

ARCHITECTURE 2202
Architectural Design II
Spring Semester 2012

GALLERY / STUDIO / RESIDENCE

The design challenge this semester is a gallery, studio and residence to be located in the river north gallery district. The building will serve as a model for urban living in the 21st century, providing public gallery spaces, private work studio spaces, and a living space for a visiting artist all in the same structure.

Your client strongly desires the building to be sustainable and responsive to its environment. Your design should be a model for sustainable urban living.

GALLERY ONE (gallery with a collection of one)

Your gallery space will have one piece of artwork on permanent display. The remainder of the gallery spaces will be used for temporary exhibitions and installations associated with the visiting artist in residence. You will select the artwork that will become the one piece in the permanent collection. The artwork that you select will serve as inspiration for the design of the building.

STUDIO:

Your design will accommodate studio spaces for a visiting artist in residence.

RESIDENCE:

You will design a small loft residence for a visiting artist in residence.

SITE

The site for this project is located on the northwest corner of W. Chicago Avenue and N. Franklin St. in Chicago. The site is currently a vacant triangular site bounded by Franklin Street to the east, Chicago Avenue to the south, and the brown line elevated tracks to the west.

The site is located in the heart of the River North gallery district. This area is a vibrant neighborhood home to art galleries, product showrooms, architects and designers offices, bars, restaurants and nightclubs. The site is an ideal location chosen for its adjacency to many local art galleries, as well as its accessibility to public transportation.



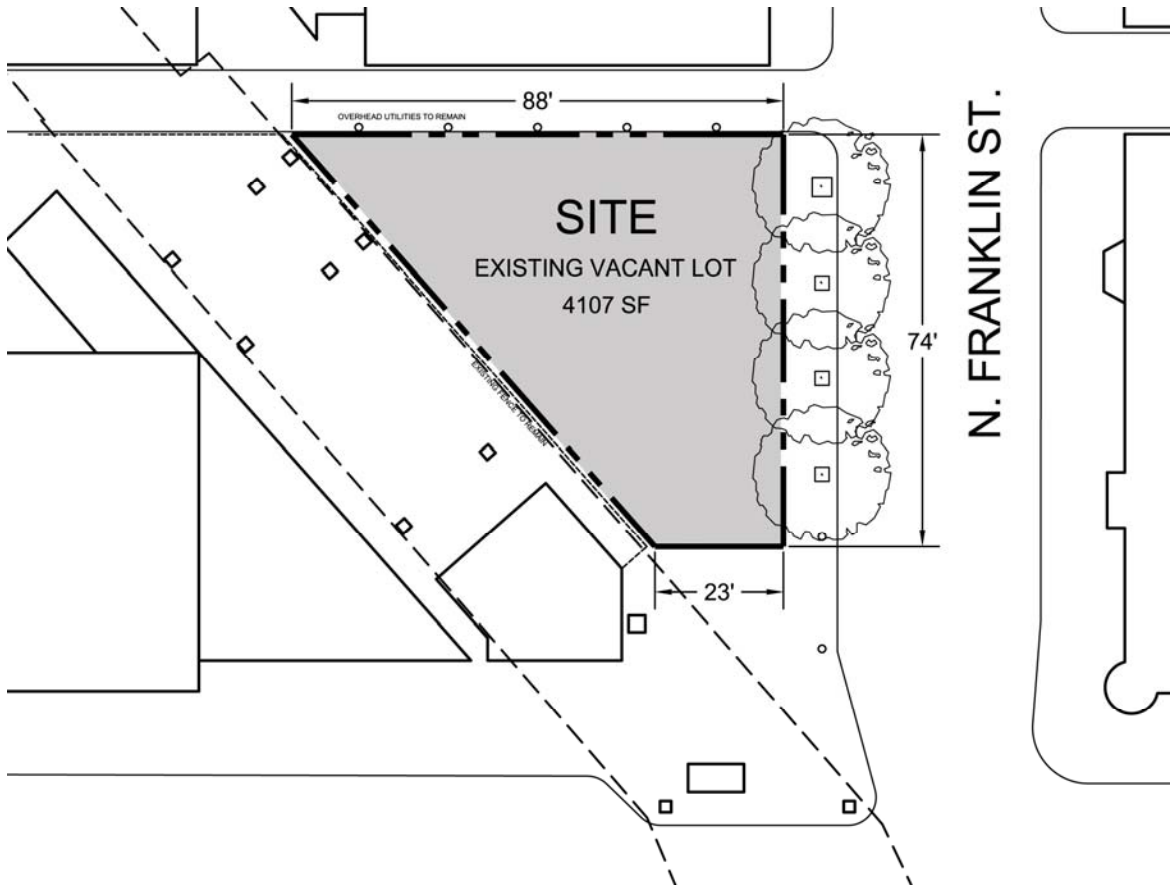
From Chicago Avenue looking northwest



From Franklin Street looking west toward site



Site Location



Site Plan

THE URBAN INFILL

Infill buildings are common in almost every American city and town. These buildings are used where a uniform and continuous streetscape is desirable, and where property value-to-land ratios warrant greater building density.

Infill buildings types include residential (townhouse or row houses), commercial, warehouse, and mixed use (residential and commercial) functions. Infill buildings have several characteristics in common:

Zero-lot-line Construction: Infill buildings are generally constructed party wall to party wall. Individual buildings cannot share structural party walls. (they must be constructed independent of one another and they must be separated by fire rated construction)

Minimal Exterior Wall Surface: Typically, infill buildings are constructed within blocks. The mid-block sites usually allow for only two elevations. This reduces the amount of natural light that can enter into the building from the elevations. Skylights and multi-story, open interior spaces are often used to maximize daylight in the building's interior.

Vertical Space: Due to the restricted footprint of the site, the architect must maximize the use of vertical space. Infill buildings must be designed in section as well as plan. Developing multi-story vertical spaces and breaking up floor levels in section is desirable for maximizing space and the use of light within the building. The challenge of providing adequate natural light to lower levels will require thorough design study.

Vertical Circulation: Because of the necessity to design with vertical space, vertical circulation becomes critical to the success of the design. The architect must pay special attention to the circulation requirements for the design to function properly.

BUILDING PROGRAM

GALLERY: Public

These spaces are the most public spaces in the building. The gallery will maintain open business hours for the general public, as well as host receptions and show openings. The gallery spaces will be used to display work by visiting and invited guest artists, changing installations on a regular basis. The gallery may also display various other exhibits and shows, and therefore needs to be designed for flexibility of use. The gallery space needs to be able to accommodate a variety of artwork in a variety of media. These spaces must be visible and fully accessible to the public.

Entry / Vestibule: 75-100 SF

This space is the public entrance for the art gallery. This will be the first space experienced by a visitor. It is desirable that this space provide an air lock against cold Chicago winters. All doors must swing in the direction of exit travel. Outward swinging doors may not encroach the sidewalk.

Reception / Information / Sales Counter: 150-200 SF

This area must accommodate orientation and serve as an initial gathering space for visitors. A reception desk is required. The desk should contain space to conceal a computer, telephone and fax machine. This space must be adjacent to the public entrance and should be visible from the street. At times, the gallery will be staffed and maintained by only one gallery employee from this information desk. Consider location and sight lines as part of your design considerations for this programmatic requirement.

Permanent Collection Gallery: 200 SF

This area will accommodate the one piece of artwork in the permanent collection. This space should be designed specifically to accommodate the piece of art that you have selected for this project. This space should be centrally located in the composition and maintain a sense of importance in terms of organization.

Installation Gallery: 400-600 SF

Provide a gallery space to accommodate temporary exhibits and installations. This space should be flexible, having the ability to display a variety of different types of artwork. A clear ceiling height of 18' should be maintained throughout this space to accommodate larger works of sculpture.

Painting Gallery: 400-600 SF

Provide a gallery space to accommodate the display of flat artwork and paintings. This space should also be designed as flexible spaces, having the ability to accommodate changing temporary exhibits and installations. Control of natural light in this space should be a primary consideration.

Terrace / Sculpture Garden: NSF

Provide an outdoor space to host gallery openings, receptions, and the display of sculptures. This space may be at ground level or be conceived of as a roof terrace space.

Gallery Director's Office: 150 SF

This space must accommodate an executive desk, file cabinets, and a small side table with two guest chairs. This space should be organized adjacent to other administrative areas, and should not be readily accessible to the public.

Conference Room: 200 SF

Provide a small conference room with a conference table to seat 8-12 persons comfortably. The conference room should be adjacent to the Gallery Director's Office

Small Storage Room: 50-100 SF

Provide a small storage room for business operations of the public gallery

Copy / Archive Room: 100-150 SF

This space should contain a Xerox machine, 4 drawer filing cabinets and a work surface for collating and sorting. The copy room should be adjacent to the director's office and conference room.

Public Restroom: 70 SF each

Provide one accessible restroom (1 water closet) per each gender. Restrooms must be designed in accordance with the American with Disabilities Act.

Consult Graphic Standards chapter 21 for information regarding universally accessible restrooms.

VISITING ARTIST STUDIO: semi-public

Your design should provide a studio space to be used by a visiting artist in residence. These spaces are the primary work spaces for the artist. Studio spaces should be flexible to accommodate the needs of visiting artists working in a variety of material and medium. These spaces are mostly private spaces, but may be used from time to time to in a more public manner depending on the artist and need.

Main Studio: 400-600 SF

This is the primary work space for the artists. This space should be open and flexible, and have ample natural daylight. Spaces with high ceilings are desirable for this space. This space should include a built-in counter with a shop sink. Consider built-in casework to accommodate storage of materials and small tools as part of the design of this space.

Artist Office: 150 SF

Provide a small office space for working. The office space should contain flat work surfaces for drawing and model building, as well as a workspace for computer work. Space for file storage should also be accommodated.

Restroom: NSF

Adjacency to a restroom is desirable for the artist's studio space.

RESIDENCE: private

This is the private residential space for a visiting artist. Open, loft style spaces are desirable.

Entry Area: 50 SF

The residence should have its own private entrance. This area will accommodate entrance to the apartment. This area may be a part of the Living / Dining area, or it may be a separate space. A small coat closet located near the entry is desirable.

Living / Dining Area: 300 - 400 SF

The Living / Dining area may be a single large space or it may be subdivided into two zones. It is desirable that this area feels spacious and open with ample natural light. This area must be accessible directly from the entry area. Access to the roof terrace from this area should be considered, although it is not a requirement. The dining area must be adjacent to the kitchen. Your drawings should show furniture layouts for this space. The dining room must accommodate a table with at least 6 chairs. A sofa, 2 chairs, and a coffee table are required for the living area.

Kitchen: 125 - 150 SF

The Kitchen must be adjacent to the dining area. Access from the entry area to the kitchen should be considered, although it is not a requirement. The Kitchen must be directly related to the service core. Built-in cabinets, fixtures, and appliances should be shown.

Bedroom with Closet: 150-200 SF

The Bedroom requires privacy and separation from other functions. It may be the same level as the Living/Dining Area, or it may be on a separate level. It must contain a medium sized closet for clothes storage.

Bathroom: 50-75 SF

This must be a full bathroom space (lavatory, water closet, and bathtub). The bathroom should be adjacent to the bedroom. The bathroom must also be directly related to the service core.

Roof Terrace / Green Roof: NSF

The private residence should have access to an outdoor space within the site. The roof terrace is a way to reclaim exterior space on a site that has limited ground to work with. The roof terrace may also accommodate other functions on the site, such as the display of outdoor sculptures or functioning as a terrace for public gallery receptions. If the roof terrace is used for public functions, it must be accessible as well as served by two means of egress. A green roof is strongly encouraged.

OTHER REQUIREMENTS**Circulation:**

Allow approximately 10% of the total gross floor area for circulation. Circulation is a critical aspect for the public spaces. It is essential that a visitor to the gallery have a sense of orientation.

Exit Stairs: 2 @ 200 SF EA = 400 SF

All public floors must have accessible access to 2 exit stairs at opposite ends of the building. Exit stairs must exit directly to a public way. Elevators are not considered a means of egress in an emergency. The residence may be served by one exit only.

Stairs: 11" min tread. 7" max riser. Stairs may not be less than 44" wide. A stair cannot rise more than 12'-0" without an intermediate landing.

Elevator: 80 SF

The elevator must serve all public levels of the building. Public spaces include the gallery and studio spaces of the building. Elevator service is not required to serve the private residence. You should use a minimum of a 2500# hydraulic passenger elevator. The elevator can double as a service elevator if necessary. Details for Otis Elevators can be found at www.otis.com

Ramps: Accessible ramps may be used where appropriate. Ramps may not exceed a 1:12 slope. Landings must be provided every 30'-0" of ramp length.

Structural Grid: Your building must provide adequate structure to support the multi-level design. Structure can be accomplished through load bearing walls (1 foot thick minimum), a structural grid system, or a combination of both. Students may need to research structural systems to determine the appropriate solution for your design. Structure should not span more than 30'-0" in either direction as a general rule of thumb.

Service Core Walls: All mechanical services (electrical, plumbing, heating, and ventilation) will be handled through one or more service cores. The walls of the service core must be cavity walls (they must have an interstitial space) to provide vertical chases to accommodate ducts, wiring and plumbing. Common mechanical services should be stacked for efficiency. All mechanical elements (plumbing, HVAC) must be vented directly through the roof. Service core zones must therefore accommodate vertical ducts and pipes that extend from the ground floor level to the roof.

Mechanical Room: 5% of total gross floor area served

This space will accommodate all of the HVAC / electrical / telecom and fire protection equipment for the building. Provide 25 SF of clear floor space for the furnace and at least one wall with 5' of horizontal clear space for electrical and telecommunications equipment.

Bicycle Racks: SF as required

Provide public bicycle parking for at least 4 bicycles. Optional showers and lockers may also be provided to serve the neighborhood if desired.

Basement: Basement spaces are not desirable public spaces, but will be allowed. You may dig into the site below the level of the city sidewalk as necessary, but should not exceed one storey below grade.

General Note:

The SF allowances listed here are a guide for planning purposes only. Final designs will likely vary based on the configuration of spaces. Designers should test all spaces with furniture and equipment for efficiency and accuracy.