

FALL 2004
MITSCHOOL OF ARCHITECTURE AND PLANNING
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URBANDESIGNSKILLS

OBSERVING, INTERPRETING & REPRESENTING THE CITY ASSIGNMENT THREE Representing The City

PART B – MIXED USE INFILL PROPOSAL

As an urban design consultant for the City of Cambridge, you are being asked to propose an infill development in Cambridgeport neighborhood. See Image 1.

The City would like to develop the site to its maximum potential, in accordance with its current zoning, urban design guidelines, and development plan for the area. The City would like to see at least 60% of the square footage be developed as housing. The proposed development site is located within the Cambridgeport Revitalization District. The zoning ordinance for this district allows a diverse land use in close proximity within a limited area; encourages a transition from the existing residential neighborhoods to business oriented uses, and interaction among activities, while providing for mixed income residential, as an extension of the Cambridgeport neighborhood.

Purpose: To introduce students to the design process for an urban infill project. To develop an understanding of some of the factors that influence design decisions. To prepare presentation panels, in order to convey ideas in a convincing and graphic manner. To supplement their graphic presentation with a concise oral explanation of the proposal.

Task: To prepare a design proposal for the site that meets the City's objectives and development framework for the site. Information on the parameters for the site are as follows:

Zoning

The zoning regulations for the site are comparable to those designated in Office District no. 03. Uses allowed in residential districts are usually allowed in this district also, as well as banks, businesses, professional and technical offices. Some commercial uses such as theaters are also permitted. Table 1 summarizes some of the office district's dimensional requirements. Also see the notes on dimensional requirement of the City of Cambridge.

Access

The site is bounded by three streets: Albany, Sidney, Pacific and the CSX rail corridor. The proposals can consider subdividing the block by creating new streets, or continuing existing ones. Pedestrian access and circulation should be encouraged.

Built Form

All built forms should adhere to existing regulations as specified in Office District no. 03. Parcelization and ownership should be considered as well as private and public access.

FAR: Maximum Floor Area Ratio is 3

Height: Maximum building height is 120 feet

Density: Maximum Dwelling Units per Acre : 145

Parcelization and ownership should be considered as well as private and public access.

Parking

Minimum of 1 parking space per housing unit off-street is required. Office parking will rely on existing parking facilities in University Park and the surrounding area.

Environmental Factors

Consideration should be taken to mitigate for noise and other nuisances associated with incompatible land uses. If possible, stormwater drainage should be handled on site.



Image 1

CITY OF CAMBRIDGE DIMENSIONAL REGULATIONS

Dimensional Regulations limit the intensity of activity and the size and location of buildings on a piece of land. These regulations specify maximum gross floor area, density, height and minimum yards and open space.

Density Regulations

Density regulations limit the number of dwelling units which may be built on a piece of land by requiring a minimum number of square feet of lot area per dwelling unit. A dwelling unit is a portion of a building containing the living space for one family or household. A 6,000 square foot lot in an apartment district with a 1200 square foot minimum lot area could contain a five unit (6000/1200) apartment building. It is often useful to convert the minimum required lot area for one dwelling unit to units per acre.

This provides a measure of how many new units exist or are allowed on a city block or other larger tract of land.

Setback Regulations

Setback regulations control the distance between the building and street and lot lines. These distances define the yards on a lot. The Zoning Ordinance specifies minimum front, side and rear yard setbacks for residential and office districts and for some business and industrial districts.

Open Space Regulations

Open space regulations require that a specified minimum portion of a lot remain open and usable. Several dimensional regulations are illustrated in the accompanying diagram.

Parking Regulations

Parking Regulations specify the amount of off-street parking required for each type of land use. These are usually expressed as one space per some unit of measure (e.g. dwelling unit, gross floor area, or number of seats). Parking regulations also control the location of the parking, and layout and landscaping of parking facilities.

Height Regulations

Height regulations limit how tall buildings may be. This is expressed as a maximum number of feet. As a rule of thumb, a single story of a building is about 10 feet high. Some districts have different height limits at the edge of the district than at other locations within the district.

See Diagram 1.

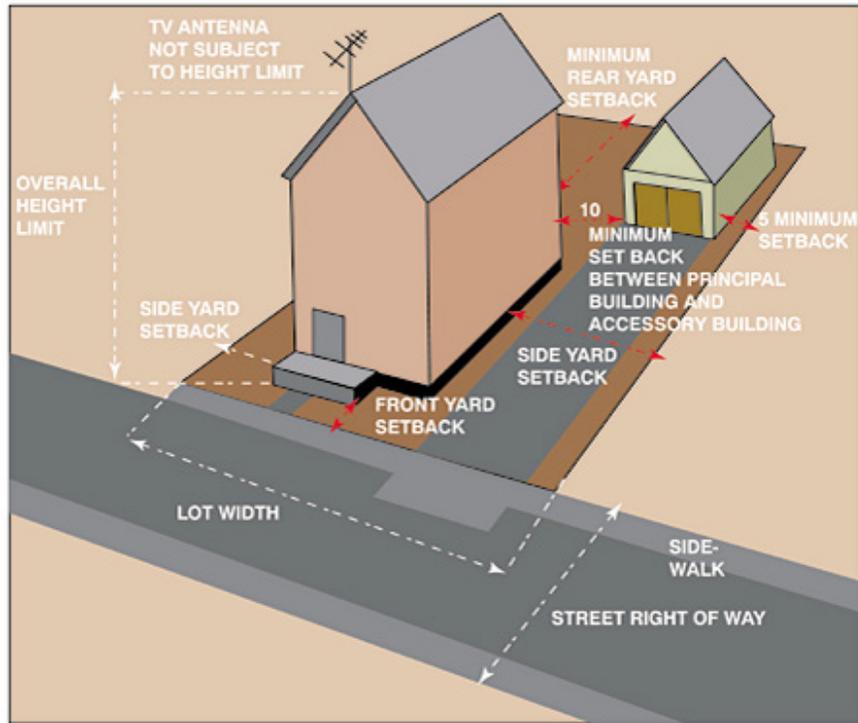


DIAGRAM 1.

Floor Area Ratio

Floor area ratio (FAR) limits how intensively a lot may be built upon. Indirectly it controls building volume. FAR is the gross floor area of the building divided by the area of the lot. Areas devoted to parking, to building mechanical systems and certain other areas are not counted when calculating gross floor area, Business districts such as Harvard Square and Central Square have much larger FAR limits than most residential neighborhoods. See Diagram 2.

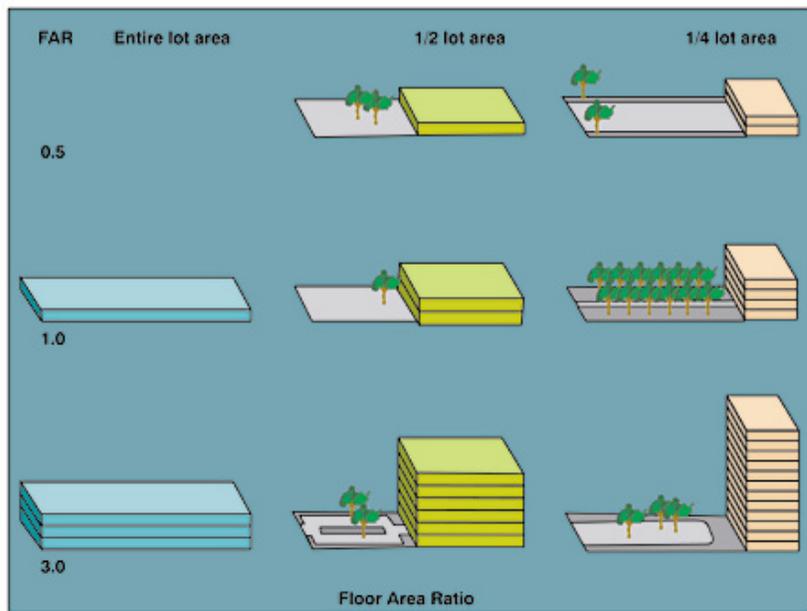


DIAGRAM 2.

Deliverable:

- Context Plan (see sample plans on website)
- Site Analysis
- Concept Plan
- Site Plan(1:50)
- Land Use Diagram
- Parcelization Diagram
- Density Diagram
- Urban Design guidelines
- Two sections (1:20)
- Study foam massing model (1:50)