

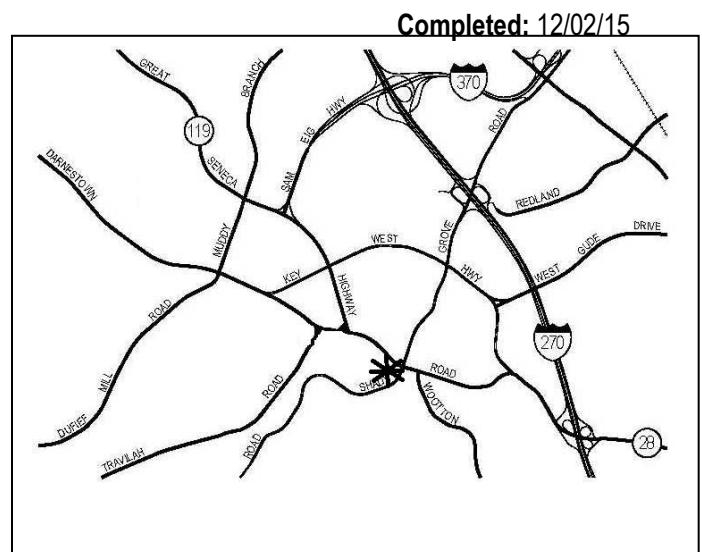


**The Universities at Shady Grove Biomedical Sciences and Engineering Building, Mandatory Referral, MR2016008**

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**Description**

- Construction of a 220,000-square foot, six-story academic building, pedestrian walkways, vehicular access drives and related infrastructure, stormwater management, and landscaping and lighting;
- Located on Lot 2 on the south side of Gudelsky Drive, approximately 500 feet west of the traffic circle at Traville Gateway Drive, Rockville, within the *Great Seneca Science Corridor Master Plan* area, and the Piney Branch Special Protection Area (SPA);
- 6.22 acres, LSC Zone;
- Applicant: The Universities at Shady Grove;
- Application accepted: 10/27/15.



**Summary**

- Staff recommends approval to transmit comments to the Applicant.
- The site is owned by the State of Maryland; therefore, forest conservation, stormwater management and historic resources plans are under review by state agencies; no action on the Forest Conservation Plan is required by the Planning Board.
- The site is located in the Greater Shady Grove Transportation Management District (TMD). The Applicant has submitted a traffic study to satisfy the Local Area Transportation Review (LATR) test because the proposed academic building generates 30 or more peak-hour trips within the weekday evening peak period.

Staff recommends that the following comments be transmitted to the Applicant:

1. This Mandatory Referral approval is for the construction of a new 220,000-square foot academic building that will result in an associated increase in enrollment from 2,500 to 4,000 students. Future changes or modifications will require a new mandatory referral review.
2. The Applicant should coordinate with the Montgomery County Department of Transportation (MCDOT), Commuter Services Section to participate in the Greater Shady Grove Transportation Management District (TMD) and assist in achieving its Stage 2 non-auto driver mode share of 18% in accordance with the *Great Seneca Science Corridor Master Plan*. Participation should include coordination with the MCDOT, Division of Transit Services, to consider enhancing the existing transit service to the campus as part of the on-going campus transportation management efforts.
3. The Applicant should designate the reconfigured two access points as a one-way pair into (eastbound) and out of (southbound) the parking area on the north side of the proposed building with a stop sign at the southbound exit to give Gudelsky Drive traffic the right-of-way.
4. The Applicant should provide the following pedestrian improvements:
  - a) Convenient and direct pedestrian access from the 15 handicap parking spaces in the western parking area to the entrance(s) of the proposed academic building.
  - b) At-grade pedestrian paths at the three connections between the west parking lot and the proposed academic building.
  - c) Replace the existing substandard four-foot wide sidewalk on Gudelsky Drive with a five-foot wide sidewalk leading to the proposed academic building from the parking garage.
  - d) The proposed development must meet all accessibility requirements.
  - e) Coordinate with the Montgomery County Department of Transportation (MCDOT) to allow sufficient time for pedestrian crossings at the west leg of Darnestown Road at Traville Gateway Drive.
5. The Applicant should provide a minimum of 44 bicycle parking spaces located near the entrance to the proposed academic building as follows:
  - a) Eight (8) public inverted-U bike racks (or equivalent) and,
  - b) Thirty-six (36) private bike lockers or bicycle parking spaces in a secured bike room included in the new parking garage II.
6. The Applicant should coordinate with the Maryland Transit Administration's (MTA's) project manager for the Corridor Cities Transitway (CCT) to assure that the future campus plans reflect the latest design for the CCT.

## **INTRODUCTION**

The University System of Maryland's 2003 Land Use Master Plan for the Shady Grove Campus is a framework to guide future development of the Shady Grove Campus to meet the short and long-term educational needs of County residents and the business community. It contains a campus build-out of 985,000 square feet. Currently, 519,000 square feet have been constructed with one parking garage and several surface-level parking lots containing 1,425 existing parking spaces. A total of three parking garage structures are proposed in the Campus Master Plan.

### **Previous Mandatory Referral Reviews**

In December 2003, the Planning Board reviewed MR2003401-USM-1 for the University's Master Plan including a Site Plan for Education Center III building, and provided comments relating to water quality and impervious surface levels, transportation demand management, traffic statements, and coordination of transit and ridesharing programs.

In September 2008, the Board approved Mandatory Referral MR2008403-USM-1 for the first parking garage, which is six-stories in height and located at the northeast intersection of Darnestown Road and Traville Gateway Drive.

In February 2014, the Planning Director approved MR2014030 for a road relocation and vehicular access modifications to Gudelsky Way for a new entry road to the campus from Shady Grove Road.

In September 2014, the Board approved Mandatory Referral MR2015001 for the construction of a 45,000-square foot, five-story parking garage (Garage II) with 700 parking spaces and related infrastructure and site amenities located in the southwest quadrant of the Shady Grove Road and Darnestown Road intersection. Garage II is under construction (identified as the Shady Grove Parking Garage in Figure 1 below).



**Figure 1: The Universities at Shady Grove Campus**

The Universities at Shady Grove Campus - Existing Conditions

The Universities at Shady Grove Campus contains 45.71 acres on one lot owned by the State of Maryland. The campus is within the Shady Grove Life Sciences Center (SGLSC) and is zoned LSC (Life Sciences Center). It has existing wetland and forest areas running north to south through the center. The campus is gently sloped with a high point at the northern edge and drains toward a stream and wetlands that traverse its center. The stream drains south to the Gudelsky Pond. The wetlands are located along both sides of the stream and a second pond is located south of the research center. Most of the campus site is located within the Piney Branch Special Protection Area (SPA) (see the Vicinity Map). There are no known rare, threatened or endangered species associated with, or in the vicinity of the proposed academic building. There are no historic resources/properties at the project site. There are no individually-designated resources or historic districts listed on the County’s Master Plan for Historic Preservation.

**Neighborhood Description**

Confronting Darnestown Road to the north are the Shady Grove Adventist Hospital and biotech research buildings in the LSC Zone. The County’s newly constructed fire station is located in the northwest quadrant of the Darnestown Road/Shady Grove Road intersection. To the northeast, diagonally across the intersection of Shady Grove Road and Darnestown Road and inside the City of Rockville, is the Falls Grove mixed-use development with planned build-out of 1,530 dwelling units, 950,000 square feet of office and R&D, and 150,000 square feet of retail space. To the east and south of the site are the residential subdivisions of Hunting Hills Estates and The Willows of Potomac in the R-200 and R-200/TDR Zones. To the west is the 192-acre Traville development in the MXN Zone with a planned build-out of 1.5 million square feet of office, R&D, and retail space, and 750 apartments.



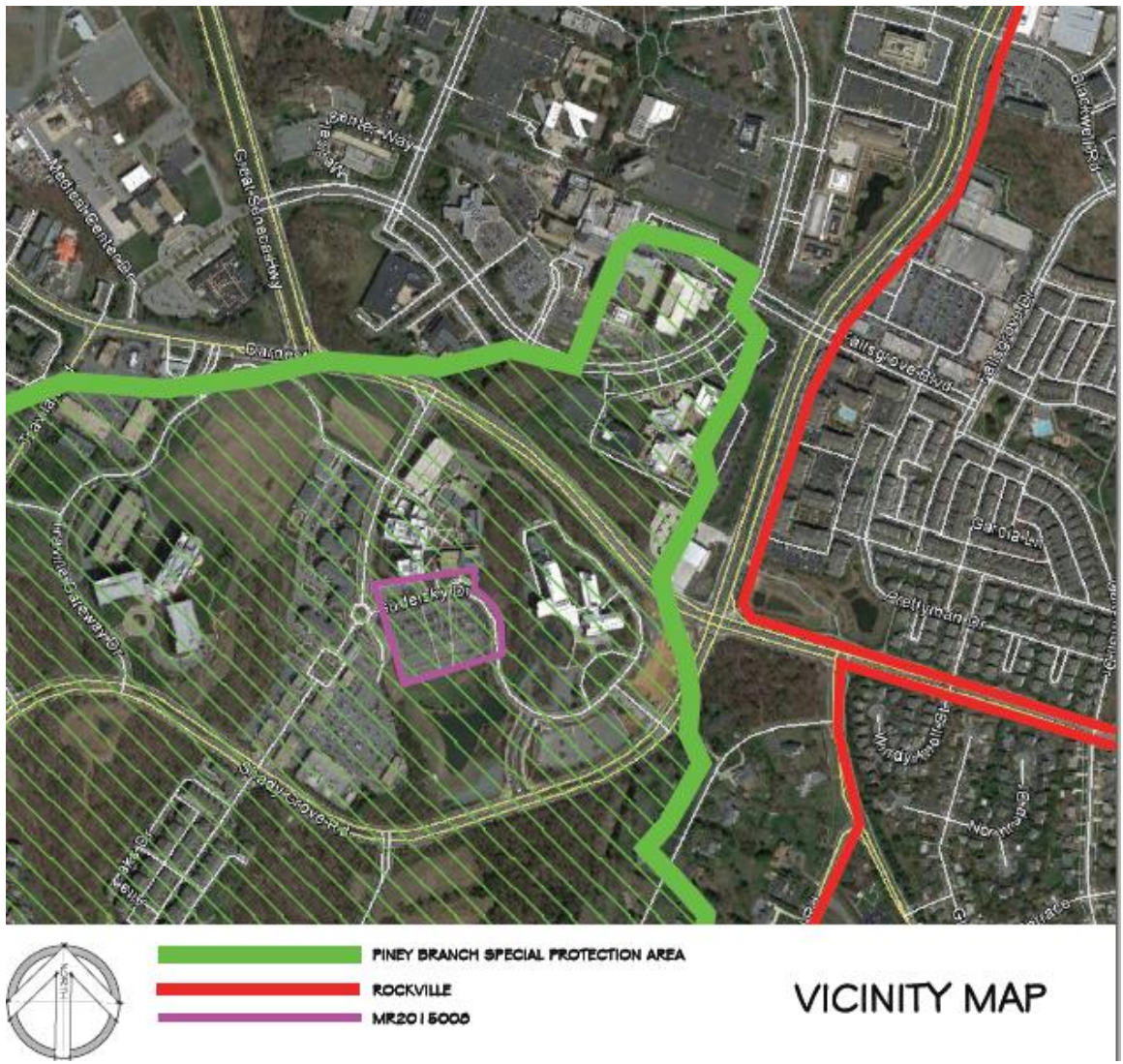


Figure 2: Vicinity Map

**PROJECT DESCRIPTION**

The proposed academic building will be located on the 6.22-acre Parking Lot 2 on the south side of Gudelsky Drive, approximately 500 feet west of the Traville Gateway Drive intersection (see Attachment 1). This area is currently an existing surface parking lot, referred to as Parking Lot 2 (see Figure 3). Vehicular access to and from the proposed building will be from a modified Gudelsky Drive and the existing Traville Gateway Drive on the eastern section of Parking Lot 2. A portion of Gudelsky Drive (which is a private street) will be re-routed within the existing paved drive isles along the southern and western edges of the parking lot as part of this project (see Figure 4: Proposed Vehicular Circulation Plan).



Figure 3: Parking Lot 2 highlighted





**Figure 4: Proposed Vehicular Circulation Plan**

### Architecture

The academic building will be a prominent structure located at the core of the campus. Architectural design objectives include consideration of the general scale of the building and its relationship to the surrounding campus and roadway environments. Both interior and exterior materials have been selected based on their embodied energy, chemical makeup, regional availability/manufacturing, and long-term durability in an effort to provide finishes that are healthy to building occupants and connected to the culture and environment in which the building is located. The two illustrations below (East and West facades) depict the material selections and overall aesthetics of the proposed building.





**Biomedical Sciences and Engineering Building - East facade**



PROPOSED BUILDING PERSPECTIVE  
WEST FACADE



**Biomedical Sciences and Engineering Building - West facade**





**Figure 5: Biomedical Building (#4) site layout**

#### Landscape and Lighting Plans

Landscape treatments around the building will emphasize its importance as a link between the north/academic campus and the east/research side of the campus. The scale of plant material and plant massing will be consistent with the scale of the building. Throughout the site, plant materials have been chosen for their appropriateness to aesthetics, orientation, function, and maintenance requirements. Plant materials adjacent to plazas and walkways will be native and adapted species to encourage a sustainable, low maintenance landscape; ornamental grasses and limited perennials will also be used.

Plants will incorporate both evergreen and deciduous species for year-round interest. Placement of evergreen material will be sensitive to safety and visibility concerns. Planting areas close to the building and in the reinforced turf and limited lawn areas will be irrigated from non-potable water sources, such as cisterns. Stormwater management areas and microbioretention facilities will be planted with native and adaptive species that can withstand both inundation and drought.

The pedestrian lighting will occur primarily along the proposed walkways and common areas and will consist of a combination of high quality, energy efficient LED cut-off fixtures on 14-foot high poles with low-level LED lighting fixtures. Retaining walls, planters, steps and seat walls will include wall lighting elements both to highlight the architectural character of the building and its surrounding, and to provide security lighting along pathways and specialty paved areas.

## **ANALYSIS**

### **Relationship to the Master Plan**

The site is in the LSC South District of the *Great Seneca Science Corridor Master Plan (GSSC)*. The proposal is consistent with key recommendations, goals and guidelines of the Master Plan (see Attachment 2). The proposed building design addresses urban form aspects of the Master Plan's Design Guidelines. The proposed building materials complement other campus buildings and are compatible with adjacent development.

The GSSC Master Plan contains a number of recommendations to promote environmental sustainability as the area develops. These recommendations include increasing tree canopy, minimizing impervious surfaces, improving stormwater treatment, preservation of habitat, and energy conservation measures. The Universities at Shady Grove has always considered the use of sustainable site elements in the design and construction of new buildings on the campus. As recommended in the GSSC Master Plan's sustainability section, the proposed building's design includes components to promote a sustainable community with environmentally-conscious features and renewable energy resources. These design components include: an overall focus on passive systems design, daylight harvesting, renewable energy resources, natural ventilation, and energy recovery systems capable of reducing its overall energy demand by 30% over baseline code requirements. Particular focus has been placed on minimizing the impact that the proposed building and landscape will have on the local watershed. One-hundred percent of the condensate and roof harvested rainwater will be collected into a cistern that can be used for irrigation, toilet/urinal flushing, and chiller water makeup. A series of bioretention areas will be incorporated to filter water and allow it to infiltrate the adjacent soils prior to being introduced into the watershed. The Applicant will seek LEED Silver certification or better.

### **LSC Zone Compliance**

The proposed building's height is 74 feet 4-inches at the highest point, well below the 200 feet maximum allowed in the LSC Zone. Building setbacks are not required in the LSC Zone. Vehicular parking is based on the parking ratio determined for the site in the 2003 Campus Master Plan. Bicycle parking requirements from the current Zoning Ordinance were used to determine the required number of spaces (see the Bicycle Facilities section of this report below).

### **Transportation Analysis**

#### Transportation Demand Management

The campus is located within the boundaries of the Greater Shady Grove Transportation Management District (TMD). The Applicant should work with the Greater Shady Grove TMD to assist the County in achieving and maintaining its Stage 2, non-auto driver mode share of 18%.

#### Master-Planned Roadways and Bikeways

In accordance with the 2010 *Great Seneca Science Corridor Master Plan* and the 2005 *Countywide Bikeways Functional Master Plan*, the classified roadways and bikeways are as follows:

1. Shady Grove Road along the campus frontage is designated as a four-lane arterial, A-34, with a recommended 100-foot right-of-way and a dual bikeway, DB-23 (bike lanes and an existing shared use path on the west side). The existing right-of-way along the campus frontage varies from 100 to 107 feet.



2. Darnestown Road is designated as a four-lane arterial, A-280, with a recommended 100-foot right-of-way and a shared-use path, SP-59 (a signed shared roadway and a shared use path on the north side). Along the campus frontage, the existing right-of-way for Darnestown Road varies from 76 to 125 feet.
3. Traville Gateway Drive is designated as a business district street, B-16, with a recommended 70-foot right-of-way and a shared-use path on the west side. Along the campus frontage, the existing right-of-way varies from zero to 63 feet where approximately half of the existing drive is located within the campus property.

Dedication of additional right-of-way is not required along Darnestown Road or Traville Gateway Drive. Gudelsky Drive is a four-lane, privately-maintained internal road with 36-foot wide paved travelway, a raised median, four-foot wide sidewalks, and green panels between the sidewalk and curb. See the On-Site Queuing section of this report below for further analysis.

#### On-Site Campus Parking

The proposed building will require 725 parking spaces for a total of 1,708 spaces for the entire campus per the Applicant's 2003 Campus Master Plan parking guidelines. The previously approved 700-space parking garage II will replace the estimated 300 surface parking spaces on Parking Lot 2 that will be displaced with the proposed building. Once the proposed building is completed there will be 2,075 parking spaces for the entire campus (equivalent to 3.16 parking spaces per 1,000 gross square feet of development). Therefore, the total campus parking will be in compliance with the Zoning Ordinance and the 2003 Campus Master Plan.

#### Corridor Cities Transitway (CCT)

The Maryland Transit Administration's (MTA's) current "preferred alignment" and design of the CCT along Medical Center Drive includes a proposed loop extension to The Universities at Shady Grove Campus via Great Seneca Highway (MD119) from the north with segments along Shady Grove Road and Darnestown Road in the vicinity of the proposed building. The Applicant should coordinate with the MTA to assure that the future campus plans reflect the latest MTA alignment and design for the CCT.

#### Transit Service

Five transit routes serve the Universities at Shady Grove campus as follows:

1. Ride On bus routes 45 and 56 operate along Shady Grove Road, but not along the campus frontage. These routes have bus stops located at the nearby corner of Shady Grove Road and Darnestown Road. Ride On bus route 45 operates between the Rockville Regional Transit Center at Falls Grove and the Twinbrook Metrorail Station. Ride On bus route 46 operates between the Lakeforest Transit Center and the Rockville Metrorail Station.
2. Ride On bus route 43 operates along Shady Grove Road on the campus frontage connecting the Traville Transit Center and the Shady Grove Metrorail Station.
3. Ride On bus routes 66 and 67 can be accessed from the nearby Traville Transit Center. Both Ride On bus routes 66 and 67 operate between the Shady Grove Metrorail Station and the Traville Transit Center.

The Traville Transit Center is located in the southwest corner of the campus in-between the Traville Gateway Shopping Center. In this Application for the proposed academic building, the Applicant should coordinate with the Montgomery County Department of Transportation (MCDOT), Division of Transit Services program manager, to consider enhancing the existing service to the campus as part of the on-going campus transportation management efforts.

#### Bicycle Facilities

A bike sharing station is on-campus at the east side of Traville Gateway Drive, just north of Gudelsky Drive. As stated in the recommended comments at the front of this report, the Applicant should provide 44 bicycle parking spaces based on the current Zoning Ordinance, with at least 85% (or 36) to be long-term spaces (such as bike lockers) near the main entrance, or as private bicycle parking spaces in a secured room in the new parking garage II.

#### Pedestrian Circulation

Although the plan shows interconnected pedestrian sidewalks from five to eight feet wide, the following are not included on the plans and should be provided:

1. Convenient and direct pedestrian access from the 15 handicap parking spaces in the western parking area to the entrance(s) of the proposed building.
2. At-grade pedestrian paths at the three connections between the west parking lot and the proposed academic building.

Replace the existing substandard four-foot wide sidewalk on Gudelsky Drive with a five-foot wide sidewalk leading to the proposed academic building from the parking garage.

#### On-Site Queuing

As part of this Application, the western segment of Gudelsky Drive is proposed to be realigned from the northeast side of the existing Parking Lot 2 to the southwest side of the proposed building. This realignment will result in a relatively short westbound approach of Gudelsky Drive at the campus entrance from the Traville Gateway Drive roundabout. The Applicant's consultant conducted an analysis of the on-site queuing in two-minute intervals during the weekday morning and evening peak periods, 6:30 to 9:30 a.m. and 4:00 to 6:00 p.m., respectively. Two vehicles can be stored between the roundabout, Gudelsky Drive, and the reconfigured two access points to the parking area on the north side of the proposed building.

On the westbound approach of Gudelsky Drive at this entrance, the maximum observed queue was four vehicles stacked once at 8:34 a.m., over two vehicles in four of 90 two-minute time periods, compared to the average queue of 0.7 vehicles within the weekday morning peak period. In the weekday evening peak period, the maximum observed queue was ten vehicles stacked once at 5:56 p.m., over two vehicles in 22 of 90 two-minute time periods compared to the average observed queue of 2.0 vehicles within the evening peak period. The reconfiguration creates an inadequate stacking condition. To accommodate the projected 14% occurrence during the weekday peak periods when the queue is more than two vehicles at the intersection of Gudelsky Drive and the Traville Gateway Drive roundabout, the two reconfigured access points should be further reconfigured into a one-way pair into (eastbound) and out of (southbound) the parking area on the north side of the proposed building, with a stop sign at the southbound exit to give Gudelsky Drive traffic the right-of-way.



Local Area Transportation Review

The table below shows the number of total peak-hour trips generated by the proposed increased capacity from 2,500 to the capacity of 4,000 students during the weekday morning peak hour within the peak period (6:30 to 9:30 a.m.) and the evening peak hour within the peak period (4:00 to 7:00 p.m.):

Number of Students		Weekday Peak-Hour	
		Morning	Evening
Existing Enrollment	2,500	502	560
Proposed Capacity	4,000	697	757
Net Increase	1,500	195	197

A traffic study was submitted to satisfy the Local Area Transportation Review (LATR) test because the proposed land use generates 30 or more peak-hour trips within the weekday morning and evening peak periods. The table below shows the calculated Critical Lane Volume (CLV) values at the four analyzed intersections for the following traffic conditions:

1. Existing: Existing traffic conditions as they now exist.
2. Background: The existing condition plus the trips generated from approved but un-built nearby developments.
3. Total: The background condition plus the additional site-generated trips.

Studied Intersection	Critical Lane Volume for each Traffic Condition					
	Existing		Background		Total	
	AM	PM	AM	PM	AM	PM
<b>Darnestown Road &amp; Great Seneca Highway</b>	<b>1,002</b>	<b>805</b>	<b>1,142</b>	<b>910</b>	<b>1,171</b>	<b>929</b>
<b>Darnestown Road &amp; Traville Gateway Drive</b>	<b>1,030</b>	<b>939</b>	<b>1,164</b>	<b>1,132</b>	<b>1,224</b>	<b>1,194</b>
<b>Darnestown Road &amp; Shady Grove Road</b>	<b>1,035</b>	<b>1,104</b>	<b>1,222</b>	<b>1,234</b>	<b>1,261</b>	<b>1,262</b>
<b>Shady Grove Road &amp; Gudelsky Drive</b>	<b>444</b>	<b>546</b>	<b>484</b>	<b>588</b>	<b>494</b>	<b>638</b>

The CLV values for the studied intersections are less than the applicable CLV standard of the maximum 1,450 for intersections located within the Research & Development Village Policy Area. Therefore, the proposed building passes the LATR component of the Adequate Public Facilities (APF) test.

### Pedestrian Signal Timing

The pedestrian crossing time was observed for all four analyzed intersections to compare the observed times with the required minimum standard of 3.5 feet per second. The observed time was equal to or more than the standard time except on the west leg of Darnestown Road at Traville Gateway Drive, where the 12 seconds of observed pedestrian crossing time was less than the 15 seconds required for pedestrians to cross the 64-foot and 69-foot crossings, northbound and southbound, respectively. The Applicant should coordinate with the MCDOT and the SHA regarding changes to allow sufficient time for pedestrian crossings at this location.

### Transportation Policy Area Review

The Transportation Policy Area Review (TPAR) test will not require a TPAR payment to the Montgomery County Department of Permitting Services (DPS) because the proposed use is a generalized “public social service agency” type facility.

## **Environment**

### Forest Conservation

Because this is a State of Maryland project, authority for the approval of a forest conservation plan rests with the Maryland Department of Natural Resources (DNR), rather than the Montgomery County Planning Board. This Application includes a copy of the Forest Conservation Plan submitted to Maryland DNR. The site contains an existing Forest Conservation Easement granted to Maryland DNR. This easement is not being disturbed by the proposed academic building. The submitted Forest Conservation Plan proposes to satisfy the estimated mitigation requirement of 0.40 acres through a payment of a fee-in-lieu. The Applicant’s planting requirement in the most recent mandatory referral for the parking garage II (MR2015001) used the last of the unencumbered area available on-site.

### Environmental Guidelines

The proposed project encroaches slightly into a stream buffer shown on the approved Natural Resources Inventory/Forest Stand Delineation and submitted Forest Conservation Plan. The encroachment is within an area currently occupied by a portion of Gudelsky Drive. This segment of the road will be relocated as part of the project. The encroachment is minimal and within an area that is currently paved. The encroachment is at one small corner of a proposed boardwalk deck to connect a boardwalk pedestrian path through the stream buffer. The boardwalk will include educational signage to interpret the values of the nearby wetlands and stream buffer. Staff finds the proposed buffer encroachment is negligible, and the project is in substantial conformance with the Environmental Guidelines.

### Piney Branch Special Protection Area (SPA)

Because the property is owned by the State of Maryland, authority for review and approval of the stormwater management concept rests with the Maryland Department of Environment (MDE) rather than the Montgomery County’s Department of Permitting Services (DPS). Therefore, no Planning Board approval is required for the Water Quality Plan, since the Water Quality Plan would be associated with a County-reviewed stormwater concept. However, the State and the Applicant are aware that this project lies within the Piney Branch SPA, and the latter has developed plans that respect the goals of the SPA. Stormwater management goals substantially exceed the minimum requirements. Typically, the Planning Board’s focus in reviewing Water Quality Plans is to see that new impervious surfaces have been minimized. In this Application, the proposed building represents infill development that occupies a portion of an existing surface parking lot. Through removal of the parking lot and inclusion of landscaped areas, the impervious areas on the project site will be reduced by 0.19 acres.



### Environmental Sustainability

The project incorporates sustainable practices and materials in the building's design and contains sustainability provisions to potentially reduce up to 30% of the proposed building's anticipated energy needs. The design also incorporates daylight harvesting, natural ventilation and focuses plant selection in the landscape primarily for native and adaptable species that are both inundation and drought tolerant.

### **COMMUNITY OUTREACH**

Planning Department Staff mailed out an initial public notice on November 5, 2015, with the tentative Planning Board hearing date (Attachment 3). On October 15, 2015, the Applicant conducted an outreach meeting with the stakeholders from the community by letter dated October 6, 2015 (Attachment 4). No recipients of the Applicant's meeting notice attended the meeting and no inquiries have been received by Staff since the initial public notice was mailed.

### **CONCLUSION**

The proposed academic building is compatible with existing adjacent development at the campus and in the neighborhood. The proposal is consistent with the GSSC Master Plan and the guidelines relevant to Universities at Shady Grove. The project provides for increased connectivity at the campus and the community. With the additional biomedical sciences and engineering programs offered at the campus, it will result in job creation and enhanced life sciences opportunities in the LSC. Pedestrian and vehicular circulation systems will be adequate, safe and efficient. This proposal meets the intent and requirements of the LSC Zone. Staff recommends the Planning Board authorize transmittal of the comments to the Applicant, as listed at the front of this report.

#### Attachments

1. Applicant's Project Narrative
2. GSSC Master Plan LSC - pages 9-13
3. Planning Department's Public Notice letter
4. Applicant's Public Notice letter

## 2) PROJECT SCOPE / NARRATIVE INTRODUCTION

The Universities at Shady Grove has planned the development of a Biomedical Sciences and Engineering Education Building for the center of its campus in Rockville, Maryland, located in Montgomery County. The University campus occupies the south portion of an area designated by Montgomery County as the Life Sciences Center District (LSC). The LSC area is comprised of institutions intended primarily for research, development, education, and related activities. The primary purpose of the district is to promote research, academic and clinical facilities that advance the life sciences, health care services, and applied technologies. The Life Sciences Center District is part of the larger Montgomery County Great Seneca Science Corridor that incorporates areas of the cities of Gaithersburg and Rockville.

The project site occupies an important central location of the campus currently occupied by an existing surface parking lot and a portion of Gudelsky Drive. The university leadership envisions that the building shall express the university's ideals as a center for academics and technology while acknowledging its relationship as part of the Life Sciences Center District.

The building also highlights the university's commitment to sustainable and environmentally sensitive design through the implementation of technologies and materials that limit the buildings carbon footprint and respect local ecology.

The primary objectives accomplished by the design and construction of the project are:

- Addressing campus circulation and open space needs, utility improvements, stormwater management, pedestrian circulation, accommodation of vehicular requirements, coordination with public transportation, landscaping, service access, and other site amenities and requirements within the site.
- Improving and adding distinction to the central location of campus through forward-looking, high performance architecture while leaving a delicate environmental footprint.
- Implementation of forms and materials that express a modern aesthetic with an emphasis on technology that celebrates the Universities' mission as a center of research and technology. The proposed materials are generally compatible with materials used elsewhere on campus – brick, concrete, glass, and metal.
- Utilize building principals which adhere to the US Green Building Council (USGBC) guidelines to measure sustainable features. This project is to obtain a minimum LEED certification at the Silver Level.
- Enhance pedestrian and vehicular driver safety through a design that reduces crossover paths for each and affords open sightlines as can be seen on the site plan. The design of human-scale circulation and open space is reflected in this project's central location and implementation within the campus master plan.
- Foster appropriately lit spaces within the building and on the grounds by high-efficiency LED fixtures and incorporate automation techniques for energy management.

Highlights of the environmental considerations relating to this development include:

- Multiple micro-bioretenion facilities for water quality management and ground water recharge

- A green roof with approximately 3,280 square feet of extensive area.
- Rainwater Harvesting for reuse as “grey water” in irrigation and plumbing systems
- Promotion of natural daylight supplemented by high efficiency LED lighting and lighting controls
- Energy augmentation through the use of solar photovoltaic’s, solar-derived domestic hot water, and geothermal wells.

USG’s mission and its future growth are in close alignment with key elements of both the Maryland State Plan for Postsecondary Education and the USM Strategic Plan; providing access to a high quality, affordable education, improving the state’s workforce through targeted academic and professional degree programs, and focusing on comprehensive, high quality services that place students at the center of the learning process to insure retention and degree completion. The BSE Building will allow USG and its USM partner institutions to expand degree opportunities in healthcare and biosciences, engineering, and science, technology, engineering, mathematics, and medical sciences (STEMM) education. With the addition of the BSE building, USG will be able to provide state-of-the-art laboratories, active learning classrooms, clinical training facilities, academic offices, and an expanded level of student services necessary to support program and enrollment growth in these fields.

The BSE building will be situated west of a wetland/stream corridor, south of Building I and in place of an existing asphalt parking lot and Gudelsky Drive. Construction of the BSE building will include relocation/upgrading of utilities, installation or stormwater management facilities, pedestrian paths, vehicle circulation and landscaping. The pedestrian paths will include a boardwalk connecting the new parking garage from Shady Grove Road to the new BSE building and Building I. The boardwalk will begin on Institute for Bioscience and Biotechnology Research (IBBR) property, cross the wetland/stream corridor and end at the BSE building and Building I. The existing parking lot, comprised of 363 total spaces, will be reduced to 122 total spaces, post construction. This reduction in parking spaces was anticipated and is being mitigated with the construction of a new 700 space parking garage located at the south east corner of the campus. The proposed building complies with the approved 1994 Universities at Shady Grove Master Plan parking guidelines which indicates 3.16 parking spaces per 1,000 GSF of development and was informed by enrollment projections. A detailed analysis of the campus parking requirements is located in Appendix-A, #20. In summary, the construction of the Biomedical Science and Engineering Education building will result in the following:

BSE Gross Square Feet = 229,500	Total BSE Parking Spaces Required = 725
Total USG Buildings Gross Square Feet = 540,500	Total Campus Parking Required = 1,708
	Total Campus Parking Provided = 1,723



The new building will be located on the eastern section of an existing parking lot known as "lot 2" and a portion of Gudelsky Drive will be re-routed within the existing paved drive aisles along the south and western edges of the existing parking lot.



PHOTO KEY MAP



PHOTO 'A'-- N/E BEND AT GUDELSKY DRIVE LOOKING NORTH ('BUILDING 1' IN VIEW)

#### a) HOURS OF OPERATION

In general, the hours of operation for campus academic buildings and activities are Monday through Friday, 8:00 a.m. – 10:00 p.m.; Saturday, 8:30 a.m. – 7:00 p.m.; Sunday 8:00 a.m. – 10:00 p.m. The library in Building III remains open later for students, faculty and staff.

#### b) MONTGOMERY COUNTY GENERAL PLAN COMPLIANCE

The design intent of the 2003 Universities at Shady Grove Master Plan (USG Master Plan) anticipated an expansion of academic space, supported by structured parking and open space. The defining character of the site is established by the existing wetland and forest conservation area running north to south through the center of the campus. The Biomedical Sciences & Engineering Education building makes steps towards accomplishing the USG Master Plan Land Use Goals by promoting linkage between Shady Grove Center and Shady Grove Life Science Center, showcasing ecological stewardship, and supporting responsible development.

The location of the building results in a reduction in impervious area, providing increased building density for programmatic requirements such as classrooms, laboratories, and service facilities (per 59-C-5.473). Its central location also promotes the USG Master Plan vision of an internally-focused campus that highlights woodlands and wetlands as sustainable environmental features.

The new Biomedical Sciences & Engineering Education building is designed to achieve the Master Plan goals and therefore generally conforms to the currently approved USG Master Plan. Additionally, the USG campus Master Plan conforms to the goals and intentions set forth in the 2010 Great Seneca Science Corridor Master Plan and the development of the Life Science Center which promotes:

- Expansion of health science related facilities
- Removal of surface lots in favor of structured parking when applicable
- Development of dense inward-focused land use
- Protection of historic and environmental resources



## plan summary

The *Great Seneca Science Corridor (GSSC) Master Plan* envisions a vibrant Life Sciences Center (LSC) where the foundation of health care, biotechnology, and academia combine to create a dynamic and sustainable science and medical hub. Knowledge will drive its agenda, attracting international scientists, business leaders, physicians, and professors who will contribute ideas and insights for the future. Labs, classrooms, research centers, and universities will encourage and foster cutting-edge discoveries. The LSC should evolve into a place where the physical form—buildings, open spaces, and amenities—is as inspiring as the discoveries occurring inside.

This Plan's vision will develop over 25 to 35 years. During that time, the local and national economy will experience three or four business cycles. These economic cycles make it imperative to periodically check the Plan's progress and recommendations. Regardless of the pace of growth, it is essential to establish a vision and provide a blueprint for the future that will enable the LSC to evolve over time.

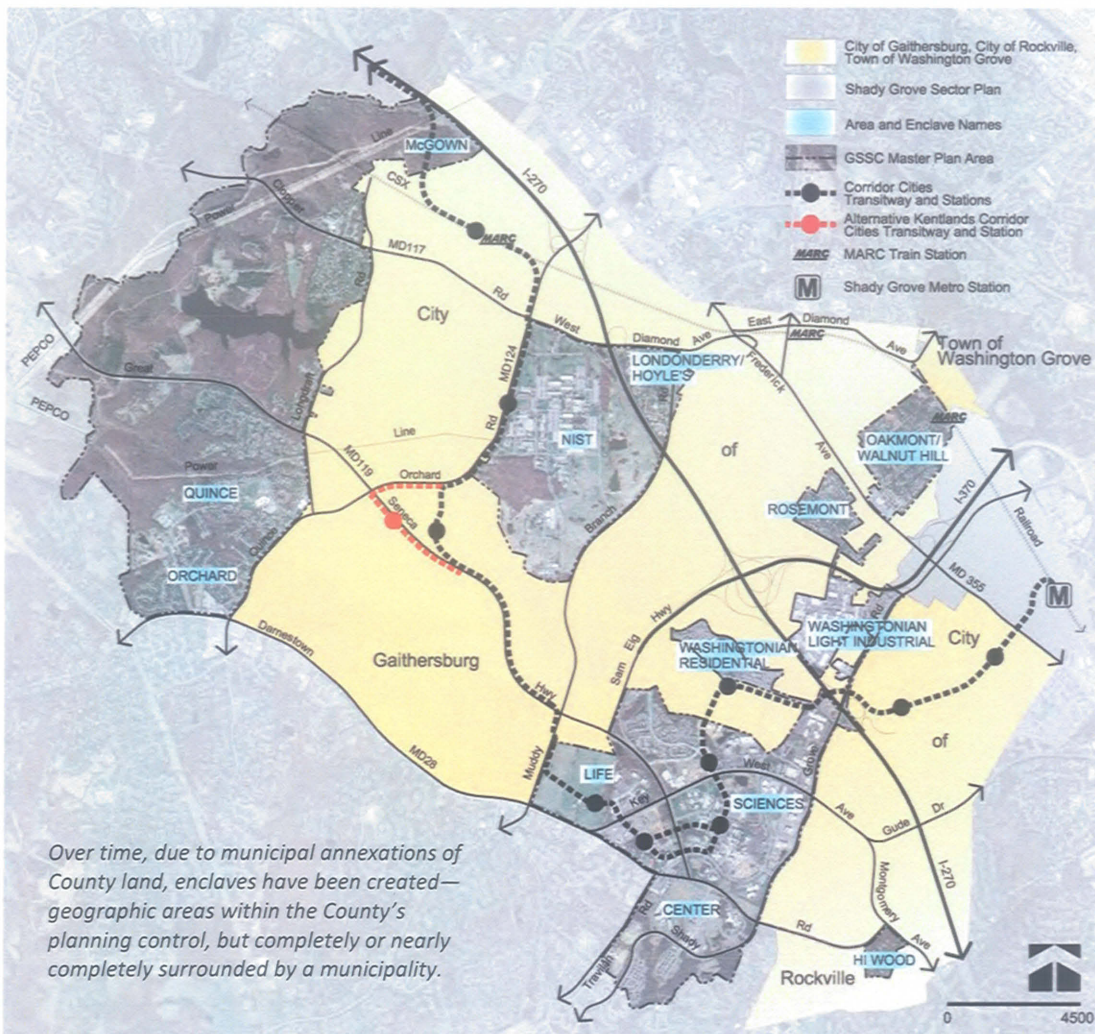
While this Plan is about providing opportunities for future world-leading scientific research, it is also concerned with protecting residential neighborhoods and investments made by businesses and institutions in the area. Growth and change in the LSC must occur in a way that does not overburden the surrounding communities. This Plan's explicit staging recommendations are essential to preserving the quality of life that residents enjoy. Infrastructure—particularly transit—must be provided before significant amounts of development can be built. Staging development ensures that growth will be managed and timed with the delivery of the infrastructure necessary to support it.

## Key Recommendations

- Transform the LSC into a dynamic live/work community while ensuring growth opportunities for research, medical, and bioscience interests.
- Align the Corridor Cities Transitway (CCT) through the LSC and provide four transit stations that will be the focal point of new development in the LSC North, Central, West, and Belward districts.
- Concentrate density, building height, and civic green spaces at the CCT stations. Provide appropriate transitions to adjacent neighborhoods and to the historic Belward Farm.
- Create a grid pattern of new streets that improve local circulation and connectivity among the LSC districts, promote alternatives to car use, and enhance access to the future transit stations.



map 1 Great Seneca Science Corridor Master Plan



- Create the LSC Loop as the organizing element of the open space plan to connect districts and destinations, incorporate natural features, and provide opportunities for recreation and non-motorized transportation.
- Replace the Public Safety Training Academy (PSTA) in the LSC West District with a new residential community that includes supporting retail, open spaces, and community facilities.
- Maintain the established residential neighborhoods throughout the GSSC Master Plan area.
- Create a sustainable community that will attract nationwide interest with design and materials that minimize carbon emissions, maximize energy conservation, and preserve water and air quality.
- Ensure that development in the Piney Branch Special Protection Area uses the best available stormwater management treatment techniques to protect the watershed's headwaters.
- Meet the recreation needs of the GSSC area by identifying and acquiring a site for a new local public park in the Quince Orchard area and requiring the dedication of parkland for new parks and open spaces in the LSC Districts.
- Support the County's Agricultural Reserve with zoning that requires acquisition of Building Lot Termination (BLT) easements to achieve maximum densities.

## overview and context

Forty-five years ago, the County identified the I-270 Corridor as a place for higher densities in a series of Corridor Cities supported by a comprehensive transportation network. Since then, jobs and business opportunities have attracted skilled workers and business investment that have in turn enabled local government to provide quality schools, amenities, and services.

The GSSC Master Plan area covers 4,360 acres in the heart of the I-270 Corridor. It includes the Life Sciences Center, the western Quince Orchard neighborhoods and enclave areas such as the National Institute of Standards and Technology (NIST) and Rosemont, which are completely or nearly completely surrounded by a municipality. The City of Gaithersburg occupies 10 square miles in the center of the Plan area. The City of Rockville borders the Plan area on the east and the Town of Washington Grove is located to the northeast. The incorporated municipalities have their own planning and zoning authority and are not part of the County's master plans.

The Life Sciences Center has played a significant role in establishing the Corridor as a globally known center for science and technology-driven industry, home to biotechnology companies, higher education facilities, and a quality medical center. This Plan provides a blueprint for the future that will transform the LSC into a vibrant place served by transit and enhanced by activating uses, open spaces, and amenities.

## Planning Framework

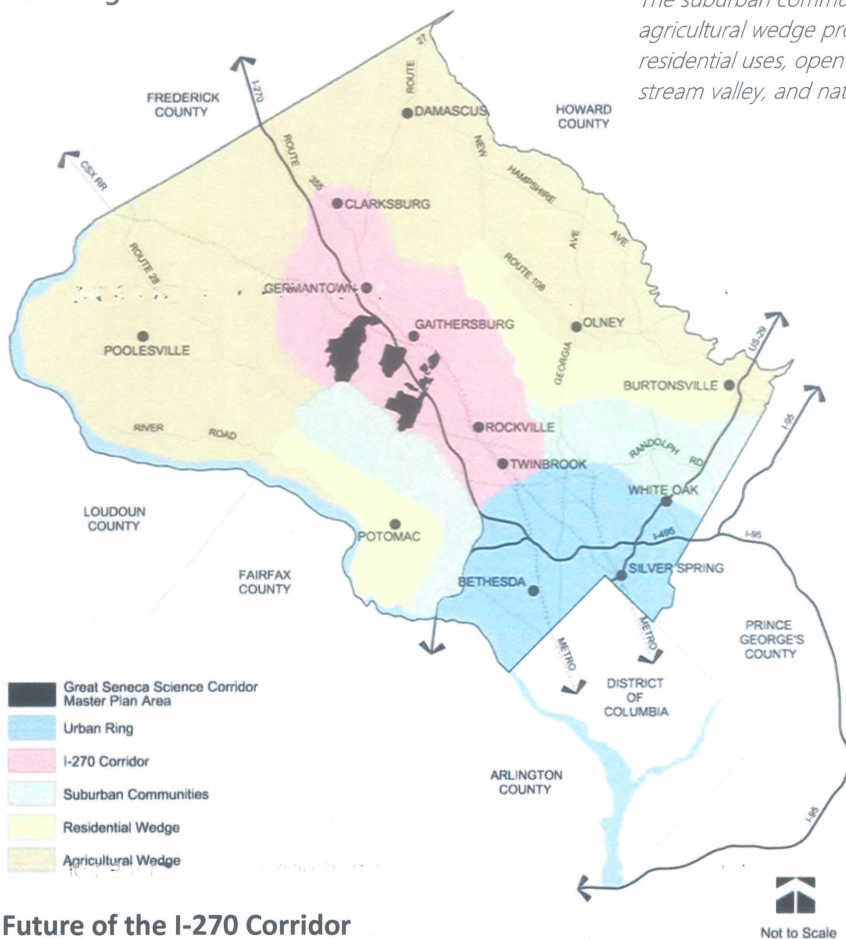
The Plan's recommendations are consistent with State and County planning policies.

- The 1964 General Plan identifies the I-270 Corridor (which includes the LSC) for concentrated, high-density development supported by a comprehensive transportation system including a major highway network, rail lines, and centers called Corridor Cities.
- The 1992 Economic Growth, Resources Protection and Planning Act requires local plans to protect sensitive environmental resources.
- The 1993 *General Plan Refinement* supported the Corridor Cities concept but acknowledged that it had not yet fully evolved.
- The 1997 Priority Funding Areas Act directs State spending to support smart growth, typically to existing communities and places where local governments want investment to support future growth. The entire Master Plan area is within a Priority Funding area and is eligible for State funding.



## map 2 Wedges and Corridors

*The suburban communities, residential wedge, and agricultural wedge provide areas for lower density residential uses, open space, as well as farmland, stream valley, and natural resources protection.*



### The Future of the I-270 Corridor

The I-270 Corridor is the County’s economic engine and the biotechnology industry is a critical driver. Area businesses benefit from proximity to the federal government—the world’s largest technology buyer. Locally based federal research centers support a major biotechnology industry cluster and offer promising future opportunities such as nanotechnology.

Economic expansion, population growth, and diversification will stimulate new development. New residents—many from highly skilled backgrounds—will augment an extraordinary talent pool. This larger, more varied skill base could open new creative and entrepreneurial business directions—from digital media to international market development to technology commercialization. New and expanding opportunities combined with a “quality of place” that fosters innovation could encourage younger residents and recruits to stay in the area.

By channeling development into existing centers served by transit, highways and infrastructure, the County will protect its natural environment and agricultural land that contribute to our quality of life while making better use of existing transportation and service infrastructure.

This Plan’s recommendations work within the comprehensive overview of the 2008 *MD 355/I-270 Corridor Study*, which provides a policy framework for the Corridor master and sector plans. The County’s approach to managing growth could bolster the Corridor’s competitive strengths—a high quality of life, exceptional talent base, strong employment resources and the potential for enhanced economic opportunity. Creating higher density, mixed-use communities at transit stations epitomizes smart growth and sound planning principles by:

- balancing land use and transportation
- providing opportunities to live near work
- maximizing public investments in infrastructure
- reducing sprawl and protecting the environment
- reducing the carbon footprint and reliance on fossil fuels
- producing more sustainable forms of development.

The 2006 *Shady Grove Sector Plan* recommends that the area around the Shady Grove Metro Station be transformed from a light industrial service park to a high-density mixed-use community with a residential focus that makes the best use of Metro proximity.

The 2009 *Twinbrook Sector Plan* builds on the area's proximity to the Metro station and allows growth for technology-oriented businesses as well as a complementary mix of housing and service uses.

The 2009 *Germantown Master Plan* builds on the Corridor City concept and envisions an up-County center for community life with mixed uses and density focused at transit stations.

The 2010 *White Flint Sector Plan* envisions the Metro station area and Rockville Pike as a vibrant and sustainable urban center that can adapt to future challenges.

This Plan focuses development around future transit stations in the LSC with bicycle and pedestrian systems that enhance access. The Corridor Cities Transitway (CCT) will enable people who work at the LSC to live in nearby communities connected by transit. The Plan also recommends new housing in the LSC to create more opportunities to live near work. In addition to promoting a compact form of development, the Plan seeks to promote healthy, active living by fostering walking, creating new opportunities for recreation, and providing growth potential for important medical services. The result will be a sustainable form of development and a community where people want to live and work.

## Annexation

Municipalities establish Maximum Expansion Limits (MEL) to set boundaries for future potential annexations of unincorporated land. The Maryland State Code (Article 23A, Section 19) requires that municipalities produce a Municipal Growth Plan delineating the MEL. Only land within the MEL and adjoining the municipal boundaries can be considered for annexation.

In 2009, the City of Gaithersburg established a new MEL as part of its adopted *Municipal Growth Element*. The City's new MEL includes nearly all of the GSSC Master Plan area, including the Life Sciences Center. This Master Plan recognizes that future annexations may occur and that annexing properties surrounded by municipalities would help create coherent boundaries.



## ATTACHMENT 3



MONTGOMERY COUNTY PLANNING DEPARTMENT  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
8787 Georgia Avenue  
Silver Spring, MD 20910-3700

### **Mandatory Referral Notice – MR2016008**

#### **The Universities at Shady Grove / University of Maryland has filed a**

Mandatory Referral Request for a 220,000 square foot, six-story, Biomedical Sciences and Engineering building on a 6.22 acre site in the LSC Zone; located on the north side of Gudelsky Drive approximately 500 feet east of Traville Gateway Drive, in the 2010 Great Seneca Science Corridor Master Plan Area. A tentative (subject to change) hearing date is listed below. The final notice of hearing will be published in the Planning Board's weekly agenda, accessible via [www.montgomeryplanning.org/meetings\\_archive/](http://www.montgomeryplanning.org/meetings_archive/)

**Tentative Hearing Date: December 10, 2015.**

If you have any questions regarding this project or wish to see the proposed plans, please contact: **Lori Shirley** at **(301) 495-4557** or **Lori.Shirley@montgomeryplanning.org**.

**From:** Stewart Edelstein [mailto:sedels@umd.edu]

**Sent:** Tuesday, September 22, 2015 1:22 PM

**To:** Jane A. Briggs

**Subject:** Join us Oct. 15th!

ATTACHMENT 4

## **You're invited to an Open House**

for an exclusive look at the current design concepts for USG's new  
Biomedical Science & Engineering Education Facility  
set to open Fall 2018!

**Thursday, October 15, 2015**

**3:30 PM - 6:30 PM**

**USG Building II Multipurpose Room**

**Stop by to learn more about the growth of  
the USG Campus!**

Cooper Carry and Lake | Flato Architects will display drawings,  
video walk-throughs, interior room layouts including furniture and  
material samples, wall treatments and furniture coverings.

Learn more about STEM programs coming to  
Montgomery County.

The Universities at Shady Grove

9630 Gudelsky Drive

Rockville, Maryland 20850

This email was sent to: jbriggs1@umd.edu

Unsubscribe