

Design Excellence: Tools to Improve Growth's Contribution to Our Quality of Life



Bethesda

Introduction

The following discussion of design excellence is intended to address methods to achieve the objectives identified in the other papers included in the Growth Policy report. Design is not an end unto itself; it is the means by which we use the forces of growth and change to achieve objectives that we mutually set. As an example, if the report on sustainability identifies a set of objectives for the preservation of the environment, the design excellence report provides the tools to achieve those objectives.

Planning in Montgomery County in the next century will require significant attention to design quality in community building. Directing development to more dense Metro station areas and the I-270 Corridor and away from rural areas is a hallmark of the General Plan ...on Wedges and Corridors for Montgomery County. Montgomery County has a limited amount of available land for development. Redevelopment of existing areas including older retail centers could be a focus of development. Preserving the character of the existing rural communities continues to be a challenge. The character of the major transportation travel routes could be significantly improved. From an economic point of view, design excellence should also be part of maintaining the County's competitive edge in attracting quality businesses in the 21st century global market place. These development conditions require attention to design in community building for success as part of a comprehensive growth policy.

This report provides options for augmenting and enhancing the planning tools and methods authorized for Montgomery County. For the Growth Policy Report, the discussion of design excellence is concentrated on implementing sustainability goals, augmenting and enhancing the public realm, and improving pedestrian access in Montgomery County as outlined in the following:

- **Design Excellence and Sustainability** – Emphasizing the design of communities will assist in accomplishing the objective of creating a sustainable environment. Planning for sustainability should occur early in the design of communities. LEED (Leadership in Energy and Environmental Design)

standards have been developed as part of a pilot program for planning green neighborhoods. Montgomery County could take a leadership role in reviewing the pilot program and establishing new standards in the design of green communities to assist in creating a sustainable environment.

- **Design Excellence and the Public Realm** - Emphasizing design excellence in the public realm would significantly improve the character of Montgomery County. The following three areas of the public realm should be the focus of design excellence:
 - o Streets and Highways (coordinate with the revisions underway to the Road Code) - The design of streets represents a major determinant of the function and character of neighborhoods in Montgomery County.
 - o Public Spaces (clarify and enhance the requirements for public use space, green space, and active and passive recreation identified in the Zoning Ordinance) - The design of public spaces (the space between buildings) has a significant impact on the character of Montgomery County.
 - o Blocks and Buildings (coordinate with the finding for compatibility, and the finding for the provision of adequate, safe and efficient layout of buildings and open space specified in the Zoning Ordinance) - The layout of blocks and buildings provides the form and structure for the space between buildings.
- **Design Excellence and Pedestrian Access** – Enhancing the design of sidewalks, pathways and park trails would provide opportunities to improve the connections to transit facilities, commercial centers, and recreation areas in Montgomery County. Improving pedestrian connections and enhancing the pedestrian experience provides the opportunity to significantly benefit the overall health of the residents in Montgomery County by encouraging alternatives to travel by the automobile.

This report recognizes that the discussion of design excellence is limited by the tools authorized by the laws and administrative procedures established for the State of Maryland. As an example, existing regulations already provide a bonus density for including moderately priced dwelling units, work force housing, and amenities and facilities as an accepted practice in Montgomery County. Providing bonus densities requires quality design to establish compatibility with existing neighborhoods.

The following group of tools could be augmented and enhanced to foster design excellence in Montgomery County:

- Master Plans and Sector Plans (review the design guidelines included in these plans)
- Zoning Ordinance (enhance the findings for design excellence, and create form-based codes to foster design excellence)

- Design Guidelines (provide additional guidelines separate from master plans, and the provisions in the Zoning Ordinance for streetscape standards, urban recreation guidelines, guidelines for town centers and environmental guidelines)

The following paragraphs provide a more detailed discussion of the ideas to improve design excellence in Montgomery County.

DISCUSSION

Design in the built environment is the tool to create high quality (functional, pleasant, respectful of the environment) places for living, work, leisure and transportation. A program of needs and constraints guides the design process and sets an objective for the design process. The overarching vision of sustainability is a significant guiding principle and objective for design excellence in the built environment. Before discussing how to achieve design excellence, concrete terms should define the goals of design excellence in Montgomery County under the umbrella of sustainable design, and in ways that are understood by all stakeholders and participants in the development process. Sustainability should be defined at different scales (countywide, neighborhood, streets, block, buildings, and open spaces); and the most sustainable development pattern at each scale. A well-defined and clear set of objectives should set priorities and resolve conflicts among competing and conflicting goals.

Achieving design excellence is a complex and long-term undertaking that involves numerous stakeholders in both the public and the private sectors. This report focuses on how to achieve design excellence mainly through the public review process and better design of the public infrastructure. We propose that the following three principles guide the design excellence initiative in Montgomery County:

- Design excellence is a core value in the process of community building in Montgomery County
- Sustainability is a guiding principle for land use planning and design
- The public realm is an important concern for design excellence
- Pedestrian access should be a focus of development

Sustainability, the public realm and pedestrian access represent the areas of the focus of this Growth Policy Report. The quality of the public realm—streets, parks and open spaces, and the layout of blocks and buildings forms the basis of our perception of a place. Although the quality of the private realm is important in that it impacts the health and welfare of its inhabitants, the use of energy, building materials and other resources, the public realm is the context in which the private realm exists. Design excellence should be focused on the quality of the public realm. The following discussion lays out a framework on how to design for sustainability, enhance the public realm and improve pedestrian access through the development review process mainly by improving our planning and development tools such as master planning, regulatory planning, public facilities and the CIP, and the promotion of good design and staff training.

MASTER PLANS, ZONING ORDINANCE AND DESIGN GUIDELINES

Master Plans

The County's master plan, *the General Plan ... on Wedges and Corridors*, defines the land use and design vision of the county. This vision is further refined in forty-four area master plans and sector plans. These master and sector plans vary in terms of their style and degree of design guidance - some are very detailed while others are more policy and land use oriented. We need to look at the master plan development process and create a master plan protocol about how much design detail should be included in the master plans.

Zoning Ordinance

After the area wide recommendations on land use are set in the master and sector plans, a significant portion of the implementation of the recommendations occurs through the Zoning Ordinance. The design guidance in the Zoning Ordinance varies depending upon when each zone was created and what the prevailing best practice on designing development controls at the time was. Today, new techniques such as form-based codes or smart codes include higher design emphasis than the typical traditional Euclidean zones. The Zoning Ordinance could be revised to include greater emphasis on design guidance as follows:

- Revise the CBD Zones
- Create new zones for Metro station areas, commercial areas and mixed-use areas
- Create new floating zones for commercial areas and mixed-use areas
- Augment the findings for design excellence in project plans, preliminary plans, and site plans

Design Guidelines

Design guidelines have been used in Montgomery County to provide more detailed design guidance generally not possible, and sometimes not desirable, through the Zoning Ordinance. Design guidelines to supplement the master plans and the Zoning Ordinance. The Planning Board could approve guidelines for staff use to provide detailed guidance for streetscape, recreational needs, compatibility of buildings and open spaces, and environmental protection.

FINDINGS FOR PROJECT PLANS, PRELIMINARY PLANS AND SITE PLANS

The second set of tools in achieving design excellence in Montgomery County is regulatory processes. It includes project plans, preliminary plans, and site plans. Design excellence for projects going through any of these processes can be achieved by

including more focused design guidance. The existing findings required for approval could be expanded to emphasize design excellence. These findings could be tailored to the specific needs of an area starting with two broad geographic categories: inside the Ag Reserve; and outside the Ag reserve.

Inside the Ag Reserve

The following considerations could augment the goal of preserving agriculture in the Ag Reserve:

- Is the proposed use consistent with the intent of preserving agriculture?
- Are the proposed uses and structures clustered to save agricultural land?
- Does the proposal preserve rural character of the area by preserving view sheds and unique vistas, rustic roads, historic resources and their settings, and the setting and character of small towns?

Outside the Ag Reserve

The areas of high density such as CBDs, Metro stations areas, mixed-use town centers, and other commercial areas could be the focus of design excellence outside the Ag Reserve. For projects going through any of the three regulatory processes (project plans, preliminary plans, and site plans) existing findings should be augmented to include a greater emphasis on design excellence. These findings should focus on three major areas:

- Streets and highways (coordinate with the revised Road Code with standards for urban, suburban, rural and rustic roads):
- Public spaces (local parks and open spaces, public use spaces and amenities, spaces between structures); and
- Blocks and buildings

The design excellence findings in the project plans, preliminary plans and site plans could be based on the following considerations that are attributes of design excellence in community building:

- **Safety:** Crime Prevention Through Environmental Design (CPTED) type review of streets and highways including sidewalks, trails, pedestrian bridges and other pedestrian facilities, individual building sites, and open spaces.
- **Walkability** - interconnected street network with adequate and convenient sidewalks to public facilities, and the surrounding neighborhoods.
- **Identity/character** - Unique design features for various types of streets, buildings and open spaces that give a special character to a place.
- **Sustainability** - Leadership in Energy and Environmental Design (LEED) standards for neighborhood planning, imperviousness caps, forest conservation, street tree standards, stormwater management in high-density areas.

- **Durability** - quality materials and good workmanship.
- **Context Sensitivity** - street design appropriate to its context (rural, rustic, urban, suburban), relationship of buildings and open spaces to their context, setback from adjoining uses and other considerations.

DESIGN EXCELLENCE IN PLANNING FOR PUBLIC FACILITIES

Design excellence can also be achieved by improving the County's infrastructure planning and development process, and the Capital Improvement Program (CIP). This can be done by employing high quality designers, through competitions for major civic projects, adopting stricter design standards for County facilities, and by including design guidance in the mandatory referral process. Another possibility would be to designate one project in each of the following areas in the County's CIP as a demonstration project with the idea of using this exercise to develop a rigorous design excellence program for public projects:

- Office building (Park and Planning headquarter building)
- Urban open space
- Library, recreation center or another community facility
- Road project
- Public parking garage
- Renovation of a county facility

PROMOTION AND TRAINING

A design excellence initiative would benefit from a promotional and training program to raise awareness of good design for developers, elected officials, professional staff, and the community. It could include the following items:

- Annual design awards program (results of project plans, preliminary Plans and site plans)
- Staff training on how to analyze a project from a public interest and regulatory perspective.
- Develop three dimensional design tools and standards for use in regulatory and master planning.
- Study existing projects and learn what works, what doesn't. Analyze built spaces, buildings and open spaces. Create an electronic library of good design in the County and elsewhere

APPENDIX A: HOW TO MEASURE DESIGN EXCELLENCE

Measuring design quality is somewhat like measuring a community's quality of life. Except for some quantitative indicators, (economic health, affordable housing, average travel times, etc.) the qualitative measures for the design quality of a place, that give a place its local flavor, are specific to each community and are hard to distill and not widely available in the literature. The hard part in developing good design indicators is that it requires that we first define what we are trying to achieve, and what the desired quality of that end product is. Walkability, for example can be measured by measuring just the linear feet of sidewalk in a community, but measuring walkability should also assess sidewalks are lined with retail, building entrances, and open spaces to make walking a safer and more interesting experience.

The following is a list of design measures commonly used to evaluate some aspects of the design quality of the built environment. These and other indicators should be considered as Montgomery County develops its own measures of design excellence.

Measures of Design Excellence

- 1. Qualitative indicators that can be evaluated:**
 - a. Quality of life indicators
 - b. Polling and sampling data
 - c. Public space use
 - d. Diversity of architects/landscape architects
 - e. Diversity of styles and projects
 - f. Recognition and awards by professional organizations
- 2. Quantitative indicators that can be evaluated:**
 - a. Quality of life indicators
 - b. Walkability indicators
 - c. Health statistics
 - d. Design review timelines
 - e. Travel times
 - f. Public transportation use
 - g. Public parks use
 - h. Standard economic indicators
 - i. Diversity statistics
 - j. Housing market statistics
 - k. Pollution measurements
 - l. Environmental measurements
 - m. Public art projects

APPENDIX B: IMPEDIMENTS TO GOOD DESIGN

Bad design does not just happen; it requires a lot of work. It is the result of a series of bad decisions made during a complex process by different participants at various times. These decisions are made not necessarily in bad faith, but they are certainly misguided and controlled by conflicting priorities and requirements of the various parties involved. Since nobody disagrees with the general notion that all developments should be well designed, the fact that there is so much bad design indicates that there must be some impediments to good design in the typical development process. Following are some of the factors that may hinder achieving the best possible design of a development.

1. **Lack of commitment to design excellence.** This impediment exists both in the public and the private sectors. It probably is rooted in the lack of awareness of the costs of bad design and the benefits of good design, especially when some upfront work on design can save significant money and time and create both short and the long-term benefits. On the private side it prevents developers from hiring good designers. On the public side it shows up in public land use policy and CIP process, which sometimes favors initial cost over long-term value.
2. **Upfront Costs.** Creating well-designed buildings, open spaces and public facilities requires higher upfront costs in terms of time, money and resources. In the design phase, the extra cost may come from higher consulting fees from better designers, larger multi-disciplinary design team, and more time needed to study and evaluate various options including new materials and building techniques. In the construction phase, higher cost may be due to better and more expensive materials, shortage of skilled labor for specialized or new construction techniques, and extra time and cost added by a more complex construction process such as saving adjoining trees or wetlands during construction.
3. **Lack of knowledge and design skills.** Designers and those reviewing and approving their projects may not have the knowledge or skills to raise questions that would lead to exploration of better design alternatives.
4. **Lack of a comprehensive design-oriented review process.** The current public review process often does not consider overall design questions and therefore does not require that better design alternatives be explored and evaluated.
5. **Lack of consensus or a shared vision.** The participants and decision makers come to the table with their own vision of what the appropriate form of development is, which creates conflicts in the development process. Most storeowners, for example, want parking right in front of their stores, and for stores to be visible from the highway. The community, on the other hand, may prefer stores more integrated into the community and oriented to pedestrians.

6. **Conflicting priorities of different stakeholders.** A developer may define the problem in terms of maximizing units and profits, while the community planner defines the problem as compatibility and environmental protection. Similarly, the developer's priority may be to deliver the project quickly and cheaply to reduce carrying costs and to capture the market before the demand changes. Achieving better design, however, may require more time to explore other design options.
7. **Regulatory controls and guidelines do not provide adequate checks when short-term market conditions prevail.**

Development based on market economics alone can lead to disposable or short-lived, less sustainable buildings and infrastructure. For example, high density mixed use development is desirable next to metro stations, but market conditions in some areas of the county support medium density townhouses resulting in far less green open space than would be provided with a more compact footprint of a mid to high-rise condominium building pattern.
8. **Lack of good design indicators.** Design by its very nature is subjective, and the results of any effort to achieve design excellence are not easily quantifiable, especially the intangible values of aesthetics, balance, composition and other purely design related components of the built form. The benefits of good design may be more readily apparent in a large signature-type project. But in most cases such benefits are subtler and require a certain critical mass of good examples over a period of time to have a material impact. The difficulties are summarized in "the value of urban design" by the Commission on Architecture and the Built Environment (CABE) as follows:
 - a. "The problem of defining urban design on simple scale from good to bad, and within that coping with the fact that urban design is both a product and a process.
 - b. The problem that good urban design-even more than good architectural design-generates benefits for adjoining sites and areas; therefore only a proportion of the benefit created by good design is enjoyed by those working in a particular development or visiting it as customers.
 - c. Even those benefits enjoyed by workers and customers may not be transmitted as profits to companies, to the rents paid by occupiers, or the valuations placed on buildings by investors.
 - d. Different stakeholders have different expectations regarding value."

APPENDIX C:

AIA COMMUNITIES BY DESIGN: 10 PRINCIPLES FOR LIVABLE COMMUNITIES

1. **Design on a Human Scale**
Compact, pedestrian-friendly communities allow residents to walk to shops, services, cultural resources, and jobs and can reduce traffic congestion and benefit people's health.
2. **Provide Choices**
People want variety in housing, shopping, recreation, transportation, and employment. Variety creates lively neighborhoods and accommodates residents in different stages of their lives.
3. **Encourage Mixed-Use Development**
Integrating different land uses and providing a variety of building types creates vibrant, pedestrian-friendly and diverse communities.
4. **Preserve Urban Centers**
Restoring, revitalizing, and infilling urban centers takes advantage of existing streets, services and buildings and avoids the need for new infrastructure. This helps to curb sprawl and promote stability for city neighborhoods.
5. **Vary Transportation Options**
Giving people the option of walking, biking and using public transit, in addition to driving, reduces traffic congestion, protects the environment and encourages physical activity.
6. **Build Vibrant Public Spaces**
Citizens need welcoming, well-defined public places to stimulate face-to-face interaction, collectively celebrate and mourn, encourage civic participation, admire public art, and gather for public events.
7. **Create a Neighborhood Identity**
A "sense of place" gives neighborhoods a unique character, enhances the walking environment, and creates pride in the community.
8. **Protect Environmental Resources**
A well-designed balance of nature and development preserves natural systems, protects waterways from pollution, reduces air pollution, and protects property values.
9. **Conserve Landscapes**
Open space, farms, and wildlife habitat are essential for environmental, recreational, and cultural reasons.
10. **Design Matters**
Design excellence is the foundation of successful and healthy communities.

APPENDIX D: THE BUILDING FOR LIFE QUESTIONS (FROM CABE, THE VALUE HANDBOOK)

Character

- 1 Does the scheme feel like a place with a distinctive character?
- 2 Do buildings exhibit architectural quality?
- 3 Are streets defined by a well-structured Building layout?
- 4 Do the buildings and layout make it easy to find your way around?
- 5 Does the scheme exploit existing buildings, landscape or topography?

Roads, Parking and Pedestrianization

- 6 Does the building layout take priority over the roads and car parking, so that the highways do not dominate?
- 7 Are the streets pedestrian, cycle and vehicle friendly?
- 8 Is the car parking well integrated and situated so it supports the street scene?
- 9 Does the scheme integrate with existing roads, paths and surrounding development?
- 10 Are public spaces and pedestrian routes overlooked and do they feel safe?

Design and Construction

- 11 Is the design specific to the scheme?
- 12 Is public space well designed and does it have suitable management arrangements in place?
- 13 Do buildings or spaces outperform statutory minima, such as Building Regulations?
- 14 Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?
- 15 Do internal spaces and layout allow for adaptation, conversion or extension?

Environment and Community

- 16 Does the development have easy access to public transport?
- 17 Does the development have any features that reduce its environmental impact?
- 18 Is there a tenure mix that reflects the needs of the Local community?
- 19 Is there an accommodation mix that reflects the needs and aspirations of the local community?
- 20 Does the development provide for (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafes?

APPENDIX E: WHITE PAPER ON DESIGN EXCELLENCE

November 8, 2006

MEMORANDUM

TO: Montgomery County Planning Board

FROM: John Carter, Chief
Community-Based Planning Division

PARTICIPANTS: Khalid Afzal, Marion Clark, Marilyn Clemens, Robert Kronenburg,
David Lieb, Michael Ma, Calvin Nelson, Mary Beth O'Quin,
Margaret Rifkin

SUBJECT: Design Quality in Community Building

PROBLEM STATEMENT

Planning in Montgomery County in the next century will require significant attention to design quality in community building. Directing development to more dense Metro station areas and the I-270 Corridor and away from rural areas is a hallmark of the General Plan ...on Wedges and Corridors for Montgomery County. Montgomery County has a limited amount of available land for development. Redevelopment of existing areas including older retail centers is a focus of development. Preserving the character of the existing rural communities continues to be a challenge. The character of the major transportation travel routes could be significantly improved. These development conditions require attention to design in community building for success.

Existing regulations already provide a bonus density for including moderately priced dwelling units, work force housing, and amenities and facilities as an accepted practice in Montgomery County. Providing bonus densities requires quality design to establish compatibility with existing neighborhoods.

AUTHORIZATION IN THE ZONING ORDINANCE

The Montgomery County Zoning Ordinance provides some authorization for the Planning Board to address design issues. The CBD Zones provide the most significant opportunity for the review of buildings in central business districts. The Montgomery County Zoning Ordinance also provides authorization in select zones for the review of the layout of buildings, structures, and open spaces as part of the compatibility finding necessary during the review of site plans. The development standards (e.g. standards for building height, setback and open space) specified in all the zones provide another more limited method to address design standards.

The following paragraphs summarize the existing authorization in the Montgomery County Zoning Ordinance for the Planning Board to review design issues.

1. **Section 59-C-6.212. Intent of the CBD Zones**
 - (c) To encourage designs which produce a desirable relationship between buildings in the central business district, between buildings and the circulation system and between the central business district and adjacent areas.
2. **59-D-2.42. Findings for Approval of Project Plans**
 - (b) It would conform to the approved and adopted sector plan or an urban renewal plan approved under Chapter 56.
 - (c) Because of its location, size, intensity, design, operational characteristics and staging, it would be compatible with not detrimental to existing or potential development in the general neighborhood.
3. **59-D-3.4 Action by the Planning Board Concerning Site Plans**
 - (a)
 - (3) The locations of the buildings and structures, the open spaces, the landscaping, recreation facilities, and pedestrian and vehicular circulation systems are adequate, safe, and efficient
 - (4) Each structure and use is compatible with other uses and other site plans and with existing and proposed adjacent development
 - (b) The Planning Board shall not approve the site plan if it finds that the development would not achieve the maximum of compatibility, safety, efficiency and attractiveness; and the fact that the site plan complies with all the stated general regulations, development standards or specific requirements of the zone shall not, by itself, be deemed to create a presumption that the proposed site plan is, in fact, compatible with the surrounding land uses and, in itself, shall not be sufficient to require approval of the site plan.
4. **Development Standards in all Zones**

The Development Standards for setback, building height, green space, public use space, and pedestrian facilities in the existing zones provide a limited set of design standards.

OTHER TECHNIQUES AND AUTHORIZATION

The following paragraphs summarize the techniques established by the Planning Board to address design issues outside the Zoning Ordinance.

Guidelines Established by the Planning Department

The Planning Department has addressed design quality by providing design guidelines for public art in central business districts, establishing guidelines for the provision of streetscape in central business districts, and guidelines for development in areas such as the Germantown Town Center. The Planning Department has also provided design services to other departments including the design for the relocation of Montgomery College in Silver Spring, and the selection of sites for public facilities.

Standards for Streets and Highways and Other Requirements

The approved Road Code with the Published Design Standards establishes the requirements for streets and highways in Montgomery County. In addition, standards for stormwater management facilities, forest conservation, and the preservation of historic structures and environmental settings have also been established.

DISCUSSION AND RECOMMENDATIONS

The following recommendations are intended to augment and enhance design quality in community building in Montgomery County.

1. **Master Plan Recommendations**

The master plan process provides a significant opportunity for the Planning Department to emphasize design quality in community building. The next set of master plans include portions of two corridor cities, three Metro station areas, and three neighborhoods. These small area plans need a significant emphasis on design quality. These master plans should include extensive use of design guidelines, and reliance on the use of three dimensional visualization techniques. The master plan outreach process could be supplemented by establishing advisors or focus groups from the design fields to assist the Planning Board and staff in preparing design recommendations.

2. **Create New Zones with Expanded Design Expectations**

To implement the recommendations in the new set of master plans, new zones should be created. These new zones would replace the existing TS-M and TS-R Zones at Metro stations with four Euclidean zones with expectations for high quality design. In addition, a new floating zone could be created for use in large commercial areas. The new zones include the following:

- Create one mixed-use floating zone for large, commercial centers with requirements and standards based on design (form based codes and performance zoning (0.5 to 3.0 FAR)
- Create four Euclidean Zones for transit station areas with the use of a Project Plan with specific requirement for consistency with master plan recommendations concerning quality design (0.5, 1.0, 2.0 and 3.0 FAR)

3. **Design Guidelines**

The Planning Department could expand the use of streetscape standards. Bethesda, Friendship Heights and Silver Spring have long established streetscape standards. Streetscape standards will be necessary for the Shady Grove, Twinbrook and White Flint areas to allow the use of special street lighting, special sidewalk paving, closely spaced street trees and other elements that will substantially improve the character of these areas. Streetscape standards should also be considered for other areas in Montgomery County.

4. **Expanding the Site Plan Review Process**

The site plan review process is authorized to consider compatibility. The use of

the compatibility finding could be used in appropriate cases to consider building materials, location of windows in addition to the more traditional reliance on massing of buildings, setback and building height.

5. Design and Performance Measures Included in Master Plans

Specific design and performance measures could be included in master plans. Examples of performance measures include the following:

- Amount of open space and public use space
- Imperviousness
- Number of trees planted
- Length of streetscape

5. Community Design Presentations to the Planning Board

Recent presentations of the status of public and private development in Clarksburg and Silver Spring provided the Planning Board with an opportunity to assess the quality of design in community building. This post planning and post occupancy evaluation practice should be extended to other areas.

6. Expanded Visualization Techniques

An emphasis on quality design will require extensive use of visualization tools including the following:

- Three dimensional computer techniques
- Computer animation
- Rendering and delineation
- Photo library of high quality public and private projects
- Public use space examples and evaluations
- Documentation for the public art program

7. Newspaper Articles by Staff Members Concerning Community Design Issues and Ideas

The staff could be encouraged to prepare articles concerning community design issues to be included in both national and local publications. These articles could be used to both advocate and publicize high quality design in Montgomery County.

8. Community Design Awards Program

A design awards program could be established to publicize private projects approved by the Planning Board. A list of approved projects would include participating architects, landscape architects and planners involved in the design.

9. Create a Design Summit

A design summit could be established to review the authorization, techniques and approach to improving the design quality in community building for Montgomery County. This summit could be a joint effort with a respected design organization such as the American Institute of Architects or a university such as the College of design of the University of Maryland.