

ABSTRACT

Title of thesis: ARCHITECTURE THAT EMBODIES THE SYMBOLIC
 NATURE OF GOOD LEADERSHIP AND PROMOTES
 PRODUCTIVE COLLABORATION BETWEEN WOMEN'S
 INTERNATIONAL ORGANIZATIONS
 WILL: WOMEN'S INTERNATIONAL LEADERSHIP LEAGUE

Carol Diahann Bandy, Master of Architecture, 2004

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 Department of Architecture

Women provide leadership toward economic, political, and social advancements in the world. In order to consolidate their efforts under one roof, and promote leadership activities of the many women's international organizations, the US Government has authorized funding for the design and construction of a building that serves as a center for women's leadership internationally. The project proposed herein provides such a facility and is hereafter referred to as WILL, the Women's International Leadership League. Through architectural and urban relationships, the center embodies the symbolic nature and traits of good leadership and promotes the productive collaboration of women's international organizations as they focus their attentions to global problems and solutions.

ARCHITECTURE THAT EMBODIES THE SYMBOLIC NATURE OF GOOD
LEADERSHIP AND PROMOTES PRODUCTIVE COLLABORATION BETWEEN
WOMEN'S INTERNATIONAL ORGANIZATIONS
WILL: WOMEN'S INTERNATIONAL LEADERSHIP LEAGUE

by

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Thesis submitted to the Faculty of the Graduate School of the University of Maryland,
College Park in partial fulfillment of the requirements for the degree of
Master of Architecture
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Advisory Committee:

Professor Roger K. Lewis, Chair
Professor Richard Etlin
Professor Julie Gabrielli

DEDICATION

During this process, many times, I was overwhelmed with amount of joy that filled my heart -being able to work with wonderful creative minds. They became apart of this project in tangible real ways, as well as in spirit. It seemed that many were touched by my project and what I was trying to accomplish as I followed my intuition moving forward with determination. I am thankful and will never forget, for they have become apart of my growth and who I am today and forever.

Roger Lewis trusted me, my instincts, and took a risk allowing me to explore a difficult building form and socially challenging topic. I learned a great deal from his tremendous wealth of knowledge. For this, I will always hold him in the highest regard. Thank you, Roger.

Things always happen for a reason. And I could not have been more pleased with my two other committee chairs, Richard Etlin and Julie Gabrielli. Seemed that this project and all of us as a team, working together, was the way it was suppose to be. It felt right and natural for this project and for me personally.

I would like to acknowledge my family and friends for their love, support and for all they have sacrificed to make my dreams happen. My gratitude is deep. Thank you, Ian and Nina Paulin. You are the loves of my life and I have never felt more fortunate to be around two more incredible people.

TABLE OF CONTENTS

| | |
|--|------|
| List of Figures | iv |
| Introduction | ix |
| I. LEADERSHIP..... | p.1 |
| II. THE SITE..... | p. 3 |
| Site Description | |
| Site History | |
| Site Analysis | |
| Site Intervention | |
| III. PROGRAM..... | p.30 |
| Program Introduction | |
| Program Description | |
| Tabulation | |
| IV. PRECEDENT..... | p.38 |
| V. DESIGN OBJECTIVES AND CHALLENGES..... | p.52 |
| Master Planning | |
| Building | |
| VI. DESIGN STRATEGIES..... | p.59 |
| VII. DESIGN CONCLUSIONS..... | p.65 |
| Bibliography | p.74 |

LIST OF FIGURES

| | | |
|-----------|---|------|
| Figure 1 | Vicinity map showing the DC/Metro area. | p. 3 |
| Figure 2 | Location of Cluster 5 within The District of Columbia | p. 3 |
| Figure 3 | Location of WILL within Cluster 5 | p. 4 |
| Figure 4 | L'Enfants Original Plan for the District of Columbia | p. 4 |
| Figure 5 | Aerial photo with Square 25 highlighted | p. 5 |
| Figure 6 | Site Plan showing location of WILL | p. 6 |
| Figure 7 | Key of photographs | p. 6 |
| Figure 8 | View 1: Historic Residential Townhouses | p. 7 |
| Figure 9 | View 2: West End Public Library | p. 7 |
| Figure 10 | View 3: Later Addition to Columbia Hospital for Women | p. 7 |
| Figure 11 | View 4: Later Addition to Columbia Hospital for Women | p. 8 |
| Figure 12 | View 5: Future Site of WILL | p. 8 |
| Figure 13 | View 6: Future site of WILL | p. 8 |
| Figure 14 | View 7: Corner Location of WILL | p. 9 |
| Figure 15 | View 8: Westin Grand Hotel | p. 9 |
| Figure 16 | View 9: Fairmont Hotel | p. 9 |
| Figure 17 | View 10: Park Hyatt Hotel | p.10 |
| Figure 18 | View 11: Retail/Office/Residential Building | p.10 |
| Figure 19 | View 12: Office/Residential Building | p.10 |
| Figure 20 | View 13: European Union | p.10 |
| Figure 21 | View 14: Entrance to the European Union | p.11 |

| | | |
|------------|--|------|
| Figure 22 | View 15: Office Building | p.11 |
| Figure 23 | West End Boundaries | p.11 |
| Figure 24 | Columbia Hospital for Women | p.13 |
| Figure 25 | US Weather Bureau, 1910 | p.14 |
| Figure 26 | JBG proposed condominium project | p.14 |
| Figure 27 | Building Footprints and Streets; Site Boundaries | p.15 |
| Figure 28 | Aerial View | p.16 |
| Figure 29 | Figure/Ground | p.17 |
| Figure 30 | Figure/Ground Reversal | p.18 |
| Figure 31 | 5 minute walking radius, ¼ mile | p.19 |
| Figure 32 | Land Use Diagram | p.20 |
| Figure 33 | Block/Street Pattern | p.21 |
| Figure 34 | Solar Orientation | p.22 |
| Figure 35 | Site Boundaries | p.23 |
| Figure 36 | Site Topography | p.23 |
| Figure 37 | Site Figure/Ground | p.23 |
| Figure 38 | Site Intervention | p.24 |
| Figure 39 | Linking West End to existing park system | p.25 |
| Figure 40 | New Urban Park | p.26 |
| Figure 41 | International Neighborhood | p.27 |
| Figure 41A | Final Site Intervention | p.28 |
| Figure 42 | Central Atrium | p.39 |
| Figure 43 | East Elevation | p.39 |

| | | |
|-----------|---|------|
| Figure 44 | Site plan showing ground floor | p.40 |
| Figure 45 | Typical Upper Story Plan | p.40 |
| Figure 46 | Ground floor | p.41 |
| Figure 47 | Garden | p.41 |
| Figure 48 | Central atrium | p.42 |
| Figure 49 | Offices | p.42 |
| Figure 50 | Exterior of Cartier Foundation | p.43 |
| Figure 51 | Cartier Foundation with urban context | p.44 |
| Figure 52 | Site and Ground Floor Plan | p.44 |
| Figure 53 | Typical Office Level Plan | p.44 |
| Figure 54 | Cartier Foundation | p.45 |
| Figure 55 | Main entry | p.45 |
| Figure 56 | Circulation on typical office floor | p.45 |
| Figure 57 | Interior of Women's Memorial | p.46 |
| Figure 58 | Plan of Women's Memorial | p.47 |
| Figure 59 | Main entry and circulation | p.47 |
| Figure 60 | Exterior of Max Plank Institute | p.49 |
| Figure 61 | Helical stair | p.50 |
| Figure 62 | Main Entrance | p.50 |
| Figure 63 | Ground Floor Plan | p.51 |
| Figure 64 | First Floor Plan | p.51 |
| Figure 65 | Current Condition of East side of 24 th Street | p.52 |
| Figure 66 | Current condition of west side of 24 th Street | p.52 |

| | | |
|-----------|-------------------------------------|------|
| Figure 67 | Fairmont Hotel and Park Hyatt Hotel | p.53 |
| Figure 68 | Westin Grand Hotel | p.53 |
| Figure 69 | Aerial photo | p.54 |
| Figure 70 | Axon showing Retail | p.54 |
| Figure 71 | Columbia Hospital for Women | p.54 |
| Figure 72 | Proposed residential design | p.55 |
| Figure 73 | Aerial photo | p.55 |
| Figure 74 | Axonometric diagram | p.55 |
| Figure 75 | Parti A | p.59 |
| Figure 76 | Concept Diagram | p.59 |
| Figure 77 | Concept Diagram | p.60 |
| Figure 78 | Parti A Schematic Designs | p.61 |
| Figure 79 | Parti A Sectional Schematic | p.61 |
| Figure 80 | Parti B | p.62 |
| Figure 81 | Concept diagram | p.62 |
| Figure 82 | Parti B Schematic Designs | p.63 |
| Figure 83 | Parti B Sectional Schematic | p.63 |
| Figure 84 | Parti C | p.64 |
| Figure 85 | Parti D | p.65 |
| Figure 86 | Context Map | p.66 |
| Figure 87 | Context Plan | p.66 |
| Figure 88 | Site and Entry Level Plan | p.67 |
| Figure 89 | Floor Plans | p.68 |

| | | |
|-----------|--------------------------|------|
| Figure 90 | Longitudinal Section | p.69 |
| Figure 91 | Transverse Section | p.69 |
| Figure 92 | North Facing Elevation | p.70 |
| Figure 93 | South Facing Elevation | p.70 |
| Figure 94 | Wall Section | p.71 |
| Figure 95 | M St. Perspective | p.72 |
| Figure 96 | Garden Entry Perspective | p.72 |
| Figure 97 | Interior Perspective | p.73 |

INTRODUCTION

Why WILL we?

This building is a place. A haven for ideas. Ideas relating to how the world can be bettered. It is my belief that women's leadership is strong and powerful as a collective voice and needs a forum for expression. For the purpose of this thesis, let us forget about what has been written exploring the differences between men and women's leadership or trying to conjure images that symbolize women as a whole. The question of the thesis is: how can architecture clear obstacles so the voice of a group can be heard? How can architecture promote the sharing and exploration of ideas to further the development and growth of a group of individuals and a society as a whole?

The center's location in Washington DC, the political heart of the United States, enables WILL members to work closely with the government, affiliated agencies and nonprofit groups. The project includes joint facilities for women's organizations co-locating to WILL. Additionally, part of WILL's mission is the creation of a park developed as a memorial to women's leadership. This park will be located on the site of the Historic Columbia Hospital for Women, adjacent to WILL.

WILL performs several functions. First, WILL focuses on the architectural expression of good leadership traits and the symbolic nature of leadership. Second, it acts as a unifier for the various agencies, think tanks, nonprofits, advocacy, and lobbying organizations involved in women's international leadership. Third, it develops international communications by providing a central conference center for several hundred attendees, a mechanism for self-funding the center. Fourth, it provides a state-

of-the-art electronic library that can access information from all over the world. Fifth, it provides office spaces to lease organizations, a function that further establishes self-support. Sixth, it locates a quaint café close to the conference center and outdoor gathering area so the WILL users have a casual “meeting up” place. Seventh, short term stay residential units are provided for a handful of visiting scholars. And lastly, the facility establishes a gallery, a flexible high tech space, featuring women’s issues and women as global contributors.

CHAPTER I: LEADERSHIP

Symbolism in architectural form can be derived from a vocabulary generated from the practices of exemplary leaders¹.

Challenge the Process: Searching for opportunities; *experimenting* and *taking risks*: Leaders know that *greatness* does not come from maintaining the status quo, so they search for *opportunities* for improvement. Leaders exemplify the *pioneer spirit*. They are willing to take risks, to *venture* into the unknown, to *innovate* and experiment in order to find new and better ways of doing things.

Inspire a Shared Vision: *Envisioning* the future: Leaders *passionately* believe they can make a difference. They have a desire to *make something happen*, to change the way things are, to *create* something that has never existed before. They are driven by a *clear image* of what things can become.

Enable Others to Act: Fostering *collaboration* and *strengthening* others: Leaders foster collaboration and build spirited teams. They know that their relationships with constituents foster *enthusiasm* for achievement and that mutual *respect* sustains *extraordinary* efforts. They strive to create an atmosphere of *trust* and human dignity, and *nurture* self-esteem in others. In an environment like this people feel *strong* and capable.

¹ Kouzes and Posner

Modeling the Way: Setting the example: Leaders set standard for the way people should be treated and the way goals should be pursued.

Encouraging the Heart: Recognizing individual contributors and celebrating team accomplishments: Accomplishing extraordinary things is hard work. To keep *hope* and *determination* alive, leaders recognize the contributions that individuals make.

CHAPTER II: THE SITE

SITE DESCRIPTION

Metro Washington, D.C.

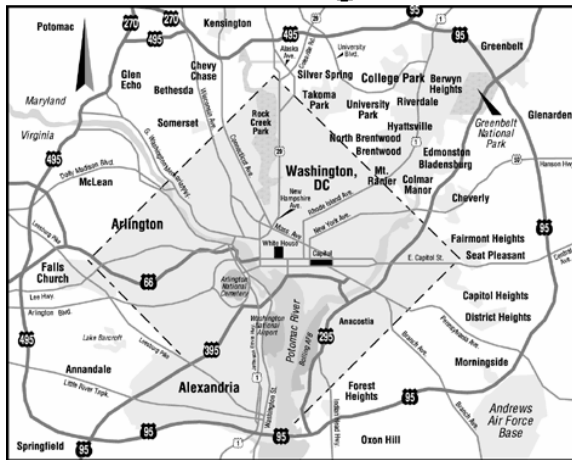


Figure 1: Vicinity map showing the DC/Metro area

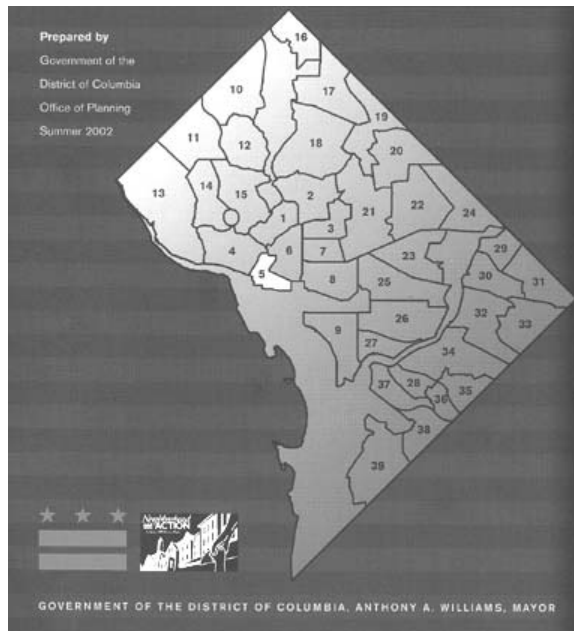


Figure 2: Location of Cluster 5 within The District of Columbia

According to the Office of City Planning in The District of Columbia, WILL's site is located in Cluster 5 (Figure 2).² Cluster 5 includes the neighborhoods of the West End, George Washington University, and Foggy Bottom. WILL is located in the West End neighborhood (Figure 3).

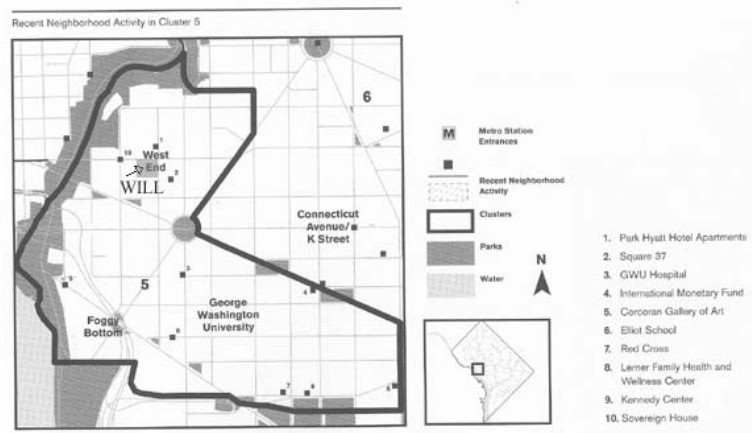


Figure 3: Location of WILL within Cluster 5

Will is sited on Square 25. Square 25 is part of Pierre L'Enfant's original 1791 plan for the District of Columbia (Figure 4).



² District of Columbia Strategic Neighborhood Action Plan, Neighborhood Cluster 5

Figure 4: L'Enfants Original Plan for the District of Columbia, 1791

Square 25 is bound by the streets L, M, 24th, and 25th, with one side measuring 510 ft. The square has thirty foot set backs; sidewalk and planting depths vary around the perimeter. WILL is located on a square lot with one side measuring 220 ft. The lot is located on the northeast corner of square 25 bounded by M and 24th streets. In addition to the vacant lot where WILL resides, square 25 is occupied by a 5 story historic hospital, Columbia Hospital for Women (currently being converted into luxury apartments), and a 7 story medical office building (top floors being converted into luxury condominiums) (Figure 5).



Figure 5: Aerial photo with Square 25 highlighted with current buildings indicated

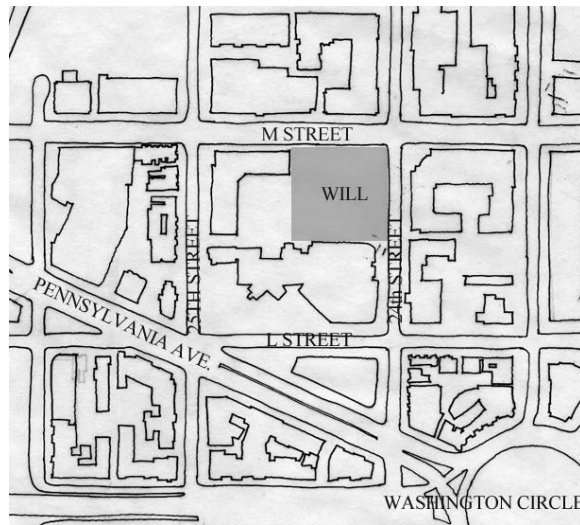


Figure 6: Site Plan showing location of WILL

The site is 1200 ft. from Rock Creek Park and approximately 2 miles from the Capital. George Washington University is approximately 900 ft. away. Foggy Bottom metro entrance is 900 ft. away. Dupont Circle is approximately one half mile from the site. Land use in the area is mostly a mixture of high-rise apartment buildings and medium density commercial land use (Figure 32). There is a scant amount of retail. However, there are many hotels located on 24th street on and north of M street.

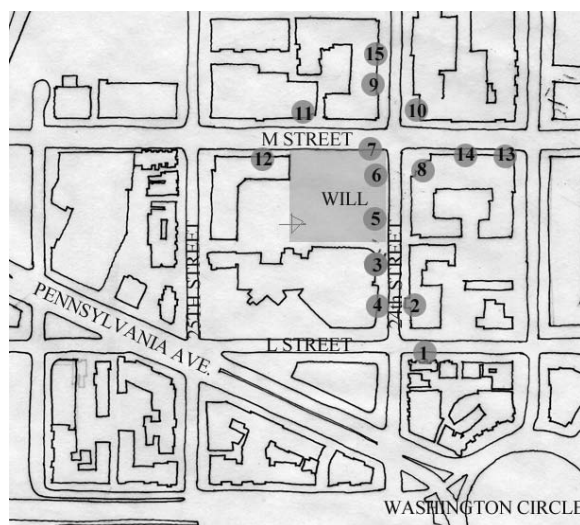


Figure 7: Key of photographs



Figure 8: View 1: Historic Residential Townhouses



Figure 9: View 2: West End Public Library



Figure 10: View 3: Later Addition to Columbia Hospital for Women



Figure 11: View 4: Later Addition to the Columbia Hospital for Women



Figure 12: View 5: Future Site of WILL



Figure 13: View 6: Future site of WILL



Figure 14: View 7: Corner Location of WILL, M and 24th Streets



Figure 15: View 8: Sharing the corner with WILL, M and 24th Streets, Westin Grand Hotel



**Figure 16: View 9:
WILL, M and 24th**



**Sharing the corner with
Streets, Fairmont Hotel**

Figure 17: View 10: Sharing the corner with WILL, M and 24th Streets, Park Hyatt Hotel



Figure 18: View 11: Retail/Office/Residential Building across from WILL



Figure 19: View 12: Office/Residential Building next to WILL



Figure 20: View 13: European Union



Figure 21: View 14: Entrance to the European Union



Figure 22: View 15: Office Building

SITE HISTORY

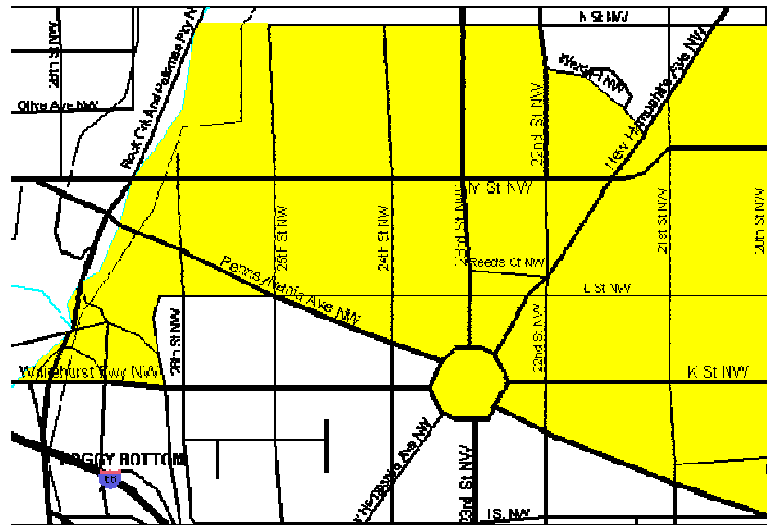


Figure 23: West End Boundaries

The neighborhood called the West End is anchored on the southeast corner by Washington Circle, bounded on the east by New Hampshire Avenue, on the north by N Street, on the west by Rock Creek Parkway, and on the south by Pennsylvania Avenue (Figure 23). The area today known as the West End obtained its name in the 1950s when area developers attempted to create a newly fashionable residential neighborhood akin to the west ends of other major American Cities.³ The twelve-block area first developed into a residential neighborhood containing elite residences and modest frame dwellings in the mid-nineteenth century. Substantial single, twin, and rowhouse dwellings of brick occupied the high ground between E and I streets. The area south of E Street contained

³ West End Library web page

more modest frame residences. In the late nineteenth and early twentieth centuries, the trend of suburbanization began to diminish the number of fashionable residences in the neighborhood. By the 1930s, the area provided housing for a sizable population of working and middle class families. In the 1940s and 1950s, the neighborhood again underwent significant changes with much of the area being developed for light industrial uses, including dairies, warehouses, and automotive repair shops. West End's strategic location between the downtown business district and residential Georgetown made it a prime target for development in the late 1950s and 1960s. Because of its development potential and the overwhelming proportion of absentee owners, land speculators began to buy large pieces of land in the West End in the 1960s, evicting the residents and razing many of the residential buildings.

Square 25 has experienced an interesting history. In 1870, the south half of Square 25 became the home for the Columbia Hospital for Women (Figure 24). The building remains to this day and is considered a historical building. The hospital was created shortly after the US Civil War for women who were arriving in the city in search of missing relatives. The hospital has pioneered and implemented a number of innovative techniques in obstetrics and gynecology.



Figure 24: Columbia Hospital for Women

Another interesting building was the US Weather Bureau, built in 1910, formerly occupying WILL's proposed site (Figure 25). The last portion of this structure was razed in 2001; mostly the site has served as parking for the area. The US property was then sold to JBG Co. who is using this site and adjacent sites to build luxury condominiums. JBJ plans to add 706 residences to Square 25 by 2006 and construction is underway (Figure 26).



Figure 25: US Weather Bureau, 1910



Figure 26: JBG proposed condominium project (luckily instead, the future site of WILL)

SITE ANALYSIS



Figure 27: Building Footprints and Streets; Site Boundaries



Figure 28: Aerial View



Figure 29: Figure/Ground



Figure 30: Figure/Ground Reversal



Figure 31: 5 minute walking radius, 1/4 mile



Figure 32: Land Use Diagram



Figure 33: Block/Street Pattern

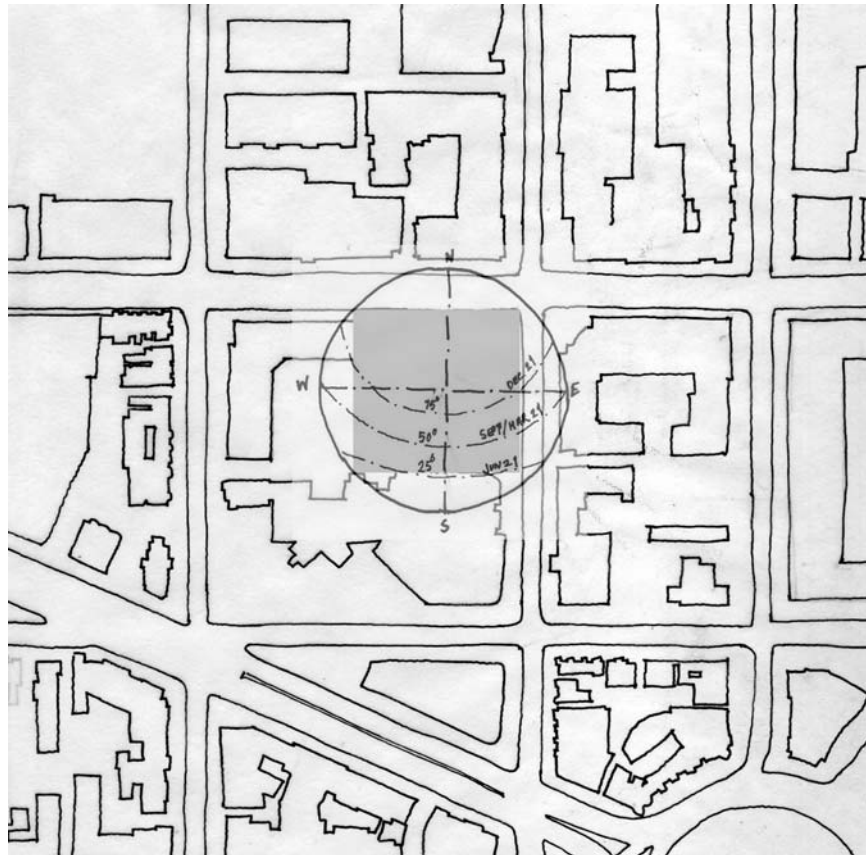


Figure 34: Solar Orientation

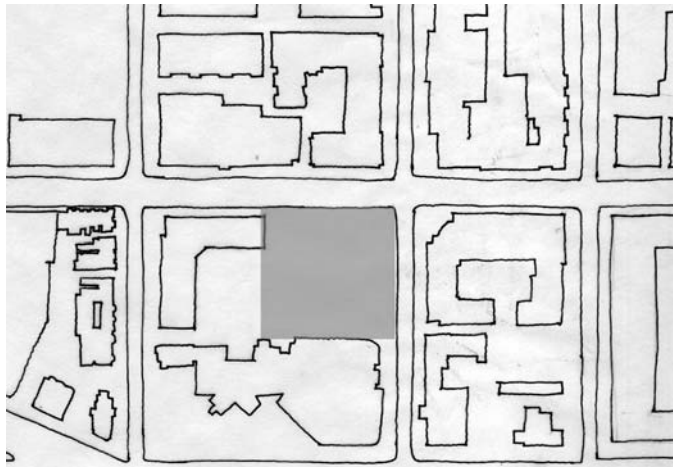


Figure 35: Site Boundaries

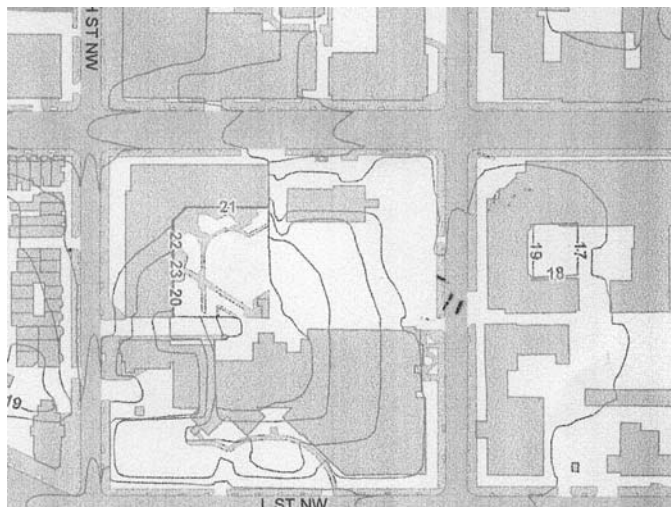


Figure 36: Site Topography

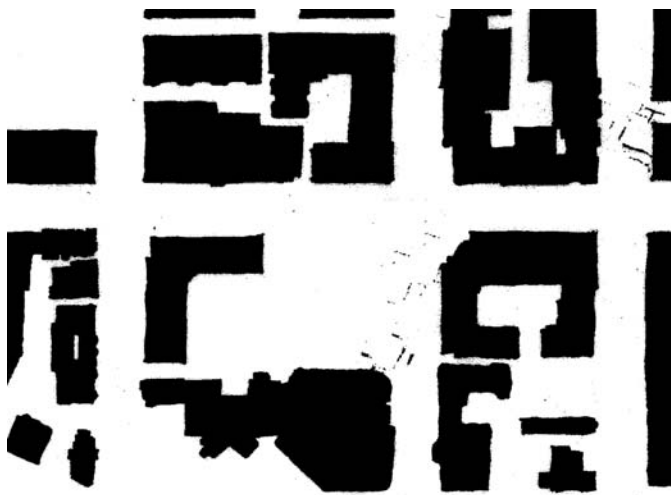


Figure 37: Site Figure/Ground

SITE INTERVENTION

This section has two parts. The first part of the section explores three different site interventions expressing a wide range of ideas. The second part is the final site intervention; a melding of ideas discovered during the exploration.

International Corridor: Pennsylvania Ave

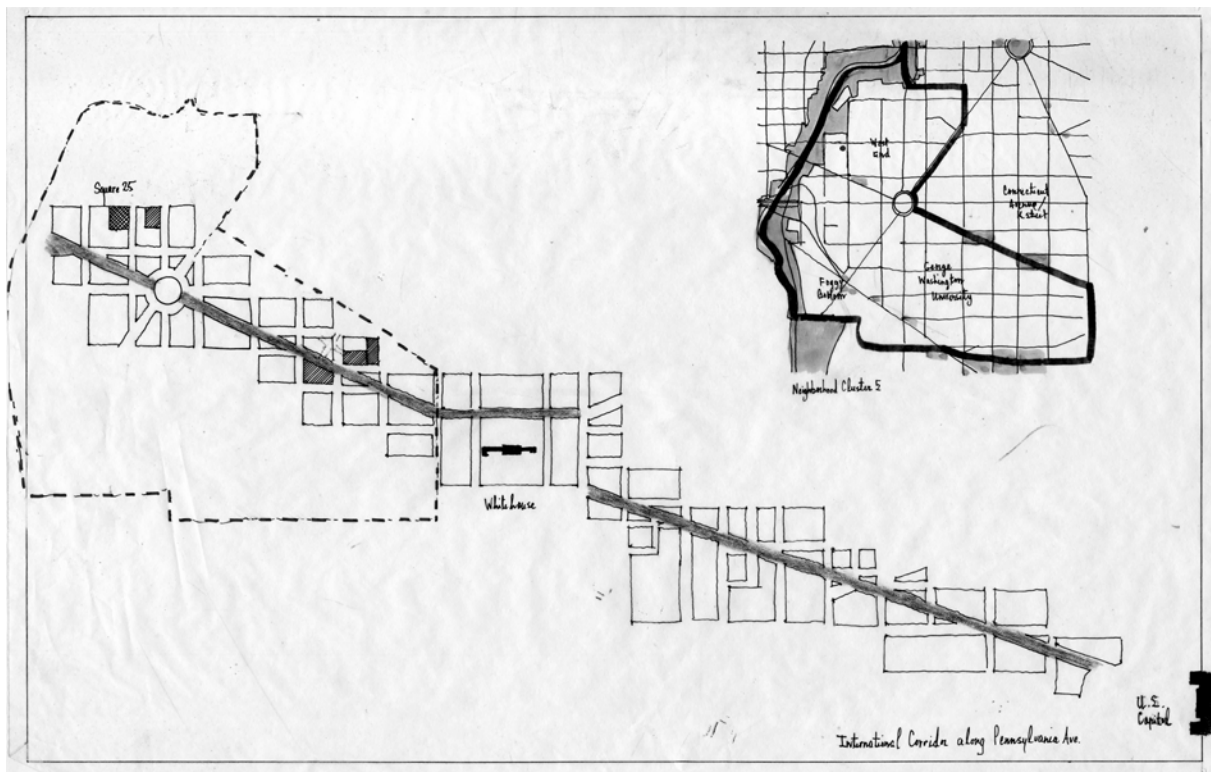


Figure 38: Site Intervention exploring the concept of an international corridor along Pennsylvania Ave. Starting from the left the highlighted buildings are the European Union, the World Bank, The International Press Core, the IMF, and the White House

- 1) WILL would be part of the existing international corridor along Pennsylvania Ave. World Bank, IMF, International Press Core, and European Union are all located either on Pennsylvania Ave. or within one block from Pennsylvania Ave.

- 2) Pennsylvania Ave. is on axis with the White House and approximately on axis with the Capitol. Symbolically this is significant to international political buildings such as WILL.
- 3) Pennsylvania Ave acts as the “datum” that collects such buildings

Park System used to Unify

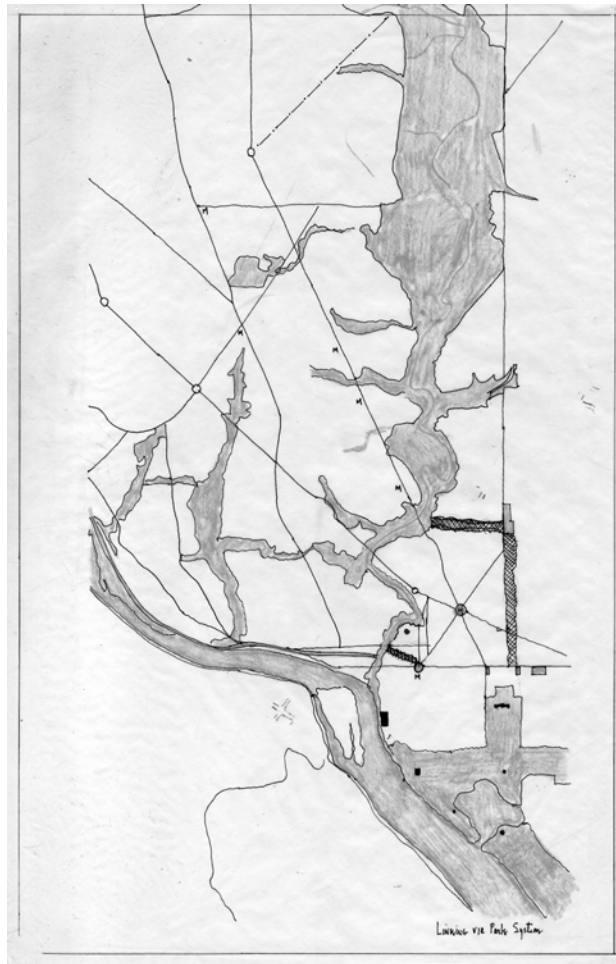


Figure 39: Linking West End to existing park system

- 1) Create “finger” parks to connect the West End, Dupont, Foggy Bottom metro, and the Mall (Figure 39)

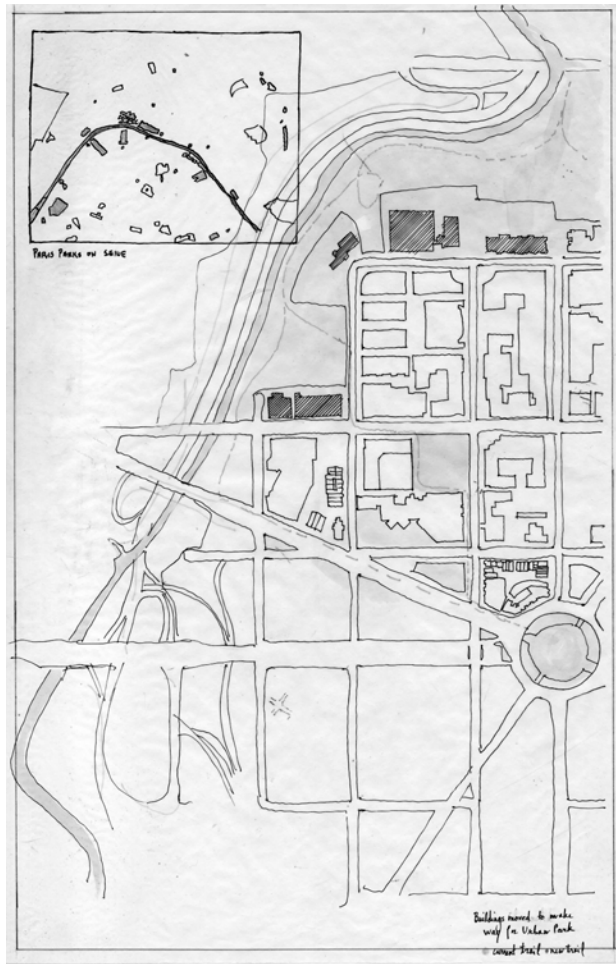


Figure 40: Highlighted buildings are removed to make way for new urban park in this portion of Rock Creek Park (Urban parks along the Seine River used as a precedence)

- 2) Paris used as an example of how “formal” urban parks along the water are used to enhance the enjoyment of life (Figure 40).
- 3) High School will be moved to a more centralized urban location rather than placed in isolation in Rock Creek Park (Figure 40). This could better serve the community by offering another significant civic building within the urban fabric. Perhaps one the entire community can use.
- 4) Another bike/foot trail is added to the east side of Rock Creek Park (Figure 40)

International Neighborhood



Figure 41: Intervention Concept of and International Neighborhood

- 1) Beautiful, gated, heavily planted urban family park created at the site of the historic Columbia Hospital for Women (Figure 41)
- 2) Columbia Hospital is the object in the park
- 3) Later additions to the hospital are razed leaving only the original building
- 4) The park relates to the West End library across the street

- 5) Retail stems from the new park along side streets and especially strong on M street
- 6) Retail should include cafes, grocery, wine stores, etc.
- 7) Open markets are set up weekly on the park

FINAL SITE INTERVENTION

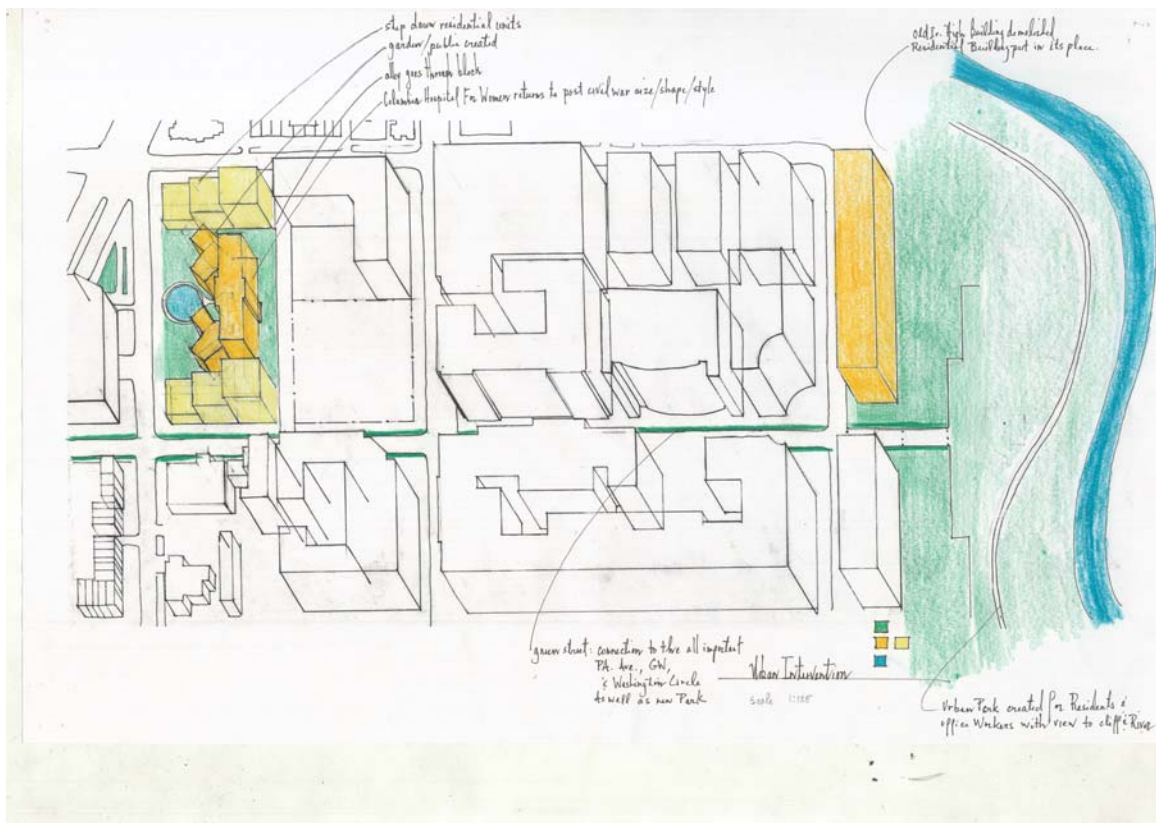


Figure 41A: Final Site Intervention

- 1) Enhanced 24th street connecting Foggy Bottom Metro, Washington Circle area and GW University to the West End and Rock Creek Park.
- 2) Neighborhood Park around the Historic Columbia Hospital for Women.
- 3) Enhancement of Rock Creek Park

4) Medium Density Residential units flanking the restored Columbia Hospital for Women

CHAPTER III: PROGRAM

PROGRAM INTRODUCTION

The primary goal of WILL is to foster the collaboration between co-located women's international organizations focusing on women's leadership, creating an oasis for the sharing of thought and the generation of ideas regarding women's increasing role as leaders in the world. The secondary goal of WILL is to bring awareness to the general public, as well as the professional community, regarding WILL's mission. The site measures 220 SQ. FT. X 220 SQ. FT. = 48,400 SQ. FT. The building height will be between 8 and 9 stories mandated by adjacent buildings. If all public and semi-private functions are placed on the ground floor, the building footprint would be 34,000 sq. ft., or 70% site coverage.

PROGRAM DESCRIPTIONS

Coffee Lounge/Bar with Bookstore 5500 sq.ft.

This space serves two purposes. One, enliven the street corner with a space activated by office workers and visitors during the day and residents during the early morning and evening hours. An outdoor seating area will be required. Two, to introduce the public informally to the architectural and intellectual ideas celebrated within the building. This space can be accessed during the day from Will's lobby but the entrance must be located before the security checkpoint.

Entrance Lobby/ Interior Courtyard/Guard House/Coat Room 4000 sq. ft.

This space is the formal entrance to the building with a drop off for those visiting (the public wanting to view exhibits, conference guests, fellow scholars). This space serves to modify the emotions of those entering the building, i.e., a transition zone between the ideas and functions of the street and ideas and functions found within the building. This is accomplished by movement through a series of layered thresholds. First, there will be a layer of orientation to the building. Second, a security layer. It seems reasonable to take care of the issue of security soon after people move into the lobby and to do so in an emotionally and physically separate zone. The enhanced street of 24th street suggests an entrance on 24th street to be appropriate. This entrance will be open during operating hours and on the occasion of a special event.

Central Atrium Space 4500 sq. ft.

This space acts as the organizer of all the spaces and is intended to be central and focal to all the spaces. It acts as the organizer and joiner. Vertical circulation will occur within this space with elevator and stair access. And it is intended that this will be the main form of circulation helping to promote the informal and symbolic cooperation between groups and individuals. The atrium will go the full height of the building, so light is let in from above, and air can be exhausted out top windows. People will move up and down the space, have views into the central space, and air will circulate from the perimeter of the building, up and out through this space. It will serve as a symbolic linkage between

the various international organizations. It will also organize the ground level common spaces of the café, forum, break out spaces, as well as the gallery.

Electronic Library 4700 sq. ft.

This space features a state-of-the-art electronic library that can access information from all over the world. Proper lighting for viewing computer screens is necessary.

Forum 6500 sq. ft.

This is the formal ceremonial space for the meeting of the minds, i.e., lectures, presentations, town hall type meetings. Relationship to interior spaces: break out spaces and café need to be in close proximity. Light: this room should have the ability be lit from as many sides as possible and have the ability to be naturally ventilated. Exterior relationship: the street should be able to catch a glimpse of the formal activities inside, but perhaps denied a spacious view. It may seem reasonable to locate a portion of this facility on M street. Who: the facility will be used most often by conference guests and scholars within the building. However, special events will be held in which the public will be invited. VIPs will have a private room and must have a method of coming in and out of the facility privately. The press will be invited to document and promote WILL's programs and will be provided a production booth.

Café 3700 sq. ft.

Kitchen facilities are not made available on individual floors so that members are encouraged to eat and mingle in the ground floor café. Relationship to the interior: the

café should be close in proximity to the forum as well as the break out spaces in case these spaces need to be catered. Exterior relationship: since there is already a storefront café, there need not be a presence on the street. The South and East elevations make since for this function. There should be a garden associated with the café for outdoor seating, views, and milling about after lunch. A roof terrace may be an appropriate place for the café and a way in which scholars can enjoy a view. However, this would mean that service would need to travel vertically and the café would be separate from the forum and other possible reception spaces where the kitchen would be needed.

Exhibition/Gallery Space 4000 sq. ft.

The gallery space can be accessed from the public after passing through security. The primary role of this space is to have a flexible space that can showcase a changing display reflecting women's interests all around the world. There are a wide range of possibilities for the placement of the gallery. It can be centrally connected, i.e., to the atrium, or placed on multiple floors.

Office Spaces 240,000 sq. ft.

8 upper stories will be used for office space. Each floor will have 30,000 sq. ft. of office space. Most likely there will be two organizations per floor. Each floor will represent a different international women's organization and will be surround the central atrium space.

Visiting Scholars Quarters 5000 sq. ft.

The visiting scholars quarters will be located on the roof terrace or in a separate wing of the building with an associated green space. There will be approximately 10 rooms.

Underground Parking 100,000 sq.ft

There will be 2 floors of underground parking for employees and visitors to WILL.

There will be on grade parking for VIPs. The parking will be accessed through the service alley on the south side that runs through the center of the block.

PROGRAM TABULATIONS

PUBLIC FUNCTIONS

Coffee Lounge/Bar with Bookstore

| | |
|------------------------------|---------------------|
| Kitchen | 1000 sq. ft. |
| Bookstore | 2000 sq. ft. |
| Seating | 2000 sq. ft. |
| Administrative Space/storage | <u>500 sq. ft.</u> |
| | 5500 sq. ft. |

Entry/Courtyard

| | |
|------------------------------------|---------------------|
| Courtyard | 3000 sq. ft. |
| Reception Desk | 200 sq. ft. |
| Coat Room | 300 sq. ft. |
| Guard station | 500 sq. ft. |
| Office | 200 sq. ft. |
| Rest Rooms (<u>2@400</u> sq. ft.) | <u>800 sq. ft.</u> |
| | 5000 sq. ft. |

Central Atrium Space **4500 sq. ft.**

Gallery/Exhibition Space

| | |
|------------------------|--------------|
| Flexible Display Space | 3000 sq. ft. |
|------------------------|--------------|

| | |
|---------|---------------------|
| Storage | <u>1000 sq. ft.</u> |
| | 4000 sq. ft. |

SEMI PRIVATE FUNCTIONS

Café

| | |
|------------------|---------------------|
| Seating | 2000 sq. ft. |
| Kitchen | 1000 sq. ft. |
| Storage | 500 sq. ft. |
| Manager's Office | <u>200 sq. ft.</u> |
| | 3700 sq. ft. |

Electronic Library

| | |
|-------------------------|---------------------|
| Circulation Desk | 100 sq. ft. |
| Reading Area | 2000 sq. ft. |
| Computer Terminal Area | 2000 sq. ft. |
| Librarian's Desk/Office | 200 sq. ft. |
| Work Room | 200 sq. ft. |
| Storage | <u>200 sq. ft.</u> |
| | 4700 sq. ft. |

Forum (seats 360 people)

| | |
|------------------|--------------|
| Ceremonial space | 3500 sq. ft. |
| VIP room | 300 sq. ft. |

| | |
|--|------------------------|
| Press Room | 1000 sq. ft. |
| Broadcast Booths (2@ 200 sq. ft.) | 400 sq. ft. |
| Wireless Service Room | 300 sq. ft. |
| A/V room | 500 sq. ft. |
| Storage | <u>500 sq. ft.</u> |
| | 6500 sq. ft. |
| | |
| SUBTOTAL OF PUBLIC AND SEMI-PRIVATE FUNCTIONS | 33,900 sq. ft. |
| Gross up 30% (circulation/mechanical) | 10,170 sq. ft. |
| TOTAL FOR PUBLIC AND SEMI-PRIVATE FUNCTIONS | 44,070 sq. ft. |
| | |
| PRIVATE FUNCTIONS | |
| | |
| Office Space (8 floors @ 30,000) | 240,000 sq. ft. |
| | |
| Visiting Scholars Quarters (10@500 sq. ft.) | 5000 sq. ft. |
| | |
| SUBTOTAL FOR PRIVATE FUNCTIONS | 245,000 sq. ft. |
| Gross up 30% (circulation/mechanical) | 73,500 sq. ft. |
| TOTAL FOR PRIVATE FUNCTIONS | 318,500 sq. ft. |
| | |
| TOTAL | 362,570 SQ. FT. |

CHAPTER IV: PRECEDENT

EMBASSY BUILDING

DAR ES SALAAM, TANZANIA

ARCHITECT: THE MANSAR PRACTICE

The Embassy Building is a co-location building designed by the Mansar Practice. It is a modern building located in the Tanzanian capital of Dar es Salaam. Dar es Salaam witnessed the devastation of international terrorism in 1997 with the destruction of the US Embassy. This multiple occupancy building brings together diplomats under one roof. The Embassy Building houses the embassies for Germany, the Netherlands, and the United Kingdom, as well as the British DFID (Department for International Development), and the European Union offices. The Embassy Building “stands out from the less distinct individual embassies in an area that is seen by some as a diplomatic ghetto.”⁴ The mission of the building is to offer a bright and efficient place for those seeking visas and passports, and to provide a “base from where the five diplomatic missions seek to improve international relations and to facilitate development aid”⁵ Above a ground floor free plan with corner less pod-like communal spaces placed between pilotis (Figures 44 and 46) are five floors of office accommodations arranged in two parallel blocks. The system of organization provides flexibility for each organization, allowing open-plan and cellular configurations (Figures 45 and 49). Each floor has its own identity, with varying proportions of circulation, office, and sheltered terrace space.

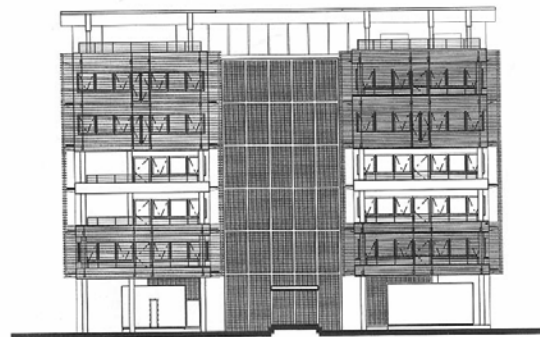
⁴ “WHITE HEAT, With a new co-location embassy, Mansar revives Modernism in the Tanzanian capital, Dar es Salaam”, *Architectural Review*, vol. 216, no. 1280, October 2003, p.61-65

⁵ “WHITE HEAT”

The central atrium assists the buildings in its cross ventilation strategy (Figure 42). Also, the mass of the concrete building provides enough thermal mass requiring the mechanical plant only to be active a few hours a day.



Figure 42: Central Atrium allows for ventilation of offices

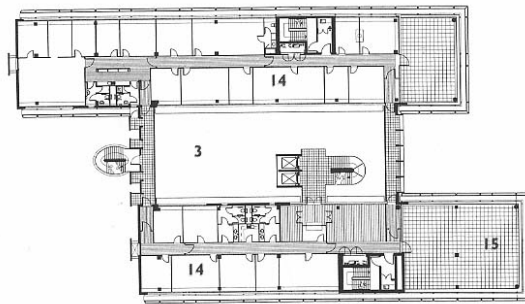


east elevation (scale approx 1:700)

Figure 43: East Elevation showing entrance and atrium



Figure 44: Site plan showing ground floor



typical upper floor plan (scale approx 1:1250)

Figure 45: Typical Upper Story Plan showing office spaces

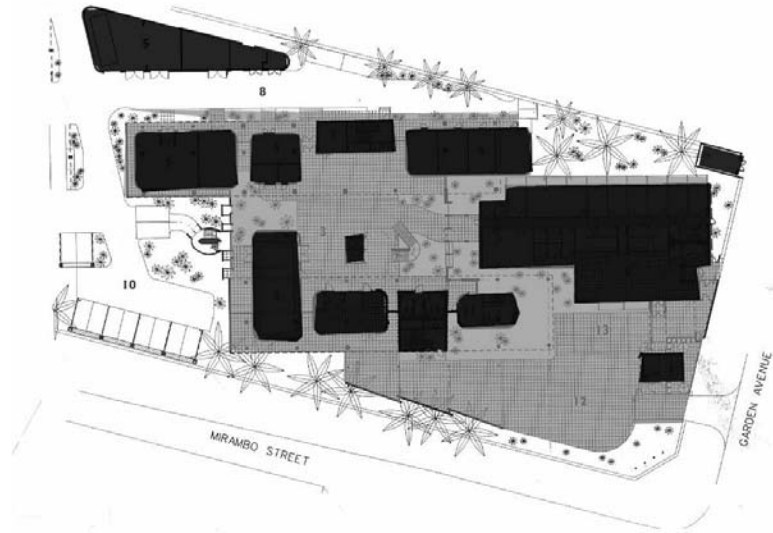
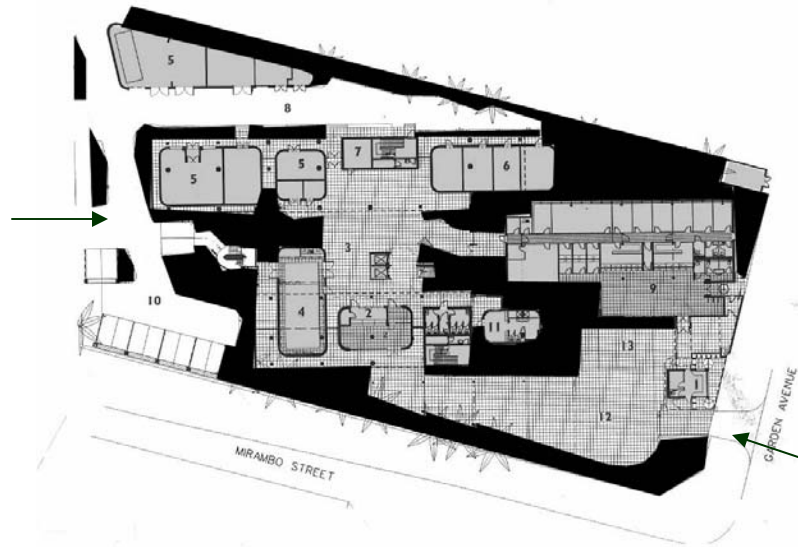


Figure 46: Ground floor free plan with pod-like communal spaces



**Figure 47: Garden penetrates building
Staff entry (left) Visitor entry (right)**

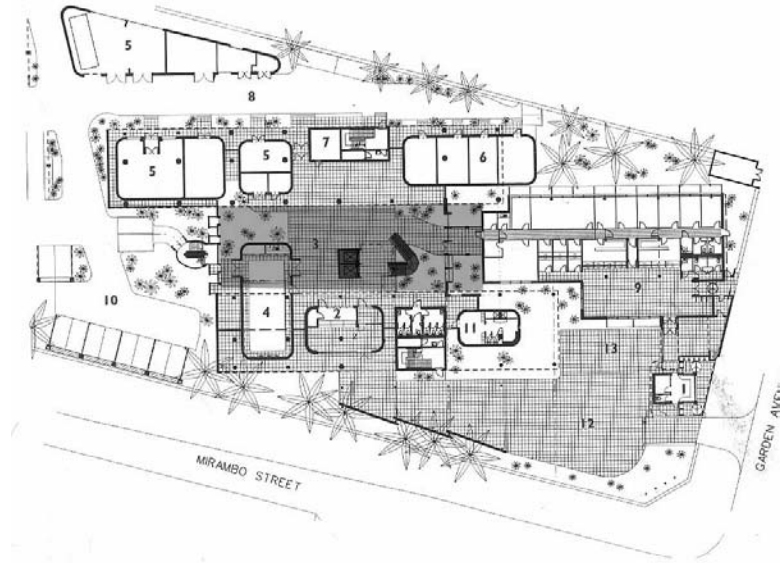
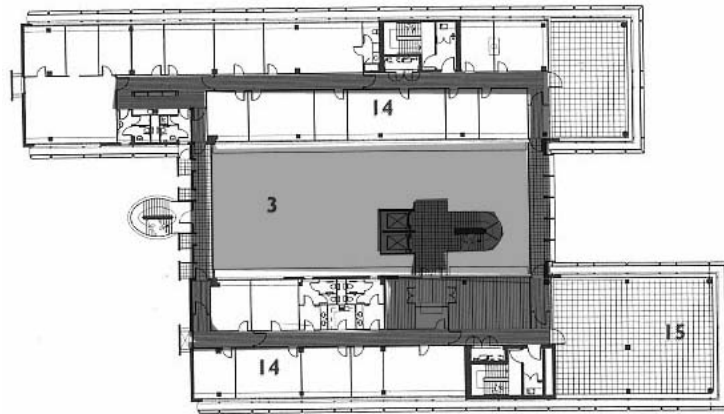


Figure 48: Central atrium/ main circulation to upper floors



**Figure 49: Offices are organized around an atrium space (light grey); circulation (dark grey)
Note: outdoor terraces for each wing**

CARTIER FOUNDATION FOR CONTEMPORARY ART

PARIS, FRANCE

ARCHITECT: JEAN NOUVEL

The Cartier Foundation is located in an urban setting of Paris. This site was a former villa and garden and historically protected. Nouvel had to contain the building within the footprint of the existing house and maintain all existing trees. The most important concept behind the design of the building is ‘the landscape and building are interwoven; there are no clear visual delimitations between garden and building.’⁶ There are stainless steel exterior fire stairs set on the short east and west facades and the elevators are placed as the center of the north façade (Figure 52 and 55). The mechanical equipment is underground. The facade wall sometimes encloses space and sometimes is just 2 dimensional (Figure 50). Sunshades are used on the north and south facades.



Figure 50: Exterior of Cartier Foundation

⁶ Parisian Jewel, Cartier Foundation for Contemporary Art, Architecture, vol. 83, no. 9, Sept. 1994, p. 64-65.



Figure 51: Cartier Foundation with urban context

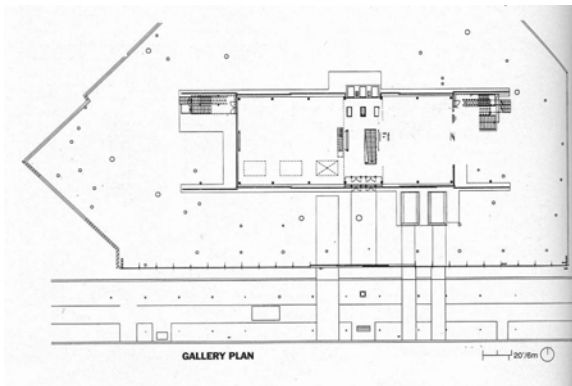


Figure 52: Site and Ground Floor Plan

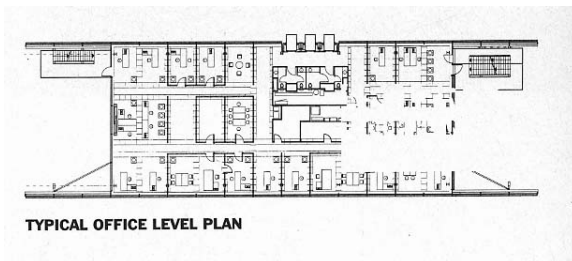


Figure 53: Typical Office Level Plan

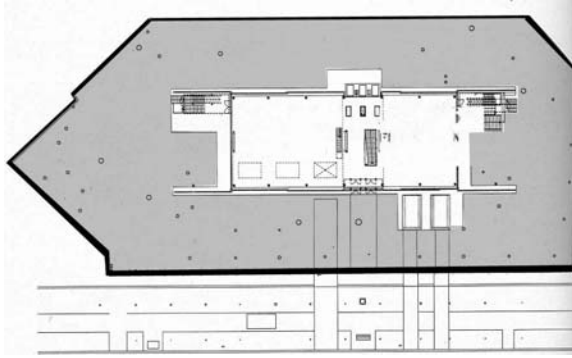


Figure 54: Cartier foundation nestled within the garden and garden wall.

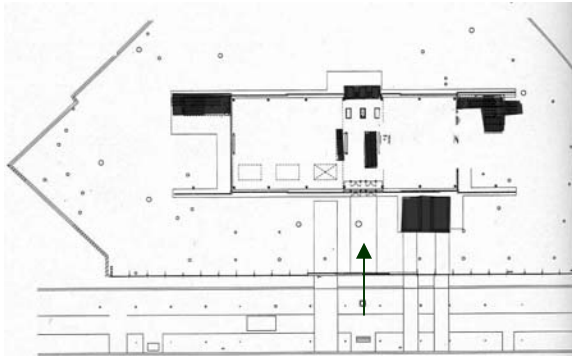


Figure 55: Main entry and vertical circulation from ground floor

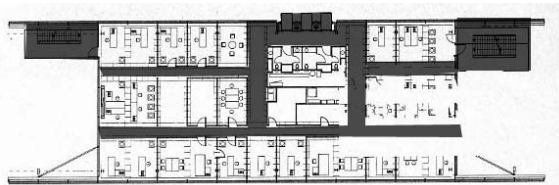


Figure 56: Circulation on typical office floor

WOMEN'S MEMORIAL AND EDUCATION CENTER

WASHINGTON, DC

ARCHITECTS: WEISS AND MANFREDI

The memorial makes its symbolic gestures through the use of the sun. The sun makes a continually moving pattern of shadows (Figure 57). Shadow words are thrown onto the smooth, pale, finely crafted marble wall which runs round the whole of the circumference of the space. The sunshine casts the shadows down from where the letters are incised into the 3/4" glass slabs held by stainless steel brackets above the weatherproof glazing.⁷



Figure 57: Interior of Women's Memorial

⁷ Military Honours, A dignified subterranean space into which the sky's light throws shadowy, moving memories of the contribution made by women to US defense, *Architectural Review*, vol. 206, no. 1230, Aug. 1999, p. 53-54.

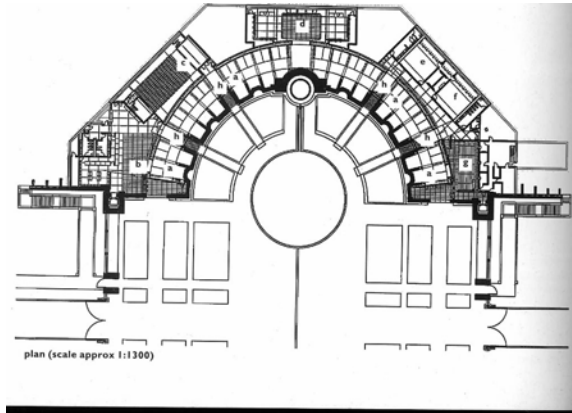


Figure 58: Plan of Women's Memorial

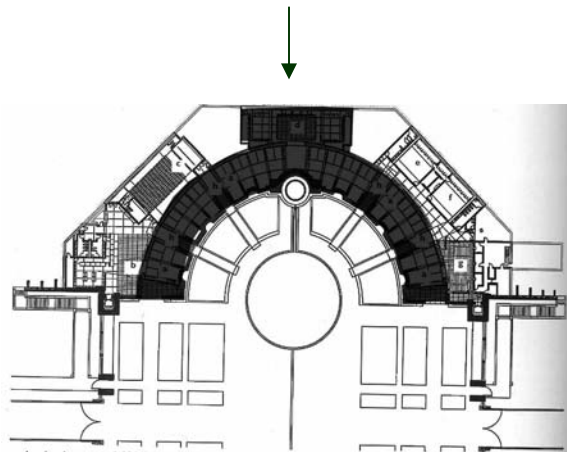


Figure 59: Main entry and circulation

MAX PLANK INSTITUTE

DRESDEN, GERMANY

ARCHITECT: HEIKKINEN-KOMONEN ARCHITECTS

The Max Plank Institute of Molecular Cell Biology and Genetics is located in Dresden, Germany. The goal of the architects “goes beyond the exacting technical requirements or questions of styling, to assuring that the working environment helps, rather than hinders, the researchers in their highly demanding creative work.”⁸ The most important goal of the designers is to promote a sense of community and collective identity among the scientists. They have pursued this aim through two strategies: a spectacular atrium that creates a central communal focus (Figures 61 and 62), and through the use of a vividly colored exterior façade (Figure 60). The directors presented the architects with four freehand sketches of how they thought the building should be organized. “As Heikkinen and Komonen recalled, ‘They were concerned about how to promote synergy, cooperation, and community. The idea was to try to force the scientists to come together, to create the critical mass necessary for new discoveries.’”⁹ The atrium is the key to the success of this goal. The atriums space gathers all the public areas of the facility, with the suites of laboratories and offices radiating from this. The atrium occupies the full height and width of the institute. The ground floor includes a café near

⁸ “Heikkinen-Komonen Architects create a sense of community for scientists at the Max Planck Institute in Dresden”, *Architectural Record*, Vol. 191, January 2003, p. 110-117.

⁹ “Heikkinen-Komonen Architects create a sense of community for scientists at the Max Planck Institute in Dresden”, *Architectural Record*, Vol. 191, January 2003, p. 110-117.

the entrance and a dining hall overlooking a rear garden, with a study and library and immediately adjacent (Figure 63). On the three upper floors, the space is crossed by concrete bridges that connect the laboratory wings to the atrium's elevators and its wide helical stair (Figure 61). The bridges include informal meeting points and a small seminar room. Also, in order to force interactions, no kitchens are provided on the individual floors, so that scientists will use the restaurant. Open plans were recommended by the scientists to promote maximum cooperation. The atrium is placed at the center of the building, sandwiched between the two laboratory wings. There is a small apartment building in back that is used for visitors to the institute.



Figure 60: Exterior of Max Plank Institute



Figure 61: Helical stair in atrium space



Figure 62: Main Entrance to the Max Planck Institute

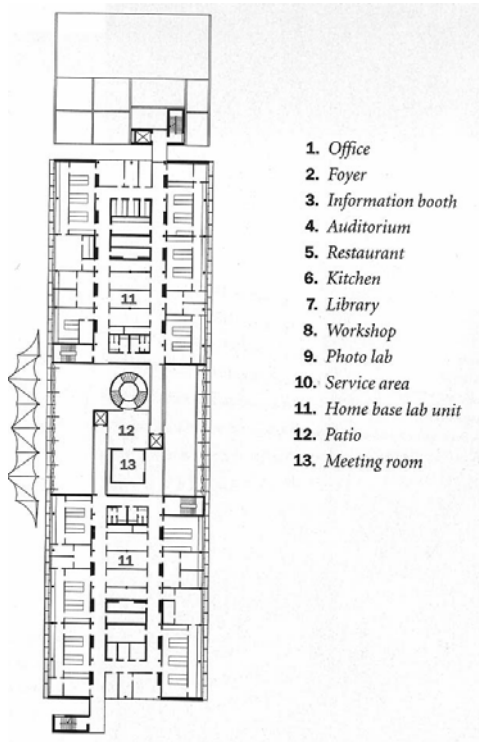


Figure 63: Ground Floor Plan



Figure 64: First Floor Plan

CHAPTER V: DESIGN OBJECTIVES AND CHALLENGES

MASTER PLANNING

1) Street enhancements will be made along 24th street encouraging the connection and movement between Rock Creek Park, George Washington University, Pennsylvania Ave., Washington Circle, and Foggy Bottom metro stop. If permit able, there will be a bike path created along 24th street to encourage movement between north and south locations. Improvements will be made along M street as well.



Figure 65: Current Condition of east side of 24th street.



Figure 66: Current condition of west side of 24th street

2) Retail that has both day and evening activity will be focused along the intersection of M and 24th street. This will enliven the streetscape, bring in much needed retail to the neighborhood, as well as an opportunity to promote WILL's activities (Figures 69 and 70)



Figure 67: Fairmont Hotel and Park Hyatt Hotel

Each of these hotels occupies a corner of the intersection of M and 24. The objective is for retail to be located at this intersection and along 24th street in order to enhance the quality of living for office workers, visitors to the area, and residents during day and evening hours.



Figure 68: Westin Grand Hotel

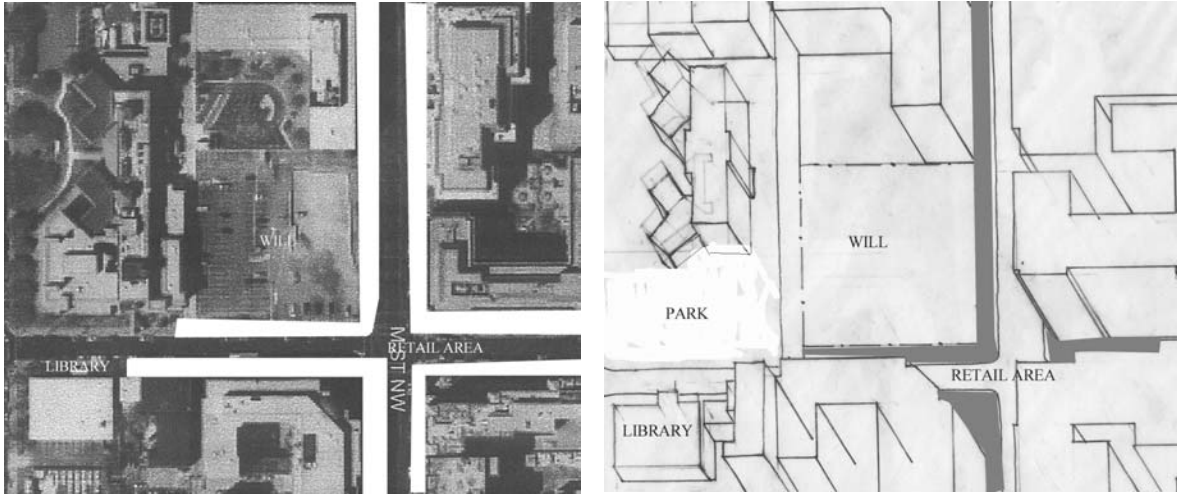


Figure 69: Aerial photo showing suggested areas of retail

Figure 70: Axon showing suggested areas for retail on M and 24th

3) The historical monument, Columbia Hospital for Women, located at 24th and L, behind the future site of WILL, will be renovated to the original size and condition. The land to the west of the hospital will be used for high-density residential units. The remainder of the land around the hospital will be used as a neighborhood park. The new park will be closely linked to the West End Library across the street on L and 24th and improved 24th street.



Figure 71: Historic, Columbia Hospital for Women, 1915



Figure 72: Trammel Crow Co. proposed residential design for Columbia Hospital for Women and adjacent sites

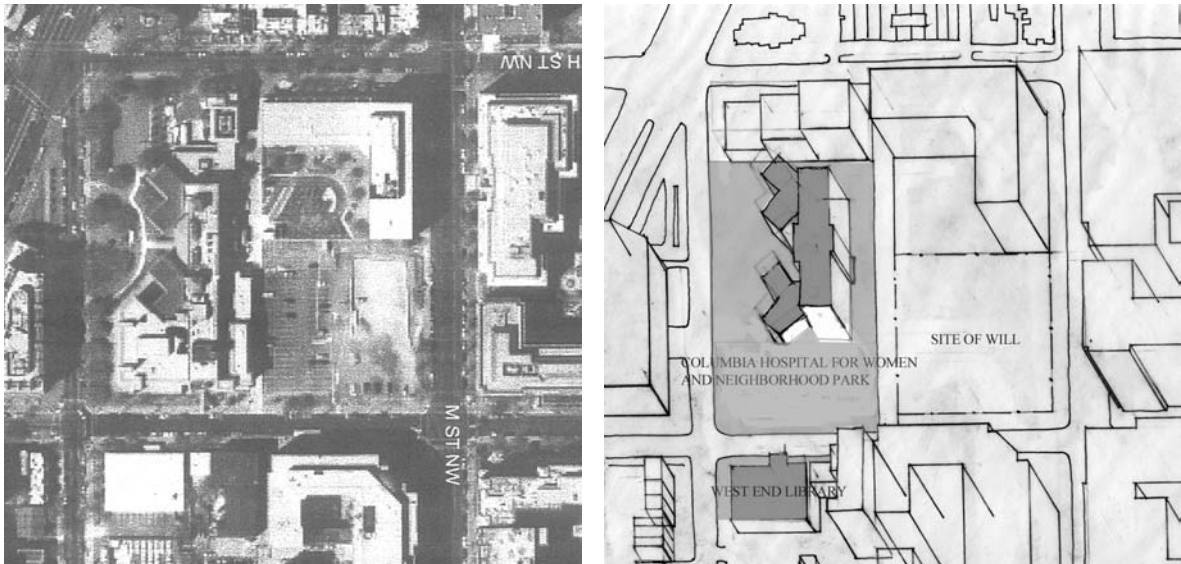


Figure 73: Aerial photo shows the condition of the current hospital site

Figure 74: Axonometric diagram showing proposed relationship between hospital, neighborhood park, library, and WILL site

BUILDING PLANNING

WILL contains three objectives stemming from one goal, that the built form of WILL be focused on leadership and the symbolic nature of leadership. Leadership embodies, to name just a few, the qualities of transparency, openness, responsibility, strength, boldness, risk taking, inspiring the future, collaboration, and mentoring.

1) Elevation/section/plan: In these three areas there is the desire to congeal many of the ideals of leadership. Transparency and openness, being able to see into the building, and understanding the operations within. Strength and boldness can be achieved through the expression of form and materiality. The symbolism of risk taking can be created through the use of new technologies and tectonics. Inspiration can be reflected tectonically and in form.

2) Sustainability: Good leadership involves taking responsibility. WILL exemplifies this sense of responsibility by the way in which it conserves energy and resources. Mentoring and modeling are also reflections of good leadership. WILL models the way for the future demonstrating low environmental building.

3) Relationship to the street, corner, and new retail. WILL, as a good leader does not see themselves in isolation. They see themselves as part of a global environment as well as a neighborhood friend. Will collaborates with the neighborhood to help in attaining urban goals and needs.

DESIGN CHALLENGES

- 1) How will the building accommodate various and multiple users and still provide security controls? Given the need for security, how will the circulation, vertical and horizontal, be made both restrictive and porous, allowing WILL to perform its major function of bringing people and ideas together? Entry and circulation into the public, semi private, and private spaces will be one of the building's biggest challenges. People will be entering from the street, VIP parking, as well as an underground parking garage. There are other complications as well. One, there will be different groups arriving into the building simultaneously. Some will need private circulation and other groups can share circulation. There will be the visiting public to the coffee shop, café, and gallery; internationals and locals coming to the building for conferences, lectures, and press meetings; leaders and dignitaries; service to the café, coffee shop, and bookstore; office workers and administrative staff joint to the collocation project. Two, there will be people arriving at different times of the day. Three, there will need to be security checkpoints for the various types of entry, i.e., garage, public street access, as well as private street access. Also, once in the interior of the building, the general public should be denied access into the upper floors of office space unless otherwise invited. This last point leads to what is the biggest challenge: if vertical circulation is encouraged for the gallery, café, or other public functions, how is security handled?

- 2) There is no doubt that this neighborhood needs basic retail for the residents who live there, especially now with a quickly expanding residential population. The challenge is determining what type of retail is appropriate and necessary for the area and what works well with WILL.

CHAPTER VI: DESIGN STRATEGIES

PART I A

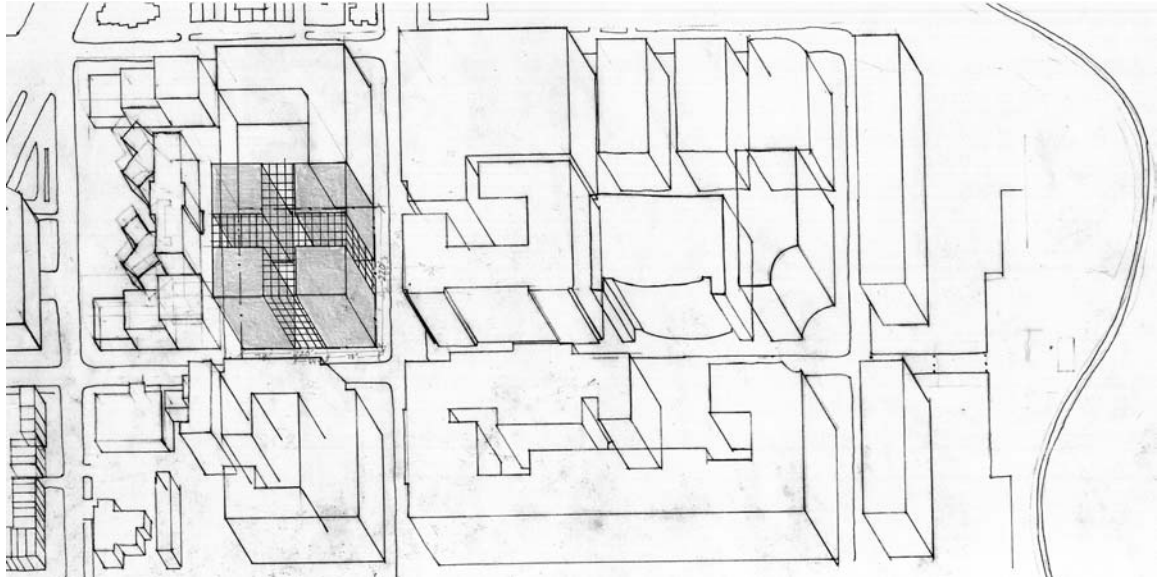


Figure 75: Parti A

There are four forms that surround the atrium space. Perhaps each form can represent leadership in different fields. This is similar to representing the four seasons (Figure 75).

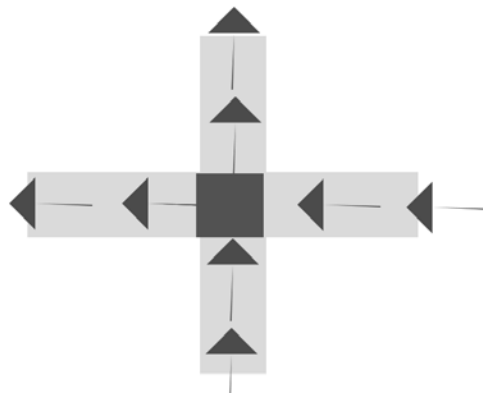


Figure 76: Concept Diagram

Leadership implies honesty, openness, and transparency. This transparency occurs at all levels of the building, as it should in all levels of a government or organization. One can see through one side of the building to the other and to what lies beyond (Figure 76).



Figure 77: Concept Diagram

There is a focal point created at the building center by the crossing of the two axis. This captured space symbolizes the hierarchical importance of the space (Figure 77).

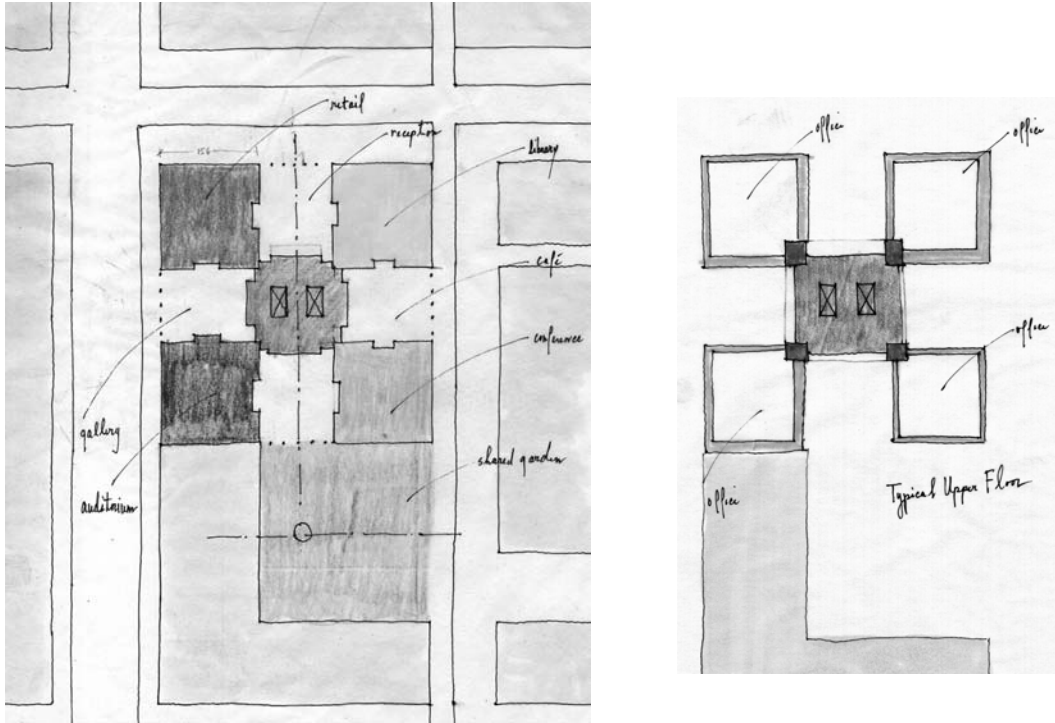


Figure 78: Parti A Ground Floor and Upper Floor Schematic Designs

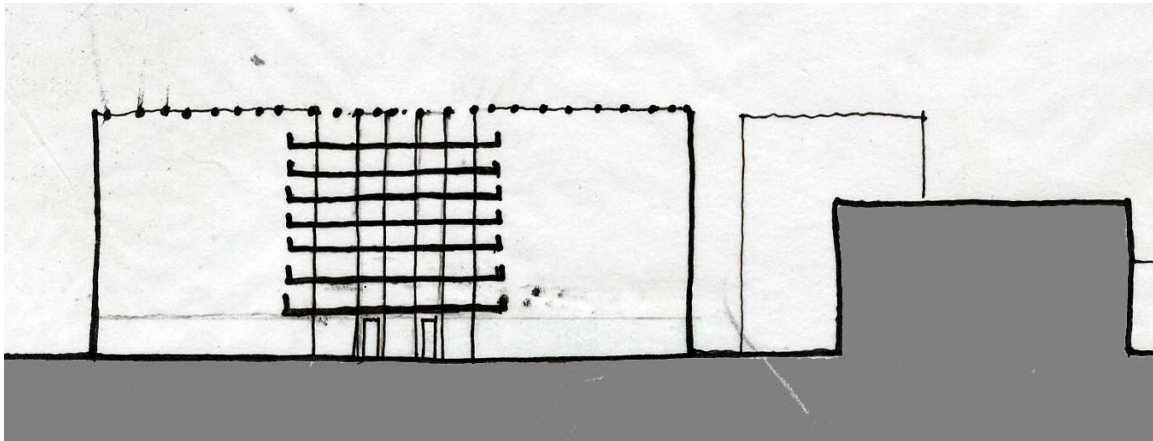


Figure 79: Parti A Sectional Schematic

PARTI B

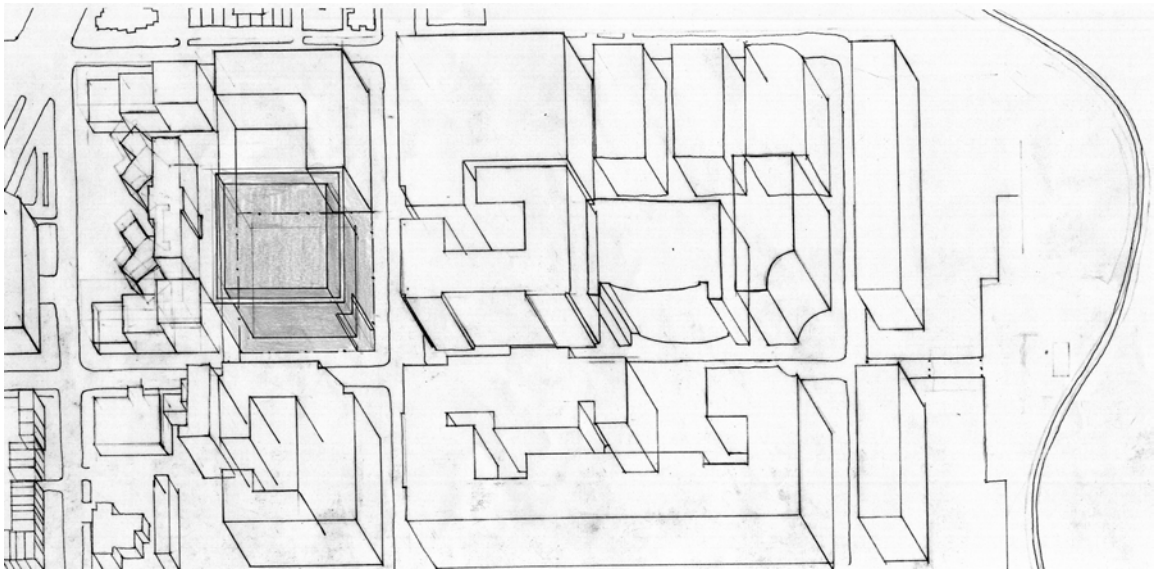


Figure 80: Part B

Parti B represents the idea of crossing through a garden barrier



Figure 81: Concept diagram showing garden wall, garden, and building

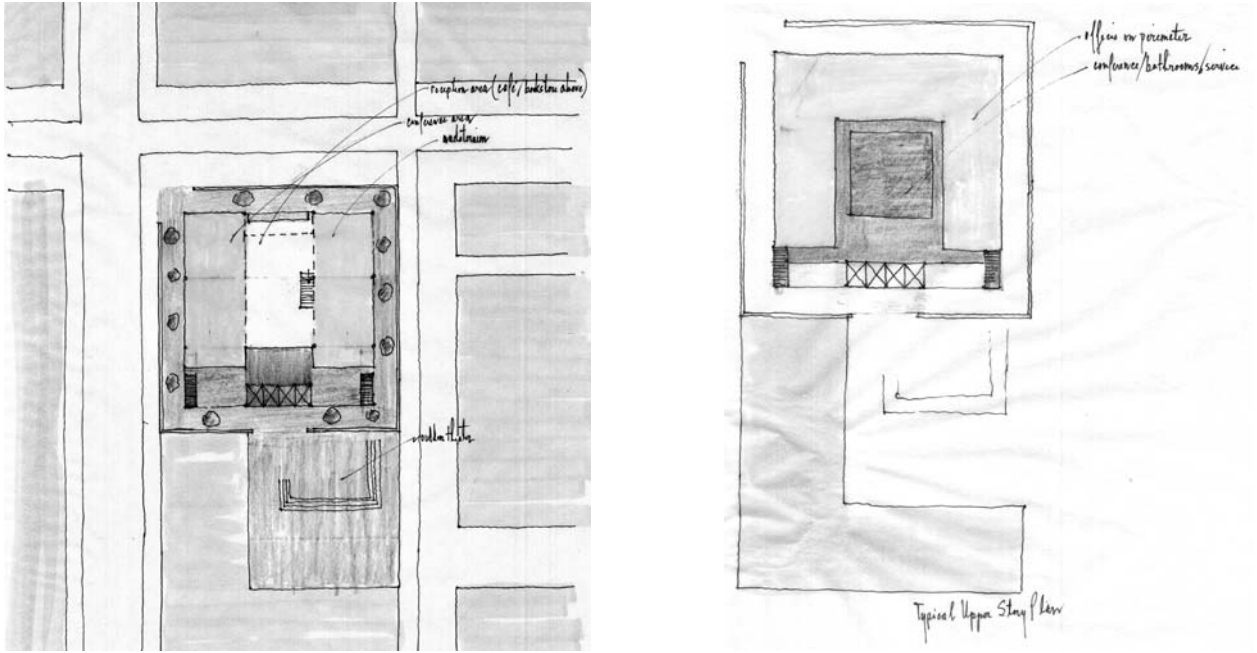


Figure 82: Parti B Ground Floor and Upper Floor Schematic

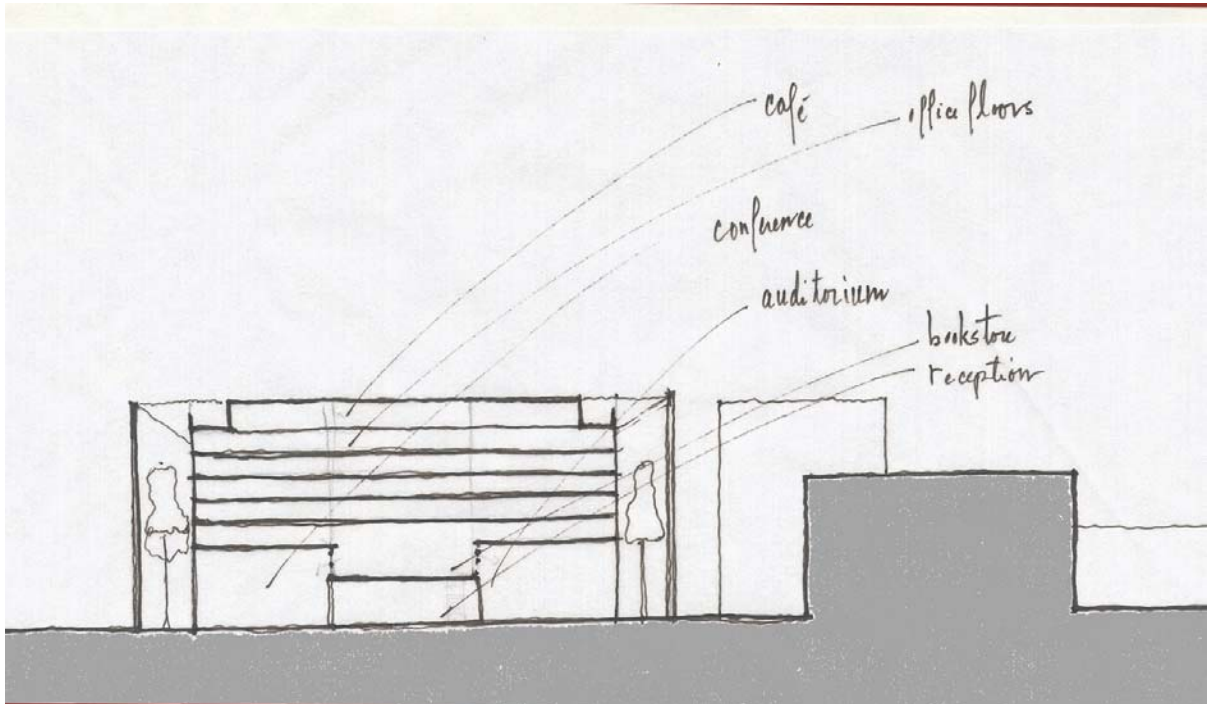


Figure 83: Parti B Sectional Schematic

PARTIC

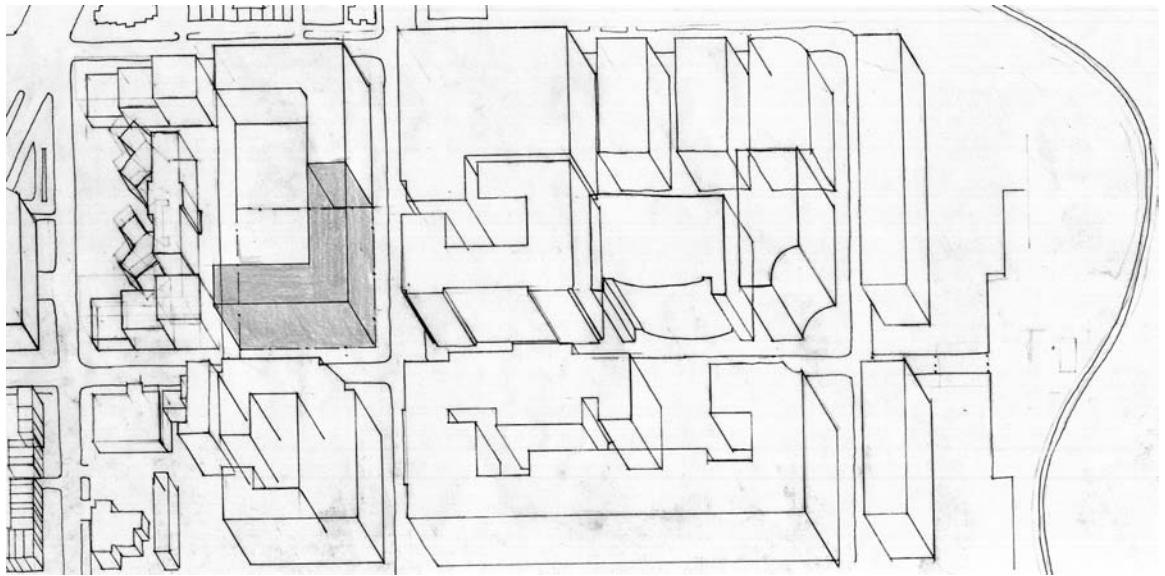


Figure 84: Parti C

The L shaped parti captures private outdoor space.

PARTID

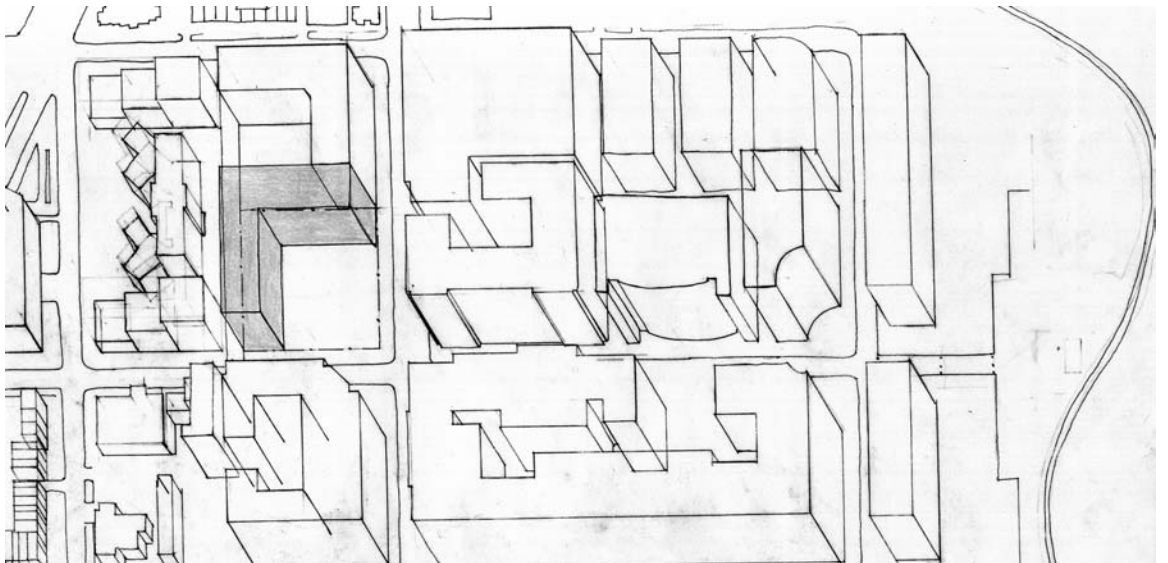


Figure 85: Parti D

The L shaped parti captures public outdoor space.

CHAPTER VII: CONCLUSIONS

The search for an appropriate form with the ability to evoke not just a singular idea but a complexity of ideas relating to women and women's leadership was important to this project. It was critical that the atrium space be the primary space representing women's leadership symbolically. The atrium space also needed to be able to function as space for informal and formal gathering, promoting the sharing and exploration of new ideas and information relating to women's issues. I arrived at an elliptical form for the atrium, symbolically representing universality, motion, and suggesting a form to represent women and power.

It was determined, after much thought, the most symbolically significant way to enter WILL would be along a southern garden adjacent to the Historic Columbia Hospital of Women, in recognition of the historically important role this building has played for women since the Civil War. Reinforcing another of WILL's missions, to be a lobbying institution taking advantage of its proximity to the Federal Government, the entry and atrium space were positioned on axis with Pennsylvania Ave. and the National Mall. The curve of the building was created and shaped, like a violin, from two elliptical forms to create an aesthetically pleasing form. The curve takes place on the southern side further reinforcing relationships to the park, Pennsylvania Ave. and increasing the amount of southern light entering the atrium space and offices. Again using the elliptical form, the garden reaches in and leads one to the conference level floor where there is a bamboo garden. This is where one achieves the first full glimpse of the elliptical atrium space.

In order to address the significance of the corner at M street, a vertical block of important spaces were developed on the corner: the restaurant, electronic library, office floor, conference spaces, and the forum at the top floor. These special spaces are the only time when the regular, rectilinear grid is broken adding to their symbolic significance within the building.

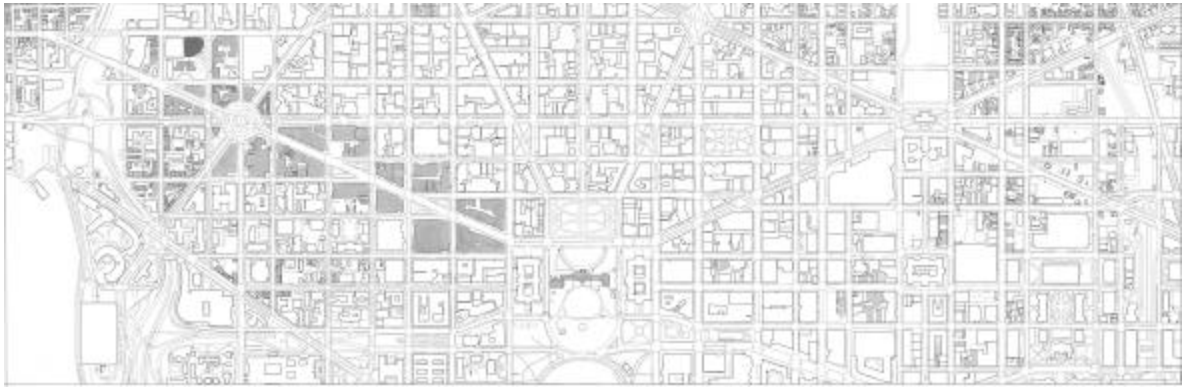


Figure 86: Context Map showing the relationship of WILL to Pennsylvania Ave. and the National Mall.

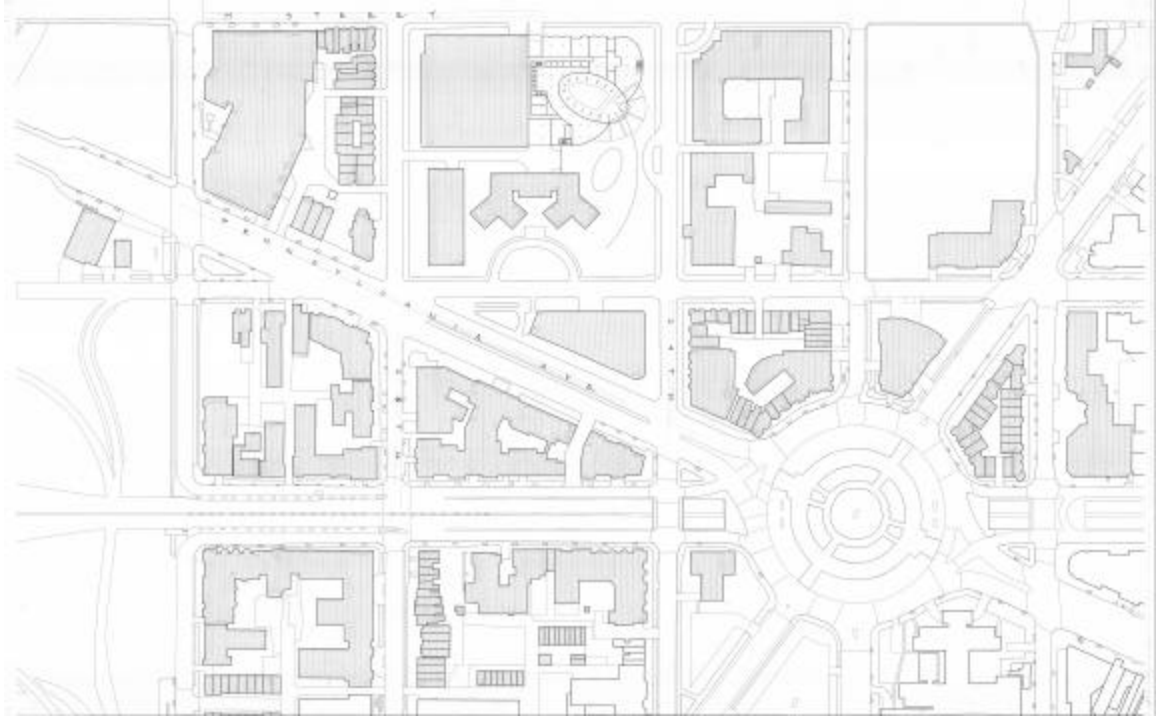


Figure 87: Context Plan showing elliptical atrium space and its axial relationship to Pennsylvania.

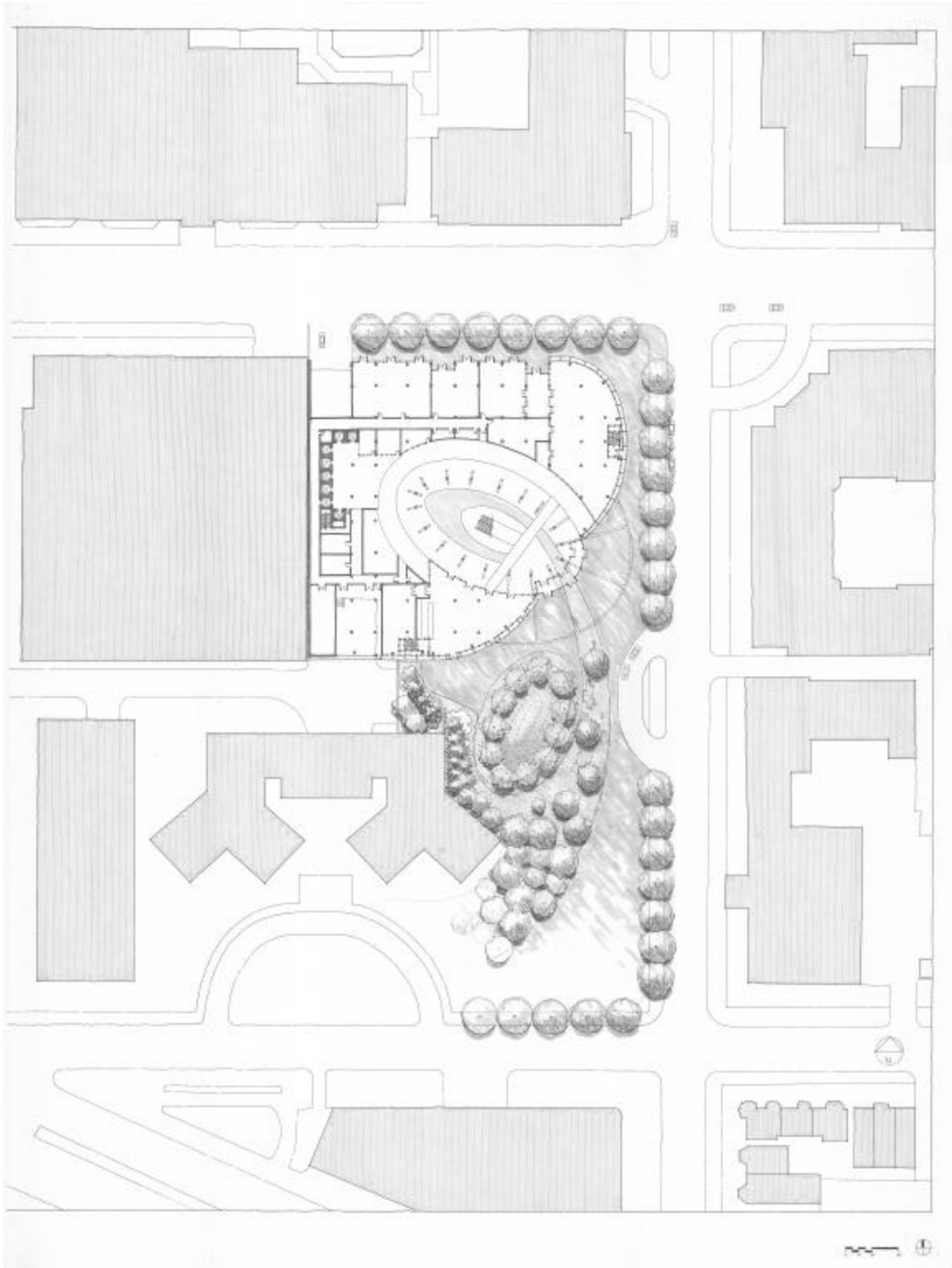
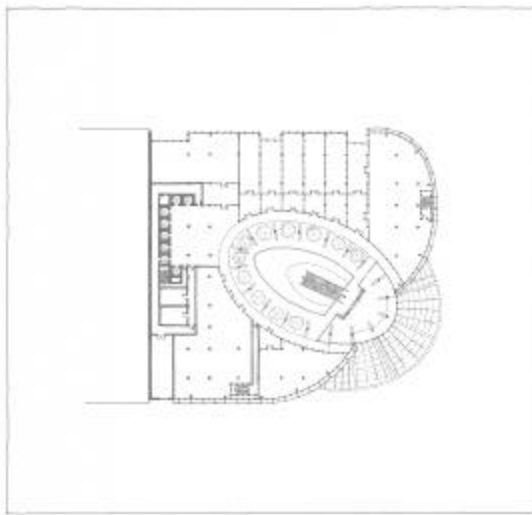
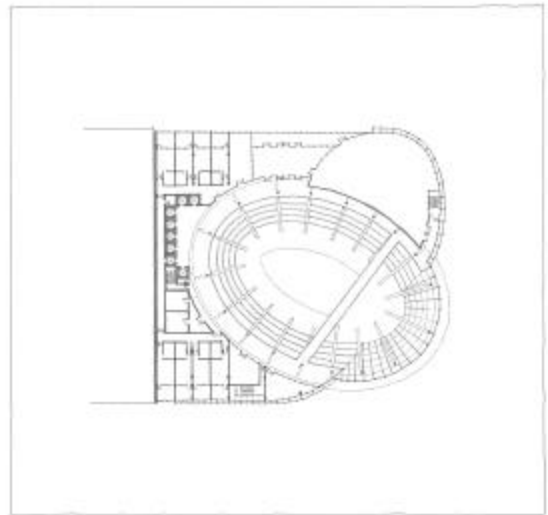


Figure 88: Site Plan showing block modifications, entry level floor plan and garden



CONFERENCE LEVEL PLAN



FORUM LEVEL PLAN

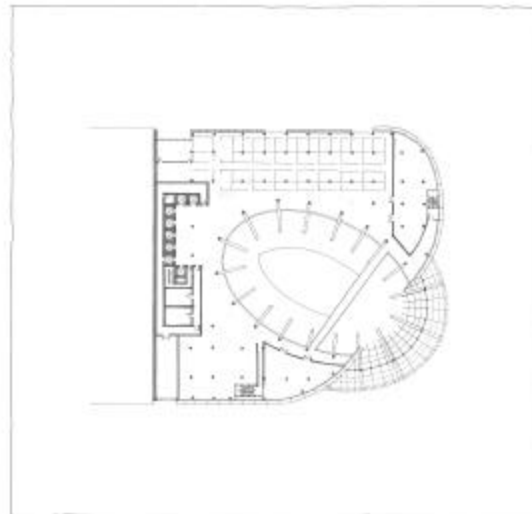


Figure 89: Conference Level, Forum Level, Office Level, and Parking Level Plans

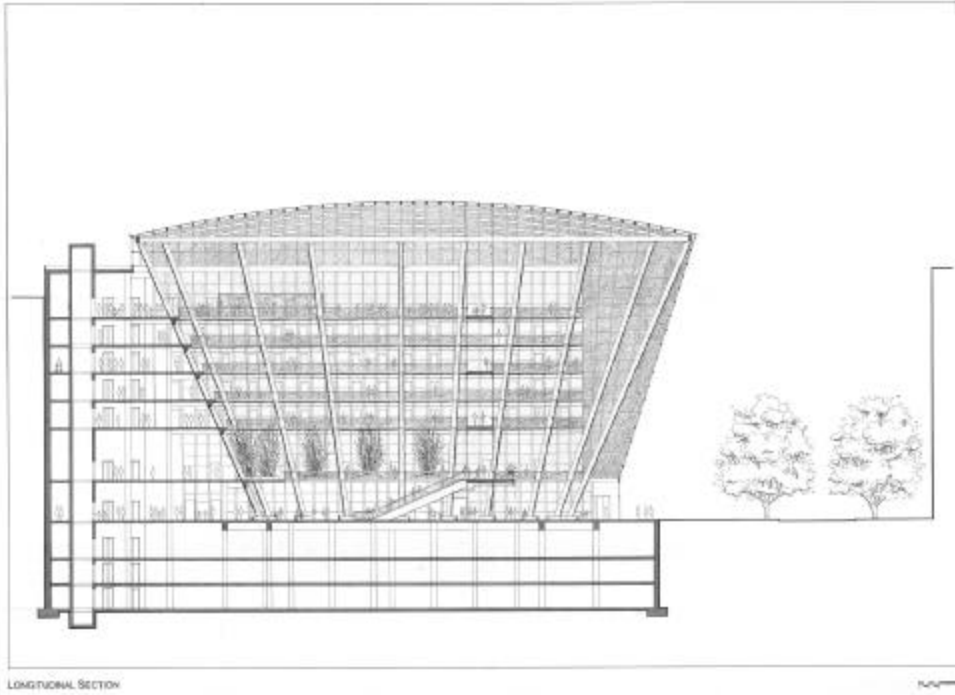


Figure 90: Longitudinal Section

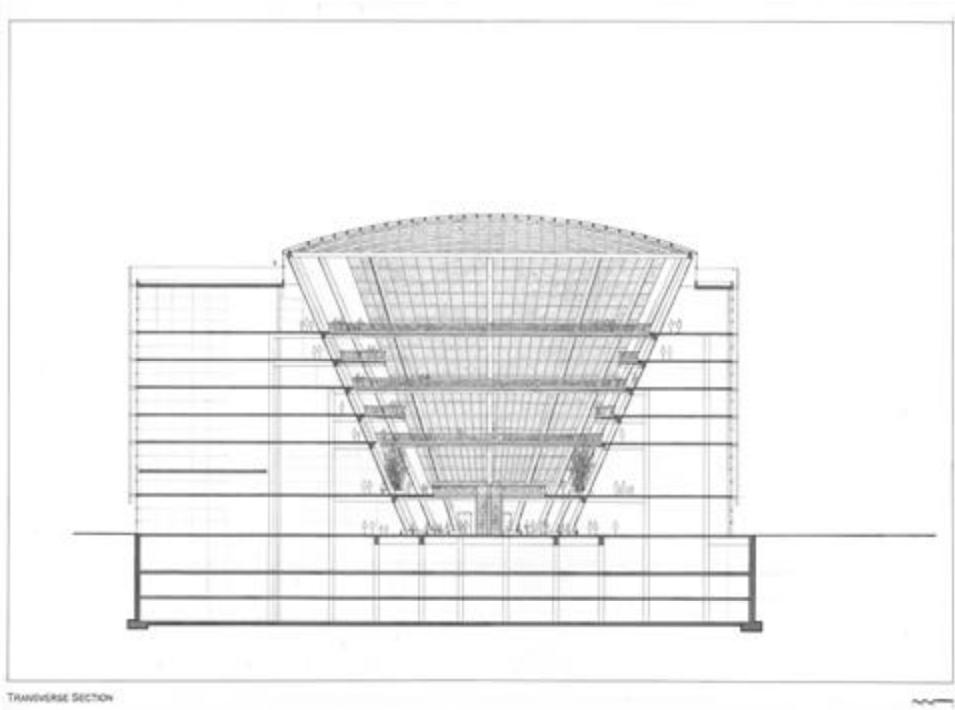


Figure 91: Transverse Section



Figure 92: North Facing Elevation

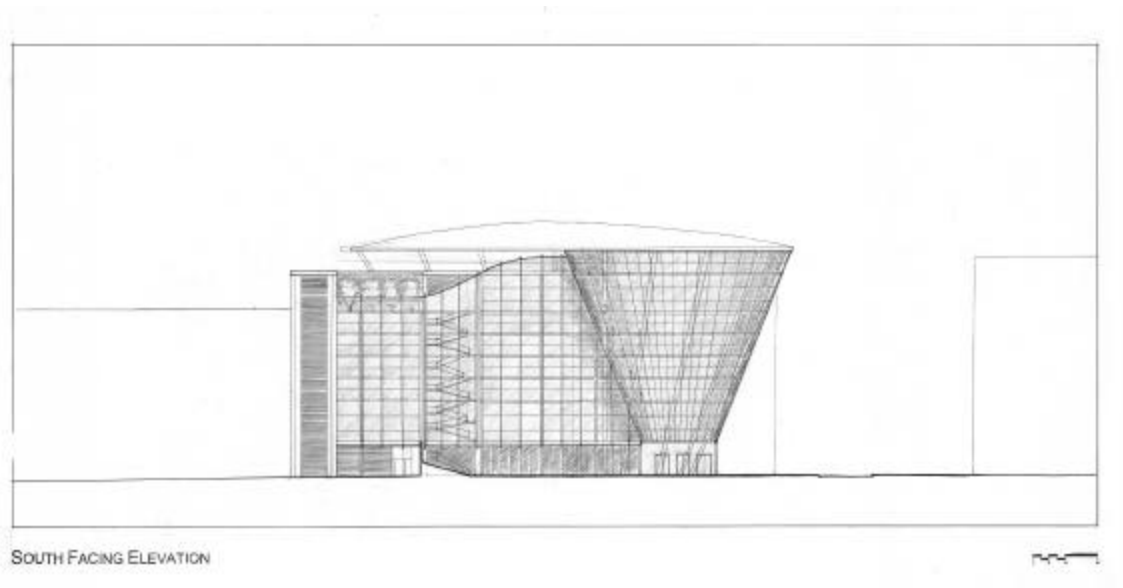


Figure 93: South Facing Elevation

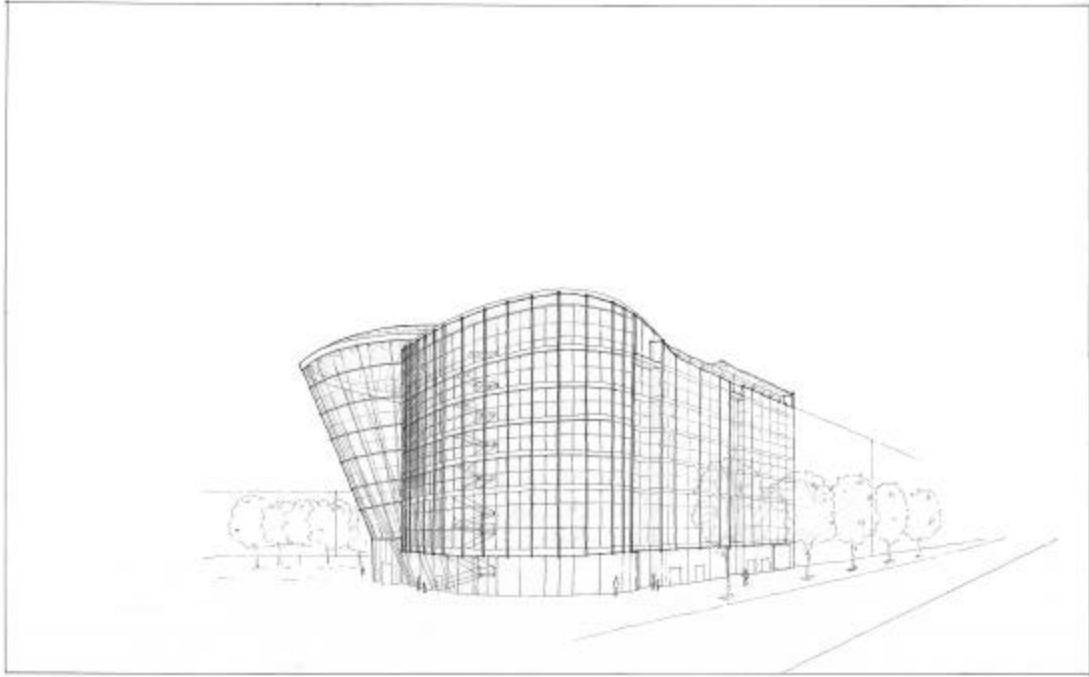


Figure 95: M Street Elevation

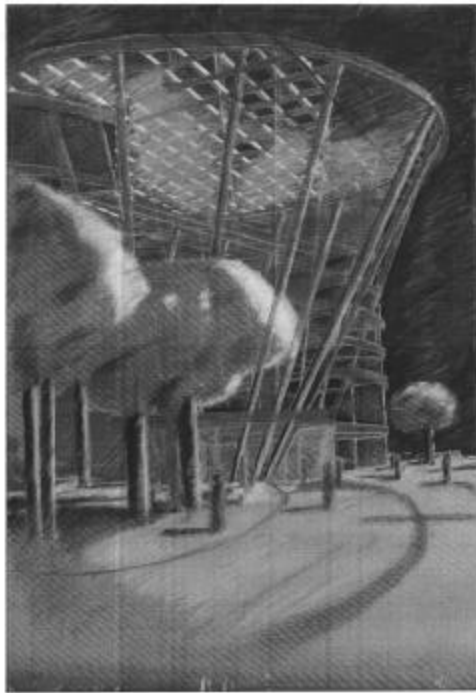


Figure 96: Garden Entry and Roof Top Perspective

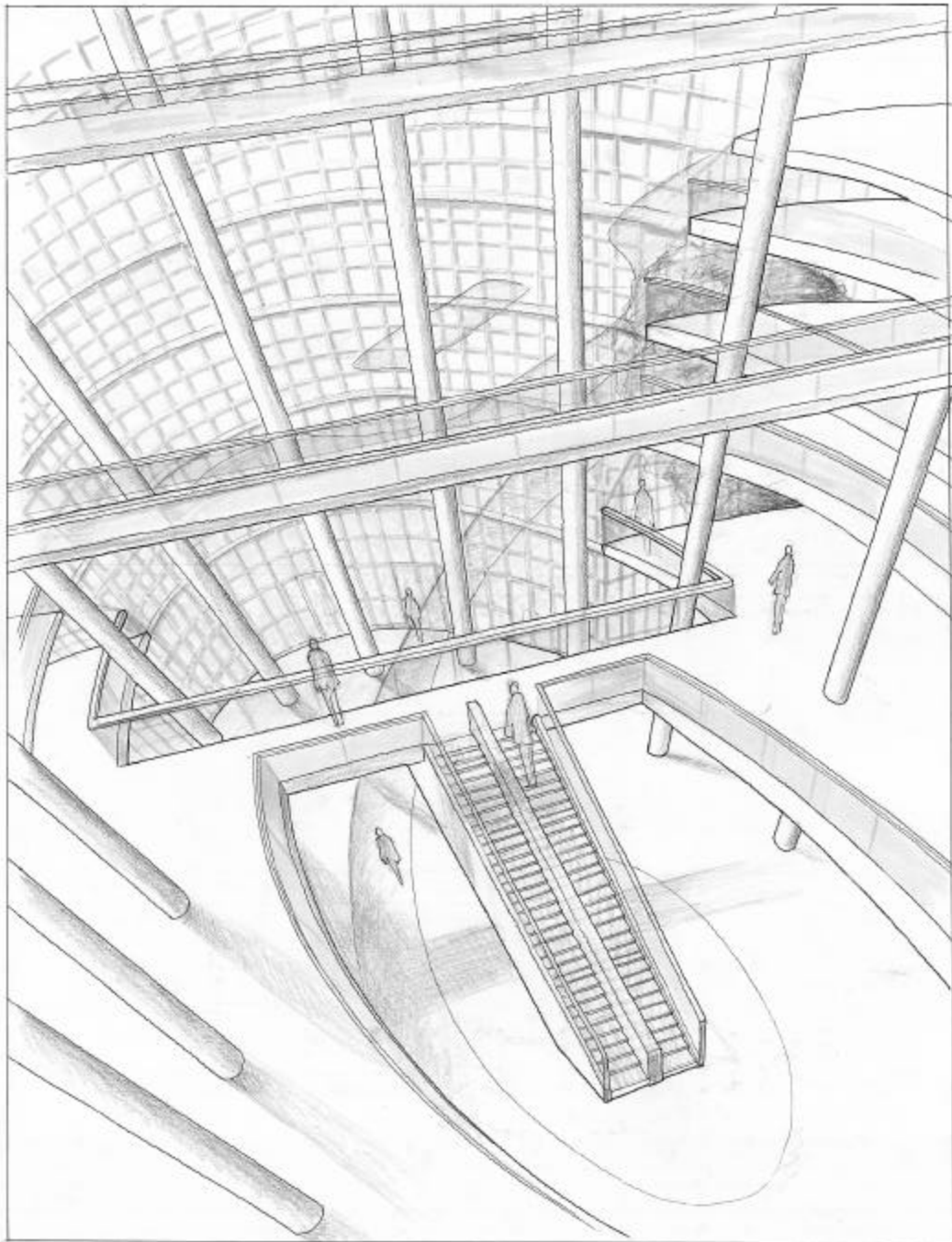


Figure 97: Interior Perspective

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