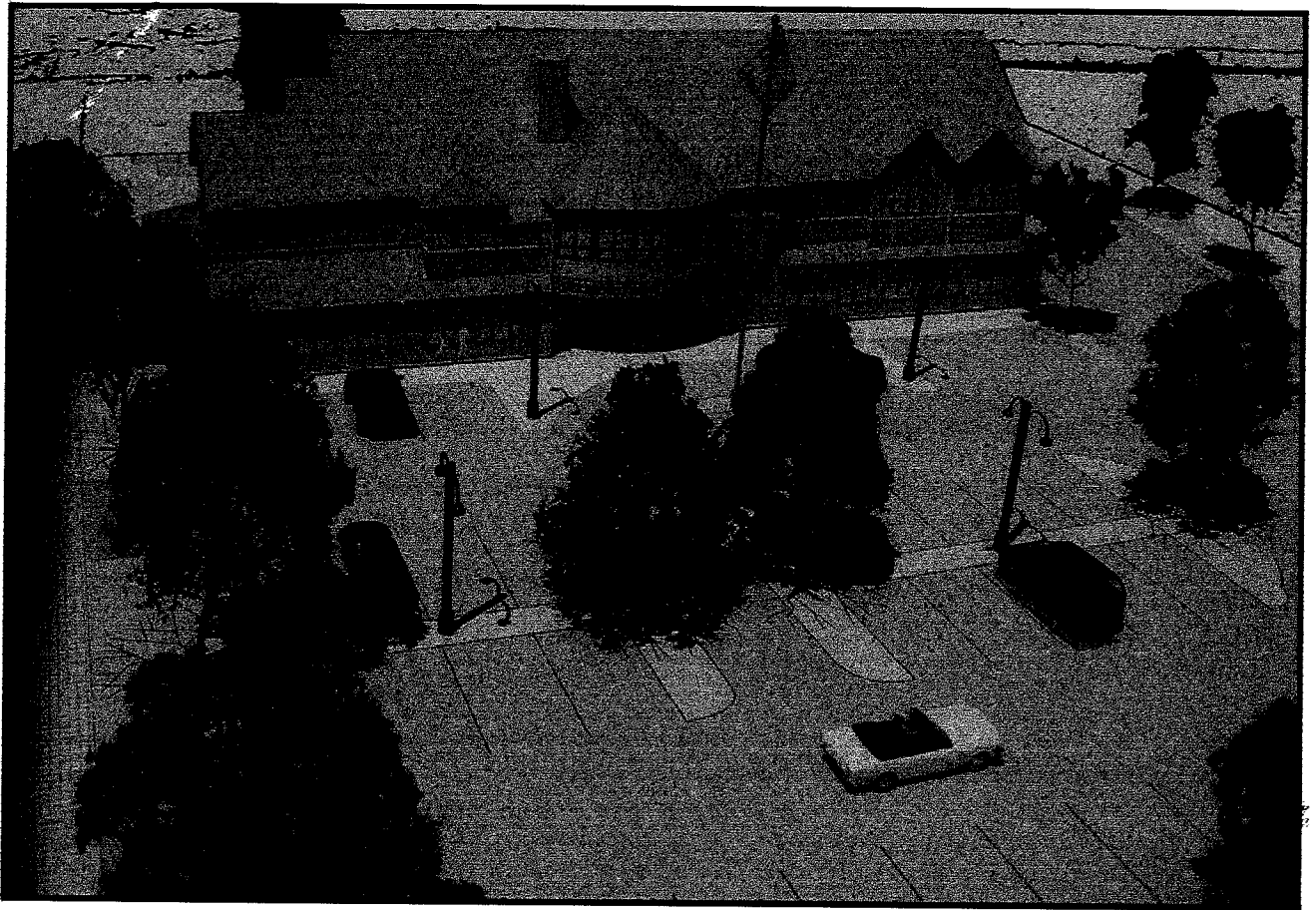

The New Belmont Senior Community Center



Schematic Design Phase

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Town of Belmont

Senior Community Center Schematic Design Phase

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EXECUTIVE SUMMARY

Objectives

The objectives of the schematic design were:

- to develop a Senior Center planning program to address the growing needs of the Town of Belmont's older citizens
- to analyze the former Kendall School site on Beech Street and explore site development options
- to develop schematic site and building plans and elevations to establish the approximate costs for the proposed Senior Center
- to explore green design opportunities and determine if LEED certification is desirable

Major Design Issues

Program Development

A space program of approximately 18,350 gross square feet, focusing on senior community needs was developed. The program assumes the possibility of future expansion.

The program elements include: a large multi-purpose room with a small stage for large gatherings and meals programs; a lounge/library with adjacent coffee bar; classrooms including an arts classroom, crafts classroom and computer lab/classroom; a card/conference room, a fitness room; a games room; a health room; administrative and counseling space; storage rooms; toilet rooms and a commercial kitchen. Outdoor program elements include: landscaped parking area for +/- 60 vehicles, a drop-off for the main entry, a separate service area, and terrace / porch areas. Parking includes handicap accessible parking for six vehicles.

Schematic Design

Based upon the program and visits to other senior centers, schematic floor plans and elevations were developed.

Site Development

The primary goal in the development of the site was to maximize parking and minimize the mass of a municipal building in a residential neighborhood.

The major development constraint of the site is its size and accommodating adequate parking. The site is approximately 54,040 square feet, or 1.24 acres. Typically, a site of two to three acres is recommended to accommodate 90 parking spaces and a 10,000 square foot building, setbacks, outdoor areas, drives and buffers. However, considering the density of the Town of Belmont, the Kendall School site is a very good opportunity considering the adjacent large park/playground facility.

More than 7 site development options were explored in the process of identifying the preferred building location and parking configuration. The various scenarios yielded between 54 and 65 parking spaces.

See site development options attached for evaluation of each option.

Estimated Construction Costs

The estimated construction cost (bricks and mortar) for the proposed schematic 18,350 square foot Senior Center (including parking areas) is:

$$18,350 \text{ sf} \times \$190 / \text{sf} = \$3.486 \text{ million}^*$$

*(Costs assume present dollars, normal foundations and a level site adjacent to a public way.)

Construction Fall 2005

Escalation costs related to a construction start of Fall 2005 are estimated to be approximately 5% of the base building construction estimate or \$87,126 for a total base building cost of \$3,645,274 (\$198.64/sf)

The LEED option for Geothermal and Rain Water Harvest would add approximately \$58,800 with a combined payback of an estimated FOUR years. With these

two options factored into the costs the base building cost would be \$3,704,074. (\$201.85/sf) See attached documentation.

LEED (Leadership in Environmental and Energy Design) Sustainable High Performance Design.

The project as presently budgeted would be able to be LEED certified. The required points for certification ranges from 26 to 32 points. (See attached). It would be the first senior community center to receive such an honored designation. There would be additional engineering and application costs associated with certification which are estimated to be \$45,000. These cost include a greater degree of calculations on the part of the engineers and consultants, oversight during construction to effect compliance, building commissioning to verify that the systems meet LEED design standards, and the application fees for submission for certification.

Conclusion

The schematic design and corresponding construction cost estimate provide a benchmark against which planning and budgeting decisions can be made.

There are many potential variables that can affect the ultimate scope and cost of the building: site conditions; escalation costs; additional funding sources; unknown subsurface conditions; change in program scope.

