



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Request for Quotation**

RFQ NUMBER  
 DNR209057

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF  
 FRANK WHITTAKER  
 304-558-2316

RFQ COPY

TYPE NAME/ADDRESS HERE  
 Paul R. Erickson  
 LeMay Erickson Willcox Architects  
 11250 Roger Bacon Drive, Suite 16  
 Reston, VA 20190

RFQ COPY

DIVISION OF NATURAL RESOURCES  
 PARKS & RECREATION SECTION  
 BUILDING 3, ROOM 719  
 1900 KANAWHA BOULEVARD, EAST  
 CHARLESTON, WV  
 25305-0662 304-558-2775

| DATE PRINTED | TERMS OF SALE | SHIP VIA | FOB | FRIGHT TERMS |
|--------------|---------------|----------|-----|--------------|
| 11/06/2008   |               |          |     |              |

BID OPENING DATE: 12/09/2008 BID OPENING TIME: 01:30PM

| LINE | QUANTITY | UOP | CAT NO | ITEM NUMBER | UNIT PRICE | AMOUNT |
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| 0001  | 1 | LS |  | 906-00-00-001 |  |  |
| ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL<br><br>EXPRESSION OF INTEREST<br><br>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION IF NATURAL RESOURCES, IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR LODGE EXPANSION AND PARK IMPROVEMENTS AT CACAPON RESORT STATE PARK LOCATED IN BERKELEY SPRINGS WV, PER THE ATTACHED SPECIFICATIONS.<br><br>TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO FRANK WHITTAKER IN THE WEST VIRGINIA PURCHASING DIVISION VIA FAX AT 304-558-4115 OR VIS EMAIL AT FRANK.M.WHITTAKER@WV.GOV. DEADLINE FOR ALL TECHNICAL QUESTIONS IS NOVEMBER 21, 2008 AT 3:00 PM. ALL TECHNICAL QUESTIONS RECEIVED, IF ANY WILL BE ANSWERED BY ADDENDUM AFTER THE DEADLINE.<br><br>QUESTIONS CONCERNING THE PROCESS BY WHICH A VENDOR MAY SUBMIT AN EXPRESSION OF INTEREST TO THE STATE OF WEST VIRGINIA ARE NOT CONSIDERED TECHNICAL QUESTIONS AND MAY BE SUBMITTED AT ANY TIME PRIOR TO THE BID OPENING DATE AND TIME.<br><br>EXHIBIT 10<br><br>ADDENDUM ACKNOWLEDGEMENT<br><br>I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO |   |    |  |               |  |  |

RECEIVED  
 2008 DEC -8 A 9:50  
 PURCHASING DIVISION  
 STATE OF WV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

|                         |              |                                   |
|-------------------------|--------------|-----------------------------------|
| SIGNATURE               | TELEPHONE    | DATE                              |
| <i>Paul R. Erickson</i> | 703 956 5600 | 12/09/08                          |
| TITLE                   | FEIN         | ADDRESS CHANGES TO BE NOTED ABOVE |
| President               | 54-1492493   |                                   |

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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 11250 Roger Bacon Drive, Suite 16  
 Reston, VA 20190

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| MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.  |          |         |          |             |            |        |
| ADDENDUM NOS :   |          |         |          |             |            |        |
| NO. 1  |          | 12/1/08 |          |             |            |        |
| NO. 2  |          |         |          |             |            |        |
| NO. 3  |          |         |          |             |            |        |
| NO. 4  |          |         |          |             |            |        |
| NO. 5  |          |         |          |             |            |        |
| I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF THE BIDS.  |          |         |          |             |            |        |
| VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING. |          |         |          |             |            |        |
| SIGNATURE  |          |         |          |             |            |        |
| LeMay Erickson Willcox Architects COMPANY  |          |         |          |             |            |        |
| 12/09/08   |          |         |          |             |            |        |
| DATE   |          |         |          |             |            |        |
| REV. 11/96   |          |         |          |             |            |        |
| BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATI-   |          |         |          |             |            |        |

SIGNATURE *Paul R. Erickson* TELEPHONE 703.956.5600 DATE 12/9/08  
 TITLE President FEIN 54-1492493 ADDRESS CHANGES TO BE NOTED ABOVE

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PAGE  
**3**

ADDRESS/RESPONSE TO AS TENDER OR  
**FRANK WHITTAKER  
 304-558-2316**

VENDOR

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 TYPE NAME/ADDRESS HERE**  
 Paul R. Erickson  
 LeMay Erickson Willcox Architects  
 11250 Roger Bacon Drive, Suite 16  
 Reston, VA 20190

BUYER

**DIVISION OF NATURAL RESOURCES  
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 25305-0662 304-558-2775**

| DATE FINISHED | TERMS OF SALE | SHIP VIA | FOB | FREIGHT TERMS |
|---------------|---------------|----------|-----|---------------|
| 11/06/2008    |               |          |     |               |

BID OPENING DATE: **12/09/2008** BID OPENING TIME: **01:30PM**

| LINE   | QUANTITY | U.P. | CAT. NO. | ITEM NUMBER | UNIT PRICE | AMOUNT |
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| <p><b>CALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</b></p> <p><b>REV. 1/2005</b></p> <p style="text-align: center;"><b>NOTICE</b></p> <p><b>A SIGNED BID MUST BE SUBMITTED TO:</b></p> <p style="padding-left: 40px;"><b>DEPARTMENT OF ADMINISTRATION<br/>                 PURCHASING DIVISION<br/>                 BUILDING 15<br/>                 2019 WASHINGTON STREET, EAST<br/>                 CHARLESTON, WV 25305-0130</b></p> <p><b>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</b></p> <p><b>SEALED BID</b></p> <p><b>BUYER: 44</b></p> <p><b>REQ. NO.: DNR209057</b></p> <p><b>BID OPENING DATE: 12/09/08</b></p> <p><b>BID OPENING TIME: 1:30 PM</b></p> <p><b>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:</b></p> <p style="text-align: center;">-----</p> <p><b>PLEASE PRINT OR TYPE NAME OF PERSON TO CONTACT</b></p> |          |      |          |             |            |        |

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

|                                      |                           |                                   |
|--------------------------------------|---------------------------|-----------------------------------|
| SIGNATURE<br><i>Paul R. Erickson</i> | TELEPHONE<br>703.956.5600 | DATE<br>12/9/08                   |
| TITLE<br>President                   | FAX<br>54-1492493         | ADDRESS CHANGES TO BE NOTED ABOVE |

**WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'**



December 9, 2008

Mr. Frank Whittaker  
State of West Virginia  
Department of Administration  
Purchasing Division  
Building 152019 Washington Street, East  
Charleston, West Virginia 25305-0130

**Re: DNR 209057, Architectural /Engineering Services for Cacapon Resort State Park**

Dear Mr. Whittaker:

We are pleased to have the opportunity to submit our qualifications for Architectural and Engineering Services for the Cacapon Resort State Park project for the West Virginia Division of Natural Resources.

LeMay Erickson Willcox offers over 20 years of experience in the greater Washington DC metropolitan area with extensive expertise relevant for the expansion to the Lodge facilities. In addition to parks, recreation and retreat facilities, we have residential, multi-family, mixed-use, commercial and hotel experience. Regarding interior space planning and design applicable to your needs, our projects include multi-functional community gathering spaces, community club houses and pools, dining and kitchen facilities, exercise and full scale gyms. In addition, all of our expansion and renovation projects have required uninterrupted operational capabilities for the client during the course of construction.

The carefully assembled team we are proposing offers proven expertise to provide the Cacapon Resort State Park with exceptional services for all aspects of the new building facilities and improvements to the golf course and water and wastewater treatment system.

We are also LEED professionals and are currently working on several projects targeting LEED Certification. Following the development of green design closely, we have presented seminars on sustainable design at national conferences and have recently authored a chapter on sustainable design for a national design manual to be published early next year. Although pursuing LEED certification may not be in the scope of the project, we will ensure the goals of sustainable-design, energy efficiency and environmental consciousness are considered where appropriate to enhance the natural resources of the project and park.

We are committed to providing the highest caliber architectural services and look forward to developing a successful relationship with the State.

Sincerely,

A handwritten signature in cursive script that reads "Paul R. Erickson".

Paul R. Erickson, AIA  
Senior Principal Architect

Enclosure: Expression of Interest

11250 Roger Bacon Drive  
Suite Number Sixteen  
Reston, Virginia 20190  
703 956 5600 T  
703.956 5601 F  
www.lewarchitects.com



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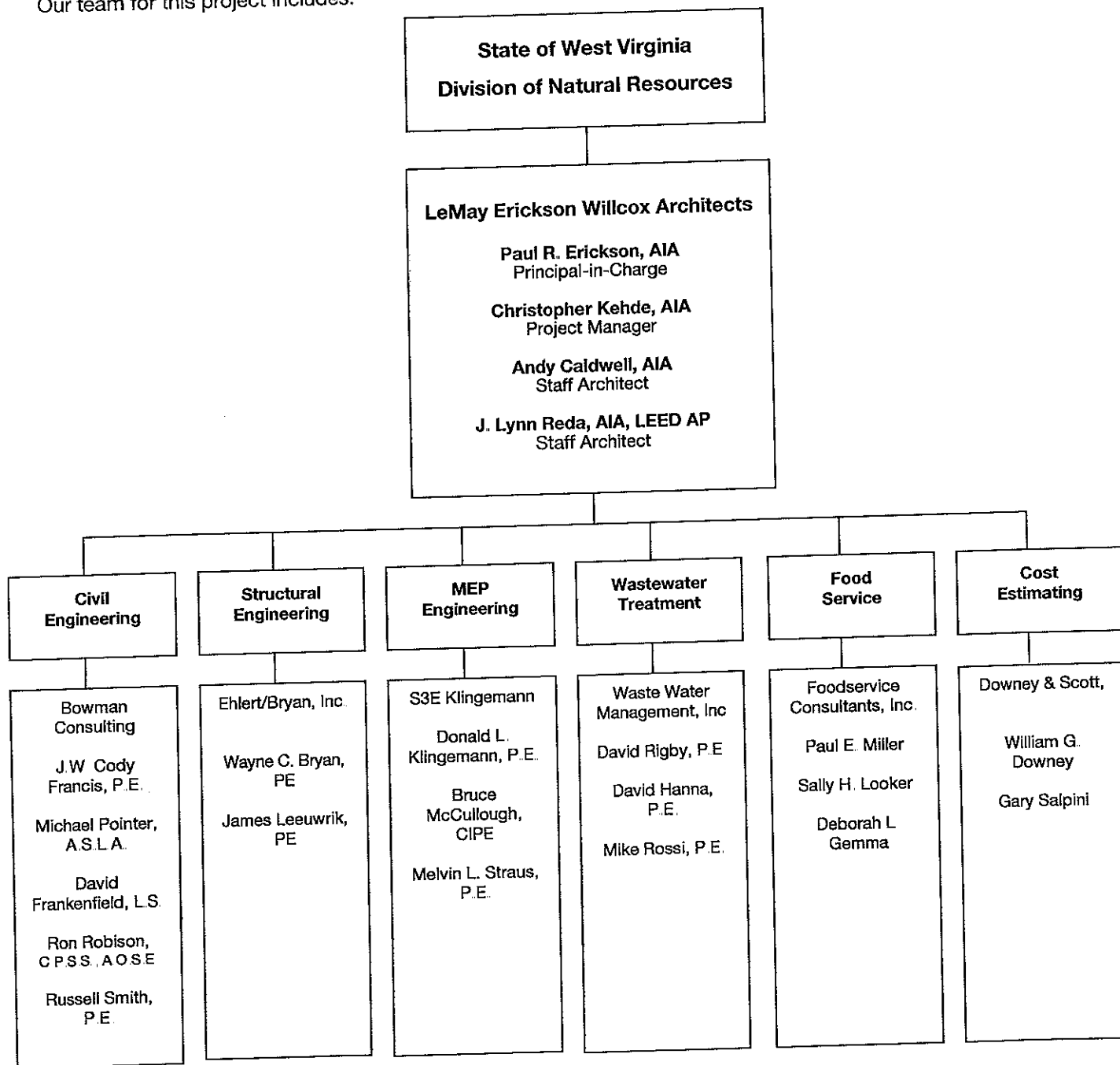


## CACAPON RESORT STATE PARK LODGE EXPANSION AND PARK IMPROVEMENTS

### ORGANIZATIONAL CHART

LeMay Erickson Willcox Architects coordinates and directs the work of highly qualified engineering consultants who are specifically selected due to their relative expertise, experience and availability.

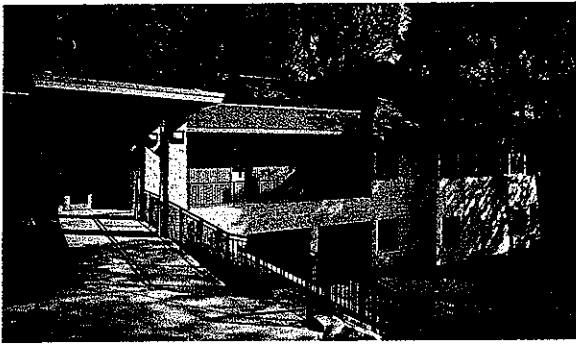
Our team for this project includes:





## OUR FIRM

**Profile** LeMay Erickson Willcox Architects is an architectural, planning, and interior design firm based in Reston, Virginia, specializing in the design of multi-family, mixed-use and commercial facilities for a broad range of clients in the Mid-Atlantic region. Founded in 1986, the ownership of the firm today includes Paul Erickson, AIA, Jared Willcox, AIA, and Neal Roseberry, AIA who work closely with over 20 design, technical, and administrative staff members.



Over the past two decades, the firm has created an acclaimed practice known for delivering award-winning results and enduring value to our clients. LeMay Erickson Willcox Architects brings a creative yet disciplined approach to our work in the residential and commercial sectors, including multi-family residential, mixed-use, office buildings, corporate campuses, and town center environments. We focus on generating value and realizing optimal return for each site and building.

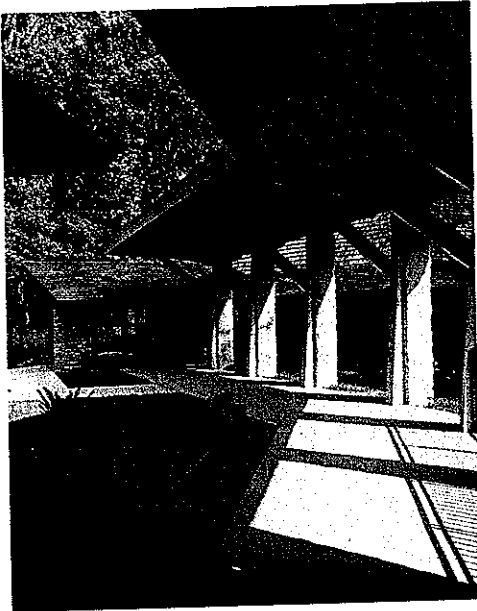


In 2005, LeMay Erickson Willcox was awarded the T. David Fitz-Gibbon Architecture Firm Award from the Virginia Society AIA. The highest honor to be bestowed by the society upon a Virginia-based architecture firm, LeMay Erickson Willcox is one of only three Northern Virginia firms to earn this honor. The Honors Committee noted that our many repeat clients "attest to the firm's timeless designs and commitment to client satisfaction."



## OUR APPROACH

### Inspired Results



Whether we're involved from the earliest phases of master planning and conceptual design or brought in to resolve challenges in project viability and yield, our professional team is consistently recognized for going beyond the expected and delivering results of the highest quality and value. Our clients' confidence is paramount—we strive to respond to each project with energy and resourcefulness, and to streamline the delivery process while providing inspired results that surpass our clients' expectations.

With a practice comprising hundreds of building projects, LeMay Erickson Willcox also offers strengths in contextual, site-sensitive design, enabling us to create residences and work places that embrace and enhance the natural and built environment while optimizing the outdoor setting. We believe that design plays a vital role in shaping the character and appeal of neighborhoods and office parks whether urban or suburban, or traditional.

### Design Flexibility

Each project we undertake is distinct, and our work embraces many different architectural styles and materials. The inspiration for our designs is varied, and comes from sources that include the project context, program requirements, and our client's vision. We are skilled, versatile architects, with design awards from national, state and local organizations.

### Highest and Best Use

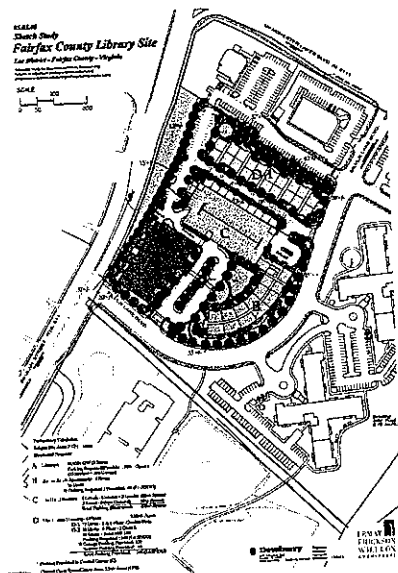
Understanding the economic viability and meeting the financial objectives of the development community are key to the success of their projects. Whether our clients are embarking on a venture to develop a new site or considering new additions and or renovations to an existing facility, our ability to draw from an extensive knowledge base of project experience provides a valuable resource in considering the financial opportunities that may be realized.

The combination of this experience along with our recognition of the importance to fully understand our clients' goals has uniquely positioned LeMay Erickson Willcox to serve as trusted advisors to our development clients. Our ability to listen, understand and anticipate serve as building blocks for design solutions that are formulated through a collaborative and creative process.





## OUR APPROACH



We have found that a proven methodology that begins with an overall strategic planning process helps formulate and implement an appropriate strategic plan that results in an effective and efficient implementation program. This strategy considers aspects of such issues as the individual organizations' real estate development objectives, the availability of resources such as financing, land availability, existing facilities and market demand as well as the overall project development schedule. Ultimately, our clients benefit from our ability to refine this information and implement a rigorous and thorough feasibility study that results in logical and considered highest and best use planning studies for their respective projects.

**Quality Control** Excellent client service demands attentiveness to quality control. LeMay Erickson Willcox believes that superior project management with clear communication is perhaps the essential factor determining the ultimate success of every project. Our firm is purposefully organized to allow the principals to remain available to our clients and actively involved in quality control from the first master planning study through final construction. Our project managers are likewise trained to listen and communicate effectively, with regularly-scheduled meetings and team project updates helping ensure that each project's requirements are understood and achieved.

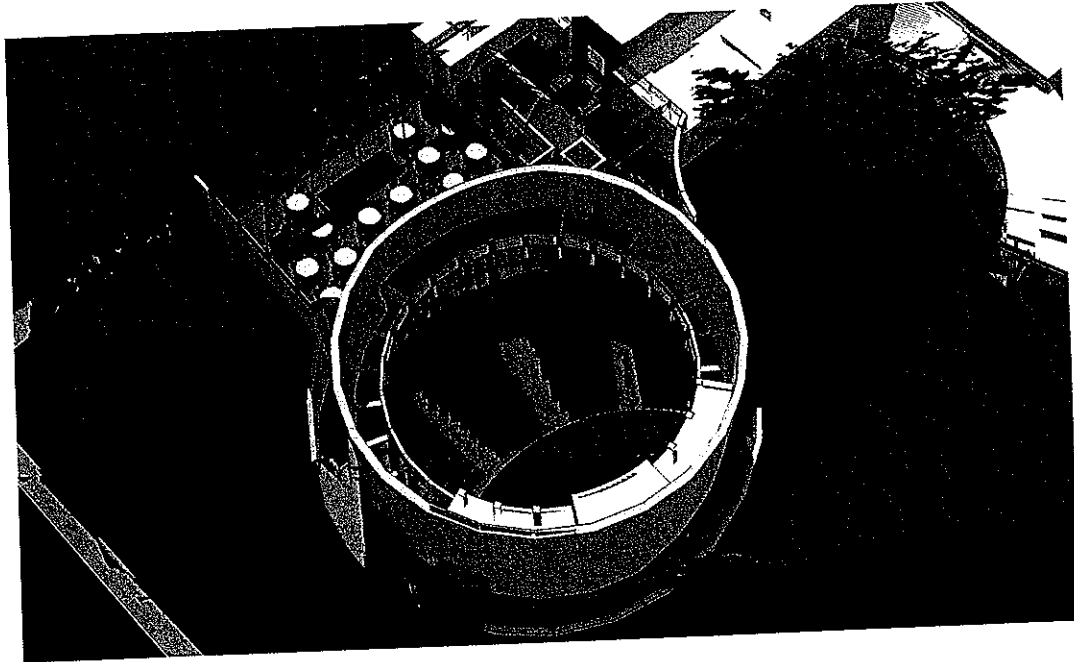
**Cost Control** No client service is as fundamental to our role as architects as delivery of a project that meets its established budget and quality goals. We employ several methods of responsible cost control at appropriate project stages. These include in-house cost data based on completed projects, independent professional cost estimates, and contractor estimates. We advise our clients on total project costs from the earliest design meetings, including both "hard" construction costs; "soft" costs such as permit and municipal fees, utility fees, and professional fees; and design and construction contingencies appropriate for each project phase. Ultimately, careful communication, thorough documentation, and ongoing review of scope and budget by the entire team helps ensure that cost parameters are appropriately set, monitored, and met.



## OUR APPROACH

### Technical Capability

LeMay Erickson Willcox has a fundamental business policy of maintaining our computer infrastructure and staff training at the front edge of technology and architectural practice. All project management is computer-based employing current release AutoCAD, Microsoft Office, and other appropriate software and shareware. We employ three-dimensional computer modeling of our designs at both the sketch level and as photo-realistic renderings, assisting our clients in visualizing concepts and supporting communication, publicity and fund-raising programs. Along with our in-house network, we also maintain a File Transfer Protocol site on the internet, facilitating timely sharing and coordination of documents with both our clients and technical consultants.



### Sustainable Design

Many of our clients are increasingly interested in sustainable design, including projects that are LEED-certified by the United States Green Building Council. LeMay Erickson Willcox believes that sustainable design represents responsible stewardship of both natural resources and our client's resources, resulting in buildings that are energy efficient, eco-friendly, and sustainable. Whether a client is interested in LEED certification, or simply wishes to employ a project approach that is environmentally aware, our LEED-accredited professionals can help guide the process.



## RECENT PROJECTS

**South Run Office Park**  
Warrenton, Virginia

**Park Center at Manassas Park**  
Manassas Park, Virginia

**The Station at Potomac Yard**  
Alexandria, Virginia

**Lee Village at Silver Lake**  
Lee District, Fairfax County, Virginia

**Linden Lake Business Center**  
Manassas, Virginia

**Sudley South Business Center**  
Manassas, Virginia

**Cascades Office Center**  
Loudoun County, Virginia

**Colts Neck Apartments**  
Reston, Virginia

**Woodland Park Apartments**  
Fairfax County, Virginia

**Elms at Stoney Run**  
Severn, Maryland

**Elms at Mont Joy**  
Columbia, Maryland

**Elms at Germantown**  
Germantown, Maryland

**Elms at Kingsview Village**  
Germantown, Maryland

**Rosemary Ridge Apartments**  
Prince William County, Virginia

**Armistead Apartments**  
Fairfax County, Virginia

**Ashburn Farms Medical Building**  
Ashburn, Virginia

**Village Square at Greenhill Crossing**  
Haymarket, Virginia

**Ashburn Village I & II Apartments**  
Loudoun County, Virginia

**Northpoint Village Apartments**  
Reston, Virginia

**Woodmont Crossing Apartment Homes**  
Washington, D.C.

**Stuart Hill Apartments**  
Winchester, Virginia

**Ashburn Meadows - Phase I & II**  
Ashburn, Virginia

**Trevors Run Apartments**  
Loudoun County, Virginia

**Kenton Crossing at Lorton Station**  
Lorton, Virginia

**The Arbors at Broadlands**  
Loudoun County, Virginia

**Mayfaire Apartments**  
St. Mary's County, Maryland

**South Riding Apartments**  
Loudoun County, Virginia

**Flynn's Crossing Apartments**  
Loudoun County, Virginia

**Merrifield Commons Apartments**  
Fairfax County, Virginia

**Lee Overlook Apartments**  
Fairfax County, Virginia

**Cascades Commons Apartments**  
Loudoun County, Virginia

**Gunston Commons Apartments**  
Fairfax County, Virginia

**Chantilly Crossing**  
Chantilly, Virginia

## OUR REFERENCES

**Mr. Clark Massie**

Partner  
The Tetra Corporation  
2653 Black Fir Court  
Reston VA 20191  
(703) 391-6245  
tetracorporation@aol.com

**Mr. Glenn Ferguson**

President  
Clark Builders Group  
4401 Wilson Boulevard, Suite 600  
Arlington, VA 22203  
(703) 294-4610

**Mr. James M. Mobley**

Elm Street Development  
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McLean, Virginia 22101  
(703) 734-9730  
jmobley@elmstreetdev.com

**Mr. Jeff Hadlock**

President  
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**Mr. Adam Schulman**

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Vienna, VA 22182  
(703) 760-9500  
adam@arc Realty.com

**Ms. Cheryl Hartman**

Executive Director  
Meadowkirk Retreat Center  
37982 Delta Farm Lane  
Middleburg, VA 20117  
540. 687. 5565

**Rev. Dr. Rich Reifsnyder**

Senior Pastor  
First Presbyterian Church  
116 S. Loudoun Street  
Winchester, VA 22601  
540. 662. 3824

**Ms. Claudia Meer**

Managing Director  
Clark Ventures  
7500 Old Georgetown Road  
Bethesda, Maryland 20814-6133  
(301) 272-2989  
claudia.meer@clarkconstruction.com

**Mr. Robert Smith**

President  
AHC Holdings LLC  
17877 Key Vista Way  
Boca Raton, FL 33496  
(561) 488-7735  
rsmith@ahcholdings.com



## **PAUL R. ERICKSON, AIA**

### **Senior Principal**

Throughout his 30-year career, Paul Erickson has been consistently recognized as one of the commonwealth of Virginia's most acclaimed architects. He has managed and designed award-winning projects and served the profession as an active leader of the American Institute of Architects' Virginia State and Northern Virginia chapters, juror for prominent design competitions and speaker at national events and symposia. He brings a thoughtful and sophisticated design perspective to each of his projects, along with a compelling eye for detail.

### **Career Highlights**

- Co-Founder and Principal, LeMay Erickson Willcox Architects – Established in 1986
- Architect, Donald, LeMay and Page – 1983-1986
- Architect, Gruen Associates (Office of Cesar Pelli) – 1981 -1983

### **Education**

Bachelor of Science/Architecture, University of Virginia

### **Professional Registration**

Registered Architect, Virginia, Maryland, West Virginia, District of Columbia,

### **Professional/Civic Service**

- Board of Directors, Virginia Society of the American Institute of Architects
- Board of Directors and Chapter Leadership, Northern Virginia Chapter of the American Institute of Architects, *Served as President, Vice President, Secretary, and Treasurer.*
- Chair, Northern Virginia Chapter AIA Design Awards
- Juror, Fairfax County Exceptional Design Awards, VSAIA Virginia Prize, Maryland AIA Awards, Inter-School Design Competition, Fire Chief Station Style Awards
- Graduate, Leadership Fairfax Program
- Member, Leadership Fairfax Advisory Committee, Selection Committee, and Board of Directors

### **Professional Experience**

Meadowkirk Outdoor Ministry Center  
Meadowlark Gardens Regional Park  
Conservatory and Visitors Center  
Autumnwood Park Pool and Bath House  
The Station at Potomac Yard No. 9

Global Mission Church  
Covenant Presbyterian Church  
City of Charlottesville Fire Facility Study  
Germantown East Fire Station No. 34  
Dale City VFD Stations No.s 10, 13, 18, 20



**CHRISTOPHER S. KEHDE, AIA**  
**Associate**

With extensive experience in master planning, architecture, interior design, construction documentation, and project management, Christopher Kehde brings diverse, senior-level expertise to each project. He has designed and managed the renovation and/or new construction of projects including: recreational facilities; religious buildings including sanctuaries, classrooms, commercial kitchens, fellowship halls, and administrative offices; office buildings; and fire stations. Christopher is a native of West Virginia and has an interest in modern architecture with a respect for traditional design values.

Christopher's recent project experience includes the design and project management of the Meadowkirk Outdoor Ministry Center (MOMC), a religious retreat center in rural Middleburg, Virginia. Informally referred to as "Camp Meadowkirk", the project is a multi-building campus set on a 380 acre farm and includes a new 25,000 s.f. dining center, renovation of an existing stone barn into a multi-purpose chapel, a new 20-room Inn with meeting rooms, new residential guest cabins, a new swimming pool and bathhouse, a new rustic camp bathhouse, a new pump house for the campus well-water distribution system, and renovation to existing residential buildings. Christopher has also worked on the development of a new 100,000 s.f. religious project set in rural Frederick country, where environmental impact including well water, waste water treatment, and storm water management are prominent issues.

**Education**

Bachelor of Architecture, Virginia Polytechnic and State University  
Advanced Studies, European Studies Center, Riva San Vitale, Switzerland

**Professional Registration**

Registered Architect, Virginia

**Professional/Civic Service**

- Member, American Institute of Architects
- Member, Northern Virginia Young Architects Forum
- Former Vice President and Artistic Director, American Music Stage
- Former Board Member and Set Designer, Contemporary Youth Arts Company
- Youth Soccer Coach - D License

**Professional Experience**

Meadowkirk Outdoor Ministry Center  
Global Mission Church  
Gainesville United Methodist Church  
Grace Baptist Church  
St. Margaret's Episcopal Church

The Falls Church  
Our Lady of Good Counsel Catholic Church  
Warrenton Volunteer Fire Company No. 1  
Gainesville District Volunteer Fire Dept. No. 24



## **ANDY CALDWELL, AIA**

### **Senior Project Architect**

Andy Caldwell is a registered architect with over 22 years of experience in commercial and residential architecture. His institutional design and management experience includes recreational facilities, commercial banks, high and low rise multifamily residential buildings, public safety, religious and animal care facilities.

Joining LeMay Erickson Willcox Architects in 2006, Andy enjoys the technical challenges of architecture and applies his extensive experience with 3D computer modeling and rendering to solve those challenges with practical design solutions to meet his client's goals.

### **Career Highlights**

Mr. Caldwell's institutional design and management experience includes numerous projects for Wolf Trap, National Park for the Performing Arts, including the Ovations Restaurant, Encore Lounge expansion and the Center for Education at Wolf Trap, headquarters for the Wolf Trap Foundation.

### **Education**

Bachelor of Science, Architecture, Georgia Institute of Technology  
- Senior Year Program in Paris France  
Master of Architecture, Georgia Institute of Technology  
- Emphasis on energy efficiency and day lighting design.

### **Professional Registration**

Registered Architect, Virginia, Delaware and Washington, DC.  
National Council of Architectural Registration Boards

### **Professional/Civic Service**

- Member, American Institute of Architects, Northern Virginia Chapter
- Juror, Associated Builders and Contractors Excellence in Construction Awards
- President, Hunters Creek Swim and Racquet Club
- Member, New Building Commission, Reston Presbyterian Church
- Team Leader, 2006 Church roof building project trip, Millia, Kenya

### **Professional Experience**

Center for Education at Wolf Trap  
Wolf Trap Ovations Restaurant  
Wolf Trap Meadows Pavilion Band Shell  
The Station at Potomac Yard  
Global Mission Church  
Colts Neck Apartments  
Belmont Towers Condominiums

Spring Lake Townhouses  
Calvin B. Taylor Bank  
Sussex County Federal Credit Union  
Baltimore Trust Bank  
Bank of the Potomac (now BB&T)



## **J. LYNN REDA, AIA, LEED AP**

### **Senior Associate**

Lynn Reda is a senior project manager and designer with LeMay Erickson Willcox Architects whose broad portfolio includes the design of international hotels and resorts for Ritz Carlton and Four Seasons, as well as the acclaimed One and Only Ocean Club. She also assisted in the design of the National Air and Space Museum Udvar-Hazy Center in Northern Virginia. Lynn is committed to the practice of sustainable strategies in building design, and has achieved LEED accreditation through the U.S. Green Building Council.

She has numerous fire and rescue facility projects in her portfolio, and regularly takes part in fire training exercises in order to stay current with the evolving needs of the firefighting community. She is knowledgeable about trends and state-of-the-art practices in the public safety field, and has spoken at conferences and industry forums on issues

### **Education**

Bachelor of Architecture, California State Polytechnic University  
Rotary Scholar, University of Bath, England  
The Polytechnic University, Athens, Greece

### **Professional Registration**

Registered Architect, California  
LEED Accredited Professional

### **Professional/Civic Service**

- Member, American Institute of Architects

### **Professional Experience**

Warrenton Vol. Fire Company No. 1  
Germantown East Fire Station No. 34  
The Station at Potomac Yard  
Arcola United Methodist Church  
NASM Udvar-Hazy Center, Dulles

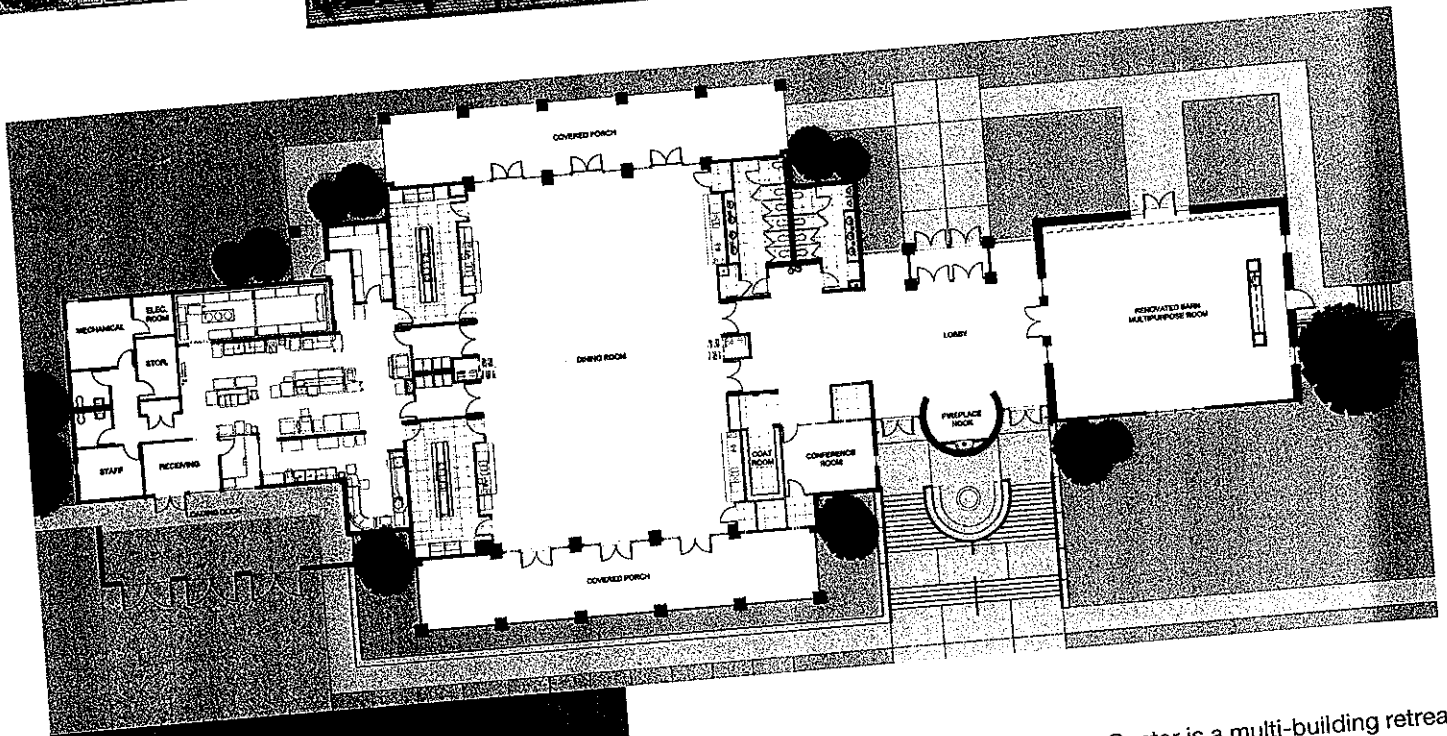
Four Seasons Sedona  
Four Seasons Jerusalem  
Four Seasons Dubai  
Various Ritz Carlton Properties  
The Ocean Club



# Meadowkirk Outdoor Ministry Center

MIDDLEBURG, VIRGINIA

Renovated stone barn and new dining center anchor retreat facilities



## WORK STATUS

Phase I Dining Center and Stone Barn  
Completed Spring 2008

## CONTACT

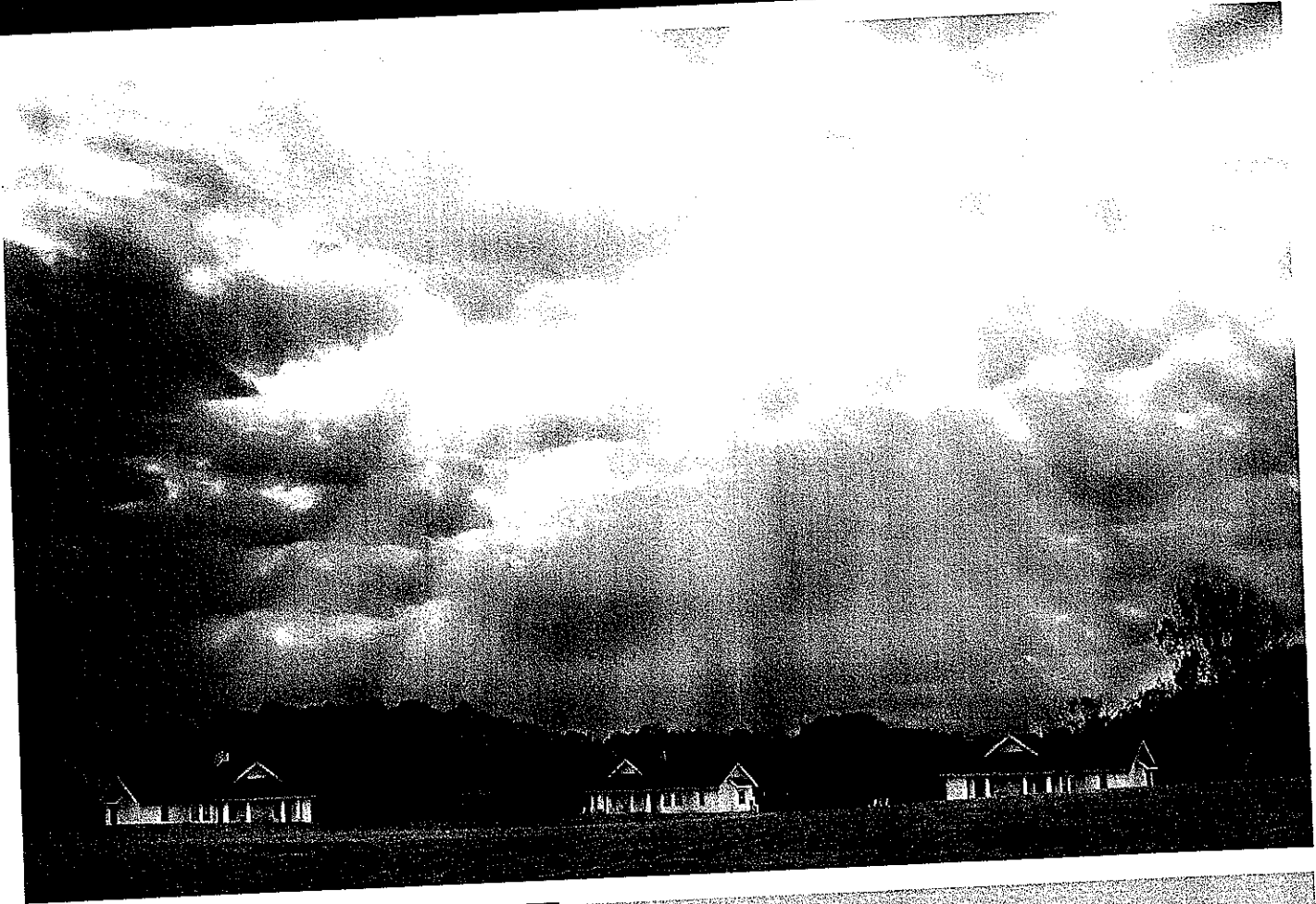
Cheryl Hartman  
Meadowkirk Retreat Center Director  
540. 687. 5565

The Meadowkirk Outdoor Ministry Center is a multi-building retreat center complex located on 380 acres of rolling farmland near Middleburg, VA. Phase I construction includes a new 12,800 sf dining center, renovation of an existing stone barn for use as a multipurpose meeting hall and chapel, a new pool and bathhouse, three new 2,600 sf cabins, a 13,000 sf adult lodge, roadway development, and a new on-site water and sewer infrastructure including a facilities pump building. The Master Plan for future development includes five additional cabins, a bathhouse for the rustic camp, and conversion of an existing pole barn into an outdoor dining pavilion.

LEMAY  
ERICKSON  
WILCOX  
ARCHITECTS

**Meadowkirk Outdoor Ministry Center**  
MIDDLEBURG, VIRGINIA

*Inn and guest cabins*



**WORK STATUS**  
Guest Cabins  
Completed Summer 2007

The Inn  
Completion Winter 2008

**CONTACT**  
Cheryl Hartman  
Meadowkirk Retreat Center Director  
540. 687. 5565



**LEMAY**  
**ERICKSON**  
**WILLCOX**  
ARCHITECTS

# Meadowlark Gardens Regional Park - Conservatory

VIENNA, VIRGINIA



Meadowlark Gardens Regional Park Phase II, the Conservatory, centers on a large skylit reception and banquet garden room, accented with potted tropical plants and a meandering indoor stream. Other Phase II program areas include seminar rooms, a commercial grade kitchen, offices, classrooms, outdoor terraces and parking for 100 cars—all within a garden setting.

With heavy public use, the Visitors Center and Conservatory both use durable building materials including red brick, white columns, metal roofs, and stone floors. The building forms recall Virginia vernacular architecture, expressed in a clearly contemporary fashion. The landscape links all aspects of the park-like setting, and features such elements as formal entrance courts, tree-lined alleys, terraces, and outdoor garden rooms.

NAHB's National Commercial Builders Council Award  
Fairfax County Exceptional Design Award  
Masonry Institute Design Award  
Award for Community Appearance

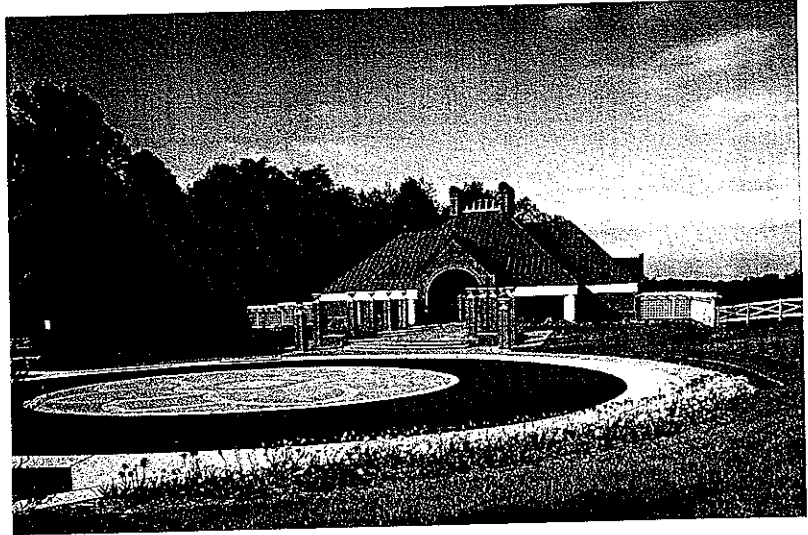
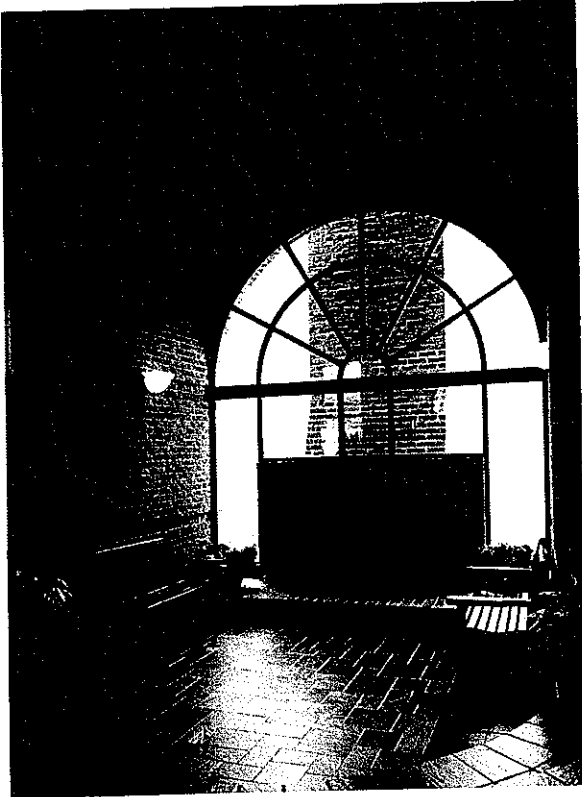
**WORK STATUS**  
Completed 1998

**CONTACT**  
Todd Hafner  
Director of Development  
NVRPA 703.359.4606

**LEMAY**  
**ERICKSON**  
**WILCOX**  
ARCHITECTS

# Meadowlark Gardens Regional Park - Visitors Center

VIENNA, VIRGINIA



Master planning of a multi-phased construction program for a 100-acre regional park. Phase I consists of a Visitors Center with information/sales facility, multi-purpose exhibition hall, administrative offices, vending lounge and restrooms. Phase II consists of a large multi-purpose reception/banquet hall with seminar rooms, commercial grade kitchen, offices, classrooms, table/chair storage, outdoor terraces and parking for 100 cars in a garden setting. Both buildings are designed to operate independently of one another and are situated to "set up" the prominence of a large future arboretum/ conservatory building.

Landscape architecture forms a major component of the scheme linking all aspects of arrival, circulation and outdoor spaces with pathways, tree lined alleys, terraces, berms and "outdoor rooms."

## WORK STATUS

Completed

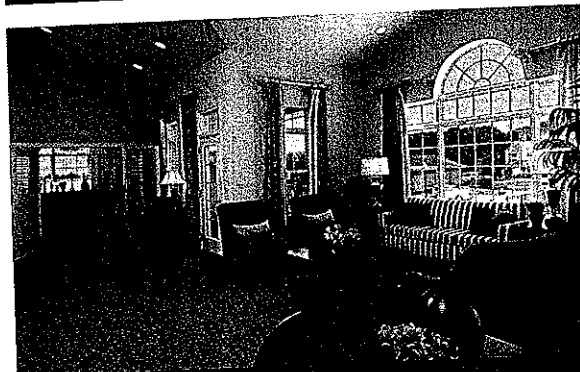
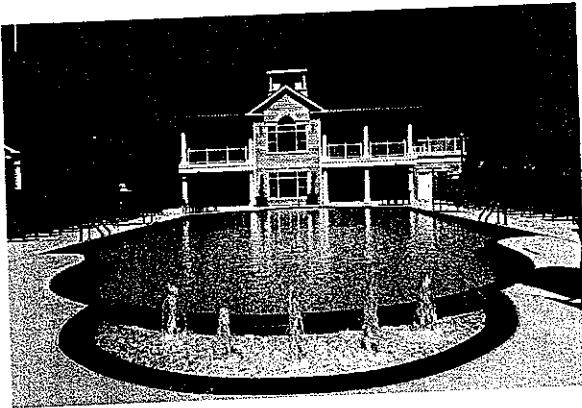
## CONTACT

Todd Hafner  
Director of Development  
NVRPA 703.359.4606

# The Elms at Germantown

MONTGOMERY COUNTY, MARYLAND

*Classic stone and metal roof details  
highlight community*



The Elms at Germantown is a Greater Washington and Baltimore area planned community developed in partnership by Elm Street Development and Clark Builders Group. LeMay Erickson Willcox Architects assisted Elm Street Development in designing these 316 spacious garden-style apartments strategically situated within walking distance of the Germantown Town Center and Montgomery College Germantown Campus. The graciously appointed apartments have fireplaces, wood cabinets, high-speed internet wiring, 9-foot ceilings, vaulted ceilings and loft units. Amenities available to residents include a community building with an exercise room, a clubroom maximizing light from oversized windows and French doors as well as the beautifully adorned cupola, a pool and private enclosed garages.

The apartment building exterior is carefully articulated with bay windows, hipped roofs and dormers to visually reduce the scale of the buildings and accentuate a sense of home. The stone base is accented by complementary soft warm siding colors, with crisp white trim, window heads and bandboards providing a gracious, timeless design.

**WORK STATUS**  
Completed 2006

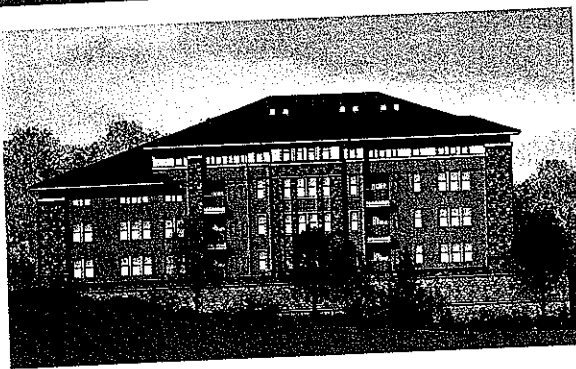
**CONTACT**  
Mr. James M. Mobley  
Elm Street Development  
703.734.9730

**LEMAY  
ERICKSON  
WILLCOX  
ARCHITECTS**

# Colts Neck Apartments

RESTON, VIRGINIA

*Contemporary living for mature  
adults in wooded setting*



Nestled in a wooded area of Reston, the Colts Neck Apartments enjoy close proximity to work, shopping and transportation. The mature living community offers 210 apartments with convenient underground parking and elevator access to all levels. The Prairie style apartments with large roof overhangs and stone façade elements overlook a park like setting, meandering brook and one of Reston's many trails. Amenities available to residents include a library, business center, billiards and cards room, a dining room, community room with a double sided fire place, outdoor recreation areas with chess and more.

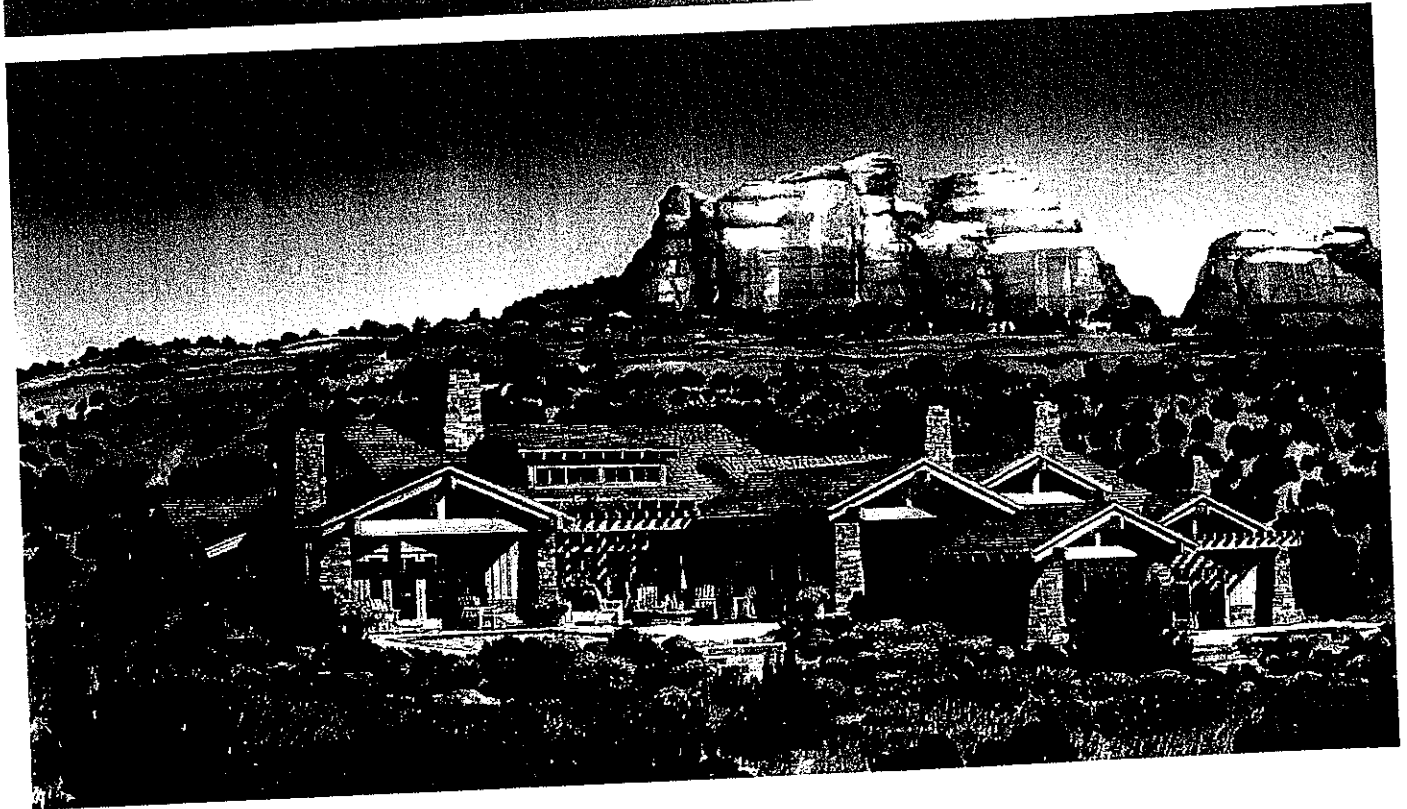
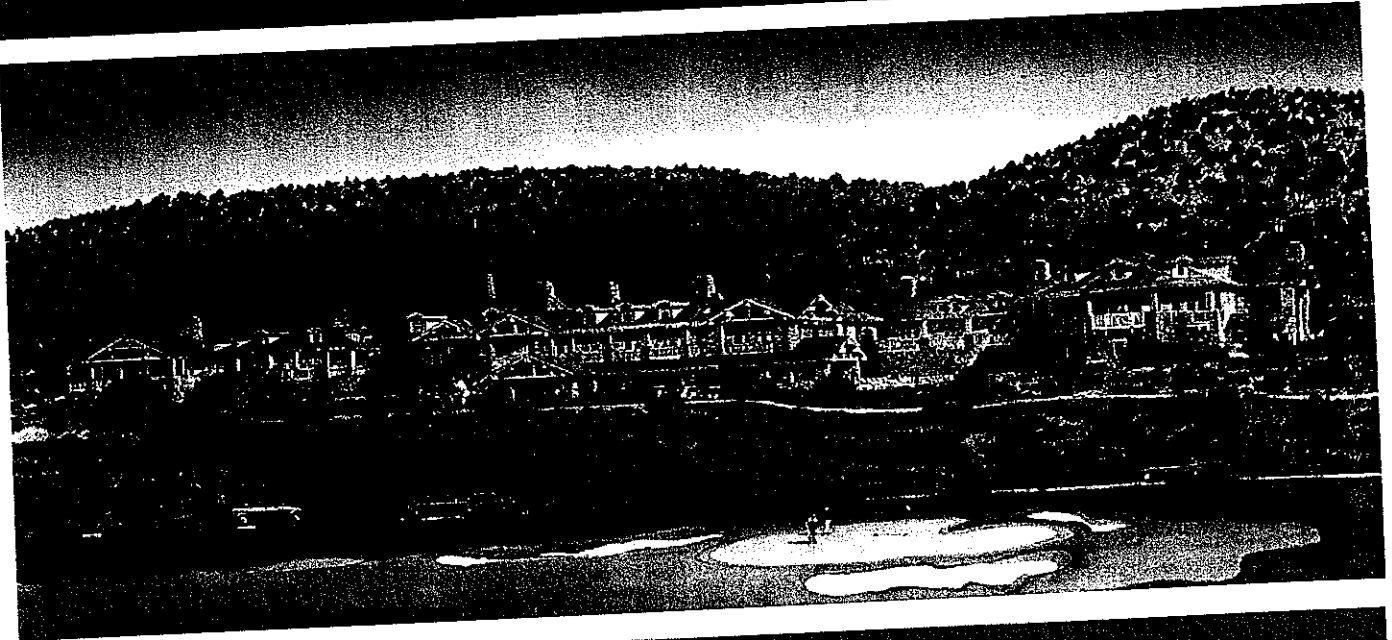
**CONSTRUCTION**  
In Design

**CONTACT**  
Mr. Adam Schulman  
Atlantic Realty Companies  
703.760.9500

**LEMAY**  
**ERICKSON**  
**WILLCOX**  
**ARCHITECTS**

**Four Seasons Sedona**  
SEDONA, ARIZONA

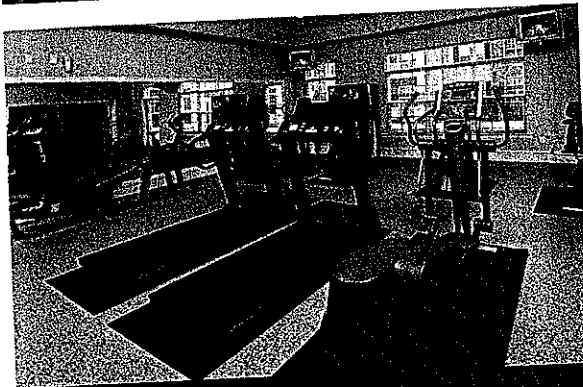
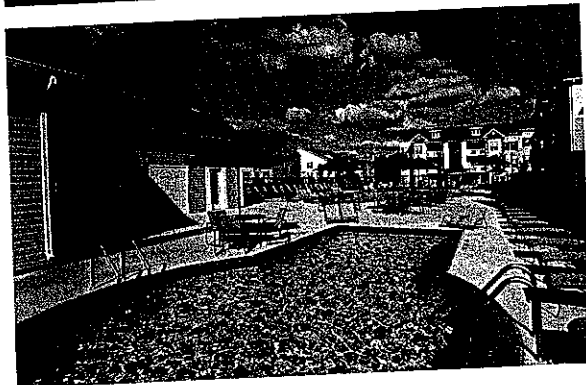
*Lynn Reda - Individual Experience*



# The Elms at Mont Joy

HOWARD COUNTY, MARYLAND

*Classic stone and metal roof details  
highlight community*



The Elms at Mont Joy a planned community developed in partnership by Elm Street Development and Winchester Homesis strategically located between Washington, DC and Baltimore, Maryland. LeMay Erickson Willcox Architects assisted Elm Street Development in designing these 286 spacious garden-style apartments which are graciously appointed with fireplaces, wood cabinets, high-speed internet wiring, 9-foot ceilings, vaulted ceilings and loft units. Amenities available to residents include a community building with an exercise room, a clubroom maximizing light from oversized windows and French doors as well as the beautifully adorned cupola, a pools and private enclosed garages.

The apartment building exterior is carefully articulated with bay windows, hipped roofs and dormers to visually reduce the scale of the buildings and accentuate a sense of home. The stone base is accented by complementary soft warm siding colors, with crisp white trim, window heads and bandboards providing a gracious, timeless design.

2006 Delta Associates Mid-Atlantic Rental Apt Industry  
Awards for Excellence

**WORK STATUS**  
Completed 2006

**CONTACT**  
Mr. James M. Mobley  
Elm Street Development  
703.734.9730

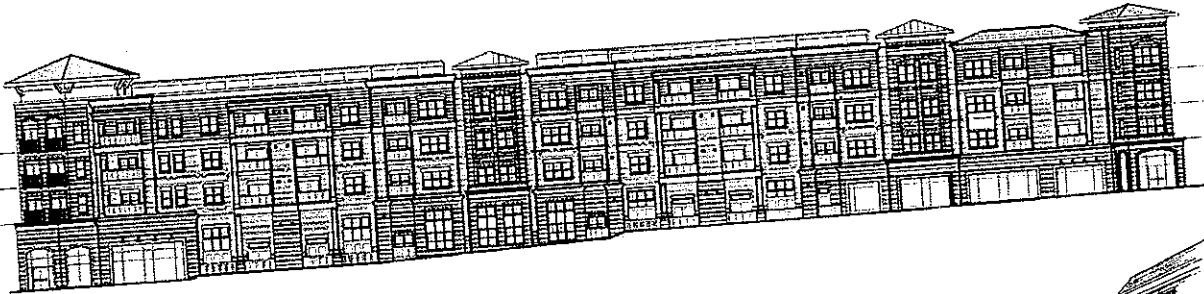
**LEMAY  
ERICKSON  
WILLCOX  
ARCHITECTS**



# Park Center at Manassas Park

MANASSAS PARK, VIRGINIA

*New city center reinterprets  
urbane old town style*



## CONSTRUCTION

In Construction

**CONTACT**  
Mr. Will Skinner  
Clark Realty Capital  
703.294.4513

Ms. Vanessa Watson  
City Planner  
City of Manassas Park  
703.335.8820

The Park Center at Manassas Park is Northern Virginia's newest addition to the mixed use, transit-oriented community. LeMay Erickson Willcox is working with Clark Realty Capital in designing the first phase of the town center core with three stories of one hundred ninety apartments accessed through luxuriously appointed elevator lobbies and containing over 75,000 square feet of retail space. The retail space is being designed to accommodate multiple restaurants and in-line shops. The graciously appointed apartments will have fireplaces, wood cabinets, high-speed internet wiring and 9' foot ceilings.

In addition to being in walking distance to the VRE station, amenities available to the residents include exercise facilities, a business center, community room, pool and private enclosed garages. The buildings are carefully articulated with a pedestrian friendly stone retail base and a residential exterior with box bays, a clock tower element, crisp white trim, window heads, band-boards and cornices. This combined with creatively used vinyl siding and vertical elements provide a new first-class downtown development project for the City of Manassas Park.

**LEMAY  
ERICKSON  
WILLCOX**  
ARCHITECTS

## PROFILE

Bowman Consulting provides engineering, planning, surveying, environmental, and landscape architectural services to a variety of markets, both public and private, throughout the mid-Atlantic region. It also offers particular expertise in zoning, and in land development/building regulations at the local, state and federal levels. The work of the firm includes residential, commercial, retail, health care, educational, recreational, municipal, and federal projects. Headquartered just west of Washington, D.C. in Chantilly, Virginia, Bowman Consulting has ten regional offices and over 250 employees.

Additional areas of expertise include:

- Master and Land Use Planning
- Development Feasibility Analysis
- Landscape Architecture
- Geothermal Systems & Technologies
- Zoning Entitlements
- Rezoning and Special Exception Consulting
- Design Guidelines and Development Standards
- Preliminary and Final Site Planning
- Visualization
- Phase I and Phase II Environmental Site Assessments
- Wetlands Delineation, Permitting and Mitigation
- Perennial Flow Studies
- Site and Subdivision Design
- Water Supply and Distribution
- Wastewater Collection
- Street and Highway Design
- Storm Drainage and Storm Water Management
- Construction Phase Services
- Surveying and Mapping / GPS
- Boundary Surveys
- ALTA Surveys
- Construction Stake-Out
- Condominium, Conversions with Associated Plats and Plans
- Topographic Surveys
- Resource Protection Area (RPA) Studies

Bowman Consulting's clients benefit from a balance of deep resources, often associated with large firms, and the flexibility and quick response associated with smaller boutique firms. Its geographic footprint --- VA, WV, DE, MD, and the District of Columbia -- results in the regional jurisdictional knowledge that clients need to move projects through intricate approval processes.

Since the company's inception in 1995, Bowman has provided professional opportunities for its staff and dedicates remarkable resources to projects of any size. Bowman Consulting's progressive culture attracts the industry's best and brightest people. The focus, however, has remained on the clients and on providing them with high-quality, innovative, cost-effective, and efficient solutions to site and design challenges. From personnel to technology, Bowman continues to offer and provide the best resources available in the industry.

Bowman Consulting has attracted local and national recognition, recently winning the 2008 Helios Apollo Award for a Mid-Sized Company. Recognition has also come from *The Washington Business Journal* (Fastest Growing Companies, 2003/2004), *ENR Magazine* (Top 500 Design Firms, 2005), *Virginia Business Magazine* (List of Leaders, 2005), *The Zweig Letter* (The 100 Fastest-Growing U.S. A/E/P & Environmental Consulting Firms, 2004), *Inc. Magazine* (Top 500 Engineering Firms, 2000) and the Virginia Chamber of Commerce (The 2004 Fantastic 50 Award Program).



## GOLF COURSE EXPERIENCE

### LAUREL HILL GOLF COURSE, FAIRFAX COUNTY, VA

Bowman Consulting was responsible for the overall site work for this 18-hole championship golf course with maintenance facility and clubhouse, located on the site of what was once was the DC Correctional Complex at Lorton. Scope of services included: floodplain studies on the original, undeveloped property; storm water and best management (BMP) practices; site design; provision of a 14" gravity sewer that crosses the RF&P Railroad; formal wetland delineation and Resource Protection Area (RPA) analysis; completion of a WQIA and Exception Request for encroachments to the RPA along Giles Run; submission of a wetland permit application; coordination of the wetland and RPA enhancement plans; and the performance of a bathymetric survey on the existing wet pond to verify the stored water available for irrigation of the course.

### ROBERT TRENT JONES GOLF RESORT, PRINCE WILLIAM COUNTY, VA

Project was a 1,139-acre exclusive community development that included a championship golf course, and clubhouse, 1,200 residential units, and a retail office park. Provided planning and administrative services from rezoning through construction.

### RIVERBEND GOLF AND COUNTRY CLUB, GREAT FALLS, VA

Provided layout design for expansive sewage disposal system. Performed all soil and geologic analysis of materials, and assessed their suitability for use in on-site sewage disposal. Conducted nitrate loading studies and water mounding analysis for this 10,000 gallon per day mass system. All local, state and federal permitting associated with the development of the system was provided, along with construction inspection and management of the system, and oversight for all groundwater monitoring, sampling, and reporting for continued use of the facility.

### PENINSULA AT INDIAN HEAD, SUSSEX COUNTY, DE

This was a 300 acre Jack Nicholas Inc. designed waterfront and golf course community. It was the largest of the phased PUD consisting of 164 single family lots and an extensive drainage and stormwater management system to serve the golf course and single family lots. Over 4 miles of roadway infrastructure were designed, including water and sewer distribution systems, mass grading, and sediment and erosion control.

### VERANDA, SUSSEX COUNTY, DELAWARE

This was a second phase of the Jack Nicholas Inc. designed waterfront and golf course community. It involved a cluster design development for condominium units on a 10 acre parcel within the Peninsula at Indian Head subdivision. Creative grading layouts were incorporated to integrate the condominium layouts within the golf course and pond system to provide innovative stormwater management with aesthetically pleasing landscapes.

### LAKEWOOD COUNTRY CLUB GOLF COURSE RENOVATION, MONTGOMERY COUNTY, MD

This project was the renovation of the existing 161 acre golf course property which included regrading, pathway relocations, drainage, and stormwater management improvements. The project also included the removal of the existing parking lot, the design of a new, larger parking lot, and the redefinition of the access road to the maintenance yard. The Club's main entrance was relocated along Glen Mill Road, approximately 500 ft. Frontage sidewalk and roadway improvements were also designed and constructed. Construction permitting and administration services were provided.

## INFRASTRUCTURE ENGINEERING EXPERIENCE

### BULL RUN COUNTRY CLUB ESTATES PRINCE WILLIAM COUNTY, VA

Bowman Consulting provided land planning, engineering, surveying, permit processing, and environmental services for this single family subdivision with lots of 10 acres or more in size. Lots were designed to be accessible by a network of private streets and roadways from existing Route 15. Individual well and septic disposal systems were also designed. Final subdivision construction plans for 26 lots and related infrastructure were provided. The site features existing lakes, flood plains, wetlands, and RPA's, all of which had to be considered in the design of the final project. The main thrust of the project was to provide extreme environmental controls throughout the construction process to protect existing site features. The project included design of grading, drainage, and an extensive public roadway network.

### CEDAR CREST ESTATES FAIRFAX, LOUDOUN AND PRINCE WILLIAM COUNTIES, VA

This residential community that occupies 900 acres spans three Northern Virginia's counties, meaning three sets of entitlements. Bowman Consulting surveyors performed essential network controls using GPS, established additional controls for photogrammetry mapping, performed an ALTA survey and conducted a route survey for 1 1/2 miles of sewer and water infrastructure. Bowman also prepared subdivision and easement plats to meet the requirements of the state as well as each of the affected jurisdictions. Surveying and engineering services for the Cedar Crest community began in 1996, and work is ongoing.

### CEDAR HUNT HYDRALIC MODELING LOUDOUN COUNTY, VA

Cedar Hunt is 244-lot subdivision on 247-acres located near the western edge of South Riding. During the review of the construction plans, the Loudoun County Sanitation Authority (LCSA) requested that a detailed hydraulic analysis be performed to ensure that adequate pressures and fire flows could be achieved. With the permission of the LCSA, Bowman Consulting took the South Riding portion of LCSA's hydraulic model of the County and simplified the

network to only those pipes 12" in diameter and above. The domestic demands for South Riding were appropriated to the simplified pipe network. In close coordination with LCSA, a fixed grade node modeled as a reservoir WaterCAD element, was selected for the boundary condition. LCSA provided the fixed grade node elevation of the Route 50, 30" waterline. Bowman Consulting set-up a detailed model of the Cedar Hunt development using WaterCAD version 5.0 by Haestad Methods, Inc. Three demand scenarios were studied for average daily demand, peak hourly demand, and maximum daily demand plus for fire flow. The model showed that there were adequate pressures for the three scenarios and no additional looping was required.

### EVERGREEN VILLAGE WATER AND SEWER MASTER PLAN LOUDOUN COUNTY, VA

Evergreen Village is a planned rural development, located on the west side of Beaver Dam Reservoir. The design features 80% of the land as protected open space and 20% clustered for use. This 845-acre site contains 281 single-family detached lots, 24 townhouse lots, 10,000sf of office space, 5,000sf of retail space, and a 10,000sf community center. The master plan for water facilities included the extension of central water to serve Evergreen Village and the surrounding properties. A water main network was designed and analyzed utilizing WaterCAD hydraulic modeling. Fire flow and service demands were developed using local codes. The resulting network consisted of approximately 30,300 LF of 8" and 12" water mains. The master plan for sewage facilities required the design of an extension of the central sewer to serve Evergreen Village and the surrounding properties. The extension consisted of one major outfall served by a pump station and force main. The required capacity of the sanitary sewer outfall was determined based on planned land use within the sewer shed, with flows computed in accordance with local codes. The resulting sewer plan consisted of approximately 26,000 LF of 8", 10" and 12" gravity sewer and provision for 1,700 LF of forcemain to service a sewer shed of over 1,100 acres.

## INFRASTRUCTURE ENGINEERING EXPERIENCE

### LORTON PUMPOVER LORTON, VA

Bowman Consulting worked on this sanitary sewer system to serve the Lorton Valley area development spanning several hundred acres with over 1,000 homes. Due to the proximity of the railroad to this project, a main design issue was a sanitary sewer force main crossing involving the RF&P Railroad. Bowman engineers designed a 2-mile sanitary sewer trunk line with a 1.6 MGD pump station and the associated 10" force main that crossed Interstate 95 and the RF&P Railroad. The crossing of the railroad consisted of jack and bore operations under the tracks and provided emergency shut-off valves and associated safety measures. Bowman Consulting organized and managed the plan approval through Fairfax County. In addition, Bowman Consulting also coordinated the agreement between CSX Transportation, Inc. and Fairfax County as well as provided coordination with MCI Telecommunications.

### LOUDOUN VALLEY ESTATES 24" TRANSMISSION MAIN LOUDOUN COUNTY, VA

Loudoun Valley Estates is an 1,163-acre P.U.D. located on the south sides of Loudoun County Parkway and Ryan Road. Loudoun Valley Estates I consists of 600 townhouses and single family detached units on 298-acres. Loudoun Valley Estates II consists of 2,761 townhouse, single family detached and multi-family units on 865-acres. As part of the Loudoun County Sanitation Authority's master plan for water distribution in the eastern portion of the County, the developer was required to construct a 24" transmission main. The transmission main also provides water for the development. Bowman Consulting produced two construction plans for this 24" transmission main. Phase I consisted of 4,747 feet and Phase II consisted of 4,955 feet of 24" water line. The plans were submitted and approved by Loudoun County Sanitation Authority (LCSA) and the Virginia Department of Health (VDH).

### LOUDOUN VALLEY ESTATES HYDRALIC MODELING LOUDOUN COUNTY, VA

Loudoun Valley Estates II is an 865-acre P.U.D. which contains 2,761 single-family, townhouse and multi-family dwelling units, a 30-acre middle school site, 100,000

square feet of commercial development, and a 26,000 square foot recreation center. As part of the initial planning of which landbays would be developed first and in what order, the need for a hydraulic model became apparent. Domestic demands based on land use were developed as well as appropriate fire flow demands. Three boundary conditions were established as fixed grade nodes modeled as reservoirs. Four construction staging scenarios were modeled, each with average daily demand, peak hour demand and maximum daily demand plus fire flow. Modeling software used was WaterCAD version 5.0 by Haestad Methods, Inc. After the four construction staging scenarios were established and shown to meet the pressure and flow requirements of Loudoun County Sanitation Authority (LCSA), the model was re-evaluated. By running addition scenarios it was determined that a 4,000 foot long piece of 16" waterline could be removed by up sizing 6,200 feet of 12" waterline to 16" waterline.

### WILLISVILLE WASTEWATER TREATMENT SYSTEM LOUDOUN COUNTY, VA

After failing on-site wastewater systems were identified in the community of Willisville, Loudoun County received funding from the Virginia State Department of Environmental Quality to repair or replace the failing systems. Bowman Consulting developed the design of the "Willisville Community Wastewater Treatment System" for Loudoun County, in coordination with the Loudoun County Sanitation Authority, Loudoun County Health Department, and the Virginia State Department of Environmental Quality. The project consisted of the design and preparation of construction drawings for a sanitary collection, treatment and disposal system for approximately 11 properties within the community of Willisville. The system consists of approximately 1000 feet of low-pressure sewer, 800 feet of gravity sewer, a pre-treatment system, and an effluent drainfield.

**MICHAEL P.  
POINTER, A.S.L.A.**

Principal-in-Charge

Mr. Pointer brings over 22 years of planning and civil engineering experience in all aspects of land development with numerous commercial, residential and municipal projects in Loudoun County, Fairfax County, Prince William County Virginia, Frederick County, Warren County, Shenandoah County and numerous towns throughout Virginia.

He is responsible for concept development planning for rezoning applications and special use permits, and master plans through detailed subdivision site planning and construction plans and profiles. As Branch Manager for the Winchester office, he oversees planning, engineering, and surveying services in the City of Winchester, Clarke and Frederick Counties, Virginia and points west

**PROFESSIONAL EDUCATION**  
Bachelor of Science, Landscape Architecture,  
West Virginia University, 1986

**PROFESSIONAL REGISTRATION**  
Certified Landscape Architect, Virginia

**PROFESSIONAL AFFILIATIONS/  
ACTIVITIES**  
American Society of Landscape Architects  
(ASLA)

**REPRESENTATIVE PROJECTS**

**JEFFERSON MEMORIAL HOSPITAL, JEFFERSON COUNTY, WV**  
Principal-in-Charge of annexation, rezoning, and schematic plans for the future site of this new hospital facility. To date, an ALTA survey and topographic mapping with GPS controls have been performed. In addition preliminary grading and drainage plans, preliminary water and sewer plans, preliminary stormwater management plans and infrastructure planning for access to the hospital site have been completed.

**CITY HOSPITAL OF MARTINSBURG, MARTINSBURG, WV**  
Principal-in-Charge contracted with the West Virginia University Hospitals—East (WVUH-E) to assess alternative access points to the existing facility including possible improvements to Dry Run Road, the main access road to the hospital. Services included topographic mapping, utility locating, hospital expansion planning, and campus master planning.

**LIBERTY RUN, BERKELEY COUNTY, WV**  
Principal-in-Charge for this expansive 3410-lot community, including detached and attached homes. Services provided included the preparation of a separate site plan for a required pump station for the site. Plan consisted of over 2-miles of force main and was processed through Berkeley County Public Service Sewer District and then through the State's Health and Human Resources Department.

**BERKELEY BUSINESS CENTER, BERKELEY COUNTY, WV**  
Served as Principal-in-Charge for this redevelopment project. Project consisted of transforming existing 400,000 sq. ft. building warehouse truck center.

**WINCHESTER GREEN CIRCLE, CITY OF WINCHESTER, VA**  
Principal-in-Charge for the development of the Winchester Green Circle Project, a walking and biking trail following Town Run and Abrams Creek, encircling the City of Winchester. The project provides safe bike and pedestrian facilities for the entire community. Bowman Consulting assisted in the development and implementation of two bio-retention facilities, including an innovative rain garden, to reduce stormwater run-off on the site. The facilities when complete will be the first ever installed in the City. Services for the rain garden include performing a topographical survey to establish the location of exiting trees throughout the site and to establish a site for the facility.

**J.W. CODY FRANCIS,  
P.E.**

Director of Engineering

With over 12 years of experience, Mr. Francis brings a solid background in civil engineering and project management. His experience covers the final design of roads, the development of site plans and floodplain studies, Best Management Practices and the design of stormwater management systems. Additionally, Cody has extensive jurisdictional knowledge of Loudoun County and its surrounding areas.

**PROFESSIONAL EDUCATION**

BS, Civil Engineering, Brigham Young University, 1995

**PROFESSIONAL REGISTRATION**

Professional Engineer, West Virginia

**REPRESENTATIVE PROJECTS**

**BERKELEY BUSINESS PARK, BERKELEY COUNTY, WV**

Director of Engineering for this three phase redevelopment project consisting of transforming the former Corning Glass Facility, an existing 400,000 sq. ft. facility, into a warehouse distribution center, and developing 90,000sf of retail/office space along the Route 11 frontage of the business park.

**PRINCETON SHOALS, BERKELEY COUNTY, WV**

Director of Engineering for this 250-lot single-family detached subdivision in Berkeley County. Full construction plans for streets and stormwater management were provided, and extensive coordination with adjacent properties was required.

**MARTINSBURG PUBLIC SAFETY CENTER, MARTINSBURG, WV**

Director of Engineering for the construction of a new police/fire/EMS building. Scope of services included feasibility studies on three different parcels, a concept grading plan, site plan, and associated stormwater management design, water system analysis, and stormwater pollution prevention plan. Surveying included GPS horizontal and vertical control by GPS, boundary, field run topography, and location of utilities.

**WVUH-EAST CITY HOSPITAL, MARTINSBURG, WV**

Director of Engineering of general consulting services contract with WVUH-E. Services include topographic mapping, utility locating and mapping, city hospital parking and facilities expansions, analysis of existing traffic patterns and engineering improvements to entrances and stormwater management design. Also contracted with the architects chosen to prepare campus facility assessment and expansion master planning.

**DAVID T.  
FRANKENFIELD, L.S.**

Director of Surveys

With over 19 years of surveying experience, Mr. Frankenfield is an expert in survey software, including AutoCAD, CMLSE and SDC. In addition, he contributed significantly to the establishment of Bowman Consulting's survey department software standards. Mr. Frankenfield's primary duties include quality control of field crew work, management of the day-to-day department operations, and oversight of survey work conformance with both industry and company standards.

Mr. Frankenfield's experience includes boundary surveys, ALTA surveys, horizontal position sheets, wetland locations, subdivisions, locations for utilities, cut sheets, metes and bounds descriptions, easement plats, record plats, house location surveys, and deed and document research.

**PROFESSIONAL EDUCATION**

Associate of Applied Science, Civil Engineering, Northern Virginia Community College, 1987

**PROFESSIONAL REGISTRATION**

Licensed Land Surveyor, West Virginia

**REPRESENTATIVE PROJECTS**

**CITY HOSPITAL OF MARTINSBURG, MARTINSBURG, WV**

Director of Surveys of general consulting contract with the West Virginia University Hospitals - East (WVUH-E) to assess alternative access points to the existing facility including possible improvements to Dry Run Road, the main access road to the hospital and the possible expansion of the medical campus. Extensive utility locating was completed.

**JEFFERSON MEMORIAL HOSPITAL, CITY OF CHARLESTOWN, WV**

Director of Surveys for ALTA surveys and topographic mapping with GPS control.

**WINEBRENNER'S CROSSING, BERKELEY COUNTY, WV**

Director of Surveys for this 961-lot subdivision community on over 300-acres. Scope of services provided include civil engineering, planning, surveying and environmental sciences. Extensive coordination was required with geotechnical engineers and the Department of Environmental Protection to remediate sink holes found on-site.

**LIBERTY RUN, PHASE 1, BERKELEY COUNTY, WV**

Project comprised of 48 townhouse lots, 43 single family detached lots and a 10,000 l.f. sanitary sewer force main. The water and sewer services comprised of 5,533 l.f. of water main and 3,558 l.f. of sanitary sewer. Director of Surveys in charge of stake for construction all infrastructure and utilities per the approved plans and to as-built plans at the completion of the project to Berkeley County and to the Berkeley County Public Service Water District and Sewer District.



**RON M. ROBISON,  
C.P.S.S., A.O.S.E.**

## Principal and Senior Soil Scientist

With over 25 years of experience, Mr. Robison has an extensive portfolio of work including the design and installation of geothermal well systems, design of individual and community sewage treatment and disposal systems, soil evaluations, and testing and environmental assessments. His experience includes Phase I and Phase II environmental site assessments, hydrogeologic investigations, underground and above-ground fuel storage tank closures, groundwater and soil remediation, and asbestos surveys. He has worked with the Virginia Petroleum Storage Tank Program, and with the Voluntary Remediation Program which is designed to facilitate property transfers and encourage development on previously contaminated sites. Mr. Robison is actively involved in the expansion of the environmental science services work of the firm, and in establishing the firm's site soil evaluation and design practice

Mr. Robison specializes in Piedmont, Coastal Plain, and Valley/Ridge geology and soils. He frequently provides expert testimony regarding soil science and sewage treatment technologies for VDOT and various area law firms. He provides soil mapping for unmapped areas in various counties, especially in Fairfax County where the identification of alluvial soils and other problem soils is required. Mr. Robison participates in every stage of the project from initial concept to completion, and ensures technical accuracy and clarity of the final product.

**PROFESSIONAL EDUCATION**

BS, Physical Geology and Geography  
James Madison University, 1982

**PROFESSIONAL REGISTRATION**

Certified Professional Soil Scientist, Virginia  
Authorized On-site Soil Evaluator, Virginia  
Dept. of Health

**PROFESSIONAL AFFILIATIONS/  
ACTIVITIES**

Virginia Department of Health -- Committee  
for ADSE Program  
Virginia Association of Professional Soil  
Scientist (VAPSS)  
Soil Science Society of America (SSSA)

**REPRESENTATIVE PROJECTS**

**AUDUBON SOCIETY BIRD SANCTUARY, TOWN OF CLIFTON, VA**  
Provided environmental assessment studies for this 17 Acre bird sanctuary park at the end of Chestnut Street in the Town. I prepared all soil evaluation, environmental impact and water supply studies required for the establishment of the Client's Office and Classroom facility.

**CLEARBROOK VDOT WELCOME CENTER, I-81, WINCHESTER, VA**  
Principal-in-Charge. Designed a closed-loop geothermal system for this VDOT tourism welcome center which is expected to receive Silver LEED Certification.

**RIVERBEND GOLF AND COUNTRY CLUB, GREAT FALLS, VA**  
Provided layout design for expansive sewage disposal system. Performed all soil and geologic analysis of materials, and assessed their suitability for use in on-site sewage disposal. Conducted nitrate loading studies and water mounding analysis for this 10,000 gallon per day mass system. All local, state and federal permitting associated with the development of the system was provided by Mr. Robison, along with construction inspection and management of the system. Mr. Robison provided oversight for all groundwater monitoring, sampling, and reporting for continued use of the facility.

**LOUDOUN COUNTY PUBLIC SCHOOLS, LOUDOUN COUNTY, VA**  
Working with LCPS on the Lenah Road project for MS-5 and HS-7. Project includes an environmental site assessment, stream assessments and mitigation evaluation, and a tree location survey.

**O'CONNOR SITE - STREAM ASSESSMENTS & EVALUATIONS, LOUDOUN COUNTY, VA**  
Supervised detailed field assessments along those streams located within the project limits, and identified potential candidates for restoration and enhancement activities. The field assessments included the following: a geomorphic channel assessment to determine the classification, natural variability, and the dimension, pattern, and profile of each stream reach; the selection of an onsite representative reach or other reference reach for stability analyses; stability analysis; sediment impact assessment; general instream habitat assessment; field-determination of the bankfull elevation; an evaluation of the existing riparian buffer; and an analysis of the removal of the existing pond embankment to restore a stream channel, and the potential to create adjacent wetlands. Special features that may affect the conceptual and final designs were also identified and marked.

**GRASSLANDS MITIGATION PROJECT, LOUDOUN COUNTY, VA**  
Developed a conceptual offsite stream and wetland mitigation plan at the 204-acre property to satisfy the mitigation requirements of the Arcola Center project, including the restoration of 2,400 linear feet of stream, 24 acres of riparian buffer plantings, and 3.4 acres of wetland creation. Assisted with the development of a conceptual wetland and stream mitigation bank plan for remainder of the property.

**DIRTING/OATES PROPERTY, BERKELEY COUNTY, WEST VIRGINIA**  
Supervised a wetland delineation on the 847-acre property and coordinated a Jurisdictional Determination from the U.S. ACOE. Conducted baseline stream sampling along five reaches, consisting of both physicochemical sampling and benthic macroinvertebrate sampling per EPA's Rapid Bioassessment Protocol (Second Edition). Final report included a summary of the sampling results and an assessment of water quality and aquatic habitat.

## RUSSELL R. SMITH, P.E.

### QA / QC

With over 30 years experience in civil engineering and site design, Mr. Smith serves as Director of Engineering for Bowman Consulting's Prince William office. His extensive experience includes the design and management of many projects for Schools, churches, government facilities, assisted living quarters and retirement homes, as well as hotels, fire stations, office buildings and commercial / retail projects.

Mr. Smith's responsibilities include overall project management and design assistance on projects, with specialties in site planning, stormwater management, grading and drainage, water distribution systems, site evaluations and code studies, construction specifications and cost estimating. His responsibilities also include project scheduling, quality control and plan review and client relations. Additionally, Mr. Smith has extensive expertise in re-zoning, special exception, special use and construction permit processing in Fairfax, Prince William, Loudoun, Stafford, Henrico and Arlington Counties, the Cities of Alexandria, Winchester and Fairfax in northern Virginia, as well as Montgomery, Howard, Anne Arundel, Charles and Prince George's Counties in Maryland, and in the District of Columbia.

### PROFESSIONAL EDUCATION

Bachelor of Science, Mechanical Engineering,  
Virginia Tech, 1974

### PROFESSIONAL REGISTRATION

Professional Engineer, Commonwealth of  
Virginia

### REPRESENTATIVE PROJECTS

#### WESTMORELAND STATE PARK VISITOR'S CENTER, WESTMORELAND COUNTY, VA

This Commonwealth of Virginia Department of Parks and Recreation project, administered by the Bureau of Capital Outlay Management (BCOM), includes design for a new Park Visitor's Center and office structure overlooking the Potomac River, with access and parking provisions for personal vehicles and large recreational vehicles. The project also includes widening and improvement of several hundred feet of existing paved access road, provision of new water service and a sanitary septic system and design of innovative and Low Impact Design (LID) practices for stormwater management quality and quantity control facilities. The work includes provision of full construction documents, construction specifications, cost estimating, VSMP / SWPPP application and report and construction administration services.

#### A O.L. CHILDCARE CENTER, LOUDOUN COUNTY, VA

P.E. in charge and design engineer for this LEED Gold-rated Child Development Center on the AOL campus in Dulles, Virginia. The project featured preservation of existing open space and forested areas, design of special outdoor play areas using modular play equipment and a water play park facility, and design of parking and site access. Special attention was paid to providing extensive erosion and sediment control measures for protection of the surrounding undeveloped areas.

#### MANASSAS CITY PUBLIC SCHOOLS ON-CALL CONTRACT, MANASSAS, VA

Project Manager for civil engineering projects on the MCPS buildings in Manassas. The first project under the contract was begun in August, 2008 and included the topographic and boundary survey of the entire multi-parcel educational campus within the City of Manassas, including the Baldwin Elementary School site, the Osborne High School site, several adjacent school-owned parcels, and the School Administration Headquarters on Tudor Lane. The work also includes preparation and processing of a Consolidation Plat to consolidate all the parcels into one property, and provision of back-up exhibits and Flood Plain Elimination Plat to eliminate a FEMA flood plain that affects the Elementary School and High School sites.

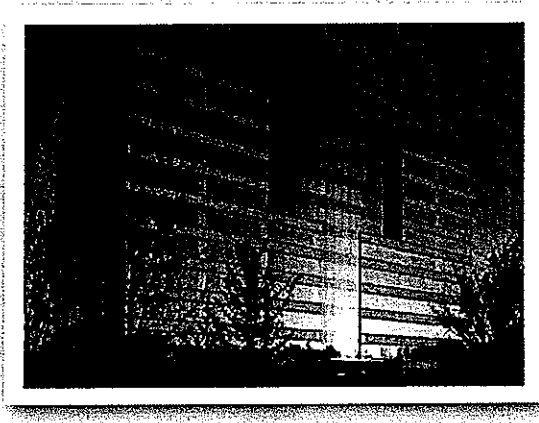
#### COUGAR UPPER ELEMENTARY SCHOOL, CITY OF MANASSAS PARK, VA

Bowman Consulting provided civil engineering services for this LEED, Gold-rated school project which includes two new buildings constructed adjacent to the existing Cougar Elementary School. The new buildings are targeted to become the first LEED Gold-rated school project in Virginia. The project design included extensive demolition of existing facilities and construction of expanded parking and site access; separation of bus and private vehicle traffic; development of a geothermal well and piping system for the new HVAC system; relocation and expansion of existing natural gas service and electrical service to the site; grading and drainage; and the relocation and extension of sanitary sewer and water distribution systems.

**Creating Communities That Work**

***Twenty-Seven Years of Excellence.***

Ehlert/Bryan, Inc. Consulting Structural Engineers was founded in 1981. During the ensuing years, the firm has maintained a high level of professional achievement, providing a wide variety of services in the specialized field of Structural Engineering to Building Owners, Architects, Federal Agencies, Local Governments, and Contractors. Ehlert/Bryan, Inc. maintains offices in McLean, Virginia and Southfield, Michigan with completed projects in over thirty-one states, Canada and overseas using the three national building codes and now the International Building Code.



Ehlert/Bryan, Inc. is a diverse firm with broad experience in project design and project management. The firm has a staff of 36 with twenty structural engineers, thirteen of whom are registered professionals. The office is fully automated with the latest software to provide efficient design, effective communication, and quality documents.



Client responsiveness, practical solutions, and technical excellence are the basis of our engineering practice and the reason we continue to attract repeat clients. To best serve our clients we maintain Professional Registrations in 35 states and professional affiliations with the AISC, ACI, ASCE, CASE, NCSEA and the American Consulting Engineers Council.

The firm's principals, George R. Ehlert, PE, Wayne C. Bryan, PE, Thomas A. Bouffard, PE, and Jason B. Sparrow, PE blend to give the firm its broad base of experience. Under their personal guidance, the firm has grown from a two-person office in 1981, to a prominent consulting firm providing a wide range of structural engineering services.

## PROJECT APPROACH

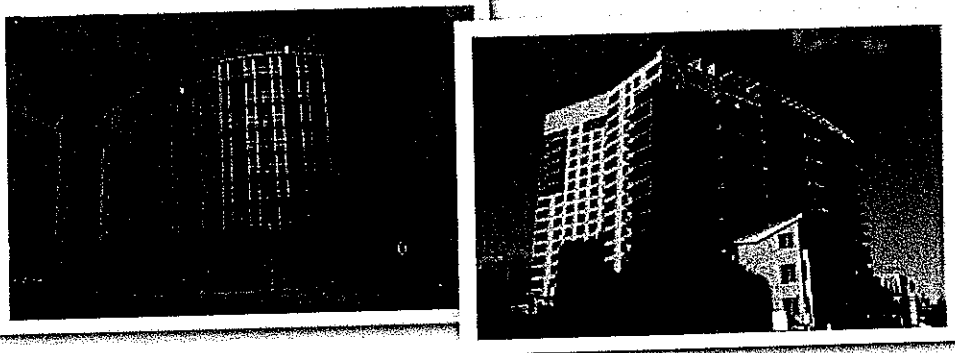
Ehlert/Bryan, Inc. has grown by building a foundation of repeat clients who value the overall service that we provide. In the beginning years, Wayne Bryan and George Ehlert realized structural engineers need to do more than just design beams and columns. They need to see the project as one cohesive building that is structurally sound and aesthetically pleasing. By being involved from a project's conception and through its infancy, a structural engineer can be creative. The engineer's creativity can help simplify buildings, reduce construction costs, and allow the building to work efficiently with other systems.

## SERVICES

A partial list of services include:

- New Construction and Design Build
- Renovation and Restoration
- International Design
- Physical Security Design
- Condition Surveys & Reports
- Feasibility Analysis & Reports
- Construction Administration
- Forensic Investigation & Analysis
- Constructability Reviews
- Value Engineering
- Parking Structure Investigation
- Specialty Engineering—Unique Structures
- Due Diligence Reports

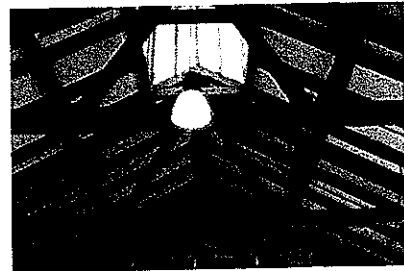
## DEDICATION & COMMITMENT



We at Ehlert/Bryan, Inc. take a great deal of pride in both the product we deliver and the relationships we form with our clients. Our success is due in large part to our exceedingly strong work ethic combined with an exceptionally talented and qualified staff. Everyone at Ehlert/Bryan, Inc. is committed to seeing your project successfully completed in a timely and reliable fashion. We look forward to working with you on this upcoming project and are confident that we can contribute the required structural expertise.

## RELEVANT PROJECT EXPERIENCE

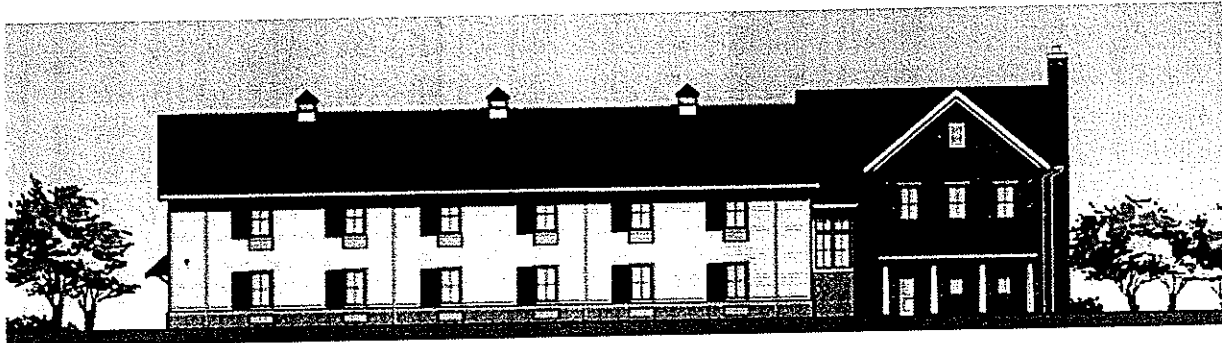
### Meadowkirk Retreat Center—Middleburg, VA



A campus of various buildings for the construction of a National Presbyterian Church retreat facility on an existing farm site near Leesburg, Virginia. Buildings included a main dining hall with an attached chapel, a two-story adult lodge residential facility, four individual cabin buildings, a pool bath-house, a pump house to house the domestic water supply systems, and an existing pole barn structure that was retrofitted to serve as an outdoor pavilion. The chapel attached to the main dining hall was built as an adaptive reuse of the original stone barn structure that existed on the site.



While the main dining hall is a steel frame, masonry, and wood frame building, the balance of the buildings consist of wood frame construction. The chapel consists of a new heavy timber trussed roof with a steel frame and concrete slab floor, but the original stone wall construction was incorporated into the construction to retain the rustic aesthetic of the original farm.



## RELEVANT PROJECT EXPERIENCE

### Twinbrook Community Center—Rockville, MD



### Sherwood Community Center — Fairfax, VA



### Hotel Experience with locations throughout the U.S.

- Hampton Inn
- Springhill Suites
- Fairfield Inn
- Courtyard by Marriott
- Towne Place Suites
- Residence Inn
- Aloft Hotel
- Hilton Garden Inn
- Staybridge Suites

### Additional Community Center Experience

- Chevy Chase Community Cntr—Chevy Chase, MD
- Sunset Island Recreation Center—Ocean City, MD
- East Park Aquatic Center—Anne Arundel, MD
- Ida Lee Community Center—Leesburg, VA
- Potomac Club @ Lansdowne—Pool Bldg—  
Leesburg, VA
- Sugarland Run Community Center—Sterling, VA
- Cameron Run Pool and Water Park, Alexandria, VA
- Laurel Highlands—Pool/Gazebo—Lorton, VA
- James Lee Community Center—Falls Church, VA
- Plymouth Township Community Center—Plymouth,  
PA

**QUALIFICATIONS**

*27 Years with  
Ehlert/Bryan, Inc.*

*28 Years of  
Experience*

**EDUCATION**

Master of Science:  
Geotechnical  
Engineering  
Purdue University  
1979

Bachelor of Science:  
Civil Engineering  
Michigan Technological  
University  
1978

**PROFESSIONAL  
LICENSES**

Colorado  
Connecticut  
Washington, DC  
Delaware  
Florida  
Georgia  
Indiana  
Iowa  
Massachusetts  
Maryland  
Michigan  
Minnesota  
Mississippi  
New Jersey  
New York  
North Carolina  
Pennsylvania  
South Carolina  
Tennessee  
Texas  
Virginia  
West Virginia  
Wisconsin

**AWARDS**

*1995 Engineer of the Year Award - CEC-MW*  
*Distinguished Service as an Allied Professional - Northern Virginia Chapter of  
AIA - 1991*  
*Contributions made to the Council, its Members & the Engineering Profession -  
CEC-MW - 1993*

**EXPERIENCE**

Mr. Bryan is the co-founder of Ehlert/Bryan, Inc. which was formed in 1981 to provide consulting structural engineering services. He is well qualified and had experience in the design of commercial, institutional and residential structures. He has extensive experience in office buildings, parking garages, adaptive reuse, churches, municipal, government, retail, renovation and the alteration of existing buildings. His geotechnical education and general experience in mechanical and electrical systems also make him suited to existing building evaluation work. Mr. Bryan was the project manager for the following projects:

- Mainstay Suite Hotel – Annapolis, MD; Pittsburgh, PA; Malvern, PA; Mt. Laurel, NJ; Schaumburg, IL; Billerica, MA, Secaucus, NJ
- Staybridge Suites – Austin, TX; Louisville, KY; Allentown, PA, Fishers, IN
- Residence Inn by Marriott – Charlottesville, VA; State College, PA, Frederick, MD, White Marsh, MD, Moline, IL
- Fairfield Inn by Marriott – Bloomington, IN; Sterling, VA; Naperville, IL
- Towne Place Suites – Cary, NC; Streetsboro, OH, Springfield, VA
- Hampton Inn – Glen Burnie, MD, Jacksonville, IL, Urbana, IL, Grand Rapids, MI, Jacksonville, FL
- Springhill Suites – Milwaukee, WI, Newark, NJ, Aberdeen, MD, Hagerstown, MD, Ann Arundel, MD

**PROFESSIONAL AFFILIATIONS**

Structural Engineering Certification Board – (SECB)  
Consulting Engineers Council - Metropolitan Washington (CEC-MW) - Past President 1996-97  
Structural Engineering Association - Metropolitan Washington (SEA-MW) - Past President 1993  
National Council of Structural Engineering Associations (NCSEA)  
American Consulting Engineers Council (ACEC)  
American Institute of Steel Construction (AISC)  
American Concrete Institute (ACI)  
International Concrete Repair Institute (ICRI)

**QUALIFICATIONS**

*19 Years with  
Ehlert/Bryan, Inc.*

*27 Years of  
Experience*

**EDUCATION**

Master of Science:  
Structural Engineering  
Virginia Polytechnical  
Institute & State  
University  
1987

Bachelor of Science:  
Civil Engineering  
Virginia Polytechnic  
Institute & State  
University  
1981

**PROFESSIONAL  
LICENSES**

Virginia

**EXPERIENCE**

Mr. Leeuwrik has been with the firm since 1989. He has experience in design and production of contract documents for a wide variety of commercial, institutional, and municipal projects. His project background includes new construction and renovation for office buildings, schools, churches, fire stations, and retail centers. He has worked with most structural systems including flat plate concrete and composite structural steel and has prepared designs for new buildings and alterations utilizing intricate systems in order to accommodate elegant architecture as well as programmatic requirements. Mr. Leeuwrik has provided structural consultation for the evaluation and repair of existing structures including the preparation of innovative structural modifications to resolve code deviations without requiring extensive demolition.

- Broadlands Public Safety Center – Ashburn, VA
- Moorefield Fire Station – Loudoun, VA
- Lansdowne Fire Station – Lansdowne, VA
- Purcellville Fire Station – Purcellville, VA
- Hill School – Middleburg, VA
- Vienna Volunteer Fire Department #2 – Vienna, VA
- Quantico Fire and Rescue Squad – Quantico, VA
- Annandale Volunteer Fire Station – Annandale, VA
- Greater Springfield Volunteer Fire Department #22 – Springfield, VA
- Centreville Volunteer Fire Department – Centreville, VA
- Dale City Fire Station #20 – Dale City, VA

**PROFESSIONAL AFFILIATIONS**

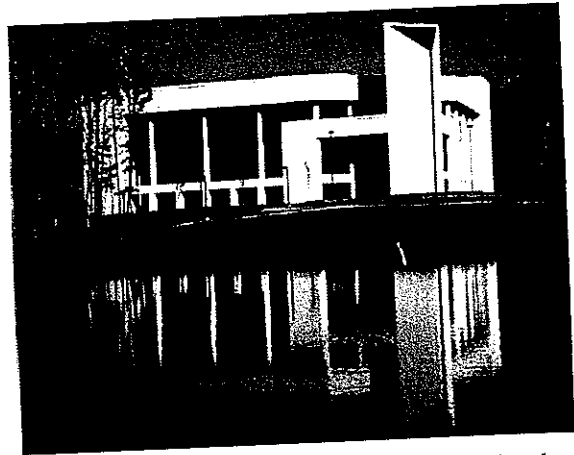
American Society of Civil Engineers (ASCE)  
National Society of Professional Engineers (NSPE)



## S3E Klingemann, Inc.

### A Firm Profile

S3E Klingemann consists of a staff of 42 and offers a complete range of building design services including mechanical, electrical, plumbing, fire protection and structural engineering. In addition to providing building engineering system design, the firm also offers a variety of related services such as energy and life cycle cost studies, commissioning, construction services and building evaluations and is recognized for its comprehensive and integrated approach to building systems design.



S3E Klingemann designs to the needs and budget of each project. Our mission is to provide the highest level of quality professional engineering services and to maintain a tradition of technical excellence, economy of design, commitment to design quality and client satisfaction.

### Organization & Staff

S3E Klingemann is organized around a team of project managers reporting directly to the firm principals. In addition to directing the project managers, the principals are the lead engineers for their respective disciplines. Each project is assigned a principal and an experienced project manager who serves as the main point of contact with the client and has the authority to schedule personnel to assure the project is completed on time.

The principals of S3E Klingemann realize that in order to provide high quality professional services we must provide an atmosphere that will attract and retain those whose commitment to excellence is innate and self-generated. We have established an environment that encourages initiative and professional development. As we continue to grow we are always looking for those exceptional individuals who share our commitment and who will further strengthen our staff.

### Technical Support

S3E Klingemann's approach takes into consideration all aspects of the project's program, budget, organization, technology, aesthetics, and quality. We value a close and interactive relationship with each client. By emphasizing the mechanical and electrical aspects of building design, S3E Klingemann is able to develop engineering solutions that work, and that fully meet or exceed our clients' expectations. We are equipped with the latest computer software, hardware and telecommunication capabilities. The firm produces all of its drawings on AUTOCAD software. Each staff member has desktop email, Internet access and voice mail. These multiple forms of communication allow clients to be in contact with our staff whenever necessary.

### History

S3E Klingemann, Inc. and its predecessors have served the Mid-Atlantic Region since 1963. Originally known as LBC&W/Maguire Group, Inc., an internal ownership transition in 1989 created S3E, Inc. as an independent consulting engineering group maintaining the same staff and location. S3E Klingemann was created through a 1998 merger of S3E, Inc. Consulting Engineers and Klingemann Consultants, Inc. The firm and its personnel have provided engineering services on numerous institutional, public and private projects throughout the region. S3E Klingemann specializes in projects with complex requirements and has an experienced, dedicated design team ready to assist on this project.

## Hospitality Experience

### Hotels, Motels, Mixed-Use Facilities

S3E Klingemann has provided design engineering services on a variety of hospitality projects ranging from full service hotel design to troubleshooting and repairing existing systems. Representative projects include:

#### **Marriott Courtyard Rosslyn Rosslyn, Virginia**

A 170-guest room hotel on 10 floors with a three-story below grade parking structure. Amenities include a small restaurant, meeting rooms, exercise room, indoor pool, and courtyard garden cafe.

#### **Hilton Gardens @ Fair Ridge Place Fairfax, Virginia**

A 134-unit full service hotel with restaurant, kitchen, seven conference rooms, swimming pool, and fitness center.

#### **Radisson Barcelo Hotel Washington, DC**

HVAC upgrades for over 100 guest rooms in this nine-story hotel located in downtown Washington, DC.

#### **Marriott Courtyard Hotels (6 locations) Mid-Atlantic Region**

Classic Marriott Courtyard hotels including guest rooms; indoor swimming pool & exercise room, guest entertaining & gathering spaces, and courtyards. Projects were located in Virginia, Maryland, and Pennsylvania.

#### **Visiting Officer's Quarters Bldg. #1385 Andrews Air Force Base; Maryland**

Renovation of a 28 unit, two-story officer's quarters at AAFB including complete HVAC, plumbing, and electrical system replacement.

#### **Spring Hill Suites Herndon, Virginia**

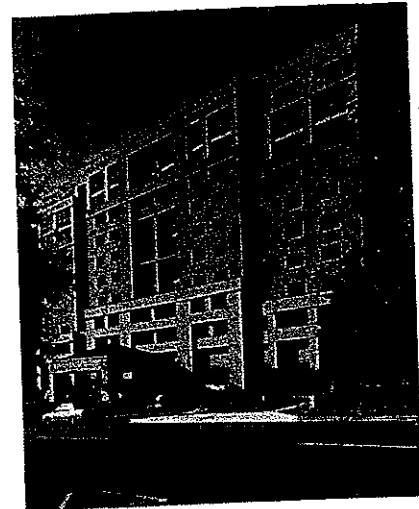
A 130 unit suite hotel for the Marriott Foundation including swimming pool, gathering spaces, conference room, warming kitchen, and fitness center.

#### **White House Conference Center Renovation Washington, DC**

Conversion of a 4,600sf multi-story building to include meeting rooms, offices/support facilities, and a conference center for use by the White House staff and Press Corps. The renovations included replacements of the HVAC, electrical, sprinkler, fire alarm, and communication systems.

#### **Thomas Stone Mansion Historic Site Visitors Center Expansion; La Plata, Maryland**

Expansion of the visitor and education center at this historic site includes a 1500sf addition, structural stabilization and lighting upgrades to the East Wing of the mansion, and rehabilitation/replacement of electrical services to the mansion.



#### **Fisher House Renovation WRAMC; Forest Glen, Maryland**

Reinforcement and upgrades to the structural systems of this a unique private-public partnership facility that supports America's military in their time of need providing "a home away from home" that enables family members to be close to a loved one at the most stressful time; during hospitalization for an illness, disease or injury.

#### **Meadowkirk Retreat Purcellville, Virginia**

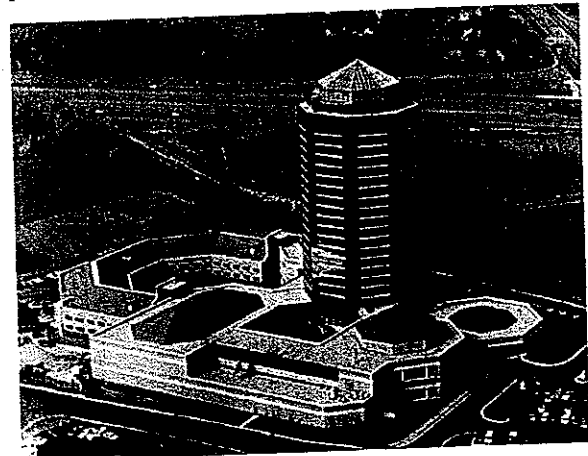
A 2-story, 24 room lodge, dining center, pool bathhouse, and cottages complete this rural retreat complex for the Presbyterian Church.

#### **Fairfield Suites Streetsville, Ohio**

An 85 unit suite hotel for the Marriott Foundation including swimming pool, gathering spaces, conference room, warming kitchen, and fitness center.

#### **Tyson's Sheraton Premiere Tyson's Corner, Virginia**

A full service hotel with 455 guest rooms, indoor & outdoors pools, three-story atrium/lobby with waterfall, conference center, extensive ballroom & banquet facilities, complete health club, three restaurants, full kitchen, and parking structure.



## Community and Recreation Experience

### **Charles Houston Recreation Center** **City of Alexandria, Virginia**

New 36,000SF community and recreation center with areas for seniors, pre-school, general activities, gymnasium seating 500 and outdoor pool

### **Salvation Army - Casey Community Center** **Germantown, Maryland**

New 25,000SF facility including chapel, gym, game rooms, educational spaces and administrative areas

### **Ernst Cultural Center** **Northern Virginia Community College** **Annandale, Virginia**

New community center including art gallery, 525-seat theater, conferencing areas, gymnasium, aerobic studio, and physical education facilities

### **Maury School Feasibility Study** **Spotsylvania County, Virginia**

Master Plan and phased renovation of this 1930's facility into a cultural arts center with city and county offices.

### **Marshall Center** **Spotsylvania County, Virginia**

Master plan and phased renovation of this 1930's facility into a cultural arts center, senior/teen center and library

### **WRAMC Fitness Center** **Washington, DC**

Renovation and additions to a circa 1930 natatorium building to create a 20,000SF fitness center with a new locker room wing and a new entry. Activity areas include free weights, circuit training machines, banks of various individual exercise apparatus, and an aerobics area



*Walter Reed Army Medical Center Fitness Center*



*Charles Houston Recreation Center*

### **Sport & Health Club** **Gaithersburg, Maryland**

Renovation of a 3-story, 35,000SF fitness facility including showers, pool areas, handball courts and exercise area

### **One-to-One Fitness** **Tyson's Corner, Virginia**

Renovation and HVAC upgrades of a 10,000SF facility to include new showers, toilets, and spa. Provided electrical systems to accommodate new TV and sound system

### **Tyson's Sheraton Premiere Health and Fitness Center** **Tyson's Corner, Virginia**

New Health and Fitness Center at the Tyson's Corner Sheraton Premiere Hotel including three racquetball courts, aerobic studios and other exercise equipment rooms and other exercise equipment rooms, and both indoor and outdoor pool areas with a Jacuzzi and three-story waterfall

### **Gannett Health & Fitness Center** **Rosslyn, Virginia**

Conversion of a newspaper editing and writer's area to accommodate the health club in the Gannett headquarters

### **Sport & Health Club** **Tyson's Corner, Virginia**

Renovation of 20,000SF in this fitness facility including the men's and women's locker rooms and an addition of new steam rooms

### **Health Club at 601 Pennsylvania Avenue, NW** **Washington, DC**

New addition of 3,500SF fitness and exercise room

### **Advantage Golf Worldgate** **Sterling, Virginia**

Renovation of a 14,000SF indoor sports training center including a tennis area and adjacent athletic golf instruction and training facility

## Project Experience

### Meadowkirk Retreat Center

**Meadowkirk Retreat Center**  
**Purcellville, Virginia**

S3EK provided engineering design and construction administration services for multiple buildings at the Meadowkirk Retreat Center. The facility is a rural complex of buildings and park land owned and operated by the Presbyterian Church. The facility underwent a significant upgrade and expansion beginning in 2005 with some portions yet to be completed through early 2009. The complex includes several buildings strategically dispersed about the 134 acres of property in the rolling hills between Middleburg and Purcellville Virginia.

The following buildings were recently added to the complex:

**Cottages:** Three cottage buildings were constructed, each including two 8-bed sleeping rooms and a common meeting room. The cottages are by design remote, some 500 yards from the main buildings. Ground source heat pumps are used for heating and cooling.

**Bath House:** A swimming pool with bath house was constructed on the property for recreational use. The bath house includes changing, shower, and rest room facilities.



**Dining Center:** The dining center includes a full service kitchen and hall with seating for 350 people as well as adjoining meeting spaces. An old stone barn was restored and the dining hall added onto the barn structure. The stone barn is used as a large fellowship hall with capacity for 180 people. The dining center, kitchen and stone barn are heated and cooled with ground source equipment.

**Adult Lodge:** The last phase of the project included a 24 room 2 story lodge building that included common areas on each floor. The environment in each room is controlled by individual self contained air conditioning units.

Due to the remote nature of the property, the project included a well, storage tank, and pumping equipment for domestic water; each building included a septic system; and significant upgrade was required to the electric service to the property.



# Melvin L. Straus, P.E.

## Mechanical Engineer

### General Qualifications

Mr. Straus is experienced in project management as well as mechanical engineering design. His leadership skills allow a strong, comfortable relationship with clients while providing support and guidance to the design team. Throughout his 30 year career, Mr. Straus has developed a very strong technical expertise in HVAC, plumbing and fire protection systems for buildings. Mr. Straus has extensive experience in the design of public access facilities.

### Experience

#### Meadowkirk Retreat Purcellville, Virginia

Engineering design services for the complex of retreat buildings including cottages, bath house, dining facilities, lodge, and infrastructure upgrades.

#### Marriott Courtyard Rosslyn Rosslyn, Virginia

Engineering design services for a 170-guest room hotel on 10 floors with a three-story below grade parking structure including a restaurant, meeting rooms, exercise room, and indoor pool.

#### Advantage Golf Worldgate Sterling, Virginia

Engineering design services for the renovation of a 14,000 SF indoor sports training center including a tennis area and adjacent athletic golf instruction and training facility

#### Thomas Stone National Historic Site Visitor's Center Expansion & Mansion Upgrades La Plata, Maryland

Engineering design services for this expansion to the visitor and education center at the Thomas Stone national Historic Site. Expansion includes a 1500 sf addition to the Visitor's Center, structural stabilization and lighting upgrades to the East Wing, and rehabilitation/replacement of electrical services to the mansion.

#### Charles Houston Community Recreation Center Alexandria, Virginia

Engineering design services for a new 36,000 SF LEED community and recreation center with areas for seniors, pre-school, general activities, gymnasium seating 500, boxing arena, locker rooms, training/weight rooms, game rooms, and an outdoor pool.

Years with S3E Klingemann: 19

Years with Other Firms: 11

#### Education

B.S., 1978, Mechanical Engineering,  
University of Minnesota

#### Licenses/Certifications

Professional Engineer, Virginia

Also licensed Professional Engineer  
in: MD, DC, NJ, NY, MI, RI, DE, IL,  
LA, AL

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# Bruce McCullough, CIPE

## Plumbing Engineer

### **General Qualifications**

Mr. McCullough has more than 33 years of experience in plumbing design and leads the plumbing group at S3E Klingemann, Inc. His extensive experience covers a broad range of projects including the design of plumbing systems for maintenance facilities, laboratories, medical, correctional, residential, and commercial facilities. He has extensive experience with federal and other public facilities and has provided design services on numerous new and renovation projects. Like the remainder of the engineering team, Mr. McCullough is also well versed in construction administration and follows his projects through the construction phase.

Years with S3E Klingemann: 15

Years with Other Firms: 18

#### **Education**

Prince George's Community College, No Degree

#### **Licenses/Certifications**

Certified in Plumbing Engineering, 1996

### **Experience**

#### **Meadowkirk Retreat Purcellville, Virginia**

Engineering design services for the complex of retreat buildings including cottages, bath house, dining facilities, lodge, and infrastructure upgrades.

#### **Marriott Courtyard Rosslyn Rosslyn, Virginia**

Engineering design services for a 170-guest room hotel on 10 floors with a three-story below grade parking structure including a restaurant, meeting rooms, exercise room, and indoor pool.

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Engineering design services for a new 36,000 SF LEED community and recreation center with areas for seniors, pre-school, general activities, gymnasium seating 500, boxing arena, locker rooms, training/weight rooms, game rooms, and an outdoor pool.

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Engineering design services for this expansion to the visitor and education center at the Thomas Stone national Historic Site. Expansion includes a 1500 sf addition to the Visitor's Center, structural stabilization and lighting upgrades to the East Wing, and rehabilitation/replacement of electrical services to the mansion.

#### **Salvation Army Community Center Germantown, Maryland**

Engineering design services for this 25,000 sf community center including a gymnasium, game room, classrooms, offices, and chapel for the Salvation Army.

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# Donald L. Klingemann, P.E.

## *Electrical Engineer*

### **General Qualifications**

Mr. Klingemann, is a professional engineer and registered architect. His experience of handling many projects, small and multimillion dollar projects simultaneously, demonstrates his capacity and ability in project management. Mr. Klingemann has extensive experience in the design of electrical systems. This experience covers a wide variety of building types which include many hotels, athletic facilities, and community access buildings. His experience includes the design of virtually all types of lighting, power, life safety, communications, and security systems found in buildings.

### **Experience**

#### **Meadowkirk Retreat**

##### **Purcellville, Virginia**

Engineering design services for the complex of retreat buildings including cottages, bath house, dining facilities, lodge, and infrastructure upgrades.

#### **Hilton Gardens @ Fair Ridge Place**

##### **Fairfax, Virginia**

Engineering design services for a 134-unit full service hotel with restaurant, kitchen, seven conference rooms, swimming pool, and fitness center.

#### **Expansion of the Tennis Pavilion**

##### **Congressional Country Club; Bethesda, Maryland**

Engineering design services for a two-story expansion to the existing Tennis Pavilion at the famed Congressional Country Club. The facility was designed to initially support the Press for a U.S. open Golf event and then act permanently in support of the tennis facility.

#### **Thomas Stone National Historic Site Visitor's Center Expansion & Mansion Upgrades**

##### **La Plata, Maryland**

Engineering design services for this expansion to the visitor and education center at the Thomas Stone national Historic Site. Expansion includes a 1500 sf addition to the Visitor's Center, structural stabilization and lighting upgrades to the East Wing, and rehabilitation/replacement of electrical services to the mansion.

#### **Charles Houston Community Recreation Center**

##### **Alexandria, Virginia**

Engineering design services for a new 36,000 SF LEED community and recreation center with areas for seniors, pre-school, general activities, gymnasium seating 500, boxing arena, locker rooms, training/weight rooms, game rooms, and an outdoor pool.

**Years with S3E Klingemann:** 14

**Years with Other Firms:** 22

#### **Education**

B.S., 1972, Electrical Engineering

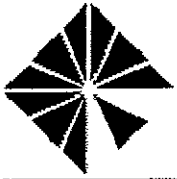
#### **Licenses/Certifications**

Professional Engineer, West Virginia

Also licensed Professional Engineer in: PA, VA, MD, DC, VA, NC, SC, FL, NY, NJ, CA, AZ

1985 Registered Architect: DC, MD

LEED Accredited Professional

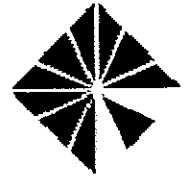


**WASTE WATER MANAGEMENT, INC.**

# **COMPANY PROFILE**

**Waste Water Management, Inc.  
2815 Hartland Road  
Falls Church, VA 22043  
703-846-0098  
[www.wwmi.net](http://www.wwmi.net)**





## EXECUTIVE SUMMARY

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Waste Water Management, Inc. (WWM), headquartered in Falls Church, VA is a registered Small Business Entity (SBE #P0894363) professional services engineering corporation. David Rigby, P.E., founder and current President of WWM, has over 35 years of experience in the planning, design, construction, operation and financing of municipal, industrial and private water and wastewater piping, pumping and treatment systems. WWM typical scopes of services includes planning, existing facility analysis, operations assessments, engineering reports, preliminary engineering design, detailed engineering, bidding, contract document preparation, contract management, construction inspection, shop drawing review, start-up assistance, and as-built drawings. WWM is also internationally recognized for its experience in industrial process assessment and treatment design, and for its capabilities in forensic evaluation and expert testimony.

WWM is nationally recognized for its expertise in the analysis and design of complex hydraulic systems, industrial wastewater process evaluation, and treatment systems. WWM provides engineering, consulting, and design services throughout the mid-Atlantic region of the United States for all types of water and wastewater system needs including operation and maintenance performance assessments, asset management, facility upgrades, new utility development, financial planning, grant and loan management and environmental permitting. WWM is internationally recognized for its expertise in the fields of environmental policy development, industrial waste management and regionalization, waste minimization, and the application of appropriate technologies.

WWM has successfully completed over 200 major wastewater treatment design and construction projects, and we developed the first project funded through the EPA Construction Grants Program in the 1970s. WWM is also known for its expertise in the analysis and design of complex hydraulic and pumping systems for water, sewage, stormwater and industrial process water applications. At any time, WWM may have as many as 20 pumping projects on its active project list. For the past 35 years, WWM and its team of engineers have designed over 500 major pumping projects throughout the United States. WWM's principal, David Rigby, is a long standing adjunct professor of graduate environmental and civil engineering studies at The George Washington University in Washington, DC. Among his teaching assignments is Advanced Sanitary Engineering Design which he commonly refers to as "Applied Fluid Mechanics" and / or "Pumping System Hydraulics". In that course, Mr. Rigby teaches the three governing equations for closed pipe hydraulics being "Continuity", "Energy", and "Momentum". He also teaches single and parallel force main hydraulics, multiple and variable speed pumping applications, design of water booster stations, cavitation and its causes and techniques for mitigation, ground and elevated water storage tank siting criteria, hypod pneumatic tank sizing, gravity sanitary and storm sewer design, and inverted siphon design.

## EXECUTIVE HIGHLIGHTS

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- ◆ Completion of over 150 major water and wastewater design projects for municipalities.
- ◆ Completion of over 300 major water and wastewater design projects for industrial, commercial, and residential clients.
- ◆ Planned numerous new town, city, and country-wide water and sewer projects, including treatment.
- ◆ Responsible for the design and project management of the first project ever funded by The Environmental Protection Agency's "Construction Grants Program" in the United States.
- ◆ Designed the 266 MGD Edmonston Stormwater Pumping Station project featured in the Washington Post and currently nominated for the ASCE national design award of excellence.
- ◆ Designed hundreds of miles of water and sewer lines with experience ranging in size from 4" – 60" diameter.
- ◆ Strong history of working with municipalities including the City of Roanoke (60 MGD). Kit Kiser, Director of Public Works, and Charlie Huffine, City Engineer, would openly say, "we turn to you for all the hard (treatment and pumping) projects."



## COMPANY PROFILE

The key to successful project execution is having the right people for the job, organized in a structure to maximize responsiveness. WWM offers extensive in-house expertise and principal level expert consultation services. Our team allows us to call on a broad spectrum of expert services without being burdened by the overhead associated with that expertise. WWM can offer full services for the rehabilitation and capacity analysis of the existing McLean Pumping Station.

WWM employs the following engineering staff, all of which have worked extensively across the state of Virginia:

- ◆ David J Rigby, PE – Sanitary, Hydraulic, Process, Mechanical, Value Engineering, Licensed Wastewater Operator; 35+ years
- ◆ David Hanna, PE – Pumping System Hydraulics, Quality Assurance and Control; 35+ years
- ◆ Mike Rossi, PE – Hydraulics, Piping, Water Treatment, Project Management; 15+ years
- ◆ Huy Nguyen – Hydraulic and Mechanical Engineering; 10+ years
- ◆ Arbina Shrestha – Sanitary and Environmental Engineering, 8+ years
- ◆ Nick Valcourt – Process and Project Engineering, 1+ years

WWM's project managers and design engineers hold degrees in their field of expertise, are professionally licensed or in the process of becoming licensed, experienced, and well qualified. WWM's engineering staff is proficient in AutoCAD 2006, AutoCAD Civil 3D, Haested Methods WaterCAD, ArcGIS, EPANET 2.0, EPA SWMM 5.0, and Microsoft Office applications. Additionally, WWM maintains a continually updated database of hydraulic, structural, and civil programs which have been written by in-house staff. These programs are based on accepted design standards, industry practices, and engineering experience. All of these technical tools are enhanced by the individual principal and senior level engineers' extensive experience gained throughout their careers.

## PROJECT EXPERIENCE

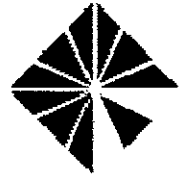
In May 1979, our very first project was the Town of Fincastle, VA wastewater treatment plant and collection system. That system employed a Hinde diffused lagoon aeration system with a rated capacity of 75,000 gpd. In 2004, the Town turned again to us to assist in the upgrade and expansion of the wastewater treatment plant to 130,000 gpd. WWM and its President bring the experience of more than 100 domestic wastewater treatment plants and more than 80 industrial wastewater treatment plants to the project. In addition to the planning, design, and construction management project experience, WWM and its President have extensive hands on experience in both construction and treatment plant operations. As a licensed General Contractor Class A and Water and Wastewater Operator Class I, WWM brings to the project a comprehensive package of professional capabilities unparalleled in the industry.

WWM is a recognized leader in the design of municipal and industrial water and wastewater treatment plants and pumping stations with extensive experience in the preparation of preliminary assessments and reports, budget cost estimates, final engineering documents, and in the performance of construction phase activities.

From the influent piping through the treatment or pumping facilities and out to the discharge point, WWM views a water or wastewater treatment plant or pumping station as a complete system not just an assemblage of the individual parts. WWM also has expertise in water distribution system analysis, mechanical sewer design and electrical and SCADA control design and can select and integrate all the proper components into an overall operating system. WWM's staff of degreed and licensed engineers are highly capable of developing physical, chemical and biological process designs to meet specific permit requirements and for the subsequent selection of the most appropriate, efficient and economical equipment.

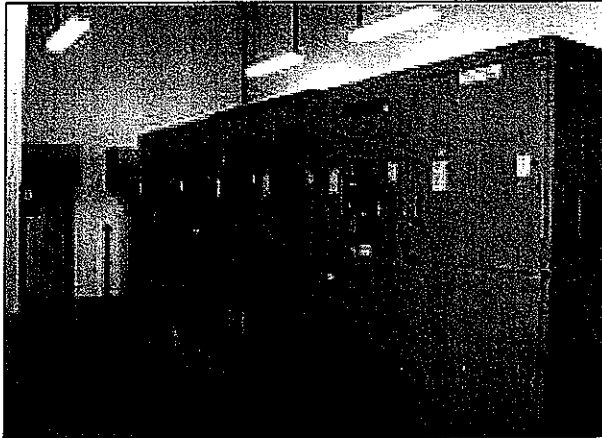


Due to its extensive hands on construction and operations experience WWM designs are easily constructed and are as maintenance free and operationally straight forward as possible. WWM designed facilities are accessible and well lit, easy to clean and maintain, making emergency repairs easier to perform. WWM has expertise with constant speed and variable speed controllers, flow metering, and SCADA. WWM's design engineers work seamlessly with its core



electrical power and structural engineering sub-consultants in order to design treatment plants stations and pump stations that are reliable, cost efficient, and aesthetically pleasing.

WWM has completed numerous projects for the Prince William County Service Authority and has a close relationship with its Engineering and Operations Department. Working with the Service Authority, WWM has developed the Service Authority's standard large flow pump stations. These pump stations include a monolithic comminutor vault / wet well / meter vault structure with associated control building, emergency generator, SCADA, and future provisions for odor control equipment.



WWM employs professional engineers and scientists in the fields of hydraulic engineering and advanced wastewater treatment process engineering. WWM has developed expertise with the use of computer hydraulic models and has generated numerous models for municipal water distribution systems and for municipal wastewater treatment plants. WWM utilizes computerized hydraulic modeling to analyze the interaction of multiple pumping stations tied into common force mains. Software that WWM uses includes Haestad Methods WaterCAD and EPANET 2.0. WWM also uses SWMM to model gravity sewer systems and BioWin to model wastewater treatment plant performance.

#### **Wastewater Treatment Plants**

Town of Montross, Westmoreland County VA  
 City of Danville, Danville VA  
 Town of Chincoteague, Accomack County, VA  
 Town of Hamilton, Loudoun County, VA  
 Town of Fincastle, Botetourt County, VA  
 Geshner Jewish Day School, Fairfax County VA  
 Evergreen Country Club, Prince William County VA  
 Warrenton Chase, Fauquier County, VA  
 Widewater, Stafford County, VA

#### **Sewage Pumping Facilities**

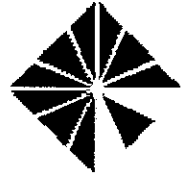
Timber Truss, Orange County, VA  
 Stafford Commerce Park, Stafford County, VA  
 Rappahanock Landing, Stafford County, VA  
 Cabin Run, Prince William County, VA  
 Mayfield Trace, Prince William County, VA  
 Belmont, Loudoun County, VA  
 Cedarcrest, Loudoun County, VA  
 Gunston Commerce, Fairfax County, VA  
 Lorton, Fairfax County, VA

#### **Water and Sewer Systems**

Potomac Crossing, Westmoreland County, VA  
 Town of Chincoteague, Accomack County, VA  
 Botetourt County VA Comprehensive Water and Sewer systems  
 Town of Hamilton, 50 Year Water and Sewer Master Plan  
 Town of Kilmarnock, VA, Water and Sewer Master Plan  
 Town of Purcellville, VA, Sewer Master Plan

#### **Water Storage Tanks, Main Replacements/Extensions, and Treatment Plants**

Lovettsville Development Partners, Loudoun County, VA  
 Hamilton, Loudoun County, VA  
 Ladysmith, Caroline County, VA  
 Lovettsville Retirement Village, Loudoun County, VA



Town of Hamilton, VA

**Stormwater Pumping Facilities**

Edmonston, Prince George's County, MD

**Construction Administration**

Route 20 Sewer, Orange County, VA

Warrenton Chase WWTP, Fauquier County VA

Hamilton Water System, Loudoun County, VA

Hamilton / Loudoun Sewer Extension Project, Loudoun County, VA

Mountain Vernon Ladies Association of the Union, Fairfax County, VA

**Water System Modeling**

Town of Colonial Beach, Westmoreland County, VA

Town of Hamilton, Loudoun County, VA

Town of Lovettsville, Loudoun County, VA

## WARRENTON CHASE TREATMENT PLANT (WWTP) AND SUBSURFACE DISCHARGE

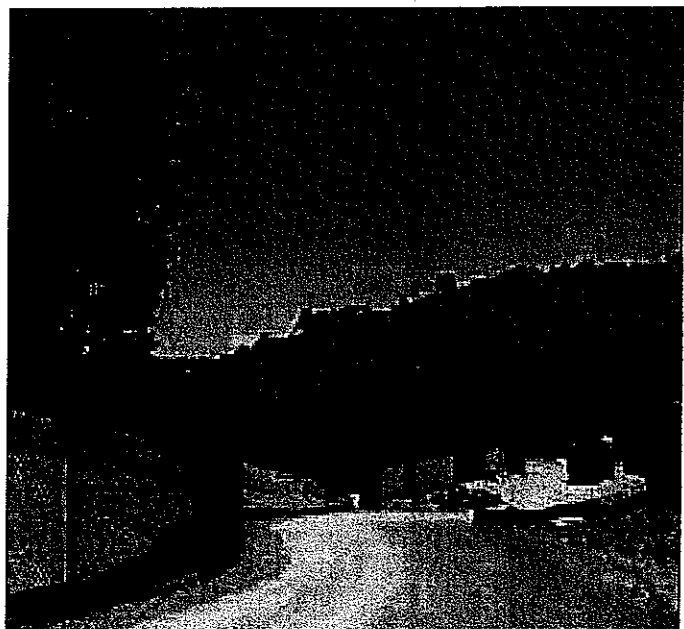
### Fauquier County, Virginia

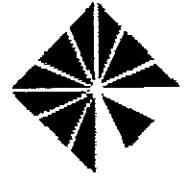
#### Project Highlights

- 60,000 gpd WWTP
- 7.5 acres of drainfields with monitoring wells and drip system tubing
- Lakeside Screen and grit removal
- Aqua Aerobic Dual train SBR system w/ pre- and post-equalization
- Aerobic digester
- Dynasand tertiary filters
- 24 hour emergency effluent storage
- Goulds disposal field dosing pumps
- American Manufacturing disc filtration unit
- 400 kw Standby Generator (also serves adjacent water booster station facility)

#### Project Description

Waste Water Management, Inc. provided complete civil, hydraulic, mechanical, structural, and electrical engineering design services for the wastewater treatment plant (WWTP) at Warrenton Chase, a residential development composed of 150 single family homes. The WWTP is enclosed inside a CMU block building covering 6,000 sf. The treatment process begins with a screenings and grit removal system that drains into a pre-equalization basin. The flow is then pumped into a dual Sequencing Batch Reactor (SBR) that either pumps mixed liquor to an aerobic digester or decants to a post-equalization tank. The treated effluent in the post-eq tank is pumped through sand filters and a UV disinfection system before being stored in dual underground tanks which provide 24 hours of emergency storage in case of any drainfield disposal issues. These tanks drain to a duplex submersible disposal field dosing pump station. Effluent is pumped through a final disc filtration unit before discharging to a 32 field network of drainfields using ½ inch polyethylene dripper tubing to distribute the final effluent over 7.5 acres. The site was constructed with expandability for a methanol building in case of stricter nutrient limits in the future. Construction cost was approximately \$5.8 million.





### Project References

#### Owner

Toll Brothers Inc  
43089 Ryan Road, Suite 101  
Ashburn, VA 20148  
(703) 729-0951  
Contact: Jon Cannizzo, P.E

#### Regulatory Agency

Fauquier County Water and Sanitation Authority  
7172 Kennedy Road  
Warrenton, VA 20187-1646  
(540) 349-2092  
Contact: Wayne Stephens, P.E.

## BEL ALTON

### Charles County, Maryland

#### Project Reference

JLW Associates  
23464 Hollywood Road  
Leonardtown, MD 20650  
Contact: Michael Baker, Vice President  
Telephone: (301) 475-5747

#### Project Description

WWM and JLW are currently working in a Design/Build team arrangement on the Charles County MD "Bel Alton Wastewater Treatment Plant Improvements" project. This small project is being upgraded in response to the Chesapeake Bay Nutrient Reduction Program and involves maintaining full operating capability of the existing wastewater treatment plant during the construction of the new facilities. The 30% design submittal is in the final stages of review by the Maryland Department of the Environment. Construction completion is scheduled for spring 2009.



## WIDEWATER

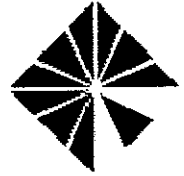
### Stafford County, Maryland

#### Project Highlights

- Influent equalization control and pumping system
- Four state aerobic – anoxic reactor
- Aerobic sludge digestion and thickening
- Chemical feed systems
- LEED certified laboratory and control building
- SCADA system integration

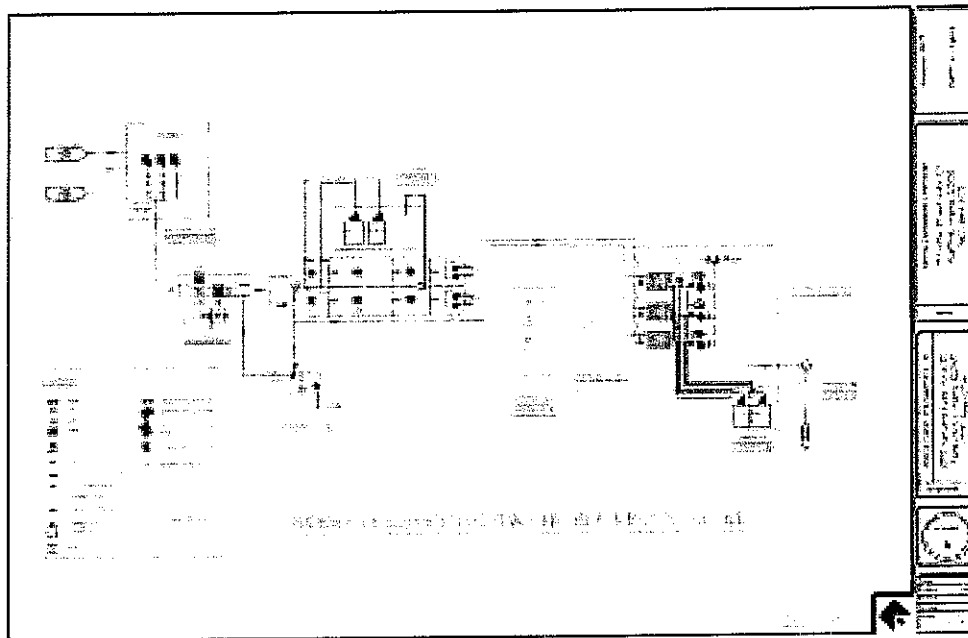
#### Project Description

The Widenwater wastewater treatment is planned to serve the "Widenwater Magisterial District" in accordance with the Stafford County, VA Comprehensive Plan. Originally controlled by the Maryland Department of the Environment it was permitted for an initial flow of 0.50 MDG with expansion to 2.20 MGD. Following an



agreement between the states of Maryland and Virginia, the project now carries a Virginia Pollutant Discharge Elimination System (VPDES) permit issued by the Virginia Department of Environmental Quality. In response to the recently adopted Chesapeake Bay Nutrient Reduction Strategy the permit has been amended to include limits on Nitrogen (3.0 mg/l) and Phosphorous (0.14 mg/l).

Originally proposed as a Sequencing Batch Reactor (SBR) process, recent improvements in membrane bioreactor (MBR) technologies and economics, the proposed project will include an influent equalization control and pumping system, a four stage aerobic - anoxic reactor utilizing low energy high oxygen transfer hyperbolic disc mix air systems for denitrification, an external MBR equipment package, ultraviolet disinfection, aerobic sludge digestion and thickening, chemical feed systems, a LEED certified laboratory and control building, and a SCADA system integrated into the local utility communications program. The initial design submission will be in November 2008.



## TOWN ENGINEER FOR THE TOWN OF HAMILTON, VIRGINIA

### Town of Hamilton, Virginia

#### Project Description

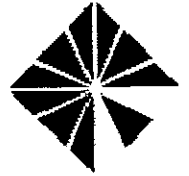
WWM has served as the Town Engineer for over ten years and completed numerous critical infrastructure projects related to the Town of Hamilton's water and sewer systems.

#### Water Treatment Plant

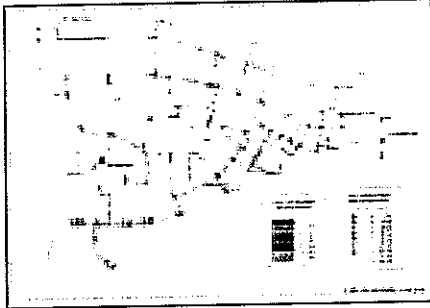
Waste Water Management, Inc. was retained by the Town of Hamilton, Virginia to design a new water treatment plant to serve a new Loudoun County elementary school. Recognizing the need to replace the Town's aging distributed system of groundwater treatment plants and to fully utilize a new high yield well, Waste Water Management, Inc. sized the plant at 400 gpm, which is enough to supply the entire Town. The plant incorporates raw water storage, greensand filtration, disinfection, finished water storage, and distribution pumping systems. A laboratory and storage facilities are also provided. Waste Water Management, Inc. incorporated the new 6500' raw water pipeline into the Town's hydraulic network model.

#### Project Highlights

- Two greensand filters 200 gpm each
- 50,000 gallon raw water storage tank
- 200,000 gallon finished water storage tank
- Filter pumps 400 gpm @ 97'

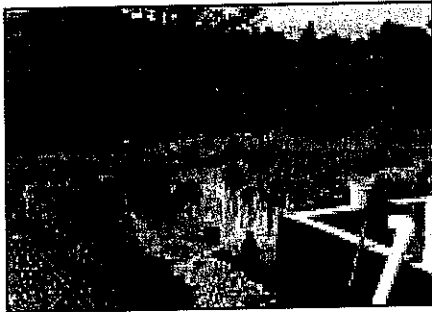


- Distribution pumps 500 gpm @168'
- Chemical Feed Systems
- 300 kw emergency generator
- SCADA



#### **Water Distribution System Model**

As a part of the Town's water system upgrade, a hydraulic and water quality model of the Town's water distribution network was developed. The model was developed using AutoCAD and Haestad Methods WaterCAD. Field determination of friction factors was performed at various locations to calibrate the model, which is now used successfully in the optimal selection of waterline replacement projects. It has also been used to determine the effects of taking various wells out of service.



#### **Stone Eden Well (Well 14)**

WWM developed, designed, and coordinated the permitting of the Town's new Stone Eden Well (Well #14). The well is a high yield well designed to replace the Town's aging distributed system of wells. The project is a part of the Town of Hamilton's Water System Improvements as conceptualized in the Town of Hamilton Water System Preliminary Planning Report, also prepared by WWM.



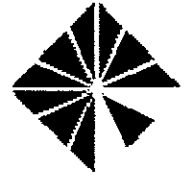
#### **Harmony Sewage Pump and Water Booster Stations**

WWM designed the Harmony Intermediate School Sewage Pump Station and Water Booster Stations to serve the new Harmony Middle School and growing western part of the town. The sewage pump station incorporates precast wet well and valve vault structures, ventilation fans, outdoor lighting, and a precast concrete control building. The control system for these stations provides the groundwork for the Town's upcoming SCADA conversion project.

#### **Project Reference**

Town of Hamilton, Virginia  
53 East Colonial Highway  
Hamilton, Virginia 20159

Contacts: Past Mayor Keith Reasoner  
(540) 338-2811  
Email: kreasoner@aol.com



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## EVERGREEN COUNTRY CLUB WASTEWATER TREATMENT PLANT

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Prince William County, Virginia

### Project Highlights

- 7,500 gpd Dual Train CSBR with Sludge Holding Tank
- Tertiary Filtration with Sand Media
- PLC Controls for Automated Cycle Timing
- UV Disinfection
- 50 KW Standby Generator
- Enclosure for chemical feed and onsite lab equipment
- E-One Package Duplex Grinder Station
- 1-1/2" flowmeter

### Project Description

Waste Water Management, Inc. provided complete civil, hydraulic, mechanical, structural, and electrical engineering design services for Evergreen Country Club Golf Course.

The 7,500 gpd station consists of an influent grinder pump station, dual train Continuous Sequencing Batch Reactor (CSBR) with a sludge holding tank, sand filtration, UV disinfection, and post aeration before discharging to a receiving stream of the Potomac River. The biological system first treats for removal of nitrogen, solids and organics with coarse bubble diffused air. The effluent is decanted into tertiary sand filters which act as a second barrier to remove solid contaminants. Final treatment involves disinfection with UV light and post aeration to meet State regulations for dissolved oxygen concentration. A programmable logic controller (PLC) was installed for controlling the system.



### Owner

Evergreen Country Club  
15900 Berkeley Drive  
Haymarket, Virginia 20169  
(703) 754-4778

Contact: Dave Anderson

### Equipment Supplier

Kappe Associates  
P.O. Box 7986  
Charlottesville, VA 22906  
(434) 985-7090

Contact: George Long

### Regulatory Agency

Virginia Department of Environmental Quality  
Northern Virginia Regional Office  
13901 Crown Court  
Woodbridge, Virginia 22193  
(703) 583-3903

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## LOVETTSVILLE WATER SYSTEM

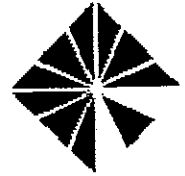
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Loudoun County, Virginia

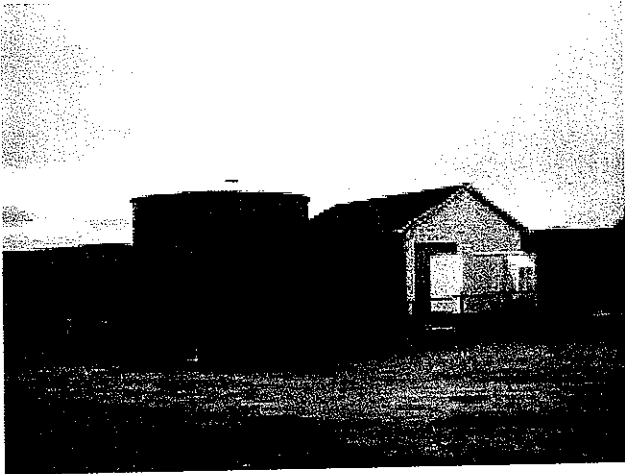
### Project Highlights

- Water Main Extension -- 13,000' of 8" and 6" main
- 400 gpm Water Treatment Plant with iron and manganese removal
- 300 gpm Water Treatment Plant with iron and manganese removal





- 158,000 gallon water storage tank
- Backwash pump station and force main
- Design of SCADA system



#### Project Description

Waste Water Management, Inc. was the Engineer on a variety of public and private water system projects for the Town of Lovettsville, Virginia. A complete hydraulic analysis of the Town's existing distribution system was performed using Haestad Methods WaterCAD. Areas of substandard pressure were identified and the distribution systems serving subsequent developments were designed to remedy this. Two potable water treatment plants with filtration, chlorination, and storage tanks were designed to serve development. A new SCADA system was designed to monitor the Town's existing and new facilities. Cost of water plants was approximately \$2.5 million.

#### Clients

JGS Residential, LLC  
5126 Harford Road  
Baltimore, Maryland 21214  
(410) 426-5000

Contact: Jim Sakellaris

Town of Lovettsville, Virginia  
6 East Pennsylvania Avenue  
Lovettsville, Virginia 20180  
(540) 822-5788

Contact: Mayor Elaine Walker

#### Contractor

Structures and Utilities  
3381 Torrey Pines Circle  
Riner, Virginia 24149  
(540) 382-3967

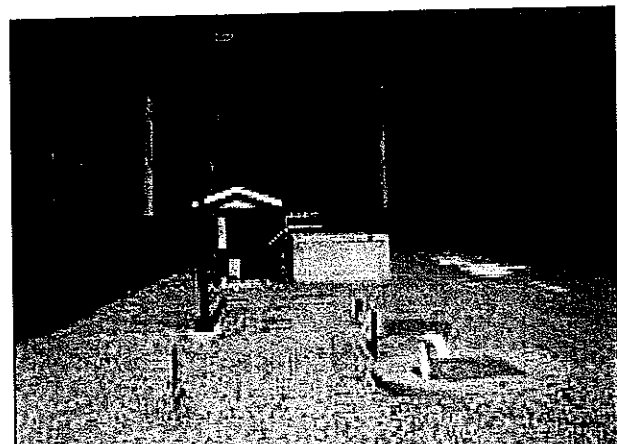
Contact: Dewey Lusk

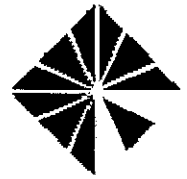
## GESHER JEWISH DAY SCHOOL ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM

Fairfax County, Virginia

#### Project Highlights

- 3,000 gpd CSBR train (6,000 gpd future)
- 7,000 gallon influent septic tank
- 13' deep wet well with duplex submersible grinder pumps rated at 25 gpm
- Valve vault with 2" flowmeter
- Weathershed for controls including PLC and Autodialer system for alarm conditions
- Discharge to drainfields with 5,972 gpd capacity (2 sites)
- Privacy slat fencing



**Project Description**

Waste Water Management, Inc provided complete civil, hydraulic, mechanical, architectural, structural, and electrical engineering design services for Gesher, the first Jewish Day School to open in Northern Virginia. The 3,000 gpd station consists of an influent pump station, septic tank and a single train Continuous Sequencing Batch Reactor (CSBR). At an undetermined time in the future, the system will be upgraded to 6,000 gpd capacity by installing a second train CSBR unit. The CSBR receives flow from the septic tank continuously during its biological treatment process to remove total nitrogen to a discharge limit of 7 mg/l. When the School is in use, the process train discharges to the drainfield. When the School is not in use such as during weekends, holidays and nights, the system recycles the effluent to the septic tank which serves as a food source during these periods. A programmable logic controller (PLC) was installed to control the cycle times and to control the discharge to each drainfield. An autodialer alarm was provided to notify the operator of any alarm conditions. Due to the proximity of the site to the School, privacy slat fencing was installed at the request of the Owner.

**Owner's Representative**

RMK Enterprises, LLC  
3819 Prince William Drive  
Fairfax, VA 22031  
(703) 764-9399

Contact: Ron Katz

**Regulatory Agency**

Fairfax County Division of Environmental Health  
Onsite Sewage & Water Section  
10777 Main Street  
Fairfax, Virginia 22030  
(703) 246-8463

Contact: Marty Shannon

**General Contractor**

Scott-Long Construction, Inc.  
14170 Newbrook Drive  
Chantilly, Virginia 20151  
(703) 802-7617

Contact: Brett Miller

**President****PROFILE**

Mr. David Rigby has emerged as a national and international expert in the field of industrial and domestic water and wastewater engineering. With more than thirty five years of experience, both as an entrepreneur and as an executive of Virginia-based firms, he has demonstrated a broad level of expertise in engineering, conservation and environmental issues, as well as business development, corporate finance, and human resources. He is also an Adjunct Professor of Graduate Studies at the George Washington University in the Civil and Environmental Engineering Department (1996 – Present), an Assistant Instructor at George Mason University in the Volgenau School of Information Technology and Engineering (2005), and a Guest Lecturer at the University of Nebraska Department of Civil Engineering.

Prior to becoming founder and president of Waste Water Management, Inc., he founded the environmental consulting firm Clean Water Engineers, Inc. in 1979. Through his leadership, the firm became one of the premiere U.S. water and wastewater planning and engineering design firms serving the water industry in response to the promulgation of the Clean Water Act in 1972. Clean Water Engineers provided services to industries, municipalities, and private developers. In 1986, Mr. Rigby was selected as the U.S. Delegate to the People's Republic of China in the field of Industrial Wastewater Treatment working directly with the Chinese Ministry of Industry. In 1990, Mr. Rigby expanded Clean Water Engineers' practice into Mexico and successfully served water intensive industries throughout the country for several years.

In 1992, Clean Water Engineers was acquired by a consortium of Mitsubishi and Osaka Natural Gas to supplement their international environmental engineering capabilities. As his first assignment, Mr. Rigby led a technical team of engineers, scientists, and economists to Thailand to manage a comprehensive multifaceted project funded by the Asian Development Bank to study and plan for major industrial pollution controls in the industrialized Samut Prakarn region of Bangkok. There he worked directly with the Ministry of Science, Technology, and Environment to identify the magnitude of the industrial pollution in the region, after which he developed a long-range regional pollution reduction plan and identified the framework for the creation of the Thai "EPA" to complete the recommended plan implementation.

Mr. Rigby is an accomplished corporate executive with years of versatile experiences in advanced water and wastewater pumping and treatment systems. He is nationally and internationally recognized for his expertise in industrial wastewater treatment, waste minimization, water supply and wastewater treatment and environmental planning. He is known throughout the industry as a Consultant's Consultant and is often retained by larger firms in an expert capacity for specific advice and support on system planning, complex hydraulic or treatment process designs, and business acquisitions.

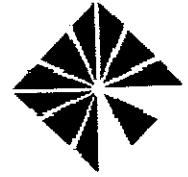
**EDUCATION**

- ◆ Doctor of Science studies in Environmental Engineering and Engineering Management, The George Washington University, January 2001 – Present
- ◆ Ph.D., course study completed in Sanitary Engineering, Virginia Polytechnic Institute and State University, 1978
- ◆ Master of Science, Civil Engineering, Virginia Polytechnic Institute and State University, 1972
- ◆ Bachelor of Science, Civil Engineering, Virginia Polytechnic Institute and State University, 1971
- ◆ Attendance at numerous professional conferences, seminars, and short schools in sanitary and environmental engineering.

**AUTHOR AND PRESENTER**

Mr. Rigby has been an author and presenter at various conferences including:

- ◆ Principal Author: "An Innovative Solution Resolves Political, Inter-Governmental and Technical Constraints", (addressing the Gunston Commerce Center Pump Station and Force Main), ASCE "Pipelines" Conference, 2003.
- ◆ Presenter: Georgia Tech Food Industry Environmental Conferences, 1990, 1993, 1994.
- ◆ Presenter: Soap and Detergent Conference, Mexico City, Mexico, 1991.
- ◆ Presenter: Wastewater Reuse Conference, Mazatlan, Mexico, 1992.

**President****PROFESSIONAL EXPERIENCE**

**WASTE WATER MANAGEMENT, INC., President** **1994-PRESENT**  
**Falls Church, VA**  
Founded Waste Water Management, Inc. in 1994 for the provision of professional engineering services in the areas of water and wastewater pumping and treatment for industrial, private, and municipal clients. Consulting engineering in the areas of water supply, distribution and storage, wastewater collection, treatment and disposal, stormwater management, and land development. Detailed engineering design and drafting, bid analysis, and construction management for water and wastewater treatment plants and pump station projects. Industrial and municipal water and wastewater treatment process and operations evaluations. Preparation of operations and maintenance manuals. Contract operations for industrial water, wastewater and pretreatment plants, and municipal water and wastewater systems. Project financing and ownership for industrial water and wastewater treatment systems. Turn-key private and industrial water and wastewater project development. International project management consulting.

**ESPEY, HUSTON & ASSOCIATES, INC.** **1992-1994**  
**International Projects and Eastern Region Water and Wastewater Division Director**  
**Fincastle, Virginia**  
Involved in the planning and implementation of the International Services Division, which continued to build on the Mexican client base of services developed by Clean Water Engineers, Inc.. Responsible for the continued marketing of the Mexican industrial water and wastewater treatment market and for providing technical leadership for EH&A's Far East initiative.

Worked directly with the Ministry of Science, Technology, and Environment in Bangkok, Thailand as technical team leader for a large, multifaceted regional industrial wastewater project for the Asian Development Bank. Responsible for establishing and managing the Water and Wastewater Services Division in EH&A's Eastern Region, which served industrial and municipal clients in Virginia and the Carolinas.

**CLEAN WATER ENGINEERS, INC., President** **1979-1992**  
**Williamsburg, Virginia**  
Founded Clean Water Engineers, Inc. and was involved in all aspects of the business, including engineering, business administration, marketing, and personnel management. Supervised a thirty person professional staff of engineers, drafters, surveyors, and administrative assistants. Expanded the firm from a local municipal service firm to a nationally recognized expert firm in the field of industrial wastewater treatment. Actively involved in plant operations, wastewater treatability studies, municipal financing, engineering planning, design, and construction supervision, as well as providing expert testimony. Operated a Virginia Class A Utility Construction Division, which constructed small sewer and pump station projects and provided sewer system infiltration/inflow maintenance and repair services. Expanded the company to the international level, successfully penetrating the Mexican industrial market, performing fifteen water and wastewater treatment projects in 1991—1992.

**DRAPER-ADEN ASSOCIATES, President** **1975-1979**  
**Blacksburg, Virginia**  
Developed the water and wastewater engineering department and supervised numerous municipal and private water and wastewater utility projects, including water and sewer lines, pump stations, storage tanks, and treatment plants. Prepared and filed numerous federal and state grant and loan applications. Performed construction estimating, monitoring, engineering, report writing, and public presentations. Developed, budgeted and monitored municipal water and wastewater projects. Performed extensive marketing for new projects and clients. Supervised a small engineering staff and coordinated the activities of the engineering department with the surveying and drafting departments.

**President**

**GILBERT W. CLIFFORD & ASSOCIATES, Engineer**  
**Fredericksburg, Virginia**

**1972-1974**

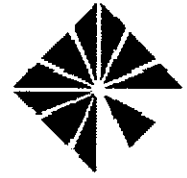
Planned and designed numerous public and private water and sewer utilities throughout Virginia. Designed water and sewer lines, pump stations, storage tanks, and treatment plants. Supervised and managed a staff of three design engineers and five drafters, and coordinated the activities of the production department with other departments.

**DESIGN AND CONSULTING EXPERIENCE**

- ◆ Designed the first wastewater treatment plant project funded under Public Law 92-500 for the EPA Construction Grant program.
- ◆ First engineer in Virginia to use UV technology for disinfection of both drinking water and treated wastewater
- ◆ Designed more than 100 industrial wastewater treatment plants
- ◆ Designed more than 100 municipal wastewater treatment plants and evaluated more than 100 municipal wastewater treatment plants not designed.
- ◆ Designed more than 50 municipal and industrial water treatment plants.
- ◆ Designed more than 300 water, sewage and stormwater pumping stations
- ◆ Past Corporate wastewater treatment and process consultant to Burlington Industries, Coca Cola, McCormick & Company, and Kimberly Clark de Mexico.
- ◆ Performed extensive construction management on state and federal grant and loan funded projects including projects funded by EPA, FmHA, and the COE.
- ◆ Designed the Roanoke City, Virginia wastewater plant upgrade from 24 - 60 MGD.
- ◆ Designed the 266 MGD Edmonston stormwater pump station in Prince George's County, MD in a record 90 days. The project was completed first quarter 2008.
- ◆ Developed the engineering program for the conversion of the City of Danville 24 MGD wastewater treatment plant from pure oxygen to single stage nitrification in 2007.
- ◆ Selected from 20 engineering firms as the Town Engineer for the Island of Chincoteague to develop its first public sewer system, 2006. Currently proposing to dispose of highly treated effluent through deep well injection utilizing an EPA issued permit.

**PROJECT HIGHLIGHTS**

- ◆ **Industrial Wastewater:** Led more than one- hundred industrial wastewater treatment projects in the United States and around the world, including more than twenty in the state of Virginia.
- ◆ **Domestic Wastewater:** Engineering design and evaluation of more than one hundred wastewater treatment plants throughout Virginia, Maryland, Delaware and the southeastern United States.
- ◆ **Hydraulic Systems and Pumping:** Directed more than three hundred major pumping system projects, including ground-up design and expansion projects in Virginia and the southeast.
- ◆ **Water System and Treatment Plants:** Designed more than eighty five water systems for municipalities, developments, schools and hospitals in Virginia, West Virginia and North Carolina.
- ◆ **Sewage Collection Systems:** Designed more than fifty community-wide sewer systems for municipal and private clients in Virginia, West Virginia and the Carolinas.
- ◆ **Expert Testimony:** Provided expert legal testimony in several significant legal cases in Virginia, Kentucky, South Carolina, Alabama and Indiana.



**President**

**PROFESSIONAL REGISTRATION**

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Professional Engineer in the States of Virginia, West Virginia, Maryland, North Carolina, South Carolina, Tennessee, Kentucky, Wisconsin and Nevada  
Virginia Wastewater Works Operator - Class I  
Virginia Wastewater Works Operator - Class II

**TEACHING**

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Mr. Rigby is an Adjunct Professor of Graduate Studies at the George Washington University in the Civil and Environmental Engineering Department (1996 – Present), an Assistant Instructor at George Mason University in the Volgenau School of Information Technology and Engineering (2005), and a Guest Lecturer at the University of Nebraska Department of Civil Engineering. The courses he teaches include:

- ◆ Wastewater Treatment Plant Design
- ◆ Advanced Sanitary Engineering Design
- ◆ Environmental Impact Assessment
- ◆ Environmental Chemistry
- ◆ Hazardous Waste Management
- ◆ Industrial Waste Management

**PROFESSIONAL AFFILIATIONS**

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American Society of Civil Engineers, Member  
American Water Works Association, Life Member  
Botetourt County Building Code Board of Appeals, Past Member  
Botetourt Regional Health Department Advisory Committee, Past Member  
Chi Epsilon Civil Engineering Honor Society, Member  
"Clean Water Journal" (1989 to 1992), Editor  
"Meriwether Planned Community" (Fincastle, Virginia), Developer  
National Society of Professional Members, Past Member  
United States Coast Guard, E-6 Quartermaster, Honorable Discharge  
US Department of Health & Human Services (1985 to 1986), Discretionary Grant Officer  
US Small Business Association (1986), Delegate to Peoples Republic of China  
Virginia Water Project, Ford Foundation Loan Board, Past Member  
Water Environment Federation, Member

**Project Manager****PROFILE**

Mr. Michael Rossi is a Project Manager with over 13 years experience with water and wastewater projects throughout the Chesapeake Bay Watershed region. Since joining Waste Water Management, Inc. in 2005, Mr. Rossi has worked on a variety of public and private projects focusing on the design and construction of sanitary sewage pumping and force main systems, stormwater pumping stations, water treatment plants, and water distribution systems. Other work has included VPDES permitting, a wastewater treatment plant metals removal study, and user fee studies. Mr. Rossi is proficient with AutoCAD, Microstation, SketchUp, Haestad Methods WaterCAD, EPANET 2.0, EPA SWM 5.0, the Microsoft Office Suite, and VisualBasic.

**EDUCATION**

- ◆ Master of Science, Civil Engineering, The University of Iowa
- ◆ Bachelor of Science, Civil Engineering, University of Missouri

**PROJECT EXPERIENCE****EDMONSTON STORMWATER PUMP STATION, Project Manager  
Edmonston, VA**

Served as Project Manager responsible for design oversight, sub-consultant coordination, and day to day project management on a 266 MGD stormwater pump station. Pump station included three 10' diameter 350 hp Archimedes screw pumps, a 100' long x 11' wide concrete discharge channel, a mechanically cleaned bar screen system, a 1750 kw emergency generator, a new 3000 amp Pepco electrical service, and new WSSC water and sewer services.

**ROUTE 20 SEWER PROJECT, Project Manager  
International Projects and Eastern Region Water and Wastewater Division Director  
Orange, Virginia**

Served as Project Manager responsible for design oversight, sub-consultant coordination, and day to day project management on a suction lift pump station and associated 600 foot gravity sewer and 13,000 foot force main to serve a new manufacturing facility. Pump station includes an 80 kw generator and has provisions for future chemical feed odor control equipment. Project included hydraulic modeling of the force main. Project funding source was a Community Block Development Grant obtained by the Orange County Office of Economic Development.

**EDWARD L. KELLY LEADERSHIP CENTER SANITARY SEWAGE PUMP STATION  
Project Manager****Prince William County, Virginia**

Served as Project Manager responsible for design oversight, sub-consultant coordination, and day to day project management on a duplex submersible pump station to serve a new school administration building. Pump station includes a precast concrete wetwell, control building (structure designed by others) with a valve/meter room and an electrical/control room. Pump station includes carbon adsorption air scrubbing odor control equipment. The pump station connects to an existing force main. Extensive hydraulic modeling was performed to determine the optimum setpoint speeds of the variable frequency drives at each pump station.

**RAPPAHANNOCK LANDING SANITARY SEWER PUMP STATION, Project Manager  
Stafford, Virginia**

Served as Project Manager responsible for design oversight, sub-consultant coordination, and day to day project management on a duplex submersible pump station to serve new development. Pump station includes a precast concrete wetwell, valve vault, and pig launch structures and chemical feed odor control equipment.



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**Project Manager**

**BELMONT GLEN VILLAGE, Project Manager  
Loudoun, Virginia**

Project Manager responsible for the day to day client management, subconsultant coordination, and oversight of the design of a wet well / dry well sanitary sewage pump station. The pump station was designed as part of the LCSA's Belmont Glen area facilities in order to serve a new development. The pump station includes chemical feed and air scrubbing odor control equipment, an overhead monorail crane, and a 42,000 gallon emergency storage tank.

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**PROFESSIONAL REGISTRATION**

Professional Engineer in the State of Virginia

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**PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers, Member





**Affiliated Consultant**

**PROFILE**

Mr. David Hanna is a registered professional engineer with 35 years of experience in the field of water and wastewater treatment, pump hydraulics, and project management. He is a USCG licensed marine engineer for both steam and diesel vessels of unlimited horsepower. Mr. Hanna has been involved in both the consulting engineering design field and the academic arena teaching first at the State University of New York, Department of Public Health, then at prestigious Rensselaer Polytechnic Institute.

Currently, Mr. Hanna is the chair of the Construction Technology and Management Department at Ferris State University. He is also an ASCE author and conducts seminars for wastewater plant processes and pump system hydraulics. Mr. Hanna has worked with several consulting firms including Calocerinos & Spina, Stearns & Wheeler, J.K. Fraser, Engineering Science and McClure Engineering. Throughout his career, Mr. Hanna has had many professional achievements and has written and published numerous technical papers.

**EDUCATION**

- ◆ Master of Science in Environmental Engineering, Rensselaer Polytechnic institute, Troy NY
- ◆ Bachelor of Science in Marine Engineering, US Merchant Marine Academy, Kingspoint NY

**AUTHOR AND PRESENTER**

Mr. Hanna has been an author and presenter of the following:

- ◆ "Pumping Station Design – Sludge Pumping Chapter", Butterworths Publishers, Boston MA, 1989.
- ◆ "Design Concerns in Upgrading Wastewater Treatment Plants", Iowa Water Pollution Control Association.
- ◆ "Design Considerations for Medium Sized Plants", New York Water Pollution Control Association.
- ◆ "Evaluation of Plant Hydraulics and Pumping Wastewater Treatment Plants, New York State Department of Environmental Conservation and Operator Training and Certification Program.
- ◆ "Advanced Treatment Cost Savings with Biological Nitrification and Denitrification", New York Water Pollution Control Association.
- ◆ "Evaluation of Plant Hydraulics and Pumping In Existing Wastewater Treatment Plants", New York State Department of Environmental Conservation Operator Training and Certification Program.
- ◆ "Practical Sludge Pumping", Iowa Water and Wastewater Short Course, Iowa Water Pollution Control Association.
- ◆ "Hydraulic Analysis and Upgrade Considerations for Water and Wastewater" seminars

**PROJECT EXPERIENCE**

- ◆ 2 MGD "cold climate" oxidation ditch WWTP at Sherill NY.
- ◆ Upgrade to the City of Youngstown OH, 30 MGD WWTP.
- ◆ 4.0 MGD WWTP.
- ◆ 8.0 MGD WWTP for the community of Fulton NY
- ◆ 7.0 MGD WWTP for the City of Ottumwa IA.
- ◆ 0.0 MGD WWTP for the City of Binghamton NY
- ◆ 9.0 MGD WWTP for the Seneca Knolls NY.
- ◆ 6.0 MGD WWTP for the City of Adel IA.

**DAVID HANNA, P.E.**

**WASTE WATER MANAGEMENT, INC.**



**Affiliated Consultant**

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**DESIGN AND CONSULTING EXPERIENCE**

- ◆ Served as the hydraulic engineer advisor, analyzing the design flow in the discharge channel and openings in an existing box culvert for the Edmonston Stormwater Pump Station, in Edmonston, VA
- ◆ Lead Engineer for the design and development of bid ready documents for the construction of a waste activated sludge pumping station for the Big Rapids wastewater treatment plant in Big Rapids, MI.
- ◆ Project Engineer for the evaluation and development of contract drawings for the retrofit for the Adel Sewage Pump Station in Idaho. The final set of bid documents developed for the project quadrupled the flow capacity of the pump station without significant structural changes.
- ◆ Project Evaluation Engineer for the field evaluation of a municipal pump station to fix a complicated cavitation problem. The problem at Sawmill Creek Pump Station in Sawmill Creek, NY was corrected and other upgrades were recommended.
- ◆ Project Evaluation Engineer for the Binghamton Pump Station evaluation. Responsible for the evaluation of seventeen existing sewage pump stations in order to determine the remaining useful service life and providing upgrade recommendations

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**PROFESSIONAL REGISTRATION**

- ◆ Professional Engineer in the State of Ohio

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**TEACHING**

- ◆ Chairman, Department of Civil and Construction Engineering, Ferris State University, Big Rapids Michigan, 1991 – Present

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**PROFESSIONAL AFFILIATIONS**

ASCE, ASME, ASHRAE



## WASTE WATER MANAGEMENT, INC.

2815 HARTLAND ROAD, SUITE 210 • FALLS CHURCH, VIRGINIA 22043 • 703-846-0098 • FAX: 703-846-0357

### Town of Hamilton Water Treatment Plant Loudoun County, Virginia



#### Project Highlights

- Two iron and manganese removal filters 200 gpm each
- 50,000 gallon raw water storage tank
- 200,000 gallon finished water storage tank
- Filter pumps 400 gpm @ 97'
- Distribution pumps 500 gpm @ 168'
- Chemical Feed Systems
- 300 kw emergency generator
- SCADA

#### Client / Owner

Town of Hamilton, Virginia  
53 East Colonial Highway  
Hamilton, Virginia 20159  
(540) 338-2811

Contact: *Past Mayor Keith Reasoner*  
*Mayor Ray Whitbey*

#### Contractor

Patterson Construction Company, Inc.  
12315 McClain Street  
Fredericksburg, Virginia 22407  
(540) 338-2811

Contact: *Jim Patterson*

#### Project Description

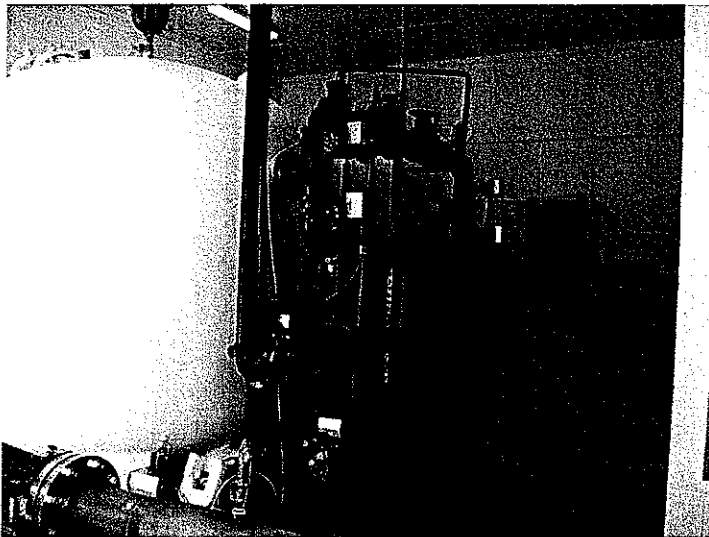
Waste Water Management, Inc. was retained by the Town of Hamilton, Virginia to design a new water treatment plant to serve a new Loudoun County elementary school. Recognizing the need to replace the Town's aging distributed system of groundwater treatment plants and to fully utilize a new high yield well, Waste Water Management, Inc. sized the plant at 400 gpm, which is enough to supply the entire Town. The plant incorporates raw water storage, greensand filtration, disinfection, finished water storage, and distribution pumping systems. A laboratory and storage facilities are also provided. Waste Water Management, Inc incorporated the new 6500' raw water pipeline into the Town's hydraulic network model.



## WASTE WATER MANAGEMENT, INC.

2815 HARTLAND ROAD SUITE 210 • FALLS CHURCH, VIRGINIA 22043 • 703-846-0098 • FAX: 703-846-0357

### Lovettsville Retirement Village Loudoun County, Virginia



#### Project Highlights

- 300 gpm water treatment plant with iron and manganese removal filters
- 158,000 gallon finished water storage tank
- 300 gpm seven stage vertical turbine well pump
- Triplex skid mounted booster pumps each rate at 500 gpm @ 260' TDH
- 12' diameter 19' deep backwash equalization tank with duplex submersible pumps
- SCADA system per LCSA standards

#### Clients

US Home Corporation, Inc.  
3554 Chain Bridge Road, Suite 100  
Fairfax, VA 22030  
(703) 359-6200

Contact: Don Fink

#### Contractor

Structures and Utilities  
3381 Torrey Pines Circle  
Riner, Virginia 24149  
(540) 382-3967

Contact: Dewey Lusk

#### Project Description

Waste Water Management, Inc. was the Engineer on a variety of public and private water system projects for the Town of Lovettsville, Virginia. A complete hydraulic analysis of the Town's existing distribution system was performed using Haestad Methods WaterCAD. Areas of substandard pressure were identified and the distribution systems serving subsequent developments were designed to remedy this. Two potable water treatment plants with filtration, chlorination, and storage tanks were designed to serve development. A new SCADA system was designed to monitor the Town's existing and new facilities. Cost of water plants was approximately \$2.5 million.

## PROFILE - TRICON FOODSERVICE CONSULTANTS, INC.

Tricon Foodservice Consultants is an internationally recognized resource for exemplary design and management consulting services to the Hospitality Industry. Our facilities planning services include all of the elements necessary for the operation of mass feeding and housing facilities, from food and beverage service through catering, and even includes solid waste management and laundry planning. Far more than half of our clients' projects are for-profit, bottom-line driven operations that demand careful consideration of efficiency and practicality of design solutions. We have earned the trust of our many repeat clients by diligent attention to their functional needs while rendering exceptionally attractive interior designs. Tricon facilities are sensible, cost-effective, and manageable. We fully understand the requirements of quality service and the special demands of the private club atmosphere expected by club members.

Tricon was established in 1987 under its present name from roots stemming from 1979, as MDR (Management and Design Resources) and Paul E. Miller Associates, and was lately reincorporated in 1992 with the retirement and acquisition of partners' shares by the present owner/partners. Among our staffers in the Washington office alone we share more than 250 years of aggregate specific education, hands-on experience, and professional practice and more than 3,500 completed projects in all areas of the trade. Tricon is unsurpassed in technical ability, production capacity, and knowledge of the hospitality and construction industry.

Tricon Foodservice Consultants is comprised of professional consultants, associates, support staffers, and specialists for project teams. The talent and experience of the Tricon team is deep and extensive, with the combined experience of over two hundred aggregate years of education, training, practice and operational experience, and over 4,000 completed projects of all natures and sizes. No project is too large or too small to receive intense, individual attention.

Tricon offers both design and management consulting services. Design teams are always staffed with management services members who investigate and validate the actual operational needs of every facility to render design decisions even more functional and cost-effective. We are extremely proud of our staffers and confident of their abilities.

We tackle every project, large or small, with the same degree of energy. We work rapidly and with great accuracy to best serve our clients' needs. Tricon has an outstanding reputation for efficient, attractive, and user-friendly designs that make money for the operators. Our practice includes health care, schools and universities, assisted living, employee feeding, and detention, as well as hospitality. We would enjoy working with you toward the common goal of total quality assurance. Our many clients deserve the best and we always exceed their expectations.

Our primary products are facilities planning, back-of-the-house design in food and beverage industry. In our hotel and lodging practice, we also incorporate commercial laundry planning and solid waste-stream management for a complete slate of services. We blend cost-effective design solutions with attractive equipment styles and finishes where the public areas meet the utilitarian areas, to create pleasing results. Our work goes well beyond design into the equally critical planning of ventilation, fire protection, refrigeration, electric power, gas, plumbing, and other support systems required to operate the facilities. There is no firm with more design ability and technical knowledge in commercial food service in the mass-feeding and housing industry.

The quality of Tricon products is reflected in the eager response by bidders and kitchen equipment contractors who know that our project documents are accurate, concise, and easy to bid, build, and

complete. Change orders due to Tricon influences after the award of a kitchen equipment contract are virtually non-existent. Our budget accuracy is to within five percent on preliminary design and one half of one percent on final issue. Tricon performs all of its services using in-house staff and never farms out design or specifications to equipment manufacturers.

Our staffers maintain the highest level of professional proficiency, integrity, and performance. Tricon is internationally recognized as representing the highest level of achievement in the consulting industry.

Thank you for the opportunity to be of service.

**PAUL E. MILLER**  
President - Tricon Foodservice Consultants, Inc.

## **PROFESSIONAL BACKGROUND**

Mr. Miller's background includes experience with major foodservice equipment dealers and installers; a custom stainless steel equipment fabricator; and a national manufacturer of ventilation equipment. He held an administrative and teaching position with the Hilton School of Hotel and Restaurant Management, University of Houston. Prior to establishing his own firm, he was with Cini-Grissom Associates, and was Associate Vice President/Design of Cini-Little International.

## **POSITIONS HELD**

President - Tricon Foodservice Consultants, Inc.

Principal - Paul E. Miller Associates

Associate Vice President  
Senior Associate/Regional Manager  
Senior Associate/Project Manager  
Cini-Little International, Inc.

Principal - Paul E. Miller Associates, Foodservice Design and Management

Senior Associate/Regional Manager - Cini-Grissom Associates, Inc.

General Manager, Ventilation, Inc. Division - Kitchen Equipment Fabricating, Co.

Associate Professor/Comptroller - Hilton School of Hotel and Restaurant Management,  
College of Continuing Education, University of Houston (TX)

Commissioned Design Engineer - Gerber's Restaurant Supply Co.

Teaching Assistant/Instructor, Foodservice and Hospitality Planning  
Professor O. Ernest Bangs, Emeritus, Cornell University, Ithaca, NY

## **PROFESSIONAL TRAINING**

Bachelor of Science Degree: School of Hotel Administration, Cornell University, Ithaca, NY, 1970  
Hotel Engineering and Facilities Planning  
Co-majors in Food Science and Accounting

## **PROFESSIONAL ASSOCIATIONS**

Foodservice Industry Council, Charter Board of Directors  
Cornell Society of Hotelmen  
Vice President, Cornell Club of Houston  
National Restaurant Association  
Cayuga Hospitality Advisors, Inc.  
Virginia School Food Service Association

Past associations: FCSI, CMAA, NACUFS, NH&MA, NAMP  
Specialist: Advanced-technology foodservice systems

**SALLY H. LOOKER**

**Vice President/Senior Associate - Tricon Foodservice Consultants, Inc.**

**PROFESSIONAL BACKGROUND**

Ms. Looker has over twenty-five years of experience in the foodservice industry. She has provided design and coordination on both government and private industry projects. She has assisted in the development of equipment designs and specifications, recipes and menus, and accounting packages for restaurants and hotels.

**POSITIONS HELD**

Vice President, Project Coordinator - Tricon Foodservice Consultants, Inc.

Senior Associate, Accounting - Emerson Management Group, Inc

Senior Associate, Director of Research - Tricon Hospitality Consultants, Inc.

Director of Research - MDR Associates

Research Associate - Cini-Grissom Associates, Inc.

Secretary - Southland Distributing Company

Bookkeeper - First Gulf Beach Bank

**PROFESSIONAL TRAINING**

Bachelor of Arts Degree – McDaniel College (formerly Western Maryland College)

Masters of Library Studies - University of Hawaii



**DEBORAH L. GEMMA**  
Senior Associate - Tricon Foodservice Consultants, Inc.

### **PROFESSIONAL BACKGROUND**

Ms. Gemma has been formally educated and employed in the Hospitality Industry and has many years' experience in back-of-the-house operations. She has worked as manager at numerous local restaurants, and has trained and supervised several employees at each. Her educational background is in Restaurant/Foodservice Management as well as cuisine.

She also trained in Kosher cuisine and production supervision. She brings a general business as well as practical knowledge to project design and coordination

### **POSITIONS HELD**

Senior Associate - Tricon Foodservice Consultants, Inc.

Assistant Catering Manager - 1001 Restaurant Corp.

Manager - Charcoal Deli

Bakery Chef and Catering Coordinator - Grauls Market

Manager - Professional Food Designers, Inc.

Caterer and Kitchen Supervisor - Arlington Fairfax Jewish Congregation

### **PROFESSIONAL TRAINING**

B.S., Hospitality and Tourism Management - Southeastern University, 1993

A.A., Restaurant/Foodservice Management - Baltimore International Culinary College, 1994

### **PROFESSIONAL CERTIFICATIONS**

Arlington County, VA, Certified Foodservice Manager  
State of Maryland Sanitation Certificate

## HOTELS, RESORTS AND CONFERENCE CENTERS

|  |   |  |
|--|---|--|
| Addison Hotel<br>Dallas, Texas   | Dallas Hilton Hotel<br>Dallas, Texas                              | The Headquarters Hotel<br>Boston, Massachusetts<br>Hilton Garden Inns<br>- Austin, Texas<br>- Boca Raton, Florida<br>- Dulles, Virginia<br>- Fair Ridge, Virginia<br>- Georgetown, Kentucky<br>- Mettawa, Illinois<br>- Miramar, Florida<br>- Outer Banks, North Carolina<br>- Schaumburg, Illinois<br>- Warrenville, Illinois<br>- Washington, DC |
| Americana - Tandy Center<br>(Now Hotel Worthington)<br>Fort Worth, Texas   | Double Tree Club Hotel<br>St. Louis, Missouri                     |  |
| Barcelo Washington Hotel<br>Washington, DC   | Doyle DuPont Plaza Hotel<br>Washington, DC                        |  |
| Beaumont Hilton<br>Beaumont, Texas   | Edward Maurer International<br>Hotel Consultants<br>Austin, Texas |  |
| Brookhollow Marriott<br>Houston, Texas   | El Paso Hilton - East<br>El Paso, Texas                           |  |
| Brookhollow Hilton<br>Houston, Texas   | Emerald Beach Resort<br>Segal-West Interests<br>Houston, Texas    | Hilton LBJ<br>Dallas, Texas  |
| Brume-Howard House<br>Bed and Breakfast Inn<br>St. Mary's County, Maryland   | The Exchange Hotel<br>Richmond, Virginia                          | Holiday Inn Crowne Plaza<br>Washington, DC   |
| Clarion Hotel Baltimore<br>Harbor<br>Baltimore, Maryland   | Ferrence Conference Center<br>Weston, Connecticut                 | Hotel DuPont<br>Wilmington, Delaware   |
| Colonial Williamsburg<br>Foundation<br>and The Rockefeller<br>Foundation<br>Williamsburg, Virginia<br>- Christiana Campbells Tavern<br>- Central Foodservice<br>Commissary<br>- Presidential Reception Center<br>- Williamsburg Inn<br>- Williamsburg Lodge<br>- Williamsburg Tavern | Fort Harrison Hotel<br>Clearwater, Florida                        | Hotel Gatlinburg<br>Gatlinburg, Tennessee  |
|  | Four Seasons Resort<br>Spring, Texas                              | Hotel Richard<br>Kiev, Ukraine   |
|  | Grand Hyatt Hotel<br>Washington, DC                               | Hotel San Carlos<br>Phoenix, Arizona   |
|  | Grand Hotel<br>Houston, Texas                                     | Hyatt Beach Resort-Grand<br>Cayman Islands<br>Seven Mile Beach, Grand<br>Cayman<br>British West Indies   |
|  | The Greenbrier<br>White Sulphur Springs,<br>Virginia              | Hyatt - Dulles Airport<br>Chantilly, Virginia  |
| Crowne Plaza Hotel<br>Washington, DC   | Hay Adams Hotel<br>Washington, DC                                 | Hyatt - Fair Lakes<br>Fairfax, Virginia  |

Hyatt Regency Hotel  
Houston, Texas

Hyatt Regency Hotel  
- Lobby Bar  
- Hugo's  
Rosslyn, Virginia

Hyatt Hotels, Inc.  
Chicago, Illinois

Inn at Montchanin  
Montchanin, Delaware

Kingsmill Conference Center  
Jamestown, Virginia

Lansdowne Resort and  
Country Club  
Leesburg, Virginia

Meadowlark Lake Lodge  
Tensleep, Wyoming

Omni Shoreham Hotel  
Washington, DC

Pennsylvania Convention  
Center  
Philadelphia, Pennsylvania

Perdido Key Resort  
Destin, Florida

Poplar Springs Inn and Spa  
Casanova, Virginia

Radisson Suite Beach Resort  
Marco Island, Florida

Radisson Suite Hotel  
Clearwater Beach, Florida

Red Sea Resort  
Sinai, Egypt

Ritz Carlton Hotel  
Atlanta, Georgia

Sheraton Towers  
Arlington, Virginia  
Southwest Freeway Hilton  
Houston, Texas

Tahiti Condotel  
Papeete, Tahiti, FSI

The Warwick - Post Oak  
Houston International Hotels,  
Inc  
Houston, Texas

Washington Renaissance Hotel  
Washington, DC  
- Sports Bar  
- Main Kitchen

Wintergreen Resort  
Wintergreen, Virginia

Wintergreen Stoney Creek  
Wintergreen, Virginia

The Woodlands Inn and  
Conference Center  
The Woodlands, Texas

Wyndham Hotel  
Gettysburg, Pennsylvania

## COUNTRY CLUBS AND CITY CLUBS

Belmont Bay Country Club  
Belmont Bay, Virginia

Belmont Country Club  
Leesburg, Virginia

Bermuda Run Country Club  
Winston-Salem, North  
Carolina

The Briar Club  
Houston, Texas

Houston Country Club  
Houston, Texas

Kings Mill Golf and Country  
Club  
Williamsburg, Virginia

Lansdowne Resort and  
Country Club  
Leesburg, Virginia

Lowes Island Club  
Loudoun County, Virginia

The Old Houston Executives  
Club  
Houston, Texas

The Paragon Club  
Midland, Texas

Perdido Key Club  
Destin, Florida

The Petroleum Club  
Houston, Texas

Raspberry Plains Country  
Club  
Leesburg, Virginia

Briarcrest Country Club  
Burning Tree Country Club  
Bethesda, Maryland

Chevy Chase Club  
- Main Clubhouse  
- Winter Center  
Chevy Chase, Maryland

Colonial Country Club  
Harrisburg, Pennsylvania

Emerald Beach Resort and

The Resorts at Lakeway  
Austin, Texas

River Bend Country Club  
Houston, Texas

River Oaks Country Club  
Houston, Texas

River Run Country Club  
Charlotte, North Carolina

Saucon Valley Country Club  
- Main Clubhouse  
- Villa Pazzetti  
Bethlehem, Pennsylvania

Seaford Golf & Country Club  
Seaford, Delaware

Spearman Country Club  
Spearman, Texas

Sugar Creek Country Club  
Ft. Worth, Texas

Tiki Island Resort  
Galveston, Texas  
Bryan, Texas

Houston, Texas  
Farmington Country Club  
Charlottesville, Virginia

Golfcrest Country Club  
Alvin, Texas

Greenway Gardens Club  
Houston, Texas

The Houston Club  
Houston, Texas

Valley International Country  
Club  
Kingsville, Texas

Washington Golf and Country  
Club  
Arlington, VA

Westwood Country Club  
Houston, Texas

Whitemarsh Valley Country  
Club  
Lafayette Hills, Pennsylvania

The Woodlands Inn and  
Country Club  
- The Glass Menagerie  
- Seven Phases of Expansion

## Downey & Scott, LLC Company Overview

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Downey & Scott, LLC offers a comprehensive range of construction consulting technologies to the business community. Recognition of our independent status, principal generated reports and respected qualifications has resulted in solicitation of our professional services not only by owners, design professionals, and attorneys, but also by members of the national print and electronic media. We have produced reports and studies since our formation in 1984 representing over 750 million square feet of construction. Our continuing success and roster of repeat clients are evidence of both the high quality professional work we produce as well as our commitment to client satisfaction.

Downey & Scott, LLC expertise coupled with state of the art analytical techniques provides our clients with valuable advice and information at all phases of development. Downey & Scott, LLC personnel possess degrees from respected American colleges and universities plus maintain professional certifications from various state licenser boards of architecture and engineering. Senior level Construction Management expertise earned previously from recognized construction firms permits us to offer to our clients' considerable depth. Downey & Scott, LLC project managers have specified, estimated, bought-out, scheduled, managed and inspected hundreds of substantial construction projects.

Downey & Scott, LLC has also participated as a team member on numerous Community Parks. We are conversant with the components, materials and methods unique to the construction of Parks. Our list of projects includes State and Federal Government projects as well as private institutions. We understand the special requirements and considerations in planning and designing Community Parks. We have participated as a team member on numerous Community Parks projects including the Long Bridge Park project, Bolen Memorial Park project, the Fuller Heights Park project, to name a few.

Our consulting assignments are as varied as the clients we serve. We have been retained on a broad spectrum of projects that range from regional libraries to long-range studies for military agencies, from renovations of historic landmarks to the disassembly and reconstruction of portions of deficiently constructed new developments. We understand the risks associated with creating, completing and operating a facility today. We look forward to an opportunity to add an important dimension to your management team.

## Resumes of Key Personnel



**Name:** William G. Downey, Managing Principal

**Project Assignment:** Chief Estimator / Principal in Charge

**Years Experience:** Total: 27; With Downey & Scott, LLC: 17

**Education:** Bachelor of Science, Syracuse University, Construction Management, 1984

**Professional Memberships:** The Association for the Advancement of Cost Engineering, Associated General Contractors, Construction Specifications Institute, Member of County of Fauquier Board of Supervisors, Past School Board Member Fauquier County Virginia.

**Relevant Experience:** William Downey brings a seasoned perspective from his twenty-seven years of construction management experience on many different projects with regionally recognized constructors, Chas. H. Tompkins Company (Estimator), Sabre Construction Corporation (Chief Estimator) and Chamberlain Construction Corporation (Chief Estimator).

Mr. Downey served successfully with integrity and resolve as a key Construction Executive with industry leading and award winning Construction Companies. He is currently an elected member of the Board of Supervisors in Fauquier County, VA. He previously served a 4-year term as an elected member of the Fauquier County School Board. As a senior level Cost Engineer and Principal of the firm, his experience adds a valuable hands-on perspective. He has performed extensive Construction Management and Cost Engineering functions on numerous Community Parks. His partial list includes:

- ◆ Hutchison Park Phase II: Fairfax, Virginia
- ◆ Long Bridge Park: Arlington, Virginia
- ◆ Greenbriar Park: Arlington, Virginia
- ◆ Bolen Memorial Park: Loudoun County, Virginia
- ◆ West Virginia Air National Guard C-5 Fire Station: Martinsburg, West Virginia
- ◆ Locust Shade Park: Prince William County, Virginia

He is well known as an expert in negotiation services, claims analysis and dispute resolution on a wide range of project types. His skills, derived from within the industry, add critical depth and perspective to the Downey & Scott, LLC team. His analytical techniques are used extensively as part of the consulting services provided by the firm.

## Resumes of Key Personnel

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**Name:** Gary Salpini, Senior Project Manager

**Project Assignment:** Senior Estimator, Project Manager

**Years Experience:** Total: 39; With Downey & Scott, LLC: 3

**Education:** 1968 Campbell College  
Business Administration

**Professional Memberships:** Commonwealth of Virginia Contractor Class A  
Past Member Associated Builders & Contractors

**Relevant Experience:** Mr. Salpini brings invaluable perspective from his thirty-nine years of both Military and Construction Management/Cost Estimating experience. He has extensive project experience in both Community Park projects and private commercial facilities construction. Before joining Downey & Scott, LLC, Mr. Salpini served for ten (10) years as Vice President at Whitner & Jackson General Contractors. Prior to working for Whitner & Jackson, Mr. Salpini worked with award-winning contractors' such as Auger Construction and Sabre Construction Corporation. While at Auger Construction, Mr. Salpini served as Project Manager on the 1.8 million square feet Parklawn Building in Rockville, Maryland. His focus and "can do" attitude brought the project to a successful on time, on budget, no claims conclusion. His partial list includes:

- ◆ Hutchison Park Phase II: Fairfax, Virginia
- ◆ Northern Virginia Regional Park W & OD Trail:  
Prince William County, Virginia
- ◆ Temple Hills Farms: Leesburg, Virginia
- ◆ East Park Aquatic Center
- ◆ Mid County Recreation Center
- ◆ Dulles South Multi Purpose Facility

Mr. Salpini brings focus and great depth with his expertise and varied accomplishments to our team.

## Downey & Scott, LLC Relevant Experience

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Title: Arlington North Park  
Location: Arlington County, Virginia  
Owner: Arlington County  
Client: Hughes Group Architect  
Project Budget: \$70,298,000.00  
Project Size: 119,616  
Period Performance: 2007

Title: Hutchison Park Phase II  
Location: Fairfax, Virginia  
Owner: Fairfax County Parks and Recreation  
Client: Greenhorne & O'Mara  
Project Budget: \$3,072,000.00  
Project Size: 35 Acres  
Period Performance: 2006

Title: Greenbriar Park  
Location: Arlington, Virginia  
Owner: Arlington County, Virginia  
Client: Lewis, Scully, and Gionet, Inc.  
Project Budget: \$12,224,000.00  
Project Size: 12 Acres  
Period Performance: 2005

Title: Long Bridge Park (Formally North Tract)  
Location: Arlington, Virginia  
Owner: Arlington County, Virginia  
Client: Hughes Group Architects  
Project Budget: \$39,481,000.00  
Project Size: 194,878  
Period Performance: 2008

Title: Northern Virginia Regional Park W & OD Trail  
Location: Prince William County, Virginia  
Owner: Northern Virginia Regional Park Authority  
Client: Northern Virginia Regional Park  
Project Budget: \$192,814.00  
Period Performance: 2007



## Downey & Scott, LLC Relevant Experience

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Title: Bolen Memorial Park  
Location: Loudoun County, Virginia  
Owner: Loudoun County  
Client: Loudoun County, Virginia  
Project Budget: \$29,287,000.00  
Project Size: 100 Acres  
Period Performance: 2007

Title: Frying Pan Park  
Location: Fairfax, Virginia  
Owner: Fairfax County Parks and Recreation  
Client: Samaha Associates  
Project Budget: \$8,375,000.00  
Period Performance: 2007

Title: Fuller Heights Park  
Location: Prince William County, Virginia  
Owner: Prince William County Park Authority  
Client: Lewis Scully Gionet, Inc.  
Project Budget: \$10,968,000.00  
Project Size: 25.17 Acres  
Period Performance: 2007

Title: Veterans Park at Balls Bluff  
Location: Leesburg, Virginia  
Owner: Town of Leesburg Parks & Recreation  
Client: Lewis, Scully, and Gionet, Inc.  
Project Budget: \$2,537,000.00  
Project Size: 8.18 Acres  
Period Performance: 2007

Title: Locust Shade Park  
Location: Prince William County, Virginia  
Owner: Prince William County Parks and Recreation  
Client: Lewis, Scully, and Gionet, Inc.  
Project Budget: \$3,420,000.00  
Project Size: 15.21 Acres  
Period Performance: 2005

## Downey & Scott, LLC Relevant Experience

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Title: South Run Recreation Center Fitness Addition  
Location: Springfield, Virginia  
Owner: Fairfax County Parks & Recreation  
Client: Bowie Gridley Architects: Washington, DC  
Project Budget: \$2,737,000.00  
Project Size: 8,620 GSF  
Period Performance: 2007

Title: Veterans Park at Balls Bluff  
Location: Leesburg, Virginia  
Owner: Town of Leesburg Parks & Recreation  
Client: The Lukmire Partnership: Arlington, Virginia  
Project Budget: \$2,537,000.00  
Period Performance: 2007

Title: Temple Hills Farms  
Location: Leesburg, Virginia  
Owner: Northern Virginia Regional Park Authority  
Client: Northern Virginia Regional Park Authority  
Project Budget: \$3,946,000.00  
Project Size: 12,864 GSF  
Period Performance: 2007

Title: West Virginia Air National Guard C-5 Fire Station  
Location: Martinsburg, West Virginia  
Owner: West Virginia Air National Guard  
Client: Hayes, Seay, Mattern and Mattern  
Project Budget: \$6,345,000.00  
Project Size: 3.20 Acres  
Period Performance: 2005