

To: All
From: Professor Liel
CC: Sarah Welsh-Huggins
Date: January 1, 2014
Re: Term Project

North Boulder Library Design

For several years, the City of Boulder has been planning to build a new branch library in North Boulder. The construction of this library is motivated by the increase in population of Boulder, particularly toward the northern side of town. There is currently no library facility north of the Boulder downtown area. As a stop-gap measure, a small “corner” library will be opened in March, 2014, but plans remain to eventually provide a larger facility.

Jennifer Miles, the Deputy Library Director, provided the following information:

“At this time, the City of Boulder owns a piece of land in north Boulder that was identified as the site for a north Boulder library branch someday. That land is located at 4540 Broadway, and the site is where 13th Street dead ends at Fourmile Canyon Creek.

In the Boulder Public Library’s 2007 Master Plan, a north Boulder library branch was listed as a “vision plan” project, which in the city’s funding strategies, means what we would like to do if we had unlimited funding. Because of other, higher priorities for city funding, no funding to build and operate a full, stand-alone north Boulder library branch has been identified, and therefore, a north Boulder library branch is listed as an unfunded capital item in the library master plan.

A library branch in north Boulder is listed in the city’s North Boulder Subcommunity Plan, which is currently in the process of being updated.

Boulder Public Library (BPL) will open the North Boulder (NoBo) Corner Library at the northeast corner of Broadway and Yarmouth in March 2014. This small space (570 square feet) is part of the WestView Apartments, and is owned by Boulder Housing Partners (BHP). BHP offered BPL the opportunity to operate the space for library services for north Boulder in early 2013. Services to be offered in this space are: materials return, pick up for items placed on hold, public access computers, WiFi, and popular materials. The corner library will be open 40 hours per week.”

These resources and others are available on D2L.

Your task is to develop a conceptual design for the new North Boulder library at the site already designed for a North Boulder library branch. You should work in groups of 2. Your conceptual design should include:

- (1) A Community Needs Statement: Why does Boulder need a new library? Who are the intended users of this space? What amount of space and types of space are required to meet these needs? Does the unique nature of a library place any additional constraints on the building design? Unlimited funding is not available from the city government; how would you advocate for more funding? What are the long-term community benefits of such a library?
- (2) A Site Plan: Where is the building site? Where (on the site) will the building be located? What are the key risks or concerns with this site? How does your team propose to mitigate or address these concerns?
- (3) A Depiction of the Exterior of the Building: This could be a rendering, a physical model, or a video of your proposed design.

- (4) A Building Sustainability Plan: How do you propose to reduce the building's environmental impacts? Will your building earn a LEED rating? By how much do the proposed "green building" features reduce key metrics of environmental impacts? LEED BD + C (Building Design + Construction) may be relevant here.
- (5) A Building Floorplan: How do you envision the spaces within the building being used? Be sure to consider the needs statement, as well as the green building plans and other issues.
- (6) A Building Structural Plan: What are the load bearing elements in the building? Provide a structural plan of the building. Note that you don't need to design any of the elements, but you should do enough calculations that you are confident your design is feasible.

The conceptual design will be presented to your client (represented by Professor Liel and Sarah) during the final class meeting time of the semester. You should plan on about 20-25 minutes to make your presentation. Your physical submission should include your presentation materials (slides, props or whatever you choose to use), supporting documentation such as calculations or other data, as well as a 2 pg. letter to the client describing how the proposed design satisfies the goals of safety, sustainability, style and society.

This is not a project that can be completed in the last week of the semester. To help you along, we suggest you adhere to the following schedule. During weeks 3, 6 and 9, you will be asked to submit a short progress report. These reports will not be graded, but are an excellent opportunity to get feedback on your work.

Week 1: Choose team and visit proposed site

Week 2: Collect information and brainstorm "needs" assessment

Week 3 (Submission date February 12): Develop list of requirements for building

Weeks 4-5: Develop basic building design: What materials will it use? What do you want it to look like?

Week 6-7 (Submission date March 12): Demonstrate feasibility of structural system

Week 8: Identify desired green building features

Week 9: Assess life-cycle environmental impact

Week 10 (Submission date April 2): Modify building design to improve performance

Week 11: Create architectural rendering or model of building

Weeks 12-14: Develop documentation your design