

# Chesapeake Bay Foundation



## Virginia Beach Environmental Center

Proposal & Qualifications for  
Owner's Representative Services

Presented By



Powell Management Associates  
Virginia Beach, Virginia  
Annapolis, Maryland





# Table of Contents

<b>Content</b>	<b>Page Number</b>
<b>Letter of Transmittal</b>	<b>Hard Copy Attached</b>
<b>Table of Contents</b>	<b>2</b>
<b>SECTION 1: Company Background, History &amp; Backlog</b>	<b>3-4</b>
<b>SECTION 2: Organizational Approach</b>	<b>5-8</b>
<b>SECTION 3: Responses to Specific Questions</b>	<b>9-18</b>
<b>A. Architect &amp; General Contractor Selection</b>	<b>9</b>
<b>B. Project Documentation</b>	<b>10</b>
<b>C. Progress Meetings and Meeting Minutes</b>	<b>10</b>
<b>D. Cost Estimating</b>	<b>11</b>
<b>E. Permitting</b>	<b>12</b>
<b>F. Scheduling</b>	<b>12</b>
<b>G. RFI's</b>	<b>13</b>
<b>H. Quality Oversight</b>	<b>13-17</b>
<b>I. Noncompliance Notification</b>	<b>18</b>
<b>J. Day to Day Site Visits</b>	<b>18</b>
<b>K. Punch List - Closeout and Occupancy</b>	<b>19</b>
<b>SECTION 4 Proposed Fee Schedule</b>	<b>20</b>
<b>SECTION 5 Project Leader</b>	<b>21</b>
<b>SECTION 6 Sub Consultants</b>	<b>22</b>
<b>SECTION 7 Client References</b>	<b>23</b>
<b>SECTION 8 Architectural &amp; Construction Firm References</b>	<b>24</b>
<b>SECTION 9 LEED Experience</b>	<b>25-34</b>
<b>SECTION 10 Integrated Design Experience</b>	<b>35-36</b>
<b>SECTION 11 Coastal Hazards</b>	<b>37-38</b>
<b>SECTION 12 Litigations &amp; Arbitration</b>	<b>39</b>
<b>SECTION 13 Conflicts of Interest</b>	<b>40</b>
<b>Appendices</b>	
<b>I. Certificate of Insurance</b>	<b>41-43</b>
<b>II. Article: "Finding middle ground on Indigo Dunes"</b>	
<i>The Virginian-Pilot and The Ledger-Star, Mar 12, 2007</i>	
<i>By Brian V. Camden, Principal Powell Management Associates</i>	<b>44-45</b>





## Section 1: Company Background, History & Backlog

### Corporate Organizational Overview

Firm Name: B & C Management, Inc.  
d/b/a Powell Management Associates

Organization: Corporation

Virginia State Corporation ID Number F155574-9

Federal Tax ID Number 20-0081293

DUNS Number 172386059

Virginia Small Business Enterprise Certification Number 653407

Maryland Small Business Enterprise Certification Number  
SB09-4824

License: Virginia Class A Contractor Number 2705 120350A

Ownership: Bruce A. Bruchey, Principal  
(bbruchey@powellmanage.com)

Brian V. Camden, Principal  
(bcamden@powellmanage.com)

Offices: 607 Lynnhaven Parkway  
Suite 202  
Virginia Beach Virginia 23452  
Voice: 757.486.0200  
Fax: 757.486.5599

1997 Annapolis Exchange Parkway  
Suite 300  
Annapolis, Maryland 21401  
Voice: 410.234.2800

***Powell Management Associates also maintains a presence on the Internet at [www.powellmanage.com](http://www.powellmanage.com)***



POWELL MANAGEMENT ASSOCIATES

•VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND•



## Section 1: Company Background, History & Backlog

### Services

Powell Management Associates is a full service construction program management firm, managing the planning, design, bid and award, construction and post construction phases of our client's projects.

**Powell Management serves solely as  
the advocate for the Owner.**

Services provided by Powell Management Associates include:

- ◆ LEED Project Coordination
- ◆ Owner's Project Representative
- ◆ Construction Program Management
- ◆ Construction Management
- ◆ Project Management
- ◆ Staff Augmentation
- ◆ Construction Quality Management
- ◆ LEED Certification, sustainable design and green building practices.
- ◆ Program/Project Planning, Programming and Budget Confirmation Studies
- ◆ Feasibility Studies
- ◆ Existing Condition Studies
- ◆ Site Evaluations
- ◆ Funding Consultation
- ◆ Program/Project Start-up Implementation
- ◆ Cost Management
- ◆ Phase Estimates
- ◆ Value Engineering and Life Cycle Costing
- ◆ Constructability Reviews
- ◆ Expert Testimony
- ◆ Financial Management
- ◆ Time Management
- ◆ Scheduling
- ◆ Design and Specialist Consultant Selection Assistance
- ◆ Construction Procurement Analysis and Consultation
- ◆ Bidder Interest Campaigns
- ◆ Project/Program Reporting (Management Information System)
- ◆ Claims Consultation
- ◆ Contract Administration
- ◆ Resident Engineering
- ◆ Facility Commissioning and Start-Up
- ◆ Historic Preservation
- ◆ Need Assessments and Site Planning
- ◆ Financial Analysis/Feasibility Studies
- ◆ Public/Private Ventures
- ◆ Community Relations Programs
- ◆ Remedial Investigations/ Feasibility Studies

### Current Volume/Work Load

Approximately 10% of our work force is available for reassignment at this time. This excess will enable Powell Management Associates to assure an ample supply of staff for the duration of this project. Furthermore, our two consultant firms have many more resources available to support any tasks assigned under the Owner's Representative contract.

We are confident that Powell Management Associates will have more than sufficient staff capacity to accomplish all assigned tasks serving as the Owner's Representative for the Chesapeake Bay Foundation.

### Historical Significance of Pleasure House Point...

*"...The settlers in Lynnhaven Parish suffered what might have befallen the original Jamestown settlers if they had not been ordered by King James I to locate up the James River, safe from possible attacks by pirate, French, Spanish and Dutch ships. The pirate Capt. Kidd had his rendezvous in Pleasure House Creek (now Lake Joyce) which was then on the Lynnhaven River. The English pirate Edward Teach (1680-1718), better known as Blackbeard, buried some of his treasure in the sands of a hill near Cape Henry. In 1669, the ship Maryland Merchant, while anchored near the Lynnhaven River was seized and plundered by an unknown vessel carrying thirty guns and a large crew. Lookouts were established along the shore for all suspicious vessels, and later all ships coming to Virginia were provided with cannon and men trained to shoot them. In 1684 the English Government furnished a Ketch for the protection of the Virginia coast, but in spite of the Governor's instruction to the naval officers to capture Capt. Kidd, he openly walked the streets of Norfolk."*

**--Old Donation Episcopal Church  
Witchduck Road, Virginia Beach**



POWELL MANAGEMENT ASSOCIATES

● VIRGINIA BEACH, VIRGINIA ● ANNAPOLIS, MARYLAND ●



## Section 2: Organizational Approach

**When selecting Powell Management Associates the Chesapeake Bay Foundation will have an Owners Representative that will provide:**

- ♦ An intimate knowledge of the project site and surrounding areas
- ♦ **A Principal that actually helped clean the site during a "Clean the Bay Day"**
- ♦ **Civic League and Shore Drive Coalition, familiarity and coordination.**
- ♦ Extensive local contacts with Regulatory Agencies and City officials
- ♦ A Principal in Charge living less than one mile from the project site
- ♦ **Offices in both Virginia Beach and Annapolis to coordinate face-to-face with Foundation staff at the Merrill Center and have "boots-on-the ground" at the project site**
- ♦ Assistance with legal issues involving the land transfer
- ♦ Extensive long-standing contacts within the local construction industry
- ♦ **Expert LEED consultants and expert waterfront engineers**
- ♦ Innovative site specific green building practices
- ♦ **A clear management plan for the project**
- ♦ Better control of budget, schedule and construction performance
- ♦ Better contract documents with designers and contractors
- ♦ Better management and communication of information between the Chesapeake Bay Foundation and interest groups.
- ♦ Better protection for the Foundation in dealing with local regulatory agencies and building officials
- ♦ Better mitigation of change orders and claims
- ♦ **A management team to...**
  - ♦ **Professionally administer the CBF's Goals**
  - ♦ **Explore new venues to achieve the CBF's goals**
  - ♦ **Protect the CBF's interests exclusively**

**Powell Management works as both the Owner's advocate and the Owner's staff. The proposed team is extremely well-qualified in terms of both expertise and experience to meet the needs of the Chesapeake Bay Foundation for the Virginia Beach Environmental Center in providing superior services as the Owner's Representative. We have left no issue unaddressed or problem unresolved.**

**All members of our team have excellent credentials in providing Owner's Representative services with experience on over \$200 million worth of public and private facilities in the Hampton Roads Region.**

**One of the key elements of Powell Management's approach to providing high-quality services is the direct project commitment and interaction of the firm's two Principals with our clients and their projects. For the Chesapeake Bay Foundation's Virginia Beach Environmental Center, both Mr. Camden and Mr. Bruchey will serve in direct, active capacities over the course of the entire project.**

**Powell Management's offices in Annapolis and Virginia Beach will provide the Chesapeake Bay Foundation immediate service both on the project site and at the headquarters of the Chesapeake Bay Foundation. We will be able to provide to the CBF unparalleled service as your Project Representative!**





## Section 2: Organizational Approach

### Roles & Responsibilities

**Principal/Project Director: Bruce A. Bruchey**

As Principal operating out of our Annapolis office, Mr. Bruchey will be Powell Management Associates' primary contact with the Chesapeake Bay Foundation on contractual matters. He will be responsible for the overall delivery of the Owner's Representative services for the new Virginia Beach Environmental Center.

Additionally, Mr. Bruchey will be intensely involved with the project planning and pre-construction activities, especially the development of the overall Program Management Plan, all elements related to overall budget and schedule control and in the development of the Contract Documents to be used on the project.

During the Design Phase and Bid and Award Phases, Mr. Bruchey will provide hands-on management of the project. Mr. Bruchey will serve in a continuing capacity to assure your satisfaction in the firms' overall performance in the delivery of services and resources.

**Principal: Brian V. Camden**

As Principal operating out of our Virginia Beach office, Mr. Camden will lead the Powell team during the Bid and Award and Construction Phases.

He will use his three decades of local construction experience to identify qualified bidders, ensure reliable construction phasing and methodology, and review contractor and subcontractor qualifications.

Mr. Camden will oversee the construction process, focusing on guarding the Chesapeake Bay Foundations interests while furthering the project's goals in terms of quality, time LEED and stellar environmental achievements during the construction progress.

His efforts will include interfacing with the Chesapeake Bay Foundation's Norfolk-based team, the design team and using his existing relationships with State and City building officials and approving agencies.

Mr. Camden will administer the services of other Powell Management Associates support personnel throughout the construction phase and move-in as required.

In addition to Mr. Camden's professional experience, he is a member of the Civic League, the Shore Drive Coalition, has volunteered of his own time in previous "Chesapeake Bay Days" to clean this very site, and has been a vocal advocate. Refer to the article written by Mr. Camden included as Appendix II of this proposal.



**Google Earth image of Pleasure House Point.  
Future Home of the Chesapeake Bay Foundation's  
Virginia Beach Environmental Center**



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 2: Organizational Approach

### Project/Construction Manager: Joe Gilbert

Mr. Gilbert, a licensed environmental engineer and mechanical engineer, is employed in our Virginia Beach office and his role will be to chair progress meetings, establish and maintain project budgets and schedules, direct designers, contractors, and consultants, ensure quality expectations are met, strictly enforce LEED procedures and prepare project status reports. During the Construction Phase, Mr. Gilbert will assume responsibility for the day-to-day management of the project. He will be on-site in Virginia Beach where he will coordinate activities daily and carry out the directives of the CBF. He will establish and maintain project systems for communicating among the architects, consultants, contractors, subcontractors, regulatory agencies and vendors, and be the initial point on resolving issues in the field. Mr. Gilbert has a BS in Mechanical Engineering and will manage, inspect, coordinate and report on the construction operations, LEED issues, sustainable design and green building practices. His principle focus will be ensuring that construction remains within schedule, on budget, constantly meets LEED Platinum requirements and is in accordance with the Contract Documents. He will be responsible for managing and sequencing the work of the various contractors, for overall coordination of activities on-site, implementing and enforcing the CBF's directives and to ensure that the construction contractors maintain the highest LEED quality levels..

***All members of our team have excellent credentials in providing Owner's Representative services with experience on over \$200 million worth of educational and institutional facilities in the Hampton Roads Region.***

### Technical Support Team (Cost Analysis, Value Engineering, Management Information, Scheduling, & Constructability): H.V. Ewell, III

Headed by our Senior Project Manager H.V. Ewell, The Technical Support Team for costing and constructability will be responsible for developing project budget and construction cost information for all components of the project, maintaining current cost information, incorporating LEED Platinum components, and developing sustainable design and construction building costs and ROI's. He will provide budgeting, conceptual estimating, quality survey pricing, value analysis, and life-cycle cost analysis during the Design Phase and cost monitoring, bid evaluation, and change order and claims proposal review during construction.

Our in-house staff will have direct responsibility for the development and implementation of a system designed to provide the Chesapeake Bay Foundation with accurate and timely information regarding project progress, budget, LEED compliance and schedule status, constraint identification and management, and change tracking.

The Technical Support Team will provide design and construction document review for constructability, LEED Platinum assurances, clarity and completion, sustainable design technology innovations and participate in other design related meetings. Powell Management Associates staff will perform in-process design and constructability reviews on the project as required. Such reviews on the developing design will focus on the completeness of the drawings and specifications, coordination between functional and program requirements, LEED and environmental achievements and possible conflicts in architectural, structural, mechanical and electrical systems and components, and on document clarity, with respect to the construction contractor's ability to fabricate, install, erect, and assemble the building efficiently while maintaining strict LEED compliance.

### Administrative Support

Powell Management Associates will provide, as required, on-site administrative personnel (secretaries, clerks, and data processing personnel) to support the Construction Program Management Team.





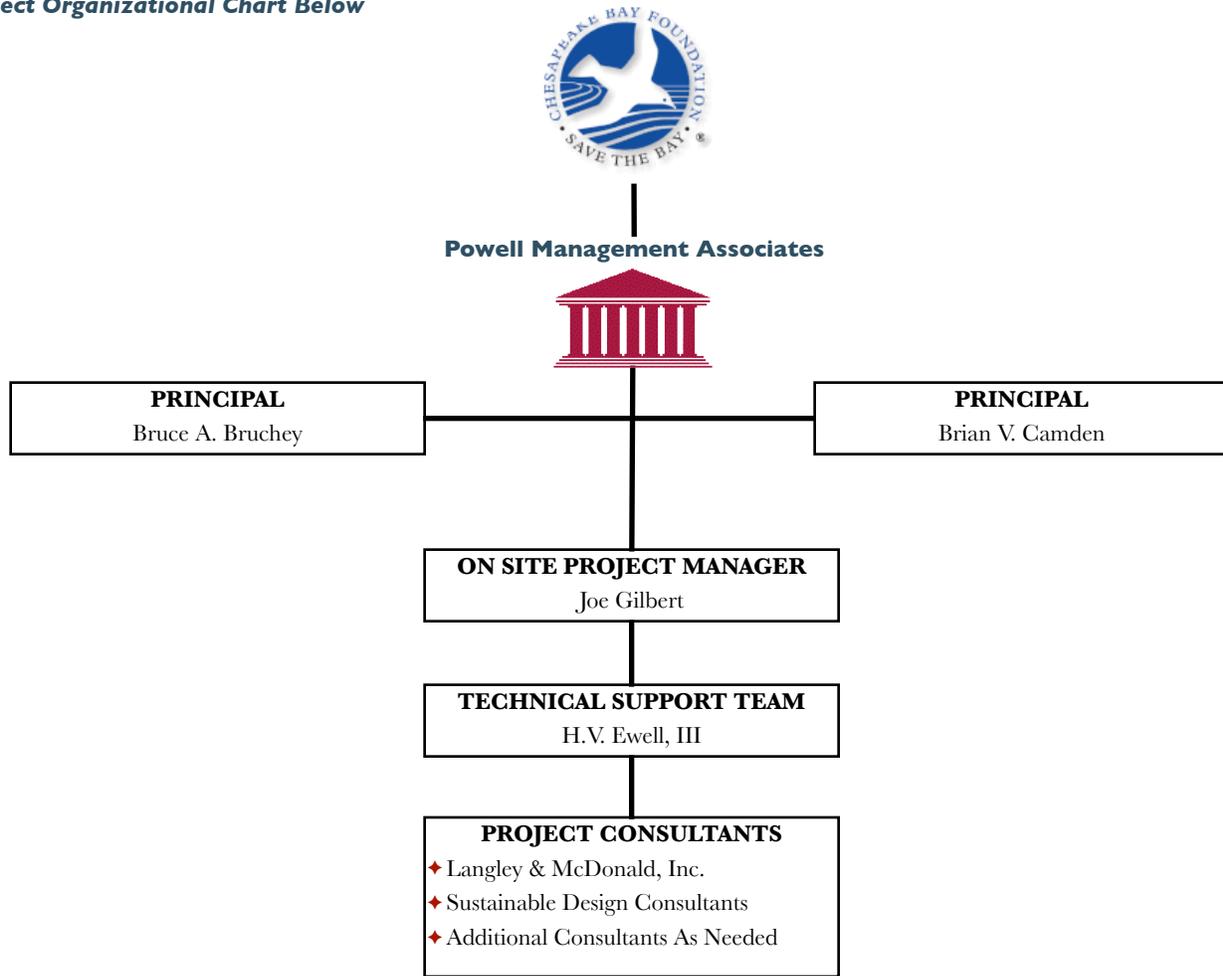
## Section 2: Organizational Approach

### Additional Support and Consultants

Powell Management Associates can provide additional project management from highly qualified managers, all of whom have vast experience in the management of educational and institutional facilities. These resources would be brought to bear on the project at anytime circumstances require.

Additionally, due to the unique nature of the New Virginia Beach Environmental Center, the Powell Management Team will include Langley & McDonald, Civil & Waterfront Engineers for site, waterfront and environmental hazards issues and Sustainable Design Consultants on LEED Certification compliance, green building technology and sustainable design.

### Project Organizational Chart Below



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 3: Responses to Specific Questions

### A. Architect & General Contractor Selection

#### Architect Selection

As the Owner's Representative for the Chesapeake Bay Foundation, Powell Management Associates will recommend procedures to assist the Foundation in reviewing the already submitted responses from Architectural and Engineering firms. We will develop evaluation criteria specifically based on the design goals prescribed by the CBF, focusing on the competing design firm's past LEED performance, the inherent specifics of the site and the necessary capabilities of the successful firm to achieve the CBF's goals.

Based on the findings of the selection evaluations and in conjunction with the Chesapeake Bay Foundation, Powell Management Associates will compile a "Short List" scoring criteria to assist the Foundation staff in interviewing prospective architects. We will notify the firms selected for interviews and transmit to them a list of quality points and scoring criteria to be used by the CBF in selecting the successful firm. We will coordinate, schedule and manage the interview process, suggest questions for the CBF staff to present to the firms, collect and compile the questionnaires after each interview and present the results with our recommendation. Following the Foundation's selection we will assist in negotiations for and preparation of the Owner/Architect Agreement which will include making the Project Construction Budget, the Facility Program and the Management Plan, a part of the Owner/Architect Agreement.

Powell Management Associates will then arrange and conduct a detailed project orientation for the Architect and his consultants. Thereafter, Powell Management Associates will serve as CBF's representative to the Architect, coordinating such design reviews and presentations as may be required and as may be desired by the Foundation.

#### Contractor Selection

While the RFP did not specifically the CBF's preferred process for acquiring construction services, it is our recommendation that due to the uniqueness and high visibility of this project that Contractor Qualification criteria be established and only those qualified construction firms that meet the highest standard of quality criteria be allowed to submit bids. Moreover, the construction contracting strategy developed as part of the Program Management Plan may be segmented into several specialized Bid Packages to allow the CBF multiple options for early site preparation, utility inclusion, waterfront specialties, alternative energy options, environmental landscaping, advanced telecommunications/data technology, general building, security, artistic/educational displays and interactions, FF&E and others.

Powell Management Associates, develops contract agreements and, more importantly, the General Conditions of the contracts, which contain tried and proven language giving owners greater flexibility and control over such items as change order costs and time extensions and LEED compliance than "typical" standard form contract documents.

Integral to Powell Management Associates' role in construction contracting is our management of the bid and award phase(s). By establishing bid procedures, addendum control and documentation, private bid opening, bid analysis and making recommendations for contract award(s).



**Rouse Tower, Newport News, Virginia**  
**Architect: Caro, Monroe, Liang Architects**



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 3: Responses to Specific Questions

### B. Project Documentation

**As the Owner's Representative, Project Documentation is one of the most critical roles Powell Management will play for the Chesapeake Bay Foundation.**

All phases of the project will be documented thoroughly, including:

- ◆ LEED Project Score Card
- ◆ Pre-Construction
- ◆ Master Planning / Programming
- ◆ Budgets
- ◆ A/E Selection
- ◆ Design Reviews - Value Engineering
- ◆ Constructability
- ◆ Operability
- ◆ Schedule
- ◆ Bid Evaluation / Negotiation
- ◆ Commissioning Plan Construction Observation and Inspection
- ◆ QA/QC Systems
- ◆ Contract Administration
- ◆ Project Controls
- ◆ Submittal Review
- ◆ Change Order Negotiations
- ◆ As-Built Records
- ◆ Cost Management
- ◆ Closeout
- ◆ Substantial and Final Completion
- ◆ Acceptance / Turnover
- ◆ Owner Move-in
- ◆ Training of Owner Personnel
- ◆ As-Built Drawings
- ◆ Operations and Maintenance Manuals
- ◆ Guaranties / Warrantees
- ◆ Disputes Resolution
- ◆ Release / Final Payment

### C. Progress Meetings & Meeting Minutes

During the Design Phase of the project, Powell Management Associates, the Chesapeake Bay Foundation's representative(s), the architect, engineers, and other interested parties (including local neighborhood associations, if desired by the CBF) will participate in progress meetings regarding the design of the project and how the design meets the overall goals of the Chesapeake Bay Foundation.

During Pre-construction/bidding phase on site pre-construction meetings will be attended by both the PMA Project Manager and Principal. Powell Management Associates' role will be to clearly communicate the goals and expectations of the Chesapeake Bay Foundation for the construction of the Virginia Beach Environmental Center. The environmental factors will be clearly communicated and the all perspective bidders will be required to visit the site and present preliminary questions. It will be the responsibility of the project architect to respond to questions in a timely manner during the bidding phase. Furthermore, it will be communicated to perspective General Contractors that it is the responsibility of the Contractor to have a thorough and intimate understanding of the contract documents and the Chesapeake Bay Foundation for the Virginia Beach Environmental Center.

Due to the environmental and historical significance of this project Powell Management Associates is prepared to coordinate efforts with the Chesapeake Bay Foundation to keep the local community and the extended communities of the CBF informed of the projects progress.



**Suffolk Center for Cultural Arts  
Suffolk, Virginia  
Architect: CMSS Architects  
Contractor: VIRTEXCO Corporation**





## Section 3: Responses to Specific Questions

### D. Cost Estimating

Powell Management Associates' Project Control System is a tried-and-proven methodology for achieving schedule, budget, and quality objectives of a building program. The basic service elements outlined below comprise the primary activities of our highly successful management process. Our proven methods for cost, time, and quality control are employed throughout all phases of a project to provide total comprehensive management of the construction program.

During the cost estimating process design and building components will be evaluated for their long term cost savings due to LEED certification.

### Project Budgeting

Powell Management Associates typically prepares a preliminary budget for the project, including a budget for construction, for the Owner's approval. Should the calculated preliminary budget be in excess of the Owner's available funds, we consult and advise the Owner on reductions to ensure that the final approved program and budget are compatible. Specifically to ensure program and budget compatibility, on the Virginia Beach Environmental Center project, we will:

- ◆ Weigh LEED incorporation versus ROI
- ◆ Develop/analyze specific facility requirements and user needs
- ◆ Establish clear, comprehensive design criteria
- ◆ Identify cost reduction opportunities
- ◆ Translate project budget into cost model of building components
- ◆ Establish total project cost budget to include appropriate contingencies
- ◆ Conduct cost benefit studies, value analysis, and trade-off evaluations



**Riverdale Elementary School**  
**Courtland, Virginia**  
**Architect: Moseley Architects**  
**Contractor: Blue Ridge General, Inc.**

### Design Phase Cost Control

Powell Management Associates implements cost control procedures to assure that the facility design is developed within established budgetary parameters for the various components. The Cost Model of the project budget is used to monitor the cost impact of design decisions, with formal phase estimates performed to report cost status. We provide continuous monitoring of design progression to identify cost reduction opportunity and provide construction cost input to the designers. We perform trade-off studies, cost analysis and value engineering to assure the best value attainable under the budget.

Specifically our cost control procedures for the Chesapeake Bay Foundation will include:

- ◆ Administer Architect's contact for budget adherence
- ◆ Provide phase estimates in cost component format (Cost Model)
- ◆ Conduct formal in-progress design reviews and value analysis
- ◆ Conduct value engineering workshop
- ◆ Provide current cost information for design decision-making
- ◆ Implement Design Change Order control

During the schematic design development and construction documents phases, we provide detailed analyses of all systems materials and equipment proposed by the Design Team for the construction and operation of the facility. Both life-cycle costing and value analysis will be completed of all of these systems. We work directly with the Design Team members in defining the most cost-effective construction approaches, structural systems, mechanical electrical, plumbing, and ventilating systems for the facility. Recommendations will also be made using life-cycle costs and value analysis for the security system and all equipment and furnishings necessary to support the facility operations, including the food service area.

### Construction Phase Cost Control

Powell Management Associates' cost control efforts continue into the construction phase of the Virginia Beach Environmental Center, where we will:

- ◆ Obtain cost-loaded CPM network construction schedule as basis of payment
- ◆ Provide cost control through progress payment review and verification according to the approved schedule and budget
- ◆ Provide financial tracking of the project through monthly cash flow projections, project payment reports, and contract cost summaries
- ◆ Provide claims control by documentation, prompt disposition, fact finding and negotiation and assist the Chesapeake Bay Foundation in the resolution of any claims





## Section 3: Responses to Specific Questions

### E. Permitting

Through the selection of Powell Management Associates the Chesapeake Bay Foundation will have an Owner's Representative with an office in Virginia Beach, and a firm with deep knowledge of the City's permitting and zoning requirements. Furthermore, as a firm that is located in the City of Virginia Beach we have an existing working relationship with the City. Powell Management Associates will provide oversight to the project Architect regarding all permitting, and will request that documentation of such permits be presented to Powell Management Associates prior to proceeding to the next phase of the project. As the Owner's Representative, Powell Management will ensure that all work performed on the Virginia Beach Environmental Center commences only with the proper permitting and inspections.

Should additional permitting be required do to the nature of the project through the VMRC or other entities, Powell Management Associates will continue to monitor all activities of the permitting process to ensure that all local, state and federal laws are complied with, or exceeded, as is the mission of the Chesapeake Bay Foundation.

LEED Certification is generally coordinated through the project Architect. Powell Management Associates will remain on the project during the certification process, and will work with the project Architect on point appeals if necessary.

### F. Scheduling

Powell Management Associates' staff of project and construction managers use computer generated schedules, primarily the Critical Path Method (CPM), for all phases of the project. In preparation of bid documents we recommend the inclusion of a provisional time-phased CPM network demonstrating how we view the tasks to be performed. Consequently, as a part of the bid response, the Contractor(s) will either review and accept that schedule and submit it, or he will be allowed to alter that schedule with his own plan, provided he does not change the date for substantial completion, final completion, and/or any critical interface dates with other sub-contractors or equipment deliveries on the job.

Powell Management Associates has extensive experience in scheduling all Project Team members activities, including all design phase activities, approvals, procurement constraints, reviews, meetings and conferences, bids, awards and construction commencement. The schedule identifies activities required for completing the total project, while recognizing those activities which require phased construction and/or early procurement. Therefore, proper interface is developed as to how the design must be completed for phase bid, award and construction. Reviews are conducted at regular intervals.

Our CPM network for a construction schedule contains appropriate activities for effectiveness of planning, control, status reporting and monitoring.

Once the detailed network is prepared, we require the contractor(s) to distribute the cost of the project across the activities of the network. We then review his cost display to assure proper cost allocation and cash flow. The computer printout is used to verify the schedule conditions as a basis of support of the contractor's payment request. This network with activity costs provides a cash flow forecast for the Chesapeake Bay Foundation and the contractors.

In addition, our narrative reporting systems have a direct relationship to our automated systems. Outputs from the automated system are one basis for preparing routine narrative reports. Many other factors are considered for the final report preparation, including such factors that are not and cannot be made an integral part of the automated system. The narrative reports are much more involved, analytical and definitive than computer outputs.





## Section 3: Responses to Specific Questions

### G. RFI's (Requests for Information)

All Requests for Information (RFI's) for the project will be logged in the RFI log for the Project. The project manager will check daily on any outstanding RFI's and make certain the flow of information from the Architect to the Contractor takes place in a timely manner. As the Owner's Representative for the Chesapeake Bay Foundation, Powell Management will assume the responsibility of ensuring that RFI's are addressed immediately, all questions posed and responses sent will be reviewed by Powell Management to ensure compliance with the mission of the project and the contract documents (including but not limited to: Project Drawings, LEED Certification Points, Project Specifications)

Powell Management Associates, as the Chesapeake Bay Foundation's Owner's Representative, will impress upon all selected contractors during the selection/bidding phase that it is the responsibility of the General Contractor to clearly communicate the projects goals and objectives to their respective trades and perspective bidders, including, but not limited to making complete sets of project drawings available to trades during the bidding phase.

The Pre-qualified General Contractors should, during the bidding phase, have the ability to provide answers to respective trades regarding the project drawings. During the phase of selecting the successful General Contractor it will be stressed that a thorough understanding of the mission of the project and the project documents are of the utmost importance.

Once the successful General Contractor is selected, Powell Management Associates will, again stress the importance of all members of the construction team need to have intimate knowledge of both the project's mission and the documents.

In our experience we have found that unnecessary RFI's can hold up materials delivery and delay the overall project. Therefore, we would recommend the construction contract for the project clearly state that the General Contractor will be back charged at the rate of the Architect's fees to respond and review RFI's plus 20% as an incentive to ensure total knowledge of the project's mission and contract documents.

### H. Quality Oversight

Quality control under Powell Management Associate's watch will become a common goal of all participants on the Virginia Beach Environmental Center project. PMA's role will be to be the champion of project quality. Our quality control procedures place the contracting professional on the same side of the construction process as the Chesapeake Bay Foundation and the design professional. The design professional specifies quality, retains the right to judge quality performance, and remains the final authority who determines if the quality of the Contractor's work meets the requirements of the contract documents. The role of Powell Management Associates will be to plan quality into the design, establish and monitor the procedures by which quality control occurs during construction and to detect any non-conforming work and notify the Architect/Engineer of that deficiency.

### Constructability Review

The first step in Powell Management Associates' approach to quality control on project is reviewing the developing design for constructability. As experienced construction program managers, PMA has witnessed the expenditure of hundreds of thousands of man-hours on project sites. We can provide great value in detecting potential inefficiencies and pitfalls in the project contract documents. A review of the design drawings and specifications usually results in considerable, even spectacular, cost savings. In addition to cost, construction time savings can often be achieved.

Constructability reviews are accomplished by PMA's Technical Support staff in a systematic review of the design documents, resulting in a compilation of specific comments and questions. PMA's approach is to read the drawings and specifications to view the project as if the review team was the Contractor building the job. Potentially vague areas in plans and specifications and conflicts and clashes between building elements are flagged to be addressed by the Design Team, reducing change orders and improving on-site construction efficiency and project quality.





## Section 3: Responses to Specific Questions

### Building Information and Modeling

The use of Building Information and Modeling (BIM) technology has become a key component in construction to identify conflicts and solve problems. BIM is a digital representation of physical and functional characteristics of a facility in the built environment, and serves as a shared knowledge resource. It provides a reliable basis for decisions throughout the facility's lifecycle. Different stakeholders at different phases of the lifecycle of a facility can insert, extract, update or modify information in BIM.

BIM is much more than the assembled 2D or 3D CAD and Facilities Management (FM) drawings created for the facility. Typically it uses three-dimensional, real-time, dynamic building modeling software to increase productivity in building design and construction. The process produces the Building Information Model (BIM), which encompasses building geometry, spatial relationships, geographic information, and quantities and properties.

CBF Facilities staff will enjoy the future benefits afforded by access to BIM information to look back or forward in the lifecycle of a building. For maintenance and operations information and/or should changes or renovations be considered later in the buildings life, the Foundation will have available an invaluable tool.

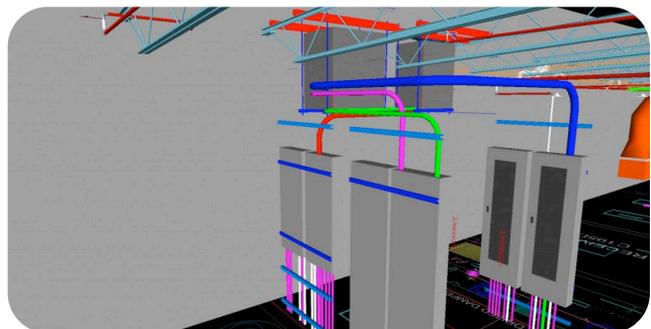
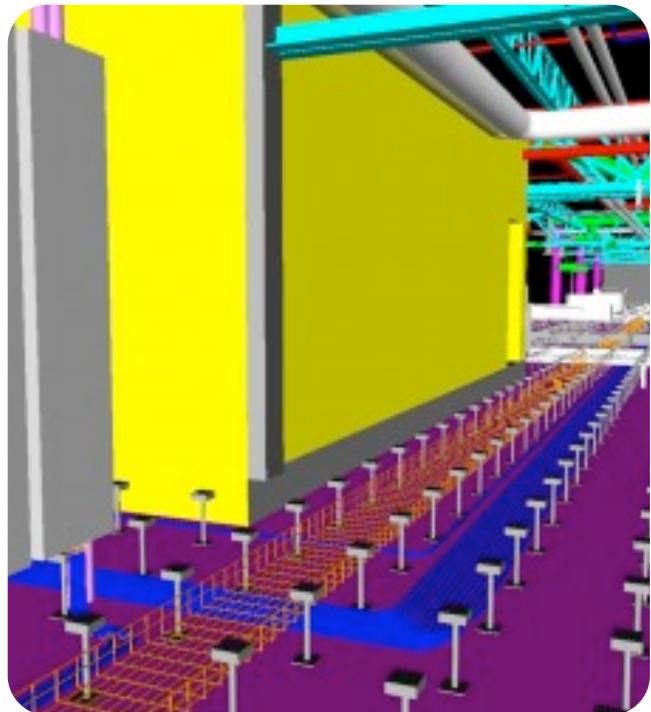
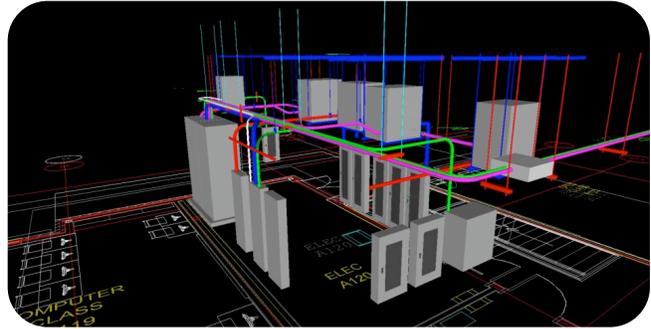
#### Benefits of BIM

The primary benefit of BIM is that it produces a better quality project outcome by eliminating ambiguities and conflicts while the plans are still in the Design Team's computer system, not when they are in steel and concrete at the job site. Other benefits include:

- ◆ LEED point opportunities regarding early systems integration identification,
- ◆ lower net costs and risks are recognized by owners, designers, subcontractors and engineers,
- ◆ safer, more effective structures for the owners and occupants,
- ◆ efficient monitoring lowers operating costs,
- ◆ improved coordination of building systems – preventing clashes between systems like structural, plumbing and mechanical, and
- ◆ better views of the facility result in better decisions

### Cohesive and Coordinated Projects = Success

Powell Management believes that the better the coordination and cohesive planning at the outset of the Virginia Beach Environmental Center project, the better the resulting facility will be for the Chesapeake Bay Foundation.





## Section 3: Responses to Specific Questions

### Quality Control Categories

The categories which will be utilized to achieve quality control on this project are observation, procedures, testing, certification, guarantees, and warranties. Of these six categories, the Contractor will be expected to diligently assume full responsibility for procedures. The other categories, particularly certification, guarantees, and warranties, are not contractor-dependent, but rather manufacturer- and vendor-dependent.

Both the Architect and Powell Management Associates will be heavily involved in observation and reporting.

The on-site Construction Manager will have extensive construction and general management experience. In addition to being experienced in the judgment of quality, the on-site representatives will be experienced in quality control procedures for educational and institutional facilities. The testing activities will be done by specialists employed directly by the Chesapeake Bay Foundation, but will work in concert with Powell Management Associates and the Architect. Enhanced observation, by virtue of the site team, will facilitate recognition of the need for testing and, consequently, should provide a more efficient control of the testing category.

If construction begins with a certified product; installation is completed according to proper procedures, supplemented with observation and testing, and guarantees are provided, then the entire quality control process will have been successfully accomplished. Powell Management Associates fully recognizes the importance of informing the project team that if any one of the control categories is neglected, the entire process could lose its credibility, resulting in an unfavorable effect on the total project.

### Powell Management's Role

A significant potential for improved quality control lies in anticipation of problems before they occur. We are aware that working conditions and practices exist that make quality construction very difficult. The role of our on-site staff is that of a problem-seeker and problem-solver. It is extremely important to look for conditions, practices, and situations, that are conducive to poor performance.

The fundamental prerequisites for quality control that we will follow include:

- ◆ Strict adherence to the LEED Platinum Standards required for the success of the project.
- ◆ Early Identification of additional LEED opportunities for the Project (Typically identified during the conceptual design phase)

- (SS) Sustainable Sites
- (WE) Water Efficiency
- (EA) Energy & Atmosphere
- (MR) Materials & Resources
- (IEQ) Indoor Environmental Quality
- (ID) Innovation in Design

- ◆ A proper working environment, including control over temperature, humidity, cleanliness, lighting, etc.
- ◆ Proper receipt, handling, storage, coverage, and care of materials.
- ◆ Sufficient skilled labor, adequate supervision and construction equipment that is maintained and in good repair.
- ◆ Proper project documentation
- ◆ Inspection of the Contractor's onsite records regarding MSDS Information
- ◆ A clear understanding of the contract documents by the personnel supervising and performing the work activities. A thorough review of the documents and requirements prior to conducting the work activities.
- ◆ Adequate time to perform the work activities, averting situations where workers do not have sufficient time to conduct the work activities.
- ◆ Periodic review and inspection at the earliest levels to identify areas that do not meet the quality standards.
- ◆ Early identification of problem areas allowing for immediate corrective action and establishment of the standards of quality that will be required throughout the work process.





## Section 3: Responses to Specific Questions

The following is an outline a typical Quality Assurance Plan.

### DESIGN PHASE

1. A/E QA/QC Program
2. Design Phase Submittals
  - 2.1. Pre-Design Phase
    - a. Design Statement
    - b. Program Requirements
    - c. Internal Functions
    - d. Circulation
      - People
      - Vehicles
      - Materials
    - e. Space Allocation
    - f. Operating Function Analysis
    - g. Adjacencies/Affinities
    - h. Building Components
    - i. Building Systems
    - j. USGBC LEED Score Card
  - 2.2. Schematic Design Phase
    - a. Architectural
      - Single-line drawings showing complete building layout, identifying the various major areas, core areas and their relationships.
      - Preliminary exterior wall cross section and evaluation indicating location and size of fenestration, and indicating overall thermal transfer value for exterior wall envelope.
      - Identification of roof system, deck, membrane flashing and drainage technique and indicating overall combined heat transfer coefficient for roof/ceiling composite and roof area.
      - Identification of all proposed finishes.
      - Site plan with building located and overall grading plan with a minimum of 5'-0" contour lines. All major site development such as access road paving, walls and outside support buildings, structured parking facilities, and paved parking lots should be shown.
      - Gross and net area calculations separated to show conformance with the Program of Requirements.
    - b. Structural
      - Structural systems layout with overall dimensions and floor elevations.
      - Identification of structural system.
      - Identification of foundation requirements.
    - c. Mechanical
      - Block heating, ventilating and cooling loads calculations including skin versus internal loading.
      - Minimum of two HVAC systems that appear compatible with loading conditions for subsequent life-cycle costing.
      - Single-line drawings of all mechanical equipment spaces, duct chases and pipe chases.
      - Location of all major equipment in allocated spaces
    - d. Electrical
      - Lighting fixtures outlines in plan and roughly scheduled showing types and quantities of fixtures to be used.
      - Major electrical equipment roughly scheduled indicating size and capacity.
      - Complete preliminary one-line electrical distribution diagrams with indications of final location of service entry, switchboards, motor control center, panels, transformers and emergency generator, if required.
      - Legend showing all symbols used on drawings.
    - e. Telephone Systems
      - Analysis of the existing telephone system.
      - Existing and future requirements and applications.
      - Show preliminary locations of lines, control panels, stations, etc.
      - Legend showing all symbols used in drawings.





## Section 3: Responses to Specific Questions

- f. Computer Cabling
    - Computer Cabling
    - Analysis of existing computer cabling.
    - Provide preliminary line diagrams indicating cable locations, conduits, etc.
    - Legend showing all symbols used on drawings.
3. Design Development Phase
- a. Architectural
    - Floor plans.
    - Wall sections.
    - Fixed and loose equipment.
    - Finish schedule.
    - Door and hardware schedule showing final quantity plus type and quality levels.
    - Site plan including grading and drainage.
    - Preliminary details and large scale blow-ups.
    - Legend showing all symbols used on drawings.
    - Outline of specifications.
  - b. Structural
    - Plan drawings with typical structural members located and sized.
    - Footing, beam, column and connection schedules.
    - Final building, elevations.
    - Outline specifications.
    - Foundation drawings.
  - c. Mechanical
    - Heating and cooling load calculations for each space and major duct or pipe runs sized to interface structural.
    - Major mechanical equipment schedule.
    - Duct work and piping located and sized.
    - Devices in ceiling located.
    - Legend showing all symbols used on drawings.
    - Outline specifications.
  - d. Electrical
    - All power consuming equipment and load characteristics.
    - Total electric load.
    - Major electrical equipment dimensioned and drawn to scale into the space allocated.
    - Preliminary site lighting design.
    - Outline specifications.
    - Lighting, power, telecommunications and office automation devices plan.
    - Light fixture schedule.
    - Interior electrical loads estimate for systems furniture, receptacles, lighting, and special use areas.
  - e. Telephone System
    - Outline specifications.
    - Show locations for equipment, panels, stations, etc., on drawings using appropriate symbols.
  - f. Computer Cabling
    - Plan drawings showing all conduits, receptacles, connects, etc.
    - Legend showing all symbols used on drawings.
4. Construction Documents Phase
- a. Complete Permutable Drawings
  - b. Complete Specifications in CSI Format
2. CONSTRUCTION PHASE
- 2.1. Responsibilities
    1. Contractor
    2. Architectural/Engineer
    3. Construction Program Manager
    4. Testing/Inspection Consultant
    5. Other Agencies
  - 2.2. Procedures
    1. Notice of Defective or Non-Conforming Work
    2. Rejection/Replacement
    3. Resolution
  - 2.3. Submittals
    1. Shop Drawings
    2. Samples
    3. Mock-ups
    4. Delivery/Shipping Documents
    5. USGBC LEED Certifications
    6. Laboratory Testing and Inspection Reports
    7. Photography/Video Recording
  - 2.4. Materials
    1. Compliance with Specifications
    2. Substitutions
    3. Cleanliness





## Section 3: Responses to Specific Questions

### I. Noncompliance Notifications

An integral part of Powell Management Associates approach to quality construction is the use of what we call NONCs (“knocks”) - Notices of Non-Conformance. As we discuss further in Part K below, for the Virginia Beach Environmental Center project, PMA will make use of a “living punch list”, where observed deficiencies in construction are brought to the Contractor’s attention in a contemporaneous manner.

For projects candidate for LEED certification such as the CBF project, immediate corrective action may be necessary to prevent contamination from improper materials, such as odorous, high VOC materials. On PMA’s recent project for Isle of Wight County this was exactly the case, when the Powell Project Manager observed flooring adhesive being unloaded from a contractor truck during the installation of final floor finishes. The Project Manager checked, determined that adhesive was not an approved product, and stopped the material from being moved into the building while simultaneously notifying the Contractor of the non-conformance with the Contract Documents. Had PMA staff not immediately alerted and acted, the adhesive, once opened in the 90% complete, would have caused indoor air quality problems, which would have necessitated flushing the building air and delaying the project.

The Notices of Non-Conformance are documented, numbered and tracked to completion. They are closed only when the Architect/Engineer confirms that the questioned work has brought into compliance with the requirements of the Contract Documents. As part of the regular Project Status Reports to the CBF, Powell Management will provide the updated log of these notices.

### J. Day to Day Site Visits

#### Day to Day Site Visits

Applying on-site project management and contract administration are basic tenets of Powell Management Associates’ approach to construction program management. We believe that the construction process requires hands-on management, meaning our construction managers are either frequently or constantly on the construction site.

A complex project, such as the Virginia Beach Environmental Center necessitates a full-time construction manager for Powell Management to best represent the interests of the Chesapeake Bay Foundation.

A regular presence at the project site is necessary to fulfill one of the basics in Powell Management Associates’ approach to eliminating claims and resolving disputes, that such conflicts are

best resolved at the lowest possible level, which usually means with the Contractor, in the field.

Related to both contracting and site management is the important element of job site rules. It has been Powell Management Associates’ experience on previous facilities where we have served as the Owner’s Representative that policies ranging from site safety and security to litter control, need to be spelled out in the Contract Documents and then, enforced by PMA’s Project Manager on the job site. We frequently refer to such policies and rules as Powell Management’s “good neighbor” approach. Such work an approach will be even more critical on the CBF’s project where the work is adjacent to an the established, active and vocal beach neighborhoods, of Ocean Park, and Shore Drive.

For the CBF’s Virginia Beach Environmental Center project, Powell Management will develop and implement policies, procedures and job rules which not only make the Foundation a good neighbor in the Shore Drive community, but also reflect and foster CBF’s role in promoting environmental stewardship in the Chesapeake and global communities. PMA envisions that these policies and rules will include such efforts as installing “best practices” and demonstration erosion control measures with continuous and extended monitoring and maintenance, identifying and protecting breeding areas (the entire site, especially the coastal pine areas, is well populated with various types of coastal marine life), managing the construction waste stream including debris and recyclable material designation and proper placement enforcement, and coordinating site activities to minimize interference with pedestrian, vehicular and boat traffic, on and adjacent to the site.

Additionally, Powell Management’s on-site Project Manager will perform continuing observations of the entire site compliance to LEED Platinum requirements and to ensure that the entire process is well managed.





## Section 3: Responses to Specific Questions

### K. Punch List

As the Owner's Representative Powell Management Associates minimizes punch list items. With an on-site Project Manager we are able to identify issues and resolve them with the contractor and/or architect/engineer immediately. PMA advocates the use of what we term a "living punch list". That process notes and identifies for the contractor defective or non-conforming work elements in real time, as they occur. This prevents unacceptable work from being closed up or covered over, where it could be missed in subsequent observations and inspections. This continuous process also encourages the Contractor to embrace fully his quality control responsibilities on a daily basis, not relying simply on a list of what was noticed at the end of construction. Our proactive approach to managing our clients' projects provides limited punch lists resulting in faster occupancy at the close of the construction phase.

As required, punch list items will be compared to the projects LEED Score Card and tracking system to ensure the goals from the onset of the project are carried through to the completion of the project.

### Closeout and Occupancy

Not mentioned in the RFP for the Virginia Beach Environment Center is the Project Closeout. While the punch list is most commonly thought of as amongst the last steps in the Construction Phase, Powell Management Associates recognizes that there are numerous additional tasks at the end of construction which contribute to project success.

For the CBF project, PMA will prepare and manage a closeout program that provides a systematic procedure to accelerate delivery and acceptance of the project by the Foundation. Well coordinated and managed closeout procedures of the final stages of the project will avoid a lengthy or drawn out final project closeout. Like the punchlist process, PMA's closeout program actually starts several months before the completion of construction and to assure a timely closeout, we will:

- ◆ Prepare a turn-over a register in the early construction stages identifying items that are to be turned over to the CBF prior to project completion
- ◆ Prepare a detailed closeout schedule
- ◆ Review open or unresolved NONCs and other deficiency lists
- ◆ Develop an occupancy plan and schedule
- ◆ Coordinate preparation of and receipt of record drawings
- ◆ Meet with Virginia Beach building officials to understand the requirements necessary to secure occupancy permits and obtain other required approvals
- ◆ Review any outstanding LEED submittals and documentation and assist the Architect with USGBC certification submittals
- ◆ Compile and organize operation and maintenance manuals to be turned over to the CBF
- ◆ Establish and coordinate program for CBF staff training in the operation and maintenance of systems and equipment
- ◆ Prepare project close-out cost report
- ◆ Assist the Foundation with the LEED-required post-occupancy evaluation of the project





## Section 4: Proposed Fee Schedule

Simply stated, Powell Management Associates bases its fees on the level of effort required to provide the services requested. This level of effort is usually expressed as the estimated man-hours which our staff will expend in performing the various Owner Representative and Project Management tasks on a project. Where the nature of the project or program does not lend itself to defining the level of effort, we use a simple hourly rate for professional services.

On full service engagements such as the Virginia Beach Environmental Center project, Powell Management Associates will work with the client to negotiate lower, more appropriate rates for our professional staff labor. An assignment of this nature will benefit the CBF in allowing the use of a lump-sum fee arrangement with a fixed monthly billing schedule. Where PMA's services are commissioned on a limited, part-time or a la carte basis, we utilize our Standard Hourly Billing Rates, as shown in the following schedule.

	Per hour
Principal	\$185
Senior Project Manager	\$128
Project Manager	\$104
Senior Construction Manager	\$98
Construction Manager	\$87
Contract Administration/Support	\$64
Cost Analyst/Estimator	\$95
Scheduler/Planner	\$95
Technical Support	\$140

The only additional costs, beyond manning, would be our direct or reimbursable costs, which are itemized. Examples of reimbursable costs are telephone charges, mileage and travel expenses, postage, FedEx and copying and printing.

The Chesapeake Bay Foundation can expect a fair and open discussion of Powell Management Associates' rates and fees during contract formulation and negotiations. We are proud to note that, in our history, once a client has decided to retain Powell Management to serve as their representative, we have never failed to find compromise and enter into a contract because of our professional fees.

Because of the potential conflict of interest between controlling the cost of projects and the cost of our services, we never price our work as a percentage of construction cost.





## Section 5: Project Leader

During the Design Phase, our Project Leader will be Bruce Bruchey in our Annapolis office. As a Principal, he has the authority to commit the necessary resources and to carry out owner requests within the confines of the contract. The Principals of Powell Management Associates, as communicated earlier, will both be involved intimately with the project, and are always immediately available.

One of the keys to the success of Powell Management Associates in managing and controlling major design and construction efforts is the hands-on involvement of our company executives. Unlike other firms in our business which are divisions or branches of large, multinational firms, Powell Management Associates is a smaller, close-knit organization with an active and involved owner.

***In this unique circumstance, Powell Management Associates' offices are in a proximity to meet the Chesapeake Bay Foundation's needs on site, and if needed at the Headquarters. We are less than 20 minutes from each.***

Powell Management Associates clients are provided with the home telephone numbers and personal cell phone numbers of our senior management, ensuring access by our clients on a 24/7 basis.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 6: Sub Consultants

**To provide the Chesapeake Bay Foundation with comprehensive Owner's representative services for this unique, flagship project, we intend to use the following consultants to ensure the highest standards are met during design and construction of the new Virginia Beach Environmental Center:**

Langley & MacDonald, Civil Engineers, to provide as needed consulting services regarding site issues, and coastal mitigation. Langley & MacDonald is based in Virginia Beach, and is intimately familiar with this particular site.

Few buildings in the Nation have achieved LEED Platinum Certification, and the Chesapeake Bay Foundation has lead the way in their construction of the Merrill Center. Powell Management Associates will enlist the services of Sustainable Design Consultants regarding LEED related issues as they have extensive experience in providing LEED Certification, including LEED Platinum projects.





## Section 7: Client References

**Powell Management Associates has a reputation for providing our client's with outstanding service.**

**We present as requested by the Chesapeake Bay Foundation, the following client references:**

Mr. W. Douglas Caskey, County Administrator  
 Isle of Wight County  
 P.O. Box 80, Isle of Wight VA 23397  
 Phone: 757-365-6201

Mr. David Rosenfield, General Manager  
 Norfolk Tides Baseball Club  
 Harbor Park, 150 Park Avenue, Norfolk, VA 23510  
 Phone: 757-622-2222 ext. 109

Mr. Charles E. Turner, Superintendent  
 Southampton County Public Schools  
 P.O. Box 96, Courtland, VA 23837  
 Phone: 757-653-2692

Mr. Michael W. Johnson, County Administrator  
 Southampton County  
 P.O. Box 400, Courtland, VA 23837  
 Phone: 757-653-3015

Mr. John W. Hazelette, Sr. Director of Planning  
 Norfolk Public Schools  
 800 E. City Hall Avenue, #707, Norfolk, VA 23510  
 Phone: 757-628-3448



**Harbor Park, Home of the Norfolk Tides  
 Norfolk, Virginia  
 Architect: VIA Design Architects, PC  
 Contractor: VIRTEXCO Corporation**



**Crossroads Pre-K-8 Elementary School  
 (2013 Completion Date)  
 Norfolk Public Schools, Norfolk, Virginia  
 Architect: Moseley Architects, PC**



**Riverdale Elementary School  
 Courtland, Virginia  
 Architect: Moseley Architects  
 Contractor: Blue Ridge General, Inc.**



**Southampton County Wastewater Treatment Plant  
 Courtland, Virginia  
 Architect: Timmons Group**





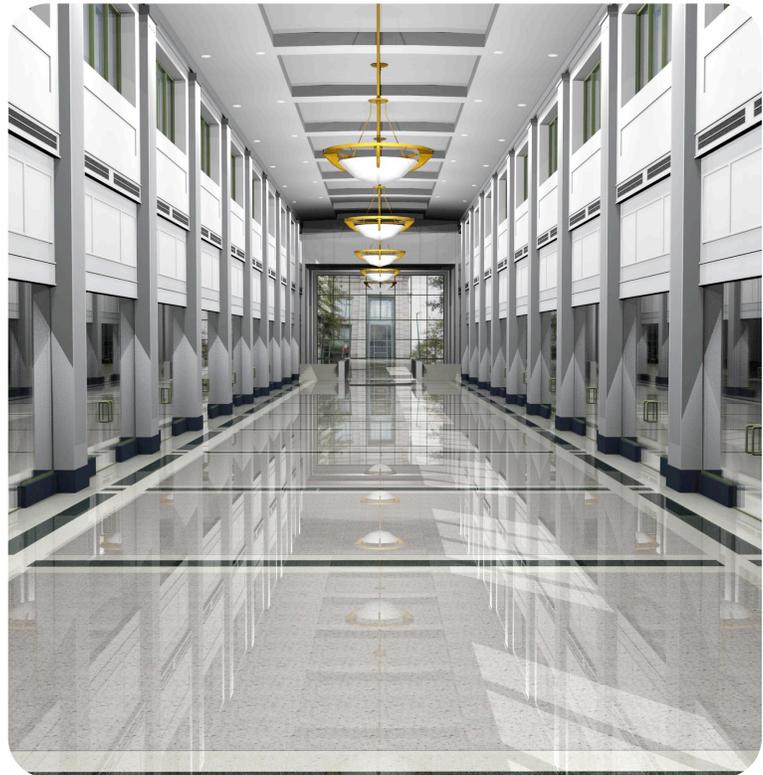
## Section 8: Architectural & Construction Firm References

### Architect References

Mr. Jack Hasten, Jr., AIA  
 Vice President  
 Moseley Architects, PC  
 780 Lynnhaven Parkway, Suite 200  
 Virginia Beach, VA 23452  
 Phone: 757-368-2800

Ms. Donna M. Phaneuf, AIA  
 President  
 VIA Design Architects, PC  
 150 Randolph Street  
 Norfolk, VA 23510  
 Phone: 757-627-1489

Mr. Brian Caro  
 Principal  
 Caro, Monroe, & Liang, Architects, PC  
 739 Thimble Shoals Boulevard, Suite 805  
 Newport News, Virginia  
 Phone: 757-873-2222



**The Selden Arcade & Gallery**  
**Main Street, Norfolk, Virginia**  
**Architect: VIA Design Architects, PC & ClarkNexsen**  
**Contractor: VIRTEXCO Corporation**

### General Contractor References

Mr. Robert H. Wells, CPC, LEED, AP  
 Chief Executive Officer  
 VIRTEXCO Corporation  
 977 Norfolk Square  
 Norfolk, VA 23502  
 Phone: 757-466-1114

Mr. James L. Wood  
 Vice President  
 JD&W, Inc.  
 208 Ash Avenue, Suite 101  
 Virginia Beach, VA 23452  
 Phone: 757-340-8411

Mr. Brian A. Geary  
 President  
 Blueridge General, Inc.  
 3422 Strathmore Avenue  
 Norfolk, VA 23504  
 Phone: 757-627-9914



**Suffolk Center for Cultural Arts**  
**Finney Avenue, Suffolk, Virginia**  
**Architect: CMSS Architects**  
**Contractor: VIRTEXCO Corporation**





## Section 9: LEED Experience

***Powell Management Associates is in the unique position to provide services has recently completed the management of two LEED Projects in the Hampton Roads Region. Furthermore, we intend to enlist the services of Sustainable Design Consultants to ensure the highest standards of LEED Certification are complied with for this project.***

Powell Management Associates recently successfully managed the design and construction of two projects in Hampton Roads, one with LEED Accreditation, the under review by the Green Building Council.

***Young-Laine Courts Building  
Isle Of Wight County, Virginia  
LEED Silver***

Young-Laine Courts Building, Isle Of Wight County, Virginia - LEED Silver (pending). Powell Management was the Construction Program Manager for the design and construction of the new Isle of Wight Young-Laine Courts Building, completed in December of 2010. The County elected to pursue LEED Certification, with the goal of achieving Silver level certification, and Powell Management assisted every step of the way.

Sustainable elements utilized in the project include: Landscaping with native and drought-resistant vegetation, which reduces the need for irrigation; Stormwater management strategies that minimize the quantity and improve the quality of discharge to surrounding watershed; Low-flow plumbing fixtures to reduce water use by an estimated 38 percent; A modeled energy use reduction of 21 percent compared to a minimally code-compliant building, achieved through strategies such as high-performance mechanical equipment, an air barrier system, low-e, double-pane glazing, and energy-efficient interior and exterior lighting systems; Refrigerant selections that minimize ozone depletion potential; Approximately 75 percent of construction waste was diverted away from landfills by separating recyclable or salvageable materials; Use of regionally-produced construction materials composed of recycled content; Low-emitting building materials, including carpet, adhesive and sealants, paints and coatings, and composite wood; Additional lighting controllability for building occupants; Limiting indoor pollutants through the use of walk-off grates at entrances, and high-efficiency air filtration media; and an emergency generator fueled in part by biodiesel fuel.



***Young-Laine Courts Building  
Isle of Wight County, Virginia  
Architect: Moseley Architects***



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 9: LEED Experience

**Crossroads Pre-K Elementary School**  
**Norfolk, Virginia**  
**LEED Certified**

Crossroads Pre-K Elementary School, Norfolk, Virginia - LEED Certified. Powell Management Associates is part of the team for the first Green building project for Norfolk Public Schools. The new 145,000 square foot facility replaces the existing 1940s era elementary school and creates an efficient footprint on the same 10-acre site. The existing school facility will be demolished upon the completion of the new school. The new school features a three story academic wing with the youngest students on the first floor, the upper elementary students on the second floor and the middle grade students on the third floor. The school's media center is located on the second floor directly above the front door to make it as close as possible to all of the students. The public portions of the building include a multi-purpose room, a gymnasium and a student dining area with a performance platform. Another unique element is a dedicated portion of the facility will be used by the City's Parks and Recreation Department.





# Section 9: LEED Experience

## Sustainable Design Consulting - Sub Consultant LEED Experience



**Project Sheet**  
**Recreational**

### **Ft. Belvoir Residential Community - Fairfax Village Neighborhood Center** **Fort Belvoir, Virginia**



**Rating System: LEED-NC**  
**Rating Level: Platinum**  
**Rating Status: Certified**

Fort Belvoir Residential Community in Fairfax County, Virginia is a 13 acre neighborhood masterplanned development of over 1,600 low-rise residential dwelling units, most of which are new construction, plus several neighborhood centers. This private development on the military base is one of the U.S. Army's first projects developed under the Residential Communities Initiative (RCI).



Throughout the villages at Fort Belvoir, five neighborhood centers are planned to be built as an amenity to the community. Three have been built to date. These neighborhood centers are frequented by residents for large gatherings, parties, and meetings. Each month, the centers are reserved up to thirty times for various functions. In addition to serving the community needs, the Pinnacle property management offices and maintenance staff are located within the building. The neighborhood centers' program typically includes two property management offices with a reception desk and copy/fax room, a great room for larger social functions, conference room, kitchen, bathrooms, foyer, maintenance shed, patio/courtyard, playground, and surface parking lot.



With the completion of the most recent neighborhood center in George Washington Village, the design focus turned to the next one planned: the 3,770 square foot Fairfax Village Neighborhood Center. The project team decided to top all other sustainable efforts at Fort Belvoir and showcase this next neighborhood center as the "greenest" possible building. A team of consultants came together and kicked off the design charrette. Among members of the project team were Sustainable Design Consulting (LEED Consultant), Torti Gallas & Partners (Architect), Bowman Consulting Group (Civil Engineer), E.K. Fox & Associates (MEP), HOK (Interior Designer), Parker Rodriguez (Landscape Architect), Wetlands Studies & Solutions (Environmental Consultant), and Fort Belvoir environmental personnel from the Army. On the ownership side of the project, members of Clark Pinnacle team also contributed to this early green vision. **This project earned LEED Platinum certification in 2009, becoming the second LEED Platinum project in Virginia.**



With assistance from Sustainable Design Consulting the website (<http://www.greenbelvoir.com/website/about.asp>) will help tell the this project's story and begin to educate not only the residents at Fort Belvoir that will use this facility, but also the general public about sustainability and green building.

**Reference**  
Richard Turner, ENRD Reviewer  
Fort Belvoir  
703-806-0051  
richard.b.turner@us.army.mil

**Project Team**  
General Contractor - Clark Realty  
Architect - Torti Gallas and Partners  
Civil Engineer - Bowman Consulting  
Landscape Architect - Parker Rodriguez  
MEP Engineer - EK Fox





# Section 9: LEED Experience

**Sustainable Design Consulting - Sub Consultant LEED Experience**



**Project Sheet**  
**Higher Ed**

**Virginia Commonwealth University (VCU), Walter L. Rice Education Building**  
*Charles City County, Virginia*



**Rating System: LEED-NC**  
**Rating Level: Platinum**  
**Rating Status: Certified**

The Inger and Walter Rice Center for Environmental Life Sciences in Charles City, Virginia is VCU's field station devoted to a broad array of environmental research, teaching and public service. Located on 342 acres along the historic James River, midway between Richmond and Williamsburg, the Rice Center has a variety of aquatic and terrestrial habitats that provide many research and educational opportunities.



The new 4,889 square foot Walter L. Rice Education Building building provides space for four open area offices, with a reception desk and conference room associated with the office space. The building provides two teaching classrooms and a multi-purpose classroom with design occupancy of 110 people. The site selected for the for the Rice Educational Building is a small 4.8 acre portion of a largely undeveloped 344 acre parcel of land overlooking the James River. Care for the environment and the communities VCU serves were taken into great consideration during the development of this building. The project incorporated high standards for environmental, sustainability, and energy efficiency strategies to help attain the goal of LEED-NC Platinum certification in March 2009.



The design includes innovative stormwater technologies such as rain gardens, swales and stormwater re-use for flushing. Also featured are a ground source heat pump system, radiant flooring, operable windows and photovoltaic panels to provide electricity to the building. The site is landscaped with native hearty plants that require no irrigation and most site are pervious, such as the gravel road and parking areas. It has both a white membrane and a vegetated green roof, which will be monitored by students. The project team also carefully selected materials with an eye to sustainability and minimal use. Therefore, most floors are finished concrete, without a flooring material. The wood structure and cladding are natural products with non-toxic finishes, requiring minimal maintenance. All adhesives, sealants, paints and carpeting shall be low-VOC. The project also integrates small samples of rapidly renewable materials for visual interest and educational purposes.



VCU has developed a Green Education Program that will include comprehensive signage throughout the building, integration into the curriculum and case studies of the project to inform the faculty, students, and the community at large about the benefits of sustainable building practices, and the successes of the project that could be applied to other projects in the future.

**Reference**

Virginia Commonwealth University  
Carl F. Purdin, Asst. Dir. of Design Svc  
P.O. Box 843049  
Richmond, VA 23284  
804-828-0391  
cfpurdin@vcu.edu

This building was recently named a finalist for the Real Estate Stars 2010 Awards presented by the Greater Richmond Association for Commercial Real Estate in the Public/Institutional category.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



# Section 9: LEED Experience

*Sustainable Design Consulting - Sub Consultant LEED Experience*



**Project Sheet**  
**Recreational**

## **Sailor's Creek Battlefield State Park Visitor Center** *Green Bay, Virginia*



**Rating System: LEED-NC**  
**Rating Level: Silver**  
**Rating Status: Certified**



This project is located in the Sailors Creek Battlefield State Park in Green Bay, Nottoway County, Virginia. The 4,070 SF single story new visitor center facility is used as an information center for people visiting the historic civil war battlefield. It provides a small sales area, an Exhibit/Battlefield viewing area and an outdoor observation deck, as well as three small offices for full-time park officials, a meeting/ library area, and restrooms for both building occupants and visitors.



The Virginia's Department of Conservation and Recreation's (DCR's) care for the environment and respect for the historical landmark on which this facility is built were taken into great consideration during its development by the . The project incorporated high standards for environmental, sustainability, and energy efficiency strategies to help attain the goal of LEED certification.



The building's small footprint on the Battlefield allows it to provide 25,600 SF of vegetated open space, greatly exceeding LEED requirements. Construction and disturbance boundaries were clearly established in the construction documents to preserve and enhance the natural and historical site elements. The building's exterior lighting is also used as security lighting and was kept to a minimum since the facility closes at dusk as is located in a park setting. The interior lighting for the facility has been designed to have timers with overrides and occupancy sensors.

The plumbing fixture selection, a combination of using low-flow water closets, urinals, lavatories, kitchen sink, and showerhead, result in a 33% building water savings for this project. To promote comfort and well-being of visitors and occupants as well as energy savings, the building is heated and cooled by two split system heat pumps: one for the exhibit room, and the other for the other areas. The building is ventilated naturally and operable windows in regularly occupied areas are provided to occupants to control the amount of ventilation needed.

**Reference**

Michael Miller  
Va. Dept. of Conservation & Recreation  
101 N 14th Street, 11th Floor  
Richmond, VA 23219  
(804) 225-4447  
michael.miller@dcr.virginia.gov

The Sailor's Creek Visitor Center project has incorporated the development of a Green Education Program to educate the occupants and many visitors to the park about the benefits of green building and the various strategies and materials used in this project. Comprehensive signage and educational literature are displayed throughout the facility to describe the projects sustainable building practices.



POWELL MANAGEMENT ASSOCIATES

•VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND•



## Section 9: LEED Experience

### Sustainable Design Consulting - Sub Consultant LEED Experience



### Services

We provide a range of services, customized to each client's goals and project parameters:

**Concept Design & Solicitation Assessments** – Early project guidance for goal setting and design compliance with green building standards. Review of A/E Services for LEED conformance.

**Green Building Technical Consulting** – Project-specific and general consulting on planning, site design, water, energy, materials and indoor environmental quality issues for sustainable design and operations. Reports and presentations.

**Stormwater/Water Reuse Assessment (by Greening Urban LLC)** – Evaluation of options for stormwater management and water reuse to address potable water costs and impervious pavement fees in support of sustainable concepts.

**Sustainable Design Assessment and Drawing Review** – Project review at any stage for sustainable design opportunities and areas of concern. Recommendations and design guidance based on project goals and constraints.

**Specifications Review and Editing** – Expert review of outline or fully-developed project specifications incorporating LEED/green building criteria. Initial review with section-by-section recommendations and editing.

**Energy Modeling and Review** – Creation of original and review of existing energy modeling reports for compliance with ASHRAE standards and compliance with LEED requirements.

**Energy and Water Efficiency Auditing** – Auditing program development and implementation for small and medium-scale existing buildings.

**Carbon Footprint Assessment** – Preliminary assessment for buildings, organizations, or campuses and identification of actionable strategies for reduction.

**LEED® Green Building Rating System™ (NC, CI, CS, S, EB, ND) Process Management** – Consulting including feasibility assessment, project goalsetting, design integration, technical consulting, project management, documentation coordination and submission to GBCI for certification.

**LEED Advisory Services** – Professional guidance for experienced teams who wish to manage and coordinate the LEED process internally.

**LEED-ND Feasibility Assessment** – Analysis of project potential for meeting LEED requirements.

**Project Assessments for Compliance with Other Rating Systems or Guidelines** – Compliance with SB Tool, Green Globes, Green Guide for Healthcare, CHPS, Green Communities Criteria, EarthCraft Virginia.

**Green Communities Initiative** – Project team charrettes and related services to create Green Development Plans based on the Green Communities Criteria for affordable, urban, multifamily housing.

**Green Building and Operations Guideline Development** – Preparation of guidance documents for any intended audience.

**Tenant Design Services & Furniture Selection Guidelines** – Development of sustainable guidelines for tenant fit-out of new and existing facilities.

**Post Occupancy Evaluations** – Performance Assessment for compliance with building and system design intent.

**Preparation of Project Financial Incentive Applications** – Assistance with preparation of required documents to obtain tax credits, tax deductions, grants, or other financial assessments.

**Preparation of Project Award Applications** – Assistance with preparation of project award applications to major publications and professional organizations.

**Preparation of Project Case Studies** – Documentation of project statistics in online or print format for inclusion in sustainable building directories and databases.

**Green Curriculum Development** – Preparation of classroom-ready green building and related educational materials for k-12, higher education and professional training environments.

**Lectures, Workshops and Trainings** – Conference and small group presentations, project team workshops, professional trainings.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



# Section 9: LEED Experience

## Sustainable Design Consulting - Sub Consultant LEED Experience



### Firm Profile

Sustainable Design Consulting, LLC (SDC) is an award-winning firm with specialties in LEED Process Management, Training, Energy Services, Green Best Practices and Corporate Responsibility. Headquartered in Richmond, Virginia with a regional office in Washington, DC, SDC is comprised of an interdisciplinary staff of 22 design, construction, and business professionals. Our experienced team members have served more than 300 green building project teams and have built a solid reputation for delivering excellence in the Mid-Atlantic region.



SDC is dedicated to sustainable design, construction, operations and maintenance, including recognized expertise in green building technology, strategies, training, process management and the LEED® Green Building Rating System™. SDC was founded in 2002 by Sandra Leibowitz, an architect with over 18 years of advanced experience who has provided sustainable design consulting services for nearly 300 projects, has authored and co-authored a number of articles and books, and has presented nationally on sustainable design and development topics.

In addition to its expanding portfolio of consulting services, SDC has also developed a professional training program for which it is an approved continuing education provider by the U.S. Green Building Council and the American Institute of Architects.



SDC is a 100% woman-owned business and has been certified as follows:

- Maryland MBE (minority business enterprise, woman-owned), #06-479
- Virginia SWaM (small, woman-owned), #650068
- North Carolina HUB (historically underutilized business, small, woman-owned)
- Delaware WOB (woman-owned business), #DE10061298
- New Jersey MBE (minority business enterprise), #53233-10
- Pennsylvania WBE (woman business enterprise), #120731
- New York WOBE (woman-owned business enterprise), #54073
- West Virginia WOB (woman-owned business)
- Metropolitan Washington Airports Authority LSBE (local small business enterprise) #LD2006-0493-2012
- Howard County, MD MBE (woman-owned small business), #W11-19

SDC is also listed on the U.S. General Services Administration (GSA) Schedule (#GS-21F-0129V).

SDC was recently honored as 'Member Firm of the Year,' Designer/Consultant Category by the USGBC National Capital Region Chapter, and received the 2006 'Green Building Leadership Award', Private Sector Category by the James River Green Building Council.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



# Section 9: LEED Experience



<u>Project</u> <u>Project Location</u>	<u>Owner</u> <u>Completion Date</u>	<u>Rating System</u> <u>SDC Scope</u>	<u>Rating Level</u>	<u>Rating Status</u> <u>Project TOTAL Cost</u> <u>Project SF</u>
Mid-County Recreation Center Silver Spring, Maryland	Montgomery County Dept. of Recreation 2006	LEED-NC Process Management	Silver	Target 8,000,000 31,860
LEED Silver-level consulting, project management and specification integration for new county facility, ongoing.				
Arthur Capper Community Center Washington, DC	DC Housing Authority	LEED-NC Process Management	Certified	Target 9,400,000 18,042
LEED Certified-level technical consulting, specification integration and documentation coordination for new community center in HOPE IV affordable housing complex, ongoing.				
Sailor's Creek Battlefield State Park Visitor Center Green Bay, Virginia	Virginia Department of Conservation and Recreation 11/2009	LEED-NC Process Management	Silver	Certified Unknown 4,070
LEED for New Construction & Major Renovations Silver-level technical consulting, specification integration and documentation coordination for new visitors center for the Virginia Department of Conservation and Recreation.				
Ft. Ritchie Community Center Cascade, Maryland	U.S. Army 11/1/2009	LEED-NC Process Management	Gold	Certified 5,000,000 18,000
LEED for New Construction & Major Renovations Gold-level process management for 10,000 sf addition to and 8,000 renovation of a community center at Fort Ritchie in Washington County, Maryland.				
Ft. Belvoir Residential Community - Fairfax Village Neighborhood Center Fort Belvoir, Virginia	Clark Realty Capital, LLC 5/6/2009	LEED-NC Process Management	Platinum	Certified Unknown 3,770
LEED for New Construction & Major Renovations process management for 3,770 sf community center in one of 13 residential neighborhoods developed as a public-private partnership at Fort Belvoir in Fairfax County, Virginia. This building is the second LEED Platinum-level certified project in Virginia.				
Walter Reed Community Center Arlington, Virginia	Arlington County 2006	LEED-NC Specifications	Silver	Certified Unknown
LEED for New Construction & Major Renovations Silver-level green specifications review and editing for new county facility.				
White Oak Community Recreation Center Colesville, Maryland	Montgomery County Maryland Government Ongoing	LEED-NC Process Management	Silver	Target 24,300,000 50,000
LEED Silver-level consulting, project management and specification integration for new community recreation center and associated site, ongoing.				
Smith Mountain Lake State Park Visitor Center Huddleston, Virginia	Virginia Department of Conservation and Recreation 11/2009	LEED-NC Process Management	Certified	Certified Unknown 3,760
LEED for New Construction & Major Renovations Certified Level Process Management for new Visitors Center. Certification received from USGBC in November, 2009.				



# Section 9: LEED Experience



<u>Project</u> <u>Project Location</u>	<u>Owner</u> <u>Completion Date</u>	<u>Rating System</u> <u>SDC Scope</u>	<u>Rating Level</u>	<u>Rating Status</u> <u>Project TOTAL Cost</u> <u>Project SF</u>
Shenandoah River State Park Visitors Center Warren County, VA	Virginia Department of Conservation and Recreation 11/21/2008	LEED-NC Process Management	Certified	Target Unknown 4,000
LEED Certified-Silver-level technical consulting, specification integration and documentation coordination for new building for the Virginia Department of Conservation and Recreation.				
Westmoreland State Park Visitor Center Montross, Virginia	Virginia Department of Conservation and Recreation 2009	LEED-NC Advisory	Gold	Certified Unknown 4,000
LEED Gold-level technical consulting, specification integration and documentation coordination for new visitors center for the Virginia Department of Conservation and Recreation.				
James River State Park Visitor Center Buckingham County, Virginia	Virginia Department of Conservation and Recreation	LEED-NC Process Management	Certified	Target Unknown 4000
LEED Certified-Silver-level technical consulting, specification integration and documentation coordination for new visitors center for the Virginia Department of Conservation and Recreation.				
Eastern Henrico Recreation Center Richmond, Virginia	Henrico County Anticipated 2011	LEED-NC Process Management	Silver	Target Unknown 27,000
Two-story municipal facility, to be located on a 25-acre site in Henrico County, Virginia, of which the County is only developing 2/3 with this new recreational building, a multi-use playing field, parking, and walking trails.				
National Zoological Park Seals and Sea Lion Exhibit Washington, DC	Smithsonian 2010	LEED-NC	Certified	Target 4000
This project will pursue the application, as a pilot, of the Standards and Guidelines Sustainable Sites Initiative (SSI) currently under development by the ASLA. As this program is not due to begin until 2010, we are proposing the third phase as an open ended support for the application of this product until the scope and effort needed is established. We will do this in close association with the green site consultancy of Greening Urban, LLC. When established we				
North Potomac Community Recreation Center Montgomery County, Maryland	Montgomery County Maryland Government 2013	LEED-NC Process Management	Silver	Target 20,000,000 50,000
LEED Silver-level consulting, project management and specification integration for new community recreation center and associated site, ongoing.				
Woodlawn Visitor's Center Sandy Spring, Maryland	Virginia Department of Conservation and Recreation	LEED-NC Process Management	Certified	Guideline 7000
3-10-09 - per KS - Project closed per email from M-NCPPC.				
First Landing State Park Visitors Center Virginia Beach, Virginia	Virginia Department of Conservation and Recreation 11/30/2009	LEED-NC Process Management	Certified-Silver	Target Unknown 4,000
LEED Certified-Silver-level technical consulting, specification integration and documentation coordination for new visitors center for the Virginia Department of Conservation and Recreation.				





# Section 9: LEED Experience

## Sustainable Design Consulting - Sub Consultant LEED Experience



<u>Project</u>	<u>Owner</u>	<u>Rating System</u>	<u>Rating Level</u>	<u>Rating Status</u>
<u>Project Location</u>	<u>Completion Date</u>	<u>SDC Scope</u>		<u>Project TOTAL Cost</u>
				<u>Project SF</u>
Guilford Gardens Club House		LEED-NC	Gold	Target
Columbia, Maryland	2012	Process Management		Unknown
				4,500
Guilford Gardens Residences		Green Comm.		Target
Columbia, Maryland	2012	Process Management		Unknown
Ft. Belvoir Residential Community - Woodlawn Village Neighborhood Center	Clark Realty Capital, LLC	LEED-NC	Silver	Target
Fort Belvoir, Virginia	Anticipated 2010	Process Management		Unknown
				5,000
LEED-NC process management for new community center in one of 13 residential neighborhoods developed as a public-private partnership at Fort Belvoir in Fairfax County, Virginia.				
Westmoreland Appeal Assistance	Virginia Department of Conservation and Recreation	LEED-NC		
Westmoreland, VA	3/11/2010	Advisory		5,000
Appeal assistance				





## Section 10: Integrated Design Experience

Powell Management Associates is known as a team builder and as a team player. As long as everyone on the team is rowing in the same direction, and the owner (or PMA, as the Owner's Representative) has his hand on the rudder, there can be great value in a collaborative process. We always advocate bringing all of the stakeholders and as much of the project team together as early as possible.

Powell Management Associates' role is to always protect the interests of the Chesapeake Bay Foundation in our capacity as Owner's Representative, including, the goodwill and reputation of the Chesapeake Bay Foundation.

Powell Management Associates' unique knowledge of the project (one of the firm's Principals living in the neighboring area) provide the Chesapeake Bay Foundation a head start in bringing the community into the project.

In the case of the proposed site of the Chesapeake Bay Foundation's Virginia Beach Environmental Center on Pleasure House Point, collaboration will be critical, if not essential to the project's success. The site is one of significant historical and environmental importance. A site of this profile will have many stakeholders, and the neighborhoods, including their respective organizations as assembled by the Shore Drive Community Coalition, will want inclusion in the process - as they have fought so hard against the development of the property.

The recent controversy over the land calls for nothing less than the collaborative approach to design and construction. Opportunity for such collaboration, coupled with avoidance of controversy, will present itself earlier in the project. Sensitive to this, Powell Management will work closely with the Foundation during the early planning and permitting phases. Counsel for the CBF and it's partners, will likely lead these efforts, with PMA carefully listening to the concerns expressed which may impact the design and construction project.

Powell Management's approach is to include all Project Stakeholders including the Owner, Design Team, Builder, Facility Managers, Community Members, and others with an interest in the construction of the building in a Pre-Design Project Analysis or preliminary design charrette. We explain the benefits of the charrette and ensure that all participants have an opportunity to engage in dialogue and provide input.

For projects seeking USGBC LEED certification, such as the Virginia Beach Environmental Center, these "brainstorming" sessions can aid in identifying Design and Sustainability objectives as well as obstacles that might impede successful certification. At

the conclusion of the charrette PMA and the Architect team will develop a LEED scorecard showing the LEED credits that the CBF and the design team have decided to pursue and a report that can serve as a guide through the design phase of the project and as a benchmarking and monitoring tool through the entire design and construction process.

The project team typically includes the "owner", usually a superior in the organization and typically the person or persons with fiscal accountability, the users/occupants of the facility, the facility "caregivers" - the people responsible for operation and maintenance of the building(s), the Design Team - architects, engineers, and design consultants, and the builder/contractor. For the CBF's Virginia Beach project, "the owner" will likely include the Foundation's Annapolis-based leadership, Environmental Education and Fleet & Facilities Directors, and senior personnel from both the Richmond-based Virginia staff and Norfolk staff.

In the planning and design phases, input from the users/occupants is vital to ensuring that the facility fulfills the program of requirements. One example is our role in working with public schools. Ultimately the local School Board is the client, however, schools are the center of our communities. Through this knowledge, Powell Management is able to coordinate with the design team to make certain parents, citizen groups, the PTA, teachers, educational support personnel, maintenance and building staff, civic groups, other advisory boards and local elected officials to make certain the goals of the school are met both from a construction and operability perspective, but also from the goodwill the client holds in the community. On numerous schools projects, PMA has brought teachers and principals into design charrettes, to reap the benefits of their "hands-on" classroom experiences in other school buildings. On a recent school project, maintenance staff was concerned about the boiler chemical treatment, which was part of the heating system. The design engineer suggested a hopper-fed automated system, which was billed as making the maintenance easier. The actual building staff proposed a simple hose fed directly from the chemical buckets. Their suggested solution not only eliminated the costly, stainless steel hopper, but, more importantly from the staff's point of view, eliminated the back-breaking effort needed to empty the chemical buckets into the hopper.

Another example is the recently completed project of new Courthouse for Isle of Wight County. On the Young Laine Courts Building for the County, Powell Management coordinated and facilitated meetings between the Design Team and the Judges, court Clerks and staff and Sheriff's personnel to transfer understanding of how the Courts functioned on a daily basis. One result of these interactions was when we identified that the





## Section 10: Integrated Design Experience

General District Court was using a uniformed, armed Deputy Sheriff to hand carry important documents from the Judge to the Clerk's office. In response, the Architects included a pneumatic tube delivery system between the Courtroom and the Clerk's office, which not only improved document handling efficiency in the Court, but also it freed up a Deputy to perform other important law enforcement work.

On privately-owned projects, where the Contractor can be selected and engaged early, Powell Management advocates welcoming the builder on the overall team, to harvest their knowledge and experience in such areas as materials and systems selections and constructability issues. Input from the various construction trades can eliminate costly detours and delays during the Construction Phase. Giving the Contractor a voice in the early project planning and in design decisions can aid in preventing disputes during the actual building and assembly process. One drawback which PMA has observed to this approach is that too often General Contractors are merely brokers for a collection of non-stakeholder, subcontractors and will actually not be self-performing much of the construction work. For the builder to truly add value in a collaborative design process, the builder itself has to have a unified and complete team.





## Section 11: Coastal Hazards

**The Location of the New Virginia Beach Environmental Center for the Chesapeake Bay Foundation will present unique coastal hazards.**

**Pleasure House Point is the largest undeveloped parcel of land on the Lynnhaven River, and its protection during construction will be of the utmost importance to Powell Management Associates as the Chesapeake Bay Foundations Owner's Representative.**



When selecting Powell Management Associates, the Chesapeake Bay Foundation will select a firm who's principal, Mr. Brian Camden, participated in one of the very first "Clean the Bay" days in the area, and did so on the site where the proposed Virginia Beach Environmental Center is to be located. We believe it is important to share our firm's commitment to protecting our environment to provide the Chesapeake Bay Foundation with a better understanding of the firm it is selecting to serve as their representative - one that shares the values of the Chesapeake Bay Foundation.

**Due to the commitment of the principals of Powell Management, the proposed site is cleaner and healthier than it once was.**

To further these goals, Powell Management Associates will provide an On-Site Project Manager who is an environmental and mechanical engineer, as communicated in our proposed team.

Powell Management Associates is enlisting the services of Langley & McDonald to provide an additional layer of protection regarding the unique coastal hazards the site presents.

Langley & McDonald was established in 2000 by Tom Langley to provide quality and responsive civil engineering, planning and surveying services for both public and private sectors. The professional staff is very well experienced in institutional land development on coastal waterways in the Mid-Atlantic region. The team of professionals at Langley and McDonald includes Professional Engineers and Registered Land Surveyors.

As is Powell Management, Langley & McDonald is located minutes from the site, with their firm's office located on Lynnhaven Parkway in Virginia Beach, Virginia.

Langley & McDonald is comprised of numerous disciplines encompassing civil engineering, planning and surveying. The company's professional and technical staff members are divided into design teams, led by senior engineering managers. The highly-trained and experienced design teams have the ability to meet any challenge, especially coastal hazards, presented by their client's projects. Langley & McDonald's work ethic embodies an ongoing commitment to quality and service.

It is due to their commitment, unparalleled experience, and familiarity with this unique, local site, that Powell Management Associates has chosen this firm as a consultant on this exciting, innovative project for the Chesapeake Bay Foundation.

Langley & McDonald Project Experience in working with potential coastal hazards, to include the following projects along the Chesapeake Bay:

- ◆ Seaside Hall, Virginia Institute of Marine Science  
Wachapreague, VA
- ◆ Eastern Shore Seawater Lab, Virginia Institute of Marine Science, Wachapreague, VA
- ◆ Cape Charles Harbor Master Plan, Cape Charles, VA
- ◆ Cape Charles Yachting Center, Cape Charles, VA
- ◆ The Spectrum at Willoughby, Norfolk, VA
- ◆ Long Bay Pointe Marina, Virginia Beach, VA
- ◆ Bay Creek Marina, Cape Charles, VA

**The Following Page Depicts additional projects where Langley & McDonald provided services for projects with coastal hazards.**





# Section 11: Coastal Hazards



Long Bay Pointe Marina



Willoughby Marina



Bubba's Marina



Bluewater Yachting Center



Bay Creek Marina & Resort



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •

## MARINA PROJECT LISTING

Long Bay Pointe Marina	Virginia Beach, VA
Bluewater Yachting Center	Hampton, VA
Downtown Hampton Docks	Hampton, VA
East Beach Marina	Norfolk, VA
NAS Norfolk Marina Expansion	Norfolk, VA
Bubba's Marina	Virginia Beach, VA
Norfolk Yacht & Country Club	Norfolk, VA
Hope Springs Marina	Stafford, VA
Waterside Marina	Norfolk, VA
Bay Creek Marina & Resort	Cape Charles, VA
Harbor Walk of Norfolk	Norfolk, VA
Chesapeake Marina LLC	Chesapeake, VA
Tidewater Yacht Center	Baltimore, MD
Aquia Harbour Marina	Stafford, VA
Fisherman's Wharf Marina	Virginia Beach, VA
Owl's Creek Marina	Virginia Beach, VA
Noah's Landing Marina	Louisa County, VA
Willoughby Marina	Norfolk, VA
Little Creek Marina	Norfolk, VA
Bay Point Marina	Norfolk, VA
Rockett's Landing	Richmond, VA
Hampton River Condos & Marina	Hampton, VA



Owl's Creek Marina & Boat Launch



## Section 12: Litigation & Arbitration

Despite being involved in millions of dollars in design, construction and professional services contracts over the past 20 years, only once has any of our actions taken us into arbitration or litigation.

In 2007, when a North Carolina client failed to make payments as required by our Agreement, Powell Management Associates filed suit against the client for collection of the debt. In response to our suit, the client filed a frivolous countersuit, claiming breach of contract and negligence. Without going to trial, settlement was reached on October 8, 2007 with the client both making payment to PMA and dismissing the countersuit.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Section 13: Conflicts of Interest

Powell Management Associates sees no conflicts of interest for this project.

Through the generation of this proposal Powell Management Associates, went first to the experts in the field of LEED Building Initiatives, including those who were contracted for the design and construction of the Merrill Center. We were made quickly aware that these talents were either already engaged in the project directly with the Chesapeake Bay Foundation or had moved on to positions that would preclude them, due to state and federal laws relating to conflicts of interest, from participation on a private team for consulting services.

Should the CBF desire, and/or those previously excluded experts, because of perceived conflict become available, Powell Management would welcome the opportunity to add them to our team.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Appendix I: Certificate of Insurance

Powell Management Associates has never paid any type of claim or settlement. Because of our outstanding record, we are able to procure required insurance coverages of almost any amount for specific projects, as needed.

Powell Management Associates routinely maintains Commercial General Liability Insurance in the amount of \$1 million per occurrence with \$2 million in General Aggregate, and Excess Umbrella Liability coverage in the amount of \$1 million, all with CNA Insurance Group. PMA also maintains Professional Liability Insurance in the amount of \$1,000,000 per claim. We also maintain all statutory coverages for Workers Compensation, Automobile Liability, and Employers' Liability.

Refer to the Certificate on the following page for details.



POWELL MANAGEMENT ASSOCIATES

•VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND•



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
08/08/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Riggs, Counselman, Michaels & Downes 555 Fairmount Avenue Towson, MD 21286-5497 (410) 339-7263	<b>CONTACT NAME:</b> Angela K. Brown, CISR <b>PHONE (A/C, No, Ext):</b> 410-339-5227 <b>E-MAIL ADDRESS:</b> abrown@rcmd.com	<b>FAX (A/C, No):</b> 410-583-5459
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b> B & C Management, Inc. 1997 Annapolis Exchange, Suite 300  Annapolis, MD 21401	<b>INSURER A :</b> Transportation Insurance Co.	
	<b>INSURER B :</b> Continental Insurance Company	
	<b>INSURER C :</b>	
	<b>INSURER D :</b>	
	<b>INSURER E :</b>	

<b>COVERAGES</b>	<b>CERTIFICATE NUMBER:</b> 438495	<b>REVISION NUMBER:</b>
------------------	-----------------------------------	-------------------------

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	X		C2066377385	12/1/2010	12/1/2011	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			C2091436153	12/1/2010	12/1/2011	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> <b>EXCESS LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$()			C2066377290	12/1/2010	12/1/2011	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WC2066377421	12/1/2010	12/1/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
A	Crime			C2066377385	12/1/2010	12/1/2011	EMPLOYEE THEFT \$25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)  
General Proof Of Coverage

### CERTIFICATE HOLDER

Chesapeake Bay Foundation  
6 Herndon Avenue  
Attn: Paul Willey  
Annapolis, MD 21403

### CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE:

Client # 67 Mst # 2010-2011 All Lines  
ACORD 25 (2010/05)Subject  
The ACORD name and logo are registered marks of ACORD

© 1988-2010 ACORD CORPORATION. All rights reserved.



POWELL MANAGEMENT ASSOCIATES

• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •

**CERTIFICATE ATTACHMENT**  
**Riggs, Counselman, Michaels & Downes, Inc.**

**Named Insured:** B & C Management, Inc.

**Certificate Holder:** Chesapeake Bay Foundation

**Description of Operations/Locations/Vehicles/Restrictions/Special Items:**

PRIMARY INSURANCE: Such insurance as is afforded by the General Liability policy is primary insurance and no other insurance of the additional insured shall be called upon to contribute to a loss

Client #<sub>67</sub>

Cert # 438495

Master # 2010-2011 All Lines



POWELL MANAGEMENT ASSOCIATES  
• VIRGINIA BEACH, VIRGINIA • ANNAPOLIS, MARYLAND •



## Appendix II: Finding middle ground on Indigo Dunes

The Virginian-Pilot and The Ledger-Star, Norfolk, VA / Mar 12, 2007

### **Finding middle ground on Indigo Dunes**

*Guest columnist Brian V. Camden*

Several years ago, during Clean the Bay Day, I pitched in with other Shore Drive neighbors and helped clean what was called the McCleskey property.

Four-wheeling the trails in my old Bronco, we hauled dozens of loads of trash, rusted refrigerators and debris out of the dunes and wetlands.

We knew it was private property, but it was a peerless neighbor, devoid of homes and divinely rich in natural beauty. A remembrance of our tributaries as they once were.

Then, as now, it deserved our best efforts in preservation. But today those 69 acres of sand and marsh are the future Indigo Dunes, a Virginia Beach development of more than 1,000 homes that, with its density, is suspect environmentally.

Politically, it has fired up every civic league anywhere near the project, and they're allied in their opposition with the Shore Drive Community Coalition. Rarely does a project evoke this type of ferocity among the citizenry. Opponents actually chartered buses to go to wetland hearings.

But Shore Drive is already congested, and building more than a thousand new condos will impose an undeserved wretchedness on those of us forced to live with the aftermath.

Environmentally, judging from the developer's Web site, most of the site will be bulldozed and thousands of cubic yards of fill material will be placed over the existing habitats and breeding areas.

And whereas their proposed water quality measures are probably better than what exists now, still the vision of these environs being stripped bare should be a burden unsupportable to a virtuous City Council.

Yes, this is private property. But despite claims by the developer, Indigo Dunes cannot be built "by right." It requires approvals and variances by the City Council, Planning Commission and Army Corps of Engineers, among others. The interests of the public good must be the bulwark against which the profit to the developer is measured.

Being a builder myself, I hold strong opinions regarding property rights and resent restrictions that unreasonably encumber my plans or limit my avenues to profit.

At the same time, I'm an unapologetic tree hugger. I've rejected site plans because they removed too many trees and firmly believe our poor planet needs all the help we can give it.

Not having seen the old McCleskey property up close in several years, I decided to stop by one morning recently and look around.





## Appendix II: Finding middle ground on Indigo Dunes

Nestled on the north shore of Pleasure House creek, it reminded me of the Sound side of the Outer Banks 30 years ago: vast expanses of sea grass with large stands of dark coastal pines. What amazed me most were all of the birds. Maybe because it was a work day and no one else was around, there were hundreds of ducks, egrets and herons just a-whooping and a-crowing all over the place.

But there were also trash and haphazard dumping scarring nature's palette, together with a sense of disjointedness, as if the land was compiled a piece at a time, athwart with berms and gullies interrupting its continuity.

That the property will be developed in one manner or the other is now fairly certain and the years of sylvan enjoyment are ending. I don't share the collective opinion of the civic leagues that no development whatsoever should be allowed, unless of course the owner is fairly compensated; I can't see the city ponying up that kind of money.

But any plan showing a thousand or more units is callously indifferent to its neighbors' pleas, and two new high-rise towers are two too many. Shore Drive is already being towered to death. Also, we need to remember that the coming Duck-In development, with its hundreds of condos, will augment this increased congestion.

So begins the artful dance of the regulatory approval process, wetland notices in the Beacon, hearings, plans and density schemes evolving and all sides targeting the number of units.

At the end of the day, the number of units is the singular issue most influencing all sides. The more units, the more profit to the developer; the fewer units, the less congestion to the residents. But there is a solution if both sides remember that compromise isn't capitulation.

Indigo Dunes is a unique coastal development whose economy can be compatible with ecology by utilizing a doctrine of proportion married to preservation. After all, the best preparation for the future is proper planning in the present.

*\* Guest columnist Brian V. Camden is a Principal of a Virginia Beach construction program management firm. E-mail him at [bcamden@powellmanage.com](mailto:bcamden@powellmanage.com).*

