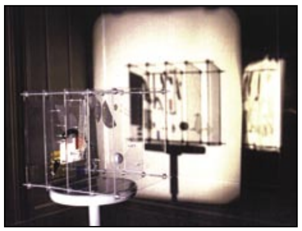
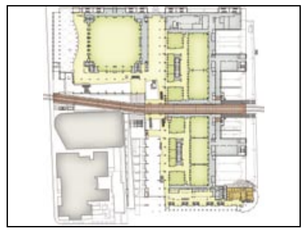
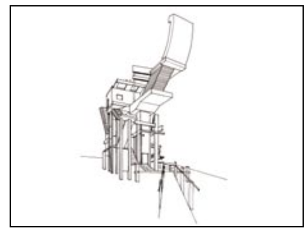
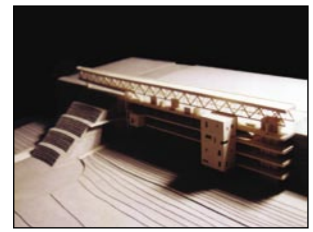
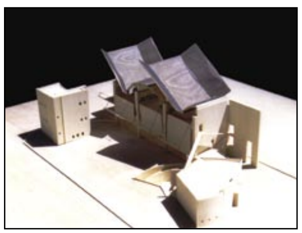
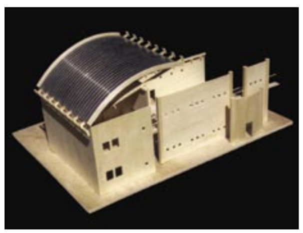
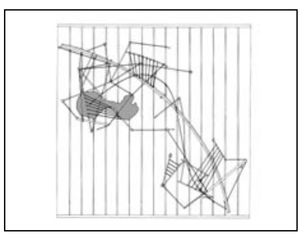


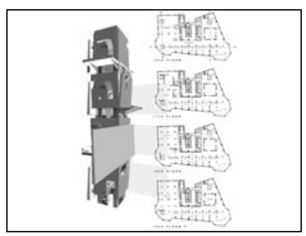




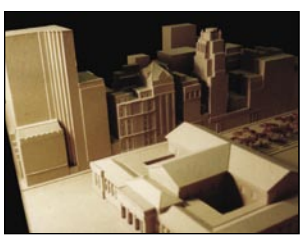
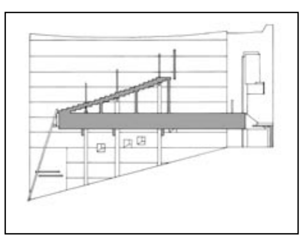
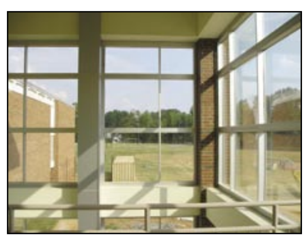


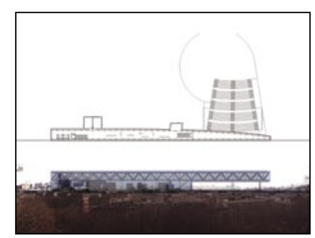




DARRYN F. BOUKNIGHT, AIA

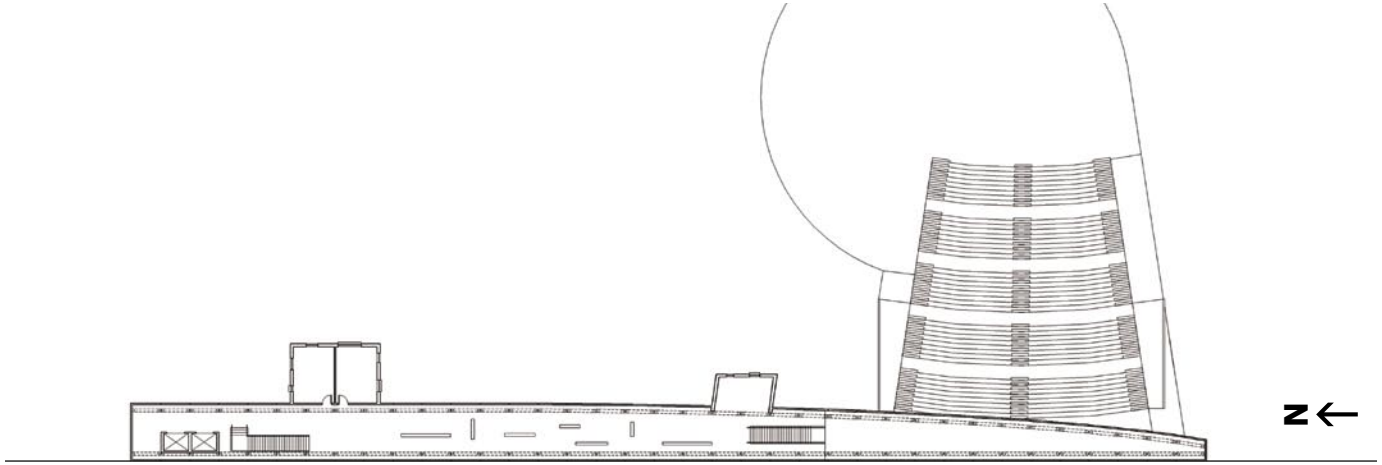
PROJECTS 1996-2009

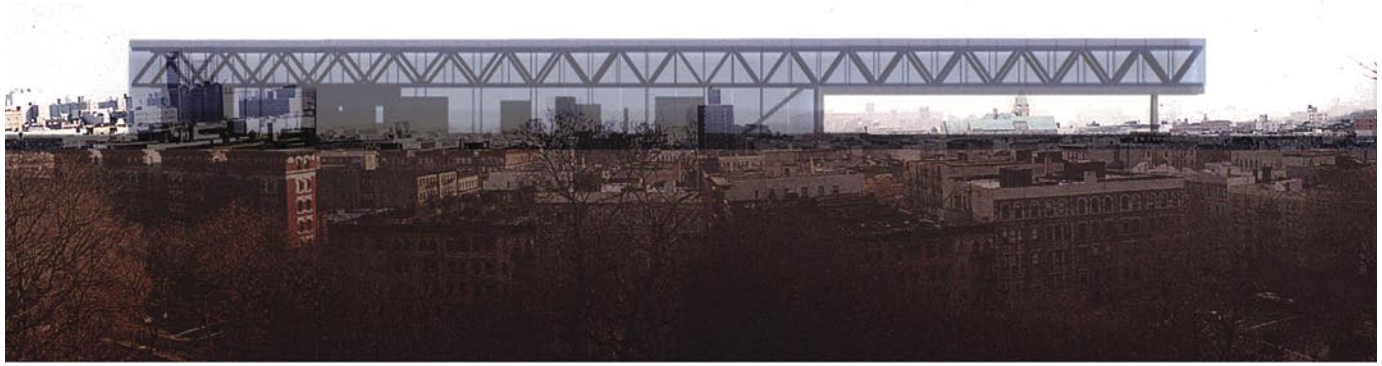


TIMELINE | TABLE OF CONTENTS

DARRYN F. BOUKNIGHT, AIA
PROJECTS 1996-2009



plan



computer model / photo collage (view from Morningside Heights into Harlem)

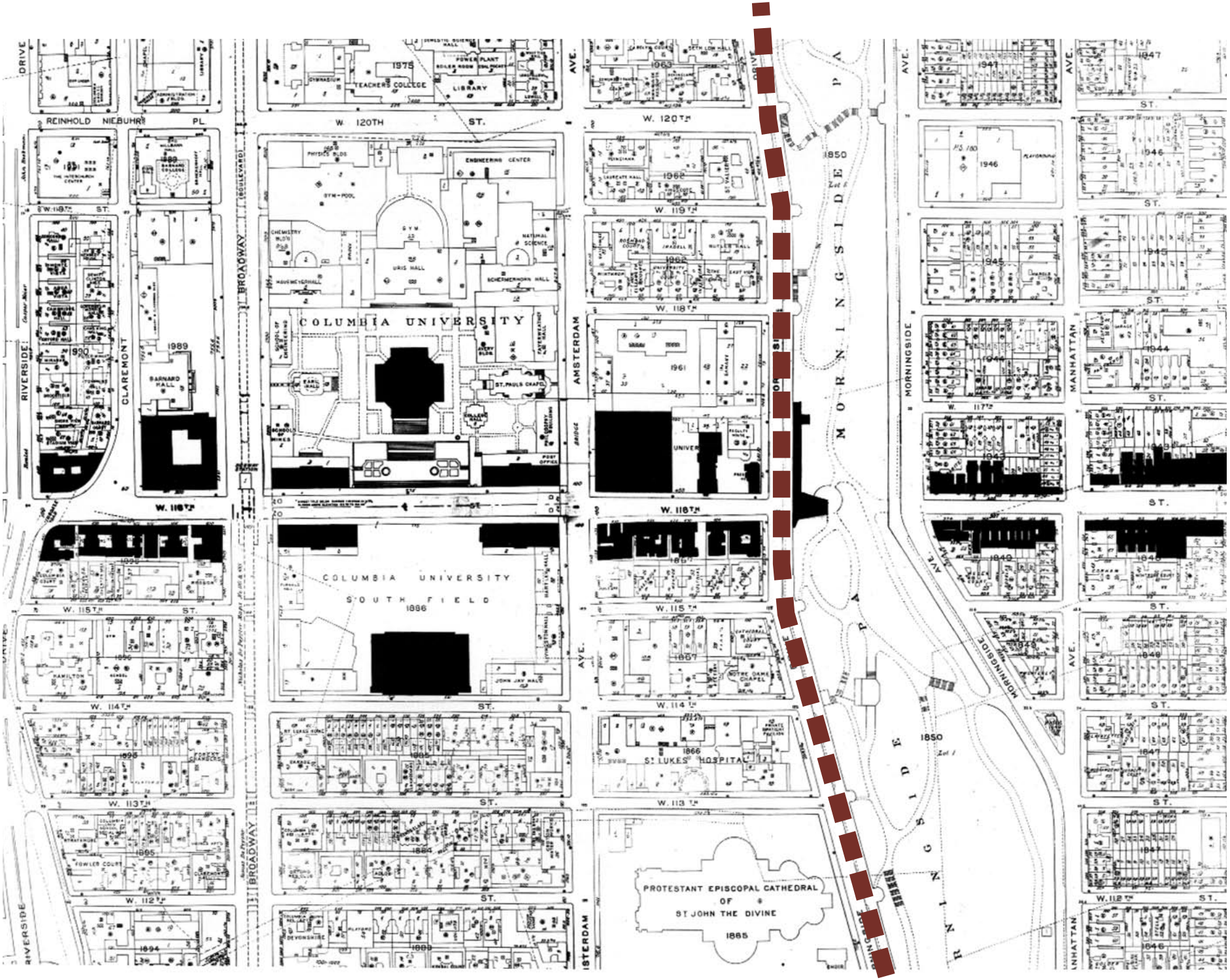
ETHNIC STUDIES CENTER

Columbia University
New York, NY

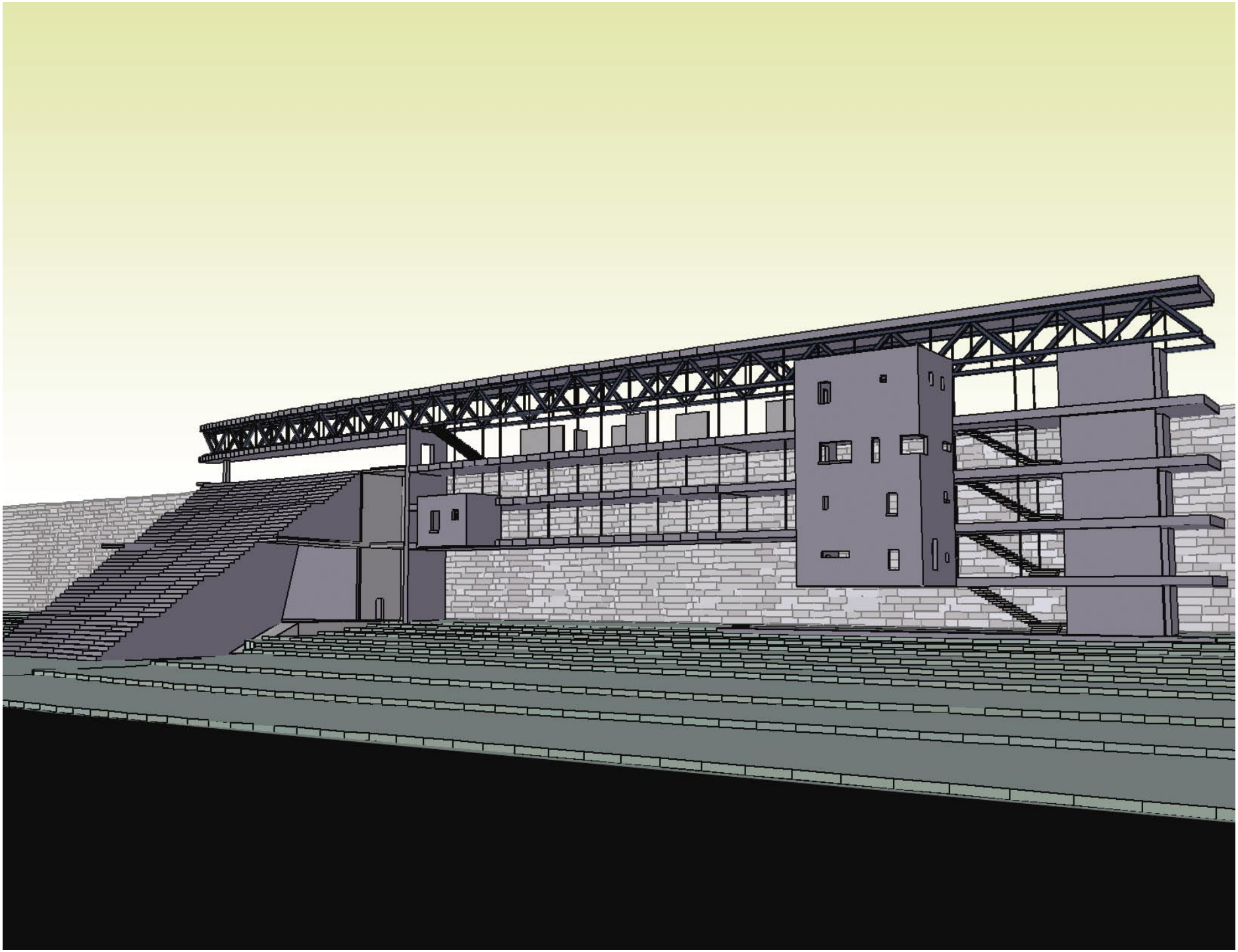
The genesis of this project was a response to the student protest of 1996 at Columbia University for the establishment of a recognized ethnic studies department within the university. The studio focused on the design for a center to house the new department to be located within the university campus at the highly visible intersection of College Walk (116th Street) and the topographical boundary between the Morningside Heights campus and the community of Harlem. This barrier is an east-facing fifty-foot precipice fronting Morningside Park and overlooking Harlem beyond. The project's intent was the mediation of the disparate influences of both communities and the creation of a new possibility for negotiation, communication, and interaction.

A monumental stair, serving as an amphitheater for outdoor performances of ethnic music and theater, also acts as a connecting device, modulating the ground levels of the two communities and allowing unimpeded exploration. The remainder of the program, including a gallery for ethnic art, a library for cultural studies, classrooms, and support services, is housed in a thin sliver of space that recalls the existing boundary but renders it transparent and transformed through the use of structural glazing. Metaphorically acting as a lens through its slight curvature, this space activates the cliff face, focuses the presence of Harlem at the boundary of campus, and allows the community to be reexamined and viewed through the presence of ethnic art displayed in the gallery. The program is lifted from the ground and hung from structural trusses to minimize its intrusion into the park landscape.

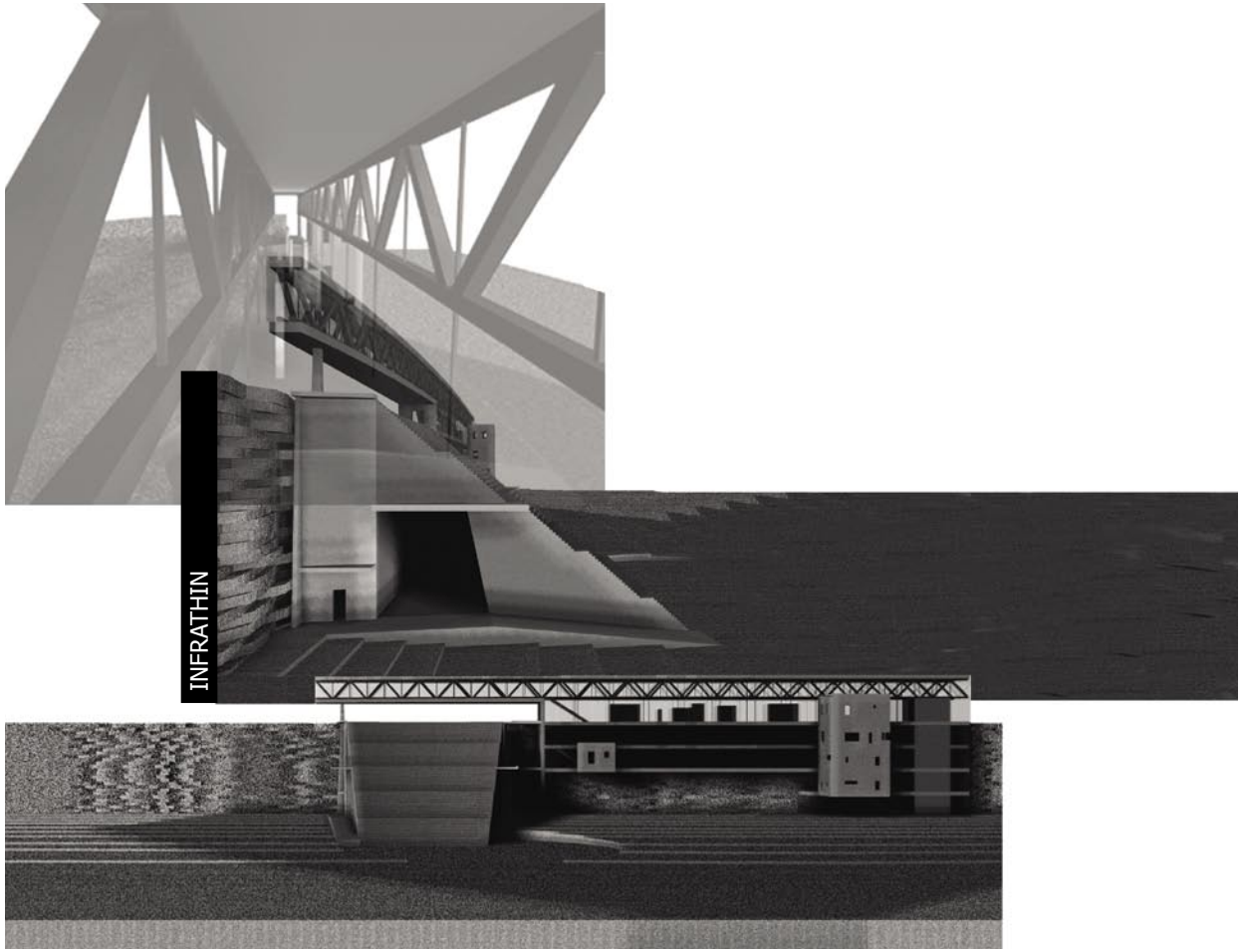
December 1996
Victoria Meyers, professor
Greg Pasquarelli, assistant professor
Columbia University



[4] *site plan (116th Street axis)*



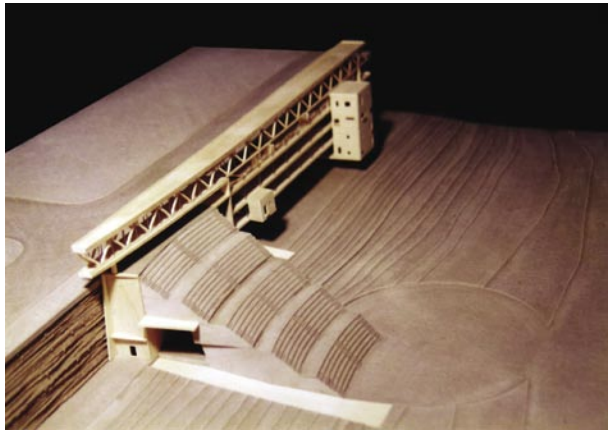
[6] *computer model view from Morningside Park (Form-Z)*

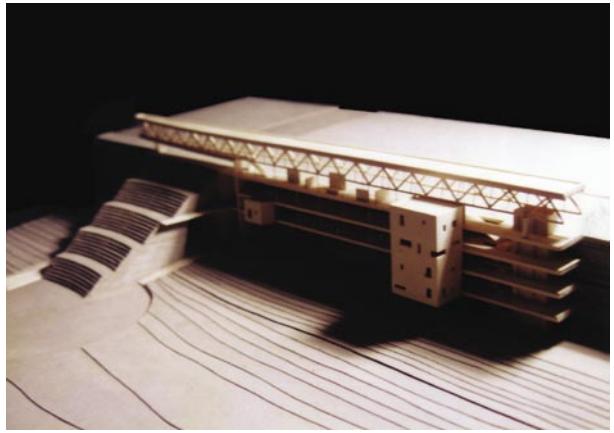


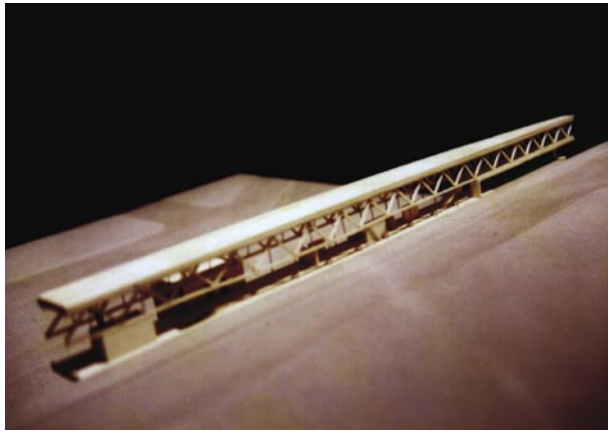
computer model composite view (Form-Z)

photo collage of Morningside Heights/Columbia

photo collage of Harlem







physical model (basswood, chipboard)

computer model / photo collage

BARD GRADUATE CENTER FOR STUDIES IN THE DECORATIVE ARTS

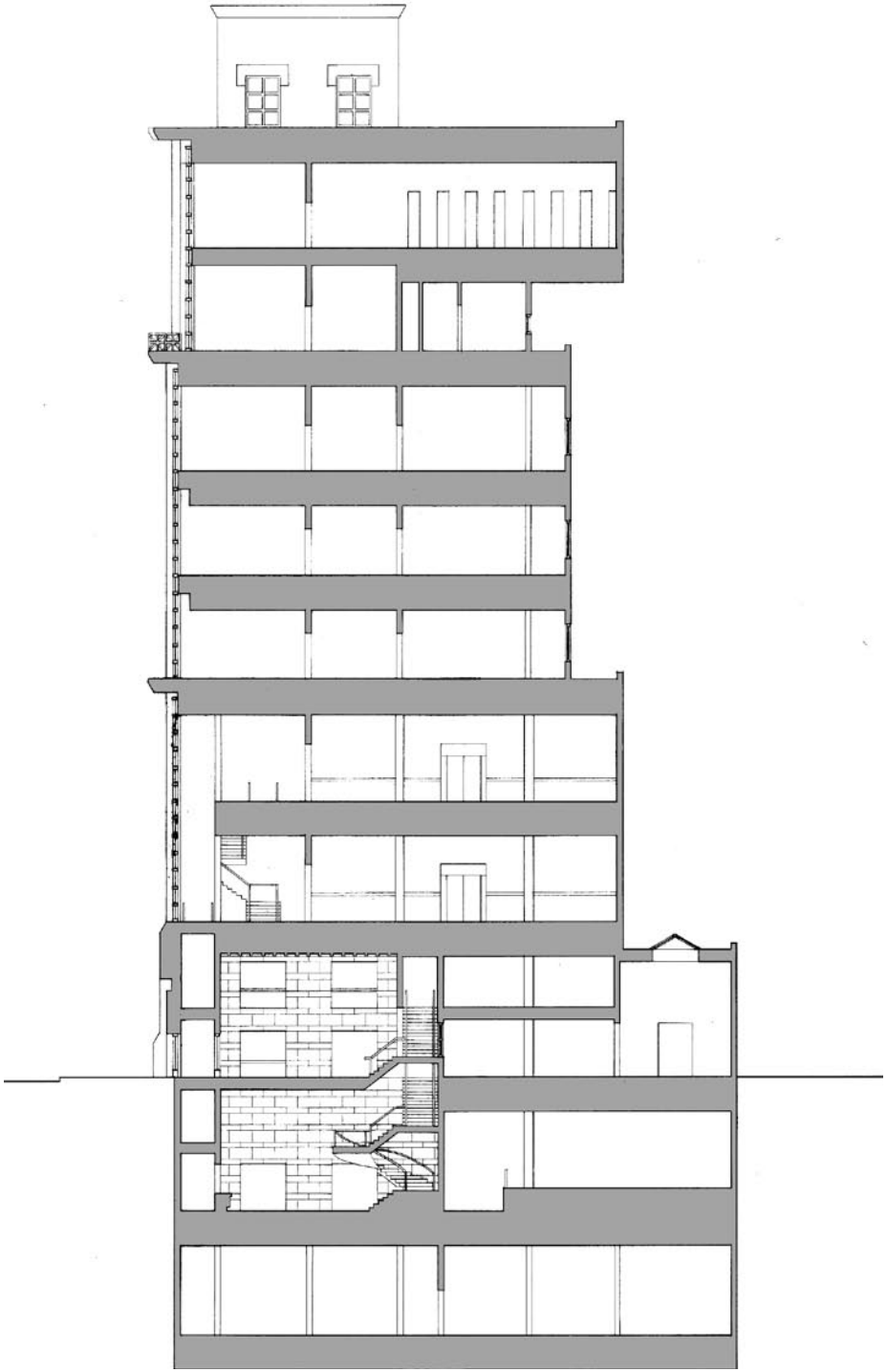
New York, NY

As a replacement for the existing Bard Graduate Center for Studies in the Decorative Arts, this project is a multi-use building located in Midtown Manhattan housing an educational institution with a museum component. The program calls for exhibition spaces, an auditorium, a library, seminar and classrooms, a conference room, a curatorial preparation area, faculty offices, a cafe/ bookstore, visiting curator apartments, and service spaces. The strategy was to organize the program by placing the graduate school component above the public realm of the museum, each with its own circulation system, and by placing the service cores to either side, leaving the center clear for primary spaces.

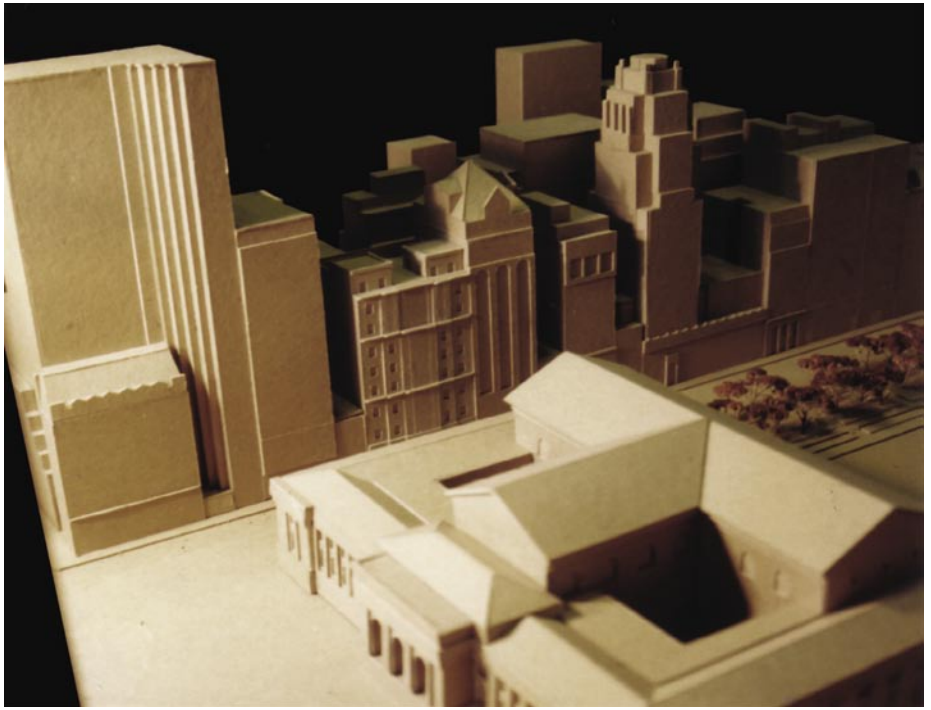
The building takes advantage of northern light exposure and the views to the New York Public Library and Bryant Park across the street by offering ample glass. The exterior and primary spaces are constructed of ashlar stone, giving a degree of permanence to the young institution, and the facade is arranged in a tripartite organization which is contextual in the surrounding buildings. Window mullion spacing and other exterior detailing speak to the function of the institution as a center for decorative arts, and recall aspects of the Glasgow School of Art by Charles Mackintosh.

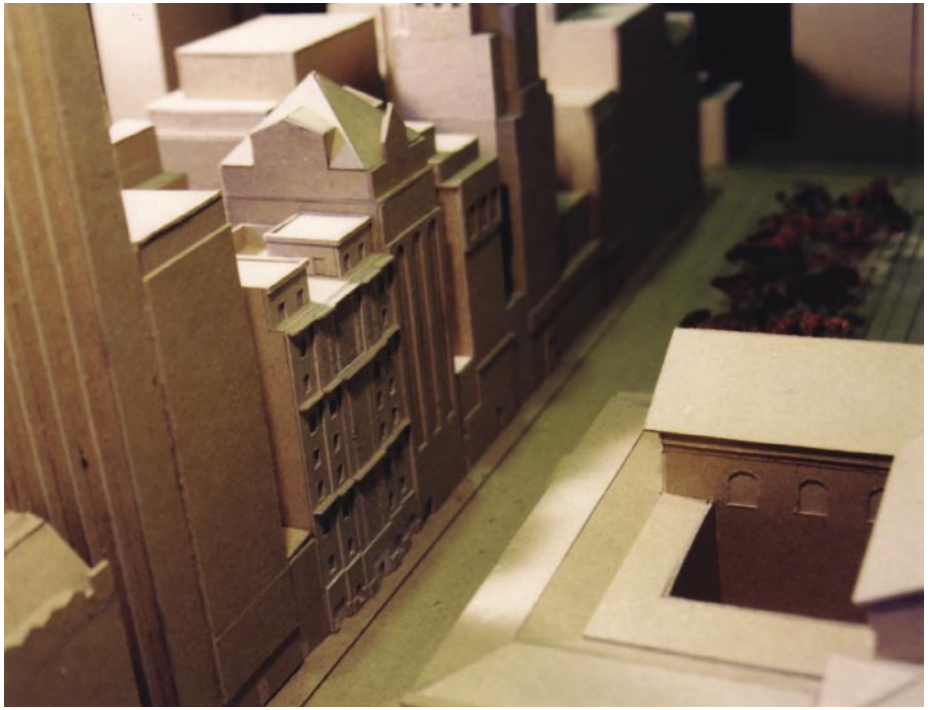
April 1996
Robert A. M. Stern, professor
Grant Marani, assistant professor
Columbia University

case study (Glasgow School of Art: Mackintosh)

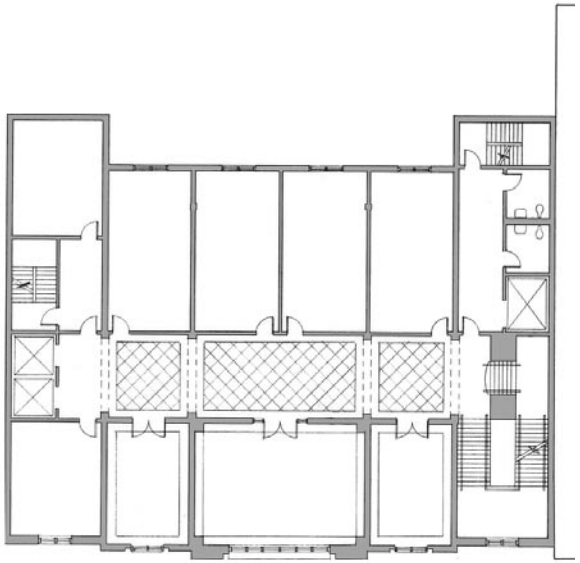


[8] *building section*

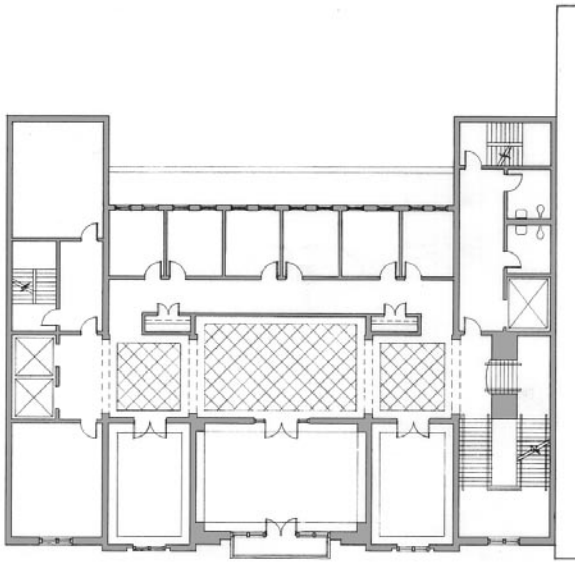




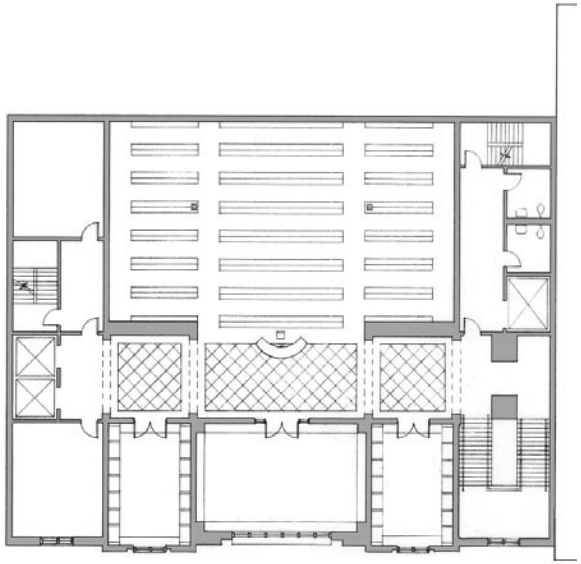
site model (chipboard)



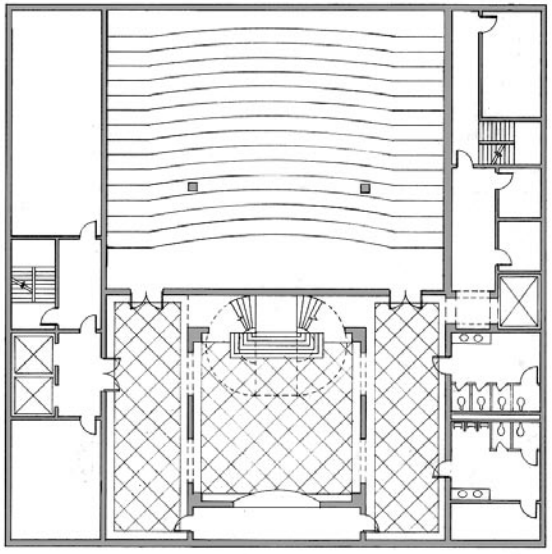
5TH | CLASSROOMS/STUDIOS



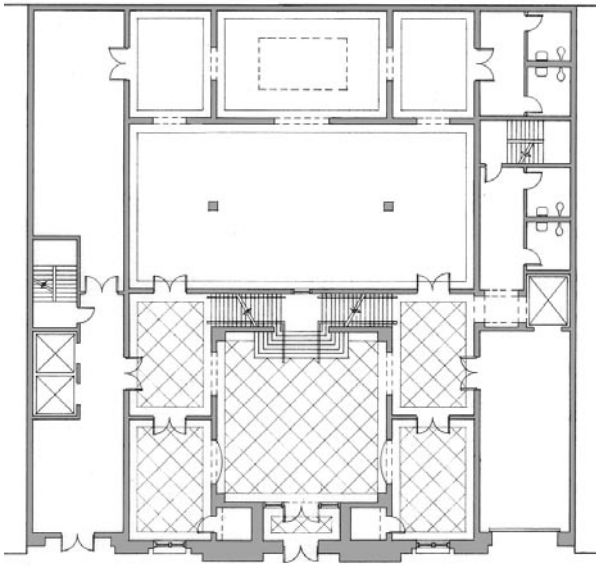
7TH | CLASSROOMS/OFFICES



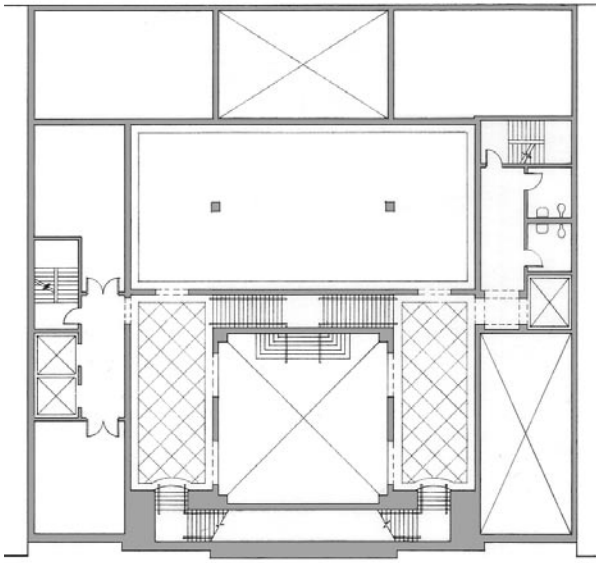
8TH | LIBRARY



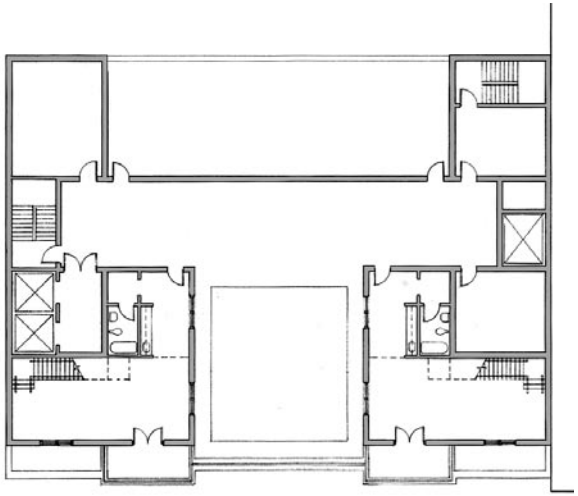
BASE | AUDITORIUM



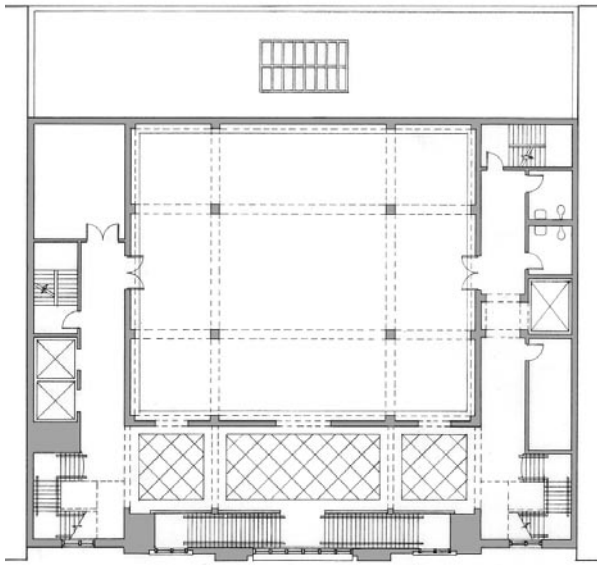
1ST | GALLERY



MEZZ | GALLERY



9TH | APARTMENTS



2ND | GALLERY

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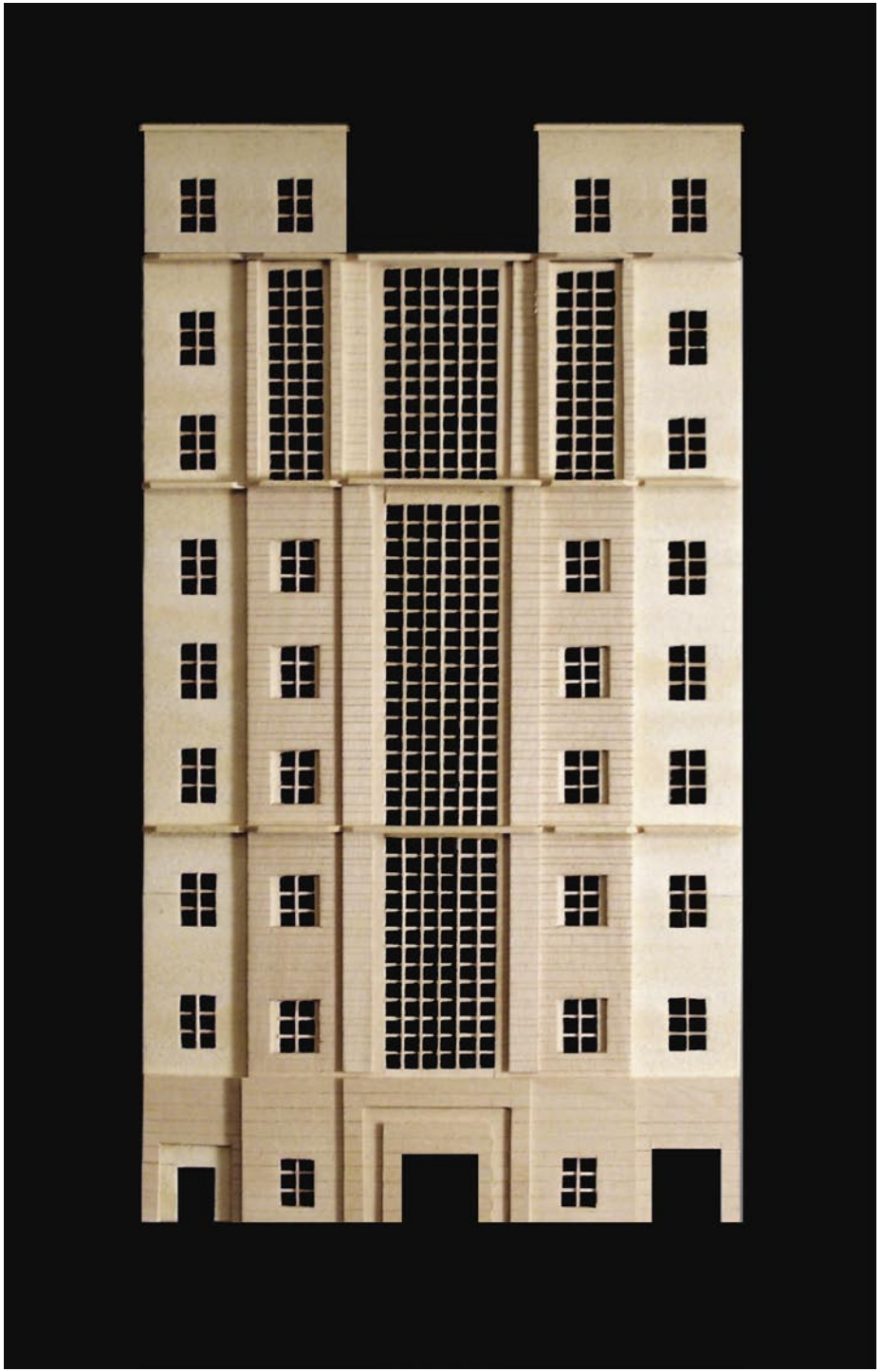
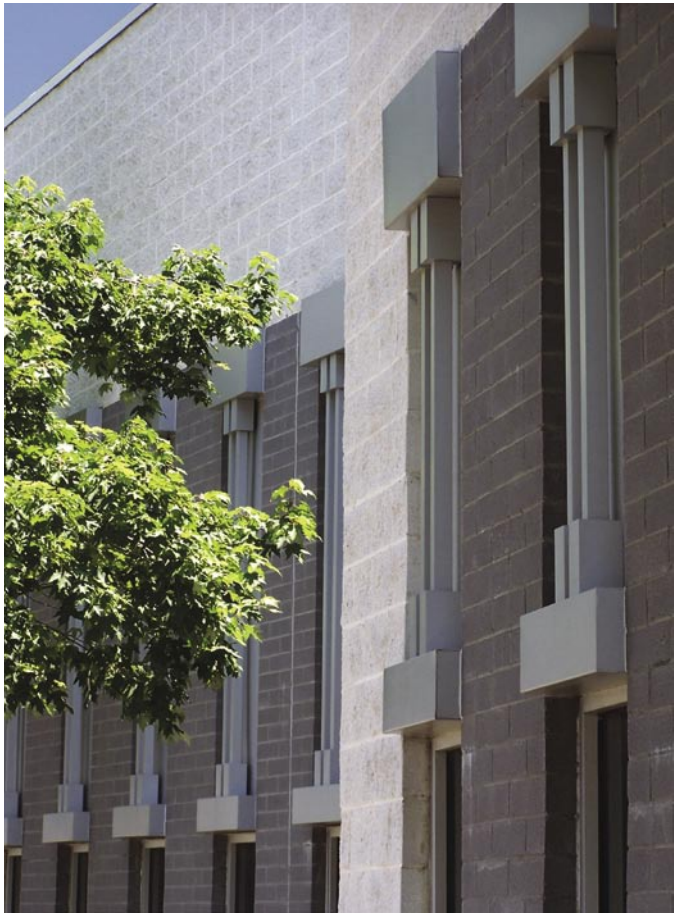
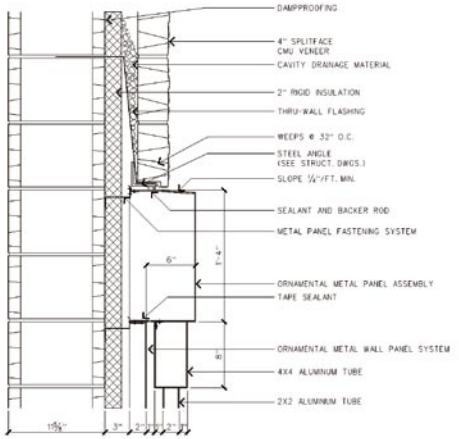


facade model (basswood)

view from Poplar St. (addition)



metal panel detail



head detail at metal panel

view from Stonewall St. (screen wall)

CHARLOTTE OBSERVER ADDITION AND RENOVATION

Charlotte, NC

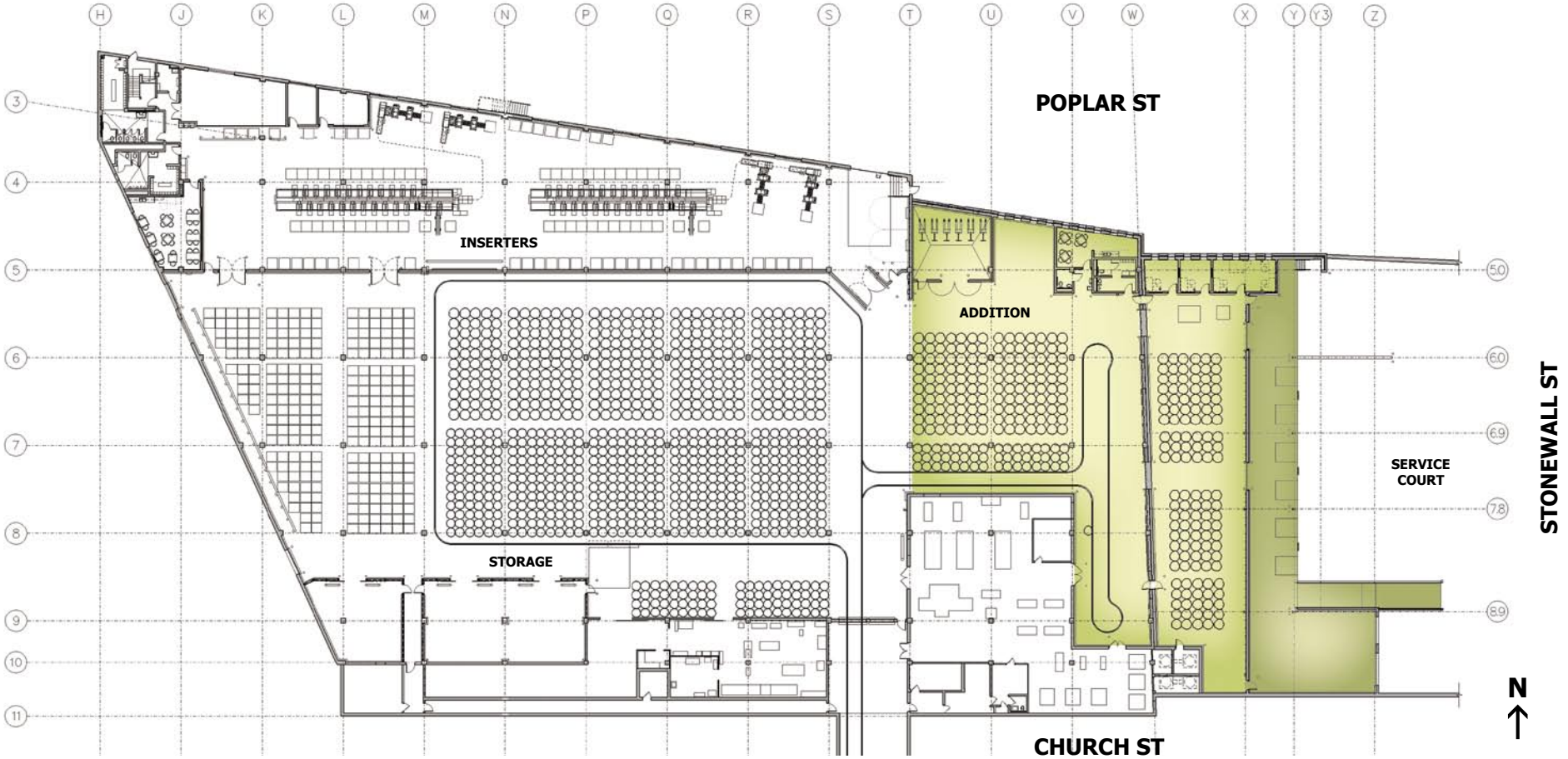
In 1998, The Charlotte Observer, located in the central business district of Charlotte, expanded its newspaper operations. Their goals were to construct a new addition to contain offices, break area, and additional storage and to renovate the existing paper storage area to house a large inserting machine. Another goal was to expand the loading dock area into a large service court capable of handling a fleet of tractor-trailer delivery trucks and facility recycling.

Because of its high degree of visibility from the Carolina Panthers stadium, the addition was designed with an articulated, engaging facade, achieved with various scales and colors of concrete masonry and a series of repeating metal sticks that give rhythm to the facade and textural difference.

The service court was surrounded on three sides with a screen wall constructed of a masonry palette complementing the addition. The wall was punctuated with repeating masonry panels that contain backlit silk-screened images of historically significant Observer front pages. These serve to engage pedestrians and reinforce the Observer's identity and presence in the city.

70,000 SF (renovation)
13,000 SF (addition)
$6.5 M

September 1998
The FWA Group



plan

[12] *elevation from Poplar St.*

view from intersection of Elizabeth Ave. and Independence Blvd.

view from Independence Blvd.

MAJORS BOOKSTORE

Central Piedmont Community College Charlotte, NC

The brick and cast stone architectural vocabulary of this building sited on a prominent corner of CPCC's central campus is an expression of the redefined visual identity of the campus from 1960s modern to traditional, collegiate, and urban. Repeating pilasters at ground level, generous windows and the recessed corner entry allow the building to serve as a liaison between Central Piedmont and the historic Elizabeth neighborhood.

The campus bookstore, which also serves the neighborhood, occupies the ground floor of the facility. It shares the corner entrance lobby with the upper floors of the building, enabling users to easily find their way and simplifying security. The two upper levels are devoted to campus functions, providing general purpose classrooms, faculty offices, and a Small Business Education Center. A simple main corridor terminates at each end with natural light.

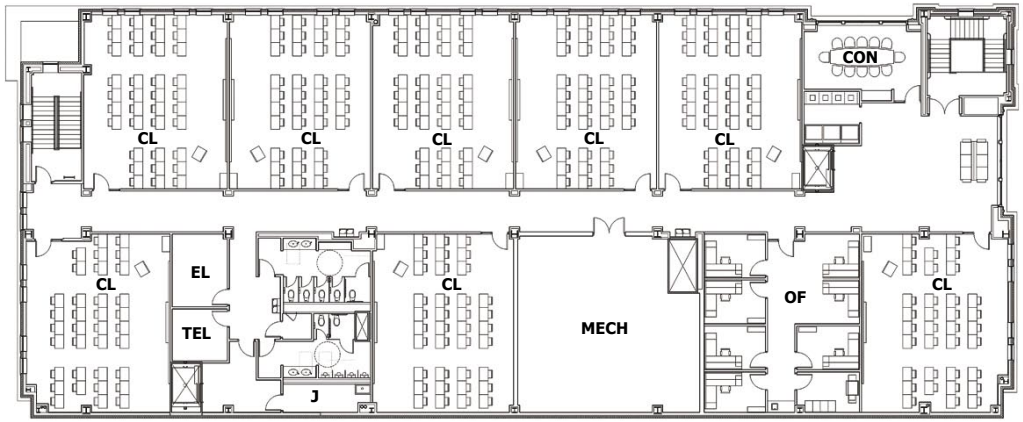
Several strategies toward sustainability were implemented. No new parking was added since the building can depend on access to public transportation and the student parking deck. High efficiency glazing and light-colored roofing minimize heat transfer. Bi-level switching, occupancy sensors, and reduced, but comfortable, lighting levels reduce lighting energy consumption.

45,000 SF
$6.1 M

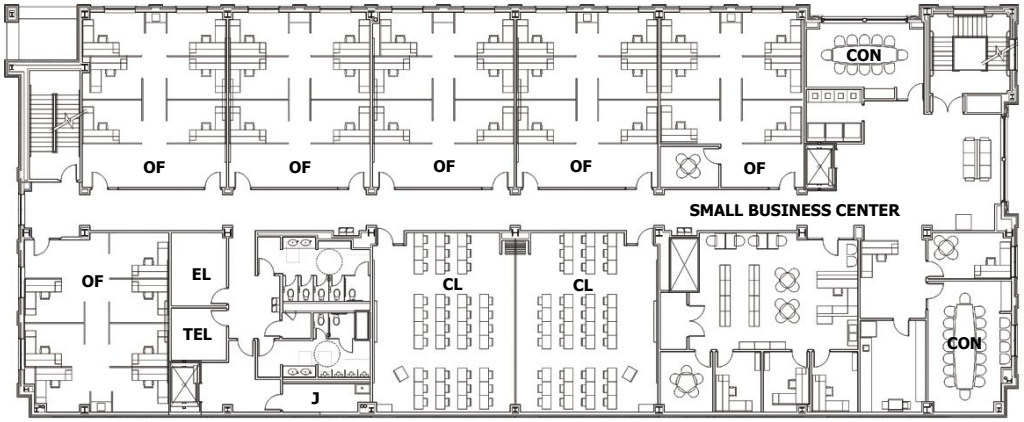
May 2004
The FWA Group

[14] *building section at entry*

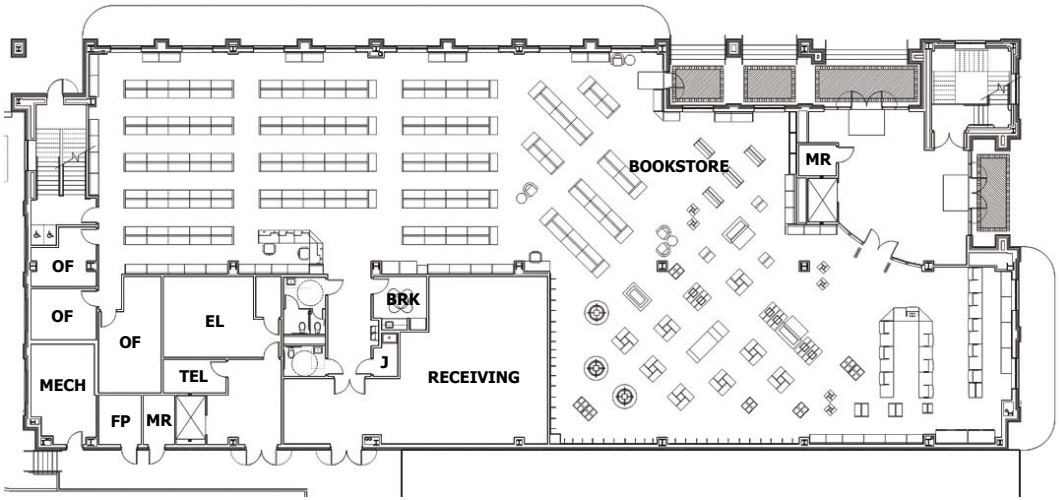
interior lobbies / bookstore



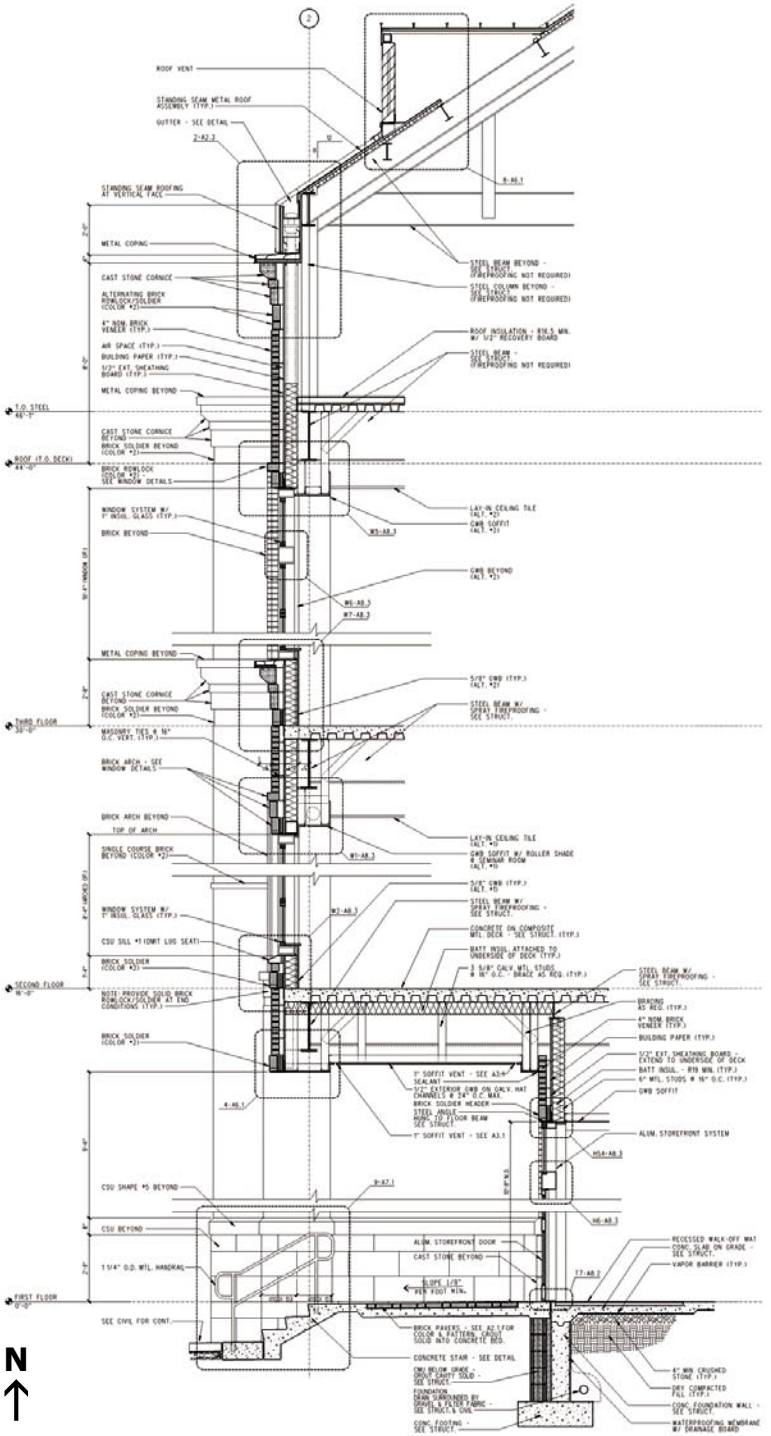
third floor plan



second floor plan



[16] *first floor plan*



wall section at entry

north elevation (Independence Blvd.)

east elevation (Elizabeth Ave.)

west elevation

north (public) end with light rail train

south (service) end with light rail train

north end with trolley

north end

north end interior (Phase 2)

north end interior (Phase 3)

CHARLOTTE CONVENTION CENTER RENOVATIONS FOR LIGHT RAIL TRANSIT

Charlotte, NC

When the Charlotte Convention Center was originally designed, the idea of a future trolley and light rail transit (LRT) system was only an uncertain proposition. Completed in 1995, the building was located unavoidably in the proposed path of the rails, where the historic trolley had previously run. A separate isolated structure for a future train had been provided, but little else was known. The 2001 renovations were to make the required modifications to accommodate the more certain vintage trolley line, and later a new light rail transit system. The renovations took place over three phases and were completed in 2006.

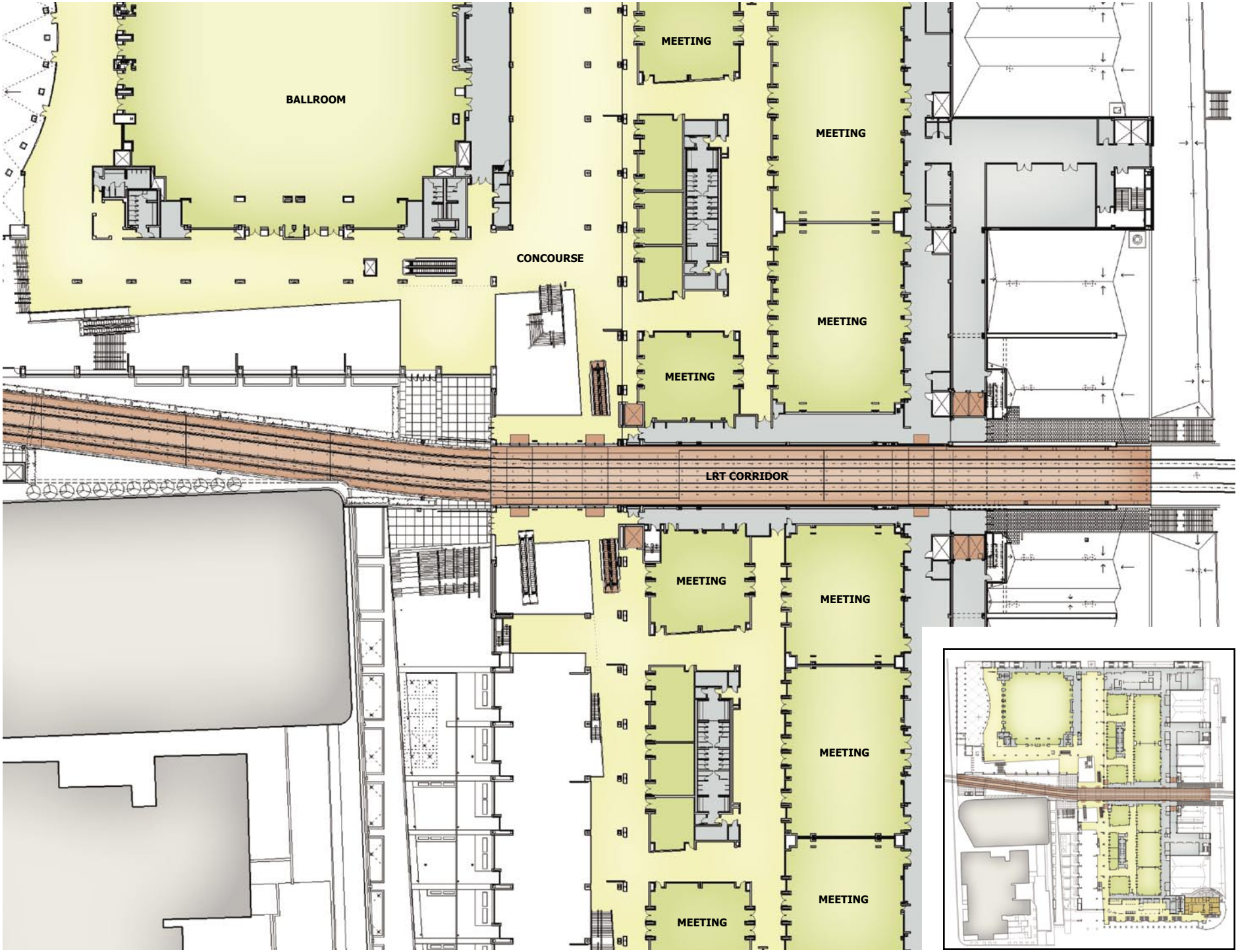
Phase 1
Construction of a vibration isolation slab over the existing structure along the LRT Corridor, employing a system of 465 springs to dampen vibrations, and laying of tracks.

Phase 2
Construction of a glass enclosure with acoustical glazing through the main public concourse (north end), and an enclosure for back-of-house service crossing (south end). Pedestrian access is across the LRT Corridor, controlled with double doors at crossing points, and four roll-down doors at points along the corridor and at each building end, segregating pedestrians from the trains. Smoke evacuation is installed.

Phase 3
Construction of escalators (north end) to carry pedestrians down and under the elevated LRT Corridor, and service elevators (south end) to carry personnel and service carts up and over via a new elevated crossing. The system of doors is removed, allowing unimpeded train access.

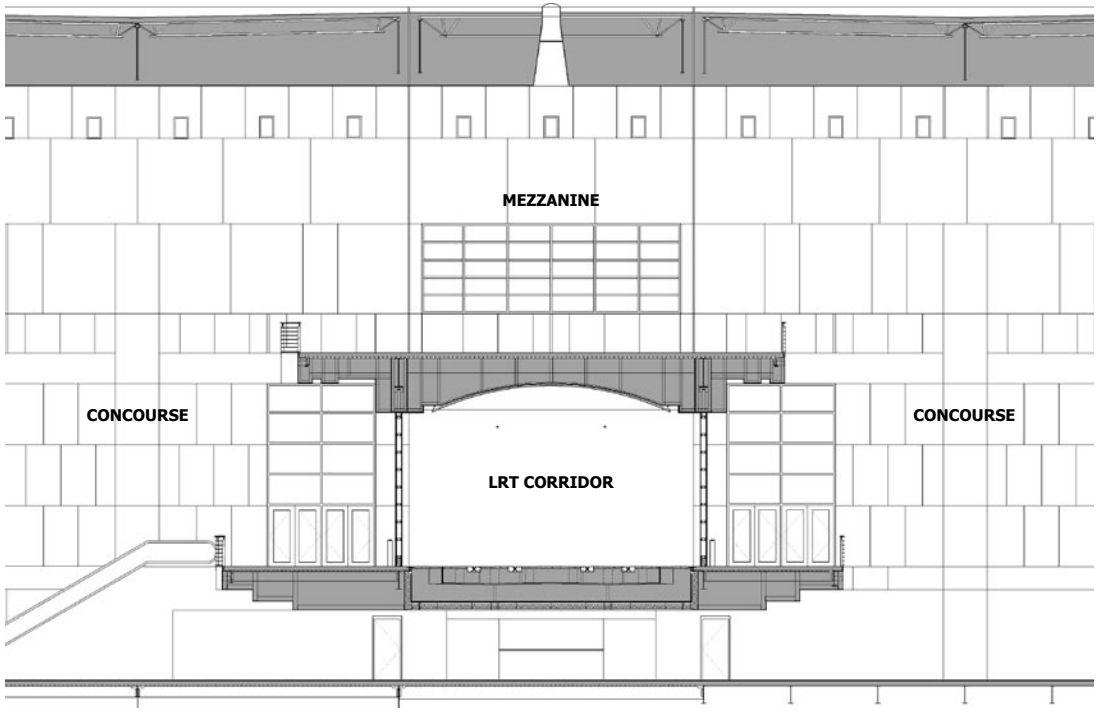
34,000 SF (renovation)
16,000 SF (addition)
$20 M

March 2006
The FWA Group

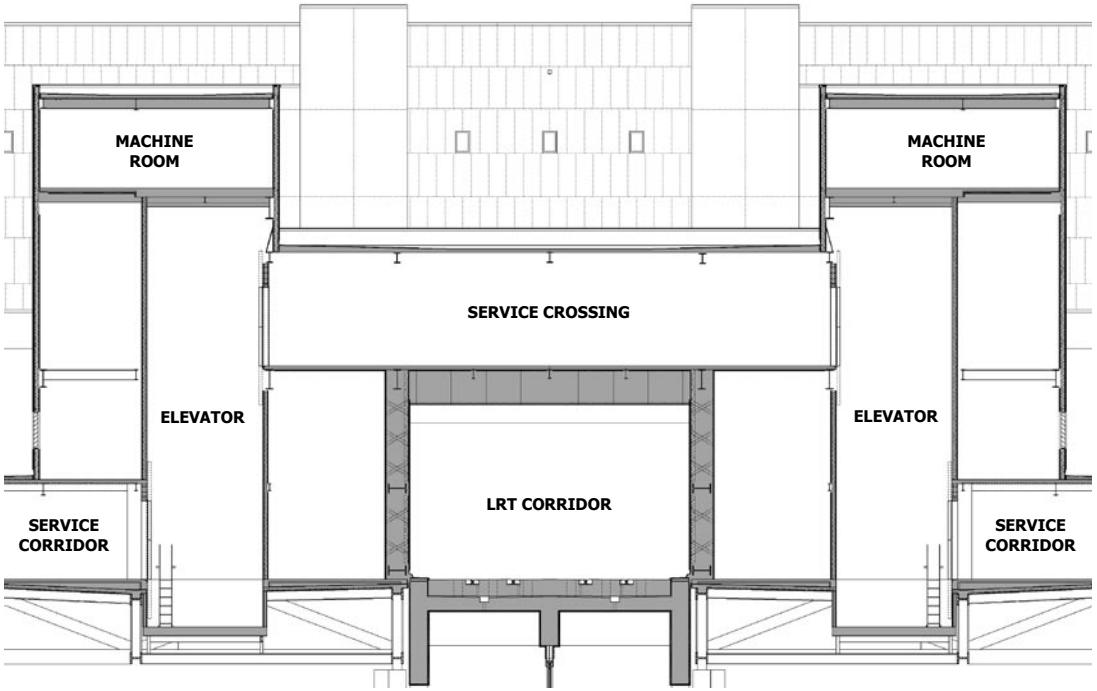


[18] *plan at LRT Corridor level*

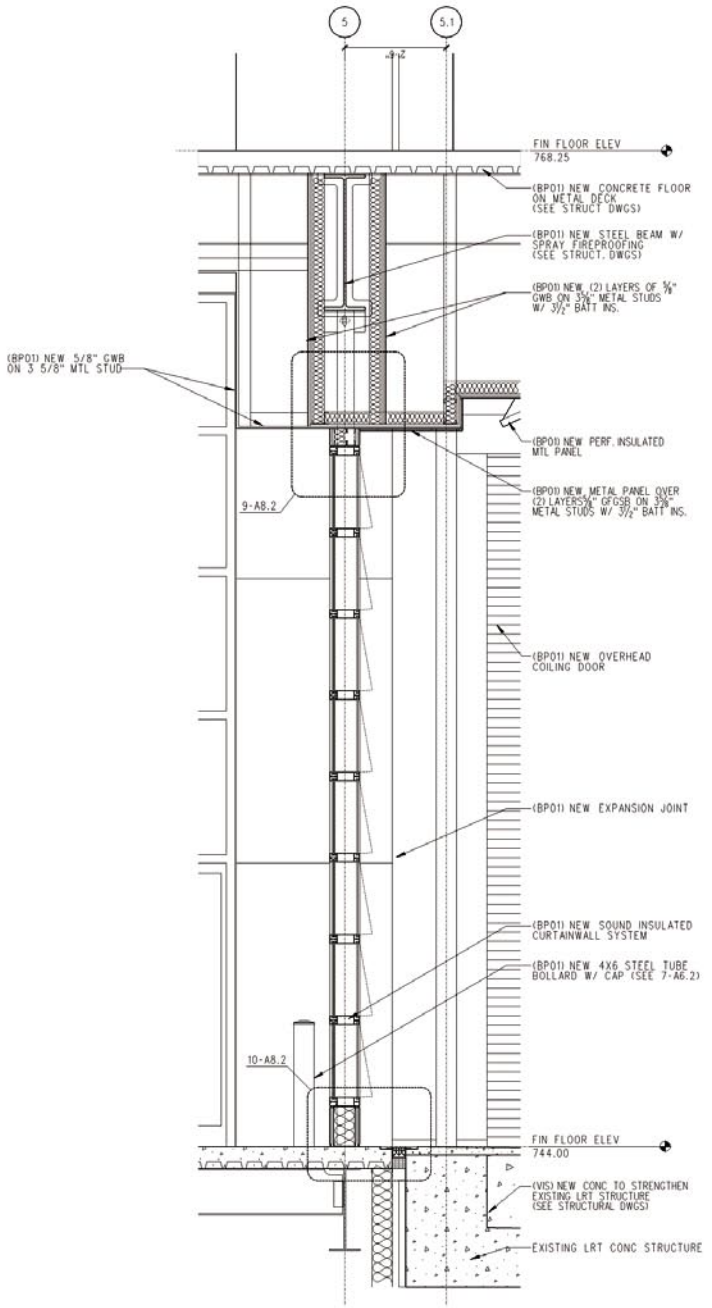
key plan



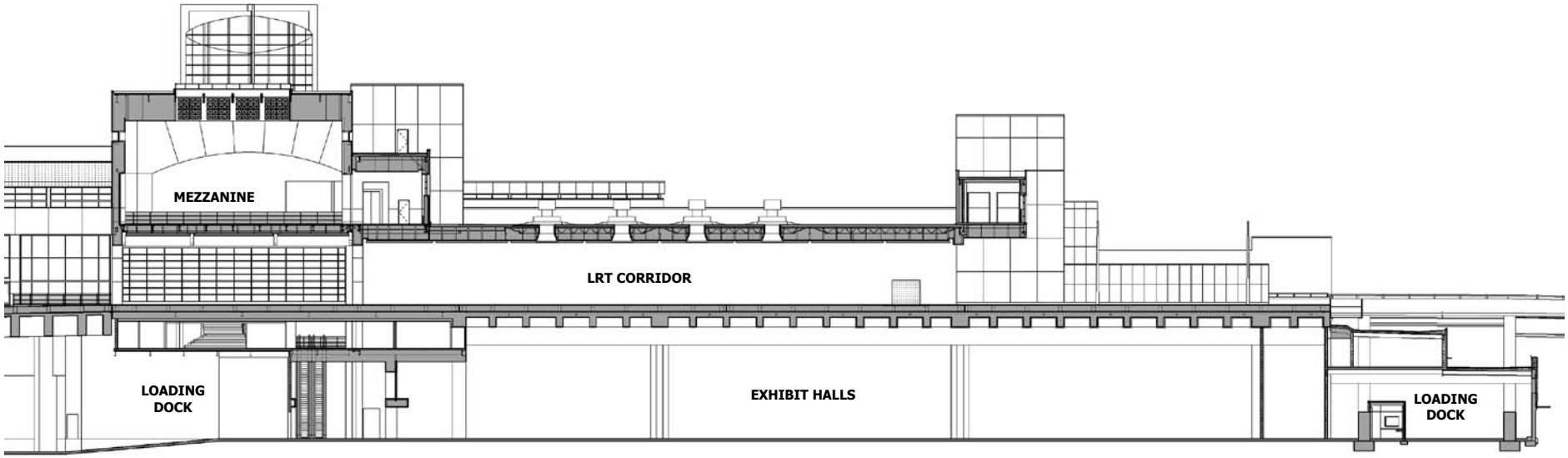
building section at north (public) end



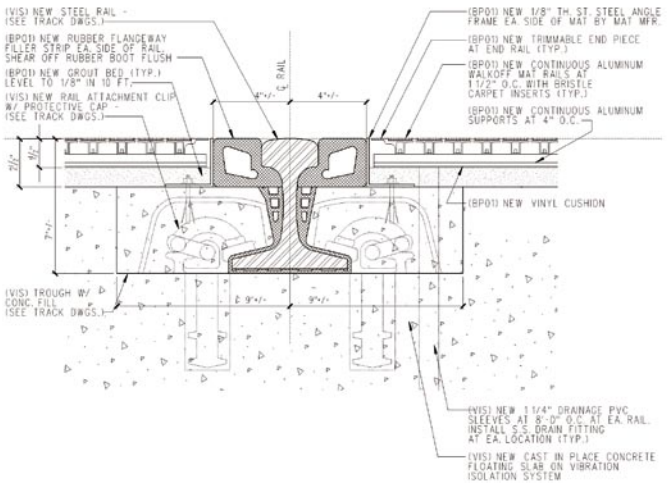
[20] *building section at south (service) end*



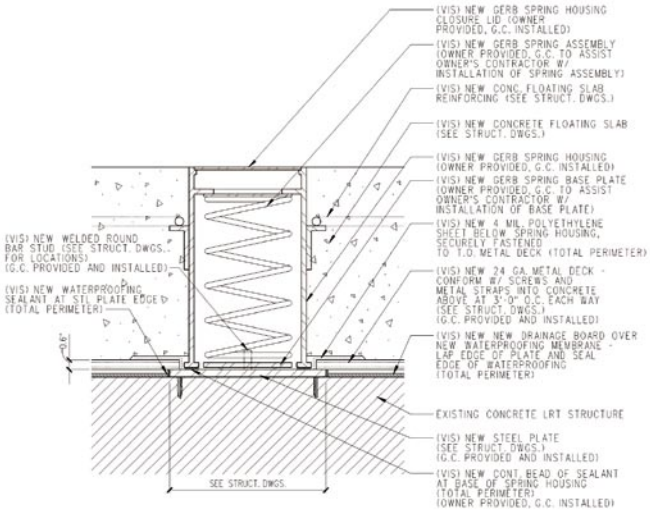
wall section at north (public) end



longitudinal building section



rail detail



vibration isolation spring detail

addition

existing building

addition (stairwell interior)

steel framing

RANDOLPH MIDDLE SCHOOL

Charlotte-Mecklenburg Schools
Charlotte, NC

Prior to renovation, Randolph Middle School was undersized and housed 800 students, approximately 100 of which were exceptional or physically challenged. The original 1966 building was designed with stepped floor elevations, which took advantage of the sloping site, and a two-story section at the west end. Most of the floor levels were only accessible with the use of a chair lift, which created significant problems for the E.C. student population.

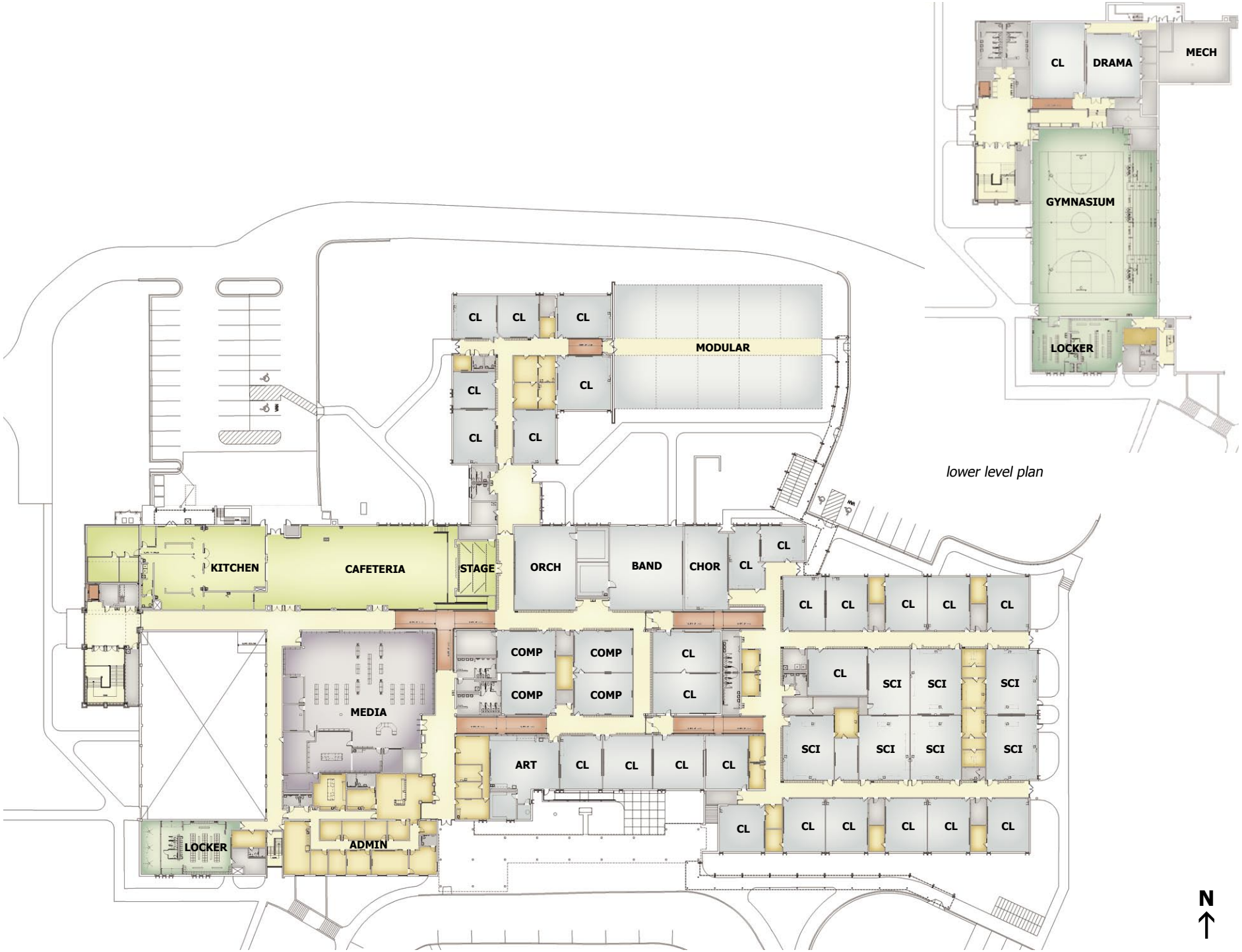
The goals of the project were to bring the school up to the current CMS baseline standard where feasible, increasing the capacity from 800 to approximately 1200 students. A modular classroom addition was constructed, connecting to the existing building. Another addition occurred adjacent to the two-story section, containing a glass-enclosed monumental stair and elevator lobby, providing accessibility to the existing gymnasium on the lower level, as well as additional kitchen space and new toilets. Much of the remainder of the school was renovated to provide new areas for administration, media center, kitchen, cafeteria, classrooms, and accessible toilets. In addition, all of the chair lifts and corridor stairs were eliminated and replaced with accessible ramps the full width of the corridors to provide an equitable means of circulation.

Summary:

- *Construct new addition for stair and elevator lobby*
- *Provide modular classroom building*
- *Reuse existing gymnasium*
- *Renovate existing building, including a relocated/ enlarged media center, music rooms, administration, kitchen, and classrooms.*
- *Expand the cafeteria into adjacent space.*
- *Replace chair lifts and corridor stairs with accessible ramps.*

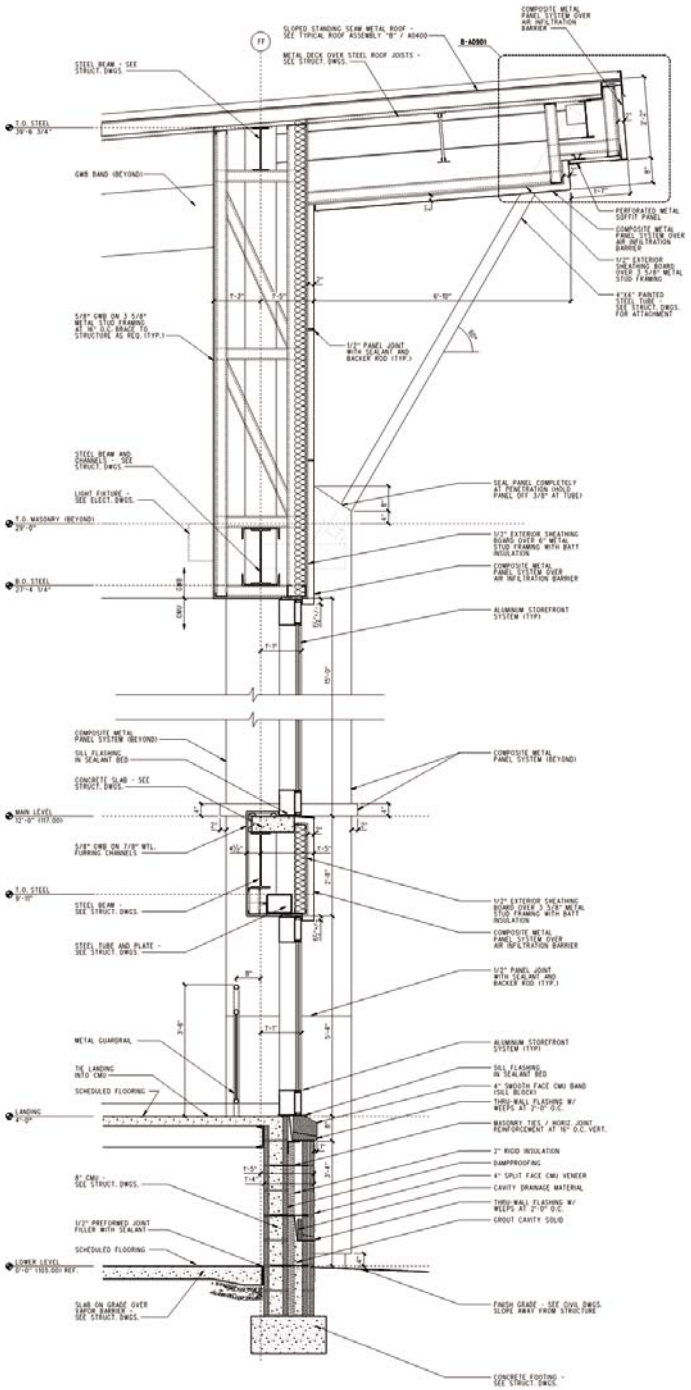
118,000 SF (renovation)
7,000 SF (addition)
$11.8 M

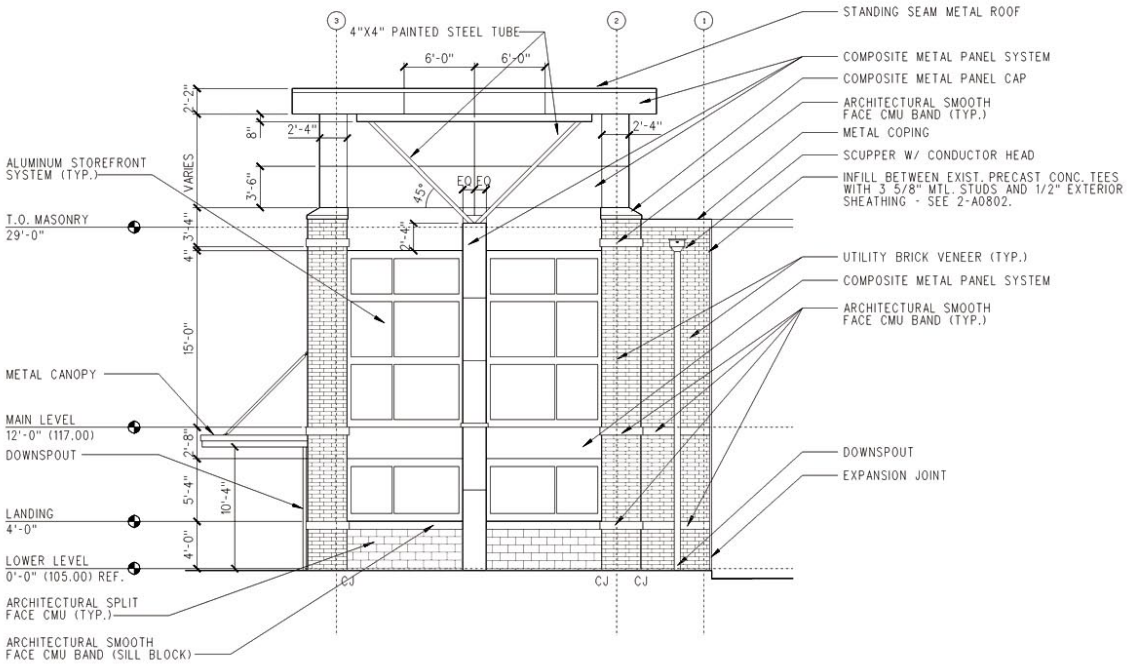
August 2008
The FWA Group



lower level plan

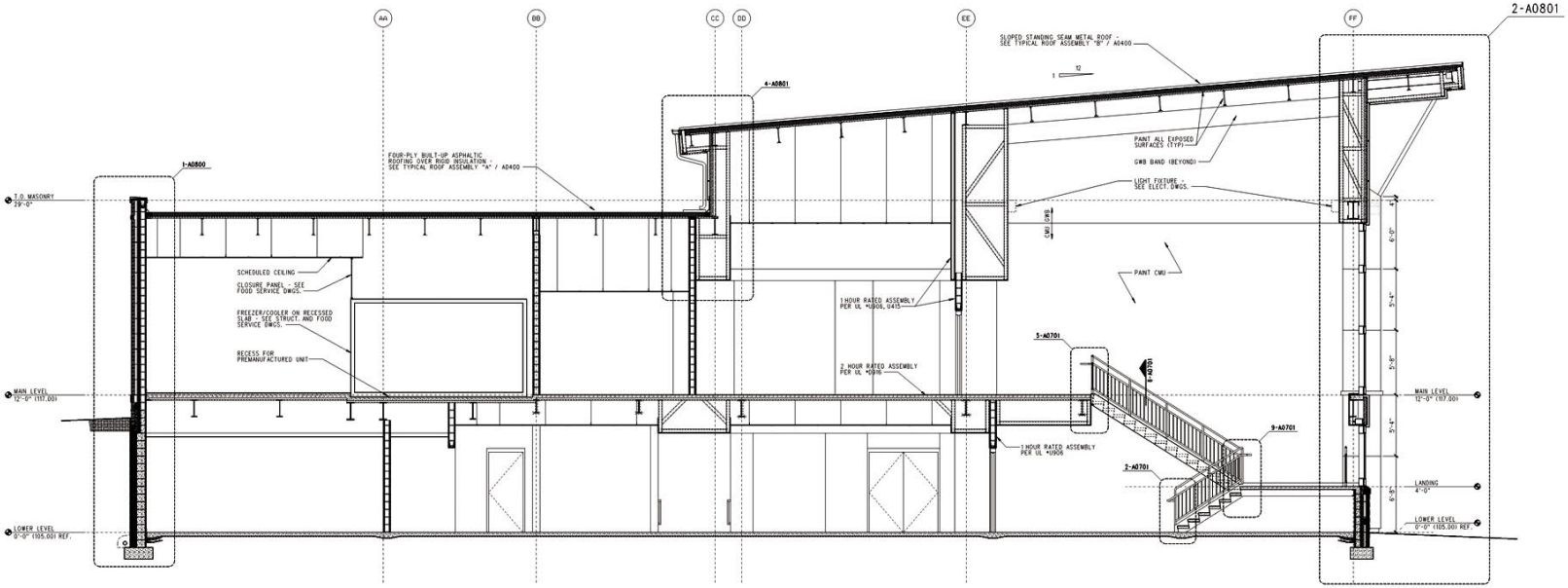
[22] *main level plan*



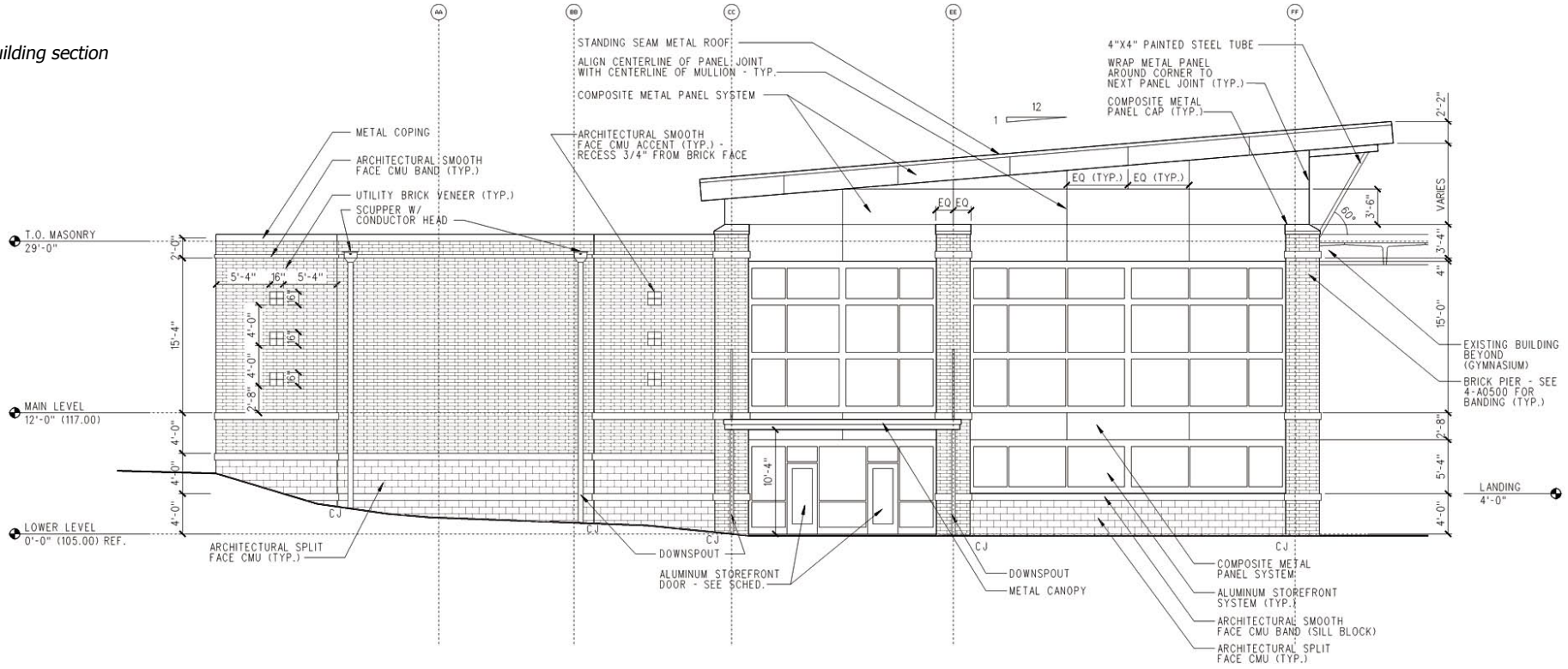


[24] *wall section*

south elevation



building section



west elevation

computer model view (admin / entry)

** model construction by project team (MicroStation)*

computer model view (gymnasium / cafeteria)

computer model view (entry)

first day of public charrette

RIDGE/BELMEADE MIDDLE SCHOOL PROTOTYPE

Charlotte-Mecklenburg Schools
Charlotte, NC

These projects are a result of the CMS Middle School Design Competition held in 2006, during which the public, educators, and parents were invited to participate and critique as designs from three architectural firms were being developed for two sites, with the goal of producing a more economical school. At the end of the week-long charrette, the three designs were evaluated, and The FWA Group was selected the winner.

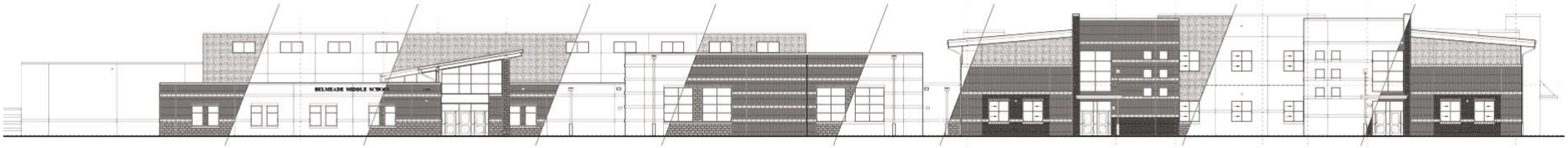
Both sites presented challenges of limited size (less than 30 acres each) and existing rolling topography. In addition, site-specific constraints, such as the presence of wetlands at Ridge and large high-voltage power line easements at Belmeade, required judicious placement of site amenities and steered the building into a compact, two-story design:

In the one-story portion of the building, all major spaces (admin, cafeteria, gymnasium, music, and media center) are volumetrically arranged around a single main corridor extending the entire length of the building, clerestory-lit, and terminating at each end with natural light and at one end with a monumental stair. This corridor intersects the main entrance lobby which is defined by a materially different, punctuated feature wall. The wall begins as structural support for the exterior entrance canopy and continues through the lobby and into the gymnasium where it opens up to define the stage proscenium. In the two-story portion, a ring corridor encircles a central core of science classrooms and support spaces, distributing other classrooms along the perimeter.

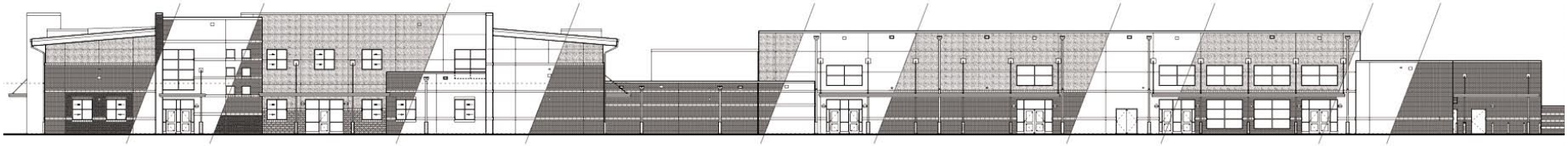
As emphasized during the competition, the building is based on efficiency of plan, clarity of circulation, flexibility of spaces, and economy of materials, without sacrifice of educational processes or inspiring design.

130,000 SF
$20.8 M

August 2009
The FWA Group

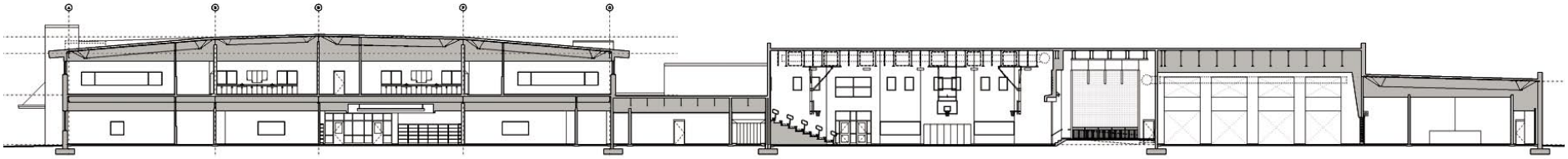


west elevation

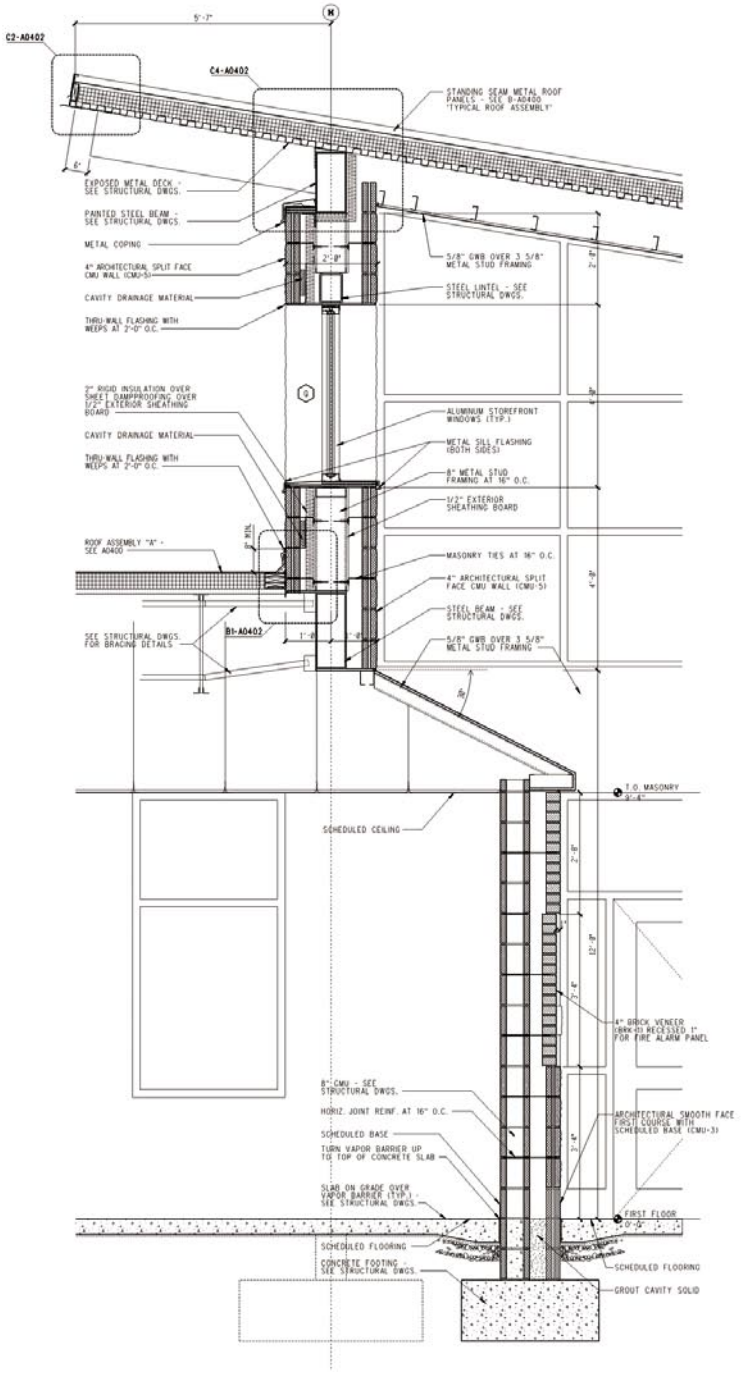


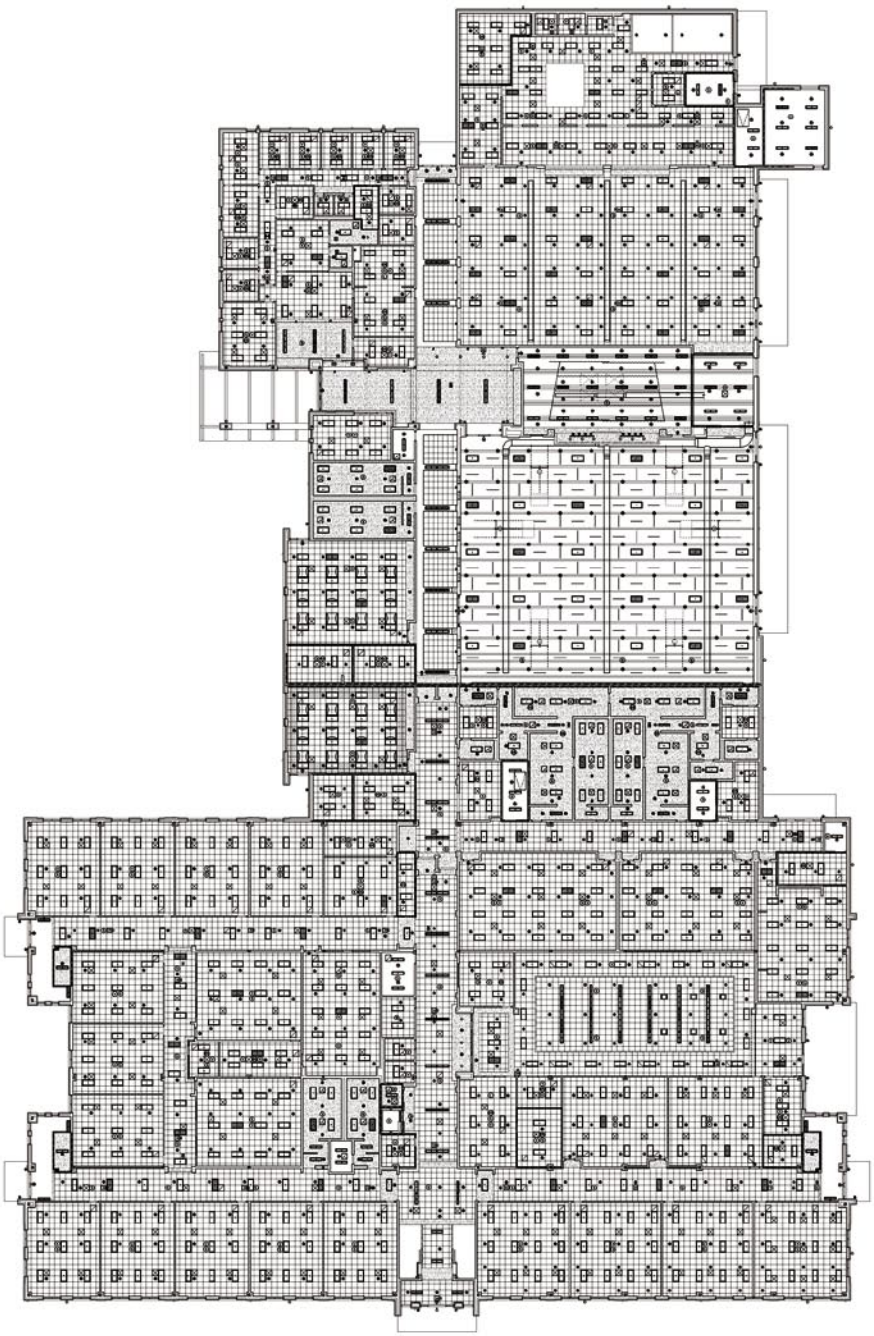
east elevation

south elevation



[26] *longitudinal building section*



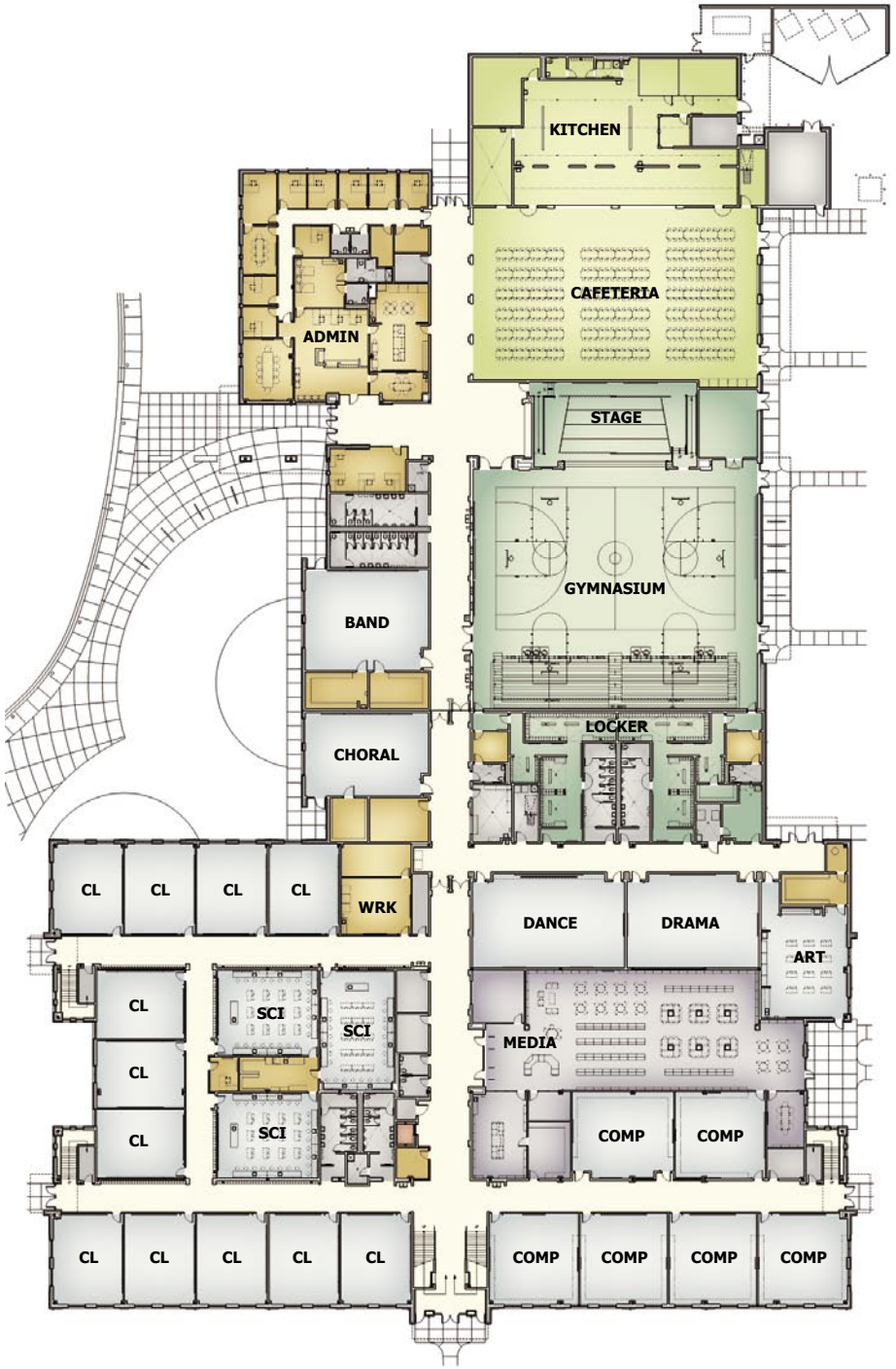


[28] *wall section at entrance lobby*

first floor reflected ceiling plan

building section at feature wall

second floor plan



first floor plan