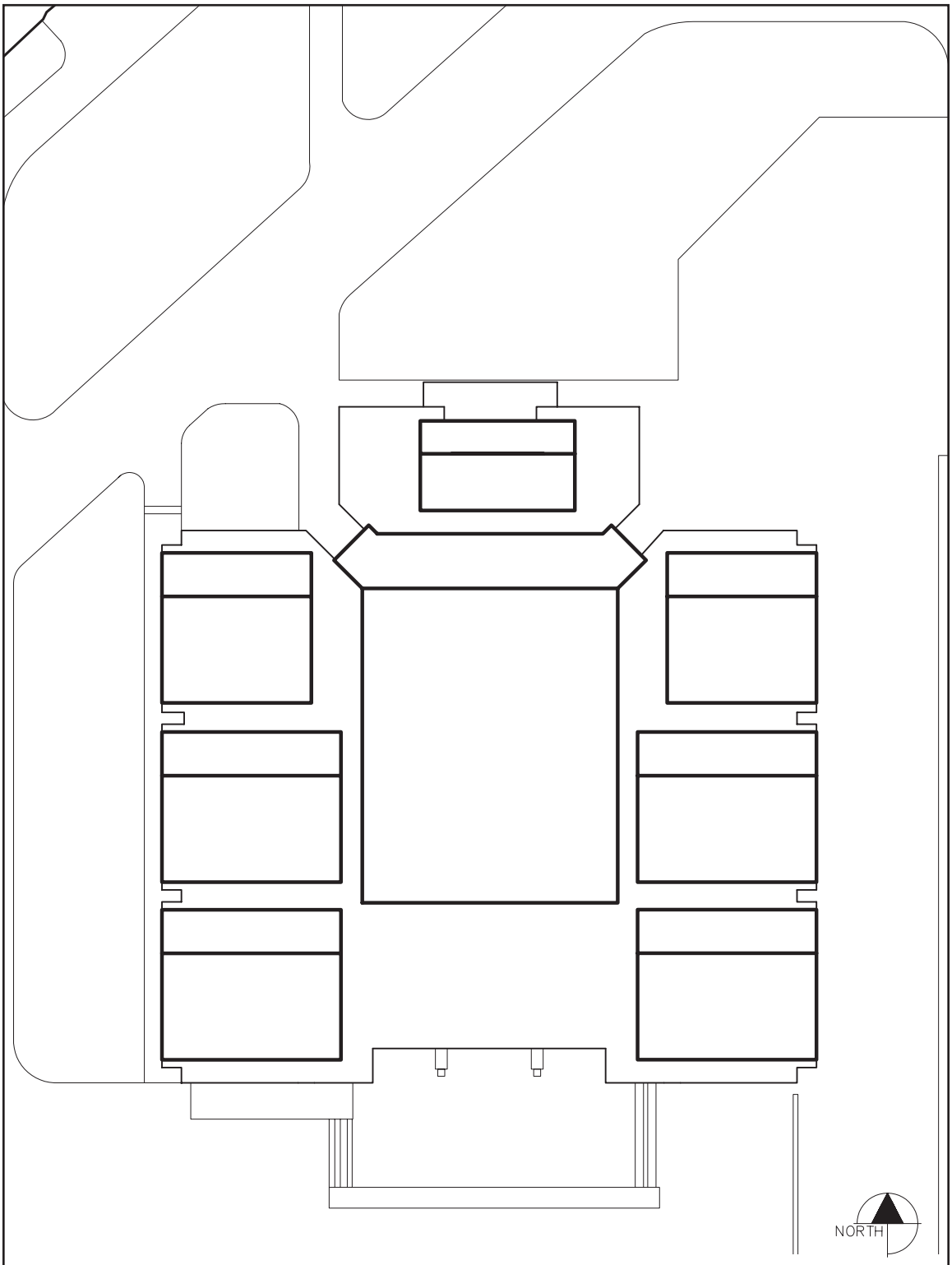
Meyerson Hall Addition	Gustavo Carrera May 2004	EX6
University of Pennsylvania	Graduate Program in Historic Preservation	



FOURTH FLOOR PLAN
SCALE: 1/32" = 1'-0"

Existing Conditions

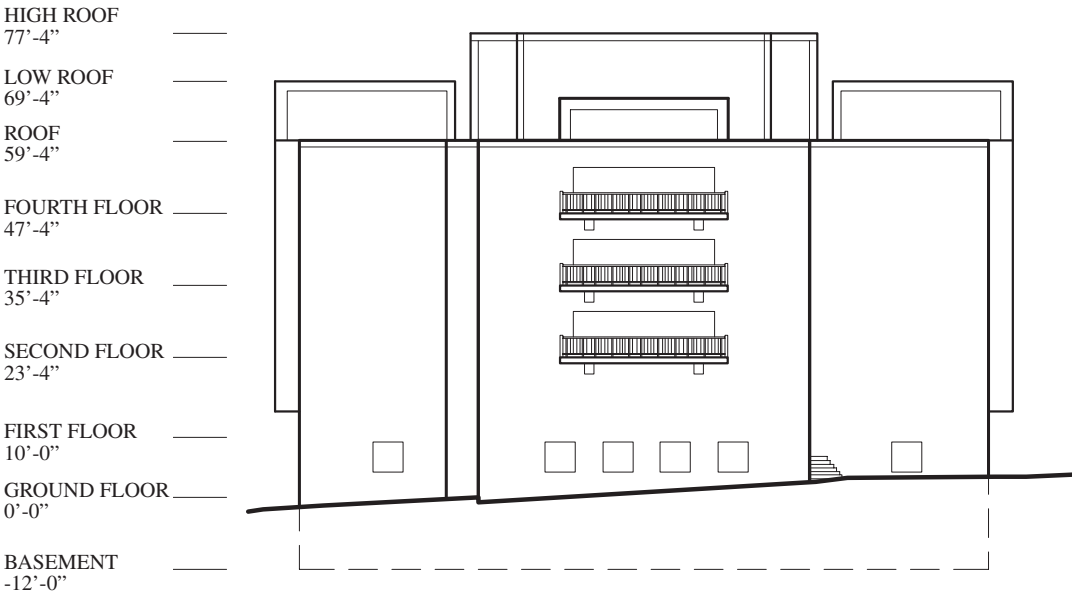
Meyerson Hall Addition	Gustavo Carrera May 2004	EX7
University of Pennsylvania	Graduate Program in Historic Preservation	



ROOF PLAN
SCALE: 1/32” = 1’-0”

Existing Conditions

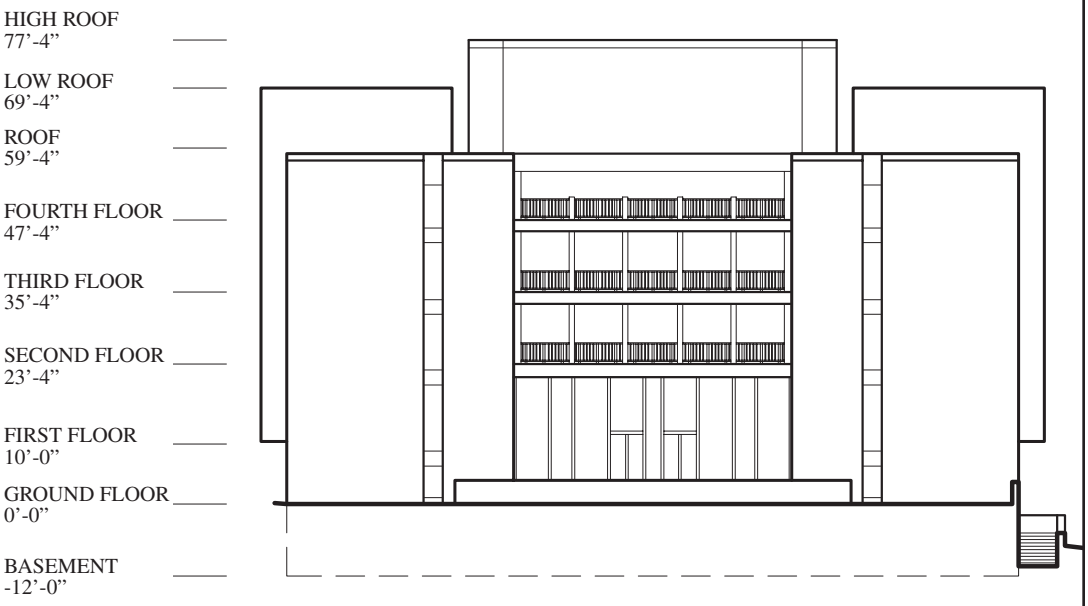
Meyerson Hall Addition	Gustavo Carrera May 2004	EX8
University of Pennsylvania	Graduate Program in Historic Preservation	



NORTH ELEVATION
SCALE: 1/32" = 1'-0"

Existing Conditions

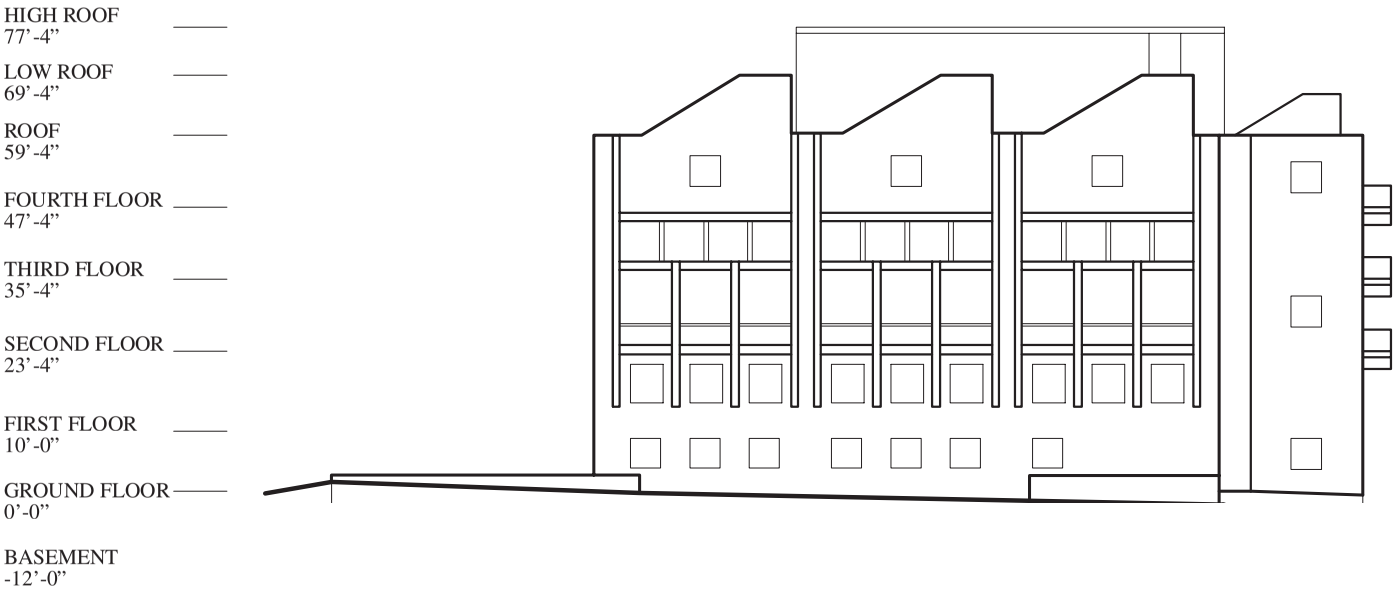
Meyerson Hall Addition	Gustavo Carrera May 2004	EX9
University of Pennsylvania	Graduate Program in Historic Preservation	



SOUTH ELEVATION
SCALE: 1/32" = 1'-0"

Existing Conditions

Meyerson Hall Addition	Gustavo Carrera May 2004	EX10
University of Pennsylvania	Graduate Program in Historic Preservation	



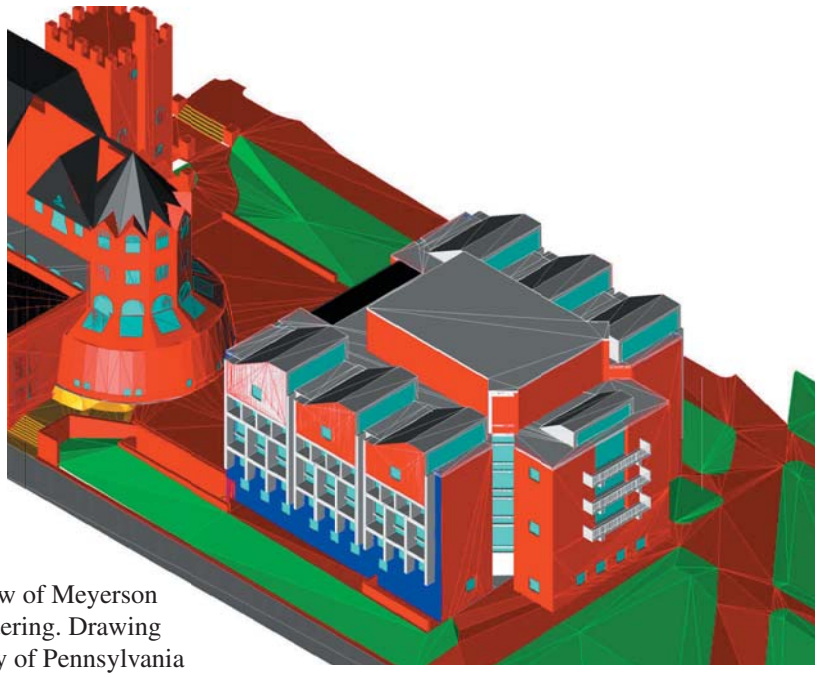
EAST ELEVATION
SCALE: 1/32" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	EXISTING CONDITIONS	EX11
University of Pennsylvania	Graduate Program in Historic Preservation		

WEST ELEVATION
SCALE: 1/32" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	EXISTING CONDITIONS	EX12
University of Pennsylvania	Graduate Program in Historic Preservation		

3D Interpretation

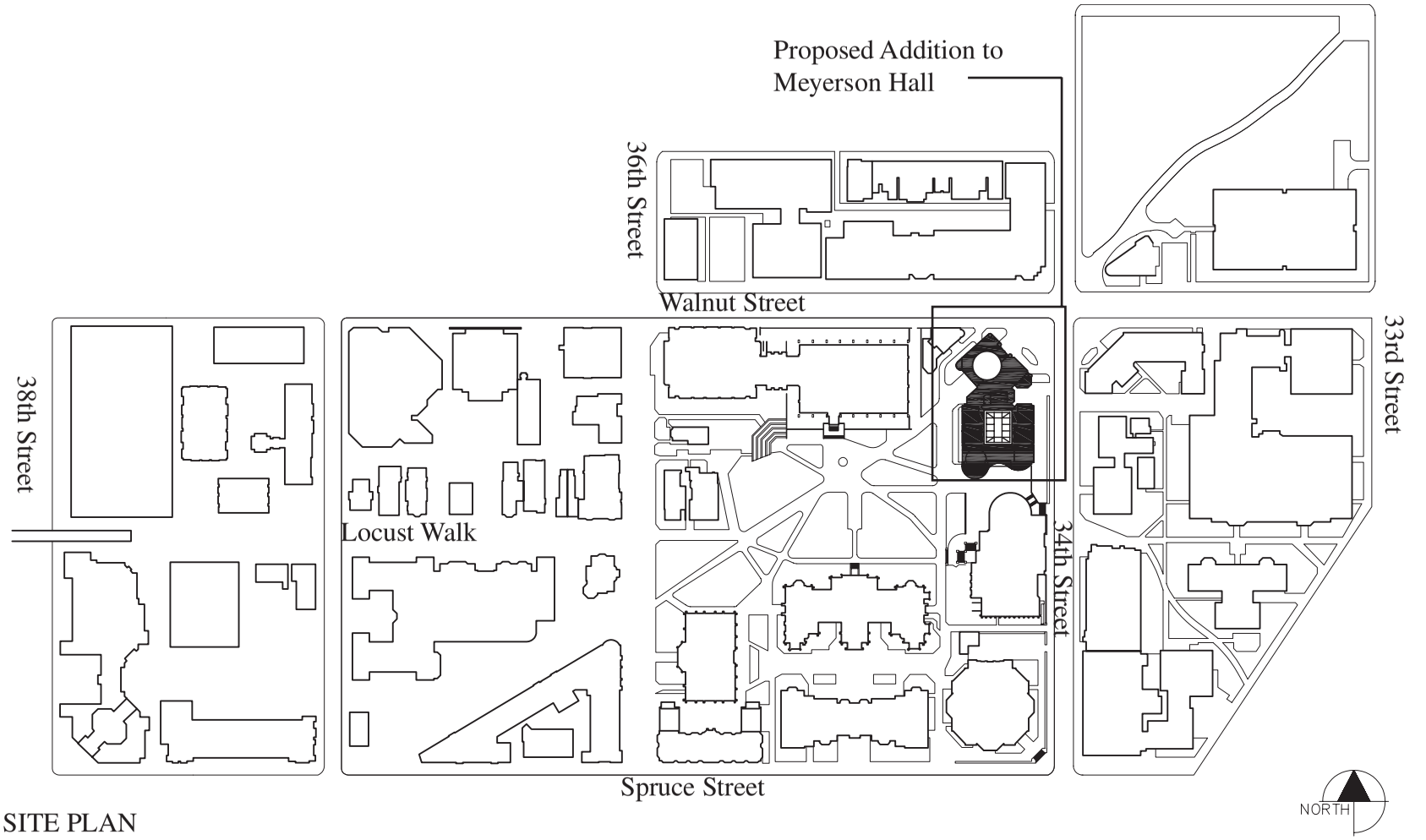


Ill. 42 Southwest view of Meyerson Hall. AutoCAD Rendering. Drawing courtesy of University of Pennsylvania Facilities & Real Estate Services.

Ill. 43 Campus Site Model. Southwest view of Meyerson Hall. Photo of University of Pennsylvania Facilities & Real Estate Services Campus Site Model

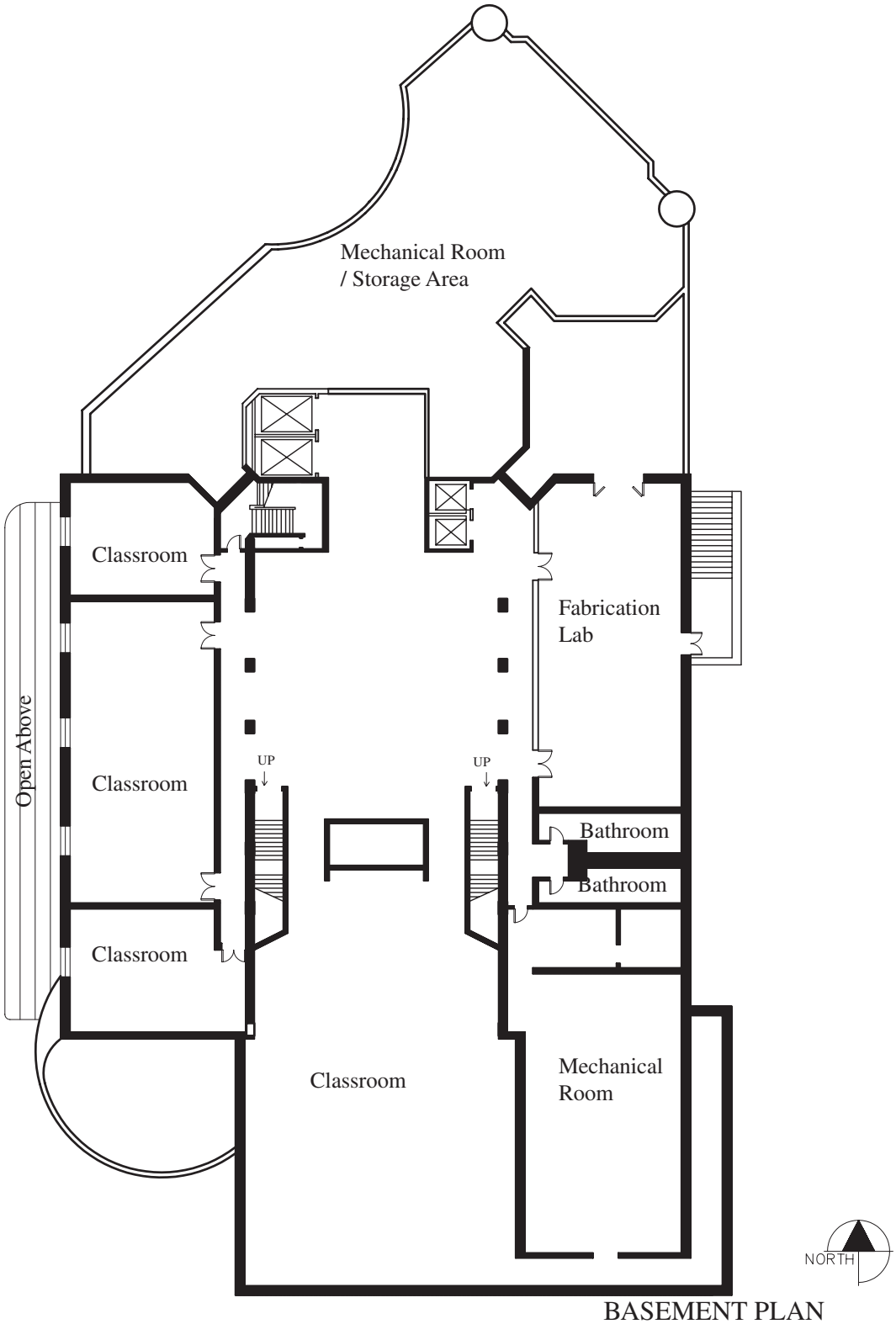
Existing Conditions

Meyerson Hall Addition	Gustavo Carrera May 2004	EX13
University of Pennsylvania	Graduate Program in Historic Preservation	



SITE PLAN
SCALE: 256' = 1"

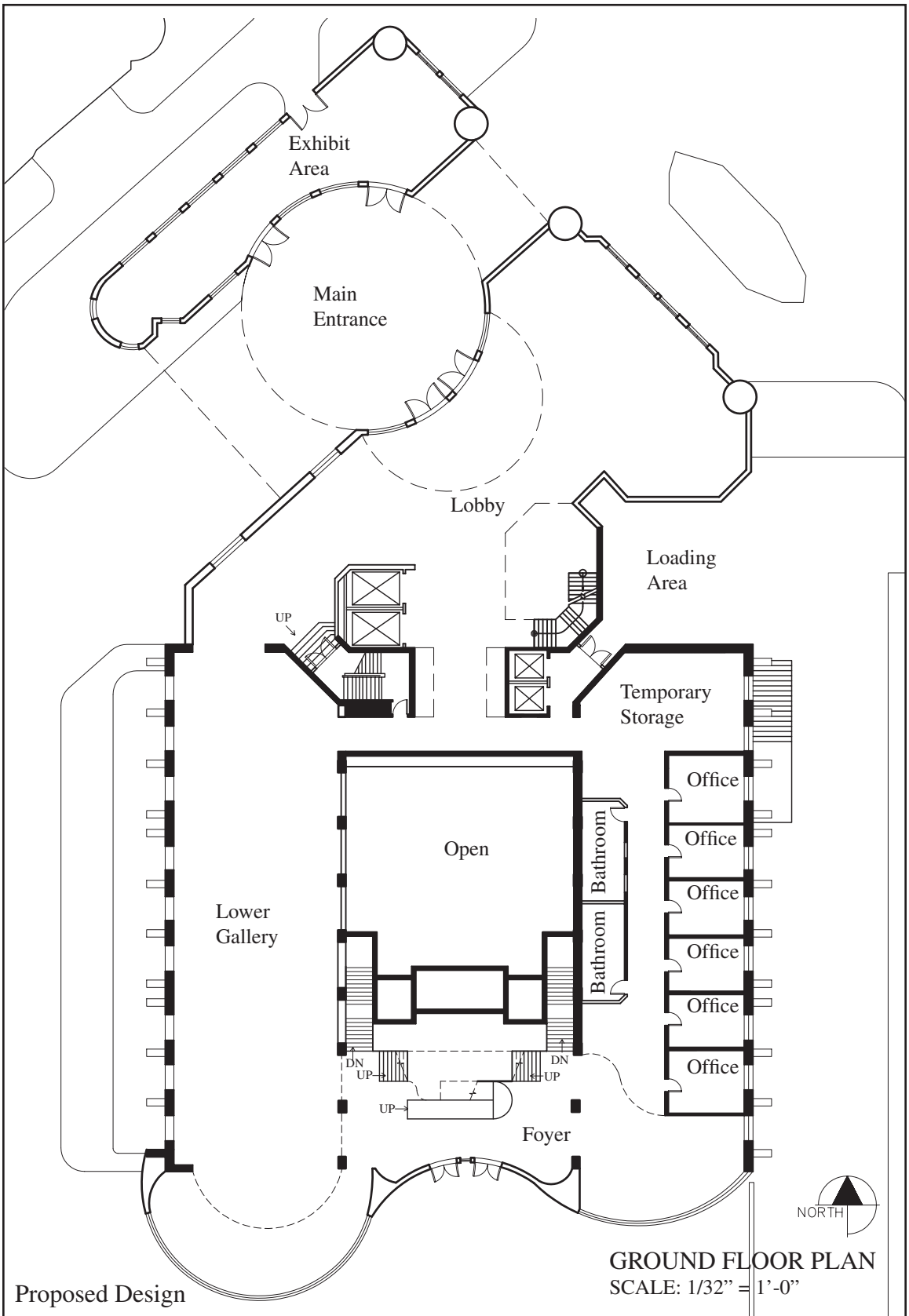
Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN	A1
University of Pennsylvania	Graduate Program in Historic Preservation		



BASEMENT PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

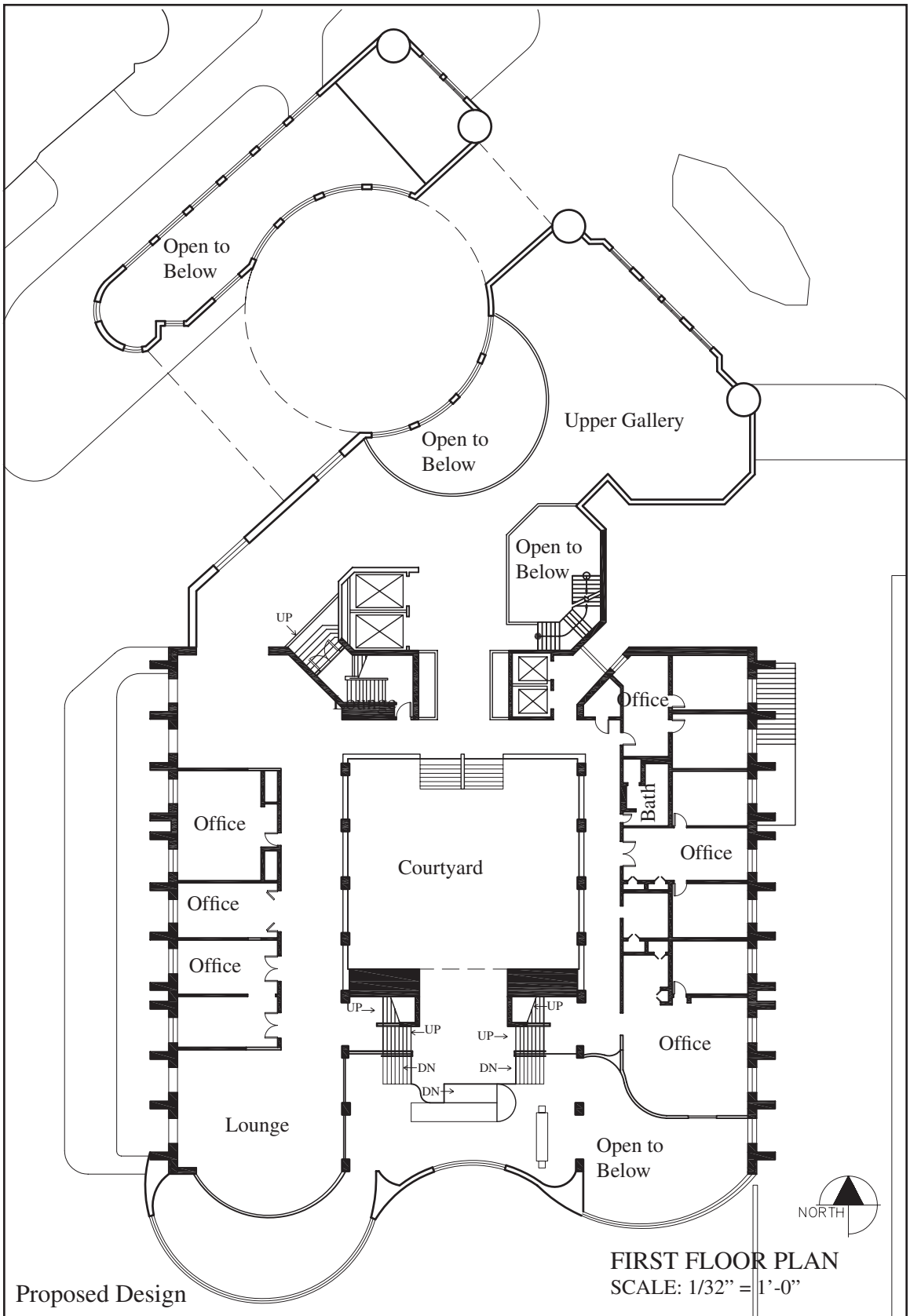
Meyerson Hall Addition	Gustavo Carrera May 2004	A2
University of Pennsylvania	Graduate Program in Historic Preservation	



GROUND FLOOR PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

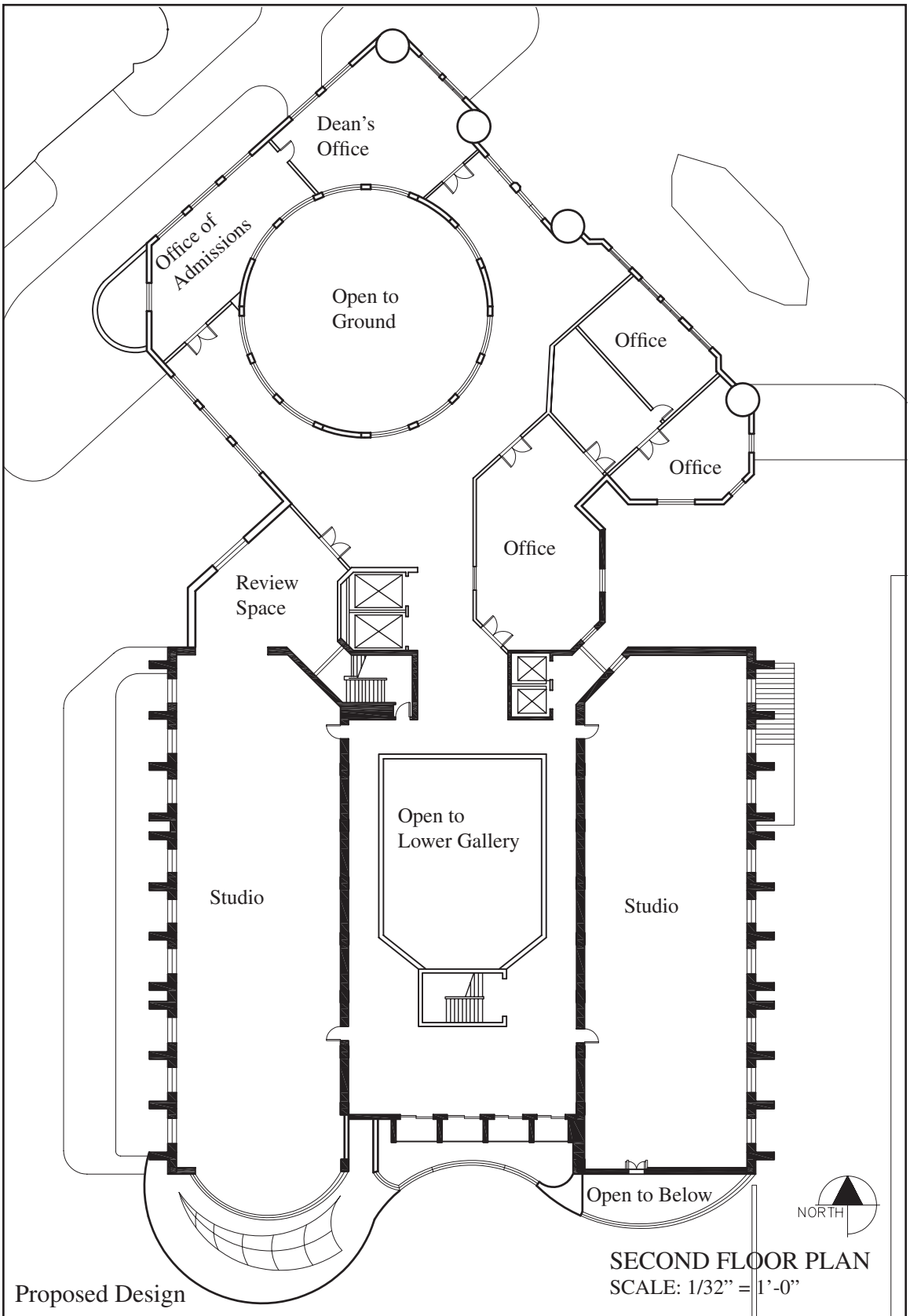
Meyerson Hall Addition	Gustavo Carrera May 2004	A3
University of Pennsylvania	Graduate Program in Historic Preservation	



FIRST FLOOR PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

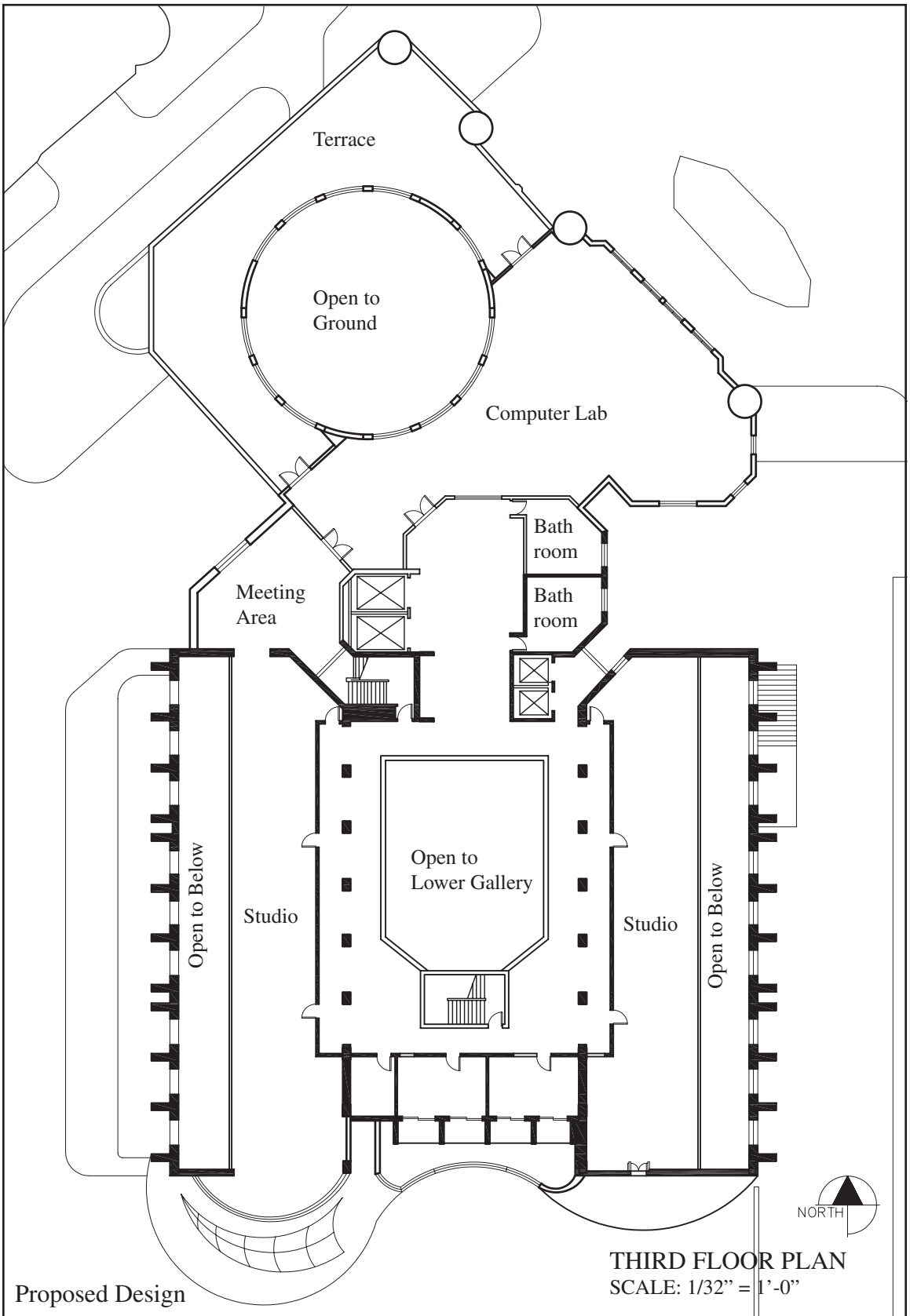
Meyerson Hall Addition	Gustavo Carrera May 2004	A4
University of Pennsylvania	Graduate Program in Historic Preservation	



SECOND FLOOR PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

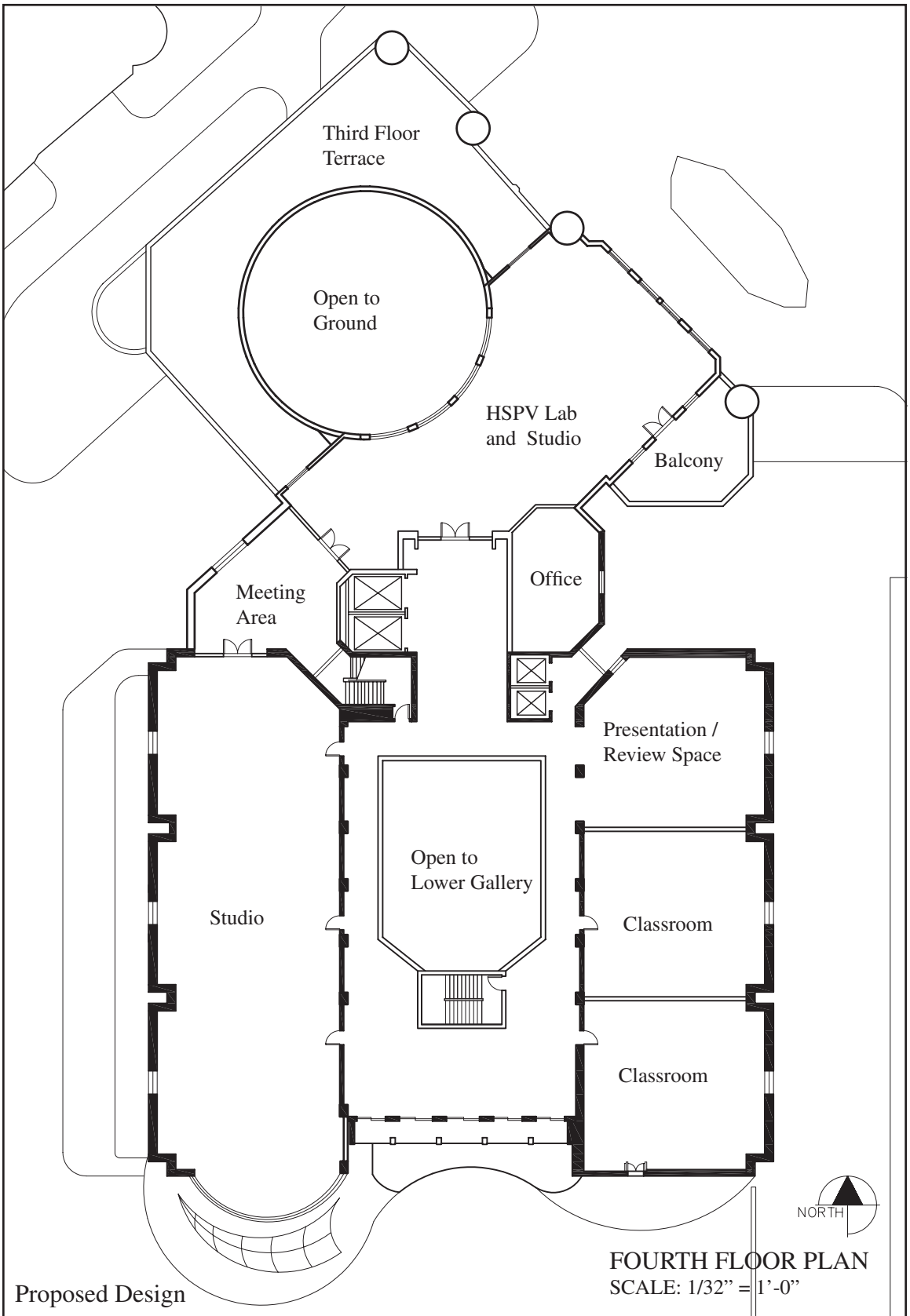
Meyerson Hall Addition	Gustavo Carrera May 2004	A5
University of Pennsylvania	Graduate Program in Historic Preservation	



THIRD FLOOR PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

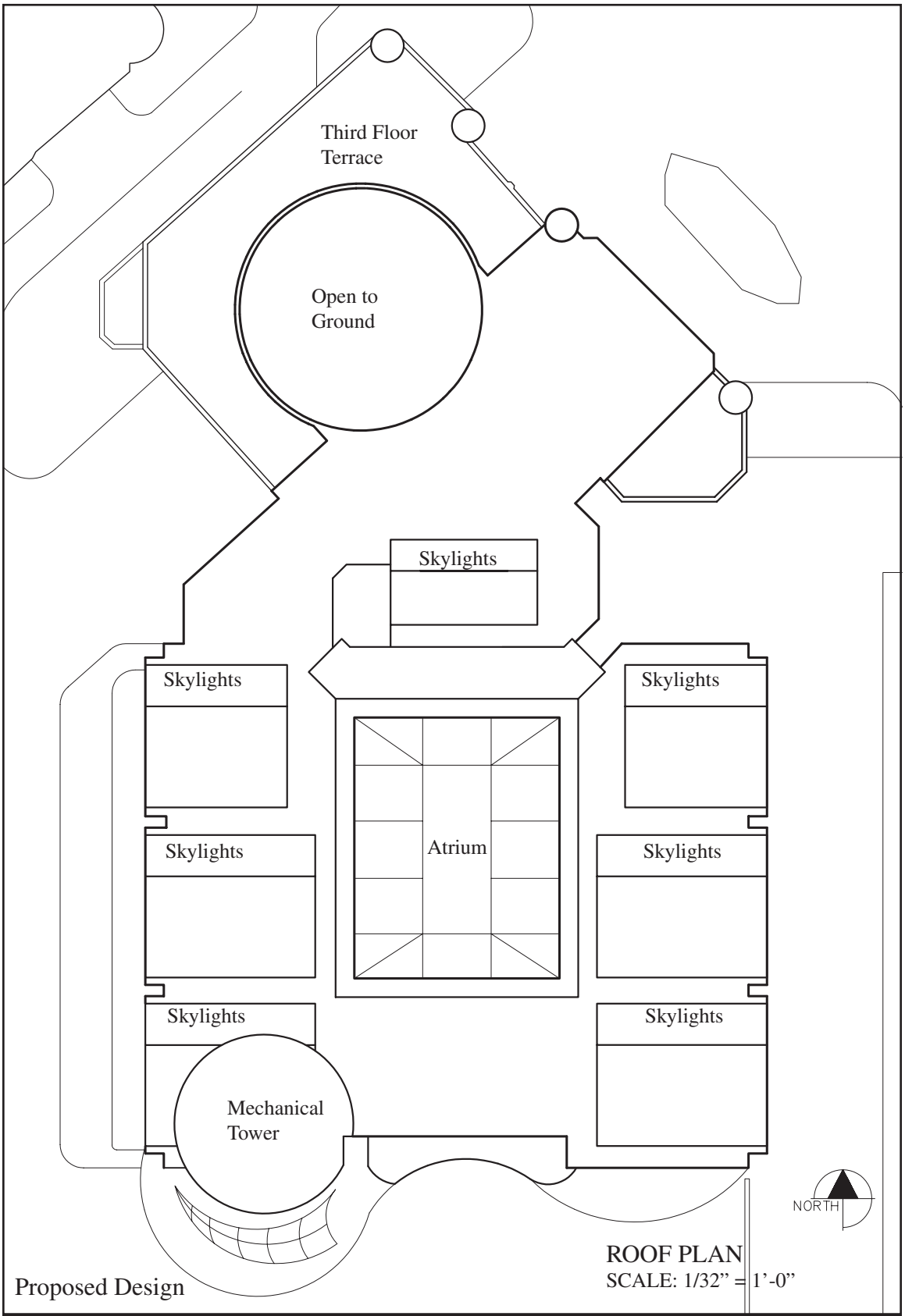
Meyerson Hall Addition	Gustavo Carrera May 2004	A6
University of Pennsylvania	Graduate Program in Historic Preservation	



FOURTH FLOOR PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

Meyerson Hall Addition	Gustavo Carrera May 2004	A7
University of Pennsylvania	Graduate Program in Historic Preservation	



ROOF PLAN
SCALE: 1/32" = 1'-0"

Proposed Design

Meyerson Hall Addition	Gustavo Carrera May 2004	A8
University of Pennsylvania	Graduate Program in Historic Preservation	

TOWER
94'-4"

ATRIUM
82'-4"

LOW ROOF
69'-4"

ROOF
59'-4"

FOURTH FLOOR
47'-4"

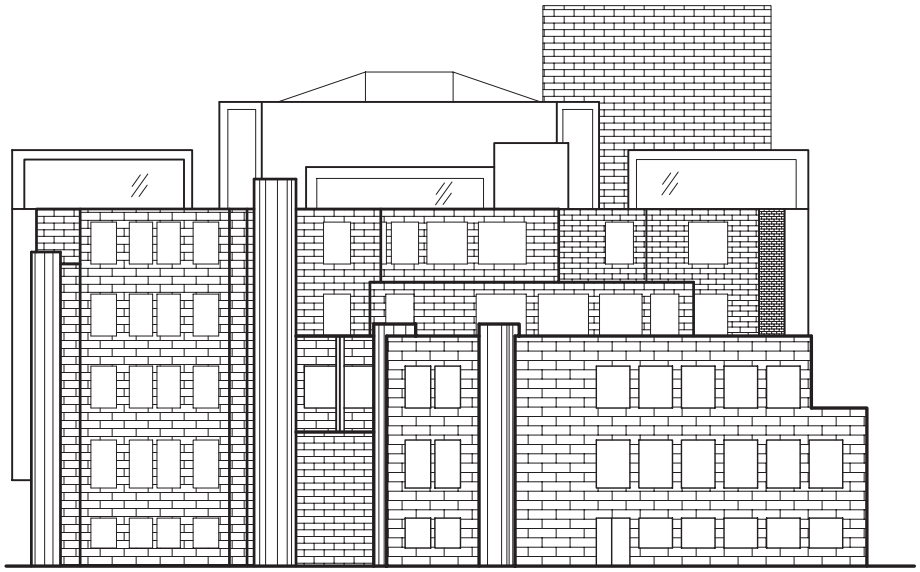
THIRD FLOOR
35'-4"

SECOND FLOOR
23'-4"

FIRST FLOOR
10'-0"

GROUND FLOOR
0'-0"

BASEMENT
-12'-0"



NORTH ELEVATION
SCALE: 1/32" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN	A9
University of Pennsylvania	Graduate Program in Historic Preservation		

TOWER
94’-4”

ATRIUM
82’-4”

LOW ROOF
69’-4”

ROOF
59’-4”

FOURTH FLOOR
47’-4”

THIRD FLOOR
35’-4”

SECOND FLOOR
23’-4”

FIRST FLOOR
10’-0”

GROUND FLOOR
0’-0”

BASEMENT
-12’-0”

SOUTH ELEVATION
SCALE: 1/32” = 1’-0”

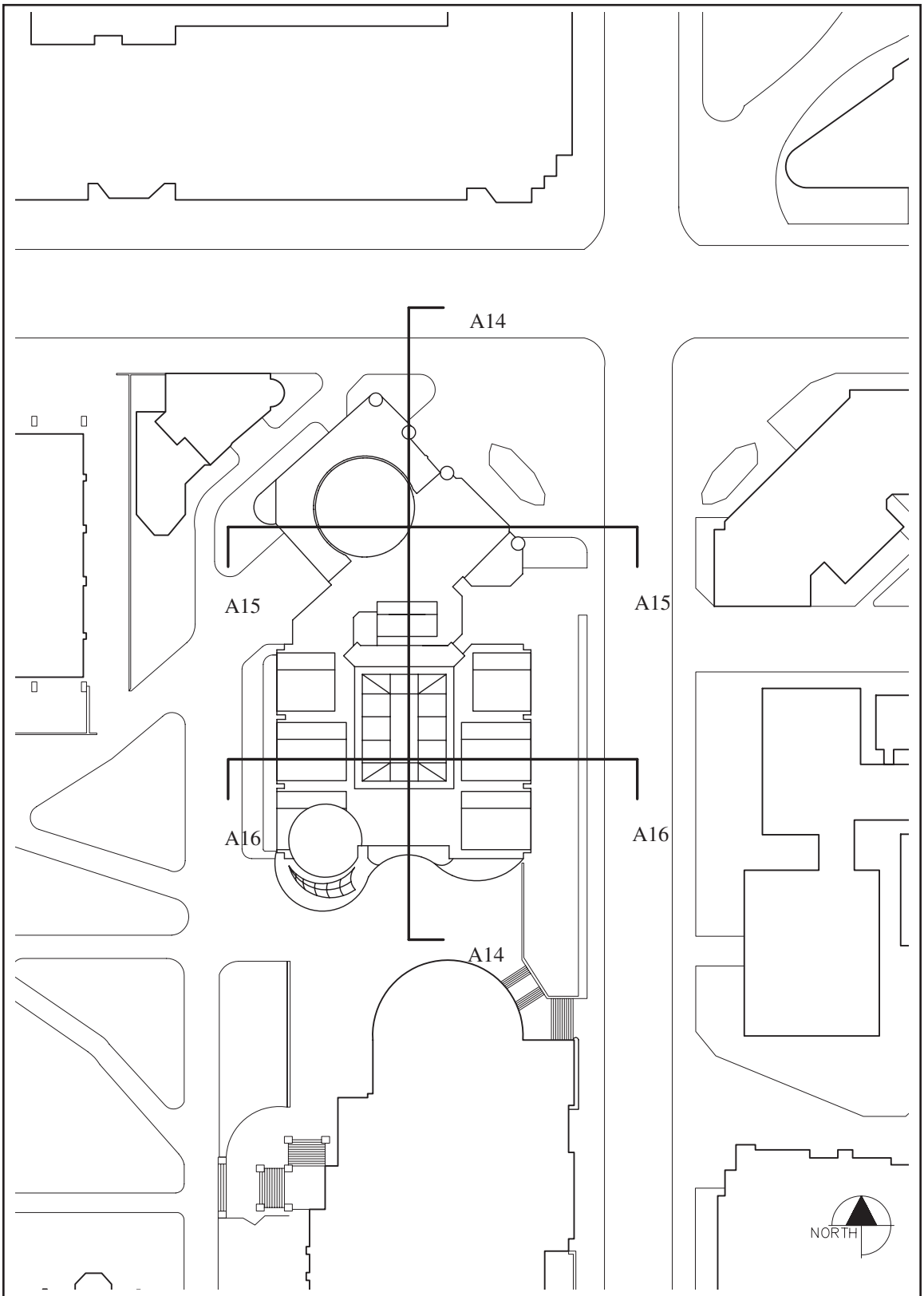
Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN	A10
University of Pennsylvania	Graduate Program in Historic Preservation		

EAST ELEVATION
SCALE: 1/32” = 1’-0”

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN	A11
University of Pennsylvania	Graduate Program in Historic Preservation		

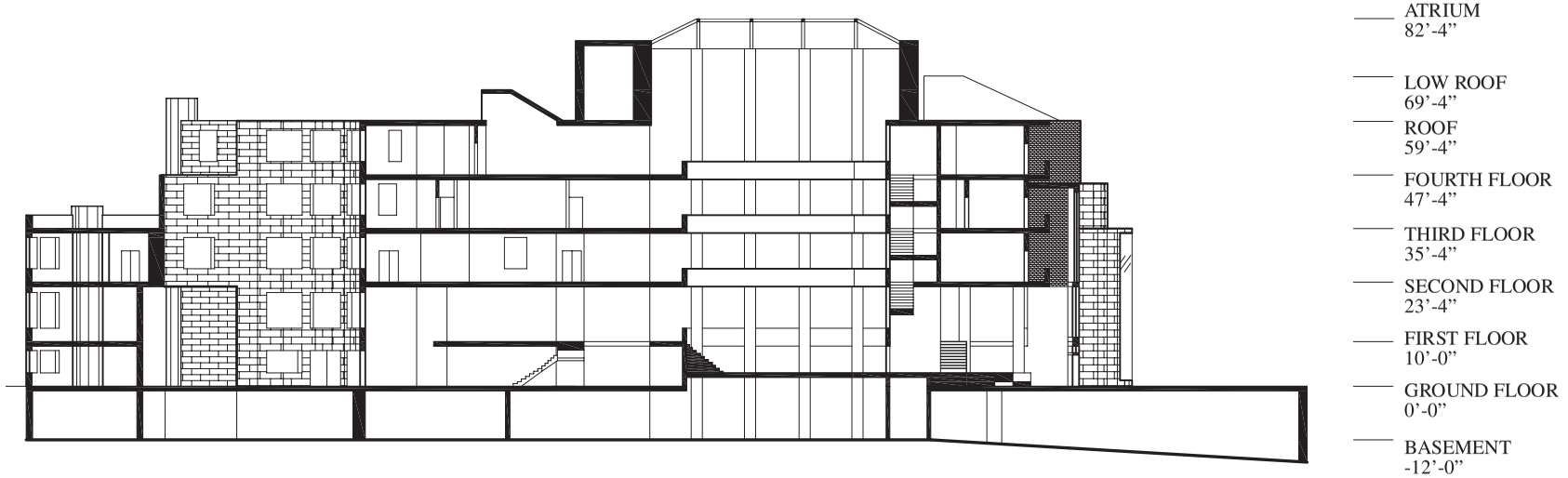
WEST ELEVATION
SCALE: 1/32” = 1’-0”

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN	A12
University of Pennsylvania	Graduate Program in Historic Preservation		



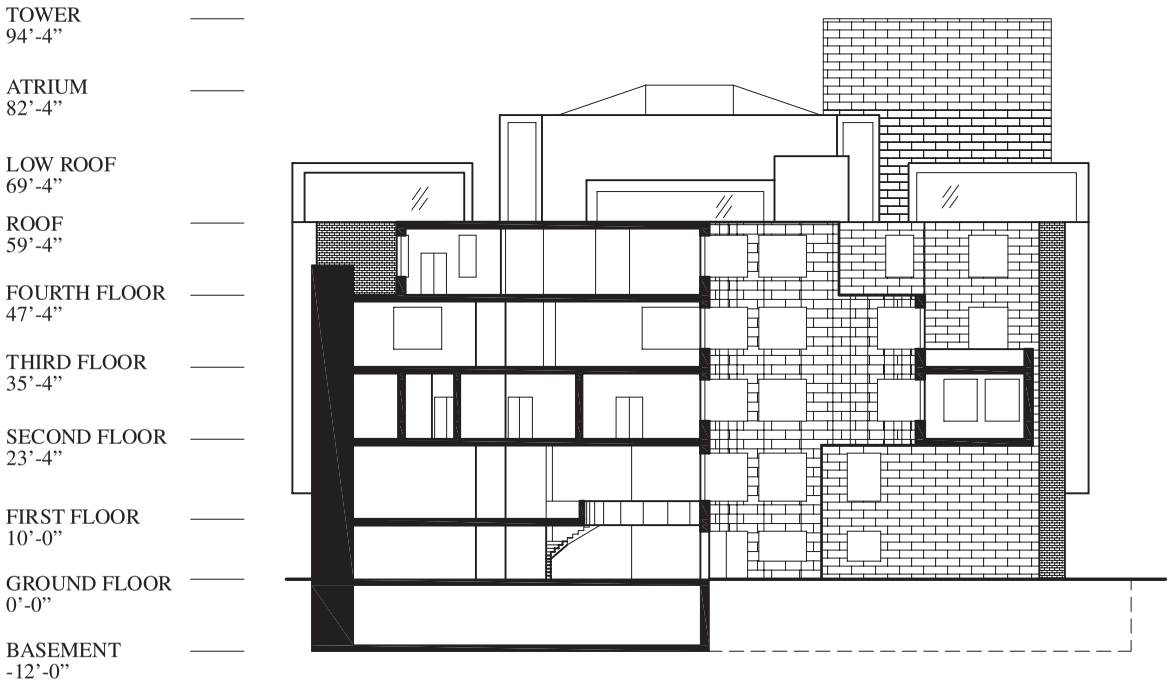
Proposed Design

Meyerson Hall Addition	Gustavo Carrera May 2004	A13
University of Pennsylvania	Graduate Program in Historic Preservation	



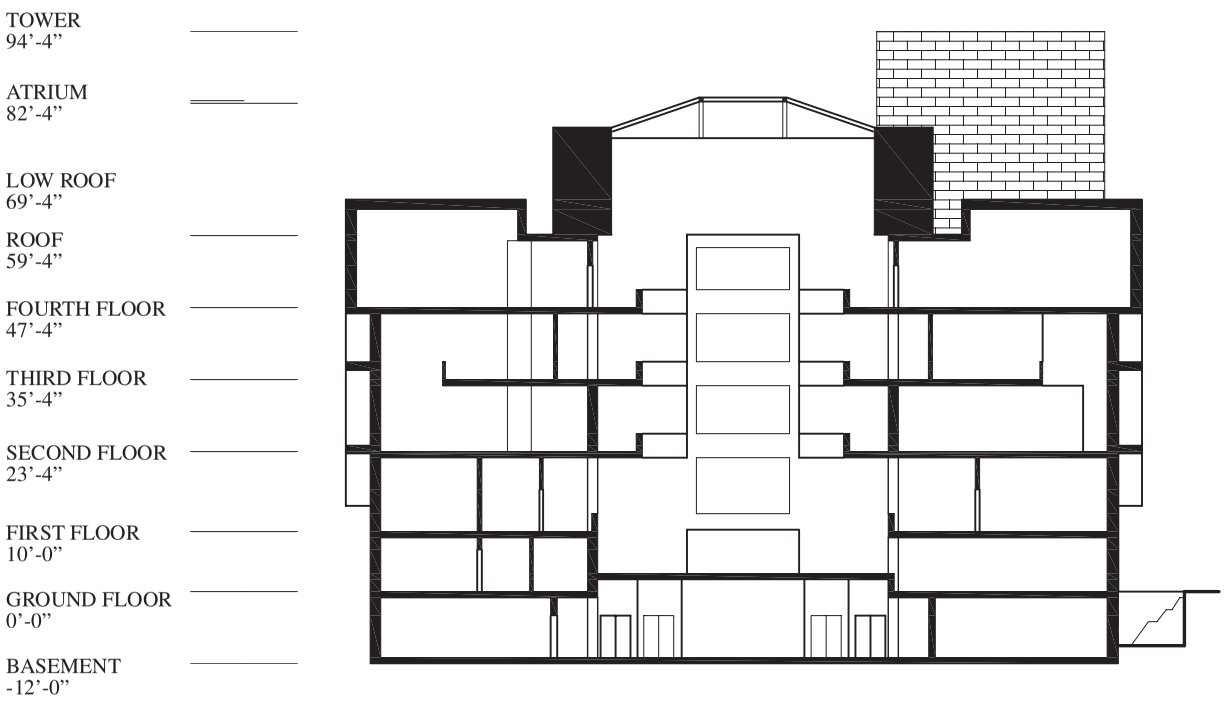
LONGITUDINAL SECTION
SCALE: 1/40" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN SECTIONS	A14
University of Pennsylvania	Graduate Program in Historic Preservation		



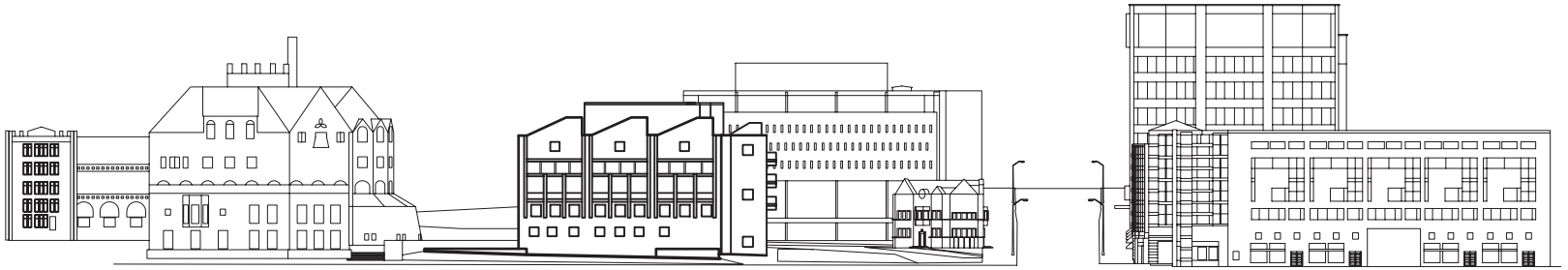
TRANSVERSE SECTION
SCALE: 1/32" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN SECTIONS	A15
University of Pennsylvania	Graduate Program in Historic Preservation		



TRANSVERSE SECTION
SCALE: 1/32" = 1'-0"

Meyerson Hall Addition	Gustavo Carrera May 2004	PROPOSED DESIGN SECTIONS	A16
University of Pennsylvania	Graduate Program in Historic Preservation		



EXISTING EAST ELEVATION

PROPOSED EAST ELEVATION

NOT TO SCALE

Meyerson Hall Addition	Gustavo Carrera May 2004	East Elevations in Context	A17
University of Pennsylvania	Graduate Program in Historic Preservation		

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