

**EAST CAMPUS REDEVELOPMENT PROJECT**  
**SUSTAINABILITY PERSPECTIVES**

**Prepared by:**

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## I. BACKGROUND

The East Campus Redevelopment Project has been envisioned for several years. The University has long recognized the need for quality redevelopment to occur in the campus vicinity to encourage a healthy College Park and to recruit and retain the best students, faculty and staff. This is an important goal of the University as it seeks to become one of the leading public research universities in the country. Many of the University's aspirational peers enjoy better amenities around their campuses that serve as thriving communities where the extended campus community can live and work.

The general goal of the East Campus Project is to redevelop a portion of the campus that has historically served as an uncontrolled landfill and later, as the site for several essential support operations. These operations consist of Facilities Management offices and shops, the University Motor Pool, Campus Mail, Shuttle Bus and now-abandoned greenhouses. In addition, the area includes existing student housing (c. 1970's), some of which is presently of lower quality and without the amenities that many students desire.

To allow for redevelopment and the benefits that will bring to the campus and surrounding community, the existing operations must be relocated. This requires careful planning. The existing facilities relocation effort involves a variety of important and competing issues, some of which include:

- The need for relocation sites that facilitate and maintain efficient operation of the relocated departments.
- The need to locate, design and construct replacement facilities (capital-first cost and on-going operation costs) that meet the overall relocation project budget and do not impact existing departmental budgets.
- The need to meet existing and projected parking demands for the relocated operations and the campus as a whole, and suitable access to the sites (employees, visitors, department vehicles, deliveries, etc.).
- The selection of sites that take into account other projected development on campus and that are consistent with the University's Facilities Master Plan (FMP) and Strategic Plan.
- The need to minimize the environmental footprint resulting from the relocation effort consistent with overall campus environmental goals and initiatives.
- The selection of sites that are comparable and compatible with existing buildings and activities in the immediate vicinity.
- The aesthetics of the site and building design from various campus vantage points.
- The maintenance of key relationships between the University and applicable regulatory agencies, non-profits, and the campus community.

## II. GENERAL BENEFITS OF PROPOSED PROGRAM

The East Campus project is considered an example of smart growth and sustainable development. The existing East Campus area to be redeveloped is an under-utilized parcel on Route 1 in the heart of College Park. It is located immediately across from the main entrance to campus. Along Route 1, little redevelopment has occurred during the past many years resulting in lower quality amenities for the on and off-campus community. While private housing projects have begun within a half mile of the site, the University continues to experience a housing shortage on and near the campus.

The proposed project involves the development of retail, entertainment, student and non-student housing and hotel accommodations. The existing site is a former landfill subject to a US Environmental Agency (US EPA) permit. Moreover, the site is immediately adjacent to the Paint Branch stream and is nearly 100% impervious with minimal stormwater management controls.

Smart and sustainable development strongly encourages redevelopment of areas such as the existing parcel since it:

- Establishes a new town center that lends itself to the overall sustainability of the community.
- Builds upon a previously developed site that is considered a “brownfield” and will require removal of the majority of the previously landfilled materials thus being considered an environmental remediation.
- Must meet current stormwater management regulations, and therefore, provide a net benefit to the Paint Branch stream as compared to existing conditions.
- Provides an economic stimulus to the community through the creation of jobs and tax revenue as well as the encouragement of additional private redevelopment along Route 1.
- Provides needed housing adjacent to the campus that will improve the community and reduce the campus carbon footprint through reduced student commuting.

The US EPA is aware of the planned project and is fully supportive. In 2008, discussions were held between the Office of Sustainability and US EPA to determine whether the project would qualify for a national smart growth award. It was decided that qualified projects had to be further along the development process and an application was not submitted at that time.

## III. RELOCATION OF EXISTING OPERATIONS

The scale of the East Campus Redevelopment project is significant and like similar projects, it faces many financial, technical and regulatory challenges. In this case, the project requires the identification of alternate sites for existing operations currently housed on the East Campus parcel and the construction of replacement facilities. According Frank Brewer, Associate Vice President for Facilities Management, the Provost appointed an East Campus

District Subcommittee (ECDS) in October 2005 to evaluate potential relocation sites and make recommendations to the Facilities Council. Appendix A, prepared by Facilities Management, summarizes the site selection criteria, a list of the screened sites, the rationale for their inclusion or exclusion from the project, and a sequence of events.

#### IV. SELECTED SITES – ENVIRONMENTAL BENEFITS AND CONCERNS

The ECDS recommended three campus sites to the Facilities Council for the relocation of existing operations (excluding the East Campus parcel). These include the “Wooded Hillock” located behind Comcast Center, Lot 4i along Paint Branch Drive and the Metzert Road Landfill located across the street from the USM offices. Each present environmental benefits and concerns as described below.

- A. LOT 4i – Lot 4i is located along Paint Branch Drive across from the Comcast Center. It is bordered by forested wetlands, the Paint Branch and the current field hockey venue. The site has been selected for the relocation of the Shuttle Bus and UM Police operations. From an environmental perspective, the site poses some benefits because it is currently an impervious, paved parking lot without any stormwater controls. Redevelopment will require compliance with current Maryland stormwater regulations resulting in a net benefit to the Paint Branch. Disturbance of the site will not affect any forested areas, but it lies within a floodplain and therefore, improvements must be designed to avoid the designated floodplain or meet applicable floodplain requirements. Fuel will be stored on the site and buses will likely be washed as is the practice at the current location. This poses a risk given the site’s proximity to the Paint Branch and the shallow depth to groundwater (discharges into the Paint Branch).
- B. Metzert Road Landfill – The Metzert Road Landfill operated as an uncontrolled solid waste disposal site until the early 1980’s and is currently subject to a US EPA Resource Conservation and Recovery Act (RCRA) Corrective Action Permit. It is located at the headwaters of a Paint Branch tributary and adjacent to the Astronomy Observatory. The site is not considered to be contaminated and development is allowable, but subject to US EPA review and comment. The proposed relocation of the recycling facility to the site would require minimal disturbance. It will not require deforestation although improvements to the entrance and access road are anticipated. These improvements, and limited paving at the site, will require compliance with Maryland erosion and sediment control and stormwater permitting requirements. The design and location of the recycling operation and controlling access will be critical to minimize unwanted dumping/abandonment of waste that could pose a hazard or liability.

- C. Wooded Hillock – The Wooded Hillock poses several environmental challenges given the goals of the 1991 and 2001 FMP’s and 2008 Strategic Plan in addition to several other key factors. This site poses the following environmental challenges:
- The area of impact resulting from the proposed development is 14.5 acres. The current site plan includes 5 buildings to house FM offices, shops, Motor Pool, the Mail Facility and Grounds. A smaller area of impact could be realized by stacking one or more of the buildings and providing below ground parking for Motor Pool vehicles. This was the University’s concept as originally approved by the Facilities Council. The developer has indicated that such a design would exceed the relocation portion of their budget. Thus, the developer has proposed individual warehouse buildings that are one-story slab-on-grade structures, an office building, a facilities shops building and surface parking for Motor Pool vehicles resulting in a larger area of disturbance than originally envisioned.
  - The Wooded Hillock site is undeveloped, steeply sloped and forested. Its redevelopment, as currently proposed, will result in approximately 9 acres of deforestation within the 14.5 acres to be disturbed. The 1991 FMP established a goal to “protect and preserve designated natural features, special open spaces, views and vistas...” on the campus and identified the Wooded Hillock as an area to preserve. The 2001 FMP significantly enhances this goal through several environmental stewardship recommendations relative to development. These include the need to establish greenways; protect streams and wetlands; conserve, restore and enhance forest cover; use university land as an environmental asset in education and research; and enhance strategies for land use that shows respect for local and regional natural systems of the Chesapeake Bay Watershed and enhances Smart Growth principles. The FMP provides broad guidance to the institution about future development. The proposed development of the Wooded Hillock appears to be inconsistent with the FMP’s environmental conservation goals.
  - The institution maintains a forest easement to meet State Forest Conservation regulations. The removal of trees will require a forest delineation, site afforestation and possibly, the removal of 6-9 acres from the tree bank to comply with the regulations. The removal of trees at the site also impacts the connectivity to other forested areas in and around the campus. It should be noted that this type of parcel (sloped, forested and contiguous) is one that the Maryland Department of Natural Resources seeks to protect under forest bank easements.

- The current site is largely pervious and therefore, stormwater is mitigated in a manner that minimizes impact to the surrounding streams. The proposed development will reverse this condition resulting in additional stormwater runoff. The proposed development must meet the Maryland regulations governing stormwater that are currently being modified to become stricter than in the past. The ability of the site to meet these new requirements while minimizing the area of disturbance is not known since a stormwater management plan has not been provided. Nonetheless, increasing peak stormwater flow (rate and quantity) to either Campus Creek or the reach of the Paint Branch adjacent to campus is contrary to the University's desire to restore both creeks which have undergone severe erosion. The University has long sought state funding to restore Campus Creek. It is also a member of a multi-agency partnership seeking to restore the Paint Branch (from University Boulevard to Lake Artemesia) which supports the larger restoration planning effort for the Anacostia Watershed.
- The proposed development will involve an office building and FM shop building that will reportedly meet the LEED Silver rating criteria. The two warehouses proposed for the site will not be required to meet LEED Silver criteria. The new buildings will replace existing operations. It is not known whether this will result in an increase, decrease or little change in the University's greenhouse gas footprint.
- The area is currently used by some faculty for classroom field studies. The ability to use the Wooded Hillock for such activities will likely be compromised due to the planned development.

In addition to the issues outlined above, noise and light pollution issues do not appear to be a major concern. Lot 4i and the Wooded Hillock are not near residential areas and it is not expected that the relocated activities will result in a significant impact. The relocation of the recycling facility should also result in little impact since it operates during daytime hours. The Astronomy Observatory adjacent to the Metzertott Landfill requires dark conditions to hold its events. Limiting site lighting during the events should not pose a significant challenge.

Aesthetically, the developer is proposing to develop Lot 4i in a way that screens the visibility of the Shuttle Buses from the road by the placement and orientation of the new Public Safety building. However, the entire site will be visible from the south entry terrace of the Comcast Center. Proposed development on the Wooded Hillock will be visible from some areas south of Campus Creek from Fall through early Spring. The new buildings on the Wooded Hillock will include brick-clad FM Shop and Office buildings that will be located adjacent to the

Comcast parking garage. The pre-engineered warehouse and Motor Pool buildings would reportedly be screened to minimize their visibility from various campus views.

## V. RECOMMENDATIONS

Development projects typically require the balancing of competing issues. From the Office of Sustainability's (OS) perspective, the overall East Campus Redevelopment initiative presents many sustainable benefits to the University and broader community. However, the University has also adopted a goal of being "...widely recognized as a national model for a Green University". It has also adopted FMP goals that should be used in this project to demonstrate how competing development interests and potential environmental impacts may be satisfactorily resolved. OS was not involved in the site selection process, does not have financial data relative to the development alternatives, nor quantified environmental impact data.

Assuming the Wooded Hillock is used as proposed by the developer, it is our Office's recommendation that the University:

- Meet and/or exceed all applicable environmental compliance requirements
- Establish a no net environmental impact goal for the relocation areas associated with the East Campus project, and incorporate environmental demonstration technologies to the extent practicable.

Specifically, the following recommendations are provided to meet these goals:

- The institution must meet the forest conservation requirements to be determined by the state Department of Natural Resources (DNR). This may or may not involve a 1:1 replacement of removed forest. Although the University does not know what DNR will require under its regulations, the institution should nonetheless establish a project goal of fully offsetting the forest impact even if it is not required by DNR. This should first occur through afforestation of the Wooded Hillock site to the maximum extent possible. The remaining forest impact should be offset equally through the existing forest bank and the planting of new trees on the campus. New trees should be planted in areas that are environmentally sensitive (e.g. stream buffers), provide greater connectivity with other forested areas consistent with the FMP, and/or lend themselves to campus beautification. Examples include expanding the forest buffers along Campus Creek and Guilford Run, expansion of the riparian buffer by University View along the Paint Branch and streetscape improvements from Kim Engineering to University Boulevard.

- Calculate the peak stormwater flow impacts from the proposed project to Campus Creek and Paint Branch Stream (per LEED NC – use the one- and two-year 24-hour design storms to calculate quantity and the average annual rainfall to calculate quality). Maximize stormwater quantity and quality control on the relocation sites by using Low Impact Development strategies, permeable paving, and other technologies to the maximum extent possible. Evaluate the potential of capturing and beneficially reusing stormwater for water closets, irrigation and other non-potable uses. Fully offset the additional impact not controlled on the relocation sites by mitigating stormwater flow in other campus areas that do not currently have stormwater controls. The locations selected should ensure that the overall stormwater discharge to the Paint Branch is not increased over current conditions. Facilities Management has previously prepared a list of potential stormwater improvement projects as part of a campus-wide sub-watershed study. Examples include the replacement of the concrete swale along Paint Branch Drive with Low Impact Development (LID) controls, and installation of bioretention/raingardens on the east side of Lot 2a, Lot 3, the perimeter of lots by the Eppley Center, and lots north of Easton Hall.
- The current facilities consume approximately 1.5 MW of energy. While the relocation is not expected to significantly change consumption, the University is seeking climate neutrality. As a result, purchase 1.5 MW of renewable power earmarked for the relocation project above and beyond the renewable power goals established in the proposed Climate Action Plan. The East Campus Redevelopment will then be the first new campus construction project that is carbon neutral.
- The new facilities will include 2 buildings that are subject to the LEED Silver standard for new construction under State law. Warehouses and projects under 7,500 square feet are exempt. The institution should incorporate applicable LEED design standards into all of the exempt buildings to be constructed and consider a project goal of meeting the LEED Core and Shell design standards for the new warehouses.
- The relocated operations maintain numerous vehicles including pick-ups and other trucks that largely operate on the main campus and use gasoline and diesel fuel that contribute to the campus carbon footprint. The purchase and use of such vehicles was encouraged for a variety of reasons, including internal University purchase/lease policies and the desire to have vehicles that were “street-legal” (capable of being on Route 1). The relocation of the operations from a central location to the north end of campus will likely increase the demand for additional

vehicles by affected staff. The project should develop an aggressive plan to mitigate this demand and replace gas/diesel vehicles with electric (plug-in) alternatives. The new compound could include solar charging stations for such vehicles which would serve as a demonstration site for other campus departments.

- The relocated operations will generate new traffic in the area of the Comcast Center. A traffic analysis should be conducted of the Wooded Hillock and surrounding area to determine the potential operational impacts (i.e., the impact of personal, University and supply vehicles entering and leaving the site on existing and planned roads and campus entrances and exits). Evaluate the results relative to peak traffic hours including football and basketball events and incorporate traffic mitigation strategies into the project design and through administrative means. In addition, Facilities, Business Services and the Department of Transportation Services (DOTS) should develop and implement a plan to expand the use of mass transit and other alternative transportation strategies to the Wooded Hillock area.
- The University's NPDES stormwater permit prohibits vehicle washing that results in the discharge of contaminants into surface waters. The University does not have facilities to wash large vehicles (buses and trucks) or mowers and other grounds maintenance equipment. The project should either include suitable on-campus facilities for this purpose or provide contracts with off-campus facilities that can meet this need. If an on-campus facility is built, it should be available to all campus departments.
- Ensure that all fuel storage at the selected relocation sites is stored in double-walled aboveground fuel tanks. Underground tanks should be prohibited. All fueling areas should be served by an oil-water separator to preclude any fuel discharge into nearby surface waters.

The University has established a goal of being a leader and role model in campus sustainability. This is a significant change inspired by the adoption of the 2001-2020 Facilities Master Plan and furthered by the signing of the American College and University Presidents Climate Commitment. Much additional change will be required to meet the new sustainability ethic instilled in the Strategic Plan and the evolving Climate Action Plan. As the University implements new programs to reduce its environmental footprint and seeks the cooperation of the campus community to meet its goals, the East Campus relocation project should be carried out to reflect the University's sustainability vision and message.

# Relocation of East Campus Facilities/Wooded Hillock Relocation

March 20, 2009

## **Introduction:**

The University of Maryland must relocate the current East Campus facilities to another site(s) so that the development of the East Campus initiative can begin.

## **Background:**

On October 20, 2005 the Provost and the Facilities Council appointed an East Campus District Subcommittee (ECDS). Among other tasks, the ECDS was specifically asked in their charge statement to "Refine site alternatives and costs for displaced East Campus functions". If approved, the sites recommended would then be offered to potential developers as part of the proposed East Campus development process.

ECDS members included: Frank Brewer (Chair), Jack Baker (O&M), Karen Breen (Business Services), Carlo Colella (Architecture, Engineering and Construction), Ken Krouse (Police), Vicki Levy (Academic Affairs), Pat Mielke (Student Affairs), Joe Nagro (City Manger, College Park), Andrew Rose (SGA President), Terry Schum (College Park Planning Director) and Brenda Testa (Facilities Planning).

## **Decision Criteria:**

The ECDS used the following criteria to identify, evaluate, and subsequently recommend relocation sites:

1. All East Campus site development costs, including relocation costs, must be born by the developer. That is the University had no additional revenues for this relocation.
  
2. The service levels, effectiveness and efficiency of the functions to be relocated must not be reduced as a result of the relocation. As a result, the ECDS determined that these units must remain geographically central to the campus and that departments that work closely together must be co-located.
  
3. Because the current East Campus activities are relatively unattractive “back of the house” operational functions, they should be relocated to a site which is less visible to the campus community and visitors.
  
4. The environmental impacts of the relocation must be minimized to the extent possible.

#### **Chronology, Analysis, Recommendations, Approvals:**

From November 2005 through May 2006 a number of alternative sites were considered by the ECDS with the aforementioned criteria in mind.

- 1.7 acre site off Greenmead Drive and adjacent to the Gudelsky Veterinary Center. Reasons eliminated from further consideration: Insufficient size; significant tree removal required; sensitive wetlands are adjacent; and use would contribute to traffic congestion on Mowatt.
  
- 1.3 acre site north of Denton Community. Reasons eliminated from further consideration: Slated for undergraduate housing; inadequate size; may be used to relocate Residential Facilities. Facilities would be visible from the adjacent student residence halls.
  
- 4.6 acre site known as Parking Lot 11b. Reasons eliminated from further consideration: The site is within the 100-year flood plain with corresponding implications for possible upstream flooding; site is surrounded on three sides with sensitive wetlands; construction costs to utilize this small site in the flood plain would be very high; site is quite visible from the Comcast Center and Paint Branch Drive; site currently accommodates 975 parking spaces which serve double duty by providing visitor parking



- 22.4 acre site known as Wooded Hillock (west of Comcast). This site is heavily forested with sloped topography (extensive tree removal and grading required). Utilities infrastructure network would need to be extended and provided.
- 2.4 acres of East Campus near and including Pocomoke. Use of this site could impact adjacent “old town” College Park neighborhood.
- 5.4 acres adjacent to Paint Branch Parkway at Patapsco Building. Reasons eliminated from further consideration: First priority is to use this site for expansion of M Square Research Park; would reduce service levels because of distance from campus; site is an inadequate size for facilities relocation and is very visible.
- 13-acre site on Lafayette Drive (known as Golob property). Reasons eliminated from further consideration: First priority is to use this site for an expansion of M Square Research Park and/or graduate housing; use would significantly reduce service levels of service units due to distance from campus.

ECDS Chair Brewer briefed the Facilities Council on the work of the Subcommittee and the four sites recommended by ECDS for the East Campus relocation facilities at their August 29, 2006 meeting. These sites were:

- 1) Metzerott Landfill for grounds equipment and material;
- 2) Wooded Hillock for O&M Shops and Motor Pool;
- 3) 4i for Shuttle UM and Recycling Yard;
- 4) East Campus for the FM Office Building, UM Mail Facility and UM Police Department.

In September 2006, Brewer recommended to Provost Bill Destler and Vice President John Porcari that these four relocation sites be offered to potential developers by the University in the RFP process. Porcari and Destler approved the utilization of these four sites in the RFP as locations to which the selected developer may relocate existing East Campus service activities.

### **Subsequent Approvals:**

On March 15, 2007 the University announced the selection of Foulger Pratt-Argo Investments (FPA) as its East Campus Development Partner. FPA indicated to the University their intention to relocate current East Campus facilities to the sites identified in the RFP document.

After working closely with the departments directly impacted by this need for relocation, on May 3, 2007 ECDS Chair Brewer recommended to the Facilities Council that the Wooded Hillock area be utilized to house a number of relocation facilities because it best met the above criteria, and:

- Its utilization allowed the elimination of the construction of 468 employee parking spaces, which would have had to have been provided had another site been recommended, because it is adjacent to 468 vacant parking spaces in the Comcast Garage.
- It is contiguous to the already existing site developed for Landscape Services operations, which is being incorporated into the relocation site for development and use for other Facilities Management operations.

ECDS Chair Brewer also recommended that the impact on the Wooded Hillock be minimized through the construction of underground or structured parking spaces for the 410 State vehicles. A concept plan depicting this goal was provided to the Facilities Council. The Facilities Council approved the use of the wooded hillock for relocation activities and the recommended conceptual site plan.

After reviewing the University's concept plan for the wooded hillock that included underground or structured parking, FPA indicated that the cost for underground or structured parking could not be contained within their relocation budget. The University would have to accept surface parking and a larger footprint, or provide significant additional funding.

After working further with the departments directly impacted and working closely with FPA, FM recommended to the Facilities Council on January 24, 2008 an updated version of the conceptual site plan for use of the Wooded Hillock which greatly expanded the impact on the forest at the Wooded Hillock because it excluded any structured parking and included Mail Services. The Lot 4i site was recommended for use by Public Safety and Shuttle UM. On a preliminary basis, FPA stated that believed these plans could be accommodated within their budget. The Facilities Council approved the conceptual site plan for these locations.

In July 2008, FPA indicated to the University that they could not provide a foot print on the East Campus for the FM Office Building and make their financial model work. FM then proposed to consolidate the FM Office Building on the Wooded Hillock with other FM facilities as the next best alternative. September 4, 2008 the Facilities Council approved this adjustment with instruction to minimize any further impact to the Wooded Hillock than indicated in the concept plan approved on January 24, 2008.

The current Wooded Hillock site plan provided by FPA on February 13, 2009 includes the FM Office Building and the entire development is within the area approved by the Facilities Council on January 24, 2008.

Based upon a conceptual site plan and design by Grimm and Parker, on March 11, 2009 FPA provided a cost estimate for re-constructing the East Campus facilities on Parking Lot 4i and the Wooded Hillock of \$39,720,314.

### **Loss of Green Space:**

The University campus is composed of approximately 1250 acres. Though 437 acres of that area contain tree canopy, about 297 acres meet the definition of forest according to the Forest Conservation Act. Of these 297 acres, 29.8 acres of campus forest are bounded by Route 193 to the west, Comcast Center to the east, the campus property boundary to the north, and the Epley Recreation Center to the south.

According to Grimm and Parker, FPA's design team, the current proposed Wooded Hillock site plan will require the removal of 8.75 acres of forest, which Grimm and Parker categorized as "poor to fair condition" as a result of the tornado that passed through that area in 2001. The removal of 8.75 acres of forest represents 2.9% of the 297 acre campus forest total.

Grimm and Parker indicated that approximately 1.5 acres of the 8.75 acres of disturbed forest can be reforested or returned to green space with tree canopy at the end of construction.

The University's Tree Bank, a permanent forest easement registered with the State Department of Natural Resources (DNR), currently includes 48.71 acres. A new easement for 21.85 acres of forest is under development that will provide the University an expanded "forest bank" to accommodate the university's future growth and development. Assuming the University implements its plan to use the Tree Bank for mitigation, the loss of 8.75 acres is expected to require approximately 6 to 9 acres from the Tree Bank. The specific amount of mitigation required will be determined by DNR upon review of FPA 's forest conservation plan which will be submitted during the course of design.