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**Council's Legislative Mandate for a Green Stadium should not be an Opportunity Lost**

**Overview of Environmental Shortcomings of SEC Application for Construction of Nationals Ballpark**

**Summary:** Our coalition of concerned citizens and environmental groups urges the Zoning Commission to reject the Sports and Entertainment Commission's (SEC) application, pending the inclusion of additional design features and details that demonstrate how the stadium uses "best practice environmental design," particularly with regard to minimization of impacts on the Anacostia River. The design details included in the application do not describe a ballpark that satisfies the Zoning Commission's regulatory requirements, as approved and incorporated into Section 1606 of the DCMR.

Further, as detailed below, the SEC's application does not fulfill the District Council's legislative mandate for a green stadium, nor is it consistent with the District's draft Comprehensive Plan, the Mayor's vision for the Anacostia River, or the mission of the Anacostia Waterfront Corporation.

**Introduction: A Golden "Green" Opportunity**

Construction of a Nationals' ballpark on the banks of the Anacostia River is a tremendous opportunity for the District of Columbia and for the restoration of the river. The ballpark will draw millions of visitors and will be televised to viewers across America. It will be a highly visible symbol of the District. Done right, this symbol will show a vibrant capital city that is world class -- a great place to live and raise a family, committed to healthy communities and restoring to its people a river that was once a great resource, but is now one of the nation's most polluted rivers.

The too often neglected and abused Anacostia River is making a comeback. Every year two billion gallons of raw sewage mixed with stormwater pour into it, and 70,000 tons of trash, sediment, and toxic pollution are washed by stormwater into the river and downstream to the Potomac River and Chesapeake Bay. Yet, restoration is gaining momentum, and life is returning, perhaps illustrated most dramatically by the return of bald eagles to the river after a 50-year absence.

The Anacostia River's full potential as a great resource for the District is yet to be realized, but that future is in jeopardy if the extensive development planned along the waterfront does not protect the river and set an example for all future developments. A ballpark that is not environmentally protective, particularly of the Anacostia River, will be a lost opportunity for the river, the District, and its people, and it will fail to meet the public policy goals of the District's government.

**ZONING COMMISSION**

CASE No. 04-28

EXHIBIT No. 18

Mayor Williams and the District Council have articulated a promising vision of Anacostia waterfront development that goes hand in hand with the restoration of the river. This vision is also the mission of the Anacostia Waterfront Corporation. Indeed, the river is the centerpiece of waterfront development. As one of the first major public investments in the Anacostia waterfront development, the Nationals ballpark has the potential to set a critical precedent for the billions of dollars of riverfront development that is yet to come.

The Council of the District of Columbia gave great promise to this vision of river restoration coupled with waterfront development when it mandated that the new ballpark “shall be designed and constructed in a manner to promote the minimization of the environmental impact of the facility .water pollution, and stormwater runoff ” Given that the Nationals ballpark is just a pitch away from the Anacostia, implementation of this mandate for a green stadium must focus on minimizing impacts on the Anacostia River. The Zoning Commission’s text amendment (sec. 1606.20) for the ballpark also specifically provides for a ballpark that demonstrates best environmental practices.

A coalition of environmental groups has worked together for more than two years to promote the concept of a green ballpark for the District. This coalition reached out to the District’s Sports and Entertainment Commission (SEC) well before a design team was chosen and has, for the past six months, been meeting with the HOK design team, the SEC, and more recently with representatives of the new owners, to pursue specific, practical recommendations that would help the ballpark achieve the goals of the Council’s legislation and the Zoning Commission’s October 17, 2005 text amendment. These recommendations (described below) are increasingly common elements of green design and have been employed in stadiums elsewhere from San Diego, to London, to Sydney. Elements such as retaining stormwater for use in irrigation or plumbing, as is done in Telstra Stadium in Sydney, Australia, would help reduce water consumption while keeping stormwater out of the Anacostia. Further, building a green ballpark will produce long-term savings for the owners.

The green design elements we are promoting are practical, cost-effective, and necessary to adequately protect the Anacostia. Unfortunately, rather than seizing the opportunity to be a world-class model for excellence in green stadium design, the Nationals ballpark appears to be on track for a future that is second rate. We think the District, its residents, and the Anacostia River deserve better.

### **Why the Zoning Commission Should Reject the SEC’s Current Application:**

On October 17, 2005, the Zoning Commission passed an amendment to the DCMR that provides that in filing for design approval, the applicant shall “**demonstrate that the proposed building or structure, including the siting, architectural design, site plan, landscaping, sidewalk treatment, and operation will...promote the use of best practice environmental design, including minimizing potential impacts on the Anacostia River through stormwater management and recycling practices.**” (Section 1606.20) The Zoning Commission’s scope of review for the SEC’s application is, in part, whether the SEC “has met its burden of demonstrating compliance with . sec. 1606.20 ”

As a matter of law, the SEC’s application does not demonstrate compliance with section 1606.20. We urge the Zoning Commission to reject the application and call for additional information on design features and details that demonstrate the use of “best practice

environmental design,” particularly with regard to minimization of water pollution impacts on the Anacostia River. Below we offer comments on the specifics of the SEC’s application as well as our recommendations for features that need to be included in the design because they are consistent with best practices used at other landmark stadiums.

We agree with the Office of Planning’s May 3 memorandum which states that the SEC’s application does not provide sufficient information on, among other things, “green building design elements.” In particular, the SEC’s filing does little to show that the stadium will go beyond business as usual practices for controlling stormwater, nor does it provide adequate information on achieving the US Green Building Council’s (USGBC) LEED certification or how the plaza and public space design will help reduce runoff from the site.

With respect to the specifics of the application, we believe that the following inadequacies must be addressed before the Zoning Commission approves the application:

- **Best practice environmental design:** The DC SEC’s application (sec F, para 5) states that the Ballpark will “promote” best practice environmental design, as required by section 1606 20 of the DCMR. The application does not demonstrate this. Though the SEC refers to following the regulatory “Best Management Practices” (BMPs) for controlling stormwater as required by the District, these BMPs are business-as-usual minimums that every new building in the District must meet, and they neither demonstrate best environmental design as the Zoning Commission requires, nor do they satisfy Council’s mandate for a green stadium.

Increasingly common best practices that we have recommended include green roofs to retain and filter rainwater, collection and re-use of rainwater on site, planting trees with large infiltration capacity, and other low impact development techniques for the plaza areas. Moreover, the *Anacostia Waterfront Initiative Framework Plan* provides that “new development must retain and filter runoff on-site, or route stormwater to green swales or filtering wetlands.” The application provides no detail on such best practices as required by Section 1606 20(e) of the text amendment to the zoning regulations.

There are examples of stadiums around the world that demonstrate innovative or best practice environmental design—several designed by HOK. The District of Columbia deserves no less. These include stadiums that capture and reuse rainwater (Arsenal Stadium in London and Telstra Stadium in Sydney, and The Kino Sports Complex in Tucson, AZ). Finally, the Municipal Sports Field in Sydney recycles nutrient-rich irrigation water back on the field. The District deserves a ballpark that matches these outstanding examples of environmental design – techniques that will keep stormwater out of the Anacostia.

**LEED certification not adequately addressed.** Beyond stating that the ballpark will follow the US Green Building Council’s Leadership in Energy and Environmental Design (LEED) standards (Section F (5)) “to the extent financially practicable” the application provides no detail on efforts that have been, or will be taken, to secure certification. The USGBC’s LEED certification provides an independent evaluation of environmental achievement in such areas as energy efficiency and water conservation,

and the District Council referenced the USGBC's LEED system in the 2004 Omnibus Ballpark Financing and Revenue Act

Significantly, the National's ballpark would be the first LEED certified stadium. It is important to note, however, that the USGBC's LEED certification program offers a broad checklist of points a development can achieve to become certified. While several of these points address stormwater the ballpark could get certified without going above the basic requirements the District now has in place for stormwater. Our coalition has developed a set of criteria, described in the next section, that should be included in a Ballpark that is "green" when it comes to the Anacostia

- Stormwater and groundwater pollution from the ballpark to the Anacostia River must be eliminated or minimized. Given the stadium's location on the bank of the Anacostia River, protection of the river is paramount. LEED certification can be achieved without a strong emphasis on stormwater control, and it is absolutely critical that the ballpark incorporate design elements that will minimize or eliminate stormwater and groundwater pollution.

Rainwater running off traditional rooftops, parking lots, and other such "impervious" surfaces washes 70,000 tons of harmful pollution into the river annually. This stormwater pollution—which floods the River every time it rains -- continues downstream to the Potomac River and Chesapeake Bay.

In addition, it is known that the groundwater at the site is contaminated with a range of toxic pollutants. Since portions of the site will be below river level, groundwater will continually pour into and need to be pumped out of the stadium complex. Strong steps must be taken to ensure that this toxic water is treated properly and is not pumped into the Anacostia.

The following steps should be taken to protect the Anacostia River

- Vegetated green roofs should be used on flat roof areas (e.g., over the center field restaurant, concessions, restrooms, and retail along First St.) These green roofs should retain most of the stormwater falling on them and thereby help keep stormwater pollution out of the Anacostia River. As with many of the following suggestions, green roofs would offer enormous and visible potential for public education about green building and control of stormwater.
- All pumped groundwater must be treated so that it meets all ambient water quality standards for the river.
- Stadium wash down must be captured and pre-treated before discharge through the sanitary sewer system to Blue Plains.
- There must be no nutrient run-off from the field drainage system entering the Anacostia River. Nutrient run-off is a major threat to the Chesapeake Bay. Excess run-off from field irrigation should be captured and re-used on the field or treated.

- Stormwater falling on the stadium bowl and grounds should be captured and reused for such purposes as field irrigation, for washing down the stadium or sidewalks
- Plaza and landscaping designs do not show use of low impact development (LID) techniques or consistent use of native plants The information in the application (Sec. D(9)) pertaining to exterior landscaping and plaza design fails to demonstrate that the plans will achieve the goal of sec. 1606.20 – specifically minimizing stormwater impacts on the Anacostia River from run-off. The SEC’s plaza design (Section D) describes “hardscape” and “hard paving materials.” These types of surfaces would promote the flow of stormwater and the trash and pollution it picks up directly into the sewer system and the Anacostia. The application also describes “lawn panels” which could contribute oxygen-depleting nutrient runoff

The SEC should provide information on how it will employ low impact development (LID) techniques that allow stormwater to soak into the ground rather than running off and washing pollution into the Anacostia River. LID techniques should be used in these areas to capture and remove contaminants from the stormwater. For example, porous paving materials that allow water infiltration could be used. Tree planters must be designed to maximize water retention and filtration. Rain gardens could be incorporated. A stormwater-fed fountain similar to what is planned for Canal Park a few blocks away could be incorporated. And native grasses and plants could replace lawns.

The South Capitol Street corridor should include a double row of trees as specified as an option in the Anacostia Watershed Initiative standards for a “symbolic corridor” and as recommended in the South Capitol Gateway Study. Double rows of trees also should be used elsewhere on and around the site. Large tree boxes and spaces should be included to maximize the planting of large canopy trees, which provide significantly more shade, and air and water pollution benefits, than small canopy trees.

English oaks are not an appropriate species for the site. American elms are a hearty native tree with historical and environmental value that would be appropriate for the site, as are other tree species from the District’s Great Streets program list. Instead of the 44-foot spacing for trees in the zoning application, the SEC landscape architect should work with the District’s Department of Transportation’s Urban Forestry Administration to reduce the distance between trees, which should be determined based on lighting, utilities, stormwater collection specifications, and tree species.

Trees, green space, green roofs and other low impact development features would not only improve the site, but also serve to connect the site to the river, the river walk trail, Canal Park, the Department of Transportation Plaza, and other area plazas and pedestrian corridors, consistent with the Anacostia Watershed Initiative and the goals of Anacostia Waterfront Corporation, Office of Planning, and other agencies.

In addition, the “Planting Plan” schematic provided in the application includes 9,325 plugs of English Ivy, which is a highly aggressive invasive plant species that is choking off native plants, degrading habitat, and complicating restoration efforts throughout the

Anacostia River watershed It would not only not help the environment, but be quite harmful, the exact opposite of what's needed for a "green" stadium

The SEC should submit a more detailed and revised description of the plaza areas and landscaping that demonstrates how these areas will minimize the flow of stormwater from the ballpark to meet the requirements of sec 1606 20

- Consistency with the District's Comprehensive Plan and the Anacostia Waterfront Initiative Not Shown. The application (Section 2(c)) states that the ballpark is consistent with the Comprehensive Plan's policy goal of ensuring that "new development enhances the physical and environmental quality of the [Anacostia and Potomac] rivers and adjoining areas " However, the application does not ensure that there will not be ongoing stormwater and groundwater pollution from the ballpark site that will further degrade the Anacostia and Potomac Rivers This should be addressed in a supplemental filing If not controlled, stormwater runoff will increase dramatically due to the large footprint of the stadium causing devastating consequences for the Anacostia

Similarly, while the application states that its development will "accelerate implementation of the Anacostia Waterfront Initiative," it does not adequately address how stormwater and groundwater from the ballpark site will be controlled to avoid jeopardizing the AWI's goal of restoring the Anacostia River, which includes retaining stormwater onsite

- Parking facilities must incorporate protection of Anacostia River The application requests relief from underground parking requirements, but it does not address how planned parking facilities would prevent stormwater from aboveground facilities or pumped groundwater from belowground facilities from degrading the Anacostia River However the parking issue is resolved, the design must show how these elements of the ballpark will demonstrate "best environmental design" not just the minimum controls required for any building This must be addressed

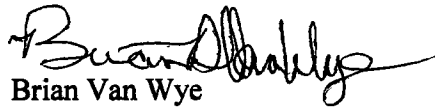
A vibrant waterfront that is protective of the river and that invites year-round use should be a boon to the restoration of the Anacostia River Parking facilities should be carefully and sparingly designed so as not to isolate the stadium area and reduce its year-round use

### **Conclusion: Seize the Opportunity, Meet the Mandate, Fulfill the Requirements**

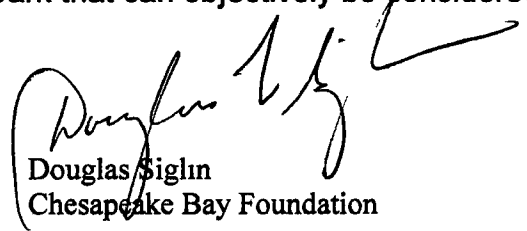
In conclusion, the construction of a green ballpark on the shores of the Anacostia River is a monumental opportunity for the District, its people, and the Anacostia River The ballpark should be world class, befitting its place in the nation's capital. Unfortunately, the SEC application does not meet the requirements laid out in the zoning regulations nor does it rise to the Council's legislated mandate set forth in the 2004 act that authorized the ballpark construction Finally, it is not consistent with other District efforts such as the Anacostia Waterfront Initiative and the Comprehensive Plan

The ballpark as described in the SEC's application does not meet the "best practice environmental design" implemented at stadiums in London, Sydney, San Diego, and elsewhere. Settling for less than "best practice environmental design" would be a disservice to the District and a river that has too often been neglected. It would be a monumental opportunity lost.

Because the SEC's filing doesn't seize this opportunity, meet the requirements of the Zoning regulations, fulfill District Council's mandate, or meet other District policy goals and increasingly common green standards, we urge the Zoning Commission to reject the SEC's application until it ensures that the District will get a ballpark that can objectively be considered a "green stadium."



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