### **ABSTRACT**

Title of Thesis: THE NATIONAL MUSEUM FOR

WOMEN'S ACHIEVEMENT

Degree Candidate: Elaine Vera Grossman

Degree and Year: Master of Architecture, 2002

Thesis Directed By: Thomas Schumacher, Professor

School of Architecture

This thesis seeks to represent and celebrate, on the Mall in Washington, D.C., a history of women's achievement. While the mall serves as host to a number of important museums and monuments, there is within this heavily symbolic tapestry little specific recognition of the history of women. Choice and equality for women should be celebrated, reinforced and recorded urbanistically and architecturally on this most symbolically significant piece of Washington D.C.'s historical urban fabric. Of primary importance here is a physical representation of the movement of women from the periphery of political, social and economic activity to the center of it.

The study of form and material for this museum will explore ideas about honor, monumentality, equality and innovation in thought.

## THE NATIONAL MUSEUM FOR WOMEN'S ACHIEVEMENT

by

## Elaine Vera Grossman

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 2002

**Advisory Committee:** 

Thomas Schumacher Pablo Guiraldes Randy Mason Steven Sachs

©Copyright by

Elaine Vera Grossman

2005

# TABLE OF CONTENTS

I.	List of Figures	iv
II.	Historical characteristics of site and context	1
III.	Physical Characteristics of Site and Context	9
IV.	Program	22
V.	Precedents	26
VI.	Design Approach	40
VII.	Special Problems and Issues	53
VIII.	. Conclusion	56
IX.	Bibliography	78

# LIST OF FIGURES

Fig.		Page
1	Plan for the Mall 1791	3
2	The Mall 1870	3
3	McMillan Commission Plan	4
4	New Master Plan for Future Development of the Mall	8
5	Site Topography	11
6	Figure Ground of the Mall	12
7	Axonometric Drawing of the Smithsonian Museums	12
8	Site Section	13
9	Site Axon	13
10	Sun Path Diagram	14
11	Axon of Area Immediately Surrounding Site	14
12	Site Dimensions	15
13	Pedestrian and Vehicular Traffic Around the Site	16
14	Site Sections	17
15	View of Site	18
16	West Façade of American History Museum	18
17	South Façade of American History Museum	18
18	View of North and West Edges of Amer. History Mus.	19
19	View of West half of Amer. History Mus. from across Mall	19
20	Museum for Women in the Arts	20
21	Women's Museum	20
22	Plan of TX Women's Museum	21
23	Pedestrian and Vehicular Circulation at Kunstandwerk	28
24	Site Plan of Kunstandwerk	29
25	First Floor Plan of Kunstandwerk	29
26	Sectional Circulation at Kunstandwerk	29
27	The High Museum of Art	30
28	Guggenheim Museum and Addition	30
29	Guggenheim Museum and Addition	31
30	Plans, Sections, Elevation, Diagram of Guggenheim Mus.	32
31	Configuration of the Original Guggenheim Museum	33
32	In Hollein's Guggenheim Museum	33
33	Hollein's Guggenheim Museum	34
34	Holocaust Museum Plans and Section	35
35	Interior circulation of the Holocaust Museum	36

# LIST OF FIGURES, CONT'D

Fig.		Page
36	Sackler Museum at Harvard, James Stirling	36
37	Section and Plans of Sackler Museum	37
38	The European Centre of Volcanism	44
39	New Corcoran Addition	44
40	Parti Diagrams	45
41	Carignano Palace, Turin	46
42	Axonometry of reconstruction	47
43	Plan Diagrams	48
44	Variations of Elevations	49
45	Section Diagrams of Rectilinear Scheme	50
46	Plan Diagram of Rectilinear Scheme	50
47	Plan and Elevation showing ideas about use of ova forms	51
48	Final Project: Exterior Perspective Drawing	59
49	Design Concept Sketch for Hall of Women	60
50	Final Model: South Façade	61
51	Final Model: West Façade	62
52	Final Model: North/West Perspective View	62
53	Final Model: Aerial View	63
54	Longitudinal Section	64
55	Transverse Section	64
56	Wall Section and Plan	65
57	Wall Section, Plan and connection detail	66
58	Perspective Sketch: Third Floor—Hall of Women	67
59	Perspective Sketch: Fourth Floor—Hall of Women	68
60	Perspective Sketch: Fifth Floor Balcony	69
61	Site Plan	70
62	Typical Floor Plan	71
63	Fifth Floor Plan	72
64	Roof Plan	73
65	Lower Level Plan	74
66	Site Elevation	75
67	East Elevation	75
68	North Elevation	76
69	South Elevation	76
70	West Elevation	77

HISTORICAL	CHARACTE	ERISTICS O	F SITE AND	CONTEXT

### HISTORICAL CHARACTERISTICS OF SITE AND CONTEXT

In June of 1791, L'Enfant devised an Outline Plan for The Mall that required the vast space between the White House and the proposed Capitol to be lined with buildings. He also imagined a "vast esplanade" of public walks, avenues and gardens that would visually connect these two significant buildings. L'Enfant designated this open space for ceremonies and ambassadorial residences.<sup>1</sup>

In 1850, Andrew Jackson Downing planned the Mall as a Romantic Landscape.

The only portion of this plan that was executed was the Ellipse (south of the White House.) However, until the end of the nineteenth century, a part of Downing's vision existed in the form of a system of informal paths on the Mall.

James Renwick's design for the Smithsonian Institution was more lasting, as it set a precedent for cultural institutions on the Mall. Renwick sited the Castle parallel to the Mall axis, which established a six hundred foot corridor.<sup>2</sup>

In the early 1900's, Senator James McMillan headed a U.S. Senate

Commission to create a new park system plan for Washington, D.C. The

McMillan Commission (Daniel Burnham, Frederick Law Olmsted, Jr., Charles F.

McKim, and Augustus Saint-Gaudens) worked toward fulfilling L'Enfant's

formal intention for the Mall.

And

<sup>&</sup>lt;sup>1</sup> Andrews, 33.

<sup>&</sup>lt;sup>2</sup> Andrews, 34

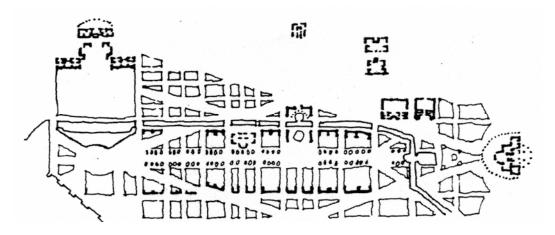


Fig. 1 Plan for the Mall: 1791

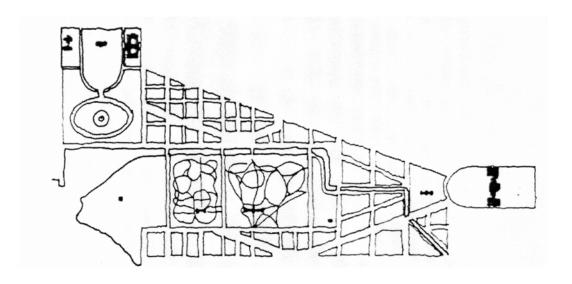




Fig. 2 The Mall 1870

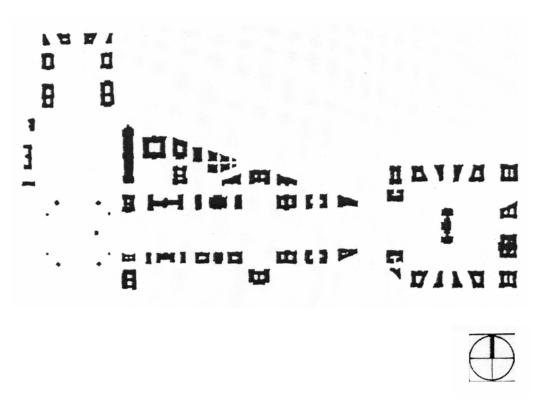


Fig. 3 McMillan Commission Plan

'... an avenue might be opened through the mall from the grounds of the Capitol to the Potomac River, where the proposed memorial bridge might be built at some future time, making that avenue a boulevard, with trees on either side, and possibly a riding path. ....Strange to say, upon looking at the maps which the committee had before it, it was seen that the original plan of Washington, as prepared by Major L'Enfant, provided for just such an avenue, public buildings to be erected on either side of the same...' In the end, the report was adopted, amended only by the addition of a new presidential residence as an alternative to the proposal to reconstruct the existing one.<sup>3</sup> Under McMillan, Colonel Theodore

<sup>&</sup>lt;sup>3</sup> Reps, 73

Bingham, Samuel Parsons, Glenn Brown and others worked on schemes for the development of the Mall.<sup>4</sup>

During the Civil War, the land surrounding the base of the Washington Monument was a drop-off point for cattle used to feed the troops. The water of the Potomac River used to extend almost to the base of the Monument. Between the 1870's and 1913, landfill operations began, during which time over 600 acres were added to Washington, D.C. All of the buildings on the mall have always been public buildings, with the exception of the Department of Agriculture. The Lincoln Memorial, which anchors the West end of the Mall, was dedicated in 1922.<sup>5</sup>

#### FEDERAL TRIANGLE

The great triangle between Pennsylvania Avenue, 15<sup>th</sup> Street, and Constitution Avenue was commonly understood as a place which should be "acquired for public purposes...In 1910, Congress had approved plans for three departments: Justice, Commerce and Labor, and State, on sites between 14<sup>th</sup> and 15<sup>th</sup> Streets and Pennsylvania and Constitution Avenues." In 1928, a new act was passed,

Authorizing the acquisition of all private lands in the triangle area at a cost not to exceed \$25,000,000. With the assurance that the entire triangle could be planned as a unit, as the Fine Arts Commission urged, the board of architectural consultants prepared a comprehensive

-

<sup>&</sup>lt;sup>4</sup> Reps, 73

<sup>&</sup>lt;sup>5</sup> Penczer, 35

<sup>&</sup>lt;sup>6</sup> Reps, 169

scheme for the area...Actual development closely followed this plan, although individual buildings took somewhat different form, and a proposed large central court between the Commerce and Post Office Departments became an automobile parking lot. The buildings are all of neo-classic design, some being fairly restrained, although John Russell Pope's National Archives building is rather more elaborately imposing. Uniform cornice and belt lines along Constitution and Pennsylvania Avenues serve to tie individual buildings together and relate them to one another. The great mass of the commerce Building facing the White House grounds on 15<sup>th</sup> Street forms an effective frame for that large and important open space.<sup>7</sup>

#### **CURRENT MALL PLANS**

The Memorials and Museums Master Plan addresses three main issues.

First, it identifies "the suitable sites in the Nation's Capital that are available to handle the memorials and museums that the nation will want to accommodate well into the 21<sup>st</sup> Century." Second, the plan develops "concepts for a new memorial and museum sites that reinforce the historic urban design features of the city, do not intrude upon the settings of existing memorials or museums, and result in minimal adverse environmental and transportation impacts and positive economic and other effects on the culture of local neighborhoods. Third, it tries to find a method of making "memorials and museums "work for a living" while also allowing them to be effective forms of commemoration or important centers of scientific and cultural information.

While it is to be admired that planners are looking to cultivate culturally, economically and socially significant areas in other parts of Washington, D.C., it seems somewhat rigid to determine that any part of the city is ever complete, or

<sup>&</sup>lt;sup>7</sup> Reps, 170-173

<sup>&</sup>lt;sup>8</sup> Memorials Master Plan, 1

unalterable. The mall seems by no means complete, especially in the area directly surrounding the Washington Monument.

It seems that adding to the Museum of American History, for example, would help to complete an ill-defined region between Constitution Avenue and Madison Drive, and 15<sup>th</sup> and 12<sup>th</sup> Streets. While studying this area in plan may give the illusion that there is not room for other building, in fact many places on the mall feel vacuous and underutilized. Rather than intrude upon existing buildings, this thesis attempts to aid the buildings on the Mall and the relationships between them. Finally, any building can "work for a living," provided that its form and function are culturally necessary and desirable, and that it is in a location that can be somewhat easily accessed.

Perhaps, through its articulation, the new Museum for Women's Achievement becomes a figurative void, where its material expression is rather

transparent and light, and whereby the most significant way in which it expresses its presence is through the use of light, rather than heavier materials such as stone.

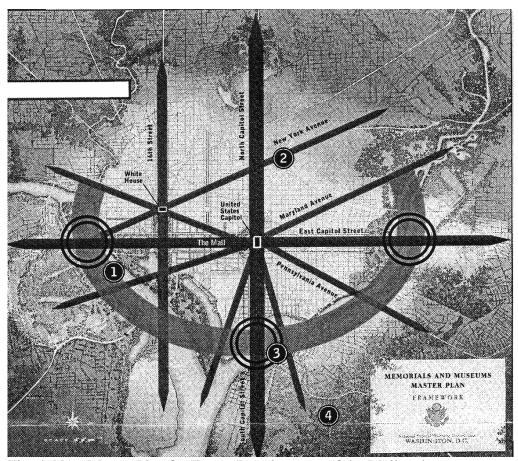


Fig. 4 New Master Plan for Future Development of the Mall and Monumental Washington

PHYSICAL CHARACTERISTICS OF SI	TE AND CONTEXT

### PHYSICAL CHARACTERISTICS OF SITE AND CONTEXT

The site for the National Museum for Women's Achievement is located between the American History Museum and 15<sup>th</sup> Street, to the northeast of the Washington Monument. This site has been selected due to its prominent location among the institutional, honorific buildings which flank the mall, completing the strong edge which lines the green space between the U.S. Capitol and the Washington Monument. The site is surrounded by buildings on the North and East, and green space on the South and West. These conditions give opportunities to explore the idea of an outdoor amphitheater space, perhaps relating to the green spaces surrounding the Monument, and addressing the Museum of American History and the façade of the Commerce Department.

#### **TOPOGRAPHY**

The site slopes downward from 20 feet to ten feet, from the south to the north of the site. To the West, the Washington Monument sits at 40 feet.

The setback of the site is 50 feet from the West street edge (14<sup>th</sup> Street), and 80 feet from the North and South street edges (Constitution Avenue and Madison Drive). The dimensions of the site are 80 feet by 375 feet (from setback on 14<sup>th</sup> Street to platform of American History Museum).

10

<sup>&</sup>lt;sup>9</sup> Smith, The United States Slavery Museum document.

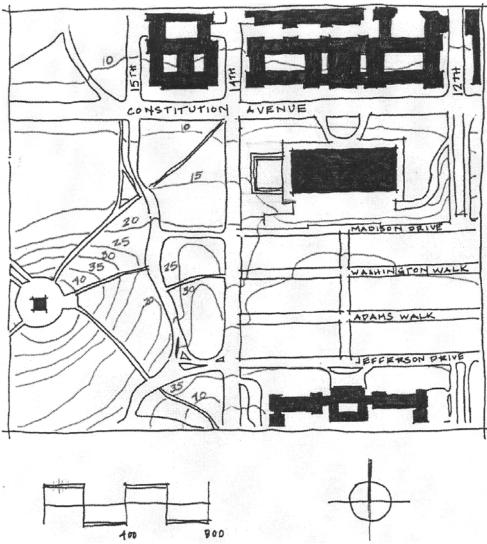


Fig. 5 Site Topography

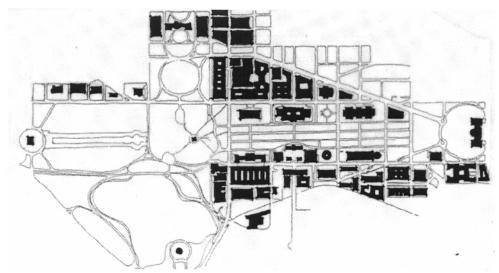
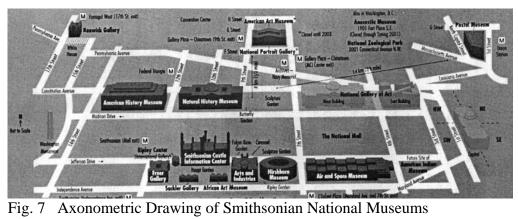


Fig. 6 Figure Ground of the Mall



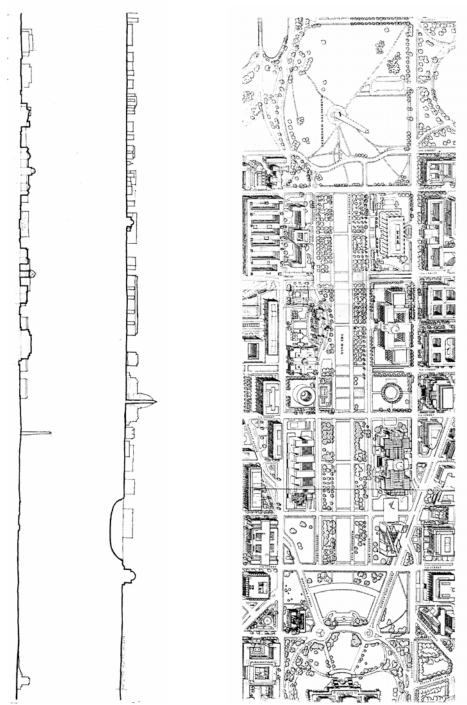


Fig. 8 Site Section

Fig. 9 Site Axon

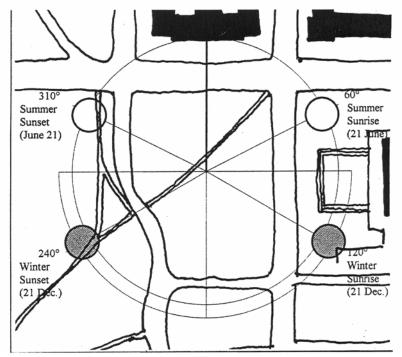
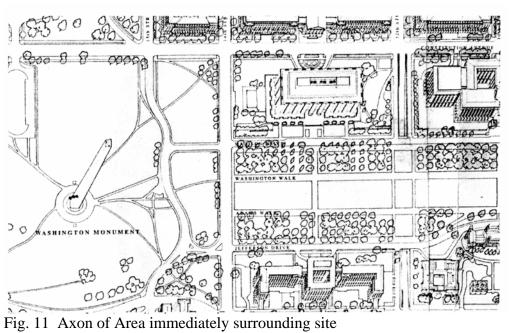
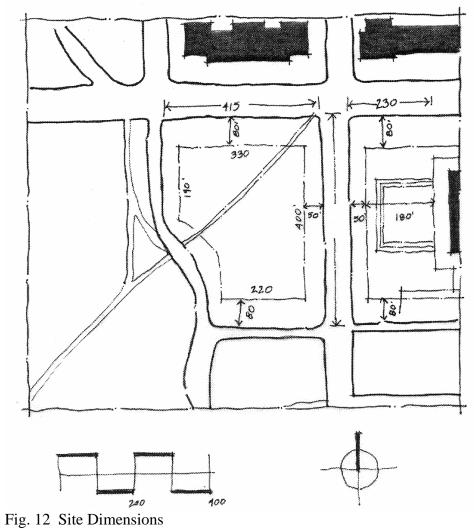


Fig. 10 Sun Path Diagram





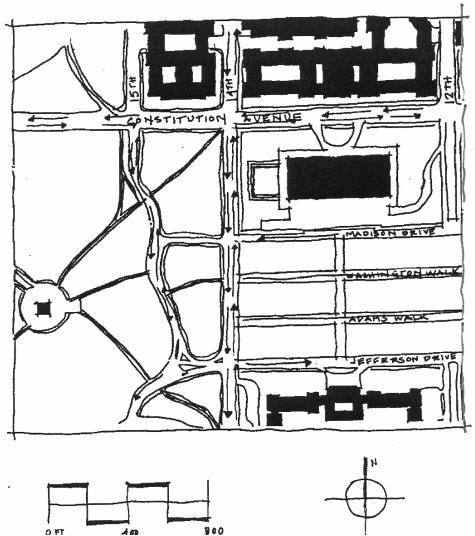


Fig. 13 Pedestrian and Vehicular Traffic Around the Site
Double Arrows = Vehicular Traffic (Constitution, 14<sup>th</sup> St, etc.)
Single Arrow = Pedestrian Traffic (Madison Drive, Washington Walk, etc.)

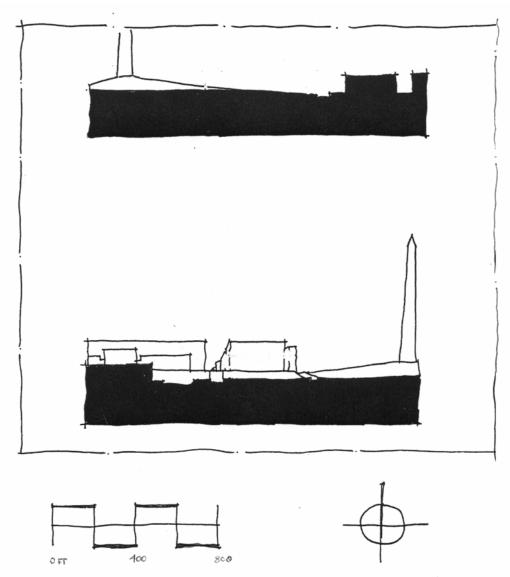


Fig. 14 Site Sections

Top: View of Site Looking North (View of Madison Drive Façade) Bottom: View of Site Looking East (View of 14<sup>th</sup> Street Façade)



Fig 15 View of Site, including possible amphitheatre site, from 15<sup>th</sup> Street.

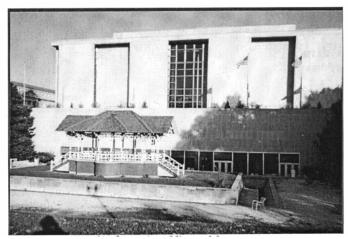


Fig. 16 West Façade of American History Museum Facing 14<sup>th</sup> Street and Washington Monument: Building rises to 60 feet, is made of stone, and has a tripartite organization. Heavy stone base wraps building. This façade will be obscured by new Museum of Women's Achievement.



Fig. 17 South Façade of American Hist. Museum

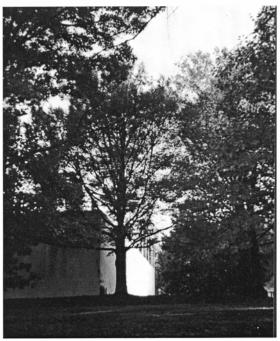


Fig 18 View of North and West Edges of American History Museum – site intervention



Fig. 19 View of West Half of American History Museum from across Mall

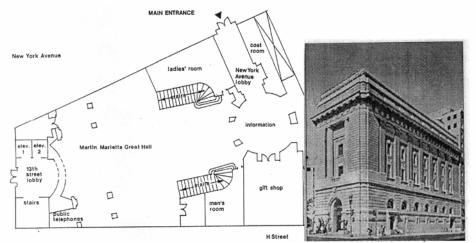
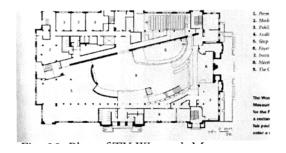
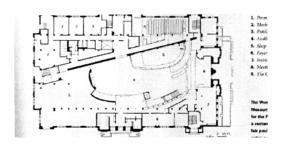


Fig. 20 Museum for Women in the Arts, Washington D.C., First floor plan, perspective of building



Fig. 21 Women's Museum, Fair Park, Dallas, TX





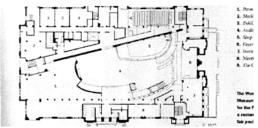


Fig. 22 Plan of TX Women's Museum: As in many of the following precedents, circulation is designed in spiral formation.



**PROGRAM** 

# **PROGRAM**

	<b>Space</b>	Size (sf)
Service:	Lobby	4,000
	Information	250
	Telephones	100
	Freight Elevator	150
	Public Elevator	150
	Loading Elevator	300
	Coat Room	125
	Women's Room (4 @ 200)	800
	Men's Room (4 @ 150)	600
	Gift Shop	2,000
	Kitchen	1,200
	Café	2,000
	<b>Total Service</b>	11,675
Exhibit:	Evhibit (Long Torm)	40,000
Exmolt:	Exhibit (Long Term)	40,000 20,000
	Exhibit (Temporary)	20,000
	Total Exhibit	60,000
<b>Education:</b>	Auditorium (150 seats)	3,500
	Green Room	200
	Classrooms (2 @ 300)	600
	Offices(5 @ 200, 2 @ 150)	1,300
	Library	1,400
	<b>Total Education</b>	7,000

# PROGRAM, cont'd

	<b>Space</b>	Size (sf)
Exhibition Support:	Exhibit Design	1,500
	Storage	3,000
	Conference	400
	<b>Total Exhibition Support</b>	4,900
<b>Building Service:</b>	Custodial	300
Building Service.	Storage	200
	Mechanical and Electrical	5,000
	<b>Total Building Service</b>	5,500
Circulation:	Grand Staircase (5 floors, incl. atrium space	20,000
	(с 110013, 1111 шили зрисс	,
	<b>Total Circulation</b>	20,000*
<b>Estimated Total Muse</b>	ım Square Footage	109,075

<sup>\*</sup>Other circulation is included in exhibition space

**PRECEDENTS** 

### **PRECEDENTS**

PROGRAM COMPARISON: MUSEUM FOR WOMEN IN THE ARTS AND MUSEUM FOR WOMEN'S ACHIEVEMENT

The following is the program for the Museum for Women in the Arts, <sup>10</sup> which has been studied in comparison with the needs of the Museum for Women's Achievement. In general, this museum has much smaller spaces and has slightly less than a third of the overall square footage of the Museum for Women's Achievement.

Program	Museum for	Museum for
	Women in the Arts (sf)	Women's Achievement (sf)
Lobby	300	4,000
Information	275	250
Elevators	150	150
Freight Elevators	150	150
Stairs	3,500	20,000
Fire Stairs	1,000	5,000
Gift Shop	300	2,000
Coats	150	125
Telephones	150	100
Women's Rooms	625	800
Men's Rooms	475	600
Loading	300	300
Kitchen	200	1,200
Café	1,000	2,000
Exhibition	11,000	40,000
Classrooms	1,500	600
Auditorium	1,520	3,500
Green Room	200	200
Offices	500	1,300
Library	1,400	1,400
Curatorial	1,500	4,900
Galleries	11,136	20,000
Total:	30,000	109,075

<sup>&</sup>lt;sup>10</sup> Courtesy of Museum for Women in the Arts

## MORE PRECEDENT STUDIES:

The High Museum of Art, Richard Meier

Kunstandwerk Museum, Richard Meier

The Guggenheim Museum, Frank Lloyd Wright

The Guggenheim Museum, Hans Hollein

The Holocaust Museum, James Ingo Freed

The Sackler Museum, James Stirling

The Carignano Palace, Andrea Bruno

### MASSING

The High Museum in Atlanta, Georgia, is an interesting precedent for a couple of reasons. First, it has a monumental expression, created as a result of its highly transparent entry piece, flanked on either side by more solid pieces, the upward ramp leading to the entrance (especially as it is juxtaposed with the more mildly sloping ramp to the left), seemingly opening and embracing "arms" of the building, more transparent first and second floors, uniformly white, shiny metal panels, and "object in the landscape" status on the site. As regards the upward sloping ramp, such a system could be used to transport visitors from the 14<sup>th</sup> Street side of the site (East of the Monument) into the building, thereby bringing them into the second level of the building as the main level. This way, the ramp

on the Constitution façade could also be utilized to bring visitors to the main level of the museum.

At the Guggenheim Museum in New York, New York, there exists a figure/bar relationship between the Guggenheim Museum and its addition. This relationship is reversed in Hollein's Guggenheim Museum, where the bar behind the figural piece is lower than the figural piece, increasing one's sense of the scale of the figure.

At Kunstandwerk, by Richard Meier, there is a similar figure/bar relationship, where the "bar" contains all of the private functions, and the figure holds the public functions.

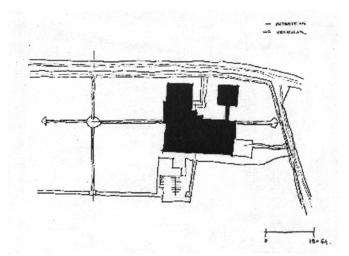


Fig. 23 Pedestrian and Vehicular Circulation at Kunstandwerk by Richard Meier

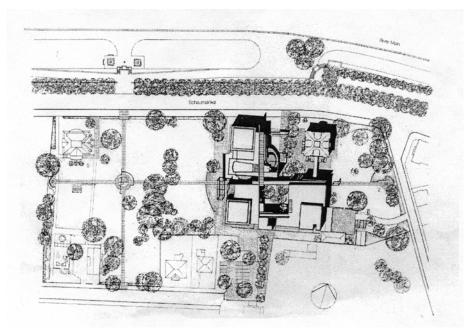


Fig. 24 Site Plan of Kunstandwerk by Richard Meier

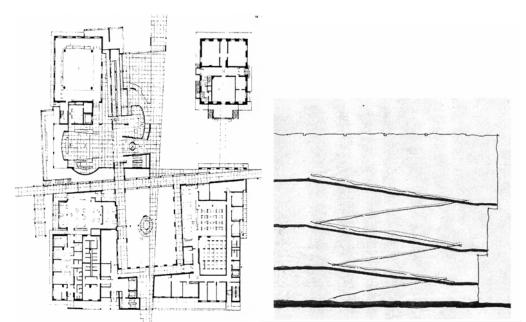


Fig. 25 First floor Plan of
Kunstandwerk
(spiraling formation)

Fig. 26 Sectional Circulation at Kunstandwerk



Fig. 27 The High Museum of Art, Atlanta, Georgia, Richard Meier



Fig. 28 Guggenheim Museum and addition, View of Roof

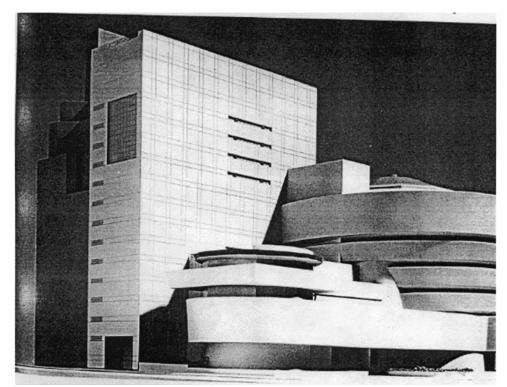


Fig. 29 Guggenheim Museum and addition, New York, NY, F.L. Wright

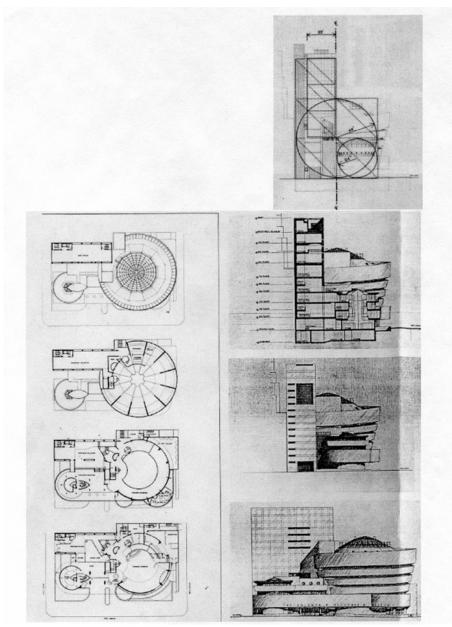


Fig. 30 Plans, Sections, Elevation, Diagram of Guggenheim

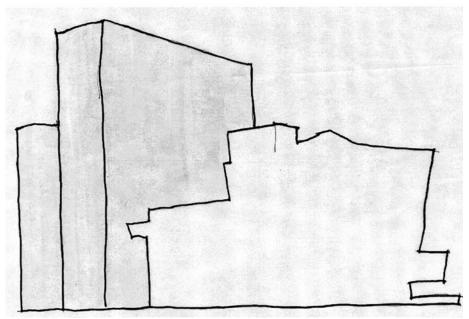


Fig. 31 The configuration of the original Guggenheim Museum and its Addition could be a precedent for an intervention on the site of the Museum of American History, where the museum serves as a backdrop for a more figural piece which holds the Museum for Women's Achievement.

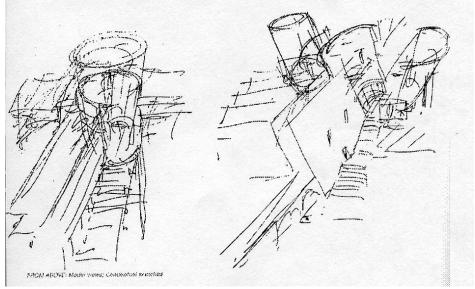


Fig. 32 In Hollein's Guggenheim Museum, the bar behind the figural Piece is lower than the figural piece, which increases one's sense of scale of the figure.

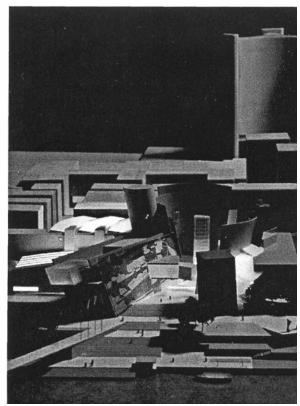


Fig. 33 Hollein's Guggenheim Museum, Note Bar/Figure relationship

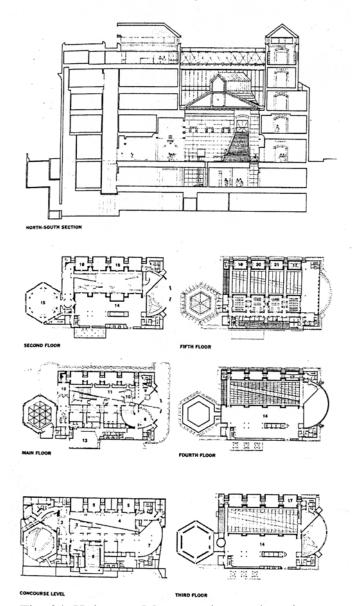


Fig. 34 Holocaust Museum plans and section

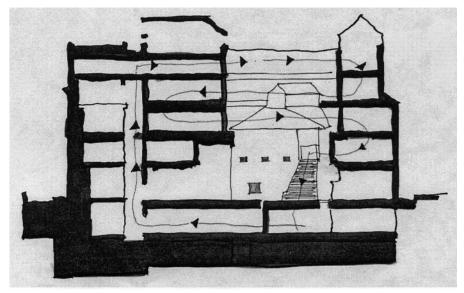


Fig. 35 Interior Circulation of the Holocaust Museum

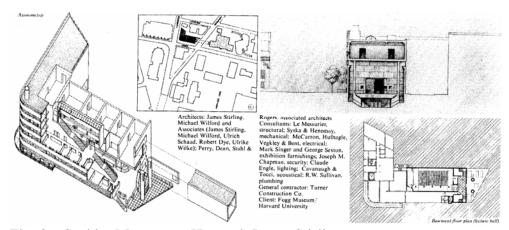
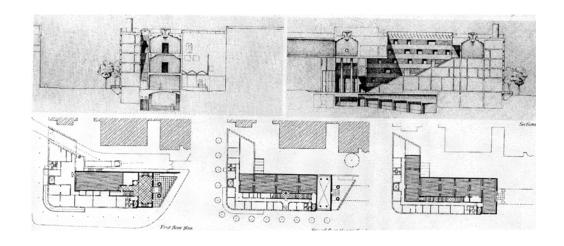


Fig. 36 Sackler Museum at Harvard, James Stirling
Axonometric, Site Plan, Section and Plan of Sackler Museum



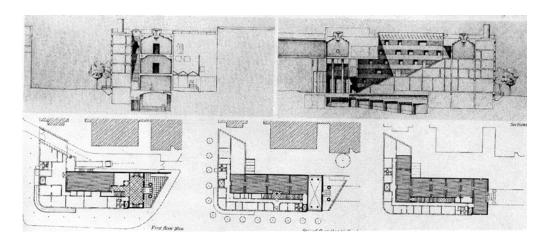


Fig. 37 Section and Plans of Sackler Museum

## PROMENADE/ CIRCULATION

The High Museum is quite similar in plan to the Guggenheim Museum, where both take the visitor on an upward, spiraling journey. At the High, however, visitors leave the ramp at each level, stopping into galleries where most of the artwork is displayed. At the Guggenheim, the artwork is experienced along the ramping journey.

The journey at Kunstandwerk is also a spiraling one, both in plan and in section. In section, visitors start at the ground floor and spiral upward by ramp.

At the Holocaust Museum, visitors are brought by elevator to the top floor, and led through the sequence of the museum from the top floor downward. This descent, it seems, is used to emphasize the downward spiral of the Holocaust experience. This is one way in which the design of circulation can begin to communicate with building patrons important ideas about the significant theoretical underpinnings of built form.

The new facilities at the Fogg Art Museum are on an L-shaped site, its principal façade residing on the main street, Broadway. This building adds over 38,000 sf. to the existing facilities, housing its important collections of Oriental, ancient and Islamic art, also providing new space for special exhibitions, offices, curatorial and service departments, storage, classrooms and library collections. Entry to the museum is through a glass lobby into a grand, 34 ft. entrance hall. Stairs flank the entry hall, leading to a 300-seat lecture hall used for University teaching and for Museum-sponsored public events. Also of interest here is the long, straight staircase that extends from the entrance to the top floor. The important functions of the museum are accessed from this staircase.<sup>11</sup>

38

<sup>&</sup>lt;sup>11</sup> Matthews.

## LIGHT

The Carignano Palace was renovated by Andrea Bruno. Bruno restored the top of the tower in the courtyard, as was Guarino Guarini's original design intention. The dome was completely remodeled, so that the heretofore blind oculi could light the galleries and allow views onto the surrounding terrace. Bruno's primary intention was to "give the palace a cohesive functionality and revalorization of the interior architecture by bringing the maximum amount of light into the building." <sup>12</sup>

Some of the important themes of the museum precedents that have been studied here are: grand entry, spiraling journey, organization around a main stair or ramp, very clear separation between public and private functions, light and metaphor in design.

<sup>12</sup> Techniques et Architecture, 96

**DESIGN APPROACH** 

## **DESIGN APPROACH**

The Museum for Women's Achievement has been placed next to the Museum of American History, on the Northern edge of the Mall, as the culmination of a series of important civic buildings. The site has been chosen for a multitude of reasons.

First, it is important that the Museum of Women's Achievement be located on the Mall, rather than on another site in the city. This placement guarantees appropriate visibility for the museum, a visibility that is congruent with the importance of its contents. Women comprise approximately one half of the United States population, and yet are still, although less today, marginalized in every aspect of society. Women can hardly be seen as a "minority," as we are often erroneously understood, or as some sort of specialized, not oft understood group of citizens. The mall, as a microcosm of American society, expresses the achievements of men to the exclusion of those of women. There have recently been museums, monuments and memorials that honor women, but these are usually in honor of women as they relate to men. Some examples of this are the Daughters of the American Revolution Building and the Nurse's Memorial. In contrast, we have honored the fathers of our country's achievement very completely: The Thomas Jefferson Memorial, the very tall and overpowering Washington Monument, the Lincoln Memorial, etc. This is not inherently bad.

Rather, it seems incomplete and somewhat dangerous to represent American society as consisting largely, if not solely, a product of male achievement.

The second reason for this placement of the museum is that the edge of Fourteenth Street is poorly defined between Constitution Avenue and Madison Drive. Presently, a vast, seldom-used gathering space faces Fourteenth Street. Furthermore, the façade of the Museum of American History that faces the Washington Monument (the West façade) is aesthetically unsatisfactory. This vast stone wall upon a platform and its associated outdoor space create little incentive for activity within it, especially because there are no functions which occur on the site directly to its west and northwest, between Fourteenth and Fifteenth Streets.

Third, the site directly to its West could be used for an outdoor amphitheater space that faces the proposed Women's Museum, hosting political speakers and theatrical events.

While the historically preserved building which currently houses the Museum for Women in the Arts has adapted well to its new use, it does not speak of its function to the public. Such a building requires a unique public persona, rather than simply wearing the clothing of its predecessors. For this reason, it is important that the building express itself as a formal, monumental achievement in honor of women. For example, it would be inappropriate for the museum to simply blend into the existing fabric, continuing the rectilinear form of the surrounding buildings or by using materials in predictable ways that mirror the building's surroundings. Furthermore, since the building is a visitor destination

point, and a national symbol, it should speak grandly, monumentally to the public, as one would on a special occasion, rather than bow to the formal implications of the everyday. Much like a person would wear special clothing on a rare and important occasion, and perhaps behave differently, if not merely more carefully than one would every day, so the building should be dressed in special materials and express its use in an original and ultimately respectful manner.

Beginning exploration of basic partis, along with precedent exploration, has clarified the importance of the originality of this building. The design process will continue an exploration of a wide variety of solutions, uninhibited by the obvious responses to such a challenge. Exploring literal interpretations of ideas surrounding women's empowerment will not be discouraged here, as visitors begin to understand significance through symbolism.



Fig. 38 The European Centre of Volcanism, St. Ours-les-roches, Auvergne The literal interpretation of building as volcano is very powerful as a destination for visitors attempting to understand the magnitute of the volcanic affect. Note Bar/Figure relationship.



Fig. 39 New Corcoran addition by Frank Gehry defies usual Washington D.C. design solutions.

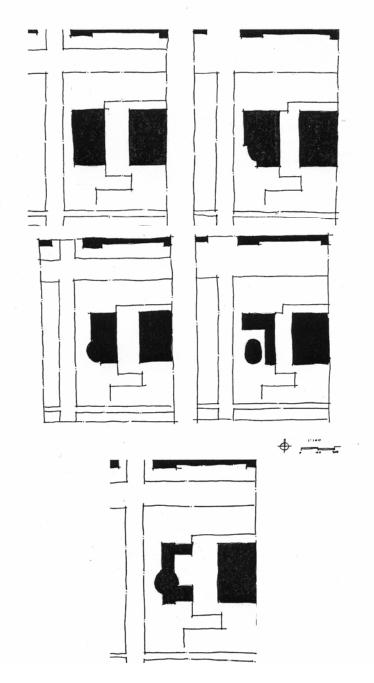


Fig. 40 Parti Diagrams describing possible design solutions ranging from filling the entirety of the site with a rectilinear form, to the emergence of a figural form from a rectilinear encasement, to a bar that incorporates a figural piece.

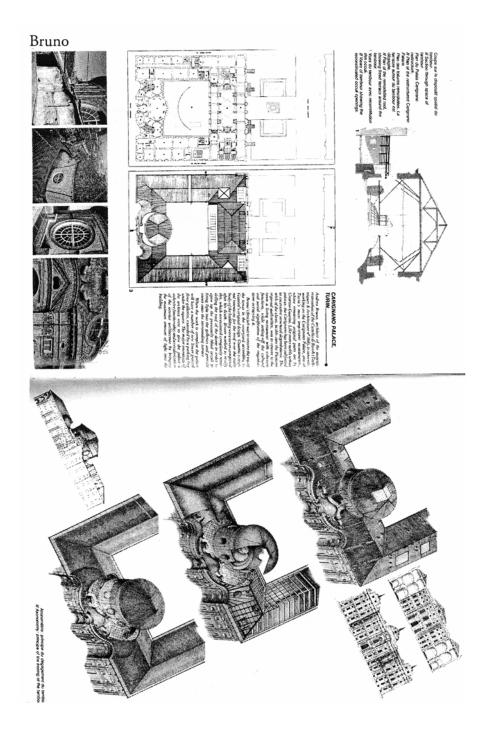


Fig. 41 Carignano Palace, Turin, Guarino Guarini, renovation by Andrea Bruno. Section, plan and axons of the Carignano Palace.

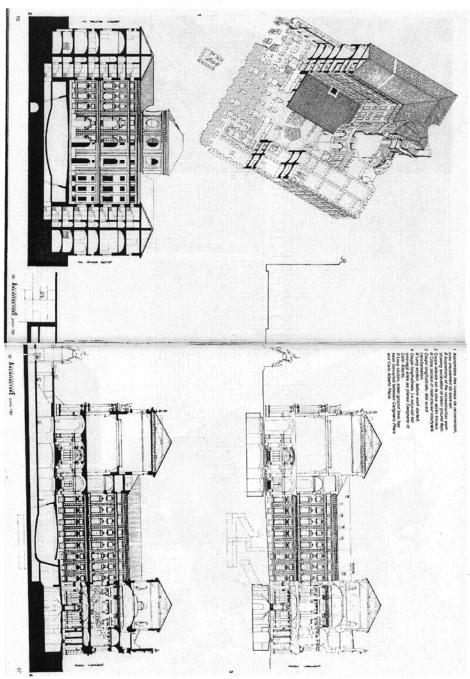


Fig. 42 Top right: Axonometry of the reconstruction work showing excavation of lower ground floor.

Top Left: Cross-section of restructured courtyard.

Bottom Left: Long section, lower ground level has been converted between Carignano Place and Carlo Alberto place.

Bottom Right: Long section, before work started.

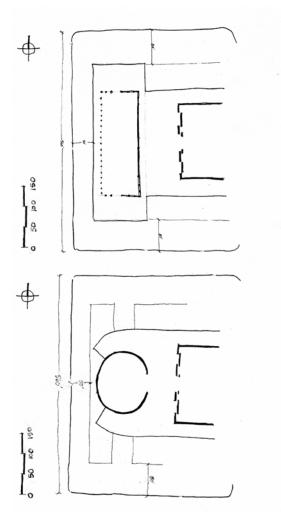
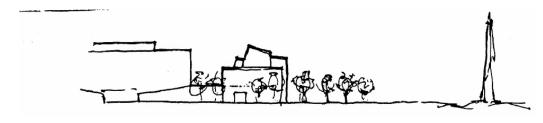
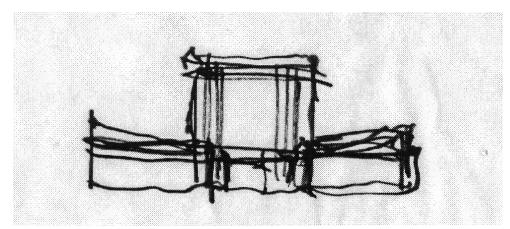


Fig. 43 Plan Diagrams:

Top: West façade is heavily glazed, while the east side of the new museum is used for service, and has a more solid façade.

Bottom: Edges of West façade wrap inward, encasing figural central piece. In both schemes, space between new museum and American History is shared courtyard.





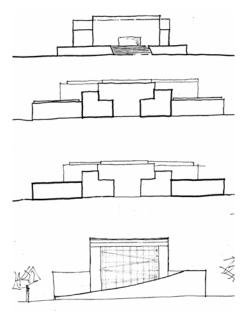


Fig. 44 Variations on Elevations, relating to plan scheme of figural piece within rectilinear encasement.

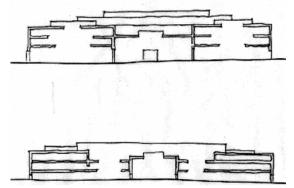


Fig. 45 Section diagrams of rectilinear scheme with embedded figure.

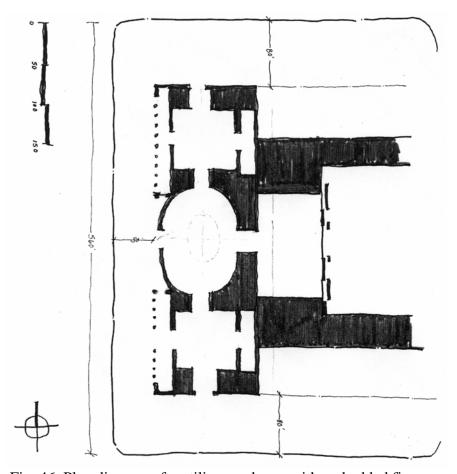


Fig. 46 Plan diagram of rectilinear scheme with embedded figure

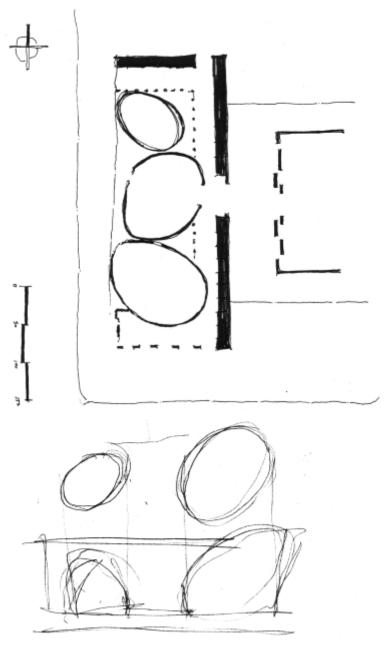


Fig. 47 Plan and elevation showing ideas about use of ova forms.

There are various options for choosing a main entry for the museum. As the entry to the Museum of American History is on Constitution Avenue, it would

work to include the entry of the Museum for Women's Achievement on Constitution Avenue as well. Certainly there is also an opportunity for the new museum to have its entry on the mall, as there is a secondary entrance to the Museum of American History on the Mall. The west façade of the museum is the main opportunity for monumental expression, as it is the one that can be viewed most easily from afar, and one of the two larger facades. Further, 14<sup>th</sup> Street is a secondary street to Constitution Avenue, less congested, so pedestrian and vehicular traffic can maneuver more easily upon entrance to the museum.

SPECIAL PROBLEMS AND ISSUES

## SPECIAL PROBLEMS AND ISSUES

One of the most significant problems in designing a museum for Women's Achievement is choosing a site. If the museum is to be in Washington, D.C., the political core of the country, then where in the city should it be? Because the agenda of the museum is to celebrate an overlooked and important part of American History, the museum should be on the Mall, where many of the city's distinguished museums have their home. To place the building in another part of the city seems to again place women on the sidelines. It could be argued that the museum, if placed in a "separate but equal" location, could command an audience, but in fact the mall is one of the first destinations for people from around the world who are trying to understand the most significant aspects of American history. This museum is about women's history being celebrated within an already strongly woven fabric, establishing an identity within this network, rather than being separated and being given the task of becoming legible in a place that is not already known as an important destination. While many important civic buildings are not on the Mall, and yet still attract visitors, a separate journey must be made in order to visit them. The Museum of Women's Achievement serves the dual function of being a museum and a political statement that the achievements of women are an important part of United States history, and should be placed in the location where other such achievements are currently celebrated.

Is there, then, a problem with the Museum of Women's Achievement becoming attached to the Museum of American History, rather than claiming its own site? If in form and function the museum can claim its own place, while also communicating that it is an important part of American history, then it has been successful. The museum would also be solving an important urban problem, which is the underutilized space on the west side of the American History Museum.

Some functional issues to be addressed are those involving entry and circulation through the museum. Throughout the thesis exploration, decisions will be made as to what happens in the space between the American History Museum and the Museum of Women's Achievement. Critical to the success of this design are ease of movement and clarity of path, both on the museum grounds and within the museum.

**CONCLUSION** 

In conclusion, the final design for the Museum for Women's Achievement utilizes a glass curtain wall technology ("spider" joints and vertical glass fins at the facade, with concrete column and slab structure supporting the building) to create a dialogue between the interior and exterior of the museum. Display boards with words and pictures stand inside the façade, as in a storefront, serving as a journal to announce to passers-by the events occurring at the museum. Museum visitors walking on the inside of the museum can be seen from the outside, and vice versa, creating an experience that is far more interactive between interior and exterior than that created by most museums on the mall, in which inside and outside are separated by large stone walls.

The outline of the building is a gently curving glass wall, creating a sculptural and womanly form. A rectilinear stone-clad spine anchors this form, and houses collections to be protected from light, a library, classrooms, bookstore, café, service, and restrooms. The stone façade stands across from the west façade of the American History Museum, creating an exterior courtyard. This courtyard houses sculpture, a linear water element, and tables, which are associated with the café, so that on a nice day, visitors can sit outside while eating or drinking. The courtyard connects the American History Museum with the new Museum for Women's Achievement (there is also an interior passageway, beneath the courtyard), and also serves as an exterior "hallway" between Constitution Avenue and the Mall.

Two large forms stand inside the museum, and can be seen from the façade. One contains the Hall of Women and additional galleries, and the other

contains a spiraling staircase. Both of these forms are clad in wood, the Hall of Women/galleries in a darker wood with larger panels, and the stair in a lighter wood with narrower panels.

Outside of the museum, on the mall side, there is a round, stone-clad amphitheater space where concerts, theater performances or speakers could be enjoyed in the warmer months. Inside, directly beneath this space is a lecture hall and supporting spaces, such as green room, practice rooms and rest rooms. This lecture hall is accessed through the interior of the museum, from the ground floor.

For those who are interested in the symbolism that inspired the design, the form of this museum and its parts are derived from the female body, where the Hall of Women represents the mind/heart, the stair represents the womb, or the capacity of the female body to create new life, and the theater space represents new life, the birth of new ideas.

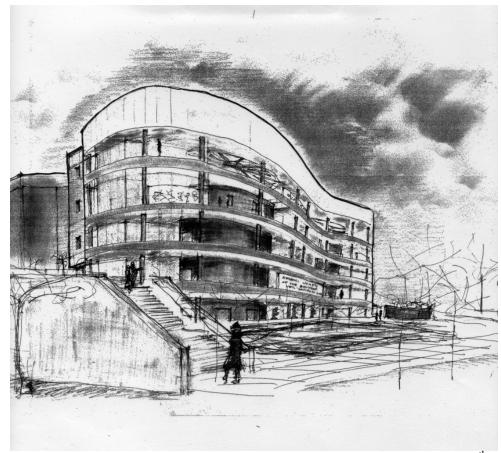


Fig. 48 Final Project: Exterior Perspective Drawing: Constitution and 14<sup>th</sup>

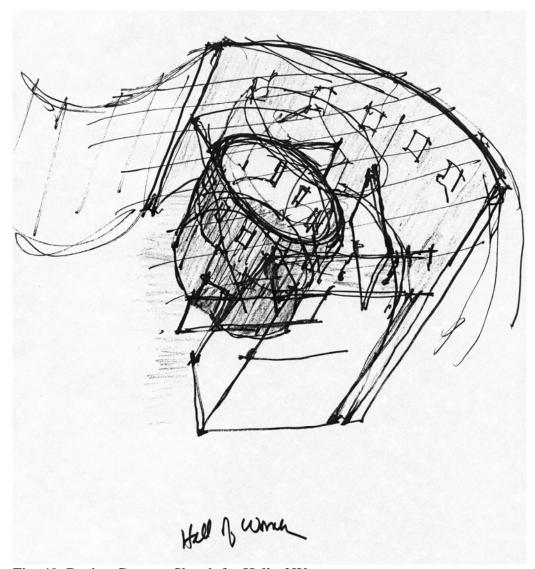


Fig. 49 Design Concept Sketch for Hall of Women

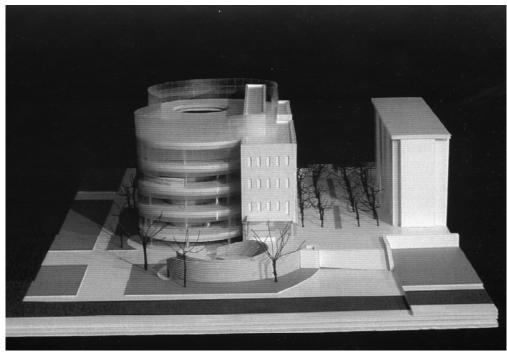


Fig. 50 Final Model: South Façade (Mall Entrance)



Fig. 51 Final Model: West Façade (14<sup>th</sup> Street Entrance)



Fig. 52 Final Model: North/West Perspective View (Constitution Entrance)

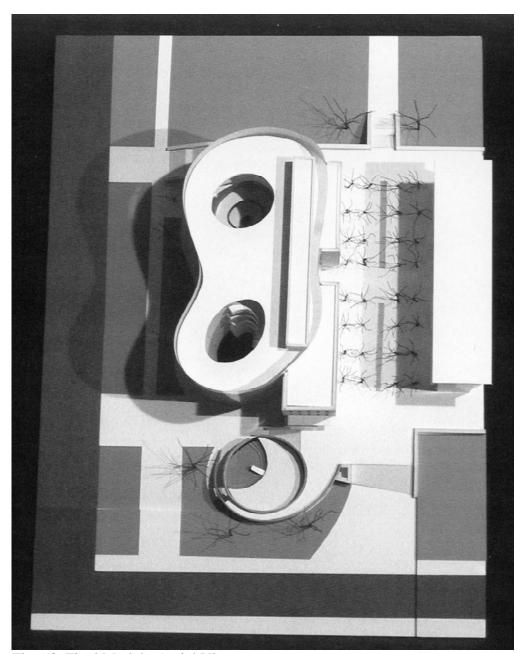


Fig. 53 Final Model: Aerial View

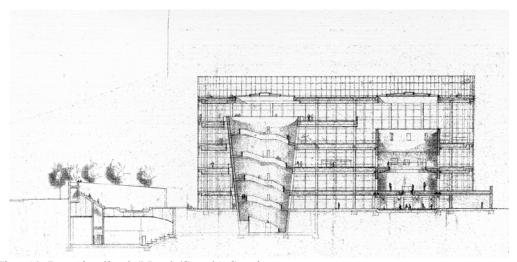


Fig. 54 Longitudinal (North/South) Section

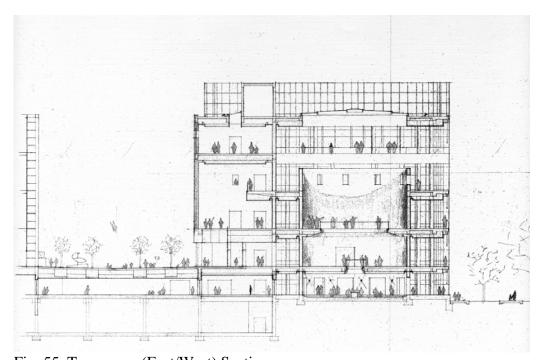


Fig. 55 Transverse (East/West) Section

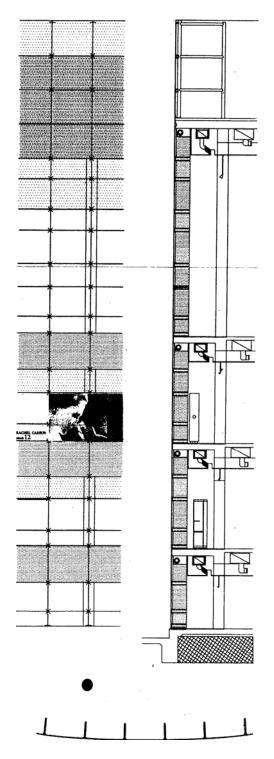


Fig. 56 Wall Section and Plan

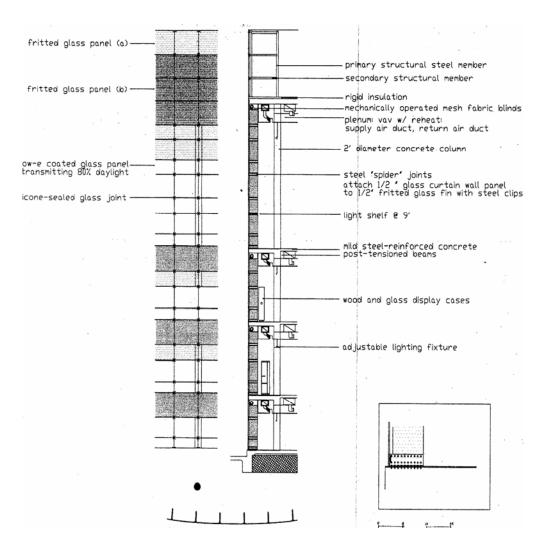
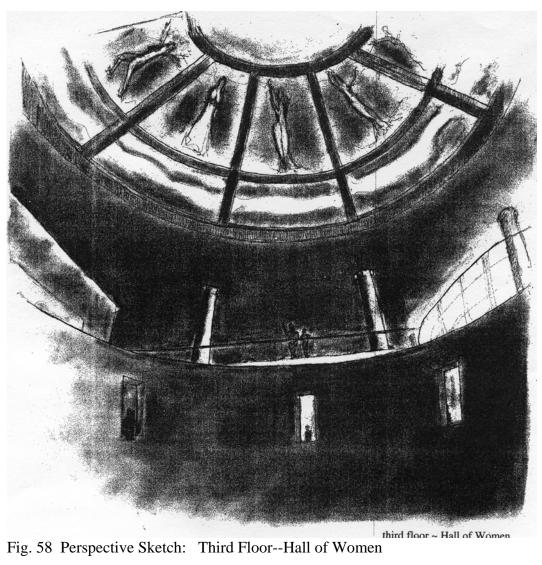


Fig. 57 Wall Section, Plan, and connection detail



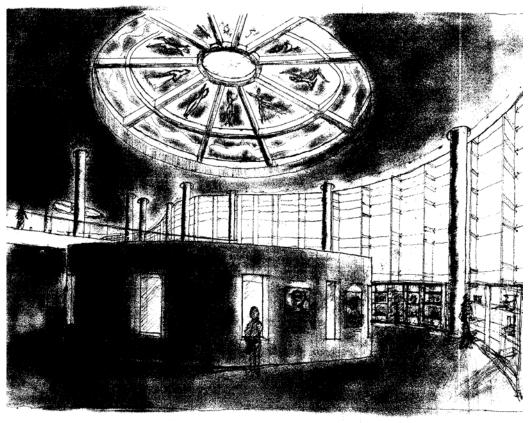


Fig. 59 Perspective Sketch: Fourth Floor—Hall of Women

fourth floor~ Hall of Wor

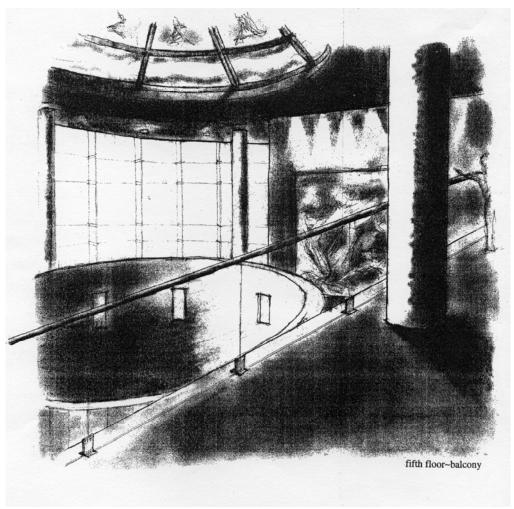


Fig. 60 Perspective Sketch: Fifth Floor—Balcony

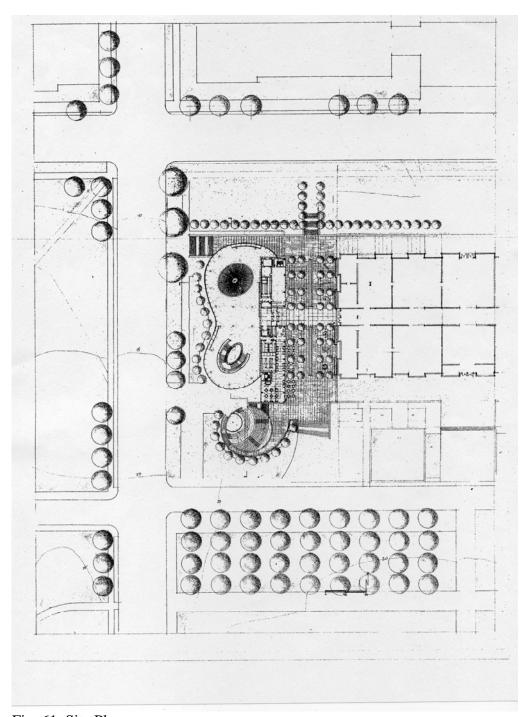


Fig. 61 Site Plan

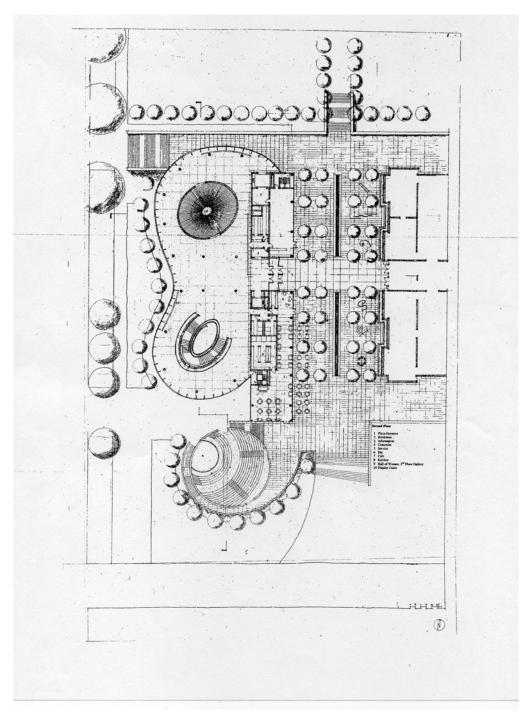


Fig. 62 Typical Floor Plan

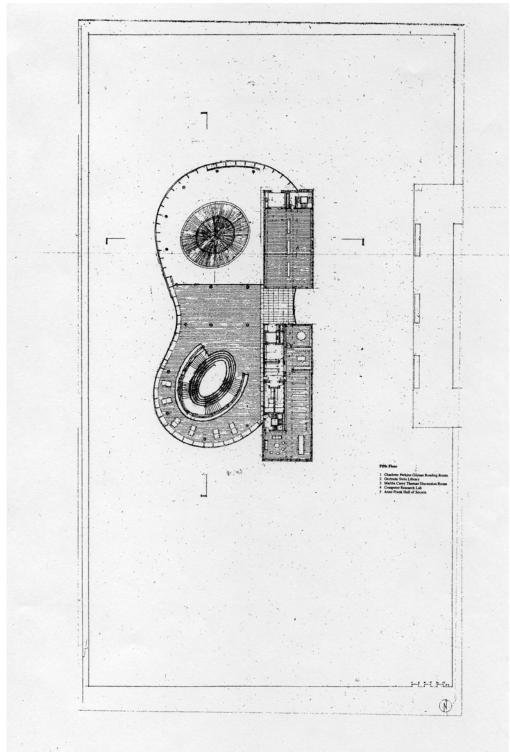


Fig. 63 Fifth Floor Plan

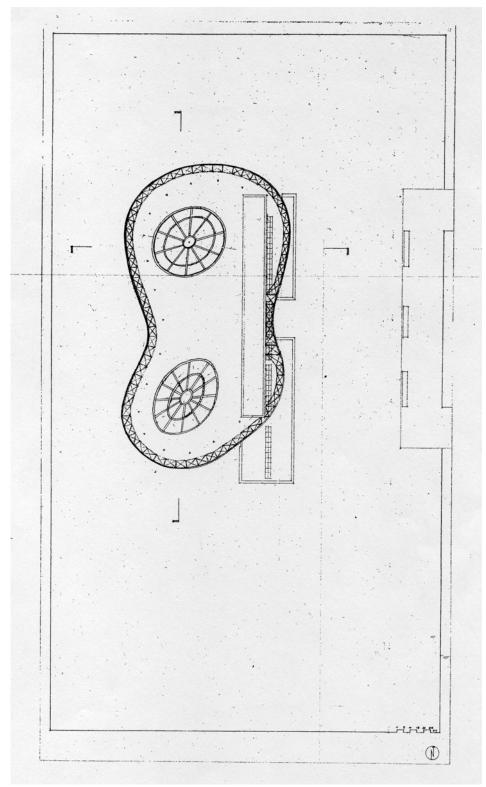


Fig. 64 Roof Plan

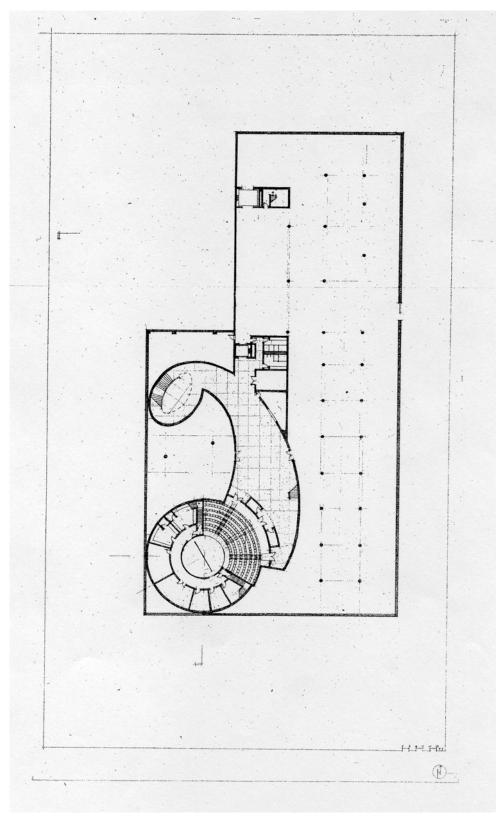


Fig. 65 Lower Level Plan

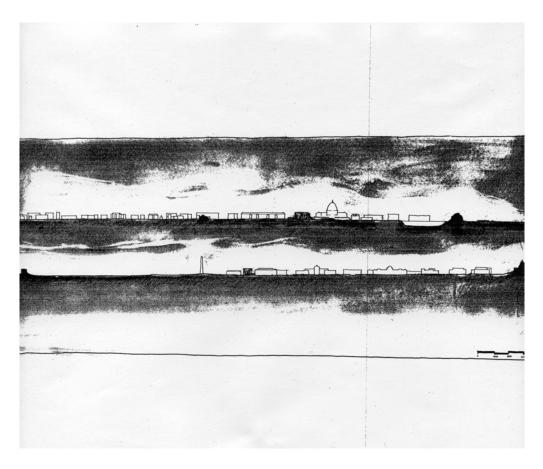


Fig. 66 Site Elevation

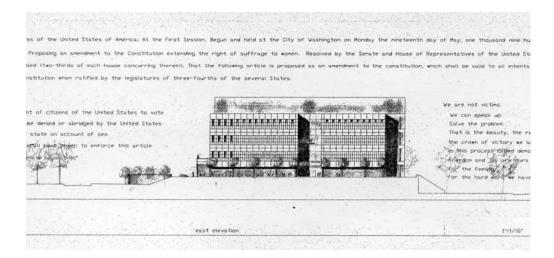


Fig. 67 East Elevation

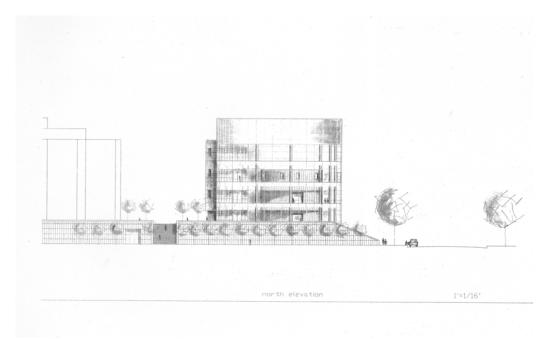


Fig. 68 North Elevation

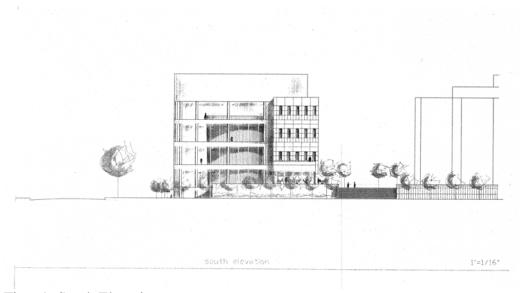


Fig. 69 South Elevation

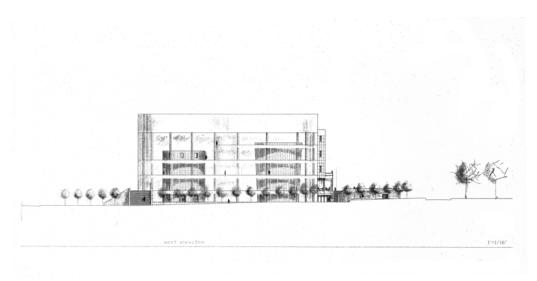


Fig. 70 West Elevation

## **BIBLIOGRAPHY**

- Abitare. September 1986, p. 385-387. Andreas C. Papadakis, ed. *New Museums*. London: Academy Editions, 1991.
- Andrews, Gregory. A Museum of Man on the Mall, Washington, D.C. College Park, Gregory Andrews, 1988.
- "In Remembrance." Architecture. July 1993, p. 54.
- Carrier, Thomas J. *Washington, D.C. A Historical Walking Tour*. Charleston, S.C.: Arcadia Publishing, 1999.
- Davis, Douglas. *The Museum Transformed. Design and Culture in the Post- Pompidou Age.* New York: Abbeville Press Publishers, 1990.
- Henderson, Justin. *Museum Architecture*. Gloucester, Massachusetts: Rockport Publishers, 1998. "Women's Museum, Texas." *Architectural Record*. November 2001, pp. 158-9.
- Matthews, Geoff. *Museums and Art Galleries*. Oxford: Butterworth Architecture, 1991.
- Miotto, Luciana. Renzo Piano. Paris: Editions du Centre Pompidou, 1987.
- Montaner, Josep M. *Nuovi Musei: spazi Per L'Arte E La Cultura*. Milan: Jaca Book, 1990.

## BIBLIOGRAPHY, CONT'D

- National Capital Planning Commission. *Memorials and Museums Master Plan*. Washington, D.C., 2001.
- Penczer, Peter R. Washington, D.C. Past and Present. Oneonta Press.
- Reps, John Williams. *Monumental Washington*. Princeton: New Jersey Press, 1967.
- Smith II, Richard Edward. The United States Slavery Museum. College Park: Richard Smith, 1996.
- Weeks, Christopher. *AIA Guide to the Architecture of Washington, D.C.*Baltimore and London: The Johns Hopkins University Press, 1974.
- Wilgoren, Debbi. "Fine Arts Panel Approves Corcoran Design. Ribbon-like Building A 'Great Addition' to Classical Gallery." The Washington Post, 19 October 2001: B3.