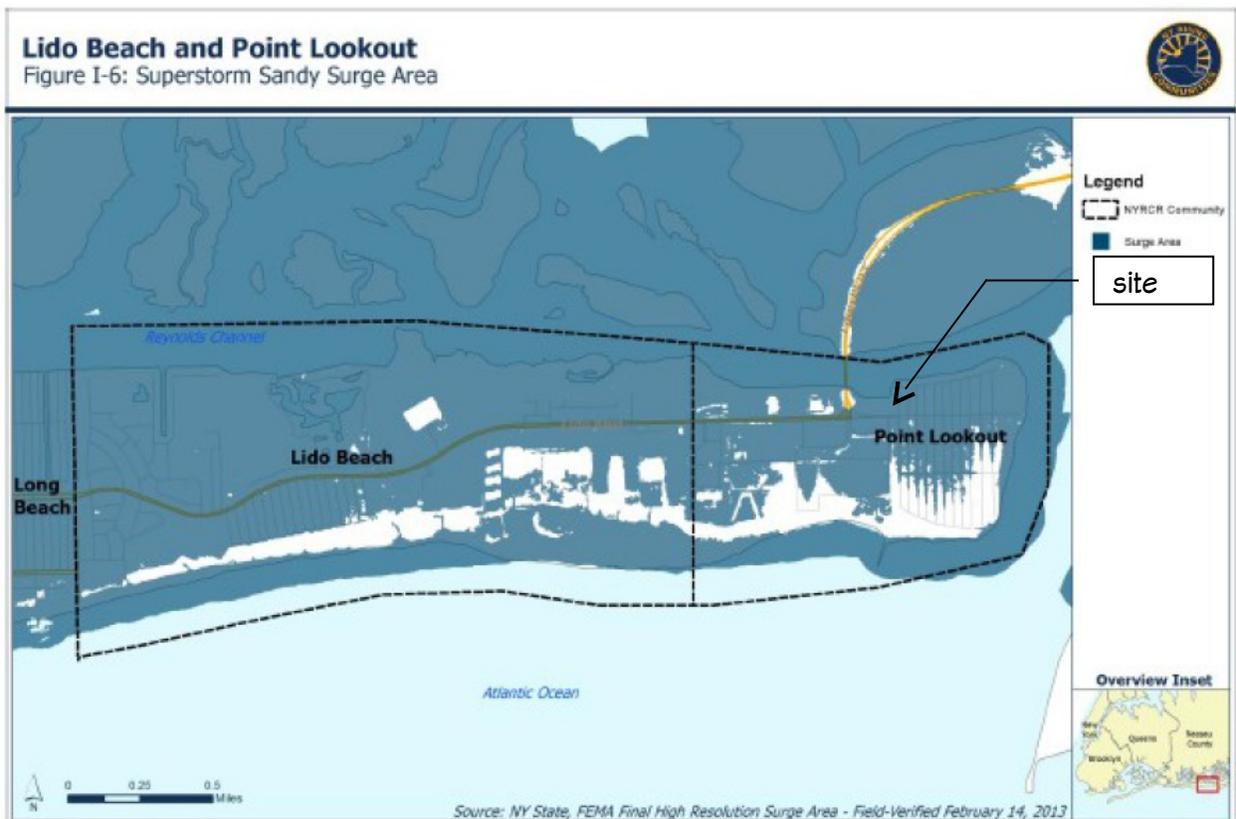


ARC466 – ARCHITECTURAL DESIGN 4 – SPRING 2015

Project 3 – Infill Neighborhood and Dwelling Prototypes

Instructor - Eric Anderson

Housing affordability on Long Island is at an all time low for entry level workers and young families. You have been retained to develop affordable housing units in Point Lookout next to a new community library and an existing town marina. The site has been classified on flood maps.



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Your goal is to make a succinct but compelling case to your fellow citizens and elected officials for the use(s) of the property for infill development and housing. You will prepare a written statement of no more than 1,500 words summarizing your proposal and strategy to be reviewed before the public meeting and develop a three-slide PowerPoint presentation to complement the summary.

A public meeting will be held to solicit recommendations from citizens and interest groups concerning the best use of three lots. Various ideas are already circulating in the community. Some people would like to keep the neighborhood as is.. Some would like to use the site for a new public facility, such as a day care center for senior citizens.

While all these ideas have merit, you are the leader of a citizens group that thinks the site should primarily be used for housing, because the need is so great for both affordable housing and to provide a model for infill development in Long Island communities. After having had several discussions, the group has asked you to prepare a written statement of no more than 1,500 words summarizing your group's proposal and strategy to be reviewed before the public meeting.

Your goal is to make a succinct but compelling case to your fellow citizens and elected officials for the use(s) of the property for housing. While there many factors you should take into account in your analysis, here are a few you might consider:

1. What are the various groups that need housing in your community? How can you describe that need? Using data available from your local government or other sources, can you quantify the need in terms of demographic information, such as households in different income ranges? Are there trends in housing that are affecting your community, such as increases in retired persons, single parent households, or immigrant families?
2. What type(s) of housing would best suit this location while serving some of the demand you have identified? Should it be single-family houses, townhouses, or apartments? Should the units be for sale or for rent, or both?
3. How would the new use for the site relate to adjacent uses? How would the transportation needs of people living on or using the site impact the surrounding area?
4. As part of your proposal, several smart growth organizations would like to determine if a pocket neighborhood ordinance using form-based zoning would provide smart guidelines for infill development. You will get a model pocket ordinance from authoritative sources and compare it to the current zoning and density ordinances in the Town of Hempstead to identify the strengths, weaknesses, opportunities, and threats resulting from implementation of the pocket neighborhood ordinance.

Judging Guidelines: Proposals will be judged on the following: Research and Analysis; Creativity and Quality of the Development Proposal; Use of hard data from authoritative planning sources.

PART 1 is Due March 11, 2015

ARC466 – ARCHITECTURAL DESIGN 4 – SPRING 2015

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Instructor - Eric Anderson

Part 2 – Unit Design

The project will result in the design of dwelling units with 1 and 2 bedroom options. The site will be planned based on form-based codes which have been developing as part of the New Urbanism recommendations for small-scale neighborhoods. You will use the codes to determine the maximum number of units that can be developed on the site.

Design a prototype dwelling for each unit and develop a comprehensive site plan in accordance with a model pocket neighborhood ordinance that establishes the highest density possible. The prototype design must support the following activities and qualities of experience for:

- Arrival and Entry
- Cooking and Dining – breakfast, lunch, dinner, snacks; occasional guests (1-6)
- Sleeping
- Storage for Clothes
- Toilet and Bathing – as compact as possible
- Social and personal intimacy for one, two, or several friends inside and outside.
- Visitability in at least one unit

As a condition for utilizing the selected site, the local authorities requires the prototype unit to be planned using at least 5 key technical innovation developed by the federal Housing and Urban Development department collaborating with industry. The innovations are identified at Toolbase.org and the combination of innovations will make the proposed units as "green" as possible in its use of energy, disposal of waste, and use of natural resources.

Design and code requirements: If the units are detached, design and construction will be governed by the Residential Code of NYS. If the units are attached (more than two units), the design and construction will be governed by the Building Code of NYS. Review and design units in accordance with the prevailing building and zoning requirements.

Presentation Requirements:

5 drawing sheets : All title blocks at bottom of each sheet, title of project, student name, and Arc 466 – Spring 2015; all lines to be black and white and conforming to CAD guidelines; 3-D images to be color or grayscale; all spaces to be labeled to ensure conformance with the minimum program described in the project brief.

- **Site plan and description of project strategy.**
- **Floor plan(s) of units with entry elevation, same scale**
- **One large three dimensional image that shows the entry to the typical unit.**
- **Key sections**
- **Technical information**
 - Roof, wall and foundation section,
 - Plan detail of kitchen and bath
 - Specific details for each of the 5 technological innovations selected from Toolbase.org. Compile an outline technical brief on selected innovations, organized by Uniformat II specification standard on 8.5 x 11 pages.

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Project 3 – Infill Neighborhood and Dwelling Prototypes

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Drawing line-weights: Although "monowidth" line work is not contractually improper, varied line widths substantially improve readability for a successful presentation or review. Most commercial CAD systems provide an extensive variety of line widths. However, for the majority of A/E/C drawings, the eight line widths defined in Table 4-1 are considered sufficient and should not be expanded unless an appreciable improvement in drawing clarity or contrast can be realized. Table 4-1 shows information about the various allowed line widths.

LINE THICKNESS	MM	INCHES	TYPICAL USE
Fine	0.18	0.007	Patterning and material indications
Thin	0.25	0.010	Dimension lines, leaders, extension lines, break lines, grid lines, schedule grid lines, hidden objects, center lines, and setback lines
Medium	0.35	0.014	Object lines, text, property lines, terminator marks, schedule grid accent lines
Wide	0.50	0.020	Major object lines, cut lines, section cutting plane lines, property lines, drawing block borders, and titles
Extra Wide	0.70	0.028	Minor title underlining, footprints, match lines, schedule outlines, sheet borders, large titles, and object lines requiring special emphasis
2 X Wide	1.00	0.040	Major title underlining and separating portions of drawings
3 X Wide	1.40	0.055	Border sheet outlines and cover sheet line work
4 X Wide	2.00	0.079	Border sheet outlines and cover sheet line work

Table 4-1 Submission Line Weights

2 models

- Inset site model for class site model – scale from ARC366
- Presentation model of the dwelling unit at 1/8" = 1-foot

Final grade will be based on

Presentation (40%) – conformance to presentation requirements, distinctive line weight. Grades will be marked down for extra sheets, light line weight, no name, no north arrow for each plan, no labels, and no key dimensions. Bring sketch books or other project developmental material to show development of design to presentation.

Design (60%) – use of green materials, technologies and assemblies; use of code criteria for space and design features, creation of dwelling units that promote individual, family, and neighborhood dignity through the creation of prospect, refuge, and neighborhood context.

ELECTRONIC SUBMISSION REQUIREMENTS

- 1 pdf file with 5 submittal sheets.
- 1 pdf file with technology brief, 5 page maximum.
- 1 pdf file, site and unit model images, 8 page maximum.
- 1 dwg or dxf file with floor plan page only to verify line weight sizes

PART 2 is Due May 4, 2015 – revision period May 4-11.