CITY COUNCIL AGENDA

Municipal Building
Monday, July 08, 2019
8:00 PM

I. ORGANIZATION

1. Call to Order

2. Roll Call

3. Meditation and Pledge of Allegiance to the Flag

4. Consent Agenda - Approval of Staff Recommendations
(Items on the Consent Agenda [marked by *] will be approved as recommended by staff, subject to removal from the Consent Agenda by Council.)

5. Approval of Agenda and Additions

II. COMMUNICATIONS

6. Presentations

6a. Parks and Recreation Month Proclamation
Suggested Action: July is Parks and Recreation Month. Greg Varda, Acting Co-Director of Recreation Programs will be present to receive the proclamation and provide an overview of summer camps, recreation programs and facilities.

P R O C L A M A T I O N - National Parks and Recreation Month.pdf

6b. Buy Local Week Proclamation
Buy Local Week.pdf

7. Petitions and Requests

8. Minutes of Council Meetings

Suggested Action:

* Work Session, December 19, 2018
* Budget Work Session, April 3, 2019
* Budget Work Session, April 10, 2019
* Budget Work Session, May 01, 2019
* Budget Work Session, May 15, 2019

WS181219.pdf
WS190403.pdf
WS190410.pdf
WS190501.pdf
WS190515.pdf

9. Administrative Reports

10. Committee Reports

10a. GreenACES Report (Complete and Green Streets Policy)

Suggested Action: It is recommended that Council accept this report.
GreenACES Report, Complete and Green Streets.pdf

10b. Advisory Planning Board Report #2019-06 Cherrywood Lane Complete and Green Streets Retrofit Project
Suggested Action: It is recommended that Council accept this report.
Cherrywood Lane 2019-06.pdf

10c. Arts Advisory Board Report #20-1
Suggested Action: It is recommended that Council accept this report and consider at the next meeting.
AAB 20-1 Banners.pdf

10d. Forest Preserve Advisory Board - Report #2019-02
Suggested Action: It is recommended that Council accept this report and consider at the next meeting.
FPAB_ReportToCouncil_2019_02_StewardshipGuidelines.pdf
GreenbeltForestPreserveStewardshipGuidelines2019-FinalForCouncil.pdf

III. LEGISLATION

11. A Resolution to Authorize the Negotiated Purchase of Certain Goods and Services from Various Vendors as Enumerated Herein When Total Fiscal Year Purchases from Each Vendor Exceed Ten Thousand Dollars
-1st Reading

Suggested Action:

Reference: Resolution

Each year, the City does business with a number of vendors from whom the City's individual purchases are below the bid limit of $10,000 but total purchases over the fiscal year reach or

exceed that amount.

Obtaining bid proposals for these goods and services is not warranted. Some of these vendors are the sole source or best source of purchase. In other instances, the City's purchases are based on bids taken by other government agencies (e.g., the State or County) or through the Council of Governments cooperative purchase program, with the bid price extended to Greenbelt.

It is recommended this resolution be introduced for first reading.

Res20XX.pdf
Negotiated Purchase List-FY20.pdf

12. An Ordinance To Authorize The Issuance, Sale And Delivery By The City Of Greenbelt, Maryland Of Its "City Of Greenbelt, Maryland Water Quality Bond, Series 2019" In An Aggregate Principal Amount Not To Exceed Two Million Five Hundred Thousand Dollars ($2,500,000), Pursuant To The Provisions Of Ordinance No. 1359 Passed On September 25, 2017; Prescribing The Form, Maturity, Interest Rate And Provisions For Payment And Redemption Of Said Bond; Confirming The Covenants Of The City To Provide For The Levy And Collection Of Taxes Sufficient For The Prompt Payment Of The Maturing Principal Of And Interest On Said Bond; Determining That The Bond Shall Be Sold By Private Sale To The Maryland Water Quality Financing Administration, Without Competitive Bid; Further Providing For The Use Of The Proceeds Of The Bond; And Providing For The Execution And Delivery Of The Bond And A Loan Agreement, And All Other Details With Respect To The Sale And Delivery Of Said Bond.
Suggested Action: Reference: Ordinance
Ordinance 1359

Ordinance 1359 authorized the City to borrow up to $2.5 Million dollars to repair the Greenbelt Lake Dam. The voters approved this borrowing at a referendum on November 7, 2017. The City is borrowing these funds from the Maryland Department of the Environment (MDE) Water Quality State Revolving Fund (WQSRF).

Under Section 55(e) of the City Charter this is considered a sale of bonds by negotiation and an Ordinance is required. This Ordinance must be approved by a 2/3 majority (at least 5 members).

Fabian Walters, the City's Bond Counsel (Miles & Stockbridge), drafted the proposed Ordinance.

Staff recommends the Ordinance be introduced for first reading.

Ordinance 1359.pdf
Greenbelt MDE Ordinance.pdf
Loan Agreement-2019-1A CW Tax Exempt.pdf

IV. OTHER BUSINESS

13. Acceptance of City Streets - South Core Phase 1A
Suggested Action: The Greenbelt Station South Core development includes a combination of public and private streets. Woodlawn Development Group has completed the construction of the public and private roads in Phase 1A of the development and is asking the City to accept a

segment of Stream Bank Lane from station 11+60 to 20+57.

The construction of this segment of roadway consists of lighting, landscaping, sidewalk, curb and gutter, storm drain and paving. A final inspection of the roadway was completed by the City's inspector and the Director of Public Works and the Director of Planning and Community Development. The final inspection confirmed that the all work has been completed per approved plans and is ready for acceptance by the City.

Staff recommends that the City accept Stream Bank Lane from station 11+60 to 0+57 into perpetual maintenance. At the time of acceptance a one-year maintenance bond will be required.

Phase 1A street exhibit.pdf

14. Complete & Green Streets Policy
Suggested Action: The City has shown and continues to show a commitment to Complete and Green Streets principles by incorporating these principles into transportation projects. The adoption of a Complete and Green Streets policy would continue to direct the City to develop and provide a well-connected, visually attractive transportation network, that balances the needs of all users, and promotes a more livable and sustainable community.

Staff has drafted a Complete and Green Streets policy after extensive research of complete and green streets policies both in the region and nationally. This policy has been presented to both the Advisory Planning Board and GreenACES. Both Boards have submitted reports that are included in Council's packet. A City Council work session was held on this topic on June 12, 2019. The policy has been revised to reflect and respond to the topics raised during that work session.

Staff recommends that City Council approve the City of Greenbelt Complete and Green Streets Policy.

Reference:
M. Porter, Memorandum 6/25/2019
Complete and Green Streets Policy
APB Report, Complete and Green Streets, 4/4/2019
GreenACES Report, Complete and Green Streets, 6/10/2019
M. Porter, Memorandum 6/25/2019.pdf
Complete and Green Streets Policy.pdf
APB Report, Complete and Green Streets, 4/4/2019
GreenACES Report, Complete and Green Streets, 6/10/2019

15. Memorializing Significant Greenbelters — Guidelines for Naming City Property
Suggested Action:

Council member Byrd requested this item to be added to the agenda.

The motion would be to direct staff to draft a resolution that would.

1) expressly re-authorize the City to name parks, streets, buildings, or other City property in accordance with efforts to commemorate and honor select individuals that have made significant contributions to Greenbelt and/or in accordance with a major donation; and

2) establish guidelines for all such naming.

16. Maryland Municipal League 2020 Legislative Requests

Suggested Action:

Reference:

2020 MML Legislative Request form
History of City MML Priority Requests
MML Assets and Liabilities of City's 2019 Submissions

The City has received the annual request from the Maryland Municipal League (MML) to submit statewide legislative initiatives by July 26.

Last year, the City submitted three proposed initiatives.

- Online Sales Tax – Municipal Share
- Local Authority over Vegetation Management
- Retroactive Utility Billing

MML did not select any of these initiatives as a priority. Included in the reference materials is a list of assets and liabilities developed by MML.

At the Regular Meeting on June 17, Council Members raised the items listed below. There was consensus to wait until after the MML Summer Conference before making a decision about 2020 submissions.

- Municipal Authority over Cell Towers
- Additional Revenue Sources beyond Property Tax
- Online Sales Tax
- Online Sports Betting & Gambling - Municipal Revenue Sharing
- Regulation of Mobile Billboards
- Ban on Single Use Plastics
- Funding for Electric Vehicle Infrastructure
- Data Storage - Police Camera Videos

Suggested initiatives must have statewide municipal impact. Per MML rules, the City may submit up to three Legislative Requests.

Council direction is sought.
2020-MML-LEGISLATIVE-REQUEST.pdf
MML Priorities.doc
MML 2019 Assets and Liabilities.pdf

*17. * License Agreement for Studio Use
Suggested Action: Due to the time sensitive nature of the item, the City Manager has already signed each lease. The one-year lease for each artist holds the same terms and for a term of July 1 to June 30. Upon approval of this item on the consent agenda, the Council will confirm approval of the leases.

A. Denn
B. Karlson
C. Cross
D. Gorson
E. Keller
F. Arrington
G. Anderson
H. Gawlik

*18. * Approval of Friends of the Old Greenbelt Museum
Suggested Action: recommended architect for the Visitors Center at 10-A Crescent
10A Architect Recommendation Memo.pdf
19012 Greenbelt Museum Experience Statement.pdf
19012 Greenbelt Museum Proposal.pdf
Christopher Weston resume and project list 4.18.19.pdf
Neha Chidura resume.pdf
references.pdf
RFP_Atelier.pdf
RFP_FieldCraft.pdf

19. Letter to the NAACP regarding MAGLEV
Suggested Action: This item was added by Mayor Pro Tem Davis
NAACP-MarylandStateConference-CC-letter.pdf

20. Letter of support for UMD Smart Cities grant application
Suggested Action: A letter of support was requested by the University of Maryland. Mayor Jordan and Mayor Pro Tem Davis requested that the item be placed on the agenda.
Request for Greenbelt LOS for Demand Response Grant 6.20.19.pdf
Gabriel_SmartCities6June2019.pdf
smartcitiesletter07052019.pdf

21. * Reappointment to Advisory Group
Suggested Action: Reference: Reappointment Survey

Steven Gilbert has indicated his willingness to continue to serve on the Board of Elections (BOE)

Approval of this item on the consent agenda will indicate Council's intent to appoint Mr. Gilbert to a new term on BOE.

22. Council Activities

23. Council Reports

V. MEETINGS

Meetings
meetings.pdf

Stakeholder Schedule.pdf

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Bonita Anderson
Submitting Department: Administration
Item Type: Presentations
Agenda Section:

Subject:
Presentations

Suggested Action:

Attachments:

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Recreation
Item Type: Proclamation
Agenda Section:

Subject:
Parks and Recreation Month Proclamation

Suggested Action:
July is Parks and Recreation Month. Greg Varda, Acting Co-Director of Recreation Programs will be present to receive the proclamation and provide an overview of summer camps, recreation programs and facilities.

Attachments:
P R O C L A M A T I O N - National Parks and Recreation Month.pdf

P R O C L A M A T I O N

WHEREAS, Greenbelt's parks and recreation programs generate opportunities for people of all ages to come together and experience a sense of community through pursuits that are pleasurable and congenial; and

WHEREAS, our parks and natural recreation areas ensure the ecological beauty of our community and provide a place for children and adults to connect with nature and recreate outdoors; and

WHEREAS, recreation programs build healthy, active communities, provide therapeutic services for those who are mentally or physically disabled, and improve the mental and emotional health of all citizens; and

WHEREAS, our parks, green spaces, and open spaces preserve our natural environment and the City's Green Belt, while offering much-needed relief from our fast-paced lives; and

WHEREAS, parks, playgrounds, ball fields, walking paths, aquatic and fitness centers, community and recreation centers, sports and arts programs, and cultural and historic sites make communities attractive and desirable places to live; and

WHEREAS, parks and recreation programs increase a community's economic prosperity through higher property values, the attraction and retention of businesses, increased tourism, and the reduction of crime; and

WHEREAS, the City of Greenbelt recognizes these and all other benefits derived from our parks and recreation resources.

NOW, THEREFORE, I, Emmett V. Jordan, by the authority vested in me by the citizens and City Council of Greenbelt, do hereby proclaim the month of July 2018 to be

PARKS AND RECREATION MONTH

in Greenbelt and encourage all our citizens to participate in recreation programs, enjoy and appreciate the City's parks and recreation facilities, and recognize the creativity and hard work of our Recreation Department staff in providing diverse programs that make Greenbelt such a special place in which to live.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Greenbelt, Maryland, to be affixed this 8th day of July, 2019.

EMMETT V. JORDAN, Mayor

ATTEST:
Bonita Anderson, City Clerk

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: Proclamation
Agenda Section:

Subject:
Buy Local Week Proclamation

Suggested Action:

Attachments:
Buy Local Week.pdf

P R O C L A M A T I O N

WHEREAS, local farms help build and sustain healthy communities and enhance the quality of life for the residents of Greenbelt and for others throughout Prince George's County, the State of Maryland, and the nation; and

WHEREAS, Buy Local Week cultivates awareness among consumers and leaders of the vital role local farms play in a balanced community; and

WHEREAS, buying local ensures that more of the money spent on food keeps circulating within local areas; and

WHEREAS, local farms promote environmental stewardship by providing cleaner air and water and reducing our carbon footprint; and

WHEREAS, buying local enables residents to choose farmers who may avoid or reduce their use of chemicals, pesticides, hormones, antibiotics or genetically modified seed.

NOW THEREFORE, I, Emmett V. Jordan, by the authority vested in me by the citizens and City Council of Greenbelt, do hereby proclaim the week of July 20 to 28, 2019, as

BUY LOCAL WEEK

in Greenbelt and encourage all our residents to support local farms by buying locally during this week and throughout the year.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Greenbelt, Maryland, to be affixed this 8th day of July 2019.

EMMETT V. JORDAN, Mayor

ATTEST:

David Moran
Assistant City Manager

DRAFT

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: Meeting Minutes
Agenda Section:

Subject:
Minutes of Council Meetings

Suggested Action:

* Work Session, December 19, 2018
* Budget Work Session, April 3, 2019
* Budget Work Session, April 10, 2019
* Budget Work Session, May 01, 2019
* Budget Work Session, May 15, 2019

Attachments:
WS181219.pdf

WS190403.pdf

WS190410.pdf

WS190501.pdf

WS190515.pdf

WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, December 19, 2018, to meet with Franklin Park Apartments.

Mayor Pro Tem Davis started the meeting at 8:02 p.m. The meeting was held in room 201 of the Greenbelt Community Center, 15 Crescent Road.

PRESENT WERE: Councilmembers Colin A. Byrd, Judith F. Davis, Leta M. Mach, Edward V. J. Putens, and Rodney M. Roberts. Mayor Emmett V. Jordan was away on business and Councilmember Silke I. Pope was on travel.

STAFF PRESENT WERE: David Moran, Assistant City Manager; Chief Richard Bowers, Police Department; MPO Carlos Torres, Police Department; Terri Hruby, Director of Planning and Community Development; Gilberto Cabrera, Code Enforcement Supervisor; Greg Varda, Assistant Director of Recreation; Brian Butler, Recreation Coordinator; and Shaniya Lashley-Mullen, Administrative Assistant.

FRANKLIN PARK REPRESENTATIVES: Timeka Anderson, Senior Regional Manager; Denise Knight, Director of Resident Services; Iman Taylor, Director of Sales and Marketing; Mark Pauley, Director of Maintenance; Lea Garcia, Asset Manager; and Gail Comfort, VP of Operation.

ALSO PRESENT WERE: Rick Gordon, Vice Chair Park and Recreation Advisory Board; Reverend Ray Raysor; Nedria Solomon; Bill Orleans and others.

Mr. Pauley provided an update on the renovations of the fire damaged building. He stated that the building was up to code at the time of the fire and the permits would be in next week. Ms. Mach asked if the windows will be redesigned because windows down to the floor are too low. He stated that is up to corporate management.

Mr. Pauley answered Mayor Pro Tem Davis's question advising 1,090 apartment windows have been done with window locks. Mayor Pro Tem Davis stated all units with children should have the window locks on them. Ms. Mach stated all units should have window locks because visitors might have children. Ms. Knight stated since the last work session, the lease reflects that window locks are mandatory and cannot be removed. Ms. Knight also stated Franklin Park is making sure they have the correct window locks. Next year, Franklin Park is putting in place a preventative maintenance plan. Mr. Putens stated Council would like to see the plan. Mr. Pauley stated that Franklin Park doesn't have the manpower or resources to put in window locks on 18,000 windows in six months.

Ms. Taylor provided an update on Franklin Park Apartments. She reported that the retention rate is at 69% and 94% of the units are occupied. Mr. Pauley stated 2,300 units have been remodeled, and 500 units have been upgraded. Ms. Knight stated rent has increased 4% across the board. Mayor Pro Tem Davis asked if Franklin Park still accepts vouchers from the County. Ms. Taylor answered yes.

Mr. Pauley answered Mayor Pro Tem Davis's question advising the following capital projects have taken place: the gas valves have been replaced in sections 1, 2 and 5; a new policy for pest control; upgraded the lights to LED; improved the sidewalks; and made improvements to the storm drains. Ms. Comfort stated pool #1 was upgraded last year. Mr. Pauley also stated a

handicap rail was installed in pool #2.

Ms. Knight commented on the better reviews Franklin Park Apartments has been receiving on social media. She advised they have a staff person that responds to each post, good or bad. On the positive reviews, the staff acknowledges with a thank you. With the negative reviews, they question what they can do to fix that certain problem.

Mr. Pauley answered Mr. Roberts's question advising that leaky pipes get changed from bottom to the top.

Mr. Pauley answered Ms. Mach's question advising the laundry rooms are locked and can't be accessed unless a person has a key. He also advised the rooms are too small to convert into daycare facilities.

Mr. Putens stated Council hasn't received a link to the news letters. Ms. Knight advised the list will be updated with Council email addresses. Ms. Knight answered Mayor Pro Tem Davis's question advising the email blast goes out quarterly, unless it has specific information and it goes to a particular section. Ms. Knight also advised they communicate with the residence via social media, (i.e. Facebook and Instagram). Mr. Gordon stated the communication is good but it could improve.

Mr. Putens stated that at the last work session, it was suggested to go into public/private partnership regarding a dog park. Mr. Pauley advised Franklin Park Apartments did look into that but parking would be a main issue. Mr. Putens suggested a private dog park for Franklin Park Apartments residents only.

There was a discussion in reference to security cameras at Franklin Park Apartments.

Mayor Pro Tem Davis asked how many units per year Code Enforcement inspects and if they are up to date. Mr. Cabrera stated 20% of the units are inspected per year and there are still some outstanding citations.

Ms. Solomon explained the mold issue she was having in her residence. Mr. Roberts asked if a mold test was performed. Mr. Pauley stated the issues will be handled the next day.

Mr. Byrd stated there are similar concerns with mold at Springhill Lake Elementary.

Mr. Gordon suggested a resident's association, where residents and management can come together at monthly meetings and bring their grievances. Ms. Knight added it could be a quarterly meeting.

Mr. Byrd stated he heard other complaints: the parking lot has glass and trash, customer service issues, mold and the vents are dirty.

Mr. Pauley answered Mayor Pro Tem Davis's question stating they are still educating the residents on recycling. He also advised Franklin Park Apartments wasn't installing dog waste stations because the residents place trash in them. There are dumpsters on the property; the residents can place the dog waste in them.

Ms. Hruby advised a bus shelter was recently replaced and looks forward to a partnership to replace more in Franklin Park.

Chief Bowers provided an update on public safety. He reported 11 robberies were committed by one person in a short time frame. Theft from vehicles and property crimes are a trend in Franklin Park Apartments but they are lower than last year. MPO Torres reported there has been an increase by patrol on all squads and foot patrol too. MPO Torres also advised he has been working with the owners and Franklin Park has also increased their security cameras.

MPO Torres answered Mayor Pro Tem Davis's question advising the lighting had increased.

Mayor Pro Tem Davis asked if last night's homicide was gang related. MPO Torres stated that was an ongoing investigation.

There was a discussion on gangs. Ms. Knight stated if residents noticed a trend to please inform the Franklin Park Apartments management office.

Mayor Pro Tem Davis stated when there is graffiti to call the police so they can take pictures, have it removed and investigated.

There was a discussion on developing a plan to give to Franklin Park on safety tips. Mayor Pro Tem Davis stated not just for Franklin Park Apartments, but for the whole city.

Ms. Knight answered Mayor Pro Tem Davis's question stating Franklin Park Apartments was in the middle of transitioning to Mr. Pauley, so they didn't get in contact with Dr. Robles in reference to education on recycling.

Mr. Pauley answered Mayor Pro Tem Davis's question and advised that the community garden failed. Mr. Putens said it might have been the weather that caused the garden failure. Ms. Mach said it might have been the way it was promoted.

Mayor Pro Tem Davis suggested that Ms. Knight contact Kap Kapastin at Beltway Plaza to see if Franklin Park Apartments signage can be placed on Beltway Plaza property.

Mayor Pro Tem Davis stated that she noticed that Franklin Park Apartments had increased its events and asked if they have partnered with the Recreation Department. Ms. Knight stated she would like to partner with the Recreation Department in 2019.

There was a discussion on various recreation programs including pop up playgrounds to bring recreation into the community. Mr. Butler stated they just finished up a program promoting IT and also collaborated with Springhill Lake Elementary School to promote healthier eating and recreation.

Mayor Pro Tem Davis asked if overnight parking was still an issue at the Recreation Center. Mr. Butler stated no, it was resolved completely when signs were put in place. No vehicles were towed.

Ms. Garcia asked if there were any plans for the Springhill Lake Elementary School due to overcrowding. Mayor Pro Tem Davis stated Council will be looking at the Prince George's

County school list to see where Springhill Lake Elementary falls on the list. Mayor Pro Tem Davis also stated the school needs to be replaced and made bigger. The school is dealing with mold issues and leaks.

There was a discussion of Beltway Plaza building townhouses. Ms. Hruby stated that Prince George's County Planning Board is scheduled to act on their conceptual plan on February 21st. They are proposing a mixed housing type, anywhere between 1,000-2,000 homes is their proposal along Breezewood Drive. It's a five or six stage project; first the building of the residences and then redesign of the mall. Mr. Orleans suggested that all interested in the concept plan from Beltway Plaza should attend the next Advisory Planning Board meeting in January.

Information Items – several information items were discussed.

The meeting ended at 9:47 p.m.

Respectfully submitted,

Shaniya Lashley-Mullen
Administrative Assistant

DRAFT

BUDGET WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, April 3, 2019, to discuss Miscellaneous – Museum/Grants & Contributions/Social Service, FY 2020 Proposed Budget.

Mayor Jordan started the meeting at 7:32 p.m. The meeting was held in the Springhill Lake Recreation Center.

Present were: Councilmembers Colin A. Byrd, Judith F. Davis, Leta M. Mach, Silke I. Pope, Edward V. J. Putens (9:11p.m.), Rodney M. Roberts and Mayor Emmett V. Jordan.

Staff present were: David Moran, Assistant City Manager; Jeff Williams, City Treasurer; Liz Park, Director of Greenbelt CARES; Christal Batey; Community Resource Advocate; Megan Searing-Young, Museum Curator; Shaniya Lashley-Mullen, Administrative Assistant.

Also present were: Jean Cook, Greenbelt Intergenerational Volunteer Exchange Services (GIVES); Neely Oplinger, Washington Ear; Phil Newsom, College Park Meals on Wheels; Sheila Maffay-Tuthill; FOGM Education and Volunteer Coordinator; Lawana Holland-Moore, FOGM Office Manager; Stephen Oetken, Jen Ruffner and Pam Gregory, Friends of the Greenbelt Museum; Molly Lester, Bill Orleans and others.

Grants & Contributions

Ms. Jean Cook, Greenbelt Intergenerational Volunteer Exchange Services (GIVES), reported on the services that GIVES provides. She stated that GIVES has between 220-230 members who volunteered between 2,500-3,000 hours throughout the year.

Ms. Oplinger, Metropolitan Washington Ear, reported on the services provided for the blind, visually impaired and physically disabled individuals who cannot read print materials. She said Metropolitan Washington Ear has 18 residents in Greenbelt that receive services. She stated that they have 300 volunteers, which includes 6 from Greenbelt.

Mr. Newsom, College Park Meals on Wheels Program, reported that they prepare between 80-90 meals daily. He said that delivery to Greenbelt has increased by 10% and there are 14 volunteers from the City.

Mayor Jordan stated an additional $1,600 is allocated for unanticipated needs for the year.

Greenbelt Museum

Ms. Searing-Young, Greenbelt Museum Curator, reviewed the Museum's accomplishments over the past year. Ms. Searing-Young advised that 10-A Crescent Road's grand opening will be during the summer of 2020.

There was a brief discussion on how to increase membership at the Museum.

Council then reviewed the Greenbelt Museum section of the proposed budget page by page.

Ms. Ruffner answered Ms. Lester's question stating that $15,000 in pledges were received during the Capital Campaign for 10-A.

CARES

Dr. Liz Park, Director of Greenbelt CARES, reviewed accomplishments over the past year. Dr. Park reported on the NARCAN training that was offered to community members and nursing students.

There was a brief discussion on available space at the Community Center. Ms. Davis asked what or when could the old Adult Day Care space be utilized. Mr. Moran stated that planning for the space was underway. Mayor Jordan stated that space has moisture issues. Ms. Mach stated that space there is bigger than the space CARES has now. Ms. Davis requested a work session once it's ready to discuss who will eventually utilize that space. Mr. Roberts stated that the Community Center shouldn't be turned into office space. He explained that would take away from the community and that they should look for office space somewhere else in the City.

Dr. Park answered Ms. Davis's question, stating the County's Crisis Counselors would cover the night hours and Greenbelt CARES would handle the day hours.

There was a brief discussion on the Eviction Relief Program. Dr. Park answered Mr. Orleans's question stating that the church approves the funds to be distributed to apartment complexes that vary throughout the City. Dr. Park stated the reason that most citizens utilize the fund is for rent payments.

Council then reviewed the CARES section of the proposed budget page by page.

Greenbelt Assistance in Living (GAIL)

Ms. Batey, Community Resource Advocate, reviewed Greenbelt Assistance in Living (GAIL) accomplishments over the past year. Ms. Batey reported on the Caregiver Workshop, Memory Support Group and the Memory Café programs.

Ms. Batey advised Ms. Katherine Farzin, Bilingual Community Outreach Coordinator, spearheads the community nursing program for pediatrics. Ms. Batey advised they had two workshops going on simultaneously, one in Greenbelt West and the other in the Community Center for new and expecting parents.

There was a brief discussion on space issues GAIL was facing. Ms. Batey stated that the files at Green Ridge House are stored in a small space. A lot of the files are kept on computers but HUD requires hard copies of active documents.

Ms. Batey answered Ms. Davis's question, stating they just received a grant from the Maryland Department of Aging for $58,000 and a portion of it would found mental health services at Green Ridge House. This would expand into fiscal year 2020 in mid-October. There is a contractor on site for approximately five hours a week for one on one and group sessions for the residents at Green Ridge House.

There was a brief discussion on the half-time Mobility Manager position that is authorized but not funded. Dr. Park advised there wasn't any space in the CARES office for the individual. Mr.

Putens asked did anyone in CARES work from home. Dr. Park stated no. Dr. Park advised that a policy and procedure would need to be developed. Mr. Putens said the policy and procedures have been put in place for many years and referred Dr. Park to Ms. Ard.

There was a brief discussion about changing the Senior Housing Section (202) classification at Green Ridge House. Ms. Batey stated that the marketing plan was under review by HUD. Since submitting the marketing plan, Ms. Batey said there were changes to Fair Housing Regulations, so additional information was submitted to HUD. Once the marketing plan is approved, Ms. Batey said the waiting list for Green Ridge House can be opened and advertised. Ms. Davis requested a work session to look into the admission policy and marketing plan at Green Ridge House.

Council then reviewed the Greenbelt Assistance in Living section of the proposed budget page by page.

Mr. Jeff Williams, City Treasurer, stated staff would like to propose a change to the GAIL proposed FY2020 budget and that is too add $9,000 to professional services and transfer corresponding revenue from Green Ridge House in the same amount. Mr. Williams advised Ms. Batey received a grant that wasn't tied to a fiscal year; it was a six month grant. The $9,000 is to continue the grant from October through June 30, 2020. Dr. Park stated the grant is to continue mental health services.

Mr. Orleans asked why the Mobility Manager position wasn't funded and will the Green Ridge House budget reflect the mortgage being paid off. Council stated that the reason the Mobility Manager wasn't funded was explained already. Mr. Williams stated the Green Ridge House budget is a stand-a-lone budget and the mortgage being paid off will be reflected in its separate budget.

Informational items were discussed.

The meeting ended at 10:13 p.m.

Respectfully submitted,

Shaniya Lashley-Mullen
Administrative Assistant

DRAFT

BUDGET WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, April 10, 2019, to discuss Public Safety, FY 2020 Proposed Budget.

Mayor Jordan started the meeting at 7:36 p.m. The meeting was held in the Recreation Center at Springhill Lake, 6101 Cherrywood Lane.

Present were: Councilmembers Colin A. Byrd, Judith F. Davis, Leta M. Mach, Silke I. Pope, Edward V. J. Putens (7:38 p.m.), Rodney M. Roberts and Mayor Emmett V. Jordan.

Staff present were: Nicole Ard, City Manager; Jeff Williams, City Treasurer; Chief Richard Bowers; Captain Gordon Pracht; Captain Mark Sagan; Lieutenant Seung Lee; Lieutenant Tim White; and Shaniya Lashley-Mullen, Administrative Assistant.

Also present were: Deputy Chief Gigiliotti, Greenbelt Volunteer Fire Department and Rescue Squad; Dr. Laura Kressler, Greenbelt's Citizens Emergency Response Team (CERT) & Greenbelt Community Animal Response Team (GCART); Bill Orleans and others.

Greenbelt Volunteer Fire Department and Rescue Squad (GVFDRS)

Deputy Chief Gigiliotti, Greenbelt Volunteer Fire Department and Rescue Squad (GVFDRS), stated they have two ambulances, one is the County's and the other belongs to the City.

Deputy Chief Gigiliotti reported on the roof replacement at the fire station.

Council then reviewed the GVFDRS section of the proposed budget.

Deputy Chief Gigiliotti answered Mr. Putens's question stating recruiting and keeping volunteers are hard everywhere. He stated that GVFDRS was having an open house/recruitment event on Saturday, April 13th.

Deputy Chief Gigiliotti answered Ms. Davis's question stating that the GVFDRS is still looking for volunteers for the paramedic program. Deputy Chief Gigiliotti explained that courses are expensive and once the EMT's complete the 180 hours, they would be looking for a job elsewhere.

There was discussion on the direct phone system being down, not 911.

Deputy Chief Gigiliotti and Council reviewed GVFDRS proposed capital improvement program projects.

Greenbelt's Citizens Emergency Response Team & Community Animal Response Team

Dr. Laura Kressler, Greenbelt's Citizens Emergency Response Team (CERT) & Greenbelt Community Animal Response Team (GCART), reviewed both CERT's and GCART's accomplishments over the past year. She stated she didn't have the Public Safety Advisory Committee (PSAC) budget to present. Mr. Williams advised CERT budget is $1,500, CART budget is $1,500 and PSAC budget is $900.

Ms. Davis requested membership lists for both GCART and CERT.

Police Department

Chief Bowers proposed to move one of the full time employees from communication to staff a new civilian property clerk position. Chief Bowers stated this move would allow for more sworn officers to provide law enforcement services.

There was discussion on switching from the city owned Computer Aided Dispatch (CAD) system to County's. Ms. Davis stated that a lot of money was spent on the current system. Lieutenant White stated the current CAD and Record Management System (RMS) is out dated and it would cost about $100,000 to get it updated. Lieutenant White advised it would be seamless for dispatch to receive calls for service from County and vice versa. It is a onetime fee of $45,000 and County would handle the training for the system. Captain Pracht stated all the current data that is in the current CAD/RMS would be transferred into the new system.

Captain Pracht provided updates on the increased police testing, increased outreach and thinking outside the box.

Chief Bowers answered Mr. Byrd's question stating that community relations and outreach is a community beat officer, having a personal relationship with his/her beat, getting out of his/her car and walking the neighborhood, building a relationship with the HOAs and attending their meetings.

There was a brief discussion of red light cameras, speed cameras, speed humps and raised crossed walks. Captain Pracht stated State Highway Administration (SHA) declined the city's request of putting back the two red light cameras and they will reevaluate for speed cameras. Mr. Byrd suggested more speed bumps on Ridge Road. Chief Bowers advised the speed bumps only slow traffic at that particular location and then drivers continue to speed. Mr. Roberts advised he has received complaints that a crossing sign with flashers needs to be placed on Hanover Parkway near Megan Lane. He stated that there is a path at that location where kids cross often.

There was a brief discussion on body worn cameras, data storage, cameras on weapons and dash cameras. Chief Bowers stated that for each additional video source the department has added to the price for storing data. Mr. Putens stated that adding cameras on weapons could eliminate body worn cameras. Ms. Davis said if the officer doesn't draw his weapon there wouldn't be any footage, so the department shouldn't eliminate body worn cameras.

Council then reviewed the Public Safety section of the proposed budget page by page.

Animal Control

There was a discussion that the City needed a bigger shelter. Ms. Touchet, Chairperson of WAGS (Well-Wishers for the Animals of the Greenbelt Shelter) and a volunteer at the Greenbelt Animal Shelter, stated the volunteers of the Greenbelt Animal Shelter contacted Public Works requesting new windows. She stated that the volunteers could raise the funds for the windows, but the volunteers have not gotten an actual answer except no. The current shelter has single pane windows, which makes it difficult to control the temperatures. The current shelter does not have a bathroom. Mayor Jordan suggested that Ms. Touchet follow up with the City Manager if her needs/concerns haven't been met. Ms. Touchet stated the Animal Shelter is under a new

Chain of Command and it will go well. Chief Bowers stated the shelter is small and quickly gets over-crowded. There isn't a physical place for the overflow of animals to go. Mr. Putens asked is the current space big enough to build a bigger shelter or does the City need to be looking at a different space.

Council then reviewed the Animal Control section of the proposed budget.

Informational items were discussed.

The meeting ended at 11:18 p.m.

Respectfully submitted,

Shaniya Lashley-Mullen
Administrative Assistant

DRAFT

BUDGET WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, May 1, 2019, to discuss the Planning & Community Development and Economic Development, FY 2020 Proposed Budget.

Mayor Jordan started the meeting at 7:32 p.m. The meeting was held in room 201 of the Greenbelt Community Center, 15 Crescent Road.

Present were: Councilmembers Colin A. Byrd, Judith F. Davis, Leta M. Mach, Edward V. J. Putens, Rodney M. Roberts (7:33pm) and Mayor Emmett V. Jordan. Councilmember Silke I. Pope was absent.

Staff present were: Nicole Ard, City Manager; David Moran, Assistant City Manager; Jeff Williams, City Treasurer; Terri Hruby, Director of Planning and Community Development; Gilberto Cabrera; Supervisory Inspector; Molly Porter, Community Planner; Charise Liggins, Economic Development Coordinator; and Shaniya Lashley-Mullen, Administrative Assistant.

Also present were: Kathleen Gallagher, Greenbelt News Review; John Campanile, Pedestrian and Bike Task Force; Bill Orleans and others.

Planning & Community Development

Ms. Hruby reviewed the Planning & Community Development accomplishments over the past year. She stated the department had hired two community planners. The administration staff handles the False Alarm Do Not Respond List which has had a reduction. The goal is to have the list at zero. Mr. Cabrera stated he has established a relationship with the State of Maryland Fire Marshal's Office and he is also a certified Fire Marshal. He stated the Franklin Park Apartments annual inspection is coming up and they will be inspecting up to 20% of the apartments.

Ms. Hruby stated that the department is currently working closely with the IT staff to generate in-field reports, violations and notices.

There was a brief discussion about Airbnb. Ms. Hruby advised she had requested a meeting with the County this summer. Ms. Hruby answered Mr. Putens's question, stating that the County is creating a system to identify and track all Airbnb locations. Ms. Hruby answered Mr. Roberts's question stating, in Prince George's County, only a primary owner/resident can have an Airbnb.

There was a brief discussion on the implementation of the Bus Stop Safety and Accessibility Study. Ms. Davis stated the bus stop at Greenway Shopping Center needed to be updated.

Ms. Hruby stated the Bike Share program has been delayed until spring of 2020 and the bike share location at the Greenbelt Metro has been approved.

There was a discussion on traffic calming measures. Mr. Roberts stated that more speed humps/bumps needed to be placed near the stop signs on Ridge Road. Mr. Byrd agreed with Mr. Roberts. There was concern about the driver familiarity and lack of success of the speed sensory devices. Ms. Ard stated that alternative devices have been purchased.

Ms. Hruby advised the Greenbelt Lake Dam project is scheduled to start after July 4th. Mayor

Jordan stated that public information needs to begin to alert the public when the project is going to start.

Council then reviewed the Planning & Community Development section of the proposed budget page by page.

Economic Development

Ms. Liggins reviewed the Economic Development accomplishments.

Ms. Davis stated that the Maryland Municipal League doesn't have an Economic Development Association. Mayor Jordan was going to bring it up at the next board meeting.

Mayor Jordan said that Ms. Liggins should engage Council when they are available because there is an interest in supporting and building relationships with members of the business community.

Ms. Liggins stated that she attended Maryland Economic Development Association (MEDA) training on "How the State of Maryland does Economic Development". She said there was a panel discussion from different economic development professionals and they said that economic development often follows the 80/20 rule; where 80% of the efforts are focused on business retention and 20% focused on attracting new businesses.

Ms. Liggins answered Mr. Byrd's question stating there are over 100 businesses in Greenbelt. There are tools that the City can use to know when a business lease is expiring.

There was a brief discussion on furthering and growing "One Greenbelt". Ms. Liggins stated that activities like the HUG Walk and programs at the Old Greenbelt Theater bring the community together. Mr. Byrd suggested the "Taste of Greenbelt". Ms. Davis stated the Roosevelt Center Merchants had a "bingo" themed activity where customers would go to the different businesses at Roosevelt Center.

There was a brief discussion on technical assistance programs. Ms. Liggins recommended workshops on how to start a new business and partner with Prince George's County. Ms. Liggins stated that Prince George's County has a lot of tools and workshops for developing new business and they would come out to municipalities to assist.

Ms. Liggins answered Mr. Orleans's question stating the Special Programs line item was a place holder in the Economic Development budget for various educational workshops, networking events and business coffees.

Ms. Liggins answered Mr. Orleans's question stating the cost of joining ICSC was $100 and the ICSC Conference booth space was $1000.00. She also stated that the annual membership for MEDA is $200.00 and the training and workshops costs vary. Ms. Hruby added the booth space was a shared cost with other municipalities and the County.

Council then reviewed the Economic Development section of the proposed budget.

Informational items were discussed.

The meeting ended at 10:56 p.m.

Respectfully submitted,

Shaniya Lashley-Mullen
Administrative Assistant

DRAFT

BUDGET WORK SESSION OF THE GREENBELT CITY COUNCIL held Wednesday, May 15, 2019, for undertaking a final review of the Proposed FY 2020 Budget.

Mayor Jordan started the meeting at 7:35 p.m. The meeting was held in room 201 of the Greenbelt Community Center.

Present were: Councilmembers Colin A. Byrd, Judith F. Davis, Leta M. Mach, Silke I. Pope Edward V. J. Putens, Rodney M. Roberts (7:44pm) and Mayor Emmett V. Jordan.

Staff present were: Nicole Ard, City Manager; David Moran, Assistant City Manager; Jeff Williams, City Treasurer; Terri Hruby, Director of Planning and Community Development; Brian Kim, Assistant Public Works Director; Dale Worley, Director of Information Technology; Richard Bowers, Chief of Police; Dr. Liz Park, Director of Greenbelt CARES; and Shaniya Lashley-Mullen, Administrative Assistant.

Also present were: Diane Oberg, Greenbelt News Review; Bill Orleans and others.

Ms. Ard provided an overview of the proposed FY 2020 budget. She stated the current proposed budget is $31 million dollars and is primarily funded by real estate taxes. Ms. Ard advised Council was presented with a proposed budget that meets Council's objectives and goals. There were challenges in terms of the current and long term funding needed to address some of the $4 million dollars of infrastructure needs. Ms. Ard stated the proposed budget includes a $0.015 (one and one half cent tax increase) which equals $338,000 in revenue. Ms. Ard also stated the following was included in the proposed FY 2020 budget: no new positions; health insurance; employee performance merit and cost of living increases; road resurfacing; sidewalk repairs; replacement vehicles, including police vehicles, a dump truck for public works and for a recreation cargo van.

Ms. Ard answered Ms. Mach's question stating that the homestead credit is in the budget as well as the rental credit and incentives for senior citizens. Mr. Williams stated the homestead credit is accounted in the negative revenues.

Council reviewed the following items, which Council Members had included on the list for further consideration during the budget work sessions.

Revenues

Annual Dog License Fee (400 licenses @ $5)	*$2,000*

Expenditures

1. Health Insurance Cost Reduction	*-142,000*
2. Increased Vehicle Fuel Cost	*25,000*
3. Fund FOGT request for lost revenue during closure (This is an estimate.)	*78,500*
4. Upgrade Springhill Lake Computer Lab laptops	*7,000*
5. Provide portraits for residents at Green Ridge House	*???*
6. Provide a grant to an immigrant organization to support Census 2020	*???*
7. Support a New Animal Control Facility (City)	*???*
8. Acquire and Implement Police Dash Cameras (first year)	*60,000*

(ongoing)	*35,000*
9. Acquire and Implement Police Weapons Cameras	*???*
10. Install additional Recycling Bins at Buddy Attick Park (Five Solar Big Belly Units)	*38,800*
11. Construct sidewalks on Eastway & Crescent Road	*???*
12. Approve Recognition Group Grants as Recommended by Review Panel or	*-4,450*
Increase Senior Softball $500 & Increase Soccer Alliance $1,300	*-3,150*
13. Increase Community Development Membership & Training	*5,000*
14. Fund the Shuttle Bus for the Labor Day Festival (Funds are included in the FY #2020 Budget)	*0*
15. Engineer and Install Traffic Calming Devices on Ridge Road	*???*
16. Fund Arts Advisory Board Request to Host Artist Receptions	*1,000*
17. Reduce Homeowner Investment Program Funding	*-5,000*
18. Renovate the Community Center Multi-Purpose Room Kitchen	*5,000*
19. Provide a Line Dancing Instructor at Green Ridge House	*???*

Mayor Jordan stated Paradyme Management would donate the computers at the Springhill Lake Recreation Center. Mayor Jordan requested Mr. Worley to follow up with Paradyme Management.

Ms. Mach, Ms. Pope, Mr. Williams and Mr. Putens agreed that the portraits for the residents at Green Ridge House should come out of the Green Ridge House budget.

There was a brief discussion on capital improvements at the police department. Chief Bowers stated the station needs renovation to add space for Animal Control, and a key card security system. He said the key card security system could be an expandable system that can be used at other buildings in the City. Chief Bowers stated that both projects would cost $60,000.

There was discussion on increasing the recognition group grants for the Senior Softball and Soccer Alliance. Ms. Pope stated the discount the Soccer Alliance receives is passed along to the Greenbelt residents and is in favor of increasing the grant to $4,500. Ms. Pope explained the Soccer Alliance received $3,800 last year and requested an additional $700 bringing their request to $4,500. Mr. Roberts agreed with Ms. Pope.

Mr. Moran answered Ms. Pope's question stating the City's donation to the Co-Op's Rays on the Roof campaign was coming out of the FY 2019 budget.

Council reviewed the three printed suggested proposals that Ms. Davis, Ms. Mach and Mr. Putens had submitted.

There was a discussion on the City's Reserves. Mayor Jordan proposed reducing the Fund Balance by 1% or .5%. Mr. Williams stated that a 1% reduction to the Fund Balance would be $311,000, and a .5% would be $156,000. Mayor Jordan suggested transferring the funds to another account. Mr. Williams advised transferring the funds into the Capital Projects Fund. Mr. Williams explained it would be expenditure to the General Fund and revenue for the Capital Projects Fund.

Council took a brief break at 9:22 pm and reconvened at 9:38 pm.

After the break, Council continued their discussion on the Reserves. Mr. Williams stated that transferring a half percent from the General Fund Balance in FY 2019 would allow Council to include the following projects in the FY 2020 Building Capital Reserve Fund, Reserve for Cameras at Schrom Hills Park ($30,000), Police Key Card ($30,000), Police Station Renovations ($30,000), and Multi-Purpose Room Kitchen ($5,000).

After considerable discussion, there was consensus to include the following changes to the proposed FY 2020 budget.

Proposed FY2020 Revenues	*$31,170,600*
Annual Dog Park Licenses	*3,000*
TOTAL Revenues	*$31,173,600*
Proposed FY 2020 Expenditures	*$31,170,600*
Health Insurance Savings	*-142,000*
Increased Vehicle Fuel Cost	*25,000*
Theater – Lost Revenue during Closure	*78,500*
Community Development Training	*5,000*
FPAB Science Fund	*2,000*
Panel Recommendation	*-4,500*
Increase Senior Softball	*500*
Arts Advisory Board	*1,000*
Increase Soccer Alliance	*2,000*
Multi-Purpose Room Kitchen – 5K	
Police Station Renovations – 30K	
Police Key Card – 30K	
Bike Racks	*1,000*
Reserve for Cameras at Schrom Hills Park -30K	
TOTAL Expenditures	*$31,139,100*
Difference	*34,500*

Informational items were discussed.

The meeting ended at 10:24 p.m.

Respectfully submitted,

Shaniya Lashley-Mullen
Administrative Assistant

DRAFT

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Molly Porter
Submitting Department:
Item Type: Board and Committee Reports
Agenda Section:

Subject:
GreenACES Report (Complete and Green Streets Policy)

Suggested Action:
It is recommended that Council accept this report.

Attachments:
GreenACES Report, Complete and Green Streets.pdf

Green ACES & Green Team comments on the presentation of the Complete and Green Streets Policy.

June 10, 2019

On February 26, 2019, Molly Porter from the Planning Department presented to Green ACES/Green Team the Complete and Green Streets Policy document.

Molly showed a PowerPoint describing Complete and Green Streets, the purpose of the policy, and the policy itself. The group discussed a number of issues, including whether the City wanted to, eventually, make all streets Green and Complete; and about safety, cutting of trees, PEPCO involvement in tree cutting, and whether wires could be buried.

Molly explained that technical implementation would be based on the latest available data and thus would be fluid and change over time as better practices and products became available.

All present Green ACES/Team members agreed with the policy that was presented and expressed a desire to review technical details as they became available and updated.

Thank you,

John Lippert

Chair, Green ACES / Green Team

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Molly Porter
Submitting Department:
Item Type: Board and Committee Reports
Agenda Section:

Subject:
Advisory Planning Board Report #2019-06 Cherrywood Lane Complete and Green Streets Retrofit Project

Suggested Action:
It is recommended that Council accept this report.

Attachments:
Cherrywood Lane 2019-06.pdf

ADVISORY PLANNING BOARD REPORT NO. 2019-06
REPORT TO COUNCIL June 27, 2019

SUBJECT: Cherrywood Lane Complete and Green Street Retrofit Project
Engineered Design Plans

BACKGROUND:

In 2017, the City was awarded grant funding from the Chesapeake Bay Trust (CBT) to undertake 90% engineering for Phase 1 of the subject project. Following an RFP process and an award of contract to Charles P Johnson and Associates (CPJ) the project is currently underway. A kickoff meeting was held on February 4, 2019 to finalize the scope of work with a timeline of completion in June 2019.

The project awarded to CPJ for Phase 1 takes the project from conceptual design recommendations to develop engineered designs, ready for construction. To accomplish this, the city was granted an award in the amount of $56,000, delivered through the CBT's Green Streets, Green Jobs, Green Towns Grant Program as part of a contract agreement signed July 5, 2017. It is understood that CBT has stipulated that grant monies must be spent by October 2019.

ANALYSIS:

A representative from Charles P Johnson Associates (CPJ) presented to the APB on June 19, 2019. It was noted that Phase One (1) now begins at Breezewood drive (to accommodate for other developer related projects) and ends at 350 feet south of the Greenbelt Metro Access Drive roundabout's center. Along with the coordination of City Staff, CPJ has been working on completion of the engineered designs and presented a near final project for the Advisory Planning Board (APB) for review.

COMMENTS:

Following the presentation, the board had several questions and discussed the Cherrywood Lane Project details. Comments from the meeting were as follows:

1) The Board strongly favors the installation of a protected bicycle lane for as much of the project area as possible. To this end, the Board favors the removal of the parking spaces on the east side of Cherrywood Lane near the Springhill Lake Recreation Center allowing for the adequate width needed to install a barrier, such as a bio-swale or grass channel, between cars and bicyclists on the west side of the street.
2) Some of the members of the Board expressed concerns regarding the installation of street trees, including the possibility of reduced visibility due to the trees. This concern, however, was not unanimous and other Board members felt that the inclusion of trees was adequately addressed by the technical recommendations of the contractor.
3) Inquired about the possibility of having public art/art installation in order to improve the visual appearance of the streetscape

Respectfully submitted,
Keith Chernikoff
Chair

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department:
Item Type: MEETINGS
Agenda Section:

Subject:
Arts Advisory Board Report #20-1

Suggested Action:
It is recommended that Council accept this report and consider at the next meeting.

Attachments:
AAB 20-1 Banners.pdf

Greenbelt Arts Advisory Board Report 20-1
To the City Council of the City of Greenbelt
July 1, 2019

Subject: Councilman Colin Byrd's request that the Arts Advisory Board provide recommendations to the Greenbelt City Council on whether to partner with local artists to design and add placemaking banners to lamp posts and if so, ways to do so.

The Arts Advisory Board discussion of Mr. Byrd's request took place at its meetings held October 2nd, informally on November 13th and then again on December 4th, 2018. AAB discussed a variety of approaches to the possible selection of artwork, including commissions from individual artists and/or the commissioning of a graphic designer to work with neighborhood residents who may or may not be artists themselves. The difficulty the AAB has encountered in responding to this request comes from answering the "why" question regarding the creation of banners. Absent clear direction and purpose for the banners, we feel at a loss as to what exactly we would be asking local artists or a graphic designer to create. Not only is the AAB being requested to give artistic input in the creation of the proposed banners, we feel we are also being implicitly requested to justify the potential project, which is something we do not feel qualified to do.

However, the AAB is making the following recommendation regarding the council referral. In theory, we feel that the best use of banners would be to visually unify three areas of Greenbelt to make them identifiable as part of the city of Greenbelt while at the same time celebrating the diversity each neighborhood represents. The number of metal light poles available for the installation of banners varies significantly from one area to the next, though, which causes AAB to question whether banners are actually the most equitable strategy for recognizing and unifying Greenbelt neighborhoods. An alternative suggestion would be the creation of painted intersections.

Should banners be created, they should be uniform in font, wording and style with the variations coming from the image content provided by local artists and/or a graphic designer. AAB would recommend that each banner be unique, so as not to expect any one image to adequately represent the identity of a neighborhood.

One of our considerations is the cost of the design, creation and installation of banners. Where will the funding for the project come from? AAB recommends that participating artists and designers should be compensated for the use of their artwork. With respect to production, a preliminary cost estimate of $129 per banner was obtained from signs.com for unique, 18" X 42" color banners with installation hardware. It is of concern to the AAB that money would be be diverted from other arts funding and if that would be the case, we don't feel that defunding current projects or organizations in order to create banners would be appropriate.

The artwork represented on the banners may be multimedia in nature since each piece will need to be photographed and it is the photographic image of the artwork that will be used for the banner and not the art itself. There could be an art showing of the original pieces in the Greenbelt Municipal Building in conjunction with the installation of the banners. The art show could help

to highlight the artists whose work was used as well as how they visually celebrate the diversity of the neighborhoods in Greenbelt.

Thank you for this referral to the Arts Advisory Board. I hope that our input on the idea of banner creation in the city of Greenbelt is useful.

Respectfully Submitted,

Mark Granfors-Hunt, Chair
Arts Advisory Board

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
Forest Preserve Advisory Board - Report #2019-02

Suggested Action:
It is recommended that Council accept this report and consider at the next meeting.

Attachments:
FPAB_ReportToCouncil_2019_02_StewardshipGuidelines.pdf

GreenbeltForestPreserveStewardshipGuidelines2019-FinalForCouncil.pdf

FOREST PRESERVE ADVISORY BOARD Report No. 2019-02
REPORT TO COUNCIL

SUBJECT: Comprehensive revision and update to the Forest Preserve Management and Maintenance Guidelines

DATE: June 27, 2019

BACKGROUND: Council tasked the Forest Preserve Advisory Board with reviewing and revising the Management and Maintenance Guidelines during the November 24, 2014 City Council meeting. The Board has undertaken this task over the past four years.

DISCUSSION: FPAB has revised and updated the original Management and Maintenance Guidelines. Many sections have been rewritten, and new sections have been added. FPAB has renamed the guidelines as "Stewardship Guidelines" to reflect a new philosophy of forest management. This philosophy acknowledges that change and disturbance are natural processes, but that human activity can cause changes that can distress an otherwise healthy ecosystem. Stewardship acknowledges that changes to the forest should be assessed and addressed to preserve healthy functioning of the forest ecosystem. This philosophy informs the entire document, but specifically the updates to the Trails, Disturbances, and Invasive Species sections, and the new Wetlands section.

FPAB made limited use of the recommendations and edits to the guidelines that were provided to City Council in *Volume II (Goals and Recommendation)* of the *Forest Health Assessment Report* by A. Morton Thomas Inc. (AMT), but relied most heavily on the expertise of the board members throughout the revision process.

These new stewardship guidelines represent the work of the existing advisory board: Bryan Bruns, Valerie Elliott, Susan Gregersen, Donna Hoffmeister, Leeann Irwin, Owen Kelley, Damien Ossi, and John Paul Schmit, under the leadership of former chair Valerie Elliott and current co-chairs Donna Hoffmeister and Damien Ossi. It also represents the work of several former members who have since rotated off of the board: Jason Martin, Annie Montes, Joseph Murray, and Lauren Young, and the guidance and input of several staff liaisons: Celia Craze, Erin Josephitis, Terry Hruby, and Jason Martin.

RECOMMENDATION: FPAB asks Council to accept this report, publicize these new draft guidelines, and schedule a work session to discuss them with FPAB and the public. When the guidelines have been reviewed by Council, FPAB recommends that the City employ a technical/copy/style editor to review the guidelines. Like the original Management and Maintenance Guidelines these new Stewardship Guidelines have been authored by many people, and a fresh look from an outside editor can unify the language and style and may find discrepancies or contradictions that have been missed.

ATTACHMENT: Forest Preserve Stewardship Guidelines (52 pages).

CITY OF GREENBELT, MARYLAND

FOREST PRESERVE

STEWARDSHIP GUIDELINES

2019

Executive Summary

The Greenbelt Forest Preserve is 183 acres of forested land that are protected and conserved in their existing natural state, for the use and enjoyment of present and future generations. The Forest Preserve serves a vital function by providing a link between residents of the city and nature. The Forest Preserve is part of Greenbelt's cultural identity, its ambiance and sense of place. It adds to Greenbelt's air and water quality and ultimately, by reducing storm water runoff, improves the quality of the Chesapeake Bay. By providing a form of passive recreation, it contributes to the health and wellness of Greenbelt residents. The Guidelines aim to expand on Greenbelt's historic legacy by suggesting ways to protect the Forest Preserve and its wildlife in a natural state to the maximum extent practicable.

On October 27, 2003, the City of Greenbelt passed legislation to designate these lands as a "Forest Preserve" (Ordinance No. 1243). Subsequently, a task force of citizens was formed to write the *Management and Maintenance Guidelines,* which were adopted by the City in 2007. This current document revises the *Management and Maintenance Guidelines*, expanding and clarifying the care needed for the Forest Preserve. In updating the guidelines, the Forest Preserve Advisory Board adopted a new title *Stewardship Guidelines* to reflect a more active approach for protecting and conserving this dynamic ecosystem.

When the federal government established the town of Greenbelt in the 1930s the city planners intended the land around the town to be a "belt of green." Greenbelt was designed as a "Garden City," a residential area surrounded by forests, community gardens, recreational facilities, farms, and other green space. This green space would provide health benefits to residents as well as protection from encroachment by nearby development that was out-of-character with the town's design. As the decades passed, parts of the "belt of green" were sold, developed, and repurchased, resulting in the loss of much of the original forest.

These *Stewardship Guidelines* are detailed and multifaceted, to cover a wide range of events, activities and uses of the forest that could have impacts on the health of the ecosystem. Residents of Greenbelt are encouraged to enjoy the Forest Preserve and explore it passively. People are encouraged to walk on designated trails. These guidelines exist so that the impact of human activity on the ecosystem is kept to a minimum. Many activities, such as lighting fires, hunting, camping, building structures and disposing of litter, are not permitted. The city code describes these in detail. Both natural events and anthropogenic activities can impact the quality of the air, land and water, as well as the health of the plants, animals and microscopic organisms. These

guidelines cover ecosystem health, trails, invasive species, disturbance, wetlands, non-conforming uses, litter cleanup, special events, and enforcement. All of these topics have been carefully reviewed and revised to create this update to the original 2007 guidelines.

- **Ecosystem Health**: The chapter on ecosystem health discusses how to determine if a forest ecosystem is healthy and functioning, and describes strategies for improving the health of the Preserve.
- **Trails**: The section on trails discusses the existing primitive informal trails and proposes a Master Trails Plan. This plan would create a designated trail system in the Preserve and describe the type and intensity of trail maintenance that should occur in order to maintain ecological health in each area. These guidelines stipulate that in all instances the City will maintain the trails to the minimal extent possible.
- **Invasive Species**: The chapter establishes a process to evaluate the impacts of invasive species in the preserve and a strategy to reduce their impacts on the forest ecosystem in a manner that will minimize disturbance caused by invasive species management. The principles of Integrated Pest Management shall be used in all planning for invasive species management.
- **Disturbance**: The disturbance section describes natural and anthropogenic disturbances in the Preserve, and establishes a method for the Board to assess and address various types of disturbance.
- **Wetlands**: This chapter describes wetlands and provides details about the location and condition of streams and wetlands in various Preserve tracts. It also describes threats to wetland and stream health and methods for assessing their health along with possible stewardship remediation.
- **Specially Managed Areas**: The parcels that make up the Preserve include non-forested areas that have been set aside for other uses. The specially managed areas section addresses these areas, as well as impacts to the Preserve from activities and uses on adjacent land.
- **Cleanup, Enforcement and Special Events**: This final chapter discusses litter and debris cleanup, the permitting process and the management of special events, prohibited activities within the Preserve and their enforcement.
- **Glossary**
- **Appendix A**: A copy of Greenbelt City Code pertaining to the Preserve, Article IX, Sec. 12-150 to 12-163 is included as Appendix A

Typically, the hallmark sign of ecosystem health is the presence of a wide diversity of organisms, living in a harmonious community. These guidelines seek to improve—or at a minimum, to maintain—the ecosystem health and biodiversity in the Preserve, while also allowing compatible recreation.

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Chapter One

HISTORY AND OVERVIEW

1.1. History

In the 1930s, the federal government established the town of Greenbelt as a New Deal era experiment in suburban planning. City planners envisioned that residential areas would be surrounded in perpetuity by what they called a "belt of green" that was to contain forests, community gardens, recreational facilities, farms, and other green space. Planners believed that green space immediately adjacent to residential areas would provide health benefits to residents. Planners also expected the belt to protect the town from encroachment by nearby development that was out-of-character with the town's design. New Deal planners cited as one of their inspirations the "Garden City" design of Ebenezer Howard, which called for a 5,000-acre belt of green around a 1,000-acre developed area. The cooperative housing of the New Deal era and the rest of what is now called "Old Greenbelt" occupies approximately 1,000 acres, but only a small portion of the surrounding 5,000 acres is still green space.[1]

The tracts of the present-day Forest Preserve are among the portions of the town's original "belt of green" that still exist. Elsewhere in town, the southern portion of the belt of green was safeguarded, when approximately 1,000 acres were transferred to the National Park Service in 1950 to create Greenbelt Park. New Deal planners intended the thousands of acres of green space in the Beltsville Agricultural Research Center (BARC) to permanently protect Greenbelt from encroachment from the north. To the west of the original cooperative housing, a partial "belt of green" exists today as Buddy Attick Park and the Belle Point Tract and Boxwood Tract of the Forest Preserve.

The surviving portion of the belt of green that lies immediately to the east of Greenbelt's original cooperative housing is made up of the two largest tracts of the present-day Forest Preserve plus a smaller area of woodlands owned by Greenbelt Homes Inc. (GHI). The precursor to GHI purchased all of this land from the federal government in December, 1952.[2] GHI soon sold much of this land to developers. Nothing was built on the land that would eventually become the North Woods and Hamilton Woods Tracts of the Forest Preserve because the county repeatedly denied the developers' petitions to have the land rezoned for high-density development in the 1960s and 1980s. Over the

[1] Ebenezer Howard, 1902: *Garden Cities of Tomorrow*, Swan Sonnenschein, 167 pp, available online at https://books.google.com/books?id=jVJUAAAAMAAJ ; Resettlement Administration, September 1936: *Greenbelt Towns*, USDA, 32 pp, available online at https://archive.org/ details/greenbelttowns1936unit ; Cedric Larsen, 1938 August: Greenbelt, Maryland: A Federally Planned Community, *National Municipal Review*, pp. 413-420, available online at http://onlinelibrary.wiley.com/doi/ 10.1002/ncr.4110270806.epdf.

[2] Maryland Land Records, Liber 1568, Folio 199-233, 31 Dec 1952; Plats.net, Map C2482-185, Dec 1952.

years, Greenbelt residents and the city government became increasingly interested in preserving this green space, culminating in the 1990 purchase of what was then known as Parcel 1.

Following the purchase of Parcel 1, the City sought to protect the forest ecosystem in this corner of town. After considering public land trusts, private land trusts, easements, and county zoning overlays, the City determined that the best mechanism for protecting the forest would be to establish a Forest Preserve program. In 2003, the City Council modified the City Code to establish the Forest Preserve as city-owned land distinct in purpose from the town's parks, picnic grounds, and sport fields. In 2003, the City Council also formed a citizen task force to write management guidelines. In 2007, the council created the Forest Preserve Advisory Board. As is the case with the Greenbelt Forest Preserve, the term "forest preserve" generally refers to an area where the primary goal is to allow a healthy ecosystem to persist rather than altering the ecosystem to accommodate recreation or resource extraction.

In 2015, the City Council hired A. Morton Thomas and Associates to assess the health of the North Woods and Hamilton Woods Tracts of the Forest Preserve. In light of this study, the Forest Preserve Advisory Board proposed a number of revisions to the management and maintenance guidelines in 2019, including that the guidelines be renamed "Stewardship Guidelines." The motivation for using the word "stewardship" is that the forest is a living system to be watched over and protected, not a machine to be maintained. The intent of these guidelines is that Greenbelt residents will participate in the stewardship of the forest, while the City Council and the Forest Preserve Advisory Board play well-defined stewardship roles as well.

1.2. Stewardship Philosophy

The primary goal of this document is to guide the preservation of the Forest Preserve areas and the wildlife habitats within their boundaries. The first concern for citizens is the stewardship of the Forest Preserve—to protect and conserve the land in a natural state. Change occurs through natural processes in every forest and, in most forests, through human activity that occurs either inside or outside of the forest boundary. Such changes may indicate a healthy ecosystem or distressed one. The Forest Preserve Advisory Board will assist the City in determining what observed changes are acceptable and what changes should be addressed to preserve the healthy functioning of the forest ecosystem.

Secondary goals of this document are to guide and allow for public education, passive recreation, and activities that improve the aesthetics within the preserve. These secondary goals should be embraced to the maximum extent practicable, consistent with wise stewardship and conservation of the forest ecosystem. In terms of education,

the Forest Preserve Advisory Board may host a table at one of the town's various public-information days or submit letters or articles to the Greenbelt News Review about seasonal features of the forest or threats to the forest. Passive recreation refers to walking or jogging through the forest or to studying the flora and fauna to the extent that such activities do not harm the ecosystem. The Forest Preserve Advisory Board and other organizations may host free, public hikes with an ecological or education theme, subject to the permitting provisions stated in these Guidelines. Aesthetics refers to the desire that the forest appear to be a wild place free from structures, refuse, or other man-made marks. In connection with the desire for an aesthetic experience within the Preserve, the Forest Preserve Advisory Board may invite the public to participate in trash clean-up events.

1.3. Enabling Legislation

The Forest Preserve and its administration is defined in the Greenbelt City Code, Section 12, Articles 8 and 9. The original legislation that defined the Forest Preserve is City Council Ordinance 1243, which was adopted on October 27, 2003.

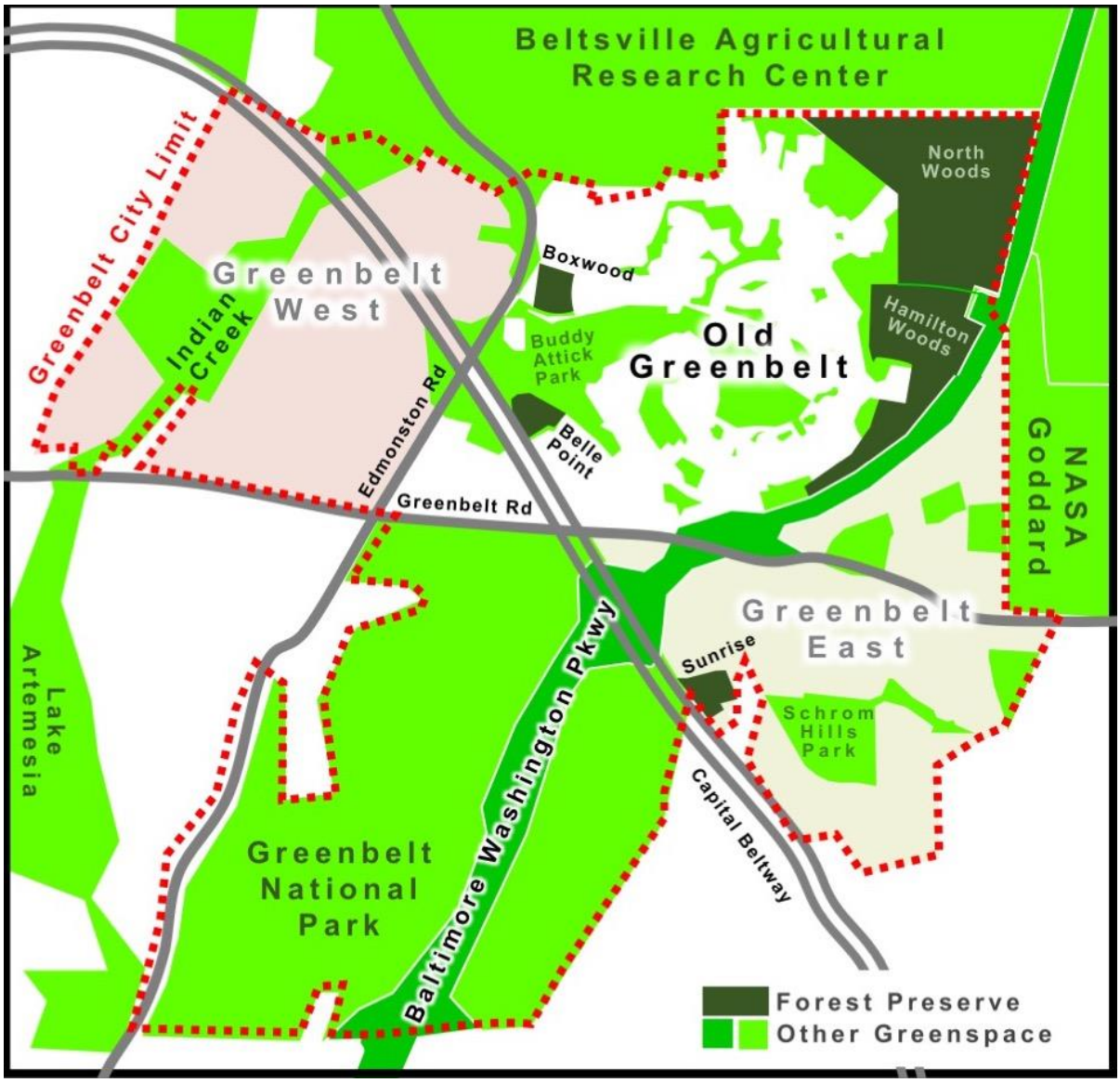
1.4. Description of the Forest Preserve

The Forest Preserve consists of five tracts shown on the following map. When the Forest Preserve was created in 2003, it originally contained only two tracts: the North Woods and the Hamilton Woods. In 2007, the Forest Preserve Task Force recommended that the City add four more tracts to the Forest Preserve, three of which were added: Boxwood, Belle Point, and Sunrise. The different ecological characteristics and surroundings of each tract influence the stewardship activities that are appropriate there.

1.4.1. North Woods Tract

Physical Description: The North Woods Tract consists of 145 acres. It is the largest tract in the Greenbelt Forest Preserve and contains more than half of the total acreage managed under the Forest Preserve program. The North Woods Tract lies immediately north of Northway Road, west of the Baltimore-Washington Parkway, south of the Beltsville Agricultural Research Center (BARC), and east of the woodlands owned by Greenbelt Homes, Inc. (GHI). The North Woods Tract lies north of the Northway athletic fields at the end of Northway Road. When the Forest Preserve was created, the city was in the process of constructing an astronomical observatory just north of Northway Road and the city had, for years, collected yard waste and generated mulch just north of Northway Road. While neither of these activities are consistent with

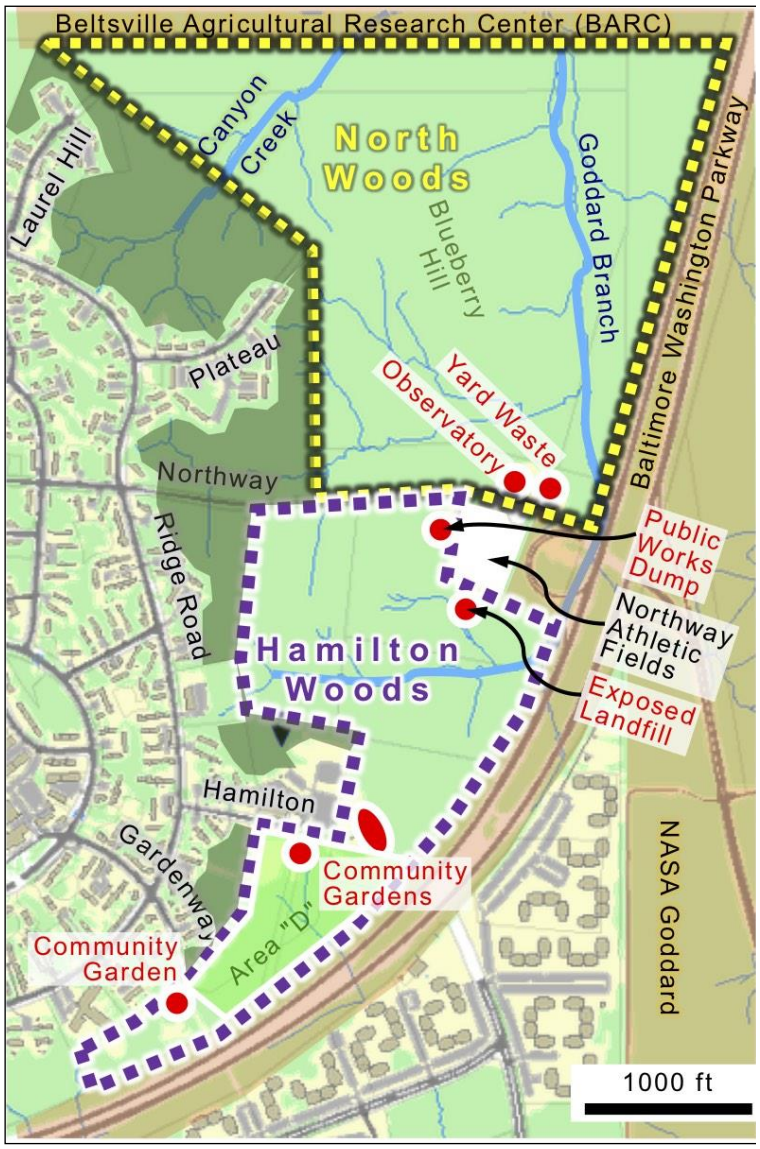
the intended purpose of the Forest Preserve, they were permitted as pre-existing uses of the land just within the southern boundary of the North Woods Tract of the Forest Preserve (See Map 2).



Map 1: A map of Greenbelt that shows the five tracts of the Forest Preserve in dark green, other public and private green space in light green (parks, athletic fields, forested acreage, etc.), and the town's boundaries with a red-dotted line.

Ecological Characteristics: Among all of the tracts in the Forest Preserve, the North Woods Tract contains the greatest diversity of species and habitats and is considered the most ecologically valuable. At its center is Blueberry Hill, which rises 100 feet above the Goddard Branch wetlands and Canyon Creek (See Map 2). The types of

habitats within the North Woods Tract include floodplain, cove forest, seep, vernal pools, upland oak-hickory forest, and heath forest. The North Woods Tract also contains a considerable area that is suitable for species that dwell preferentially in forest interiors, a feature of the North Woods that is enhanced because it is adjacent to extensive forest within the Beltsville Agricultural Research Center (BARC) of the U.S. Department of Agriculture.



Map 2: North Woods and Hamilton Woods Tracts, showing their boundaries and non-conforming areas within them. Forest cover, streams, buildings, and pavement from pgatlas.com.

History: A number of tulip poplars, oaks, and red maples have grown to considerable girth in the North Woods tract, suggesting that some of these trees may have been growing already before Greenbelt was founded in 1937. Maryland Land Records trace the North Woods tract to three parcels of land known as Green Spring (on present-day Blueberry Hill), Poplar Thicket (north and west of Blueberry Hill), and Parcel Enlarged (along the east bank of Goddard Branch). The North Woods Tract and Hamilton Woods Tract are a remnant of the eastern portion of the "belt of green" that originally surrounded Old Greenbelt in 1937.

Stewardship: The North Woods Tract shall be managed in such a way as to promote its ecosystem health to the maximum possible extent. Improvements should only be permitted when they are necessary to maintain ecosystem health.

1.4.2. Hamilton Woods Tract

Physical Description: The Hamilton Woods Tract consists of 81 acres, making it the second largest tract in the Forest Preserve. The Hamilton Woods Tract has also been called the "South Woods" because it lies immediately south of the North Woods Tract. The Hamilton Woods Tract includes land that is bounded by the Baltimore-Washington Parkway and by GHI woodlands. The narrowness of the southern portion of the Hamilton Woods Tract results in noise pollution from the Baltimore Washington Parkway impacting visitor experience.

Ecological Characteristics: The Hamilton Woods Tract contains stream and upland-forest habitats. The tract is almost entirely forested. One exception is the clearing along the western edge of Northway Athletic Fields where the Public Works Department maintains a road-tailings pile, fill-dirt pile, and large-timber pile adjacent to and possibly within the Hamilton Woods Tract. Public works also keeps a buffer zone free of trees around the community gardens that are located within the Hamilton Woods Tract. The three garden areas are located beyond the end of Hamilton Place, opposite the GHI office building, and near Gardenway Road. Along the northern boundary of the Hamilton Woods Tract and just south of Northway Athletic Fields, a known hazard is the scrap metal and other large, non-biodegradable trash items that have been scattered over several acres. This hazard has existed for a number of decades.

History: The Hamilton family owned this land from the mid-1700s to the mid-1800s. Since the late 1930s, community gardens have existed at approximately their present-day locations within the Hamilton Woods Tract. Community gardens in roughly this area were part of the original New Deal era design for Greenbelt. Since the creation of the Forest Preserve, the northern portion of the Hamilton Woods Tract has often been used for the annual pumpkin walk. Greenbelt's volunteer-run pumpkin walk was originally envisioned as a way to introduce residents to Greenbelt's forests in 1988 during the campaign to have the city purchase Parcel 1 at the heart of the North Woods Tract. While the North Woods and northern portion of the Hamilton Woods have for decades contained an informal network of trails, the southern portion of the Hamilton Woods Tract currently lacks clear trails. FPAB takes the lack of informal trails as evidence that hikers visit this area less often than other areas of the Forest Preserve.

Stewardship:

1. FPAB may recommend removing the exposed landfill refuse in the northern portion of the Hamilton Woods if a way could be found to do so without causing unacceptable disturbance to the forest ecosystem.

2. FPAB is monitoring the Public Works road-tailings and other piles of material within the eastern edge of the Hamilton Woods Tract next to Northway Athletic Fields.

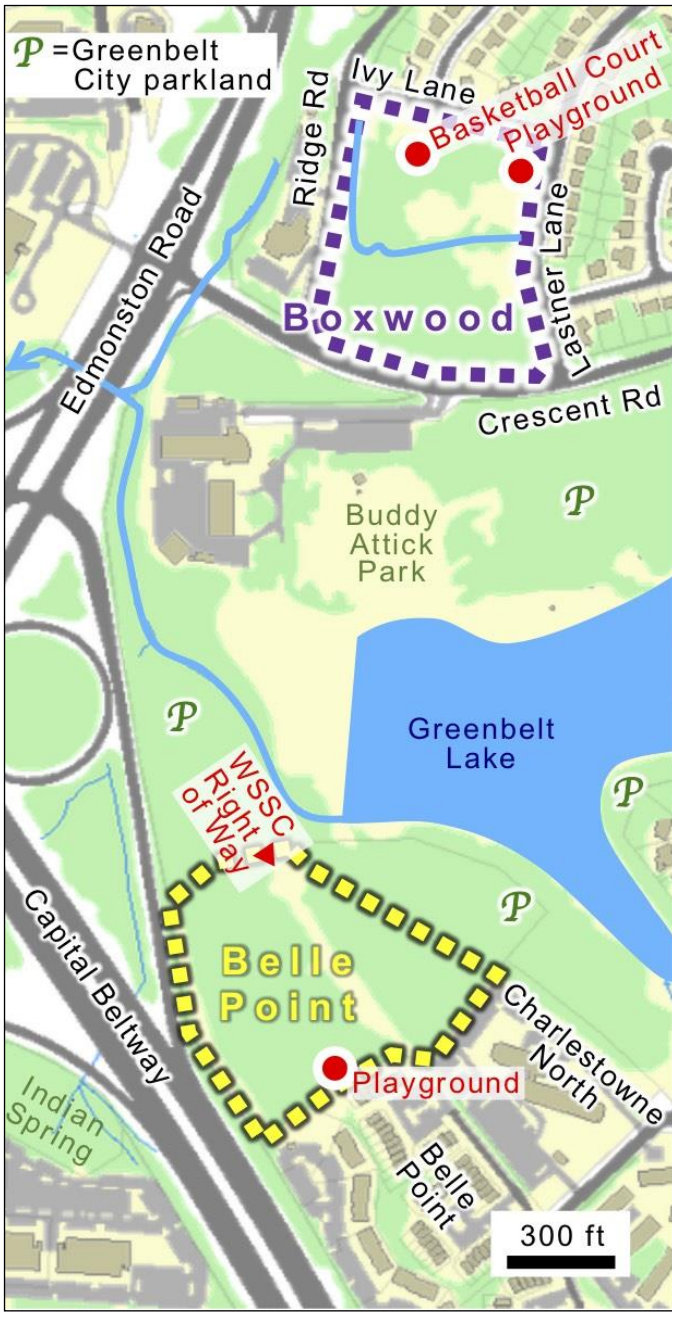
FPAB will recommend remedial action if such use were expanded or was deemed likely to cause harm to the adjacent, forested portion of the Hamilton Woods Tract.

1.4.3. Boxwood Tract

Physical Description: The Boxwood Tract consists of 8.8 acres located north of Greenbelt Lake and across the street from the main entrance to Buddy Attick Park. The Boxwood Tract is bounded by Crescent Road, Lastner Lane, Ivy Lane, and Ridge Road. The tract contains approximately two acres of mowed lawn, a playground, and a small basketball court, all of which pre-date the creation of the Forest Preserve program and are excluded by City Code from Forest Preserve regulations. These features are shown on Map 3.

Ecological Characteristics: The Boxwood Tract is mostly wooded but includes approximately two acres of fields that are regularly mowed by Greenbelt Public Works. A stream flows through the middle of the Boxwood Tract, from east to west.

History: The Boxwood Tract is named after the Boxwood subdivision of Greenbelt that was built during the 1960s. The City of Greenbelt acquired this tract in March, 1970.[3] Along with the parkland around Greenbelt Lake, the Boxwood and Belle Point Tracts are



Map 3: Boxwood and Belle Point Tracts, showing their boundaries and non-conforming areas within them. Forest cover, streams, buildings, and pavement from pgatlas.com.

[3] Maryland Land Records, Liber 3813, Folio 470

remnants of the western portion of the "belt of green" that originally surrounded the residential areas of Old Greenbelt. The Boxwood Tract was added to the Forest Preserve following the recommendation of the Forest Preserve Task Force in 2007.

Stewardship: The aesthetic value of the stream could be improved by removal of debris.

1.4.4. Belle Point Tract

Physical Description: The Belle Point Tract consists of 10 acres. It is immediately south of the parkland that surrounds Greenbelt Lake and lies north of the 495 Capital Beltway (Map 3). Within the tract, there is a small playground for the adjacent Belle Point Subdivision. The Washington Suburban and Sanitary Commission (WSSC) maintains a non-forested strip that passes through the Belle Point Tract to provide WSSC access to the underlying water main.

Ecological Characteristics: The tract is forested other than the clearing associated with the WSSC right of way.

History: During the construction of Greenbelt (1935-1937), federal relief workers cleared a path from Greenbelt Lake through the Belle Point Tract heading southwest to Indian Springs. The path was a popular one during the early years of Greenbelt, as residents walked from the residential areas of Old Greenbelt to Indian Springs, where many arrowheads were found. The construction of the Capital Beltway in the 1960s isolated Indian Springs from the Belle Point Tract and the rest of the forested area around Greenbelt Lake. The Belle Point Tract is named after the adjacent Belle Point subdivision and was acquired by the City of Greenbelt in November of 1987.[4] The Belle Point Tract was added to the Forest Preserve following the recommendation of the Forest Preserve Task Force in 2007.

Stewardship: Currently, there are no long-term stewardship concerns specific to the Belle Point Tract.

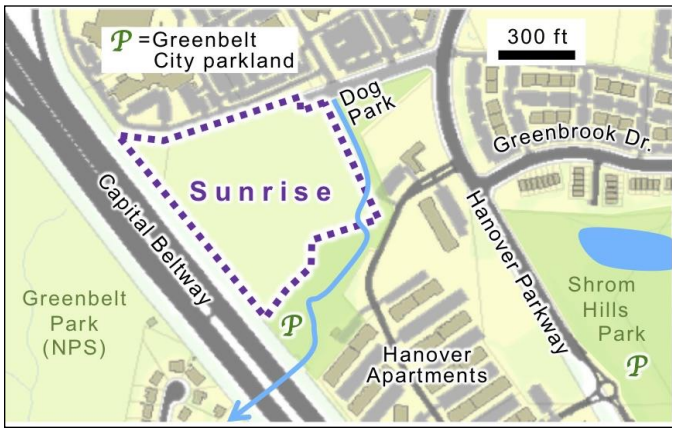
1.4.5. Sunrise Tract

Physical Description: The Sunrise Tract consists of 10 acres. It is located immediately to the east of the Capital Beltway, north of Hanover Apartments, west of Hanover Parkway, and immediately west of the Greenbelt Dog Park (See Map 4).

Ecological Characteristics: The Sunrise Track is entirely forested. A stream flows just outside the Sunrise Tract's eastern and southern boundary and within a strip of land that is owned by the City of Greenbelt. This stream flows west into Still Creek in Greenbelt Park, a tributary to the Anacostia River.

[4] Maryland Land Records, Liber 6833, Folio 779

History: In 1991, the City worked to prevent the Sunrise Development Corporation from constructing high-rise buildings on this tract. As a result of negotiations related to the construction of a nearby post office, the City purchased the Sunrise Tract using Program Open Space Funds in October, 2004.[5] The Sunrise Tract was added to the Forest Preserve following the recommendation of the Forest Preserve Task Force in 2007.



Map 4: Sunrise tract, basemap from PGatlas.com.

Stewardship: Several large dumpsters surround the northwest access point for the Sunrise Tract, which leads to littering and the dumping of large items in the Forest Preserve. A wooden fence to replace the broken plastic one might enhance the aesthetics of the property and a regulatory sign might mitigate dumping. The stream along the eastern and southern boundary of the Sunrise Tract that contributes to Still Creek collects trash and needs protection.

[5] Greenbelt *News Review*, 14 Feb 1991; 12 June, 2003; 14 June 2007; Maryland Land Records, Liber 20449, Folio 716.

Chapter Two

ECOSYSTEM HEALTH

The goal of all management activities in the forest Preserve is to maintain and enhance ecosystem health. To accomplish this, it is necessary to assess the current ecosystem health of the Preserve, to determine threats and opportunities for enhancing its health and to select appropriate strategies.

2.1. What is Ecosystem Health?

“Ecosystem health” is a metaphor that uses our ideas of human health to describe the state of an ecosystem. Just as human health is complex, so too many factors make up ecosystem health. In general, a healthy ecosystem is one that is able to maintain its natural diversity, including the diversity of native species and habitats and the diversity of natural processes, such as succession, predation, competition and community dynamics. The closer an ecosystem is to having its natural suite of species and processes the healthier it is. This idea can also be applied to specific habitats in the ecosystem such as forest, stream, and wetland health.

Focusing on threats to the ecosystem is one method for assessing health. The wide variety of threats to the Preserve include air pollution, water pollution, excessive runoff from impervious surfaces, litter, and invasive exotic species, including exotic pests and pathogens that kill trees.

A second way to assess ecosystem health is to consider what is missing but which should be present in an ecosystem. For example, some large native predators would naturally be present in the Forest Preserve, but were eliminated many years ago. Similarly whole processes can be absent from an ecosystem. Fires naturally drive a cycle of disturbance and recovery in forest ecosystems and many forest trees have evolved to survive fires. However, due to the threat to life and property, fires have been suppressed, so this process no longer occurs naturally in the Forest Preserve.

It is important to keep in mind that not all changes are a threat to ecosystem health. Forests naturally undergo the processes of succession, where light loving trees that grow early in the life of a forest are replaced by more shade tolerant species. Virginia pine is an example of a common early successional tree species in the Forest Preserve that will naturally become rarer as time goes on. Similarly, as forests change, the species of animals that live there may naturally become more common or more rare.

2.2. Determining the Health of an Ecosystem

As there is no strict definition of ecosystem health, there is no simple method for measuring it. Instead there are a variety of ways to get insight into the state of the ecosystem. One common method is to conduct an inventory to determine the status of some aspect of the ecosystem. This could be an assessment of some threat to the Forest Preserve, such as determining where trash should be cleared or where new trails are being formed.

Inventories are often conducted to determine what species of plants and animals are found in an area. This sort of inventory is often carried out by a trained specialist or experienced amateur naturalist who is familiar with the species they are likely to find. The results of this type of inventory can identify areas where rare species that need extra protection are found and indicate the quality of the habitats in the Preserve. A newer type of inventory makes use of citizen science to study an area. Volunteers can download apps to their phones, such as eBird or iNaturalist, which will allow them to record when and where they have seen various species. This type of inventory is less structured than a formal study, but by harnessing the help of many volunteers it can provide information that would otherwise be unavailable.

A second type of study used to assess ecosystem health is a monitoring study. A monitoring study measures some aspect of ecosystem health – such as water quality or numbers and sizes of trees, in order to detect changes over time. By revealing trends in ecosystem health, monitoring can help managers set priorities and discover problems, before they become unmanageable. Because monitoring studies may extend over several years, they can require more financial commitment, planning and work than other types of studies.

Finally, from time to time it may be necessary to conduct an in depth study on a particular problem in the Forest Preserve. This can be particularly helpful if a problem has been identified but it is unclear what the preferred means of addressing it should be, such as determining how storm water runoff from the mulch pile effects the nearby stream.

2.3. Managing for Ecosystem Health

Preserving and enhancing ecosystem health should be a guiding principal for management of the Forest Preserve. While other parts of these management guidelines will specify actions to be taken, some general strategies and guidelines to achieve this are discussed below.

One of the simplest strategies is to identify and address conditions that are a threat to ecosystem health. In the context of the Forest Preserve these conditions could include areas being used as trash dumps, erosion along streams and trails, invasive species and a proliferation of trails in a sensitive habitat. Direct action can mitigate these threats and preserve the health of the Preserve.

A second strategy involves restoring species or processes which have been lost from the Forest Preserve. The lands of the Forest Preserve are too small to accommodate large predators, but it is possible that some native plants that could survive in the Preserve have been lost prior to the establishment of the Preserve when much of the area was farmed. In principal, if such a species was identified, it could be restored to the Preserve and enhance ecosystem health. Similarly, fires are a natural part of forest ecosystems, but are largely absent from the Preserve. A controlled burn could restore this process to the Preserve and could benefit species that are adapted to thrive after a fire.

A third strategy does not look to current problems, but rather tries to build resilience to future threats. Increasing urbanization, a changing climate and ongoing air pollution will likely impact the Preserve. Some actions may help maintain ecosystem health, despite these ongoing problems. These could include maintaining connections to adjacent forests to provide a better larger habitat for forest dwelling species or ensuring that streams continue to have canopy cover to prevent overheating during the summer months.

Regardless of the management strategy used, it is useful to consider the scale at which a problem should be solved. If there is litter in the Preserve or erosion along a trail, these issues can be addressed within the Preserve. Erosion due to runoff from neighboring properties would need to be addressed at a wider scale and management to mitigate the runoff may take place entirely outside of the Preserve. Effective management will likely require efforts at a variety of scales, and it will be helpful to enlist the help of neighboring property owners and other organizations to address these and related issues.

Finally, it is important to remember that management activities themselves carry the risk of causing harm to ecosystem health. For example, using broad application of an herbicide may control an infestation of an invasive plant, but it also has the potential to kill non-target species. Before any management activity takes place, there should be a careful consideration of both the risks and the benefits to ensure that the action truly promotes ecosystem health. In general, actions that address problems, when they are small, and actions that prevent problems from occurring are likely to have fewer harmful consequences. Once problems become larger, more drastic actions will need to be taken, which in turn have more potential for degrading some aspect of ecosystem health.

Chapter Three

TRAILS

3.1. Master Trails Plan

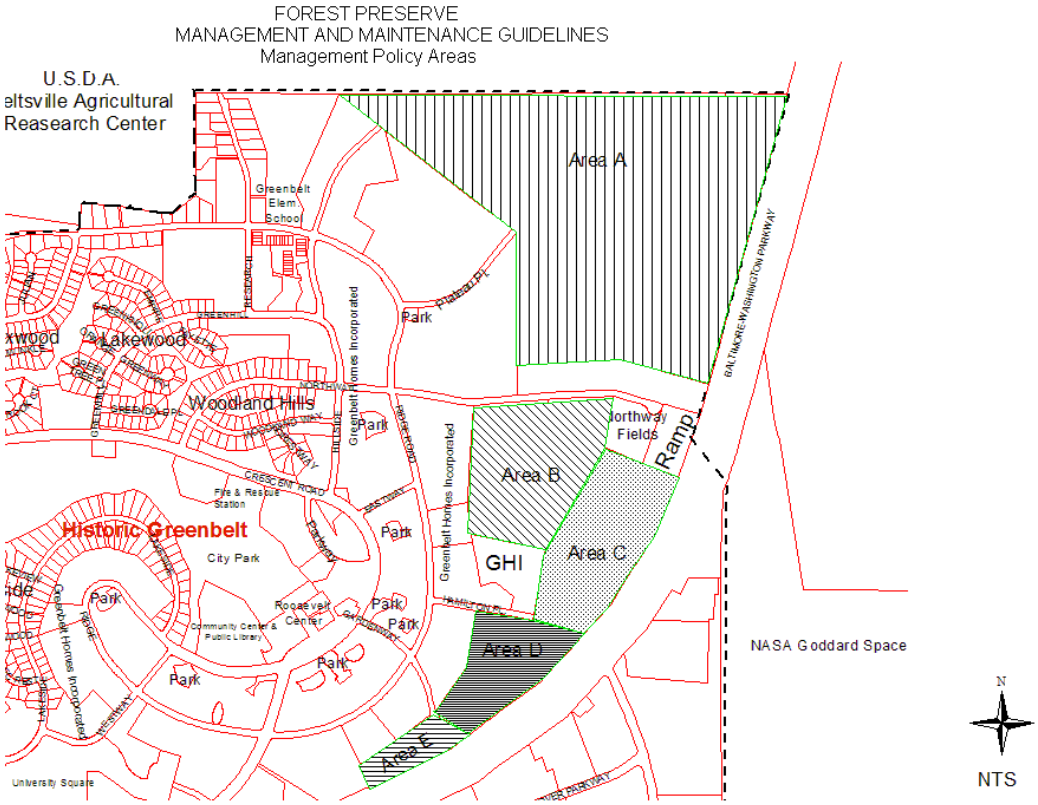
The largest tracts of the Forest Preserve have long attracted visitors, which resulted in an extensive network of trails in the North Woods and Hamilton Woods tracts. The original Forest Preserve Management and Maintenance Guidelines of 2007 acknowledged these trails, but did not designate official or sanctioned trails. Those guidelines describe “a primitive, informal trail system,” with the goal of minimizing the impact on the environment. But over time, adverse impacts have occurred. Members of the public have made new trails, rerouted old trails around obstacles and have undertaken impromptu trail maintenance with mixed results for the environment. This section details a new approach to trail management to promote good stewardship and encourage appropriate use of the Preserve.

Trails will be officially designated and maintained to protect the health of the Preserve, provide a variety of experiences to hikers and allow the city to discourage unofficial trails or maintenance activities. FPAB and City staff will create a Master Trails Plan that will designate and map the official trails in each parcel and describe the type and intensity of trail maintenance that should occur to preserve ecological health in each area. In all instances, the City will maintain the trails to the minimal extent possible. Designating a trail to be an official trail does not mean it will be marked by physical blazes. The Master Trails Plan will include an inventory of existing trails, sensitive areas, areas of misuse or environmental decline and stream crossings. It will denote those areas where public access may be restricted or existing trails closed. For instance, we would designate a trail on the west-side of Goddard Creek and leave the east-side without a designated trail in order to protect the wetlands. The Master Trails Plan will also indicate which trails are easy to use and barrier-free.

When issues arise, FPAB will consider and address the need for trail maintenance at specific locations. Such issues might include a newly fallen tree blocking a trail in an ecologically sensitive area, eroding trails or newly created trails. Maintenance activities on designated trails will minimize disturbance to the Preserve to the maximum extent practicable, while at the same time allowing the public to experience a large, forested area and participate in activities consistent with that type of experience.

3.2. Trail-specific Stewardship

The Preserve includes the North Woods, Hamilton Woods, Boxwood, Belle Point and Sunrise Tracts, each with its own ecological features. For Boxwood, Belle Point and Sunrise, refer to the maps in the Introduction. The North and Hamilton Woods Tracts consist of five distinct areas known as Areas A, B, C, D, and E as indicated in the diagram below.



3.2.1. North Woods Tract (Area A – Parcels 10, 12, 17, 19, 20)

The trails in the North Woods Tract are to be managed in such a way as to promote ecosystem health and minimize visitors' impacts on the forest. The visitor experience in the North Woods should be that of hiking through a natural environment with few, minimally maintained trails. Trail improvements or alterations would only be permitted, when they are necessary to maintain ecosystem health or pursue stewardship goals, such as if a bridge were needed to protect a steep stream bank or if fallen trees block the trail in sensitive habitats. There will be no permanent trail markings in the interior of the North Woods Tract. Special care needs to be taken to ensure that existing trails do

not damage wetlands.

3.2.2. Hamilton Woods Tract (Area B, Parcels 6, 7, 8; Area C, Parcels 8 & 9)

Trail management will support informal experiential and educational events and activities, such as the Pumpkin Walk, and allow temporary, non-destructive marking of trails for these events. The Master Trails Plan will designate a network of trails that maintain the existing access from the James Wolf Athletic Fields, Northway Road and GHI woodlands. The northern portion of Area C was once the site of a landfill. The presence of landfill materials in areas near existing trails may present a hazard to the public. The City might consider installing a barrier, such as a split rail fence, around the landfill to discourage public access. We discourage the use of chain link fences anywhere within the Preserve.

3.2.3. Hamilton Woods Tract (Area D, Part of Parcel 21)

This area is flat and has few streams or other crossings, making it the most suitable of all Preserve tracts for planning and managing an open access hiking area. Developing interpretive trails that are easy to use and barrier-free will make a portion of the Forest Preserve available to a larger segment of the public without threatening or compromising the character and quality of the Preserve as a whole. Trails that provide accessibility for citizens with mobility issues would need to comply with the 2013 Americans with Disabilities Act Accessibility Standards. Chapters 4 and 10 of 2013 ADA Standards stipulate surface, size and slope of accessible routes and trails.

3.2.4. Hamilton Woods Tract (Area E, Part of Parcel 21)

This area of the Forest Preserve from Gardenway to McDonald Field is relatively flat, non-wooded in places and heavily vegetated. The few existing, informal trails will be minimally managed in their current condition.

3.2.5 The Boxwood Tract (Parcel 7)

Boxwood Tract has a playground, picnic area and basketball court on the north side. There are a few social trails through the woods to the basketball court.

3.2.6. Belle Point Tract (Parcel 15)

The Belle Point Tract has a WSSC right-of-way that extends from the Belle Point subdivision to Buddy Attick Park along a wide, cleared area. Since Belle Point residents use this trail to access Buddy Attick Park, it needs to be kept clear of debris.

3.2.7. Sunrise Tract (Parcel A)

This heavily wooded area has no discernible trails. A managed trail here would provide recreational hiking to the Hanover Parkway neighborhood. A wooden fence and a

regulatory sign might bring recognition to this Preserve, while also discouraging extreme littering.

Chapter Four

INVASIVE SPECIES

4.1. Managing Invasive Species

Invasive species are recognized as a difficult and ongoing threat to wildlife and natural areas in North America, and many invasive species are well established in the Forest Preserve. An invasive species is defined as a species that is not native to the ecosystem under consideration and whose introduction has caused or is likely to cause economic harm, environmental harm, or harm to human health. It can be a plant, animal fungus or other organism. Conversely, a native species is any organism that existed in forest communities in the mid-Atlantic region prior to European colonization. The term invasive species has been used in gardening to describe any overly aggressive weed, but under the above definition, a native species can never be considered invasive. This includes native species that may grow in large impenetrable stands in the forest (e.g. greenbrier), as weeds in garden areas (e.g. Virginia creeper) or impact human health (e.g. poison ivy). Several species of invasive plants are common in parts of the Preserve, while invasive animals such as the emerald ash borer and invasive pathogens are likely present and may also impact the forest ecosystem. All invasive species may not merit management efforts within the Preserve, but all should be surveyed in any forest health assessments that are performed in the Preserve.

There are two significant factors that lead some non-native species to be invasive and have severe impacts on native species and natural communities. First, non-native organisms lack the typical predators, pathogens, and/or the inter-specific competition that they encounter in their native ecosystems. This lack can allow some non-native plants to outcompete native plants and allow some non-native animals to overbrowse, defoliate or otherwise kill native plants species that have not evolved defenses against them. Second, species that become invasive often have advantageous life history traits such as high seed productivity, vegetative reproduction, or allelopathy. Many invasive plants are colonizers of disturbed areas and bare soil. These species typically thrive in full sunlight, but others, such as garlic mustard, English ivy, and Japanese stiltgrass, can invade relatively undisturbed, closed-canopy, shaded forest habitats. Despite these advantages, not all non-native plants become invasive, but those that do will negatively affect native wildlife, plant communities, and ecosystems.

Invasive plants are considered one of the greatest threats to wildlife and wildlife habitat in Maryland. In urban and suburban areas where high quality wildlife habitats are often restricted to public lands, invasive plants reduce local biodiversity by overgrowing native plant communities. There are many lists of invasive species that are of concern in the region, and several lists have been prepared for the Preserve. There are significant

populations of multiforal rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), English ivy (*Hedera helix*), Japanese stiltgrass (*Microstegium viminum*), oriental bittersweet (*Celastrus orbiculatus*), and lesser celandine (*Ficaria verna*) in the Preserve.

Research is on-going on the efficacy and side effects of specific invasive-species remediation techniques. We will make use of up-to-date science with regard to invasive species in the Preserve. To the degree that there is lack of scientific consensus about a particular technique, we will factor in that uncertainty into the decision-making process.

This section establishes a specific set of guidelines that will be followed to evaluate and reduce the impacts of invasive species on the Preserve, while also minimizing the disturbance caused by invasive species management. These criteria will be used to determine the need for and the likelihood of successful management of those species and to set priorities based on site characteristics, location within the Preserve, site use, target species, and feasibility of control efforts. When management of a species or community of invasive plants in a given area is determined to be necessary, a plan specific to that site should be developed and a multi-year commitment made for the plan to be carried out. In preparing management plans, the FPAB, City Council, and city staff should adhere to the principles of adaptive Integrated Pest Management. At times, attempts to manage invasive plants without the necessary knowledge of plant biology and ecology, the proper management tools, and without sufficient long-term commitment and funding for control measures, can worsen existing environmental problems, leading to invasive species composition shifts, erosion, and further habitat loss. In these situations doing nothing is preferable to haphazard and inconsistent attempts at management.

4.2. Guidelines for managing invasive plants

1. Assess the scope and magnitude of invasive populations. The MD DNR and AMT reports contain inventories of invasive plants and recommendations of areas and plants that should be prioritized. These reports should be used as starting points for prioritizing and conducting location-specific invasive plant management inventories.

    a. FPAB members, qualified Greenbelt Public Works staff, or qualified volunteers may conduct inventories under the direction of FPAB.

    b. Inventories in sensitive habitats (bogs and seeps) shall be performed in a way that minimizes entry, disturbance and trampling in those locations.

2. Identify and prioritize target locations and species in this general order:

    (1) Areas with populations of emerging or less widespread invasive species should be given priority for management over areas invaded by more common invasive plant species. These are often referred to as “Early

detection/Rapid response" species. One example is wavyleaf basketgrass.

(2) Ecologically significant plant communities should be given high priority for protection from invasive species. For example, in the North Woods Tract, the areas known as Blueberry Hill and Canyon Creek are two areas with unique plant populations. Blueberry Hill is less disturbed than any other part of the Preserve, and contains a number of spring-fed boggy areas with rare plants. Canyon Creek contains similar boggy areas. In these cases prevention is easier than remediation.

(3) Areas with the fewest invasive species should have priority for management over those areas with the most.

(4) Large tracts of habitat with limited incursions by invasive species should have priority for management over smaller parcels with heavy infestations.

(5) Growth habit (e.g. vines growing on trees or pervasive groundcover)

(6) Generally, older forest stands should receive higher priority for invasive species management than younger stands.

(7) Small tracts and areas adjacent to residential property shall be the lowest priority.

3. Set goals

    a. The ultimate goal should be to minimize the impacts of invasive plants on the entire Preserve. Proximate goals must derive from the results of the inventory.

    b. Options and goals will vary based on:

        i. Scope, magnitude and species present in the infestation,

        ii. Proximity to existing disturbances that may impact the success of the management effort.

        iii. Resources and effort needed (ease of management)

        iv. Effectiveness of management options

        v. Growth habit

    c. Need for post-management restoration or planting

4. Assess and implement management options

    a. Management methods will follow the principles of Integrated Pest

Management, an adaptive approach that includes identification, monitoring, prevention, and a variety of control tactics. These tactics are:

i. Cultural control

    1. Prevention

    2. Education

    3. Early detection

ii. Mechanical control

    1. Pulling up, grubbing, or cutting, using hands, hand tools or power tools.

        a. Pulling is effective for garlic mustard (*Aliaria petiolata*), Japanese stiltgrass, Japanese honeysuckle (*Lonicera japonica*), small bush honeysuckles (*Lonicera* spp.), small populations of English ivy.

        b. Grubbing or digging is effective for multifloral rose, bush honeysuckle, Japanese barberry

        c. Cutting can be effective for arborized English ivy, large bush honeysuckles, oriental bittersweet and porcelainberry (*Ampelopsis brevipedunculata*).

iii. Chemical control

    1. Herbicide applications to species that do not respond to mechanical control. Many species will re-sprout if cut and not dug up, and mechanical control is not appropriate for some invasive plant species. For example, lesser celandine is a small herbaceous plant that grows in stream and river floodplains in early spring, where it out-competes native spring ephemeral wildflowers. This species is not controlled by cutting or mowing. Digging or grubbing this species can affect native plants and the native seed bank, and can spread the tiny bulblets and tubers that grow at or below the ground level.

    2. Avoid broadcast herbicide applications except where necessary. Woody invasive plants can be cut down and an herbicide applied to the stumps (cut stump application), or herbicides can be applied to notches cut into the bark at

regular intervals (hack-and-squirt).

iv. Biological control

1. Goats may eat enough leafy and wood plant material to control some species. This is a form of mechanical control, and must be regularly performed.

2. Few invasive plant species that are found in the Preserve have biological control organisms that are approved by the USDA.

3. There are some native fungi and viruses that may eventually provide natural control of some species present in the Preserve.

a. Rose rosette disease, which affects non-native roses (such as multiflora rose), is caused by a virus that is spread by a eriophyid mite.

b. Populations of Japanese stiltgrass can be affected by a *Bipolaris* fungus that is present in Pennsylvania and western Maryland.

b. Implement invasive plant management. Once management efforts are implemented in a given area, there must be a commitment to continued management at that site for an indefinite period of time, often many years in length.

i. Plant removal can be carried out by people and groups with a wide variety of skills, including:

1. Untrained volunteers led by experts

2. Trained volunteers operating independently with approval

3. City staff or other professionals

c. Implement restoration if necessary

i. Removal of invasive plant species without a plan for filling the void left by removal may result in reinvasion by the same or more aggressive invasive plant.

ii. Planting appropriate native trees, shrubs, grasses and forbs, that are locally derived (i.e., grown from wild stock from near Greenbelt) can fill empty areas after invasive plants are removed, especially

along forest edges.

5. Monitor and evaluate results, reassess management needs and options.

4.3. Other invasive species

Other invasive threats to the forest include pest animals and several types of pathogen. The most recent and destructive example of an animal pest is the emerald ash borer (*Agrilus planipennis*). This invasive Asian beetle was first discovered in Michigan in 2002 and in Maryland in 2006. It has since spread to nearly every state east of the Rocky Mouintains. The beetle's larvae live in and eat the living wood of ash trees under the bark. Once infested, a tree will typically die within two years. There was a large stand of green and pumpkin ash that supported a small colony of great blue heron nests along Beaverdam Creek in BARC just north of the Preserve, but those trees have now died and the nest colony abandoned. Other known, imminent insect pest threats to Maryland forests include the pine shoot beetle (*Tomicus piniperda*), spotted lanternfly (*Lycorma delicatula*), and the Asian longhorned beetle (*Anoplophora glabripennis*). Additionally there are invasive diseases that can impact trees in the Preserve. Thousand cankers disease is a disease complex native to the western United States that primarily affects black walnut. This disease is the result of the interactions between a fungus and the walnut twig beetle *Pityophthorus juglandis*. "Sudden oak death" is a disease caused by the pathogen *Phytophthora ramorum*. It kills oaks rapidly, but also affects woody plants that are common in the horticulture trade. Beech bark disease is a fungal disease that is introduced to American beech trees by scale insects that feed on the trees. These diseases are closely monitored by the Maryland Department of Agriculture and responses are coordinated at the federal and state level. The Preserve and other forested city property should be monitored periodically for the presence of these invasive species.

Chapter Five

DISTURBANCES

5.1. What is disturbance?

Disturbance is anything that causes a sudden disruption or pronounced change to an ecosystem. The spatial and temporal scale of a disturbance may vary due to its type or severity. For instance, a disturbance could disrupt a patch within a forest or the entire forest and the result of the disturbance could last for days or decades. Disturbances can cause damage or improve biodiversity and ecosystem resilience. Disturbances within the Forest Preserve can be natural or anthropogenic. Natural disturbances come from biotic sources (e.g., disease or locusts) and abiotic sources (e.g., wind, fire, or earthquakes). Anthropogenic disturbances are due to human activities, such as dumping, vandalism, habitat fragmentation or climate change. When responding to disturbances, forest stewards must consider the source (natural or anthropogenic), the scale (spatial and temporal) and the threat to the health of the forest ecosystem, safety of the public, and impacts on the adjacent land.

Prior to European colonization the forest ecosystems in the mid-Atlantic region were managed by Native Americans with fire, and by hunting, gathering, and selective forest thinning. This activity was followed by decades of additional disturbance including timber harvesting, grazing, and farming. In more recent decades the forest ecosystem in the Preserve has been unmanaged and free of acute and large-scale anthropogenic disturbances, resulting in the flora and fauna found there today.

The City is unable to protect the Preserve from all types and degrees of disturbance. FPAB and city staff will monitor the Forest Preserve and recommend when intervention might be advisable.

5.2. Natural disturbances

Natural disturbances occur normally in forest ecosystems. For instance, the wind may blow down older trees and open the canopy, resulting in subsequent microsite availability for understory forbs and tree seedling establishment and increased habitat for insects and birds. Wind, in this example, may enrich the species and improve tree demographics. Many of the species that live within the forest have encountered natural disturbances for generations and may have adapted to one or more of them.

For many natural disturbances, regardless of scale, it may not be necessary for the city to take action because the disturbance does not decrease the health of the forest

ecosystem or pose a threat to the public or adjacent land. The city may need to intervene, only if the disturbance severely decreases the health of the forest ecosystem or creates a safety concern. Such intervention needs to minimize negative impacts to the health of the forest ecosystem.

5.3 Anthropogenic disturbance

Anthropogenic disturbance is common in the Forest Preserve and can impact the resilience and subsequent health of the forest ecosystem. FPAB evaluates the disturbance based on the spatial scale affected, the amount of time the ecosystem is disrupted, the frequency of the disruption, the severity of the threat to the ecosystem health and the safety risk to the public or adjacent land. A simple clean-up effort might be an appropriate response to dumping, for instance. The intervention may be more involved for other events, such as storm water runoff; in this case, the City might want to implement storm water retrofits to decrease the rate and volume of storm water flowing in the Forest Preserve or plant appropriate native vegetation to stabilize the stream banks. Other efforts to promote ecosystem resilience may also help to deal with the disturbances caused by climate change.

Chapter Six

WETLANDS

6.1. Introduction

Wetlands are important to the overall quality of the Forest Preserve. Healthy wetlands provide a good habitat for plants, animals and microorganisms, and many rare species are found only in wetland environments. Wetlands also provide ecosystem services to humans such as protecting and improving water quality. Wetlands can also store water during high rainfall, thereby reducing flooding.

Wetlands are found throughout the tracts of the Forest Preserve. The most prominent wetlands are the streams that flow through the forest and a large seepage bog. Streams can be divided into perennial, intermittent and ephemeral streams based on how consistently they flow. Perennial streams are those that typically flow throughout the year. Intermittent streams will flow during wetter months when the underlying water table is relatively high, but do not flow during dry months when their water table drops. Ephemeral streams only flow immediately after rain storms and are otherwise dry.

Seeps, springs, vernal pools, and acidic seepage bogs are also found in the Preserve. Seeps are springs with low flow and often appear to be wet spots in the forest, whereas springs have visible water flow. Seeps and springs are generally found on hillsides and can be home to a variety of unique organisms. Vernal pools are pools of water formed during the spring that dry out later in the year. These are important breeding habitat for amphibians because they lack fish predators that eat eggs and tadpoles. Seepage bogs are fed by groundwater, typically with a slightly acidic pH. These bogs are uncommon in Maryland and typically have communities of plants that can tolerate low nutrient soils.

6.2. Location and Condition of Wetlands

6.2.1. North Woods Tract

<u>Streams</u>

“Goddard Branch” of Beaverdam Creek: This is an incised, perennial stream that flows north from within Goddard Space Flight Center, through the North Tract, and into Beaverdam Creek in Beltsville Agricultural Research Center. This stream is included in the Beaverdam Creek Wetland of Special State Concern. It receives significant amounts of stormwater runoff from the Baltimore-Washington Parkway.

“Canyon Creek”: This is a deeply incised, perennial stream that flows northeast from “60 Court” Ridge Road (between 58 and 62 Courts), through GHI Woodlands and the North Tract, and into Beltsville Agricultural Research Center. It is a tributary of Goddard Branch. This stream receives significant amounts of stormwater runoff from Ridge Road and other nearby roadways and parking areas. Stormwater control measures along Ridge Road and within GHI parking areas could alleviate the impacts of stormwater on this stream.

Unnamed intermittent creek: Runs parallel to and close to Northway through GHI Woodlands and the North Tract. It is a tributary of Goddard Branch and has several intermittent tributaries. The stream originates in GHI near Ridge Road and receives significant amounts of stormwater runoff from Northway, Ridge Road, and other nearby roadways and parking areas. Stormwater control measures adjacent to these paved areas could alleviate the impacts of stormwater on this stream.

Seeps and springs

Several are located on the eastern slope of Blueberry Hill and feed groundwater wetlands on the west side of Goddard Branch.

Groundwater wetlands

There is an extensive skunk cabbage bog in the floodplain of Goddard Branch. This is part of the Beaverdam Creek Wetland of Special State Concern

- Several smaller seepage bogs at the base of Blueberry Hill that are fed by the springs and seeps uphill.
- Two small seepage bogs along Canyon Creek

6.2.3 Hamilton Tract

Streams

- Unnamed intermittent / ephemeral streams across areas B and C. These streams are tributaries of Goddard Branch
- Unnamed intermittent stream running SE from area D to the BW Parkway and into a pipe. This stream is a tributary of Goddard Branch

6.2.4. Boxwood

- Unnamed intermittent stream that emerges from a pipe and runs west across the tract, enters a culvert, and then passes underneath Ridge Road to join the stream that emerges from Greenbelt Lake. These streams are tributaries of Indian Creek.

6.2.5. Belle Point

None

6.2.6. Sunrise

Streams

- Unnamed perennial stream that emerges from a pipe near the dog park, and runs along the edge of the tract, eventually crossing under the BW parkway and into Still Creek. This stream receives significant amounts of stormwater runoff and trash from the parking lots in the Greenway Center area.

Seeps and Springs

- Several along the hillside which dominates this tract.

6.3. Threats to Wetland Health

The first step in protecting the wetlands is to protect the forests themselves, but this alone is not sufficient. Wetlands face a variety of unique threats and require appropriate stewardship. Threats to wetland health can be roughly divided into three categories: 1) Biological threats arising from the presence of unwanted species, 2) Chemical threats from pollution or excess nutrients, 3) Physical threats from erosion and high water flows.

6.3.1. Biological

A diverse community of native animals, plants, fungi, algae, and microorganisms should thrive in the Forest Preserve's streams and wetlands. However, in some situations there can be threats to wetland health from organisms that live in the wetlands. Just as invasive species can be problematic in forest ecosystems, they can be problematic in

wetlands. For example, *Didymosphenia geminata*, aka “Didymo” or “rock snot” is an invasive diatom that grows in ponds and on stream bottoms. It grows as a thick mat which can exclude other forms of aquatic life, particularly plants and algae. Once established it will alter stream ecosystems to make them less favorable for many aquatic animals. A second example is *Batrachochytrium dendrobatidis*, a fungal disease, which attacks amphibians developing in vernal pools. Once established this disease can have disastrous effects on amphibian populations and can even eliminate populations in the impacted wetlands. For many aquatic invasive species there is little that can be done once they are established; thus prevention is important. Preventive measures can include public education, and ensuring that trails are routed so that they encourage people and pets to stay out of streams.

6.3.2. Chemical

Pollution of streams with harmful chemicals is a common threat to wetland health. Many chemicals enter streams in runoff water during rainstorms. These can include fertilizers and pesticides from yards, road salt, oil, gasoline, and other automotive products. Runoff can also bring trash, which can be both chemical and physical pollution. While trash can be collected from streams, reducing other sources of pollutants requires public education and working closely with homeowners who border the Preserve to reduce runoff. An additional potential source of pollution is the trash dump buried beneath area C in the South Woods. In some areas the overlying soil has been eroded away exposing refuse, including large objects such as appliances. During rainstorms water drains from this dump into nearby streams. A study is needed to determine if this runoff contains harmful pollutants.

A second type of pollution is nutrients, such as nitrogen (N) and phosphorus (P). These are required for aquatic life in small amounts but are detrimental if too much is available. Excess nutrients can lead to algal blooms. As the algae die, they sink to the bottom of the wetlands where they decompose, which reduces the oxygen available to aquatic life. There are many potential sources of excess N and P, including air pollution, detergents in waste water, and fertilizers. Furthermore, the city’s mulch pile is a potential source of these nutrients, as rainwater that falls on the mulch pile will drain into Goddard Branch in the North Woods.

6.3.3. Physical

Streams located in urban areas, including those in the Forest Preserve, can have greatly altered hydrology. The watersheds of these streams often have large areas of impervious surfaces, such as roads and parking lots. During rain storms, water quickly

drains off of these surfaces and into the streams. This fast moving storm water can cause the stream channels to erode. Because much of the rainwater is not absorbed by the ground, there is less groundwater available to enter the streams between rainstorms, leading to low streamflow. This cycle of floods and dry periods is called “urban stream syndrome” and is a sign of poor stream health. Several streams in the Forest Preserve, such as Canyon Creek, show signs of erosion. These should be monitored to determine if there are signs of urban stream syndrome and if erosion is an ongoing problem. The solution to the problems caused by stormwater runoff should be to manage the storm water outside of the Preserve, before it enters the streams, so that fast, eroding flows are prevented.

A related concern is that streams in the Boxwood and Sunrise tracts emerge from storm drains as they enter the Preserve. It is not clear what areas are drained by these streams as they are fed by the storm water drainage system. These streams are likely to be heavily influenced by rainfall, and the aboveground portions are at risk of being eroded. These streams should be monitored for flooding, drying and erosion issues.

Finally, visitors to the Forest Preserve can inadvertently cause physical damage to the streams. Many trails cross stream beds, and hikers can cause erosion at these crossing points. Seeps, springs and vernal pools can be sensitive environments that are damaged by trampling by visitors and their pets. Public education and careful management of trails can help prevent this.

6.4. Assessing Stream Health

Assessing the health of streams can be very challenging. Conditions in streams are constantly changing depending on factors such as recent rainfall, time of day and the season of the year. As a result it is hard to assess the health of a stream in a single visit.

One way scientists have dealt with this problem is to assess stream health using aquatic macroinvertebrates. Macroinvertebrates are invertebrates that are generally large enough to be seen by the naked eye. A wide variety of aquatic macroinvertebrates are found in healthy streams, but many species are sensitive to pollution. As these species are restricted to the water during all or part of their life cycle, they are subjected to the entire range of stream conditions. The presence of pollution sensitive species indicates that stream health is generally good.

Most of the streams in the Forest Preserve have not been sampled for macroinvertebrates. However, according to the Maryland Biological Stream Survey (MBSS), one site in the North Woods on Goddard Branch (referred to as Beaverdam Creek by MBSS) was sampled in 2008. At that time it was given a rating of “Poor”

regarding its biotic integrity; see http://eyesonthebay.dnr.maryland.gov/mbss/v_site.cfm?site=0823-01-2008 for details.

There are a variety of tests to determine the amount of nutrients and pollutants in streams. These can be compared to standards set by the EPA or the State of Maryland to determine if the water quality is acceptable.

Although physical damage to the streams through erosion can be easy to spot, it can be difficult to determine if it is an ongoing problem. One way to monitor erosion is to take a series of photos over time at the same location to assess if there are changes in the banks of a stream.

6.5. State Legal Protections for Wetlands

The state of Maryland has many legal protections for non-tidal wetlands. These are contained in the Code of Maryland, Title 26 – Department of the Environment, Subtitle 23 – Non Tidal Wetlands. In general, activities such as clearing vegetation, filling, excavating, flooding or draining are regulated and require a permit if done in or within 25 feet of a wetland. The Goddard Branch of Beaverdam Creek is a Wetland of Special State Concern (see Maryland code 26.23.06). This indicates that the Goddard Branch is considered by the state to have exceptional ecological and/or educational benefits. To protect this stream, the restrictions on development in the wetland extend to a 100 foot buffer. Permits to conduct restricted activities receive strict review and will not be granted, when reasonable alternatives are available. Mitigation will be required, if a permit is granted.

In general, city law extends greater protections to the wetlands in the Forest Preserve than state law. On the other hand, the protections of state laws extend to those portions of the wetlands that are outside of the Forest Preserve, including those upstream, which enhances the overall protection of these wetlands.

6.6. Suggested Stewardship Actions

The following actions are recommended for protection of wetland health.

- All wetlands in the Preserve should be mapped. Watersheds of all streams should be determined, including those that originate from drainage pipes.
- Trash should be removed from wetlands on a regular basis
- The public should be educated on the importance of wetlands, and that they and their pets should minimize time spent walking thought the wetlands.

- The Master Trails Plan should make protection of wetlands a priority. This would include ensuring that trails do not unnecessarily enter wetlands and that all stream crossings do not damage the stream.
- The streams, particularly Goddard Branch, should be monitored for macroinvertebrates to determine this aspect of stream health.
- Runoff from the mulch pile should be tested to determine if the mulch pile is leaching excess nutrients into Goddard Branch.
- The buried dump should be studied to determine, if it is impacting the nearby streams.
- Streams should be monitored to determine, if they are currently undergoing erosion.
- Consider potential wetland and stream restoration activities that are compatible with Anacostia River watershed and subwatershed plans and policies.

Chapter Seven

CLEAN-UP, ENFORCEMENT AND SPECIAL EVENTS

7.1 Clean Up

The Forest Preserve Advisory Board will coordinate with City staff to schedule cleanup efforts. Visitors to the Preserve should take it upon themselves to remove any trash or garbage they may find. Organizations or individuals interested in sponsoring a clean-up effort should coordinate through the Department of Planning and Community Development in order to obtain appropriate support (i.e. scheduling trash pick-up, supplying bags, gloves, tools, etc.) and also to make sure that there are no scheduling conflicts.

7.2 Enforcement

In order to protect the forest, Greenbelt is more restrictive about what activities may take place in the Preserve than what is permitted in City parks. The City Code describes the restricted/prohibited activities which are considered civil infractions, punishable with a fine of $1000. More serious violations are considered misdemeanors, including poaching of natural features. Aggressive patrol and strict enforcement of these rules would detract, however, from the experience hikers would have in the Forest Preserve. The following guidelines reflect the City's enforcement approach.

- We encourage the public to report violations. Contact phone numbers for reporting problems or violations are posted at the entrance to each Forest Preserve Tract and on the City of Greenbelt's website.
- Code enforcement personnel and other authorized individuals will inform people found violating the rules about the relevant regulations and associated penalties. The Department of Planning and Community Development will coordinate such compliance efforts.
- Anyone observing or hearing about criminal violations should promptly notify the Greenbelt Police Department non-emergency number (301 474 5454).

7.3 Activities and Special Events

Permitted activities and events are those which do not alter or degrade the essential natural characteristics of the Forest Preserve (see City Code Section 12-155). In

general, the benefit to the community of an activity or event is weighed against its potential harm to the environment. Hiking is permitted, since the experience of a woodland environment is deemed to be of value to the Greenbelt community, even though hiking itself alters the natural environment. The number of participants and the magnitude of an event may determine, whether it is permitted or not. City code specifically prohibits survival exercises, war games and activities which are “principally commercial” in nature. The Office of the City Manager ultimately decides what activities to allow. Anyone interested in sponsoring an activity or event first needs to contact the Department of Planning and Community Development.

Chapter Eight

SPECIALLY MANAGED AREAS

Several areas within the Forest Preserve host activities and uses that do not conform to the Greenbelt City Code or the Stewardship Guidelines but which have traditionally been important to the community. In light of this, their management differs from the rest of the Preserve. When a use or activity in a specially-managed area is in conflict with other parts of these guidelines, disturbance of forested areas must be minimized. Activities that may disturb the forest shall only be permitted following input of the FPAB, the related Greenbelt community (e.g., the garden club or astronomy club), city staff, the public and City Council.

The physical limits of these specially managed areas shall remain unchanged. Expansion into forested areas is not permitted and the forest should, in turn, not encroach into special use areas.

The following are the specially-managed areas within the Forest Preserve that have either existed for many years, or are part of Greenbelt's original city plan. Special considerations related to each use are identified.

8.1. Community Gardens

The community garden areas are shown on the original City plan and remain an integral part of the social structure and cooperative spirit of Greenbelt. Individual garden plots are assigned and managed by a garden club. Many Greenbelters view these gardens as unique and reflective of the community's spirit.

These guidelines do not govern the gardening activities within the community gardens but rather explain the historic and planned relationship between the gardens and the Forest Preserve. In order to maintain the physical area set aside for the gardens, necessary pruning, tree removal, and selective clearing by City of Greenbelt employees may be permitted. Such pruning or removal of vegetation will only be permitted as necessary, such as to maintain garden boundaries or limit the shading of the canopy that obstructs garden areas from the sun. Currently city staff maintains an 8 foot buffer around each garden area. This buffer maintenance is permitted under these guidelines.

Garden Locations – The following descriptions are not intended to specify exact measurements, but rather to give the general locations and dimensions of each garden area. One group of community gardens is located on the south side and east end of Hamilton Place. South of Hamilton Place, the garden area measures approximately 200 feet parallel to Hamilton Place and 275 feet in depth from Hamilton Place, with a total of slightly more than 1.05 acres. This garden is commonly referred to as Henry's Hollow.

The garden area located east of the end of Hamilton Place extends 200 feet along the east-west axis, and extends 250 feet north, with an total area of approximately one acre. This is commonly referred to as the Hamilton Gardens. These gardens are within Areas C and D of the Hamilton Woods Tract.

Two garden areas, known as the Gardenway Plots, are located southwest of Gardenway, within Area E of the Hamilton Woods Tract. A smaller garden area exists 40 feet southwest of the end of the Gardenway right-of-way, and measures 100 feet square. A second, larger garden area is located 210 feet south-southwest from the end of Gardenway. This area measures 90 feet in depth and 230 feet in length, with a total of approximately 0.5 acres. A small portion of these gardens are on GHI property.

8.2. Hamilton Cemetery

The Hamilton Cemetery, located at the end of Hamilton Place near the Greenbelt Homes Administration Building, in Area C of the Hamilton Woods Tract, contains seven graves of the Hamilton family, who occupied land now part of Greenbelt during the late 1700s and into the 1800s. Samuel Hamilton's will specified that one-quarter of an acre of land be set aside for a grave yard. After Hamilton's death, the property changed hands, and in 1939, the U.S. government purchased this property for the Greenbelt Project. An interpretive panel marks the trail head leading to the grave site.

The city provides basic maintenance to protect the grave site and the interpretive panel, and to respect the dignity of the Hamilton family's final resting place. The grave site is identified and discussed in Greenbelt City history and tourism materials, but no effort is made to direct visitors to the site.

8.3. Northway Fields

The Northway Fields, including two softball fields, is located at the end of Northway, adjacent to the Baltimore-Washington Parkway. There are two gravel-surfaced parking areas adjacent to the softball fields. These fields and parking lots are not in a Forest Preserve parcel. The south edge and fence of the softball field does impinge into the Hamilton Wood Tract. Use and maintenance of this field area and fence should not further infringe or encroach upon the surrounding Forest Preserve areas.

8.4. Yard Waste and Compost Facility

Greenbelt Department of Public Works maintains a yard waste recycling and composting center at the end of Northway, adjacent to the North Preserve. The use of a small portion of the Preserve is designated in Sec. 12-152(a) of the City Code. The composting area expanded over several years and encroached on the Forest Preserve. This led to concerns about environmental impacts. The City is currently reducing the mulch pile so that it no longer encroaches on the Preserve and intends to maintain a smaller mulch pile.

8.5. Astronomy Observatory

A small observatory, given to the City by Montgomery County Community College, is built in Parcel 12 of the North Woods. This observatory and the use of the surrounding area for astronomical observations is a designated use of the Preserve in Sec. 12-152(a) of the City Code. This observatory and related viewing platforms and paths are considered acceptable improvements within the Forest Preserve and are consistent with excepted uses in the Preserve.

10.6. Belle Point Preserve

This section of the Preserve extends from the Belle Point subdivision to Albert S. “Buddy” Attick Lake Park. A wide cleared area corresponding to a WSSC right-of-way runs through the property, providing the WSSC unrestricted access to a large water main. Pepco also has a power line right-of-way on the edge of the tract.

Additionally, in 2016 a playground was built adjacent to the north section of Belle Point, within the Preserve. This playground area was set aside, when the Preserve was first established and is excluded from the Preserve by Sec. 12-152(d) of the City Code.

10.7. Boxwood Preserve

This section of the Preserve is only partially wooded because it includes cleared areas that serve as open space and recreation areas for the Boxwood community. The cleared areas include a playground, a sitting area, and a basketball court. These areas are excluded from the Forest Preserve in Sec. 12-152 (c) (1) and (2) of the City Code. Therefore, these guidelines do not apply to the cleared and improved areas of the Boxwood Preserve because these areas provide one of a few public recreation areas within that community. A description of the area is provided here to ensure the protection of the open recreation areas. Neither the Forest Preserve nor the open areas should encroach into the limits of the other.

GLOSSARY

Adaptive Integrated Pest Management: An ecosystem-based strategy that focuses on prevention and management of invasive pests through identification, monitoring, and a variety of control tactics such as biological control, habitat manipulation, modification of cultural practices, and judicious use of chemical pesticides. Sometimes abbreviated as IPM.

Allelopathy: The chemical inhibition of one plant (or other organism) by another, due to the release into the environment of chemicals acting as germination or growth inhibitors.

AMT: A. Morton Thomas and Associates Inc.

Anthropogenic activities: Environmental impacts resulting from human activities.

Aquatic macroinvertebrates: Stream dwelling invertebrates that are large enough to be seen with the naked eye such as insect larvae.

Belt of Green: Vision of a forested area surrounding the city of Greenbelt.

Biodiversity: The variety of life in the world or in a particular habitat or ecosystem.

Community dynamics: Fluctuation in the abundance of species in a natural community.

Controlled burn: A fire which is deliberately allowed to burn in an area in order to improve the habitat for fire adapted species. The fire is “controlled” in that it is prevented from spreading outside of the target area.

Defoliate: Overbrowsing to the extent that all of the leaves or foliage are stripped from the plant.

Disturbance: In ecology, a disturbance is a sudden change in environmental conditions that causes a pronounced change in an ecosystem.

Early Detection/Rapid Response: A coordinated set of human actions to find and eradicate potential invasive species in a specific location before they spread and cause harm.

Ecologically significant plant communities: Plant communities in the Preserve that are regionally rare or uncommon due to geological or hydrological processes.

Ecosystem health: A metaphor that uses our ideas of human health to describe the state of an ecosystem.

Ephemeral stream: A stream that only flows immediately after a rainstorm and is otherwise dry.

Exotic species: A species which occurs in an area where it is not native.

Floodplain: The area on either side of a stream that can be covered with water during floods.

Growth habit: In plants, the form a plant takes as it grows. Examples include trees, and shrubs; herbaceous vines and woody vines; herbaceous plants, grass-like.

Impervious surface: A surface which prevents water from being absorbed into the soil, such as asphalt or concrete.

Incised stream: A steam that has eroded a deep channel that is far below its floodplain.

Inter-specific competition: Any interaction, between different species that are both using the same resources in an ecosystem, in which one or both the species' populations are harmed.

Intermittent stream: A stream that flows only during the wettest months of the year.

Invasive species: A species of organism that is not native to the ecosystem under consideration and whose introduction has caused or is likely to cause economic harm, environmental harm, or harm to human health.

Life history: The lifecycle or pattern of survival and reproduction events typical for all members of a given species.

Management and Maintenance Guidelines: the set of guidelines created by the Forest Preserve Task Force and adopted by Greenbelt City Council in 2007. This document provided policy guidance on the care of the Greenbelt Forest Preserve. As of 2019 these are called Stewardship Guidelines.

MD DNR: Maryland Department of Natural Resources.

Native species: A species that is found in a certain ecosystem due to natural processes, such as natural distribution and evolution, and without human intervention or influence.

Non-conforming uses: a type of zoning variance where a parcel of land may be given an exception from current zoning ordinances due to improvements made before the current zoning ordinances were adopted.

Outcompete: To displace another species in the competition for space, food, or other resources.

Overbrowse: To eat too much vegetationto the detriment of the environment.

Pathogen: A bacterium, virus, or other microorganism that can cause disease.

Perennial stream: A stream that flows throughout the year.

Predator: An animal that naturally preys on others.

Restoration: The practice of renewing and improving degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action.

Seep: A type of spring with low water flow that appears as a wet spot on the ground and does not have a stream flowing away from it.

Seepage bog: A type of wetland formed by water seeping out of a slope. These have an acidic pH and support unique plant communities.

Sensitive habitats: Any area in which plant or animal life or their habitats are either rare or especially valuable and susceptible to loss. Sensitive habitat areas include, but are not limited to, riparian corridors, wetlands, marine habitats, and habitats supporting rare, endangered, and unique species.

Stormwater runoff: Stormwater runoff is precipitation such as rainfall and melted snow that flows over the ground surface and enters water bodies. It is created when precipitation falls on surfaces including roads, driveways, parking lots, rooftops and other surfaces that do not allow water to soak into the ground.

Subwatershed: A portion of a watershed tThe Anacostia is a subwatershed of the Potomac River Watershed**.**

Succession: The natural change over time of the mix of species that are most common in a forest.

Target species: The species of invasive plant or animal that is being targeted for management or eradication.

Urbanization: The conversion of undeveloped natural and agricultural land into land developed for usages such as housing, commerce, and industry.

USDA: United States Department of Agriculture.

Vernal pool: A pool that forms in the spring and dries out later in the year.

Watershed: The surface drainage basin of a stream or river.

Wetlands: Areas where water is at or near the surface. This includes a wide variety of habitats such as streams, springs, bogs and marshes.

Appendix A

ARTICLE IX. FOREST PRESERVE*

*Ord. No. 1279, adopted May 29, 2007 redesignated Art. VIII, §§ 12-132--12-145 as Art. IX, §§ 12-150--12-163.

Sec. 12-150. Intent.

In order to protect, manage, and administer certain designated areas for the present and future use and enjoyment of the citizens of Greenbelt by protecting them from the impacts of a growing population, expanding growth, and growing mechanization, thus preserving these lands as an enduring natural resource.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-151. Forest preserve defined.

Forest preserve areas shall be considered those parcels and lots, or portions thereof, and areas owned by the City of Greenbelt, characterized as predominantly undisturbed and wooded, which are to be protected and conserved in their existing natural state for the use and enjoyment of present and future generations, by restricting uses to those consistent with the goals of protection and conservation and by setting forth procedures for management and maintenance that are consistent with the goals of protection and conservation.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-152. Designated forest preserve areas.

(a) The North Preserve shall be defined as that area held in ownership by the City of Greenbelt and located north of Northway, west of the Baltimore-Washington Parkway, south of the corporate city limits, and east of Ridge Road, comprised of legal parcels described as Map 27, Grid A2, Parcel 10, consisting of 102.5869 acres; Map 27, Grid B2, Parcel 17, consisting of 13.90 acres; Map 27, Grid A1, Parcel 19, consisting of 24.3363 acres; Map 27, Grid B3, Parcel 20, consisting of 4.079 acres; and Map 27, Grid A3, Parcel 12, consisting of 10.6427 acres; excluding those areas designated for location of the observatory and appurtenance improvements, and a yard waste collection location and described as follows: Beginning at the southwest property corner and extending east for a distance of 1,025 feet, then extending north at a 90-degree angle for a distance of 275 feet, then extending east at a 90-degree angle for a distance of 450 feet, then extending south at a 90-degree angle for a

distance of approximately 275 feet to its intersection with the southern property line.

(b) The South Preserve shall be defined as that area held in ownership by the City of Greenbelt and

located south of Northway, west of the Baltimore-Washington Parkway, and east of Ridge Road, comprised of legal parcels described as Map 27, Grid A3, Parcel 6, consisting of 20.4667 acres; Map 27, Grid A3, Parcel 7, consisting of 17.1919 acres; Map 27, Grid A3, Parcel 8, consisting of 11.8707 acres; Map 27, Grid A4, Parcel 9, consisting of 11.8707 acres; Map 27, Grid A4, Parcel 11, consisting of 9.34 acres; and Map 27, Grid A4, Parcel 21, consisting of 10.1552 acres.

(c) The Boxwood Preserve shall be defined as that area held in ownership by the City of Greenbelt and located north of Crescent Road, west of Lastner Lane, south of Ivy Lane, and east of Ridge Road, comprised of the legal parcel described as Map 26, Grid D3, Parcel 56, consisting of 8.81 acres; excluding those areas improved for active use and recreation, and described as follows:

(1) The basketball court area located in the northwest corner of the Boxwood Preserve, consisting of
.69 acres, and extending from the property corner at the point of intersection of Ridge Road and Ivy Lane, east along the Ivy Lane property line for a distance of 200 feet; and then extending south at a 90-degree angle for a distance of 150 feet; and then extending west at a 90-degree angle to the property line along Ridge Road for a distance of 200 feet; and then extending north along the Ridge Road property line for a distance of 150 feet to the point of origin.

(2) The playground and picnic area, located in the northeast to north central quadrant of the Boxwood Preserve, consisting of 2.2 acres, more or less, and extending from the property corner at the point of intersection of Ivy Lane and Lastner Lane, and extending south along the Lastner Lane property line for a distance of 430 feet; and then extending northwest at a 70-degree angle for a distance of 350 feet; and then extending north for a distance of 110 feet; and then extending northeast to the point of origin.

(d) The Belle Point Preserve shall be defined as that area held in ownership by the City of Greenbelt and located south of the Greenbelt Lake; adjacent to Map 26, Parcel 81; northwest of Vanity Fair Drive; and east of I-495, comprised of the legal parcel described as Map 26, Parcel 59, consisting of 10.0 acres; except that an area located adjacent to the Belle Point subdivision, adequate in size and dimension to accommodate playground, picnic or similar neighborhood recreation amenities, as designated by the city council, shall be considered excluded from the area included in the forest preserve and shall not be regulated by

the provisions of this chapter.

(e) The Sunrise Preserve shall be defined as that area held in ownership by the City of Greenbelt and located northwest of the Capital Beltway, Route I-495, north of Parcel B held in ownership by the City of Greenbelt, south of the Maryland Trade Center Parcel B, and southwest of the terminus of Hanover Drive, comprised of the legal parcel described as Tax Map 34, Grid E2, Parcel A and consisting of 9.9591 acres, more or less.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07; Ord. No. 1282, 6-18-07; Ord. No. 1283, 6-18-07; Ord. No.
1284, 6-18-07; Ord. No. 1285, 6-18-07)

Sec. 12-153. Designation of or addition to forest preserve areas.

(a) Any designation of or addition to a forest preserve area shall be accomplished by ordinance adopted by the city council.

(b) Prior to the introduction of any ordinance to designate or add to a forest preserve area, the city council shall cause to be prepared a report that includes but is not limited to: a description of the area proposed as a forest preserve, including its unique characteristics and its existing uses and users; and a map indicating the location and boundaries of the proposed forest preserve area.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-154. Removal of forest preserve designation.

(a) Removal of any lands, in whole or in part, from the forest preserve designation as set forth in section 12-152 shall be by ordinance of the city council, following a public hearing which shall be held not less than two (2) weeks preceding first reading of the ordinance.

(b) Approval of any ordinance to remove lands from the forest preserve designation shall be by supermajority vote of the city council.

(c) No ordinance passed by the city council to delete or reduce a forest preserve area may become effective until approved by the voters of the City of Greenbelt, by way of a question placed on the ballot of the next regularly scheduled general city election, in accord with the city Charter.

(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-155. Management and maintenance guidelines.

(a) Forest preserve areas as defined in this article shall be managed to provide for and protect the natural character of these lands and to allow for the use of these lands in a manner that does not alter or degrade the essential natural character of these lands.

(b) The city council shall adopt management and maintenance guidelines, which shall set forth policy on permissible, required, and prohibited management and maintenance activities. Such guidelines shall be subject to the limitation that any maintenance proposed is the minimum necessary to preserve and protect the natural resource.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-156. Prohibited activities.

(a) Except as otherwise provided in this article and subject to any existing rights, no commercial enterprise or permanent road, except for fire roads or temporary road required in emergencies involving the health and safety of persons and/or the area and its environs, shall be permitted within an area designated under this article as a forest preserve area. Prohibited activities shall also include the use of motorized vehicles, except for maintenance and public safety vehicles operated in conformance with the management and maintenance guidelines; landing aircraft; or other forms of mechanical transport except for that authorized subject to the Americans with Disabilities Act.

(b) The grading of any area shall be prohibited, except as provided in the adopted management and maintenance guidelines. Grading shall be considered the alteration of natural and existing grade by any means other than natural forces.

(c) Except as provided in the management and maintenance guidelines, the construction of bridges, shelters, culverts, levees, dams, dikes, or other manmade structures shall be prohibited, unless required by a state or federal agency whose authority supersedes that of the city, subject to approval by the city council.

(d) The construction, either permanent or temporary, of any structure, or the installation of any public facilities or utilities shall be prohibited.

(e) No action shall be taken to alter or modify the natural course of any water course or body, even if such body is only seasonal or intermittent in nature, unless required by a state or federal agency whose authority supersedes that of the city, subject to approval by the city council.

(f) Hunting, trapping, fishing, driving, harassing or otherwise capturing or harming wildlife shall be prohibited.

(g) All forms of biking shall be prohibited.

(h) The introduction of any exotic or invasive species is prohibited.

(i) No trail maintenance shall be permitted except as provided in the management and maintenance guidelines.

(j) The creation of trails or the widening, grading, or change of surface materials of any existing trail shall be prohibited except as provided in the management and maintenance guidelines or as set forth in an adopted trails plan.

(k) Dumping or depositing of soil, trash, yard waste, garbage, or other offensive material shall be prohibited.

(l) The addition, extension of, or modification to any utility, except as otherwise provided in this article, shall be prohibited.

(m) Clearing and pruning of vegetation shall not be permitted, unless for the benefit of the land and consistent with the management and maintenance guidelines.

(n) Camping, grilling, cooking, or creation of any fire, regardless of purpose, mechanism of combustion, type of fuel, or type of containment, is prohibited.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-157. Resource protection.

(a) Natural resources within a forest preserve area are considered protected and may not be harmed, damaged, killed, relocated or removed, except as related to exotic and/or non-native species that may be recommended for removal or as otherwise provided in the management and maintenance guidelines.

(b) Resources of the forest preserve area shall include all trees, indigenous plants and flora, all forms and species of wildlife, including fish, amphibians, and birds.

(c) Violation of this section shall be considered a misdemeanor. (Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-158. Permitted activities.

(a) Any activities intended to and conducted so as to result in the non-destructive experience of the forest preserve and its essential natural qualities are considered consistent with the intent of this article and are permitted activities.

(b) Maintenance activities as set forth in the approved management and maintenance guidelines are permitted.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-159. Management and maintenance activities.

(a) The upgrading or expansion of any electrical transmission line, distribution line, telephone line, natural gas line, or other aboveground or underground line is permitted, if the person or entity responsible for the line had the right, subject to any required approvals, to upgrade or expand the line in the forest preserve area prior to the designation of the area as a forest preserve.

(b) Normal maintenance of utility lines and related easement areas is permitted, such that the activities are consistent with the right-of-way and/or easement, and such that the utility line, easement, or right-of-way existed prior to the date that the forest preserve was so designated.

(c) Any activity related to the management and maintenance of existing public

drainage within a forest preserve area is permitted, provided that such maintenance does not increase the impervious area of coverage and does not widen, extend, or modify the drainage channel such that it would increase volume, velocity, or rates of discharge of natural or stormwater flows.

(d) Maintenance improvements to existing roads and parking areas within forest preserve areas, or within twenty-five (25) feet of the edge of the existing road or parking areas, are permitted so long as such maintenance improvements do not alter the existing surface material, do not expand or extend the area of the improvement, and do nothing to increase impervious surfaces.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-160. Special events.

The city will not sponsor or permit special events to be conducted in forest preserve areas if those events might be inconsistent with the intent of this article. Special events that are principally commercial in nature or activities involving animal, foot or watercraft races, physical endurance of a person or animal, organized survival exercises, war games, or similar exercises shall be considered inconsistent with the intent of this article. (Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-161. Preexisting improvements.

Improvements existing within designated forest preserve areas as of the day of designation shall be considered preexisting improvements and may be continued and maintained, but may not be expanded in size, area, or character of the improvement or related use.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-162. Enforcement and violations.

Violations of this article shall be considered a municipal infraction and may be punishable with a fine of one thousand dollars ($1,000.00) for each violation, except as provided in section 12-157 of this article.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

Sec. 12-163. Changes to article.

(a) Prior to the consideration of any ordinance to amend this article, except for revisions to forest preserve boundaries as set forth in sections 12-152 through 12-154, the city council shall make a mandatory referral of the ordinance for review and comment to the forest preserve advisory board, in addition to any other city council advisory boards or committees, or other groups as determined by the city council.

(b) Prior to the consideration of any ordinance to amend this article, the city council shall schedule and hold a public hearing.

(c) Any ordinance that provides for an addition to, amendment of, or deletion from this article, except for revisions to forest preserve boundaries as set forth in sections 12-152 through 12-154, may be placed on the ballot as a referendum question as provided in the city charter.

(d) Any ballot question shall be placed on the ballot of the next regularly scheduled city election, in accord with the city charter.
(Ord. No. 1243, 10-27-03; Ord. No. 1279, 5-29-07)

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: David Moran
Submitting Department: Administration
Item Type: Resolution
Agenda Section:

Subject:
A Resolution to Authorize the Negotiated Purchase of Certain Goods and Services from Various Vendors as Enumerated Herein When Total Fiscal Year Purchases from Each Vendor Exceed Ten Thousand Dollars
-1st Reading

Suggested Action:

Reference: Resolution

Each year, the City does business with a number of vendors from whom the City's individual purchases are below the bid limit of $10,000 but total purchases over the fiscal year reach or exceed that amount.

Obtaining bid proposals for these goods and services is not warranted. Some of these vendors are the sole source or best source of purchase. In other instances, the City's purchases are based on bids taken by other government agencies (e.g., the State or County) or through the Council of Governments cooperative purchase program, with the bid price extended to Greenbelt.

It is recommended this resolution be introduced for first reading.

Attachments:
Res20XX.pdf

Negotiated Purchase List-FY20.pdf

Introduced: July 8, 2019
1st Reading:
2nd Reading:
Passed:
Posted:
Effective:

RESOLUTION NUMBER 20XX

A RESOLUTION TO AUTHORIZE THE NEGOTIATED PURCHASE OF CERTAIN GOODS AND SERVICES FROM VARIOUS VENDORS AS ENUMERATED HEREIN WHEN TOTAL FISCAL YEAR PURCHASES FROM EACH VENDOR EXCEED TEN THOUSAND DOLLARS ($10,000)

WHEREAS, Section 40, "Purchases," of the Greenbelt City Charter, as amended, authorizes the City Council to waive bidding procedures and to authorize by resolution a negotiated purchase or contract whenever it is in the best interests of the City; and

WHEREAS, the purchases of certain goods and services from certain vendors during Fiscal Year 2020 individually may cost less than $10,000 but will in the aggregate exceed $10,000 for the year; and

WHEREAS, payment for the various vendors will be based on the best current negotiated or contract price available; and

WHEREAS, monies for these goods and services have already been approved by the City Council in the Fiscal Year 2020 budget; and

WHEREAS, the City Council has determined it to be in the best interests of the City to purchase the goods and services listed for the enumerated reasons on a negotiated basis. NOW, THEREFORE,

BE IT RESOLVED by the Council of the City of Greenbelt, Maryland, that the City Manager be and hereby is authorized to purchase the following goods and services listed.

– See Attachment -

PASSED by the Council of the City of Greenbelt, Maryland, at its regular meeting of August 12, 2019.

_____
Emmett V. Jordan, Mayor

ATTEST:

_____
Bonita Anderson, City Clerk

City of Greenbelt, Maryland
Recommended Vendors for Negotiated Purchase - FY 2020

	Vendor-Number	Commodity	Requesting Department	FY2019	FY2018	FY2017	FY2016	FY2015	Justification for not Bidding
1	Alexander & Cleaver PA - 905	Legal Services	Admin	164,542	28,100	New FY18	-	-	Selected by competitive process
2	Friends of Old Greenbelt Theatre - 6742	Theatre management	Admin	59,217	63,128	37,228	42,107	33,333	Selected by competitive process
3	Granicus Inc - 4960	Video Streaming/Open Platform	Admin	25,518	36,606	9,489	9,489	9,238	Specialized Service
4	Greenbelt Homes Inc - 363	Museum Co-op fees & Playground Maint	Admin	15,942	13,129	18,005	6,770	6,170	Sole Provider
5	Jackson Lewis - 6275 & 6613	Legal Services: CBA	Admin	310	47,747	20,507	0	23,424	Specialized Service
6	Maryland Municipal League-563	Membership	Admin	27,421	24,167	24,736	26,127	25,521	Govt Association
7	Metropolitan Washington Council of Governments - 601	Association fees	Admin	19,100	18,522	17,968	17,685	17,494	COG Contract
8	Miles & Stockbridge - 3801	Legal services: TIF	Admin	25,220	33,668	9,846	0	13,877	Specialized Service
9	Aetna Middletown - 4257	Employee life insurance	All	39,296	34,749	36,821	39,105	43,921	Competitive Pricing & Value
10	Amazon.com - 7039	Misc products	All	31,312	New FY19	-	-	-	Competitive Pricing & Value
11	AT&T Mobility - 220218	Cellular phone service	All	36,575	39,399	44,049	41,979	42,690	State Contract
12	Capitol Office Solutions -147	Copier Service & supplies	All	16,515	17,612	27,248	38,447	32,511	Competitive Pricing & Value
13	Carefirst Bluecross Blueshield - 512803	Employee Health Insurance	All	1,973,703	1,870,005	1,620,784	1,737,313	1,599,582	Competitive Pricing & Value
14	Key Risk Ins (replaced Chesapeake Employers Ins FY19) - 210190	Workers compensation insurance	All	567,882	692,182	632,756	615,769	653,120	Long-term relationship
15	Delta Dental - 6092	Employee Dental Insurance	All	124,351	120,425	110,734	121,095	114,823	Competitive Pricing & Value
16	Express Scripts - 512808	Employee prescription drugs	All	315,635	304,580	273,546	301,523	301,186	Competitive Pricing & Value
17	International City/County Management Association (ICMA) - 419 + 512802	Deferred compensation program	All	619,798	537,937	756,697	783,318	712,630	Long-term relationship
18	James River Solutions - 6703	Unleaded Fuel	All	163,746	135,569	113,561	137,438	100,607	COG Bid
19	Local Government Insurance Trust- 1125 & 528	Liability & property insurance	All	153,823	158,696	157,522	149,667	134,670	Competitive Pricing & Value
20	Maryland State Retirement System 512806, 512807, 527301, & 527302	Retirement and pension plans	All	1,785,878	1,682,060	1,590,937	1,598,295	1,592,020	State Agency
21	Staples - 486, 5718 & 5925	Office & Green Cleaning Supplies	All	24,149	19,944	16,508	23,865	5,793	NJPA Contract
22	Trippe Sports & Promotions LLC - 4466	Uniforms	All	11,885	10,050	7,845	9,879	13,245	Competitive Pricing & Value
23	U.S. Postal Service - 2213	Postage & Delivery	All	4,000	6,000	2,000	19,619	9,742	Local Vendor, Competitve Pricing
24	Verizon - 523801	Local phone service	All	48,916	33,677	23,290	12,482	25,429	Sole Provider
25	Verizon Wireless 1966	Police laptops & Cell Phones	All	43,152	41,239	41,764	43,901	45,151	State Contract
26	Xerox - 292 (replacing COS)	Copier Service & supplies	All	20,028	16,653	6,722	-	-	Competitive Pricing & Value
27	Wash. Suburban Sanitary Comm - 523903	Water and sewer suppliers	All	80,082	78,307	75,271	79,387	75,153	Sole Provider
28	Petsmart - 3339	Animal Food & Supplies	Animal Control	8,702	9,398	7,933	10,178	9,993	Local Vendor, Competitve Pricing
29	Spay Now - 6734	Veterinarian services	Animal Control	15,161	15,823	9,910	12,900	5,133	Competitive Pricing & Value
30	Epstein, Norman-1374	Psychological services	CARES	9,900	10,890	10,450	11,000	12,100	Long-term relationship
31	Bolton Partners Inc - 4789	Post Retirement Medical	Fin & Admin	9,500	0	9,500	0	0	Actuarial Study every two years
32	Cohn Reznick - replaced McGladrey 2015	Auditing services	Fin & Admin	36,500	35,500	34,500	32,500	30,000	Selected by competitive process
33	Columbia Bank - 523403	Banking services	Fin & Admin	38,862	38,445	33,986	31,347	29,444	Selected by competitive process
34	Greenbelt News Review - 368	Legal & help wanted ads	Fin & Admin	24,181	25,363	19,068	22,235	23,555	Local Vendor, Competitve Pricing
35	Municap - 3493	TIF Administrator	Fin & Admin	8,206	New FY19	-	-	-	Specialized Service
36	Occupational Medical Services - 3774	Employee Physicals	Fin & Admin	11,579	7,223	8,595	10,410	9,349	Competitive Pricing & Value
37	Executime (replaces TimeClocks Plus)	Automated Timesheet Reporting	Finance	0	New FY19	-	-	-	Business Partner with Superion
38	Paymentus	Online Payment Vendor	Finance	0	New FY19	-	-	-	Business Partner with Superion
39	Superion - Pentamation (was Sungard) - 1721	Financial system sofware maint	Finance	71,663	50,196	48,667	52,560	49,554	Sole Provider
40	Washington Post - 7055	Employment Advertising	HR	10,030	New FY19	-	-	-	Competitive Pricing & Value

City of Greenbelt, Maryland
Recommended Vendors for Negotiated Purchase - FY 2020

	Vendor-Number	Commodity	Requesting Department	FY2019	FY2018	FY2017	FY2016	FY2015	Justification for not Bidding
41	CDW-G Computer Center Inc-153	Computers	IT	27,834	11,153	8,622	8,756	9,145	Competitive Pricing & Value
42	Delta Telephone & Cabling - 5016	Phone Maint & Licenses	IT	7,123	9,612	8,300	1,288	9,925	Local Vendor, Competitve Pricing
43	GHA Technologies - 4077	Computers & Computer Equip	IT	17,177	1,962	10,239	19,290	27,197	Competitive Pricing & Value
44	J&M Security Solutions - 1007	Security Cameras	IT	100,859	53,500	New FY18	-	-	Selected by competitive process
45	MCCI - 2709	Laserfische Project Mgmt	IT	36,355	New FY19	-	-	-	Competitive Pricing & Value
46	Microsoft - 6170	Email Service	IT	10,289	9,812	9,830	9,801	9,609	Competitive Pricing & Value
47	Vermont systems - 956	Rec Trac Upgrade, Training, Maint	IT	13,968	16,562	6,353	8,394	8,215	Specialized Service
48	Zones - 34	Computer Equipment	IT	810	43,820	24,979	6,577	-	Last competitive quote June 2016
49	Perconti Data Systems - 5396	Utopia System Upgrade & Maint	IT/Planning	14,495	13,495	5,995	5,995	-	Sole Provider
50	Charles P. Johnson & Assoc - 4802	Greenbelt Lake dam inspection & remediation	Planning	66,520	35,417	0	0	13,423	Specialized Service
51	Bradley Site Design - 1918	Design for Gateway and Buddy Attick Park signage	Planning	1,000	8,004	20,904	23,096	-	Long-term relationship
52	Greenman Pedersen - 379	Engineering consultant	Planning	101,298	118,035	115,398	100,410	150,991	Long-term relationship
53	NAA, Inc.	Remediation of CC Windows	Planning	New FY20	-	-	-	-	Selected by competitive process
54	Acme Auto Leasing LLC - 3190	Police Undercover Leased Vehicle	Police	78,993	61,875	88,750	45,000	81,827	Competitive Pricing & Value
55	American Traffic Solutions (ATS) - 3203	Redlight citation processing	Police	217,918	180,149	215,786	224,126	192,556	Howard County Contract
56	AXON - 620	Body Cameras	Police	64,624	66,499	New FY18	-	-	Specialized Service
57	Complus Data Innovations - 4299	Parking ticket collection services	Police	14,133	14,434	21,569	28,662	16,015	Competitive Pricing & Value
58	D & D Tire - 3204	Auto & Truck Tires	Police	33,171	28,751	26,292	21,541	1,607	State Contract
59	Emerg Serv Consult Intl - 2933 (was Fields Consulting Group - 5873)	Promotional Assessment Center	Police	18,000	0	20,500	0	0	Competitive Pricing & Value
60	Galls Inc - 329	Uniforms and police equipment	Police	16,083	8,274	9,143	16,519	19,571	Sole Provider
61	Gun Shop, The 899	Firearms training, ammunition	Police	17,592	7,603	10,973	15,964	16,531	State Contract
62	Howard County - 2572	Redlight Camera	Police	10,718	10,254	10,302	9,068	9,667	Specialized Service
63	Municipal Emerg Sv Dep - 145 (was Lawmen Supply - 6505)	Simmunition Training, body armor, uniforms	Police	26,255	25,903	19,665	16,067	-	Specialized Service
64	Major Police Supply - 4188	Emergency equipment & installatioin on police vehicles	Police	141,446	31,409	78,250	68,202	40,869	State Contract
65	Motorola - 6109	Radios & related service	Police	27,740	29,934	17,161	15,967	15,967	State Contract
66	Quill - 3937	Office Supplies	Police	13,355	11,179	11,635	4,779	3,981	Competitive Pricing & Value
67	Rekor Recognition Systems - 3487 (was Brekford International - 4533)	Speed Cameras; Purchase and installation of Police Laptops	Police	239,500	260,400	245,000	272,480	281,872	Specialized Service
68	Silver Hill Cleaners - 149	Uniform cleaning	Police	9,042	12,062	14,598	19,912	19,536	Competitive Pricing & Value
69	Smith & Wesson	Handgun purchase	Police	0	0	0	new FY17	-	Competitive Pricing & Value
70	Steven Keller - 2397	Background Checks	Police	23,326	13,046	5,083	-	-	Long-term relationship
71	Tyler Tech (was New World Systems) 5332	Computer System	Police	51,006	104,350	100,196	98,304	99,419	Selected by competitive process

City of Greenbelt, Maryland
Recommended Vendors for Negotiated Purchase - FY 2020

	Vendor-Number	Commodity	Requesting Department	FY2019	FY2018	FY2017	FY2016	FY2015	Justification for not Bidding
72	Suburban Signs Inc - 856	City Vehicle decals & Installation	PD, PW, PCD	19,872	7,035	8,902	9,175	8,776	Competitive Pricing & Value
73	Assa Abloy Entrance Systems US Inc-840	Door repairs	Public Works	9,860	5,807	-	-	-	Local Vendor, Competitive Pricing
74	BFPE International - 1466	Fire Alarm	Public Works	8,302	New FY19	-	-	-	Local Vendor, Competitive Pricing
75	Boland Services - 118	HVAC Services	Public Works	5,437	2,046	37,546	1,772	2,086	Local Vendor, Competitve Pricing
76	Bortek Industries - 979	Auto/Sweeper Parts	Public Works	13,899	New FY19	-	-	-	Competitive Pricing & Value
77	Budget Painting - 734	Painting	Public Works	9,800	0	4,000	5,100	0	Competitive Pricing & Value
78	Chesapeake Ford Truck - 995	Auto Parts	Public Works	13,721	2,102	New FY18	-	-	Competitive Pricing & Value
79	Climate Engineers-2210	HVAC service at AFC	Public Works	74,050	49,226	63,202	49,266	47,087	Local Vendor, Competitve Pricing
80	C N Robinson Lighing - 6118	LED Lighting	Public Works	8,143	6,212	108,748	78,955	34,362	Local Vendor, Competitve Pricing
81	Crovato Products & Svcs - 4009	Auto maintenance	Public Works	9,763	18,171	24,248	22,280	24,962	Local Vendor, Competitve Pricing
82	Crowley Construction - 1221	Roof repairs	Public Works	15,717	30,690	9,438	67,006	61,396	Local Vendor, Competitve Pricing
83	Cunninghan Assoc-6786 (was West Rec-378	Playground Wood Fiber/Mulch	Public Works	24,105	21,906	39,629	15,145	14,537	Local Vendor, Competitve Pricing
84	Dalmex - 6171	Janitorial Services	Public Works	35,039	31,970	28,720	33,320	36,492	Selected by competitive process
85	Dude Solutions Inc - 298	Facility Dude	Public Works	30,775	2,639	2,771	-	-	Competitive Pricing & Value
86	Densel Company - 630	Boiler Replacement	Public Works	56,361	233,610	New FY18	-	-	Selected by competitive process
87	Eastern Salt Co - 2772	Road Salt	Public Works	14,400	New FY19	-	-	-	Competitive Pricing & Value
88	Ennis-Flint - 980	Traffic signs/Crosswalks	Public Works	11,862	2,307	-	-	-	Competitive Pricing & Value
89	Ferguson Enterprises- 299	Plumbing services	Public Works	10,985	6,025	5,273	14,679	10,596	Local Vendor, Competitve Pricing
90	Fidelity Power Systems - 300	Generator Inspection & Maint.	Public Works	4,942	4,225	6,044	25,591	5,700	Long-term relationship
91	Gametime - 1043	Playground Equipment	Public Works	54,533	163,198	1,549	106,635	94,453	Local Vendor, Competitive Pricing
92	General Glass - 4746	Windows	Public Works	2,465	1,779	4,700	19,199	4,730	Selected by competitive process
93	GHE Electric Services Inc - 6290	Electrical Supplies & Repairs	Public Works	12,075	425	8,622	16,060	26,267	Local Vendor, Competitve Pricing
94	Grainger - 350	Filters, lights, tools, misc supplies	Public Works	7,618	3,711	5,100	5,147	6,454	Local Vendor, Competitve Pricing
95	Greenbelt Auto & Truck Repair - 1091	Auto body repair	Public Works	17,725	28,610	36,543	51,261	30,107	Local Vendor, Competitve Pricing
96	Greenbriar Community Assoc - 376	Landscape Maintenance	Public Works	11,599	7,555	6,288	12,077	8,433	Long-term relationship
97	Home Depot - 1183 + 6211	Miscellaneous supplies	Public Works	18,007	17,880	18,108	10,079	16,707	Local Vendor, Competitve Pricing
98	Hi-Line - 2317	Auto Shop Supplies for PD	Public Works	11,943	9,201	6,931	6,687	4,962	Local Vendor, Competitve Pricing
99	Innovative Pyrotechnic Concepts - 6595	Fireworks	Public Works	13,825	13,250	12,800	12,400	12,000	Specialized Service
100	Intercon Truck Equipment - 6331	Truck Equipment	Public Works	13,524	11,167	-	-	-	Competitive Pricing & Value
101	Kimball Midwest - 482	Auto Shop Supplies	Public Works	8,783	4,949	9,459	5,448	3,572	Local Vendor, Competitve Pricing
102	Kohler Equipment - 4683	Tools & Parts	Public Works	9,878	8,771	6,086	3,670	4,488	Local Vendor, Competitve Pricing
103	Leonard Paper Company - 2276	Paper towels & toilet tissue	Public Works	5,588	7,309	7,926	15,283	28,395	Competitive Pricing & Value
104	Mansfield Oil Co - 550	Diesel Fuel	Public Works	47,532	43,854	37,254	39,181	59,940	COG Contract
105	Manuel Tree Service - 6282	Tree pruning/removal	Public Works	4,900	16,100	30,750	2,200	5,850	Competitive Pricing & Value
106	Maryland Environmental Services - 559	Leaf grinding	Public Works	57,200	12,871	18,367	14,132	11,485	Local Vendor, Competitve Pricing
107	NZI Construction Corp - 670	Concrete & street work	Public Works	10,363	159,362	35,951	290,045	341,229	Selected by competitive process
108	Overhead Door - 681	Bay Door Repairs	Public Works	2,085	1,324	7,828	9,253	1,895	Specialized Service
109	P2 Maintenance Services - 3423	Landscape Maintenance	Public Works	5,521	New FY19	-	-	-	Competitive Pricing & Value
110	Parts Authority - 5896	Auto Parts, Supplies & Tools	Public Works	46,838	42,686	62,772	55,636	79,622	Local Vendor, Competitve Pricing
111	Raymar Plumbing Services-767	Plumbing services	Public Works	27,506	31,002	15,244	38,931	26,594	Local Vendor, Competitve Pricing
112	Red Hawk Fire & Security - 6140	Fire Alarm Testion/Inspection	Public Works	15,412	16,940	13,673	25,717	15,297	Local Vendor, Competitve Pricing

City of Greenbelt, Maryland
Recommended Vendors for Negotiated Purchase - FY 2020

	Vendor-Number	Commodity	Requesting Department	FY2019	FY2018	FY2017	FY2016	FY2015	Justification for not Bidding
113	Schindler Elevator - 799	Elevator service and repair	Public Works	15,975	12,490	13,001	13,319	12,928	Competitive Pricing & Value
114	Shapiro & Duncan Mechanical Contractors -5526	Pool Pac Service, HVAC-CC	Public Works	26,655	50,868	289,381	-	-	Competitive Pricing & Value
115	Siteone Landscape Supply - 415	Trees, Landscape Supplies	Public Works	11,442	3,174	2,176	-	-	Local Vendor, Competitve Pricing
116	Tilley Chemical Coumpany - 1049	Oil and Lubricants	Public Works	4,810	New FY19	-	-	-	Selected by competitive process
117	VMP Construction - 951	Asphalt Work	Public Works	786,548	180,090	-	-	-	Selected by competitive process
118	Prince George's County- 693, 694 & 739	Landfill disposal services & I-Net	PW & IT	134,310	112,270	105,865	155,104	99,335	Specialized Service
119	Roberts Oxygen - 784	Propane & Pool Chemicals	PW & Rec	10,743	8,805	9,456	9,582	8,133	Competitive Pricing & Value
120	Amato Industries - 3679	Chlorine & Other Pool Chemicals	Recreation	9,445	8,407	11,123	10,858	11,105	MNCPPC Contract
121	Bonkosky, Laura - 3010	Yoga Instructor	Recreation	14,431	8,720	9,190	9,613	10,015	Local Vendor, Competitive Pricing
122	Doloff Printing - 259	Newsletters & Seasonal Brochures	Recreation	10,783	10,655	21,774	4,632	2,590	Competitive Pricing & Value
123	Mendoza, Ribas, Farinas, & Assoc - 5225	Consulting Engineers	Recreation	6,700	16,023	11,273	1,875	52,073	Long-term relationship
124	O'Brien Bus Service Inc - 672	Bus service for camps- shorter trips	Recreation	14,350	14,425	15,850	17,050	16,875	Competitive Pricing & Value
125	Weyers Floor Service 976	Wood floor re-surfacing & refinishing	Recreation	12,411	16,757	12,530	7,870	8,763	Competitive Pricing & Value

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: David Moran
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
An Ordinance To Authorize The Issuance, Sale And Delivery By The City Of Greenbelt, Maryland Of Its "City Of Greenbelt, Maryland Water Quality Bond, Series 2019" In An Aggregate Principal Amount Not To Exceed Two Million Five Hundred Thousand Dollars ($2,500,000), Pursuant To The Provisions Of Ordinance No. 1359 Passed On September 25, 2017; Prescribing The Form, Maturity, Interest Rate And Provisions For Payment And Redemption Of Said Bond; Confirming The Covenants Of The City To Provide For The Levy And Collection Of Taxes Sufficient For The Prompt Payment Of The Maturing Principal Of And Interest On Said Bond; Determining That The Bond Shall Be Sold By Private Sale To The Maryland Water Quality Financing Administration, Without Competitive Bid; Further Providing For The Use Of The Proceeds Of The Bond; And Providing For The Execution And Delivery Of The Bond And A Loan Agreement, And All Other Details With Respect To The Sale And Delivery Of Said Bond.

Suggested Action:
Reference: Ordinance
Ordinance 1359

Ordinance 1359 authorized the City to borrow up to $2.5 Million dollars to repair the Greenbelt Lake Dam. The voters approved this borrowing at a referendum on November 7, 2017. The City is borrowing these funds from the Maryland Department of the Environment (MDE) Water Quality State Revolving Fund (WQSRF).

Under Section 55(e) of the City Charter this is considered a sale of bonds by negotiation and an Ordinance is required. This Ordinance must be approved by a 2/3 majority (at least 5 members).

Fabian Walters, the City's Bond Counsel (Miles & Stockbridge), drafted the proposed Ordinance.

Staff recommends the Ordinance be introduced for first reading.

Attachments:
Ordinance 1359.pdf

Greenbelt MDE Ordinance.pdf

Loan Agreement-2019-1A CW Tax Exempt.pdf

Introduced: Ms. Davis
1st Reading: September 11, 2017
Passed September 25, 2017
Posted: September 26, 2017
Effective: September 25, 2017

ORDINANCE NUMBER 1359

AN ORDINANCE TO AUTHORIZE AND EMPOWER THE CITY OF GREENBELT, MARYLAND, TO BORROW NOT MORE THAN TWO MILLION FIVE HUNDRED THOUSAND DOLLARS ($2,500,000) FOR THE PUBLIC PURPOSE OF REPAIRING THE GREENBELT LAKE DAM AS REQUIRED BY MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) CONSENT ORDER DSD-2010-5 AS MORE PARTICULARLY DESCRIBED HEREIN, AND TO EFFECT SUCH BORROWING BY OBTAINING A LOAN FROM THE MARYLAND WATER QUALITY FINANCING ADMINISTRATION OR ISSUING ITS GENERAL OBLIGATION BONDS AND IN EITHER CASE PLEDGING THE CITY'S FULL FAITH AND CREDIT TO REPAY THE BORROWING, PURSUANT TO THE AUTHORITY OF SECTION 3 AND SECTION 55 OF THE CITY CHARTER AND EITHER THE MARYLAND WATER QUALITY FINANCING ADMINISTRATION ACT OR SECTIONS 19-301 TO 19-309 OF THE LOCAL GOVERNMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND PROVIDING FOR THE APPROPRIATION AND DISPOSAL OF THE PROCEEDS OF THE BORROWING; PROVIDING FOR THE LEVY AND COLLECTION OF TAXES SUFFICIENT FOR THE PROMPT PAYMENT OF THE MATURING PRINCIPAL OF AND INTEREST ON THE BORROWING; AND GENERALLY RELATING TO THE BORROWING AND THE REPAYMENT THEREOF.

BE IT ORDAINED by the Council of the City of Greenbelt, Maryland, that:

SECTION 1. Pursuant to (a) the authority Sections 3 and 55 of the Charter of the City of Greenbelt (the "Charter") and (b) either (i) the Maryland Water Quality Financing Administration Act (Sections 9-1601 to 9-1622 of the Annotated Code of Maryland) or (ii) Sections 19-301 to 19-309 of Local Government Article of the Annotated Code of Maryland, the City of Greenbelt, Maryland (the "City") is hereby authorized and empowered to borrow money and incur indebtedness (the "Borrowing") for the public purposes described in Section 2 hereof, at one time or from time to time, in an amount not exceeding, in the aggregate, Two Million Five Hundred Thousand Dollars ($2,500,000).

SECTION 2. The proceeds of the Borrowing shall be used and applied for the public purpose of financing, in whole or in part, the public improvement project to repair the Greenbelt Lake Dam as required by the Maryland Department of the Environment Consent Order DSD-2010-5.

SECTION 3. The proceeds of the Borrowing authorized, including any premium and accrued interest received therefor, shall be deposited in the proper account or accounts of the City. The Borrowing proceeds shall be expended for the public purposes described in Section 2 hereof, and said proceeds are hereby appropriated for said purpose.

SECTION 4. For the purpose of meeting the debt service requirements on the Borrowing

authorized hereunder, and in addition to such funds received from any other source as may from time to time be legally available and allocated for such purpose, the City shall, if and when such funds are or will be insufficient for such purpose, levy for each and every fiscal year during which the Borrowing may be outstanding ad valorem taxes upon all real and tangible personal property within its corporate limits subject to assessment for unlimited municipal taxation in rate and amount sufficient to provide for the prompt payment of the principal of and interest on the Borrowing in each such fiscal year, and, in the event the proceeds from the collection of the taxes so levied in any such fiscal year may prove inadequate for such purpose, additional taxes shall be levied in the subsequent fiscal year to make up any deficiency. The full faith and credit and unlimited taxing power of the City are hereby irrevocably pledged to the prompt payment of the maturing principal of and interest on the Borrowing and to the levy and collection of the taxes hereinabove described as and when such taxes may become necessary in order to provide sufficient funds timely to meet the debt service requirements of the Borrowing.

SECTION 5. In accordance with Section 55(b) of the Charter, a complete and exact copy of this Ordinance shall be posted in a public place or places within the boundaries of the City for thirty (30) days and shall be published at least once within ten (10) days of its passage in a newspaper of general circulation in the City.

SECTION 6. This Ordinance shall take effect immediately upon its approval by a majority of the qualified electors of the City voting on the issue at a referendum to be held on a date specified by the Council in accordance with Section 55(c) of the Charter.

PASSED by the Council of the City of Greenbelt, Maryland, at its regular meeting, September 25, 2017.

Emmett V. Jordan, Mayor

ATTEST:

Bonita Anderson, City Clerk

Introduced:
1st Reading:
Passed:
Posted:
Effective:

ORDINANCE NO.

AN ORDINANCE TO AUTHORIZE THE ISSUANCE, SALE AND DELIVERY BY THE CITY OF GREENBELT, MARYLAND OF ITS "CITY OF GREENBELT, MARYLAND WATER QUALITY BOND, SERIES 2019" IN AN AGGREGATE PRINCIPAL AMOUNT NOT TO EXCEED TWO MILLION FIVE HUNDRED THOUSAND DOLLARS ($2,500,000), PURSUANT TO THE PROVISIONS OF ORDINANCE NO. 1359 PASSED ON SEPTEMBER 25, 2017; PRESCRIBING THE FORM, MATURITY, INTEREST RATE AND PROVISIONS FOR PAYMENT AND REDEMPTION OF SAID BOND; CONFIRMING THE COVENANTS OF THE CITY TO PROVIDE FOR THE LEVY AND COLLECTION OF TAXES SUFFICIENT FOR THE PROMPT PAYMENT OF THE MATURING PRINCIPAL OF AND INTEREST ON SAID BOND; DETERMINING THAT THE BOND SHALL BE SOLD BY PRIVATE SALE TO THE MARYLAND WATER QUALITY FINANCING ADMINISTRATION, WITHOUT COMPETITIVE BID; FURTHER PROVIDING FOR THE USE OF THE PROCEEDS OF THE BOND; AND PROVIDING FOR THE EXECUTION AND DELIVERY OF THE BOND AND A LOAN AGREEMENT, AND ALL OTHER DETAILS WITH RESPECT TO THE SALE AND DELIVERY OF SAID BOND.

WHEREAS, the Council of the City of Greenbelt, Maryland (the "City") on September 25, 2017, passed an ordinance ("Ordinance No. 1359") authorizing the City to obtain a loan from the Maryland Water Quality Financing Administration (the "Administration") evidenced by a bond of the City in an aggregate principal amount not to exceed Two Million Five Hundred Thousand Dollars ($2,500,000) for the public purpose of financing, in whole or in part, the public improvement project to repair the Greenbelt Lake Dam as required by the Maryland Department of the Environment Consent Order DSD-2010-5 (the "Project"); and

WHEREAS, Title VI of the Federal Water Pollution Control Act, as amended by the Water Quality Act of 1987 (the "Clean Water Act"), authorizes the United States Environmental Protection Agency (the "EPA") to award grants to qualifying States to establish and capitalize State water pollution control revolving funds ("SRFs") for the purpose of providing loans and certain other forms of financial assistance to finance, among other things, the construction and improvement of publicly-owned wastewater treatment facilities and the implementation of estuary conservation management plans and nonpoint source management programs; and

WHEREAS, as contemplated by the Clean Water Act, the General Assembly of Maryland at its 1988 session enacted the Maryland Water Quality Financing Administration Act, as amended, codified at Sections 9-1601 through 9-1622 of the Environment Article of the Annotated Code of Maryland (the "MWQFA Act"), establishing the Administration and establishing an SRF designated the Maryland Water Quality Revolving Loan Fund (the "Fund") to be maintained and administered

by the Administration. The MWQFA Act, as amended, authorizes the Administration, among other things, to make loans from the Fund to a "local government" (as defined in the MWQFA Act) for the purpose of financing all or a portion of the cost of a "wastewater facility" project (as defined in the MWQFA Act). The City is a "local government" within the meaning of the MWQFA Act. The Project constitutes a "wastewater facility" within the meaning of the MWQFA Act; and

WHEREAS, the Council of the City has determined that it is in the best interests of the City to issue and sell the bond authorized by Ordinance No. 1359 as a single issue to be designated City of Greenbelt, Maryland Water Quality Bond, Series 2019 (the "Bond"); and

WHEREAS, in accordance with the procedures described in Section 55(e) of the Charter of the City, the Council of the City has determined that it is in the best interests of the City to negotiate the sale of the Bond in lieu of taking bids and has waived the bidding procedures by a vote of not less than 2/3 of its members; and

WHEREAS, the Council of the City has determined that it is in the best interests of the City to enter into a loan agreement with the Administration and evidence such loan with the Bond on the terms herein set forth.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Greenbelt, Maryland, that:

SECTION 1. Pursuant to the authority of the Maryland Water Quality Financing Administration Act, codified at Sections 9-601 to 9-1622, inclusive, of the Environment Article of the Annotated Code of Maryland (the "MWQFA Act"), Sections 19-301 through 19-309 of the Local Government Article of the Annotated Code of Maryland (the "Enabling Act"), Sections 3 and 55 of the Charter of the City of Greenbelt (the "Charter"), Ordinance No. 1359, and the laws of the State of Maryland, the City shall borrow money and incur indebtedness to finance the costs of the Project, together with the financial, accounting, legal, bond counsel, financial advisor, paying agent, registrar and accrued interest expenses, in the aggregate principal amount not to exceed Two Million Five Hundred Thousand Dollars ($2,500,000).

SECTION 2. To evidence the indebtedness, the City shall issue and sell upon its full faith and credit and unlimited taxing power, its Water Quality Bond, Series 2019 in the aggregate principal amount not to exceed Two Million Five Hundred Thousand Dollars ($2,500,000), to be designated "City of Greenbelt, Maryland Water Quality Bond, Series 2019" (the "Bond") and the form of Bond is attached as Exhibit F to Appendix A hereto.

SECTION 3. The Bond shall be sold at private negotiated sale to the Administration. The date of sale shall be determined by the Mayor and the Administration.

SECTION 4. The Bond shall be issued and sold by the City pursuant to a loan agreement substantially in the form attached to this Ordinance as

Appendix A, between the City and the Administration (the "Loan Agreement") and the terms and conditions stated in the Loan Agreement are hereby approved as the terms and conditions and the manner in which the Bond shall be sold, issued and delivered. Appropriate variations in the Bond and/or the Loan Agreement may be made and approved by the Mayor to finalize the terms of the Bond and to carry into effect the purposes of this Ordinance, or to comply with recommendations of legal counsel, or bond counsel.

SECTION 5. The Bond shall be dated as of the date of its initial delivery to the Administration, and shall be initially issued and sold as one fully registered bond numbered R-1. The Bond shall be subject to redemption prior to maturity, shall otherwise have the terms, tenor, details and specifications as set forth in the form of Bond, and shall be completed in accordance with the provisions of this Ordinance, with such changes therein as the Mayor shall approve (such approval to be conclusively evidenced by the execution and delivery of the Bond by the Mayor). The covenants and conditions set forth in such form are incorporated into this Ordinance by reference and shall be binding upon the City as though set forth in full herein.

SECTION 6. Based on an anticipated delivery date of the Bond in calendar year 2019 and an estimated completion date for the Project in calendar year 2020, the principal of the Bond shall mature and be due and payable in thirty (30) annual installments, beginning on such date as approved by the Mayor in the Loan Agreement, and payable annually thereafter, as approved by the Mayor in the Loan Agreement, in the amounts specified in the debt service schedule appended to the Bond, provided that the Mayor may make changes in the debt service schedule; provided further that the Bond shall mature no later than 30 years after the completion date of the Project and the aggregate principal amount of the Bond shall not exceed $2,500,000. The principal of the Bond shall be payable at the principal office of the Administration.

SECTION 7. The Bond shall bear interest at the rate of 25% of the average of the Bond Buyer 11-Bond Index for the month preceding the month of issuance of the Bond (subject to adjustment as approved by the Mayor in the Loan Agreement), provided that, the rate determined by such calculation may be rounded down by the Administration in its sole discretion. Based on the anticipated delivery date of the Bond set forth in Section 6, interest due on the unpaid principal amounts advanced on Bond under the Loan Agreement shall be payable on February 1, 2020 and semiannually thereafter on August 1 and February 1 in each year in which the Bond is outstanding, or on such other dates as approved by the Mayor in the Loan Agreement. Interest payments due under the Bond will be payable by electronic funds transfer, check or draft to the Administration.

SECTION 8. The City shall pay (i) a late charge for any payment of principal of or interest on the Bond that is received later than the tenth (10th) day following its due date, in an amount equal to 5% of such payment, and (ii) interest on overdue installments of principal and (to the extent permitted by law) interest at a rate equal to the Default Rate provided for in the Loan Agreement, which Default Rate shall be equal to 100% of the average of the Bond Buyer 11-Bond Index for the calendar month prior to the month in which the Bond is delivered, provided that the rate determined by such calculation may be rounded down by the Administration in its sole discretion. Amounts payable pursuant to this section shall be immediately due and payable to the Administration, and interest at the Default Rate shall continue to accrue on overdue installments of principal and (to the extent permitted by law) interest until such amounts are paid in full.

SECTION 9. The City hereby covenants and agrees to pay all administrative fees and expenses charged by the Administration under the Loan Agreement.

SECTION 10. The Bond shall be executed in the name of the City and on its behalf by the Mayor, whose signature may be by facsimile, and the corporate seal of the City shall be imprinted thereon, attested by the City Clerk, whose signature may be by facsimile; provided that at least one of such signatures shall be a manual signature. In case any official of the City whose signature appears on the Bond shall cease to be such official prior to the authentication and delivery of the Bond, or in the case that any such official shall take office subsequent to the date of issue of the Bond, his or her signature, in either event, shall nevertheless be valid for the purposes herein intended.

SECTION 11. The Bond will be delivered as soon as practicable, upon due notice and at the expense of the City, at such place as may be agreed upon between the Administration and the City, upon payment of the principal amount of the Bond in immediately available funds. The Mayor, the City Manager, the City Treasurer and all other officials and employees of the City are expressly authorized, empowered and directed to take any and all action necessary to complete and close the sale, issuance and delivery of the Bond to the Administration and to execute and deliver all documents, certificates and instruments necessary or appropriate in connection therewith.

SECTION 12. Proceeds of the loan from the Administration shall be used and applied for the public purpose of financing, in whole or in part, the public improvement project to repair the Greenbelt Lake Dam as required by the Maryland Department of the Environment Consent Order DSD-2010-5.

SECTION 13. All of the covenants of the City set forth in Ordinance No. 1359 with respect to the levy and collection of *ad valorem* taxes to provide for payment of the principal of and interest on the Bond, are hereby ratified, confirmed, and approved and declared to be binding upon the City.

SECTION 14. The City Manager, is hereby appointed bond registrar (the "Bond Registrar") and paying agent (the "Paying Agent").

SECTION 15. (a) The Mayor and the City Manager shall be the officers of the City responsible for issuing the Bond within the meaning of Section 1.1482(b)(2) of the Arbitrage Regulations (defined below). The Mayor and the City Manager shall also be the officers of the City responsible for the execution and delivery (on the date of the issuance of the Bond) of a certificate or certificates of the City (a "Tax Certificate and Compliance Agreement") that complies with the requirements of Section 148 of the Internal Revenue Code of 1986, as amended ("Section 148"), and the applicable regulations thereunder (the "Arbitrage Regulations"), and such officials are hereby authorized and directed to execute and deliver a Tax Certificate and Compliance Agreement to counsel rendering an opinion on the validity of the Bond on the date of the issuance of the Bond.

(b) The City shall set forth in the Tax Certificate and Compliance Agreement its reasonable expectations as to relevant facts, estimates and circumstances relating to the use of the proceeds of the Bond or of any moneys, securities or other obligations on deposit to the credit of any account of the City which may be deemed to be proceeds of the Bond pursuant to Section 148 or the Arbitrage Regulations (collectively, the "Bond Proceeds"). The City covenants that the facts, estimates and circumstances set forth in the Tax Certificate and Compliance Agreement will be based on the City's reasonable expectations as of the date of the issuance of the Bond and will be, to the best of the certifying officials' knowledge, true and correct as of that date.

(c) The City covenants and agrees with the registered owner or owners of the Bond that it will not make, or (to the extent that it exercises control or direction) permit to be made, any use of the Bond Proceeds that would cause the Bond to be a "arbitrage bond" within the meaning of Section 148 and the Arbitrage Regulations. The City further covenants that it will comply with Section 148 and the Arbitrage Regulations which are applicable to the Bond on the date of issuance thereof and which may subsequently be made applicable thereto as long as the Bond remains outstanding and unpaid. The Mayor and the City Manager are hereby authorized and directed to prepare or cause to be prepared and to execute any certification, opinion or other document, including, without limitation, a Tax Certificate and Compliance Agreement, which may be required to assure that the Bond will not be deemed to be a "arbitrage bond" within the meaning of Section 148 and the Arbitrage Regulations. All officers, employees and agents of the City are hereby authorized and directed to take such actions, and to provide such certifications of facts and estimates regarding the amount and use of the proceeds of the Bond, as may be necessary or appropriate from time to time

to comply with, or to evidence the City's compliance with, the covenants set forth in this Section.

(d) The City further covenants that it shall make such use of the proceeds of the Bond, regulate the investment of the proceeds thereof, and take such other and further actions as may be required to maintain the excludability from gross income for federal income tax purposes of interest on the Bond.

(e) The City further covenants with the registered owner or owners of the Bond (i) that it will not take any action or (to the extent that it exercises control or direction) permit any action to be taken that would cause the Bond or a portion of the Bond to be "federally guaranteed" within the meaning of Section 149(b) of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) that it will not make or (to the extent that it exercises control or direction) permit to be made, any use of the proceeds of the Bond or a portion of such proceeds that would cause the Bond or a portion of the Bond to be a "private loan bond" within the meaning of Section 141(c) of the Code.

(f) The Mayor and the City Manager may make such covenants or agreements in connection with the issuance of the Bond as they or either of them shall deem advisable in order to assure the registered owner or owners of the Bond that interest thereon shall be and remain excludable from gross income for federal income tax purposes, and such covenants or agreements shall be binding on the City so long as the observance by the City of any such covenants or agreements is necessary in connection with the maintenance of the exclusion of the interest on the Bond from gross income for federal income tax purposes. The foregoing covenants and agreements may include such covenants and agreements on behalf of the City regarding compliance with the provisions of the Code as the Mayor or the City Manager shall deem advisable in order to assure the registered owner or owners of the Bonds that the interest thereon shall be and remain excludable from gross income for federal income tax purposes, including (without limitation) covenants or agreements relating to the investment of Bond Proceeds, the payment of certain earnings resulting from such investment to the United States, limitations on the times within which, and the purpose for which, Bond Proceeds may be expended, or the use of specified procedures for accounting for and segregating Bond Proceeds. Such covenants and agreements may be set forth in a Tax Certificate and Compliance Agreement.

SECTION 16. The Mayor, the City Manager, and the City Treasurer are authorized to distribute current financial information concerning the City to the Administration.

SECTION 17. The City confirms that Ordinance No. 1359 will serve and constitute as a declaration of official intent within the meaning of, and for the purposes set

forth in, Section 1.150-2 of the Income Tax Regulations prescribed by the U.S. Treasury Department.

SECTION 18. With respect to all documents, certificates and other forms the execution, authentication and delivery of which is authorized herein, the official(s) or representative(s) authorized to execute, authenticate or deliver such documents, certificates or other forms is (are) hereby authorized to do so with such changes from the forms approved herein as may be necessary, prudent or desirable to effect the transactions contemplated by Ordinance No. 1359 or this Ordinance.

SECTION 19. The Mayor, City Manager and City Treasurer are authorized to execute and deliver such other and further documents as may be necessary or appropriate to complete sale and delivery of the Bond.

SECTION 20. The provisions of this Ordinance shall constitute a contract between the City and the registered owners of the Bond so long as the Bond or any portion thereof hereby authorized remain unpaid.

PASSED by the Council of the City of Greenbelt, Maryland, at its meeting on July 8, 2019.

_____
Emmett V. Jordan, Mayor

[SEAL]

Attest:

_____
Bonita Anderson, City Clerk

Appendix A

[Form of Loan Agreement]

LOAN AGREEMENT

By and Between

MARYLAND WATER QUALITY
FINANCING ADMINISTRATION

and

"Insert Name of Entity"

Dated as of "Insert Month and Day", 2019

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LOAN AGREEMENT

THIS LOAN AGREEMENT, made this "Insert Day" day of "Insert Month", 2019, between the Maryland Water Quality Financing Administration (the "Administration"), a unit of the Department of the Environment (the "Department") of the State of Maryland (the "State"), and "Insert Name of Entity", a "Insert Entity Type" of the State (the "Borrower").

RECITALS

Title VI of the Federal Water Pollution Control Act (commonly known as the "Clean Water Act"), as amended by the Water Quality Act of 1987 ("Title VI"), authorizes the Environmental Protection Agency ("EPA") to award grants to qualifying States to establish and capitalize State water pollution control revolving funds ("SRFs") for the purpose of providing loans and certain other forms of financial assistance (but not grants) to finance, among other things, the construction and improvement of publicly-owned wastewater treatment facilities and the implementation of estuary conservation management plans and nonpoint source management programs.

As contemplated by Title VI, the General Assembly of the State at its 1988 session enacted the Maryland Water Quality Financing Administration Act, codified at Sections 9-1601 through 9-1622 of the Environment Article of the Annotated Code of Maryland, as amended (the "Act"), establishing an SRF designated the Maryland Water Quality Revolving Loan Fund (the "Fund") to be maintained and administered by the Administration. The Act authorizes the Administration, among other things, to make a loan from the Fund to a "local government" (as defined in the Act) for the purpose of financing all or a portion of the cost of a "wastewater facility" project (as defined in the Act).

The Borrower, which is a "local government" within the meaning of the Act, has applied to the Administration for a loan from the Fund to assist in the financing of a certain project or projects of the Borrower (the "Project," as defined herein) which constitutes a "wastewater facility" within the meaning of the Act. The Project is one designated for funding in an Intended Use Plan promulgated by the Administration in accordance with regulations issued by the EPA pursuant to Title VI, and the Project conforms to the applicable "county plan" adopted pursuant to the requirements of Subtitle 5 of Title 9 of the Environment Article of the Annotated Code of Maryland, as amended.

The Director of the Administration has determined that the making of a loan to the Borrower for the purpose of assisting the financing of the Project, on the terms and conditions hereinafter set forth, is necessary and desirable in the public interest, will promote the health, safety and welfare of the inhabitants of the State and the United States by assisting in the prevention of pollution of the environment, and will further the purposes of Title VI and the Act.

The Act authorizes the Administration, subject to the prior approval of the Secretary of the Department and the Board of Public Works, to issue its revenue bonds for the

purpose of providing monies for deposit to the Fund. The Administration may issue and sell one or more series of such revenue bonds (the "Bonds") for the purpose of providing monies for deposit to the Fund in an amount sufficient, together with certain other monies expected to be available for that purpose, to enable the Administration to make, or reimburse the Administration for making, a loan to the Borrower and certain other entities to assist in the financing of projects, all as contemplated by the Administration's Intended Use Plan. The revenues from this loan and such other loans, whether or not funded from the proceeds of Bonds, may be pledged by the Administration to secure Bonds.

NOW THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower and the Administration, each intending to be legally bound, hereby agree as follows:

ARTICLE I

DEFINITIONS

Section 1.01. Definitions. Unless specifically provided otherwise or the context otherwise requires, when used in this Agreement:

"Act" means the Maryland Water Quality Financing Administration Act, Sections 9-1601 through 9-1622 of the Environment Article, Annotated Code of Maryland, and all acts supplemental thereto or amendatory thereof.

"Administration" means the Maryland Water Quality Financing Administration, a unit of the Department of the Environment of the State, and its successors and assigns.

"Administrative Fee" means the fee payable by the Borrower pursuant to this Agreement for the general administrative services and other functions and expenses of the Administration.

"Agreement" means this Loan Agreement, including the Exhibits attached hereto and any amendments hereto.

"Application" means the application for the Loan submitted by the Borrower to the Administration, together with any amendments thereto.

"Authorized Officer" means, in the case of the Borrower, any person authorized by law or by a resolution of the governing body of the Borrower to perform any act or execute any document on behalf of the Borrower.

"Board" means the Board of Public Works of the State.

"Bonds" means any series of revenue bonds issued by the Administration under the Act.

"Bond Counsel" means a law firm acceptable to the Administration whose legal opinions are generally accepted by purchasers of municipal bonds.

"Borrower" means the local government (as defined in the Act) that is identified in the first paragraph of this Agreement, and its successors and assigns.

"Business Day" means a day other than a Saturday, Sunday, or day on which the offices of the Administration or commercial banks in the State are authorized or obligated to remain closed.

"Change Orders" means any amendments or modifications to any Plans and Specifications or any general construction contract for the Project.

"Clean Water Act" means the Water Pollution Control Act of 1972, PL 92-500, as amended, 33 U.S.C. §1251 et seq., and rules and regulations promulgated thereunder.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, or any successor federal income tax statute or code, and the applicable regulations and rulings promulgated thereunder.

"Default" means an event or condition the occurrence of which would, with the lapse of time or the giving of notice or both, constitute an Event of Default.

"Default Rate" means the interest rate so specified in Exhibit B of this Agreement.

"Department" means the Maryland Department of the Environment, and its successors.

"Director" means the Director of the Administration.

"Eligible Project Costs" means all those costs of the Project permitted by the Act to be funded by a loan from the Fund and which have been approved by the Director.

"EPA" means the United States Environmental Protection Agency, and its successors.

"Event of Default" means any occurrence or event specified in Section 4.01 hereof.

"Fiscal Year" means the period of 12 consecutive months commencing on July 1 in any calendar year and ending on June 30 of the succeeding calendar year.

"Fund" means the Maryland Water Quality Revolving Loan Fund.

"Governmental Authority" means the United States, the State of Maryland, or any of their political subdivisions, agencies, departments, commissions, boards, bureaus or instrumentalities, including any local authority having jurisdiction over the Project, and including EPA, the Department, the Board and the Administration.

"Indenture" means the indenture of trust, bond resolution or other trust agreement between the Administration and the Trustee, providing for the issuance of Bonds, as amended, modified or supplemented from time to time.

"Independent Counsel" means any attorney or law firm with attorneys duly admitted to practice law before the highest court of any state who has or have regularly engaged in the practice of law as the primary occupation of such attorney or attorneys for at least five years. Independent Counsel may also serve as Bond Counsel if qualified to act as Bond Counsel.

"Independent Public Accountant" means an individual, partnership or corporation engaged in the accounting profession, either entitled to practice, or having members or officers entitled to practice, as a certified public accountant under the laws of the State of Maryland and, in fact, independent.

"Loan" means the aggregate amounts which are advanced from time to time by the Administration to the Borrower pursuant to the terms and provisions of this Agreement.

"Loan Closing Date" means the date on which the Note is executed and delivered to the Administration.

"Loan Commitment" means that amount which the Administration is obligated to lend to the Borrower pursuant to the terms and provisions of this Agreement and subject to the satisfaction of the conditions set forth in this Agreement, as such amount may be adjusted as provided in this Agreement.

"Loan Proceeds Questionnaire and Certificate" means the Loan Proceeds Questionnaire and Certificate executed and provided by the Borrower in connection with the Loan, in form and substance satisfactory to the Administration.

"Loan Year" means the period beginning on the first February 1 on which principal of the Loan is payable and each February 1 thereafter and ending on the immediately succeeding January 31.

"Note" means the bond, note or other obligation executed and delivered by the Borrower to the Administration to evidence the Loan, such Note to be substantially in the form attached hereto as Exhibit F.

"Plans and Specifications" means the final plans and specifications for the construction of the Project prepared by the architect or engineer and approved by the Department.

"Project" means the project or projects of the Borrower described in Exhibit B to this Agreement.

"Project Budget" means the budget for the Project as set forth in Exhibit C to this Agreement, as revised in accordance with Section 2.02(d).

"Related Financing" means any bond, note, agreement or other instrument or transaction (other than this Agreement or the Note) pursuant to which the Borrower obtains any monies that may be expended to pay costs of the Project.

"Requirement" means any law, ordinance, code, order, rule or regulation of a Governmental Authority, including, without limitation, a condition set forth in a National Pollution Discharge Elimination System ("NPDES") permit or in a construction permit issued by the Department.

"State" means the State of Maryland.

"Tax-Exempt Bonds" means Bonds the interest on which is excludable from gross income for federal income tax purposes under the Code.

"Trustee" means the trustee for the Bonds.

Section 1.02. Rules of Construction. Unless the context clearly indicates to the contrary, the following rules shall apply to the construction of this Agreement:

(a) words importing the singular number include the plural number and words importing the plural number include the singular number;

(b) words of the masculine gender include correlative words of the feminine and neuter genders;

(c) words importing persons include any individual, corporation, partnership, joint venture, association, joint stock company, trust, unincorporated organization or government or agency or political subdivision thereof;

(d) the terms "agree" and "agreement" shall include and mean "covenant", and all agreements contained in this Agreement are intended to constitute covenants and shall be enforceable as such;

(e) the headings and the Table of Contents set forth in this Agreement are solely for convenience of reference and shall not constitute a part of this Agreement or affect its meaning, construction or effect; and

(f) any reference to a particular Article or Section shall be to such Article or Section of this Agreement unless the context shall otherwise require.

ARTICLE II

REPRESENTATIONS AND COVENANTS OF BORROWER

Section 2.01. Representations of Borrower. The Borrower represents for the benefit of the Administration as follows:

(a) Corporate Organization and Authority. The Borrower:

(i) is a "local government" as defined in the Act; and

(ii) has all requisite power and authority and all necessary licenses and permits required as of the date hereof to own and operate the Project, to enter into this Agreement, to execute and deliver the Note, and to carry out and consummate all transactions contemplated by this Agreement.

(b) Full Disclosure. There is no fact that the Borrower has not disclosed to the Administration in writing that materially adversely affects or (so far as the Borrower can now foresee) that will materially adversely affect the properties, activities, prospects or condition (financial or other) of the Borrower or the ability of the Borrower to make all payments due hereunder and otherwise perform its obligations under this Agreement and the Note.

(c) Pending Litigation. There are no proceedings pending, or to the knowledge of the Borrower threatened, against or affecting the Borrower in any court or before any Governmental Authority or arbitration board or tribunal that, if adversely determined, would materially adversely affect the properties, activities, prospects or condition (financial or other) of the Borrower, or the ability of the Borrower to make all payments due hereunder and otherwise perform its obligations under this Agreement and the Note, and that have not been disclosed in writing to the Administration in the Application or otherwise.

(d) Borrowing Legal and Authorized. The consummation of the transactions provided for in this Agreement and the Note and compliance by the Borrower with the provisions of this Agreement and the Note:

(i) are within its powers and have been duly authorized by all necessary action on the part of the governing body of the Borrower; and

(ii) will not result in any breach of any of the terms, conditions or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrances upon any property or assets of the Borrower pursuant to, any indenture, loan agreement or other instrument (other than this Agreement and the Note) to which the Borrower is a party or by which the Borrower may be bound, nor will such action result in any violation of the provisions of laws, ordinances, governmental rules, regulations or court orders to which the Borrower or its properties or operations is subject.

(e) No Defaults. No event has occurred and no condition exists that, upon execution of this Agreement and the Note or receipt of the Loan, would constitute a Default hereunder. The Borrower is not in violation, and has not received notice of any claimed violation, of any term of any agreement or other instrument to which it is a party or by which it or its property may be bound, which violation would materially adversely affect the properties, activities, prospects or condition (financial or other) of the Borrower or the ability of the Borrower to make all payments due hereunder and otherwise perform its obligations under this Agreement and the Note, and that have not been disclosed in writing to the Administration in the Application or otherwise.

(f) Governmental Consent; Project Consistency.

(i) The Borrower has obtained all permits and approvals required to date by any Governmental Authority for the making and performance by the Borrower of its obligations under this Agreement and the Note or for the Project and the financing thereof. No consent, approval or authorization of, or filing, registration or qualification with, any Governmental Authority that has not been obtained is required on the part of the Borrower as a condition to the execution and delivery of this Agreement and the Note or the consummation of any transaction herein contemplated.

(ii) The Project is consistent with (A) the local plan of the Borrower as contemplated under Section 5-7A-02 of the State Finance and Procurement Article of the Annotated Code of Maryland, as amended; (B) the State Economic Growth, Resource Protection, and Planning Policy established in Section 5-7A-01 of the State Finance and Procurement Article of the Annotated Code of Maryland, as amended; and (C) all applicable provisions of *Subtitle 7B,* "*Priority Funding Areas,*" of Title 5 of the State Finance and Procurement Article of the Annotated Code of Maryland, as amended.

(g) No Conflicts. No member, officer, or employee of the Borrower, or its designees, or agents, no consultant, no member of the governing body of the Borrower or of any Governmental Authority, who exercises or has exercised any authority over the Project during such person's tenure, shall have any interest, direct or indirect, in any contract or subcontract, or its proceeds, in any activity, or in any benefit therefrom, which is part of the Project.

(h) Use of Proceeds. The Borrower will apply the proceeds of the Loan from the Administration as described in Exhibit B attached hereto and made a part hereof (i) to finance all or a portion of the Eligible Project Costs; and (ii) to reimburse the Borrower for all or a portion of the Eligible Project Costs paid or incurred prior to the date hereof in anticipation of reimbursement by the Administration (and subject to compliance with Section 2.02(l) of this Agreement). Except as provided in Sections 3.01 and 3.03(c) of this Agreement, before each and every advance of the proceeds of the Loan to the Borrower, the Borrower shall submit to the Administration a requisition meeting the requirements of Section 3.03 of this Agreement.

(i) Loan Closing Submissions. On or before the Loan Closing Date, the Borrower will cause to be delivered to the Administration each of the following items:

(i) an opinion of Independent Counsel, acceptable to the Administration, dated as of the Loan Closing Date, substantially in the form set forth in Exhibit D to this Agreement;

(ii) an opinion of Bond Counsel [who may rely, as to the validity of this Agreement and the Note, on the opinion of Independent Counsel referred to in (i)], dated as of the Loan Closing Date, and acceptable to the Administration, to the effect that (A) interest on the Loan and the Note will be excludable from gross income for purposes of federal income taxation and (B) interest on the Loan and the Note will not be included in the alternative minimum taxable income of individuals, corporations or other taxpayers as an enumerated item of tax preference or other specific adjustment;

(iii) fully executed counterparts of this Agreement, the Note and the Loan Proceeds Questionnaire and Certificate;

(iv) copies of the ordinance, resolution or other official action of the governing body of the Borrower authorizing the execution and delivery of this Agreement and the Note, certified by an appropriate officer of the Borrower;

(v) a certificate, dated as of the Loan Closing Date, signed by an Authorized Officer of the Borrower and in form satisfactory to the Administration, confirming the Borrower's obligations under and representations in the Loan Agreement and the Loan Proceeds Questionnaire and Certificate as of such date;

(vi) a requisition in an amount not less than the lesser of 5% of the Loan Commitment or $50,000 for (i) reimbursement to the Borrower of Eligible Project Costs together with paid invoices supporting such reimbursement, or (ii) payment to third-parties of currently due and payable invoices for Eligible Project Costs, or (iii) a combination of (i) and (ii); and

(vii) such other certificates, documents, opinions and information as the Administration may require.

Section 2.02. Particular Covenants of the Borrower.

(a) Maintenance of Project; Insurance. The Borrower shall (i) keep, operate and maintain, or cause to be kept, operated and maintained, the Project in good working order, condition and repair; (ii) make or cause to be made all needed and proper replacements to the Project so that the Project will at all times be in good operating condition, fit and proper for the purposes for which it was originally erected or installed; (iii) not permit any waste of the Project; (iv) observe and comply with, or cause to be observed and complied with, all Requirements; and (v) operate, or cause to be operated, the Project in the manner in which similar projects are operated by persons operating a first-class facility of a similar nature. The Borrower shall maintain or cause to be maintained at its sole cost and expense insurance with respect to the Project, both during its construction and thereafter, against such casualties and contingencies and in such amounts as are customarily maintained by governmental entities similarly situated and as are consistent with sound governmental practice.

(b) Sale or Disposition of Project. The Borrower reasonably expects that no portion of the Project will be sold prior to the final maturity date of the Loan. In the event that the Borrower shall sell or otherwise dispose of any portion of the Project prior to the final maturity date of the Loan, the Borrower shall apply the net proceeds thereof to the prepayment of the Loan or as the Administration shall otherwise direct unless (i) the Borrower shall have obtained the prior written consent of the Administration to some other proposed application of such net proceeds and (ii) there shall have been delivered to the Administration an opinion of Bond Counsel to the effect that, in the opinion of such firm, such proposed application of such net proceeds will not adversely affect the tax-exempt status for federal income tax purposes of the interest on any Tax-Exempt Bonds applicable to the Project or the Note.

(c) Inspections; Information. The Borrower shall permit the Administration or its designee to examine, visit and inspect, at any and all reasonable times (including, without limitation, any time during which the Project is under construction or in operation), the property constituting the Project, to attend all construction progress meetings relating to the Project and to inspect and make copies of any accounts, books and records, including (without limitation) its records regarding receipts, disbursements, contracts, investments and any other matters relating to the Project and the financing thereof, and shall supply such reports and information as the Administration may reasonably require in connection therewith. Without limiting the generality of the foregoing, the Borrower shall keep and maintain any books, records, and other documents that may be required under applicable federal and State statutes, regulations, guidelines, rules and procedures now or hereafter applicable to loans made by the Administration from the Fund, and as may be reasonably necessary to reflect and disclose fully the amount and disposition of the Loan, the total cost of the activities paid for, in whole or in part, with the proceeds of the Loan, and the amount and nature of all investments related to such activities which are supplied or to be supplied by other sources. All such books, records and other documents shall be maintained at the offices of the Borrower, as specified on Exhibit B attached hereto, for

inspection, copying, audit and examination at all reasonable times by any duly authorized representative of the Administration. All such books, records and other documents shall be maintained until the completion of an audit of the Project by the EPA or notification from the State or the EPA that no audit is required.

(d) Completion of the Project; Payment of Excess Costs of the Project. The Borrower shall proceed diligently to complete the Project in accordance with the Plans and Specifications, and in accordance with any requirements set forth in the construction and NPDES permits. The Borrower shall satisfy all applicable Requirements for operation of the Project by the completion of the Project, and shall commence operation of the Project promptly upon its completion. No substantial changes may be made to the Plans and Specifications, the general construction contract or the Project Budget, or in the construction of the Project without the prior written approval of the Administration in its discretion. The Borrower shall pay any amount required for the acquisition, construction and equipping of the Project in excess of the amount available to be loaned to the Borrower hereunder. Upon the completion of the Project, the Borrower shall deliver to the Administration a certificate of the Borrower certifying that the Project was completed as of the date set forth in such certificate.

(e) Cancellation of Loan. As provided by Section 9-1606(e) of the Act, the Borrower acknowledges and agrees that its obligation to make the payments due hereunder and under the Note is cancelable only upon repayment in full of the Loan, and that neither the Administration, the Secretary of the Department, nor the Board is authorized to forgive the repayment of all or any portion of the Loan.

(f) Dedicated Source of Revenue. Pursuant to the Clean Water Act, the Borrower has established one or more dedicated sources of revenue for repayment of the Loan, as described in Exhibit E attached hereto as a part hereof.

(g) Indemnification. To the extent permitted by law, the Borrower releases the Administration, the Fund, the Department, the Board and the State from, agrees that the Administration, the Fund, the Department, the Board and the State shall not have any liability for, and agrees to protect, indemnify and save harmless the Administration, the Fund, the Department, the Board and the State from and against, any and all liabilities, suits, actions, claims, demands, losses, expenses and costs of every kind and nature incurred by, or asserted or imposed against, the Administration, the Fund, the Department, the Board or the State, as a result of or in connection with the Project or the financing thereof. To the extent permitted by law, all money expended by the Administration, the Fund, the Department, the Board or the State as a result of such liabilities, suits, actions, claims, demands, losses, expenses or costs, together with interest at the rate provided in the Note from the date of such payment, shall constitute an additional indebtedness of the Borrower and shall be immediately and without notice due and payable by the Borrower to the Administration.

(h) Non-discrimination. The Borrower certifies that it does not discriminate, and covenants that it shall not discriminate, on the basis of (1) political or religious opinion or affiliation, marital status, race, color, creed or national origin, or (2) sex or age, except where sex or age constitutes a bona fide occupational qualification, or (3) the physical or mental handicap

of a qualified handicapped individual. At such times as the Administration requests, the Borrower shall submit to the Administration information relating to the Borrower's operations, with regard to political or religious opinion or affiliation, marital status, physical or mental handicap, race, color, creed, sex, age, or national origin, on a form to be prescribed by the Administration.

(i) Compliance with Requirements. The Borrower acknowledges that the Loan and this Agreement are subject to, and the Borrower agrees to comply with, all Requirements applicable to the Project and the financing thereof, including (without limiting the generality of the foregoing) the Clean Water Act, the Act, and all other applicable State and federal statutes and such rules, regulations, orders and procedural guidelines as may be promulgated from time to time by the EPA, the Board, the Department, the Administration, or other Governmental Authority.

(j) Annual Audit. Within nine (9) months of the end of each Fiscal Year (unless such period is changed to comply with terms of the Administration's financings, or a Requirement, in which case the Administration shall notify the Borrower in writing), the Borrower shall cause financial statements of the Borrower to be prepared with respect to such Fiscal Year in accordance with generally accepted accounting principles, applicable to governmental units, consistently applied, which financial statements shall be audited by, and accompanied by a report of, an Independent Public Accountant. Such financial statements and report shall be delivered upon completion to the Administration within the nine (9) month period or within thirty (30) days from receipt of a report from the auditor, whichever period is shorter.

(k) Bonds Not to Be Arbitrage Bonds. The Administration expects to deliver on each date of issuance of each series of Tax-Exempt Bonds a certificate (such certificate, as it may be amended and supplemented from time to time in accordance with the Indenture, being referred to herein as the "Section 148 Certificate") that complies with the requirements of Section 148 of the Code or applicable successor provisions ("Section 148") and that states the Administration's reasonable expectations as to relevant facts, estimates and circumstances relating to the use of the proceeds of such Tax-Exempt Bonds or of any monies, securities or other obligations on deposit to the credit of any of the funds and accounts created by the Indenture or this Agreement or otherwise that may be deemed to be proceeds of the Tax-Exempt Bonds within the meaning of Section 148 (collectively, "Bond Proceeds"). The Borrower covenants to provide, or cause to be provided, such facts and estimates as the Administration reasonably considers necessary to enable it to execute and deliver its Section 148 Certificate including (but not limited to) those updates required in the Loan Proceeds Questionnaire and Certificate. The Borrower further covenants that (i) such facts and estimates will be based on its reasonable expectations on the date of issuance of the Tax-Exempt Bonds and will be, to the best of the knowledge of the officers of the Borrower providing such facts and estimates, true, correct and complete as of that date, and (ii) the Borrower will make reasonable inquiries to ensure such truth, correctness and completeness.

The Borrower covenants that it will not make, or (to the extent that it exercises control or direction) permit to be made, any use of the Bond Proceeds that would cause any of the Tax-Exempt Bonds to be "arbitrage bonds" within the meaning of Section 148. The

Borrower further covenants that it will comply with those provisions of Section 148 that are applicable to the Tax-Exempt Bonds on the date of issuance of such Tax-Exempt Bonds and with those provisions of Section 148 that may subsequently be lawfully made applicable to such Bonds.

The Administration and the Borrower shall hold and invest Bond Proceeds within their control (if such proceeds are invested) in accordance with the expectations of the Administration set forth in the Section 148 Certificate. If the Administration is of the opinion, upon receipt of advice of Bond Counsel, that it is necessary further to restrict or limit the yield on the investment of any Bond Proceeds in order to avoid any of the Tax-Exempt Bonds being considered "arbitrage bonds" within the meaning of Section 148, the Borrower shall take such action as is necessary to restrict or limit the yield on such investment, irrespective of whether the Borrower is of the same or a different opinion. Upon the request of the Borrower and receipt of advice of Bond Counsel, the Administration may, and upon receipt of an approving ruling from the Internal Revenue Service or a decision of a court of competent jurisdiction, the Administration shall, take such action as is necessary to remove or modify a restriction or limitation on the yield on the investment of any Bond Proceeds that was formerly deemed necessary. The Administration shall incur no liability in connection with action as contemplated herein so long as the Administration acts in good faith.

The Administration contemplates and will use its best efforts to provide for the payment of rebate or penalties in lieu of rebate with respect to the Tax-Exempt Bonds pursuant to Section 148 from the proceeds of the Tax-Exempt Bonds or investment earnings thereon. However, in the event that funds from this source are inadequate to provide for any such payment of rebate or such penalties, the Borrower agrees to pay to the Administration the portion of the rebate or penalties with respect to any Tax-Exempt Bonds fairly allocable to the Loan (as reasonably determined by the Administration) upon written request of the Administration accompanied by an explanation of the method for allocating any such penalties or rebate.

In addition, the Borrower covenants that it will not make, or (to the extent that it exercises control or direction) permit to be made, any use of the monies deemed to be proceeds of any other Tax-Exempt Bonds of the Administration that would cause any such Tax-Exempt Bonds to be "arbitrage bonds" within the meaning of Section 148. The Borrower further covenants that it will comply with those provisions of Section 148 that are applicable to such other Tax-Exempt Bonds on the date of issuance of such Tax-Exempt Bonds and with those provisions of Section 148 that may subsequently be lawfully made applicable to such Tax-Exempt Bonds. The Borrower shall have no obligation under this paragraph unless advised of such in writing by the Administration.

(l) Compliance With Loan Proceeds Questionnaire and Certificate. Without otherwise limiting the covenants or representations set forth in this Agreement or in the Loan Proceeds Questionnaire and Certificate, the representations set forth in Paragraphs 3 through 9, inclusive, and Paragraphs 11 through 14, inclusive, of the Loan Proceeds Questionnaire and Certificate are hereby incorporated as continuing representations of the Borrower, except to the extent that the Administration shall receive an opinion from Bond Counsel to the effect that any variation from such representations shall not adversely affect the excludability of interest on any

Tax-Exempt Bonds from gross income for federal income tax purposes. The Borrower shall not take or permit to be taken any action or actions which would cause any Tax-Exempt Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code or which would otherwise cause interest on any Tax-Exempt Bonds to be includable in gross income for federal income tax purposes.

(m) Additional Disclosure Information. The Borrower agrees to provide the Administration with such information regarding the Borrower and its finances as the Administration may from time to time request. The Borrower further acknowledges that the Administration may issue one or more series of Bonds pursuant to the Indenture, and that any or all of such Bonds may be secured in part by repayments of the Borrower with respect to the Loan. The Borrower accordingly agrees to provide to the Administration such information regarding the Borrower and its finances as the Administration may from time to time request for inclusion in the official statements or other offering documents to be distributed in connection with the sale of any such Bonds or any annual disclosure document or other informational document prepared from time to time by the Administration to be made available to prospective purchasers or holders of any of such Bonds. The Borrower shall also furnish to the Administration at its request a certificate of an Authorized Officer of the Borrower to the effect that any information so provided or included contains no material inaccuracy or omission in light of the purposes for which such information is provided or included. The Borrower agrees to notify the Administration promptly in writing of (a) any changes in the condition or affairs of the Borrower (financial or other) that would cause any information regarding the Borrower so provided or included in an official statement or any subsequent offering document, annual disclosure document or other informational document of the Administration that the Borrower has had an opportunity to review and certify as to its accuracy, to contain a material inaccuracy or omission in light of the purposes for which such information is so included, and (b) upon request from the Administration, any event set forth in Securities and Exchange Commission Rule 15c2-12(b)(5)(i)(C), as such rule may be amended and supplemented.

(n) Related Financing. The Borrower agrees that the proceeds of any Related Financing shall be expended to pay costs of the Project on a monthly basis proportionately with the proceeds of the Loan, taking into account the total amount of the proceeds of such Related Financing available to pay costs of the Project and the maximum amount of the Loan Commitment. The Borrower agrees to provide the Administration upon its request with such information as the Administration deems reasonably necessary to determine whether the Borrower is in compliance with the provisions of this Section 2.02(n).

ARTICLE III

LOAN TO BORROWER; AMOUNTS PAYABLE; GENERAL AGREEMENTS

Section 3.01. The Loan. Subject to the provisions of Sections 3.02, 3.03 and 3.08 hereof, the Administration hereby agrees to advance amounts under this Agreement to the Borrower, and the Borrower agrees to borrow and accept from the Administration amounts

advanced under this Agreement, in an aggregate principal amount not to exceed the maximum amount of the Loan Commitment set forth on Exhibit B attached hereto.

Section 3.02. Availability of Funds. The Administration expects to have, and shall use its best efforts to obtain and maintain, funds in an amount sufficient to make advances to the Borrower in accordance with the "Construction Cash Draw Schedule" included in Exhibit C attached hereto. The Borrower recognizes, however, that the Administration is a governmental entity with limited financial resources and that the Administration's ability to make such advances may be adversely affected by events or circumstances beyond the Administration's control. The Borrower accordingly assumes the risk that monies may not be available to make advances of the Loan to the Borrower, and, in such event, the Borrower specifically agrees that the Administration shall have no obligation to lend any amounts to the Borrower in excess of the amount theretofore advanced to the Borrower.

Section 3.03. Disbursements and Capitalized Interest.

(a) Requisitions and Disbursements. Amounts shall be loaned from time to time to pay, or reimburse the Borrower for the payment of, Eligible Project Costs, upon receipt of requisitions of the Borrower. Each such requisition shall (i) state the names of the payees, (ii) describe in reasonable detail the purpose of each payment, (iii) state the amount of each payment (supported by appropriate paid invoices or other evidence satisfactory to the Administration that the amount requisitioned has been paid or has been incurred by the Borrower and is then due), (iv) state that the amount so requisitioned constitutes a part of the Eligible Project Costs, and (v) state that no Default or Event of Default under this Agreement has occurred and is continuing; provided, that this section shall not apply to advances made or deemed to have been made as provided in Section 3.03(c) hereof. The Administration shall not be required to advance monies on more than one day in each month, and the Administration shall not be required to advance monies for the Project sooner than, or in an amount greater than, the schedule of disbursements for the Project shown on the "Construction Cash Draw Schedule" included in Exhibit C attached hereto. The Administration may require the Borrower to submit requisitions in advance of each such disbursement date in such manner as shall be reasonably acceptable to the Administration.

(b) Conditions Precedent. Before making the first advance of Loan proceeds, the Administration shall receive the following in form and content satisfactory to the Administration:

(i) copies of the Plans and Specifications and of any Change Orders issued through the date of such advance, the general construction contract, and the Project Budget;

(ii) a survey showing the location of existing and proposed easements, rights-of-way and improvements, and the perimeter boundaries of the land upon which the Project will be located, if any Loan proceeds are to be used for acquisition of the land;

(iii) copies of all building permits, if any, pertaining to the Project;

(iv) cost breakdown in trade form showing all subcontracts which represent at least 10 percent of the costs of the Project, and indicating use of the proceeds of the Loan therefor;

(v) a fully executed copy of any contract for the purchase of real property constituting a portion of the Eligible Project Costs described in Exhibit C; and

(vi) evidence satisfactory to the Administration that the conditions (if any) set forth in Exhibit A to this Agreement have been satisfied.

In addition, it shall be a condition precedent to the Administration's obligation to make any advance of Loan proceeds under this Agreement that no Default or Event of Default shall have occurred and be continuing at the time of any such advance.

(c) Interest During Construction. In the event that the Administration has consented to permit the Borrower to pay interest on the Loan from proceeds of the Loan during all or a portion of the period of time related to construction of the Project (as itemized in Exhibit C) ("Construction Period Interest"), the Administration shall on each February 1 and August 1 during such period advance to the Borrower and immediately apply to the interest then due and owing, an amount equal to the interest on the Loan due on such February 1 or August 1 and not theretofore paid by the Borrower. Any such amount of Construction Period Interest advanced by the Administration shall constitute part of the principal amount of the Loan hereunder immediately upon its advance to the Borrower in accordance with this paragraph. Notwithstanding the advance of any Construction Period Interest to the Borrower in accordance with this Section, the Borrower shall pay directly to the Administration the Administrative Fee on the dates and in the amounts set forth in Section 3.04(c), and no amounts shall be advanced under the Loan for the payment of the Administrative Fee.

Section 3.04. Amounts Payable.

(a) Loan Payments. The Borrower shall punctually repay the Loan in installments on the dates, in the amounts, and in the manner specified in the Note. The outstanding amount of the Loan shall bear interest at a rate per annum equal to the rate or rates of interest set forth in Exhibit B, and shall be payable in accordance with the amortization schedule as specified in Exhibit B attached hereto and more particularly set out in the Note (which amortization schedule is subject to adjustment in accordance with this Agreement and the Note). On or prior to the Loan Closing Date, the Borrower shall execute the Note to evidence such obligation. In addition, the Borrower shall pay to the Administration an Administrative Fee in accordance with paragraph (c) of this Section.

(b) Late Charges. In addition to the payments of principal and interest on the Loan required by paragraph (a) of this Section, the Borrower shall pay (i) a late charge for any payment of principal or interest on the Loan that is received later than the tenth day following its

due date, in an amount equal to 5% of such payment, and (ii) interest on overdue installments of principal and (to the extent permitted by law) interest at a rate equal to the Default Rate set forth in Exhibit B. Amounts payable pursuant to this paragraph (b) shall be immediately due and payable to the Administration, and interest at the Default Rate shall continue to accrue on overdue installments of principal and (to the extent permitted by law) interest until such amounts are paid in full.

(c) Administrative Fee. (i) On the date specified in Exhibit B for the first payment of the Administrative Fee and on each August 1 thereafter that the Note remains outstanding and unpaid to and including the date of final maturity of the Note (each such date, an "Administrative Fee Payment Date"), the Borrower shall pay to the Administration an Administrative Fee. Subject to paragraph (iv) below, the Administrative Fee for any Administrative Fee Payment Date shall be (A) the Administrative Fee set forth in Exhibit B or (B) after any date on which the outstanding principal amount of the Loan Commitment is reduced by the Administration by a notice in writing to the Borrower in accordance with this Agreement (other than by reason of the repayment of the principal of the Loan), the Administrative Fee set forth in a notice from the Administration to the Borrower in connection with such reduction. Any adjustment of the Administrative Fee in accordance with the foregoing shall be prospective only, and the Administration shall in no event be obligated to refund any portion of any Administrative Fee payment theretofore received from the Borrower.

(ii) In prescribing the Administrative Fee for a loan with a term of thirty years for purposes of paragraph (i) above, the Administration shall employ the following formula, it being understood that any determinations as to the application of such formula shall be within the discretion of the Administration and any Administrative Fee Payment prescribed by the Administration in accordance with the foregoing shall be conclusive and binding upon the Administration and the Borrower: the Administrative Fee equals (A) the aggregate amount of all scheduled payments of principal of and interest on the Note, multiplied by the Percentage Rate (defined in paragraph (iv) below) then in effect, (B) divided by the total number of scheduled Administrative Fee Payment Dates. For example, if the aggregate amount of all scheduled payments of principal of and interest on the Note were $5,000,000 and the Percentage Rate were 5%, and the total number of scheduled Administrative Fee Payment Dates were 31, the Administrative Fee to be paid each year would equal:

$$\frac{\$5{,}000{,}000 \times .05}{31} = \$8{,}064.52$$

(iii) In prescribing the Administrative Fee for a loan with a term of less than thirty years for purposes of paragraph (i) above, the Administration shall employ the following formula, it being understood that any determinations as to the application of such formula shall be within the discretion of the Administration and any Administrative Fee Payment prescribed by the Administration in accordance with the foregoing shall be conclusive and binding upon the Administration and the Borrower: The Administrative Fee equals (A) the aggregate amount of all scheduled payments of principal of and interest on the Note, multiplied by the Percentage Rate (defined in paragraph (iv) below) then in effect, (B) divided by 30. For example, if the aggregate amount of all scheduled payments of principal of and interest on the

Note were $4,000,000 and the Percentage Rate were 5%, the Administrative Fee to be paid each year would equal:

$$\frac{\$4,000,000 \times .05}{30} = \$6,666.67$$

(iv) The Percentage Rate for each Fiscal Year shall be fixed as a uniform rate for all borrowers receiving loans from the Fund in order to provide sufficient revenues to pay the expenses of the Administration, as approved in the operating budget of the State by the General Assembly of the State; provided, however, that in no event shall the Percentage Rate exceed five percent (5%). In each Fiscal Year, the Administration shall review the Percentage Rate then in effect and adjust it for the immediately succeeding Fiscal Year to reflect its approved budget for the immediately succeeding Fiscal Year, a retainage of not more than ten percent (10%) for an operating reserve within the Administration's general account, and other factors as reasonably determined by the Secretary. No later than June 1 following the end of the Session of the General Assembly in each Fiscal Year, the Administration shall notify the Borrower of the newly established Percentage Rate, which shall be the Percentage Rate applicable to the immediately succeeding Fiscal Year, and of any change in the amount of the Administrative Fee payable by the Borrower in such Fiscal Year as a result of the application of such Percentage Rate.

Section 3.05. Sources of Payment.

(a) Dedicated Revenues. In accordance with Section 2.02(f) hereof, the principal of and interest on the Note, and any other amounts due from time to time under this Agreement, shall be payable in the first instance from the dedicated source of revenues described in Exhibit E attached hereto.

(b) General Obligation. In addition, the Note constitutes a general obligation of the Borrower, to the payment of which the full faith and credit and taxing power of the Borrower are pledged.

(c) State Withholding. As further security for the payment of the Note and any other amounts due hereunder, the Borrower hereby pledges the following to the Administration and grants a security interest therein to the Administration: (i) as authorized by Section 9-1606(d) of the Act, the Borrower's share of any and all income tax revenues collected by the State from time to time that would otherwise be payable to the Borrower, and (ii) to the maximum extent permitted by law, any and all other tax revenues, grants, and other monies that the Borrower is or may from time to time be entitled to receive from the State or that may at any time be due from the State, or any department, agency, or instrumentality of the State, to the Borrower. The Borrower further agrees that, upon the occurrence of an Event of Default, among other things, the State Comptroller and the State Treasurer may (i) withhold any such amounts that the Borrower is then or may thereafter be entitled to receive and (ii) at the direction of the Administration, apply the amounts so withheld to the payment of any amounts then due or thereafter becoming due hereunder (including, without limitation, payments under the Note) until the Borrower's obligations hereunder have been fully paid and discharged.

Section 3.06. Unconditional Obligations. The obligations of the Borrower to make payments under the Note as and when due and all other payments required hereunder and to perform and observe the other agreements on its part contained herein shall be absolute and unconditional, and shall not be abated, rebated, set-off, reduced, abrogated, terminated, waived, diminished, postponed or otherwise modified in any manner or to any extent whatsoever, regardless of any contingency, act of God, event or cause whatsoever, including (without limitation) any acts or circumstances that may constitute failure of consideration, eviction or constructive eviction, the taking by eminent domain or destruction of or damage to the Project, commercial frustration of purpose, any change in the laws of the United States of America or of the State or any political subdivision of either or in the rules or regulations of any Governmental Authority, any failure of the Administration, the Department or the State to perform or observe any agreement, whether express or implied, or any duty, liability or obligation arising out of or connected with the Project, this Agreement, or otherwise or any rights of set-off, recoupment, abatement or counterclaim that the Borrower might otherwise have against the Administration, the Department or the State or any other party or parties; provided, however, that payments hereunder shall not constitute a waiver of any such rights.

Section 3.07. Loan Commitment. The Borrower acknowledges and agrees that the monies attributable to the Borrower's Loan Commitment are the property of the Administration and are held by the Administration to provide for advances to be made to the Borrower in accordance with this Agreement. Without limiting the foregoing, the Borrower acknowledges and agrees that monies attributable to the Borrower's Loan Commitment may at the discretion of the Administration be pledged or applied to the payment of Bonds.

Section 3.08. Reduction of Loan Commitment. The Loan Commitment is subject to reduction in accordance with the provisions of this Section 3.08.

(a) Any portion of the Loan Commitment not advanced to the Borrower under Section 3.03 of this Agreement at the later of (1) two years from the date of this Agreement and (2) the earlier of one year following (i) actual completion of construction of the Project or (ii) the estimated completion date specified on Exhibit B attached hereto, shall no longer be available to be advanced to the Borrower and the amount of the Loan Commitment shall be reduced by an amount equal to the portion of the Loan Commitment not advanced, unless otherwise agreed to by the Administration in writing.

(b) The Administration may reduce the amount of the Loan Commitment if the Administration should for any reason determine that it will be unable to fund the full amount of the Loan Commitment (including, without limitation, a determination that the Eligible Project Costs to be paid with proceeds of the Loan are expected to be less than the maximum amount of the Loan Commitment), or if it determines that the Borrower is not proceeding satisfactorily and expeditiously with the Project in accordance with schedules and plans provided to the Administration, or if it determines that the Borrower is no longer able to make the certifications required under Section 3.03 in connection with the submission of requisitions.

(c) Any reduction in the amount of the Loan Commitment shall not affect the obligation of the Borrower to repay the Loan in accordance with the provisions of this Agreement and the Note.

(d) The Administration shall advise the Borrower in writing of any reduction in the amount of the Loan Commitment. Such notice shall specify the reason for and the amount of the reduction. In the event of any such reduction, the Borrower shall repay the Loan in accordance with such revised principal amortization schedule (prepared by applying such amount to reduce the installments of principal due under the Note in inverse order of payment, such that any such reduction is applied first to the last installment of principal due under the Note) as may be prescribed by the Administration in accordance with the provisions of the Note executed in connection therewith. The Administration may require, and the Borrower shall deliver, such certificates, documents, opinions and other evidence as the Administration may deem necessary or advisable in connection with any such reduction in the Loan Commitment. If a new Note is delivered in connection with any such reduction, the Administration shall cancel the Note initially delivered to the Administration by the Borrower pursuant to this Agreement.

Section 3.09. Disclaimer of Warranties. The Administration makes no warranty or representation, either express or implied, as to the value, design, condition, merchantability or fitness for particular purpose or fitness for use of the Project or any portion thereof or any other warranty with respect thereto. In no event shall the Administration be liable for any incidental, indirect, special or consequential damages in connection with or arising out of this Agreement or the Project or the existence, furnishing, functioning or use of the Project or any item or products or services provided for in this Agreement.

Section 3.10. Prepayments. The Loan shall be subject to mandatory prepayment, in whole or in part, as, when and to the extent required by the EPA's State Revolving Fund Program Regulations. Otherwise, the Loan may be prepaid by the Borrower, in whole or in part, only at such times and in such amounts, and upon the payment by the Borrower of such prepayment premium or penalty, as the Director, in his or her discretion, may specify and approve.

Section 3.11. Assignment. Neither this Agreement nor the Note may be assigned by the Borrower for any reason without the prior written consent of the Administration. The Administration may transfer, pledge or assign the Note and any or all rights or interests of the Administration under this Agreement without the prior consent of the Borrower.

ARTICLE IV

EVENTS OF DEFAULT AND REMEDIES

Section 4.01. Events of Default. If any of the following events occur, it is hereby defined as and declared to be and to constitute an "Event of Default":

(a) failure by the Borrower to pay any amount required to be paid hereunder or under the Note when due, which failure shall continue for a period of 20 days;

(b) failure by the Borrower to observe and perform any covenant, condition or agreement on its part to be observed or performed under this Agreement, other than as referred to in paragraph (a) of this Section, which failure shall continue for a period of 30 days after written notice specifying such failure and requesting that it be remedied is given to the Borrower by the Administration, unless the Administration shall agree in writing to an extension of such time prior to its expiration; provided, however, that if the failure stated in such notice is correctable but cannot be corrected within the applicable period, the Administration will not unreasonably withhold its consent to an extension of such time if corrective action is instituted by the Borrower within the applicable period and diligently pursued until the Default is corrected;

(c) if (i) at any time any representation made by the Borrower in Section 2.01(f)(ii) is incorrect, or (ii) any other representation made by or on behalf of the Borrower contained in this Agreement, or in any instrument furnished in compliance with or with reference to this Agreement, the Loan Commitment or the Loan, is false or misleading in any material respect on the date on which such representation is made;

(d) if an order, judgment or decree is entered by a court of competent jurisdiction (i) appointing a receiver, trustee, or liquidator for the Borrower; (ii) granting relief in involuntary proceedings with respect to the Borrower under the federal bankruptcy act, or (iii) assuming custody or control of the Borrower under the provision of any law for the relief of debtors, and the order, judgment or decree is not set aside or stayed within 60 days from the date of entry of the order, judgment or decree; or

(e) if the Borrower (i) admits in writing its inability to pay its debts generally as they become due, (ii) commences voluntary proceedings in bankruptcy or seeking a composition of indebtedness, (iii) makes an assignment for the benefit of its creditors, (iv) consents to the appointment of a receiver, or (v) consents to the assumption of custody or control of the Borrower by any court of competent jurisdiction under any law for the relief of debtors.

Section 4.02. Notice of Default. The Borrower shall give the Administration prompt telephonic notice by contacting the Director of the Administration, followed by prompt written confirmation, of the occurrence of any event referred to in Section 4.01(d) or (e) hereof and of the occurrence of any other event or condition that constitutes a Default or an Event of Default at such time as any senior administrative or financial officer of the Borrower becomes aware of the existence thereof.

Section 4.03. Remedies on Default. Whenever any Event of Default referred to in Section 4.01 hereof shall have happened and be continuing, the Administration shall have the right to take one or more of the following remedial steps:

(a) declare all amounts due hereunder (including, without limitation, payments under the Note) to be immediately due and payable, and upon notice to the Borrower the same shall become immediately due and payable by the Borrower without further notice or demand; and

(b) take whatever other action at law or in equity that may appear necessary or desirable to collect the amounts then due and thereafter to become due hereunder or to enforce the performance and observance of any obligation, agreement or covenant of the Borrower hereunder.

Section 4.04. Attorneys' Fees and Other Expenses. The Borrower shall on demand pay to the Administration the reasonable fees and expenses of attorneys and the Trustee and other reasonable expenses incurred in the collection of any sum due hereunder or in the enforcement of performance of any other obligations of the Borrower upon an Event of Default.

Section 4.05. Application of Monies. Any monies collected by the Administration pursuant to Section 4.03 hereof shall be applied (a) first, to pay any attorneys' fees or other fees and expenses owed by the Borrower pursuant to Section 4.04 hereof, (b) second, to pay interest due on the Loan, (c) third, to pay principal due on the Loan, (d) fourth, to pay any other amounts due hereunder, and (e) fifth, to pay interest and principal on the Loan and other amounts payable hereunder as such amounts become due and payable.

Section 4.06. No Remedy Exclusive; Waiver; Notice. No remedy herein conferred upon or reserved to the Administration is intended to be exclusive and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Agreement or now or hereafter existing at law or in equity. No delay or omission to exercise any right, remedy or power accruing upon any Default or Event of Default shall impair any such right, remedy or power or shall be construed to be a waiver thereof, but any such right, remedy or power may be exercised from time to time and as often as may be deemed expedient. In order to entitle the Administration to exercise any remedy reserved to it in this Article, it shall not be necessary to give any notice, other than such notice as may be required in this Article.

ARTICLE V

MISCELLANEOUS

Section 5.01. Notices. All notices, requests, objections, waivers, rejections, agreements, approvals, disclosures and consents of any kind made pursuant to this Agreement shall be in writing, unless expressly stated otherwise herein. Any such communication shall be sufficiently given and shall be deemed given when hand delivered or mailed by registered or certified mail, postage prepaid, to the Borrower at the address specified on Exhibit B attached hereto and to the Administration at Maryland Water Quality Financing Administration, 1800 Washington Blvd., Baltimore, Maryland 21230-1718, Attention: Director.

Section 5.02. Binding Effect. This Agreement shall inure to the benefit of and shall be binding upon the Administration and the Borrower and their respective successors and assigns.

Section 5.03. Severability. In the event any provision of this Agreement shall be held illegal, invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate, render unenforceable or otherwise affect any other provision hereof.

Section 5.04. Execution in Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 5.05. Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland.

Section 5.06. Captions. The captions or headings in this Agreement are for convenience only and shall not in any way define, limit or describe the scope or intent of any provisions or sections of this Agreement.

Section 5.07. Further Assurances. The Borrower shall, at the request of the Administration, execute, acknowledge and deliver such further resolutions, conveyances, transfers, assurances, financing statements, certificates and other instruments as may be necessary or desirable for better assuring, conveying, granting, assigning and confirming the rights, security interests and agreements granted or intended to be granted by this Agreement and the Note.

Section 5.08. Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes all prior oral and written agreements between the parties hereto with respect to the Loan. In the event of any inconsistency between the provisions of this Agreement and anything contained in the Application, the provisions of this Agreement shall prevail.

Section 5.09. Amendment of this Agreement. This Agreement, or any part hereof, may be amended from time to time hereafter only if and to the extent permitted by the Indenture and only by an instrument in writing jointly executed by the Administration and the Borrower.

Section 5.10. Disclaimer of Relationships. The Borrower acknowledges that the obligation of the Administration is limited to making the Loan in the manner and on the terms set forth in this Agreement. Nothing in this Agreement and no act of either the Administration or of the Borrower shall be deemed or construed by either of them, or by third persons, to create any relationship of third-party beneficiary, principal and agent, limited or general partnership, or joint venture, or of any association or relationship whatsoever involving the Borrower and the Administration.

Section 5.11. Effective Date. The effective date of this Agreement shall be the date of the Administration's execution.

Section 5.12. Term of this Agreement. Unless sooner terminated pursuant to Article IV of this Agreement, or by the mutual consent of the Borrower and the Administration, this Agreement shall continue and remain in full force and effect until the Loan, together with interest and all other sums due and owing in connection with this Agreement or the Loan, have been paid in full to the satisfaction of the Administration. Upon payment in full of the Loan together with interest and all other sums due and owing in connection with this Agreement or the Loan from any source whatsoever, this Agreement shall be terminated.

Section 5.13. Delegation Not to Relieve Obligations. The delegation by the Borrower of the planning, construction or carrying out of the Project shall not relieve the Borrower of any obligations under this Agreement and any other documents executed in connection with the Loan.

Section 5.14. Additional Terms. This Agreement shall also be subject to the additional terms, if any, set forth in Exhibit A hereto. The terms, if any, set forth in Exhibit A shall be deemed to be a part of this Agreement as if set forth in full herein. In the case of any conflict between the terms set forth in Exhibit A and any term of this Agreement, the terms set forth in Exhibit A shall be controlling.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and delivered as of the day and year first above written.

(SEAL)

WITNESS:

_____
Name:
Title:

LENDER:

MARYLAND WATER QUALITY FINANCING ADMINISTRATION

By: _____
Name:
Title:

(SEAL)

ATTEST:

_____
Name:
Title:

BORROWER:

_____

By: _____
Name:
Title:

Approved for form and legal sufficiency

this ____ day of _____, 2019

_____
Name:
Local Attorney for Borrower

Approved for form and legal sufficiency

this ____ day of _____, 2019

_____
Name:
Assistant Attorney General

EXHIBIT A
to Loan Agreement

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

CONDITIONS TO INITIAL ADVANCE UNDER SECTION 3.03(b)(vi) OF LOAN AGREEMENT:

NONE

ADDITIONAL TERMS APPLICABLE TO LOAN AGREEMENT:

The provisions of this Exhibit A shall be deemed to be a part of the foregoing Agreement as if set forth in full therein. In the case of any conflict between this Exhibit A and any provision thereof, the provisions of this Exhibit A shall be controlling, notwithstanding any other provisions contained in the Agreement.

1. The first regularly scheduled payment of interest on the Loan shall be due on _____.

2. The Borrower agrees to comply with the Davis-Bacon Act requirements of Section 513 of the Federal Water Pollution Control Act for the entirety of construction contract costs of the Project, and shall include specific language regarding compliance in its contracts and subcontracts.

3. The Borrower agrees to comply with the Use of American Iron and Steel requirement of federal law, which provides that all of the iron and steel products used in the Project are produced in the United States, unless a waiver is granted.

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

ADDITIONAL TERMS APPLICABLE TO LOAN AGREEMENT (CONT.):

4. The Borrower agrees to comply with EPA's Final Financial Assistance Conflict of Interest Policy, and report any instances of actual or potential conflicts of interest in the award, administration, or monitoring of subawards arising from procurements or other actions. Any conflicts of interest must be immediately disclosed to the Administration within 30 days of discovery for further guidance. The EPA's Final Financial Assistance Conflict of Interest Policy is found at: https://www.epa.gov/grants/epas-final-financial-assistance-conflict-interest-policy

5. If this Project is financed with the use of federal funds under CFDA # 66.458, the Borrower may be subject to a single audit to be undertaken by an independent auditor in accordance with uniform administrative requirements, cost principles, and audit requirements for federal awards, 2 C.F.R. § 200.501 (see generally, Subpart F – Audit Requirements of 2 C.F.R. Part 200). The Borrower hereby agrees to obtain such single audit, if required by the Single Audit Act.

EXHIBIT B
to Loan Agreement

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

DESCRIPTION OF THE LOAN

(1) Project Name(s): _____

(2) Maximum Principal Amount of Loan Commitment: $_____

(3) Rate of Interest: ___% (*Based upon ____% of the_____ average of the Bond Buyer 11-Bond Index*)

(4) Amortization Schedule:

(a) ___ years
$1,000 Mini Principal Payment Date: _____
Date of First of _____ Amortizing Principal Payments: _____

(b) Level Principal _____; or
Level Debt Service _____; or
Other _____

(5) Annual Administrative Fee: $_____, beginning August 1, _____.

(6) Estimated Completion Date of Project(s): _____

(7) Default Rate: _____% (*Based upon the _____ average of the Bond Buyer 11-Bond Index*)

(8) Description of Project:

(9) Address for Borrower's Office(s) Where Books and Records Are Kept, if different from address printed above:

EXHIBIT C
to Loan Agreement

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

PROJECT BUDGET

Breakdown of Eligible Project Costs:

A. Portion of Eligible Project Costs to be directly financed:

Description	Allocated Amount of Loan*
Eligible Project Costs include administrative and legal expenses, planning/design engineering fees, construction costs, construction phase engineering/ inspection fees and contingencies	
Subtotal Loan:	$_____

B. Portion of Eligible Project Costs for which Borrower will be reimbursed at closing, which the Borrower hereby certifies were paid or incurred prior to the date of the Agreement, in anticipation of being reimbursed through a loan from the Administration (and subject to compliance with Sections 2.02(l) and 3.03(a) of the Agreement):

Description	Allocated Amount of Loan
Eligible Project Costs include administrative and legal expenses, planning/design engineering fees, construction costs, construction phase engineering/ inspection fees and contingencies	
Total Reimbursement at Closing:	$_____
Total Loan:	$_____

EXHIBIT C
to Loan Agreement

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

C. Construction Cash Draw Schedule*

Federal Quarter	Cash Disbursements*
FFY 19 Q2 (Jan 19 – Mar 19)	
FFY 19 Q3 (Apr 19 – June 19)	
FFY 19 Q4 (Jul 19 – Sep 19)	
FFY 20 Q1 (Oct 19 – Dec 19)	
FFY 20 Q2 (Jan 20 – Mar 20)	
FFY 20 Q3 (Apr 20 – June 20)	
FFY 20 Q4 (Jul 20 – Sep 20)	
FFY 21 Q1 (Oct 20 – Dec 20)	
FFY 21 Q2 (Jan 21 – Mar 21)	
FFY 21 Q3 (Apr 21 – June 21)	

Total Disbursements: $_____

* SUBJECT TO CHANGE WITH CONSENT OF THE ADMINISTRATION IN ITS DISCRETION UNDER SECTION 2.02(d) OF THIS AGREEMENT

EXHIBIT D
to Loan Agreement

OPINION OF BORROWER'S COUNSEL

[LETTERHEAD OF COUNSEL TO BORROWER]

[CLOSING DATE]

Maryland Water Quality
Financing Administration
1800 Washington Blvd.
Baltimore, Maryland 21230-1718

Ladies and Gentlemen:

We are counsel to [NAME OF BORROWER], a [body politic and corporate and a political subdivision] [municipal corporation] [other appropriate description] of the State of Maryland (the "Borrower") in connection with the loan (the "Loan") by Maryland Water Quality Financing Administration (the "Administration") to the Borrower of funds to finance all or a portion of the costs of a project (the "Project") described in Exhibit B to the Loan Agreement dated as of _____, 2019 (the "Agreement") by and between the Administration and the Borrower.

In this connection, we have reviewed such records, certificates, and other documents as we have considered necessary or appropriate for the purposes of this opinion, including, without limitation, the Agreement and the Borrower's $ Water Quality Bond, Series 2019, dated _____, 2019 (the "Note"). The Agreement and the Note are referred to herein collectively as the "Loan Documents". Based on such review, and such other considerations of law and fact as we believe to be relevant, we are of the opinion that:

(a) The Borrower is a validly created and existing [body politic and corporate and a political subdivision] [municipal corporation] [other appropriate description] of the State of Maryland, possessing authority to acquire, construct and operate the Project and to enter into the Loan Documents and perform its obligations thereunder.

(b) The Borrower has duly authorized, executed and delivered the Loan Documents and, assuming due authorization, execution and delivery of the Agreement by the Administration, the Loan Documents constitute legal, valid and binding obligations of the Borrower enforceable in accordance with their respective terms.

(c) The Note is a general obligation of the Borrower to which its full faith and credit is pledged payable, if and to the extent not paid from other sources as described in the Agreement, from ad valorem taxes, unlimited as to rate and amount, which the Borrower is empowered to levy on all real and tangible personal property within its corporate limits subject to assessment for unlimited taxation by the Borrower.

(d) The Loan Documents and the enforceability thereof are subject to bankruptcy, insolvency, moratorium, reorganization and other state and federal laws affecting the enforcement of creditors' rights and to general principles of equity.

(e) To the best of our knowledge after reasonable investigation, the Borrower has all necessary licenses, approvals and permits required to date under federal, state and local law to own, construct and acquire the Project.

(f) Neither the execution and delivery of the Loan Documents, nor the consummation of the transactions contemplated thereby, nor the acquisition and construction of the Project, nor the fulfillment of or compliance with the terms and conditions of the Loan Documents, conflicts with or results in a breach of or default under any of the terms, conditions or provisions of the charter or laws governing the Borrower (including any limit on indebtedness) or, to the best of our knowledge after reasonable investigation, any agreement, contract or other instrument, or law, ordinance, regulation, or judicial or other governmental order, to which the Borrower is now a party or by which the Borrower or its properties are otherwise subject or bound, and the Borrower is not otherwise in violation of any of the foregoing in a manner material to the transactions contemplated by the Loan Documents.

(g) To the best of our knowledge after reasonable investigation, there is no action, suit, proceeding or investigation, at law or in equity, before or by any court, governmental agency or public board or body pending or threatened against or affecting the Borrower that, if adversely determined, would materially affect the ability of the Borrower to perform its obligations under the Loan Documents, which has not been disclosed in writing to the Administration.

We hereby authorize Bond Counsel to the Administration to rely on this opinion as if we had addressed this opinion to them in addition to you.

Very truly yours,

EXHIBIT E
to Loan Agreement

Borrower Name: _____
Address: _____
_____
Attention: _____

Project Name: _____

DESCRIPTION OF DEDICATED REVENUES*

* The identification of the dedicated source or sources of revenues above is intended to specify a source or sources of revenues available in sufficient amount to provide for the payment of the costs of operating and maintaining the Project as well as the payment of the costs of debt service of any borrowing incurred to finance the Project. The specification of a dedicated source or sources of revenues above is not intended to constitute an undertaking by the Borrower to pledge, segregate or otherwise set aside any specific funds of the Borrower with the expectation that such funds would be used to pay the debt service on the Loan.

EXHIBIT F
to Loan Agreement

$[MAX. AMT.] R-1

REGISTERED

UNITED STATES OF AMERICA
STATE OF MARYLAND

[NAME OF BORROWER]
WATER QUALITY BOND, SERIES 2019
Dated _____, 2019

PAYMENTS OF PRINCIPAL AND INTEREST ON THIS BOND ARE MADE BY CHECK, DRAFT OR ELECTRONIC FUNDS TRANSFER TO THE REGISTERED OWNER AND IT CANNOT BE DETERMINED FROM THE FACE OF THIS BOND WHETHER ALL OR ANY PART OF THE PRINCIPAL OF OR INTEREST ON THIS BOND HAS BEEN PAID.

REGISTERED OWNER: Maryland Water Quality Financing Administration

_____, a [body politic and corporate] [municipal corporation] [other appropriate description] of the State of Maryland (the "Borrower"), hereby acknowledges itself obligated to pay to the Registered Owner shown above, the principal amount of $____ (the "Maximum Principal Amount") or so much thereof as shall have been advanced from time to time under the terms of the Loan Agreement dated as of _____, 2019 (the "Loan Agreement") by and between the Borrower and the Maryland Water Quality Financing Administration (the "Administration"), plus interest on the unpaid principal advanced under the terms of the Loan Agreement at the rate of _____ per centum (___%) per annum.

The principal advanced under the Loan Agreement shall be paid in installments on the dates and in the amounts as set forth in the following schedule, as such schedule may be amended in accordance with the terms hereof:

Due [February 1]	Principal Amount	Due [February 1]	Principal Amount
2020		2030	
2021		2031	
2022		2032	
2023		2033	
2024		2034	
2025		2035	
2026		2036	
2027		2037	
2028		2038	
2029		2039	

If the Administration determines at any time to reduce the maximum amount of the Loan Commitment (as defined in the Loan Agreement) in accordance with Section 3.08 of the Loan Agreement, the Maximum Principal Amount shall be reduced accordingly and the Maximum Principal Amount as so reduced shall be amortized in accordance with Section 3.08 of the Loan Agreement. The Administration shall deliver, and the Borrower shall acknowledge in writing, a certificate setting forth such reamortized payment schedule, which shall be attached hereto and shall replace and supersede for all purposes the foregoing payment schedule. Any such reduction shall not affect the obligation of the Borrower to pay the principal of and interest on this bond as and when the same shall become due.

Notwithstanding the foregoing, all outstanding unpaid principal amounts advanced under the Loan Agreement, if not previously due hereunder, shall be due on that date which is the lesser of the useful life of the Project as determined by the Administration in its sole and absolute discretion or [20] years after the date of completion of the Project (as defined in the Loan Agreement), as certified by the Borrower to the Administration pursuant to Section 2.02(d) of the Loan Agreement.

Interest due on the unpaid principal amounts advanced under the Loan Agreement shall accrue on the basis of a 30-day month, 360-day year from the date of the respective advances of such principal amount, and shall be paid on _____, 20__, and semiannually thereafter on the 1st day of _____ and _____ in each year until the principal amount hereof has been paid.

This bond is subject to (i) a late charge for any payment of principal or interest that is received later than the tenth day following its due date and (ii) interest on overdue installments of principal and (to the extent permitted by law) interest at a rate equal to the Default Rate (as defined in the Loan Agreement) in accordance with Section 3.04(b) of the Loan Agreement. Interest at the Default Rate shall accrue on the basis of a 30-day month, 360-day year.

This bond is subject to prepayment only in accordance with Section 3.10 of the Loan Agreement.

Both the principal of and interest on this bond will be paid to the registered owner in lawful money of the United States of America, at the time of payment, and will be paid by electronic funds transfer, or by check or draft mailed (by depositing such check or draft, correctly addressed and postage prepaid, in the United States mail before the payment date) to the registered owner at such address as the registered owner may designate from time to time by a notice in writing delivered to the [INSERT BORROWER'S AUTHORIZED OFFICER].

This bond is issued pursuant to and in full conformity with the provisions of [INSERT BORROWER'S LOCAL ACT(S)] and the Maryland Water Quality Financing Administration Act (codified as Sections 9-1601 to 9-1622, inclusive, of the Environment Article of the Annotated Code of Maryland, as amended), and by virtue of due proceedings had and taken by the Borrower, particularly [AN ORDINANCE AND OR A RESOLUTION] (numbered ____) [INSERT BORROWER'S AUTHORIZING ORDINANCE OR RESOLUTION] (collectively, the "Resolution") adopted by Borrower.

This bond, together with the Loan Agreement, evidences the Loan (as defined in the Loan Agreement) to the Borrower from the Maryland Water Quality Financing Administration. In accordance with the Loan Agreement, the principal amount of the Loan, being the amount denominated as principal under this bond, is subject to reduction or adjustment by the Administration in accordance with the Loan Agreement.

The full faith and credit and unlimited taxing power of the Borrower are hereby irrevocably pledged to the prompt payment of the principal of and interest on this bond according to its terms, and the Borrower does hereby covenant and agree to pay the principal of and interest on this bond at the dates and in the manner prescribed herein.

This bond is transferable only after the first principal payment date as set forth above or the date upon which the Maximum Principal Amount has been borrowed, whichever is earlier, upon the books of the Borrower at the office of the [INSERT BORROWER'S AUTHORIZED OFFICERS] by the registered owner hereof in person or by his attorney duly authorized in writing, upon surrender hereof, together with a written instrument of transfer satisfactory to the [INSERT BORROWER'S AUTHORIZED OFFICER], duly executed by the registered owner or his duly authorized attorney. The Borrower shall, within a reasonable time, issue in the name of the transferee a new registered bond or bonds, in such denominations as the Borrower shall by resolution approve, in an aggregate principal amount equal to the unpaid principal amount of the bond or bonds surrendered and with the same maturities and interest rate. If more than one bond is issued upon any such transfer, the installment of principal and interest to be paid on each such bond on each payment date shall be equal to the product of the following formula: the total installment due on each payment date multiplied by a fraction, the numerator of which shall be the principal amount of such bond and the denominator of which shall be the aggregate principal amount of bonds then outstanding and unpaid. The new bond or bonds shall be delivered to the transferee only after payment of any taxes on and any shipping or insurance expenses relating to such transfer. The Borrower may deem and treat the party in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payment of or on account of the principal hereof and interest due hereon and for all other purposes.

It is hereby certified and recited that all conditions, acts and things required by the Constitution or statutes of the State of Maryland and the Resolution to exist, to have happened or to have been performed precedent to or in the issuance of this bond, exist, have happened and have been performed, and that the issuance of this bond, together with all other indebtedness of the Borrower, is within every debt and other limit prescribed by said Constitution or statutes.

IN WITNESS WHEREOF, this bond has been executed by the manual signature of the [INSERT AUTHORIZED OFFICERS] and the seal of the Borrower has been affixed hereto, attested by the manual signature of the [INSERT AUTHORIZED OFFICER], all as of the __ day of ____, 2019.

(SEAL)

ATTEST:

[NAME OF BORROWER]

_____ By: _____

[AUTHORIZED OFFICER] [AUTHORIZED OFFICER]

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Terri Hruby
Submitting Department: Planning
Item Type: OTHER BUSINESS
Agenda Section:

Subject:
Acceptance of City Streets - South Core Phase 1A

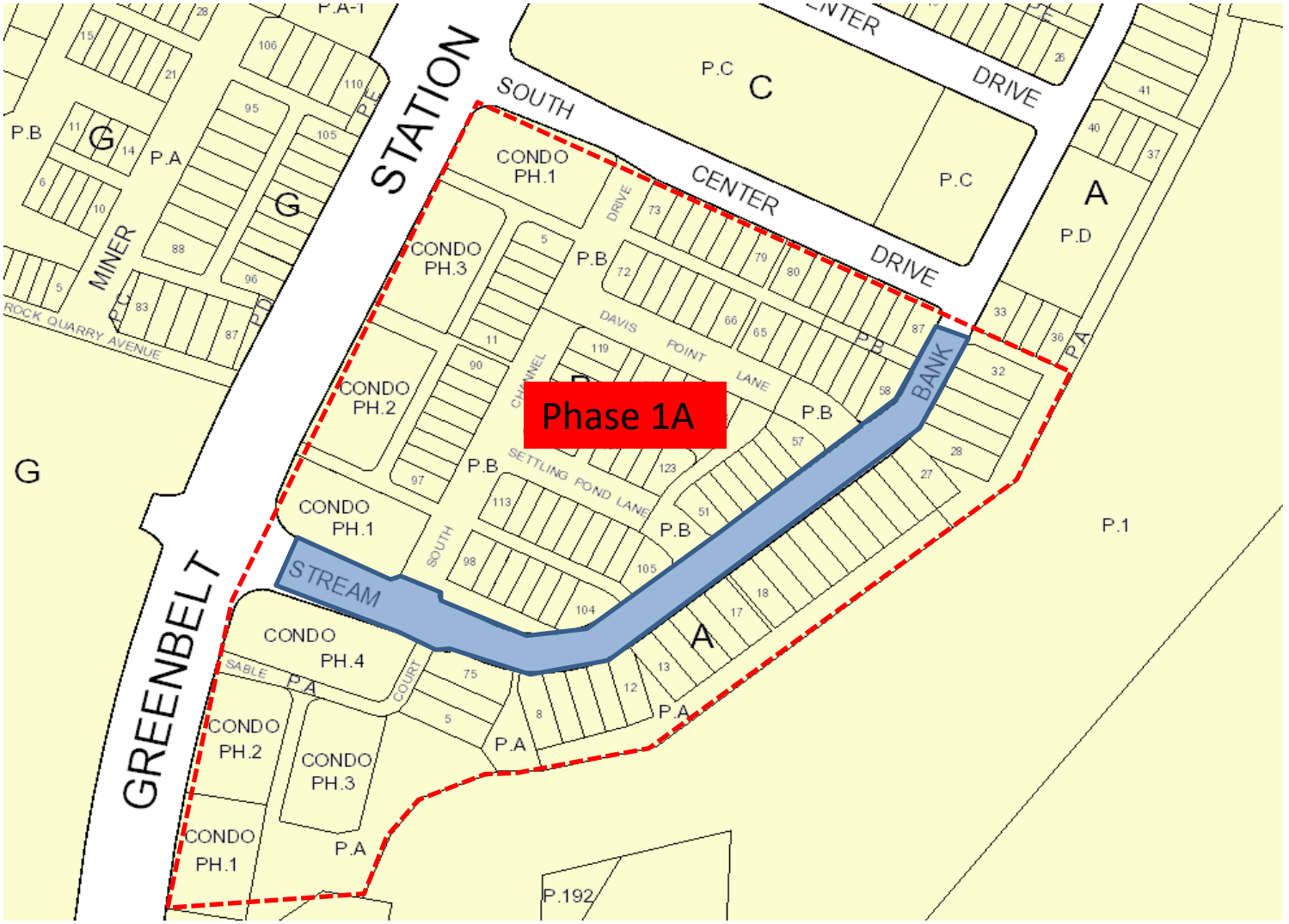
Suggested Action:
The Greenbelt Station South Core development includes a combination of public and private streets. Woodlawn Development Group has completed the construction of the public and private roads in Phase 1A of the development and is asking the City to accept a segment of Stream Bank Lane from station 11+60 to 20+57.

The construction of this segment of roadway consists of lighting, landscaping, sidewalk, curb and gutter, storm drain and paving. A final inspection of the roadway was completed by the City's inspector and the Director of Public Works and the Director of Planning and Community Development. The final inspection confirmed that the all work has been completed per approved plans and is ready for acceptance by the City.

Staff recommends that the City accept Stream Bank Lane from station 11+60 to 0+57 into perpetual maintenance. At the time of acceptance a one-year maintenance bond will be required.

Attachments:
Phase 1A street exhibit.pdf

GREENBELT STATION SOUTH CORE – PHASE 1 A



Public Street to be accepted

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Molly Porter
Submitting Department: Planning
Item Type: OTHER BUSINESS
Agenda Section:

Subject:
Complete & Green Streets Policy

Suggested Action:
The City has shown and continues to show a commitment to Complete and Green Streets principles by incorporating these principles into transportation projects. The adoption of a Complete and Green Streets policy would continue to direct the City to develop and provide a well-connected, visually attractive transportation network, that balances the needs of all users, and promotes a more livable and sustainable community.

Staff has drafted a Complete and Green Streets policy after extensive research of complete and green streets policies both in the region and nationally. This policy has been presented to both the Advisory Planning Board and GreenACES. Both Boards have submitted reports that are included in Council's packet. A City Council work session was held on this topic on June 12, 2019. The policy has been revised to reflect and respond to the topics raised during that work session.

Staff recommends that City Council approve the City of Greenbelt Complete and Green Streets Policy.

Reference:
M. Porter, Memorandum 6/25/2019
Complete and Green Streets Policy
APB Report, Complete and Green Streets, 4/4/2019
GreenACES Report, Complete and Green Streets, 6/10/2019

Attachments:
M. Porter, Memorandum 6/25/2019.pdf

Complete and Green Streets Policy.pdf

APB Report, Complete and Green Streets, 4/4/2019

GreenACES Report, Complete and Green Streets, 6/10/2019

Memorandum:

TO: Nicole Ard, City Manager

FROM: Molly Porter, Community Planner I

VIA: Terri Hruby, Director, Planning and Community Development

DATE: June 4, 2019
REVISED: June 25, 2019
All changes to this memorandum have been underlined

RE: Draft Complete and Green Streets Policy

Background:

The City has shown and continues to show a commitment to Complete and Green Streets principles by incorporating these principles into transportation projects, including the engineered design plans for Cherrywood Lane. The adoption of a Complete and Green Streets policy would continue to direct the City to develop and provide a well-connected, visually attractive transportation network, that balances the needs of all users, and promotes a more livable and sustainable community.

Staff initially drafted a Complete and Green Streets policy in 2011. This draft policy was presented to GreenACES and the Advisory Planning Board. Since that time staff has been working to research complete and green streets best practices in both policy formation and policy implementation. Substantive revisions were made to the original draft policy after extensive research of complete and green street policies both in the region and nationally.

The draft policy outlines the vision, purpose and need, scope, exceptions, performance measures and implementation steps. The revised draft policy has been presented to APB and GreenACES. APB submitted a report on the draft policy that was accepted by Council at the regular meeting on April 23, 2019.

On June 12, 2019, City Council held a work session to discuss the draft Complete and Green Streets policy. Staff presented the draft policy and the reports submitted by APB and GreenACES. This memorandum and the attached policy have been revised to reflect and respond to topics of discussion that were raised during the June 12, 2019 work session.

Complete and Green Streets:

Complete streets are designed and maintained to accommodate all users regardless of mode of transportation, age, and/or ability. The central tenant of complete streets is that all users can travel safely and efficiently. Green streets are designed and maintained to slow, filter, and cleanse stormwater runoff from impervious surfaces.

Complete and green streets are designed to be context-sensitive and to respond to the user's needs, therefore there is no single design. Common elements can include bioretention areas, bus lanes, bicycle lanes, and median islands. It is also true that not all streets can accommodate these principles due to a variety of factors including limited right of way or low levels of existing or planned traffic.

Streets that incorporate complete and green street principles benefit the community in several different ways:

- Better health outcomes due to a safer and more connected transportation network that supports travel by foot and bicycle
- Reduced emissions as a result of a decrease in automobile trips
- A more equitable transportation network that provides safer travel options for individuals/families who have limited or no access to automobiles
- Reduction in stormwater runoff

Staff believes that the adoption of a Complete and Green Streets Policy will support the City's goal to be a place where pedestrians, cyclists, public transportation vehicles, and motorists can navigate the City safely and with ease.

Revisions to Draft Policy:

The following section outlines the revisions to the draft policy resulting from the City Council work session on June 12, 2019.

Vision Section:

a. The Vision statement was changed to list pedestrians and cyclists before other modes of transportation

b. The phrase "complete safety" was changed to "safely and with ease"

Policy Section:

a. The word transportation was removed from the policy statement

Implementation Section:

a. "Offering educational opportunities for the public to learn more about the use of Complete and Green Street elements, such as bicycle lanes" was added to the list

Performance Measures and Reporting Section:

a. "Number and type of stormwater management facilities built or improved" was added to the list

b. “Number of bicycle racks installed” was added to the list

c. “Number of fatalities and crashes for all modes of transportation” was added to the list

d. “Number of bus shelters built or improved” was added to the list

The revisions to this policy are **in bold** on the attached policy document.

City of Greenbelt

Complete and Green Streets Policy

December 14, 2018
Revised June 25, 2019

Table of Contents:

I. Definitions
II. Vision
III. Purpose and Need
IV. Policy Statement
V. Scope
VI. Exceptions
VII. Design Guidelines
VIII. Implementation
IX. Performance Measures and Reporting

I. Definitions

The term "complete streets" is defined by the National Complete Streets Coalition as follows: "Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities." The power of this philosophy is that it advocates balance in the transportation system. It specifies that a complete street enables safe access for all users.

According to the Environmental Protection Agency (EPA) the term "green streets" is defined as follows: "Green streets achieve multiple benefits, such as improved water quality and more livable communities, through the integration of stormwater treatment techniques which use natural processes and landscaping."

II. Vision

The City of Greenbelt shall be a place where **pedestrians, cyclists,** public transportation vehicles, and motorists can navigate the City **safely and** with ease ~~**and in complete safety**~~. This policy will direct the City of Greenbelt to develop and provide a well-connected, visually attractive transportation network, that balances the needs of all users, and promotes a more livable and sustainable community.

III. Purpose and Need

The City of Greenbelt recognizes that roadway projects, whether new or reconstruction, are potential opportunities to apply Complete and Green Street principles. The City will, to the maximum extent practicable, design, construct, maintain, and operate all streets to provide for a comprehensive and integrated street network that is safe and accessible for all users. This central idea of a Complete and Green Streets Policy would enhance the legacy of the City of Greenbelt.

The adoption of a Complete and Green Streets Policy will facilitate the following:

- Develop a more comprehensive, integrated, and connected transportation network that offers a wide variety of choices
- Improve transportation safety for users of all ages and abilities
- Reduce the number of vehicular, pedestrian, and bicycle-related accidents and fatalities
- Incorporate sustainable stormwater management strategies in street infrastructure
- Promote better health outcomes as a result of increased physical activity
- Reduce emissions through increasing opportunities for travel by foot, bike, and public transit
- Increase transportation access and options for individuals and families who have limited access to automobiles

IV. Policy Statement

The City of Greenbelt shall strive to complete all road construction and reconstruction projects in a manner that will accommodate the safety and convenience of all ~~**transportation**~~ users in accordance with Complete and Green Streets principles.

V. Scope

The principles of Complete and Green Street design shall be applied at all stages of new road construction projects, and shall be considered in reconstruction projects to the maximum extent practicable. The variation in width of City rights-of-way may have an effect on the ability to incorporate Complete and Green Streets principles on some sections of roadway. Where projects involve other jurisdictions or other transportation agencies, The City of Greenbelt will work with those jurisdictions or agencies to implement this policy.

It is understood that transportation priorities may vary by area and facility, though new road construction is urged to accommodate as many users as possible. Where reconstruction would result in excessive expense or disruption of the area, local transportation priorities shall be respected.

If a section of a road is being reconstructed and accommodates Complete and Green Streets principles, the entirety of that road should be updated accordingly, as funding and timing permit.

Public input will be required before the implementation of a Complete and Green Streets project.

VI. Exceptions

Exceptions to this policy must be approved through the Department of Planning and Community Development and the Department of Public Works.

Exceptions are as follows:

- Where limited right-of-way prohibits the installation of bicycle, pedestrian and or stormwater practices that would not meet applicable design guidelines.
- Projects for which the cost of compliance with the Complete and Green Streets policy guidelines would be excessive as compared to the need or use of the particular street;
- The low levels of existing and planned population, traffic volumes, or level of transit service around a particular roadway demonstrate an absence of current and future need
- Minor repair or repaving projects
- Instances where the incorporation of all elements would disrupt the historical inner walkway system, green space, tree cover, protected environmental areas, or residential private property;
- Other specific, individual exceptions from any of the above policies as approved by the City Council.

VII. Design Guidelines

The City of Greenbelt shall follow accepted or adopted design guidelines, using the best and latest design guidelines available. These guidelines include, but are not limited to:

- American Association of State Highway and Transportation Official (AASHTO) guides
- National Association of City Transportation Officials (NACTO) guides
- Maryland State Highway Administration (SHA) guides
- Americans with Disabilities Act (ADA) Standards for Accessible Design guidelines
- Prince George's County Department of Public Works & Transportation (DPW&T) guidelines
- U.S. Environmental Protection Agency Municipal Handbook: Green Streets

The Complete and Green Streets principles outlined above should be applied in consideration of the context of the neighborhood in which a project is located, in addition to the context and heritage of greater Greenbelt.

VIII. Implementation

The City of Greenbelt shall incorporate Complete and Green Streets principles into the City decision-making process with the following actions:

- Actively seeking funding opportunities necessary for the implementation of Complete and Green Streets projects
- Implementing street design guidelines which are contextually sensitive, based on area character and heritage
- Incorporating Complete and Green Street policies into relevant plans, procedures, and manuals
- Offering workshops for staff members and the public to learn more about Complete and Green Streets policies
- **Offering educational opportunities for the public to learn more about the use of Complete and Green street elements, such as bicycle lanes**
- When available, the City shall encourage relevant staff to attend professional development and training on non-motorized transportation issues through attending conferences, classes, seminars, and workshops
- Developing a Complete and Green Streets Checklist to be used for all construction and reconstruction projects
- Maintaining an inventory of sidewalks, streets, bicycle facilities and crosswalks

IX. Performance Measures and Reporting

The Department of Planning and Community Development shall coordinate the tracking of Complete and Green Street elements implemented per calendar year with the Department of Public Works, and shall include performance measures in the City's Annual Operating Budget that quantifies road improvements completed consistent with this policy.

Improvements to be tracked in accordance with this policy include:

- ADA compliant roadway improvements
- Number of crosswalks built or improved
- Number of street trees planted
- Square feet of sidewalk repair
- Miles of bike lanes and sharrows **installed**
- **Number and type of stormwater management facilities built or improved**
- **Number of bicycle racks installed**
- **Number of fatalities and crashes for all modes of transportation**
- **Number of bus shelters built or improved**

ADVISORY PLANNING BOARD **REPORT NO. 2019-04**
REPORT TO COUNCIL **Date: April 9, 2019**

SUBJECT: Complete and Green Streets Draft Policy

BACKGROUND:

On March 6, 2019 Ms. Porter presented the Board with a draft Complete and Green Streets Policy. The presentation included an explanation of Complete Streets and Green Streets, the vision of the policy, the purpose and need for a policy, and examples of Complete and Green Streets projects.

The vision of the policy is, "The City of Greenbelt shall be a place where public transportation vehicles, motorists, cyclists, and pedestrians can navigate the City with ease and in complete safety. This policy will direct the City of Greenbelt to develop and provide a well-connected, visually attractive transportation network, that balances the needs of all users, and promotes a more livable and sustainable community."

ANAYLSIS:

The Board supports the adoption of a Complete and Green Streets policy and believes that it incorporates a lot of the goals that have been discussed by the Advisory Planning Board.

RECOMMENDATION:

The Board recommends that City Council adopt the Complete and Green Streets Policy.

Respectfully Submitted,

Keith Chernikoff
Chair

This recommendation was adopted by a vote of 5-0.

Green ACES & Green Team comments on the presentation of the Complete and Green Streets Policy.

June 10, 2019

On February 26, 2019, Molly Porter from the Planning Department presented to Green ACES/Green Team the Complete and Green Streets Policy document.

Molly showed a PowerPoint describing Complete and Green Streets, the purpose of the policy, and the policy itself. The group discussed a number of issues, including whether the City wanted to, eventually, make all streets Green and Complete; and about safety, cutting of trees, PEPCO involvement in tree cutting, and whether wires could be buried.

Molly explained that technical implementation would be based on the latest available data and thus would be fluid and change over time as better practices and products became available.

All present Green ACES/Team members agreed with the policy that was presented and expressed a desire to review technical details as they became available and updated.

Thank you,

John Lippert

Chair, Green ACES / Green Team

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: OTHER BUSINESS
Agenda Section:

Subject:
Memorializing Significant Greenbelters — Guidelines for Naming City Property

Suggested Action:

Council member Byrd requested this item to be added to the agenda.

The motion would be to direct staff to draft a resolution that would.

1) expressly re-authorize the City to name parks, streets, buildings, or other City property in accordance with efforts to commemorate and honor select individuals that have made significant contributions to Greenbelt and/or in accordance with a major donation; and

2) establish guidelines for all such naming.

Attachments:

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Bonita Anderson
Submitting Department: Administration
Item Type: OTHER BUSINESS
Agenda Section:

Subject:
Maryland Municipal League 2020 Legislative Requests

Suggested Action:

Reference:

2020 MML Legislative Request form
History of City MML Priority Requests
MML Assets and Liabilities of City's 2019 Submissions

The City has received the annual request from the Maryland Municipal League (MML) to submit statewide legislative initiatives by July 26.

Last year, the City submitted three proposed initiatives.

- Online Sales Tax – Municipal Share
- Local Authority over Vegetation Management
- Retroactive Utility Billing

MML did not select any of these initiatives as a priority. Included in the reference materials is a list of assets and liabilities developed by MML.

At the Regular Meeting on June 17, Council Members raised the items listed below. There was consensus to wait until after the MML Summer Conference before making a decision about 2020 submissions.

- Municipal Authority over Cell Towers
- Additional Revenue Sources beyond Property Tax
- Online Sales Tax
- Online Sports Betting & Gambling - Municipal Revenue Sharing
- Regulation of Mobile Billboards
- Ban on Single Use Plastics
- Funding for Electric Vehicle Infrastructure
- Data Storage - Police Camera Videos

Suggested initiatives must have statewide municipal impact. Per MML rules, the City may submit up to three Legislative Requests.

Council direction is sought.

Attachments:
2020-MML-LEGISLATIVE-REQUEST.pdf

MML Priorities.doc

MML 2019 Assets and Liabilities.pdf

2020 MML LEGISLATIVE REQUEST

Name of Municipality, Chapter or Department submitting request:_____

Contact Person/Title_____

Address/City/State/Zip:_____

Telephone numbers: (Work)_____(Home)_____E-mail:_____

How MML Legislative Priority Issues Are Selected

1. The League shall inform all member municipalities, chapters, and departments that they may **submit up to three legislative requests each for consideration** as MML initiatives before the Maryland General Assembly by a deadline selected by the League.
2. The staff reviews these requests and prepares background information for the Legislative Committee.
3. The Legislative Committee meets to discuss these requests and to consider MML priority issues not resolved during the previous session.
4. A legislative request that is the same or as substantially similar to a request that has previously been considered and rejected by the committee twice within a four-year period coinciding with the current term of the General Assembly shall be excluded from consideration by the committee.
5. The LAR submission form requires verification that the elected body of a municipality or the membership of a chapter or department has endorsed a legislative request prior to submission.
6. The committee shall limit legislative sponsorship proposals to the membership for consideration at the fall conference to no more than four (4) non-prioritized items and limit the proposals adopted by the membership to four (4).

LAR FORM MUST BE RETURNED VIA MAIL OR E-MAIL NO LATER THAN FRIDAY, JULY 26, 2019.

1. Describe the problem or situation the request is intended to address:

2. Describe the requested legislation:

3. Describe how the requested legislation would remedy the problem:

4. The proposed legislation would address: _____Only your municipality

   ____Only municipalities in your county _____ Municipalities in the entire state

   _____All counties and municipalities in the entire state

5. Would the proposed remedy have a significant fiscal impact on your municipality?

BACKGROUND INFORMATION

1. Could the problem be resolved by something other than a new law, i.e., action by another level of government or changes in administrative procedures?

2. If administrative remedies have already been pursued, what were they and what was the outcome?

3. What other state and/or local agencies, if any, would be affected by this proposal?

4. Have any state agencies been contacted about the proposal? If yes, what was their reaction?

HISTORICAL INFORMATION

1. Has the League considered this proposal in a previous year? If yes, describe any significant changes in circumstances that might improve its chances of success in 2020:

2. Has this request been considered by the General Assembly in prior sessions? If yes, please provide the bill number, year, and outcome of legislation, if known:

3. Has this proposed legislation been implemented by any other city, county or state? If yes, please describe where it has been implemented and cite any existing law or model code upon which the proposal is based:

_____
Signature of authorized municipal, chapter or departmental official

_____ _____
Print name & Title Date

Please return LAR form to:
MML Legislative Committee
1212 West Street
Annapolis, MD 21401
ATTN: Bill Jorch
410-268-5514
E-mail: kevinc@mdmunicipal.org
& copy billj@mdmunicipal.org

Please indicate the date of the meeting where the governing body of the municipality, chapter or department endorsed/approved this request: _____.

Please complete this form in its entirety. Attach additional sheets, if necessary, as well as documents related to your request. Please return to MML NO LATER THAN **FRIDAY, JULY 26, 2019**.

History of City MML "Priority" Legislative Requests

YEAR	SUBMISSION
2019	Online Sales Tax – Municipal Share Local Authority over Vegetation Management Prohibit Retroactive Utility Billing
2018	Prohibit Housing Discrimination based on Source of Income Municipal Authority over Cell Towers Prohibit Retroactive Utility Billing
2017	Protect Youth Service Bureau Funding Local Authority over Vegetation Management Protect Program Open Space Funding
2016	Incentives for Solar Energy Use Protect Program Open Space Funding Local Authority over Vegetation Management
2015	Debit Card Transactions Should be Treated as Cash Maintain Municipal Ability to Establishing Different Tax Rates on Property Classes.
2014	Solar Energy Initiative Funding for Electric Vehicle Infrastructure
2013	Plastic Bag Fee Bill Alternative Revenue Raising Authority Speed Cameras - Enforcement
2012	No Submission
2011	Funding/Incentives for Alternative Fuel Vehicles and Stations Sign removal on State Highways
2010	Apartment Assessment Issue Funding/Incentives for Alternative Fuel Vehicles and Stations
2009	Speed Cameras
2008	Apartment Assessment Issue Radar Cameras
2007	Electricity Aggregation Increase State Police Aid
2006	No Submission
2005	Electricity Aggregation
2004	Protect Municipal Fiscal Resources Radar Cameras
2003	Speed Cameras
2002	Fiscal Sustainability Speed Cameras Car Sharing Matching Grants
2001	Electricity Aggregation Income Tax – Increase Municipal Share
2000	Electricity Aggregation Consideration of Distribution of Income Tax
1999	Increased Funding for Youth Prevention Programs Local Representatives for Absentee Landlords
1998	Consumer Protection Improperly Registered Motor Vehicles

2019 LEGISLATIVE ACTION REQUESTS (As of 7/31/18)

(LR 2019 – 01)	County Tax Duplication – Mandatory Tax Set-Off to Municipalities (Chestertown & Salisbury)
(LR 2019 – 02)	State Online Sales Tax – Municipal Share (Greenbelt & PGCMA)
(LR 2019 – 03)	Public utilities – Vegetation Management – Municipal Authority (Greenbelt)
(LR 2019 – 04)	Utility Retroactive Billing – Prohibition (Greenbelt)
(LR 2019 – 05)	Five Year Rule – Annexation – Repeal/Modification (Centreville)
(LR 2019 – 06)	Degradation of Municipal Authority – Opposition (Rockville)
(LR 2019 – 07)	Small Cellular Infrastructure – State Preemption – Opposition (Gaithersburg & Rockville)
(LR 2019 – 08)	Congressional Redistricting and Appointment Commission - Establishment (Rockville)
(LR 2019 – 09)	Bromethalin-Based Rat Traps – Usage – Limitations (Gaithersburg)
(LR 2019 – 10)	Stormwater Management on State/County-Owned Property within Municipalities (Gaithersburg)
(LR 2019 – 11)	Public Utilities and State Highway Administration – Coordination with State and Local Governments (Takoma Park)
(LR 2019 – 12)	Municipal Taxing Authority – Creation of New Opportunities (Takoma Park)
(LR 2019 – 13)	Affordable Housing Programs – Additional Funding Sources (Takoma Park)
(LR 2019 – 14)	Bus Transit Waiting Area – Public Private Partnership – Establishment (Glenarden)
(LR 2019 – 15)	Public Safety Body Camera Footage – Storage – Workgroup (PGCMA)
(LR 2019 – 16)	State Sports Betting Revenue – Municipal Eligibility (PGCMA)

THE MARYLAND MUNICIPAL LEAGUE

Assets and Liabilities
2019 Legislative Action Requests (LARs)

NOTE: With an anticipated 35%-40% turnover in the 2019 General Assembly, 5 out of 12 new House Chairs and Vice Chairs, and 7 out of 8 new Senate Chairs and Vice Chairs, municipal education and relationship building requirements will play a huge factor in the success/failure of many of MML's proposed LARs. The time needed on the part of MML members and staff during the 2019 GA legislative session to educate new General Assembly legislators and House and Senate (and possibly administration) leadership should be taken into consideration when discussing the LARs listed below.

2019 – 01 - County Tax Duplication – Mandatory Tax Set-Off to Municipalities

Assets:

1. Legislation could correct a longstanding inequity that requires municipal residents to pay for county services they do not receive.
2. An equity and fairness argument can well be made for this issue.
3. Some members of the General Assembly were educated about the issue as a result of legislation on the issue considered in 2015, but many will be gone after the 2018 general election.

Liabilities:

1. MACo will oppose such legislation as they did during the 2015 legislative session and every other session when the issue was considered in the past.
2. Legislative headway on this issue in the last four decades has largely been limited to only five bills affecting individual counties.
3. Legislation addressing double taxation has historically been more successful as a local bill supported by a local delegation.
4. Legislators dislike being asked to pick sides between municipalities and counties.
5. Legislation introduced to address double taxation could evolve into legislation detrimental to municipal interests.
6. There is no perfect model to address this issue (i.e., no one-size-fits-all solution). Some municipalities are content with their current arrangements and are hesitant to highlight the issue with members of the General Assembly and within their own county governments.
7. To the extent that the Anne Arundel County model is implemented statewide, research in the past indicated it would have eliminated tax rebates to cities and towns that provided $19.9 million in county grants to 97 municipalities in 12 counties in FY 2014.
8. A pending court case filed by the Town of Ocean City could derail legislation until the case is decided.

2019-02-State Online Sales Tax – Municipal Share

Assets:

1. The proposal would broaden a very narrow municipal tax base.

Liabilities:

1. The General Assembly has not historically been supportive of expanding local government taxing authority in the past.
2. This potential source of municipal revenue is vulnerable to volatile shifts in the State's economy.
3. Given that this is a new source of revenue for the State, it may be difficult to wrest any of it away from state elected officials.

2019 – 03 - Public Utilities – Vegetation Management – Municipal Authority

Assets:

1. This has been an ongoing issue of concern for municipal officials for many years.
2. It is felt that the "fix" passed by the General Assembly in 2013 does not sufficiently address communication problems between municipal officials, residents, utilities and tree trimming subcontractors.

Liabilities:

1. Utilities and the Public Service Commission will likely oppose any efforts to restore local government authority over tree trimming activities, as they claim this was addressed and included in regulations promulgated several years ago.
2. A workgroup report on this topic was released in January of 2018 where it was stated that "all is well with current practices." Municipalities were invited to participate and some were apparently included in the promulgation of the report.
3. Numerous bills on this issue have failed in recent years.

2019 – 04 - Utility Retroactive Billing

Assets:

1. To the extent a municipality was underbilled for utility usage, it could save money if this proposal became law.

Liabilities:

1. This issue is more of a consumer initiative than a municipal issue.
2. Municipalities currently enjoy similar authority to collect property taxes going back for a period of three years when errors are encountered in property tax billing.
3. Utilities will oppose this initiative.

2019 – 05 - Municipal Annexation –Five-Year Rule – Repeal/Modification

Assets:

1. Municipal desired development of land annexed into a municipality would occur in a more timely fashion.
2. A recent Maryland Court of Appeals decision that upheld the counties' right to rescind a waiver of the five-year rule despite a significant change in elected leadership at the county level could lend support to a MML initiative on this issue.

Liabilities:

1. The proposal would put MML at odds with MACo. Legislators have traditionally viewed such initiatives negatively as it puts them uncomfortably in the middle of a local government conflict, having to choose sides.
2. MML has used the five-year rule as a defense against aggressive MACo legislation (specifically when they've attempted to extend the referendum option to adjoining precincts).
3. Reacting to the recent county/municipal rezoning Court of Appeals decision by attempting to pass reactive legislation could backfire by also restricting a municipality's ability to employ the same action(s) when appropriate against a county or other entity.

2019 – 06 - Degradation of Municipal Authority – Opposition

Assets:

1. This is a timely issue that does not tie the League to just one issue
2. MACo is considering and may adopt a similar broad-based anti-preemption priority.
3. This priority would not require specific legislation.

Liabilities:

1. Such a broad priority lacks the clarity that may be needed to resonate with legislators

2019 – 07 – Small Cellular Infrastructure – State Preemption - Opposition

Assets:

1. This is a statewide issue for municipalities.
2. This issue was adopted as a priority in 2018 and MML was successful in defeating the industry bill.
3. MML has already been approached recently by industry to re-engage in discussions about a bill in 2019, which may result in a compromise on some areas of disagreement.
4. State legislation would likely void all local government MOUs and ordinances currently in place, which strengthens the stance against a "one size fits all" approach.

Liabilities:

1. Some existing local government authority and restrictions on this issue reside in federal statute and FCC regulations
2. The FCC and Congress are looking at the issue and considering potential further federal intervention.

3. The Senate Chair who withdrew his legislation on this issue last session failed to win his primary. The House Chair, who cross-filed the bill, is very sympathetic to utility issues.

2019 – 08 - Congressional Redistricting and Appointment Commission - Establishment

Assets:

1. A successful workgroup outcome could positively realign some legislative districts within municipal borders.

Liabilities:

1. The long-time state majority party is unlikely to cede the authority they enjoy on this issue.
2. Similar bills in the past have either failed or were approved with amendments to gut them.
3. A direct impact on municipal government and its operations is not readily apparent in this initiative.

2019 – 09 - Bromethalin-Based Rat Traps – Usage – Limitations

Assets:

1. The measure would promote animal safety.

Liabilities:

1. A direct impact on municipal government and its operations is not readily apparent in this initiative.
2. The League may be in a better position to support a bill, should one be introduced, that addresses this issue.

2019 – 10 - Stormwater Management on State/County-Owned Property within Municipalities

Assets:

1. This is an important issue for the municipalities in the affected counties. Before federal fees can be levied, the State and respective counties must begin paying a municipal stormwater fee for properties owned within a municipality.
2. By bringing on approximately 47 municipalities that currently operate under a Phase II stormwater permit, this issue will become more relevant as more stringent and expensive permit requirements are put in place by MDE in 2018/2019.

Liabilities:

1. This LAR impacts only municipalities that are currently imposing a stormwater fee (SWF) or those that impose a fee in the future.
2. Once the State Highway Administration, the Boards of Education, and state colleges and universities exempt themselves, it becomes difficult to force other federal, state and county property owners to pay a municipal stormwater fee.
3. Legislation to address this issue has failed repeatedly over the past several years.
4. Some municipalities with a SWF currently receive funding from their respective counties for county owned properties, in some cases, including school facilities, so legislation could result in a negative effect on those municipalities currently in a good position.

5. The fact that the legislation fell apart in 2017 at the eleventh hour because some stakeholders changed their positions and a few of our members had second thoughts about the MML bill would likely mean that MML could be back to square one on this initiative.
6. Changes in MACo leadership subsequent to the 2018 general election could change the landscape as far as their willingness to work on a compromise bill with MML this time around.

2019 – 11- Public Utilities and State Highway Administration – Coordination with State and Local Governments

Assets:

1. Requiring better communication between utility companies, the State Highway Administration, and municipal officials could better coordinate local projects to save money and increase efficiency.
2. Some headway was made on the issue through past negotiations.
3. Maryland utility companies are much more engaged with MML subsequent to the adoption of this initiative by MML several years ago.

Liabilities:

1. Utility companies and the State could oppose any measure that requires more notification and communication with local officials.
2. This issue was adopted as League priority for 2017, and while no legislation was introduced, three important action items were completed to enhance communication and coordination of utility work with municipal elected and appointed officials.
3. Legislation to require SHA to communicate with residents impacted by state highway work failed in the last two legislative sessions.

2019 – 12 - Municipal Taxing Authority – Creation of New Opportunities

Assets:

1. The proposal would broaden a very narrow municipal tax base.

Liabilities:

1. The General Assembly has not been supportive of expanding local government taxing authority in the past.
2. Although municipal HUR funding was largely restored with legislation passed during the 2018 legislative session, MML will be tasked with ensuring that municipal HUR funding is included in the state budget for the next five years, beginning in FY 2020. The adoption of a priority to expand municipal taxing authority could negatively impact MML's ability to retain and increase HUR funding over the next five years with the transition to a significantly changed General Assembly in 2019.

2019 – 13 - Affordable Housing Programs – Additional Funding Sources

Assets:

1. This initiative would add additional revenue source for municipalities for affordable housing.
2. Affordable housing has become an important issue in the Maryland General Assembly, which could facilitate a successful measure to acquire additional funding for this specific use.

Liabilities:

1. Requests of the legislature for additional municipal revenue sources has traditionally been difficult.

2019 – 14 - Bus Transit Waiting Area – Public Private Partnership – Establishment

Assets:

1. The issue would promote public safety and improve community aesthetics.

Liabilities:

1. Bus stops are rarely constructed and owned by municipalities. Most are owned and maintained by counties and the state.
2. An alternative may exist in potential negotiations with bus service providers.
3. There is currently no prohibition against engaging in public-private partnerships to achieve the objectives outlined in this LAR.

2019 – 15 - Public Safety Body Camera Footage – Storage – Workgroup

Assets:

1. Body cameras are becoming an important tool for many municipal police departments.
2. Finding a better solution to storage could save money for many municipalities.
3. Without a solution to this problem, body camera use may continue to decline.

Liabilities:

1. Perhaps this can be done without an act of the legislature.
2. Legislation introduced on this topic over the past several years has failed largely due to the significant opposition mounted by the ACLU. It's likely their opposition would carry over to the actions of a workgroup on this issue.

2019 – 16 - State Sports Betting Revenue – Municipal Eligibility

Assets:

1. To the extent that municipalities could get a percentage of this new revenue stream, it would be beneficial.

Liabilities:

1. There is precedent for a percentage of gambling proceeds to go to the local government in which the casino or racetrack is located. If this model is adopted, it likely would not have a statewide impact on municipalities.
2. The General Assembly has historically been reluctant to share state revenues with local governments.

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
* License Agreement for Studio Use

Suggested Action:
Due to the time sensitive nature of the item, the City Manager has already signed each lease. The one-year lease for each artist holds the same terms and for a term of July 1 to June 30. Upon approval of this item on the consent agenda, the Council will confirm approval of the leases.

A. Denn
B. Karlson
C. Cross
D. Gorson
E. Keller
F. Arrington
G. Anderson
H. Gawlik

Attachments:

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
* Approval of Friends of the Old Greenbelt Museum

Suggested Action:
recommended architect for the Visitors Center at 10-A Crescent

Attachments:
10A Architect Recommendation Memo.pdf

19012 Greenbelt Museum Experience Statement.pdf

19012 Greenbelt Museum Proposal.pdf

Christopher Weston resume and project list 4.18.19.pdf

Neha Chidura resume.pdf

references.pdf

RFP_Atelier.pdf

RFP_FieldCraft.pdf

GREENBELT MUSEUM

To: Greenbelt City Council

CC: Nicole Ard; David Moran; Megan Searing Young

From: Jennifer Ruffner, President, Friends of the Greenbelt Museum

Date: June 17, 2019

Re: RFP - Architectural Services, 10A Crescent Road

The purpose of this memo is to request your approval of the award recommendation for an architectural and engineering firm for the renovation of 10A Crescent Road. The Friends of the Greenbelt Museum (FOGM) will fund the proposed work in its entirety; however, because 10A is owned by the City of Greenbelt, we want to ensure that the City supports our recommendation for the architectural firm.

Recommended Awardee: Old Line Architects, LLC

The Board of FOGM recommends the award go to Old Line Architects, LLC. In making the most advantageous offeror determination, technical factors were given equal weight with financial factors. The Board felt that the technical and financial superiority of Old Line's proposal made the firm the best choice.

Background

This contract will provide architectural services for the conversion of 10A Crescent Road from a residence into the Greenbelt Visitor and Education Center. Deliverables will include:

- Measured drawings
- Renderings
- Constructions specifications
- List of furnishings
- Cost estimates

An RFP was issued in January 2019, and three proposals were received. The chart below summarizes the proposals received, and all three proposals are available here: https://drive.google.com/drive/folders/1-38j9bv8Bhxqhp62eYX_nLtHdkPonr29

Offeror	Price Proposal	Ranking
Old Line Architects	$34,000+optional items	1
Fieldcraft Studio	$43,655+optional items	2
Atelier Giguere	$120,280	3

Evaluation Process and Results

FOGM reviewed all three proposals, and Megan Searing Young and/or Jen Ruffner met with all three firms on-site at 10A. The proposal from Atelier Giguere was deemed to be too expensive, and represented a much higher level of design than was necessary for the project. The proposal from Fieldcraft Studio was more in line with the requirements of FOGM, and was more cost effective, but was limited in terms of relevant examples of previous work, with limited museum and visitor center experience demonstrated.

The recommended firm, Old Line Architects, LLC, represents a good combination of affordability, and relevant experience. The owner of Old Line Architects, Christopher Weston, has extensive experience relating to museums and visitor centers, including the Walters Art Museum in Baltimore, the Abraham Lincoln Boyhood Home Visitor Center, and the Harriet Tubman Underground Railroad National Historic Park Visitor Center in Cambridge, as well as the Eisenhower Home National Historic Site. Mr. Weston has an understanding of, and appreciation for historic buildings and their unique needs, while at the same time having a strong understanding of the needs of both museums and visitor centers. During our site visit, Mr. Weston demonstrated a stronger understanding of the challenges we face in converting a residential property, restricted by the rules of Greenbelt Homes, Inc., into a public-facing visitor and museum facility. We are confident that Old Line Architects, LLC is the best choice for the work.

With your approval, FOGM will move forward with notifying the proposed awardee and entering into a contract. We have received grants from the Maryland Heritage Areas Authority and the Prince George's Redevelopment Authority to cover the costs of this work, and must complete the work within the next year. We must begin this process as soon as possible to ensure we meet that deadline.

Should you wish to discuss any of this information further, we are available to meet with you.

Respectfully Submitted,

Jennifer Ruffner
President
Friends of the Greenbelt Museum

STATEMENT OF APPLICABLE EXPERIENCE

April 22, 2019

Jennifer Ruffner, President
Friends of the Greenbelt Museum, Inc.
Jen.Ruffner@greenbeltmuseum.org

Dear Jennifer:

Please find below a statement of experience specifically applicable to the Greenbelt Visitor Center project.

From 1995 to 2000 I worked as a home inspector in Baltimore City and surrounding counties, and over that time inspected more than 2,000 homes. The skills acquired during that experience have provided the insight to understand problems with existing buildings, and detail new work to avoid future problems. As applicable to the Greenbelt Museum Visitor Center, stakeholders can rest assured that the existing building is understood in its entirety; that any specified work would be physically sympathetic to the existing structure; and that new work, like the original, would be designed to last.

From 2008 to 2015 I was an employee of GWWO Architects in Baltimore, Maryland. GWWO specializes in visitor center and museum projects working at the city, state, and national level. While there, I had the opportunity to take project architect roles at both the Abraham Lincoln Boyhood Home Visitor Center in Hodgenville, KY; and the Harriet Tubman Underground Railroad National Historic Park in Cambridge, MD. I also had support roles at the Hancock's Resolution Visitor Center in Pasadena, MD (unbuilt); and the Robinson Nature Center in Columbia, MD. Collectively, these projects represent more than three full years of professional experience with Visitor Centers. The specific insight applicable to the Greenbelt Museum Visitor Center is the understanding of how the service functions (toilets, tickets, information and gifts) are integrated with visitor immersion experience; in this case the appreciation of the economic, sociological and a design forces that came together to create this place and the artifacts of the era.

Also while at GWWO, I had the opportunity to take the lead role in the creation of the Historic Structure Report for the Eisenhower Home National Historic Site in Gettysburg, PA. This was a six month project that involved building history, condition assessment, and existing conditions drawings (Historic American Building Survey). Applicable to the Greenbelt Museum, the Eisenhower Home contains period furnishings and artifacts, many of which were the Eisenhower's personal possessions. Together, the artifacts and the home are a time capsule of 1950s and 60s America.

In 2015 I started my own firm, which was a life-long ambition. In 2016, I was fortunate to be asked to join the team that renovated 1 West Mount Vernon Place, one of the Historic Buildings on the campus of the Walters Art Museum. Since that time I have maintained a relationship with the Walters, and have designed their café and the Charles Street entrance to the building.

OLD LINE ARCHITECTS
1340 Smith Avenue, Suite 200, Baltimore, MD 21209
443.977.8387
www.oldlinearchitects.com

Currently, Old Line is working as the envelope consultant for campus wide renovations, and also as the design architect for the exterior renovation of 5 West Mount Vernon place. Two of my listed references stem from this work: one being the Walters Director of Facilities, and the other being the President of the general contracting firm who renovated 1 West Mount Vernon Place. Similar to the Eisenhower home, the 1 West Mount Vernon Place building is part of the collection, it too being a work of art. Also, the experience has afforded me the opportunity to work with a large museum board and understand their collective interest in their mission: art for all.

In summary, I have extensive experience with historic buildings, visitor centers, and museums; I have managed projects of similar size and larger; and I am able to work closely with stakeholder groups to achieve desired outcomes. Equally important to the architecture credentials, I have an appreciation for the history and sociology behind Historic Greenbelt, which is an important part of the American story.

Sincerely,

Christopher Weston, AIA, LEED AP
OLD LINE ARCHITECTS

(please see photos on pages that follow)

1 West Mount Vernon Place Exterior post renovation

1 West Mount Vernon Place interior post renovation

Eisenhower Home Exterior

Eisenhower Home Interior

Robinson Nature Center (GWWO Architects)

Harriet Tubman Underground Railroad Visitor Center (GWWO Architects)

FEE PROPOSAL

April 19, 2019

Jennifer Ruffner, President
Friends of the Greenbelt Museum, Inc.
Jen.Ruffner@greenbeltmuseum.org

Dear Jennifer:

It was a pleasure to meet you last week and we very much enjoyed touring the museum. Thank you for the opportunity to submit this proposal for architectural services for the proposed Visitor Center.

PERTINENT INFORMATION

- This is a duplex building. 10A is the proposed Visitor Center and 10B is the existing functioning museum. 10A was, until recently, a privately owned home. Building work is limited to 10A. Some site work may extend to 10B for accessibility.
- The desired Visitor Center renovation and addition includes:
    - 1st Floor
        - Accessible entry and path
        - ADA restroom
        - Gift shop
        - Space for food warming / serving / staging for events
        - History room
        - Multipurpose room
        - New / renovated finishes all
        - Addition to incorporate program
    - 2nd Floor
        - Museum offices and archives
        - New / renovated finishes all
    - Site
        - ADA parking (may be striping and sign on street)
        - Accessible path to entrance
    - Mechanical
        - New HVAC to provide climate control for A and B units
        - Supply and drain and fixtures for ADA restroom
        - New fixtures for 2nd floor bathroom
    - Furnishings
        - Architect will select furnishings with the assistance of the client

- The engineering scope of work is not fully defined at this time and may yield higher than necessary proposals. For that reason, engineering services have been excluded. A range of fees is shown in the exclusion section. Time for architectural coordination with engineers has been included. As the design is developed, proposals from engineers will

be solicited. The proposals will be shared with the client and invoices passed through without additional markup.

- This proposal is based on tearing down the existing addition and building new. The work involved in renovating the existing addition is more complex than starting over and will require additional fee (not calculated at this time).
- A fee to subcontract a professional cost estimator is not included in the proposal. We include fee for a class C estimate, which has a range of 20%. If a more accurate number is desired, we would be happy to contract a professional estimator and pass through the cost with no additional markup.
- The RFP states a requirement for an Accessibility Specialist. There is currently no credential for this role in Maryland. Old Line will comply with all applicable components of ADA for this project.

SCOPE OF WORK

- Project kick-off meeting
- Field measure and document existing conditions for 10A.
- Field measure and document exterior of 10B (necessary for context)
- Electronically draft existing conditions
- Create up to three schematic designs that fulfill the client's program. 3d images of the proposed addition included
- Create Class C estimate
- Hold stakeholder meeting to discuss designs (at project site)
- Create a developed design based on stakeholder feedback
- Screen share meeting to discuss developed design
- Create a fundraising drawing based on the developed design (11x17 sheet showing plans, elevations, 3d view of addition)
- Create construction documents (drawings and specifications) for the developed design
- Refine the cost estimate
- Assist the client with furniture selection
- Assist the client with bidding the project
- Construction administration (6 bi-weekly visits and 6 field reports)

EXCLUSIONS

The following services are excluded from the fee proposal:

- Civil Engineer: Approximate fee range for this project includes survey work, design and drafting: $5,000 - $7,000.
- Mechanical Engineer. Approximate fee range for this project: $4,000 - $6,000
- Structural Engineer. Approximate fee range for this project: $3,000 - $5,000 to design a new addition.
    - In order to accurately determine the 2nd floor loading (without assumption), it would be necessary to x-ray the floor to determine the structural reinforcing. This task may add an additional $3,000 - $5,000 to the engineering fee.
- Permitting (by contractor)
- Custom desk for entry. Can be included for additional fee

DELIVERABLES

- Measured drawings and details
- Renderings of interior and exterior spaces
- Construction specifications
- List of furnishings
- Class A cost estimate
- All deliverables are pdfs
- CAD files will be provided as requested

REIMBURSABLES

- Hard copy printing x 10% markup

SCHEDULE

- Per schedule in RFP

FEE

The fee for the Visitor Center project is: $34,000.

If you accept the proposal, the project will be invoiced at the following milestones as a percentage of the total contract value:

1.	Existing Conditions	1/6
2.	Schematic Designs	1/6
3.	75% Documents	1/6
4.	100% Documents	1/6
5.	Bidding	1/6
6.	Construction Administration	1/6

USE OF IMAGES

Old Line Architects requests the right to use project images in marketing media on-line and in print.

ADDITIONAL SERVICES

If additional services are required which are not listed in the Scope of Work defined on previous pages, these services will be billed at the rate of $100 per hour for principal and $75 per hour for associate.

CONTRACT

This document is a fee proposal only. If you agree to the fee we will issue an AIA B105 short form agreement between owner and architect for signature. This proposal will be attached to that document as an exhibit.

CONCLUSION

We are excited about the prospect of working on your project and will look forward to your response. If you have any questions about the proposal you may email me at cweston@oldlinearchitects.com or call me at 443.977.8387.

Sincerely,

Christopher Weston, AIA, LEED AP
OLD LINE ARCHITECTS

CHRISTOPHER WESTON

Professional Experience

2015 – present:	Owner/founder of Old Line Architects, LLC. Old Line's mission is to provide exceptional quality residential and commercial architectural services. Focus areas include: renovations, additions, accessibility, new construction, condition assessment, construction administration, owner's representation, and feasibility studies.
2008 – 2015:	GWWO Inc. Architects, Baltimore, MD Historic, educational, visitors centers, athletic facilities
2006 – 2008:	RTKL Associates Inc., Baltimore, MD Hotel, retail, office
2000 – 2006:	Marks, Thomas Architects, Baltimore, MD Multifamily housing, recreational
1995 – 2000:	Boswell Building Surveys, Baltimore, MD Home inspection
1994 – 1995:	HMS Designs, Inc., Potomac, MD Residential architecture
Graduated 1994:	University of Maryland, College Park, Bachelor of Science, Architecture

Professional Accreditations

Registered Architect, State of Maryland #18086

USGBC LEED Accredited Professional

The attached sheet has a detailed list of completed projects.

OLD LINE ARCHITECTS
3731-A Roland Avenue, Baltimore, MD 21211
443.977.8387
www.oldlinearchitects.com

Christopher Weston, AIA, LEEP AP
Projects 2000 - Present

YEAR	PROJECT NAME	PROJECT TYPE	FIRM	LOCATION	OWNER
2000	Eskay Residence	Residential New Construction	Chris Weston	Barnesville, MD	Private
2001	Greenspring Retirement Community	Senior Housing	Marks Thomas	Springfield, VA	Erickson Retirement Communities
2002	Heritage Crossing Townhomes	Affordable Housing	Marks Thomas	Baltimore, MD	Housing Authority of Baltimore City
2003	Stadium Place Venable Apartments	Affordable Housing	Marks Thomas	Baltimore, MD	Govans Ecumenical Development Co.
2003	Bloomsbury Square Townhomes	Affordable Housing	Marks Thomas	Annapolis, MD	Housing Authority City of Annapolis
2003	Garland Residence	Residential Addn./Renovation	Chris Weston	Bushy Park, MD	Private
2004	Stadium Place Ednor Apartments	Affordable Housing	Marks Thomas	Baltimore, MD	Govans Ecumenecil Development Co.
2004	Northbay Camp	Recreational	Marks Thomas	Northeast, MD	Erickson Retirement Communities
2005	Derocco Residence	Residential	Chris Weston	Towson, MD	Private
2006	Ritz Carlton Residences	Luxury Housing	Marks Thomas	Baltimore, MD	Ritz Carlton Residences
2006	Baltimore Hilton Hotel	Hotel	RTKL	Baltimore, MD	Baltimore Development Corporation
2007	Mercy Hospital Parking Garage	Parking Garage	RTKL	Baltimore, MD	Mercy Hospital
2007	Times Square Kyungbang Mall	Retail	RTKL	Seoul, South Korea	Kyungbang Company
2007	Johns Hopkins Applied Physics Lab Bldg. 21	Office	RTKL	Laurel, MD	Johns Hopkins Applied Physics Lab
2007	National Ground Intelligence Center	Office	RTKL	Charlottesville, VA	United States Army
2008	Southgate Elementary	Educational	GWWO	Glen Burnie, MD	Anne Arundel Co. Public Schools
2008	Abraham Lincoln Boyhood Home	Visitor Center	GWWO	Hodgenville, KY	National Park Service
2008	Hancock's Resolution	Visitor Center	GWWO	Pasadena, MD	Friends of Hancock's Resolution
2008	Mount Vernon Place Rehabilitation	Exterior Hardscape Renovation	GWWO	Baltimore, MD	Baltimore City Dept. of Rec. and Parks
2009	The Brafferton, College of William and Mary	Historic Renovation	GWWO	Williamsburg, VA	College of William and Mary
2009	Harriet Tubman Underground Railroad State Park	Visitor Center / Museum	GWWO	Cambridge, MD	National Park Service
2009	Union Square Spring House Gazebo	Historic Renovation	GWWO	Baltimore, MD	Baltimore City Dept. of Rec. and Parks
2009	Riverside Park Pool Building	Historic Renovation	GWWO	Baltimore, MD	Baltimore City Dept. of Rec. and Parks
2009	Rita Church Community Center at Clifton Park	Historic Renovation	GWWO	Baltimore, MD	Baltimore City Dept. of Rec. and Parks
2009	Robinson Nature Center	Visitor Center	GWWO	Columbia, MD	Howard County Recreation and Parks
2009	Baltimore Zoo Reptile House	Historic Renovation	GWWO	Baltimore, MD	Baltimore City Dept. of Rec. and Parks
2010	Shenandoah National Park Reservoirs	Infrastructure	GWWO	Shanandoah National Park	National Park Service
2010	Shenandoah National Park Maintenance Offices	Office	GWWO	Shanandoah National Park	National Park Service
2010	The Grange (Historic Residence)	Historic Structure Report	GWWO	Cumberland Island N.S.	National Park Service
2011	Fort McHenry Barracks	Historic Structure Report	GWWO	Baltimore, MD	National Park Service
2011	Fort McHenry Seawall Trail	Exterior Hardscape Renovation	GWWO	Baltimore, MD	National Park Service
2012	Auburn Mills	Historic Structure Report	GWWO	Yorklyn, DE	Delaware DNREC
2012	Carl Sandburg Home, NHS	Transportation Study	GWWO	Flat Rock, NC	National Park Service
2013	Community College of Baltimore Co. STEM Building	Educational	GWWO	Catonsville, MD	Baltimore County Community College
2013	Prince George's County Correctional Center	Institutional	GWWO	Upper Marlboro, MD	Prince George's County
2014	Salisbury University Stadium	Athletic Facility	GWWO	Salisbury, MD	Salisbury University
2014	Eisenhower Home NHS	Historic Structure Report	GWWO	Gettysburg, PA	National Park Service
2015	Salisbury University Tennis Center	Athletic Facility	GWWO	Salisbury, MD	Salisbury University
2015	Wheaton Woods Elementary	Educational	GWWO	Wheaton, MD	Montgomery Co. Public Schools
2015	Winters Residence	Residential Renovation	Old Line	Arlington, VA	Private
2015	Brandlink DC	Tenant Fit Out	Old Line	Washington, DC	Brandlink DC
2016	1120 South Hanover Street	Existing Conditions Documents	Old Line	Baltimore, MD	Private Developer
2016	Baltimore County Detention Center	Existing Conditions Documents	Old Line	Towson, MD	Baltimore County Dept. of Corrections
2016	108 W. Saratoga St.	Condition Assessment	Old Line	Baltimore, MD	Private Developer
2016	65-75 W. Timonium Road Shopping Center	New Façade Study	Old Line	Timonium, MD	Private Owner

Christopher Weston, AIA, LEEP AP
Projects 2000 - Present

2016-17	16960 Gerting Road	Residential New Construction	Old Line	Sparks, MD	Private Owner
2016-17	Pierre Metcalfe Residence	Historic Residential	Old Line	Mt. Airy, MD	Private Owner
2016-17	Walters Art Museum 1 West Mt. Vernon Place	Owner's Representative	Old Line	Baltimore, MD	Walters Art Museum
2016-19	Meadow Mill, Montgomery Park, 190 W. Ostend St	Tenant Fit Out (multiple)	Old Line	Baltimore, MD	Himmelrich Associates
2016-17	Walters Art Museum Café	Restauarant	Old Line	Baltimore, MD	Walters Art Museum
2017	West Side Shopping Center	ADA Assessment	Old Line	Baltimore, MD	Private Owner
2017	3811 Roland Avenue	Residential Addn./Renovation	Old Line	Baltimore, MD	Private Owner
2017	Hilti Store	Tenant Fit Out	Old Line	Golden Ring, MD	Hilti Power Tools USA
2017	519 Old Orchard Road	Residential Addn./Renovation	Old Line	Ten Hills, MD	Private Owner
2018	Walters Art Museum - Entry Canopy and desk	Commercial	Old Line	Baltimore, MD	Walters Art Museum
2018	812 Park Avenue	Condition Assessment	Old Line	Baltimore, MD	Private Client
2018	88 Bethel Cemetery Road	Residential Addn./Renovation	Old Line	Chesapeake City, MD	Private Owner
2018	200 Tunbridge Road	Residential Renovation	Old Line	Baltimore, MD	Private Owner
2018-19	Stadium Crossing	Envelope Consultant	Old Line	Baltimore, MD	Himmelrich Associates
2018-19	Parker Metal Buidling	Tenant Fit Out (multiple)	Old Line	Baltimore, MD	Himmelrich Associates
2018-19	Beth Tfiloh School	Classroom Renovations (multi)	Old Line	Pikesville, MD	Beth Tfiloh School
2019	Walters Art Museum - Campus Envelope Repairs	Owner's Representative	Old Line	Baltimore, MD	Walters Art Museum

Neharikha Chidura

Address: [redacted]
Email: [redacted] **Phone:** [redacted]

Summary:

- 8+ years experience in **Autocad.**
- 6+ years experience in **Sketchup.**
- 3+ years experience in **Revit.**
- Proficiency in translating abstract requirements into concrete user flows and interaction designs.
- Expertise in reviewing completed reports, plans, estimates and calculations for accuracy.
- Proficiency in estimation of project construction costs and timelines for the design.

Skills:

- Autocad, Sketchup, Revit Architecture, Microsoft office suite, Adobe Photoshop

Certifications:

- Autodesk certified Autocad Certification.
- CADD center certified Revit Certification.

Projects:

MAR 2013 - APRIL 2016 - IRA Creative Design Agency - Hyderabad, India (Architect)

SPORTS BAR & CAFE, Hyderabad:

- Prepared 3D drawings of lounge areas and DJ station specifying materials using **Revit.**
- Supervised project architects and CADD technicians throughout the duration of the project.
- Collaborated with builders to see that construction was in line with the drawings and designs.

MULTI-STOREYED 4 BED, 4.5 BATH VILLA, Secunderabad:

- Sketched conceptual designs and used **CAD** programs to create detailed design and specifications.
- Prepared 3D models using **Sketchup.**
- Involved in selection of various Interior & exterior materials used during implementation.

MULTI-STOREYED 3 BED, 3 BATH VILLA, Shadnagar:

- Involved from the schematic design stage to on-site execution of the project.
- Monitored construction site progress and managed issues that arose.

RESTAURANT – WAFFLE HOUSE, Indore:

- Completed formal design intent and construction documentation.
- Estimated project construction costs and timelines for the design.
- Oversaw technical engineering staff to guarantee the successful and timely completion of the project.

AUG 2010 - FEB 2011 - HYPERCUBE DESIGN CENTER - Secunderabad, India (Architect - Interior Designer)

FLAT AT MY-HOME-JEWEL 3 BED, 3 BATH, Miyapur, Hyderabad:

- Performed construction site pre-inspections and coordinated post-construction audits.
- Monitored the design process from conceptual phase through execution on-site.
- Preparation of 3D **Sketchup** models of Kitchen and Bedrooms.

E-SEVA CENTER, Madhapur, Hyderabad:

- Preparation of furniture layouts showing the details using **AutoCAD.**
- Performed technical analysis and economic studies of cost, operation and safety aspects of production facilities.

3 BED, 3 BATH FLAT AT BASHEERBAGH, Hyderabad:

- Carefully coordinated plans and specifications with the client.
- Preparation of working details of the furniture using **AutoCAD.**
- Responded to emergency callbacks and provided onsite support.

NOV 2009 - APRIL 2010 - FRONTIERS - Hyderabad, India (Architectural Trainee)

RURAL BOUTIQUE:

- Undertake Conceptual designs and design development tasks.
- Usage of different materials such as glass, acrylic, stainless steel, etc and presented them using **AutoCAD.**

OFFICE at Hyderabad:

- Worked on Furniture layout using ergonomics by giving enough circulation space.
- Preparation of detailed wall elevations by specifying the materials being used and details of built in furniture using **AutoCAD.**
- Involved in estimation of the project.

SPICE VILLAGE RESTAURANT at Miyapur, Hyderabad:

- Worked on the interior furniture layout options in the restaurant using **AutoCAD.**
- Worked on different types of staircase options within the restaurant.

DEC 2008 - NOV 2009 - RAGA ARCHITECTS - Secunderabad, India (Junior Architect - part time)

FLAT AT FILM NAGAR, Hyderabad:

- Went on regular site visits and prepared drawings according to the existing dimensions using **AutoCAD.**
- Worked on manual Site plans.

OFFICE at Hyderabad:

- Worked on different design themes and schematic design options.
- Drafting manually and working on the presentation.

EDUCATIONAL QUALIFICATION:

- Bachelor of Architecture (Interior Design) - 2005 - 2010 - Jawaharlal Nehru Architecture and Fine Arts University, Hyderabad, India (JNAFAU).

  Bachelor Thesis: Institute Of Fashion Technology

ADDITIONAL INFORMATION:

- Licensed Architect - Council Of Architecture, New-Delhi, India - CA/2010/49285
- US Permanent Resident (Green Card)
- MD State Driving License

References for Christopher Weston

Evander Toney, Jr (client)
Director of Building Operations
Walters Art Museum
410-547-9000, ext. 213
etoney@thewalters.org

Anne Raines (colleague)
Deputy Director / Deputy State Historic Preservation Officer
Maryland Historic Trust
410-697-9584
anne.raines@maryland.gov

Tyler Tate, P.E., LEED AP (professional affiliation and colleague)
President
Lewis Contractors
55 Gwynns Mill Court, Owings Mills, MD 21117
410.356.4200
tylertate@lewis-contractors.com

PROPOSAL

The Visitor and Education Center
for
FRIENDS OF THE GREENBELT MUSEUM, INC.
10A Crescent Road
Greenbelt, Maryland 20770

Presented by:

ATELIER GIGUÈRE
Historic Preservation · Architecture
· Cultural Resource Management

PO Box 39756 | Baltimore | Maryland 21212
P: 667-930-3067

ATELIER GIGUÈRE
Historic Preservation · Architecture
· Cultural Resource Management

March 22, 2019

Ms. Jennifer Ruffner, President
Friends of the Greenbelt Museum, Inc.
10A Crescent Road
Greenbelt, MD 20770

RE: VISITOR & EDUCATION CENTER AND OFFICES

Dear Ms. Ruffner,

Thank you for the opportunity to submit this proposal for the conversion of the existing duplex at 10A and 10B into museum offices and visitor/education center including the estimated cost to purchase furnishing for the Friends of the Greenbelt Museum, Inc. (FOGM). We are excited to deliver a project of the highest standards and that is uplifting for Greenbelt residents and visitors at large.

We make it a practice to retain, under our umbrella, the best consultants for our client's specific requirements. This allows us to tailor the most qualified and highly skilled team for this project to support your structural and site engineers, as well as your historic preservation consultant. We are skilled at organizing and coordinating such a team of experts, and accordingly, hold frequent meetings and on-going communications with FOGM'S representatives during the entire design and construction process to meet your project goals and schedules.

Thank you again for this opportunity and should you have any questions about this proposal, please do not hesitate to contact me at 443-676-2688 or email: mgiguere@ateliergiguere.com.

Sincerely,
ATELIER GIGUERE, LLC

Mimi Giguere
President

Enclosure
Cc: Aisha Isackson, AIA

I. NARRATIVE DESCRIPTION

Atelier Giguere, LLC (AG, LLC) and Isackson Design Group (IDG) are partnering to submit this proposal to the Friends of the Greenbelt Museum, Inc. for this exciting opportunity to assist the Museum in improving its facilities and outreach into the future. Atelier Giguere, LLC will serve as the prime for the project, bringing our extensive experience in preserving historic buildings – both by continuing existing uses and by adaptive re-use. IDG brings experience with educational projects and other public facilities for non-profit organizations. We have approached the project together to provide the Friends of the Greenbelt Museum (FOGM) with what we believe to be the best possible combination of expertise to execute this transformative project for the Museum. We have carefully reviewed the RFP, made a site visit, and requested additional information from the Board.

We have also brought consulting engineers who have expertise in Museums and Historic Buildings. We believe this is extremely important, as many firms have unproven track records in this niche. Engineering which is not well designed for these environments is likely to cause issues and additional costs during the construction period, when addressing them is most expensive. Our Structural Engineering consultants, McLaren Engineering Group, has worked on a number of projects with the Principals of AG, LLC and IDG, as well as the Mechanical, Electrical, and Plumbing Engineering consultant, Henry Adams, Inc. We have chosen not to include a separate accessibility consultant since we have the in-house experience with providing design of compliance measures as part of a lawsuit settlement for the Baltimore City Courts in the historic Clarence M. Mitchell Courthouse and the Court facilities of the Old Post Office, known as Courthouse East. That experience prepares us well to complete an evaluation of this facility.

Structurally, one of the challenges for this project will be to perform a load rating and remedial repairs to upgrade the existing 2nd floor framing to support the higher live loads that are required for storage space. This is an exercise that our engineers frequently get asked to perform for wood framed structures, as the requirements for residential live loads are much lower than that which is required for any assembly or storage use, which are the live load categories that are required for this program that is being proposed for this renovation project. Please see McLaren's examples of recent projects where they have converted an existing space into exhibit spaces, and where they have restored wood framed structures to a serviceable condition, included with their qualification information. They are well qualified for the Scope of Work requested.

Henry Adams, Inc. is a recognized leader in the mid-Atlantic for the design of mechanical, electrical, plumbing, and fire protection for a variety of museums. The firm's hallmark is a collaborative design process engaging all the stakeholders, discussing the advantages and disadvantages of engineering decisions, resulting in its signature - a value-based design that stretches the project budget by effectively balancing decisions on the aesthetic features and operational functions that are most important to the client. Their expert team has been called upon to tackle museum projects far outside the mid-Atlantic Region, such as Nebraska and Florida. Museums create an enduring presence in the community. The final facility must successfully meet the needs of the artifacts while being efficient, economical, and functional. The design of museums is a collaborative effort between the design team and the museum. Henry Adams works with the architect to determine the exterior exposures and building system required to maintain the proper environment including temperature and humidity within the various spaces. The mechanical systems will use more energy than traditional buildings because of the need to maintain temperature and humidity to protect and preserve the artifacts. Each piece of equipment may not be the most efficient, however, all components must work together to provide the required environmental conditions. Henry Adams looks at the total system to provide an energy efficient design. Energy recovery equipment, heat, recovery chillers, fan optimization, outdoor optimization and pumping strategies are all detailed in our automatic control systems to provide the most efficient operation. At the Hampton Mansion, they designed the HVAC to preserve the ornate, 18th

century structure and the artifacts inside. Henry Adams has provided a fee which is commensurate with their experience, and which covers all possible contingencies for this work. Their fee is a not-to-exceed value.

Our team will begin the project with a field investigation site visit. We will verify the existing condition drawings that have been compiled by others, and review existing conditions affecting the conceptual design as proposed. The structural engineers will investigate the existing condition of the Greenbelt Museum structural elements that are made accessible to us at the time of our visit. Access to structural elements shall be provided by the FOGM (i.e., gain permission for removal of ceiling tiles, access to roof and attic spaces, etc.). They will look for evidence of cracks and/or deterioration of the floor and wall systems and gather qualitative information regarding condition of existing structural elements. They will also review the balance of the building for "deal breakers" as they relate to the proposed program. Following the site review, the existing condition drawings will be modified as needed, and the conceptual plan will be applied to the bases created. We will meet with representatives of the FOGM to review our findings and the preliminary information gathered to this point to assure the course is set for the design process moving forward. This will be the review of Scope of Work with the FOGM and Museum Staff referenced in the proposed schedule in the RFP.

The information gathered in the field will be provided to the Mechanical Engineers, so they may begin to examine how the climate control needs might be met. This will be a critical point in the project, as the envelope requirements will now begin to be defined. Once we understand these parameters, the need for envelope modifications that would exceed our assumptions will become known, and an appropriate contract modification can be negotiated with the FOGM. Once that is accomplished, the impact the envelope requirements might have on the space plan can be determined and accommodated. Once the questions are resolved, the team can move into its Design Development (DD) phase. We recommend the submission of a review set to the FOGM at the conclusion of the DD phase, so that everyone is assured we are all moving in the correct direction. Review by the client at this stage leaves more room for adjustments without impacting the overall schedule and budget. Once FOGM has signed off on the DD documents for the team to proceed, the Construction Documents (CD) will be completed. We can still provide a "Draft" CD set for final review by the FOGM, before completion for filing for Permit and Advertisement for Bid. Atelier Giguere, LLC will provide support for the FOGM to conduct a Pre-Bid Conference and respond to Requests for Information from Bidders. We will provide Construction Administration services, including review of shop drawings and submittals and Requests for Information (RFI) from the Contractor (to a maximum of 12) for an estimated construction period of six months with meetings/site visits every other week, for a maximum of 12 visits. We have allowed two visits at the end of construction for completion checklists with the contractor. Construction Administration in excess of this time period, or for more RFI's than expected, will be accommodated with Additional Services. When these appear to be required, Atelier Giguere can negotiate a monthly fee with the FOGM, based on the experience of the project to date.

We highly recommend that the FOGM consider bringing a contractor on board early in the project, with a negotiated Guaranteed Maximum Price (GMP) contract including pre-construction services – provided the grants that have been acquired will allow this type of project delivery. We have found that this type of delivery provides the best opportunity for accomplishing the project's goals and controlling construction costs and the potential for Change Orders during construction. The final cost estimating exercise would move to the contractor's pre-construction services and would provide the basis for the GMP. This would provide the FOGM with the most accurate possible final cost estimate. Atelier Giguere, LLC utilizes RS Means Cost book data for our estimates, which is an industry standard, but the General Contractor is in better contact with the most up-to-date market conditions in the immediate region. Their estimates are always more accurate. We can work with the FOGM to establish this type of delivery for the project, if the grant programs will allow it. These can be let out to a list of potential bidders, which can be passed through a prequalification

process to make a competitively based selection, if required. We know a number of qualified contractors which could be invited into this process.

We have identified some challenges for this project which are not well addressed by the Scope of Work in the RFP. No site work has been included. This means that the accessibility review for design compliance will be limited to the interior improvements. However, our overall evaluation of the accessibility of the facility will include identification of site issues. We noted a steep swale on the west side of 10A, which will likely be impacted by the proposed addition, and will certainly be impacted by the proposed walkway indicated in the NDC planning documents. Our team is well positioned to provide a proposal for Additional Services to complete the site work since McLaren Engineering Group also has a surveying and civil design division which can handle the engineering aspect required. We can also bring on a landscape designer if necessary. It will be an advantage to the FOGM to take this option as the project proceeds due to the familiarity of the design team and our working relationship will have been established, thus simplifying the design process. We expect to be able to use a plat, available through property records, to provide sufficient location information for a building permit application for the Scope of Work indicated in the RFP. If the County Permit Office requires a more detailed site plan, an additional service for the survey shall be provided as required.

In order to adequately address the type of HVAC requirements given in the RFP, there will likely be a need to make some modifications to the envelope of the buildings, which is not anticipated by the Scope of Work as written. We will do our best to be able to address this within the fee, but we do not yet know what those modifications will need to be. It is likely that the engineers will provide us with a target or targets to be met, and designing a solution that respects the historic configuration, finishes and materials may require some extensive research. We are concerned that the solution here is not going to be simply adding insulation somewhere in the external wall system, but will also need to address moisture management, location of dew points and freeze planes, and similar factors to protect the historic materials involved. Concrete block, especially the earlier versions, is not “bulletproof” and may need some special consideration. Because of these factors, we reserve the opportunity to provide FOGM a proposal for Additional Services to cover these scenarios, so we can provide a solution that is truly appropriate to the facility. If we need to fur-out walls for some insulation or moisture management, modifications to the basic design would also be included in these additional services. We are committed to getting the Museum as close to its goal as possible, and are certain that building this flexibility in on our fee side (adjusting the fee to meet the requirements determined by the engineers) provides us the best capability of doing the job required to meet those goals.

The FOGM may wish to explore the possibility of removing the siding from Unit 10A. Atelier Giguere would be pleased to prepare a proposal to explore the possibility and determine the condition of the masonry under the existing vinyl siding. This may also be something that works with exploration of the envelope modifications that might be required to meet HVAC goals, and could be built into that work as required.

Atelier Giguere, LLC and our consultants are committed to working closely with the FOGM and Museum Staff to execute the best possible solution for the museum to have an exciting future, and we look forward to working with you.

II. FIRM OVERVIEW

A. Personalized Services

ATELIER GIGUERE, LLC is a multi-disciplinary architectural and interior design firm based in Baltimore City, Maryland. Founded by Mimi Giguere, we seek the possible, we are prospectors. We enjoy the excitement of exploring an old building, looking past deterioration, dirt, peeling paint, crumbling stone to see the building how it was and can be. We take on the challenge of fitting a new purpose to a historic building. We are constantly searching out the story, and finding the opportunities.

We seek the story of a structure, its property, its community, and those who have been associated with it. We endeavor to tell the building's story in its architecture and its continuing contribution to its neighborhood and community.

We believe in historic buildings. We believe in how they are part of the fabric of their communities, how they are touchstones to our shared past, and physical reminders of stories to be told.

We take the time to understand our clients and find the heart of each project, so that your project reflects who you are as an organization. We strive to design inspiring spaces that champion each client's vision and meet budgetary needs, so that your project exudes design excellence regardless of financial constraints. We are driven to create a cohesive environment between the historic character, architecture and interior design, so that your project maintains its design aesthetics, inside and outside.

B. Professional Qualifications

From alterations and modernization to adaptive reuse, our team of professionals bring hands-on expertise and experience in historic and adaptive reuse design with the current local, state and federal design standards and code requirements. We are committed to complete client satisfaction through strong design talent, create a vision, analyze project requirements, establish priorities and guide the efforts of multiple disciplines to attain project goals through ongoing communications that are warm and personable to gain trust, confidence and excitement for the project, to raise the standard of excellence, and to persevere and overcome any challenges inherent with project delivery and schedule.

With over twenty years of experience on various types of historic building projects, **ATELIER GIGUERE, LLC** (AG, LLC) has experience in providing conditions assessments, and assisting with planning prioritized repairs; we bring technical understanding and expertise with historic materials, including understanding the interface of historic materials with contemporary interventions. We provide assistance in detailing historic materials and systems and with energy improvement strategies and their impact on those materials and systems. We focus on sustainable solutions. Not just "green" in the contemporary sense, but what was efficient about the original systems of the building, and how that can be leveraged for an energy efficient building in combination with current technologies. Understanding how contemporary energy efficiency processes and products might damage historic materials and systems and how to avoid those problems is important.

We have selected the Isackson Design Group (IDG) to provide interior design services and contribute to the architectural design for the project. With over 30 years of experience in architecture and interior design, IDG is an award-winning design firm with unique hands-on experience working with non-profit organizations and public charter schools with tight construction budgets. From renovation to adaptive reuse,

the projects exude a cohesive architecture and interiors with educational, business and training spaces that are warm and inviting, and of exceptional function, quality and beauty.

We have selected the McLaren Engineering Group to provide the Structural Engineering services for the projects. AG, LLC and IDG have both worked with McLaren on many past projects, and their engineers have demonstrated creative structural thinking to address issues in historic buildings. Their firm also has capabilities for site survey and civil engineering site design, if FOGM desires to add that service in the future.

We have selected Henry Adams, Inc. as Mechanical, Electrical, and Plumbing Engineers. Their experience with historic structures and museums is unmatched, and they have the understanding of historic character and context to fit systems into existing buildings within the Secretary's Standards. We firmly believe they are the most qualified to handle the complexities of the HVAC design to meet the museum's needs in this project. If the FOGM truly desires systems that meet museum quality interior conditions, Henry Adams is the best choice. This is particularly well demonstrated in extensive work they have executed at the Hampton National Historic Site in Towson, MD. They have submitted a fee which reflects their extensive experience, and the complexity of this small project. Their fee is a not-to-exceed amount.

C. Capability to Accomplish

ATELIER GIGUERE, LLC provides quality professional and design services in completing given assignments. In order to fulfill this commitment, we shall review the Scope of Work and Design Intent with our Client's Representative to ensure a clear understanding of all project details to develop the proposed building programming and concept. If necessary, the Design Team (including Owner's Representatives and Consultants) will review the as-built drawings and perform site visits to examine and evaluate the existing conditions and operations. Physical and economic trade-offs shall be evaluated carefully with the Design Team to ensure that the design and the completed project maintain the singular character and quality of the original historic structure to meet project goals and schedules.

While we strive to maintain design integrity of historic structure, the proposed design shall incorporate new mechanical, electrical, plumbing, security and safety systems to ensure that the building meets current building codes and energy standards for compliance with the International Green Construction Code applied in a manner which will satisfy the Secretary of the Interiors' Standards. However, our Design Team is concerned that the RFP does not address the desired building envelope, and providing a complete project may not be possible without Additional Services to meet desired humidity factor. Our Mechanical engineers have made clear in their proposal to us that we will all need to come to terms with the envelope needs before they can complete their work. We will review, observe and document all design decisions and assumptions.

In house, we provide our own Designer's Checklist before and after design completion to ensure that design details, drafting details, construction concerns are addressed. The Principal-in-Charge/Project Manager and the Project Designer/Architect must each signify their review of the project by signing off. Collectively, they are accountable for the project's design and success.

D. Schedule Control

We establish a realistic time frame from the onset of a project. Where it is necessary or mandated, we will institute overtime or increase manpower to maintain our agreed upon schedule. The Principal-in-Charge/Project Manager and Project Architect play a major role in ensuring that the project is scheduled as contracted, or to make pertinent recommendations as required to the Design Team.

III. PROFESSIONAL FEES

A. Outline of Fees by Phases

The fee structure proposed below is based on a traditional Design-Bid-Build project delivery. It does not accommodate breaking the project into multiple planned, phased packages. It is not based on a negotiated contract with a contractor to include pre-construction services with a guaranteed maximum price (GMP), although we would recommend this delivery system for this project. A GMP contract with pre-construction services may save on some aspects of our fees, and would transfer the final cost estimating task to the Contractor. A contractor-developed final cost estimate will more accurately reflect current market conditions. However, the GMP contract would add some meetings that are not currently accommodated.

Our outline of fees is as follows:

	AG LLC	IDG	McLaren	Henry Adams (NTE)
Existing Condition: ▪ Field verification and CAD Input for Base drawings ▪ Note: Water Flow Test by others	$2,500	$2,160	$2,000	
Schematic Design includes: ▪ Building Programming & Code Analysis ▪ Schematic design/completion of work done by NDC. ▪ Meeting with Permit Office ▪ Scope Review Meeting with FOGM	$8,500	$4,320		$7,600
Design Development: ▪ Continued development of design process & drawings ▪ Outline Specifications ▪ Preparation of Renderings for Community and Co-Operative Presentations ▪ Preliminary Cost Estimate	$12,500	$7,560		$11,600
Construction/Permit Document: ▪ Completion of Drawing documentation for Permit and Construction ▪ Short-form Specifications on drawings ▪ Cost Estimates ▪ Note: Permit fee, submission, and coordination shall be by others	$12,000	$10,800	$3,500	$21,200
Bidding/Negotiation and includes: ▪ Pre-Bid Conference ▪ Request for Information	$1,300	$1,080		
Construction Administration includes:				

▪ Based on a 6-month construction schedule ▪ Bi-monthly meetings – (12) for **AG, LLC** ▪ Shop drawings and submittal reviews ▪ Up to (2) Punch list visits & Project Close-out ▪ Note: Excludes Contractor Application for Payment & meeting minutes (Contractor)	$8,000	$2,160	$1,500	On Hourly Basis
SUBTOTAL	**$44,800.00**	**$28,080.00**	**$7,000.00**	**$40,400.00**

It shall be herein mutually agreed that a 20% deposit is due prior to the commencement of work and additional payments made monthly in proportion to the amount of work completed. Deposit is credited to the Final Invoice.

B. **Exclusions:**

1. Fees above exclude building envelope modification design for the new HVAC system. This will be resolved as Additional Services, negotiated between AG, LLC and the FOGM.
2. Fees above exclude any revisions to drawings if required by Prince George's County's Peer Review process for building permits (if Peer Review applies to this project), will be performed as Additional Services, on an hourly basis.
3. Fees above exclude application to historic agencies for work/design review (Easements, Preservation Commissions) these can be accommodated as Additional Services, negotiated between AG, LLC and the FOGM.
4. Fees above exclude applications for historic rehabilitation tax credits, these can be accommodated as Additional Services, negotiated between AG, LLC and the FOGM.
5. Fees above exclude phasing the project into multiple construction document packages for phased construction delivery.
6. Fees exclude Negotiated/GMP contractor selection with Pre-Construction Services. Such a contract may produce savings in some areas of our fees, but may add meetings that are not currently reflected in the fees.
7. Fees above exclude landscape design of site improvements, grading, or walkways (including accessibility requirements).
8. Fees above exclude any way finding or exterior signage design.
9. Fees above exclude any civil or geotechnical services to perform any surveying, boundary or topography to accomplish the potential exterior design.
10. Fees above exclude costs of Building Permit, Occupancy Permit, and Permit Expediting Services.
11. Fees above exclude any meetings or any work related to jurisdiction hearing, City of Greenbelt Co-operative, historic organization, zoning, or design board any government agencies or community design review panels to gain approval for the design for review and gain approval, etc.
12. Fees above exclude Value Engineering, Change Order Reviews, and Additional Site Visit Requests
13. Fees above exclude Furniture and Furnishings Procurement, Shopping, Delivery Coordination and Set-in Place.

B. Reimbursable Expenses

1. Reimbursable Expenses will be billed at 1.1 multiplier of direct cost: mileage, travel related expenses, prints and plots, finishes boards, 3D renderings, express mailing, deliveries, etc.
2. We recommend a budget of **$5,000.00** be set aside for reimbursable expenses.
3. If additional consultants are required, Professional Fees shall include a 10% administrative mark-up of consultants' fees. Unless noted otherwise, other consultant fees are not limited to:

    a) Site Utilities, Civil and Geotechnical Engineering
    b) Fire Sprinkler Engineering and Flow Test
    c) Green/Sustainability/LEED Consultant
    d) Audio-Visual, Security, Technology, Phone and Data Consultant

C. Additional Services

Any services not indicated in our Professional Fees shall be performed on Hourly Fees as on-need basis and upon request.

	Hourly Fees
Principal-in-Charge	$150.00/hour
Project Manager	$135.00/hour
Project Designer/Architect	$115.00/hour
Architect I/Designer I/CADD	$95.00/hour
Senior Interior Designer	$135.00/hour
Interior Designer I/CADD	$75.00/hour
Structural Engineering Principal	$250.00/hour
Structural Senior Engineer	$145.00/hour
Structural Staff Engineer	$125.00/hour
Structural Junior Engineer	$100.00/hour
Structural CADD Operator	$100.00/hour
Structural Engineering Technical Typist	$65.00/hour
M/E/P Engineering Principal	$180.00/hour
M/E/P Project Manager/Senior Engineer	$150.00/hour
M/E/P Project Engineer (PE or 10+ years)	$130.00/hour
M/E/P Engineer - EIT	$110.00/hour
M/E/P Designer/CADD Technician	$90.00/hour
M/E/P Administrative Technician	$55.00/hour

IV. RESUMES OF KEY PERSONNEL

Marie-Thérèse (Mimi) Giguère, AIA
Principal In Charge | Project Manager | Historic Preservation Architect

EXPERIENCE: 31 Years

EDUCATION:
M. Architecture, State University of New York at Buffalo, NY
B.S. degree, Towson State University, Towson, MD
2005/6 Campbell Center for Historic Preservation Studies

Mimi is a Qualified Historic Architect under the Secretary of the Interiors' Standards (36 CFR Part 61) with a long standing working relationship with the Maryland Historical Trust and National Park Service review staff. As the Principal in Charge and Project Manager, she is responsible for all phases of the project and her responsibilities include: code analysis, design, preliminary construction cost estimates, supervision of drawing production and coordination of the Design Team, assessment of conditions and historic significance, and development of treatment programs, primarily for projects involving renovation, alteration, rehabilitation and adaptive reuse of historic properties of various building types including house museums, offices and galleries.

RELATED PROJECT EXPERIENCE:

Hays-Heighe House, Harford Community College, Bel Air, MD - Mimi was the Project Manager for Kann Partners. The Scope was to document, stabilize and rehabilitate a historic house on the National Register to provide opportunities for historical education. The original two and a half story, 7,0444 GSF stone home was constructed in 1808 by Archer and Hannah Hays in the Federal style typical of the early 19th century Mid-Atlantic region, and enhanced by an east wing addition and full height cellar. The house was the center of a prominent horse farm in the mid 20th century and was bought by Harford Community College in 1962. Her tasks included: perform a comprehensive restoration to the historic structure and conducted an extensive investigation of moisture penetration into the house. Documentation included: structural; a new foundation drainage system for the house; extensive repointing of the foundation; masonry restoration of stone walls and brick chimneys; replacement of the slate roof and flashings; restoration of windows and shutters; and replication of windows and shutters. An exhibit design firm completed the interior rehabilitation of the facility into a museum, art gallery and event space.

Hessian Barracks, Maryland School for the Deaf, Frederick, MD - Mimi was the Project Manager for Kann Partners. The Scope was to produce drawings and specification to allow a contractor to reasonably contract with the Stat, and to work with the contractor and the State during construction. Her tasks included: Fireplace detailing in consultation with structural engineers to recreate a fireplace; to reconstruct of a stone gable; to knit the infill a former opening into the overall wall better and stabilize that support a slate roof. Replacement timbers were fabricated from reclaimed wood. Other work included the installation of a foundation drainage system, rehabilitation of the second floor porch and the reconstruction of the stone wall where another vehicular opening existed in the corner of the "L" of the building need to be completed to permit the building to be used as a museum in the future.

Thomas Point Shoal Lighthouse, U.S. Lighthouse Society, Chesapeake Bay, Off Annapolis, MD - Mimi was the Project Manager for Kann Partners. The Thomas Point Shoal Lighthouse stands as a National Historic Landmark 43 feet above mean high water, offshore from the City of Annapolis in the Chesapeake Bay. The lighthouse consists primarily of a hexagonal, one and a half story, wood balloon-framed cottage on a supporting iron framework, including columns and screw-piles. It is the only screw-pile light on the Chesapeake Bay still in its original location and consequently, one of the most widely recognized lighthouses in the state of Maryland. The Scope was to survey and examine the Lighthouse, in order to evaluate its condition in light of proposed programmatic functions and operations. It included the review of all known related reports and documentation and site visits for analysis of existing conditions; stabilize the existing building structure to protect the public during tours of the Lighthouse; protect the volunteers while working on restoration projects; additional repairs to vulnerable building elements with the potential to cause further damage to the building itself and the public; and the replacement of windows and doors on the lighthouse, which were won in an online voting selection process by Jeld-Wen Windows and Doors. The lighthouse functions as a museum of lighthouse keeping, with the interior keepers quarters serving as the exhibit space. It operates seasonally, accessed by boat from the Annapolis Maritime Museum.

Phillips Collection: Phillips House, Washington, DC - Mimi was Historic Preservation Specialist and Project Architect for Kann Partners – KANN Partners was retained by The Phillips Collection, the nation's first museum of modern art, to provide a building restoration program for the circa 1896 Phillips House structure designed by Hornblower and Marshall Architects. Built for Duncan Clinch Phillips, the house was originally a three-story brick and stone dwelling. After a series of renovations and expansions, the house is now four stories with a mansard roofed fourth floor. The issue of leaking and water damage first began the investigation and need for rehabilitation. The work included:

- investigation and diagnosis of restoration issues;
- preparation of repair options, priorities, and analysis – including interior humidity and ultraviolet controls;
- preparation of construction documents;
- management of bid process; and,
- construction administration.

Allegheny Arts Council, Cumberland, MD - Mimi was Historic Preservation Specialist and Project Architect for Kann Partners – This Historic Tax Credit Rehabilitation of a former Goodwill Store featured an Art Gallery with an event space on ground floor, offices on second floor, and (4) apartments on the third floor. Her responsibilities included: design for rehabilitation of the storefront and replacement windows from historic photographs, historic tax credit applications, as-built survey and base drawings, and preliminary review with local historic preservation planning staff.

REFERENCES:

Michael Day, Senior Vice President
Historic Annapolis, Inc.
michael.day@annapolis.org
443-221-6979
Hessian Barracks, as Deputy SHPO, Maryland Historical Trust

Sherri Marsh Johns, Principal
Retrospect Architectural Research, LLC
SMJohns@RetrospectLLC.com
443-994-1591
Thomas Point Shoal Lighthouse, as Board Member for US Lighthouse Society, Chesapeake Chapter

Lisa Craig, Principal
The Craig Group, LLC
lcraig1960@gmail.com
410-991-0288
Maynard Burgess House, as Chief of Historic Preservation, City of Annapolis

Aisha Isackson, AIA
Project Architect | Senior Interior Designer

EXPERIENCE: 31 Years

EDUCATION:
Bachelor of Architecture | University of Oklahoma

Aisha is an effective and strategic team leader with proven understanding of design and construction from Pre-Design to Close-out. Her expertise includes: Owner's representation; facility operation and maintenance; project design/management/development/marketing; furniture/fixturing/equipment (FF&E) specifications, procurement, delivery coordination and set-in-place; project delivery method, contract negotiation and management; and, coordination and management between clients, architects, designers, engineers, contractors and FF&E suppliers. As the Senior Interior Designer, she is responsible for all phases of a project. Building types: commercial, educational, residential, multi-family, retail and institutional facilities.

RELATED PROJECT EXPERIENCE:

City Neighbors Hamilton and City Neighbors High School, Baltimore, MD - Aisha was the Project Manager and Project Designer of the award-winning renovation of the 132,785 square feet public charter school buildings built in 1931 and 1954 on a 5.4 acre sites, serving Grades K through 12. Over 6 years, she was responsible for the $10.5 Million phased-in design and construction project, from Master Planning to Move-In Phases that included architectural and interior design services, FF&E selection, procurement and set-in-place as both schools grew every year until they reached full capacity to serve 550 Baltimore City Public School students. A variety of learning spaces were created intentionally throughout the buildings - from cozy nooks to movable glass walls that can serve 24 to 100 students - collaborative learning spaces are equipped with fixed and flexible furniture, and from new to "used, donated or upcycled" furnishings. The schools exude warm and welcoming interiors and shared community spaces included: an auditorium with a ticket booth, student-run school store, two (2) separate cafes with booth seating and cafe furniture, a Dance Studio and a Fabrication Lab.

Blue Water Baltimore, Baltimore, MD - Aisha was the Project Architect and Project Designer for the interior alteration of a 20,000 square feet building for a rapidly growing non-profit environmental advocacy organization. Over the course of 3 months, the phased-in project was fast-tracked from design to move-in phases with a general contractor and a moving company. With lack of natural lighting on the 2nd floor, the interior colors were carefully selected to uplift the office environment and to complement the client's existing and donated furniture as well as furnishings, where they were inventoried, tagged and relocated from a former location. The 2nd floor housed two tenants with shared collaborative spaces, private offices, office cubicles, conference rooms and a nursing room. The 1st floor includes a community learning center with flexible furniture to accommodate large and small groups, a resource area, a communal kitchen, a wet lab and a warehouse. The organization plans to complete the alteration of the 1st Floor as more funding becomes available to bring the Master Plan to fruition to meet their vision and mission.

KIPP Harmony and KIPP Ujima Villlage Academies, Baltimore, MD - Aisha was the Project Designer for the phased-in branding, interior design and FF&E services for 316,150 square feet building on a 18.5 acre site to serve 1,200 students for Grades K-8. From designing outdoor banners and signage to exude a cohesive branding for both schools, the Phase 1 work began on the 4th floor to outfit (16) classrooms where finishes were selected to add warmth and inviting aesthetics to the existing campus to emphasize its mission as college preparatory schools. Master Specification and Budget were developed for new furniture and furnishings that will be prioritized at the schools' discretion based on available funding should KIPP choose to stay at its current facility or relocate as both schools grew rapidly to include a high school. FF&E services included: existing inventory, Quotation, Purchase Order Management and Delivery/Installation/Set-in-place Coordination. Other design work for the Master Plan includes a welcoming entrance lobby to feature both schools and their alumna, a welcoming reception with a mosaic mural to inspire the school community

Creative City Public Charter School, Baltimore, MD - Aisha was the Project Designer and provided Interior Design and FF&E Services for the progressive place-based, arts integration, diverse and cooperative community school when it initially opened its doors as K-3 school. New furniture and furnishings were carefully specified, managed and procured to meet the tight budget by working with existing material and finishes as well as donated furniture, labor and construction material. The initiated color, material and finishes set the standard for future FF&E purchases and establish the interior design aesthetics until it reached its full capacity as a K-5 school to serve 450 Baltimore City Public School students.

REFERENCES:

Bobbi Macdonald
Former Executive Director of City Neighbors Foundation
M: 443.540.8129

Marisa Canino
Executive Director, Creative City Public Charter School
O: 443.642.3600

Jenn Aiosa
Executive Director, Blue Water Baltimore
O: 410.254.1577

ATELIER GIGUÈRE, LLC

Historic Preservation · Architecture · Cultural Resource Management

HESSIAN BARRACKS

Maryland School for the Deaf, Frederick, MD

In association with
KANN Partners

- Historic Preservation
- Conservation

The State of Maryland had begun research and purchasing for replacing a slate roof on the Hessian Barracks building (ca. 1777-1781) with a side-lap wood shingle roof, which research indicated was the original type of roof for the building. The State had previously had the special white oak shingles and custom wrought nails fabricated for the specialized side-lap installation.

KANN Partners was brought in to execute a set of drawings and specifications to allow a contractor to reasonably contract with the State for the installation, and to work with the contractor and the State during construction. Some of the work scope had to be finalized once the slate roof was removed, and the framing could be observed directly.

Complicating the roof replacement, an original fireplace had been removed from the building in the 1970's to create a larger program space in the building, and that masonry mass had been integral to the structure of the building. The modifications made at that time were not adequate to secure the structure, causing issues with the roof framing. The fireplace mass was re-created with a non-functional set of fireplaces, based on the remaining stone footing under the floor of the building. The detailing was accomplished in consultation with the structural engineers to return the structure to its original configuration and stabilize the roof framing. The gable at one end had been modified sometime during the life of the building to incorporate a vehicle entry, and this had also destabilized that portion of the building and its roof framing as well, despite thee opening being infilled later. Again, the team developed a scope for the reconstruction of the stone gable, to knit the infill in the former opening into the overall wall better and stabilize that support for the roof. The remaining roof framing was examined once the slate roof was removed to determine which areas had lost too much section to be structurally sound. Replacement timbers were fabricated from reclaimed wood.

Unfortunately, the funding available did not permit the remaining work to be accomplished. Installation of a foundation drainage system, rehabilitation of the second-floor porch, and reconstruction of the stone wall where another vehicular opening once existed in the corner of the "L" of the building, need to be completed to permit the building to be used as a museum in the future.

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Historic Preservation · Architecture · Cultural Resource Management

MAYNARD BURGESS HOUSE

Annapolis, MD The City of Annapolis

In association with
KANN Partners

- Assessment Report
- Historic Preservation
- Conservation

The Maynard-Burgess House, a wood structure on Duke of Gloucester Street, is a complicated historic structure. Part of the frame and siding dates to the latter part of the 18th century, with the oldest section dated to 1795. KANN Partners was asked by the City of Annapolis to investigate and determine the best course of action to conserve the wood siding, weatherize the structure, and design for occupancy. The building falls under the review of the local Preservation Commission (HPC), and is ruled by an Easement with the Maryland Historical Trust (MHT).

The complexity of this project was due to issues surrounding the best means of conserving the siding, balanced with the requirement to weatherize the building. KANN's analysis indicated that the siding needed to be removed to permit installation of a new sheathing layer for weatherization and structural stability as the condition of the siding no longer permitted it to function as lateral stabilization, but concerns existed that removing the siding would result in too much loss. To gain approval from both the HPC and MHT, KANN assembled presentations to illustrate flaws in proposed alternate systems. A Conservator with expertise in wood conservation was engaged to add specific information regarding type and species of each piece of siding, conservation strategies, and treatment protocols for each. The conservator's strategies included methodology for careful removal of the siding boards, with temporary reinforcing which was satisfactory to the review boards. The conservator's recommendations became the basis for the construction specifications for the project.

The design also included the addition of an accessible restroom to the building, which was required by the code officials for occupancy. The weatherization project was completed, but the interior and the addition remain to be accomplished. The City is seeking a partnership to complete the project.

ATELIER GIGUÈRE, LLC

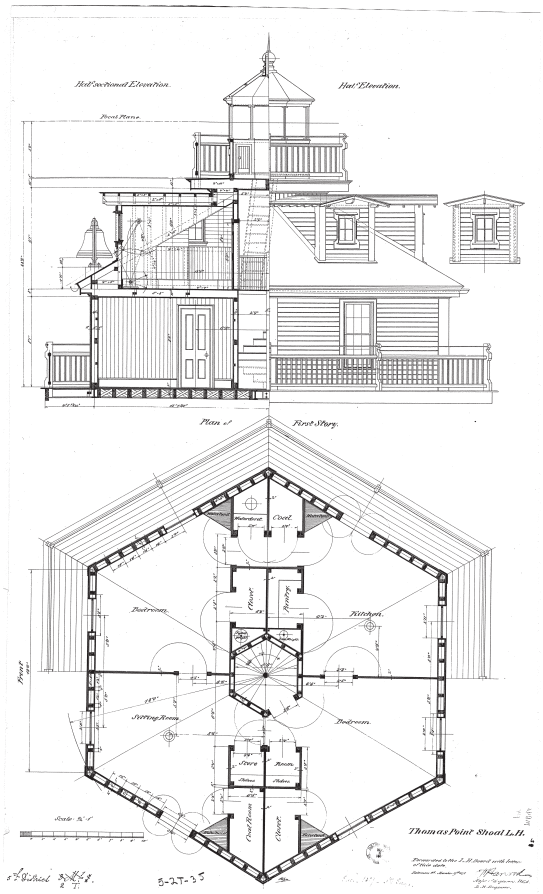
Historic Preservation · Architecture · Cultural Resource Management

THOMAS POINT SHOAL LIGHTHOUSE

U.S. Lighthouse Society, Chesapeake Bay, Off Annapolis, MD

In association with
KANN Partners

- Assessment Report
- Historic Preservation
- Conservation
- National Historic Landmark



The Thomas Point Shoal Lighthouse stands as a National Historic Landmark 43 feet above mean high water. The lighthouse consists primarily of a hexagonal, one and a half story, wood balloon-framed cottage on a supporting iron framework, including columns and screw-piles. It is the only screw-pile light on the Chesapeake Bay still in its original location and consequently, one of the most widely recognized lighthouses in the state of Maryland.

KANN Partners was contracted by the U.S. Lighthouse Society to survey and examine the Lighthouse, in order to evaluate its condition in light of proposed programmatic functions and operations. Our study of the Lighthouse included the review of all known related reports and documentation and site visits for analysis of existing conditions.

The scope of work included stabilizing the existing building structure in order to protect the public during tours of the Lighthouse and to protect the volunteers while working on restoration projects. Additional repairs were also needed to vulnerable building elements with the potential to cause further damage to the building itself and the public.

KANN Partners also assisted the U.S. Lighthouse Society with the replacement of windows and doors on the lighthouse, which were won from Jeld-Wen Windows and Doors.

ATELIER GIGUÈRE, LLC

Historic Preservation · Architecture · Cultural Resource Management

THE PHILLIPS COLLECTION - PHILLIPS HOUSE

The Phillips Collection

In association with
KANN Partners

- Assessment Report
- Historic Preservation
- Conservation
- Comprehensive Restoration Program
- Historic Art Museum Envelope

Mimi Giguere served as Project Manager when KANN Partners was retained by The Phillips Collection, the nation's first museum of modern art, to provide a building restoration program for the circa 1896 Phillips House structure designed by Hornblower and Marshall Architects. Built for Duncan Clinch Phillips, the house was originally a three-story brick and stone dwelling. After a series of renovations and expansions, the house is now four stories with a mansard roof fourth floor.
The issue of leakage and water damage first began the investigation and need for rehabilitation. The work included:

- investigation and diagnosis of restoration issues;
- preparation of repair options, priorities, and analysis – including interior humidity and ultraviolet controls;
- preparation of construction documents;
- management of bid process; and,
- construction administration.

Awards:
2012 Honorable Mention: Design and Constrction, DC Awards for Excellence in Historic Preservation

ATELIER GIGUÈRE, LLC

Historic Preservation · Architecture · Cultural Resource Management

HAYS-HEIGHE HOUSE

Harford Community College, Belair, MD

In association with
KANN Partners

- Assessment Report
- Historic Preservation
- Adaptive Re-Use

The Goal: Document, stabilize and rehabilitate a historic house on the National Register to provide opportunities for historical education.
The Whole Story: The original house was constructed in 1808 by Archer and Hannah Hays. It is a two and a half story, 7,044 GSF, stone home built in the Federal style typical of the early 19th century Mid-Atlantic region. The original house was enhanced by an east wing addition and full height cellar. The house was the center of a prominent horse farm in the mid 20th century and was bought by Harford Community College in 1962. Harford Community College tasked KANN Partners to perform a comprehensive restoration to the historic structure. KANN Partners conducted an extensive investigation of moisture penetration into the house, particularly the basement, which involved detailed review of the slate, masonry and testing of problem areas along the foundation wall. Documentation was developed for a new foundation drainage system for the house, extensive repointing of the foundation, masonry restoration of stone walls and brick chimneys, and replacement of the slate roof and flashings. Structural issues in the main parlor and at basement opening lintels were addressed. Windows and shutters were restored, and missing sash and shutters replicated.

BLUE WATER BALTIMORE

RENOVATION

PROJECT DESCRIPTION:

Isackson Design Group provided architectural, interior design and FF&E services for the rapidly growing environmental advocacy non-profit organization. Over the course of 3 months, the phased-in project was fast-tracked from Design to Move-In Phase with a general contractor and a moving company.

With lack of natural lighting on the 2nd floor, interior colors were carefully selected to uplift the office environment and to complement the client's existing and donated furniture and furnishings which were inventoried, tagged and relocated from their former location. The 2nd floor also boosts shared collaborative spaces, private offices, office cubicles and conference rooms.

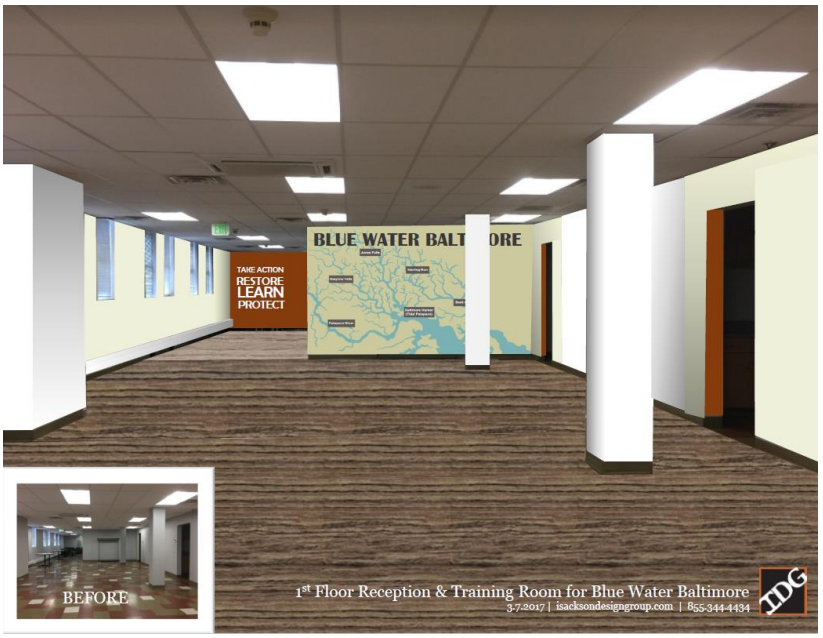
The 1st floor includes a community learning center with flexible furniture to accommodate large and small groups, a resource area, a communal kitchen, a Water Lab and a warehouse. The organization plans to complete the alteration of the 1st Floor as more funding becomes a available to bring the Master Plan to fruition to meet their vision and mission.

BUILDING & SITE INFO:
2631 Sisson Street
Baltimore, MD 21211

PROJECT COST:
$75,000

PROJECT TIMELINE:
2017 – On-going

CLIENT INFO:
Jenn Aiosa, Executive Director
410.767.1184



Future Reception and Community Learning Center (Training Room)

Office Hallway

Conference Room

Reception Area on the 2nd Floor Offices

ISACKSON
DESIGN GROUP

CITY NEIGHBORS HAMILTON & CITY NEIGHBORS HIGH SCHOOL

RENOVATION, HISTORIC PRESERVATION AND ADAPTIVE REUSE

PROJECT DESCRIPTION:

Isackson Design Group led the Expansion Team and provided Owner's Representation, Master Planning, Interior Design and FF&E services to (2) new progressive schools: City Neighbors Hamilton (Grades K-8) and City Neighbors High School (Grades 9-12) to serve 650 Baltimore City Public School students.

"What does it take for every student to be Known, Loved and Inspired?" Over (6) years of renovation, this design question was used to transform a 1930's industrial-model school to house both schools with new separate entrances and shared community spaces, and to align the physical learning environment with City Neighbors' mission. Despite its minimal budget, the award-winning project exudes innovative, cost-effective and exemplary 21st Century Physical Learning Environment that is "embracing and welcoming, and evokes a sense of community and togetherness."

BUILDING & SITE INFO:

5609 Sefton Avenue, Baltimore, MD
132,900 SF & 5.4 Acre

PROJECT COST:

$8.9 Million

PROJECT TIMELINE:

2009-2015 (and on-going)

CLIENT INFO:

Bobbi Macdonald, Executive Director
City Neighbors Foundation
443-642-2052

Flexible learning environment for small, medium and large learning spaces

Collaborative nook

Student-designed Café with casual dining experience

City Neighbors Hamilton entrance with amphitheater & outdoor stage

ISACKSON
DESIGN GROUP

KIPP HARMONY & KIPP UJIMA VILLAGE ACADEMY

RENOVATION

PROJECT DESCRIPTION:
Isackson Design Group provided Branding, Interior Design and FF&E services for the school campus that currently houses (2) public charter schools: KIPP Harmony Academy for Grades K-4 and KIPP Ujima Village Academy for Grades 5-8, serving approximately 1,200 students with future plans to include a high school to serve 2,340 Baltimore City Public School students, either in the existing campus or relocate.

With this in mind, IDG developed a design package that will be prioritized at the school's discretion based on available funding; to improve, and add warmth and inviting aesthetics to the existing campus through cost-effective re-branding, signage, color, material and texture to emphasize its mission as college preparatory schools and strong team and family commitment, from inside out, while working with existing conditions and finishes.

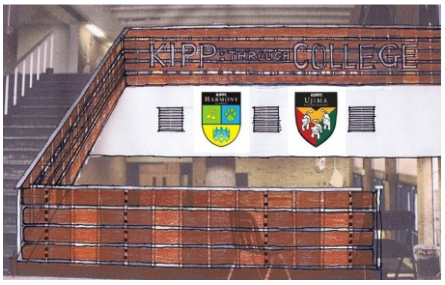
BUILDING & SITE INFO:
4701 Greenspring Avenue
Baltimore, MD
333,386 SF & 18.6 Acres

PROJECT COST:
$300,000 - TBD

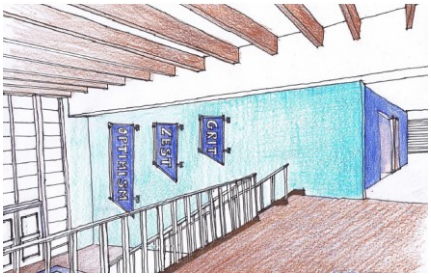
PROJECT TIMELINE:
2016 - On-going

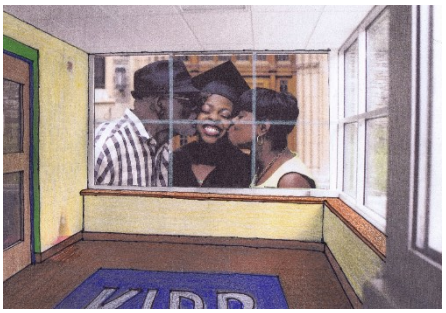
CLIENT INFO:
Ms. Marsha Reeves
KIPP Baltimore, Executive Director
T: 410.725.0311

Exterior branding to exude a college campus feel



KIPP Baltimore entrance


KIPP Baltimore entrance


KIPP Baltimore with college-prep branding

KIPP Baltimore Mosaic

KIPP Ujima with college-prep branding

KIPP Harmony with family & team branding

ISACKSON
DESIGN GROUP

CREATIVE CITY PUBLIC CHARTER SCHOOL

RENOVATION

PROJECT DESCRIPTION:

Isackson Design Group provided Interior Design and FF&E services for the new progressive elementary school when it initially opened its K-3 doors to 450 Baltimore City Public School students in 2013.

By working with existing material and finishes; and donated furniture, labor and construction material, IDG managed to procure furniture and furnishings for the school to meet its tight budget for the Opening Day, while maintaining its mission as a place-based, arts integration, and diverse and cooperative community school. The initiated color, material and finishes set the standard for future FF&E purchases and establish the interior design aesthetics as the school continued to grow and to reach its full capacity in 2016.

BUILDING & SITE INFO:

2810 Shirley Avenue, Baltimore, MD
36,320 SF & 1.6 Acres

PROJECT COST:

$60,000

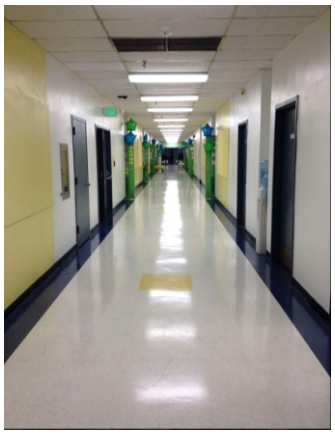
PROJECT TIMELINE:

2013

CLIENT INFO:

Marisa Canino, Executive Director
Creative City Public Charter School
443.642.3600

1st Floor Hallway with gallery spaces



2nd Floor Hallway

Typical classroom

Library

ISACKSON
DESIGN GROUP

CITY NEIGHBORS CHARTER SCHOOL

RENOVATION

PROJECT DESCRIPTION:

Isackson Design Group provided Owner's Representation, Master Planning, Interior Design and FF&E services to one of the first 4 public charter schools to open in Baltimore City in 2005, City Neighbors Charter School. Renovated over the course of 3 years, the K-8 school served 216 Baltimore City Public School students and has become a model of progressive public education through project-based learning, arts integration, parental involvement and community engagement.

IDG led the Expansion Team from its grass root inception and site acquisition to move-in phases. The modernization of the 1950's former parochial building was accomplished by working effectively with Epihiphany Lutheran Church, Cedmont and School volunteers as well as the Architectural, Engineering and Contracting teams to achieve a code-compliance facility that enhances the unique vision and mission of the school.

BUILDING & SITE INFO:

4301 Raspe Avenue, Baltimore, MD
24,900 SF & 1.6 Acre

PROJECT COST:

$1.5 Million

PROJECT TIMELINE:

2003-2006 (and on-going)

CLIENT INFO:

Bobbi Macdonald, Executive Director
City Neighbors Foundation
443-642-2052

Play-based Kindergarten Classroom

Classroom with stage

Formal and informal learning environment

School entrance with a safe and welcoming courtyard

ISACKSON
DESIGN GROUP

David W. McLaren, P.E., SECB

Maryland Regional Director, Senior Engineer

PROJECT ROLE
Lead Structural Engineer

Mr. McLaren has over 29 years of experience in structural engineering analysis and design. His expertise includes detailed design of structural systems and the preparation of contract drawings and specifications during the design phases of a project. He is directly involved in the review of shop drawings and submittals, and makes periodic site visits during the construction administration phase of work. He also possesses a specialty in providing preliminary design evaluations required to select appropriate and economical structural systems for each project. Mr. McLaren has worked on facilities ranging from parking garages to multi-story residential and mixed-use structures, as well as performance and museum/exhibit spaces. These include a multitude of wood framed structures and ones in need of preservation as is illustrated below.

Education
Bachelor of Science, Civil Engineering, University of Maryland, 1989

Professional Registrations
PE: Maryland and 10 other states

Certifications
SECB: #3202-0818
TWIC
Confined Space: #29CFR 1920.146

- **300 West Fayette Street; Baltimore, MD**; Project Manager for the redevelopment of an existing historic residential building (originally built in 1907) for new use as a storage facility. McLaren performed structural condition assessment and feasibility study, and structural engineering and design to accommodate new loading docks.
- **400 Park Avenue; Baltimore, MD;** Project Manager for this mixed-use redevelopment, which includes residential, commercial, office, and courtyard space in 3 discrete buildings (2 existing and 1 new). The site is located in the Market Center Historic District of Baltimore City. A significant portion of the project consists of load rating and partial preservation of existing wood framing of historically contributing structures.
- **Carroll Doughoregan Manor Horse Barn; Ellicott City, MD;** Project Manager for structural assessment of damage to foundation wall of horse barn that is listed on the National Register of Historic Places that resulted from severe winter storm events. Proposed recommendations for remedial repairs that were in accordance with National Park Service guidelines.
- **Paca House Renovation; Baltimore, MD;** Project Manager for redevelopment of existing three-building property operated by Volunteers of America Chesapeake providing permanent housing and support services to individuals facing homelessness in Baltimore City. Redevelopment includes two new additions, including vertical and horizontal expansions.
- **10 North Calvert Street; Baltimore, MD;** Project Manager for the historic renovation of The Equitable Building, originally constructed in 1891. The 120 year old, 225,000 square foot historic office building was renovated into approximately 180 market rate rental apartments while retaining the existing 26,000 square feet of retail space at street level. McLaren completed evaluation of Historic Turkish Bath building, retrofit of two separate elevator shafts to accommodate modern elevators to serve the basement level up to the penthouse level; structural support (dunnage) for new HVAC equipment provision of new trash cart path; assessment of flat terra-cotta tile arch floor framing system to assess need for remedial repairs at proposed new floor openings; assessment of structural damage to reinforced concrete floor structure below the Calvert Street entrance, and preparation of bid documents for the required repairs.
- **Admiral Fell Inn, Phases II and III; Fells Point, MD;** Project Engineer for a multi-phase renovation to an existing historical building. Work included stabilization of the existing foundations, addition of an elevator and redesign of the interior structural system.
- **706 Giddings Avenue; Annapolis, MD;** Project Principal for the vertical expansion and renovations to two buildings in Annapolis. Work consisted of a feasibility study and design work to convert a three-story,

building into a four-story building. McLaren assessed the existing lateral system and existing foundations to determine project feasibility, proposed modifications in a written report.

- **National Aquarium Animal Care and Rescue Center; Baltimore, MD;** Project Manager for the redevelopment of one-story approximately 59,000 square foot building to house the contents of the National Aquarium's former Wolfe Street Warehouse building. An additional level of framing was provided to create a new mezzanine with approximately 16,000 square feet to accommodate all of the proposed program space required by the Aquarium. Visitor mezzanines were also added as behind-the-scenes access.
- **Round House Theatre Renovation; Bethesda, MD;** Project Manager for renovation to the existing building to include approximately 7 foot balcony extension (re-raked to improve sightlines), orchestra pit revisions, orchestra seating riser revisions, catwalk expansion, new feature stair in lobby, lobby balcony addition, new F&B service, new RTU plus screen wall for HVAC upgrades.
- **Mt. Vernon Center Office Building; Baltimore, MD;** Project manager for renovation to existing 3-story wood framed structure including the addition of a new elevator to serve all floors. Wood-framed floors were upgraded to accommodate a higher live load due to change in use.
- **Additions and Renovations to the Annapolis Yacht Club; Annapolis, MD;** Project Manager for work that consisted of extending the existing outdoor decking, adding a second level of decking, providing a new elevator and designing support for new rooftop mechanical units on this venerable wood framing structure.
- **Algonquin Apartments (11 E. Chase St); Baltimore, MD;** A new stair tower, 10 stories above grade and 2 below, was added to the rear of the building. Elevator upgrades required new supports for the new equipment and shaft enclosure, as well as a new access platform for the machine room. Analysis and design new openings in bearing walls for ductwork upgrades. Infill framing to close existing floor openings. New lobby entry required modification to the floor framing to meet ADA compliance. The historic terracotta cornice was deteriorating and required stabilization. Sidewalk over existing underground vaults had to be replaced.
- **Pascault Row Dormitory; University of Maryland at Baltimore; Baltimore, MD;** Project Manager for structural investigation of first floor framing of a three-story brick masonry dormitory with wood framed floors to determine extent of termite damage and make recommendations for remedial repairs.
- **Mt. Vernon Center Office Building; Baltimore, MD;** Project manager for renovation to existing 3-story structure including the addition of a new elevator to serve all floors. Wood-framed floors were upgraded for a higher live load due to change in use.
- **The National Theatre Roof Load Rating; Washington, DC;** Project Manager for field investigation and load rating of existing steel truss roof framing above house and stage portions of the historic theatre. Included performing full tactile investigation to gather information regarding size and condition of roof structure. Used to assess load carrying capacity of roof structure and to assess feasibility of providing additional RTUs and ceiling supported elements.
- **Mamma Lucia's by the Bay; Chesapeake Beach, MD;** Project Manager for a renovation of an existing building to become a one-story restaurant containing approximately 5,000 square feet of interior restaurant space and an additional 1,800 square feet of exterior dining floor space spread over an exterior patio and accessible roof deck at the rear of the building to provide views of the Chesapeake Bay less than 200 feet away. Design included full kitchen, accessibility ramps to address exterior grade issues at new access points, new access stair for roof top deck, and new ramp to main Chesapeake Bay deck. Provided building expansion joint and allow water to flow through the portions of the building that were within the FEMA floodplain (Zone AO).

400 Park Avenue

Location
Baltimore, Maryland

Client/Owner
Park Avenue Partners, LLC

Services
Structural Engineering
Site/Civil Engineering
Geotechnical Engineering
Construction Administration

Contract Period
2017 - Present

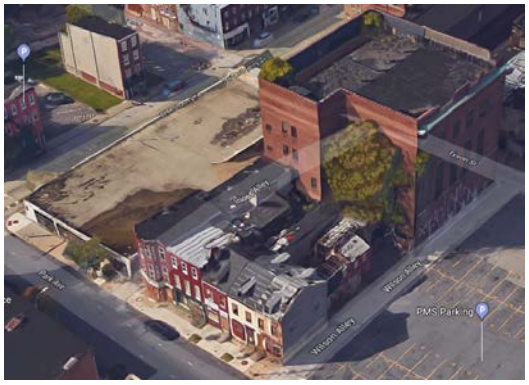
Construction Cost
$ 20,000,000 (expected)

Reference
Park Avenue Partners, LLC
326 St. Paul Pl., Suite 4008
Baltimore, MD 21202
Mr. Michael Hunter
(571) 299-4535

Project Description

The 400 block of Park Avenue is being redeveloped into a mixed-use project that includes residential, commercial, office, and courtyard space. The site, located in the Market Center Historic District of Baltimore City, currently consists of seven (7) existing City-owned properties, including a vacant parking structure, a string of unoccupied rowhomes, a former electric substation known as 409 Tyson, and an independent rowhome on the southwest corner of the property known as the Martick Property. The redevelopment consists of razing the existing parking garage, constructing a new multi-family building, and adapting the existing buildings. 400 Park Avenue is the latest of several projects revitalizing this Baltimore City neighborhood.

Proposed Redevelopment at 400 Park Avenue



Aerial of existing properties

McLaren's Role

McLaren is the Prime consultant for this project and is providing the following engineering services:

- Site Investigation
- Site/Civil Engineering
- Structural Engineering
- Project Management Services
- Construction Administration

The project consists of four (4) main feature elements. The existing parking garage at 400 Park will be razed in order to make way for a new 5-story multi-family residential building over 1-story of retail. The five (5) existing rowhomes will be converted into restaurant space, and their back additions will be removed to create an outdoor courtyard. This courtyard will serve the tenants of all three (3) buildings. The former electric substation (known as the 409 Tyson building) will be converted into a multi-use facility. The final uses for 409 Tyson are not currently defined, but it may contain office, residential, hotel, retail, and amenity facilities.

Partway through the project, the existing rowhome at 214 W. Mulberry on the southwest corner of 400 Park Property, referred to as Martick Property, was acquired. Through discussions with CHAP, the back 2/3 of the building was allowed to be demolished and its footprint was incorporated into the Multi-Family building.

Project Challenges/Client Benefit

- Coordinated with the Commission for Historical and Architectural Preservation (CHAP) to maintain the items deemed historically significant.
- Worked with Owner and Maryland Department of the Environment (MDE) to minimize environmental risk.

- Optimized the loading access within site constraints. The multi-family building on Mulberry Street will be constructed tight to the existing Martick building, which is to partially remain, creating a constrained turning radius behind the new Multi-Family building.
- To make a more rentable floor area, the 409 Tyson building requires infill of multiple floors to close off a former BGE equipment bay.
- Analysis of existing soils to limit foundation upgrades due to new floor area and rooftop amenity for the 409 Tyson building.
- Temporary stabilization of the Park Avenue Rowhomes' facades and demising walls until the new floor and roof framing are installed in order to make all floors the same level for all five (5) rowhomes.
- Incorporate all stormwater management requirements within the new courtyard space while maximizing occupiable area within.
- Assessment of the structural condition of the five (5) rowhomes on Park, the Tyson Building, and the Martick Building.

Existing surface parking lot and 409 Tyson building (left) and unoccupied rowhomes (right) on 400 block of Park Avenue

Paca House Renovation

Location
Baltimore, Maryland

Client/Owner
Kann Partners
Volunteers of America Chesapeake

Services
Feasibility Studies
Support of Excavation
Building Envelope Design
Concrete Footings & Foundations
Condition Assessments
Construction Phase Services
Design of Deep & Shallow Foundation Systems
Facility Renovations/Conversions
Floor Vibration Analysis
Lateral Support of Systems Design
Light Gage metal Framing (LGMF) Design
Lumber & Glulam Structures Design
New Building Design – Mid-Rise
Seismic Design
Structural Design of Additions, Alterations, & Repairs
Structural Reinforcing Design
Temporary Shoring/Jacking Procedures
Temporary Stability Analysis of Structures & Members
Timber Structure Design & Repairs
Wind, Seismic, Snow, & Thermal Load Analysis
Wood Frame Design

Contract Period
2013 to Present

Reference
Kann Partners
33 S. Gay Street, Suite 400
Baltimore, MD 21202
Mr. Jon Fisher
(410) 234-0900

Existing Paca House Property

Project Description

Paca House, operated by Volunteers of America Chesapeake, is a permanent housing program providing residence and support services for individuals facing homelessness in Baltimore City. In addition to housing, the program provides psychiatric care, recreational, and educational/vocational support. The program has been servicing low income families, seniors, persons with disabilities, and veterans out of its 116 North Paca Street property since 1996.

The existing property at 116 North Paca consists of three interconnected buildings that form a U-shaped complex: a previously renovated firehouse and the Carton building currently contain single room occupancy units, and a 1996 addition in between connects the two wings and provides ground floor office space with single room occupancy units above.

McLaren was retained by Kann Partners to provide structural engineering services for the redevelopment of the property. The redevelopment will include two residential additions and will provide approximately 60,000 square feet of gross building area, with approximately 90 total residential units.

McLaren's Role

McLaren Engineering Group (McLaren) is currently providing structural engineering services, including:

- Feasibility study, structural design, and construction administration for two additions
- 4-story wood framed addition over composite steel moment frame podium structures, totaling 15,000 square feet
- 5-story wood framed addition over LGMF basement walls, totaling 12,000 square feet

Project Challenges / Client Benefit

- Provided remedial repairs when existing conditions were found to be rotted.
- Worked with contractor to provide shoring detail to remove a rotted and crushed beam bearing block
- The new basement/foundations are directly adjacent to an existing building, creating a site constraint. McLaren designed and detailed footings to not interfere with the existing structure of the adjacent building. Additionally, underpinning was required for the existing adjacent foundations, which were higher than the Paca House foundations.

National Aquarium – Animal Care & Rescue Center

Location
Baltimore, Maryland

Client/Owner
National Aquarium in Baltimore

Services
Concrete Footings & Foundations
Condition Inspections & Surveys
Constructibility Reviews
Construction Administration
Feasibility Study
Finite Element Modelling & Analysis
Gravity & Lateral System Analysis
Lateral Support Systems Design
Load Rating Analysis
Structural Analysis
Structural Engineering
Structural Inspections
Structural Steel Design
Structural System Design – Computerized
Truck Turning Studies
Underpinning
Value Engineering Review

Contract Period
2015 – 2018

Construction Value
$14,000,000

Reference
National Aquarium
111 Market Place
Suite 800
Baltimore, MD 21202
Linda Vislocky
Capital Planning
(410) 576-8640

Design Collective, Inc.
601 E. Pratt Street
Suite 300
Baltimore, MD 21202
Mr. Matthew Herbert, AIA, NCARB, LEED AP BD+C
Principal
(410) 685-6655

Quarantine Room with Visitor Access in Mezzanine, *Courtesy of Design Collective, Inc.*

Project Description

National Aquarium's 901 E. Fayette Street property occupies an entire city block and includes a one-story structure with brick veneer and a surface parking lot. The building was converted for use as additional program space for the Aquarium, with visitor and behind-the-scenes access to portions of the facility. McLaren was commissioned to design two major aspects of renovation – an additional level of framing extending from an existing mezzanine and the relocation of a loading dock.

View of Quarantine Room from Visitor Mezzanine

Rendering, *Courtesy of Design Collective, Inc.*

McLaren's Role

- Feasibility study, prior to acquisition of property.
- Comparative analysis of alternate framing schemes.
- Development of a subsurface exploration plan.
- Assistance in developing details for curtain wall and façade system.
- Assessment of appropriate construction materials and systems.
- Provision of sealed structural drawings, and concrete and steel specifications.
- Review of Contractor's detailed shop and erection drawings.

Provision of close-out phase services, including preparation of As-Built drawings and provision of final close-out letter indicating completion of work.

Project Challenges / Client Benefit

- Lowered existing floor by 18" to increase available head-height in the new two-story mezzanine level. This also allowed client flexibility in future drain locations as they could be designed and poured into the new slab.
- Proposed investigation of existing soils to determine in-situ soil pressures. This allowed us to not require foundation modifications due to added load from mezzanine level.
- Assessed turning movements for various loading dock configurations.
- Analyzed existing bar joist roof for new mechanical equipment.
- Analyzed and strengthened existing columns to account for additional load from mezzanine.

Appraisers' Building

Location
Baltimore, Maryland

Client/Owner
PMC Property Group

Services
Building Code Assessments
Concrete Repair Design
Condition Assessments
Constructibility Reviews
Construction Administration
Finite Element Modelling & Analysis
Gravity & Lateral System Analysis
Historic Preservation & Restoration Design
Reinforced & Prestressed Concrete Design
Seismic Design
Structural Analysis
Structural Engineering
Structural Reinforcing Design
Structural Steel Design
Value Engineering Review
Wind, Seismic, Snow, & Thermal Load Analysis

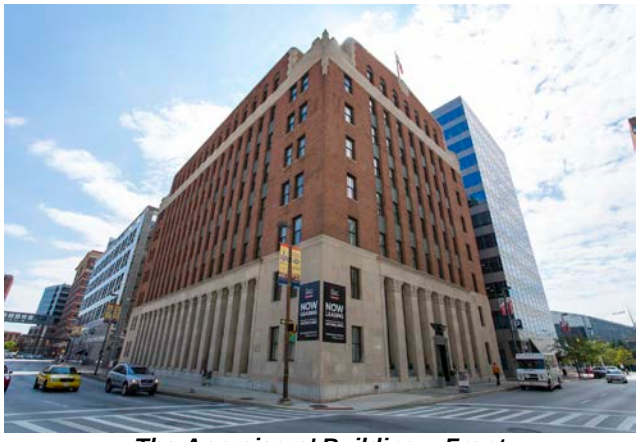
Contract Period
2015-2017

Construction Value
$30 million

Reference
PMC Property Group
175 Commerce Drive
Suite 200
Fort Washington, PA 19034
Mr. Steven Bloom

Project Description

The Appraisers' Building is an existing ten-story steel framed building with reinforced concrete floor slabs, originally constructed in 1935 (16,000 SF footprint). Interior modifications helped to transform this existing office building into high-end luxury apartments located only blocks away from Baltimore's Inner Harbor.



The Appraisers' Building – Front

McLaren's Role

Our office analyzed the building laterally using column-slab interaction to determine that the existing steel cross-braces could be removed. We also provided miscellaneous structural engineering services, including the design and detailing of the following:

- Framing to support a new concrete floor slab at existing mechanical slab openings
- Framing to support a new amenity roof deck
- Bracing for the existing boiler flue, which was to be removed below the penthouse
- A new support for a slab opening at the lobby to allow for an accessible lift
- Reinforced masonry flood barrier and review of pre-fabricated flood barrier alternates
- A new screen wall in-fill at the existing loading dock

Steel Cross-Bracing Encased in Concrete (with Ex. Mechanical Slab Openings Behind)

Project Challenges / Client Benefit

The removal of the cross-bracing allowed for the corridor to be centered in the building. This allowed for more efficient access to the central stair and elevator cores, as well as providing units of equal width on either side of the corridor.

McLaren worked with the client, contractor, and architect to provide designs, details, and on-site assistance throughout the development and construction of this project, allowing for the design work to proceed in parallel with the on-site construction and avoid delays.

706 Giddings

Location
Annapolis, Maryland

Client
GriD Architects, PC

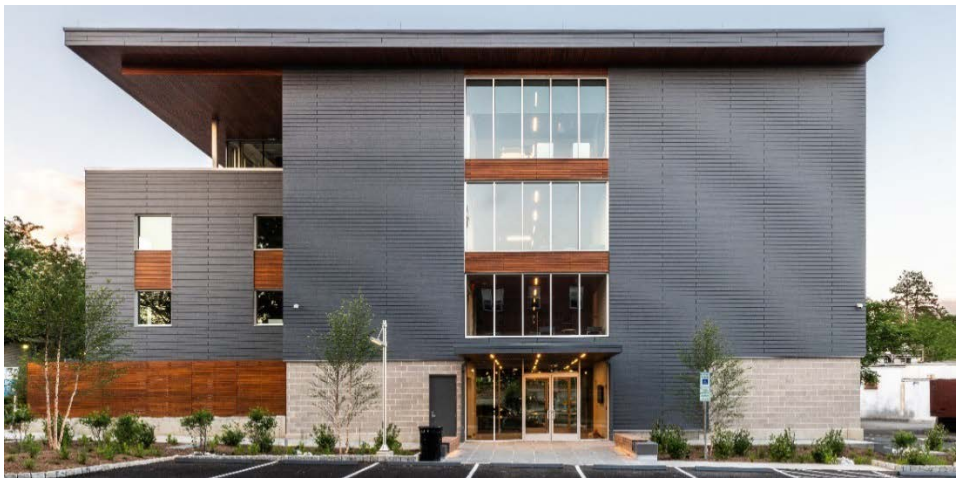
Services
Brick Masonry
Building Code Assessments
Canopy Structure Design
Concrete Footings & Foundations
Condition Assessments
Condition Inspections
Construction Phase Services
Construction Plans & Specs
Design of Deep & Shallow Foundation Systems
Dynamic Analysis
Facility Renovations
Feasibility Studies
Gravity & Lateral System Analysis
Lateral Support Systems Design
New Building Design
Seismic Design
Static & Dynamic Analysis
Structural Analysis
Structural Engineering
Structural Steel Design
Structural Systems Design
Temporary Shoring
Wind, Seismic, Snow & Thermal Load Analysis

Contract Period
2014 - 2017

Construction Cost
$4,000,000

Reference
GriD Architects, PC
103 Annapolis Street
Annapolis, MD 21401
Mr. Alick Dearie
(410) 919-9669

AWARDS
2018 WaveMaker Award
Urban Land Institute
2018 Honorable Mention
AIA Baltimore Design Awards
2018 People's Choice Award
AIA Maryland Design Awards
The Honor Award
AIA Chesapeake Bay Awards



Photos courtesy of GriD Architects, PC

Project Description

McLaren Engineering Group (McLaren) provided the structural engineering services necessary for the transformation of a 13,000 sf Class C office building and adjacent surface parking lot into a 22,000 sf award-winning Class A office building known as 706 Giddings. The renovations provided a vertical and horizontal expansion, which included a new floor level for additional offices and an outdoor terrace, a new lobby entrance, and new stair and elevator locations that free up floor space within the office floor plans.

McLaren's Role

McLaren performed structural engineering services, including:

- Initial Feasibility Study and Condition Assessment to determine that the renovations and expansions were structurally possible.
- Design of the existing roof conversion into an occupiable floor level, new cantilevered roof, new vertical circulation, and new lateral bracing to accommodate all additions.

Existing Building

Under Construction

Project Challenges/Client Benefit

- Designed and detailed steel brace frames to fit within both the existing and new steel framing, bringing the lateral force resisting system up to current code and accommodating new loads from the additional floor level (33% taller building).
- Modified existing sloped roof framing in order to convert the roof into a level, occupiable office space and an outdoor terrace.
- Designed a new roof that cantilevers out over the building below, most notably at the west corner where the overhang extends in two directions: 25-ft by 16-ft.
- Designed and detailed the steel framing for a low-profile soffit at the edge of the roof to be a maximum of six-inches deep to create this visual. This involved cutting down the typical deeper roof beams, adding plate reinforcement, and detailing six-inch deep outriggers where possible.
- Removed an existing obstructive column while maintaining the structural integrity of the floor framing.

10 North Calvert Street (a.k.a. The Equitable Building)

Location
Baltimore, Maryland

Client/Owner
Equitable Development, LLC

Services
Brick Masonry Design
Concrete Repair Design
Condition Assessment
Construction Administration
Historic Preservation & Restoration Design
Lateral Support Systems Design
Peer Review
Reinforced & Prestressed Concrete Design
Steel Design
Structural Analysis
Structural Engineering
Value Engineering Review

Contract Period
2014-2015

Construction Value
$32,000,000

Reference
JK Equities d/b/a Equitable Development, LLC
2 Seaview Blvd., Suite 102
Port Washington, NY 11050
516-622-7500
Mr. Jordan Karlik

Project Description

The Equitable Building is an historic building located in Downtown Baltimore's City Center neighborhood. Originally constructed in 1891, the Equitable Building is the oldest building in Monument Square and was considered the City's first skyscraper. After renovations, this 120 year old, 225,000 square foot historic office building was transformed into approximately 180 market rate rental apartments, while retaining the existing 26,000 square feet of retail space at street level.

McLaren's Role

Originally brought into the project to provide a second opinion on one element of the project, McLaren's scope increased to include the following:

- Evaluation of Historic Turkish Bath building in the central courtyard. Including preparation of remedial repair drawings for ***terra cotta block bearing walls*** with ***terra cotta tile arch*** floor/roof system.
- Retrofit of 2 separate elevator shafts (1 of which used to be a monumental stair) to accommodate modern elevators to serve the basement level up to the penthouse level.
- Structural support (dunnage) for new HVAC equipment to be located on top of the Turkish Bath in the courtyard.
- Provision of new trash cart path out of building across the Turkish bath to the adjacent alley for removal.
- Assessment of ***flat terra-cotta tile arch floor framing system*** to assess need for remedial repairs at proposed new floor openings.
- Assessment of structural damage to reinforced concrete floor structure below the Calvert Street entrance. Included preparation of bid documents for required repairs.

300 West Fayette Street

Location
Baltimore, Maryland

Client/Owner
Blue Ocean

Services
Feasibility Studies
Grading Design
Site/Civil Engineering
Street Parking & Design
Condition Assessments
Construction Administration
Facility Renovations/Conversions
Structural Design of Additions, Alterations, & Repairs
Structural Inspections
ALTA/NSPS Surveys
Boundary Surveys
Stake Out Surveys
Topographic Surveys

Contract Period
2018 to 2019

Reference
Blue Ocean
6615 Reisterstown Road
Baltimore, MD 21215
Alex Ehrenfeld
(410) 358-2232

Marenberg Enterprises Incorporated, dba MEI Real Estate
1143 W. Lake Avenue
Baltimore, MD 21210
Sandy Marenberg
(410) 377-8505

Existing building exterior (left) and existing conditions interior (right)

Project Description

Redevelopment of an existing historically contributing building at 300 West Fayette Street for new use as a storage facility. The existing building most recent use was as office, but was originally constructed as a mercantile building in 1907. The redevelopment includes creating large wall openings at grade on the alley side to allow ingress and egress of trucks, and creating new floor openings for larger elevators to enable easier vertical movement of items to be stored.

McLaren's Role

McLaren Engineering Group (McLaren) is proposed to provide structural and site/civil engineering services, including:

- Structural Condition Assessment and Feasibility Study
- Structural design to accommodate three (3) new loading docks
- Civil engineering and Surveying services at new loading dock

Project Challenges/Client Benefit

- Performed load rating of existing floor framing in a building that did not have any documentation of the existing structural systems.
- During the site investigation, McLaren observed evidence of water intrusion into the building and concluded that the building had not been weather tight for an extended period of time. McLaren recommended remediation of the structural system and that the issue be addressed quickly to mitigate potential damage to the building's structural stability.
- Investigated the existing floor structure at all seven (7) levels to determine if it the building was adequate for the proposed self-storage use.
- Proposed framing modifications to accommodate a new loading dock. Will expand this assessment to 3 new loading docks in the future.
- Performed Autoturn analysis/studies to determine whether new tracks could access the proposed loading docks.

Approach & Methodology to Museum Projects

HENRY ADAMS is a recognized leader in the mid-Atlantic for the design of mechanical, electrical, plumbing, and fire protection for a variety of museums. The firm's hallmark is a collaborative design process engaging all the stakeholders, discussing the advantages and disadvantages of engineering decisions, resulting in its signature - a value-based design that stretches the project budget by effectively balancing decisions on the aesthetic features and operational functions that are most important to the client. Our expert team has been called upon to tackle museum projects far outside the mid-Atlantic Region, such as Nebraska and Florida.

We treat each new project as an entirely new experience. Museums create an enduring presence in the community. The final facility must successfully meet the needs of the artifacts while being efficient, economical, and functional. HENRY ADAMS does not rely on "cookie-cutter" designs. The design of museums is a collaborative effort between the design team and the museum. HENRY ADAMS works with the architect to determine the exterior exposures and building system required to maintain the proper environment including temperature and humidity within the various spaces. The mechanical systems will use more energy than traditional buildings because of the need to maintain temperature and humidity to protect and preserve the artifacts. Each piece of equipment may not be the most efficient, however, all components must work together to provide the required environmental conditions. HENRY ADAMS looks at the total system to provide an energy efficient design. Energy recovery equipment, heat, recovery chillers, fan optimization, outdoor optimization and pumping strategies are all detailed in our automatic control systems to provide the most efficient operation. At the Hampton Mansion, we designed the HVAC to preserve the ornate, 18th century structure and the artifacts inside.

Our approach considers the following:

- Integration of MEP systems into architectural features to limit visual intrusion
- HVAC and environmental controls to meet required temperature and relative humidity levels to preserve historic collections
- Particle and gaseous filtration to protect artifacts from the damage caused by the surrounding external environment's pollutants and odors
- MEP system design with sensitivity to special acoustical needs, such as vibration isolation and special equipment selection
- Analysis of design alternatives for energy and economic efficiencies
- Air supply devices to provide proper air movement for galleries
- Flexibility in lighting design to adjust for the changing exhibits

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Hampton Mansion

HENRY ADAMS provided the MEP engineering design for the $1.7M HVAC renovation in order to preserve the ornate, historic, 18th century mansion and the artifacts within it. Tasks included the design of HVAC air handlers, humidifiers, filters, ductwork, piping, insulation, controls and electrical distribution for the visitor facilities, museum storage areas, exhibit spaces, period rooms, offices and gift shop.

The design of both the HVAC and fire suppression systems was predicated on preserving the artifacts without damaging the historic fabric of the over 200-year-old structure. The facility uses a geothermal heat pump system. Water to water heat pump units provide chilled water to zoned air handling units to provide more precise temperature and humidity control as compared with a 100 percent compressarized heating and cooling system. A sophisticated control system was installed to ensure winter humidification and summer humidification will not cause freezing and thawing and drying out of the structure.

The design included the design of a fire pump to boost the marginal water supply pressure allowing us to greatly decrease piping size, allowing more flexibility to weave the sprinkler system through the historic fabric. A highly sensitive fire detection system, called a VESDA system, was also designed, which can provide up to a 20 minute advanced notice of a fire event over a conventional fire detection system.

Hampton Mansion serves as an elegant reminder of an era when gentrified living took on magnificent proportions. To this day, it is praised as one of the country's finest examples of Georgian architecture. The mansion was constructed between 1783 and 1790 as the centerpiece of a 24,000-acre empire of agriculture, industry and commerce, amassed by the Ridgely family in Baltimore County.

Since 1948, the site has been managed by the National Park Service.

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Museum Experience

Ft. McHenry National Monument | Visitor Center | Baltimore, MD (First Image)
HENRY ADAMS provided the MEP engineering design for the new $6M, 17,200 SF, LEED Gold visitor center at Fort McHenry National Monument & Historic Shrine. There are multiple exhibits highlighting the battle and life during that time period.

Cade Museum for Creativity & Invention | Gainesville, FL (Second Image)
HENRY ADAMS provided the MEP engineering design for the new 50,000 SF museum, including a fabrication lab, creativity lab, and classrooms. The museum features exhibits highlighting the invention of Gatorade, a history of great American inventors, as well as interactions of the brain.

Smithsonian Institution | National Air & Space Museum | Washington, DC (Third Image)
HENRY ADAMS provided the MEP engineering design for three, state-of-the-art exhibitions: the Exploration Exhibitions Suite, Revolutions in the Sky, and the Specialty Exhibitions Suite at the National Air & Space Museum. Each suite was renovated with their respective displays. The entire project was approximately 50,000 SF.

Drug Enforcement Museum | Arlington, VA
HENRY ADAMS provided the MEP engineering design for the museum renovations. Included relocating a pocketed sliding door located in the lobby, relocating museum offices to accommodate the gift shop, and renovating a vacant office to house the gift shop.

Calvert Marine Museum | Solomons, MD
HENRY ADAMS provided the MEP engineering design for the renovation of the museum's Exhibition Building. The project involved the evaluation and design of the lobby, auditorium, and second floor education center.

Smithsonian Institution | American Enterprise Exhibit | Washington, DC
HENRY ADAMS provided electrical engineering design services for the 7,500 SF American Enterprise exhibit at the Smithsonian's National Museum of American History. The exhibit explores the history of American business and innovation from the 1750s to present day.

David Wills House Museum | Gettysburg, PA
HENRY ADAMS provided the MEP engineering design for the renovation of the historic David Wills House, where Abraham Lincoln penned a portion of his Gettysburg Address. The building functions as an interpretive center for visitors in downtown Gettysburg.

Brandywine River Museum | Brandywine, MD
HENRY ADAMS provided the MEP engineering design for the new 2-story, 6,800 SF administration building and new 2-story, 28,000 SF art storage/maintenance building. This addition includes a classroom, library, art preservation work rooms, art storage vault, bookstore, catering kitchen, loading dock, offices and equipment rooms.

Smithsonian Institution | American Democracy Exhibit | Washington, DC
HENRY ADAMS provided the electrical engineering services for the 7,235 SF American Democracy exhibit at the Smithsonian's National Museum of American History. The exhibit unfolds the history of America's experimentation with government and political principles of the nation.

Phillips Collection | Washington, DC (Fourth Image)
HENRY ADAMS provided the assessment for the HVAC system serving the 70,000 SF historic museum. The Phillips Collection, America's first museum of modern art, was founded in 1921 by Duncan Phillips. The assessment involved the physical survey of the original building and identification of deficiencies for the HVAC systems.

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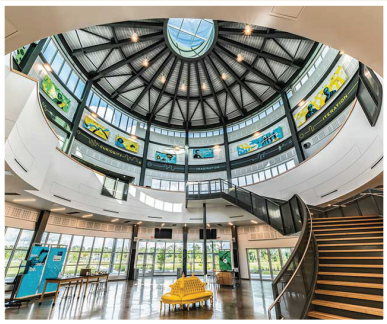
Museum Clients

- Antietam National Battlefield | Sharpsburg, MD
- Arlington House Mansion | Fort Myer, VA
- Baltimore Jewelry Center | Baltimore, MD
- Boarman Arts Center | Martinsburg, WV
- Brandywine River Museum | Chadds Ford, PA
- Brown University | Rare Books Library & Museum | Providence, RI
- Cade Museum for Creativity + Invention | Gainesville, FL
- Calvert Marine Museum | Solomons, MD
- Corcoran Gallery of Art | Washington, DC
- Cylburn Arboretum | Baltimore, MD
- Daughters of the American Revolution | Constitution Hall | Washington, DC
- David Wills House Museum | Gettysburg, PA
- Dumbarton Oaks Museum | Washington, DC
- Exploration Tower at Port Canaveral | Cape Canaveral, FL
- Fort McHenry National Monument & Historic Shrine | Baltimore, MD
- General Grant's Tomb Viewing Pavilion | New York, NY
- Great Falls Tavern | Potomac, MD
- Hammerman Visitor Center | Kingsville, MD
- Hampton Mansion National Historic Site | Towson, MD
- Harpers Ferry Museum | Harpers Ferry, WV
- Holocaust Memorial Museum | Washington, DC
- Homestead National Monument | Heritage Center | Beatrice, NE
- Irvine Nature Center | Owings Mills, MD
- Manassas National Battlefield | Manassas, VA
- Manassas National Park | Manassas, VA
- Maryland Science Center | Baltimore, MD
- Mexican Cultural Institute | Washington, DC
- Monocacy National Battlefield | Frederick, MD
- Mount Vernon Inn | Alexandria, VA
- Penn Museum | Philadelphia, PA
- Phillips Collection | Washington, DC
- Plum Orchard Mansion | St Marys, GA
- Robinson Nature Center | Columbia, MD
- Shenandoah National Park | Panorama Visitor Center | Luray, VA
- Smithsonian Institution | Arts & Industries Building | Washington, DC
- Smithsonian Institution | The Castle | Washington, DC
- Smithsonian Institution | Environmental Research Center | Washington, DC
- Smithsonian Institution | Freer Gallery of Art | Washington, DC
- Smithsonian Institution | National Air & Space Museum | Washington, DC
- Smithsonian Institution | National Museum of American History | Washington, DC
- Smithsonian Institution | Sackler Gallery | Washington, DC
- St. Mary's Spiritual Center & Historic Site | Baltimore, MD
- University of Maryland Baltimore | National Museum of Dentistry | Baltimore, MD
- University of Maryland University College | Leroy Merritt Center | Marlboro, MD
- Walters Art Gallery | Baltimore, MD



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Scott Haythorn, PE, LEED AP, CEM

SENIOR MECHANICAL ENGINEER

Total Experience
20+ Years

Education
BS | Mechanical Engineering
University of MD Baltimore County

Certificate
Museum Environmental Controls
University of Wisconsin-Madison

Registration
Professional Engineer
MD | 27767

Also registered in CT, FL, KY, ME, NC, NH, NY, OH, PA, RI, SC, VA, & VT

LEED Accredited Professional

Certified Energy Manager
15750

Scott leads the museum and cultural design teams. He directs field surveys, existing condition assessment, data analysis, energy analysis, systems layout, design and documentation. His experience includes conducting life cycle cost studies, energy models, and intricate campus infrastructure upgrades for occupied renovations. His portfolio includes many high profile projects for clients such as the Smithsonian Institution and National Park Service.

Hampton Mansion | Towson, MD
Senior Mechanical Engineer for the $1.7M HVAC system renovation in order to preserve the historic 18th century mansion and the artifacts within it. A sophisticated control system was installed to ensure the structure will be protected from temperature extremes.

France-Merrick Performing Arts Center | Baltimore, MD
Senior Mechanical Engineer for the $64M renovation/addition to preserve the historic 169,500 SF performing arts facility. The project included renovations to the building's HVAC system.

Gateway Gallery | Adelphi, MD
Senior Mechanical Engineer for the 5,500 SF addition to the conference center to house art exhibition space. The mechanical systems include an air-cooled chiller that provides both temperature and humidity control, critical to the housing of art.

Fort McHenry Visitor Center | Baltimore, MD
Senior Mechanical Engineer for the $6M, 17,200 SF, LEED Gold visitor center at the Fort McHenry National Monument & Historic Shrine. The design included a geothermal heat pump system, HVAC, and a domestic hot water system.

Cade Museum for Creativity + Innovation | Gainesville, FL
Senior Mechanical Engineer for the $9M, 50,000 SF interactive museum. The museum features exhibits highlighting the inventor of Gatorade and other inventions. The mechanical scope includes HVAC and plumbing.

Smithsonian Institution | National Air & Space Museum | Washington, DC
Senior Mechanical Engineer for the replacement of 20 air handling units, 2,000-ton chilled water plant, and analysis of garage space serving the 3-story, 320,000 SF museum facility.

Smithsonian Institution | Exploration Suite Exhibit | Washington, DC
Senior Mechanical Engineer for the three new exhibits at the National Air & Space Museum: Exploring the Planets, Destination Moon, and Planet Earth, totaling 18,500 SF.

Smithsonian Institution | Revolutions in the Sky Exhibit | Washington, DC
Senior Mechanical Engineer for the new exhibits at the National Air & Space Museum: Reinventing Flight, We All Fly, and Early Flight, totaling 16,500 SF.

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Jeanne Tebera, PE, CFPS

SENIOR ELECTRICAL ENGINEER

Total Experience
30+ Years

Education
BS | Electrical Engineering
Loyola University

Registration
Professional Engineer
MD | 42418

Certified Fire Protection Specialist
4887

Jeanne specializes in learning center and place-of-assembly design. She has completed a substantial catalog of projects for high profile clientele ranging from education centers, visitor centers, nature centers, interpretive centers, to museums. Her expertise includes systems from the incoming electrical utilities to power distribution, specialty lighting, and low voltage communication, fire alarm, and security systems. Dedicated to historic preservation, Jeanne is an active participant in the League of Historic American Theaters.

Hampton Mansion | Towson, MD
Senior Electrical Engineer supporting the $1.7M HVAC system renovation in order to preserve the historic 18th century mansion and its artifacts. A sophisticated control system was installed to ensure the structure will be protected from temperature extremes.

France-Merrick Performing Arts Center | Baltimore, MD
Senior Electrical Engineer for the $64M renovation/addition to preserve the historic 169,500 SF performing arts facility. The project included renovations to the building's electrical infrastructure.

Maryland Club | Baltimore, MD
Senior Electrical Engineer for the $10M renovation and expansion of the historic club. The electrical scope includes power, lighting, communications, and fire alarm.

Cade Museum for Creativity + Innovation | Gainesville, FL
Senior Electrical Engineer for the $9M, 50,000 SF interactive museum. The museum features exhibits highlighting the inventor of Gatorade and other inventions. The electrical scope includes power and lighting.

Gateway Gallery | Adelphi, MD
Senior Electrical Engineer for the 5,500 SF addition to the conference center to house art exhibition space. The electrical systems included lighting and associated control systems, fire alarms, and power distribution.

Fort McHenry Visitor Center | Baltimore, MD
Senior Electrical Engineer for the new 17,200 SF, LEED Gold visitor center at the Fort McHenry National Monument & Historic Shrine. The electrical scope includes power and lighting.

Smithsonian Institution | Revolutions in the Sky Exhibit | Washington, DC
Senior Electrical Engineer for the new exhibits at the National Air & Space Museum: Reinventing Flight, We All Fly, and Early Flight, totaling 16,500 SF.

Smithsonian Institution | Air & Space Museum Specialty Exhibits | Washington, DC
Senior Electrical Engineer for the new exhibits at the National Air & Space Museum: A Nation of Speed, America By Air, and The Wright Brothers, totaling at 22,500 SF.

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GREENBELT MUSEUM
VISITOR & EDUCATION CENTER AND OFFICES

PROPOSAL FOR ARCHITECTURAL SERVICES
MARCH 22, 2019

FIELD CRAFT STUDIO

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BACKGROUND

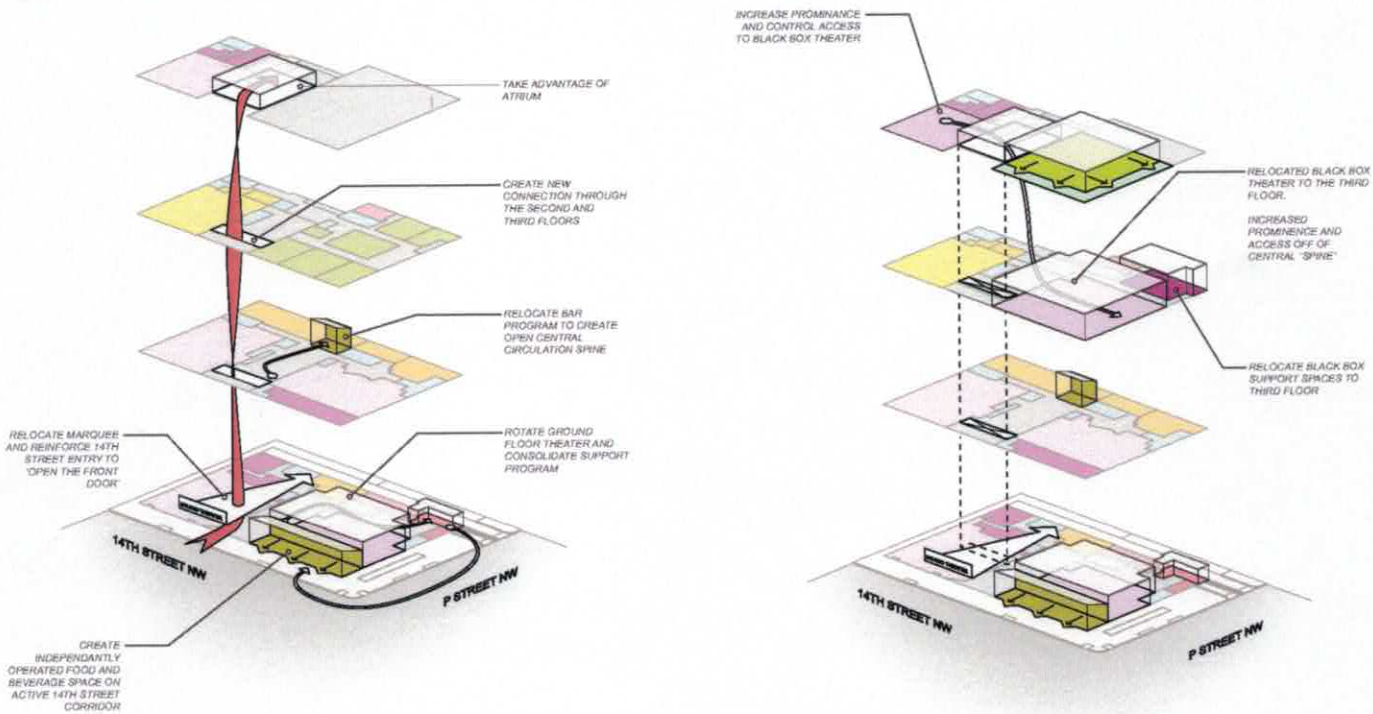
Harry is a licensed architect and managing member of the firm fieldCRAFTstudio PLLC where he works on a variety of project sizes from interiors to urban design. At fieldCRAFTstudio he embraces opportunities as a designer, detailer, and project manager for projects in all phases from concept to construction administration. This allows him to inject his highly personal approach into the project delivery process.

A majority of Harry's professional career has been spent in New York where he had the opportunity to work for three firms recognized internationally for design excellence. His experience included working at RMJM Hillier, Grimshaw Architects and Ennead (formerly the Polshek Partnership) where he was a team member on a variety of award winning urban design and architectural projects.

His firm fieldCRAFTstudio PLLC has been recognized by AIA Atlanta for the National Pavilion Design Competition and by Curb'd Covington in association with US Bank and the Haile Foundation for an interactive parklet in downtown Covington, Kentucky. With a focus on urban projects and sustainability, fieldCRAFTstudio takes a multidisciplinary approach to design where sustainability and utility are paired with narrative and novel uses of materials to achieve site specific designs.

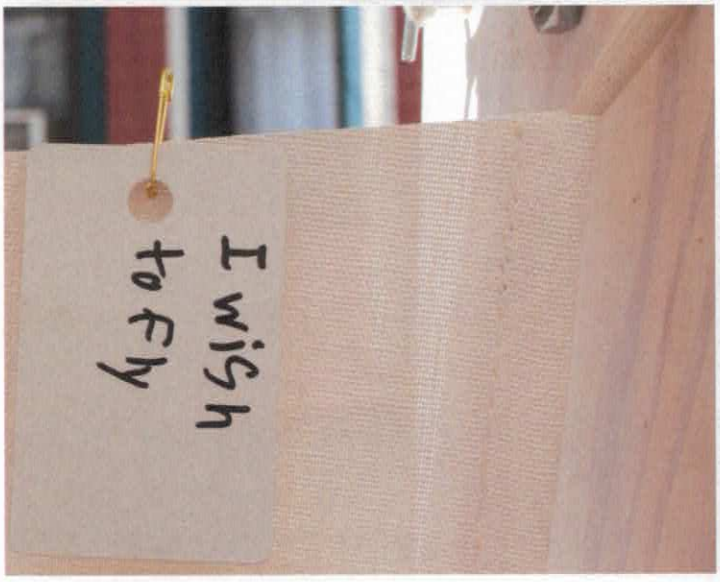
In addition to practice, Harry continues to develop a connection with academia. He was a studio section coordinator with David Shove-Brown in Catholic University's summer Experiences in Architecture program and continues to participate in graduate, undergraduate and thesis juries there. While in New York, Harry also participated in juries at Pratt and City College --the latter as a short-term substitute studio critic. The time spent in the studios is invigorating: allowing him to reflect on his training and experience and finding ways to communicate and inspire students at multiple ability levels.

He earned a Bachelor of Arts in French International Business from the University of Maryland, College Park and a Masters of Architecture from The Catholic University of America in Washington, DC.



SAMPLE PROJECT DIAGRAMS PREPARED FOR THE STUDIO THEATER WHILE AT CORE GROUP PC

WORKING WITH fieldCRAFTstudio

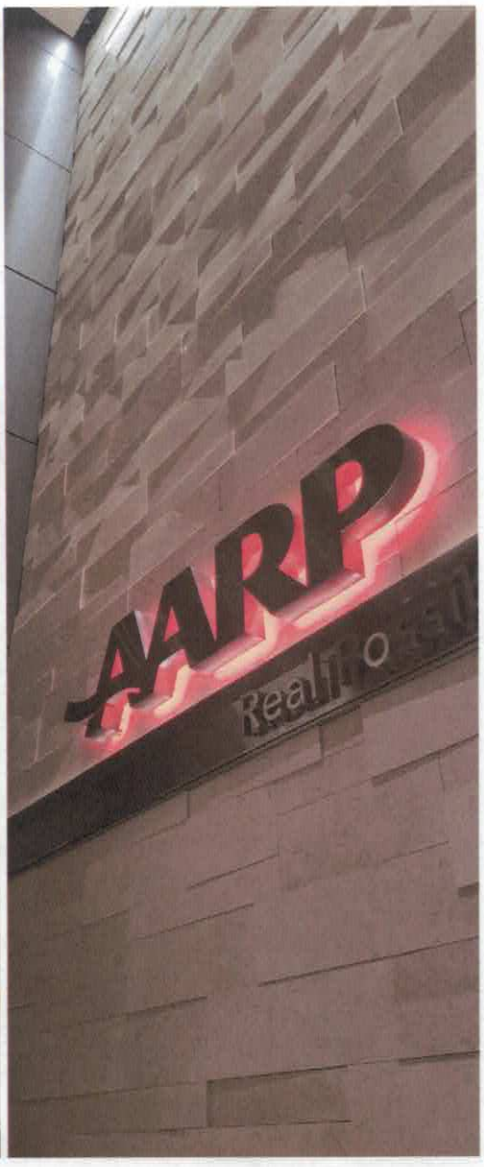


PROJECT: WISH-IGLOO PARKLET
LOCATION: COVINGTON KENTUCKY
CLIENT: CURB'D COVINGTON / LEFT BANK COFFEE HOUSE
BUDGET: $15,000

The goal of the design brief was to design a parklet (structure designed to transform a parking space into a public park) that brings attention to how walkable a city's downtown could be. Harry teamed with Seth Trance for this two stage competition.

We were initially inspired by the Japanese tradition of Emas - small wooden plaques, that people write on to share their hopes and aspirations with the public. Taking this idea, we designed and built a structure that created two types of space. One for enjoying the passers by on the sidewalk, the other for seeing cars and bikes fly by in the adjacent roadway. The single steel post with wood ribs creates an enclosure with fabric panels between. The visitors were able to write their dreams on small cards and pin them to the fabric panels. Throughout the summer, we were amazed by how many people shared personal, funny, and transformative stories with the larger community. The positivity and excitement that the Wish-Igloo generated exceeded everyone's expectations.

RELEVANT PROJECT EXPERIENCE

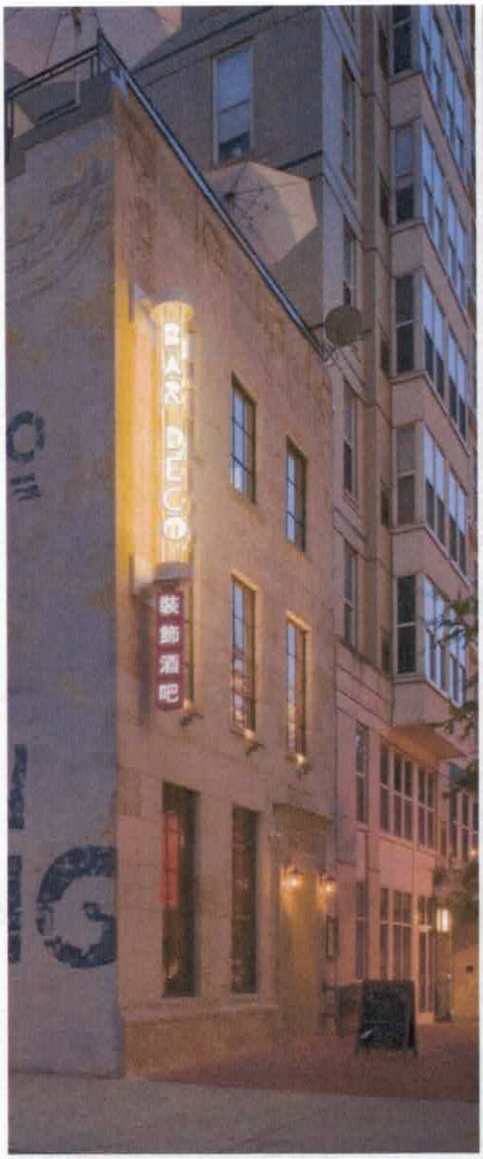


PROJECT: AARP PHASE 1.5 AND 1.75 BUILDING AMENITIES
LOCATION: WASHINGTON DC
CLIENT: AARP (PROJECT ARCHITECT WHILE EMPLOYED BY OPX GLOBAL)
BUDGET: NOT DISCLOSED

AARP undertook a transformative repositioning of their headquarters building located at 601 E Street NW in downtown Washington DC. In a strategic effort to bring a number of business operations under a single roof, the design team developed an efficient LEED Silver Certified design to increase employee productivity, engagement, and satisfaction.

Critical to attracting the ever evolving workforce was a repositioning of the amenities provided for the employees. A fitness center, cafeteria, coffee shop, lobby and entry complimented new conferencing and auditorium spaces which allow staff to gather for group meetings, wellness initiatives and training. The design goals were to create a ground floor space that simplifies the way-finding through the building. Creating bright, light filled, open and active spaces within an existing building that was designed for the office of another era is always a challenge. AARP's commitment to the transformation empowered the design team and construction team to achieve a great result.

RELEVANT PROJECT EXPERIENCE



PROJECT: BAR DECO
LOCATION: WASHINGTON DC
CLIENT: NOE LANDINI (PROJECT ARCHITECT ON-SITE WHILE EMPLOYED BY CORE GROUP)
BUDGET: NOT DISCLOSED

Located in the historic Bulletin Buildling at 717 6th Street NW in Washington DC, the design intent for the Bar Deco project was to capture the raw beauty of the years of use of the buildling, while completely modernizing and adding accessible and safety features that were not previously included in the space. Conceived as a vertical restaurant, the stacked plan was a unique restaurant concept that required vertical connections at the front and back of the existing buildling without compromising a unique urban rooftop dining experience.

The addition of a new elevator, egress stair, mechanical systems, and smoke exhaust required significant site coordination with the general contractor. The ability to consider the details and simultaneously keep the larger life-safety and design goals in mind was critical to the project's success.

Architect

Harry P Ross RA_AIA has over 15 years of experience in the design and delivery of design-intensive projects. With experience working on projects ranging in size from a 120 square foot Parklet (public park in a parking space) to a 60+ acre master plan on a man-made island in Dubai, UAE, Harry's diverse perspective allows him to see new potential in objects, buildings, and public space.

Mechanical, Electrical, Plumbing

Evan Bjorndal PE has six years of experience in the consulting engineering field. A large portion of his design experience is in design-build work; especially historic and government applications. His experience also includes design of spaces for commercial interiors, restaurants, grocery stores, laboratory, religious worship, healthcare, broadcast, and telecommunications.

Structural Engineer

Robert A. Wixson PE is a structural engineer and President of APAC engineering. APAC is a full-service structural engineering firm serving Maryland, Virginia, the District of Columbia, and Pennsylvania providing services for both residential and commercial applications.

Geotechnical

Piedmont Geotechnical, Inc., performs geotechnical and environmental engineering services, foundation monitoring, and forensic engineering services. Mr. Rom is responsible for the general management of company operations and engineering evaluations. He has been an independent geotechnical reviewer for Fairfax County, VA, and Clarke County, VA, for many years, and reviews construction dewatering plans for a major national dewatering contractor.

Civil Engineer / Survey

Jim Witmer PE brings years of professional experience in civil engineering, land surveying, land development, and technical design / review that is perfectly aligned to assist clients through land use challenges in today's aggressive construction environment.

Accessibility Consultant

Peter Stratton is a Senior Vice President and Managing Director of Accessibility Services with Steven Winter Associates, Inc. He is a 25-year veteran of the firm, where he developed and continues to manage SWA's accessibility business sector. Stratton provides leadership to a team of professionals located in New York, NY, Norwalk, CT, and Washington, DC.

Seth R Trance AIA, LEED AP BD+C

Harry teamed with Seth on the Wish Igloo Parklet in Covington Kentucky.

DLR Group
629 North High Street
4th Floor
Columbus, OH 43215

seth.trance@gmail.com

Steve Polo

Steve is the Managing Partner of OPX Design Consultancy and was Harry's most recent employer

OPX Global
21 Dupont Circle NW
Suite 200
Washington DC 20036

polo@opxglobal.com

Najeeb "Naj" Uddin

Naj was OPX's client for the AARP amenities and building repositioning project.

AARP Corporate Headquarters
601 E Street NW
Washington DC 20049

NUddin@aarp.org

Kathleen "Kate" Kulpa AIA, LEED AP BD+C

Kate managed Harry while working at Ennead Archtiects in New York

Ennead Architects
320 West 13th Street
New York, NY 10014

kkulpa@ennead.com

REFERENCES

PROJECT SCHEDULE

MILESTONE / PRESENTATION/ MEETING	DATE / DURATION
• PRE-PROPOSAL SITE VISIT	JANUARY 30, 2019
• PROJECT KICK OFF (INCL. INITIAL SITE VISIT)	APRIL 16, 2019 *
• REVIEW SCOPE OF WORK W/ FOGM & STAFF	APRIL 16, 2019
• SITE VISIT	APRIL 30, 2019
INCLUDES ALL NECESSARY SUB-CONSULTANTS	
• INTERIM MATERIALS AND DESIGN PRESENTATION	MAY 7, 2019
• PREPARE DRAFT DELIVERABLES	JUNE 11, 2019
• COST VERIFICATION - (WORKING WITH GC)	DATE T.B.D.
• FOGM REVIEW	JUNE 25, 2019
• SUBMISSION OF FINAL DELIVERABLES	JULY 9, 2019
• PUBLIC PRESENTATION	DATE T.B.D.

NOTES:

* ASSUMES EARLY APRIL AWARD. APPROXIMATELY 2 WEEKS WILL BE NECESSARY TO FINALIZE SCOPE AND CONTRACTS WITH SUB CONSULTANTS

SITE SURVEY SCOPE MUST START IMMEDIATELY AFTER AWARD

FEE SUMMARY

CONSULTANT	BASE FEE	HOURLY	NOTES
• ARCHITECTURE	$15,800	BID, PERMIT, CA	
• MEP	$10,760	CA	$3,150 N.T.E.
• STRUCTURAL	$7,200	BID / CA	
• GEOTECHNICAL	$7,295		
• CIVIL / SURVEY	$2,600		
TOTAL	$43,655		
• ACCESSIBILITY		PLAN REVIEW	$5,000 N.T.E.
• MECHANICAL SYSTEMS REPORT	$3,150		IF REQUIRED

NOTES:

REINBURSABLE EXPENSES OF SUBCONSULTANTS ARE NOT REFLECTED IN THE FEE

IF REQUESTED BY THE CLIENT, THE ARCHITECT WILL ADMINISTER THE CONSULTANT CONTRACTS. THE ADMINISTRATION RATE IS 10% OF THE CONTRACT SUM.

FIELD CRAFT STUDIO

PROPOSAL FOR ARCHITECTURAL SERVICES
220 4TH STREET SE #2
WASHINGTON DC 20003

FCS-1903-001

March 22, 2019

Jennifer Ruffner, President
Friends of the Greenbelt Museum Inc.
10A Crescent Road
Greenbelt, MD 20770

RE: RFP for Greenbelt Museum Visitor and Education Center and Offices Project

Dear Jennifer:

I am pleased to submit this proposal on behalf of fieldCRAFTstudio PLLC ("Architect") to provide architectural services to you (collectively referred to herein as the "Owner") in connection with the following Project:

+++++++Final Project Description to be provided after SOW meeting+++++++

The Owner's budget for the Project is between _____ ($_____) and _____ ($_____). The Architect may provide a feasibility cost estimate. Actual construction costs will vary, and feasibility cost estimates are merely illustrative to assist in assessing preliminary Schematic Designs. The Owner may, at their discretion, retain an independent cost estimator to provide actual cost estimates during the design phases. The Architect makes no guarantee or warranty that any design concept will meet the Owner's budget constraints.

Architect agrees to provide you architectural services on the following basis:

I. Scope of Services

Final Design Development Phase: Upon approval of the Schematic Design drawings from Owner, the Architect shall prepare one (1) set of Design Development drawings and accompanying documents to develop the design. The Architect will meet with the Owner for approval of the Design Development documents. If any modifications are needed in order to reduce the estimate cost of construction or to incorporate changes to the Schematic Design documents previously approved by the Owner, the Architect shall incorporate such modifications into the Contract Documents. [Architect agrees to attend _____ meetings with the Owner during the Final Design Development Phase]

Construction Documents Phase: Upon approval of the Design Development Documents from the Owner, the Architect shall prepare final working drawings and specifications ("Contract Documents") for the Owner to obtain contractor bids

and a building permit. Any modifications to the Contract Documents in order to reduce the estimated cost of construction or to incorporate changes to the Design Development documents previously approved by the Owner shall be billed to the Owner as an Additional Service. [Architect agrees to attend _____ meetings with the Owner during the Construction Document Phase]

Construction Administration Phase: As part of its Basic Services, the Architect shall conduct up to [_____] site visits to review the work in progress and to consult with Owner and the Contractor during the Construction Administration Phase. Any additional site visits will be billed to the Owner as an Additional Service. The Architect's services during the Construction Administration Phase include the following: (i) a review of Contractor's submittals (i.e. shop drawings), but only for the limited purpose of checking for conformance with the design concept expressed in the Contract Documents; (ii) preparation of change orders and change directives; (iii) a review of any progress payments and a recommendation of amounts owed to Contractor based on site observations and an evaluation of Contractor's application for payment; and (iv) recommendation to Owner of the rejection of work observed which does not conform to the Contract Documents.

II. Project Sequence

Design Development Phase
Construction Documents Phase
Permitting Phase - Prepare permit filing for Permit Processor and respond to comments from permitting authority
Construction Administration Phase

If Architect or its consultants are delayed or prevented from performing services for any reason beyond their control, they shall be granted an extension equivalent to the period of delay in which to complete their services and their compensation shall be equitably adjusted. Owner agrees to render decisions timely as necessary for Architect and its consultants to provide services within this schedule.

III. Additional Services

If requested and authorized by Owner, Architect will provide Additional Services for the Project. Any service not specifically included under Section I, is considered an Additional Service.

Additional services include, but are not limited to, the following:

1. Design revisions after the Construction Documents phase has begun
2. Interior design
3. Plumbing and/or decorative electrical fixture selection
4. Legal or property line or variances negotiations
5. Matters pertaining to historical review agencies
6. Condominium Board approvals
7. Government agency approvals
8. Additional Architect/Owner meetings per phase, beyond enumerated amount stated above.
9. Making revisions to documents inconsistent with approvals or instructions previously given by Owner, including increases or decreases in the Owner's budget
10. Developing Schematic Design drawing options and/or Design Development drawing options in excess of the number of options set forth above
11. Cost Estimating and Bid Services
12. Additional site visits above the number agreed to in Base Services

The following services are specifically excluded from this Agreement. The Architect will solicit proposals as appropriate to the project.

1. Survey services including topographical, boundaries, drainage, sediment control
2. Mechanical, electrical, plumbing engineering services
3. Structural engineering services

4. Civil engineering, Geotechnical services
5. Solar, photovoltaic, or Geothermal design services
6. Permit Processor/expeditor
7. Structural engineering design
8. Audio/Visual/Security equipment selection
9. Furniture procurement

IV. Architect's Compensation

A. For the Scope of Services described under Section I above ("Basic Services") the fee shall be billed as follows:

Principal	$150.00	per hour
Draftsperson	$90.00	per hour
Administrative staff	$45.00	per hour

These rates may change annually on January 1st.

LUMP SUM: The total fee for the following Basic Services will be a lump sum of $_____ billed monthly as follows:

Design Development	$_____ [not to exceed 1 final design]
Construction Documents	$_____
Permitting Work	$_____
Construction Administration	$_____ [___ months]

HOURLY: The total fee for the Bid Negotiation Phase and Permitting services will be invoiced on an hourly basis, as the amount of time/effort associated with this scope of services will depend on project jurisdiction, and a variety of factors not currently known to the Architect.

B. For any Additional Services required under Section III above, Architect's compensation shall be billed hourly at the rates below:

Principal	$150.00	per hour
Draftsperson	$90.00	per hour
Administrative staff	$45.00	per hour

These rates may change annually on January 1st.

C. Expenses incurred by Architect in relation to this Project shall be billed to Owner at 1.10 times the amount expended by Architect and are separate from Architect's fee ("Reimbursable Expenses"). Expenses include, but are not limited to, the following:

1. Printing for Project coordination, authority reviews, bidding or construction or Owner requests
2. Reproducible drawings, photocopies, documentation photographs
3. Messenger and express courier deliveries
4. Mileage at the current IRS rate
5. Out of town travel and expenses (as necessary)
6. Long distance or international telephone calls
7. Permit fees, survey documents, estimating fees, etc., as requested by Owner

To the extent structural, electrical, mechanical, civil, geotechnical or other consultant services are necessary for completion of the design under this Agreement, these services will be billed as Reimbursable Expenses. All Reimbursable Expenses shall be billed at a multiple of one point one (1.1) times the amount billed to the Architect for such expenses.

D. An initial retainer of _____ Dollars ($_____) is required when this Agreement is executed and shall be applied to the final invoice on Project.

E. Fees and expenses shall be billed monthly and payable within fifteen (15) days of receipt of invoice for services rendered to date. Amounts unpaid thirty (30) days after the invoice date shall bear simple interest at the rate of ten percent (10%) per annum. Architect has no obligation to start a new phase of services until the previous phase's payment has been received.

F. Inquiries and questions regarding any invoice shall be made within fifteen (15) days of receipt of the invoice. Failure to notify Architect within this time period shall constitute a waiver of any claim with respect to the content or accuracy of the invoice as well as acceptance of the services provided.

G. Owner agrees to pay reasonable attorney's fees, agency fees and other expenses or losses, prior to and through any trial and subsequent proceedings, incurred by Architect in the event Architect employs the services of an attorney or agency to collect sums due hereunder or to enforce any terms contained herein.

H. If the services covered by this Agreement have not been completed by [INSERT DATE], compensation for Architect's and its consultants' services beyond that time shall be appropriately adjusted.

V. Terms and Conditions

Incorporated by reference as part of this Agreement between Owner and Architect are the "Standard Terms and Conditions" attached hereto as Exhibit A.

This Agreement and the attached Standard Terms and Conditions represent the entire and integrated Agreement between the parties and supercede all prior negotiations, representations or agreements, written or oral. This Agreement may be amended only by written instrument signed by all the parties.

If Owner directs Architect to perform services as set forth in this Agreement or payment of the retainer without signing the Agreement, such verbal direction constitutes acceptance by Owner of the terms of this Agreement including the Standard Terms and Conditions attached hereto.

Very truly yours,

Enclosure: Exhibit A Terms and Conditions

ACCEPTED:

[Insert Owner's Name]

Name: _____

Date: _____

1. Owner's Responsibilities. Owner shall provide full information regarding the requirements and budget for the Project and Architect and its consultants and their respective representatives and agents (hereafter referred to collectively as the "Architect") shall be entitled to rely on the accuracy and completeness thereof. Owner, for its own benefit may, from time to time on its own or retain others to perform certain tests, inspections, and analyses or other information and materials for use by Architect. Architect may and is expected to rely on such tests, inspections, analyses, opinions, data, reports, materials and other information without the need for independent evaluation and/or verification. Moreover, Owner agrees to indemnify, defend and hold Architect harmless from any and all losses, damages, and claims of any nature which may in any way arise out of or in connection with the use by Architect of the tests, inspections, analyses, opinions, data, reports, materials and other information prepared by Owner or others and furnished to Architect in connection with this Project.

If Owner or Contractor becomes aware of any discrepancies, errors, or omissions in the Contract Documents, or of any unanticipated job or site conditions, or of any fault or defect in the Project or nonconformance with the design documents, or of any proposed field revisions, prompt written notice thereof shall be given by Owner to Architect.

The Architect is not responsible for providing cost estimates for the construction of the Project. The Owner has the sole responsibility for retaining a cost estimator during the design phase of the Project who shall estimate the cost of construction and identify any costs that vary from or exceed any prior estimates or budgets. Architect is entitled to rely upon the estimates provided by the Owner. Any modifications to the Architect's Contract Documents that are necessary to meet the Owner's budget for the cost of construction shall be billed as an Additional Service.

In the event this Agreement is rendered to a corporation, partnership, LLC, or other entity, the individual executing this Agreement on behalf of the corporation, partnership, LLC or other entity agrees to personally guarantee payment of account even if this Agreement is signed in a representative capacity and waives any and all notices to which he may be entitled as guarantor.

2. Contractor's Responsibilities. Architect shall be responsible only for the design shown in Architect's Contract Documents. Owner shall specifically hold Architect harmless from any and all claims or damages arising from or relating to the Contractor's failure to properly perform the work. Furthermore, Architect shall not be responsible for or have control over the means, methods, procedures of construction, dimensions, quantities or instructions for installation or performance of equipment or systems designed by the Contractor or site safety precautions employed by the Contractor or subcontractors on the Project, which remain the sole responsibility of the Contractor.

3. Standard of Care. Architect will perform services under this Agreement, consistent with that level of care and skill ordinarily exercised by members of Architect's and its consultants' profession, practicing under similar circumstances in the same or similar locality in the same period of time. No guarantees or warranties are included or intended in this Agreement or in any representation, opinion or otherwise of Architect. This representation and warranty are in lieu of all other warranties and representations, either express or implied.

4. Use of Architect's Design Documents. Documents prepared by Architect are Instruments of Service for use solely with respect to this Project. Architect retains all common law, statutory and other reserved rights, including the copyright thereto. Owner will not use or permit the reuse of the Instruments of Service except, as a condition precedent, by mutual agreement in writing with Architect. Provided Owner is not in default under this Agreement, Owner may retain copies solely for information and reference in connection with occupancy and maintenance of the Project. However, such documents are not intended or represented to be suitable for use by Owner or others on extensions of the Project, for completion or implementation of the Project by others, or any other project. Owner further agrees to waive all claims against Architect resulting in any way from unauthorized changes or use of the Instruments of Service or completion of the Project without Architect's involvement.

5. Construction Administration Services. Architect's Scope of Services does not provide for continuous supervision or exhaustive inspection of the work performed by the Contractor or subcontractors. If Architect is required to assist Owner in bidding or in determining whether cause exists to terminate a contractor, pursuant to the terms of this Agreement or the construction contract, then Owner agrees to indemnify, defend and hold Architect harmless from any and all losses, damages and claims of any nature, which may in any way arise out of Architect's rendering of good faith advice to Owner on these topics. Architect's visits to the construction site shall be for the sole purpose of becoming generally familiar with the progress and quality of the construction work within Architect's scope and to determine in general if the work, when completed, will be in accordance with the Contract Documents.

6. Suspension or Termination for Owner's Breach. In the event Architect does not receive payment when due, Architect may suspend or terminate services without breach of contract immediately upon giving Owner written notice. In the event services are suspended or terminated, Architect has no obligation to deliver documents and any consequences (including delay) resulting from such suspension or termination are the sole responsibility of Owner. Architect shall be compensated for all services performed up to the date of termination together with all reimbursable expenses then due. Owner has the obligation to return all documents if Owner is in default under this Agreement. Failure of Owner to make payments to Architect in accordance with this Agreement shall be considered substantial nonperformance and is sufficient cause for Architect to either suspend or terminate services

7. Limitation of Liability. There are a variety of risks which potentially affect Architect by virtue of entering into an Agreement to perform professional services on Owner's behalf. In order for Owner to obtain the benefit of a fee which does not need to account for unlimited risks, Owner agrees to limit Architect's liability to Owner. To the fullest extent permitted by law, the total liability of Architect with regard to the Project under any and all theories of liability shall be limited to the total fee paid to Architect only, not including consultants, for the Project. Limitations on liability provided in the Agreement are business understandings between the parties and shall apply to all theories of liability, including breach of contract or warranty, tort including negligence, strict or statutory liability, or any other cause of action. The limits of liability may be

negotiated with appropriate compensation to Architect.

8. Waiver of Consequential Damages; No Personal Liability; No Third Party Beneficiaries. No partner, member, manager, director, officer, shareholder, employee, representative or agent of the Architect shall have any individual liability to Owner. Each party waives consequential damages for claims, disputes or other matters in question arising out of or relating to this agreement. Except as expressly permitted in Paragraph 18, nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, any other person.

9. Insurance. Owner is obligated at all times to carry adequate liability, property and fire insurance on the property where the Project is located and the Project. Owner must present Architect with a certificate of insurance upon the signing of this Agreement. Owner hereby releases Architect from any liability for any loss or damage notwithstanding that such loss, damage or liability may arise out of the act or omission of Architect, if such loss or damage is covered by insurance benefiting Owner or was required to be covered by insurance pursuant to this Agreement. This waiver shall survive termination of this Agreement.

10. Mediation/Litigation. In addition to, and as a condition precedent to litigation, the parties shall endeavor to settle claims or disputes by non-binding mediation, in accordance with the Construction Industry Mediation Rules of the American Arbitration Association then in effect, unless the parties mutually agree otherwise. Any mediation shall be conducted in Washington, DC. If mediation fails to resolve the claims or disputes, then all claims, disputes or other matters in question arising out of or related to this Agreement shall be determined by the Superior Court of the District of Columbia or the United States District Court for the District of Columbia. This Agreement shall be governed by the laws of the State of Maryland.

11. Limitation on Years to Bring Claim. Any and all claims and/or causes of action between the parties arising out of or relating to this Agreement shall be brought by either party within two (2) years of substantial completion of the Project or termination of this Agreement whichever is sooner.

12. Assignment. Neither party shall assign nor transfer its interest, obligations, duties, or any claim arising under or related to this Agreement, including interest in and claims for any moneys due or to become due, without the written consent of the other party. Any such assignment or transfer shall be deemed void and invalid, the assignee shall acquire no rights as a result of any such assignment and the non-assigning party shall not recognize any such assignment.

13. Certificate of Merit. Owner shall make no claim for professional negligence, either directly or in a third party claim, against Architect unless Owner has first provided Architect with a written certification executed by an independent design professional currently practicing in the discipline of the alleged defective design and licensed in the jurisdiction with the project is located. This certification shall: a) contain the name and license number of the certifier; b) specify each and every act or omission that the certifier contends is a violation of the applicable standard of care; and c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation.

14. Access to Site. Architect shall have access to the Project site at all reasonable hours and shall be permitted to photograph the Project during construction and upon completion for its records and future use. Architect shall have the right to take photographs and make other reasonable promotional use of the Project, and Architect shall be given appropriate credit on all construction signs or other promotional materials concerning the Project.

15. Hazardous Materials. Architect shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the Project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances.

16. Hidden Conditions. The Instruments of Service, and any measurements taken by Architect, are based on observable conditions. A condition is hidden if it is concealed by existing finishes or cannot be investigated by reasonable visual observation. In the event Architect, in the performance of the services, uncovers a hidden condition, Architect shall not be responsible for costs associated with repairing, restoring, removing or otherwise correcting said condition. Architect shall have no responsibility for hidden conditions or any subsequent damage to persons or property related to any hidden conditions.

17. Betterment. If due to Architect's breach of the standard of care, any required item or component of the Project is omitted from Architect's construction documents, Architect shall not be responsible for paying the cost to add such item or component to the extent that such item or component would have been otherwise necessary to the Project or otherwise adds value or betterment to the Project. In no event will Architect be responsible for any cost or expense that provides betterment, upgrade or enhancement of the Project.

18. Covenant Not to Sue. Owner shall assure that the following covenant not to sue is contained in all other contractor agreements, and shall assure its enforcement: Contractor, or any successor, assignee or subrogee of Contractor, agrees not to bring any civil suit, action or other proceeding in law, equity or arbitration against Architect, or the officers, employees, agents or consultants, of Architect, for the enforcement of any action which Contractor may have arising out of or in any manner connected with the Project. Architect, its officers, employees, agents, and consultants are intended third-party beneficiaries of this covenant not to sue, who are entitled to enforce this covenant in law or equity.

19. No Lien Waiver or Subordination. Architect expressly reserves all rights to file a mechanics' lien on the real property as provided by applicable law. Architect shall not be required to execute any agreement that diminishes its lien rights or subordinates its lien rights to the rights of another party including, but not limited to, a lender providing financing for the project. Any agreement subsequently executed by Architect diminishing the lien rights of Architect or subordinating its lien rights to another party shall be void and of no effect unless such document expressly references this provision. negotiated with appropriate compensation to Architect. beneficiaries of this covenant not to sue, who are entitled to enforce

Evan Bjorndal, PE LEED AP BD+C

Mechanical Engineer

Background Summary:

Mr. Bjorndal has six years of experience in the consulting engineering field.

A large portion of his design experience is in design-build work; especially historic and government applications. His experience also includes design of spaces for commercial interiors, restaurants, grocery stores, laboratory, religious worship, healthcare, broadcast, and telecommunications.

In his six years, he has provided project management, energy/life cycle cost analysis, design, and construction administration. He has also specialized in sustainable design and energy conservation; achieving his LEED AP certification in 2015. Examples of these projects are:

- National Park Service Phase I & II Energy Conservation Project – Mechanical system Retrofits:
    - Design of phase I & phase II HVAC retrofits for several National Capital Region facilities. Equipment upgrades/replacement included boilers, split-system heat pumps, infrared heaters, VRF heat pumps, memorial fountain pumps, fan coil units, and chillers. Sites included highly sensitive areas such as the national mall and memorial parks, as well as sites on the national historic registry. Design documents underwent park historical compliance review as well as SHPO review.
    - Development of phase II scope of work document. Included site visit and evaluation for potential HVAC upgrades.
- Historic Christ Church in Alexandria: Design-build full-campus HVAC upgrade for three parish buildings and church constructed in the 1773. Mechanical scope included life cycle cost analysis for system selection, new heating and cooling plant design, and air handling unit design. Scope also included addition of heating and cooling where only heating was available previously as well as strict humidity control for the church building. Project is on the U.S National Register of Historic Places, U.S National historic Landmark, and Virginia Landmarks Register. DesignTech served as the prime design consultant and subcontracted an architect, and structural engineer.
- Naval Research Lab: Design-build replacement of air handling units and fan coil units for the Department of the Navy at their facility in Washington, DC. The project included strict equipment visibility and phasing requirements and sub-contracting of a structural engineer.

Licenses Registration:

Professional Engineer, MD/D.C.

Education:

Grove City College – Bachelor of Science - Mechanical Engineering, 2013

Professional Affiliations: ASHRAE, AIA CES Educator, GBCI

Experience

Robert A. Wixson, P. E.

President

Structural Engineer:
specializing in the design of buildings with experience in both design and construction

Education:

University of Maryland at College Park
College Park, Maryland
Master of Science, Structural Engineering
August, 1998

Rensselaer Polytechnic Institute
Troy, New York
Bachelor of Science, Civil Engineering
Cum Laude
May, 1996

Experience:

January 2006 to Present
APAC Engineering, Inc. – Silver Spring, Maryland
Principal Engineer
Prepare contract documents and perform field services for residential and commercial projects.

May 1995 to June 1998/April 2000 to December 2005
Structural and Soil Systems, Inc. – Rockville, Maryland
Performed services as a design-build engineer. Designed and oversaw the construction of sheeting, shoring, and underpinning systems. Performed construction management and estimation.

Performed services as a structural engineer. Prepared contract drawings and performed field services for several commercial and residential buildings.

June 1998 to April 2000
Robert Theobald + Associates – Washington, DC
Performed services as a structural engineer. Prepared contract drawings and performed field services for several commercial and residential buildings.

January 1995 to April 1995
New York State Department of Transportation – Albany, NY
Performed services as an engineering intern. Assisted in the preparation of contract documents for highway bridges.

P.E. Registration: Maryland, Virginia, District of Columbia and Pennsylvania

DANIEL S. ROM, P.E.
Vice President
Piedmont Geotechnical, Inc.
Leesburg, Virginia

Education: B.C.E., Georgia Institute of Technology, 1973
M.S.C.E., Georgia Institute of Technology, 1975
Continuing Education

Registration: Professional Engineer in Alabama, Arkansas, **Delaware**, **Maryland**, **New Jersey**, **North Carolina**, **Pennsylvania**, Tennessee, **Virginia**, Vermont, **Washington, DC**, **West Virginia**, US Virgin Islands (active in **bold**)

Professional Affiliations:
Life Member, American Society of Civil Engineers; Chi Epsilon Civil Engineering Honorary Fraternity; International Society for Soil Mechanics and Foundation Engineers; Fairfax County Geotechnical Review Board; Past President of Washington Area Council of Engineering Laboratories (WACEL); American Arbitration Association

Publication:

"SPT? A Better Approach to Site Characterization of Residual Soils Using Other In Situ Tests", Geotechnical Special Publication No. 92, October, 1999, American Society of Civil Engineers.

Experience/Qualifications:

1990-Present:
Vice President of Piedmont Geotechnical, Inc., Leesburg, Virginia

Piedmont Geotechnical, Inc., performs geotechnical and environmental engineering services, foundation monitoring, and forensic engineering services. Mr. Rom is responsible for the general management of company operations and engineering evaluations. Mr. Rom has consulted on thousands of geotechnical engineering projects in Virginia, West Virginia, Maryland, and the District of Columbia, including slope stability projects. He has been an independent geotechnical reviewer for Fairfax County, VA, and Clarke County, VA, for many years, and reviews construction dewatering plans for a major national dewatering contractor. Mr. Rom has conducted slope stability analyses regionally since 1974.

Between 1990 and 2006, Mr. Rom performed dam safety inspections and reviewed nuclear waste reclamation designs nationwide. He also provided geotechnical review for the Yucca Mountain high-level waste repository project in Nevada.

1983-1990:
Manager, Froehling & Robertson, Inc. in Sterling, Virginia.

Mr. Rom was responsible for the direction and overview of all projects and client development, and for the scheduling of engineering work and cost control for the Washington Metropolitan area. He also was responsible for the planning of engineering investigations, preparation of cost and scope proposals, evaluation

of field and laboratory data, report preparation, and senior author review of reports prepared by other engineers. Mr. Rom was the engineer-of-record for major construction projects at Washington National (Reagan) and Dulles International Airports. He negotiated the contract and managed the subsurface exploration for the Dulles Greenway Toll Road. As President of WACEL, he helped revise the Fairfax County Critical Structures Manual. Mr. Rom consulted on projects in West Virginia, Virginia, Maryland, Delaware, and Pennsylvania.

1974-1983:
Staff Geotechnical Engineer; Manager, Geotechnical Services

Mr. Rom was a geotechnical engineer for Law Engineering and ATEC Associates, Inc. With these firms, Mr. Rom performed hundreds of geotechnical studies in the eastern and southeastern United States for civil works including municipal, commercial, industrial, residential, institutional, and transportation. Specialty projects included dams, sinkholes, walls, pavements, landslide evaluation, geophysics, tunnels, underpinning, and deep foundations. Mr. Rom consulted on projects in West Virginia, Virginia, Maryland, Pennsylvania, Kentucky, Alabama, and Tennessee.

SERVICES AVAILABLE

Mr. Rom has expertise in the following areas:

Shallow and deep foundations
Engineering geophysics including seismic and electrical resistivity
Karst region engineering, sinkhole evaluation
Air photo fracture trace analysis
Water well prospecting for high yields
Landslide evaluation
Retaining wall and foundation design
Pavement design
Hydrogeologic surveys
Dam safety inspections
Tailings dams
Mine and mill reclamation
Contaminated soil treatment
Ground improvement
Dewatering for construction
Phase I Environmental Site Assessment
Forensic engineering
Expert legal testimony
Earth construction
Exploration including cone penetration and dilatometer testing
Marine clay residual strength evaluation
Load testing
Settlement evaluation

James W. Witmer, PE, PS, LEED GA
JNM Engineering, LLC
1105 Leafy Hollow Circle, Mount Airy, MD 21771
jim@jnmengineeringllc.com, jnmengineeringllc.com
phone: 301-514-2808

Jim Witmer brings years of professional experience in civil engineering, land surveying, land development, and technical design / review that is perfectly aligned to assist clients through land use challenges in today's aggressive construction environment. Jim specializes in tasks that are critical to the management of construction operations including:

- Technical plan review and preparation – Grading plans, sediment control plans, road design, natural resource plans, stormwater management plans, drainage mitigation plans.
- Land surveying – Boundary surveys, topographic surveys, surveys for short term and long term planning.
- Arboriculture – Tree save plans, tree identification, and tree assessments.
- Environmental Assessments – Wetland delineations, forest conservation, natural resource inventories.
- Hydraulics and Hydrology – Stormwater management, drainage studies, stormdrain design, floodplain studies.

Professional Experience:

Town Engineer, Town of Glen Echo (October 2018 to Present)
Contracted by: **Town of Glen Echo**
Responsibilities: Provide guidance and feedback regarding all civil engineering design and proposals submitted to the town for review, review roadway contracts, review or provide roadway improvement recommendations, provided tree evaluations, and provide construction inspection services when needed.

President, Project Manager (October 2006 to Present)
Business Name: **JNM Engineering, LLC** (Previously EAP Consultants, LLC)

Responsibilities: Civil Engineering for land development, consultant for developers and civil engineering firms, Stormwater Management designs, grading plans, surveying, site plan preparation, permit and plan processing, sediment and erosion control design, natural resources inventories, forest stand delineation, forest conservation plans, tree save plans, wetland assessments, and arborist reports and recommendations.

Engineering Specialist III (October 2006 to Present)
Employed by: **Howard County Department of Planning & Zoning**

Responsibilities: Review and coordinate large scale land development projects with staff, appointed officials, and elected officials. These projects are among the largest in the county and include large residential developments, mixed use developments, large scale commercial projects, transit oriented developments, and capital projects. Project examples include Maple Lawn Farms, Laurel Park Station (redevelopment near existing horse track), Coastal Sunbelt Produce eastern distribution and processing facility, and Johns Hopkins University Applied Physics Laboratory. Specific duties include Stormwater Management, Floodplain Studies, Traffic Studies, Noise Studies, Grading Plans, Water & Sewer Design, Road Design, Record Plats, and Geotechnical Studies. I provide guidance and oversight for numerous professional engineering firms and engineering consultants to ensure their projects are accurate, efficient, and code compliant.

Project Manager (October 2003 to October 2006)
Employed by: **CAS Engineering**

Responsibilities: Residential and commercial land development design, AutoCad (CAD) drafting for plan preparation, stormwater management design, utility design, floodplain analysis and design, topographic / boundary surveys, natural resources inventories, forest stand delineations, wetland delineations, forest conservation, facility inspections, project contracting, feasibility studies, coordinate with various local / state / federal agencies as required for permitting.

Education:

Frostburg State University (Frostburg, Maryland) 1999-2002, B.S. Degree

Certifications:

- Maryland Register Professional Engineer, No. 46791
- Maryland Registered Professional Land Surveyor, No. 21931
- LEED Certified Professional, Green Associate
- International Society of Arboriculture Certified Arborist, No. MA-4587A
- Maryland Department of the Environment Certified Professional for Sediment and Erosion Control
- MD Dept. of Natural Resources Professional Certification - Natural Resource Inventories and Forest Conservation Plans

Steven Winter Associates, Inc.
Improving the Built Environment Since 1972

Peter A. Stratton

Senior VP, Managing Director, Accessibility Services

Peter A. Stratton is a Senior Vice President and Managing Director of Accessibility Services. He developed and continues to manage SWA's accessibility business sector, providing leadership to a team of professionals located in New York, NY, Norwalk, CT, and Washington, DC.

Under Stratton's leadership, the accessibility team provides services to public and private sector clients nationwide that are designed to ensure compliance with the accessible design and construction requirements of federal, state, and local laws and building codes, including plan reviews, field inspections, litigation consulting, technical assistance, training, and Universal Design consulting.

Experience

Stratton maintains a client list that includes the owner of the largest privately owned residential real estate portfolio in New York City, two of the top-ten largest housing authorities in the U.S., and the largest shelter system in the country. Stratton provides litigation consulting to attorneys representing high profile owner/developers cited for large scale and widespread noncompliance with federal, state, and local regulatory requirements for accessible design and construction.

He was invited by the New York City Bar Association to present to its membership on the challenges with achieving compliance with legal requirements for accessible design in existing construction in New York City. Stratton wrote the Designing for Accessibility LEED pilot credit and was instrumental in the development of the ground breaking Inclusive Design pilot credit for the LEED rating system.

Stratton routinely conducts accessibility training for public agencies, industry associations, developers, and architecture firms, among others, and is the author of *A Basic Guide to Fair Housing Accessibility – Everything Architects and Builders Need to Know about the Fair Housing Act Accessibility Guidelines*, published by John Wiley & Sons, Inc. As an adjunct instructor at New York University, New York Institute of Technology, and the Pratt Institute, he developed and taught courses on accessible design and construction to practicing and future industry professionals.

Expertise

Accessibility Consulting

Years of Experience

26

Education

BS Architecture Technology
Magna Cum Laude
New York Institute of Technology
New York, NY

Nu Epsilon Tau – Architecture Honors

Harvard ManageMentor, Leadership Program

Affiliations

- New York City Bar Disability Law Forum; invited panel participant "Accessibility Solutions & Legal Updates in the Areas of Housing, Education, Employment and More," New York, NY
- Member of the Reach Range Task Group of the ICC/ANSI A117.1 Committee convened to develop criteria for the 2014 edition of the ICC/ANSI A117.1 Standard for Accessible and Usable Buildings
- New York State Energy Research and Development Authority (NYSERDA); technical advisor on the NYS Healthy Homes Pilot Credit.
- U.S. Green Building Council (USGBC); technical advisor on the development of the LEED inclusive design Pilot Credit. Served as the subject matter expert to the LEED Pilot Committee.
- U.S. Green Building Council (USGBC); wrote the Designing for Accessibility LEED pilot credit.

Sample of Accessibility Trainings Conducted

- Design DC, Washington, DC
- Gensler Architects, Washington, DC
- SHoP Architects, New York, NY
- BIG, New York, NY
- AIA DC, Washington, DC
- Gables Residential, Alexandria, VA
- Lessard Design, Vienna, VA
- Shalom Baranes, Washington, DC
- Morris Adjimi, New York, NY
- DORMA Design Center, New York, NY
- RELATED Companies, New York, NY
- Cook + Fox, New York, NY
- Med Ed Facilities Conference
- DORMA Design Center, New York, NY
- GE Monogram, New York, NY
- Architecture Boston, Boston, MA
- Brick Institute, ASLA Convention, Boston, MA
- Harkins Builders, Marriottsville, MD, upcoming
- American Society of Landscape Architects, Boston, MA
- New York State Association for Affordable Housing, annual conference
- Hord Coplan Macht, Baltimore, MD
- Foulger Pratt, Rockville, MD
- GE Design Center, New York, NY
- DORMA Design Center, New York, NY
- New York City Housing Development Corporation, New York, NY

Adjunct Instructor 2000-2005

- NYU, New York, NY, 2003 to 2005
- New York Institute of Technology, New York, NY 2005 to 2007
- Pratt Institute, New York, NY, 2003 to 2005

Sample of Publications

- *A Basic Guide to Fair Housing Accessibility. Everything Architects and Builders Need to Know about the Fair Housing Act Accessibility Guidelines*. John Wiley and Sons, New York, NY
- *Accessible Housing by Design* McGraw Hill, New York, NY
- *Fair Housing Act Best Practices Handbook,* Equal Rights Center, Washington, DC
- *Inclusive Design Guidelines, New York City, MOPD* (technical reviewer)

Request for Proposal Summary

Project: Space Planning for Greenbelt Museum Visitor & Education Center and Offices

Quote: $ 43,655 USD

Please submit additional information on the services you will provide as an attachment.

To be considered, please submit bid by: 5:00 p.m. on ~~November 30, 2018~~ MARCH 22, 2019

Friends of the Greenbelt Museum, Inc.

10A Crescent Road

Greenbelt, MD 20770

FIELD CRAFT STUDIO PLLC - registered in Maryland Z19470186

Company Name

HARRY P ROSS JR RA_AIA

Contact Name

Telephone

Signature

MARCH 22, 2019

Date

Your signature will guarantee the proposed production quote will be effective for 120 days.

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
Letter to the NAACP regarding MAGLEV

Suggested Action:
This item was added by Mayor Pro Tem Davis

Attachments:
NAACP-MarylandStateConference-CC-letter.pdf

July 3, 2019

Maryland State Conference
National Association for the Advancement of Colored People
P.O. Box 9702
Arnold, Maryland 21012
Attn: Gerald G. Stansbury

RE: NAACP Maryland State Conference Partnership with Northeast MAGLEV

Dear Mr. Stansbury:

The Greenbelt City Council would like to express its disappointment with the recent news that the National Association for the Advancement of Colored (NAACP) Maryland State Conference is in partnership with the MAGLEV project. To date, the City of Greenbelt is not convinced that the MAGLEV project is necessary and has previously expressed concern on several fronts.

The MAGLEV project's plan is to put stations at the Baltimore and Washington DC destinations without providing any access to a stop within Prince Georges County. The communities and neighborhoods along the proposed routes, including Greenbelt, would endure both short and long term disruption without *any* benefits. Greenbelt is a National Historic Landmark and planned community with parks, open spaces and recreational amenities. The project could have destructive impact on valuable and environmentally sensitive resources. The environmental concerns include noise pollution, destruction of natural habitats, and harmful health impacts.

It is not clear if indeed the MAGLEV will bring jobs to the area. It may create *temporary* highly specialized jobs in engineering and construction that would go to individuals and companies that already have those skills and expertise and which may not necessarily be located within the area. Or, it may facilitate high-speed access to jobs that are high paying and would likely not greatly impact the communities it will go through. Beyond this, Maryland already has a high speed train to Baltimore and on to the north – the Acela line. The Acela line is convenient but also comes at a high price which makes it such that despite assurances, it is likely that the cost for a seat on the MAGLEV will be prohibitive and out of reach for many people.

The City of Greenbelt would like to urge the NAACP Maryland State Conference to reconsider its position in supporting the MAGLEV project. There are other important transportation priorities and needs where public funding would be better spent such as improving existing rail and local transit services. We urge you to abandon this unreasonable project.

Sincerely,

Emmett V. Jordan
Mayor

Judith F. Davis
Council Member

Colin A. Byrd
Council Member

Leta M. Mach
Council Member

Silke I. Pope
Council Member

Edward V.J. Putens
Council Member

Rodney M. Roberts
Council Member

cc: City Council
Senator Ben Cardin
Senator Chris Van Hollen
Congressman Steny Hoyer
Senator Paul Pinsky
Delegate Anne Healey
Delegate Tawanna Gaines
Delegate Alonzo Washington
Council Member Todd Turner
Nicole Ard, City Manager
Terri Hruby, Director of Planning & Community Development

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
Letter of support for UMD Smart Cities grant application

Suggested Action:
A letter of support was requested by the University of Maryland. Mayor Jordan and Mayor Pro Tem Davis requested that the item be placed
on the agenda.

Attachments:
Request for Greenbelt LOS for Demand Response Grant 6.20.19.pdf

Gabriel_SmartCities6June2019.pdf

smartcitiesletter07052019.pdf

Dear Mayor Jordan and Ms. Ard,

I realize I'm sending this just prior to MML, but this is a request that I wanted to get to you as soon as possible. The Smart Cities Initiative held its last Roundtable on June 6th, and this email is a follow-up to the presentation by Dr. Steven Gabriel, regarding a grant proposal for a tool which municipalities may be able to use to reduce greenhouse gas emissions. I hope you've had a chancy to review the minutes and the slides which were emailed to Greenbelt after the meeting. I've attached the slides to Gabriel presentation related to this email's request for your convenience.

Dr. Gabriel (www.stevenagabriel.umd.edu), a Full Professor in the Dept. of Mechanical Engineering, (enme.umd.edu) and Applied Math & Statistics, & Scientific Computation Program (amsc.umd.edu) at the University of Maryland, was the first presenter of the June 6th Roundtable. He's developing a National Science Foundation grant proposal this summer that, if funded, has the potential to bring great collaborative benefit to the City of Greenbelt. We're gathering letters of support from interested communities, and hope that Greenbelt will participate. I'm happy to help draft a letter of support.

The lead would likely be something like:

"In order to explore the possibility of reducing energy costs while reducing dependence on fossil fuels, the City of Greenbelt supports the proposal entitled **"Bringing Local Community Benefits to Prince Georges County, Maryland Through Demand Response Modeling for Electricity Usage in Buildings."**

The objective of the proposed work is to bring value to Prince Georges communities through demand response and load flexibility payments in electricity usage. More specifically, demand response is a methodology that allows a shift in the power load for buildings and other end-users from high-priced hours to lower-priced ones so that the retail electric power providers (REPs), power utility or others can meet the load with less costs. This is now more easily done by internet-based devices (e.g., smart thermostats or other appliances).

Dr. Gabriel and his colleagues have been funded by the State of Maryland and an industrial sponsor (Whisker labs) and have produced optimal scheduling software for residential demand response that can be called in as little as about 15 minutes if high prices are forecast. A similar sort of project is envisioned here with the beneficiaries being Prince Georges municipalities or other communities that could get paid to be flexible with their load.

Based on the University of Maryland's demand response experience, the expectation is to convert that to a similar methodology that would be most beneficial for partnering communities, achieving a more sustainable footprint as well by allowing the utilities to rely less on fossil fuel peaking plants (e.g., natural gas) but rather just shift the load. In essence, these communities will be paid for allowing their load to be flexible and shifted over time. Let me know how you'd like to proceed to develop a Greenbelt letter of support.

Regards,

Andy

Andrew Fellows
College of Information Studies
(Also affiliated with the National Center for Smart Growth and the
Smart Cities Initiative at the University of Maryland (SCI@UMD)
afellows@umd.edu
o) 301-405-2042; c) 240-601-9465

Sustainability and Optimal Demand Response in Power Markets for Master-Metered Buildings

Professor Steven A. Gabriel

Dept. of Mechanical Engineering

Applied Math, Statistics & Scientific Computing Program
University of Maryland

www.stevenagabriel.umd.edu

University of Maryland: Rachel Moglen Andrew Blohm, Pattanun Chanpiwat

Whisker Labs: Michael Siemann, Jaden Crawford, Andrew Blohm

Partially supported by Maryland Industrial Partnership Program (MIPS) from the State of Maryland & Whisker Labs

UNIVERSITY OF MARYLAND

Smart Cities Roundtable

June 6, 2019

Outline

- Sustainability and economic motivation for demand response programs in the power sector
- The demand response residential load-shifting problem for master-metered buildings
- Selected recent results from the retail electric power provider (REP) perspective for the Texas power market
    - 1. Monte Carlo Simulation (uncertain market settlement prices, customer load)
    - 2. Deterministic & stochastic dynamic programming (optimization methodology based on Bellman's Principle of Optimality)
- Summary and next steps for NSF proposal

Sustainability & Renewable Energy

- Sustainability goals for power include intermittent renewable energy such as wind and solar generation

https://www.technologyreview.com/s/612238/wide-scale-us-wind-power-could-cause-significant-warming/

Pros:

- Reduced GHG emissions
- Low operational costs
- Reduced foreign energy dependence
- *Renewable* energy
- Redundancy of distributed power

Cons:

- Intermittence
  - Drives high electricity prices
  - Reduced system reliability
  - Need fossil fuel plants (e.g., gas turbines) to cover peak load as thermal back-up
  - But fossil fuel plants produce carbon emissions and are expensive

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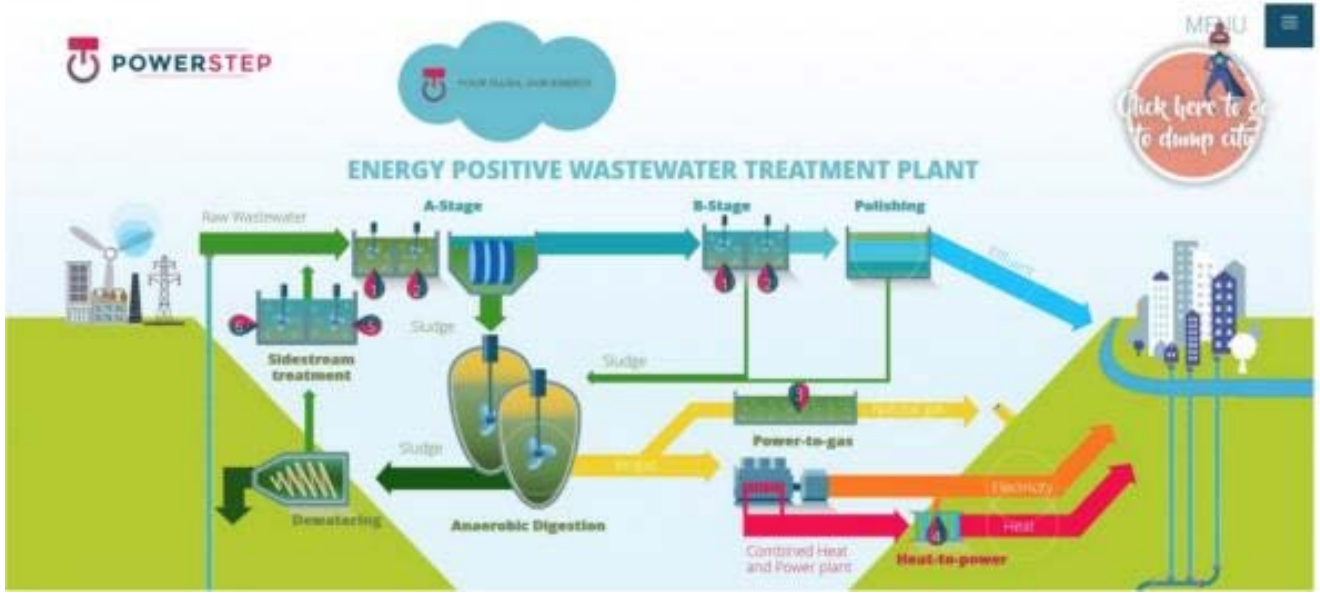
Sustainability & Demand Response: Supply Side

- How can we mitigate intermittency for renewable energy without using fossil fuel back-up?
- Can use the supply or the demand sides of energy (or both)
- **Supply side**
  - One way is to use more biofuels– renewables but these compete with food for land
  - Another way is to use waste and convert to energy (e.g., from wastewater treatment plants)



https://www.smart2zero.com/news/wastewater-power-plant-electrical-energy-sewage-treatment-plant

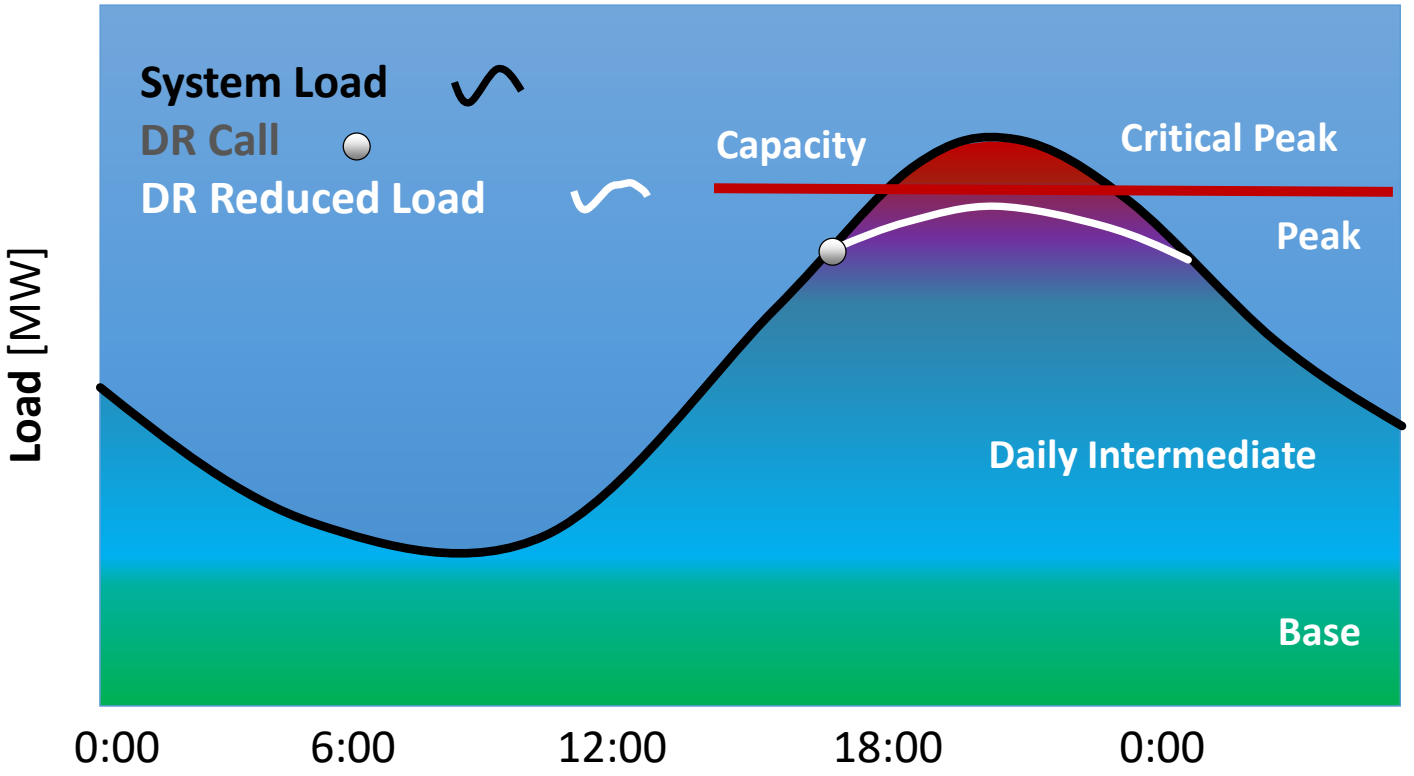
Sustainability & Demand Response: Demand Side

- **Demand side**
  - A perhaps easier way is to shift some of the load over time to avoid expensive and polluting peaking plants– this is demand response (DR)
  - DR in commercial and industrial sectors more common than in the residential one
  - Residential load is harder to predict, dependent on weather, harder to monitor
  - Smart thermostats (smart homes) allow for new residential power load-shifting via internet-based thermostats and adjustments of setpoints (e.g., for A/C) for participating customers
  - DR provides a less-polluting, more cost-effective solution given sustainability goals
  - Expanded capability with Internet-of-Things (IoT) growth, real-time aspects with IoT connection

What is Demand Response (DR)?

Responding to system inability to cover peak demands by reducing typical consumption

- The utility or grid operator (ISO) forecasts or observes a short in capacity to meet the demand.
- Calls on resources to reduce consumption (or provide new capacity)
- System load reduced so less need for peaking power plants (e.g., gas turbines)



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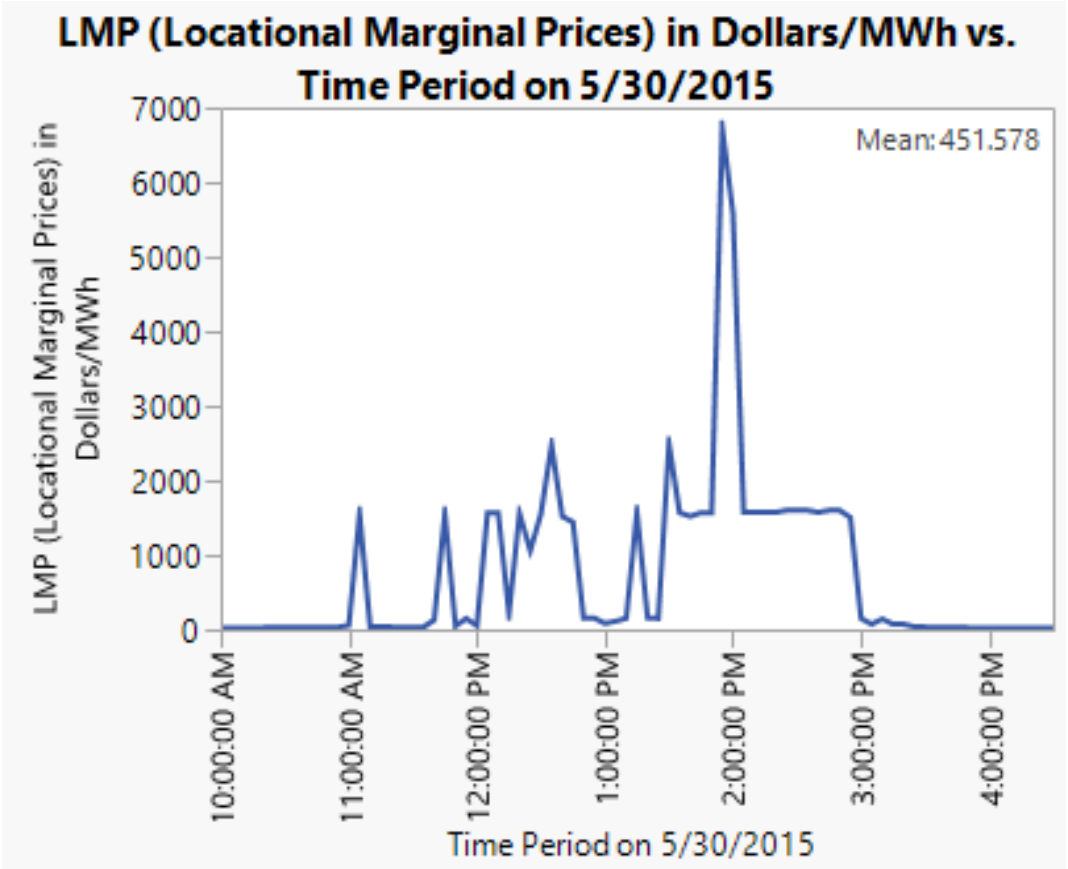
Economic Motivation for DR (Texas)

- Volatile market: power prices can increase by two orders of magnitude in 30 minutes
- Customers pay a constant rate, so the electric providers are fully exposed to these spikes
- Price spikes in 2011 put several retail electric power providers (REPs) out of business
- A few hours can be pivotal from a profit perspective



Houston, TX

Direct Metering vs. Master Metering for Buildings

- **Direct metering**: 1 meter per utility type or residential unit, after reading the meter, the utility charges the resident(s) directly
- **Master metering**: measure the electricity (or natural gas or water) of multiple tenants with the same meter, the owner/landlord gets the bill. Master metering gives wholesale rates which are less costly.
  - The building management assesses costs for each tenant based on sub-meters
  - Utility sub-metering allows the landlord to bill the tenants separately since the metering is done separately

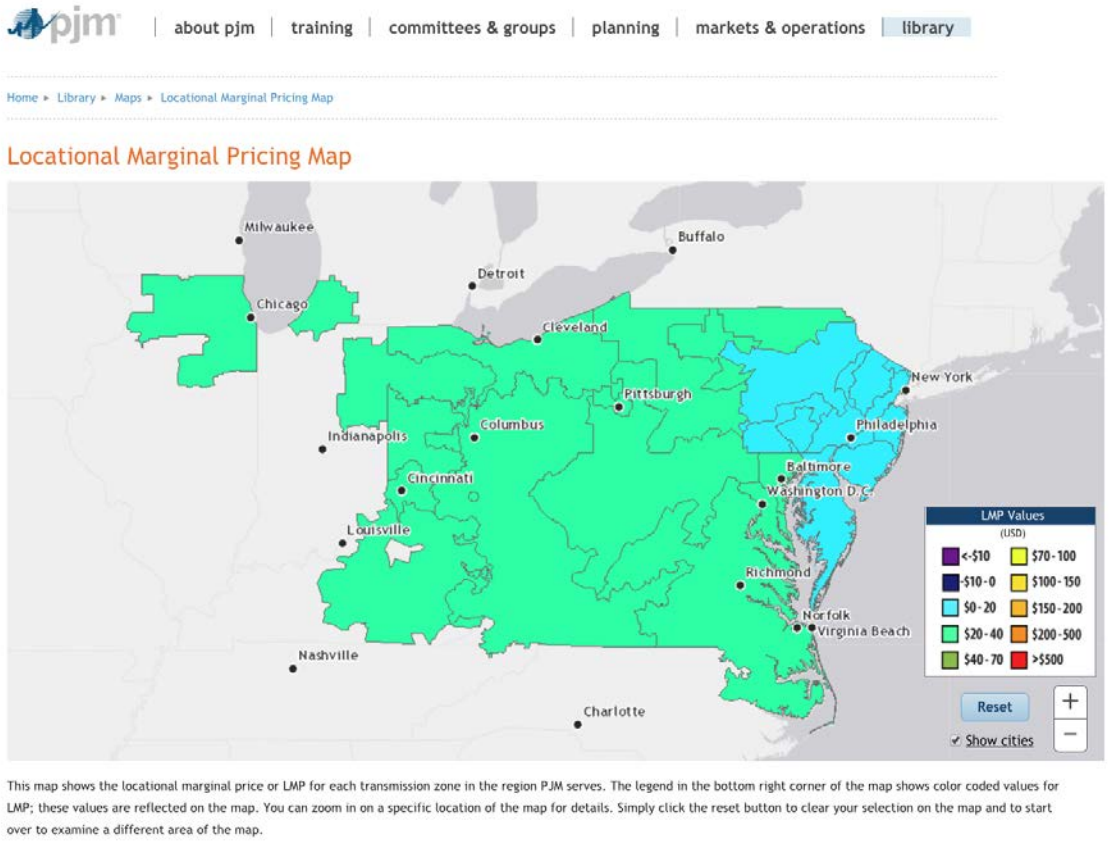
https://greencoast.org/master-metering/

Master Metering for Buildings and Demand Response Flexibility Payments

- Use the day-ahead market prices for power and commit to and deliver a reduction in power consumption and receive a payment.
- Currently University of Maryland does this and in effect gets a "check every month" that they do this for being "flexible" and committing to load reduction (i.e., decrease lighting, raise thermostat setpoints, change air flow for short periods of time)
- Illustrative example: day-ahead price is $40/MWh, master-metered building(s) commit to and deliver on 1 MW of reduction for 1 hour, get $40

Master Metering for Buildings and Demand Response Flexibility Payments

- PJM power market has curtail service providers so that this demand response can be done
- According to Dave Shaughnessy (F &M) at UMD, these are sizeable payments.
- A master-metered building then could use these ”flexibility payments” to defray things like HOA or other building costs.
- Collective benefit, stronger incentive



pjm.com (June 5, 2019)

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Selected Recent Results for Retail Electric Power Providers (REPs) for Texas Market

Monte Carlo Simulation Study (2016)

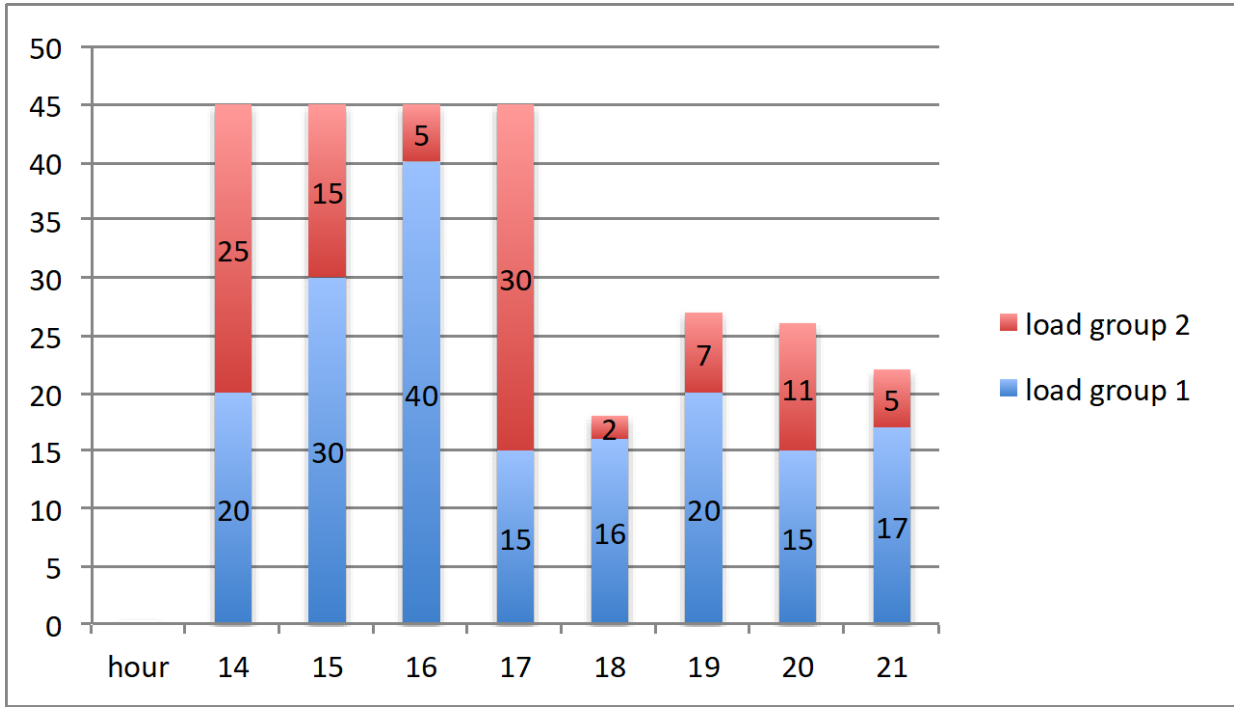
- J.R. Schaperow, S.A. Gabriel, M. Siemann, J. Crawford, 2019. "A Simulation-Based Model for Optimal Demand Response Load Shifting: Case Study for the Texas Power Market," accepted, *Journal of Energy Markets,* March 2019.

Stochastic Optimization Study (Dynamic Programming) (2018)

- R. L. Moglen, P. Chanpiwat, S.A. Gabriel, A. Blohm, 2018. “A Dynamic Programming Approach to Optimal Residential Demand Response Scheduling in Near Real-Time: Application for Electricity Retailers in ERCOT Power Markets,” under review, May 2018.

- A. Blohm, J. Crawford , S.A. Gabriel, 2019. “Demand Response as a Risk-Reduction Measure for Retail Electricity Providers: ERCOT Market Case Study,” under review, March, 2019.

Overview of DR Modeling and Results from 2016 Monte Carlo Simulation Study



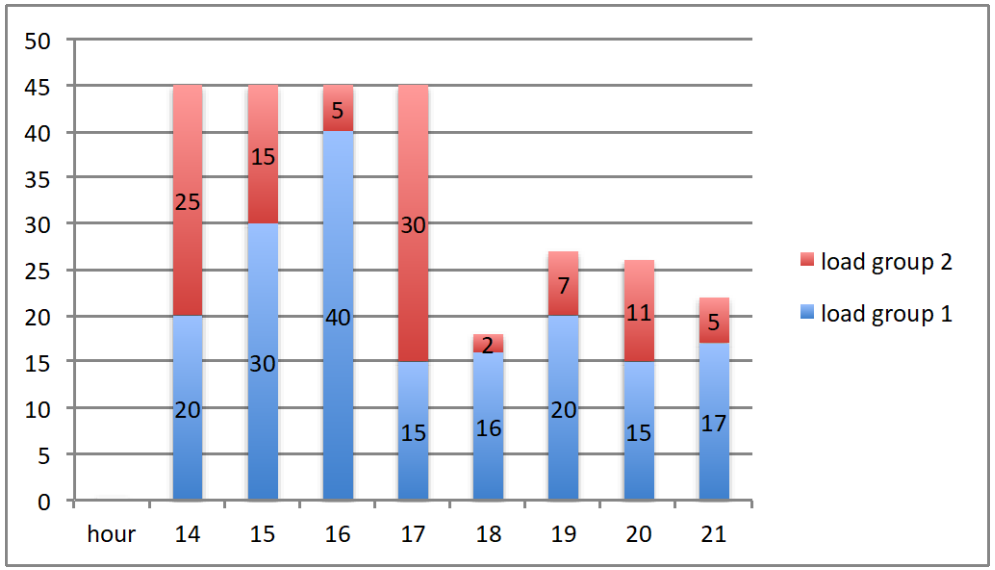
Typical day considered:

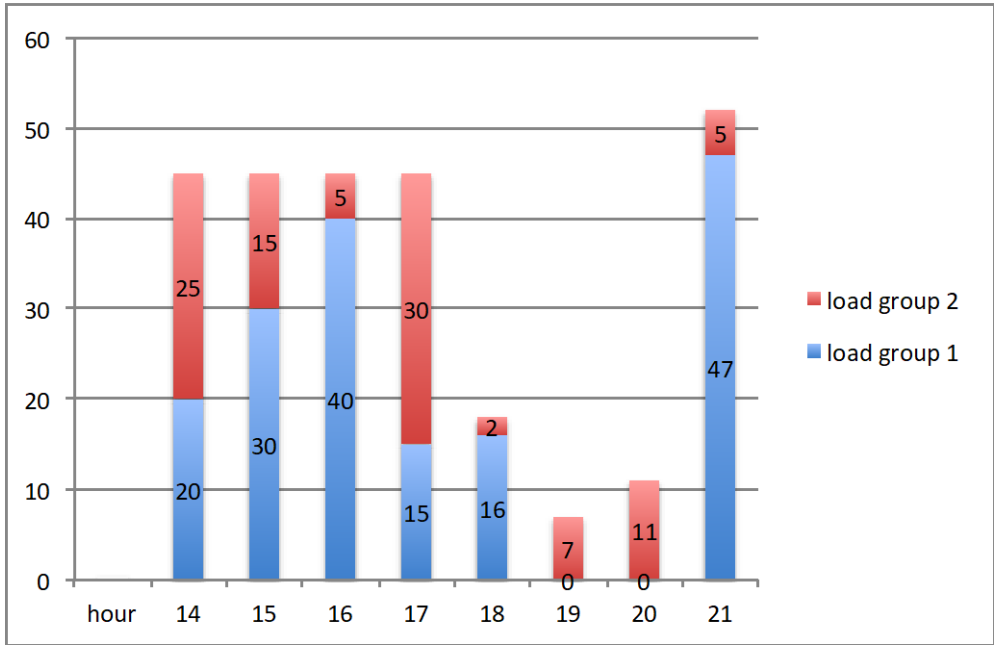
- Hours ending 14-21

- **Central Question:** How much of each customer group's load (2 shown here) should be shifted from a current hour(s) to a contiguous hour? The shifted load will be reduced by a certain factor (thermostat setpoints, etc.)

- **Benefits**: If the load is shifted to a less expensive hour, then retail electric providers (REPs) will be able to procure the needed power for less money. Even though less load, the overall effect may be beneficial in terms of expected profit and financial risk, less need for peaking machines for the energy producer, less negative environmental impacts.

Example of 2-Hour Load Shift





- Original load by group
- Group 1's load in hours ending 19 and 20 is 35 MW

- Group 1's load for hours 19 & 20 shifted to hour 21
- 35 MW reduced to 30 MW

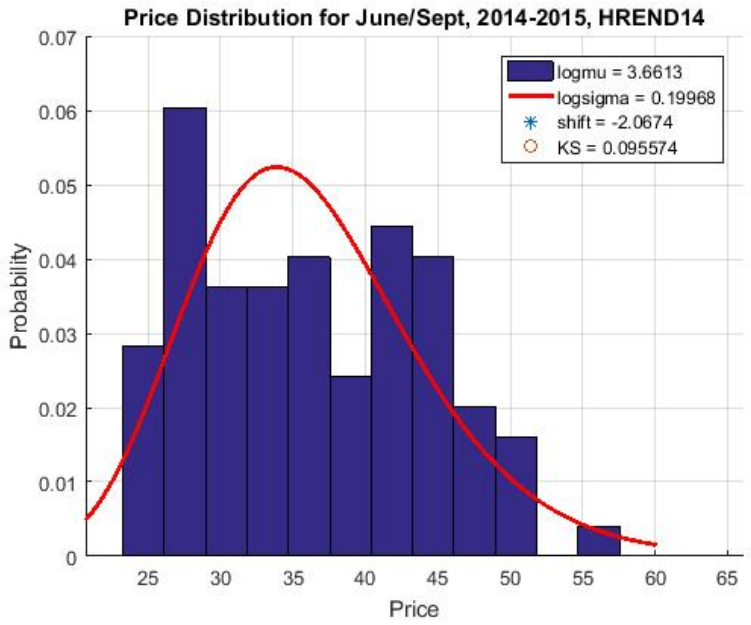
23 Possible Shifts (for each customer class)

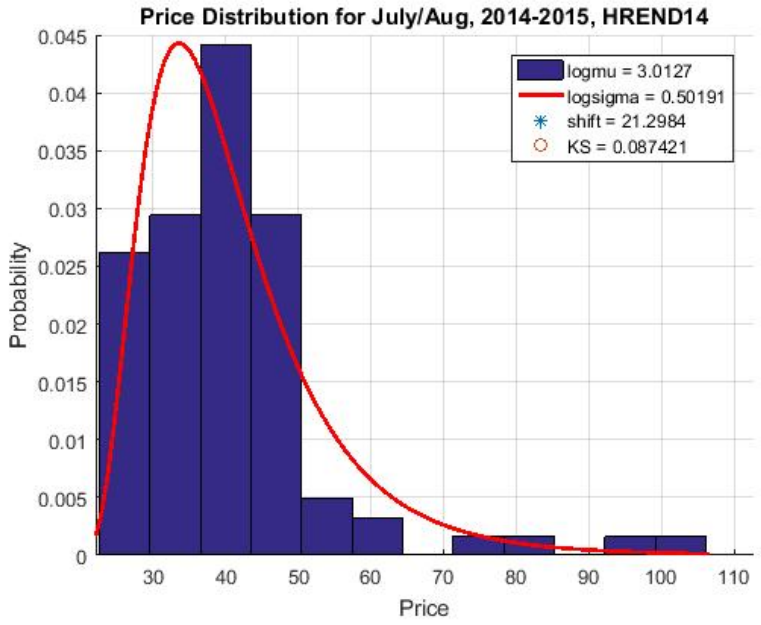
- No shift
  - #1
- 1-hour shifts:
  - #2, 14->15
  - #3, 15->16
  - #4, 16->17
  - #5, 17->18
  - #6, 18->19
  - #7, 19->20
  - #8, 20->21
- 3-hour shifts:

  #15, (14,15,16)->17
  #16, (15,16,17)->18
  #17, (16,17,18)->19
  #18, (17,18,19)->20
  #19, (18,19,20)->21
- 2-hour shifts:
  - #9, (14,15)->16
  - #10, (15,16)->17
  - #11, (16,17)->18
  - #12, (17,18)->19
  - #13, (18,19)->20
  - #14, (19,20)->21
- 4-hour shifts:

  #20, (14,15,16,17)->18
  #21, (15,16,17,18)->19
  #22, (16,17,18,19)->20
  #23, (17,18,19,20)->21

Settlement Price Probability Distributions



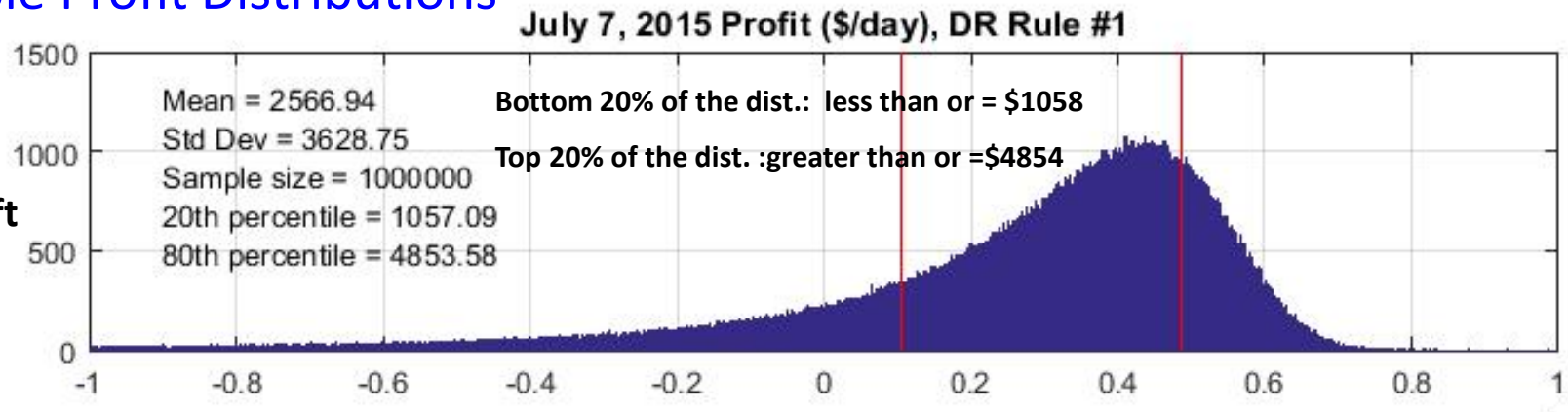


- Lognormal distribution (tail to the right)
- Law of Proportionate Effect
- Relatively good numerical fit

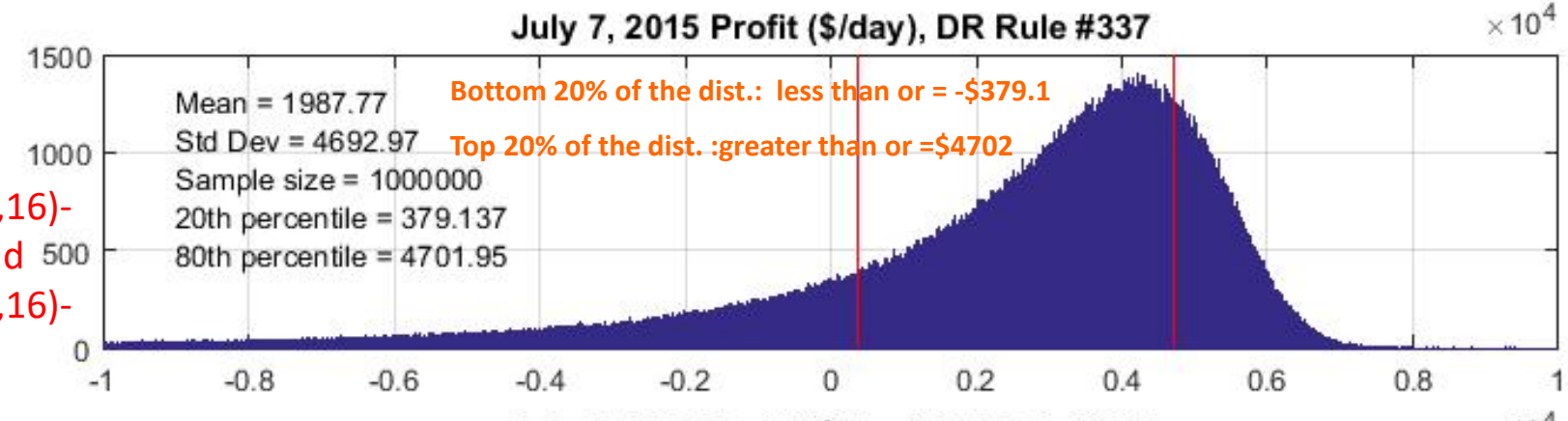
- Different lognormal distributions for Month
  - June/September
  - July, August
  - Year (2014-2015)
  - Hour (14-21)
- Also different distributions for customer load statistically fit

Sample Profit Distributions

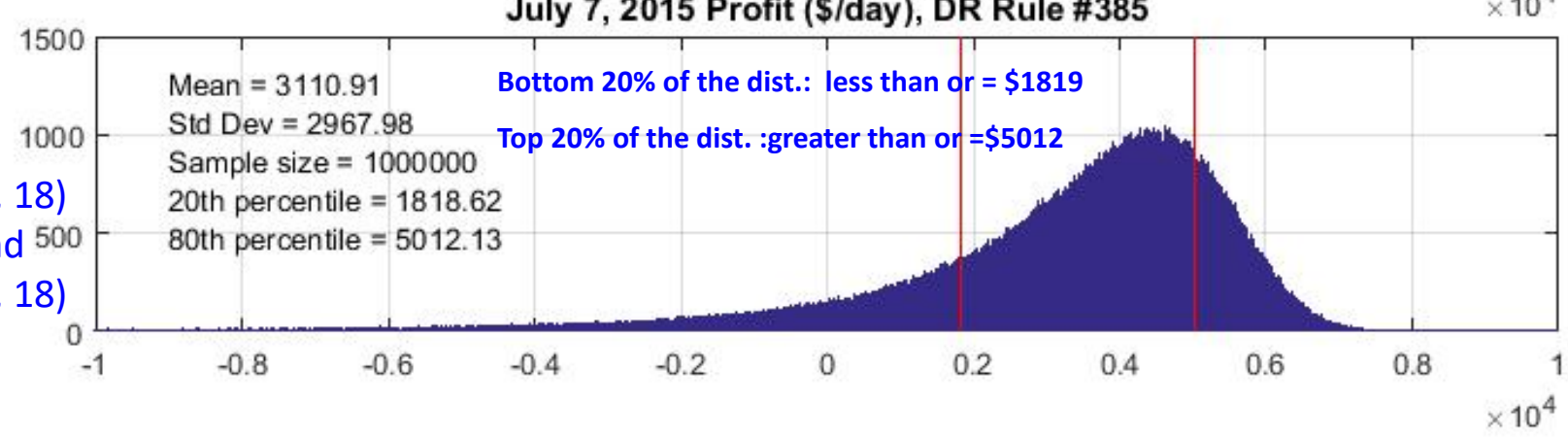
Base Case No shift



Worst #337, (14,15,16)->17 and (14,15,16)->17



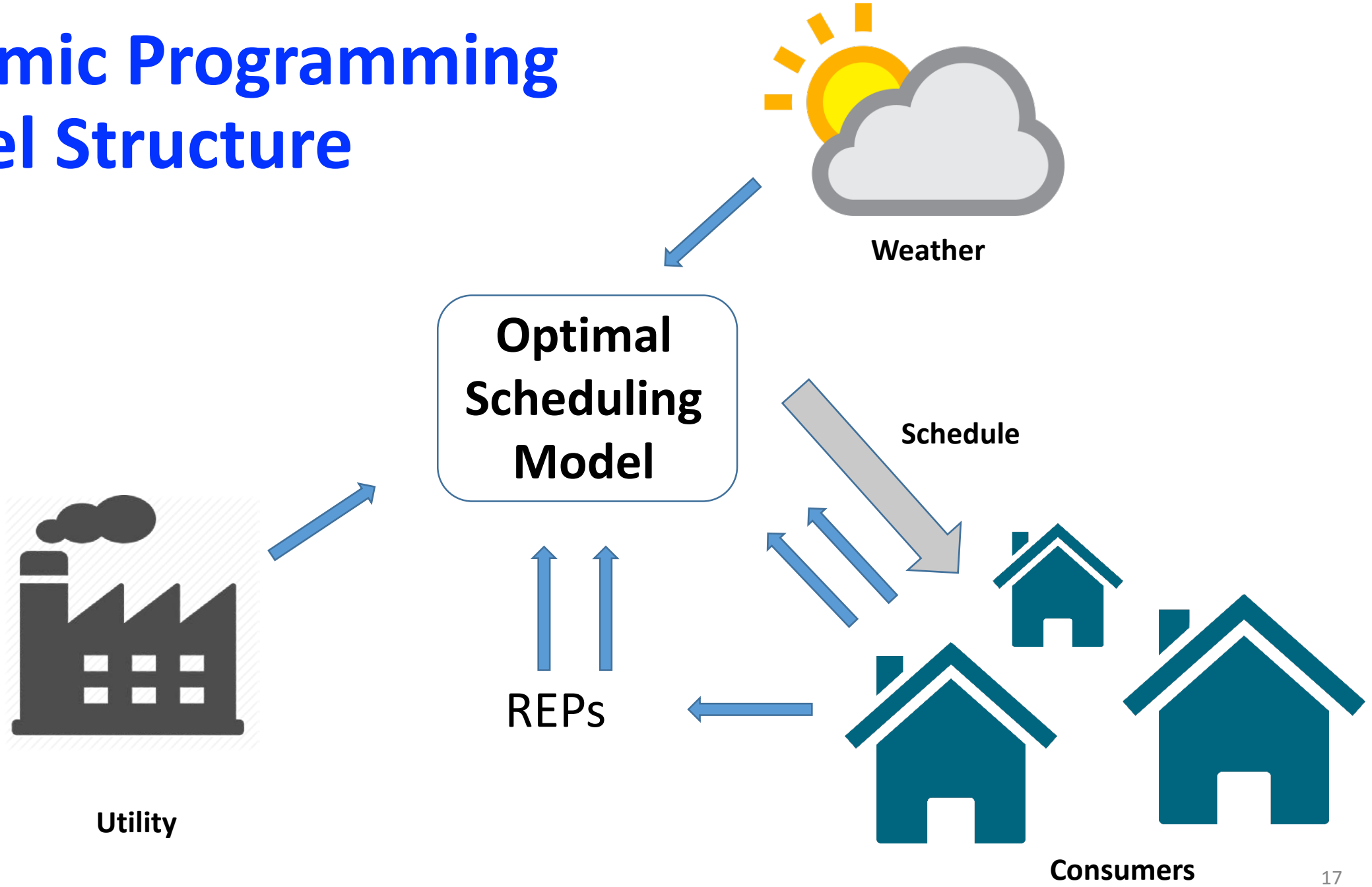
Best #385, (16, 17, 18)->19 and (16, 17, 18)->19



Profit Distribution from Simulation

- Better strategies to shift the load compress this distribution and move it to the right
- Bottom 20% of the distribution shifted (CVaR improvement)
- Less risk for the REP

Dynamic Programming Model Structure



A Scheduling Problem

- Prices are volatile
- Plan optimal DR schedule by shifting load around high prices
- 17 possible schedules for 5 time periods (no DR, 1-hour, 2-hour, 3-hour, 4-hour load shifts)
- **5.9 million schedules for 24 time periods**

Time Period				
1	**2**	**3**	**4**	**5**
0	0	0	0	0
1	0	0	0	0
0	1	0	0	0
0	0	1	0	0
0	0	0	1	0
1	0	1	0	0
1	0	0	1	0
0	1	0	1	0
2	0	0	0	0
2	0	1	0	0
2	0	0	1	0
0	2	0	0	0
0	0	2	0	0
1	0	2	0	0
3	0	0	0	0
0	3	0	0	0
4	0	0	0	0

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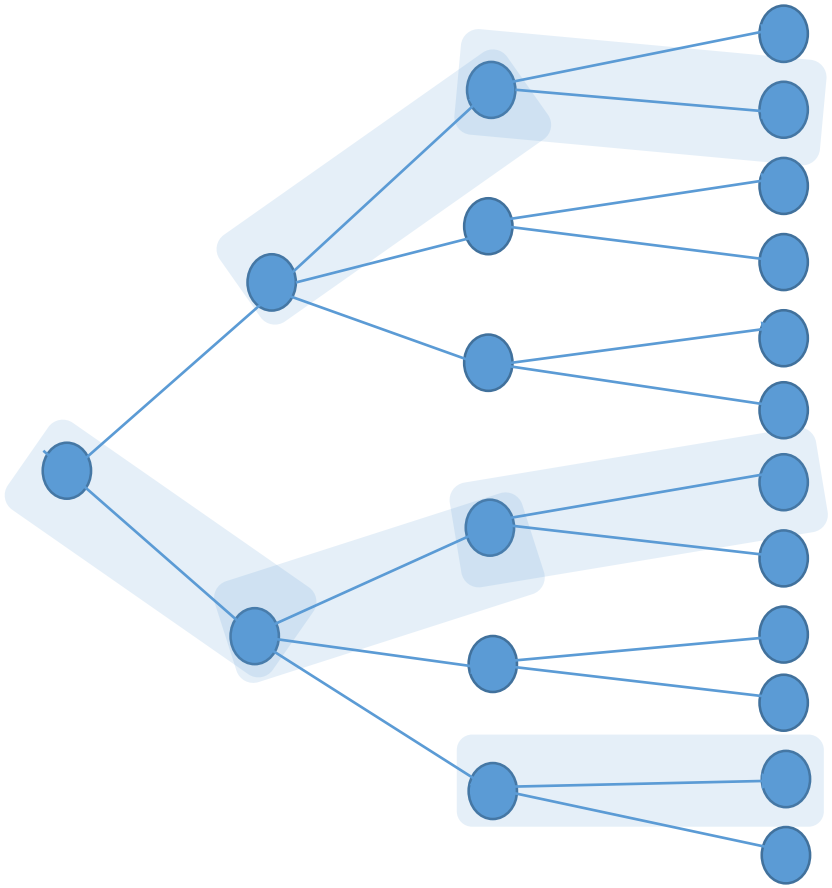
Why Dynamic Programming?



- One gets a “roadmap” of optimal decisions (based on Bellman’s Principle of Optimality)
- Simplification from exponential solving time to linear solving time w.r.t number of stages
- **Stages**: hours or half-hours (time t)
- **States**: S_t which DR events running at time t
- **Actions:** A_t 0, 1, 2,3, 4-hour DR
- **Reward function** (at a given state S_t):
  - Single-objective version: deterministic, maximize REP profit $F_t(A_t)$
  - Bi-objective: stochastic, maximize REP profit $F_t(S_t,A_t)$ $\boldsymbol{\beta}$ is weight, minimize risk, $R_t(S_t,A_t)$ $(1-\boldsymbol{\beta})$ is weight
  - $\boldsymbol{\beta}$ in [0,1]

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Conclusions for Optimization Study

- DP viable for **real-time** DR scheduling
- Savings of **$10-$25/ customer/ year**, or **10%- 25% additional savings possible on top of profit margins of $100/ customer annually**
- Less risky to call 1-hour events in the evening
- Morning events are the riskiest
- Historically:
  - **1-hour events** would have generated the most savings
  - The **shoulder season** had the most potential savings
  - Few events generated the vast majority of potential savings

Summary and Next Steps

- **Summary**
  - Using demand response for master-metered buildings in Maryland counties, cities can have real “flexibility” payments
  - Individually tenants might not see the benefit but collectively these can be sizeable and used to defray building costs and other joint expenses
  - University of Maryland has expertise in DR (via F & M), use this knowledge to build smart communities in Maryland to adopt demand response for collective benefit to master-metered buildings
- **Next Steps/Ongoing Steps**
  - Meet with communities in Maryland to see about adopting such DR programs
  - Meet with University of Maryland F & M personnel to gain more knowledge on the practical aspects of how to optimize DR for master-metered buildings
  - Submit letter of intent to NSF (Smart and Connected Communities Program) by **August 6, 2019**
  - Submit proposal to NSF by **September 6, 2019**

July 11, 2019

National Science Foundation
Smart and Connected Communities Program

Dear Friend,

The Greenbelt City Council respectfully recommends award of Smart and Connected Communities Program grant funds to the University of Maryland and Whisker Laboratory's Sustainability and Optimal Demand Response in Power Markets for Master-Metered Buildings project.

The City of Greenbelt, Maryland is located just a few miles away from campus. Greenbelt partners with the University, the City of College Park, and other public and private partners on potential economic development, technology and sustainability efforts.

The University of Maryland serves an important role as a research and innovation center yet also works in this vital capacity to help public and private sector organizations explore best practices to innovate, improve long-term sustainability, and provide additional research and educational opportunities. The University has most recently helped local governments identify innovative, state of the art techniques to address community and organizational challenges including analysis, planning and project management to meet community needs. The Sustainability and Optimal Demand Response in Power Markets project is an example of such work.

The City of Greenbelt respectfully recommends funding to the University of Maryland, on behalf of our consortium of local public and private partners. The items generated and tested can be used elsewhere in the County or regional.

Sincerely,

Councilmembers electronic signatures

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Shaniya Lashley-Mullen
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
* Reappointment to Advisory Group

Suggested Action:
Reference: Reappointment Survey

Steven Gilbert has indicated his willingness to continue to serve on the Board of Elections (BOE)

Approval of this item on the consent agenda will indicate Council's intent to appoint Mr. Gilbert to a new term on BOE.

Attachments:

Agenda Item No:

City Council Agenda Item Report

Meeting Date: July 8, 2019
Submitted by: Bonita Anderson
Submitting Department: Administration
Item Type: MEETINGS
Agenda Section:

Subject:
Meetings

Suggested Action:

Attachments:
meetings.pdf

Stakeholder Schedule.pdf

CITY OF GREENBELT, MARYLAND
25 Crescent Road, Greenbelt, MD 20770-1891

7/5/2019 4:18 PM

City Council Meetings & Work Sessions
July – August

Regular Meeting	Mon.	07/08	8:00 pm
Work Session – Cherrywood Lane Complete and Green Streets Retrofit Project, CC	Wed.	07/10	8:00 pm
Work Session – Sustainable Land Care Policy, MB	Mon.	07/15	8:00 pm
Work Session – Advisory Board Chairs, CC	Wed.	07/17	8:00 pm
Work Session – Greenbelt Homes, Inc., GHI	Mon.	07/22	8:00 pm
Work Session – Four Cities, Berwyn Heights	Wed.	07/24	7:30 pm
Work Session – Beltway Plaza (stakeholder), MB	Mon.	07/29	8:00 pm
Work Session – Prince George's County Economic Development Corporation, CC	Wed.	07/31	7:30 pm
Work Session – TBD, (MB)	Mon.	08/05	8:00 pm
Work Session – Prince George's County Memorial Library System CEO, (CC)	Wed.	08/07	8:00 pm
Exhibit Reception with Greenbelt Arts Educators, (MB)	Mon.	08/12	7:00 pm
Regular Meeting	Mon.	08/12	8:00 pm
Work Session – TBD, (CC)	Wed.	08/14	8:00 pm
Work Session – TBD, (MB)	Mon.	08/19	8:00 pm
Work Session – TBD, (CC)	Wed.	08/21	8:00 pm
Work Session – Prince George's County Fire Chief/Greenbelt Volunteer Fire Department, (MB)	Mon.	08/26	8:00 pm
Work Session – TBD, (CC)	Wed.	08/28	8:00 pm

- *Councilmembers will present reports on conferences, meetings and events as the last item of business at Monday Work Sessions.*

This schedule is subject to change. For confirmation, call 301-474-8000. Regular and Special meetings and Work Sessions are open to the public. If special accommodations are required for any disabled person, please call 301-474-8000 or 301-474-3870 no later than 10 a.m. on the meeting day. Deaf individuals are advised to use MD RELAY at 711 or e-mail *banderson@greenbeltmd.gov* to reach the City Clerk. Unless otherwise noted, meetings will be held in the Council Room of the Municipal Building (MB) at 25 Crescent Rd. Meetings marked "CC" will be held in the Community Center at 15 Crescent Rd., "Greenbriar" will be held in the Terrace Room at 7600 Hanover Parkway, "SHL" will be held in the Springhill Lake Recreation Center , Green Ridge House will be held at 22 Ridge Road and "GHI" will be held at 1 Hamilton Place.

Bonita Anderson, City Clerk

CITY OF GREENBELT, MARYLAND
25 Crescent Road, Greenbelt, MD 20770-1891

7/5/2019 4:18 PM

Ready to be scheduled:
State's Attorney Braveboy
Roosevelt Center Owner
NASA Goddard
WMATA Metro Station/ MARC Train Service/ MDOT
Verizon
University of Maryland (2019)
GHI – NCOZ/Arts & Entertainment District
Greenbelt Postmaster
Ground Floor East Space (GFES) – (*former Adult Daycare Space*)
Potential Bond Referendum/Capital Financing
CRAB Report – Police Community Relation
TGI Fridays
Museum Plans
Capital Office Park
Cemetery Plans
Greenbelt Watershed Groups
Forest Preserve/Community Gardens
WSSC
Healthy Eating Active Living (HEAL)(08-12-19)
Department of Veteran Affairs

For later scheduling:
Zoning Enforcement
Parkway Apartment Owners/GHI (parking)
Northway Fields Master Plan
City Manager Updates (Jan, Pre-budget; July & Sept/Oct)
Meeting with County on Transportation Plan
Hotels
PRAB – Buddy Attick Park Master Plan
Forest Preserve Health Assessment

Annual															
Advisory Group Chairs	3/16	2/17	7/18												
Franklin Park at Greenbelt Station Mgmt.	8/16	11/17	12/18												
Greenbelt East Advisory Coalition	3/16	7/17	3/19												
Greenbelt Homes, Inc.	6/16	7/17	7/18												
County Executive/ County Council	12/13	9/16	1/19												
Biennial															
Roosevelt Center Merchants	11/16	1/18													
Beltsville Ag. Research Center/	03/14	7/16	8/18												
NPS Greenbelt Park	7/15	1/18													
Beltway Plaza	9/14	3/17													
Greenway Center	7/14	12/16	2/19												
Civic Associations	8/14	2/18													
NASA/GSFC	3/15	3/17													
PG Co. Economic Development Corp.	8/14	4/17													
School Board	2/16	5/17	10/18	3/19											
State Highway Administration	6/15	10/17													
Every Three Years															
Apartments	2/18														
Religious/Spiritual Organizations	3/13	6/15	6/19												
Greenbelt Watershed Groups	8/14	10/16													
Hotels															
University of Maryland	3/13	4/15													
Every Three Years or Major Issue															
Comcast	9/13	11/17													
Verizon															
PEPCO	9/14	1/17													
WSSC	12/12	9/16													
WGL															
Capital Office Park	12/12	1/16													
Other Business Parks:															
Maryland Trade Center															
Golden Triangle															
Hanover Parkway															
Belle Point															
Edmonston Road															
Hanover Parkway															
Roosevelt Center Owner	9/15														

WMATA/PGDPW&T (Semi-Annual)	11/16	9/17	11/18											
Other/As Needed														
M-NCPPC/Planning Board (Major Issue)	6/06	7/14												
Business Coffee (Every Four Months)	10/17	2/18	8/18	11/18	2/19	5/19								
State's Attorney (4 years)	2/11	4/15												

(Rev. June 11, 2019)